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# Ohio Gross Domestic Product Report

## February 2022

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## **INTRODUCTION**

## INTRODUCTION

This report provides an overview of Ohio's economy and its role in the U.S. economy. It looks at the production of goods and the provision of services by people using capital located here; i.e., the Gross Domestic Product (GDP) from Ohio.

There are four major sections after this introduction and executive summary. The first describes the composition of Ohio's economy, comparing it with other states and the national distribution of economic activity. The second notes the distribution of economic activity in Ohio by county and selected metropolitan areas. The third focuses on output by sector and the major industries therein, noting the key groups or specific industries within the major industries and their relative concentrations in Ohio as well as recent trends here and across the nation. The last is an appendix containing a section on terminology and data tables for those seeking a more detailed understanding of recent economic activity here. The graphs and most of the discussions herein are based on, and refer to, the appendix tables.

The report describes economic activity from 2000 into 2021 but concentrates on 2008-2020 for the more detailed analyses of sectors and the major industries therein. Data were collected and prepared by the U.S. Bureau of Economic Analysis (BEA). The detailed GDP estimates are based on state and local taxes, value-added reports and company financial data. The BEA also has released initial total and sector-summary estimates for three quarters in 2021. Figures for more recent years may have been revised from previous reports based on new and revised data from at least 19 federal agencies. See Platt and Mead (2017) for more details. The U.S. Bureau of the Census, other federal agencies, and several private sector organizations developed additional statistics cited in this report.

Total and sector figures for metropolitan areas and counties recently were released and have been incorporated into this expanded edition. Revised state-level figures also were released with the metropolitan and county statistics. However, County Business Patterns and Annual Survey of Manufactures data are from 2019.



## EXECUTIVE SUMMARY

- Ohio's Gross Domestic Product (GDP) is estimated at \$677.6 billion for all of 2020 – a figure 2.3 percent less than the revised 2019 estimate of \$693.2 billion – ending a 10-year expansion; total U.S. GDP also was 2.2 percent less.
- Ohio's GDP contracted an inflation-adjusted 10.7 percent from 2019's 4<sup>th</sup> quarter to 2020's 2<sup>nd</sup> quarter, then expanded 12.0 percent to 2021's 3<sup>rd</sup> quarter, essentially returning to where it was – again, very close to the U.S. experience.
- Ohio remains the 7<sup>th</sup> largest source for the U.S. GDP with 3.2 percent of the national total (2021)
- If Ohio was a separate country, it would be the 34<sup>th</sup> largest national economy in the world.
- Manufacturing is the largest of the 20 sectors in Ohio's economy with 15.9 percent of its total output in 2021's 3<sup>rd</sup> quarter; durable goods manufacturing was 8.3 percent while non-durable goods manufacturing was 7.6 percent.
- Ohio's manufacturing sector produced goods at an annualized rate of \$117.8 billion in 2021's 3<sup>rd</sup> quarter, ranking it 4<sup>th</sup> after California, Texas and Illinois.
- Ohio is a leading source for many manufactured goods: primary and fabricated metal products as well as non-metallic mineral products, plastic and rubber goods, machinery, electrical equipment and appliances, and transportation equipment – especially motor vehicles and associated parts (2020).
- Oil and natural gas extraction in Ohio fell in 2020 from its 2019 peak; nevertheless, the related pipeline transportation and manufacture of petroleum and coal products remain concentrated here.
- Major service industries concentrated here include banking and related services, insurance, trucking, warehousing and storage, hospitals, nursing and residential care, waste management and remediation, enterprise management (53 Fortune U.S.-1,000 companies have their headquarters here, with six of those on Fortune's Global-500 list), and amusements, gambling and recreation facilities (2020).
- Oil and gas extraction, financial and insurance services, ambulatory health care, enterprise management and real estate (which in turn is principally home ownership) are the most notable of 34 specific industries whose expansions have driven Ohio's growth from 2000 through 2020.

- Moody's (2021) predicts Ohio's recovering economy will grow 4.5 percent for all of 2021 after adjusting for inflation, essentially returning to its 2019 total. It further predicts 5.2 percent real growth in 2022, with growth thereafter tapering off to pre-COVID-19 rates between 2.8 and 1.8 percent. Resurgent consumer confidence, expanding health care and revitalized manufacturing sectors are expected to lead the recovery. It also predicts 107,000 jobs will be added for all of 2021 followed by 159,000 in 2022 – annual growth rates of 2.1 and 3.0 percent. However, a complete recovery to the pre-COVID-19 level of employment is not expected until 2023 or 2024.
- The Cleveland-Elyria and Columbus metropolitan areas (MAs), combined with the Ohio portion of the Cincinnati MA, produced 58.3 percent of Ohio's GDP in 2020; similarly, Franklin, Cuyahoga, Hamilton, Summit, Montgomery and Lucas Counties combined to produce 53.8 percent; the six are the central counties of six multi-county MAs.

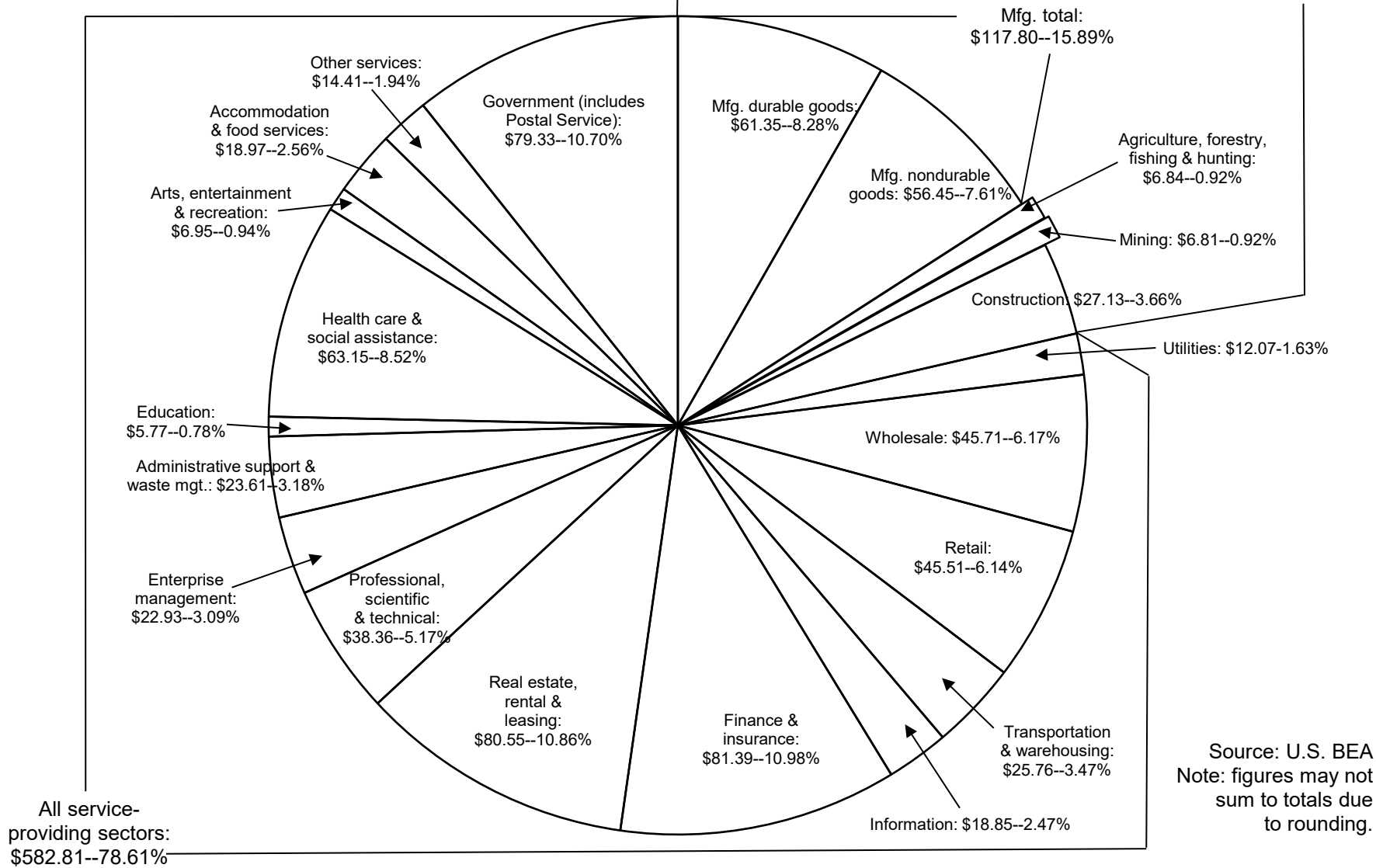
**DESCRIPTION OF OHIO'S ECONOMY AND THE IMPACT OF COVID-19**

# Ohio's Gross Domestic Product by Sector: 3rd Qtr. 2021 Annualized Rates

(in billions, except percentages)

Total: \$741.40--100.0%  
 Private sector: \$662.07--89.30%

All goods-producing sectors: \$158.59--21.39%



Source: U.S. BEA  
 Note: figures may not sum to totals due to rounding.

## OHIO'S ECONOMY IN 2021

The chart above illustrates the distribution of economic activity in Ohio across 20 sectors defined by the North American Industry Classification System (NAICS). Ohio's total economic output for the 3<sup>rd</sup> quarter of 2021 is initially estimated at an annual rate of \$741.40 billion; \$662.07 billion – 89.30 percent – came from the private sector, with \$79.33 billion – 10.70 percent – from federal, state and local government services.

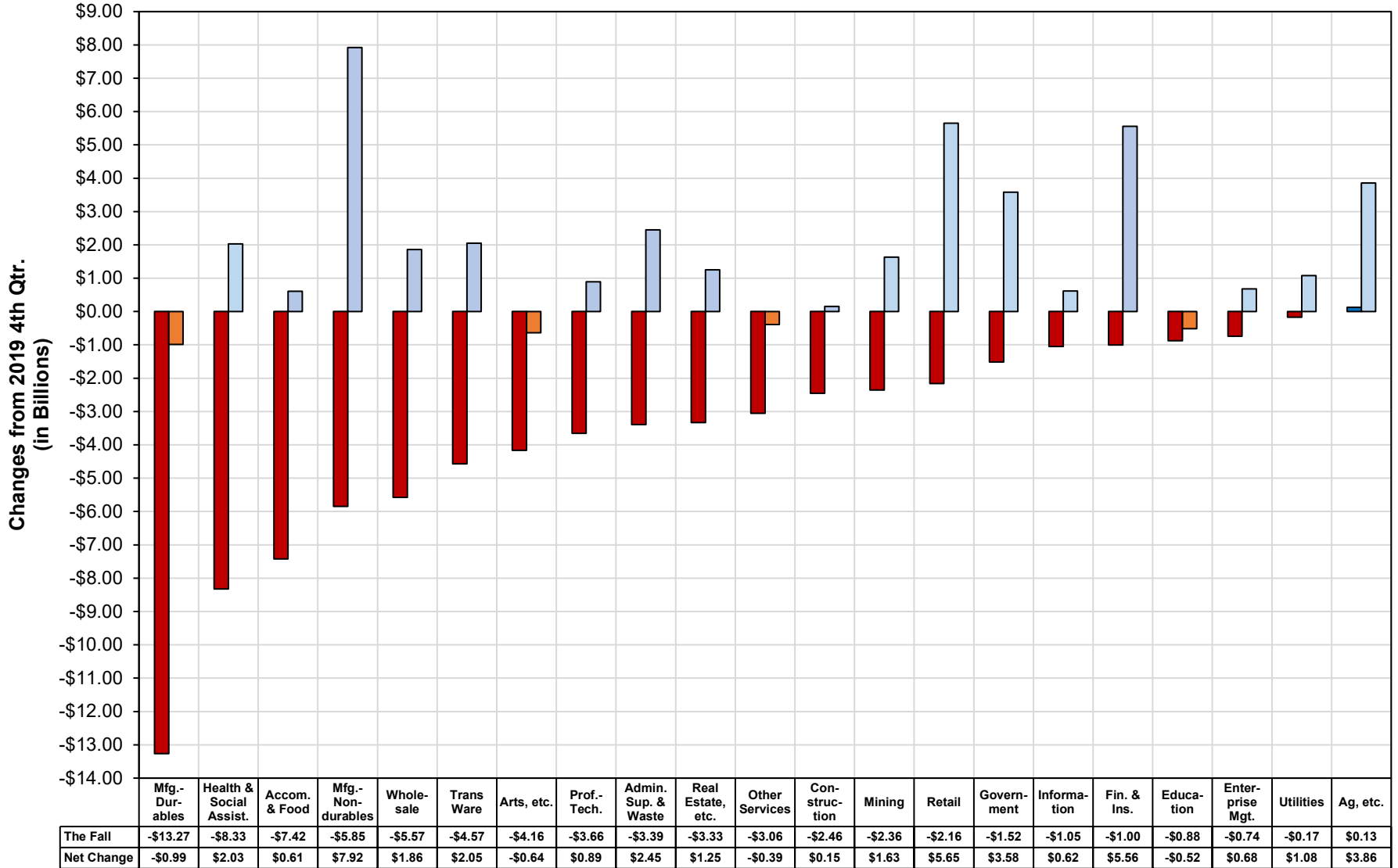
Manufacturing was the largest single sector, with such establishments producing final goods valued at \$117.80 billion, which is 15.89 percent of the state's total output. Manufacturers are divided into producers of durable and non-durable goods, with the former producing more than the latter: \$61.35 billion and 8.28 percent, compared with \$56.45 billion and 7.61 percent. Durable goods generally are made to last at least three years, while non-durables usually are expected to last less than three years. Other goods-producing sectors play smaller roles in Ohio's economy. They include construction at \$27.13 billion and 3.66 percent, agriculture-forestry-fishing-hunting at \$6.84 billion and 0.92 percent, and mining at \$6.81 billion and 0.92 percent. Combined output of these goods-producing sectors totaled \$158.59 billion, or 21.39 percent of the total GDP from Ohio.

Services provided by public and private sectors in Ohio totaled \$582.81 billion, or 78.61 percent of its economy. Total private sector services (i.e. excluding government services) were \$503.48 billion, or 67.91 percent of the total. The financial activities sectors – finance-insurance and real estate-rental-leasing – are the two largest private service sectors with nearly equal output (between \$81.39 and \$80.55 billion each) and nearly equal portions (between 10.98 and 10.86 percent). The size of the real estate sector primarily indicates the role homeownership plays in the economy, not just the activity of real estate agents, landlords, lessors, etc. They were followed by health care and social assistance at \$63.15 billion and 8.52 percent. Other private service sectors providing at least five percent of Ohio's economic output were wholesale and retail trade and professional-scientific-technical services. Other sectors played smaller roles. These include utilities, transportation and warehousing, information, enterprise management, administrative-support/waste-management, private sector educational services, arts-entertainment-recreation, accommodation and food services, and the catch-all category of other non-governmental services.

See Table A1a

## Nominal Changes in Ohio's GDP by Sector

4th Qtr. 2019 to 2nd Qtr. 2020 (the Fall on the Left)  
and to 3rd Qtr. 2021 (the Net Change on the Right)



Source: U.S. BEA

## THE IMPACT OF COVID-19: THE MAGNITUDE OF OUTPUT CHANGES, 2019-2021

The chart above illustrates the impact of the COVID-19 epidemic on Ohio's economy and how it has varied by sector. Ohio's total economic output fell \$74.8 billion from annualized rates of \$702.1 billion in 2019's 4<sup>th</sup> quarter to \$627.3 billion in 2020's 2<sup>nd</sup> quarter, a 10.7 percent contraction. Four sectors accounted for just over one-half of the aggregate contraction: manufacturing, health care and social assistance, accommodation and food services, and wholesale trade; these are represented by the five dark red columns at the left (manufacturing is subdivided into durables and non-durables). The impact of the COVID-19 recession was widespread, though, with output from almost all the remaining sectors contracting; the exception is agriculture-forestry-fishing-hunting, the tiny dark blue column at near far right.

Ohio's total economic output rose \$114.1 billion from the 2020 2<sup>nd</sup> quarter rate of \$627.3 billion to the 2021 3<sup>rd</sup> quarter rate of \$741.4 billion, an 18.2 percent increase. Ohio's total output in 2021's 3<sup>rd</sup> quarter also was 5.6 percent more than the 2019 4<sup>th</sup> quarter peak before the recession (no adjustment has been made for inflation).

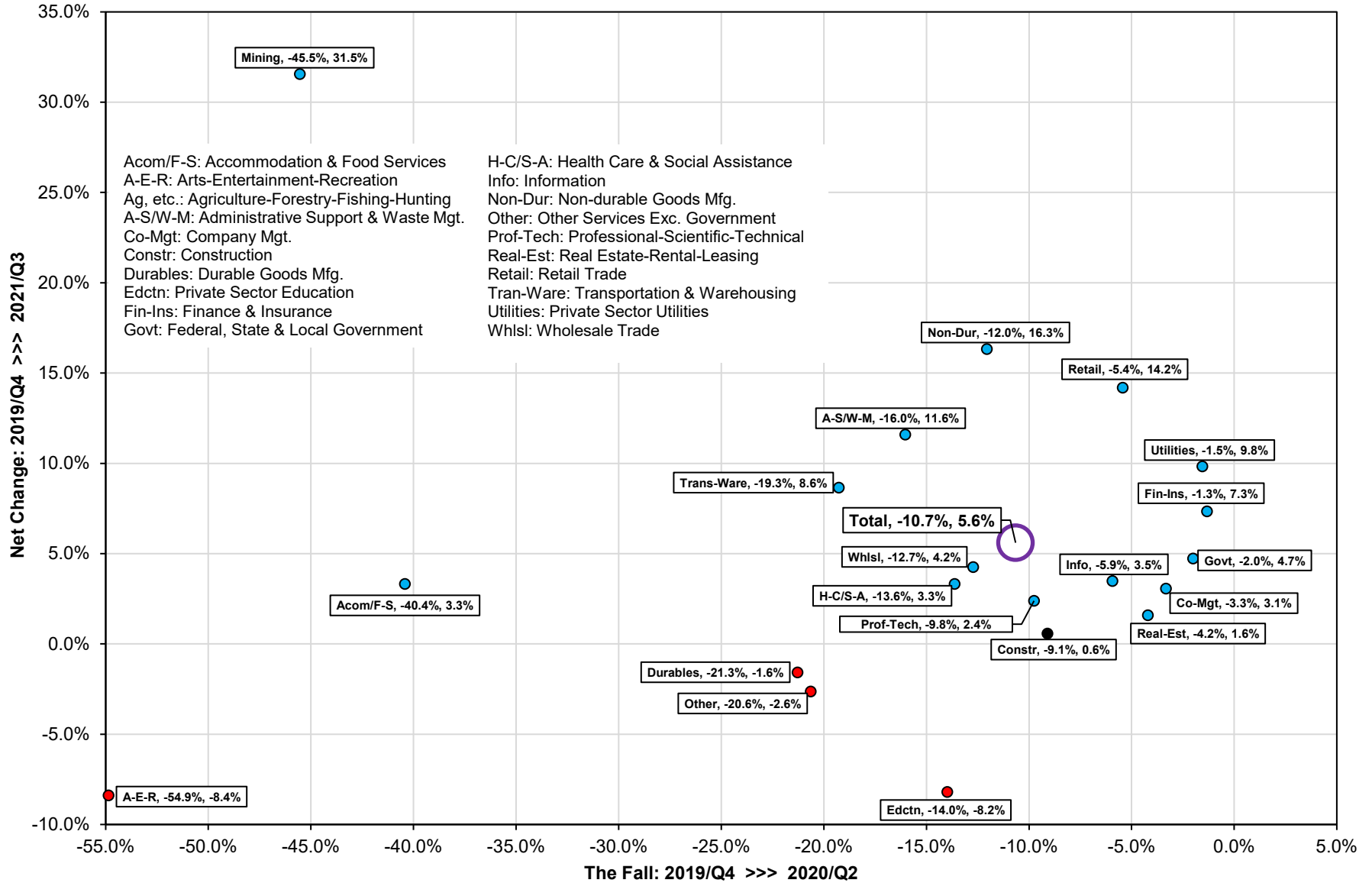
Those figures suggest the recession is over and the recovery complete, but the chart above shows this is not uniformly true; the extent of recovery has varied by sector. The pale blue columns show 3<sup>rd</sup> quarter 2021 output from 16 sectors appears greater – if only marginally – than output from 4<sup>th</sup> quarter 2019. These contrast with the orange columns, which show 3<sup>rd</sup> quarter 2021 output is still less than 4<sup>th</sup> quarter 2019. Manufacturing is counted as one sector. However, the differing lengths between associated red and orange columns indicates varying degrees of progress in recovery in those lagging sectors.

Except for the agriculture-forestry-fishing-hunting sector, these changes are nearly proportional with corresponding changes for the national economy.

See Table A1b

# Nominal Percentage Changes in Ohio's GDP by Sector

4th Qtr. 2019 to 2nd Qtr. 2020 (the Fall, the First Figure)  
and to 3rd Qtr. 2021 (the Net Change, the Second Figure)



Source: U.S. BEA



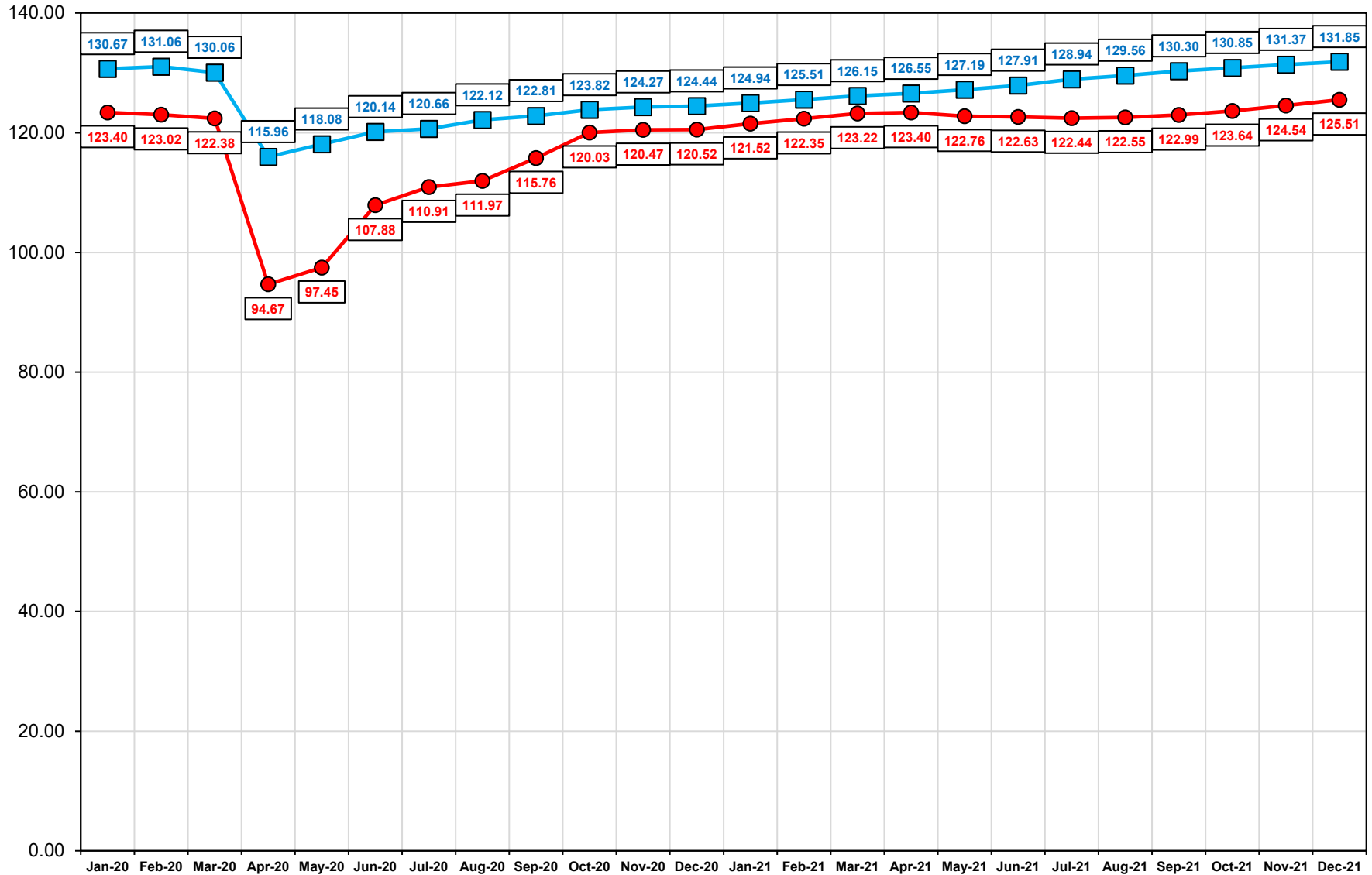
## THE IMPACT OF COVID-19: THE RELATIVE OUTPUT CHANGES, 2019-2021

The preceding section described the magnitude of changes for Ohio's economy overall and by sector. This section describes the relative impact and differential recovery by sector because sectors vary substantially in size. The chart above illustrates the percentage changes in output from 2019's 4<sup>th</sup> quarter to 2020's 2<sup>nd</sup> quarter; they are bracketed by the horizontal axis range of -55.0 to 5.0 percent. They are paired with the net percentage change from 2019's 4<sup>th</sup> quarter to 2021's 3<sup>rd</sup> quarter; the latter are bracketed by the vertical axis range of -10.0 to 35.0 percent. (The volatile agriculture-forestry-fishing-hunting sector is not shown because it is an outlier; it is off-scale high with a 129.1 percent net change from 2019's 4<sup>th</sup> quarter to 2021's 3<sup>rd</sup> quarter.) The purple circle in the chart illustrates the overall changes in Ohio's total output: a 10.7 percent contraction from 2019's 4<sup>th</sup> quarter to 2020's 2<sup>nd</sup> quarter, but a net expansion of 5.6 percent over nine quarters. The 11 dots to the left of the circle indicate sectors experiencing relatively more severe contractions, and the eight dots to the right represent sectors contracting proportionally less than average.

The blue dots represent sectors with net growth of at least 1.0 percent over the nine quarters; the red dots indicate sectors lagging in recovery by at least 1.0 percent. The one black dot indicates the construction sector is within 1.0 percent of its 2019 4<sup>th</sup> quarter output. Finally, it should be noted factors independent of COVID-19 could have influenced the nominal changes seen in the chart. For example, arts-entertainment-recreation and private sector educational services are known for seasonal variability, and agricultural output is affected by favorable and unfavorable weather.

See Table A1b

## Philadelphia FRB Conincident Economic Indicators Index Values for Ohio and the U.S. (2007 Annual Average=100)



Source: Philadelphia Federal Reserve Bank

—●— Ohio    —■— U.S.

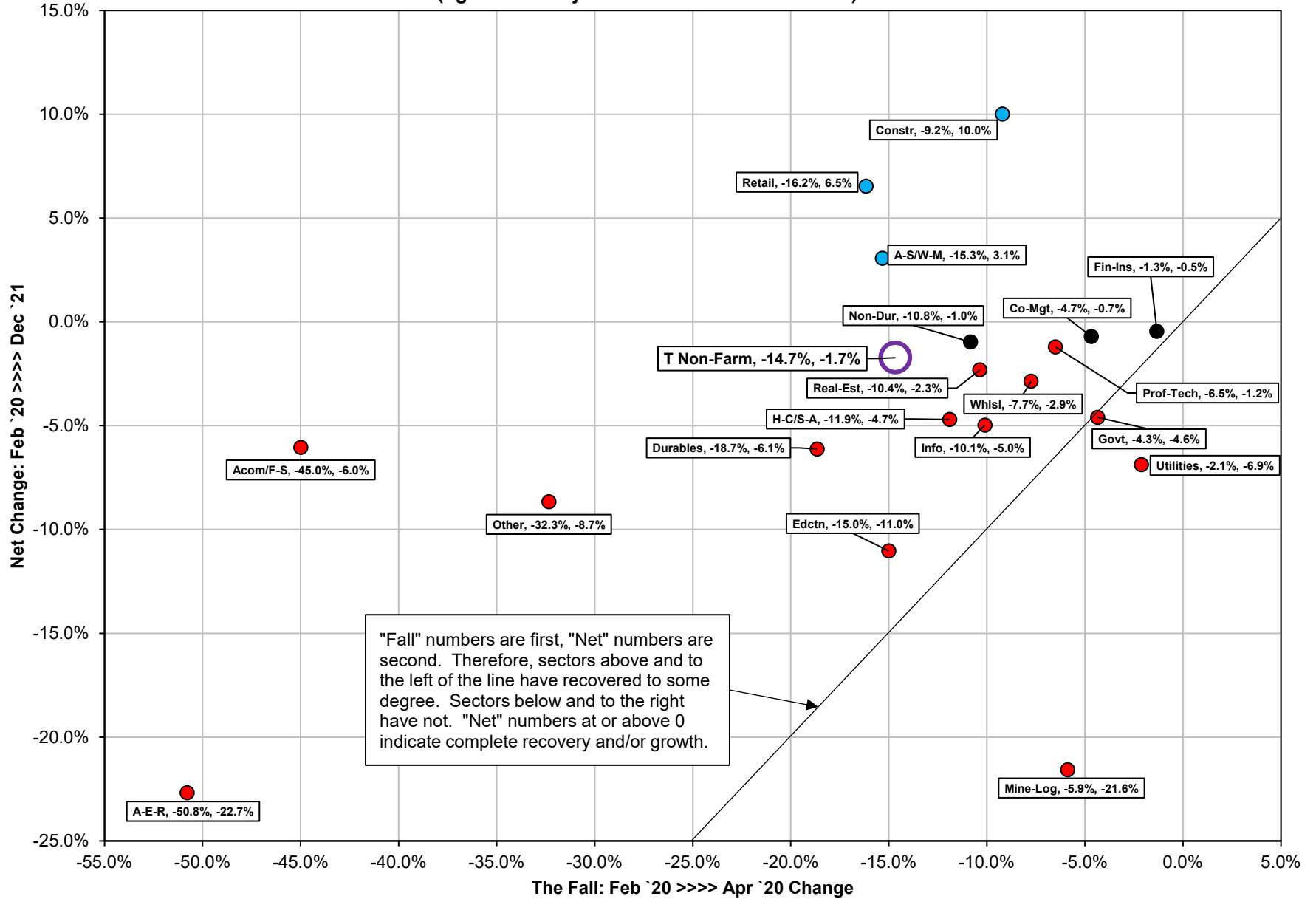
## **THE IMPACT OF COVID-19: INDICATORS FROM THE PHILADELPHIA FEDERAL RESERVE BANK**

The Philadelphia Federal Reserve Bank developed and publishes a monthly coincident economic output index for all states, permitting comparisons between them and with the nation. The index summarizes in one number the state-level changes in nonfarm payroll employment, average hours worked per week by manufacturing production workers, the unemployment rate, and wage and salary pay deflated by the U.S. Consumer Price Index. The figures in the chart above estimate the monthly changes in economic output from Ohio and the U.S. from January 2020 to the latest available month; they are as close to current as possible.

Index values in the chart above indicate output from Ohio (red dots) contracted 23.3 percent from 123.40 in January 2020 to 94.67 in April 2020. Index values subsequently rose, indicating economic expansion. The recovery first evident in May 2020 was initially rapid with the index rising more than 25 points from the April low to 120.03 in October 2020. The pace of the recovery slowed after that. The April 2021 value of 123.40 implies Ohio's overall economic output completely recovered and appears fairly steady since. The December 2021 value of 125.51 is 1.7 percent greater than the January 2020 value.

Corresponding numbers for the U.S. (blue squares) show an 11.3 percent decline from January to April 2020 followed by a 13.7 percent increase to December 2021. U.S. economic output in December 2021 appears to be 0.9 percent greater than what it was in January 2020, suggesting the Ohio's recovery is largely in line with that of the nation. The increasing index numbers for Ohio and the nation in October, November and December 2021 indicate the economic expansion seen in the BEA's figures continues into 2021's 4<sup>th</sup> quarter.

## Percentage Changes in Employment in Ohio by Sector (figures not adjusted for seasonal variations)



Source: U.S. BLS

## THE IMPACT OF COVID-19: JOBS

COVID-19 has impacted sector employment in ways similar to its impact on sector economic output. The chart above illustrates two changes over a 16-month period: 1) “the fall” of non-farm employment – overall and by sector – from the overall peak in February to total low point in April 2020, bracketed by the range on the horizontal axis, and 2) the “net change” from February 2020 through November 2021, bracketed by the vertical axis; both figures are percentage changes. To summarize:

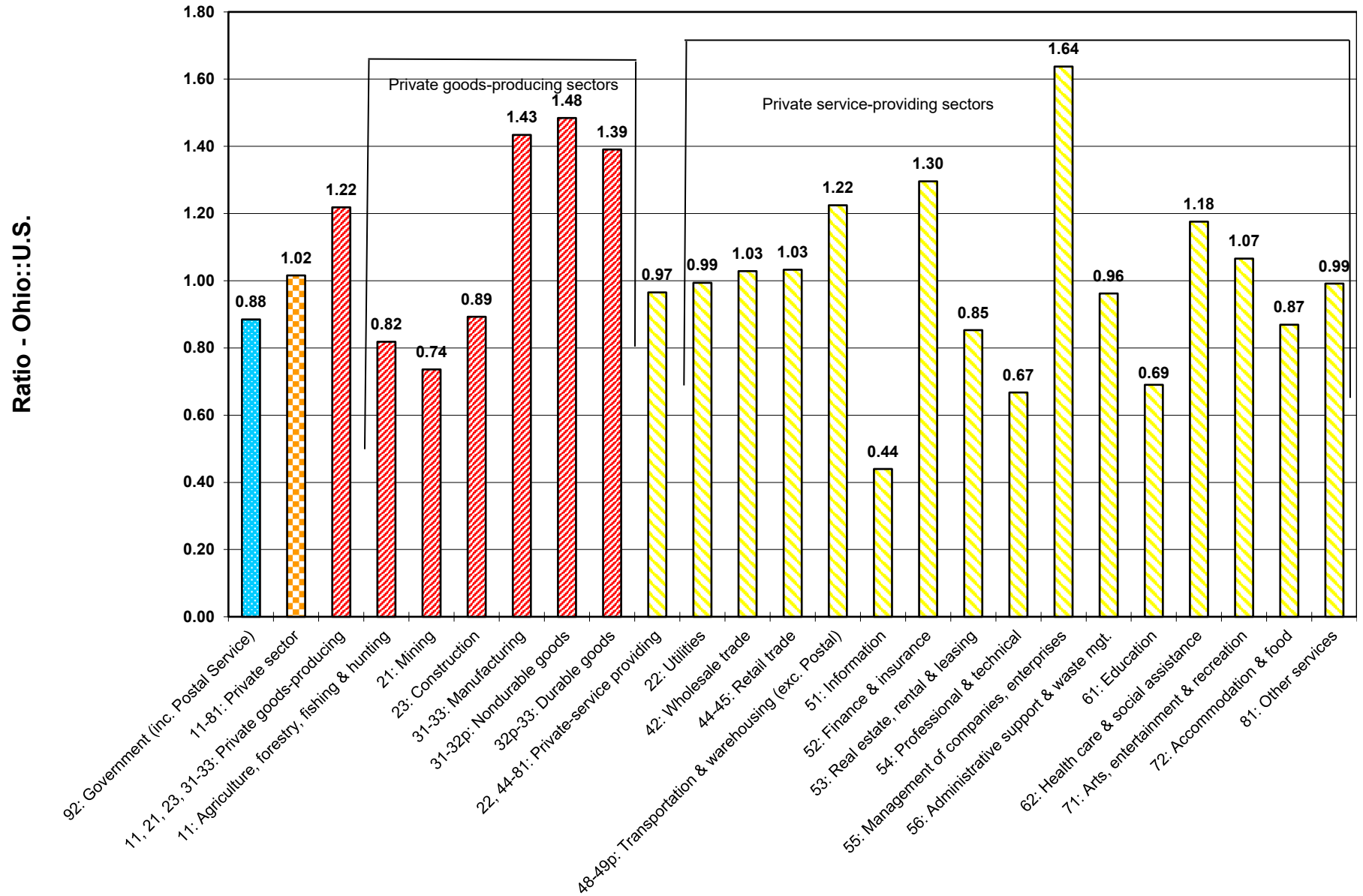
- The purple circle illustrates the overall change in Ohio’s total non-farm employment: a 14.7 percent decline from February 2020 to April 2020 paired with a net decline of 1.5 percent from February 2020 to November 2021;
- The solid-color dots illustrate relative employment changes by sector (manufacturing is divided into durable and non-durable good production);
  - those to the right of the purple circle saw proportionally milder employment losses in the fall;
  - those to the left saw more severe losses in the fall;
  - those above the level of the purple circle had net gains or relatively milder net losses in net change;
  - those below the level of the purple circle are lagging in recovery;
- The blue dots mark sectors with net employment gains; however, some of the net gains and losses – such as in retail and in the arts-entertainment-recreation sectors – probably incorporate seasonal changes in addition to recovery;
- The black dots mark sectors back to within plus-or-minus 1.0 percent of pre-pandemic employment levels;
- The red dots mark sectors with net losses still greater than 1.0 percent;
- A diagonal line has been added to distinguish sectors regaining jobs (i.e., having net gains or at least net losses less than their February-to-April losses) and sectors experiencing further losses; the former are above and to the left and the latter are below and to the right.

Appendix Table A1c records the loss and gain numbers that are the bases of the percentages seen above. It also records varied and even divergent changes of industries within sectors too numerous to be listed here (e.g., public education vs. the rest of government). Although COVID-19 and the response to it have had an impact, seasonal, market and other factors have affected changing employment numbers as well.

See Table A1c

Although the total number of nonfarm jobs in November 2021 is less than the February number, the November 2021 civilian non-institutional unemployment rate is less than in February 2020 – 3.5 percent vs. 5.0 percent. This seeming contradiction with job numbers is explained by the corresponding drop in the labor force participation rate from 63.6 percent to 61.3 percent.

## The Relative Concentration of U.S. Economic Activity in Ohio, 3rd Qtr. 2021



Source: U.S. BEA

## COMPARING THE DISTRIBUTION OF ECONOMIC ACTIVITY IN OHIO WITH THAT OF THE U.S.

Preceding sections showed the distribution of economic activity in Ohio across 20 sectors of the economy. For example, manufacturing was the largest sector in Ohio at 15.89 percent of GDP in 2021's 3<sup>rd</sup> quarter, while agriculture-forestry-fishing-hunting (AFFH) was one of the smallest at 0.92 percent. This section furthers our understanding of Ohio's economy by comparing the distribution of output across sectors in Ohio with the corresponding national distribution. The graph above shows the *ratios* of these percentages for each sector. Continuing with the two examples, output from manufacturing and AFFH comprised 11.08 and 1.13 percent, respectively, of U.S. GDP during the same time. When compared with those for Ohio, these yield ratios of 1.43 for manufacturing (15.89 percent divided by 11.08 percent) and .82 for AFFH (0.92 percent divided by 1.13 percent – all figures are rounded). There are two ways to express the meanings of these figures. One way is to say that Ohio's economy is *relatively* more dependent on manufacturing and less dependent on AFFH than the American economy. The other way is to note manufacturing in America is concentrated in Ohio, while AFFH is not. (A ratio of 1.00 indicates exactly proportional activity, neither concentrated nor sparse.)

The concentration of one sector or industry here means that another must be relatively sparse. In this sense, a broad description of Ohio's economy is illustrated by the chart above. It is driven a bit more by private sector activity than by government activity, as indicated by the concentration ratios of 1.02 and .88, respectively (orange and blue columns). Although overall goods-production is concentrated in the state (1.22, red), this reflects the concentration of manufacturing activity here (1.43) – with both durable and non-durable goods production concentrated here (1.39 and 1.48). On the other hand, AFFH production, mining and construction activity are more or less sparse (ranging from .74 to .89).

The preceding section showed that service-providing industries collectively account for most economic activity in Ohio (78.61 percent with government, 67.91 percent without); yet the graph above shows that, as a whole, the collective contribution of non-governmental services to the GDP from Ohio is very close to proportional with that of the nation (.97, yellow). However, this generalization masks considerable variability. The most notable departure is the concentration of enterprise management (1.64). The finance-insurance, transportation-warehousing, and health care-social assistance sectors are at least somewhat concentrated in Ohio. Other service sectors that are roughly proportional with the national distribution include utilities, wholesale and retail trade, administrative-support/waste-management, and other non-governmental services grouped in NAICS 81. The mild concentration of arts-entertainment-recreation may be due to the quarterly high point of this seasonal sector. Ohio's economy is less reliant on the remaining private service sectors.

See Table A1a

More-specific industry comparisons between Ohio and the U.S. follow on the next three pages.

**Ohio and U.S. Gross Domestic Products by Industry, 2020 (current dollar figures in millions)**

2012 NAICS Codes	Industry Titles	GDP		Ohio as a Percent of the U.S.	Ohio::U.S. Concentra- tion Ratio	Ohio's Rank	Top Five States
		Ohio	U.S.				
11-92	Total	\$677,561	\$20,893,746	3.24%	1.00	7	CA, TX, NY, FL, IL
11-81*	Private industries*	\$601,898	\$18,223,132	3.30%	1.02	7	CA, TX, NY, FL, IL
11, 21, 23, 31-33	Private goods producing industries	\$139,369	\$3,524,445	3.95%	1.22	<b>4</b>	CA, TX, IL, <b>OH</b> , PA
11	Agriculture, forestry, fishing, etc.	\$3,915	\$174,527	2.24%	0.69	13	CA, WA, TX, IA, IL
111-2	Crop & animal production (farms)	\$3,359	\$134,661	2.49%	0.77	13	CA, IA, WA, IL, NE
113-5	Forestry, fishing & related activities	\$556	\$39,865	1.39%	0.43	17	CA, WA, FL, TX, OR
21	Mining	\$4,066	\$182,099	2.23%	0.69	14	TX, OK, CO, PA, WV
211	Oil & gas extraction	\$2,573	\$97,653	2.63%	0.81	9	TX, OK, CO, ND, NM
212	Mining, exc. oil & gas	\$1,078	\$56,742	1.90%	0.59	22	WV, AZ, NV, TX, WY
213	Support activities for mining	\$416	\$27,704	1.50%	0.46	11	TX, LA, ND, CO, OK
23	Construction	\$26,084	\$895,860	2.91%	0.90	8	CA, TX, FL, NY, PA
31-33	Manufacturing	\$105,303	\$2,271,960	4.63%	1.43	<b>4</b>	CA, TX, IL, <b>OH</b> , NC
32p & 33	Durable goods	\$57,594	\$1,268,834	4.54%	1.40	<b>4</b>	CA, TX, MI, <b>OH</b> , IN
321	Wood products	\$1,363	\$42,241	3.23%	0.99	13	CA, GA, OR, TX, PA
327	Nonmetallic mineral products	\$4,248	\$66,753	6.36%	1.96	<b>3</b>	TX, CA, <b>OH</b> , FL, NY
331	Primary metals	\$4,761	\$58,310	8.16%	2.52	<b>3</b>	IN, PA, <b>OH</b> , AL, TX
332	Fabricated metal products	\$10,154	\$145,810	6.96%	2.15	<b>3</b>	CA, TX, <b>OH</b> , IL, PA
333	Machinery	\$8,433	\$157,569	5.35%	1.65	<b>5</b>	TX, CA, IL, WI, <b>OH</b>
334	Computer & electronic products	\$2,730	\$317,342	0.86%	0.27	19	CA, TX, MA, OR, NC
335	Electrical eqpt. & appliances	\$4,841	\$63,600	7.61%	2.35	<b>2</b>	CA, <b>OH</b> , IL, NC, PA
336	Transportation eqpt.	\$17,191	\$285,105	6.03%	1.86	6	MI, TX, WA, CA, IN
3361-3	Motor vehicles, bodies, trailers & parts	\$10,867	\$154,638	7.03%	2.17	<b>4</b>	MI, IN, TX, <b>OH</b> , TN
3364-9	Other transportation eqpt.	\$6,325	\$130,467	4.85%	1.49	<b>5</b>	WA, CA, TX, CT, <b>OH</b>
337	Furniture & related products	\$1,146	\$31,530	3.64%	1.12	8	CA, MI, NC, IN, TX
339	Miscellaneous mfg.	\$2,728	\$100,574	2.71%	0.84	15	CA, MN, IN, IL, FL
31 & 32p	Nondurable goods	\$47,709	\$1,003,125	4.76%	1.47	6	CA, TX, IL, NC, PA
311-2	Food, beverage & tobacco products	\$12,322	\$289,763	4.25%	1.31	6	CA, NC, VA, TX, IL
313-4	Textile & textile product mills	\$369	\$15,297	2.41%	0.74	10	GA, NC, SC, CA, NY
315-6	Apparel, leather & allied products	\$225	\$9,802	2.30%	0.71	11	CA, NY, TX, IL, MA
322	Paper	\$2,353	\$59,738	3.94%	1.21	10	WI, PA, GA, CA, SC
323	Printing & related support activities	\$1,809	\$39,602	4.57%	1.41	8	CA, IL, WI, MN, PA
324	Petroleum & coal products	\$5,142	\$113,676	4.52%	1.39	7	TX, CA, LA, PA, IL
325	Chemical	\$19,541	\$394,623	4.95%	1.53	8	CA, TX, IL, IN, NJ
326	Plastics & rubber products	\$5,949	\$80,624	7.38%	2.28	<b>2</b>	IL, <b>OH</b> , TX, CA, PA



**Ohio and U.S. Gross Domestic Products by Industry, 2020 (current dollar figures in millions)**

2012 NAICS Codes	Industry Titles	GDP		Ohio as a Percent of the U.S.	Ohio::U.S. Concentra- tion Ratio	Ohio's Rank	Top Five States
		Ohio	U.S.				
22, 42-81 <sup>1</sup>	Private service providing industries <sup>1</sup>	\$462,529	\$14,698,687	3.15%	0.97	8	CA, NY, TX, FL, IL
22	Utilities	\$10,907	\$341,717	3.19%	0.98	9	CA, TX, NY, FL, IL
42	Wholesale trade	\$41,728	\$1,243,274	3.36%	1.03	9	CA, TX, FL, NY, IL
44-45	Retail trade	\$40,682	\$1,202,203	3.38%	1.04	7	CA, TX, FL, NY, WA
48-49*	Transportation & warehousing*	\$22,116	\$572,021	3.87%	1.19	7	CA, TX, IL, FL, PA
481	Air transportation	\$1,681	\$57,907	2.90%	0.89	11	TX, CA, IL, FL, GA
482	Rail transportation	\$1,261	\$37,559	3.36%	1.04	9	TX, NE, IL, CA, MO
483	Water transportation	\$106	\$9,600	1.10%	0.34	19	FL, LA, CA, TX, NY
484	Truck transportation	\$7,821	\$164,719	4.75%	1.46	<b>4</b>	CA, TX, IL, <b>OH</b> , PA
485	Transit & ground passenger transportation	\$446	\$37,384	1.19%	0.37	18	CA, NY, MA, IL, NJ
486	Pipeline transportation	\$1,614	\$41,194	3.92%	1.21	6	TX, PA, OK, AK, CO
487-8, 492	Other transportation & support activities	\$5,081	\$143,803	3.53%	1.09	8	CA, TX, FL, IL, TN
493	Warehousing & storage	\$4,107	\$79,857	5.14%	1.59	<b>4</b>	CA, TX, PA, <b>OH</b> , NJ
51	Information	\$17,117	\$1,167,921	1.47%	0.45	14	CA, NY, WA, TX, GA
511	Publishing (inc. software, exc. Internet)	\$5,259	\$319,988	1.64%	0.51	14	CA, WA, NY, MA, TX
512	Motion pictures & sound recordings	\$258	\$70,140	0.37%	0.11	22	CA, NY, GA, TN, CT
515, 517	Broadcasting & telecommunications	\$8,199	\$459,473	1.78%	0.55	16	CA, NY, TX, PA, GA
518, 519	Data prcsng., hosting, other info. (inc. Internet)	\$3,401	\$318,321	1.07%	0.33	16	CA, NY, WA, TX, IL
52	Finance & insurance	\$76,445	\$1,787,746	4.28%	1.32	<b>5</b>	NY, CA, TX, IL, <b>OH</b>
521-2	Federal Reserve banks, credit intermediation, etc.	\$41,290	\$780,960	5.29%	1.63	<b>4</b>	NY, CA, TX, <b>OH</b> , NC
523	Securities, commodity contracts, investments	\$4,963	\$341,381	1.45%	0.45	12	NY, CA, MA, TX, IL
524	Insurance carriers & related activities	\$29,975	\$640,299	4.68%	1.44	6	NY, TX, CA, IL, FL
525	Funds, trusts & other financial vehicles	\$216	\$25,105	0.86%	0.26	19	TX, NY, CA, MA, IL
53	Real estate, rental & leasing	\$77,313	\$2,804,359	2.76%	0.85	9	CA, NY, TX, FL, IL
531	Real estate	\$71,962	\$2,563,063	2.81%	0.87	9	CA, NY, TX, FL, IL
532-3	Rental & leasing svcs. & lessors of intangible assets	\$5,351	\$241,296	2.22%	0.68	12	CA, TX, GA, FL, NY
54	Professional, scientific & technical svcs.	\$35,484	\$1,627,764	2.18%	0.67	16	CA, NY, TX, FL, MA
5411	Legal svcs.	\$6,090	\$281,743	2.16%	0.67	12	NY, CA, TX, FL, IL
5415	Computer systems design & related svcs.	\$7,997	\$366,626	2.18%	0.67	15	CA, TX, VA, NY, MA
5412-4, 5416-9	Other professional, scientific & technical svcs.	\$21,397	\$979,395	2.18%	0.67	16	CA, NY, TX, MA, FL
55	Management of companies & enterprises	\$22,808	\$410,456	5.56%	1.71	<b>5</b>	CA, NY, TX, PA, <b>OH</b>

**Ohio and U.S. Gross Domestic Products by Industry, 2020 (current dollar figures in millions)**

2012 NAICS Codes	Industry Titles	GDP		Ohio as a Percent of the U.S.	Ohio::U.S. Concentra- tion Ratio	Ohio's Rank	Top Five States
		Ohio	U.S.				
56	Administrative & waste srvcs.	\$20,043	\$651,554	3.08%	0.95	10	CA, TX, NY, FL, IL
561	Administrative & support srvcs.	\$17,656	\$591,716	2.98%	0.92	11	CA, TX, NY, FL, IL
562	Waste management & remediation srvcs.	\$2,387	\$59,838	3.99%	1.23	6	CA, TX, WA, FL, NY
61	Educational srvcs.	\$5,693	\$251,318	2.27%	0.70	13	NY, CA, PA, MA, TX
62	Health care & social assistance	\$58,655	\$1,547,286	3.79%	1.17	7	CA, NY, TX, FL, PA
621	Ambulatory health care srvcs.	\$25,179	\$738,500	3.41%	1.05	6	CA, TX, FL, NY, PA
622	Hospitals	\$22,537	\$513,018	4.39%	1.35	7	CA, NY, TX, FL, PA
623	Nursing & residential care facilities	\$6,855	\$154,999	4.42%	1.36	6	CA, NY, PA, FL, TX
624	Social assistance	\$4,085	\$140,768	2.90%	0.89	9	CA, NY, PA, TX, MA
71	Arts, entertainment & recreation	\$5,688	\$163,359	3.48%	1.07	7	CA, NY, FL, TX, IL
711-2	Performing arts, museums & related activities	\$2,486	\$91,298	2.72%	0.84	8	CA, NY, FL, TX, PA
713	Amusements, gambling & recreation	\$3,202	\$72,061	4.44%	1.37	6	CA, FL, TX, IL, NY
72	Accommodation & food srvcs.	\$14,424	\$508,719	2.84%	0.87	9	CA, TX, FL, NY, IL
721	Accommodation	\$1,550	\$115,768	1.34%	0.41	22	CA, FL, NV, NY, TX
722	Food srvcs. & drinking places	\$12,874	\$392,951	3.28%	1.01	6	CA, TX, FL, NY, IL
81	Other srvcs., exc. government	\$13,429	\$418,990	3.20%	0.99	7	CA, TX, NY, FL, IL
92, 491	Government	\$75,664	\$2,670,611	2.83%	0.87	11	CA, TX, NY, FL, VA
92fc, 92811, 491	Federal government	\$17,606	\$848,354	2.08%	0.64	13	CA, MD, VA, TX, DC
92fc, 491	Civilian (inc. Postal Service)	\$12,817	\$506,382	2.53%	0.78	12	CA, MD, DC, VA, TX
92811	Military	\$4,789	\$341,972	1.40%	0.43	13	CA, VA, TX, FL, NC
92sl	State & local	\$58,058	\$1,822,254	3.19%	0.98	7	CA, NY, TX, FL, IL

Notes and abbreviations: ^ - totals for the U.S. include domestic and foreign activities; however, foreign activities are not allocated to the states or the District of Columbia; components may not sum to totals due to rounding; \* - excludes Postal Service (491); exc. - except; inc. - including; info. - information; p - part; prcsng. - processing; srvcs. - services.

Sources: U.S. Bureau of Economic Analysis (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

The table beginning on page 18 highlights the major industries with comparatively large contributions to Ohio's overall 4<sup>th</sup> rank and high concentration in manufacturing (NAICS code 31-33) during 2020. They include:

- chemicals (NAICS code 325) – \$19.54 billion, 4.95 percent of the U.S. industry total and the 8<sup>th</sup>-largest source of all such products in the nation,
- the core of the motor vehicle industry: cars, trucks, trailers, RVs, their parts and accessories (3361-3) – \$10.87 billion, 7.03 percent, 4<sup>th</sup>,
- fabricated metal products (332) – \$10.15 billion, 6.96 percent, 3<sup>rd</sup>,
- machinery (333) – \$8.43 billion, 5.35 percent, 5<sup>th</sup>,
- primary metal products (331) – \$4.76 billion, 8.16 percent, 3<sup>rd</sup>,
- plastic and rubber products (326) – \$5.95 billion, 7.38 percent, 2<sup>nd</sup>,
- petroleum and coal products (324) – \$5.14 billion, 4.52 percent, 7<sup>th</sup>,
- electrical equipment and appliances (335) – \$4.84 billion, 7.61 percent, 2<sup>nd</sup>, and
- nonmetallic mineral products (327) – \$4.25 billion, 6.36 percent, 3<sup>rd</sup>.

The concentration of so many major manufacturing industries in Ohio is the reason why Ohio ranked 4<sup>th</sup> in total goods production (11, 23-33) with 3.95 percent of U.S. output.

The table also lists service-providing industries making comparatively large contributions to Ohio's and the nation's GDP during 2020:

- banks (including Federal Reserve offices), savings-and-loans, credit unions, non-depository financing and related activities (521-2) – \$41.29 billion, 5.29 percent, 4<sup>th</sup>,
- insurance carriers, agencies and related activities (524) – \$29.98 billion, 4.68 percent, 6<sup>th</sup>,
- enterprise management (55) – \$22.81 billion, 5.56 percent, 5<sup>th</sup>,
- hospitals (622) – \$22.54 billion, 4.39 percent, 7<sup>th</sup>,
- nursing and residential care facilities (623) – a \$6.86 billion, 4.42 percent, 6<sup>th</sup>,
- truck transportation (484) – \$7.82 billion, 4.75 percent, 4<sup>th</sup>,
- warehousing and storage (493) – \$4.12 billion, 5.14 percent, 4<sup>th</sup>,
- amusements, gambling and recreation (713) – \$3.20 billion, 4.44 percent, 6<sup>th</sup>, and
- waste management and remediation (562) – \$2.39 billion, 3.99 percent, 6<sup>th</sup>.

## OHIO'S RANKS AMONG THE STATES AND THE WORLD

### States and the Larger Economies in the World (in billions of dollars)

Country Estimates for 2021			Total (annualized 3 <sup>rd</sup> qtr. 2021)			Manufacturing (annualized 3 <sup>rd</sup> qtr. 2021)		
Rank	Area	GDP*	Area	GDP <sup>^</sup>	Percent of U.S.	Area	GDP <sup>^</sup>	Percent of U.S.
	World	\$142,325.5	United States~	\$23,202.3	100.00%	United States	\$2,570.8	100.00%
1	China	\$26,656.8	California	\$3,384.3	14.59%	California	\$416.7	16.21%
2	United States	\$22,675.3	Texas	\$2,006.7	8.65%	Texas	\$233.1	9.07%
3	India	\$10,181.2	New York	\$1,867.9	8.05%	Illinois	\$120.1	4.67%
4	Japan	\$5,585.8	Florida	\$1,242.3	5.35%	<b>Ohio</b>	<b>\$117.8</b>	<b>4.58%</b>
5	Germany	\$4,743.7	Illinois	\$945.7	4.08%	North Carolina	\$112.4	4.37%
6	Russia	\$4,328.1	Pennsylvania	\$846.1	3.65%	Indiana	\$111.6	4.34%
7	Indonesia	\$3,507.2	<b>Ohio</b>	<b>\$741.4</b>	<b>3.20%</b>	Pennsylvania	\$106.8	4.15%
8	Brazil	\$3,328.5	Georgia	\$690.0	2.97%	Michigan	\$102.8	4.00%
9	France	\$3,231.9	New Jersey	\$677.0	2.92%	New York	\$78.4	3.05%
10	United Kingdom	\$3,174.9	Washington	\$674.1	2.91%	Wisconsin	\$69.2	2.69%
11	Turkey	\$2,749.6	North Carolina	\$660.3	2.85%	Georgia	\$64.3	2.50%
12	Mexico	\$2,613.8	Massachusetts	\$642.0	2.77%	New Jersey	\$64.3	2.50%
13	Italy	\$2,610.6	Virginia	\$596.0	2.57%	Florida	\$64.2	2.50%
14	South Korea	\$2,436.9	Michigan	\$574.1	2.47%	Tennessee	\$64.0	2.49%
15	Canada	\$1,978.8	Maryland	\$439.0	1.89%	Massachusetts	\$62.0	2.41%
16	Spain	\$1,959.0	Colorado	\$426.5	1.84%	Washington	\$58.2	2.27%
17	Saudi Arabia	\$1,705.5	Indiana	\$423.7	1.83%	Minnesota	\$56.4	2.19%
18	Australia	\$1,415.6	Tennessee	\$421.4	1.82%	Virginia	\$48.9	1.90%
19	Taiwan	\$1,403.7	Minnesota	\$417.2	1.80%	Missouri	\$43.5	1.69%
20	Poland	\$1,363.8	Arizona	\$415.6	1.79%	Louisiana	\$42.8	1.66%
21	Egypt	\$1,346.2	Wisconsin	\$367.9	1.59%	Kentucky	\$40.9	1.59%
22	Thailand	\$1,329.3	Missouri	\$363.0	1.56%	South Carolina	\$40.7	1.58%
23	Iran	\$1,148.6	Connecticut	\$298.6	1.29%	Alabama	\$40.1	1.56%
24	Vietnam	\$1,148.1	South Carolina	\$272.1	1.17%	Iowa	\$37.8	1.47%
25	Nigeria	\$1,116.3	Oregon	\$268.9	1.16%	Oregon	\$36.5	1.42%
26	Pakistan	\$1,110.1	Louisiana	\$257.2	1.11%	Arizona	\$34.9	1.36%
27	Netherlands	\$1,055.5	Alabama	\$249.0	1.07%	Connecticut	\$32.2	1.25%
28	Argentina	\$1,015.0	Kentucky	\$236.3	1.02%	Kansas	\$29.0	1.13%
29	Philippines	\$1,000.6	Iowa	\$223.7	0.96%	Colorado	\$27.8	1.08%
30	Malaysia	\$978.8	Utah	\$222.2	0.96%	Maryland	\$27.0	1.05%
31	Bangladesh	\$966.5	Oklahoma	\$208.8	0.90%	Utah	\$25.7	1.00%

**States and the Larger Economies in the World**  
(in billions of dollars)

<u>Country Estimates for 2021</u>			<u>Total (annualized 3<sup>rd</sup> qtr. 2021)</u>			<u>Manufacturing (annualized 3<sup>rd</sup> qtr. 2021)</u>		
Rank	Area	GDP*	Area	GDP <sup>^</sup>	Percent of U.S.	Area	GDP <sup>^</sup>	Percent of U.S.
32	Colombia	\$780.3	Nevada	\$195.8	0.84%	Arkansas	\$21.4	0.83%
33	South Africa	\$753.1	Kansas	\$194.3	0.84%	Oklahoma	\$18.9	0.74%
<b>34</b>	<b>Ohio</b>	<b>\$741.4</b>	District of Columbia	\$153.2	0.66%	Mississippi	\$18.4	0.71%
35	U.A.E.	\$683.2	Nebraska	\$152.2	0.66%	Nebraska	\$17.8	0.69%
36	Switzerland	\$660.9	Arkansas	\$145.9	0.63%	Idaho	\$10.4	0.41%
37	Romania	\$636.5	Mississippi	\$126.3	0.54%	Nevada	\$10.2	0.40%
38	Belgium	\$623.7	New Mexico	\$109.6	0.47%	New Hampshire	\$9.8	0.38%
39	Singapore	\$600.1	New Hampshire	\$99.0	0.43%	West Virginia	\$8.2	0.32%
40	Sweden	\$589.8	Idaho	\$94.8	0.41%	Maine	\$7.6	0.29%
41	Ukraine	\$576.1	Hawaii	\$91.9	0.40%	Delaware	\$5.5	0.21%
42	Kazakhstan	\$526.7	West Virginia	\$88.4	0.38%	South Dakota	\$5.2	0.20%
43	Austria	\$517.9	Delaware	\$81.5	0.35%	Rhode Island	\$5.1	0.20%
44	Algeria	\$514.7	Maine	\$76.7	0.33%	New Mexico	\$4.6	0.18%
45	Ireland	\$500.3	Rhode Island	\$66.9	0.29%	North Dakota	\$4.6	0.18%
46	Chile	\$491.5	North Dakota	\$64.6	0.28%	Vermont	\$3.6	0.14%
47	Hong Kong	\$472.4	South Dakota	\$62.0	0.27%	Montana	\$3.3	0.13%
48	Czech Republic	\$460.9	Montana	\$60.0	0.26%	Wyoming	\$2.7	0.11%
49	Peru	\$439.3	Alaska	\$55.7	0.24%	Hawaii	\$1.5	0.06%
50	Iraq	\$413.3	Wyoming	\$42.1	0.18%	Alaska	(D)	(D)
51	Israel	\$399.5	Vermont	\$36.3	0.16%	District of Columbia	(D)	(D)

Notes and abbreviations: \* - Purchasing Power Parity basis from Wikipedia, except Ohio; overseas territories and special areas of countries are excluded; therefore China, Taiwan and Hong Kong are listed separately; U.A.E. - United Arab Emirates; GDP for the 27-nation European Union is \$20,918.1 billion; ~ - includes overseas activities such as diplomatic and military missions not allocated to any state; ^ - initial annualized estimates from the U.S. BEA and subject to revision; (D) - not disclosed in order to maintain confidentiality. Sources: U.S. BEA (2022), Wikipedia (2021).

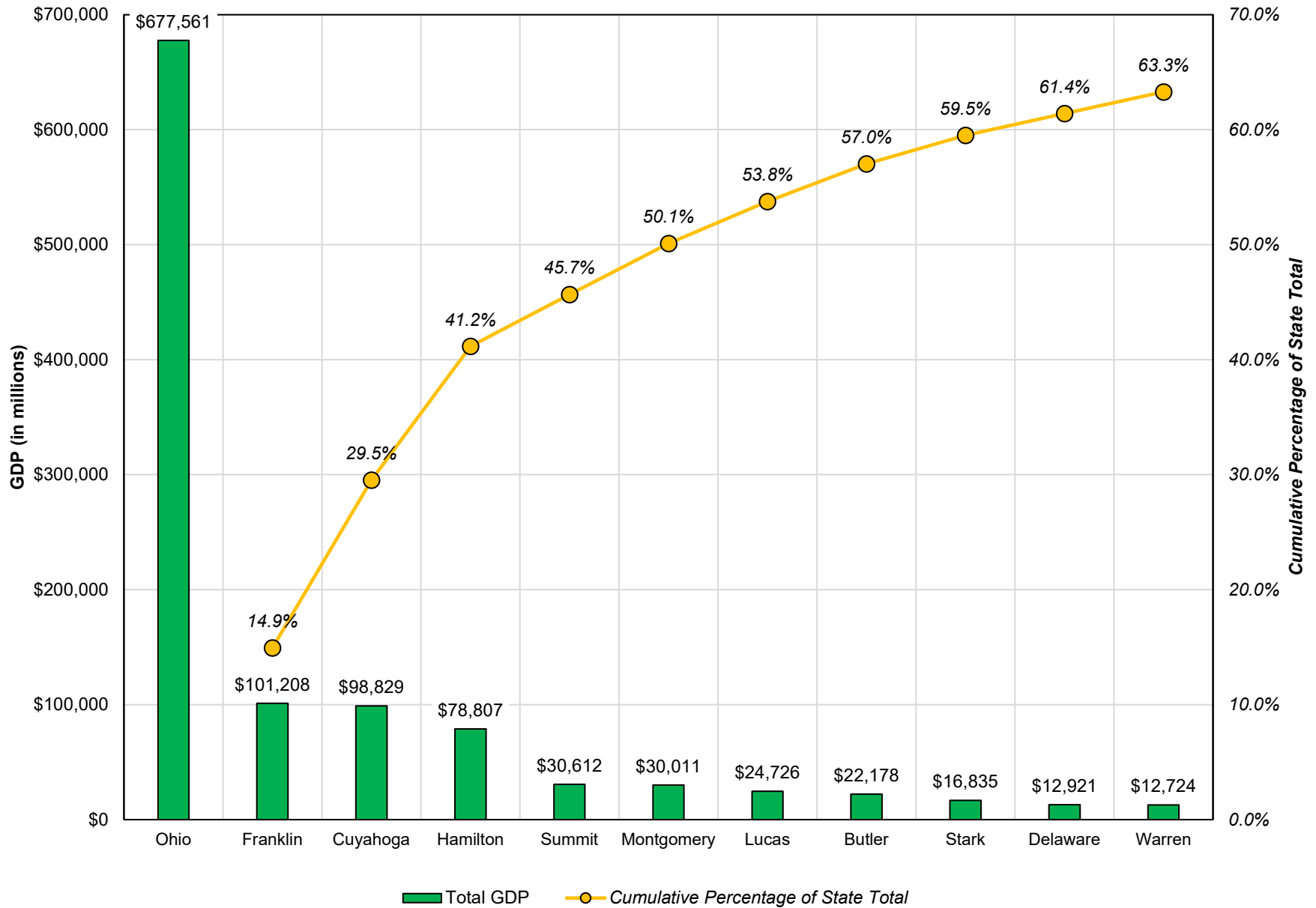
If Ohio was a separate country, it would have the 34<sup>th</sup> largest economy in the world. The U.S. BEA's annualized estimate of \$741.1 billion for 2021 places Ohio between S. Africa and the U.A.E. with estimated GDPs of \$753.1 and \$683.2 billion, respectively (Wikipedia, 2021).<sup>1</sup>

The table also shows that Ohio ranked 7<sup>th</sup> with 3.20 percent of U.S. total GDP and was the 4<sup>th</sup> ranked source for manufactured goods. The \$117.8 billion in manufacturing output was 4.58 percent of the corresponding U.S. total, exceeding the output of three more populous states: Florida, New York and Pennsylvania (U.S. BEA, 2022).

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## **THE GEOGRAPHY OF OHIO'S ECONOMY**

## 2020 Total Gross Domestic Product Ohio and the 10 Largest Counties



Source: U.S. BEA



## THE DISTRIBUTION OF GROSS DOMESTIC PRODUCT BY COUNTY, 2020

The BEA recently published GDP estimates for counties. The chart above illustrates the 10 largest contributions by county to Ohio's total GDP of \$677.6 billion. These are contributions from the counties where the work was done – as opposed to the counties' resident populations, incorporating the impact of people who cross county boundaries for work. In this sense, about \$101.2 billion, or 14.9 percent, of Ohio's GDP originated in Franklin, followed by Cuyahoga at \$98.8 billion – 14.6 percent, and Hamilton at \$78.8 billion – 11.6 percent. Individual figures for the next seven ranged between \$30.7 and \$12.7 billion (green columns), or 4.5 to 1.9 percent.

The chart also illustrates the cumulative contributions of each of the 10 to Ohio's total output (gold dots). Cuyahoga and Franklin combined for 29.5 percent, with the addition of Hamilton raising the cumulative total of the three to 41.2 percent. The five largest counties combine for 50.1 percent of Ohio's output, and the 10 accounted for 63.3 percent of the \$677.6 billion total.

Tables on the following two pages list the contributions of all 88 counties in both rank and alphabetic order.

**Ohio Counties 2020 Total Gross Domestic Products, Ranked by Size with Percentages**

		Percentages					Percentages					Percentages		
Rank	Area Name	GDP (in millions)	Individual	Cumulative	Rank	Area Name	GDP (in millions)	Individual	Cumulative	Rank	Area Name	GDP (in millions)	Individual	Cumulative
	Ohio	\$677,561			29	Geauga	\$4,483	0.66%	83.43%	59	Pickaway	\$1,992	0.29%	95.29%
1	Franklin	\$101,208	14.94%	14.94%	30	Erie	\$4,134	0.61%	84.04%	60	Lawrence	\$1,934	0.29%	95.58%
2	Cuyahoga	\$98,829	14.59%	29.52%	31	Tuscarawas	\$3,926	0.58%	84.62%	61	Ashland	\$1,873	0.28%	95.85%
3	Hamilton	\$78,807	11.63%	41.15%	32	Muskingum	\$3,798	0.56%	85.18%	62	Williams	\$1,830	0.27%	96.12%
4	Summit	\$30,612	4.52%	45.67%	33	Washington	\$3,652	0.54%	85.72%	63	Defiance	\$1,696	0.25%	96.38%
5	Montgomery	\$30,011	4.43%	50.10%	34	Jefferson	\$3,435	0.51%	86.22%	64	Henry	\$1,616	0.24%	96.61%
6	Lucas	\$24,726	3.65%	53.75%	35	Shelby	\$3,386	0.50%	86.72%	65	Highland	\$1,449	0.21%	96.83%
7	Butler	\$22,178	3.27%	57.02%	36	Ashtabula	\$3,194	0.47%	87.19%	66	Crawford	\$1,420	0.21%	97.04%
8	Stark	\$16,835	2.48%	59.51%	37	Columbiana	\$3,100	0.46%	87.65%	67	Putnam	\$1,358	0.20%	97.24%
9	Delaware	\$12,921	1.91%	61.42%	38	Sandusky	\$3,032	0.45%	88.10%	68	Van Wert	\$1,313	0.19%	97.43%
10	Warren	\$12,724	1.88%	63.29%	39	Belmont	\$2,963	0.44%	88.54%	69	Champaign	\$1,286	0.19%	97.62%
11	Lake	\$11,768	1.74%	65.03%	40	Ross	\$2,963	0.44%	88.97%	70	Coshocton	\$1,286	0.19%	97.81%
12	Lorain	\$11,032	1.63%	66.66%	41	Marion	\$2,819	0.42%	89.39%	71	Preble	\$1,271	0.19%	98.00%
13	Greene	\$10,546	1.56%	68.21%	42	Scioto	\$2,697	0.40%	89.79%	72	Pike	\$1,204	0.18%	98.18%
14	Mahoning	\$9,508	1.40%	69.62%	43	Holmes	\$2,544	0.38%	90.16%	73	Carroll	\$1,184	0.17%	98.35%
15	Clermont	\$9,246	1.36%	70.98%	44	Huron	\$2,415	0.36%	90.52%	74	Wyandot	\$1,084	0.16%	98.51%
16	Allen	\$8,116	1.20%	72.18%	45	Fayette	\$2,342	0.35%	90.87%	75	Monroe	\$1,067	0.16%	98.67%
17	Wood	\$7,716	1.14%	73.32%	46	Clinton	\$2,332	0.34%	91.21%	76	Jackson	\$1,063	0.16%	98.82%
18	Medina	\$7,513	1.11%	74.43%	47	Auglaize	\$2,293	0.34%	91.55%	77	Harrison	\$955	0.14%	98.97%
19	Licking	\$7,351	1.08%	75.51%	48	Mercer	\$2,260	0.33%	91.88%	78	Hardin	\$952	0.14%	99.11%
20	Trumbull	\$7,088	1.05%	76.56%	49	Knox	\$2,181	0.32%	92.20%	79	Brown	\$916	0.14%	99.24%
21	Wayne	\$6,592	0.97%	77.53%	50	Gallia	\$2,179	0.32%	92.53%	80	Adams	\$811	0.12%	99.36%
22	Portage	\$6,448	0.95%	78.48%	51	Athens	\$2,168	0.32%	92.85%	81	Perry	\$790	0.12%	99.48%
23	Hancock	\$5,473	0.81%	79.29%	52	Darke	\$2,157	0.32%	93.16%	82	Morrow	\$723	0.11%	99.58%
24	Fairfield	\$4,908	0.72%	80.02%	53	Ottawa	\$2,137	0.32%	93.48%	83	Hocking	\$667	0.10%	99.68%
25	Richland	\$4,721	0.70%	80.71%	54	Seneca	\$2,111	0.31%	93.79%	84	Paulding	\$650	0.10%	99.78%
26	Clark	\$4,666	0.69%	81.40%	55	Fulton	\$2,096	0.31%	94.10%	85	Noble	\$438	0.06%	99.84%
27	Union	\$4,645	0.69%	82.09%	56	Madison	\$2,053	0.30%	94.40%	86	Meigs	\$422	0.06%	99.91%
28	Miami	\$4,601	0.68%	82.77%	57	Guernsey	\$2,022	0.30%	94.70%	87	Morgan	\$345	0.05%	99.96%
					58	Logan	\$2,013	0.30%	95.00%	88	Vinton	\$293	0.04%	100.00%

Source: U.S. Bureau of Economic Analysis, Gross Domestic Product (GDP) by County [machine-readable data file] / prepared by the Bureau. Washington, D.C.: the Bureau [producer and distributor], 2021. Table CAGDP2.

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 12/21).

**Ohio Counties 2020 Total Gross Domestic Products, with Ranks and Percentages, in Alphabetic Order**

Area Name	GDP (in millions)	Percent of Ohio	Rank	Area Name	GDP (in millions)	Percent of Ohio	Rank	Area Name	GDP (in millions)	Percent of Ohio	Rank
Ohio	\$677,561	100.0%		Greene	\$10,546	1.56%	13	Morrow	\$723	0.11%	82
Adams	\$811	0.12%	80	Guernsey	\$2,022	0.30%	57	Muskingum	\$3,798	0.56%	32
Allen	\$8,116	1.20%	16	Hamilton	\$78,807	11.63%	3	Noble	\$438	0.06%	85
Ashland	\$1,873	0.28%	61	Hancock	\$5,473	0.81%	23	Ottawa	\$2,137	0.32%	53
Ashtabula	\$3,194	0.47%	36	Hardin	\$952	0.14%	78	Paulding	\$650	0.10%	84
Athens	\$2,168	0.32%	51	Harrison	\$955	0.14%	77	Perry	\$790	0.12%	81
Auglaize	\$2,293	0.34%	47	Henry	\$1,616	0.24%	64	Pickaway	\$1,992	0.29%	59
Belmont	\$2,963	0.44%	39	Highland	\$1,449	0.21%	65	Pike	\$1,204	0.18%	72
Brown	\$916	0.14%	79	Hocking	\$667	0.10%	83	Portage	\$6,448	0.95%	22
Butler	\$22,178	3.27%	7	Holmes	\$2,544	0.38%	43	Preble	\$1,271	0.19%	71
Carroll	\$1,184	0.17%	73	Huron	\$2,415	0.36%	44	Putnam	\$1,358	0.20%	67
Champaign	\$1,286	0.19%	69	Jackson	\$1,063	0.16%	76	Richland	\$4,721	0.70%	25
Clark	\$4,666	0.69%	26	Jefferson	\$3,435	0.51%	34	Ross	\$2,963	0.44%	40
Clermont	\$9,246	1.36%	15	Knox	\$2,181	0.32%	49	Sandusky	\$3,032	0.45%	38
Clinton	\$2,332	0.34%	46	Lake	\$11,768	1.74%	11	Scioto	\$2,697	0.40%	42
Columbiana	\$3,100	0.46%	37	Lawrence	\$1,934	0.29%	60	Seneca	\$2,111	0.31%	54
Coshocton	\$1,286	0.19%	70	Licking	\$7,351	1.08%	19	Shelby	\$3,386	0.50%	35
Crawford	\$1,420	0.21%	66	Logan	\$2,013	0.30%	58	Stark	\$16,835	2.48%	8
Cuyahoga	\$98,829	14.59%	2	Lorain	\$11,032	1.63%	12	Summit	\$30,612	4.52%	4
Darke	\$2,157	0.32%	52	Lucas	\$24,726	3.65%	6	Trumbull	\$7,088	1.05%	20
Defiance	\$1,696	0.25%	63	Madison	\$2,053	0.30%	56	Tuscarawas	\$3,926	0.58%	31
Delaware	\$12,921	1.91%	9	Mahoning	\$9,508	1.40%	14	Union	\$4,645	0.69%	27
Erie	\$4,134	0.61%	30	Marion	\$2,819	0.42%	41	Van Wert	\$1,313	0.19%	68
Fairfield	\$4,908	0.72%	24	Medina	\$7,513	1.11%	18	Vinton	\$293	0.04%	88
Fayette	\$2,342	0.35%	45	Meigs	\$422	0.06%	86	Warren	\$12,724	1.88%	10
Franklin	\$101,208	14.94%	1	Mercer	\$2,260	0.33%	48	Washington	\$3,652	0.54%	33
Fulton	\$2,096	0.31%	55	Miami	\$4,601	0.68%	28	Wayne	\$6,592	0.97%	21
Gallia	\$2,179	0.32%	50	Monroe	\$1,067	0.16%	75	Williams	\$1,830	0.27%	62
Geauga	\$4,483	0.66%	29	Montgomery	\$30,011	4.43%	5	Wood	\$7,716	1.14%	17
				Morgan	\$345	0.05%	87	Wyandot	\$1,084	0.16%	74

Source: U.S. Bureau of Economic Analysis, Gross Domestic Product (GDP) by County [machine-readable data file] / prepared by the Bureau. Washington, D.C.: the Bureau [producer and distributor], 2021. Table CAGDP2.

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 12/21).

## COUNTY CONTRIBUTIONS TO OHIO'S GROSS DOMESTIC PRODUCT BY SECTOR, 2020

The list below names the top 10 counties contributing to Ohio's 20 economic sectors. The counties are listed in rank order with the cumulative percentage contributions of the top five and top 10 in the column at right. An asterisk (\*) indicates the sector is concentrated in the county at a ratio of 1.1::1 or greater when compared to the U.S. distribution of goods and services provision. The sectors are in descending order of their concentration in the top five counties; the previously seen economy-wide summary is included for comparison. Sectors less than the economy-wide summary of 50.1 and 63.3 per-cent for the top five and 10 counties may be thought of as more widely diffused across the state. Appendix Table A2 shows sector and super-sector data for the U.S., Ohio and all 88 counties.

<i>Sector</i>	Cumulative Percent of Ohio
<i>Information (2.53 percent of Ohio's total GDP)</i>	
1-5: Franklin, Cuyahoga, Hamilton, Montgomery*, Summit	72.9
6-10: Lucas, Wood, Stark, Warren, Delaware	80.2
<i>Finance and Insurance (11.28 percent of Ohio's total GDP)</i>	
1-5: Cuyahoga*, Hamilton*, Franklin*, Montgomery*, Summit*	70.2
6-10: Butler*, Delaware*, Lucas, Stark, Warren	81.6
<i>Arts, Entertainment and Recreation (0.84 percent of Ohio's total GDP)</i>	
1-5: Cuyahoga*, Hamilton*, Franklin, Erie*, Summit	69.6
6-10: Lucas*, Warren*, Delaware*, Montgomery, Butler	84.4
<i>Professional-Scientific-Technical Services (5.24 percent of Ohio's total GDP)</i>	
1-5: Cuyahoga, Franklin, Hamilton, Summit, Montgomery	68.3
6-10: Greene*, Lucas, Delaware*, Stark, Warren	82.2
<i>Enterprise Management (3.37 percent of Ohio's total GDP)</i>	
1-5: Hamilton*, Cuyahoga*, Franklin*, Summit*, Delaware*	64.6
6-10: Warren*, Lucas*, Hancock*, Medina*, Montgomery	79.2
<i>Mining, Quarrying and Oil-and-Gas Extraction (0.60 percent of Ohio's total GDP)</i>	
1-5: Belmont*, Monroe*, Jefferson*, Harrison*, Guernsey*	63.6
6-10: Tuscarawas*, Muskingum*, Carroll*, Cuyahoga*, Noble*	77.6
<i>Educational Services (0.84 percent of Ohio's total GDP)</i>	
1-5: Cuyahoga*, Franklin, Hamilton, Montgomery*, Lorain*	61.9
6-10: Summit, Lucas, Stark, Greene, Licking*	74.9
<i>Health Care-Social Assistance (8.66 percent of Ohio's total GDP)</i>	
1-5: Cuyahoga*, Franklin*, Hamilton*, Montgomery*, Summit*	57.2
6-10: Lucas*, Stark*, Butler, Mahoning*, Lorain	71.1

<i>Sector</i>	<i>Cumulative Percent of Ohio</i>
<i>Wholesale Trade (6.16 percent of Ohio's total GDP)</i>	
1-5: Cuyahoga*, Franklin, Hamilton, Butler*, Summit*	56.5
6-10: Montgomery, Lucas, Stark, Warren*, Medina*	70.2
<i>Administrative-Support/Waste-Management-Remediation (3.96 percent of Ohio's total GDP)</i>	
1-5: Franklin, Cuyahoga*, Hamilton, Summit, Montgomery	55.3
6-10: Lucas, Butler, Stark, Pike*, Lorain*	68.8
<i>Governments and Their Enterprises (11.17 percent of Ohio's total GDP)</i>	
1-5: Franklin*, Cuyahoga, Hamilton, Greene*, Montgomery	52.3
6-10: Lucas, Summit, Butler, Stark, Lorain	66.2
<b>Summary GDP in Ohio (100.0 percent)</b>	
<b>1-5: Franklin, Cuyahoga, Hamilton, Summit, Montgomery</b>	<b>50.1</b>
<b>6-10: Lucas, Butler, Stark, Delaware, Warren</b>	<b>63.3</b>
<i>Transportation-Warehousing (3.26 percent of Ohio's total GDP)</i>	
1-5: Franklin*, Cuyahoga, Clermont*, Hamilton, Montgomery	47.5
6-10: Summit, Butler*, Hancock*, Lucas, Licking*	63.4
<i>Accommodation-Food Services (2.13 percent of Ohio's total GDP)</i>	
1-5: Franklin, Cuyahoga, Hamilton, Montgomery, Summit	47.1
6-10: Lucas, Butler, Stark*, Delaware* Lake	62.5
<i>Real Estate-Rental-Leasing (11.41 percent of Ohio's total GDP)</i>	
1-5: Franklin, Cuyahoga, Hamilton, Lucas, Summit	46.2
6-10: Montgomery, Butler, Stark, Lorain*, Delaware	60.9
<i>Other Private Sector Services (1.98 percent of Ohio's total GDP)</i>	
1-5: Franklin, Cuyahoga, Hamilton, Summit, Montgomery	45.5
6-10: Lucas, Stark*, Butler, Warren*, Lake*	59.7
<i>Construction (3.85 percent of Ohio's total GDP)</i>	
1-5: Franklin, Hamilton, Cuyahoga, Summit*, Butler*	42.6
6-10: Montgomery, Lucas, Stark, Warren, Medina*	56.8
<i>Retail Trade (6.00 percent of Ohio's total GDP)</i>	
1-5: Franklin, Cuyahoga, Hamilton, Summit*, Montgomery	41.6
6-10: Lucas*, Butler*, Stark*, Delaware*, Warren*	57.0
<i>Utilities (1.61 percent of Ohio's total GDP)</i>	
1-5: Jefferson*, Lake*, Washington*, Hamilton, Franklin	35.9
6-10: Lawrence*, Ottawa*, Montgomery, Lucas, Trumbull*	58.7

<i>Sector</i>	Cumulative Percent of Ohio
<i>Manufacturing, Total (15.54 percent of Ohio's total GDP)</i>	
1-5: Hamilton*, Cuyahoga, Franklin, Lucas*, Butler*	35.8
6-10: Allen*, Summit*, Stark*, Montgomery, Lake*	52.6
<i>Manufacturing, Nondurable Goods (7.04 percent of Ohio's total GDP)</i>	
1-5: Hamilton*, Franklin, Allen*, Cuyahoga, Lucas*	40.3
6-10: Butler*, Summit, Wayne*, Stark*, Lake*	58.0
<i>Manufacturing, Durable Goods (8.50 percent of Ohio's total GDP)</i>	
1-5: Cuyahoga*, Hamilton, Butler*, Lucas*, Franklin	34.9
6-10: Montgomery*, Stark*, Summit, Lake*, Lorain*	51.4
<i>Agriculture-Forestry-Fishing-Hunting (0.58 percent of Ohio's total GDP)</i>	
1-5: Mercer*, Darke*, Wayne*, Madison*, Van Wert*	19.9
6-10: Holmes*, Union*, Fayette*, Auglaize*, Pickaway*	31.9

These lists show the effects of several factors. Sometimes it is the sheer size of the counties' populations that leads to their high sector ranks; other times it is the relatively large presence of one sector regardless of a county's population size. Sometimes the concentration reflects the tendency of more specialized sectors to locate in larger counties, which may in turn reflect either or both sufficiently large markets for sales and for workers with desired skills; other times it may be strategic location, the presence of particular resources or the lack of large urban populations.<sup>2</sup>

Drawn from Table A2

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**2020 Gross Domestic Product for Multi-county Metropolitan Areas in Ohio (in millions)**

Area (number of Ohio counties)	Private Sector								Governments		
	Total	Goods-Producing			Service-Providing			Amount	Percent		
		Amount	Percent	Manufacturing		Amount	Percent				
				Amount	Percent						
Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent				
<i>Aggregate Amounts</i>											
U.S.	\$20,893,746	\$18,223,132	87.2%	\$3,524,445	16.9%	\$2,271,960	10.9%	\$14,698,687	70.3%	\$2,670,611	12.8%
Ohio	\$677,561	\$601,897	88.8%	\$139,369	20.6%	\$105,303	15.5%	\$462,529	68.3%	\$75,664	11.2%
Akron (2)	\$37,060	\$33,176	89.5%	(D)	(D)	\$5,090	13.7%	(D)	(D)	\$3,883	10.5%
Canton-Massillon (2)	\$18,019	\$16,332	90.6%	\$4,737	26.3%	\$3,744	20.8%	\$11,594	64.3%	\$1,688	9.4%
Cincinnati (three states)	\$152,619	\$140,615	92.1%	(D)	(D)	\$23,278	15.3%	(D)	(D)	\$12,004	7.9%
Cincinnati (Ohio part, 5)*	\$123,871	\$114,387	92.3%	(D)	(D)	\$18,919	15.3%	(D)	(D)	\$9,484	7.7%
Cleveland-Elyria (5)	\$133,626	\$119,982	89.8%	(D)	(D)	\$17,950	13.4%	(D)	(D)	\$13,644	10.2%
Columbus (10)	\$137,260	\$118,095	86.0%	\$17,757	12.9%	\$11,677	8.5%	\$100,338	73.1%	\$19,165	14.0%
Dayton-Kettering (3)	\$45,157	\$36,763	81.4%	(D)	(D)	\$5,089	11.3%	(D)	(D)	\$8,394	18.6%
Toledo (4)	\$36,675	\$32,510	88.6%	\$9,649	26.3%	\$7,933	21.6%	\$22,862	62.3%	\$4,165	11.4%
Youngstown-Warren... (two states)	\$20,968	\$18,507	88.3%	\$4,065	19.4%	\$2,906	13.9%	\$14,443	68.9%	\$2,460	11.7%
Youngstown-Warren... (Ohio part, 2)^	\$16,596	\$14,598	88.0%	\$2,832	17.1%	\$1,915	11.5%	\$11,767	70.9%	\$1,998	12.0%
<i>Percentage of Ohio</i>											
Sum of the Eight	80.9%	80.7%				68.7%				82.5%	
Akron (2)	5.5%	5.5%				4.8%				5.1%	
Canton-Massillon (2)	2.7%	2.7%				3.6%				2.2%	
Cincinnati (Ohio part, 5)*	18.3%	19.0%				18.0%				12.5%	
Cleveland-Elyria (5)	19.7%	19.9%				17.0%				18.0%	
Columbus (10)	20.3%	19.6%				11.1%				25.3%	
Dayton-Kettering (3)	6.7%	6.1%				4.8%				11.1%	
Toledo (4)	5.4%	5.4%				7.5%				5.5%	
Youngstown-Warren... (Ohio part, 2)^	2.4%	2.4%				1.8%				2.6%	

Notes: \* - Brown, Butler, Clermont, Hamilton and Warren Counties summed; ^ - Mahoning and Trumbull Counties summed; (D) - Suppressed to maintain confidentiality for some local enterprises - usually the agricultural sector.

Source: U.S. Bureau of Economic Analysis, Gross Domestic Product (GDP) by County [machine-readable data file] / prepared by the Bureau. Washington, D.C.: the Bureau [producer and distributor], 2020. Table CAGDP2.

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).



## THE DISTRIBUTION OF GROSS DOMESTIC PRODUCTS IN METROPOLITAN AREAS, 2020

The BEA publishes GDP data for metropolitan areas (MAs). MAs are counties or clusters of adjacent counties with a core urbanized area of at least 50,000 people. Urbanized areas include large cities, their suburbs and densely populated unincorporated areas. Multi-county MAs have a high degree of social and economic integration with one another, and typically are named after the principal city or cities. The table above shows the GDPs for six multi-county MAs wholly in Ohio and two crossing state boundaries; Ohio portions also are shown for Cincinnati and Youngstown-Warren-Boardman. One-county MAs are part of the county tables. While Cincinnati is the largest MA shown above at \$152.6 billion, its Ohio portion, \$123.9 billion, ranks it third in the state after Columbus and Cleveland-Elyria with \$137.3 and \$133.6 billion, respectively. The three are by far the largest, combining to produce a value equal to 58.3 percent of the state's 2020 GDP as judged by the Ohio portions alone. Akron, Dayton-Kettering and Toledo clustered between \$36 billion and \$46 billion, while Canton-Massillon and the Ohio portion of Youngstown were in the \$16-\$19 billion range. Altogether, the eight produced 80.9 percent of Ohio's 2020 GDP.

The table above also displays some of the amounts and percentages of GDP derived from manufacturing and government services. (Encompassing private goods producing cluster figures frequently are not disclosed to maintain confidentiality – usually for local agricultural, etc. enterprises. This results in complementary suppression of the private service providing cluster.) Several characteristics are notable in this regard:

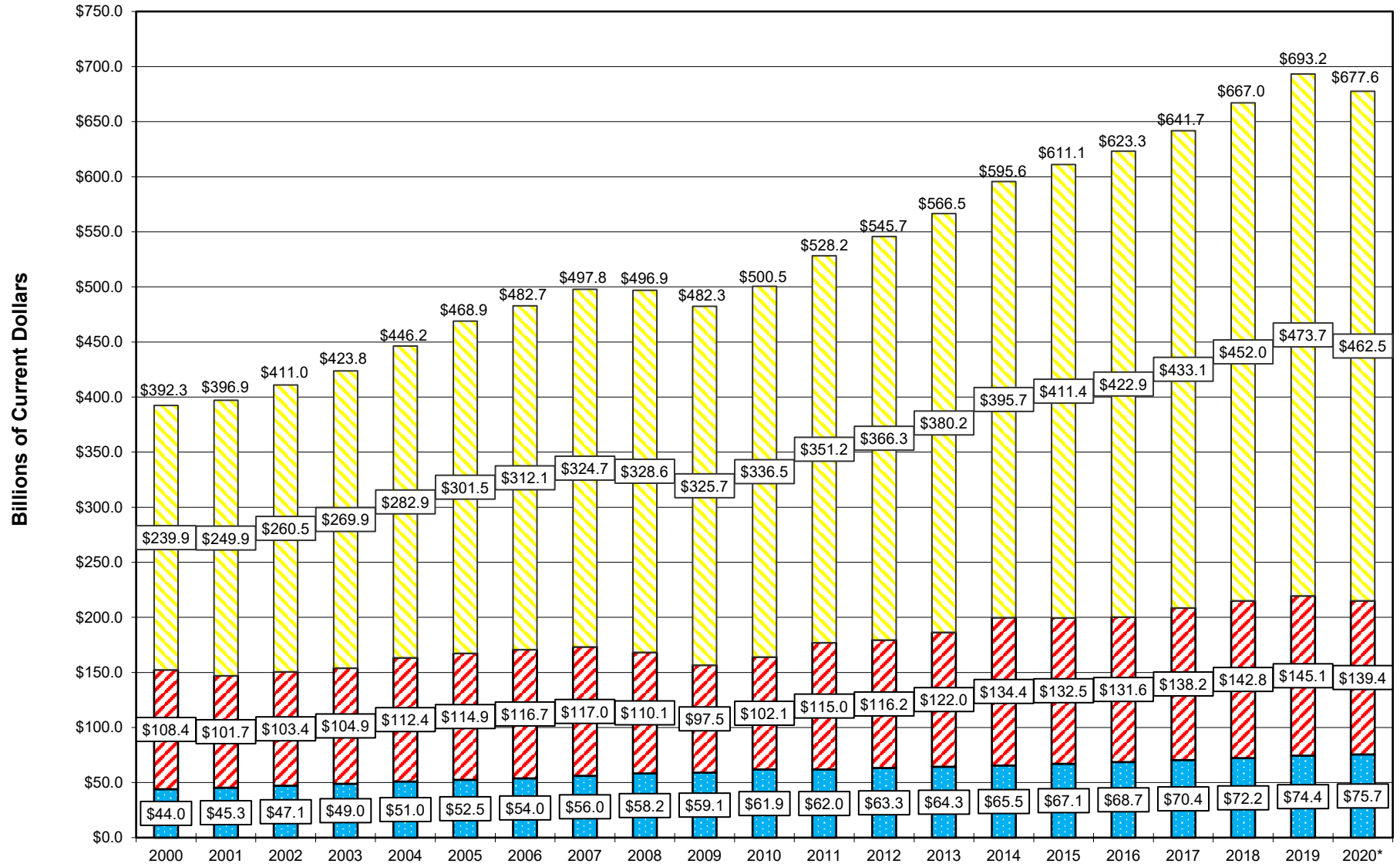
- Cincinnati, Cleveland and Columbus are the three largest sources for manufactured goods, combining for 46.1 percent of Ohio's total production;
- Despite their large absolute outputs, their *portions* of total GDP derived from manufacturing can be relatively low; in Cleveland's case, the portion is a little less than the state average; in Columbus' case, the portion is less than the state and U.S. averages;
- Akron, Dayton and Youngstown have manufacturing portions that are between the state and U.S. portions;
- Canton and Toledo – two of the smaller MAs – have manufacturing portions greater than Ohio's portion.

Federal, state and local governments combined contributions to the MAs' GDPs ranged from 7.7 percent in the Ohio portion of Cincinnati to 18.6 percent in Dayton. The relatively high percentage for Dayton incorporates the importance of Wright-Patterson Air Force Base in its economy. However, Columbus contributed 25.3 percent of Ohio's total government GDP – due in part to its large size, the location of the state capitol, a large federal agency, and the Ohio State University's main campus.

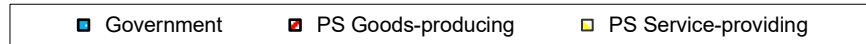
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## **LONGER TERM CHANGES IN OHIO'S ECONOMY**

# Ohio's Gross Domestic Product, 2000-2020



Note: \* - preliminary; prior years may have been revised. Figures may not sum to total due to rounding. Source: U.S. BEA.



## GROSS DOMESTIC PRODUCT FROM OHIO: 2000-2020

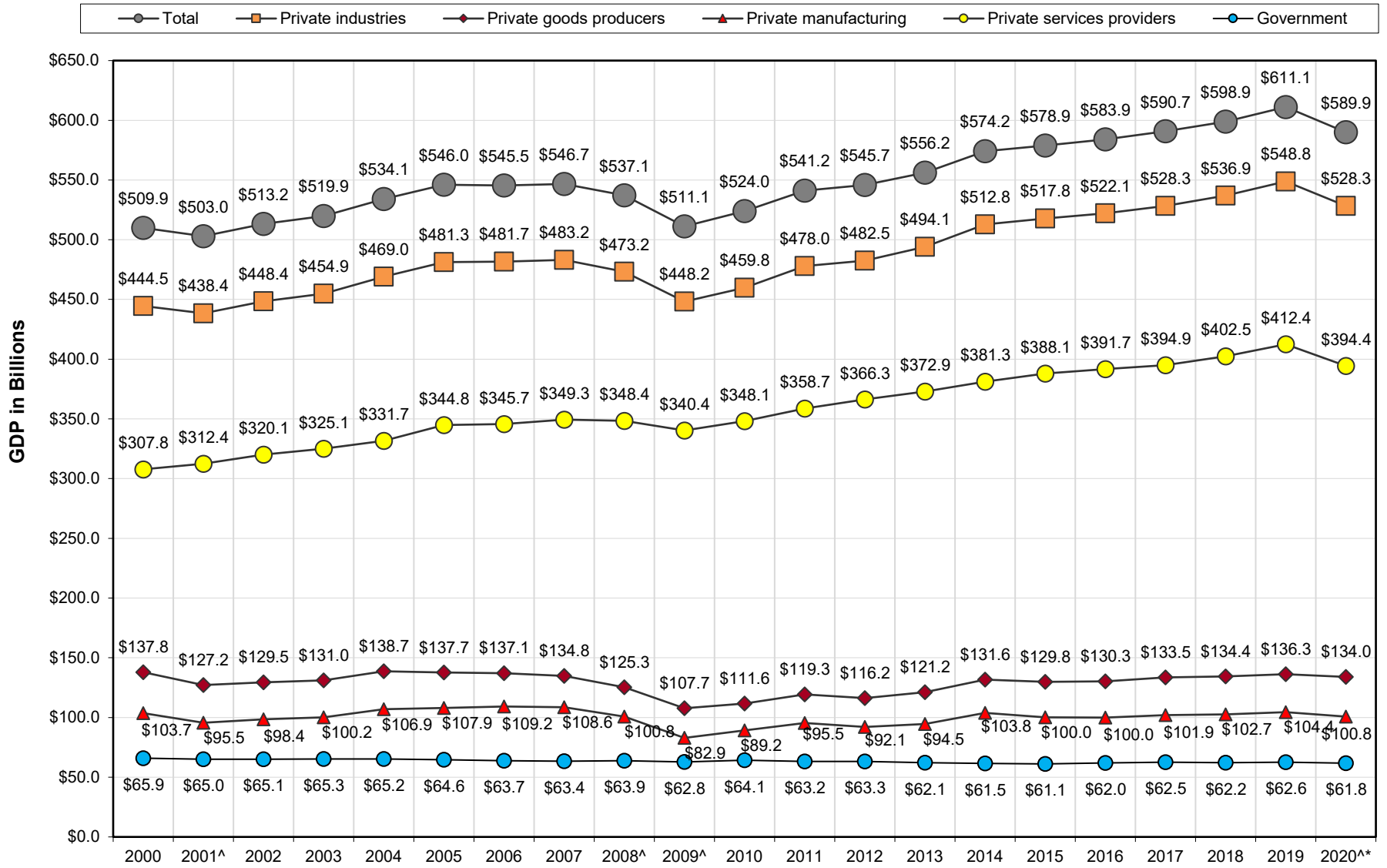
The chart above shows that the total value of goods and services produced in Ohio rose from \$392.3 to \$497.8 billion in the years 2000 to 2007 but fell to \$482.3 billion in 2009 before rising to \$693.2 billion in 2019. Ohio's total GDP dropped to \$677.6 billion in 2020. Figures for goods production (red and white stripes) show more ups and downs: down from \$108.4 in 2000 to \$101.7 in 2001, up to \$117.0 in 2007, down to \$97.5 in 2009, up to \$145.1 in 2019, and down to \$139.4 in 2020 (again, in billions). This contrasts with the relatively steady rise in the nominal value of private sector services (yellow) from \$239.9 to \$473.7; 2009 and 2020 were the exceptions. The value of government services (blue) appeared to rise without interruption from \$44.0 to \$75.7. It is important to note that the chart above makes no adjustment for inflation. Consequently, it cannot be determined from the current-dollar figures how much of the year-to-year changes seen above are due to real economic growth, and how much are due to simple price increases. This issue is addressed beginning in the next section.

The graph also illustrates the reorientation of economic activity in Ohio's private sector away from goods production and towards services. The net change in the portion of output was a decrease in goods production from 27.6 to 20.6 percent of output, while private sector services rose from 61.2 to 68.3 percent. Government services fluctuated between 10.7 and 12.4 percent, depending on how the private sector – particularly goods production – fared that year.

What happened in Ohio was part of the larger but less-pronounced shift for the nation as a whole. The private goods-producing sectors' share of total U.S. GDP fell from 21.7 to 16.9 percent, while the complementary share of service providers rose from 65.4 to 70.4 percent. Government services fluctuated between 12.4 and 14.2 percent, again depending more on how private sector goods production fared (U.S. BEA, 2021).<sup>3</sup>

# Changes in Ohio's Economic Output, 2000-2020

## Adjusted for Inflation and Standardized on 2012



Source: U.S. BEA

^ - a recession year for the nation; \* - initial; prior years may be revised.

## REMOVING THE EFFECTS OF INFLATION: AN OVERVIEW OF REAL CHANGES, 2000-2020

Removing the effects of inflation permits comparisons across the years of the *volumes* of goods produced and services provided, revealing in the chart above the expansion and contraction in Ohio’s economic output over the course of two decades. Figures are standardized on 2012. Total GDP figures (gray dots) show a recession in 2001, the resumption of growth in 2002 continuing through 2005, almost unchanging output in 2006 and 2007, the “Great Recession” in 2008 and 2009, recovery and expansion seen in 2010 through 2019, and overall recessionary year of 2020. The 6.5 percent plunge from \$546.7 to \$511.1 billion (2007-2009) wiped out 81.5 percent of the net growth from 2001 to 2007. It was not until 2013 that total output in Ohio surpassed the 2007 pre-recession peak. Similarly, annual output in 2020 was 3.5 percent less than in 2019 despite the rebound in 2020’s second half mentioned earlier. Ohio’s economic expansions and contractions essentially reflect the expansion and contraction in the private sector (orange squares) with a \$110.4 billion range between \$438.4 and \$548.8 billion. This contrasts with government services (blue dots), which decreased \$4.1 billion from a peak of \$65.9 billion in 2000 to \$61.8 billion in 2020 – relatively slight in comparison.

The chart above further specifies where changes occurred in the private sector. The collective output of goods producers (dark red diamonds) fell from \$137.8 billion (2000) to \$127.2 billion (2001), then grew to \$138.7 billion (2004) before sliding – gradually at first – to \$107.7 billion (2009). Aggregate goods output grew to \$136.3 billion in 2019 before contracting again in 2020. These changes largely reflect variations in manufacturing output (red triangles), and data derived from Appendix Table A3a show most of the manufacturing volume changes occurred in the durable goods subsector:

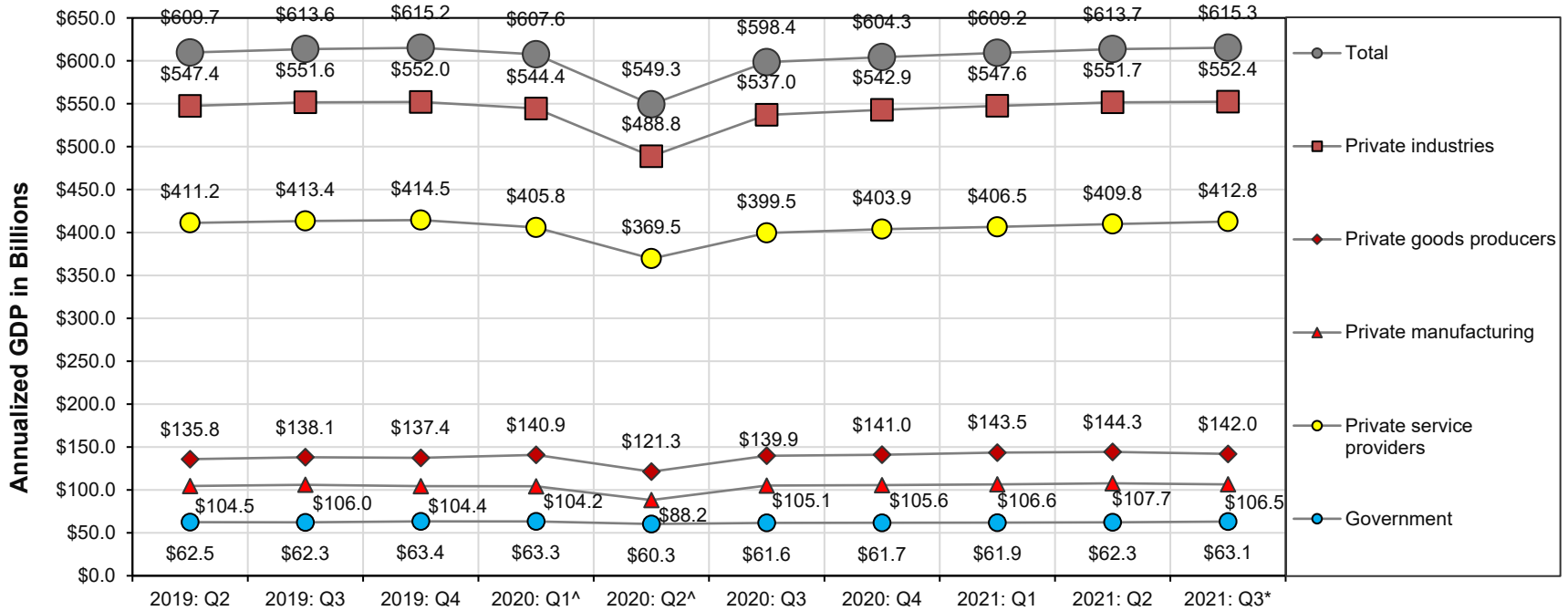
	<u>`00-`01</u>	<u>`01-`07</u>	<u>`07-`09</u>	<u>`09-`19</u>	<u>`19-`20</u>
Total (billions)	-\$7.0	+\$43.8	-\$35.7	+\$101.1	-\$21.3
<i>All goods production (billions)</i>	-\$10.6	+\$7.7	-\$27.1	+\$28.6	-\$2.3
<i>Manufacturing (billions)</i>	-\$8.2	+\$13.1	-\$25.7	+\$21.5	-\$3.6
<i>Durable goods (billions)</i>	-\$6.9	+\$9.3	-\$23.5	+\$17.8	-\$3.8

Much of the residual change among goods producers seen in the chart is due to the long-term net decline in construction, which was more than offset by the phenomenal growth in mining output from 2012 through 2020.

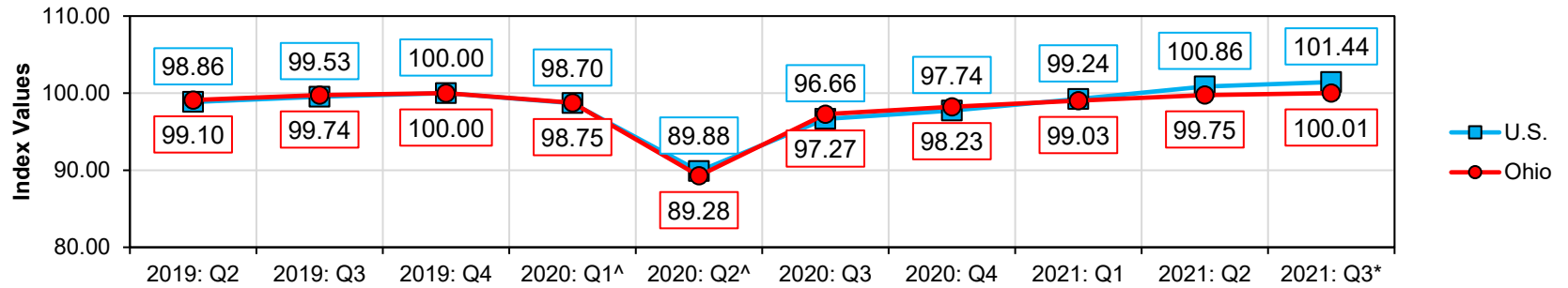
The chart above shows the long-term source of growth has been expansion of private sector services. While goods production fluctuated over the years, the net change was a 2.7 percent decrease from 2000 to 2020. By contrast, private sector services (yellow dots) grew 28.2 percent despite a 2.6 percent decline from 2007 to 2009 and a 4.4 percent drop in 2020 from 2019. Some service sectors showed greater-than-average growth over two decades: information, finance-insurance, professional-scientific-technical services, enterprise management, administrative-support/waste-management, and health care and social assistance; few have lagged or contracted. Appendix Table A3a shows the details.

See Table A3a

### Changes in Ohio's Economic Output, 2019-2021 Quarterly Figures at Annual Rates, Adjusted for Inflation and Standardized on 2012



### Annualized GDP for the U.S. and Ohio, 2019-2021 Summary Figures Standardized and Indexed to 4th Quarter, 2019



Source: U.S. BEA

\* - initial; earlier quarters may be revised; ^ - a recession quarter



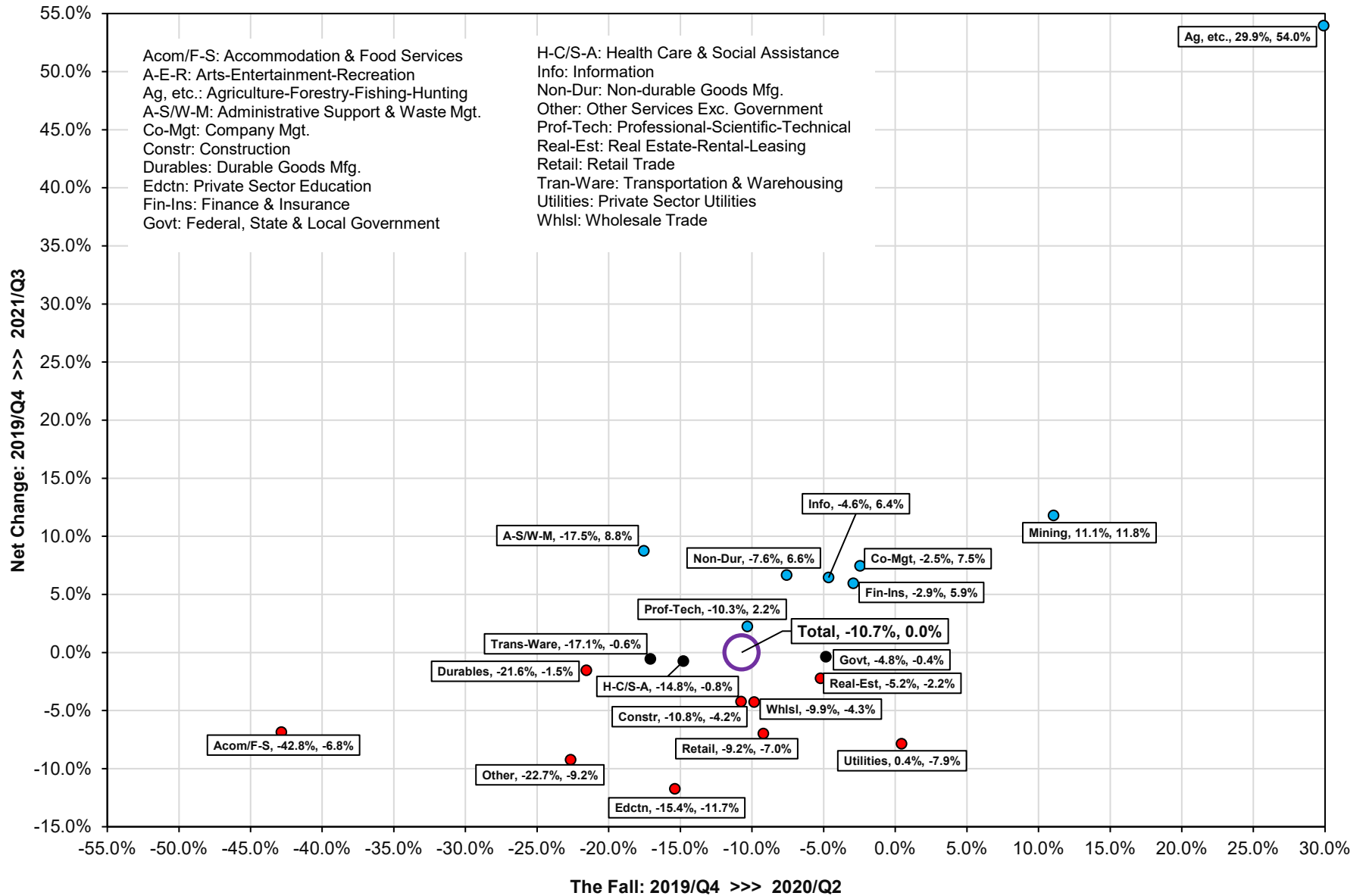
## REMOVING THE EFFECTS OF INFLATION: AN INTRODUCTION TO THE COVID-19 PERIOD

The chart at top shows that unlike prior recessions, COVID-19's impact was broadly – if not uniformly – felt by the private sector (orange squares, yellow dots, red diamonds and triangles). Private sector output fell 11.4 percent from \$552.0 billion in 2019's fourth quarter to \$488.8 billion in 2020's second quarter. Among goods producers, manufacturing's 15.5 percent contraction was partially offset by expansion among other goods providers. Overall, output from private sector service providers contracted 10.8 percent. Federal, state and local government services combined (blue dots) contracted 4.8 percent.

The top chart also shows total and private sector output essentially returned to normal in 2021's second quarter when compared with 2019's fourth quarter and continued expanding in the third quarter. Greater output in goods production more than offset the slightly lagging private sector services. Government service returned to the range seen in 2019. The lower chart illustrates the overall pattern of recession and recovery in Ohio paralleled that of the nation.

## Inflation-Adjusted Percentage Changes in Ohio's GDP by Sector

4th Qtr. 2019 to 2nd Qtr. 2020 and to 3rd Qtr. 2021, Standardized on 2012  
(The Fall and the Net Change to Date)



Source: U.S. BEA

## REMOVING THE EFFECTS OF INFLATION: THE DETAILS OF THE COVID-19 PERIOD

The chart above illustrates how the COVID-19 pandemic impacted economic sectors and how they are doing in recovery. It is the same conceptual chart seen on page 10, except the percentage changes here are based on inflation-adjusted figures. In that regard, the principal points follow:

- Overall, Ohio's economic output (purple circle) in 2021's third quarter is back to what it was in 2019's fourth quarter, its pre-recession peak;
- Dots to the right of the purple circle indicate sectors contracting proportionally less than the overall average, with output from the mining and agriculture-forestry-fishing-hunting sectors actually increasing; dots to the left indicate sectors contracting proportionally more;
- Blue dots – all above the level of the purple circle – mark sectors whose 2021 third quarter output surpassed their 2019 fourth quarter output (output from the mining and agriculture-forestry-hunting-fishing sectors continued to grow);
- Black dots mark sectors within 1.0 percent of where their output was in 2019's fourth quarter; they have essentially recovered;
- Red dots – all below the level of the purple circle – mark sectors whose output lags the overall economy, although most have recovered to at least some degree; the exception is the utilities sector.

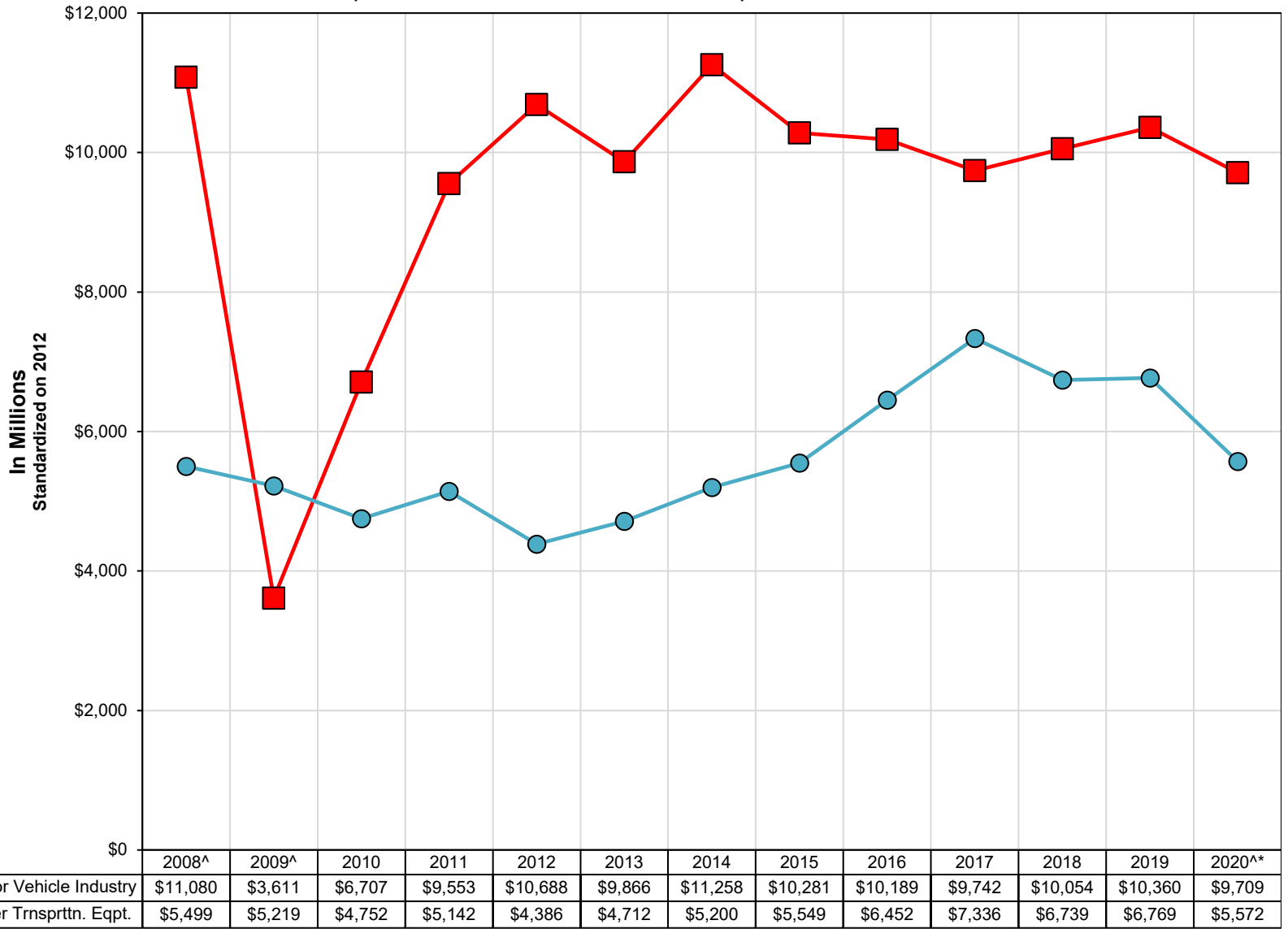
In addition to the figures above and their bases, Appendix Table A3b includes details on the magnitude of each sector's changes.

See Table A3b

Charts and text in the following sections start at 2008 due to space limitations for graph and data presentation and stop with 2020 because 2021 data for the major industries within each sector are unavailable at this writing. Quarterly data for industries within sectors are unavailable.

## Changes in Transportation Equipment Manufacturing Output in Ohio, 2008-2020

(Durable Goods Concentrated in Ohio)



Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised

## MOTOR VEHICLES AND OTHER CONCENTRATED DURABLE GOODS INDUSTRIES

A preceding section pointed to the ups and downs in durable goods manufacturing as accounting for much of the variation in Ohio's total goods production and a large role in expansion and contraction of the state's total output. The chart above shows one prominent part of that variability was the contraction and recovery in the motor vehicle industry: cars, trucks, RVs, trailers and their parts and accessories (collectively NAICS 3361-3363, red squares). The changes were the most extreme among all industries in Ohio: declining 67.4 percent from 2008 – already a recession year – to 2009 and taking several years to recover to 2008's level. Motor vehicle industry production since 2014 has fluctuated around \$10 billion. Amounts and percentages have been adjusted for inflation. Factors partially explaining why industry output remains less than the 2007 levels include:

- The permanent closures of GM's Moraine assembly and Mansfield parts plants as well as Ford's Cleveland engine plant #2 and Walton Hills stamping plant in the Great Recession's aftermath;
- Ford closed its Cleveland engine plant #1 for a year beginning in May 2007 (#2 was still operating);
- Floods at east Asian parts plants constrained Honda's assemblies in 2011-2012;
- Ford changed production at Avon Lake to emphasize commercial truck assemblies in 2014-2015;
- Stellantis (known as Fiat Chrysler Automobiles, or FCA, before merging with Peugeot) shut its Toledo North assembly plant in 2012-2013 and again in 2017, and its Supplier Park plant in 2018-2019, for major model changeovers; and
- GM permanently closed its Lordstown assembly plant in 2019 due a declining demand for small cars as buyers shifted to light trucks (Automotive News, 2016-2020).

Despite these changes, four major light vehicle assembly plants, two major medium-to-heavy-duty truck assembly plants and one major plant assembling light and medium-duty trucks currently operate along with dozens of major parts plants.

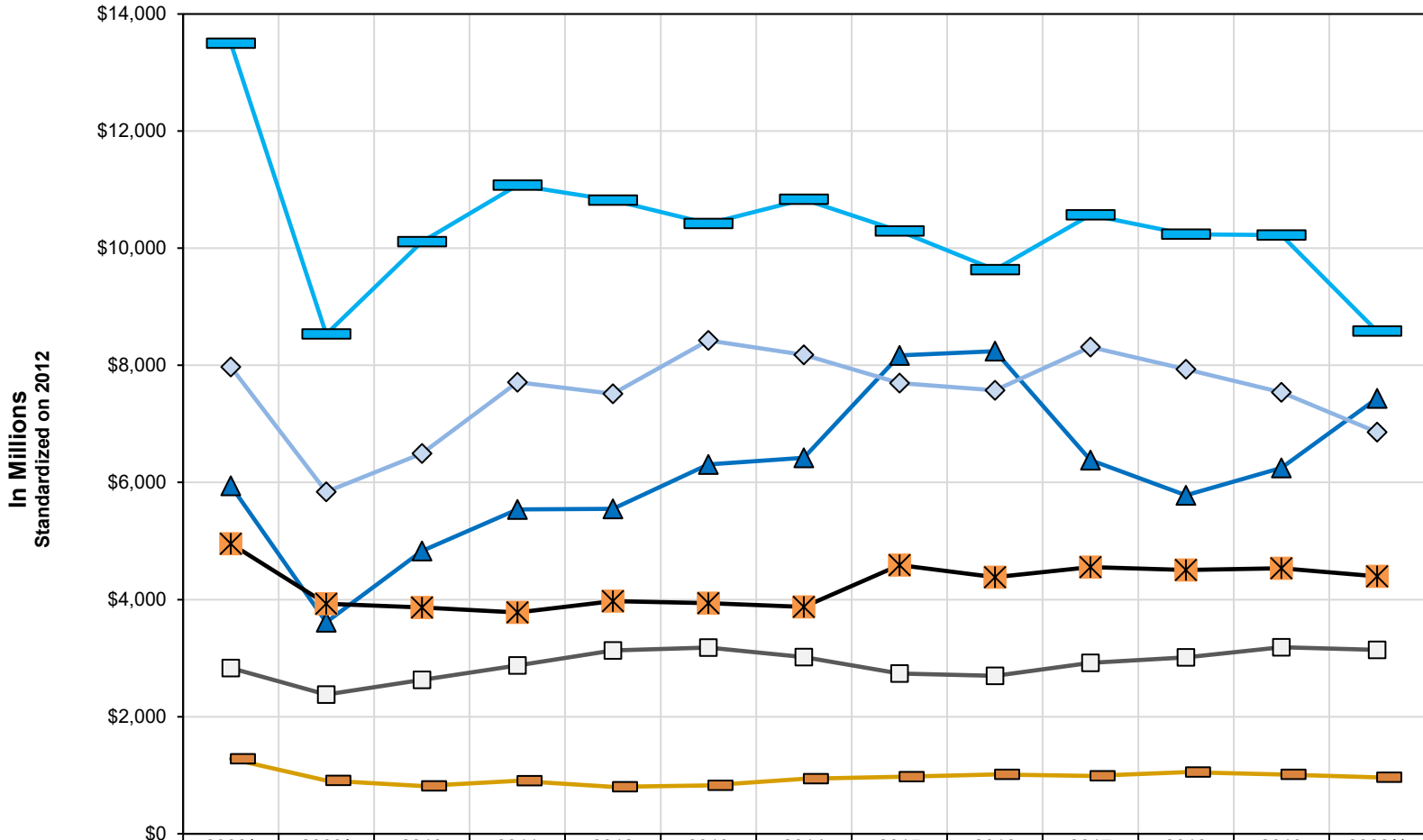
The changes seen in Ohio were similar to nationwide industry changes: output fell during the 2007-2009 recession, rose thereafter until 2019, and fell with the COVID recession of 2020. Although 7.0 percent of U.S. motor vehicle output still comes from Ohio, the industry was less concentrated here in 2020 than in 2008.

With few exceptions, GDP data provide no information about industry groups within major industries. However, value-added data from the Census Bureau's Annual Survey of Manufactures (ASM) and employment figures from its County Business Patterns (CBP) files do, thereby providing more specific insights.<sup>4</sup> Both sources indicate that vehicle assembly (3361) and parts production (3363) are particularly concentrated in Ohio, while manufacturing bodies and trailers (3362) is less concentrated.

See Tables A4, A15-A17, A19, A21

## Changes in Durable Goods Manufacturing Output in Ohio, 2008-2020

(Industries Concentrated in Ohio Other Than Transportation Equipment)



	2008 <sup>^</sup>	2009 <sup>^</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 <sup>**</sup>
—□— 327: Nonmetallic Mineral Prdcts.	\$2,830	\$2,378	\$2,630	\$2,875	\$3,129	\$3,181	\$3,016	\$2,736	\$2,697	\$2,921	\$3,015	\$3,186	\$3,140
—▲— 331: Primary Metals	\$5,944	\$3,613	\$4,828	\$5,541	\$5,551	\$6,307	\$6,420	\$8,168	\$8,242	\$6,380	\$5,782	\$6,248	\$7,438
—■— 332: Fabricated Metal Prdcts.	\$13,497	\$8,532	\$10,109	\$11,078	\$10,819	\$10,419	\$10,834	\$10,292	\$9,631	\$10,570	\$10,237	\$10,223	\$8,584
—◇— 333: Machinery	\$7,973	\$5,840	\$6,494	\$7,711	\$7,514	\$8,425	\$8,179	\$7,695	\$7,574	\$8,311	\$7,934	\$7,541	\$6,860
—×— 335: Electrical Eqpt. & Appliances	\$4,953	\$3,929	\$3,862	\$3,780	\$3,975	\$3,941	\$3,873	\$4,587	\$4,381	\$4,555	\$4,503	\$4,535	\$4,396
—■— 337: Furniture, etc.	\$1,280	\$909	\$814	\$904	\$801	\$825	\$938	\$976	\$1,015	\$990	\$1,054	\$1,013	\$966

Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised

The extreme changes in the motor vehicle industry contrast with the less dramatic contraction and recovery in manufacturing other transportation equipment: aerospace, railroad and water-faring vehicles, equipment and parts, as well as land-based vehicles such as ATVs, motorcycles, bicycles, tanks, golf carts, etc. and their parts (collectively 3364-3369, blue dots). Output from this cluster fell 20.2 percent from 2008 to 2012; recovery and expansion ensued and peaked in 2017. These changes are similar to those seen nationwide. This cluster usually is concentrated here. Unfortunately, neither Annual Survey of Manufactures (ASM), Economic Census nor County Business Patterns (CBP) data agree on a specific source of this cluster's concentration here.

The chart above illustrates changes in the inflation-adjusted output from 2008 through 2020 of six more major durable goods industries concentrated in Ohio. Output from all fell by varying degrees in the 2008-2009 recession. Net growth in output from all is evident from 2009 through 2019. However, industries varied widely in how they were impacted by the COVID recession of 2020. Output from primary metals producers (NAICS 331, dark blue triangles) rose but fell among makers of fabricated metals products and machinery (332 and 333, lighter blue rectangles and diamonds). Comparatively little changes were seen by makers of furniture, electrical equipment and appliances, and nonmetallic mineral products. None of the six industries appears to display long-term trends.

These patterns of changes in output from Ohio again are part of and frequently similar to national industry changes. Although the exact magnitude of the changes differ, they are in the same direction throughout the ups and downs in output.

ASM and CBP data again provide additional insights. All primary metals group activities are concentrated in Ohio: iron and steel mills and ferroalloy production (3311), steel products made from purchased steel (3312), aluminum smelting and subsequent production (3313) as well as producing other common metals (3314, principally copper). Foundry output and employment (3315) also are concentrated here. Appendix Tables A19 and A21 show the higher concentrations in the ferrous groups vs. non-ferrous groups (U.S. Bureau of the Census, 2021a, 2021b). Data from the U.S. Geological Survey (2021) confirm Ohio's prominent role in steel production: typically, 11 to 14 percent of U.S. raw steel production has come from Ohio in recent years, ranking it 2<sup>nd</sup>.

Output from all nine fabricated metal groups (332) is concentrated in Ohio to various degrees (U.S. Bureau of the Census, 2021a, 2021b). Output includes shaping metal pieces by forging, heat-treating, coating, stamping, bending, forming, machining, engraving and/or welding purchased materials. Stampings for motor vehicles are classified as motor vehicle parts – 33637. Products include cutlery, unpowered hand tools, boilers, containers, hardware, nuts, bolts, screws, rivets, wires, springs, valves and plumbing fixtures, bearings, safes, ladders, washers, tanks, and the output of machine shops. Washing machines and military weapons are classified elsewhere. In this case, ASM and CBP data lead to the conclusion that it is the combination of a variety of goods made in large volumes that results in Ohio's 3<sup>rd</sup> rank in industry GDP.

Machinery manufacturing output is concentrated to varying degrees in six of the seven industry groups: the more-focused industrial, commercial and service machinery industries (3332 and 3333), and the more widely applicable heating-ventilation-air conditioning (HVAC), commercial refrigeration equipment (3334), metalworking (3335), engines-turbines-power transmission equipment (3336) and general-purpose machinery (3339) groups (U.S. Bureau of the Census, 2021a, 2021b).<sup>5</sup> The combination of a variety of goods made in large volumes contributes to Ohio's overall 5<sup>th</sup> rank in industry GDP.

Ohio is the second-ranked source in the U.S. for electrical equipment and appliances. Economic Census (EC) and CBP data show this rank is due to the overwhelming concentration in household appliances (3352); 26.4 percent of U.S. value-added for the group comes from Ohio and 20.6 percent of U.S. group jobs are located here – by far the largest percentages among the states. EC and CBP data suggest near proportional value-added and jobs in electric lighting equipment (3351) and mild concentrations in electrical equipment (3353) such as motors, generators, transformers, switching equipment, relays and industrial controls (turbines for generating electricity are classified elsewhere); and other electrical equipment and components (3359) such as batteries, wires and cables (U.S. Bureau of the Census, 2020, 2021a, 2021b).

Manufacturing non-metallic mineral products (mainly from silicates and calcites, 327) is concentrated in Ohio. ASM and CBP data agree that three of the five groups are concentrated here: clay and refractory products such as china, bricks, earthenware, pottery, porcelain, wall tiles, etc. (3271), glass (3272) and other materials (3279, abrasives, cut-stone products, fiberglass, stucco, etc.) (U.S. Bureau of the Census, 2021a, 2021b). As before, it is the combination of a variety of goods made in large volumes that results in Ohio's overall 3<sup>rd</sup> rank in industry GDP. The output of household and institutional furniture and kitchen cabinets (3371) appears mildly concentrated here (U.S. Bureau of the Census, 2021a, 2021b).

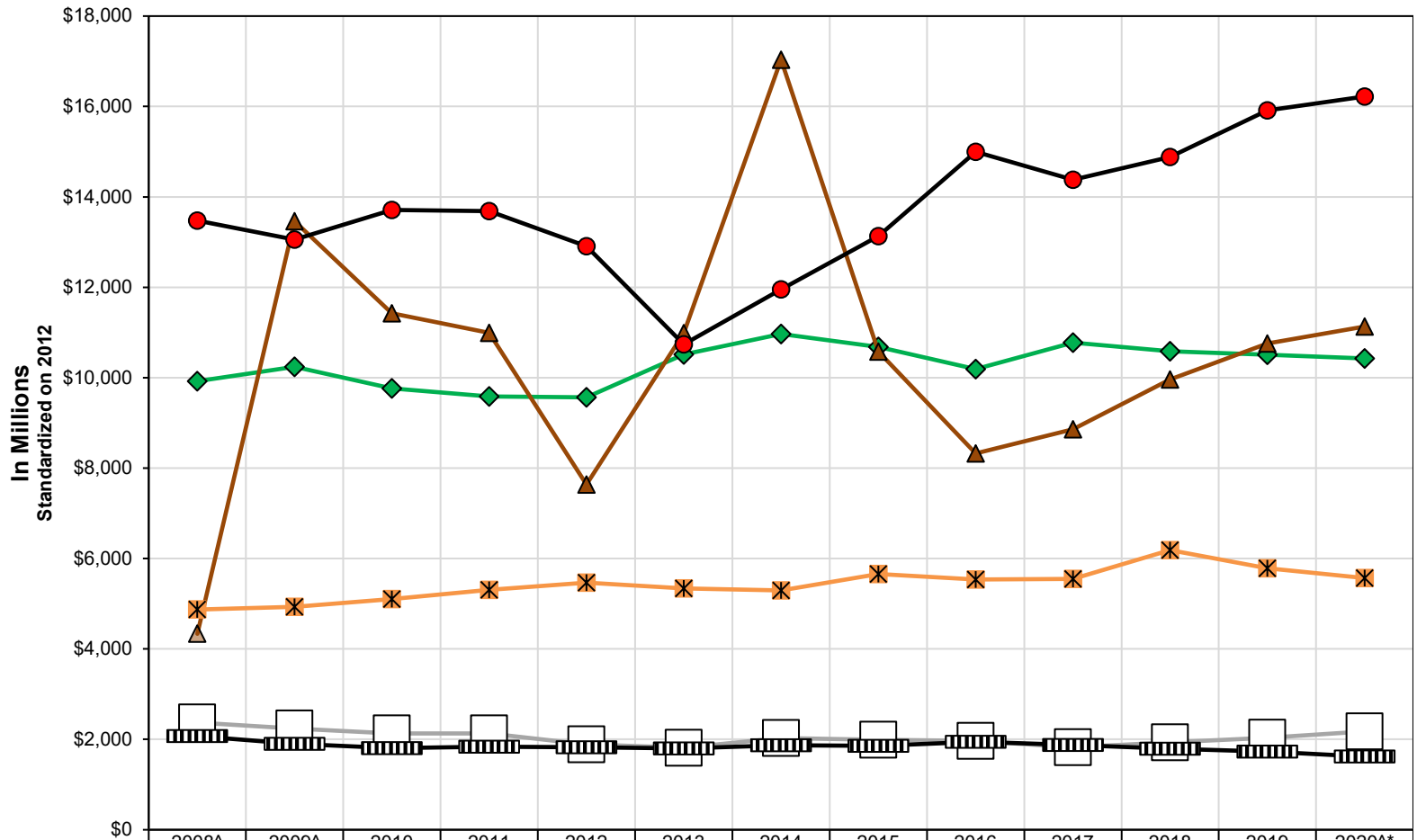
See Tables A4, A15-A17, A19, A21
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## Changes in Non-durable Goods Manufacturing Output in Ohio, 2008-2020

(Industries Concentrated in Ohio)



	2008 <sup>^</sup>	2009 <sup>^</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 <sup>^*</sup>
◆ 311-2: Food & Beverages	\$9,922	\$10,244	\$9,763	\$9,586	\$9,566	\$10,515	\$10,968	\$10,682	\$10,187	\$10,776	\$10,588	\$10,510	\$10,428
□ 322: Paper Prdcts.	\$2,371	\$2,242	\$2,130	\$2,131	\$1,886	\$1,815	\$2,031	\$1,993	\$1,968	\$1,828	\$1,936	\$2,033	\$2,174
— 323: Printing, etc.	\$2,070	\$1,902	\$1,808	\$1,837	\$1,826	\$1,799	\$1,869	\$1,859	\$1,944	\$1,876	\$1,793	\$1,727	\$1,618
▲ 324: Petroleum & Coal Prdcts.	\$4,336	\$13,464	\$11,426	\$10,993	\$7,635	\$10,984	\$17,037	\$10,576	\$8,327	\$8,860	\$9,961	\$10,760	\$11,132
● 325: Chemicals	\$13,477	\$13,056	\$13,713	\$13,688	\$12,908	\$10,739	\$11,956	\$13,132	\$14,998	\$14,382	\$14,884	\$15,913	\$16,221
✕ 326: Plastic & Rubber Prdcts.	\$4,872	\$4,934	\$5,104	\$5,305	\$5,469	\$5,338	\$5,293	\$5,659	\$5,535	\$5,552	\$6,186	\$5,782	\$5,570

Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised

## CONCENTRATED NON-DURABLE GOODS MANUFACTURING

The chart above illustrates the changing output levels of six major non-durable goods manufacturing industries concentrated in Ohio. Overall demand for non-durable goods is relatively steady when compared with durable goods, and this is evident in four industries: food and beverages, plastic, rubber and paper products, and printing (NAICS 311-2, 326 and 322-3), all of which have experienced relatively steady output despite the ups and downs of the business cycle. Non-durables generally are expected to last less than three years; the more expensive durable goods typically last much longer. This contrasts with the substantial changes seen in petroleum and coal products (324, brown triangles) and, to a lesser extent, chemical output (324, red dots). These changes appear to be unrelated to the recessions and expansion, but its noteworthy that production levels for the last few years have been greater than in 2008.

These patterns of changes in Ohio are similar to corresponding national level changes for some industries: food-beverage-tobacco production<sup>6</sup>, rubber, plastic and paper products, and printing. These contrast with the changes seen in the U.S. production of chemicals and petroleum and coal products – both down in this time frame. However, petroleum and coal products concentration in Ohio appears to be lower in recent years, while the concentration of chemicals production here seems to have trended higher.

ASM and CBP data specify which groups drive their encompassing major industry concentrations here:

- The plastic and rubber products groups (3261 and 3262, the latter more than the former);
- Most notably food for animals (3111), processing and preserving fruits and vegetables (3114), and dairy (3115) and other food products (3119 – snacks, coffees, teas, flavorings, seasonings, dressings, etc.); and
- Paint-coatings-adhesives (3255) and soaps, cleaning compound and toiletries (3256) (U.S. Bureau of the Census, 2021a, 2021b).

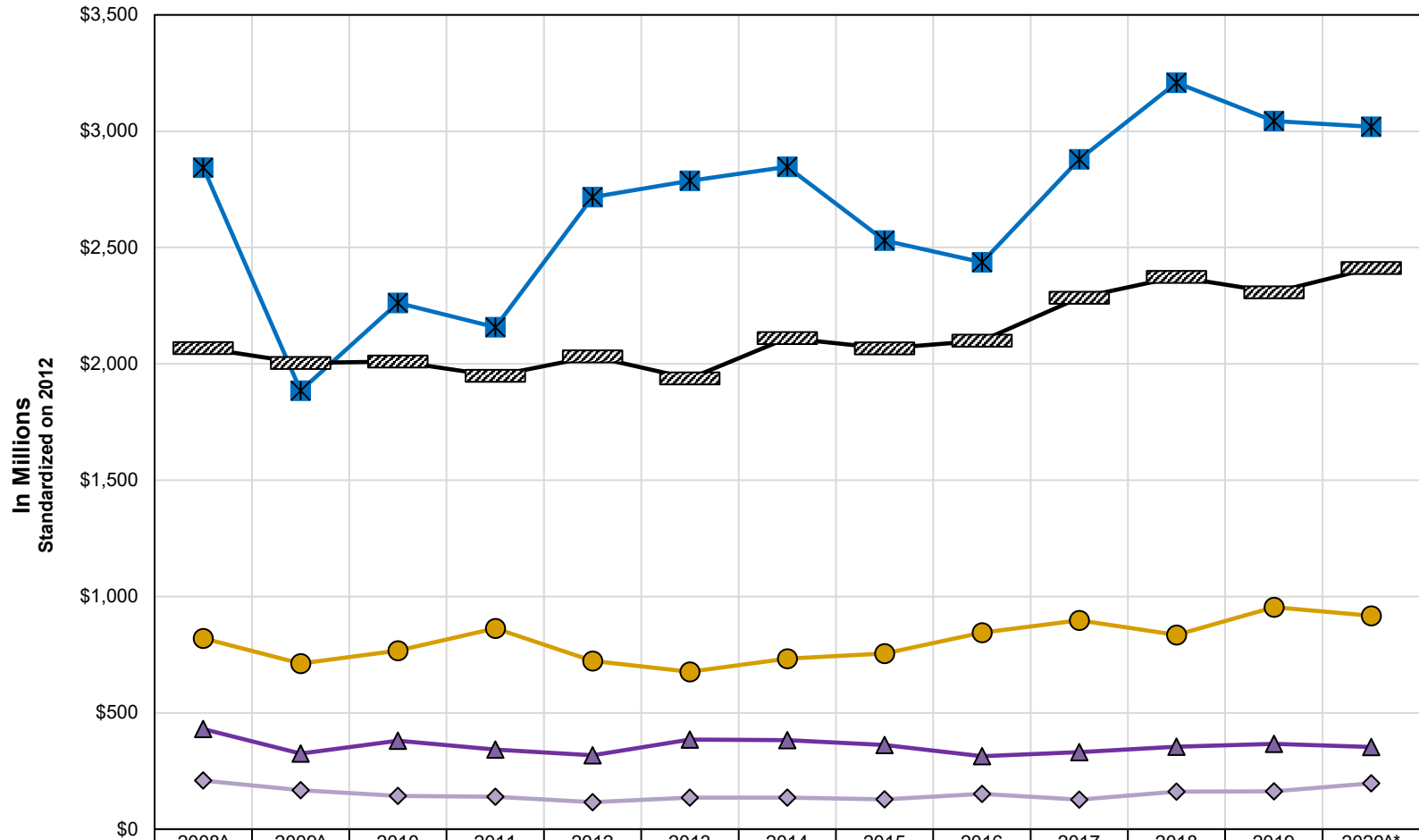
Economic Census and CBP data specify additional industries concentrated here:

- Products made from purchased paper or paperboard (3222) including coated and laminated items;
- Actual printing on materials (32311) and pre-press and post-press activities (32312);
- Asphalt (32412), and lubricants, greases, petroleum jelly, coke, etc. (32419) (U.S. Bureau of the Census, 2020, 2021b).

The three sources disagree on other specific industries.

See Tables A5, A15-A17, A19, A21

## Changes in Goods Manufacturing Output in Ohio, 2008-2020 (Industries Not Concentrated in Ohio)



● 321: Wood Prdcts.	\$820	\$712	\$767	\$864	\$723	\$677	\$733	\$756	\$845	\$897	\$836	\$954	\$917
✕ 334: Cmpt. & Elctnc. Prdcts.	\$2,843	\$1,885	\$2,262	\$2,158	\$2,717	\$2,787	\$2,847	\$2,530	\$2,437	\$2,879	\$3,209	\$3,044	\$3,020
— 339: Misc. Prdcts.	\$2,068	\$2,004	\$2,011	\$1,948	\$2,032	\$1,937	\$2,111	\$2,067	\$2,100	\$2,284	\$2,373	\$2,308	\$2,412
▲ 313-4: Textile Mills & Prdcts.	\$431	\$325	\$381	\$342	\$318	\$386	\$383	\$362	\$314	\$332	\$355	\$367	\$354
◇ 315-6: Apparel, Leather, etc.	\$209	\$168	\$143	\$139	\$116	\$136	\$136	\$129	\$151	\$127	\$162	\$163	\$197

Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised

## OTHER MAJOR MANUFACTURING INDUSTRIES

The chart above illustrates the changing output levels of three durable goods and two non-durable goods industries not concentrated in Ohio. Production levels for two – computer-electronic and miscellaneous products (NAICS 334 and 339, blue squares and black-and-white rectangles) have trended up in recent years, but only miscellaneous products escaped the 2008-2009 recession's impact. A third – wood products (321, gold dots) recovered from the recession, but had little net change over the past dozen years. The fourth and fifth groups – textiles and apparel, etc. (313-316, purple triangles and diamonds) fluctuated but drifted lower.

The experiences of all five industries here are part of corresponding national-level changes. The only differences worth noting are the notably faster growth rates of wood products and computer and electronic products.

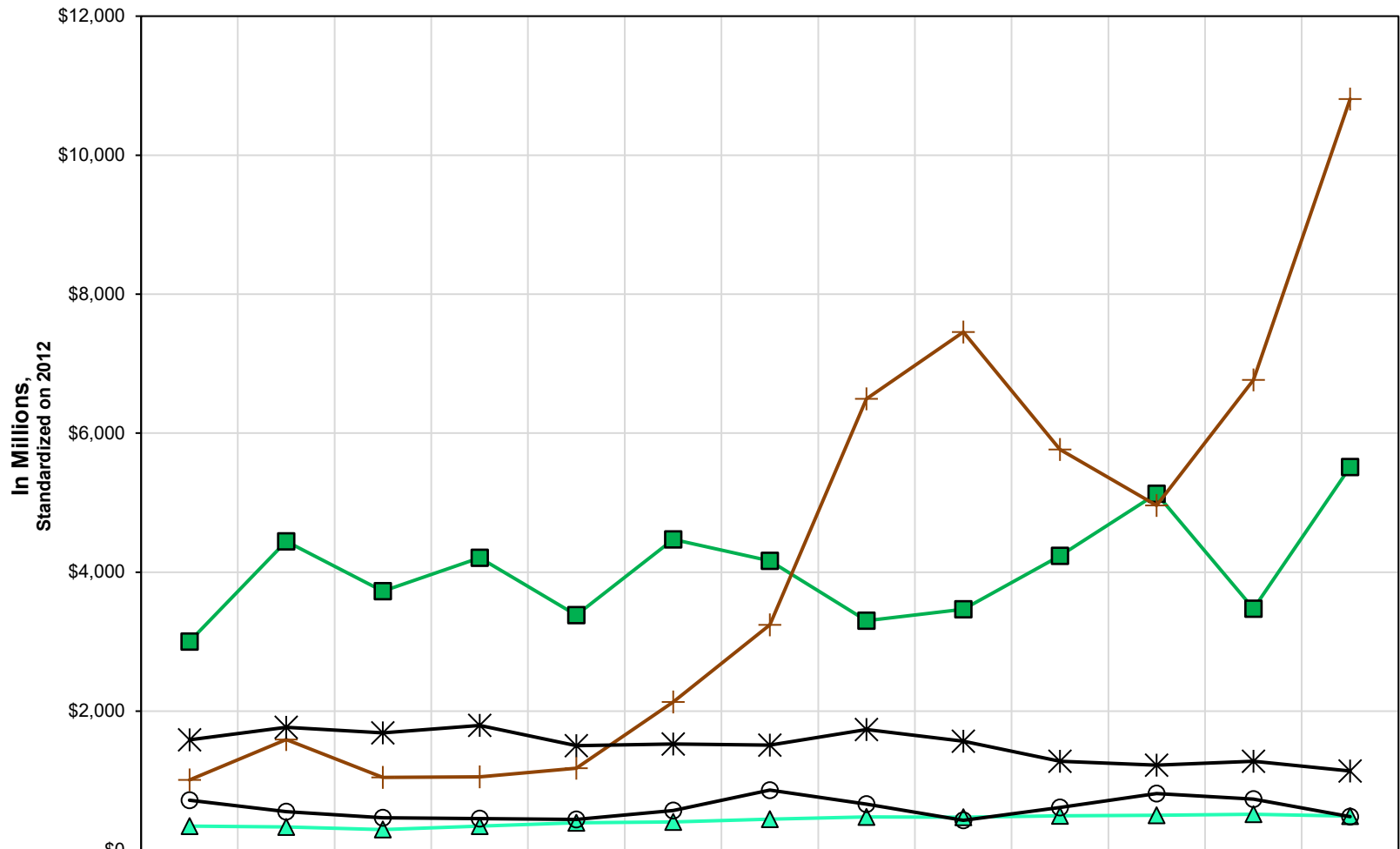
Annual Survey of Manufactures (ASM) and County Business Patterns (CBP) data show few exceptions to the overall sparse presence of these major industries in Ohio:

- Manufacturing other-leather-and-allied products (3169) like billfolds, shoe components, collars, leashes, harnesses, watchbands, luggage, purses, welders' jackets, etc. is concentrated here, as are other miscellaneous manufactures (3399 – jewelry, sporting goods, toys, games, office supplies, signs, etc.); while
- Navigational-measuring-medical-control instruments (3345) and manufacturing and reproducing magnetic and optical media (3346) may be proportional or concentrated, depending on the source (U.S. Bureau of the Census, 2021a, 2021b).

See Tables A4, A5, A15-A17, A19, A21

## Changes in Farming and Natural Resources Production in Ohio, 2008-2020

(Farming, Forestry, Fishing, Hunting & Mining)



	2008 <sup>^</sup>	2009 <sup>^</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 <sup>^*</sup>
■ 111-2: Farming	\$3,002	\$4,442	\$3,727	\$4,206	\$3,382	\$4,472	\$4,161	\$3,302	\$3,466	\$4,234	\$5,129	\$3,472	\$5,514
▲ 113-5: Frstry.-Fish.-Hunt.	\$347	\$333	\$296	\$345	\$392	\$406	\$444	\$476	\$475	\$494	\$502	\$516	\$490
✦ 211: Oil-Gas Extrctn.	\$1,010	\$1,592	\$1,044	\$1,053	\$1,178	\$2,132	\$3,243	\$6,493	\$7,454	\$5,764	\$4,959	\$6,766	\$10,808
✱ 212: Mining, exc. Oil-Gas	\$1,586	\$1,768	\$1,688	\$1,794	\$1,502	\$1,525	\$1,511	\$1,736	\$1,568	\$1,277	\$1,223	\$1,277	\$1,138
○ 213: Mining Support	\$719	\$553	\$464	\$454	\$442	\$570	\$864	\$661	\$429	\$612	\$813	\$733	\$480

Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised

## FARMING AND NATURAL RESOURCES

The chart above illustrates the varied recent histories of major natural resource and related industries in Ohio. The most obvious change has been the 970.6 percent increase in oil and gas production (NAICS 211, brown crosses) from 2008 to 2020.<sup>7</sup> ODNR (2022) production data confirm the tremendous increases:

- total oil production rose 369.1 percent from 5.09 million barrels in 2008 to 23.86 million in 2020;
- total natural gas production rose 2,797.3 percent from 81.6 billion cubic feet in 2008 to 2,363.3 billion in 2020.

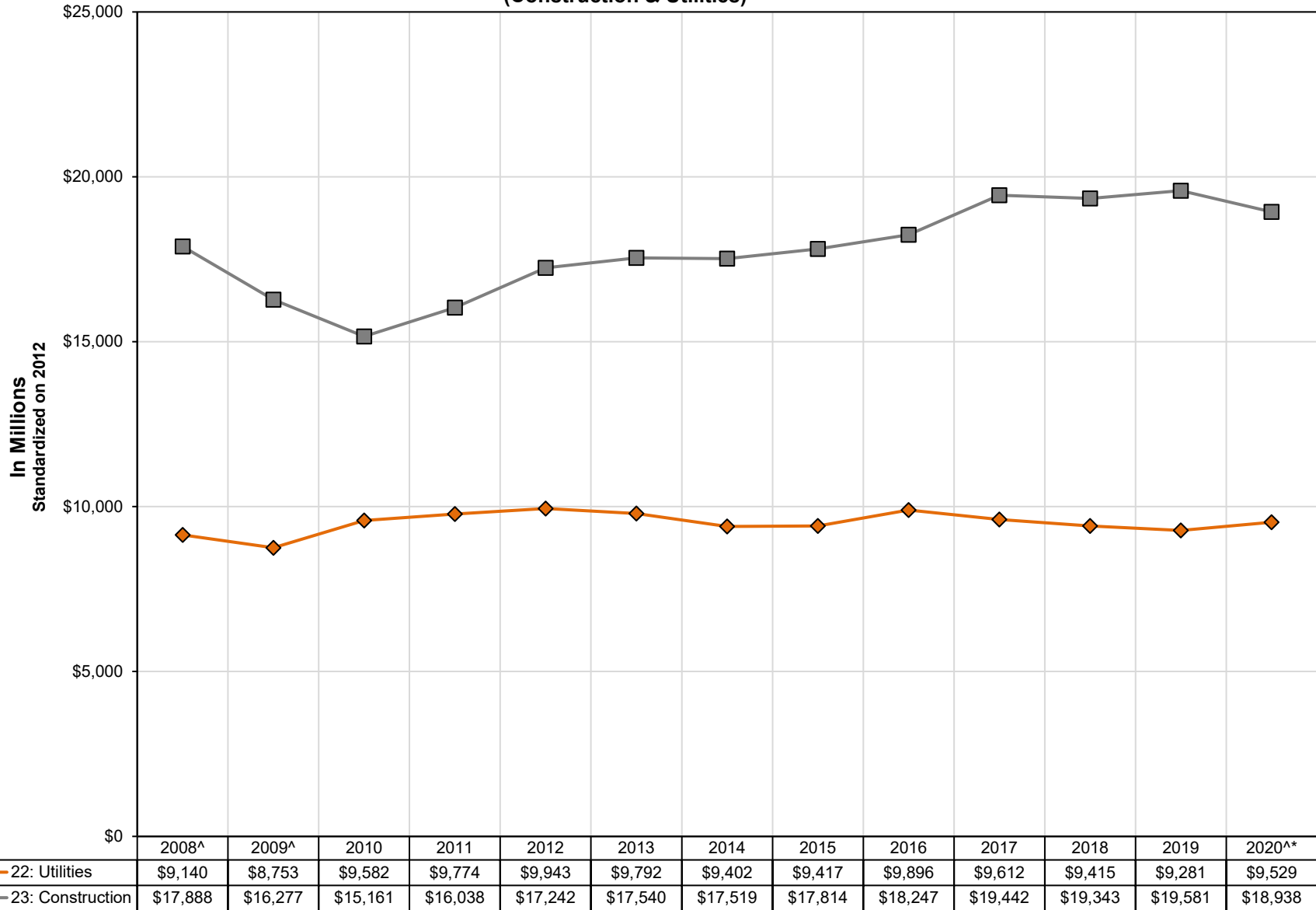
These increases are due to the development of the Marcellus and Utica shale deposits in Eastern Ohio beginning in 2011. Judging by volume, oil and natural gas extraction from these two formations comprised 89.7 and 98.4 percent, respectively, of all production for 2020 in Ohio (ODNR, 2022). Despite the production growth, Ohio oil and gas production from Ohio remains on the sparse side with 2.63 percent of U.S. GDP in 2020. County Business Patterns (CBP) data show industry employment (21112-3 and 213111-2) also is sparse in Ohio (U.S. Bureau of the Census, 2021b).

The growth of oil and gas production from Ohio contrasts with other mining production (212, black stars, principally from coal mines and quarries), which fluctuated over the years, trending lower in the last few years with a net decline of 28.2 percent from 2008 through 2020. Corresponding U.S. industry production also has trended lower with 2020 output 24.0 percent below that of 2008. Other mining output from Ohio remains sparse at 1.90 percent of U.S. industry GDP; this is consistent with actual coal production from Ohio during 2020, which was 0.7 percent of the U.S. total (U.S. EIA, 2022). Support activities for all mining (213, white dots) have fluctuated like those across the country. While CBP employment data indicate coal mining (2121) is proportional with the U.S. industry, related support jobs (213113) are sparse (U.S. Bureau of the Census, 2021b).

Farm production (NAICS 111-2, green squares) fluctuated from year to year, while output from the much smaller forestry-fishing-hunting cluster (113-5, green triangles) has trended higher. These patterns are roughly similar to their national counterparts. CBP data show all eight farm-support and forestry-fishing-hunting-etc. groups (1131-1153) are more or less sparse in Ohio, consistent with GDP figures. However, data from the U.S. DA (2022) indicate two exceptions in farming: in 2020, Ohio was the 7<sup>th</sup> ranked source for soybeans with 6.4 percent of the U.S. total and the 8<sup>th</sup> ranked source for corn with 4.0 percent of the U.S. total – both as measured in bushels harvested.

See Tables A1a, A6, A15-A17, A21

## Changes in Infrastructure Sectors' Output in Ohio, 2008-2020 (Construction & Utilities)



Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised



## INFRASTRUCTURE

The chart above illustrates changing output levels from the two infrastructure components: (1) constructing the transportation networks, homes and other facilities with their component systems (NAICS 23), and (2) supplying the electricity, fuel, water – and sometime sewage treatment – necessary to keep them and related equipment operating (utilities, 22). No more-specific GDP figures for industries are available for either sector.

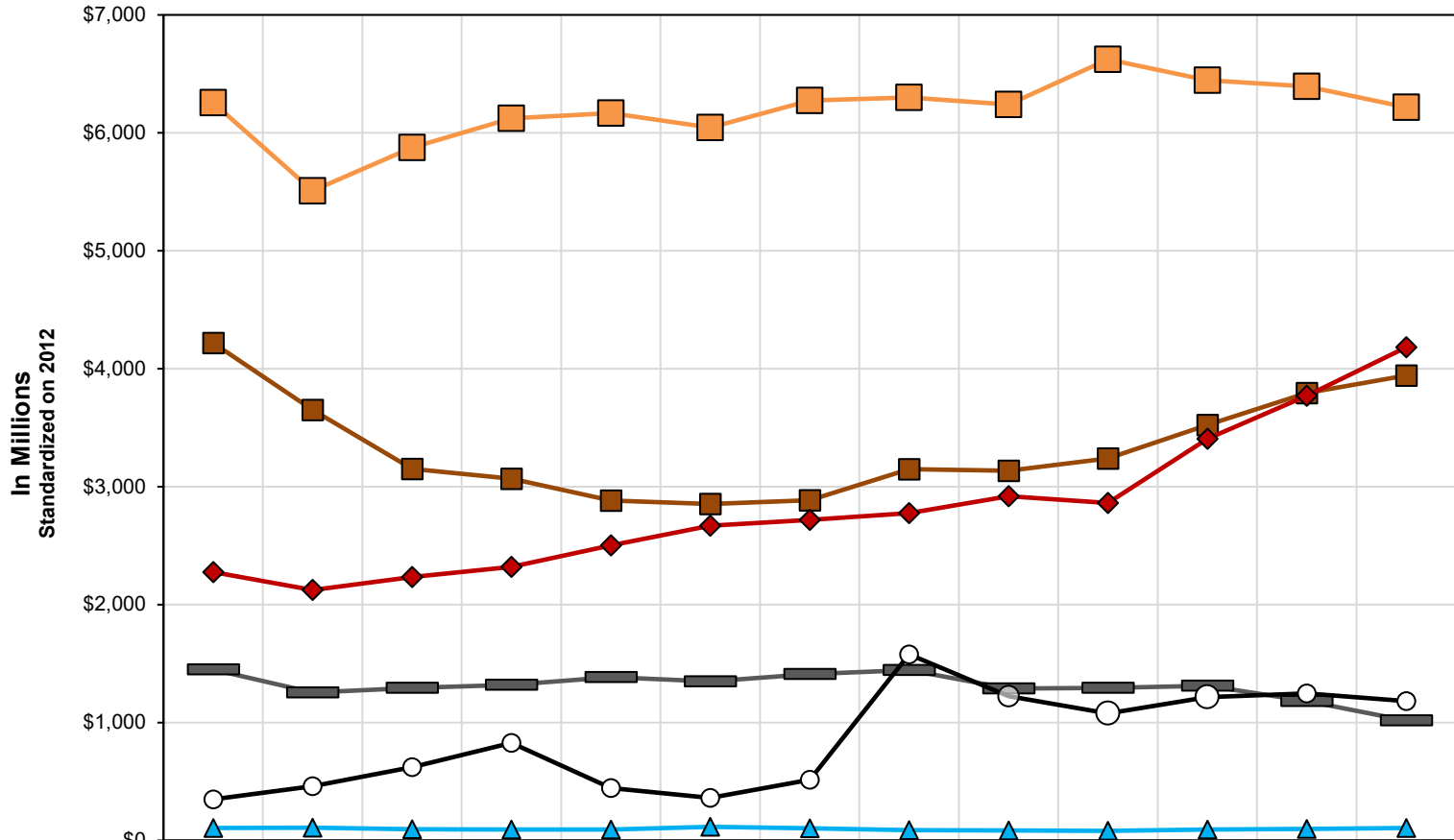
Construction activity in Ohio (gray squares) declined with the 2008-2009 recession, reaching a nadir in 2010 that was 15.2 percent below that of 2008. It rose fairly steadily to 2019 – a 29.2 percent expansion – and declined in 2020. A similar trend in national construction activity was evident: sector GDP falling 19.8 percent from 2008 through 2011, growing 25.0 percent from 2011 through 2019 and falling slightly in 2020. However, data in Appendix Table A3 show 2020 activity levels in Ohio are 31.3 percent lower than in 2000, with U.S. levels 16.8 percent less. Residential building permit data, which track part of the construction industry, tell a similar story. Permitted-units in Ohio in 2020 (29,686) were 122.5 percent above the number at the depth of the recession in 2009 (13,343), but were only 55.6 percent of the 2003 peak (53,385) (U.S. Bureau of the Census, n.d.).<sup>8</sup> County Business Patterns (CBP) data point to Ohio's non-residential building construction (2362) as essentially proportional with the nation (U.S. Bureau of the Census, 2021b).

The chart above also illustrates relatively small fluctuations in the otherwise steady provision of utility services *by private sector* organizations (orange diamonds). As judged by CBP employment numbers, these are: (1) principally generating and distributing electric power; (2) secondarily the local distribution of natural gas; and (3) supplying water and treating sewage as tertiary endeavors. Utility services provided by governments are included in the government sector. The net change in Ohio was a 4.3 percent increase from 2007 to 2019. However, data in Appendix Table A3a show 2020 service levels 9.9 percent lower than 2000. This 20-year history for Ohio contrasts with the 15.7 percent growth for the nation. This contrast is consistent with the very slow population growth in Ohio and the more rapid national growth. CBP data point to (1) roughly proportional activity in electric power generation, transmission and distribution (2211), (2) the concentration in local natural gas distribution (2212), and (3) sparse private sector water and sewage services (2213) here (U.S. Bureau of the Census, 2021b).

See Tables A3, A14-A17, A21

## Changes in Transportation and Warehouse Services in Ohio, 2008-2020

(the More Freight-Oriented Industries)



	2008 <sup>^</sup>	2009 <sup>^</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 <sup>**</sup>
—■— 482: by Rail	\$1,449	\$1,253	\$1,294	\$1,319	\$1,385	\$1,347	\$1,410	\$1,444	\$1,288	\$1,294	\$1,310	\$1,182	\$1,016
—▲— 483: by Water	\$106	\$107	\$96	\$93	\$92	\$115	\$102	\$88	\$85	\$81	\$92	\$98	\$106
—■— 484: by Truck	\$6,257	\$5,509	\$5,875	\$6,123	\$6,166	\$6,044	\$6,274	\$6,299	\$6,240	\$6,623	\$6,446	\$6,393	\$6,218
—○— 486: by Pipeline	\$349	\$459	\$620	\$828	\$443	\$361	\$515	\$1,578	\$1,224	\$1,077	\$1,216	\$1,246	\$1,180
—■— 492, 488-7: Couriers, Support, Sights	\$4,218	\$3,651	\$3,152	\$3,067	\$2,882	\$2,853	\$2,886	\$3,149	\$3,134	\$3,240	\$3,524	\$3,794	\$3,941
—◆— 493: Warehouse/Storage	\$2,274	\$2,123	\$2,233	\$2,319	\$2,501	\$2,670	\$2,719	\$2,774	\$2,920	\$2,861	\$3,406	\$3,771	\$4,181

Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; <sup>\*</sup> - Initial; earlier years may be revised

## TRANSPORTATION AND WAREHOUSING – MOVING AND STORING FREIGHT

Private sector transportation and warehousing services move people and goods in large numbers.<sup>9</sup> The more logistical industries in the sector principally move and store raw and intermediate materials as well as finished goods. The chart above shows the plurality of such services in Ohio are provided by the trucking industry (NAICS 484, orange squares), followed by combination of courier, support and sightseeing services (492, 488 and 487, brown squares).<sup>10</sup> Rail transport (482, charcoal rectangles) was third-ranked until 2015; it is now rivalled by pipeline services (486, white dots), which grew in response to the tremendous increases in oil and gas production. Water transportation services provided by freighters and barges (483, blue triangles) had the smallest role.<sup>11</sup>

Trucking services show the effects of the 2008 recession and subsequent recovery, following the pattern seen in durable goods production. Courier-support-sightseeing services also contracted during the recession but did not begin recovery until about 2015; this may have been partially due to DHL Express terminating a major operation at Wilmington Air Park in 2009 and Amazon beginning use in 2015 (Wikipedia, 2019).<sup>12</sup> These contrast with other major industries such as warehousing and storage (493, red diamonds) or rail, which were less affected by the recession, and pipeline and water transportation services, which appear to have been unaffected by the recession.

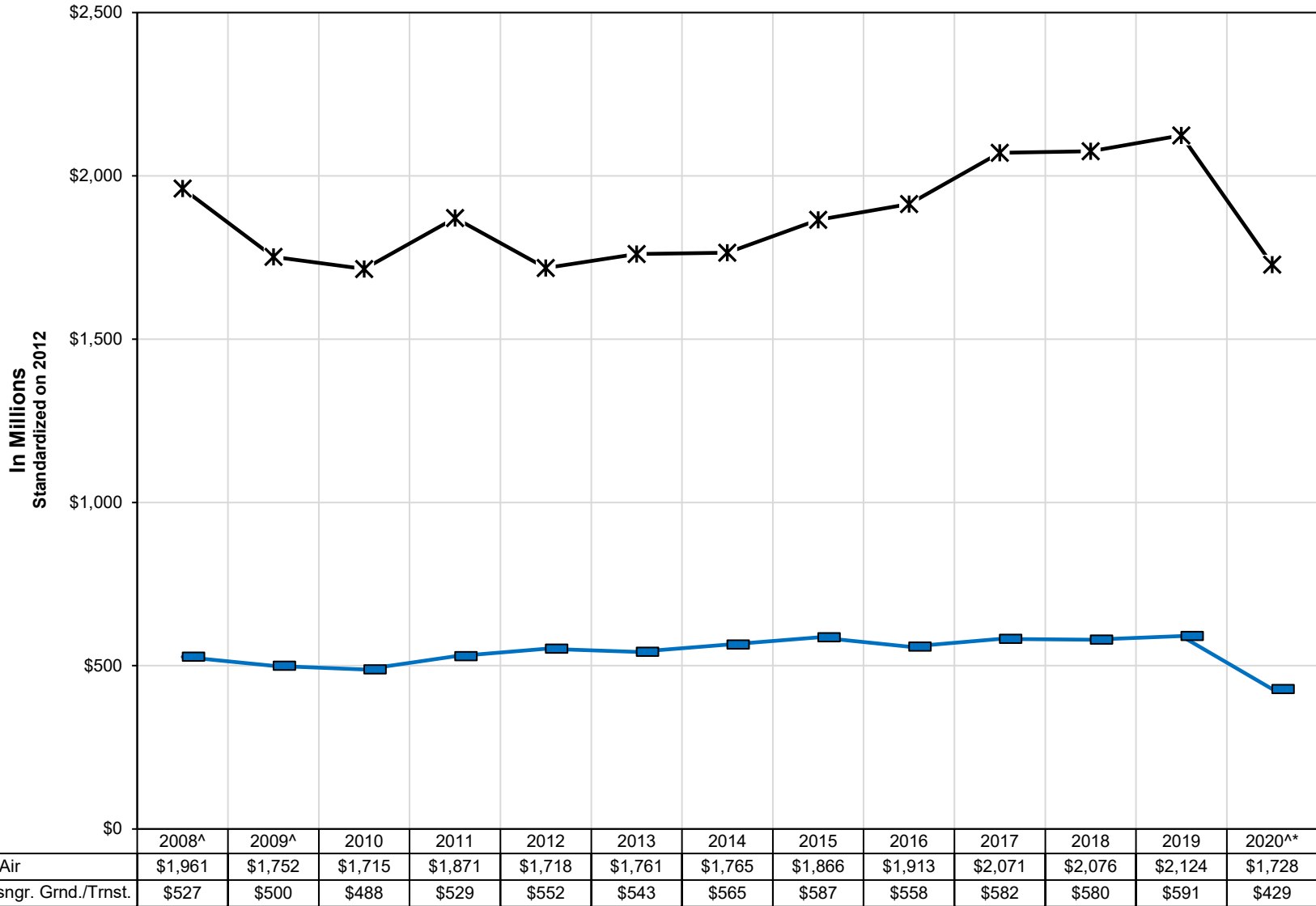
These patterns of change are more or less part of national level changes: (1) the contraction and partial recovery in trucking, (2) the decline and weaker recovery in courier and support services, (3) the relatively steady states of railroad and water transportation, (4) the more or less steady growth in warehousing and storage, and (5) the net growth in pipeline transportation. Ohio's growth rate was comparatively slower in the fourth item and faster in the fifth.

County Business Patterns (CBP) data specify generalized trucking (4841) as concentrated in Ohio. Generalized trucking moves a wide variety of commodities, often those that can be placed on pallets or in containers. Specialized trucking (4842), which uses tankers, refrigerated trailers or specialized equipment for moving household and specific industrial goods, is proportional. CBP data also point to a moderate concentration in couriers (4921) instead of local messenger and delivery services (4922). Similarly, CBP data specify the overall concentration in warehousing and storage services to general and other warehousing and storage (49311 and 49319) as opposed to refrigerated and farm produce storage (49312-3). To a large extent, this is consistent with the general concentration of manufacturing here. Employment in pipeline transportation is concentrated in moving crude oil and refined petroleum products (4861 and 4869) but not natural gas (4862). Rail and other transportation support (4882 and 4889) also are concentrated here (U.S. Bureau of the Census, 2021b).<sup>13</sup>

See Tables A7, A15-A17, A21

## Changes in Transportation Services in Ohio, 2008-2020

(the More Passenger-Oriented Industries)



Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised

## TRANSPORTATION – PASSENGER SERVICES

The chart above illustrates the BEA’s presentation of the more passenger-oriented transportation services in Ohio:

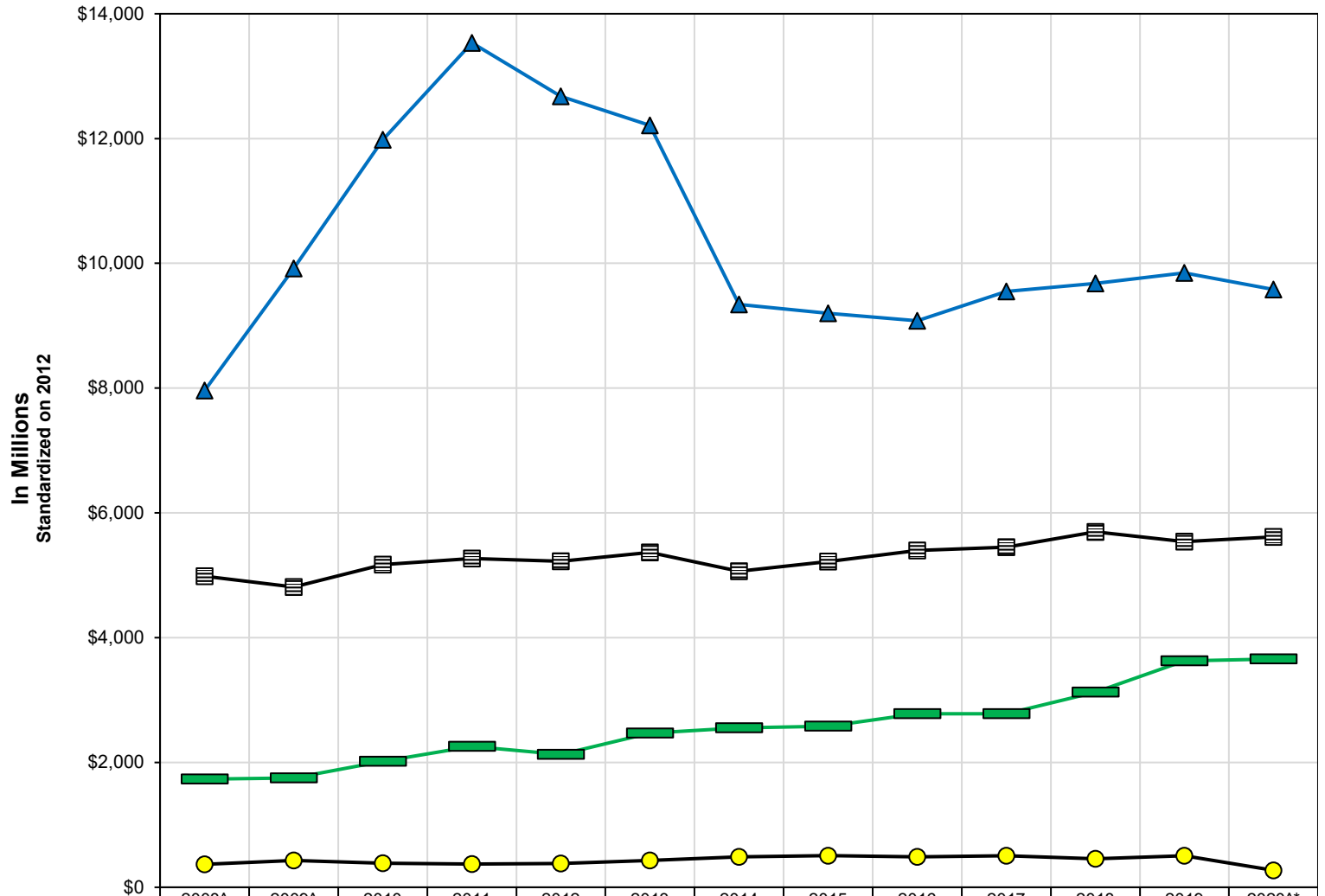
- airlines (NAICS 481, black stars), which move more passengers than freight,<sup>14</sup> and
- passenger ground transportation services such as taxis, limousines, commuter rail, and local and intercity bus systems (485, blue rectangles).

The chart shows both major industries contracting in the 2008-2009 recession. Recovery and sustained expansion was first evident in passenger ground transportation in 2011 and in airline services in 2013. These peaked in 2019 with a pronounced contraction in 2020. A similar pattern of expansion and steep contraction is evident across the nation.

Neither of these major transportation services is concentrated in Ohio, but County Business Patterns data point to one exception: non-scheduled air transportation (4812) (U.S. Bureau of the Census, 2021b). Non-scheduled air transportation is the flexible part of the system that will go anywhere at any time regularly scheduled airplanes do not.

See Tables A7, A15-A17, A21

## Changes in Information Services in Ohio, 2008-2020



■ 511: Publishing (inc. Sftwr. exc. Internet)	\$4,985	\$4,813	\$5,173	\$5,271	\$5,224	\$5,368	\$5,064	\$5,220	\$5,396	\$5,451	\$5,697	\$5,540	\$5,614
● 512: Motion Pic./Sound Rcrdng.	\$369	\$429	\$386	\$375	\$382	\$432	\$489	\$508	\$487	\$508	\$458	\$507	\$272
▲ 515, 7: Brcdstng./Telecommnctns.	\$7,960	\$9,916	\$11,980	\$13,534	\$12,677	\$12,212	\$9,340	\$9,201	\$9,078	\$9,549	\$9,678	\$9,845	\$9,581
■ 518, 9: Data Prcssng., etc. (inc. Internet)	\$1,734	\$1,753	\$2,017	\$2,259	\$2,127	\$2,471	\$2,555	\$2,582	\$2,780	\$2,783	\$3,129	\$3,630	\$3,659

Source: U.S. BEA

^ - A recession year for the nation; \* - Initial; earlier years may be revised

## INFORMATION

The chart above illustrates the net growth of three of the four major industries and clusters in this sector. The sector's net expansion of 27.6 percent was driven principally by the 111.1 percent increase in data processing, hosting and other information services, which include Internet publishing (NAICS 518 plus 519, green rectangles). The striking expansion and contraction of the broadcasting and telecommunication industry (515 plus 517, blue triangles) from 2008 to 2014 may be more apparent than real, more the outcome of methodological changes by the BEA dealing with the allocation of earned income by state than a measure of where economic activity occurred,<sup>15</sup> and its 20.4 percent net gain may be more of an artifact from the 2008 recession starting point than anything else. The publishing industry (511, black and white squares), which includes software (5112) as well as print media (5111), grew 12.6 percent. The motion picture and sound recording industry (512, yellow dots) had been trending higher until it was hit by the COVID recession.

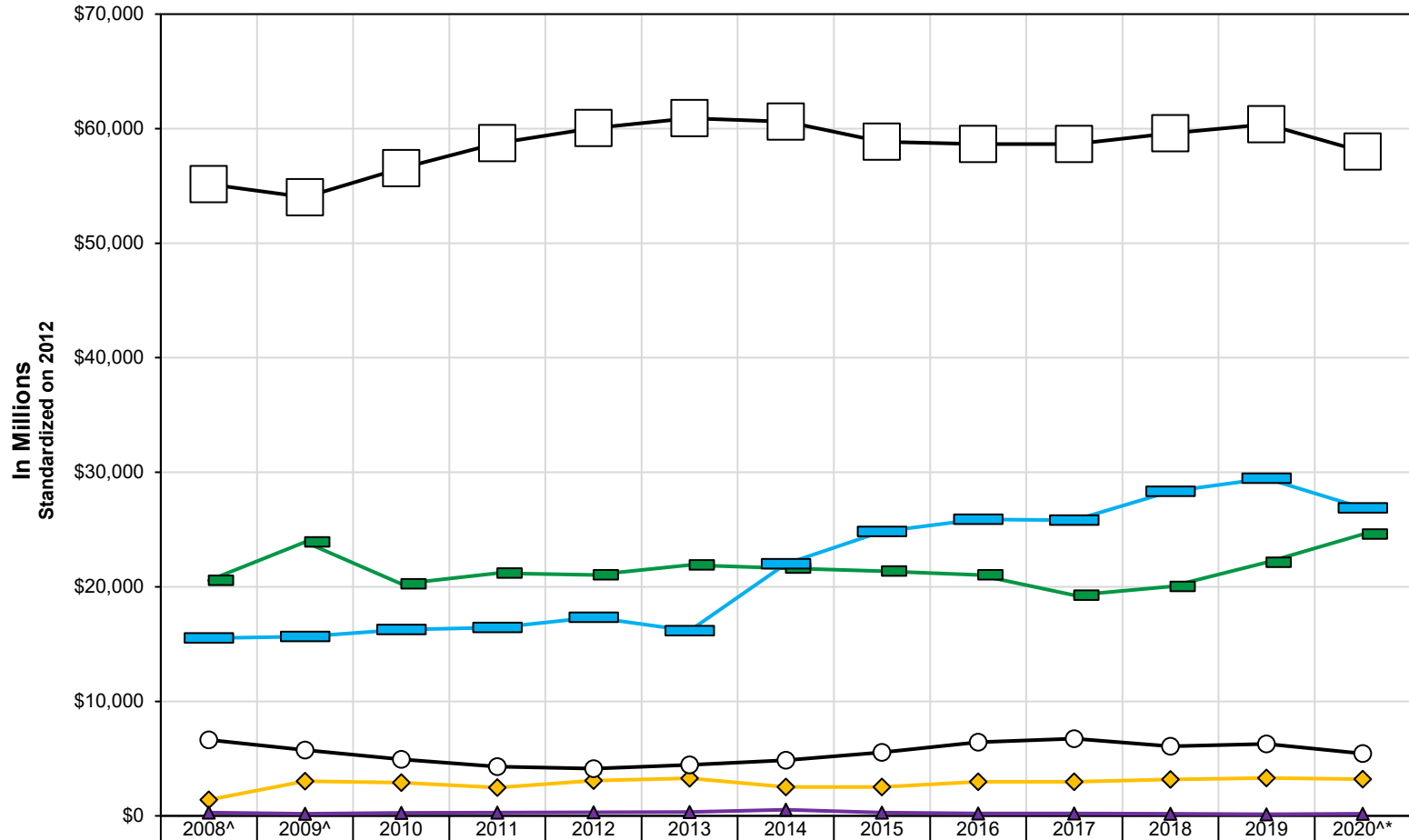
The changes seen in Ohio were part of changes seen for the nation as a whole. The difference is the slower growth rates and more severe contractions in Ohio.

Overall, the four industries or clusters are more or less sparse in Ohio despite their rapid growth. The only exception is the concentrated employment by print media with about 7.7 percent of the U.S. total, according to County Business Patterns (U.S. Bureau of the Census, 2021b).

See Tables A8, A15-A17, A21

## Changes in Financial Services in Ohio, 2008-2020

(Banks, Investments, Insurance, Real Estate & Rental/Leasing)



	2008 <sup>^</sup>	2009 <sup>^</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 <sup>^*</sup>
—■— 521-2: Banks, Other Lenders, etc.	\$20,554	\$23,896	\$20,248	\$21,194	\$21,026	\$21,909	\$21,613	\$21,373	\$21,043	\$19,262	\$20,021	\$22,119	\$24,584
—◆— 523: Securities/Investments	\$1,402	\$3,017	\$2,909	\$2,458	\$3,080	\$3,279	\$2,531	\$2,513	\$2,970	\$2,990	\$3,192	\$3,303	\$3,206
—■— 524: Insurance Carriers, etc.	\$15,515	\$15,649	\$16,258	\$16,427	\$17,319	\$16,158	\$22,006	\$24,827	\$25,891	\$25,813	\$28,336	\$29,457	\$26,865
—▲— 525: Funds, Trusts, etc.	\$288	\$171	\$263	\$279	\$317	\$330	\$536	\$297	\$202	\$214	\$192	\$142	\$173
—□— 531: Real Estate	\$55,145	\$54,017	\$56,542	\$58,724	\$60,060	\$60,908	\$60,606	\$58,864	\$58,648	\$58,660	\$59,586	\$60,368	\$57,987
—○— 532-3: Rental/Leasing	\$6,647	\$5,753	\$4,946	\$4,287	\$4,125	\$4,458	\$4,845	\$5,544	\$6,443	\$6,741	\$6,077	\$6,291	\$5,436

Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised



## FINANCIAL, REAL ESTATE, RENTAL AND LEASING ACTIVITIES

The chart above illustrates the vastly different scale of various financial activities and their changes over a dozen years in Ohio. GDP numbers for real estate (NAICS 531, white squares), the largest major industry in both the nation and Ohio, are much more indicative of the role mortgages play the economy than of real estate office activities.<sup>16</sup> The growth first evident in 2010 may indicate the start of the housing market's recovery after the 2008-2009 recession, the peak in 2013 may mark the culmination of pent-up demand and a return to normal times, and the downturn in 2020 coincides with the COVID recession. The changes in rental and leasing activities (532 plus 533, white dots), a smaller cluster including but not limited to housing units, seem to move in the opposite direction from – perhaps presaging – the changes in real estate. The corresponding U.S. industries sustained growth from 2010 through 2019 with contractions in 2020.

Despite their combined size, both industries are relatively sparse in Ohio. However, County Business Patterns (CBP) data suggest Ohioans' tendency to lease or rent motor vehicles and other consumer goods (5321-3) is largely proportional with the nation (U.S. Bureau of the Census, 2021b).

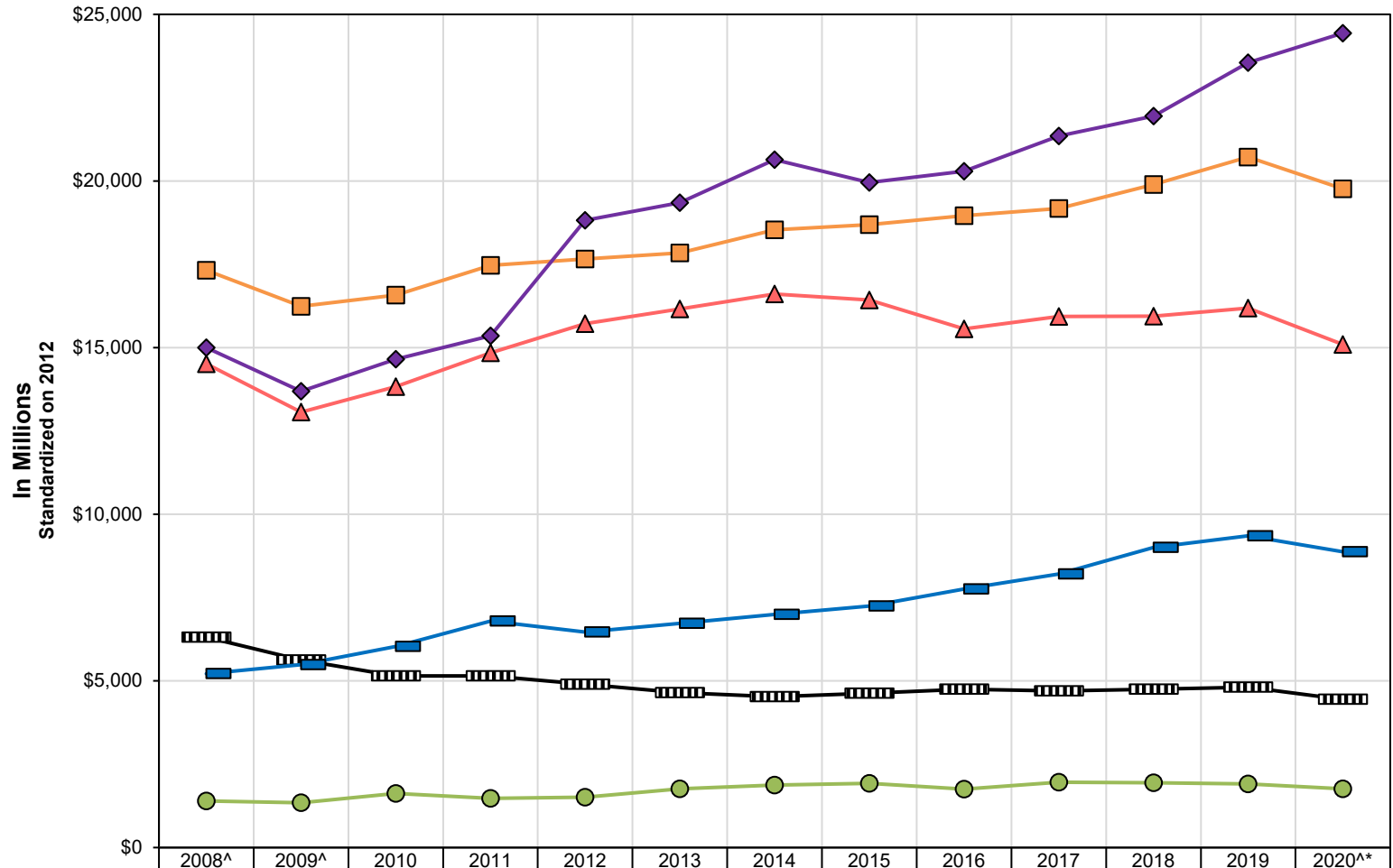
Services provided by the Federal Reserve and commercial banks, savings-and-loans, credit unions, non-depository lenders, etc. (521-2, green rectangles) peak in the recession years of 2009 and 2020; their services in other years appear fairly steady. The relatively steady provision of credit intermediation services (despite the increase of the last few years) contrasts with the insurance industry's growth since 2013 (524, blue rectangles); the latter is now the larger of the two and has become the second largest industry in this super-cluster. These patterns shown for Ohio are part of similar national changes.

Security and investment establishments (523, gold diamonds) saw reduced activity in 2008 before investors returned to financial markets in 2009. Activity has moderated in recent years here and across the nation. This contrasts with the net decline of the tiny funds-and-trusts industry (525, purple triangles) here and nationwide.

CBP data point primarily to insurance carriers (5241, companies actually writing the policies and assuming the risks) – and secondarily to depository credit intermediation (5221, banks, savings-and-loans, credit unions, etc.) as the groups driving sector (52) concentration here; the Federal Reserve also plays a small role (U.S. Bureau of the Census, 2021b).<sup>17</sup>

See Tables A9, A15-A17, A21

## Changes in Professional & Business Services in Ohio, 2008-2020



	2008 <sup>^</sup>	2009 <sup>^</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 <sup>^*</sup>
5411: Legal Svcs.	\$6,313	\$5,628	\$5,151	\$5,152	\$4,895	\$4,646	\$4,530	\$4,634	\$4,750	\$4,701	\$4,752	\$4,815	\$4,444
5415: Cmptr. Systems Dsgn., etc.	\$5,215	\$5,490	\$6,032	\$6,796	\$6,464	\$6,725	\$6,991	\$7,244	\$7,755	\$8,209	\$9,007	\$9,353	\$8,879
5412-4, 6-9: Other PST Svcs.	\$17,322	\$16,241	\$16,577	\$17,465	\$17,656	\$17,841	\$18,536	\$18,687	\$18,960	\$19,179	\$19,896	\$20,719	\$19,768
55: Mgt. of Cos./Entrprss.	\$15,003	\$13,690	\$14,653	\$15,359	\$18,822	\$19,350	\$20,641	\$19,959	\$20,291	\$21,348	\$21,947	\$23,550	\$24,438
561: Admnstrv./Spprt. Svcs.	\$14,516	\$13,065	\$13,831	\$14,840	\$15,717	\$16,162	\$16,608	\$16,429	\$15,560	\$15,931	\$15,946	\$16,189	\$15,092
562: Wst. Mgt./Rmdtn. Svcs.	\$1,399	\$1,344	\$1,624	\$1,474	\$1,513	\$1,766	\$1,875	\$1,924	\$1,751	\$1,960	\$1,947	\$1,909	\$1,764

Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised

## PROFESSIONAL AND BUSINESS SERVICES

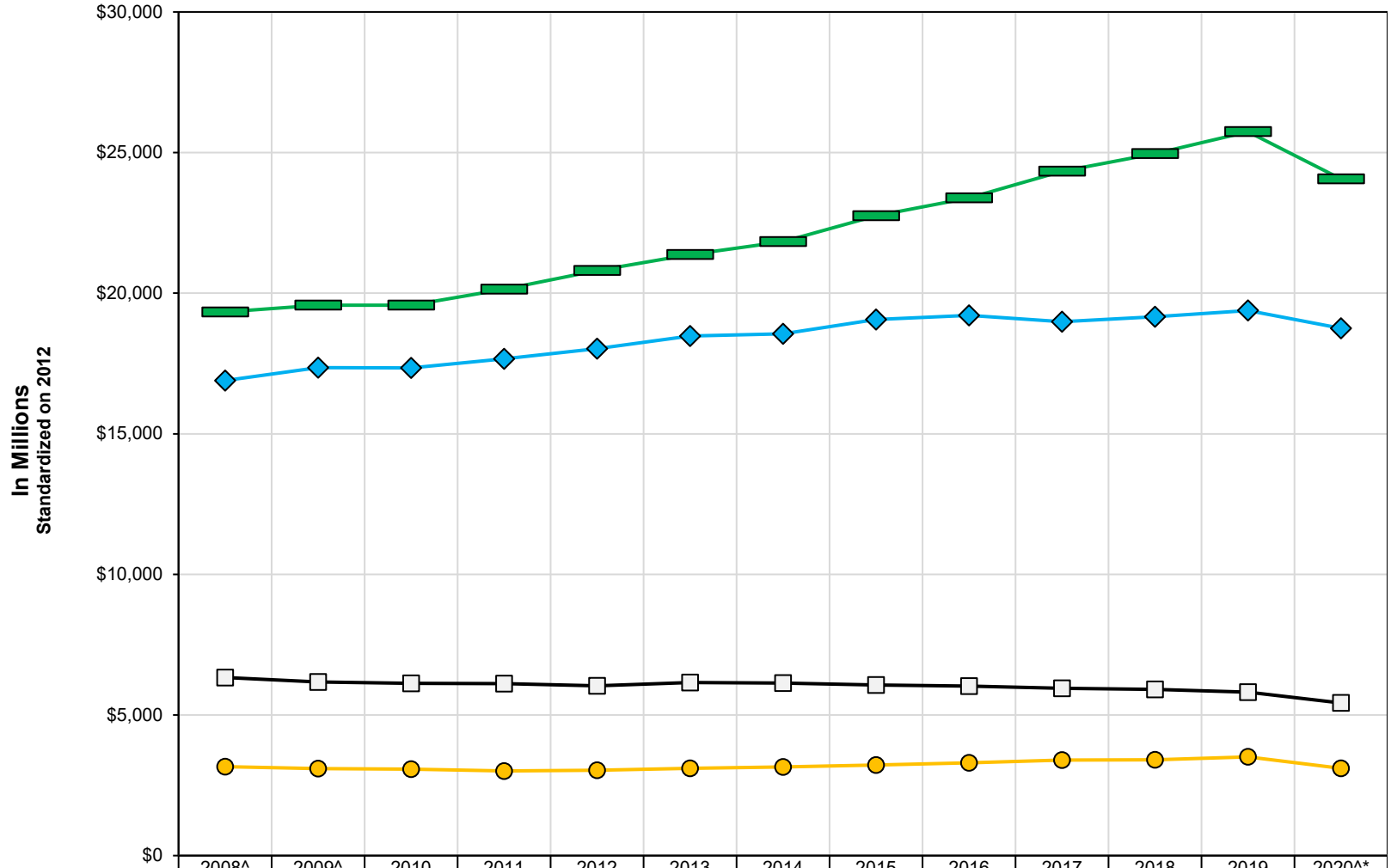
The chart above illustrates the varied experiences and changing levels of service provided by six industries from three sectors principally serving businesses. At one end this spectrum, legal services (NAICS 5411, long black and white rectangles) contracted a net 29.6 percent over a dozen years. This contrasts with the nearly uninterrupted 70.2 percent growth in computer systems design and related services (5415, short blue rectangles). The remaining professional, scientific and technical services (PST) (5412-4 and 5416-9, gold squares) also grew 14.1 percent. The only notable declines of the latter two were in 2020. All three trends were part of similar national trends. County Business Patterns (CBP) data indicate most PST services are not concentrated here; the exception is Other PST services (5419) such as marketing research, opinion polling, translating, photographic and veterinary services (U.S. Bureau of the Census, 2021b).

Enterprise management (55, purple diamonds) consists almost entirely of headquarters, regional or subsidiary management offices; holding companies are a tiny portion as judged by establishments and employment. CBP data show corporate and subsidiary *managing* offices are concentrated here (U.S. Bureau of the Census, 2021b).<sup>18</sup> This is consistent with the 53 Fortune U.S.-1,000 companies headquartered here, six of which also are on Fortune's Global 500 list, ranking Ohio 5<sup>th</sup> in the nation in both instances (Fortune, 2021). The chart above shows services contracting to the recession's 2009 nadir and expanding fairly consistently thereafter; the same is true for the industry nationwide.

Administrative support establishments (561, rose triangles) specialize in providing out-sourced services to businesses. Activities include document preparation, mailing, bookkeeping, collections and repossessions, as well as the functions of call centers, personnel, security, janitorial and clerical staff – among others. The chart above shows changes in such services often parallel changes in enterprise management. This growth pattern also mirrors the national trend. While this major industry has a proportional role in Ohio's economy, CBP data point to other support services (5619) such as repossession, court reporting, stenography, barcoding, inventory, lumber grading, fundraising, etc. as concentrated here (U.S. Bureau of the Census, 2021b). *Private sector* waste management and remediation services (562, green dots) include collecting, treating, incinerating or otherwise disposing of waste materials (except sewage, which is classified as a utility service). Also included are operating landfills and recovering recyclables. These services have trended higher here and across the nation over the decade but contracted in the 2020 COVID recession. This major industry's concentration here is focused on waste treatment and disposal (5622) (U.S. Bureau of the Census, 2021b).

See Tables A10, A15-A17, A21

## Changes in Health Care & Assistance Services in Ohio, 2008-2020



621: Ambulatory Care	\$19,332	\$19,577	\$19,572	\$20,138	\$20,805	\$21,369	\$21,831	\$22,751	\$23,382	\$24,333	\$24,956	\$25,740	\$24,056
622: Hospitals	\$16,894	\$17,355	\$17,340	\$17,667	\$18,032	\$18,478	\$18,553	\$19,062	\$19,211	\$18,981	\$19,162	\$19,382	\$18,749
623: Nrsng./Rsdntl. Care Fcts.	\$6,334	\$6,174	\$6,129	\$6,115	\$6,037	\$6,153	\$6,140	\$6,066	\$6,029	\$5,948	\$5,916	\$5,817	\$5,428
624: Social Assistance	\$3,162	\$3,092	\$3,076	\$3,011	\$3,033	\$3,107	\$3,150	\$3,219	\$3,304	\$3,399	\$3,405	\$3,510	\$3,108

Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised

## HEALTH CARE AND SOCIAL ASSISTANCE

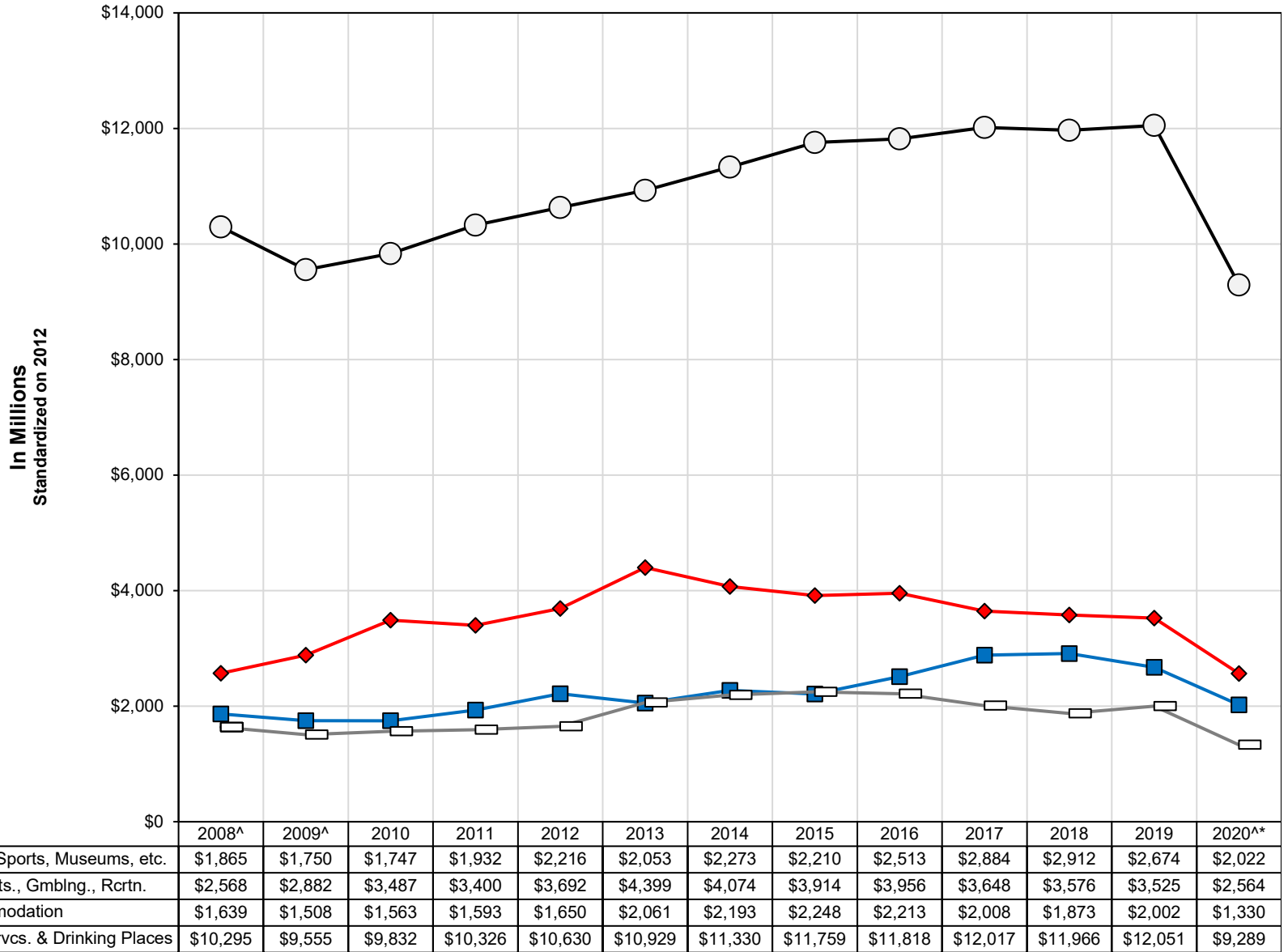
The chart above documents the recent history of the major *private sector* health care and social assistance industries. Health care services at ambulatory establishments (NAICS 621, green rectangles) and hospitals (622, blue diamonds) rose 33.1 and 14.7 percent, respectively, from 2008 through 2019, before declining 6.5 and 3.3 percent as COVID-19 spread across the state. Services provided by nursing and residential care facilities (623, light gray squares) continued to decline – just at a slightly steeper rate in 2020. The trends in ambulatory and hospital care mirror those seen for the nation as a whole, but long-term contraction in nursing and residential care here bucks the national expansion of such services. Hospitals and nursing/residential care facilities are concentrated in Ohio while ambulatory health care is essentially proportional. County Business Patterns (CBP) data suggest specific groups concentrated here:

- In ambulatory health care (621) they are physicians' offices (6211) and home health care work (6216);
- In hospitals (622) they are general medical and surgical (6221) and psychiatric and substance abuse (6222);
- In nursing and residential care facilities (623) they are nursing homes (6231), residential mental retardation and health facilities (6232) and community care facilities for the elderly (6233 – which lack nursing care) (U.S. Bureau of the Census, 2021b).

The smaller *private sector* social assistance industry (624, gold dots) was barely phased by the 2008-2009 recession, expanded 13.5 from 2009 to 2019, but contracted 11.5 percent in the 2020 COVID recession. The expansion and contraction here was part of an encompassing national trend. Overall, the industry's role in Ohio's economy is close to proportional with the nation's, with a notable concentration in vocational rehabilitation services (6243) such as job counseling, training and/or work experience for those lacking such; sheltered workshops are included (U.S. Bureau of the Census, 2021b).

See Tables A11, A15-A17, A21

## Changes in Leisure & Hospitality Services in Ohio, 2008-2020



Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised

## LEISURE AND HOSPITALITY

A look at the chart above shows the varying effect of the 2008-2009 recession on three of the four major industries in this cluster as well as the dramatic impact of COVID-19 on all four in 2020. During the hard times of the 2008-2009 recession, people reduced discretionary expenditures such as:

- travel, which means less use of accommodations (NAICS 721, white rectangles);
- going out, which means less patronage of food services and drinking places (722, light gray dots); and
- participation in arts, sports and museums events (711-2, blue squares).

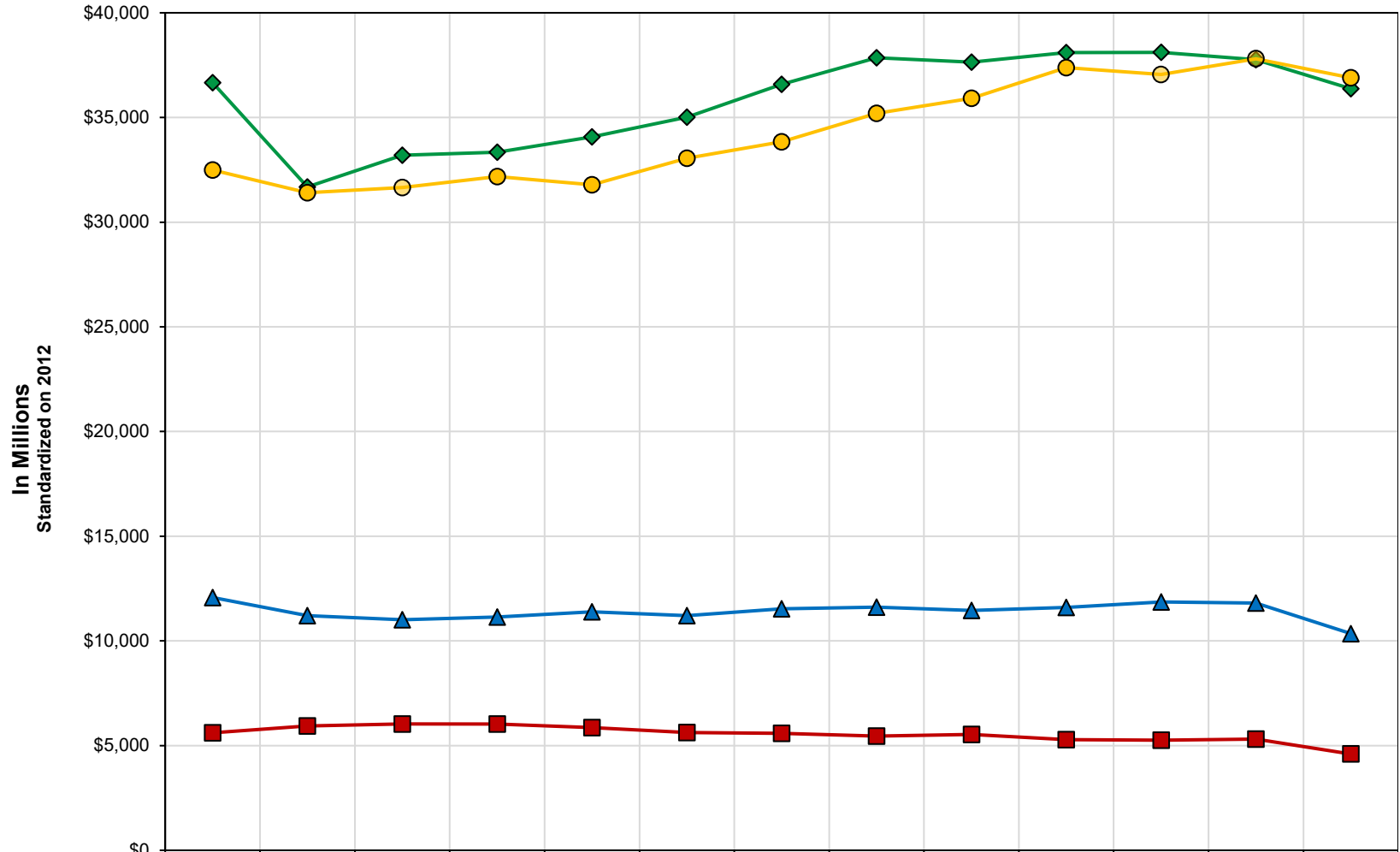
The exception in Ohio was the growth in amusements-gambling-recreation (713, red diamonds) first seen in 2009. Some forms of gambling (7132) were legalized in Ohio in 2009, with casinos opening in 2012. The growth of unregulated Internet or sweepstakes cafes may have played a role in growth from 2007 to 2012 (Ott, 2013). Services declined after 2013 while those of the other three major industries continued expanding for at least a few more years.

This contrasts with the COVID recession during which establishments were closed for a few months in an effort to limit the spread of the disease. The same patterns for the 2008-2009 and 2020 recessions are evident nationwide.

Despite legalized gambling's growth in Ohio, County Business Patterns data show it remains sparse here, with only spectator sports (7112), museums (71211), and zoos and gardens (71213) concentrated here (U.S. Bureau of the Census, 2021b).

See Tables A12, A15-A17, A21

## Changes in Trade, Education and Other Private Services in Ohio, 2008-2020



Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised



## TRADE, EDUCATION AND OTHER PRIVATE SECTOR SERVICES

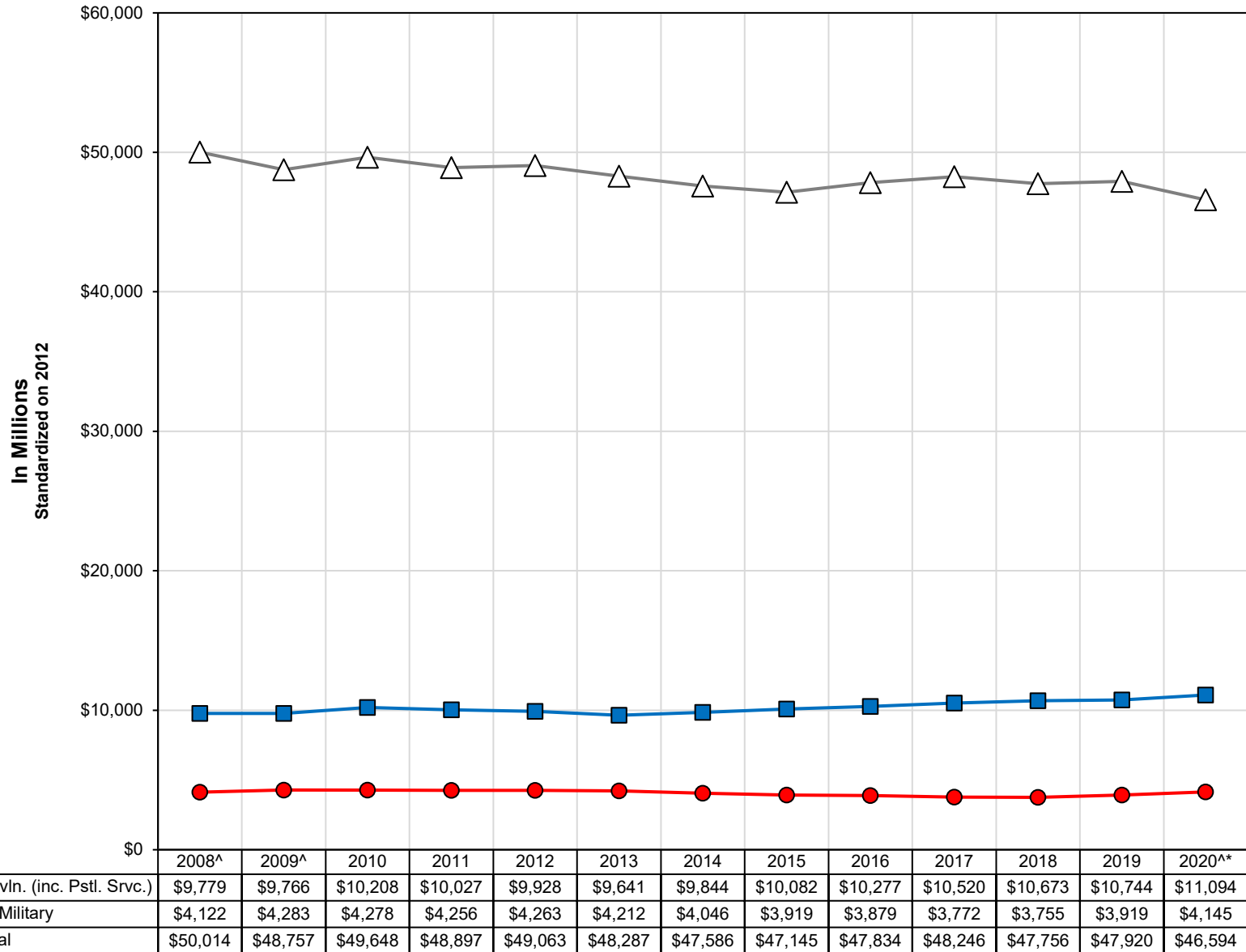
The chart above illustrates the similarities and differences in the changing activity levels of four sectors. More specific industry GDP figures are unavailable. Activity levels in wholesale and retail trade (NAICS 42 and 44-45, green diamonds and gold dots) roughly parallel each other: both contracted during the 2008-2009 recession and noticeably expanded by 2013. They plateaued in 2017-2019 and contracted in 2020. Other private sector services (81, blue triangles) contracted in 2008-2009 but fluctuated thereafter until contracting again in 2020. These three patterns in Ohio are quite similar to – and part of – corresponding national sector trends (U.S. BEA, 2021).

These contrast with the slight expansion of *private sector* educational services (61, red squares) from 2008 to 2010 and the subsequent contraction, very gradual until 2020. This is consistent with the idea some people enroll in or return to schools to add or improve skills when jobs are scarce, and choose jobs when jobs are more plentiful. Corresponding services for the nation as a whole also rose during the recession but have fluctuated with no discernible trend as the economy expanded (U.S. BEA, 2021).

Overall activity in wholesale, retail and other private sector services is largely proportional with the nation. However, County Business Patterns (CBP) data point to interesting wholesale sector variations: wholesalers distributing products of *manufacturing* industries concentrated in Ohio tend to have employment concentrated here. Wholesale jobs more or less concentrated here include those dealing in motor vehicles, parts and tires (4231), metals and minerals (except petroleum) (4235), hardware, plumbing and heating equipment (4237), machinery and equipment (4238) and chemicals and plastics (4246). The sparse employment among electrical equipment wholesalers (4236) is an exception to this tendency. CBP data also indicate the varying concentrations of some specific retail and other private sector activities in Ohio: lawn and garden equipment and supplies (4442), florists (4531), used merchandise stores (4533), vending machine operators (4542), commercial equipment repair and maintenance (8113 – excluding motor vehicle and electrical equipment repair), funeral homes, cemeteries and crematories (8122), and civic and social organizations (alumni associations, PTAs, scouts, ethnic associations, social clubs, fraternal lodges, veterans' organizations, etc., 8134). CBP data show no specific exceptions to the overall sparse private sector educational services (U.S. Bureau of the Census, 2021b).

See Tables A14-A17, A21

## Changes in Government Services in Ohio, 2008-2020



Source: U.S. BEA

<sup>^</sup> - A recession year for the nation; \* - Initial; earlier years may be revised

## FEDERAL, STATE AND LOCAL GOVERNMENT

Taken together, the services provided by federal, state and local government agencies enterprises are a little sparse in Ohio. However, the graph above illustrates the differences between the three parts of the sector. Around 77 percent of all government services in Ohio were provided by state and local agencies (NAICS 92sl, white triangles).<sup>19</sup> Those services contracted a net 6.8 percent over a dozen years from \$50.0 to \$46.6 billion. The effects of the recessions are seen in 2009 and 2020, but contractions were milder than for the overall economy. Although no specific industry GDP data are available, jobs figures in Appendix Table A1c point to public education as the industry where the 2020 contraction mainly occurred. Concentration ratios at or very close to 1.00 mean that the state and local government services provided here remained in the middle of the range of services provided by all state and local governments in the U.S.

By contrast, the civilian part of the federal government, including the Postal Service (92fc and 491, blue squares), plays a relatively small and sparse role in the state's economy. The military's role (92811, red dots) is proportionally even smaller despite the presence of facilities such as the Defense Supply Center (Columbus), Wright-Patterson Air Force Base (Dayton), and two Defense Finance and Accounting Service centers (Cleveland and Columbus). Data from other sources are consistent with the GDP concentration ratios; for example:

- 0.18 percent of the labor force (employed and unemployed persons ages 16 years and older) in Ohio was in the armed forces – less than the national average of 0.73 percent (U.S. Bureau of the Census, 2020);
- 1.82 percent of all employed persons ages 16 years and older in Ohio worked for the federal government – less than the national average of 2.43 percent (U.S. Bureau of the Census, 2020; bases for the percentages include self-employed and unpaid family workers);
- 1.53 percent of the value of 2019 U.S. Department of Defense procurement contracts went to firms in Ohio (U.S. SAM, 2021).

See Tables A1c, A13, A15-A17

## SUMMARIZING CHANGES: 4<sup>th</sup> QUARTER 2019 TO 2<sup>nd</sup> QUARTER 2020

The right-most columns in the table below display the widespread but varied impact of COVID-19 on Ohio's economy. Overall, private sector output declined more than government services in both absolute and relative terms: \$63.2 vs. \$3.1 billion and 11.4 vs. 4.8 percent. Within the private sector, the severity of the contractions exceeded 45 percent for some sectors while others were essentially untouched; real output from the mining and weather-dependent agriculture-forestry-fishing-hunting sectors actually rose. The hardest hit industries may have been those more dependent on travel, face-to-face or close-quarters interaction, less able to work-from-home or conduct business on-line, and those whose services and products are at least temporarily postpone-able. Non-COVID factors also could have affected changes.

Sector	GDP*		Changes*	
	'19-Q4	'20-Q2	Numeric	Percent
Ohio Total	\$615.2	\$549.3	-\$66.0	-10.7%
Private sector -----	\$552.0	\$488.8	-\$63.2	-11.4%
Goods-producing summary	\$137.4	\$121.3	-\$16.1	-11.7%
Agriculture, forestry, fishing & hunting -----	\$4.2	\$5.4	\$1.2	29.9%
Mining	\$9.0	\$10.0	\$1.0	11.1%
Construction -----	\$19.8	\$17.7	-\$2.1	-10.8%
Durable goods manufacturing	\$56.7	\$44.5	-\$12.2	-21.6%
Non-durable goods manufacturing-----	\$47.7	\$44.1	-\$3.6	-7.6%
Service-providing summary	\$414.5	\$369.5	-\$45.0	-10.9%
Utilities -----	\$9.6	\$9.6	\$0.0	-0.4%
Wholesale trade	\$37.7	\$34.0	-\$3.7	-9.9%
Retail trade -----	\$38.2	\$34.7	-\$3.5	-9.2%
Transportation & warehousing	\$19.5	\$16.2	-\$3.3	-17.1%
Information -----	\$19.7	\$18.8	-\$0.9	-4.6%
Finance & insurance	\$55.6	\$53.9	-\$1.6	-2.9%
Real estate, rental & leasing-----	\$66.1	\$62.6	-\$3.4	-5.2%
Professional, scientific & technical	\$34.9	\$31.3	-\$3.6	-10.3%
Management of companies & enterprises -----	\$23.6	\$23.0	-\$0.6	-2.5%
Administrative support & waste management	\$18.1	\$14.9	-\$3.2	-17.5%
Education-----	\$5.2	\$4.4	-\$0.8	-14.8%
Health care & social assistance	\$54.2	\$46.2	-\$8.0	-14.8%
Arts, entertainment & recreation-----	\$6.3	\$2.7	-\$3.6	-55.7%
Accommodation & food services	\$14.1	\$8.1	-\$6.0	-42.8%
Other non-governmental services-----	\$11.8	\$9.1	-\$2.7	-22.7%
Government	\$63.4	\$60.3	-\$3.1	-4.8%

Notes: \* - annualized, in billions and standardized on 2012; figures may not sum to totals due to rounding and different adjustment factors; percentages usually are based on unrounded numbers.

## SUMMARIZING CHANGES: 4<sup>th</sup> QUARTER 2019 TO 3<sup>rd</sup> QUARTER 2021

The right-most columns in the table below show aggregate output from Ohio had recovered from the COVID recession in the third quarter of 2021; the difference from the fourth quarter of 2019 is small after adjusting for inflation. Detailed figures show output from eight sectors exceeding fourth quarter 2019 levels and 13 with output less than that. Among the lagging sectors, 11 have seen increased output from the depths of the recession in 2020's second quarter; these sectors are highlighted in **bold** below. Again, non-COVID factors also could have affected the changes among all sectors.

Sector	GDP*		Changes*	
	'19-Q4	'21-Q3	Numeric	Percent
Ohio Total	\$615.2	\$615.3	\$0.0	0.0%
Private sector -----	\$552.0	\$552.4	\$0.3	0.1%
Goods-producing summary	\$137.4	\$142.0	\$4.6	3.3%
Agriculture, forestry, fishing & hunting -----	\$4.2	\$6.4	\$2.0	54.0%
Mining	\$9.0	\$10.1	\$1.1	11.8%
<b>Construction</b> -----	\$19.8	\$19.0	-\$0.8	-4.2%
<b>Durable goods manufacturing</b>	\$56.7	\$55.8	-\$0.9	-1.5%
Non-durable goods manufacturing-----	\$47.7	\$50.9	\$3.2	6.6%
Service-providing summary	\$414.5	\$412.8	-\$1.7	-0.4%
Utilities -----	\$9.6	\$8.8	-\$0.8	-7.9%
<b>Wholesale trade</b>	\$37.7	\$36.1	-\$1.6	-4.3%
<b>Retail trade</b> -----	\$38.2	\$35.5	-\$2.7	-7.0%
<b>Transportation &amp; warehousing</b>	\$19.5	\$19.4	-\$0.1	-0.6%
Information -----	\$19.7	\$21.0	\$1.3	6.4%
Finance & insurance	\$55.6	\$58.9	\$3.3	5.9%
<b>Real estate, rental &amp; leasing</b> -----	\$66.1	\$64.6	-\$1.5	-2.2%
Professional, scientific & technical	\$34.9	\$35.7	\$0.8	2.2%
Management of companies & enterprises -----	\$23.6	\$25.3	\$1.8	7.5%
Administrative support & waste management	\$18.1	\$19.7	\$1.6	8.8%
<b>Education</b> -----	\$5.2	\$4.6	-\$0.6	-11.7%
Health care & social assistance	\$54.2	\$53.8	-\$0.4	-0.8%
<b>Arts, entertainment &amp; recreation</b> -----	\$6.3	\$5.6	-\$0.7	-11.4%
<b>Accommodation &amp; food services</b>	\$14.1	\$13.2	-\$1.2	-6.8%
<b>Other non-governmental services</b> -----	\$11.8	\$10.7	-\$1.1	-9.2%
<b>Government</b>	\$63.4	\$63.1	-\$0.2	-0.4%

Notes: \* - annualized, in billions and standardized on 2012; figures may not sum to totals due to rounding and different adjustment factors; percentages usually are based on unrounded numbers.

**Aggregate Gross Domestic Products for Multi-county Metropolitan Areas in Ohio, 2007-2020**  
(in millions of chained dollars standardized on 2012)

Area (Number of Counties)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
U.S.	\$15,623,871	\$15,642,962	\$15,236,262	\$15,648,991	\$15,891,534	\$16,253,970	\$16,553,348	\$16,932,051	\$17,390,295	\$17,680,274	\$18,079,084	\$18,606,787
Ohio	\$546,729	\$537,124	\$511,076	\$523,979	\$541,180	\$545,740	\$556,211	\$574,178	\$578,852	\$583,946	\$590,739	\$598,917
Akron (2)	\$32,169	\$31,729	\$29,801	\$30,542	\$30,658	\$30,948	\$31,395	\$32,018	\$32,175	\$32,247	\$32,639	\$33,277
Canton-Massillon (2)	\$15,003	\$14,764	\$13,857	\$14,603	\$15,655	\$15,337	\$16,362	\$17,397	\$17,481	\$17,226	\$17,328	\$17,245
Cincinnati (Ohio part, 5)^	\$91,740	\$91,285	\$87,861	\$90,561	\$94,241	\$94,967	\$95,950	\$98,569	\$100,696	\$104,247	\$105,188	\$106,390
Cleveland-Elyria (5)	\$115,243	\$114,119	\$106,621	\$107,682	\$109,634	\$110,449	\$110,726	\$112,901	\$113,216	\$113,545	\$114,578	\$117,230
Columbus (10)	\$95,866	\$94,646	\$91,720	\$94,509	\$98,191	\$101,853	\$104,567	\$107,732	\$109,401	\$111,826	\$114,836	\$116,945
Dayton-Kettering (3)	\$37,173	\$36,197	\$34,208	\$35,095	\$36,091	\$35,902	\$35,994	\$36,360	\$36,693	\$37,233	\$38,303	\$39,237
Toledo (4)	\$33,425	\$31,367	\$29,703	\$30,757	\$32,258	\$31,882	\$32,696	\$34,731	\$33,018	\$32,994	\$33,118	\$34,021
Youngstown... (Ohio part, 2)^	\$17,704	\$17,163	\$15,306	\$15,696	\$16,219	\$15,934	\$15,913	\$15,629	\$15,409	\$15,260	\$14,922	\$14,988

Area (Number of Counties)	2019	2020*	Net Changes: '07-'09		Net Changes: '09-'19		Net Changes: '19-'20		Net Changes: '07-'20	
			Number	Percent	Number	Percent	Number	Percent	Number	Percent
U.S.	\$19,032,672	\$18,384,687	-\$387,609	-2.5%	\$3,796,410	24.9%	-\$647,985	-3.4%	\$2,760,816	17.7%
Ohio	\$611,146	\$589,898	-\$35,653	-6.5%	\$100,069	19.6%	-\$21,248	-3.5%	\$43,168	7.9%
Akron (2)	\$33,714	\$31,886	-\$2,368	-7.4%	\$3,913	13.1%	-\$1,828	-5.4%	-\$282	-0.9%
Canton-Massillon (2)	\$17,310	\$16,470	-\$1,145	-7.6%	\$3,453	24.9%	-\$840	-4.9%	\$1,467	9.8%
Cincinnati (Ohio part, 5)^	\$110,518	\$106,071	-\$3,879	-4.2%	\$22,657	25.8%	-\$4,448	-4.0%	\$14,331	15.6%
Cleveland-Elyria (5)	\$119,388	\$114,298	-\$8,622	-7.5%	\$12,767	12.0%	-\$5,090	-4.3%	-\$945	-0.8%
Columbus (10)	\$119,874	\$117,134	-\$4,146	-4.3%	\$28,153	30.7%	-\$2,740	-2.3%	\$21,268	22.2%
Dayton-Kettering (3)	\$40,187	\$38,766	-\$2,965	-8.0%	\$5,980	17.5%	-\$1,422	-3.5%	\$1,593	4.3%
Toledo (4)	\$35,026	\$33,455	-\$3,722	-11.1%	\$5,324	17.9%	-\$1,571	-4.5%	\$31	0.1%
Youngstown... (Ohio part, 2)^	\$15,242	\$14,518	-\$2,397	-13.5%	-\$65	-0.4%	-\$724	-4.7%	-\$3,185	-18.0%

Notes: \* - initial; earlier years may be revised; ^ - estimated from sums of Brown, Butler, Clermont, Hamilton and Warren Counties for the part of Cincinnati in Ohio, and Mahoning and Trumbull Counties for the part of Youngstown-Warren-Boardman in Ohio.

Source: U.S. BEA (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

## RECESSION AND RECOVERY IN METROPOLITAN AREAS AND COUNTIES

The table above displays changes in economic output for six multi-county metropolitan areas (MAs) wholly in Ohio and two crossing state boundaries, as well as for the state and the nation. Ohio portions of the latter two are also displayed. One-county MAs – either wholly in Ohio or as part of a cross-state MA – are part of the county tables. The figures have been adjusted for inflation and standardized on 2012.

The widespread impact of the recession during 2007-2009 is evident with output from all eight contracting at steeper rates than the national average of 2.7 percent; six of the eight contracted at rates steeper than the state average of 6.5 percent. Youngstown-Warren-Boardman was hit the hardest, with the Ohio portion contracting 13.5 percent. These figures contrast with Cincinnati and Columbus, which contracted 4.2 and 4.3 percent, respectively. One partial explanation may be that Cincinnati and Columbus are relatively less dependent on the highly cyclical steel and motor vehicle industries.

All the multi-county MAs except Youngstown-Warren saw real growth from 2009 through 2019. Columbus grew at a rate notably higher than the U.S. average, while Canton-Massillon and the Cincinnati portion of Ohio grew at rates matching and slightly higher than the U.S. average, respectively. The slower-than-average expansion rates in other MAs may be partially explained by the steel and motor vehicle industries not completely returning to pre-recession output levels due to plant closures, product changes and shifting market preferences. Canton-Massillon is the exception, due in part to the expansion of oil-and-gas extraction in Carroll County.

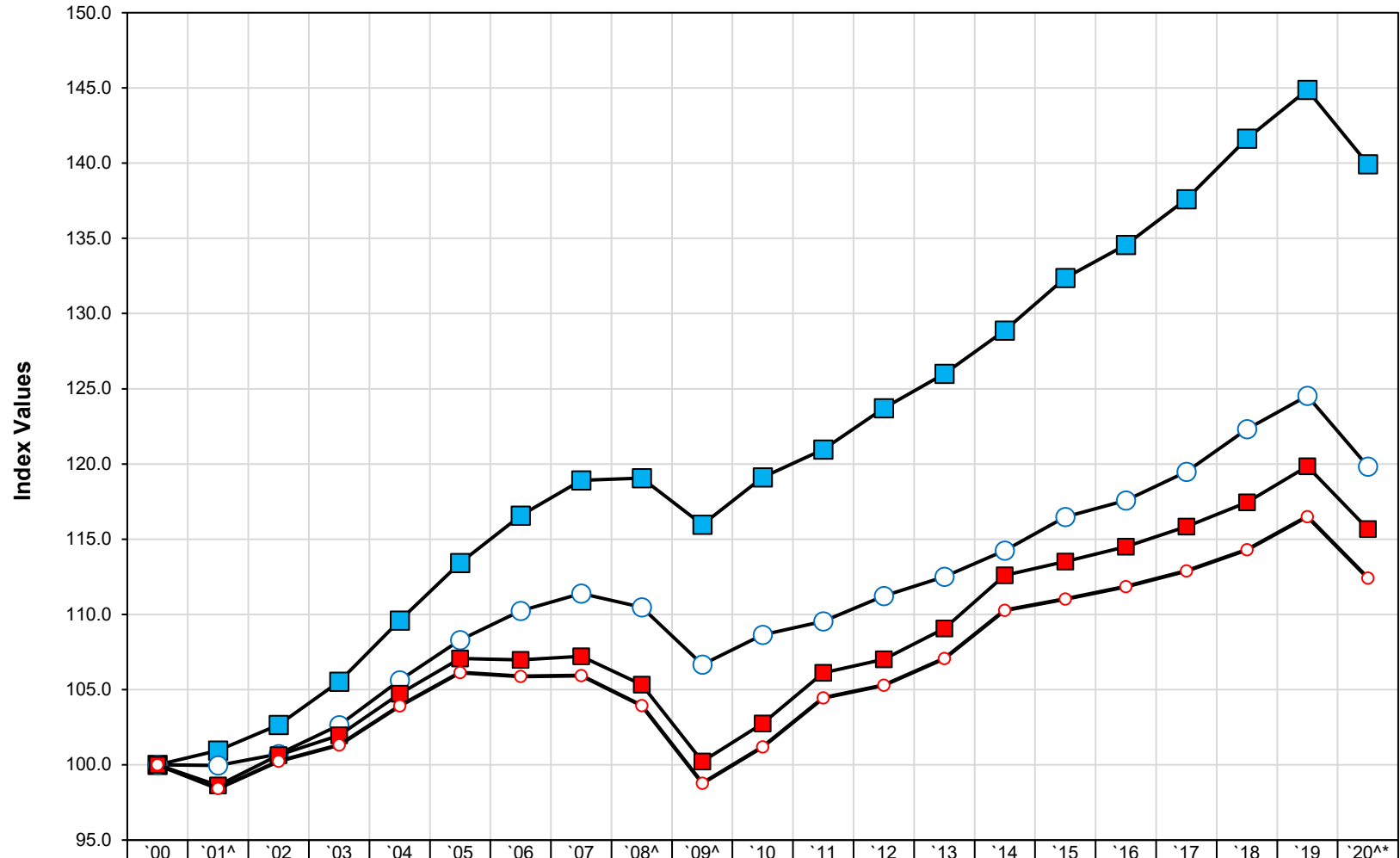
COVID-19 impacted Ohio and the multi-county MAs to a lesser and much less varied degree over the course of the year than did the financial crisis of 2008-2009. As noted earlier, quarterly figures showed the contraction in Ohio was steep but short with a rapid and substantial recovery by the end of the year. Quarterly figures are not available for substate areas. Net output declines ranged from 2.3 percent in Columbus to 5.4 percent in Akron. These are relatively closer to the national and state averages of 3.4 and 3.5 percent.

Changes for all of Ohio's counties – metropolitan and non-metropolitan – are shown in Appendix Table A22.

See Table A22

## Inflation-Adjusted Changes in Aggregate and Per Capita GDP, 2000-2020

Ohio and the U.S.: 2000=100



	'00	'01 <sup>^</sup>	'02	'03	'04	'05	'06	'07	'08 <sup>^</sup>	'09 <sup>^</sup>	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20 <sup>^*</sup>
—■— U.S. Absolute GDP	100.0	101.0	102.7	105.5	109.6	113.4	116.6	118.9	119.1	116.0	119.1	121.0	123.7	126.0	128.9	132.4	134.6	137.6	141.6	144.9	139.9
—○— U.S. Per Capita GDP	100.0	100.0	100.7	102.6	105.6	108.3	110.2	111.4	110.5	106.7	108.7	109.5	111.2	112.5	114.2	116.5	117.6	119.5	122.3	124.5	119.8
—■— Ohio Absolute GDP	100.0	98.6	100.6	102.0	104.7	107.1	107.0	107.2	105.3	100.2	102.8	106.1	107.0	109.1	112.6	113.5	114.5	115.8	117.4	119.8	115.7
—○— Ohio Per Capita GDP	100.0	98.4	100.2	101.3	103.9	106.1	105.9	105.9	103.9	98.8	101.2	104.5	105.3	107.1	110.3	111.0	111.8	112.9	114.3	116.5	112.4

Sources: U.S. Census Bureau, U.S. BEA

<sup>^</sup> - a recession year; \* - initial; earlier years may be revised



## PAST CHANGES AND FORECASTS FOR THE FUTURE: FOUR PARTS

*Part 1:* The chart above shows that, after adjusting for inflation, Ohio's absolute output (red squares) grew a net 7.2 percent from 2000 through 2007. The corresponding growth of the U.S. absolute output (blue squares) was 18.9 percent. The chart also shows 2008-2009 recession hit Ohio harder than most of the nation: total output of goods and services here fell 6.5 percent as the index value dropped from 107.2 to 100.2, while national output fell 2.5 percent from 118.9 to 116.0. Subsequent figures show Ohio's absolute output growing 19.6 percent in Ohio from 100.2 to 119.8 over 10 years; the national economy expanded 24.9 percent during the same time. Ohio's economic output in 2020 was 3.5 percent less than in 2019 due to closures and slowdowns prompted by the COVID-19 pandemic; corresponding national output fell 3.4 percent.

Absolute numbers do not tell the whole story. Several factors may explain the seemingly faster growth rates and milder contractions of the U.S. economy as compared with Ohio's; one is population growth. Population figures from the Census Bureau show the U.S. population growing 16.8 percent from 2000 through 2020, a much higher rate than Ohio's 2.9 percent; and the chart on page 180 in the Appendix shows states with faster-growing populations tended to have more rapidly growing economies. For this reason, the chart above also illustrates expansions and contractions after adjusting for population growth. Per capita GDP from Ohio (white dots with red borders) was 5.9 percent greater in 2007 than in 2000, modestly less than the 7.2 percent for the state's absolute output. By comparison, per capita GDP for the nation (white dots with blue borders) rose 11.4 percent during the same time. This is a higher rate than Ohio, but substantially less than the 18.9 percent absolute increase. The population growth adjustment also means the impact of the recession has been deeper than indicated by absolute figures alone. Per capita GDP from Ohio fell 6.8 percent – fractionally more than the 6.5 percent based on absolute output. However, per capita GDP for the nation declined 4.2 percent, notably more than the 2.5 percent for absolute output. It is also notable that national per capita GDP remained less than its 2007 pre-recession peak until 2013 – the same as Ohio. From 2009 through 2019 the U.S. economic output expanded 24.9 percent compared with Ohio's 19.6 percent. However, the per capita adjustments reverse the rankings with Ohio at 17.9 percent vs. the national average of 16.7 percent. The per capita effect of the COVID-19 pandemic was flipped; economic output for Ohio contracted 3.5 percent while national output fell 3.8 percent.

See Table A23

**Per Capita Gross Domestic Products for Multi-county Metropolitan Areas in Ohio, 2007-2020**  
(chained dollars standardized on 2012)

Area (Number of Counties)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
U.S.	\$51,867	\$51,441	\$49,666	\$50,590	\$51,002	\$51,784	\$52,374	\$53,181	\$54,219	\$54,726	\$55,607	\$56,930
Ohio	\$47,540	\$46,644	\$44,330	\$45,408	\$46,873	\$47,246	\$48,033	\$49,470	\$49,805	\$50,167	\$50,639	\$51,273
Akron (2)	\$45,732	\$45,115	\$42,369	\$43,442	\$43,593	\$44,071	\$44,610	\$45,409	\$45,663	\$45,819	\$46,354	\$47,281
Canton-Massillon (2)	\$36,958	\$36,351	\$34,204	\$36,128	\$38,814	\$38,013	\$40,559	\$43,088	\$43,428	\$42,939	\$43,380	\$43,270
Cincinnati (Ohio part, 5)^	\$57,084	\$56,585	\$54,193	\$55,650	\$57,824	\$58,109	\$58,477	\$59,786	\$60,811	\$62,643	\$62,883	\$63,330
Cleveland-Elyria (5)	\$55,098	\$54,731	\$51,234	\$51,883	\$52,986	\$53,486	\$53,556	\$54,600	\$54,838	\$55,082	\$55,684	\$57,078
Columbus (10)	\$52,058	\$50,731	\$48,592	\$49,575	\$50,967	\$52,297	\$52,955	\$53,801	\$53,932	\$54,456	\$55,102	\$55,538
Dayton-Kettering (3)	\$46,359	\$45,235	\$42,819	\$43,885	\$45,059	\$44,776	\$44,898	\$45,371	\$45,833	\$46,407	\$47,647	\$48,700
Toledo (4)	\$51,010	\$47,997	\$45,540	\$47,218	\$49,609	\$49,133	\$50,412	\$53,643	\$51,091	\$51,085	\$51,360	\$52,852
Youngstown... (Ohio part, 2)^	\$38,676	\$37,825	\$33,913	\$35,024	\$36,351	\$35,974	\$36,097	\$35,638	\$35,388	\$35,314	\$34,714	\$35,057

Area (Number of Counties)	2019	2020*	Net Changes: '07-'09		Net Changes: '09-'19		Net Changes: '19-'20		Net Changes: '07-'20	
			Number	Percent	Number	Percent	Number	Percent	Number	Percent
U.S.	\$57,968	\$55,798	-\$2,200	-4.2%	\$8,302	16.7%	-\$2,170	-3.7%	\$3,932	7.6%
Ohio	\$52,250	\$50,448	-\$3,210	-6.8%	\$7,920	17.9%	-\$1,802	-3.4%	\$2,908	6.1%
Akron (2)	\$47,941	\$45,458	-\$3,363	-7.4%	\$5,572	13.2%	-\$2,483	-5.2%	-\$274	-0.6%
Canton-Massillon (2)	\$43,525	\$41,521	-\$2,753	-7.5%	\$9,321	27.3%	-\$2,004	-4.6%	\$4,563	12.3%
Cincinnati (Ohio part, 5)^	\$65,466	\$62,656	-\$2,891	-5.1%	\$11,273	20.8%	-\$2,810	-4.3%	\$5,572	9.8%
Cleveland-Elyria (5)	\$58,266	\$55,924	-\$3,864	-7.0%	\$7,032	13.7%	-\$2,342	-4.0%	\$826	1.5%
Columbus (10)	\$56,398	\$54,763	-\$3,465	-6.7%	\$7,805	16.1%	-\$1,635	-2.9%	\$2,705	5.2%
Dayton-Kettering (3)	\$49,707	\$47,903	-\$3,540	-7.6%	\$6,888	16.1%	-\$1,803	-3.6%	\$1,545	3.3%
Toledo (4)	\$54,500	\$52,148	-\$5,470	-10.7%	\$8,960	19.7%	-\$2,353	-4.3%	\$1,138	2.2%
Youngstown... (Ohio part, 2)^	\$35,814	\$34,332	-\$4,762	-12.3%	\$1,901	5.6%	-\$1,482	-4.1%	-\$4,343	-11.2%

Notes: \* - initial; earlier years may be revised; ^ - estimated from sums of Brown, Butler, Clermont, Hamilton and Warren Counties for the part of Cincinnati in Ohio, and Mahoning and Trumbull Counties for the part of Youngstown-Warren-Boardman in Ohio.

Source: U.S. BEA (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

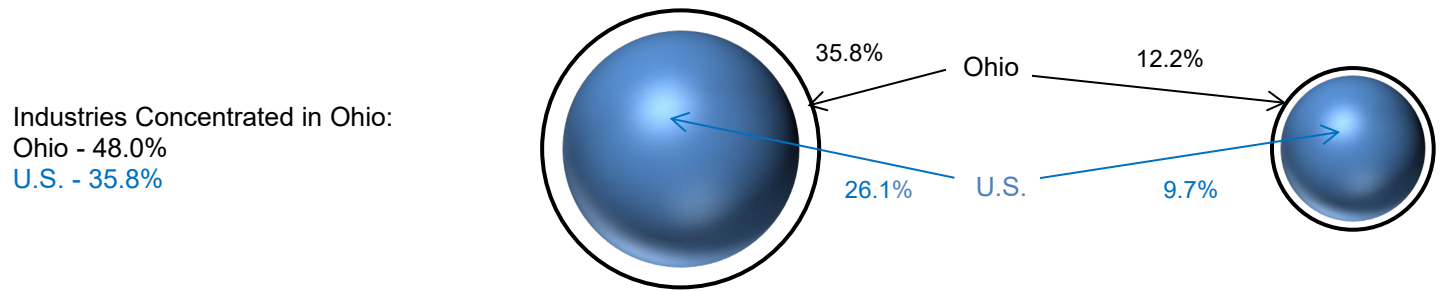
The same per capita GDP approach has been applied to the multi-county metropolitan areas (MAs) in Ohio, yielding further insight into their economic fortunes. The table above displays and summarizes the changes in inflation-adjusted per capita GDP from 2007 through 2020. As with the aggregate figures, the recession was – and the recovery and expansion were – widespread across Ohio; all the net change figures for the eight MAs were negative during 2007-2009, all the net changes were positive during 2009-2019, and all the net changes were negative in the COVID recession. However, several changes stand out:

- During 2007-2009: After adjusting for their population growth, the economic contractions in Cincinnati (Ohio portion) and Columbus were *steeper* than the aggregate figures indicated; at least 5.1 vs. 4.2 percent in Cincinnati, and 6.7 vs. 4.3 percent in Columbus due to their population growth; conversely, the contraction in Cleveland-Elyria, Dayton-Kettering, Toledo and Youngstown-Warren (Ohio portion) were not quite as steep as aggregate figures indicated, usually due to slightly smaller populations; Akron's contraction was unchanged because its population was nearly constant.
- During 2009-2019: After adjusting for their population growth, the expansions in Cincinnati and Columbus were at *slower* rates than the aggregate figures indicate – less than 20.8 vs. 25.8 percent in Cincinnati, and 16.1 vs. 30.7 percent in Columbus; Dayton-Kettering is a much milder example of this phenomenon; conversely, the growth rates in Canton-Massillon, Cleveland-Elyria, Toledo and Youngstown-Warren were greater than aggregate figures would lead one to believe after adjusting for population decreases; again, virtually no difference is seen in Akron due to its nearly constant population.
- Over the 12 years: Canton-Massillon stands out as the most rapidly growing economy at 12.3 percent, perhaps principally due to the recovery of the iron and steel industry in Stark County as well as the expansion of oil-and-gas extraction in Carroll County; Cincinnati follows as the only other multi-county MA that grew at a rate exceeding the national average; these contrasts with Youngstown-Warren, where per capita GDP in 2020 remained 11.2 percent below output from 2007.

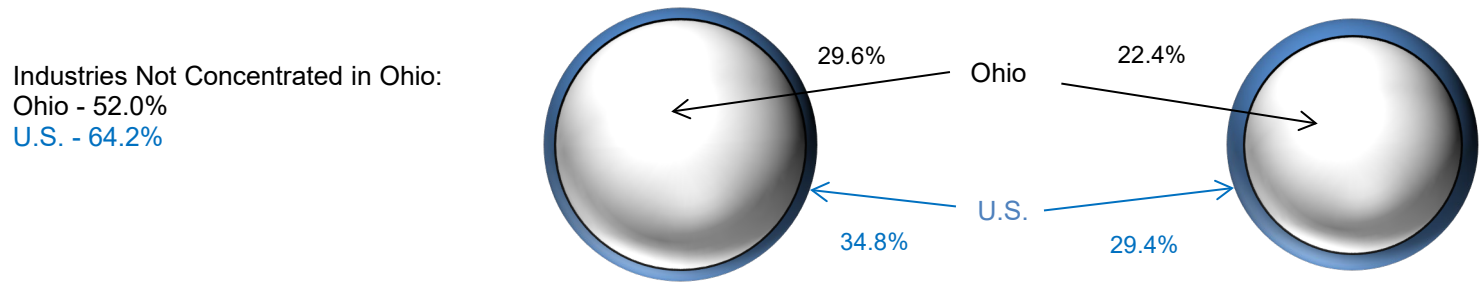
Differences between per capita and aggregate contractions during the COVID recession are marginal due to the short time span and concomitant small changes in population.

Despite the various changes, it should be noted that Cincinnati, Cleveland and Columbus maintained per capita GDP output levels usually exceeding \$50,000 per year – greater than the state average and, for Cincinnati, greater than the national average. These three remained the principal powerhouses of Ohio's economy even after adjusting for their much larger populations. Among the smaller MAs, only Toledo rivaled the big three on a per capita basis.

## Comparing Relative Portions of Ohio's Economy with the U.S.\* by Concentration (2000) and Inflation-Adjusted Growth Rate (2000-2020)



### Concentration



Slower-Growth or Contracting Industries:  
Ohio - 65.4%  
U.S. - 60.9%

### Growth Rate

More Rapidly Growing Industries:  
Ohio - 34.6%  
U.S. - 39.1%

Source: U.S. BEA

Note: \* - Components may not sum to totals due to rounding error

*Part 2:* A second factor associated with the different economic growth rates of Ohio and the U.S. may be differences in the composition of their economies. Appendix Table A24 shows that various industries grew at rates faster or slower than the national average of 39.9 percent for 2000-2020; some industries even contracted during that time. It also shows the industries concentrated in Ohio in varying degrees as well as those that are relatively sparse. The industries can be grouped by those characteristics, and the portions of the Ohio and U.S. economy may be calculated for each of the four groups:

- (1) those growing faster than the overall national growth rate and concentrated-in-Ohio,
- (2) slower-growing/contracting and concentrated here,
- (3) faster-growing but sparse in Ohio, and
- (4) slower-growing/contracting and sparse here.

The chart above illustrates the relative portions of the four groups for the U.S. and Ohio economies in 1999 as represented by the blue and white areas, respectively. Overall, 34.6 percent of Ohio's economic output in 2000 was in industries characterized by faster-than-average national growth rates for the then-coming 20 years. (See the white areas on the right side;  $12.2 + 22.4 = 34.6$ .) This compares with 39.1 percent for the U.S. (See the blue areas on the right side;  $9.7 + 29.4 = 39.1$ .) Conversely, 65.4 percent of Ohio's economic output in 2000 was in industries that would be characterized by slower-than-average or negative growth rates, compared with 60.9 percent of the U.S. (These are sums of the white and blue areas on the left side.)

Specific comparisons are even more telling. In 2000, 12.2 percent of Ohio's output was from rapid-growth industries concentrated here compared with only 9.7 percent of U.S. output, a difference of 2.5 percent favoring more rapid growth in Ohio. However, this was more than offset by the relative scarcity of *other* rapid-growth industries in Ohio: 22.4 vs. 29.4 percent, a deficit of 7.0 percent for the state. Furthermore, 35.8 percent Ohio's output that year came from slow-growth or contracting industries concentrated here vs. only 26.1 percent of total U.S. output, a 9.7 percent difference more than offsetting the state's advantage in *other* such industries *not* concentrated here – 26.9 vs. 34.8, or 5.2 percent. All of these contrasts point to the conclusion that – regardless of different population growth rates – Ohio's mix of industries in 2000 predisposed it toward slower economic growth through 2020.

See Table A24

Table: Contributions by Industry to Ohio's Economic Growth, 2000-2020 (millions of dollars standardized on 2012)

NAICS Code(s)	Description	Net Change 2000-2020	Percent Change	Proportional Contribution to Net Growth*	NAICS Code(s)	Description	Net Change 2000-2020	Percent Change	Proportional Contribution to Net Growth*
11-92	Total	\$79,948.5	15.7%		113-5	Forestry, fishing, & related activities	\$193.9	65.4%	0.2%
	Sum of Net Changes*	\$79,553.9		100.0%	711-2	Performing arts, museums & related activities	\$131.4	6.9%	0.2%
<b>55</b>	<b>Management of companies &amp; enterprises</b>	<b>\$12,168.7</b>	<b>99.2%</b>	15.3%	315-6	Apparel, leather & allied products	\$53.3	37.1%	0.1%
<b>524</b>	<b>Insurance carriers &amp; related activities</b>	<b>\$11,927.3</b>	<b>79.8%</b>	15.0%	321	Wood products	-\$23.9	-2.5%	0.0%
531	Real estate	\$10,833.0	23.0%	13.6%	61	Educational svcs.	-\$32.4	-0.7%	0.0%
<b>521-2</b>	<b>Federal Reserve banks, credit intermediation, etc.</b>	<b>\$9,949.0</b>	<b>68.0%</b>	12.5%	483	Water transportation	-\$48.0	-31.1%	-0.1%
211	Oil & gas extraction	\$9,888.9	1076.5%	12.4%	512	Motion pictures & sound recordings	-\$62.1	-18.6%	-0.1%
621	<i>Ambulatory health care svcs.</i>	\$8,958.9	59.3%	11.3%	485	Transit & ground passenger transportation	-\$64.0	-13.0%	-0.1%
5415	Computer systems design & related svcs.	\$6,634.5	295.6%	8.3%	313-4	Textile & textile product mills	-\$198.2	-35.9%	-0.2%
42	<i>Wholesale trade</i>	\$6,285.0	20.9%	7.9%	<b>323</b>	<b>Printing &amp; related support activities</b>	<b>-\$255.2</b>	<b>-13.6%</b>	-0.3%
<b>622</b>	<b>Hospitals</b>	<b>\$5,786.3</b>	<b>44.6%</b>	7.3%	487-8, 492	<i>Other transportation &amp; support activities</i>	-\$295.9	-7.0%	-0.4%
<b>325</b>	<b>Chemical</b>	<b>\$4,729.4</b>	<b>41.2%</b>	5.9%	<b>484</b>	<b>Truck transportation</b>	<b>-\$327.7</b>	<b>-5.0%</b>	-0.4%
<b>324</b>	<b>Petroleum &amp; coal products</b>	<b>\$4,039.8</b>	<b>57.0%</b>	5.1%	<b>623</b>	<b>Nursing &amp; residential care facilities</b>	<b>-\$478.0</b>	<b>-8.1%</b>	-0.6%
5412-4, 5416-9	Other professional, scientific & technical svcs.	\$4,006.7	25.4%	5.0%	482	<i>Rail transportation</i>	-\$591.8	-36.8%	-0.7%
561	Administrative & support svcs.	\$3,917.5	35.1%	4.9%	532-3	Rental & leasing svcs. & lessors of intangible assets	-\$610.2	-10.1%	-0.8%
515, 517	Broadcasting & telecommunications	\$3,602.5	60.3%	4.5%	721	Accommodation	-\$675.8	-33.7%	-0.8%
518, 519	Data prcsng., hosting, other info. (inc. Internet)	\$3,171.0	650.3%	4.0%	<b>327</b>	<b>Nonmetallic mineral products</b>	<b>-\$679.4</b>	<b>-17.8%</b>	-0.9%
<b>493</b>	<b>Warehousing &amp; storage</b>	<b>\$3,032.7</b>	<b>264.0%</b>	3.8%	<b>322</b>	<b>Paper</b>	<b>-\$781.2</b>	<b>-26.4%</b>	-1.0%
44-45	<i>Retail trade</i>	\$2,977.6	8.8%	3.7%	<b>335</b>	<b>Electrical eqpt. &amp; appliances</b>	<b>-\$783.9</b>	<b>-15.1%</b>	-1.0%
511	Publishing (inc. software, exc. Internet)	\$2,597.9	86.1%	3.3%	337	<i>Furniture &amp; related products</i>	-\$812.0	-45.7%	-1.0%
111-2	Farms	\$2,368.7	75.3%	3.0%	<b>333</b>	<b>Machinery</b>	<b>-\$922.9</b>	<b>-11.9%</b>	-1.2%
334	Computer & electronic products	\$1,973.3	188.6%	2.5%	<b>331</b>	<b>Primary metals</b>	<b>-\$962.7</b>	<b>-11.5%</b>	-1.2%
<b>311-2</b>	<b>Food, beverage &amp; tobacco products</b>	<b>\$1,490.9</b>	<b>16.7%</b>	1.9%	22	Utilities	-\$1,042.0	-9.9%	-1.3%
<b>486</b>	<b>Pipeline transportation</b>	<b>\$966.0</b>	<b>451.2%</b>	1.2%	525	Funds, trusts & other financial vehicles	-\$1,064.9	-86.1%	-1.3%
624	Social assistance	\$716.3	30.0%	0.9%	<b>713</b>	<b>Amusements, gambling &amp; recreation</b>	<b>-\$1,182.7</b>	<b>-31.6%</b>	-1.5%
92fc, 491	Federal civilian (inc. Postal Service)	\$649.0	6.2%	0.8%	<b>326</b>	<b>Plastics &amp; rubber products</b>	<b>-\$1,418.1</b>	<b>-20.3%</b>	-1.8%
523	Securities, commodity contracts, investments	\$461.2	16.8%	0.6%	5411	Legal svcs.	-\$1,455.8	-24.7%	-1.8%
<b>3364-9</b>	<b>Other transportation eqpt.</b>	<b>\$433.3</b>	<b>8.4%</b>	0.5%	722	<i>Food svcs. &amp; drinking places</i>	-\$1,601.1	-14.7%	-2.0%
481	Air transportation	\$419.1	32.0%	0.5%	212	Mining, exc. oil & gas	-\$2,125.9	-65.1%	-2.7%
92811	Federal military	\$416.1	11.2%	0.5%	<b>3361-3</b>	<b>Motor vehicles, bodies, trailers &amp; parts</b>	<b>-\$3,288.0</b>	<b>-25.3%</b>	-4.1%
339	Miscellaneous mfg.	\$398.4	19.8%	0.5%	<b>332</b>	<b>Fabricated metal products</b>	<b>-\$4,792.3</b>	<b>-35.8%</b>	-6.0%
213	Support activities for mining	\$371.8	344.3%	0.5%	92sl	State & local	-\$5,186.9	-10.0%	-6.5%
<b>562</b>	<b>Waste management &amp; remediation svcs.</b>	<b>\$276.5</b>	<b>18.6%</b>	0.3%	81	Other svcs., exc. government	-\$5,898.2	-36.3%	-7.4%
					23	Construction	-\$8,610.8	-31.3%	-10.8%

Notes: \* - the sum of the net changes is used as the divisor to compute the proportional contributions to new growth because it does not equal the total net change; the two figures are unequal because inflators and deflators varied by industry; **bold** - the industry is quite concentrated in Ohio (>=1.20); *italicized* - the industry is mildly concentrated in Ohio (>1.00, <1.20); plain face - the industry is not concentrated in Ohio (<1.00).

Abbreviations used: eqpt. - equipment; exc. - excluding; fc - federal civilian; fm - federal military; inc. - including; info. - information; mfg. - manufacturing; p - part; prcsng. - processing; sl - state & local; svcs. - services.

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 2/22).

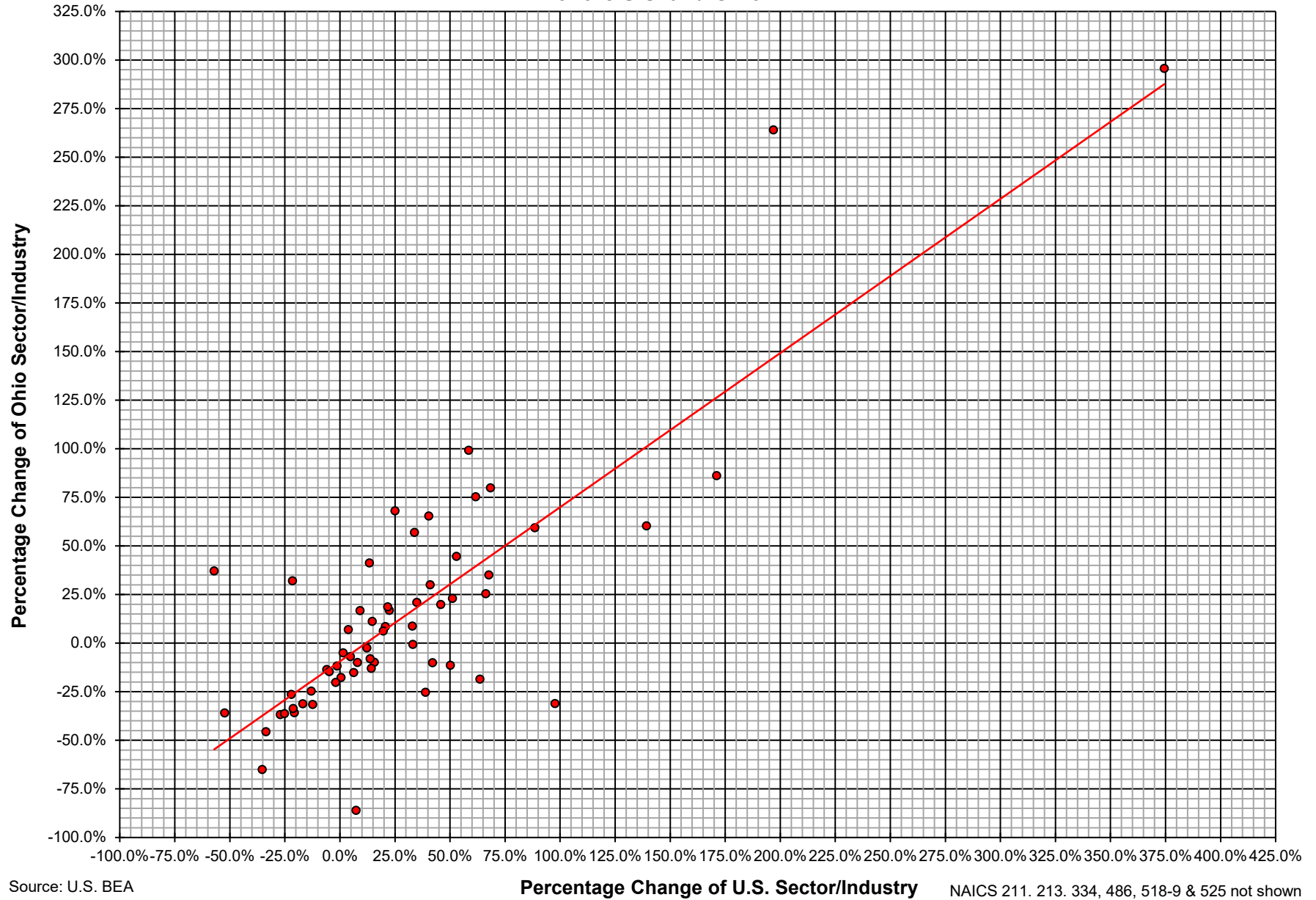
*Part 3:* The table above lists the 65 most-specific industries comprising Ohio's economy and sorts them in the order of their contributions to the state's real growth from 2000 through 2020. **Bold** entries show industries quite concentrated in Ohio – i.e. those with a concentration ratio of at least 1.2; *italicized* entries show industries mildly concentrated here – i.e. those with a concentration ratio between 1 and 1.2; all other industries – those nearly proportional with the nation or relatively sparse – are shown in plain type (as in Appendix Tables A15-A17). In this sense, the table above is a reordered list of the faster vs. slower-growth-or-contracting and concentrated vs. sparse industries seen aggregated in Part 2.

Ohio's economic output grew 15.7 percent from 2000 through 2020 after adjusting for inflation. 40.1 percent of that overall net growth is attributed to the expansion of three major financial activities industries: banking, insurance and real estate (the last of which principally reflects the impact of homeownership). Two major health care industries, ambulatory services and hospitals combined, accounted for another 18.5 percent of the net growth; however, enterprise management made the single largest contribution at 15.3 percent. Other industries made relatively large contributions to the net growth through their extraordinary expansions; examples include oil and gas extraction (production volume expanded more than 1000 percent by implementing new technology) – 12.4 percent, computer systems design and related services – 8.3 percent, and data processing-hosting-etc. (which includes the Internet) – 4.0 percent. More industries also saw rapid growth, but their small initial size limited their absolute contribution to Ohio's net expansion.

While 34 industries expanded and contributed to Ohio's growth, 31 experienced a net contraction of services provided and goods produced. The more-notable goods producing industries were construction, fabricated metal products, and motor vehicle and parts manufacturing. The more-notable services industries were state and local government, and other private sector services. All five contracted more than 4.0 percent.

Caution is warranted in interpreting the changes whether positive or negative. While some changes may indicate long-term structural changes in Ohio's economy, other industries – particularly farming and most durable goods manufacturing industries – are highly cyclical with measured changes affected by the choice of starting and ending points, and a few – such as state-and-local government and utilities – are so large that even relatively small changes in output can substantially alter their proportional contribution to the net growth. In all likelihood, the position of industries on the list is affected by varying combinations of the three factors: size, the degree of cyclicity and long-term structural change. The impact of a fourth factor – the unanticipated COVID-19 pandemic – also is evident in the temporary closure of many industries requiring close contact of people and the disruption of supply chains in others.

### The Association of Percentage Changes in GDP, 2000-2020 for the U.S. and Ohio





*Part 4:* The differing mix of industries between Ohio and the nation is a matter of degree and should not be overemphasized. The chart above illustrates the association between changes in industry output – both growth and decline – in Ohio with corresponding national changes for 2000-2020. The dots collectively cover at least 94.0 percent of output from each.<sup>20</sup> It is evident faster and slower-growing or contracting industries in one tended to be faster and slower-growing or contracting industries in the other.<sup>21</sup> (See Appendix Table A25 for specific figures.) Consequently, national forecasts for industries and the economy may be fairly reliable guides for what to expect in Ohio over the long term.<sup>22</sup>

The U.S. BLS (2021) predicts national gross duplicated output (i.e. GDP plus the value of intermediate goods and services) will grow at an average annual rate of 1.8 percent during the 2019-2029 decade (see the table on the following page). The private sector is expected to grow faster than government services: 2.0 vs. 0.7 percent. Within the private sector, the service providers collectively are expected to grow faster than goods producers: 2.2 vs. 1.6 percent. However, this is not true of every sector within the two super clusters. The fastest growing sectors are forecast to be, in descending order: health care/social assistance, mining and information. Other sectors predicted to expand faster than average are wholesale and retail trade, professional/scientific/technical services, enterprise management, administrative-support/waste-management, arts/entertainment/recreation and accommodation/foods services. So many faster-growing service sectors mean the *distribution* of economic activity is expected to continue the long-term shift away from goods production.

The concentration or sparsity in Ohio of sectors with different growth rates has mixed implications for the state's potential growth in this decade. On one hand, the concentration of sectors forecast to grow faster than average – principally health-care/social-assistance and secondarily mining – may drive economic growth. Conversely, the sparsity of predicted slower-growth sectors – agriculture-forestry-fishing-hunting, construction and private sector education – are an absence of restraint. On the other hand, the concentration of slower-growth sectors – manufacturing and finance/insurance – as well as the sparsity of more-rapid growth sectors – information and professional/scientific/technical services – bode less rapid growth. Remaining sectors are roughly proportional with the nation and may follow accordingly. However, the projected slower population growth rate for Ohio (compare Office of Research of Research, 2018, with U.S. Bureau of the Census, 2014b), due to persistent – if not constant – domestic out-migration, may be the most significant factor pointing to a slower overall long-term economic growth rate when compared with the nation as a whole (Moody's, 2021).

Real economic growth generally and often more-specifically is associated with employment growth. Figures in the table on the following page show longer-term U.S. overall economic growth averaging 1.8 percent per year with the corresponding employment growth averaging 0.4 percent. However, there are exceptions. The U.S. BLS (2021) predicts greater volumes of manufactured and agricultural-forestry-fishing-hunting goods will be produced in the U.S. and more services provided by utilities and wholesale and retail trade in the future, but jobs in these sectors are expected to decrease. In any case, though, real economic growth above and beyond employment growth is due in part to increased productivity.<sup>23</sup>

**Forecasted U.S. Economic Annual Growth Rates, 2019-29, and Projected Job Changes in Ohio, 2018-2028**

NAICS Codes	Industry Titles	Forecast U.S. Annual Growth Rates 2019-29		Projected Job Changes in Ohio 2018-28 <sup>2</sup>		Job Rates: U.S. minus Ohio
		Gross Duplicated Output <sup>1</sup>	Jobs <sup>1</sup>	Annual Growth Rate	Total	
11-92	Total	1.8%	0.4%	0.2%	138,697	0.2%
11-81	Private industry employment	2.0%	0.4%	0.3%	149,379	0.1%
11, 21, 23, 31-33	Private goods-producing employment	1.6%	-0.0%	-0.0%	-4,181	0.0%
11	Agriculture, forestry, fishing & hunting	1.8%	-0.2%	0.5%	4,793	0.7%
21	Mining	2.8%	1.3%	0.6%	708	0.7%
23	Construction	1.3%	0.4%	1.0%	22,743	-0.6%
31-33	Manufacturing	1.5%	-0.4%	-0.5%	-32,425	0.1%
32p & 33	Durable goods	1.5%	-0.3%	-0.4%	-20,920	0.1%
31 & 32p	Nondurable goods	1.7%	-0.4%	-0.5%	-11,505	0.1%
22, 42-81	Private service-providing employment	2.2%	0.5%	0.3%	153,560	0.2%
22	Utilities	1.5%	-0.8%	-0.1%	-176	-0.7%
42	Wholesale trade	2.6%	-0.2%	-0.2%	-4,262	0.0%
44-45	Retail trade	2.4%	-0.2%	-0.3%	-15,981	0.1%
48-49p	Transportation & warehousing <sup>3</sup>	1.6%	0.6%	0.7%	15,828	-0.1%
51	Information	2.7%	0.0%	-0.7%	-4,978	0.7%
52	Finance & insurance	1.4%	0.1%	0.2%	5,454	-0.1%
53	Real estate, rental & leasing	1.8%	-0.1%	0.3%	1,657	-0.4%
54	Professional, scientific & technical services	2.3%	1.0%	0.6%	15,261	0.4%
55	Management of companies & enterprises	2.3%	0.5%	0.5%	7,471	0.0%
56	Administrative support & waste management	2.2%	0.4%	0.2%	6,358	0.2%
61	Educational services	1.7%	1.2%	0.0%	2,108	1.2%
62	Health care & social assistance	2.9%	1.4%	1.1%	94,912	0.3%
71	Arts, entertainment & recreation	2.2%	0.9%	0.4%	3,019	0.5%
72	Accommodation & food services	2.1%	0.6%	0.4%	19,176	0.2%
81	Other services, exc. government	1.7%	0.4%	-0.1%	-2,516	0.5%
n.a.	Nonagricultural self-employed, etc. <sup>4</sup>	0.0%	-0.4%	0.3%	10,229	-0.7%
92, 491	Government (inc. U.S. Postal Service)	0.7%	0.1%	-0.3%	-10,682	0.4%

Notes: 1 - gross duplicated output (GDO) includes all new goods and services produced as intermediate goods for further use in production as well as the GDP (the final demand purchased of new goods and services); forecasted GDO growth rates have been adjusted for inflation; some GDO and jobs figures are derived from the U.S. BLS (2021); 2 - some components may not sum to totals due to rounding; 3 - except the U.S. Postal Service; 4 - nonagricultural self-employed and unpaid family workers may be in any non-agricultural private sector industry, but are not included in sector-specific figures above; the exception is agriculture, etc., which includes self-employed and unpaid family workers. Abbreviations: exc. - except; inc. - including; p - part. Sources: ODJFS/LMI (2021) and U.S. BLS (2021).

The latest projections by the Ohio Dept. of Job and Family Services Labor Market Information division (ODJFS/LMI, 2021) predict 138,697 jobs may be added in Ohio from 2018 through 2028, an annual average growth rate of about 0.2 percent. The 149,379 employees added from the private sector offset the 10,682 which may be lost from the government sector. In turn, expected growth in private sector self-employed-and-unpaid-family-workers plus private service-providing employees (10,229 + 153,560) offsets the forecast net loss of 4,181 jobs among goods-producing employees. Within the two private-sector super clusters, 10 service-providing sectors are expected to gain jobs – led by health care and social assistance; among goods-producers possible gains in construction, agriculture, etc., may be more than offset by losses in manufacturing. Comparing corresponding BLS projections suggest overall, super-sector and most sector jobs growth in Ohio may be equal to or less than comparable national rates, with notable exceptions in construction, transportation and warehousing, real estate/rental/leasing, and self-employment.<sup>24</sup>

Long-term projections are made with little or no consideration of business cycles. On the other hand, near- and mid-term forecasts try to anticipate changes-in or continuations-of current economic trends. Moody's (2021) predicts Ohio's economy, now in "recovery" mode, will grow 4.5 percent in 2021 after adjusting for inflation, essentially returning to its 2019 total by the end of the year. It further predicts 5.2 percent real growth in 2022, with growth thereafter tapering off to pre-COVID-19 rates between 2.8 and 1.8 percent. Resurgent consumer confidence, expanding health care and revitalized manufacturing sectors are expected to lead the recovery. It also predicts 107,000 jobs will be added in 2021 followed by 159,000 in 2022 – annual growth rates of 2.1 and 3.0 percent. However, a complete recovery of employment to the pre-COVID-19 level of 5.59 million is not expected until late in 2023 or sometime in 2024.

See Table A25

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## **APPENDICES**

## TERMINOLOGY

The *Gross Domestic Product* (GDP) of Ohio is the final value of goods produced and services provided by capital and labor located in the state. Put another way, a state's total GDP is the sum of the value-added – revenue less the costs of goods and services purchased – for all industries therein. It is actually measured using data such as employees' compensation, taxes on production and imports less subsidies, and gross operating surplus. It is nearly the state equivalent of GDP for the nation, differing from the latter by excluding contributions of overseas federal personnel as well as other methodological considerations. Data are gathered from at least 19 different federal agencies. (Platt and Mead, 2017: 2).

Beginning in 1997, statistics on the nation's industries have been organized under the North American Industrial Classification System (NAICS). Establishments producing goods or providing services sufficiently alike are classified in the same *industry*. A six-digit NAICS code is assigned to each industry. Closely related industries formed an *industry group*. The first four digits of the code indicate the group to which the industries belong. (The first five digits occasionally indicate a sub-group.) Industry groups with common elements and shared characteristics comprise a *major industry* or *sub-sector*. The first three digits of the code indicate a major industry, and the first two digits indicate the *sector* (Office of Management and Budget, 2007). The U.S. BEA usually publishes GDP-by-state figures down to the major industry level. However, figures are available only at the sector level in some instances, while in a few others, they are available for industry groups or a combination of industry groups within a major industry.

The NAICS uses guidelines that may be new or different from the 1987 Standard Industrial Classification (SIC) system that it replaced. Occasionally, this has meant that establishments classified in the same industry under the SIC system were classified in different industries – even different groups, major industries, and sectors – under the NAICS. Consequently, the change from the SIC system to the NAICS represents an insurmountable discontinuity in charting more or less specific changes in Ohio's economy before 1997. This report is therefore limited to the years beginning with 1997.

**DETAILED TABLES**

**Table A1a: Ohio's GDP by Sector\*, Annualized Third Quarter 2021 (in millions of current dollars, except percentages and ratios)**

2012 NAICS Codes	Sector Titles	Ohio (Annual Rate)		U.S. (Annualized)		Ohio as a Percentage of the U.S.	Ohio::U.S. Concentra- tion Ratio
		(in millions)	Percent Distribution	(in millions)	Percent Distribution		
11-92	Total	\$741,400	100.00%	\$23,202,344	100.00%	3.20%	1.00
11-81	Private industries	\$662,066	89.30%	\$20,396,385	87.91%	3.25%	1.02
11, 21, 23-33	Private goods producers	\$158,587	21.39%	\$4,073,102	17.55%	3.89%	1.22
11	Agriculture, forestry, fishing & hunting	\$6,844	0.92%	\$261,709	1.13%	2.62%	0.82
21	Mining	\$6,807	0.92%	\$289,426	1.25%	2.35%	0.74
23	Construction	\$27,133	3.66%	\$951,124	4.10%	2.85%	0.89
31-33	Manufacturing	\$117,803	15.89%	\$2,570,843	11.08%	4.58%	1.43
32p & 33	Durable goods	\$61,353	8.28%	\$1,380,676	5.95%	4.44%	1.39
31 & 32p	Nondurable goods	\$56,450	7.61%	\$1,190,167	5.13%	4.74%	1.48
22, 42-81 <sup>1</sup>	Private service providers <sup>1</sup>	\$503,480	67.91%	\$16,323,283	70.35%	3.08%	0.97
22	Utilities	\$12,065	1.63%	\$379,891	1.64%	3.18%	0.99
42	Wholesale trade	\$45,708	6.17%	\$1,390,616	5.99%	3.29%	1.03
44-45	Retail trade	\$45,511	6.14%	\$1,379,062	5.94%	3.30%	1.03
48-49 <sup>1</sup>	Transportation & warehousing <sup>1</sup>	\$25,760	3.47%	\$658,303	2.84%	3.91%	1.22
51	Information	\$18,345	2.47%	\$1,305,495	5.63%	1.41%	0.44
52	Finance & insurance	\$81,392	10.98%	\$1,965,715	8.47%	4.14%	1.30
53	Real estate, rental & leasing	\$80,545	10.86%	\$2,954,987	12.74%	2.73%	0.85
54	Professional, scientific & technical services	\$38,360	5.17%	\$1,798,708	7.75%	2.13%	0.67
55	Management of companies & enterprises	\$22,931	3.09%	\$438,275	1.89%	5.23%	1.64
56	Administrative & waste services	\$23,613	3.18%	\$768,093	3.31%	3.07%	0.96
61	Educational services	\$5,767	0.78%	\$261,445	1.13%	2.21%	0.69
62	Health care & social assistance	\$63,152	8.52%	\$1,680,733	7.24%	3.76%	1.18
71	Arts, entertainment & recreation	\$6,949	0.94%	\$204,017	0.88%	3.41%	1.07
72	Accommodation & food services	\$18,970	2.56%	\$683,038	2.94%	2.78%	0.87
81	Other services, exc. government	\$14,413	1.94%	\$454,905	1.96%	3.17%	0.99
92	Government <sup>c</sup>	\$79,333	10.70%	\$2,805,960	12.09%	2.83%	0.88

Notes: \* - sector figures are preliminary, and may not sum to totals due to rounding; major industry data are not available; exc. - except; p - part;  
1 - excludes the U.S. Postal Service; 2 - at the federal level, includes the U.S. Postal Service and overseas activities.

Source: U.S. BEA (2022).

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Table A1b: Annualized GDP by Quarter and Sector in the U.S. and Ohio, 2019-2021 (in billions)\*

2012 NAICS Codes	Industry Titles	Area	2019: Q4	2020: Q1	2020: Q2	2020: Q3	2020: Q4	2021: Q1	2021: Q2	2021: Q3*	Percent Change		
											`19/Q4- `20/Q2	`20/Q2- `21/Q3*	`19/Q4- `21/Q3*
11-92	Total <sup>#</sup>	U.S.	\$21,694.5	\$21,481.4	\$19,477.4	\$21,138.6	\$21,477.6	\$22,038.2	\$22,741.0	\$23,202.3	-10.2%	19.1%	7.0%
		Ohio	\$702.1	\$696.3	\$627.3	\$688.8	\$697.9	\$711.0	\$728.4	\$741.4	-10.7%	18.2%	5.6%
11-81	Private sector <sup>#</sup>	U.S.	\$19,033.4	\$18,784.2	\$16,846.5	\$18,469.7	\$18,792.2	\$19,332.8	\$19,998.2	\$20,396.4	-11.5%	21.1%	7.2%
		Ohio	\$626.3	\$619.6	\$553.0	\$613.1	\$621.8	\$634.4	\$650.9	\$662.1	-11.7%	19.7%	5.7%
11, 21, 23-33	Goods producers <sup>#</sup>	U.S.	\$3,759.6	\$3,693.6	\$3,169.9	\$3,574.5	\$3,659.8	\$3,842.8	\$3,995.9	\$4,073.1	-15.7%	28.5%	8.3%
		Ohio	\$146.0	\$146.8	\$122.2	\$143.3	\$145.1	\$152.1	\$156.5	\$158.6	-16.3%	29.8%	8.6%
11	Agriculture, forestry, fishing & hunting	U.S.	\$168.4	\$183.8	\$140.2	\$172.9	\$201.2	\$214.4	\$254.7	\$261.7	-16.7%	86.7%	55.4%
		Ohio	\$3.0	\$4.6	\$3.1	\$3.7	\$4.2	\$5.2	\$6.6	\$6.8	4.3%	119.7%	129.1%
21	Mining	U.S.	\$286.9	\$236.6	\$126.6	\$170.7	\$194.5	\$243.7	\$265.5	\$289.4	-55.9%	128.6%	0.9%
		Ohio	\$5.2	\$4.8	\$2.8	\$4.0	\$4.7	\$6.0	\$6.4	\$6.8	-45.5%	141.5%	31.5%
23	Construction	U.S.	\$914.8	\$914.3	\$851.6	\$898.2	\$919.3	\$941.2	\$951.0	\$951.1	-6.9%	11.7%	4.0%
		Ohio	\$27.0	\$27.1	\$24.5	\$26.0	\$26.7	\$27.9	\$27.0	\$27.1	-9.1%	10.6%	0.6%
31-33	Manufacturing <sup>#</sup>	U.S.	\$2,389.5	\$2,358.8	\$2,051.5	\$2,332.7	\$2,344.8	\$2,443.5	\$2,524.7	\$2,570.8	-14.1%	25.3%	7.6%
		Ohio	\$110.9	\$110.4	\$91.8	\$109.6	\$109.5	\$113.0	\$116.5	\$117.8	-17.2%	28.4%	6.3%
32p & 33	Durable goods	U.S.	\$1,329.1	\$1,308.0	\$1,134.5	\$1,314.0	\$1,318.9	\$1,346.9	\$1,375.2	\$1,380.7	-14.6%	21.7%	3.9%
		Ohio	\$62.3	\$61.4	\$49.1	\$59.9	\$60.0	\$59.7	\$61.4	\$61.4	-21.3%	25.0%	-1.6%
31 & 32p	Nondurable goods	U.S.	\$1,060.5	\$1,050.8	\$917.0	\$1,018.8	\$1,025.9	\$1,096.7	\$1,149.5	\$1,190.2	-13.5%	29.8%	12.2%
		Ohio	\$48.5	\$49.0	\$42.7	\$49.7	\$49.5	\$53.3	\$55.1	\$56.4	-12.0%	32.3%	16.3%
22, 42-81	Service providers <sup>#</sup>	U.S.	\$15,273.8	\$15,090.6	\$13,676.6	\$14,895.2	\$15,132.4	\$15,490.0	\$16,002.4	\$16,323.3	-10.5%	19.4%	6.9%
		Ohio	\$480.3	\$472.8	\$430.8	\$469.8	\$476.7	\$482.3	\$494.4	\$503.5	-10.3%	16.9%	4.8%
22	Utilities	U.S.	\$341.4	\$328.2	\$337.3	\$353.4	\$348.0	\$374.6	\$366.4	\$379.9	-1.2%	12.6%	11.3%
		Ohio	\$11.0	\$10.5	\$10.8	\$11.1	\$11.3	\$11.4	\$11.6	\$12.1	-1.5%	11.5%	9.8%
42	Wholesale trade	U.S.	\$1,286.1	\$1,280.9	\$1,136.5	\$1,275.8	\$1,279.9	\$1,319.4	\$1,377.3	\$1,390.6	-11.6%	22.4%	8.1%
		Ohio	\$43.8	\$43.0	\$38.3	\$42.8	\$42.9	\$43.8	\$45.5	\$45.7	-12.7%	19.4%	4.2%
44-45	Retail trade	U.S.	\$1,183.9	\$1,185.6	\$1,101.6	\$1,262.0	\$1,259.6	\$1,331.5	\$1,397.5	\$1,379.1	-7.0%	25.2%	16.5%
		Ohio	\$39.9	\$39.8	\$37.7	\$43.0	\$42.2	\$45.4	\$46.1	\$45.5	-5.4%	20.7%	14.2%
48-49p	Transportation & warehousing <sup>1</sup>	U.S.	\$689.9	\$660.5	\$499.2	\$555.0	\$573.4	\$594.2	\$619.8	\$658.3	-27.6%	31.9%	-4.6%
		Ohio	\$23.7	\$23.8	\$19.1	\$22.4	\$23.1	\$24.3	\$24.1	\$25.8	-19.3%	34.6%	8.6%
51	Information	U.S.	\$1,159.2	\$1,158.9	\$1,120.6	\$1,186.6	\$1,205.5	\$1,240.0	\$1,296.6	\$1,305.5	-3.3%	16.5%	12.6%
		Ohio	\$17.7	\$17.3	\$16.7	\$17.4	\$17.1	\$17.2	\$18.2	\$18.3	-5.9%	10.0%	3.5%
52	Finance & insurance	U.S.	\$1,730.8	\$1,715.1	\$1,751.1	\$1,802.9	\$1,881.9	\$1,892.6	\$1,936.3	\$1,965.7	1.2%	12.3%	13.6%
		Ohio	\$75.8	\$74.1	\$74.8	\$76.3	\$80.6	\$76.9	\$80.2	\$81.4	-1.3%	8.8%	7.3%
53	Real estate, rental & leasing	U.S.	\$2,812.5	\$2,827.7	\$2,740.6	\$2,824.3	\$2,824.8	\$2,857.3	\$2,908.6	\$2,955.0	-2.6%	7.8%	5.1%
		Ohio	\$79.3	\$78.3	\$76.0	\$77.5	\$77.4	\$78.2	\$79.5	\$80.5	-4.2%	6.0%	1.6%
54	Professional, scientific & technical	U.S.	\$1,672.6	\$1,669.3	\$1,548.3	\$1,632.1	\$1,661.3	\$1,702.9	\$1,754.4	\$1,798.7	-7.4%	16.2%	7.5%
		Ohio	\$37.5	\$36.9	\$33.8	\$35.6	\$35.6	\$36.8	\$37.5	\$38.4	-9.8%	13.5%	2.4%
55	Mgt. of companies & enterprises	U.S.	\$413.5	\$412.0	\$399.1	\$403.7	\$427.0	\$431.1	\$431.7	\$438.3	-3.5%	9.8%	6.0%
		Ohio	\$22.3	\$23.0	\$21.5	\$22.7	\$24.1	\$23.1	\$22.7	\$22.9	-3.3%	6.6%	3.1%
56	Administrative support & waste mgt.	U.S.	\$685.9	\$676.7	\$588.9	\$656.2	\$684.5	\$720.3	\$739.0	\$768.1	-14.1%	30.4%	12.0%
		Ohio	\$21.2	\$20.6	\$17.8	\$20.3	\$21.5	\$22.9	\$22.7	\$23.6	-16.0%	32.9%	11.6%
61	Education	U.S.	\$275.8	\$271.9	\$240.1	\$250.7	\$242.5	\$247.7	\$254.3	\$261.4	-12.9%	8.9%	-5.2%
		Ohio	\$6.3	\$6.2	\$5.4	\$5.7	\$5.5	\$5.5	\$5.7	\$5.8	-14.0%	6.7%	-8.2%
62	Health care & social assistance	U.S.	\$1,623.2	\$1,598.9	\$1,371.6	\$1,591.9	\$1,626.8	\$1,636.5	\$1,656.7	\$1,680.7	-15.5%	22.5%	3.5%
		Ohio	\$61.1	\$60.4	\$52.8	\$60.3	\$61.1	\$60.6	\$62.3	\$63.2	-13.6%	19.6%	3.3%
71	Arts, entertainment & recreation	U.S.	\$251.2	\$228.9	\$107.8	\$150.8	\$166.0	\$172.9	\$185.4	\$204.0	-57.1%	89.2%	-18.8%
		Ohio	\$7.6	\$7.8	\$3.4	\$5.6	\$5.9	\$6.4	\$6.5	\$6.9	-54.9%	102.9%	-8.4%
72	Accommodation & food services	U.S.	\$683.1	\$620.3	\$365.9	\$526.5	\$522.2	\$543.2	\$635.1	\$683.0	-46.4%	86.7%	0.0%
		Ohio	\$18.4	\$16.4	\$10.9	\$15.5	\$14.8	\$16.1	\$17.7	\$19.0	-40.4%	73.4%	3.3%
81	Other services (exc. Government)	U.S.	\$464.9	\$455.5	\$368.1	\$423.3	\$429.0	\$425.8	\$443.2	\$454.9	-20.8%	23.6%	-2.1%
		Ohio	\$14.8	\$14.6	\$11.7	\$13.7	\$13.7	\$13.6	\$14.1	\$14.4	-20.6%	22.7%	-2.6%
92	Government <sup>2</sup>	U.S.	\$2,661.1	\$2,697.2	\$2,630.9	\$2,668.9	\$2,685.4	\$2,705.4	\$2,742.7	\$2,806.0	-1.1%	6.7%	5.4%
		Ohio	\$75.8	\$76.7	\$74.2	\$75.7	\$76.0	\$76.6	\$77.5	\$79.3	-2.0%	6.9%	4.7%

Notes and abbreviations: \* - initial; earlier figures may be revised; # - components may not sum to totals due to rounding; 1 - excludes U.S. Postal Service (NAICS 491); 2 - includes U.S. Postal Postal Service; exc. - except; p - part; Q-quarter;

Source: U.S. BEA (2022). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 2/22).

Table A1c: Nonfarm Employment Changes in Ohio During 2020-2021 (in thousands, not seasonally adjusted)

NAICS Codes	Sector & Industry Titles	2020 - Selected Months						2021 - Selected Months						2/20->4/20		4/20->12/21		2/20->12/21	
		Feb	Apr	Jun	Aug	Oct	Dec	Feb	Apr	Jun	Aug	Oct	Dec*	Number	Percent	Number	Percent	Number	Percent
1133...92	Total Nonfarm	5,532.3	4,721.0	5,164.6	5,243.6	5,321.1	5,302.0	5,219.9	5,295.6	5,368.2	5,374.9	5,424.3	5,436.8	-811.3	-14.7%	715.8	15.2%	-95.5	-1.7%
1133...81	Total Private	4,729.7	3,953.3	4,436.9	4,519.2	4,557.8	4,547.1	4,467.8	4,534.8	4,628.9	4,647.2	4,655.4	4,671.1	-776.4	-16.4%	717.8	18.2%	-58.6	-1.2%
1133...339	Private Goods Producing	913.4	782.0	884.9	890.0	896.0	883.6	865.6	886.8	908.7	911.6	906.5	901.6	-131.4	-14.4%	119.6	15.3%	-11.8	-1.3%
21+1133	Mining & Logging	10.2	9.6	9.3	9.0	8.7	9.0	8.5	8.8	8.7	8.9	8.7	8.0	-0.6	-5.9%	-1.6	-16.7%	-2.2	-21.6%
23	Construction	210.8	191.4	225.8	230.1	230.1	214.9	199.8	222.2	236.1	239.5	239.1	231.9	-19.4	-9.2%	40.5	21.2%	21.1	10.0%
236	Construction of Buildings	48.9	42.5	48.3	48.7	49.4	47.3	46.3	50.3	52.4	54.6	54.3	53.0	-6.4	-13.1%	10.5	24.7%	4.1	8.4%
2362	Nonresidential Building Construction	28.2	24.6	27.3	27.2	27.8	26.7	25.5	27.3	29.0	29.3	29.4	28.6	-3.6	-12.8%	4.0	16.3%	0.4	1.4%
236R	Remaining Building Construction (by subtraction)	20.7	17.9	21.0	21.5	21.6	20.6	20.8	23.0	23.4	25.3	24.9	24.4	-2.8	-13.5%	6.5	36.3%	3.7	17.9%
237	Heavy & Civil Engineering Construction	24.4	25.5	32.1	33.1	30.0	22.7	19.3	25.7	30.1	31.3	31.6	28.6	1.1	4.5%	3.1	12.2%	4.2	17.2%
238	Specialty Trade Contractors	137.5	123.4	145.4	148.3	150.7	144.9	134.2	146.2	153.6	153.6	153.2	150.3	-14.1	-10.3%	26.9	21.8%	12.8	9.3%
31->33	Manufacturing	692.4	581.0	649.8	650.9	657.2	659.7	657.3	655.8	663.9	663.2	658.7	661.7	-111.4	-16.1%	80.7	13.9%	-30.7	-4.4%
321+327->339	Durable Goods	465.3	378.5	431.9	431.9	435.6	436.3	431.9	432.3	441.0	439.4	434.1	436.8	-86.8	-18.7%	58.3	15.4%	-28.5	-6.1%
327	Nonmetallic Mineral Product Mfg.	26.9	22.5	25.1	25.8	25.6	25.3	24.3	25.0	25.4	25.6	25.4	25.5	-4.4	-16.4%	3.0	13.3%	-1.4	-5.2%
331	Primary Metals Mfg.	37.1	33.1	33.6	33.2	33.8	34.2	33.8	33.8	33.5	32.9	32.0	32.2	-4.0	-10.8%	-0.9	-2.7%	-4.9	-13.2%
332	Fabricated Metal Products Mfg.	98.3	87.8	91.1	90.5	91.6	93.3	92.0	93.5	95.8	96.8	95.9	97.4	-10.5	-10.7%	9.6	10.9%	-0.9	-0.9%
3327	Machine Shops; Turned Product; & Screw, Nut & Bolt Mfg.	25.0	22.3	23.3	22.8	23.1	23.1	22.0	22.4	22.9	23.3	23.7	24.3	-2.7	-10.8%	2.0	9.0%	-0.7	-2.8%
332R	Remaining Fabricated Metal Products Mfg. (by subtraction)	73.3	65.5	67.8	67.7	68.5	70.2	70.0	71.1	72.9	73.5	72.2	73.1	-7.8	-10.6%	7.6	11.6%	-0.2	-0.3%
333	Machinery Mfg.	78.5	72.1	73.4	73.1	74.6	72.2	72.9	73.8	75.1	73.7	73.2	72.9	-6.4	-8.2%	0.8	1.1%	-5.6	-7.1%
3335	Metalworking Machinery Mfg.	22.0	19.9	20.4	20.3	21.1	20.5	20.6	20.9	21.1	20.8	20.7	20.8	-2.1	-9.5%	0.9	4.5%	-1.2	-5.5%
333R	Remaining Machinery Mfg. (by subtraction)	56.5	52.2	53.0	52.8	53.5	51.7	52.3	52.9	54.0	52.9	52.5	52.1	-4.3	-7.6%	-0.1	-0.2%	-4.4	-7.8%
334	Computer & Electronic Products Mfg.	21.2	20.2	20.5	20.5	20.6	20.6	20.4	20.5	21.1	20.7	20.5	20.4	-1.0	-4.7%	0.2	1.0%	-0.8	-3.8%
335	Electrical Eqpt., Appliances & Components Mfg.	25.9	24.4	25.4	25.0	25.3	24.8	24.2	24.3	24.4	24.2	24.2	24.1	-1.5	-5.8%	-0.3	-1.2%	-1.8	-6.9%
3352	Household Appliances Mfg.	9.5	9.3	9.6	9.6	9.9	9.9	10.0	10.0	10.0	10.0	10.0	10.0	-0.2	-2.1%	0.7	7.5%	0.5	5.3%
335R	Remaining Electrical Eqpt. & Components Mfg. (by subtraction)	16.4	15.1	15.8	15.4	15.4	14.9	14.2	14.3	14.4	14.2	14.2	14.1	-1.3	-7.9%	-1.0	-6.6%	-2.3	-14.0%
336	Transportation Eqpt. Mfg.	127.2	77.6	115.2	115.6	116.4	119.6	115.1	112.6	114.1	116.0	114.7	115.7	-49.6	-39.0%	38.1	49.1%	-11.5	-9.0%
3361	Motor Vehicle Assembly	21.4	15.4	21.1	21.3	22.0	23.7	22.8	22.4	22.9	22.2	21.7	22.3	-6.0	-28.0%	6.9	44.8%	0.9	4.2%
3363	Motor Vehicle Parts Mfg.	74.7	36.1	66.5	67.6	68.2	69.4	67.8	66.2	66.4	65.6	64.8	64.1	-38.6	-51.7%	28.0	77.6%	-10.6	-14.2%
3364	Aerospace Products & Parts Mfg.	20.2	19.4	17.8	16.7	16.4	16.4	15.8	15.0	14.6	14.4	14.4	14.2	-0.8	-4.0%	-5.2	-26.8%	-6.0	-29.7%
336R	Remaining Transportation Eqpt. Mfg. (by subtraction)	10.9	6.7	9.8	10.0	9.8	10.1	8.7	9.0	10.2	13.8	13.8	15.1	-4.2	-38.5%	8.4	125.4%	4.2	38.5%
337	Furniture & Related Products Mfg.	15.5	11.7	14.6	14.7	14.8	14.7	14.6	14.1	14.7	14.2	13.9	14.3	-3.8	-24.5%	2.6	22.2%	-1.2	-7.7%
32pR, 33R	Remaining Durable Goods Mfg. (by subtraction)	34.7	29.1	33.0	33.5	32.9	31.6	34.6	34.7	36.9	35.3	34.3	34.3	-5.6	-16.1%	5.2	17.9%	-0.4	-1.2%
311->316+322->326	Non-Durable Goods	227.1	202.5	217.9	219.0	221.6	223.4	225.4	223.5	222.9	223.8	224.6	224.9	-24.6	-10.8%	22.4	11.1%	-2.2	-1.0%
311	Food Mfg.	59.7	56.8	59.1	59.0	59.8	60.0	59.4	59.0	59.8	59.8	59.7	59.8	-2.9	-4.9%	3.0	5.3%	0.1	0.2%
323	Printing & Related Support Activities	20.6	16.0	17.9	18.0	18.4	18.6	18.1	18.2	18.1	18.3	18.3	18.3	-4.6	-22.3%	2.3	14.4%	-2.3	-11.2%
325	Chemicals Mfg.	46.4	45.2	45.3	45.7	45.6	46.4	46.8	46.7	47.1	47.3	47.1	47.5	-1.2	-2.6%	2.3	5.1%	1.1	2.4%
326	Plastic & Rubber Products Mfg.	57.8	46.6	54.2	54.6	55.0	55.5	55.5	55.1	55.1	54.8	54.5	54.6	-11.2	-19.4%	8.0	17.2%	-3.2	-5.5%
3261	Plastic Product Mfg.	44.4	36.8	42.1	42.3	42.7	43.2	43.3	43.0	43.1	43.1	42.9	43.0	-7.6	-17.1%	6.2	16.8%	-1.4	-3.2%
3262	Rubber Product Mfg.	13.4	9.8	12.1	12.3	12.3	12.3	12.2	12.1	12.0	11.7	11.6	11.6	-3.6	-26.9%	1.8	18.4%	-1.8	-13.4%
31R, 32pR	Remaining Non-Durable Goods Mfg. (by subtraction)	42.6	37.9	41.4	41.7	42.8	42.9	45.6	44.5	42.8	43.6	45.0	44.7	-4.7	-11.0%	6.8	17.9%	2.1	4.9%
22+42->81	Private Service Providing	3,816.3	3,171.3	3,552.0	3,629.2	3,661.8	3,663.5	3,602.2	3,648.0	3,720.2	3,735.6	3,748.9	3,769.5	-645.0	-16.9%	598.2	18.9%	-46.8	-1.2%
22	Utilities	18.9	18.5	18.5	18.3	18.3	18.2	18.0	18.3	18.1	17.9	17.7	17.6	-0.4	-2.1%	-0.9	-4.9%	-1.3	-6.9%
42	Wholesale Trade	233.9	215.8	223.1	224.0	224.0	226.7	225.2	224.7	224.2	225.7	227.2	227.2	-18.1	-7.7%	11.4	5.3%	-6.7	-2.9%
423	Merchant Wholesalers, Durable Goods	141.3	129.2	133.8	134.0	134.8	136.1	137.0	136.2	135.1	138.0	140.0	141.2	-12.1	-8.6%	12.0	9.3%	-0.1	-0.1%
4234	Professional & Commercial Eqpt. & Supplies Merchant Wholesalers	29.5	27.9	28.1	28.3	28.1	28.3	28.5	28.7	28.6	28.9	28.8	28.9	-1.6	-5.4%	1.0	3.6%	-0.6	-2.0%
4238	Machinery, Eqpt. & Supplies Merchant Wholesalers	35.5	33.5	34.0	34.0	33.5	33.6	34.0	33.2	33.4	34.4	34.4	34.5	-2.0	-5.6%	1.0	3.0%	-1.0	-2.8%
423R	Remaining Merchant Wholesalers, Durable Goods (by subtraction)	76.3	67.8	71.7	71.7	73.2	74.2	74.5	74.3	73.1	74.7	76.8	77.8	-8.5	-11.1%	10.0	14.7%	1.5	2.0%
424	Merchant Wholesalers, Nondurable Goods	75.2	70.8	73.2	73.2	72.4	73.3	72.5	72.9	73.8	73.6	73.6	73.1	-4.4	-5.9%	2.3	3.2%	-2.1	-2.8%
425	Wholesale Electronic Markets, Agents & Brokers (by subtraction)	17.4	15.8	16.1	16.8	16.8	17.3	15.7	15.6	15.3	14.1	13.6	12.9	-1.6	-9.2%	-2.9	-18.4%	-4.5	-25.9%
44->45	Retail Trade	542.1	454.5	524.7	534.7	542.9	561.9	535.5	540.7	551.5	545.7	555.5	577.5	-87.6	-16.2%	123.0	27.1%	35.4	6.5%
441	Motor Vehicle & Parts Dealers	79.2	61.7	72.3	74.7	74.7	76.8	77.5	78.3	79.0	79.1	79.0	79.4	-17.5	-22.1%	17.7	28.7%	0.2	0.3%
4411	Automobile Dealers	50.1	37.0	45.0	46.5	46.7	46.9	46.9	47.0	47.6	47.8	47.1	47.9	-13.1	-26.1%	10.9	29.5%	-2.2	-4.4%
441R	Remaining Motor Vehicle & Parts Dealers (by subtraction)	29.1	24.7	27.3	28.2	28.0	29.9	30.6	31.3	31.4	31.3	31.9	31.5	-4.4	-15.1%	6.8	27.5%	2.4	8.2%
442	Furniture & Home Furnishings Stores	13.3	7.0	10.9	11.8	12.6	13.0	12.7	12.8	12.6	12.6	12.8	13.2	-6.3	-47.4%	6.2	88.6%	-0.1	-0.8%
444	Building Material & Garden Eqpt. & Supplies Dealers	50.0	51.7	58.5	56.2	54.7	55.4	53.5	57.3	60.0	55.9	54.6	55.9	1.7	3.4%	4.2	8.1%	5.9	11.8%
4441	Building Material & Supplies Dealers	44.1	44.6	50.1	48.7	47.1	47.1	46.2	49.1	51.5	47.9	47.1	48.5	0.5	1.1%	3.9	8.7%	4.4	10.0%
4442	Lawn & Garden Eqpt. & Supplies Stores (by subtraction)	5.9	7.1	8.4	7.5	7.6	8.3	7.3	8.2	8.5	8.0	7.5	7.4	1.2	20.3%	0.3	4.2%	1.5	25.4%
445	Food & Beverage Stores	98.5	99.6	104.5	101.3	100.3	105.7	102.0	100.2	103.8	101.1	101.8	106.2	1.1	1.1%	6.6	6.6%	7.7	7.8%
4451	G																		

**Table A1c: Nonfarm Employment Changes in Ohio During 2020-2021 (in thousands, not seasonally adjusted)**

NAICS Codes	Sector & Industry Titles	2020 - Selected Months						2021 - Selected Months						2/20->4/20		4/20->12/21		2/20->12/21	
		Feb	Apr	Jun	Aug	Oct	Dec	Feb	Apr	Jun	Aug	Oct	Dec*	Number	Percent	Number	Percent	Number	Percent
		Changes																	
51	Information	68.3	61.4	62.0	62.6	63.1	62.5	62.8	62.9	64.3	65.3	64.5	64.9	-6.9	-10.1%	3.5	5.7%	-3.4	-5.0%
511	Publishing Industries (exc. Internet)	19.8	18.3	18.8	18.9	18.9	18.9	18.8	18.7	18.9	18.9	18.7	18.7	-1.5	-7.6%	0.4	2.2%	-1.1	-5.6%
517	Telecommunications	21.7	21.3	21.1	21.0	20.9	21.0	20.8	20.8	21.0	21.1	21.1	21.1	-0.4	-1.8%	-0.2	-0.9%	-0.6	-2.8%
51R	Remaining Information (by subtraction)	26.8	21.8	22.1	22.7	23.3	22.6	23.2	23.4	24.4	25.3	24.7	25.1	-5.0	-18.7%	3.3	15.1%	-1.7	-6.3%
52	Finance & Insurance	241.3	238.1	239.3	239.6	240.2	243.8	241.9	241.3	242.0	240.2	241.0	240.2	-3.2	-1.3%	2.1	0.9%	-1.1	-0.5%
521+522	Credit Intermediation & Related Activities inc. Monetary Authorities	95.6	94.0	94.7	95.1	94.5	95.2	94.9	93.7	92.8	91.9	92.6	91.5	-1.6	-1.7%	-2.5	-2.7%	-4.1	-4.3%
521+5221	Depository Credit Intermediation inc. Monetary Authorities	64.0	63.5	63.8	63.5	62.7	63.2	63.2	63.1	62.8	62.4	62.3	62.2	-0.5	-0.8%	-1.3	-2.0%	-1.8	-2.8%
5222+5223	Non-Depository Credit Intermediation & Related Activities (by subtraction)	31.6	30.5	30.9	31.6	31.8	32.0	31.7	30.6	30.0	29.5	30.3	29.3	-1.1	-3.5%	-1.2	-3.9%	-2.3	-7.3%
524	Insurance Carriers & Related Activities	125.6	124.4	124.6	124.2	125.3	127.5	126.1	126.4	126.7	125.6	125.7	124.1	-1.2	-1.0%	-0.3	-0.2%	-1.5	-1.2%
5241	Insurance Carriers	80.0	79.8	79.7	78.9	79.1	80.1	79.5	79.2	79.5	78.9	78.4	79.1	-0.2	-0.3%	-0.7	-0.9%	-0.9	-1.1%
5242	Agencies, Brokerages & Other Insurance Related Activities (by subtraction)	45.6	44.6	44.9	45.3	46.2	47.4	46.6	47.2	47.2	46.7	47.3	45.0	-1.0	-2.2%	0.4	0.9%	-0.6	-1.3%
523+525	Securities, Commodities, Trusts, Financial Mgt., etc. (by subtraction)	20.1	19.7	20.0	20.3	20.4	21.1	20.9	21.2	22.5	22.7	22.7	24.6	-0.4	-2.0%	4.9	24.9%	4.5	22.4%
53	Real Estate & Rental & Leasing	64.7	58.0	61.8	62.9	62.1	62.1	63.7	64.9	66.1	65.1	64.1	63.2	-6.7	-10.4%	5.2	9.0%	-1.5	-2.3%
54	Professional, Scientific & Technical Services	272.5	254.8	257.0	259.9	259.3	257.7	260.7	261.5	260.7	262.8	265.9	269.2	-17.7	-6.5%	14.4	5.7%	-3.3	-1.2%
5411	Legal Services	31.4	29.4	30.3	30.4	30.3	29.7	28.9	29.2	30.1	30.3	30.1	29.9	-2.0	-6.4%	0.5	1.7%	-1.5	-4.8%
5412	Accounting, Tax Preparation, Bookkeeping & Payroll Services	34.9	31.5	28.8	28.5	28.3	28.8	32.4	31.2	27.2	27.9	28.7	30.7	-3.4	-9.7%	-0.8	-2.5%	-4.2	-12.0%
5413	Architectural, Engineering & Related Services	42.7	40.3	41.3	41.3	41.1	41.1	41.0	40.6	41.8	42.7	42.3	43.1	-2.4	-5.6%	2.8	6.9%	0.4	0.9%
5415	Computer Systems Design & Related Services	65.0	63.8	62.7	64.2	63.1	62.4	64.4	64.9	66.0	66.1	68.2	69.0	-1.2	-1.8%	5.2	8.2%	4.0	6.2%
5416	Mgt., Scientific & Technical Consulting Services	35.1	33.0	33.8	34.2	34.0	33.3	32.0	32.7	32.6	33.2	34.2	33.8	-2.1	-6.0%	0.8	2.4%	-1.3	-3.7%
5418	Advertising, Public Relations & Related Services	12.6	10.5	10.8	11.2	11.5	11.5	11.3	11.4	11.6	11.6	11.9	12.0	-2.1	-16.7%	1.5	14.3%	-0.6	-4.8%
541R	Remaining Professional, Scientific & Technical Services (by subtraction)	50.8	46.3	49.3	50.1	51.0	50.9	50.7	51.5	51.4	51.0	50.5	50.7	-4.5	-8.9%	4.4	9.5%	-0.1	-0.2%
55	Mgt. of Companies & Enterprises	141.2	134.6	135.6	138.9	138.7	139.1	137.9	139.3	140.1	139.8	140.0	140.2	-6.6	-4.7%	5.6	4.2%	-1.0	-0.7%
56	Administrative-Support & Waste Mgt.-Remediation Services	304.2	257.6	286.6	298.6	307.4	299.2	279.1	293.6	309.1	317.6	319.2	313.5	-46.6	-15.3%	55.9	21.7%	9.3	3.1%
561	Administrative & Support Services	286.6	240.8	269.1	281.1	290.1	281.9	262.1	276.3	291.9	300.2	301.8	296.4	-45.8	-16.0%	55.6	23.1%	9.8	3.4%
5613	Employment Services	126.1	89.1	103.1	113.5	121.3	126.3	126.1	89.1	103.1	113.5	121.3	126.3	-37.0	-29.3%	37.2	41.8%	0.2	0.2%
5614	Business Support Services	34.7	31.2	31.8	32.5	33.9	34.8	33.4	32.8	32.2	32.1	32.8	33.5	-3.5	-10.1%	2.3	7.4%	-1.2	-3.5%
5617	Services to Buildings & Dwellings	63.0	65.4	76.3	75.7	75.2	63.3	60.5	72.3	78.6	76.2	73.7	68.1	2.4	3.8%	2.7	4.1%	5.1	8.1%
561R	Remaining Administrative Support Services (by subtraction)	62.8	55.1	57.9	59.4	59.7	57.5	42.1	82.1	78.0	78.4	74.0	68.5	-7.7	-12.3%	13.4	24.3%	5.7	9.1%
562	Waste Mgt. & Remediation Services (by subtraction)	17.6	16.8	17.5	17.5	17.3	17.3	17.0	17.3	17.2	17.4	17.4	17.1	-0.8	-4.5%	0.3	1.8%	-0.5	-2.8%
61	Educational Services	120.6	102.5	94.8	96.9	111.4	102.2	107.1	112.2	97.0	91.0	106.4	107.3	-18.1	-15.0%	4.8	4.7%	-13.3	-11.0%
6113	Colleges, Universities & Professional Schools	64.1	57.7	47.6	49.7	58.2	53.8	56.2	57.8	45.3	43.0	56.8	55.7	-6.4	-10.0%	-2.0	-3.5%	-8.4	-13.1%
61R	Remaining Educational Services (by subtraction)	56.5	44.8	47.2	47.2	53.2	48.4	50.9	54.4	51.7	48.0	49.6	51.6	-11.7	-20.7%	6.8	15.2%	-4.9	-8.7%
62	Health Care & Social Assistance	827.2	728.9	776.6	785.9	791.7	794.5	789.4	790.3	790.2	797.0	793.3	788.3	-98.3	-11.9%	59.4	8.1%	-38.9	-4.7%
621	Ambulatory Health Care Services (by subtraction)	278.7	229.9	262.6	269.4	272.3	275.0	273.1	272.7	273.9	278.1	278.7	278.9	-48.8	-17.5%	49.0	21.3%	0.2	0.1%
622	Hospitals	256.1	245.5	249.5	249.8	252.2	253.5	253.1	251.8	253.6	254.9	255.1	254.8	-10.6	-4.1%	9.3	3.8%	-1.3	-0.5%
623	Nursing & Residential Care Facilities	165.6	159.1	156.6	154.3	151.8	150.2	147.8	149.0	147.0	147.0	143.1	140.3	-6.5	-3.9%	-18.8	-11.8%	-25.3	-15.3%
624	Social Assistance	126.8	94.4	107.9	112.4	115.4	115.8	115.4	116.8	115.7	117.0	116.4	114.3	-32.4	-25.6%	19.9	21.1%	-12.5	-9.9%
71	Arts, Entertainment & Recreation	70.1	34.5	67.3	72.2	59.0	47.2	47.5	63.4	93.5	89.7	66.5	54.2	-35.6	-50.8%	19.7	57.1%	-15.9	-22.7%
711-2	Performance, Spectator Sports, Museums, Historical Sites, etc. (by subtraction)	20.1	13.3	13.2	13.5	14.7	15.7	16.6	21.6	25.5	25.6	23.5	20.6	-6.8	-33.8%	7.3	54.9%	0.5	2.5%
713	Amusement, Gambling & Recreation Industries	50.0	21.2	54.1	58.7	44.3	31.5	30.9	41.8	68.0	64.1	43.0	33.6	-28.8	-57.6%	12.4	58.5%	-16.4	-32.8%
72	Accommodation & Food Services	476.5	262.1	395.7	413.8	413.4	406.7	406.9	413.2	435.8	446.9	444.5	447.7	-214.4	-45.0%	185.6	70.8%	-28.8	-6.0%
721	Accommodation	36.0	16.8	23.9	27.0	25.8	22.0	23.3	26.8	32.8	35.3	35.3	34.9	-19.2	-53.3%	18.1	107.7%	-1.1	-3.1%
722	Food Services & Drinking Places	440.5	245.3	371.8	386.8	387.6	384.7	383.6	386.4	403.0	411.6	409.2	412.8	-195.2	-44.3%	167.5	68.3%	-27.7	-6.3%
81	Other Services exc. Private Households	211.2	142.9	183.2	191.3	194.1	190.8	188.8	188.4	193.4	190.5	191.8	192.9	-68.3	-32.3%	50.0	35.0%	-18.3	-8.7%
811	Repair & Maintenance	49.3	40.9	46.1	47.5	47.3	48.0	46.7	45.7	46.5	46.4	47.1	47.5	-8.4	-17.0%	6.6	16.1%	-1.8	-3.7%
812	Personal & Laundry Services	55.6	23.8	47.9	49.3	49.1	48.7	48.9	47.5	49.5	48.0	48.7	50.4	-31.8	-57.2%	26.6	111.8%	-5.2	-9.4%
813	Religious, Grantmaking, Civic, Professional & Similar Organizations	106.3	78.2	89.2	94.5	97.7	94.1	93.2	95.2	97.4	96.1	96.0	95.0	-28.1	-26.4%	16.8	21.5%	-11.3	-10.6%
92	Government	802.6	767.7	727.7	724.4	763.3	754.9	752.1	760.8	739.3	727.7	768.9	765.7	-34.9	-4.3%	-2.0	-0.3%	-36.9	-4.6%
92F	Federal Government	79.7	80.0	80.1	89.6	82.5	80.4	78.8	79.2	78.7	79.2	79.0	80.5	0.3	0.4%	0.5	0.6%	0.8	1.0%
92F-USPS	U.S. Postal Service	22.6	22.6	22.6	22.5	22.6	22.9	22.4	22.6	22.1	22.5	22.3	23.1	0.0	0.0%	0.5	2.2%	0.5	2.2%
92F-USPS	Military & Remaining Federal Civilian Employees (by subtraction)	57.1	57.4	57.5	67.1	59.9	57.5	56.4	56.6	56.6	56.7	56.7	57.4	0.3	0.5%	0.0	0.0%	0.3	0.5%
92S	State Government	186.6	178.1	152.7	150.7	168.9	167.9	167.9	169.6	145.9	146.6	170.9	165.9	-8.5	-4.6%	-12.2	-6.9%	-20.7	-11.1%
92SE	State Government Educational Services	111.6	103.8	78.5	76.8	95.1	93.7	93.6	95.7	72.2	73.6	98.1	93.8	-7.8	-7.0%	-10.0	-9.6%	-17.8	-15.9%
92S^E	State Government exc. Education	75.0	74.3	74.2	73.9	73.8	74.2	74.3	73.9	73.7	73.0	72.8	72.1	-0.7	-0.9%	-2.2	-3.0%	-2.9	-3.9%
92L	Local Government	536.3	509.6	494.9	484.1	511.9	506.6	505.4	512.0	514.7	501.9	519.0	519.3	-26.7	-5.0%	9.7	1.9%	-17.0	-3.2%
92LE	Local Government Educational Services	301.3	282.8	264.6	252.5	278.8	277.7	278.3	281.3	273.9	261.7	287.3	288.2	-18.5	-6.1%	5.4	1.9%	-13.1	-4.3%
92L^E	Local Government exc. Educational Services	235.0	226.8	230.3	231.6	233.1	228.9	227.1	230.7	240.8	240.2	231.7	231.1	-8.2	-3.5%	4.3	1.9%	-3.9	-1.7%

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Adams	Allen^	Ashland	Ashtabula	Athens	Auglaize	Belmont^	Brown
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$810.6	\$8,116.4	\$1,873.4	\$3,193.7	\$2,167.6	\$2,292.7	\$2,963.1	\$916.2
Private industries	2		\$18,223,132	\$601,897	\$715.0	\$7,578.3	\$1,673.8	\$2,849.1	\$1,369.8	\$2,116.5	\$2,661.7	\$746.1
Goods-producing Industries	91		\$3,524,445	\$139,369	(D)	\$4,349.5	\$527.7	\$1,133.8	\$136.5	\$1,152.1	\$1,167.0	\$156.0
Natural Resources & Mining	87		\$356,627	\$7,982	(D)	\$57.7	\$40.8	\$36.0	\$5.0	\$96.8	(D)	\$30.9
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	(D)	\$49.5	\$37.4	\$31.1	\$1.4	\$95.0	(D)	\$23.1
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$6.1	\$8.2	\$3.3	\$5.0	\$3.6	\$1.8	\$961.3	\$7.9
Construction	11	23	\$895,860	\$26,084	\$49.6	\$188.6	\$107.0	\$211.5	\$60.7	\$93.0	(D)	\$59.4
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$153.0	\$4,103.3	\$380.0	\$886.3	\$70.8	\$962.2	\$107.2	\$65.7
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$145.9	\$555.6	\$216.6	\$373.4	\$28.4	\$643.6	\$33.1	\$58.9
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$7.1	\$3,547.7	\$163.4	\$512.9	\$42.4	\$318.6	\$74.1	\$6.9
Services-Providing Industries	92		\$14,698,687	\$462,529	(D)	\$3,228.8	\$1,146.1	\$1,715.3	\$1,233.3	\$964.4	\$1,494.7	\$590.2
Transportation & Utilities	89		\$913,741	\$33,023	(D)	\$151.7	\$68.1	\$145.9	\$35.6	(D)	\$119.6	\$37.3
Utilities	10	22	\$341,717	\$10,907	(D)	\$18.8	\$0.0	\$33.6	\$12.2	\$4.4	\$24.7	\$4.8
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$17.0	\$132.8	\$68.1	\$112.4	\$23.4	(D)	\$94.9	\$32.5
Trade	88		\$2,445,476	\$82,410	\$118.6	\$770.3	\$237.4	\$305.8	\$245.7	\$253.7	\$321.9	(D)
Wholesale Trade	34	42	\$1,243,274	\$41,728	\$56.1	\$405.6	\$103.9	\$92.7	\$72.5	\$128.1	\$85.8	(D)
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$62.5	\$364.7	\$133.5	\$213.1	\$173.3	\$125.6	\$236.1	\$83.9
Information	45	51	\$1,167,921	\$17,117	\$6.0	\$68.2	\$49.5	\$48.7	\$59.4	\$37.0	\$65.0	\$4.7
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$167.4	\$743.1	\$312.9	\$563.0	\$429.1	\$293.8	\$542.6	\$247.5
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$60.6	\$282.2	\$88.3	\$129.3	\$100.8	\$100.1	\$193.4	\$60.1
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$106.8	\$461.0	\$224.7	\$433.7	\$328.4	\$193.7	\$349.2	\$187.4
Professional & Business Services	59		\$2,689,775	\$78,334	\$64.1	\$441.3	\$182.9	\$180.6	\$125.2	(D)	\$133.4	(D)
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	\$15.7	\$138.9	\$109.9	\$77.7	\$48.0	\$45.5	\$40.3	(D)
Enterprise Management	64	55	\$410,456	\$22,808	\$35.9	\$62.7	\$39.5	\$38.6	\$50.6	(D)	\$37.1	(D)
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$12.5	\$239.7	\$33.5	\$64.3	\$26.6	(D)	\$56.1	\$21.6
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$58.4	\$793.8	\$199.1	\$314.4	\$219.6	\$132.4	\$176.6	\$64.7
Educational Services	69	61	\$251,318	\$5,693	\$1.7	\$54.0	(D)	\$6.6	\$3.2	\$3.4	\$7.1	\$4.1
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	\$56.6	\$739.8	(D)	\$307.7	\$216.4	\$129.1	\$169.4	\$60.7
Leisure & Hospitality	75		\$672,078	\$20,112	(D)	\$142.8	\$53.8	\$89.5	\$75.0	\$50.8	\$80.9	\$26.5
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	(D)	\$13.2	\$6.2	\$8.8	\$3.7	\$6.4	\$4.3	\$1.8
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$14.0	\$129.7	\$47.6	\$80.6	\$71.3	\$44.4	\$76.7	\$24.8
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$20.3	\$117.4	\$42.5	\$67.3	\$43.7	\$50.3	\$54.8	\$33.3
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$95.5	\$538.1	\$199.6	\$344.6	\$797.8	\$176.2	\$301.4	\$170.1
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$40.6	\$0.0	\$199.1	\$0.0	\$0.0	\$96.5	\$98.4	\$70.7

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; \$0.0 may also mean less than \$500,000. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Adams	Allen^	Ashland	Ashtabula	Athens	Auglaize	Belmont^	Brown
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	88.2%	93.4%	89.3%	89.2%	63.2%	92.3%	89.8%	81.4%
Goods-producing Industries	91		16.9%	20.6%	(D)	53.6%	28.2%	35.5%	6.3%	50.2%	39.4%	17.0%
Natural Resources & Mining	87		1.7%	1.2%	(D)	0.7%	2.2%	1.1%	0.2%	4.2%	(D)	3.4%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	(D)	0.6%	2.0%	1.0%	0.1%	4.1%	(D)	2.5%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	0.7%	0.1%	0.2%	0.2%	0.2%	0.1%	32.4%	0.9%
Construction	11	23	4.3%	3.8%	6.1%	2.3%	5.7%	6.6%	2.8%	4.1%	(D)	6.5%
Manufacturing	12	31-33	10.9%	15.5%	18.9%	50.6%	20.3%	27.8%	3.3%	42.0%	3.6%	7.2%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	18.0%	6.8%	11.6%	11.7%	1.3%	28.1%	1.1%	6.4%
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	0.9%	43.7%	8.7%	16.1%	2.0%	13.9%	2.5%	0.7%
Services-Providing Industries	92		70.3%	68.3%	(D)	39.8%	61.2%	53.7%	56.9%	42.1%	50.4%	64.4%
Transportation & Utilities	89		4.4%	4.9%	(D)	1.9%	3.6%	4.6%	1.6%	(D)	4.0%	4.1%
Utilities	10	22	1.6%	1.6%	(D)	0.2%	0.0%	1.1%	0.6%	0.2%	0.8%	0.5%
Transportation & Warehousing	36	48-49	2.7%	3.3%	2.1%	1.6%	3.6%	3.5%	1.1%	(D)	3.2%	3.5%
Trade	88		11.7%	12.2%	14.6%	9.5%	12.7%	9.6%	11.3%	11.1%	10.9%	(D)
Wholesale Trade	34	42	6.0%	6.2%	6.9%	5.0%	5.5%	2.9%	3.3%	5.6%	2.9%	(D)
Retail Trade	35	44-45	5.8%	6.0%	7.7%	4.5%	7.1%	6.7%	8.0%	5.5%	8.0%	9.2%
Information	45	51	5.6%	2.5%	0.7%	0.8%	2.6%	1.5%	2.7%	1.6%	2.2%	0.5%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	20.6%	9.2%	16.7%	17.6%	19.8%	12.8%	18.3%	27.0%
Finance & Insurance	51	52	8.6%	11.3%	7.5%	3.5%	4.7%	4.0%	4.6%	4.4%	6.5%	6.6%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	13.2%	5.7%	12.0%	13.6%	15.1%	8.4%	11.8%	20.5%
Professional & Business Services	59		12.9%	11.6%	7.9%	5.4%	9.8%	5.7%	5.8%	(D)	4.5%	(D)
Professional-Scientific-Technical	60	54	7.8%	5.2%	1.9%	1.7%	5.9%	2.4%	2.2%	2.0%	1.4%	(D)
Enterprise Management	64	55	2.0%	3.4%	4.4%	0.8%	2.1%	1.2%	2.3%	(D)	1.3%	(D)
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	1.5%	3.0%	1.8%	2.0%	1.2%	(D)	1.9%	2.4%
Education-Health Care-Social Assistance	68		8.6%	9.5%	7.2%	9.8%	10.6%	9.8%	10.1%	5.8%	6.0%	7.1%
Educational Services	69	61	1.2%	0.8%	0.2%	0.7%	(D)	0.2%	0.1%	0.1%	0.2%	0.4%
Health Care & Social Assistance	70	62	7.4%	8.7%	7.0%	9.1%	(D)	9.6%	10.0%	5.6%	5.7%	6.6%
Leisure & Hospitality	75		3.2%	3.0%	(D)	1.8%	2.9%	2.8%	3.5%	2.2%	2.7%	2.9%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	(D)	0.2%	0.3%	0.3%	0.2%	0.3%	0.1%	0.2%
Accommodation & Food Services	79	72	2.4%	2.1%	1.7%	1.6%	2.5%	2.5%	3.3%	1.9%	2.6%	2.7%
Other Services (exc. Government)	82	81	2.0%	2.0%	2.5%	1.4%	2.3%	2.1%	2.0%	2.2%	1.8%	3.6%
Governments & Their Enterprises	83	92	12.8%	11.2%	11.8%	6.6%	10.7%	10.8%	36.8%	7.7%	10.2%	18.6%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	5.0%	0.0%	10.6%	0.0%	0.0%	4.2%	3.3%	7.7%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Butler	Carroll	Champaign	Clark^	Clermont	Clinton	Columbiana	Coshocton
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$22,178.0	\$1,184.4	\$1,285.8	\$4,665.7	\$9,245.6	\$2,331.8	\$3,100.0	\$1,285.7
Private industries	2		\$18,223,132	\$601,897	\$20,364.5	\$1,105.3	\$1,136.4	\$4,083.8	\$8,539.7	\$2,144.4	\$2,681.6	\$1,164.4
Goods-producing Industries	91		\$3,524,445	\$139,369	\$5,832.7	\$300.1	\$553.0	(D)	(D)	\$604.2	(D)	\$470.0
Natural Resources & Mining	87		\$356,627	\$7,982	\$34.1	\$115.4	\$90.5	(D)	(D)	\$52.8	(D)	\$44.5
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	\$11.3	\$4.4	\$87.7	(D)	(D)	\$52.8	(D)	\$36.7
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$22.8	\$111.0	\$2.8	\$17.0	\$12.1	\$0.0	\$49.1	\$7.8
Construction	11	23	\$895,860	\$26,084	\$1,165.9	\$65.8	\$39.8	\$130.9	\$436.5	\$64.5	\$204.1	\$55.2
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$4,632.8	\$118.9	\$422.7	\$634.1	\$713.6	\$486.9	\$615.6	\$370.3
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$2,760.9	\$84.0	\$330.6	\$471.7	\$428.5	\$165.5	\$335.5	\$157.0
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$1,871.9	\$34.8	\$92.1	\$162.4	\$285.1	\$321.4	\$280.1	\$213.3
Services-Providing Industries	92		\$14,698,687	\$462,529	\$14,531.8	\$805.2	\$583.4	(D)	(D)	\$1,540.2	(D)	\$694.4
Transportation & Utilities	89		\$913,741	\$33,023	\$1,005.7	(D)	(D)	(D)	(D)	\$397.2	(D)	\$139.6
Utilities	10	22	\$341,717	\$10,907	\$308.4	(D)	(D)	(D)	(D)	\$1.1	(D)	\$96.3
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$697.3	\$49.7	\$27.4	\$213.9	\$1,692.7	\$396.2	\$130.5	\$43.3
Trade	88		\$2,445,476	\$82,410	\$4,489.6	(D)	(D)	(D)	\$1,035.2	(D)	(D)	\$103.6
Wholesale Trade	34	42	\$1,243,274	\$41,728	\$2,956.1	(D)	(D)	(D)	\$328.0	(D)	(D)	\$26.3
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$1,533.5	\$49.0	\$69.7	\$297.9	\$707.2	\$105.1	\$266.6	\$77.3
Information	45	51	\$1,167,921	\$17,117	\$184.6	\$8.2	\$11.1	\$29.6	(D)	(D)	\$32.7	\$16.8
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$4,989.4	\$203.7	\$240.8	\$1,119.3	\$2,216.0	\$310.5	\$584.0	\$221.3
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$2,511.5	\$35.5	\$71.0	\$481.8	\$940.9	\$95.7	\$180.9	\$62.8
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$2,477.9	\$168.2	\$169.8	\$637.5	\$1,275.1	\$214.7	\$403.2	\$158.5
Professional & Business Services	59		\$2,689,775	\$78,334	\$1,469.4	(D)	\$78.1	\$439.3	\$702.8	\$207.3	\$185.9	\$74.8
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	\$541.6	(D)	\$30.7	\$92.5	\$365.4	\$31.2	\$58.6	(D)
Enterprise Management	64	55	\$410,456	\$22,808	\$322.4	(D)	(D)	\$198.9	\$83.8	\$79.6	\$47.1	(D)
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$605.3	\$11.7	(D)	\$147.9	\$253.6	\$96.5	\$80.3	\$20.4
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$1,386.8	(D)	\$61.8	\$515.6	\$424.3	\$116.3	\$271.7	\$85.3
Educational Services	69	61	\$251,318	\$5,693	\$56.7	(D)	\$6.6	\$47.6	\$22.5	(D)	\$8.2	\$4.5
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	\$1,330.1	(D)	\$55.2	\$468.0	\$401.8	(D)	\$263.5	\$80.8
Leisure & Hospitality	75		\$672,078	\$20,112	\$585.9	\$16.5	\$21.4	\$144.6	\$260.9	\$48.5	\$71.0	\$20.5
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	\$105.1	\$3.0	\$5.1	\$15.8	\$44.3	\$9.9	\$9.4	\$3.8
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$480.8	\$13.5	\$16.3	\$128.8	\$216.6	\$38.6	\$61.6	\$16.8
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$420.3	\$21.4	\$31.4	\$135.1	\$214.1	(D)	\$101.2	\$32.5
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$1,813.5	\$79.1	\$149.4	\$581.9	\$705.9	\$187.4	\$418.4	\$121.3
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$0.0	\$445.0	\$89.2	\$406.5	\$831.4	\$471.6	\$169.1	\$54.4

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; \$0.0 may also mean less than \$500,000. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).



**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Butler	Carroll	Champaign	Clark^	Clermont	Clinton	Columbiana	Coshocton
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	91.8%	93.3%	88.4%	87.5%	92.4%	92.0%	86.5%	90.6%
Goods-producing Industries	91		16.9%	20.6%	26.3%	25.3%	43.0%	(D)	(D)	25.9%	(D)	36.6%
Natural Resources & Mining	87		1.7%	1.2%	0.2%	9.7%	7.0%	(D)	(D)	2.3%	(D)	3.5%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	0.1%	0.4%	6.8%	(D)	(D)	2.3%	(D)	2.9%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	0.1%	9.4%	0.2%	0.4%	0.1%	0.0%	1.6%	0.6%
Construction	11	23	4.3%	3.8%	5.3%	5.6%	3.1%	2.8%	4.7%	2.8%	6.6%	4.3%
Manufacturing	12	31-33	10.9%	15.5%	20.9%	10.0%	32.9%	13.6%	7.7%	20.9%	19.9%	28.8%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	12.4%	7.1%	25.7%	10.1%	4.6%	7.1%	10.8%	12.2%
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	8.4%	2.9%	7.2%	3.5%	3.1%	13.8%	9.0%	16.6%
Services-Providing Industries	92		70.3%	68.3%	65.5%	68.0%	45.4%	(D)	(D)	66.1%	(D)	54.0%
Transportation & Utilities	89		4.4%	4.9%	4.5%	(D)	(D)	(D)	(D)	17.0%	(D)	10.9%
Utilities	10	22	1.6%	1.6%	1.4%	(D)	(D)	(D)	(D)	0.0%	(D)	7.5%
Transportation & Warehousing	36	48-49	2.7%	3.3%	3.1%	4.2%	2.1%	4.6%	18.3%	17.0%	4.2%	3.4%
Trade	88		11.7%	12.2%	20.2%	(D)	(D)	(D)	11.2%	(D)	(D)	8.1%
Wholesale Trade	34	42	6.0%	6.2%	13.3%	(D)	(D)	(D)	3.5%	(D)	(D)	2.0%
Retail Trade	35	44-45	5.8%	6.0%	6.9%	4.1%	5.4%	6.4%	7.6%	4.5%	8.6%	6.0%
Information	45	51	5.6%	2.5%	0.8%	0.7%	0.9%	0.6%	(D)	(D)	1.1%	1.3%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	22.5%	17.2%	18.7%	24.0%	24.0%	13.3%	18.8%	17.2%
Finance & Insurance	51	52	8.6%	11.3%	11.3%	3.0%	5.5%	10.3%	10.2%	4.1%	5.8%	4.9%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	11.2%	14.2%	13.2%	13.7%	13.8%	9.2%	13.0%	12.3%
Professional & Business Services	59		12.9%	11.6%	6.6%	(D)	6.1%	9.4%	7.6%	8.9%	6.0%	5.8%
Professional-Scientific-Technical	60	54	7.8%	5.2%	2.4%	(D)	2.4%	2.0%	4.0%	1.3%	1.9%	(D)
Enterprise Management	64	55	2.0%	3.4%	1.5%	(D)	(D)	4.3%	0.9%	3.4%	1.5%	(D)
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	2.7%	1.0%	(D)	3.2%	2.7%	4.1%	2.6%	1.6%
Education-Health Care-Social Assistance	68		8.6%	9.5%	6.3%	(D)	4.8%	11.1%	4.6%	5.0%	8.8%	6.6%
Educational Services	69	61	1.2%	0.8%	0.3%	(D)	0.5%	1.0%	0.2%	(D)	0.3%	0.3%
Health Care & Social Assistance	70	62	7.4%	8.7%	6.0%	(D)	4.3%	10.0%	4.3%	(D)	8.5%	6.3%
Leisure & Hospitality	75		3.2%	3.0%	2.6%	1.4%	1.7%	3.1%	2.8%	2.1%	2.3%	1.6%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	0.5%	0.3%	0.4%	0.3%	0.5%	0.4%	0.3%	0.3%
Accommodation & Food Services	79	72	2.4%	2.1%	2.2%	1.1%	1.3%	2.8%	2.3%	1.7%	2.0%	1.3%
Other Services (exc. Government)	82	81	2.0%	2.0%	1.9%	1.8%	2.4%	2.9%	2.3%	(D)	3.3%	2.5%
Governments & Their Enterprises	83	92	12.8%	11.2%	8.2%	6.7%	11.6%	12.5%	7.6%	8.0%	13.5%	9.4%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	0.0%	37.6%	6.9%	8.7%	9.0%	20.2%	5.5%	4.2%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Crawford	Cuyahoga	Darke	Defiance	Delaware	Erie	Fairfield	Fayette
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$1,419.7	\$98,829.2	\$2,156.9	\$1,696.2	\$12,921.3	\$4,133.6	\$4,908.0	\$2,342.5
Private industries	2		\$18,223,132	\$601,897	\$1,269.8	\$88,602.0	\$1,981.0	\$1,525.8	\$12,058.4	\$3,674.0	\$4,276.8	\$2,200.9
Goods-producing Industries	91		\$3,524,445	\$139,369	\$362.0	\$12,674.1	\$768.2	\$529.2	\$1,676.9	(D)	\$841.1	\$1,033.0
Natural Resources & Mining	87		\$356,627	\$7,982	\$69.4	\$104.5	\$165.4	\$47.5	\$52.8	(D)	\$34.9	\$100.2
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	\$65.6	\$9.4	\$164.9	\$47.5	\$50.2	(D)	\$34.2	\$100.2
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$3.8	\$95.1	\$0.5	\$0.0	\$2.5	\$25.9	\$0.7	\$0.0
Construction	11	23	\$895,860	\$26,084	\$47.3	\$2,290.5	\$111.9	\$42.2	\$499.8	\$106.9	\$315.6	\$38.1
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$245.2	\$10,279.1	\$490.9	\$439.5	\$1,124.3	\$862.6	\$490.6	\$894.8
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$220.4	\$6,956.0	\$377.0	\$406.7	\$571.5	\$356.0	\$358.5	\$73.4
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$24.8	\$3,323.1	\$113.8	\$32.8	\$552.8	\$506.5	\$132.1	\$821.4
Services-Providing Industries	92		\$14,698,687	\$462,529	\$907.8	\$75,927.9	\$1,212.8	\$996.6	\$10,381.6	(D)	\$3,435.6	\$1,167.8
Transportation & Utilities	89		\$913,741	\$33,023	(D)	\$2,675.0	\$139.8	(D)	\$208.4	(D)	\$141.7	\$89.8
Utilities	10	22	\$341,717	\$10,907	(D)	\$230.8	\$14.9	(D)	\$26.9	\$12.4	\$33.8	\$0.6
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$34.1	\$2,444.2	\$124.9	\$72.5	\$181.4	(D)	\$107.8	\$89.2
Trade	88		\$2,445,476	\$82,410	(D)	\$11,178.7	\$279.6	(D)	\$1,647.0	\$464.7	\$604.6	(D)
Wholesale Trade	34	42	\$1,243,274	\$41,728	(D)	\$6,863.0	\$153.0	(D)	\$681.3	\$140.6	\$193.8	(D)
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$94.0	\$4,315.7	\$126.6	\$172.1	\$965.7	\$324.1	\$410.9	\$137.4
Information	45	51	\$1,167,921	\$17,117	\$4.0	\$3,128.1	\$24.1	\$34.9	\$216.0	\$93.3	\$56.4	\$3.6
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$347.3	\$26,963.3	\$423.1	\$298.3	\$3,851.1	\$643.2	\$1,312.1	\$181.6
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$160.7	\$16,408.4	\$176.5	\$119.7	\$2,122.8	\$193.8	\$276.9	\$50.4
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$186.7	\$10,554.9	\$246.6	\$178.6	\$1,728.3	\$449.4	\$1,035.2	\$131.2
Professional & Business Services	59		\$2,689,775	\$78,334	\$105.8	\$15,133.0	\$122.9	\$108.5	\$2,841.5	\$176.7	\$397.4	(D)
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	(D)	\$7,909.1	\$44.6	\$21.4	\$996.6	\$62.0	\$141.4	(D)
Enterprise Management	64	55	\$410,456	\$22,808	(D)	\$3,839.2	\$35.3	\$37.6	\$1,502.1	\$53.9	\$53.4	(D)
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$28.8	\$3,384.7	\$43.0	\$49.5	\$342.9	\$60.8	\$202.6	\$17.7
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$193.9	\$11,917.6	\$140.1	\$146.0	\$793.0	\$350.6	\$557.0	\$51.4
Educational Services	69	61	\$251,318	\$5,693	(D)	\$1,339.0	\$3.1	(D)	\$83.5	\$10.8	\$14.6	(D)
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	(D)	\$10,578.6	\$137.0	(D)	\$709.6	\$339.8	\$542.4	(D)
Leisure & Hospitality	75		\$672,078	\$20,112	\$34.4	\$3,232.0	\$35.7	\$43.1	\$554.3	\$700.5	\$201.1	\$36.3
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	\$2.1	\$1,373.1	\$7.3	\$4.5	\$158.9	\$529.0	\$20.3	\$2.8
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$32.3	\$1,858.9	\$28.4	\$38.6	\$395.3	\$171.5	\$180.8	\$33.5
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$30.4	\$1,700.3	\$47.5	\$36.2	\$270.3	\$69.9	\$165.4	\$29.1
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$149.9	\$10,227.2	\$175.9	\$170.4	\$862.9	\$459.6	\$631.2	\$141.6
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$334.8	\$0.0	\$0.0	\$231.0	\$0.0	\$167.3	\$0.0	\$672.3

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; \$0.0 may also mean less than \$500,000. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).



**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Crawford	Cuyahoga	Darke	Defiance	Delaware	Erie	Fairfield	Fayette
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	89.4%	89.7%	91.8%	90.0%	93.3%	88.9%	87.1%	94.0%
Goods-producing Industries	91		16.9%	20.6%	25.5%	12.8%	35.6%	31.2%	13.0%	(D)	17.1%	44.1%
Natural Resources & Mining	87		1.7%	1.2%	4.9%	0.1%	7.7%	2.8%	0.4%	(D)	0.7%	4.3%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	4.6%	0.0%	7.6%	2.8%	0.4%	(D)	0.7%	4.3%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	0.3%	0.1%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%
Construction	11	23	4.3%	3.8%	3.3%	2.3%	5.2%	2.5%	3.9%	2.6%	6.4%	1.6%
Manufacturing	12	31-33	10.9%	15.5%	17.3%	10.4%	22.8%	25.9%	8.7%	20.9%	10.0%	38.2%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	15.5%	7.0%	17.5%	24.0%	4.4%	8.6%	7.3%	3.1%
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	1.7%	3.4%	5.3%	1.9%	4.3%	12.3%	2.7%	35.1%
Services-Providing Industries	92		70.3%	68.3%	63.9%	76.8%	56.2%	58.8%	80.3%	(D)	70.0%	49.9%
Transportation & Utilities	89		4.4%	4.9%	(D)	2.7%	6.5%	(D)	1.6%	(D)	2.9%	3.8%
Utilities	10	22	1.6%	1.6%	(D)	0.2%	0.7%	(D)	0.2%	0.3%	0.7%	0.0%
Transportation & Warehousing	36	48-49	2.7%	3.3%	2.4%	2.5%	5.8%	4.3%	1.4%	(D)	2.2%	3.8%
Trade	88		11.7%	12.2%	(D)	11.3%	13.0%	(D)	12.7%	11.2%	12.3%	(D)
Wholesale Trade	34	42	6.0%	6.2%	(D)	6.9%	7.1%	(D)	5.3%	3.4%	3.9%	(D)
Retail Trade	35	44-45	5.8%	6.0%	6.6%	4.4%	5.9%	10.1%	7.5%	7.8%	8.4%	5.9%
Information	45	51	5.6%	2.5%	0.3%	3.2%	1.1%	2.1%	1.7%	2.3%	1.1%	0.2%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	24.5%	27.3%	19.6%	17.6%	29.8%	15.6%	26.7%	7.8%
Finance & Insurance	51	52	8.6%	11.3%	11.3%	16.6%	8.2%	7.1%	16.4%	4.7%	5.6%	2.2%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	13.1%	10.7%	11.4%	10.5%	13.4%	10.9%	21.1%	5.6%
Professional & Business Services	59		12.9%	11.6%	7.5%	15.3%	5.7%	6.4%	22.0%	4.3%	8.1%	(D)
Professional-Scientific-Technical	60	54	7.8%	5.2%	(D)	8.0%	2.1%	1.3%	7.7%	1.5%	2.9%	(D)
Enterprise Management	64	55	2.0%	3.4%	(D)	3.9%	1.6%	2.2%	11.6%	1.3%	1.1%	(D)
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	2.0%	3.4%	2.0%	2.9%	2.7%	1.5%	4.1%	0.8%
Education-Health Care-Social Assistance	68		8.6%	9.5%	13.7%	12.1%	6.5%	8.6%	6.1%	8.5%	11.3%	2.2%
Educational Services	69	61	1.2%	0.8%	(D)	1.4%	0.1%	(D)	0.6%	0.3%	0.3%	(D)
Health Care & Social Assistance	70	62	7.4%	8.7%	(D)	10.7%	6.4%	(D)	5.5%	8.2%	11.1%	(D)
Leisure & Hospitality	75		3.2%	3.0%	2.4%	3.3%	1.7%	2.5%	4.3%	16.9%	4.1%	1.5%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	0.1%	1.4%	0.3%	0.3%	1.2%	12.8%	0.4%	0.1%
Accommodation & Food Services	79	72	2.4%	2.1%	2.3%	1.9%	1.3%	2.3%	3.1%	4.1%	3.7%	1.4%
Other Services (exc. Government)	82	81	2.0%	2.0%	2.1%	1.7%	2.2%	2.1%	2.1%	1.7%	3.4%	1.2%
Governments & Their Enterprises	83	92	12.8%	11.2%	10.6%	10.3%	8.2%	10.0%	6.7%	11.1%	12.9%	6.0%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	23.6%	0.0%	0.0%	13.6%	0.0%	4.0%	0.0%	28.7%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Franklin	Fulton	Gallia	Geauga	Greene	Guernsey	Hamilton	Hancock
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$101,208.3	\$2,096.2	\$2,179.4	\$4,483.3	\$10,545.5	\$2,022.1	\$78,807.4	\$5,473.0
Private industries	2		\$18,223,132	\$601,897	\$85,698.8	\$1,904.3	\$2,040.0	\$4,170.3	\$6,194.5	\$1,835.6	\$72,965.8	\$5,187.9
Goods-producing Industries	91		\$3,524,445	\$139,369	\$10,243.2	\$946.3	\$117.8	(D)	(D)	\$929.9	\$13,880.6	\$1,664.5
Natural Resources & Mining	87		\$356,627	\$7,982	\$61.8	\$64.4	\$5.2	(D)	(D)	\$224.6	\$50.6	\$76.9
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	\$28.9	\$62.2	\$3.6	(D)	(D)	\$6.1	\$14.7	\$74.3
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$33.0	\$2.2	\$1.6	\$13.1	\$29.9	\$218.5	\$35.8	\$2.6
Construction	11	23	\$895,860	\$26,084	\$3,661.6	\$151.4	\$60.2	\$452.0	\$240.3	\$72.6	\$2,459.2	\$95.1
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$6,519.7	\$730.4	\$52.3	\$969.5	\$600.7	\$632.7	\$11,370.8	\$1,492.5
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$2,671.9	\$602.8	\$45.9	\$387.8	\$514.3	\$192.6	\$4,998.5	\$847.7
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$3,847.8	\$127.6	\$6.4	\$581.7	\$86.5	\$440.1	\$6,372.3	\$644.8
Services-Providing Industries	92		\$14,698,687	\$462,529	\$75,455.6	\$958.0	\$1,922.2	(D)	(D)	\$905.7	\$59,085.2	\$3,523.4
Transportation & Utilities	89		\$913,741	\$33,023	\$5,113.6	(D)	(D)	(D)	(D)	\$86.6	\$1,747.8	\$703.4
Utilities	10	22	\$341,717	\$10,907	\$629.6	\$8.7	(D)	\$2.5	\$11.8	\$10.0	\$664.6	\$17.7
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$4,484.0	(D)	\$36.7	(D)	(D)	\$76.5	\$1,083.2	\$685.7
Trade	88		\$2,445,476	\$82,410	\$11,841.8	\$228.3	\$99.6	\$684.5	\$876.1	\$198.7	\$8,147.1	\$579.4
Wholesale Trade	34	42	\$1,243,274	\$41,728	\$6,429.5	\$114.0	\$11.5	\$322.0	\$222.1	\$84.2	\$5,058.9	\$300.4
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$5,412.4	\$114.3	\$88.1	\$362.5	\$654.0	\$114.5	\$3,088.2	\$279.0
Information	45	51	\$1,167,921	\$17,117	\$3,988.2	\$24.3	\$6.5	\$54.4	\$98.9	\$21.6	\$2,248.1	\$58.8
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$25,898.2	\$341.0	\$235.2	\$872.3	\$1,344.7	\$276.9	\$23,350.3	\$700.2
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$15,286.4	\$95.9	\$79.9	\$310.7	\$358.7	\$95.5	\$15,884.6	\$186.0
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$10,611.8	\$245.1	\$155.3	\$561.5	\$986.1	\$181.5	\$7,465.7	\$514.2
Professional & Business Services	59		\$2,689,775	\$78,334	\$14,405.5	(D)	(D)	\$436.5	\$1,791.7	\$90.1	\$11,948.1	\$782.5
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	\$7,257.1	(D)	\$9.7	\$191.2	\$1,531.2	\$40.1	\$5,735.7	\$164.1
Enterprise Management	64	55	\$410,456	\$22,808	\$3,700.2	(D)	(D)	\$58.3	\$135.5	(D)	\$3,924.3	\$511.8
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$3,448.2	\$23.5	(D)	\$186.9	\$125.0	(D)	\$2,288.1	\$106.7
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$9,295.9	(D)	(D)	\$322.6	\$643.6	\$144.7	\$7,955.8	\$473.2
Educational Services	69	61	\$251,318	\$5,693	\$879.7	(D)	(D)	\$40.9	\$134.1	\$2.5	\$632.8	\$65.5
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	\$8,416.3	(D)	(D)	\$281.7	\$509.5	\$142.2	\$7,323.1	\$407.6
Leisure & Hospitality	75		\$672,078	\$20,112	\$2,872.6	\$39.3	\$27.6	\$109.2	\$271.1	\$56.5	\$2,507.5	\$128.4
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	\$724.7	\$10.2	\$1.6	\$37.6	\$24.5	\$2.8	\$1,073.4	\$11.5
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$2,147.9	\$29.1	\$25.9	\$71.5	\$246.6	\$53.7	\$1,434.1	\$116.9
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$2,039.6	\$41.7	\$26.1	\$124.0	\$143.0	\$30.5	\$1,180.4	\$97.4
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$15,509.6	\$192.0	\$139.4	\$313.0	\$4,351.0	\$186.5	\$5,841.6	\$285.0
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$0.0	\$251.2	\$1,480.8	\$129.9	\$142.7	\$50.1	\$0.0	\$0.0

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; \$0.0 may also mean less than \$500,000. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Franklin	Fulton	Gallia	Geauga	Greene	Guernsey	Hamilton	Hancock
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	84.7%	90.8%	93.6%	93.0%	58.7%	90.8%	92.6%	94.8%
Goods-producing Industries	91		16.9%	20.6%	10.1%	45.1%	5.4%	(D)	(D)	46.0%	17.6%	30.4%
Natural Resources & Mining	87		1.7%	1.2%	0.1%	3.1%	0.2%	(D)	(D)	11.1%	0.1%	1.4%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	0.0%	3.0%	0.2%	(D)	(D)	0.3%	0.0%	1.4%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	0.0%	0.1%	0.1%	0.3%	0.3%	10.8%	0.0%	0.0%
Construction	11	23	4.3%	3.8%	3.6%	7.2%	2.8%	10.1%	2.3%	3.6%	3.1%	1.7%
Manufacturing	12	31-33	10.9%	15.5%	6.4%	34.8%	2.4%	21.6%	5.7%	31.3%	14.4%	27.3%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	2.6%	28.8%	2.1%	8.6%	4.9%	9.5%	6.3%	15.5%
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	3.8%	6.1%	0.3%	13.0%	0.8%	21.8%	8.1%	11.8%
Services-Providing Industries	92		70.3%	68.3%	74.6%	45.7%	88.2%	(D)	(D)	44.8%	75.0%	64.4%
Transportation & Utilities	89		4.4%	4.9%	5.1%	(D)	(D)	(D)	(D)	4.3%	2.2%	12.9%
Utilities	10	22	1.6%	1.6%	0.6%	0.4%	(D)	0.1%	0.1%	0.5%	0.8%	0.3%
Transportation & Warehousing	36	48-49	2.7%	3.3%	4.4%	(D)	1.7%	(D)	(D)	3.8%	1.4%	12.5%
Trade	88		11.7%	12.2%	11.7%	10.9%	4.6%	15.3%	8.3%	9.8%	10.3%	10.6%
Wholesale Trade	34	42	6.0%	6.2%	6.4%	5.4%	0.5%	7.2%	2.1%	4.2%	6.4%	5.5%
Retail Trade	35	44-45	5.8%	6.0%	5.3%	5.5%	4.0%	8.1%	6.2%	5.7%	3.9%	5.1%
Information	45	51	5.6%	2.5%	3.9%	1.2%	0.3%	1.2%	0.9%	1.1%	2.9%	1.1%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	25.6%	16.3%	10.8%	19.5%	12.8%	13.7%	29.6%	12.8%
Finance & Insurance	51	52	8.6%	11.3%	15.1%	4.6%	3.7%	6.9%	3.4%	4.7%	20.2%	3.4%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	10.5%	11.7%	7.1%	12.5%	9.4%	9.0%	9.5%	9.4%
Professional & Business Services	59		12.9%	11.6%	14.2%	(D)	(D)	9.7%	17.0%	4.5%	15.2%	14.3%
Professional-Scientific-Technical	60	54	7.8%	5.2%	7.2%	(D)	0.4%	4.3%	14.5%	2.0%	7.3%	3.0%
Enterprise Management	64	55	2.0%	3.4%	3.7%	(D)	(D)	1.3%	1.3%	(D)	5.0%	9.4%
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	3.4%	1.1%	(D)	4.2%	1.2%	(D)	2.9%	1.9%
Education-Health Care-Social Assistance	68		8.6%	9.5%	9.2%	(D)	(D)	7.2%	6.1%	7.2%	10.1%	8.6%
Educational Services	69	61	1.2%	0.8%	0.9%	(D)	(D)	0.9%	1.3%	0.1%	0.8%	1.2%
Health Care & Social Assistance	70	62	7.4%	8.7%	8.3%	(D)	(D)	6.3%	4.8%	7.0%	9.3%	7.4%
Leisure & Hospitality	75		3.2%	3.0%	2.8%	1.9%	1.3%	2.4%	2.6%	2.8%	3.2%	2.3%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	0.7%	0.5%	0.1%	0.8%	0.2%	0.1%	1.4%	0.2%
Accommodation & Food Services	79	72	2.4%	2.1%	2.1%	1.4%	1.2%	1.6%	2.3%	2.7%	1.8%	2.1%
Other Services (exc. Government)	82	81	2.0%	2.0%	2.0%	2.0%	1.2%	2.8%	1.4%	1.5%	1.5%	1.8%
Governments & Their Enterprises	83	92	12.8%	11.2%	15.3%	9.2%	6.4%	7.0%	41.3%	9.2%	7.4%	5.2%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	0.0%	12.0%	67.9%	2.9%	1.4%	2.5%	0.0%	0.0%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing high-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Hardin	Harrison	Henry	Highland	Hocking	Holmes	Huron	Jackson
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$951.7	\$954.7	\$1,615.8	\$1,448.5	\$667.3	\$2,544.1	\$2,414.6	\$1,063.3
Private industries	2		\$18,223,132	\$601,897	\$847.4	\$895.6	\$1,467.3	\$1,266.0	\$533.9	\$2,413.0	\$2,205.0	\$936.3
Goods-producing Industries	91		\$3,524,445	\$139,369	\$303.3	\$572.7	\$935.7	\$401.3	\$135.5	\$1,340.1	\$942.8	\$425.5
Natural Resources & Mining	87		\$356,627	\$7,982	\$58.5	\$390.8	\$63.5	\$61.9	\$6.9	\$115.1	\$77.8	\$15.5
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	\$55.2	\$3.2	\$63.2	\$57.0	\$1.2	\$108.4	\$75.5	\$13.3
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$3.3	\$387.6	\$0.3	\$4.9	\$5.7	\$6.8	\$2.3	\$2.2
Construction	11	23	\$895,860	\$26,084	\$18.1	\$28.0	\$81.8	\$76.3	\$48.0	\$377.9	\$178.7	\$68.5
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$226.7	\$153.9	\$790.4	\$263.2	\$80.6	\$847.0	\$686.3	\$341.5
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$101.5	(D)	\$144.1	\$233.3	\$56.5	\$535.3	\$241.4	\$38.7
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$125.2	(D)	\$646.3	\$29.9	\$24.1	\$311.8	\$444.9	\$302.8
Services-Providing Industries	92		\$14,698,687	\$462,529	\$544.1	\$322.9	\$531.6	\$864.6	\$398.4	\$1,072.9	\$1,262.2	\$510.8
Transportation & Utilities	89		\$913,741	\$33,023	\$46.8	\$64.6	\$52.5	\$37.1	(D)	\$126.5	\$208.8	\$34.4
Utilities	10	22	\$341,717	\$10,907	\$19.8	\$12.3	\$3.2	\$7.4	\$0.6	\$15.0	\$6.3	\$6.8
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$27.0	\$52.3	\$49.3	\$29.8	(D)	\$111.5	\$202.5	\$27.6
Trade	88		\$2,445,476	\$82,410	\$106.8	(D)	\$118.4	\$179.3	\$66.7	\$405.5	(D)	\$110.2
Wholesale Trade	34	42	\$1,243,274	\$41,728	\$49.4	(D)	\$45.6	\$40.1	\$8.2	\$130.7	(D)	\$21.9
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$57.4	\$18.4	\$72.8	\$139.3	\$58.5	\$274.8	\$148.3	\$88.3
Information	45	51	\$1,167,921	\$17,117	\$5.4	\$7.5	\$18.2	\$7.4	\$6.1	\$12.6	\$32.1	\$4.9
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$184.3	\$127.7	\$208.0	\$433.2	\$166.4	\$274.8	\$381.6	\$181.0
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$55.5	\$22.3	\$76.6	\$263.9	\$39.7	\$119.7	\$123.0	\$51.6
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$128.7	\$105.4	\$131.4	\$169.4	\$126.8	\$155.1	\$258.6	\$129.4
Professional & Business Services	59		\$2,689,775	\$78,334	\$57.3	(D)	\$25.0	\$69.9	(D)	\$94.5	(D)	\$41.4
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	\$12.4	\$7.2	\$12.7	(D)	(D)	\$36.1	(D)	\$12.5
Enterprise Management	64	55	\$410,456	\$22,808	\$34.1	(D)	\$0.0	(D)	(D)	(D)	(D)	\$1.8
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$10.8	(D)	\$12.3	\$22.8	\$12.5	(D)	\$26.5	\$27.1
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$103.2	\$21.3	\$67.1	\$77.7	\$36.1	\$53.6	\$185.2	\$90.5
Educational Services	69	61	\$251,318	\$5,693	(D)	\$0.2	\$1.3	\$1.7	\$2.0	(D)	\$8.9	(D)
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	(D)	\$21.1	\$65.7	\$76.0	\$34.1	(D)	\$176.3	(D)
Leisure & Hospitality	75		\$672,078	\$20,112	\$18.4	\$6.1	\$16.9	\$26.4	\$38.6	\$46.2	\$52.2	\$28.8
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	\$1.4	\$0.7	\$1.6	\$2.6	\$2.2	\$3.6	\$4.4	\$1.5
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$17.1	\$5.4	\$15.4	\$23.8	\$36.4	\$42.7	\$47.9	\$27.3
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$21.8	\$15.4	\$25.5	\$33.5	\$22.1	\$59.2	\$48.7	\$19.6
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$104.3	\$59.1	\$148.5	\$182.6	\$133.4	\$131.1	\$209.6	\$127.0
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$103.2	\$208.5	\$0.0	\$47.1	\$49.2	\$112.0	\$178.8	\$90.5

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; \$0.0 may also mean less than \$500,000. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Hardin	Harrison	Henry	Highland	Hocking	Holmes	Huron	Jackson
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	89.0%	93.8%	90.8%	87.4%	80.0%	94.8%	91.3%	88.1%
Goods-producing Industries	91		16.9%	20.6%	31.9%	60.0%	57.9%	27.7%	20.3%	52.7%	39.0%	40.0%
Natural Resources & Mining	87		1.7%	1.2%	6.1%	40.9%	3.9%	4.3%	1.0%	4.5%	3.2%	1.5%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	5.8%	0.3%	3.9%	3.9%	0.2%	4.3%	3.1%	1.2%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	0.3%	40.6%	0.0%	0.3%	0.9%	0.3%	0.1%	0.2%
Construction	11	23	4.3%	3.8%	1.9%	2.9%	5.1%	5.3%	7.2%	14.9%	7.4%	6.4%
Manufacturing	12	31-33	10.9%	15.5%	23.8%	16.1%	48.9%	18.2%	12.1%	33.3%	28.4%	32.1%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	10.7%	(D)	8.9%	16.1%	8.5%	21.0%	10.0%	3.6%
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	13.2%	(D)	40.0%	2.1%	3.6%	12.3%	18.4%	28.5%
Services-Providing Industries	92		70.3%	68.3%	57.2%	33.8%	32.9%	59.7%	59.7%	42.2%	52.3%	48.0%
Transportation & Utilities	89		4.4%	4.9%	4.9%	6.8%	3.3%	2.6%	(D)	5.0%	8.6%	3.2%
Utilities	10	22	1.6%	1.6%	2.1%	1.3%	0.2%	0.5%	0.1%	0.6%	0.3%	0.6%
Transportation & Warehousing	36	48-49	2.7%	3.3%	2.8%	5.5%	3.1%	2.1%	(D)	4.4%	8.4%	2.6%
Trade	88		11.7%	12.2%	11.2%	(D)	7.3%	12.4%	10.0%	15.9%	(D)	10.4%
Wholesale Trade	34	42	6.0%	6.2%	5.2%	(D)	2.8%	2.8%	1.2%	5.1%	(D)	2.1%
Retail Trade	35	44-45	5.8%	6.0%	6.0%	1.9%	4.5%	9.6%	8.8%	10.8%	6.1%	8.3%
Information	45	51	5.6%	2.5%	0.6%	0.8%	1.1%	0.5%	0.9%	0.5%	1.3%	0.5%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	19.4%	13.4%	12.9%	29.9%	24.9%	10.8%	15.8%	17.0%
Finance & Insurance	51	52	8.6%	11.3%	5.8%	2.3%	4.7%	18.2%	5.9%	4.7%	5.1%	4.8%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	13.5%	11.0%	8.1%	11.7%	19.0%	6.1%	10.7%	12.2%
Professional & Business Services	59		12.9%	11.6%	6.0%	(D)	1.5%	4.8%	(D)	3.7%	(D)	3.9%
Professional-Scientific-Technical	60	54	7.8%	5.2%	1.3%	0.7%	0.8%	(D)	(D)	1.4%	(D)	1.2%
Enterprise Management	64	55	2.0%	3.4%	3.6%	(D)	0.0%	(D)	(D)	(D)	(D)	0.2%
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	1.1%	(D)	0.8%	1.6%	1.9%	(D)	1.1%	2.5%
Education-Health Care-Social Assistance	68		8.6%	9.5%	10.8%	2.2%	4.1%	5.4%	5.4%	2.1%	7.7%	8.5%
Educational Services	69	61	1.2%	0.8%	(D)	0.0%	0.1%	0.1%	0.3%	(D)	0.4%	(D)
Health Care & Social Assistance	70	62	7.4%	8.7%	(D)	2.2%	4.1%	5.2%	5.1%	(D)	7.3%	(D)
Leisure & Hospitality	75		3.2%	3.0%	1.9%	0.6%	1.0%	1.8%	5.8%	1.8%	2.2%	2.7%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	0.1%	0.1%	0.1%	0.2%	0.3%	0.1%	0.2%	0.1%
Accommodation & Food Services	79	72	2.4%	2.1%	1.8%	0.6%	1.0%	1.6%	5.5%	1.7%	2.0%	2.6%
Other Services (exc. Government)	82	81	2.0%	2.0%	2.3%	1.6%	1.6%	2.3%	3.3%	2.3%	2.0%	1.8%
Governments & Their Enterprises	83	92	12.8%	11.2%	11.0%	6.2%	9.2%	12.6%	20.0%	5.2%	8.7%	11.9%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	10.8%	21.8%	0.0%	3.3%	7.4%	4.4%	7.4%	8.5%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Jefferson^	Knox	Lake	Lawrence^	Licking	Logan	Lorain	Lucas
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$3,434.6	\$2,181.1	\$11,768.3	\$1,934.0	\$7,351.3	\$2,013.4	\$11,031.9	\$24,725.6
Private industries	2		\$18,223,132	\$601,897	\$3,152.0	\$1,957.9	\$10,783.3	\$1,711.4	\$6,571.0	\$1,830.8	\$9,555.8	\$21,865.7
Goods-producing Industries	91		\$3,524,445	\$139,369	\$745.4	(D)	\$3,725.1	\$171.6	\$1,414.1	\$771.6	\$2,768.1	\$5,739.3
Natural Resources & Mining	87		\$356,627	\$7,982	\$459.3	(D)	\$116.7	(D)	\$27.6	\$75.9	\$30.6	\$61.2
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	\$2.1	(D)	\$57.5	(D)	\$20.8	\$66.3	\$29.9	\$18.8
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$457.2	\$15.2	\$59.2	\$0.1	\$6.8	\$9.6	\$0.7	\$42.4
Construction	11	23	\$895,860	\$26,084	\$80.5	\$180.2	\$413.4	(D)	\$393.3	\$71.2	\$420.9	\$833.1
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$205.6	\$491.0	\$3,195.0	\$94.8	\$993.2	\$624.5	\$2,316.5	\$4,845.0
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$181.5	\$407.8	\$1,712.5	\$65.8	\$474.2	\$532.1	\$1,602.8	\$2,715.9
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$24.1	\$83.3	\$1,482.5	\$29.0	\$518.9	\$92.4	\$713.7	\$2,129.1
Services-Providing Industries	92		\$14,698,687	\$462,529	\$2,406.6	(D)	\$7,058.2	\$1,539.8	\$5,156.9	\$1,059.2	\$6,787.7	\$16,126.4
Transportation & Utilities	89		\$913,741	\$33,023	\$1,122.3	(D)	\$951.6	\$696.1	\$700.9	\$149.9	\$278.1	\$1,100.2
Utilities	10	22	\$341,717	\$10,907	\$983.5	(D)	\$867.8	\$625.2	\$34.3	\$3.9	\$65.9	\$420.5
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$138.7	\$43.6	\$83.8	\$70.9	\$666.6	\$146.1	\$212.2	\$679.7
Trade	88		\$2,445,476	\$82,410	\$253.2	\$213.6	\$1,399.2	\$141.5	\$1,103.3	\$166.9	\$1,500.0	\$2,780.3
Wholesale Trade	34	42	\$1,243,274	\$41,728	\$75.9	\$63.6	\$541.4	\$37.5	\$241.1	\$47.9	\$648.0	\$1,176.0
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$177.2	\$150.1	\$857.8	\$104.0	\$862.2	\$119.0	\$852.0	\$1,604.4
Information	45	51	\$1,167,921	\$17,117	\$42.7	\$26.1	\$183.5	\$15.1	\$50.5	\$15.4	\$114.2	\$319.3
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$427.0	\$384.1	\$2,186.9	\$329.2	\$1,599.4	\$343.3	\$2,368.4	\$5,136.6
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$103.2	\$110.5	\$687.0	\$71.6	\$628.6	\$81.3	\$556.0	\$1,591.7
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$323.8	\$273.6	\$1,499.9	\$257.6	\$970.8	\$262.1	\$1,812.4	\$3,544.9
Professional & Business Services	59		\$2,689,775	\$78,334	\$133.3	\$129.7	\$931.7	\$120.7	\$702.6	\$167.1	\$888.8	\$2,458.0
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	(D)	\$39.0	\$377.6	\$24.5	\$274.2	(D)	\$288.2	\$1,124.8
Enterprise Management	64	55	\$410,456	\$22,808	(D)	\$41.2	\$243.2	\$41.0	\$233.9	(D)	\$189.8	\$667.1
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$67.7	\$49.6	\$310.9	\$55.2	\$194.6	\$63.4	\$410.8	\$666.1
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$321.2	\$311.7	\$798.6	\$156.6	\$588.5	\$125.4	\$1,049.6	\$3,056.1
Educational Services	69	61	\$251,318	\$5,693	\$53.4	\$108.7	\$70.9	\$2.9	\$108.9	\$1.1	\$180.2	\$168.7
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	\$267.7	\$203.0	\$727.7	\$153.7	\$479.6	\$124.3	\$869.4	\$2,887.3
Leisure & Hospitality	75		\$672,078	\$20,112	\$56.1	(D)	\$333.4	\$36.9	\$191.1	\$51.8	\$318.2	\$815.4
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	\$10.5	(D)	\$49.3	\$1.5	\$35.4	\$10.7	\$54.2	\$223.3
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$45.6	\$46.0	\$284.1	\$35.4	\$155.6	\$41.2	\$264.0	\$592.1
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$50.9	\$61.3	\$273.2	\$43.7	\$220.6	\$39.3	\$270.4	\$460.5
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$282.5	\$223.2	\$985.0	\$222.6	\$780.3	\$182.6	\$1,476.1	\$2,859.8
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$65.6	\$55.3	\$0.0	\$76.7	\$0.0	\$103.7	\$0.0	\$0.0

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**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Jefferson^	Knox	Lake	Lawrence^	Licking	Logan	Lorain	Lucas
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	91.8%	89.8%	91.6%	88.5%	89.4%	90.9%	86.6%	88.4%
Goods-producing Industries	91		16.9%	20.6%	21.7%	(D)	31.7%	8.9%	19.2%	38.3%	25.1%	23.2%
Natural Resources & Mining	87		1.7%	1.2%	13.4%	(D)	1.0%	(D)	0.4%	3.8%	0.3%	0.2%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	0.1%	(D)	0.5%	(D)	0.3%	3.3%	0.3%	0.1%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	13.3%	0.7%	0.5%	0.0%	0.1%	0.5%	0.0%	0.2%
Construction	11	23	4.3%	3.8%	2.3%	8.3%	3.5%	(D)	5.4%	3.5%	3.8%	3.4%
Manufacturing	12	31-33	10.9%	15.5%	6.0%	22.5%	27.1%	4.9%	13.5%	31.0%	21.0%	19.6%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	5.3%	18.7%	14.6%	3.4%	6.5%	26.4%	14.5%	11.0%
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	0.7%	3.8%	12.6%	1.5%	7.1%	4.6%	6.5%	8.6%
Services-Providing Industries	92		70.3%	68.3%	70.1%	(D)	60.0%	79.6%	70.1%	52.6%	61.5%	65.2%
Transportation & Utilities	89		4.4%	4.9%	32.7%	(D)	8.1%	36.0%	9.5%	7.4%	2.5%	4.4%
Utilities	10	22	1.6%	1.6%	28.6%	(D)	7.4%	32.3%	0.5%	0.2%	0.6%	1.7%
Transportation & Warehousing	36	48-49	2.7%	3.3%	4.0%	2.0%	0.7%	3.7%	9.1%	7.3%	1.9%	2.7%
Trade	88		11.7%	12.2%	7.4%	9.8%	11.9%	7.3%	15.0%	8.3%	13.6%	11.2%
Wholesale Trade	34	42	6.0%	6.2%	2.2%	2.9%	4.6%	1.9%	3.3%	2.4%	5.9%	4.8%
Retail Trade	35	44-45	5.8%	6.0%	5.2%	6.9%	7.3%	5.4%	11.7%	5.9%	7.7%	6.5%
Information	45	51	5.6%	2.5%	1.2%	1.2%	1.6%	0.8%	0.7%	0.8%	1.0%	1.3%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	12.4%	17.6%	18.6%	17.0%	21.8%	17.1%	21.5%	20.8%
Finance & Insurance	51	52	8.6%	11.3%	3.0%	5.1%	5.8%	3.7%	8.6%	4.0%	5.0%	6.4%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	9.4%	12.5%	12.7%	13.3%	13.2%	13.0%	16.4%	14.3%
Professional & Business Services	59		12.9%	11.6%	3.9%	5.9%	7.9%	6.2%	9.6%	8.3%	8.1%	9.9%
Professional-Scientific-Technical	60	54	7.8%	5.2%	(D)	1.8%	3.2%	1.3%	3.7%	(D)	2.6%	4.5%
Enterprise Management	64	55	2.0%	3.4%	(D)	1.9%	2.1%	2.1%	3.2%	(D)	1.7%	2.7%
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	2.0%	2.3%	2.6%	2.9%	2.6%	3.1%	3.7%	2.7%
Education-Health Care-Social Assistance	68		8.6%	9.5%	9.4%	14.3%	6.8%	8.1%	8.0%	6.2%	9.5%	12.4%
Educational Services	69	61	1.2%	0.8%	1.6%	5.0%	0.6%	0.1%	1.5%	0.1%	1.6%	0.7%
Health Care & Social Assistance	70	62	7.4%	8.7%	7.8%	9.3%	6.2%	7.9%	6.5%	6.2%	7.9%	11.7%
Leisure & Hospitality	75		3.2%	3.0%	1.6%	(D)	2.8%	1.9%	2.6%	2.6%	2.9%	3.3%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	0.3%	(D)	0.4%	0.1%	0.5%	0.5%	0.5%	0.9%
Accommodation & Food Services	79	72	2.4%	2.1%	1.3%	2.1%	2.4%	1.8%	2.1%	2.0%	2.4%	2.4%
Other Services (exc. Government)	82	81	2.0%	2.0%	1.5%	2.8%	2.3%	2.3%	3.0%	2.0%	2.5%	1.9%
Governments & Their Enterprises	83	92	12.8%	11.2%	8.2%	10.2%	8.4%	11.5%	10.6%	9.1%	13.4%	11.6%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	1.9%	2.5%	0.0%	4.0%	0.0%	5.2%	0.0%	0.0%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Madison	Mahoning	Marion	Medina	Meigs	Mercer	Miami	Monroe
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$2,053.4	\$9,508.0	\$2,819.5	\$7,513.1	\$421.9	\$2,259.5	\$4,601.1	\$1,067.4
Private industries	2		\$18,223,132	\$601,897	\$1,753.5	\$8,314.4	\$2,477.4	\$6,870.2	\$340.8	\$2,050.6	\$4,169.0	\$1,002.8
Goods-producing Industries	91		\$3,524,445	\$139,369	\$536.2	\$1,415.1	\$914.8	\$1,708.4	\$47.4	\$932.1	(D)	\$651.3
Natural Resources & Mining	87		\$356,627	\$7,982	\$115.9	\$45.8	\$68.7	\$6.6	\$15.7	\$208.8	(D)	\$562.5
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	\$115.9	\$14.1	\$67.2	\$4.3	\$5.8	\$202.1	(D)	\$2.8
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$0.0	\$31.6	\$1.6	\$2.3	\$9.9	\$6.7	\$12.7	\$559.7
Construction	11	23	\$895,860	\$26,084	\$95.8	\$425.4	\$60.0	\$511.8	\$20.7	\$118.3	\$206.4	\$82.0
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$324.5	\$943.9	\$786.2	\$1,189.9	\$11.0	\$605.0	\$1,279.3	\$6.8
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$282.0	\$742.6	\$556.4	\$538.9	\$6.1	\$354.3	\$966.2	(D)
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$42.5	\$201.3	\$229.7	\$651.0	\$4.9	\$250.7	\$313.1	(D)
Services-Providing Industries	92		\$14,698,687	\$462,529	\$1,217.3	\$6,899.4	\$1,562.6	\$5,161.8	\$293.3	\$1,118.4	(D)	\$351.5
Transportation & Utilities	89		\$913,741	\$33,023	\$225.0	\$348.2	\$103.3	\$234.6	\$25.2	\$136.7	(D)	\$33.6
Utilities	10	22	\$341,717	\$10,907	\$0.1	\$67.3	\$17.3	\$11.2	\$12.7	\$1.4	(D)	\$7.0
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$224.9	\$280.8	\$86.0	\$223.4	\$12.5	\$135.3	\$174.2	\$26.5
Trade	88		\$2,445,476	\$82,410	\$324.8	\$1,449.6	\$312.2	\$1,452.5	\$42.0	(D)	(D)	\$31.7
Wholesale Trade	34	42	\$1,243,274	\$41,728	\$57.9	\$612.1	\$123.0	\$767.8	\$5.6	(D)	(D)	\$16.2
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$266.9	\$837.4	\$189.1	\$684.7	\$36.4	\$145.5	\$320.5	\$15.4
Information	45	51	\$1,167,921	\$17,117	\$7.4	\$196.8	\$100.6	\$71.2	\$1.8	\$22.7	\$12.5	\$1.2
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$333.9	\$2,156.1	\$502.5	\$1,746.6	\$160.3	\$405.6	\$762.8	\$124.9
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$52.7	\$846.8	\$145.0	\$511.8	\$28.9	\$207.0	\$224.4	\$34.5
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$281.2	\$1,309.3	\$357.6	\$1,234.7	\$131.3	\$198.6	\$538.4	\$90.3
Professional & Business Services	59		\$2,689,775	\$78,334	\$172.1	\$841.6	\$123.6	\$853.9	\$11.4	(D)	\$319.3	\$131.8
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	\$75.2	\$301.0	\$4.8	\$273.8	(D)	\$37.8	\$118.6	\$6.1
Enterprise Management	64	55	\$410,456	\$22,808	\$34.1	\$133.7	\$45.8	\$391.4	(D)	(D)	\$84.7	\$34.1
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$62.7	\$406.8	\$73.1	\$188.7	\$5.6	(D)	\$116.1	\$91.6
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$78.4	\$1,331.6	\$307.6	\$422.6	\$26.8	\$87.5	\$307.5	\$14.7
Educational Services	69	61	\$251,318	\$5,693	(D)	\$28.4	\$2.5	\$29.8	\$0.9	(D)	\$14.6	(D)
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	(D)	\$1,303.2	\$305.0	\$392.8	\$25.9	(D)	\$293.0	(D)
Leisure & Hospitality	75		\$672,078	\$20,112	\$41.1	\$331.9	\$62.1	\$203.7	\$10.4	\$34.9	\$117.4	\$5.1
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	\$2.3	\$54.1	\$4.5	\$41.2	(D)	\$3.6	\$10.6	\$0.3
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$38.8	\$277.7	\$57.6	\$162.5	(D)	\$31.2	\$106.8	\$4.8
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$34.6	\$243.8	\$50.6	\$176.7	\$15.6	\$58.0	\$107.7	\$8.5
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$299.9	\$1,193.5	\$342.1	\$642.9	\$81.2	\$209.0	\$432.1	\$64.7
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$78.4	\$0.0	\$0.0	\$0.0	\$16.2	\$277.1	\$548.7	\$21.5

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; \$0.0 may also mean less than \$500,000. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).



**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Madison	Mahoning	Marion	Medina	Meigs	Mercer	Miami	Monroe
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	85.4%	87.4%	87.9%	91.4%	80.8%	90.8%	90.6%	93.9%
Goods-producing Industries	91		16.9%	20.6%	26.1%	14.9%	32.4%	22.7%	11.2%	41.3%	(D)	61.0%
Natural Resources & Mining	87		1.7%	1.2%	5.6%	0.5%	2.4%	0.1%	3.7%	9.2%	(D)	52.7%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	5.6%	0.1%	2.4%	0.1%	1.4%	8.9%	(D)	0.3%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	0.0%	0.3%	0.1%	0.0%	2.4%	0.3%	0.3%	52.4%
Construction	11	23	4.3%	3.8%	4.7%	4.5%	2.1%	6.8%	4.9%	5.2%	4.5%	7.7%
Manufacturing	12	31-33	10.9%	15.5%	15.8%	9.9%	27.9%	15.8%	2.6%	26.8%	27.8%	0.6%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	13.7%	7.8%	19.7%	7.2%	1.4%	15.7%	21.0%	(D)
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	2.1%	2.1%	8.1%	8.7%	1.2%	11.1%	6.8%	(D)
Services-Providing Industries	92		70.3%	68.3%	59.3%	72.6%	55.4%	68.7%	69.5%	49.5%	(D)	32.9%
Transportation & Utilities	89		4.4%	4.9%	11.0%	3.7%	3.7%	3.1%	6.0%	6.1%	(D)	3.1%
Utilities	10	22	1.6%	1.6%	0.0%	0.7%	0.6%	0.1%	3.0%	0.1%	(D)	0.7%
Transportation & Warehousing	36	48-49	2.7%	3.3%	11.0%	3.0%	3.1%	3.0%	3.0%	6.0%	3.8%	2.5%
Trade	88		11.7%	12.2%	15.8%	15.2%	11.1%	19.3%	9.9%	(D)	(D)	3.0%
Wholesale Trade	34	42	6.0%	6.2%	2.8%	6.4%	4.4%	10.2%	1.3%	(D)	(D)	1.5%
Retail Trade	35	44-45	5.8%	6.0%	13.0%	8.8%	6.7%	9.1%	8.6%	6.4%	7.0%	1.4%
Information	45	51	5.6%	2.5%	0.4%	2.1%	3.6%	0.9%	0.4%	1.0%	0.3%	0.1%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	16.3%	22.7%	17.8%	23.2%	38.0%	18.0%	16.6%	11.7%
Finance & Insurance	51	52	8.6%	11.3%	2.6%	8.9%	5.1%	6.8%	6.9%	9.2%	4.9%	3.2%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	13.7%	13.8%	12.7%	16.4%	31.1%	8.8%	11.7%	8.5%
Professional & Business Services	59		12.9%	11.6%	8.4%	8.9%	4.4%	11.4%	2.7%	(D)	6.9%	12.4%
Professional-Scientific-Technical	60	54	7.8%	5.2%	3.7%	3.2%	0.2%	3.6%	(D)	1.7%	2.6%	0.6%
Enterprise Management	64	55	2.0%	3.4%	1.7%	1.4%	1.6%	5.2%	(D)	(D)	1.8%	3.2%
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	3.1%	4.3%	2.6%	2.5%	1.3%	(D)	2.5%	8.6%
Education-Health Care-Social Assistance	68		8.6%	9.5%	3.8%	14.0%	10.9%	5.6%	6.3%	3.9%	6.7%	1.4%
Educational Services	69	61	1.2%	0.8%	(D)	0.3%	0.1%	0.4%	0.2%	(D)	0.3%	(D)
Health Care & Social Assistance	70	62	7.4%	8.7%	(D)	13.7%	10.8%	5.2%	6.1%	(D)	6.4%	(D)
Leisure & Hospitality	75		3.2%	3.0%	2.0%	3.5%	2.2%	2.7%	2.5%	1.5%	2.6%	0.5%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	0.1%	0.6%	0.2%	0.5%	(D)	0.2%	0.2%	0.0%
Accommodation & Food Services	79	72	2.4%	2.1%	1.9%	2.9%	2.0%	2.2%	(D)	1.4%	2.3%	0.5%
Other Services (exc. Government)	82	81	2.0%	2.0%	1.7%	2.6%	1.8%	2.4%	3.7%	2.6%	2.3%	0.8%
Governments & Their Enterprises	83	92	12.8%	11.2%	14.6%	12.6%	12.1%	8.6%	19.2%	9.2%	9.4%	6.1%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	3.8%	12.3%	11.9%	2.0%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Montgomery	Morgan	Morrow	Muskingum	Noble	Ottawa	Paulding	Perry
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$30,010.6	\$344.6	\$723.2	\$3,798.4	\$438.0	\$2,137.2	\$650.0	\$790.3
Private industries	2		\$18,223,132	\$601,897	\$26,399.6	\$292.9	\$609.8	\$3,407.0	\$350.0	\$1,923.9	\$570.2	\$671.3
Goods-producing Industries	91		\$3,524,445	\$139,369	\$4,312.9	\$60.8	\$198.6	\$732.6	\$131.1	\$371.2	\$199.0	\$229.8
Natural Resources & Mining	87		\$356,627	\$7,982	\$37.0	\$8.0	\$37.7	\$148.9	\$97.5	\$41.4	\$74.1	\$42.4
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	\$28.8	\$4.6	\$35.2	\$13.3	\$4.7	\$16.7	\$69.5	\$14.5
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$8.2	\$3.4	\$2.5	\$135.6	\$92.8	\$24.7	\$4.6	\$27.9
Construction	11	23	\$895,860	\$26,084	\$1,066.8	\$15.0	\$63.8	\$132.1	\$10.9	\$79.9	\$22.4	\$102.7
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$3,209.1	\$37.7	\$97.2	\$451.5	\$22.8	\$249.9	\$102.5	\$84.7
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$2,314.9	\$37.2	\$89.8	\$160.4	(D)	\$218.7	\$65.0	\$84.2
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$894.3	\$0.5	\$7.4	\$291.1	(D)	\$31.2	\$37.5	\$0.5
Services-Providing Industries	92		\$14,698,687	\$462,529	\$22,086.6	\$232.1	\$411.2	\$2,674.5	\$218.9	\$1,552.6	\$371.2	\$441.5
Transportation & Utilities	89		\$913,741	\$33,023	\$1,253.9	\$8.3	(D)	\$486.9	\$20.3	\$626.3	\$112.6	\$23.9
Utilities	10	22	\$341,717	\$10,907	\$444.1	\$3.2	\$5.6	\$331.6	\$0.5	\$582.5	\$84.8	\$6.0
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$809.9	\$5.1	(D)	\$155.3	\$19.8	\$43.8	\$27.7	\$17.9
Trade	88		\$2,445,476	\$82,410	\$3,541.9	\$84.9	\$73.9	\$501.6	(D)	(D)	(D)	\$78.9
Wholesale Trade	34	42	\$1,243,274	\$41,728	\$1,862.1	\$68.1	\$16.0	\$133.9	(D)	(D)	(D)	\$29.8
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$1,679.8	\$16.9	\$57.9	\$367.7	\$18.9	\$97.7	\$27.5	\$49.1
Information	45	51	\$1,167,921	\$17,117	\$2,062.6	\$2.8	\$3.6	\$123.7	\$2.1	\$7.8	\$3.2	\$3.3
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$6,366.5	\$91.8	\$170.9	\$572.7	\$82.6	\$442.6	\$121.0	\$174.3
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$3,070.4	\$18.7	\$26.1	\$204.6	\$25.6	\$96.0	\$35.5	\$44.3
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$3,296.1	\$73.1	\$144.7	\$368.1	\$57.1	\$346.6	\$85.4	\$130.0
Professional & Business Services	59		\$2,689,775	\$78,334	\$2,956.4	\$7.9	(D)	\$249.2	\$52.7	(D)	\$49.2	\$79.1
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	\$1,654.2	\$3.2	(D)	\$122.2	\$11.5	(D)	(D)	\$11.4
Enterprise Management	64	55	\$410,456	\$22,808	\$384.8	\$0.0	(D)	\$44.6	(D)	(D)	(D)	\$44.5
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$917.4	\$4.7	\$18.8	\$82.3	(D)	(D)	\$7.0	\$23.2
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$4,479.3	\$22.7	\$34.2	\$526.6	\$13.7	\$94.3	(D)	\$45.5
Educational Services	69	61	\$251,318	\$5,693	\$493.7	(D)	(D)	\$35.1	\$0.1	\$2.3	(D)	\$1.9
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	\$3,985.6	(D)	(D)	\$491.5	\$13.6	\$92.0	(D)	\$43.6
Leisure & Hospitality	75		\$672,078	\$20,112	\$843.1	\$5.5	\$15.4	\$115.7	(D)	\$130.7	(D)	\$12.5
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	\$155.7	(D)	\$4.8	\$13.7	(D)	\$53.1	(D)	\$1.0
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$687.4	(D)	\$10.7	\$102.0	(D)	\$77.7	(D)	\$11.5
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$582.9	\$8.2	\$24.0	\$98.1	\$9.3	\$38.2	\$14.7	\$24.0
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$3,611.1	\$51.7	\$113.3	\$391.4	\$88.0	\$213.4	\$79.8	\$119.1
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$0.0	\$28.2	\$99.1	\$0.0	\$83.3	\$115.0	\$85.2	\$0.0

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; \$0.0 may also mean less than \$500,000. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Montgomery	Morgan	Morrow	Muskingum	Noble	Ottawa	Paulding	Perry
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	88.0%	85.0%	84.3%	89.7%	79.9%	90.0%	87.7%	84.9%
Goods-producing Industries	91		16.9%	20.6%	14.4%	17.6%	27.5%	19.3%	29.9%	17.4%	30.6%	29.1%
Natural Resources & Mining	87		1.7%	1.2%	0.1%	2.3%	5.2%	3.9%	22.2%	1.9%	11.4%	5.4%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	0.1%	1.3%	4.9%	0.4%	1.1%	0.8%	10.7%	1.8%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	0.0%	1.0%	0.3%	3.6%	21.2%	1.2%	0.7%	3.5%
Construction	11	23	4.3%	3.8%	3.6%	4.4%	8.8%	3.5%	2.5%	3.7%	3.4%	13.0%
Manufacturing	12	31-33	10.9%	15.5%	10.7%	10.9%	13.4%	11.9%	5.2%	11.7%	15.8%	10.7%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	7.7%	10.8%	12.4%	4.2%	(D)	10.2%	10.0%	10.6%
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	3.0%	0.1%	1.0%	7.7%	(D)	1.5%	5.8%	0.1%
Services-Providing Industries	92		70.3%	68.3%	73.6%	67.3%	56.9%	70.4%	50.0%	72.6%	57.1%	55.9%
Transportation & Utilities	89		4.4%	4.9%	4.2%	2.4%	(D)	12.8%	4.6%	29.3%	17.3%	3.0%
Utilities	10	22	1.6%	1.6%	1.5%	0.9%	0.8%	8.7%	0.1%	27.3%	13.1%	0.8%
Transportation & Warehousing	36	48-49	2.7%	3.3%	2.7%	1.5%	(D)	4.1%	4.5%	2.1%	4.3%	2.3%
Trade	88		11.7%	12.2%	11.8%	24.7%	10.2%	13.2%	(D)	(D)	(D)	10.0%
Wholesale Trade	34	42	6.0%	6.2%	6.2%	19.7%	2.2%	3.5%	(D)	(D)	(D)	3.8%
Retail Trade	35	44-45	5.8%	6.0%	5.6%	4.9%	8.0%	9.7%	4.3%	4.6%	4.2%	6.2%
Information	45	51	5.6%	2.5%	6.9%	0.8%	0.5%	3.3%	0.5%	0.4%	0.5%	0.4%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	21.2%	26.6%	23.6%	15.1%	18.9%	20.7%	18.6%	22.1%
Finance & Insurance	51	52	8.6%	11.3%	10.2%	5.4%	3.6%	5.4%	5.8%	4.5%	5.5%	5.6%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	11.0%	21.2%	20.0%	9.7%	13.0%	16.2%	13.1%	16.4%
Professional & Business Services	59		12.9%	11.6%	9.9%	2.3%	(D)	6.6%	12.0%	(D)	7.6%	10.0%
Professional-Scientific-Technical	60	54	7.8%	5.2%	5.5%	0.9%	(D)	3.2%	2.6%	(D)	(D)	1.4%
Enterprise Management	64	55	2.0%	3.4%	1.3%	0.0%	(D)	1.2%	(D)	(D)	(D)	5.6%
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	3.1%	1.4%	2.6%	2.2%	(D)	(D)	1.1%	2.9%
Education-Health Care-Social Assistance	68		8.6%	9.5%	14.9%	6.6%	4.7%	13.9%	3.1%	4.4%	(D)	5.8%
Educational Services	69	61	1.2%	0.8%	1.6%	(D)	(D)	0.9%	0.0%	0.1%	(D)	0.2%
Health Care & Social Assistance	70	62	7.4%	8.7%	13.3%	(D)	(D)	12.9%	3.1%	4.3%	(D)	5.5%
Leisure & Hospitality	75		3.2%	3.0%	2.8%	1.6%	2.1%	3.0%	(D)	6.1%	(D)	1.6%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	0.5%	(D)	0.7%	0.4%	(D)	2.5%	(D)	0.1%
Accommodation & Food Services	79	72	2.4%	2.1%	2.3%	(D)	1.5%	2.7%	(D)	3.6%	(D)	1.5%
Other Services (exc. Government)	82	81	2.0%	2.0%	1.9%	2.4%	3.3%	2.6%	2.1%	1.8%	2.3%	3.0%
Governments & Their Enterprises	83	92	12.8%	11.2%	12.0%	15.0%	15.7%	10.3%	20.1%	10.0%	12.3%	15.1%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	0.0%	8.2%	13.7%	0.0%	19.0%	5.4%	13.1%	0.0%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing high-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Pickaway	Pike	Portage	Preble	Putnam	Richland^	Ross	Sandusky
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$1,992.0	\$1,203.8	\$6,447.9	\$1,271.3	\$1,357.6	\$4,721.1	\$2,963.1	\$3,032.0
Private industries	2		\$18,223,132	\$601,897	\$1,645.2	\$1,088.3	\$5,324.8	\$1,136.0	\$1,232.6	\$4,052.8	\$2,294.4	\$2,798.7
Goods-producing Industries	91		\$3,524,445	\$139,369	\$631.5	\$120.7	(D)	\$509.3	(D)	\$1,277.0	\$545.7	\$1,402.0
Natural Resources & Mining	87		\$356,627	\$7,982	\$97.6	\$22.3	(D)	\$70.3	(D)	\$54.4	\$42.1	\$49.4
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	\$90.5	\$18.5	(D)	\$67.1	(D)	\$53.8	\$39.1	\$41.3
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$7.1	\$3.8	\$38.2	\$3.2	\$1.1	\$0.7	\$3.1	\$8.1
Construction	11	23	\$895,860	\$26,084	\$138.3	\$44.3	\$285.2	\$62.8	\$93.8	\$241.1	\$84.1	\$94.1
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$395.6	\$54.1	\$1,433.9	\$376.2	\$380.9	\$981.5	\$419.5	\$1,258.5
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$122.2	\$50.8	\$617.0	\$312.3	\$307.9	\$828.3	\$268.0	\$962.9
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$273.4	\$3.3	\$816.9	\$63.9	\$73.0	\$153.1	\$151.5	\$295.7
Services-Providing Industries	92		\$14,698,687	\$462,529	\$1,013.6	\$967.6	(D)	\$626.6	(D)	\$2,775.8	\$1,748.7	\$1,396.7
Transportation & Utilities	89		\$913,741	\$33,023	\$81.8	\$56.4	(D)	\$55.9	(D)	\$179.9	\$142.2	(D)
Utilities	10	22	\$341,717	\$10,907	\$30.2	\$14.2	\$5.5	\$3.3	\$0.9	\$21.9	\$50.9	(D)
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$51.6	\$42.2	(D)	\$52.6	(D)	\$158.0	\$91.3	\$78.3
Trade	88		\$2,445,476	\$82,410	\$145.3	(D)	\$1,086.6	(D)	\$135.9	\$585.3	\$340.6	\$269.6
Wholesale Trade	34	42	\$1,243,274	\$41,728	\$45.9	(D)	\$616.3	(D)	\$61.8	\$187.5	\$77.1	\$101.1
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$99.4	\$62.1	\$470.4	\$84.3	\$74.1	\$397.7	\$263.5	\$168.5
Information	45	51	\$1,167,921	\$17,117	\$7.6	\$7.4	\$89.1	\$15.9	\$11.0	\$93.0	\$70.2	\$18.7
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$452.5	\$145.7	\$1,151.1	\$246.4	\$276.4	\$855.3	\$437.8	\$467.5
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$83.4	\$35.6	\$247.6	\$56.8	\$94.9	\$288.8	\$122.6	\$113.2
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$369.1	\$110.2	\$903.5	\$189.6	\$181.5	\$566.5	\$315.2	\$354.3
Professional & Business Services	59		\$2,689,775	\$78,334	\$107.7	\$554.4	\$423.3	(D)	\$83.9	\$293.9	\$129.8	\$146.6
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	\$26.9	(D)	\$215.9	(D)	\$22.4	\$83.9	\$29.7	\$33.5
Enterprise Management	64	55	\$410,456	\$22,808	\$42.2	(D)	\$111.1	(D)	\$34.1	\$43.9	\$48.3	\$60.4
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$38.5	\$462.2	\$96.3	\$14.5	\$27.4	\$166.1	\$51.8	\$52.7
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$129.1	\$89.8	\$321.8	\$52.0	\$66.7	\$513.7	\$468.5	(D)
Educational Services	69	61	\$251,318	\$5,693	(D)	(D)	\$35.5	\$1.1	\$4.1	\$24.7	(D)	(D)
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	(D)	(D)	\$286.3	\$50.8	\$62.6	\$489.0	(D)	(D)
Leisure & Hospitality	75		\$672,078	\$20,112	\$45.1	(D)	\$182.4	\$28.5	\$20.5	\$148.9	\$103.9	\$64.2
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	\$4.5	(D)	\$21.1	\$1.0	\$2.9	\$18.7	\$5.9	\$10.2
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$40.6	(D)	\$161.3	\$27.6	\$17.6	\$130.2	\$97.9	\$54.0
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$44.4	\$18.8	\$137.1	\$32.0	\$31.0	\$105.9	\$55.8	\$56.8
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$346.8	\$115.5	\$1,123.0	\$135.3	\$125.0	\$668.3	\$668.7	\$233.3
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$129.1	\$214.9	\$170.6	\$97.1	\$130.5	\$0.0	\$468.5	\$295.1

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; \$0.0 may also mean less than \$500,000. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Pickaway	Pike	Portage	Preble	Putnam	Richland^	Ross	Sandusky
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	82.6%	90.4%	82.6%	89.4%	90.8%	85.8%	77.4%	92.3%
Goods-producing Industries	91		16.9%	20.6%	31.7%	10.0%	(D)	40.1%	(D)	27.0%	18.4%	46.2%
Natural Resources & Mining	87		1.7%	1.2%	4.9%	1.9%	(D)	5.5%	(D)	1.2%	1.4%	1.6%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	4.5%	1.5%	(D)	5.3%	(D)	1.1%	1.3%	1.4%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	0.4%	0.3%	0.6%	0.2%	0.1%	0.0%	0.1%	0.3%
Construction	11	23	4.3%	3.8%	6.9%	3.7%	4.4%	4.9%	6.9%	5.1%	2.8%	3.1%
Manufacturing	12	31-33	10.9%	15.5%	19.9%	4.5%	22.2%	29.6%	28.1%	20.8%	14.2%	41.5%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	6.1%	4.2%	9.6%	24.6%	22.7%	17.5%	9.0%	31.8%
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	13.7%	0.3%	12.7%	5.0%	5.4%	3.2%	5.1%	9.8%
Services-Providing Industries	92		70.3%	68.3%	50.9%	80.4%	(D)	49.3%	(D)	58.8%	59.0%	46.1%
Transportation & Utilities	89		4.4%	4.9%	4.1%	4.7%	(D)	4.4%	(D)	3.8%	4.8%	(D)
Utilities	10	22	1.6%	1.6%	1.5%	1.2%	0.1%	0.3%	0.1%	0.5%	1.7%	(D)
Transportation & Warehousing	36	48-49	2.7%	3.3%	2.6%	3.5%	(D)	4.1%	(D)	3.3%	3.1%	2.6%
Trade	88		11.7%	12.2%	7.3%	(D)	16.9%	(D)	10.0%	12.4%	11.5%	8.9%
Wholesale Trade	34	42	6.0%	6.2%	2.3%	(D)	9.6%	(D)	4.6%	4.0%	2.6%	3.3%
Retail Trade	35	44-45	5.8%	6.0%	5.0%	5.2%	7.3%	6.6%	5.5%	8.4%	8.9%	5.6%
Information	45	51	5.6%	2.5%	0.4%	0.6%	1.4%	1.2%	0.8%	2.0%	2.4%	0.6%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	22.7%	12.1%	17.9%	19.4%	20.4%	18.1%	14.8%	15.4%
Finance & Insurance	51	52	8.6%	11.3%	4.2%	3.0%	3.8%	4.5%	7.0%	6.1%	4.1%	3.7%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	18.5%	9.2%	14.0%	14.9%	13.4%	12.0%	10.6%	11.7%
Professional & Business Services	59		12.9%	11.6%	5.4%	46.1%	6.6%	(D)	6.2%	6.2%	4.4%	4.8%
Professional-Scientific-Technical	60	54	7.8%	5.2%	1.4%	(D)	3.3%	(D)	1.6%	1.8%	1.0%	1.1%
Enterprise Management	64	55	2.0%	3.4%	2.1%	(D)	1.7%	(D)	2.5%	0.9%	1.6%	2.0%
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	1.9%	38.4%	1.5%	1.1%	2.0%	3.5%	1.7%	1.7%
Education-Health Care-Social Assistance	68		8.6%	9.5%	6.5%	7.5%	5.0%	4.1%	4.9%	10.9%	15.8%	(D)
Educational Services	69	61	1.2%	0.8%	(D)	(D)	0.5%	0.1%	0.3%	0.5%	(D)	(D)
Health Care & Social Assistance	70	62	7.4%	8.7%	(D)	(D)	4.4%	4.0%	4.6%	10.4%	(D)	(D)
Leisure & Hospitality	75		3.2%	3.0%	2.3%	(D)	2.8%	2.2%	1.5%	3.2%	3.5%	2.1%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	0.2%	(D)	0.3%	0.1%	0.2%	0.4%	0.2%	0.3%
Accommodation & Food Services	79	72	2.4%	2.1%	2.0%	(D)	2.5%	2.2%	1.3%	2.8%	3.3%	1.8%
Other Services (exc. Government)	82	81	2.0%	2.0%	2.2%	1.6%	2.1%	2.5%	2.3%	2.2%	1.9%	1.9%
Governments & Their Enterprises	83	92	12.8%	11.2%	17.4%	9.6%	17.4%	10.6%	9.2%	14.2%	22.6%	7.7%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	6.5%	17.9%	2.6%	7.6%	9.6%	0.0%	15.8%	9.7%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing high-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Scioto	Seneca	Shelby	Stark	Summit	Trumbull	Tuscarawas	Union
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$2,697.1	\$2,111.1	\$3,386.1	\$16,834.9	\$30,612.0	\$7,088.1	\$3,925.6	\$4,644.8
Private industries	2		\$18,223,132	\$601,897	\$2,260.6	\$1,899.3	\$3,185.6	\$15,226.3	\$27,851.6	\$6,283.8	\$3,508.0	\$4,276.1
Goods-producing Industries	91		\$3,524,445	\$139,369	\$571.7	\$753.6	(D)	\$4,437.3	\$5,203.3	\$1,416.4	\$1,362.9	\$1,849.6
Natural Resources & Mining	87		\$356,627	\$7,982	\$4.5	\$95.3	(D)	\$64.2	\$20.3	\$46.5	\$184.0	\$118.7
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	\$4.3	\$60.1	(D)	\$20.7	\$8.2	\$36.3	\$46.9	\$108.3
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$0.2	\$35.2	\$0.0	\$43.5	\$12.1	\$10.2	\$137.1	\$10.4
Construction	11	23	\$895,860	\$26,084	\$89.7	\$101.1	\$180.1	\$747.8	\$1,526.5	\$398.5	\$215.7	\$163.9
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$477.6	\$557.2	\$1,770.1	\$3,625.3	\$3,656.5	\$971.4	\$963.2	\$1,567.0
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$81.8	\$321.4	\$1,144.8	\$1,941.3	\$1,930.7	\$823.7	\$530.8	\$868.0
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$395.8	\$235.8	\$625.3	\$1,684.0	\$1,725.9	\$147.8	\$432.4	\$698.9
Services-Providing Industries	92		\$14,698,687	\$462,529	\$1,688.9	\$1,145.7	(D)	\$10,789.0	\$22,648.3	\$4,867.4	\$2,145.2	\$2,426.5
Transportation & Utilities	89		\$913,741	\$33,023	\$182.1	\$91.8	(D)	\$467.7	\$969.8	\$655.6	\$156.3	\$149.9
Utilities	10	22	\$341,717	\$10,907	\$45.7	\$17.3	\$8.5	\$100.2	\$184.0	\$420.4	\$19.1	\$14.4
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$136.4	\$74.5	(D)	\$367.5	\$785.8	\$235.2	\$137.3	\$135.5
Trade	88		\$2,445,476	\$82,410	\$246.2	\$264.1	\$285.4	\$2,250.1	\$4,697.8	\$926.9	\$482.0	\$682.5
Wholesale Trade	34	42	\$1,243,274	\$41,728	\$42.7	\$114.1	\$161.1	\$986.0	\$2,272.4	\$325.9	\$168.7	\$472.6
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$203.5	\$150.0	\$124.3	\$1,264.0	\$2,425.4	\$601.0	\$313.4	\$209.9
Information	45	51	\$1,167,921	\$17,117	\$21.2	\$12.5	\$20.1	\$236.5	\$1,052.6	\$134.8	\$32.4	\$49.6
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$458.3	\$380.2	\$359.9	\$3,496.4	\$6,504.8	\$1,708.7	\$699.0	\$488.4
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$138.6	\$160.3	\$114.8	\$1,449.0	\$2,979.2	\$390.9	\$204.3	\$125.8
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$319.7	\$219.9	\$245.1	\$2,047.5	\$3,525.6	\$1,317.8	\$494.7	\$362.6
Professional & Business Services	59		\$2,689,775	\$78,334	\$123.3	\$111.1	\$154.5	\$1,421.3	\$4,488.4	\$411.0	\$280.8	\$821.9
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	\$52.1	\$34.7	\$45.8	\$660.9	\$1,677.5	\$97.4	\$101.4	(D)
Enterprise Management	64	55	\$410,456	\$22,808	\$41.2	\$40.5	\$35.2	\$198.8	\$1,773.3	\$81.0	\$45.4	(D)
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$30.0	\$35.9	\$73.5	\$561.6	\$1,037.5	\$232.6	\$133.9	\$285.2
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$526.4	\$188.6	\$125.0	\$1,927.9	\$3,401.3	\$635.7	\$282.8	\$104.0
Educational Services	69	61	\$251,318	\$5,693	\$6.3	\$55.6	\$5.4	\$156.6	\$170.7	\$27.4	\$6.7	\$5.2
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	\$520.2	\$133.1	\$119.6	\$1,771.3	\$3,230.6	\$608.3	\$276.1	\$98.8
Leisure & Hospitality	75		\$672,078	\$20,112	\$70.8	\$52.8	\$37.3	\$560.2	\$923.7	\$208.1	\$109.8	\$59.8
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	\$2.7	\$4.1	\$3.6	\$94.5	\$260.7	\$22.4	\$12.6	\$8.0
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$68.1	\$48.8	\$33.7	\$465.7	\$663.0	\$185.8	\$97.3	\$51.9
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$60.5	\$44.6	\$51.8	\$428.8	\$610.0	\$186.4	\$102.0	\$70.4
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$436.5	\$211.8	\$200.6	\$1,608.6	\$2,760.3	\$804.3	\$417.5	\$368.7
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$0.0	\$0.0	\$192.8	\$0.0	\$0.0	\$0.0	\$0.0	\$536.7

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; \$0.0 may also mean less than \$500,000. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Scioto	Seneca	Shelby	Stark	Summit	Trumbull	Tuscarawas	Union
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	83.8%	90.0%	94.1%	90.4%	91.0%	88.7%	89.4%	92.1%
Goods-producing Industries	91		16.9%	20.6%	21.2%	35.7%	(D)	26.4%	17.0%	20.0%	34.7%	39.8%
Natural Resources & Mining	87		1.7%	1.2%	0.2%	4.5%	(D)	0.4%	0.1%	0.7%	4.7%	2.6%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	0.2%	2.8%	(D)	0.1%	0.0%	0.5%	1.2%	2.3%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	0.0%	1.7%	(D)	0.3%	0.0%	0.1%	3.5%	0.2%
Construction	11	23	4.3%	3.8%	3.3%	4.8%	5.3%	4.4%	5.0%	5.6%	5.5%	3.5%
Manufacturing	12	31-33	10.9%	15.5%	17.7%	26.4%	52.3%	21.5%	11.9%	13.7%	24.5%	33.7%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	3.0%	15.2%	33.8%	11.5%	6.3%	11.6%	13.5%	18.7%
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	14.7%	11.2%	18.5%	10.0%	5.6%	2.1%	11.0%	15.0%
Services-Providing Industries	92		70.3%	68.3%	62.6%	54.3%	(D)	64.1%	74.0%	68.7%	54.6%	52.2%
Transportation & Utilities	89		4.4%	4.9%	6.8%	4.3%	(D)	2.8%	3.2%	9.2%	4.0%	3.2%
Utilities	10	22	1.6%	1.6%	1.7%	0.8%	0.3%	0.6%	0.6%	5.9%	0.5%	0.3%
Transportation & Warehousing	36	48-49	2.7%	3.3%	5.1%	3.5%	(D)	2.2%	2.6%	3.3%	3.5%	2.9%
Trade	88		11.7%	12.2%	9.1%	12.5%	8.4%	13.4%	15.3%	13.1%	12.3%	14.7%
Wholesale Trade	34	42	6.0%	6.2%	1.6%	5.4%	4.8%	5.9%	7.4%	4.6%	4.3%	10.2%
Retail Trade	35	44-45	5.8%	6.0%	7.5%	7.1%	3.7%	7.5%	7.9%	8.5%	8.0%	4.5%
Information	45	51	5.6%	2.5%	0.8%	0.6%	0.6%	1.4%	3.4%	1.9%	0.8%	1.1%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	17.0%	18.0%	10.6%	20.8%	21.2%	24.1%	17.8%	10.5%
Finance & Insurance	51	52	8.6%	11.3%	5.1%	7.6%	3.4%	8.6%	9.7%	5.5%	5.2%	2.7%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	11.9%	10.4%	7.2%	12.2%	11.5%	18.6%	12.6%	7.8%
Professional & Business Services	59		12.9%	11.6%	4.6%	5.3%	4.6%	8.4%	14.7%	5.8%	7.2%	17.7%
Professional-Scientific-Technical	60	54	7.8%	5.2%	1.9%	1.6%	1.4%	3.9%	5.5%	1.4%	2.6%	(D)
Enterprise Management	64	55	2.0%	3.4%	1.5%	1.9%	1.0%	1.2%	5.8%	1.1%	1.2%	(D)
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	1.1%	1.7%	2.2%	3.3%	3.4%	3.3%	3.4%	6.1%
Education-Health Care-Social Assistance	68		8.6%	9.5%	19.5%	8.9%	3.7%	11.5%	11.1%	9.0%	7.2%	2.2%
Educational Services	69	61	1.2%	0.8%	0.2%	2.6%	0.2%	0.9%	0.6%	0.4%	0.2%	0.1%
Health Care & Social Assistance	70	62	7.4%	8.7%	19.3%	6.3%	3.5%	10.5%	10.6%	8.6%	7.0%	2.1%
Leisure & Hospitality	75		3.2%	3.0%	2.6%	2.5%	1.1%	3.3%	3.0%	2.9%	2.8%	1.3%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	0.1%	0.2%	0.1%	0.6%	0.9%	0.3%	0.3%	0.2%
Accommodation & Food Services	79	72	2.4%	2.1%	2.5%	2.3%	1.0%	2.8%	2.2%	2.6%	2.5%	1.1%
Other Services (exc. Government)	82	81	2.0%	2.0%	2.2%	2.1%	1.5%	2.5%	2.0%	2.6%	2.6%	1.5%
Governments & Their Enterprises	83	92	12.8%	11.2%	16.2%	10.0%	5.9%	9.6%	9.0%	11.3%	10.6%	7.9%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	0.0%	0.0%	5.7%	0.0%	0.0%	0.0%	0.0%	11.6%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

**Table A2: 2020 GDP by County and Sector (in millions)**

Industry Title	Codes		U.S.	Ohio	Van Wert	Vinton	Warren	Washington	Wayne	Williams	Wood	Wyandot
	Line	NAICS										
Total	1		\$20,893,746	\$677,561	\$1,312.7	\$292.8	\$12,723.8	\$3,652.2	\$6,591.7	\$1,829.8	\$7,716.4	\$1,083.8
Private industries	2		\$18,223,132	\$601,897	\$1,197.1	\$242.9	\$11,771.0	\$3,407.7	\$6,050.4	\$1,667.8	\$6,816.4	\$968.1
Goods-producing Industries	91		\$3,524,445	\$139,369	\$393.7	\$105.1	\$2,707.8	\$901.7	\$3,128.7	\$734.5	\$2,591.7	\$596.1
Natural Resources & Mining	87		\$356,627	\$7,982	\$111.6	\$5.5	\$29.1	\$58.0	\$188.0	\$53.8	\$91.8	\$99.8
Agriculture-Forestry-Fishing-Hunting	3	11	\$174,527	\$3,915	\$108.4	\$3.5	\$24.3	\$16.4	\$156.8	\$49.7	\$74.1	\$65.3
Mining-Quarrying-Oil & Gas Extraction	6	21	\$182,099	\$4,066	\$3.1	\$2.1	\$4.8	\$41.6	\$31.2	\$4.1	\$17.7	\$34.5
Construction	11	23	\$895,860	\$26,084	\$39.9	\$8.8	\$542.6	\$143.7	\$312.4	\$53.7	\$392.2	\$89.7
Manufacturing	12	31-33	\$2,271,960	\$105,303	\$242.3	\$90.8	\$2,136.0	\$700.0	\$2,628.4	\$627.0	\$2,107.7	\$406.7
Durable Goods Mfg.	13	32p-33	\$1,268,834	\$57,594	\$209.3	\$15.5	\$1,358.3	\$252.8	\$925.6	\$401.0	\$1,255.5	\$207.2
Non-durable Goods Mfg.	25	31-32p	\$1,003,125	\$47,709	\$33.0	\$75.4	\$777.7	\$447.2	\$1,702.8	\$226.0	\$852.1	\$199.5
Services-Providing Industries	92		\$14,698,687	\$462,529	\$803.4	\$137.8	\$9,063.2	\$2,506.0	\$2,921.6	\$933.3	\$4,224.6	\$371.9
Transportation & Utilities	89		\$913,741	\$33,023	\$96.4	\$17.1	\$253.8	\$854.8	\$166.6	(D)	\$575.0	(D)
Utilities	10	22	\$341,717	\$10,907	\$68.7	\$1.5	\$8.0	\$764.7	\$16.9	\$9.1	\$95.8	\$3.7
Transportation & Warehousing	36	48-49	\$572,021	\$22,116	\$27.7	\$15.5	\$245.8	\$90.1	\$149.6	(D)	\$479.2	(D)
Trade	88		\$2,445,476	\$82,410	\$159.1	(D)	\$1,833.7	\$307.2	\$730.0	\$318.1	\$897.3	\$90.4
Wholesale Trade	34	42	\$1,243,274	\$41,728	\$84.1	(D)	\$919.8	\$110.6	\$352.1	\$131.0	\$502.9	\$29.8
Retail Trade	35	44-45	\$1,202,203	\$40,682	\$74.9	\$10.2	\$913.9	\$196.6	\$377.9	\$187.1	\$394.5	\$60.6
Information	45	51	\$1,167,921	\$17,117	\$4.4	(D)	\$229.1	\$17.1	\$64.1	\$12.5	\$241.4	\$6.2
Finance-Insurance-Real Estate, etc.	50		\$4,592,105	\$153,758	\$306.4	\$71.9	\$2,779.0	\$564.5	\$1,064.5	\$274.1	\$1,245.2	\$153.4
Finance & Insurance	51	52	\$1,787,746	\$76,444	\$165.8	\$21.3	\$1,089.3	\$235.3	\$449.3	\$94.5	\$363.7	\$63.4
Real Estate-Rental-Leasing	56	53	\$2,804,359	\$77,313	\$140.6	\$50.6	\$1,689.7	\$329.1	\$615.2	\$179.6	\$881.5	\$90.0
Professional & Business Services	59		\$2,689,775	\$78,334	\$72.8	\$5.8	\$2,350.2	\$177.9	\$287.4	(D)	\$513.6	(D)
Professional-Scientific-Technical	60	54	\$1,627,764	\$35,484	(D)	(D)	\$610.9	\$66.3	\$106.1	(D)	\$202.8	(D)
Enterprise Management	64	55	\$410,456	\$22,808	(D)	(D)	\$1,365.3	\$62.6	\$125.9	(D)	\$135.8	(D)
Administrative Support & Waste Mgt.	65	56	\$651,554	\$20,043	\$24.4	\$2.3	\$374.1	\$49.1	\$55.4	\$21.9	\$174.9	\$15.0
Education-Health Care-Social Assistance	68		\$1,798,603	\$64,348	\$112.2	\$19.2	\$814.0	\$461.6	\$379.0	\$123.6	\$398.8	\$25.7
Educational Services	69	61	\$251,318	\$5,693	\$1.8	\$0.0	\$96.0	\$39.1	\$81.0	\$3.2	\$25.8	(D)
Health Care & Social Assistance	70	62	\$1,547,286	\$58,655	\$110.4	\$19.1	\$718.0	\$422.5	\$298.0	\$120.5	\$373.0	(D)
Leisure & Hospitality	75		\$672,078	\$20,112	\$21.7	\$3.5	\$476.2	\$65.6	\$96.6	\$26.6	\$196.0	\$11.3
Arts-Entertainment-Recreation	76	71	\$163,359	\$5,688	\$2.8	(D)	\$199.2	\$4.2	\$11.6	\$0.7	\$15.2	\$0.3
Accommodation & Food Services	79	72	\$508,719	\$14,424	\$18.9	(D)	\$276.9	\$61.3	\$85.0	\$25.9	\$180.8	\$10.9
Other Services (exc. Government)	82	81	\$418,990	\$13,429	\$30.4	(D)	\$327.2	\$57.3	\$133.5	\$36.2	\$157.3	\$24.4
Governments & Their Enterprises	83	92	\$2,670,611	\$75,664	\$115.5	\$49.9	\$952.8	\$244.5	\$541.3	\$162.0	\$900.0	\$115.7
Not Disclosed by <i>Most-Specific</i> Industry*			\$0	\$0	\$48.5	\$17.2	\$0.0	\$0.0	\$0.0	\$111.2	\$0.0	\$67.7

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; \$0.0 may also mean less than \$500,000. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).



**Table A2: 2020 GDP by County and Sector - Percentage Distribution**

Industry Title	Codes		U.S.	Ohio	Van Wert	Vinton	Warren	Washington	Wayne	Williams	Wood	Wyandot
	Line	NAICS										
Total	1		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	2		87.2%	88.8%	91.2%	83.0%	92.5%	93.3%	91.8%	91.1%	88.3%	89.3%
Goods-producing Industries	91		16.9%	20.6%	30.0%	35.9%	21.3%	24.7%	47.5%	40.1%	33.6%	55.0%
Natural Resources & Mining	87		1.7%	1.2%	8.5%	1.9%	0.2%	1.6%	2.9%	2.9%	1.2%	9.2%
Agriculture-Forestry-Fishing-Hunting	3	11	0.8%	0.6%	8.3%	1.2%	0.2%	0.4%	2.4%	2.7%	1.0%	6.0%
Mining-Quarrying-Oil & Gas Extraction	6	21	0.9%	0.6%	0.2%	0.7%	0.0%	1.1%	0.5%	0.2%	0.2%	3.2%
Construction	11	23	4.3%	3.8%	3.0%	3.0%	4.3%	3.9%	4.7%	2.9%	5.1%	8.3%
Manufacturing	12	31-33	10.9%	15.5%	18.5%	31.0%	16.8%	19.2%	39.9%	34.3%	27.3%	37.5%
Durable Goods Mfg.	13	32p-33	6.1%	8.5%	15.9%	5.3%	10.7%	6.9%	14.0%	21.9%	16.3%	19.1%
Non-durable Goods Mfg.	25	31-32p	4.8%	7.0%	2.5%	25.7%	6.1%	12.2%	25.8%	12.4%	11.0%	18.4%
Services-Providing Industries	92		70.3%	68.3%	61.2%	47.1%	71.2%	68.6%	44.3%	51.0%	54.7%	34.3%
Transportation & Utilities	89		4.4%	4.9%	7.3%	5.8%	2.0%	23.4%	2.5%	(D)	7.5%	(D)
Utilities	10	22	1.6%	1.6%	5.2%	0.5%	0.1%	20.9%	0.3%	0.5%	1.2%	0.3%
Transportation & Warehousing	36	48-49	2.7%	3.3%	2.1%	5.3%	1.9%	2.5%	2.3%	(D)	6.2%	(D)
Trade	88		11.7%	12.2%	12.1%	(D)	14.4%	8.4%	11.1%	17.4%	11.6%	8.3%
Wholesale Trade	34	42	6.0%	6.2%	6.4%	(D)	7.2%	3.0%	5.3%	7.2%	6.5%	2.7%
Retail Trade	35	44-45	5.8%	6.0%	5.7%	3.5%	7.2%	5.4%	5.7%	10.2%	5.1%	5.6%
Information	45	51	5.6%	2.5%	0.3%	(D)	1.8%	0.5%	1.0%	0.7%	3.1%	0.6%
Finance-Insurance-Real Estate, etc.	50		22.0%	22.7%	23.3%	24.5%	21.8%	15.5%	16.1%	15.0%	16.1%	14.2%
Finance & Insurance	51	52	8.6%	11.3%	12.6%	7.3%	8.6%	6.4%	6.8%	5.2%	4.7%	5.8%
Real Estate-Rental-Leasing	56	53	13.4%	11.4%	10.7%	17.3%	13.3%	9.0%	9.3%	9.8%	11.4%	8.3%
Professional & Business Services	59		12.9%	11.6%	5.5%	2.0%	18.5%	4.9%	4.4%	(D)	6.7%	(D)
Professional-Scientific-Technical	60	54	7.8%	5.2%	(D)	(D)	4.8%	1.8%	1.6%	(D)	2.6%	(D)
Enterprise Management	64	55	2.0%	3.4%	(D)	(D)	10.7%	1.7%	1.9%	(D)	1.8%	(D)
Administrative Support & Waste Mgt.	65	56	3.1%	3.0%	1.9%	0.8%	2.9%	1.3%	0.8%	1.2%	2.3%	1.4%
Education-Health Care-Social Assistance	68		8.6%	9.5%	8.5%	6.5%	6.4%	12.6%	5.8%	6.8%	5.2%	2.4%
Educational Services	69	61	1.2%	0.8%	0.1%	0.0%	0.8%	1.1%	1.2%	0.2%	0.3%	(D)
Health Care & Social Assistance	70	62	7.4%	8.7%	8.4%	6.5%	5.6%	11.6%	4.5%	6.6%	4.8%	(D)
Leisure & Hospitality	75		3.2%	3.0%	1.7%	1.2%	3.7%	1.8%	1.5%	1.5%	2.5%	1.0%
Arts-Entertainment-Recreation	76	71	0.8%	0.8%	0.2%	(D)	1.6%	0.1%	0.2%	0.0%	0.2%	0.0%
Accommodation & Food Services	79	72	2.4%	2.1%	1.4%	(D)	2.2%	1.7%	1.3%	1.4%	2.3%	1.0%
Other Services (exc. Government)	82	81	2.0%	2.0%	2.3%	(D)	2.6%	1.6%	2.0%	2.0%	2.0%	2.2%
Governments & Their Enterprises	83	92	12.8%	11.2%	8.8%	17.0%	7.5%	6.7%	8.2%	8.9%	11.7%	10.7%
Not Disclosed by <i>Most-Specific</i> Industry*			0.0%	0.0%	3.7%	5.9%	0.0%	0.0%	0.0%	6.1%	0.0%	6.2%

Notes and Abbreviations: ^ - A one-county MA in Ohio or the one Ohio county in a cross-state MA; (D) - suppressed to avoid disclosing confidential information; \* - using encompassing higher-level summaries may reduce this figure; exc. - except; Mfg. - Manufacturing; Mgt. - Management; NAICS - N. American Industry Classification System; p - part; 0.0% may also mean less than 0.05%. Source: U.S. BEA, table CAGDP2\_OH\_2001\_2020. Prepared by: Office of Research, Ohio Dept. of Development (DL, 12/21).

Table A3a: Ohio and U.S. GDP by Sector, 2000-2020 (in billions of chained 2012 dollars)

2012 NAICS Codes	Industry Titles	Area	2000	2001^	2002	2003	2004	2005	2006	2007	2008^	2009^	2010	Percent Change		
														'00-'01	'01-'07	'07-'09
11-92	Total#	U.S.	\$13,138.04	\$13,263.42	\$13,488.36	\$13,865.52	\$14,399.70	\$14,901.27	\$15,315.94	\$15,623.87	\$15,642.96	\$15,236.26	\$15,648.99	1.0%	17.8%	-2.5%
		Ohio	\$509.95	\$502.97	\$513.22	\$519.94	\$534.06	\$545.97	\$545.50	\$546.73	\$537.12	\$511.08	\$523.98	-1.4%	8.7%	-6.5%
11-81	Private sector#	U.S.	\$11,367.62	\$11,452.47	\$11,651.91	\$11,979.33	\$12,482.78	\$12,959.74	\$13,372.85	\$13,614.57	\$13,576.37	\$13,154.66	\$13,514.21	0.7%	18.9%	-3.4%
		Ohio	\$444.47	\$438.39	\$448.45	\$454.92	\$469.01	\$481.34	\$481.69	\$483.20	\$473.17	\$448.25	\$459.82	-1.4%	10.2%	-7.2%
11, 21, 23-33	Goods producers#	U.S.	\$2,828.58	\$2,756.86	\$2,761.43	\$2,866.29	\$3,034.72	\$3,106.87	\$3,245.53	\$3,296.23	\$3,167.87	\$2,949.55	\$2,981.87	-2.5%	19.6%	-10.5%
		Ohio	\$137.80	\$127.16	\$129.53	\$130.99	\$138.68	\$137.67	\$137.09	\$134.82	\$125.27	\$107.73	\$111.61	-7.7%	6.0%	-20.1%
11	Agriculture, forestry, fishing & hunting	U.S.	\$160.31	\$154.75	\$160.44	\$173.56	\$187.61	\$196.12	\$199.40	\$177.39	\$177.57	\$197.38	\$191.60	-3.5%	14.6%	11.3%
		Ohio	\$3.43	\$3.02	\$3.04	\$3.12	\$3.80	\$3.55	\$3.92	\$3.44	\$3.37	\$4.76	\$4.02	-12.0%	13.6%	38.6%
21	Mining	U.S.	\$234.65	\$272.25	\$279.76	\$248.02	\$249.48	\$253.50	\$292.85	\$315.90	\$305.85	\$349.75	\$309.92	16.0%	16.0%	10.7%
		Ohio	\$3.75	\$3.48	\$4.07	\$3.38	\$3.29	\$3.05	\$3.25	\$3.37	\$3.22	\$3.90	\$3.18	-7.3%	-3.1%	15.7%
23	Construction	U.S.	\$781.61	\$767.05	\$742.22	\$755.06	\$781.95	\$785.39	\$769.64	\$746.47	\$673.38	\$576.92	\$548.34	-1.9%	-2.7%	-22.7%
		Ohio	\$27.55	\$25.81	\$24.56	\$24.46	\$24.68	\$22.93	\$20.66	\$19.36	\$17.89	\$16.28	\$15.16	-6.3%	-25.0%	-15.9%
31-33	Manufacturing#	U.S.	\$1,673.68	\$1,606.89	\$1,621.11	\$1,711.85	\$1,832.65	\$1,888.06	\$1,996.78	\$2,064.67	\$2,022.15	\$1,831.89	\$1,936.23	-4.0%	28.5%	-11.3%
		Ohio	\$103.71	\$95.53	\$98.40	\$100.17	\$106.87	\$107.93	\$109.20	\$108.61	\$100.75	\$82.90	\$89.22	-7.9%	13.7%	-23.7%
32p & 33	Durable goods	U.S.	\$750.69	\$704.14	\$719.05	\$772.89	\$828.32	\$885.37	\$953.97	\$999.17	\$1,004.51	\$858.23	\$968.84	-6.2%	41.9%	-14.1%
		Ohio	\$59.66	\$52.71	\$53.97	\$55.33	\$60.21	\$62.68	\$63.03	\$62.02	\$58.85	\$38.48	\$45.23	-11.6%	17.7%	-37.9%
31 & 32p	Nondurable goods	U.S.	\$964.05	\$955.95	\$949.26	\$979.30	\$1,046.89	\$1,028.26	\$1,061.69	\$1,080.01	\$1,023.73	\$992.24	\$974.82	-0.8%	13.0%	-8.1%
		Ohio	\$42.40	\$42.54	\$44.30	\$44.52	\$45.75	\$43.47	\$44.52	\$45.20	\$40.19	\$45.50	\$44.35	0.3%	6.3%	0.7%
22, 42-81	Service providers1#	U.S.	\$8,544.58	\$8,700.27	\$8,894.03	\$9,117.78	\$9,454.62	\$9,858.74	\$10,133.61	\$10,324.82	\$10,414.45	\$10,207.75	\$10,532.97	1.8%	18.7%	-1.1%
		Ohio	\$307.78	\$312.36	\$320.07	\$325.09	\$331.68	\$344.83	\$345.74	\$349.35	\$348.39	\$340.38	\$348.13	1.5%	11.8%	-2.6%
22	Utilities	U.S.	\$258.04	\$214.83	\$222.24	\$218.32	\$231.56	\$219.70	\$233.94	\$239.06	\$251.29	\$236.78	\$266.35	-16.7%	11.3%	-1.0%
		Ohio	\$10.57	\$8.68	\$8.53	\$7.81	\$7.78	\$7.21	\$7.60	\$8.70	\$9.14	\$8.75	\$9.58	-17.9%	0.2%	0.6%
42	Wholesale trade	U.S.	\$803.12	\$817.38	\$827.63	\$871.69	\$911.32	\$952.88	\$981.76	\$1,014.36	\$1,016.80	\$892.40	\$944.96	1.8%	24.1%	-12.0%
		Ohio	\$30.09	\$30.79	\$31.04	\$32.33	\$33.27	\$34.47	\$35.63	\$36.42	\$36.66	\$31.68	\$33.20	2.3%	18.3%	-13.0%
44-45	Retail trade	U.S.	\$820.16	\$850.87	\$888.18	\$934.28	\$950.13	\$980.90	\$989.00	\$957.18	\$921.43	\$880.98	\$901.12	3.7%	12.5%	-8.0%
		Ohio	\$33.92	\$34.81	\$35.84	\$38.05	\$37.83	\$37.50	\$35.15	\$33.93	\$32.49	\$31.41	\$31.65	2.6%	-2.5%	-7.4%
48-49p	Transportation & warehousing1	U.S.	\$423.52	\$395.93	\$381.82	\$395.59	\$428.39	\$448.98	\$475.70	\$472.32	\$467.93	\$438.77	\$460.96	-6.5%	19.3%	-7.1%
		Ohio	\$15.40	\$14.51	\$14.19	\$14.63	\$15.65	\$16.81	\$17.63	\$17.40	\$17.06	\$15.30	\$15.46	-5.8%	19.9%	-12.1%
51	Information	U.S.	\$421.42	\$447.53	\$490.71	\$506.37	\$564.72	\$602.34	\$623.90	\$686.00	\$729.77	\$709.61	\$751.82	6.2%	53.3%	3.4%
		Ohio	\$9.99	\$10.55	\$12.03	\$12.42	\$12.79	\$13.37	\$13.09	\$14.01	\$15.00	\$16.89	\$19.55	5.6%	32.8%	20.5%
52	Finance & insurance	U.S.	\$915.97	\$961.79	\$955.41	\$940.99	\$949.19	\$1,033.87	\$1,069.95	\$1,032.05	\$900.78	\$1,111.26	\$1,070.99	5.0%	7.3%	7.7%
		Ohio	\$33.23	\$32.77	\$35.85	\$35.66	\$36.95	\$41.82	\$41.34	\$39.99	\$37.76	\$42.63	\$39.65	-1.4%	22.0%	6.6%
53	Real estate, rental & leasing	U.S.	\$1,536.14	\$1,614.53	\$1,636.56	\$1,668.70	\$1,709.17	\$1,801.72	\$1,826.57	\$1,929.13	\$2,001.27	\$1,949.51	\$2,033.32	5.1%	19.5%	1.1%
		Ohio	\$53.13	\$56.82	\$55.72	\$54.67	\$55.57	\$59.92	\$59.95	\$63.82	\$61.77	\$59.76	\$61.49	6.9%	12.3%	-6.4%
54	Professional, scientific & technical	U.S.	\$844.01	\$871.90	\$892.88	\$906.11	\$937.20	\$972.48	\$1,010.97	\$1,049.79	\$1,131.12	\$1,066.13	\$1,094.62	3.3%	20.4%	1.6%
		Ohio	\$22.92	\$23.78	\$24.03	\$23.90	\$24.42	\$24.80	\$25.75	\$26.66	\$28.65	\$27.26	\$27.74	3.7%	12.1%	2.3%
55	Mgt. of companies & enterprises	U.S.	\$277.52	\$289.21	\$286.42	\$296.23	\$279.18	\$279.02	\$277.92	\$271.32	\$272.95	\$251.82	\$269.68	4.2%	-6.2%	-7.2%
		Ohio	\$12.27	\$13.77	\$15.41	\$16.18	\$15.23	\$15.88	\$15.80	\$14.53	\$15.00	\$13.69	\$14.65	12.2%	5.6%	-5.8%
56	Administrative support & waste mgt.	U.S.	\$337.74	\$343.04	\$341.37	\$366.21	\$384.99	\$418.65	\$428.24	\$452.64	\$452.86	\$416.18	\$445.12	1.6%	31.9%	-8.1%
		Ohio	\$12.64	\$12.43	\$12.35	\$13.41	\$13.88	\$14.99	\$14.88	\$15.82	\$15.92	\$14.41	\$15.45	-1.6%	27.2%	-8.9%
61	Education	U.S.	\$152.46	\$156.61	\$157.49	\$165.08	\$174.97	\$171.92	\$176.29	\$179.09	\$190.63	\$205.89	\$212.14	2.7%	14.4%	15.0%
		Ohio	\$4.63	\$4.70	\$4.66	\$4.88	\$5.18	\$5.13	\$5.39	\$5.34	\$5.62	\$5.95	\$6.04	1.6%	13.4%	11.4%
62	Health care & social assistance	U.S.	\$835.18	\$856.13	\$894.94	\$929.43	\$971.87	\$995.83	\$1,038.70	\$1,045.61	\$1,111.61	\$1,140.35	\$1,149.98	2.5%	22.1%	9.1%
		Ohio	\$36.30	\$37.66	\$38.87	\$40.09	\$41.86	\$42.53	\$44.39	\$43.54	\$45.72	\$46.20	\$46.11	3.7%	15.6%	6.1%
71	Arts, entertainment & recreation	U.S.	\$137.81	\$130.14	\$135.92	\$140.79	\$145.45	\$145.32	\$149.89	\$151.68	\$153.51	\$151.29	\$159.16	-5.6%	16.6%	-0.3%
		Ohio	\$5.68	\$5.31	\$5.29	\$5.54	\$5.36	\$4.85	\$4.46	\$4.62	\$4.44	\$4.63	\$5.23	-6.4%	-12.9%	0.2%
72	Accommodation & food services	U.S.	\$424.77	\$413.69	\$422.63	\$432.08	\$453.12	\$454.89	\$466.97	\$461.82	\$445.96	\$412.84	\$427.24	-2.6%	11.6%	-10.6%
		Ohio	\$12.93	\$12.74	\$12.76	\$12.90	\$13.14	\$12.83	\$12.48	\$12.53	\$11.93	\$11.06	\$11.40	-1.5%	-1.6%	-11.7%
81	Other services (exc. Government)	U.S.	\$431.28	\$389.13	\$399.75	\$388.60	\$393.64	\$396.31	\$398.38	\$389.34	\$374.93	\$352.48	\$346.17	-9.8%	0.1%	-9.5%
		Ohio	\$16.25	\$15.01	\$15.21	\$14.53	\$14.42	\$13.55	\$13.20	\$12.80	\$12.07	\$11.20	\$11.01	-7.7%	-14.7%	-12.5%
92	Government2	U.S.	\$1,977.44	\$1,998.15	\$2,033.72	\$2,058.81	\$2,077.28	\$2,096.43	\$2,108.48	\$2,129.04	\$2,170.16	\$2,171.50	\$2,182.73	1.0%	6.6%	2.0%
		Ohio	\$65.94	\$65.03	\$65.08	\$65.27	\$65.16	\$64.60	\$63.74	\$63.43	\$63.91	\$62.81	\$64.13	-1.4%	-2.5%	-1.0%

Notes and abbreviations: ^ - a recession year, either partially or entirely, for the nation as a whole; \* - preliminary; prior years may be revised; 1 - excludes U.S. Postal Service (NAICS 491); 2 - includes U.S. Postal Service; p - part; # - components may not sum to totals due to rounding and/or different inflators/deflators used for different sectors; n.a. - not available.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A3a: Ohio and U.S. GDP by Sector, 2000-2020 (in billions of chained 2012 dollars)**

2012 NAICS Codes	Industry Titles	Area												Percent Change		
			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020**	'09-'19	'19-'20*	'00-'20*
11-92	Total#	U.S.	\$15,648.99	\$15,891.53	\$16,253.97	\$16,553.35	\$16,932.05	\$17,390.30	\$17,680.27	\$18,079.08	\$18,606.79	\$19,032.67	\$18,384.69	24.9%	-3.4%	39.9%
		Ohio	\$523.98	\$541.18	\$545.74	\$556.21	\$574.18	\$578.85	\$583.95	\$590.74	\$598.92	\$611.15	\$589.90	19.6%	-3.5%	15.7%
11-81	Private sector#	U.S.	\$13,514.21	\$13,747.76	\$14,094.48	\$14,359.46	\$14,745.23	\$15,197.80	\$15,468.41	\$15,852.63	\$16,358.20	\$16,773.56	\$16,142.27	27.5%	-3.8%	42.0%
		Ohio	\$459.82	\$478.00	\$482.49	\$494.09	\$512.79	\$517.84	\$522.07	\$528.33	\$536.93	\$548.82	\$528.27	22.4%	-3.7%	18.9%
11, 21, 23-33	Goods producers#	U.S.	\$2,981.87	\$2,990.23	\$3,028.82	\$3,141.70	\$3,226.48	\$3,320.31	\$3,337.97	\$3,439.46	\$3,553.04	\$3,627.70	\$3,523.39	23.0%	-2.9%	24.6%
		Ohio	\$111.61	\$119.34	\$116.19	\$121.17	\$131.62	\$129.77	\$130.33	\$133.48	\$134.41	\$136.32	\$134.04	26.5%	-1.7%	-2.7%
11	Agriculture, forestry, fishing & hunting	U.S.	\$191.60	\$184.28	\$178.69	\$207.51	\$208.57	\$221.86	\$234.55	\$231.02	\$237.90	\$223.34	\$254.65	13.2%	14.0%	58.8%
		Ohio	\$4.02	\$4.55	\$3.77	\$4.88	\$4.61	\$3.81	\$3.97	\$4.71	\$5.56	\$4.04	\$5.88	-15.1%	45.5%	71.2%
21	Mining	U.S.	\$309.92	\$322.26	\$360.52	\$374.02	\$414.50	\$451.23	\$427.23	\$436.02	\$436.72	\$488.27	\$438.57	39.6%	-10.2%	86.9%
		Ohio	\$3.18	\$3.28	\$3.12	\$4.27	\$5.76	\$8.60	\$8.62	\$7.26	\$6.82	\$8.23	\$10.19	111.1%	23.7%	171.6%
23	Construction	U.S.	\$548.34	\$539.95	\$554.94	\$568.27	\$579.08	\$605.09	\$628.16	\$650.56	\$665.69	\$674.74	\$650.44	17.0%	-3.6%	-16.8%
		Ohio	\$15.16	\$16.04	\$17.24	\$17.54	\$17.52	\$17.81	\$18.25	\$19.44	\$19.34	\$19.58	\$18.94	20.3%	-3.3%	-31.3%
31-33	Manufacturing#	U.S.	\$1,936.23	\$1,946.25	\$1,934.66	\$1,991.64	\$2,023.68	\$2,046.25	\$2,040.26	\$2,108.32	\$2,195.01	\$2,233.94	\$2,167.79	21.9%	-3.0%	29.5%
		Ohio	\$89.22	\$95.47	\$92.06	\$94.49	\$103.84	\$100.04	\$99.97	\$101.91	\$102.66	\$104.41	\$100.77	25.9%	-3.5%	-2.8%
32p & 33	Durable goods	U.S.	\$968.84	\$1,035.63	\$1,065.21	\$1,090.33	\$1,106.78	\$1,124.00	\$1,126.00	\$1,172.76	\$1,229.39	\$1,239.16	\$1,178.28	44.4%	-4.9%	57.0%
		Ohio	\$45.23	\$51.55	\$52.33	\$53.04	\$55.38	\$55.21	\$55.11	\$56.93	\$55.85	\$56.29	\$52.50	46.3%	-6.7%	-12.0%
31 & 32p	Nondurable goods	U.S.	\$974.82	\$911.49	\$869.45	\$901.37	\$916.98	\$922.20	\$913.98	\$934.92	\$964.93	\$994.08	\$989.93	0.2%	-0.4%	2.7%
		Ohio	\$44.35	\$43.97	\$39.72	\$41.46	\$48.58	\$44.81	\$44.86	\$44.91	\$46.83	\$48.18	\$48.50	5.9%	0.7%	14.4%
22, 42-81	Service providers##	U.S.	\$10,532.97	\$10,757.49	\$11,065.67	\$11,217.93	\$11,518.81	\$11,877.22	\$12,126.53	\$12,410.81	\$12,803.09	\$13,142.36	\$12,619.51	28.7%	-4.0%	47.7%
		Ohio	\$348.13	\$358.69	\$366.29	\$372.93	\$381.27	\$388.07	\$391.73	\$394.94	\$402.53	\$412.44	\$394.43	21.2%	-4.4%	28.2%
22	Utilities	U.S.	\$266.35	\$276.94	\$280.65	\$277.16	\$266.29	\$266.39	\$280.73	\$284.09	\$283.11	\$286.55	\$298.56	21.0%	4.2%	15.7%
		Ohio	\$9.58	\$9.77	\$9.94	\$9.79	\$9.40	\$9.42	\$9.90	\$9.61	\$9.41	\$9.28	\$9.53	6.0%	2.7%	-9.9%
42	Wholesale trade	U.S.	\$944.96	\$966.66	\$1,000.29	\$1,021.01	\$1,060.62	\$1,105.85	\$1,091.90	\$1,097.62	\$1,109.82	\$1,104.63	\$1,083.85	23.8%	-1.9%	35.0%
		Ohio	\$33.20	\$33.34	\$34.07	\$35.01	\$36.59	\$37.85	\$37.65	\$38.10	\$38.11	\$37.76	\$36.38	19.2%	-3.7%	20.9%
44-45	Retail trade	U.S.	\$901.12	\$903.25	\$910.01	\$937.73	\$955.11	\$990.74	\$1,027.57	\$1,061.80	\$1,095.55	\$1,122.90	\$1,090.50	27.5%	-2.9%	33.0%
		Ohio	\$31.65	\$32.17	\$31.79	\$33.05	\$33.84	\$35.20	\$35.92	\$37.38	\$37.05	\$37.80	\$36.90	20.4%	-2.4%	8.8%
48-49p	Transportation & warehousing <sup>1</sup>	U.S.	\$460.96	\$469.97	\$473.31	\$479.89	\$494.36	\$507.12	\$514.68	\$537.13	\$556.37	\$566.13	\$490.27	29.0%	-13.4%	15.8%
		Ohio	\$15.46	\$16.14	\$15.74	\$15.68	\$16.23	\$17.81	\$17.37	\$17.86	\$18.62	\$19.13	\$18.71	25.1%	-2.2%	21.5%
51	Information	U.S.	\$751.82	\$764.25	\$762.71	\$830.34	\$851.06	\$939.25	\$1,022.04	\$1,087.20	\$1,171.41	\$1,252.86	\$1,296.53	76.6%	3.5%	207.7%
		Ohio	\$19.55	\$21.44	\$20.41	\$20.48	\$17.45	\$17.52	\$17.76	\$18.30	\$18.97	\$19.54	\$19.14	15.7%	-2.0%	91.6%
52	Finance & insurance	U.S.	\$1,070.99	\$1,075.40	\$1,172.45	\$1,107.52	\$1,165.14	\$1,205.74	\$1,224.31	\$1,203.80	\$1,203.12	\$1,223.08	\$1,259.55	10.1%	3.0%	37.5%
		Ohio	\$39.65	\$40.36	\$41.74	\$41.70	\$46.31	\$48.50	\$49.52	\$47.47	\$50.65	\$54.18	\$55.05	27.1%	1.6%	65.7%
53	Real estate, rental & leasing	U.S.	\$2,033.32	\$2,080.08	\$2,116.80	\$2,165.55	\$2,177.62	\$2,171.82	\$2,187.70	\$2,225.92	\$2,289.30	\$2,338.31	\$2,306.83	19.9%	-1.3%	50.2%
		Ohio	\$61.49	\$63.01	\$64.19	\$65.36	\$65.44	\$64.35	\$64.93	\$65.20	\$65.58	\$66.55	\$63.43	11.4%	-4.7%	19.4%
54	Professional, scientific & technical	U.S.	\$1,094.62	\$1,142.32	\$1,191.79	\$1,193.85	\$1,245.29	\$1,299.70	\$1,338.14	\$1,383.53	\$1,466.73	\$1,530.38	\$1,501.18	43.5%	-1.9%	77.9%
		Ohio	\$27.74	\$29.41	\$29.01	\$29.20	\$30.03	\$30.54	\$31.41	\$31.98	\$33.46	\$34.67	\$32.85	27.2%	-5.2%	43.3%
55	Mgt. of companies & enterprises	U.S.	\$269.68	\$280.72	\$302.14	\$317.02	\$338.35	\$347.29	\$351.74	\$377.47	\$404.62	\$433.48	\$439.80	72.1%	1.5%	58.5%
		Ohio	\$14.65	\$15.36	\$18.82	\$19.35	\$20.64	\$19.96	\$20.29	\$21.35	\$21.95	\$23.55	\$24.44	72.0%	3.8%	99.2%
56	Administrative support & waste mgt.	U.S.	\$445.12	\$460.19	\$474.95	\$481.83	\$500.20	\$507.46	\$508.58	\$540.74	\$563.19	\$583.07	\$549.77	40.1%	-5.7%	62.8%
		Ohio	\$15.45	\$16.31	\$17.23	\$17.93	\$18.48	\$18.36	\$17.31	\$17.90	\$17.90	\$18.10	\$16.86	25.6%	-6.9%	33.4%
61	Education	U.S.	\$212.14	\$213.68	\$214.19	\$210.66	\$212.93	\$214.67	\$220.55	\$217.36	\$222.69	\$228.86	\$203.03	11.2%	-11.3%	33.2%
		Ohio	\$6.04	\$6.03	\$5.86	\$5.62	\$5.59	\$5.46	\$5.53	\$5.28	\$5.26	\$5.31	\$4.60	-10.6%	-13.5%	-0.7%
62	Health care & social assistance	U.S.	\$1,149.98	\$1,172.55	\$1,195.07	\$1,215.86	\$1,239.35	\$1,292.48	\$1,329.22	\$1,360.26	\$1,398.86	\$1,438.53	\$1,359.30	26.1%	-5.5%	62.8%
		Ohio	\$46.11	\$46.93	\$47.91	\$49.11	\$49.67	\$51.09	\$51.90	\$52.58	\$53.33	\$54.30	\$51.21	17.5%	-5.7%	41.1%
71	Arts, entertainment & recreation	U.S.	\$159.16	\$163.78	\$171.78	\$174.92	\$182.69	\$179.42	\$185.70	\$191.86	\$199.44	\$204.26	\$132.05	35.0%	-35.4%	-4.2%
		Ohio	\$5.23	\$5.33	\$5.91	\$6.45	\$6.35	\$6.12	\$6.47	\$6.54	\$6.50	\$6.21	\$4.59	34.0%	-26.0%	-19.1%
72	Accommodation & food services	U.S.	\$427.24	\$443.73	\$450.96	\$460.59	\$475.85	\$499.29	\$504.92	\$515.81	\$521.17	\$530.93	\$383.58	28.6%	-27.8%	-9.7%
		Ohio	\$11.40	\$11.92	\$12.28	\$12.99	\$13.52	\$14.01	\$14.03	\$14.03	\$13.85	\$14.06	\$10.64	27.1%	-24.3%	-17.7%
81	Other services (exc. Government)	U.S.	\$346.17	\$343.32	\$348.58	\$345.70	\$355.71	\$357.72	\$354.81	\$357.03	\$368.81	\$368.84	\$322.97	4.6%	-12.4%	-25.1%
		Ohio	\$11.01	\$11.15	\$11.40	\$11.20	\$11.53	\$11.61	\$11.46	\$11.59	\$11.86	\$11.81	\$10.35	5.4%	-12.4%	-36.3%
92	Government <sup>2</sup>	U.S.	\$2,182.73	\$2,175.79	\$2,159.49	\$2,144.29	\$2,139.64	\$2,142.19	\$2,163.35	\$2,184.63	\$2,203.00	\$2,216.26	\$2,195.49	2.1%	-0.9%	11.0%
		Ohio	\$64.13	\$63.18	\$63.25	\$62.14	\$61.47	\$61.13	\$61.98	\$62.53	\$62.16	\$62.55	\$61.75	-0.4%	-1.3%	-6.4%

Notes and abbreviations: ^ - a recession year, either partially or entirely, for the nation as a whole; \* - preliminary; prior years may be revised; 1 - excludes U.S. Postal Service (NAICS 491); 2 - includes U.S. Postal Service; p - part; # - components may not sum to totals due to rounding and/or different inflators/deflators used for different sectors; n.a. - not available.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A3b: Annualized GDP by Quarter and Sector in the U.S. and Ohio, 2019-2021 (in billions, standardized on 2012)\***

Area	NAICS Code	Sector										Percentage Changes			
			2019 Q2	2019 Q3	2019 Q4	2020 Q1^	2020 Q2^	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2019 Q4-2020 Q2	2020 Q2-2021 Q3	2019 Q4-2021 Q3
U.S.	11-92	All industry total	\$18,982.5	\$19,112.7	\$19,202.3	\$18,952.0	\$17,258.2	\$18,560.8	\$18,767.8	\$19,055.7	\$19,368.3	\$19,478.9	-10.1%	12.9%	1.4%
Ohio	11-92	All industry total	\$609.7	\$613.6	\$615.2	\$607.6	\$549.3	\$598.4	\$604.3	\$609.2	\$613.7	\$615.3	-10.7%	12.0%	0.0%
U.S.	11-81	Private industries	\$16,726.9	\$16,852.8	\$16,918.6	\$16,662.5	\$15,052.8	\$16,327.1	\$16,526.9	\$16,812.2	\$17,104.6	\$17,186.5	-11.0%	14.2%	1.6%
Ohio	11-81	Private industries	\$547.4	\$551.6	\$552.0	\$544.4	\$488.8	\$537.0	\$542.9	\$547.6	\$551.7	\$552.4	-11.4%	13.0%	0.1%
U.S.	11	Agriculture, forestry, fishing & hunting	\$221.7	\$222.6	\$228.4	\$259.5	\$236.1	\$261.7	\$261.3	\$251.7	\$243.0	\$237.4	3.4%	0.5%	3.9%
Ohio	11	Agriculture, forestry, fishing & hunting	\$3.9	\$4.3	\$4.2	\$6.7	\$5.4	\$5.7	\$5.7	\$6.2	\$6.5	\$6.4	29.9%	18.5%	54.0%
U.S.	21	Mining, quarrying & oil-gas extraction	\$486.5	\$499.9	\$491.1	\$495.5	\$433.1	\$412.9	\$412.8	\$409.2	\$416.5	\$408.0	-11.8%	-5.8%	-16.9%
Ohio	21	Mining, quarrying & oil-gas extraction	\$8.0	\$8.4	\$9.0	\$10.3	\$10.0	\$10.2	\$10.3	\$10.6	\$10.5	\$10.1	11.1%	0.6%	11.8%
U.S.	23	Construction	\$676.0	\$676.5	\$671.9	\$664.7	\$614.1	\$653.0	\$670.0	\$679.7	\$690.7	\$665.3	-8.6%	8.3%	-1.0%
Ohio	23	Construction	\$19.4	\$19.5	\$19.8	\$19.7	\$17.7	\$18.9	\$19.5	\$20.2	\$19.6	\$19.0	-10.8%	7.3%	-4.2%
U.S.	31-33	Manufacturing	\$2,228.9	\$2,258.2	\$2,253.4	\$2,225.8	\$1,966.6	\$2,228.3	\$2,250.4	\$2,298.1	\$2,329.2	\$2,320.2	-12.7%	18.0%	3.0%
Ohio	31-33	Manufacturing	\$104.5	\$106.0	\$104.4	\$104.2	\$88.2	\$105.1	\$105.6	\$106.6	\$107.7	\$106.5	-15.5%	20.8%	2.0%
U.S.	32-33D	Durable goods mfg.	\$1,240.4	\$1,237.8	\$1,240.0	\$1,217.2	\$1,048.3	\$1,214.0	\$1,233.6	\$1,272.0	\$1,285.5	\$1,277.4	-15.5%	21.9%	3.0%
Ohio	32-33D	Durable goods mfg.	\$56.4	\$56.3	\$56.7	\$55.9	\$44.5	\$54.4	\$55.2	\$55.5	\$56.5	\$55.8	-21.6%	25.5%	-1.5%
U.S.	31-32N	Nondurable goods mfg.	\$987.5	\$1,019.9	\$1,013.0	\$1,008.7	\$920.3	\$1,014.4	\$1,016.3	\$1,025.2	\$1,042.8	\$1,041.7	-9.2%	13.2%	2.8%
Ohio	31-32N	Nondurable goods mfg.	\$48.2	\$49.8	\$47.7	\$48.4	\$44.1	\$51.0	\$50.5	\$51.3	\$51.5	\$50.9	-7.6%	15.4%	6.6%
U.S.	22	Utilities	\$291.0	\$282.1	\$297.5	\$297.8	\$299.8	\$302.7	\$294.0	\$287.5	\$290.2	\$277.7	0.8%	-7.4%	-6.7%
Ohio	22	Utilities	\$9.6	\$9.2	\$9.6	\$9.5	\$9.6	\$9.5	\$9.5	\$8.8	\$9.2	\$8.8	0.4%	-8.2%	-7.9%
U.S.	42	Wholesale trade	\$1,094.4	\$1,102.9	\$1,107.0	\$1,116.1	\$1,010.2	\$1,106.4	\$1,102.8	\$1,112.0	\$1,122.2	\$1,098.8	-8.7%	8.8%	-0.7%
Ohio	42	Wholesale trade	\$37.4	\$37.8	\$37.7	\$37.4	\$34.0	\$37.1	\$36.9	\$36.9	\$37.1	\$36.1	-9.9%	6.2%	-4.3%
U.S.	44-45	Retail trade	\$1,116.4	\$1,129.7	\$1,134.0	\$1,113.5	\$1,013.0	\$1,117.5	\$1,118.0	\$1,162.8	\$1,117.5	\$1,076.1	-10.7%	6.2%	-5.1%
Ohio	44-45	Retail trade	\$37.6	\$37.9	\$38.2	\$37.4	\$34.7	\$38.1	\$37.5	\$39.6	\$36.8	\$35.5	-9.2%	2.4%	-7.0%
U.S.	48-49	Transportation & warehousing	\$565.4	\$571.4	\$567.5	\$554.0	\$427.3	\$487.0	\$492.7	\$503.4	\$490.7	\$505.0	-24.7%	18.2%	-11.0%
Ohio	48-49	Transportation & warehousing	\$18.8	\$19.3	\$19.5	\$19.8	\$16.2	\$19.3	\$19.5	\$20.2	\$18.7	\$19.4	-17.1%	19.9%	-0.6%
U.S.	51	Information	\$1,248.7	\$1,266.4	\$1,282.4	\$1,276.9	\$1,255.8	\$1,323.4	\$1,330.0	\$1,376.4	\$1,456.0	\$1,484.3	-2.1%	18.2%	15.7%
Ohio	51	Information	\$19.4	\$19.6	\$19.7	\$19.2	\$18.8	\$19.5	\$19.0	\$19.3	\$20.6	\$21.0	-4.6%	11.6%	6.4%
U.S.	52	Finance & insurance	\$1,220.6	\$1,213.5	\$1,243.4	\$1,202.8	\$1,235.0	\$1,272.1	\$1,328.3	\$1,352.3	\$1,363.8	\$1,389.8	-0.7%	12.5%	11.8%
Ohio	52	Finance & insurance	\$53.7	\$54.6	\$55.6	\$53.1	\$53.9	\$55.0	\$58.2	\$56.2	\$57.8	\$58.9	-2.9%	9.1%	5.9%
U.S.	53	Real estate, rental & leasing	\$2,335.8	\$2,347.5	\$2,349.1	\$2,344.4	\$2,265.6	\$2,311.3	\$2,306.0	\$2,335.6	\$2,363.9	\$2,376.7	-3.6%	4.9%	1.2%
Ohio	53	Real estate, rental & leasing	\$66.8	\$66.8	\$66.1	\$64.8	\$62.6	\$63.3	\$63.0	\$63.7	\$64.5	\$64.6	-5.2%	3.2%	-2.2%
U.S.	54	Professional, scientific & technical services	\$1,519.3	\$1,544.0	\$1,552.9	\$1,544.4	\$1,428.5	\$1,505.9	\$1,525.9	\$1,562.8	\$1,619.4	\$1,667.2	-8.0%	16.7%	7.4%
Ohio	54	Professional, scientific & technical services	\$34.4	\$34.9	\$34.9	\$34.3	\$31.3	\$32.9	\$32.9	\$33.9	\$34.7	\$35.7	-10.3%	14.0%	2.2%
U.S.	55	Mgt. of companies & enterprises	\$432.9	\$434.1	\$437.6	\$436.5	\$426.2	\$433.4	\$463.1	\$472.0	\$474.6	\$483.7	-2.6%	13.5%	10.5%
Ohio	55	Mgt. of companies & enterprises	\$23.4	\$23.6	\$23.6	\$24.4	\$23.0	\$24.3	\$26.1	\$25.3	\$24.9	\$25.3	-2.5%	10.2%	7.5%
U.S.	56	Administrative-support & waste mgt.-remediation services	\$581.4	\$586.2	\$587.2	\$578.6	\$495.4	\$549.6	\$575.5	\$604.1	\$618.2	\$641.5	-15.6%	29.5%	9.2%
Ohio	56	Administrative-support & waste mgt.-remediation services	\$18.1	\$18.1	\$18.1	\$17.6	\$14.9	\$16.9	\$18.0	\$19.1	\$18.9	\$19.7	-17.5%	31.9%	8.8%
U.S.	61	Educational services	\$230.6	\$229.8	\$226.8	\$221.9	\$194.2	\$201.6	\$194.3	\$198.2	\$202.6	\$206.7	-14.4%	6.4%	-8.9%
Ohio	61	Educational services	\$5.4	\$5.3	\$5.2	\$5.1	\$4.4	\$4.6	\$4.4	\$4.4	\$4.6	\$4.6	-15.4%	4.3%	-11.7%
U.S.	62	Health care & social assistance	\$1,435.5	\$1,443.2	\$1,448.4	\$1,418.3	\$1,207.4	\$1,390.9	\$1,420.6	\$1,411.8	\$1,431.5	\$1,440.7	-16.6%	19.3%	-0.5%
Ohio	62	Health care & social assistance	\$54.5	\$54.3	\$54.2	\$53.3	\$46.2	\$52.4	\$53.0	\$52.0	\$53.5	\$53.8	-14.8%	16.5%	-0.8%
U.S.	71	Arts, entertainment & recreation	\$201.2	\$206.9	\$208.7	\$187.1	\$86.1	\$121.0	\$134.0	\$144.8	\$150.3	\$164.4	-58.8%	91.0%	-21.2%
Ohio	71	Arts, entertainment & recreation	\$6.2	\$6.1	\$6.3	\$6.4	\$2.7	\$4.5	\$4.8	\$5.4	\$5.3	\$5.6	-56.7%	104.7%	-11.4%
U.S.	72	Accommodation & food services	\$529.7	\$537.6	\$529.4	\$473.3	\$275.5	\$398.4	\$387.1	\$397.7	\$466.1	\$486.2	-48.0%	76.5%	-8.2%
Ohio	72	Accommodation & food services	\$14.0	\$14.0	\$14.1	\$12.3	\$8.1	\$11.5	\$10.7	\$11.5	\$12.7	\$13.2	-42.8%	63.0%	-6.8%
U.S.	81	Other services (exc. govt. & govt. enterprises)	\$367.2	\$370.0	\$369.6	\$355.8	\$285.2	\$324.5	\$326.4	\$318.9	\$332.0	\$337.2	-22.8%	18.2%	-8.8%
Ohio	81	Other services (exc. govt. & govt. enterprises)	\$11.8	\$11.8	\$11.8	\$11.4	\$9.1	\$10.5	\$10.4	\$10.2	\$10.6	\$10.7	-22.7%	17.4%	-9.2%
U.S.	92	Government & government enterprises	\$2,212.5	\$2,217.8	\$2,240.4	\$2,242.6	\$2,155.2	\$2,189.5	\$2,194.6	\$2,199.9	\$2,218.3	\$2,245.9	-3.8%	4.2%	0.2%
Ohio	92	Government & government enterprises	\$62.5	\$62.3	\$63.4	\$63.3	\$60.3	\$61.6	\$61.7	\$61.9	\$62.3	\$63.1	-4.8%	4.7%	-0.4%
U.S.	92C	Federal civilian	\$419.0	\$421.4	\$423.1	\$426.5	\$430.8	\$441.2	\$435.2	\$432.7	\$431.9	\$432.8	1.8%	0.5%	2.3%
Ohio	92C	Federal civilian	\$10.8	\$10.8	\$10.9	\$11.0	\$11.0	\$11.3	\$11.0	\$11.0	\$10.9	\$10.9	1.5%	-1.1%	0.5%
U.S.	92M	Military	\$181.2	\$182.5	\$183.1	\$183.0	\$186.6	\$185.9	\$185.1	\$186.4	\$185.7	\$183.4	1.9%	-1.7%	0.2%
Ohio	92M	Military	\$3.9	\$4.0	\$4.0	\$4.1	\$4.2	\$4.2	\$4.2	\$4.3	\$4.2	\$4.1	3.4%	-1.5%	1.9%
U.S.	92SL	State & local	\$1,497.7	\$1,499.2	\$1,517.8	\$1,515.9	\$1,424.8	\$1,450.3	\$1,458.8	\$1,464.7	\$1,482.0	\$1,508.6	-6.1%	5.9%	-0.6%
Ohio	92SL	State & local	\$47.9	\$47.6	\$48.5	\$48.3	\$45.2	\$46.2	\$46.6	\$46.8	\$47.3	\$48.2	-6.8%	6.5%	-0.7%

Note: \* - Inflation-adjusted estimates for sectors usually do not sum to higher levels because weights vary by industry; ^ - an overall recession quarter.

Source: U.S. BEA (SQGDP9 Real GDP by state) [machine-readable data file] / prepared by the Bureau. Washington, D.C.: the Bureau [producer & distributor], 2022.

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 2/22).

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**Table A4: Comparing Ohio and U.S. GDP by Industry - Durable Goods, 2008-2020**

		Dollar figures in Billions													Nominal Net
2012 NAICS	Industry Title	2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020**	Change
<b>Durable Goods in Current Dollars</b>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
32p & 33	Durable goods summary: Ohio	\$56.31	\$38.72	\$44.45	\$50.30	\$52.33	\$53.75	\$57.32	\$59.19	\$59.22	\$61.32	\$60.57	\$62.00	\$57.59	
	U.S.	\$1,000.23	\$880.38	\$965.54	\$1,017.89	\$1,065.21	\$1,104.49	\$1,135.60	\$1,184.40	\$1,187.78	\$1,235.45	\$1,298.88	\$1,327.90	\$1,268.83	
	Ohio as percent of U.S.	5.63%	4.40%	4.60%	4.94%	4.91%	4.87%	5.05%	5.00%	4.99%	4.96%	4.66%	4.67%	4.54%	-1.09%
	Concentration ratio - Ohio::U.S.	1.67	1.32	1.38	1.46	1.46	1.45	1.49	1.49	1.50	1.51	1.44	1.44	1.40	-0.27
321	Wood products: Ohio	\$0.83	\$0.70	\$0.78	\$0.80	\$0.72	\$0.78	\$0.94	\$0.93	\$1.06	\$1.17	\$1.19	\$1.29	\$1.36	
	U.S.	\$25.62	\$21.21	\$23.32	\$23.68	\$25.82	\$30.54	\$30.98	\$32.50	\$35.33	\$37.92	\$39.22	\$39.94	\$42.24	
	Ohio as percent of U.S.	3.24%	3.31%	3.34%	3.40%	2.80%	2.56%	3.02%	2.85%	2.99%	3.09%	3.03%	3.23%	3.23%	-0.01%
	Concentration ratio - Ohio::U.S.	0.96	0.99	1.01	1.00	0.83	0.76	0.89	0.85	0.90	0.94	0.93	1.00	0.99	0.03
327	Nonmetallic mineral products: Ohio	\$2.70	\$2.44	\$2.61	\$2.76	\$3.13	\$3.32	\$3.26	\$3.23	\$3.37	\$3.66	\$3.86	\$4.18	\$4.25	
	U.S.	\$44.77	\$38.84	\$38.40	\$38.93	\$42.71	\$47.23	\$49.60	\$54.70	\$57.50	\$61.79	\$62.78	\$65.10	\$66.75	
	Ohio as percent of U.S.	6.04%	6.28%	6.79%	7.09%	7.33%	7.03%	6.58%	5.90%	5.86%	5.93%	6.14%	6.41%	6.36%	0.32%
	Concentration ratio - Ohio::U.S.	1.80	1.89	2.04	2.09	2.18	2.09	1.94	1.76	1.76	1.80	1.89	1.98	1.96	0.17
331	Primary metals: Ohio	\$7.65	\$2.98	\$4.83	\$6.14	\$5.55	\$5.66	\$6.04	\$6.57	\$5.91	\$5.33	\$5.33	\$5.19	\$4.76	
	U.S.	\$68.86	\$41.10	\$50.93	\$62.65	\$65.76	\$62.46	\$64.15	\$60.09	\$56.86	\$59.08	\$67.09	\$66.23	\$58.31	
	Ohio as percent of U.S.	11.10%	7.24%	9.49%	9.80%	8.44%	9.06%	9.42%	10.93%	10.40%	9.02%	7.94%	7.83%	8.16%	-2.94%
	Concentration ratio - Ohio::U.S.	3.30	2.17	2.85	2.90	2.51	2.69	2.78	3.26	3.12	2.74	2.44	2.42	2.52	-0.78
332	Fabricated metal products: Ohio	\$11.88	\$8.76	\$9.66	\$10.57	\$10.82	\$10.78	\$11.19	\$11.26	\$10.73	\$11.43	\$11.18	\$11.77	\$10.15	
	U.S.	\$133.18	\$117.29	\$120.01	\$127.44	\$137.98	\$141.89	\$144.08	\$147.42	\$146.04	\$149.91	\$155.44	\$162.93	\$145.81	
	Ohio as percent of U.S.	8.92%	7.47%	8.05%	8.29%	7.84%	7.60%	7.77%	7.64%	7.35%	7.62%	7.19%	7.22%	6.96%	-1.96%
	Concentration ratio - Ohio::U.S.	2.65	2.24	2.42	2.45	2.34	2.26	2.29	2.28	2.20	2.31	2.21	2.23	2.15	-0.51
333	Machinery: Ohio	\$7.16	\$5.86	\$6.25	\$7.38	\$7.51	\$8.78	\$8.77	\$8.70	\$8.78	\$9.51	\$9.02	\$8.99	\$8.43	
	U.S.	\$131.70	\$118.53	\$127.35	\$144.86	\$152.99	\$158.53	\$161.11	\$152.54	\$143.77	\$153.67	\$161.93	\$167.47	\$157.57	
	Ohio as percent of U.S.	5.44%	4.95%	4.91%	5.09%	4.91%	5.54%	5.44%	5.70%	6.10%	6.19%	5.57%	5.37%	5.35%	-0.08%
	Concentration ratio - Ohio::U.S.	1.62	1.49	1.48	1.50	1.46	1.65	1.60	1.70	1.83	1.88	1.71	1.65	1.65	0.03
334	Computer & electronic products: Ohio	\$3.37	\$2.10	\$2.39	\$2.21	\$2.72	\$2.74	\$2.74	\$2.40	\$2.24	\$2.64	\$2.91	\$2.75	\$2.73	
	U.S.	\$232.23	\$223.53	\$240.16	\$237.79	\$241.26	\$244.62	\$251.54	\$267.47	\$268.06	\$279.89	\$304.67	\$307.67	\$317.34	
	Ohio as percent of U.S.	1.45%	0.94%	1.00%	0.93%	1.13%	1.12%	1.09%	0.90%	0.84%	0.94%	0.95%	0.89%	0.86%	-0.59%
	Concentration ratio - Ohio::U.S.	0.43	0.28	0.30	0.27	0.34	0.33	0.32	0.27	0.25	0.29	0.29	0.28	0.27	-0.17
335	Electrical eqpt. & appliances: Ohio	\$4.48	\$3.89	\$3.72	\$3.58	\$3.97	\$3.99	\$3.93	\$4.75	\$4.52	\$4.64	\$4.76	\$4.99	\$4.84	
	U.S.	\$55.51	\$50.64	\$50.78	\$48.31	\$52.15	\$58.10	\$54.43	\$63.67	\$58.46	\$60.77	\$65.06	\$65.00	\$63.60	
	Ohio as percent of U.S.	8.07%	7.69%	7.32%	7.41%	7.62%	6.87%	7.23%	7.47%	7.73%	7.63%	7.31%	7.68%	7.61%	-0.46%
	Concentration ratio - Ohio::U.S.	2.40	2.31	2.20	2.19	2.27	2.04	2.13	2.22	2.32	2.32	2.25	2.37	2.35	-0.05
3361-3	Motor vehicles, bodies, trailers & parts: Ohio	\$10.05	\$3.99	\$6.83	\$9.04	\$10.69	\$10.07	\$11.92	\$12.20	\$12.29	\$11.49	\$11.34	\$11.63	\$10.87	
	U.S.	\$90.34	\$47.77	\$88.81	\$104.52	\$115.77	\$123.10	\$132.75	\$146.34	\$155.48	\$158.45	\$157.76	\$158.69	\$154.64	
	Ohio as percent of U.S.	11.13%	8.35%	7.70%	8.65%	9.23%	8.18%	8.98%	8.34%	7.90%	7.25%	7.19%	7.33%	7.03%	-4.10%
	Concentration ratio - Ohio::U.S.	3.31	2.51	2.31	2.55	2.75	2.43	2.65	2.48	2.37	2.20	2.21	2.26	2.17	-1.14
3364-9	Other transportation eqpt.: Ohio	\$5.06	\$5.06	\$4.61	\$5.05	\$4.39	\$4.82	\$5.43	\$5.95	\$6.99	\$7.98	\$7.36	\$7.53	\$6.32	
	U.S.	\$114.59	\$117.37	\$120.77	\$127.20	\$126.90	\$133.41	\$139.35	\$149.18	\$148.45	\$152.87	\$158.74	\$165.70	\$130.47	
	Ohio as percent of U.S.	4.42%	4.31%	3.82%	3.97%	3.46%	3.61%	3.90%	3.99%	4.71%	5.22%	4.63%	4.54%	4.85%	0.43%
	Concentration ratio - Ohio::U.S.	1.31	1.29	1.15	1.17	1.03	1.07	1.15	1.19	1.41	1.58	1.43	1.40	1.49	0.18
337	Furniture & related products: Ohio	\$1.15	\$0.92	\$0.79	\$0.87	\$0.80	\$0.83	\$0.95	\$1.04	\$1.11	\$1.08	\$1.13	\$1.15	\$1.15	
	U.S.	\$27.86	\$22.81	\$21.85	\$21.98	\$22.42	\$24.04	\$25.76	\$29.15	\$30.29	\$29.94	\$31.10	\$32.25	\$31.53	
	Ohio as percent of U.S.	4.13%	4.04%	3.60%	3.94%	3.57%	3.44%	3.68%	3.57%	3.66%	3.59%	3.65%	3.58%	3.64%	-0.50%
	Concentration ratio - Ohio::U.S.	1.23	1.21	1.08	1.16	1.06	1.02	1.09	1.06	1.10	1.09	1.12	1.10	1.12	-0.11
339	Miscellaneous mfg.: Ohio	\$1.97	\$2.01	\$1.98	\$1.91	\$2.03	\$1.97	\$2.14	\$2.17	\$2.22	\$2.41	\$2.50	\$2.53	\$2.73	
	U.S.	\$75.57	\$81.30	\$83.17	\$80.53	\$81.44	\$80.57	\$81.84	\$81.33	\$87.53	\$91.16	\$95.09	\$96.91	\$100.57	
	Ohio as percent of U.S.	2.61%	2.47%	2.38%	2.37%	2.50%	2.44%	2.62%	2.67%	2.54%	2.64%	2.63%	2.61%	2.71%	0.11%
	Concentration ratio - Ohio::U.S.	0.77	0.74	0.72	0.70	0.74	0.73	0.77	0.79	0.76	0.80	0.81	0.81	0.84	0.06

Notes: ^ - a recession year for the nation as a whole; \* - initial for specific industries, revised for higher levels; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A4: Comparing Ohio and U.S. GDP by Industry - Durable Goods, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS	Industry Title	2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	Numeric	Percent
<b>Durable Goods in Constant Dollars</b>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
32p & 33	Durable goods summary: Ohio	\$58.85	\$38.48	\$45.23	\$51.55	\$52.33	\$53.04	\$55.38	\$55.21	\$55.11	\$56.93	\$55.85	\$56.29	\$52.50	-\$6.35	-10.8%
	U.S.	\$1,004.51	\$858.23	\$968.84	\$1,035.63	\$1,065.21	\$1,090.33	\$1,106.78	\$1,124.00	\$1,126.00	\$1,172.76	\$1,229.39	\$1,239.16	\$1,178.28	\$173.78	17.3%
	Ohio as percent of U.S.	5.86%	4.48%	4.67%	4.98%	4.91%	4.86%	5.00%	4.91%	4.89%	4.85%	4.54%	4.54%	4.46%	-1.40%	
	Concentration ratio - Ohio::U.S.	1.71	1.34	1.39	1.46	1.46	1.45	1.48	1.48	1.48	1.49	1.41	1.41	1.39	-0.32	
321	Wood products: Ohio	\$0.82	\$0.71	\$0.77	\$0.86	\$0.72	\$0.68	\$0.73	\$0.76	\$0.84	\$0.90	\$0.84	\$0.95	\$0.92	\$0.10	11.9%
	U.S.	\$25.32	\$21.52	\$22.94	\$25.44	\$25.82	\$26.48	\$24.24	\$26.51	\$28.25	\$29.01	\$27.57	\$29.51	\$28.44	\$3.12	12.3%
	Ohio as percent of U.S.	3.24%	3.31%	3.34%	3.40%	2.80%	2.56%	3.02%	2.85%	2.99%	3.09%	3.03%	3.23%	3.23%	-0.01%	
	Concentration ratio - Ohio::U.S.	0.94	0.99	1.00	1.00	0.83	0.76	0.89	0.86	0.91	0.95	0.94	1.01	1.01	0.06	
327	Nonmetallic mineral products: Ohio	\$2.83	\$2.38	\$2.63	\$2.88	\$3.13	\$3.18	\$3.02	\$2.74	\$2.70	\$2.92	\$3.01	\$3.19	\$3.14	\$0.31	11.0%
	U.S.	\$46.85	\$37.84	\$38.73	\$40.55	\$42.71	\$45.23	\$45.84	\$46.38	\$46.06	\$49.29	\$49.07	\$49.67	\$49.35	\$2.50	5.3%
	Ohio as percent of U.S.	6.04%	6.28%	6.79%	7.09%	7.33%	7.03%	6.58%	5.90%	5.86%	5.93%	6.14%	6.41%	6.36%	0.32%	
	Concentration ratio - Ohio::U.S.	1.76	1.87	2.03	2.08	2.18	2.09	1.94	1.77	1.77	1.81	1.91	2.00	1.98	0.22	
331	Primary metals: Ohio	\$5.94	\$3.61	\$4.83	\$5.54	\$5.55	\$6.31	\$6.42	\$8.17	\$8.24	\$6.38	\$5.78	\$6.25	\$7.44	\$1.49	25.1%
	U.S.	\$53.53	\$49.91	\$50.87	\$56.52	\$65.76	\$69.60	\$68.16	\$74.73	\$79.27	\$70.76	\$72.84	\$79.75	\$91.10	\$37.57	70.2%
	Ohio as percent of U.S.	11.10%	7.24%	9.49%	9.80%	8.44%	9.06%	9.42%	10.93%	10.40%	9.02%	7.94%	7.83%	8.16%	-2.94%	
	Concentration ratio - Ohio::U.S.	3.23	2.16	2.83	2.88	2.51	2.70	2.78	3.28	3.15	2.76	2.47	2.44	2.54	-0.69	
332	Fabricated metal products: Ohio	\$13.50	\$8.53	\$10.11	\$11.08	\$10.82	\$10.42	\$10.83	\$10.29	\$9.63	\$10.57	\$10.24	\$10.22	\$8.58	-\$4.91	-36.4%
	U.S.	\$151.24	\$114.22	\$125.64	\$133.62	\$137.98	\$137.08	\$139.47	\$134.73	\$131.03	\$138.68	\$142.28	\$141.53	\$123.26	-\$27.98	-18.5%
	Ohio as percent of U.S.	8.92%	7.47%	8.05%	8.29%	7.84%	7.60%	7.77%	7.64%	7.35%	7.62%	7.19%	7.22%	6.96%	-1.96%	
	Concentration ratio - Ohio::U.S.	2.60	2.23	2.40	2.43	2.34	2.26	2.29	2.29	2.23	2.33	2.24	2.25	2.17	-0.43	
333	Machinery: Ohio	\$7.97	\$5.84	\$6.49	\$7.71	\$7.51	\$8.43	\$8.18	\$7.70	\$7.57	\$8.31	\$7.93	\$7.54	\$6.86	-\$1.11	-14.0%
	U.S.	\$146.69	\$118.05	\$132.28	\$151.35	\$152.99	\$152.06	\$150.34	\$134.93	\$124.07	\$134.34	\$142.47	\$140.49	\$128.18	-\$18.51	-12.6%
	Ohio as percent of U.S.	5.44%	4.95%	4.91%	5.09%	4.91%	5.54%	5.44%	5.70%	6.10%	6.19%	5.57%	5.37%	5.35%	-0.08%	
	Concentration ratio - Ohio::U.S.	1.58	1.47	1.47	1.50	1.46	1.65	1.60	1.71	1.85	1.89	1.73	1.67	1.67	0.09	
334	Computer & electronic products: Ohio	\$2.84	\$1.89	\$2.26	\$2.16	\$2.72	\$2.79	\$2.85	\$2.53	\$2.44	\$2.88	\$3.21	\$3.04	\$3.02	\$0.18	6.2%
	U.S.	\$195.98	\$200.37	\$227.09	\$232.69	\$241.26	\$248.44	\$261.21	\$282.30	\$291.04	\$305.63	\$336.24	\$340.69	\$350.96	\$154.98	79.1%
	Ohio as percent of U.S.	1.45%	0.94%	1.00%	0.93%	1.13%	1.12%	1.09%	0.90%	0.84%	0.94%	0.95%	0.89%	0.86%	-0.59%	
	Concentration ratio - Ohio::U.S.	0.42	0.28	0.30	0.27	0.34	0.33	0.32	0.27	0.25	0.29	0.30	0.28	0.27	-0.15	
335	Electrical eqpt. & appliances: Ohio	\$4.95	\$3.93	\$3.86	\$3.78	\$3.97	\$3.94	\$3.87	\$4.59	\$4.38	\$4.56	\$4.50	\$4.54	\$4.40	-\$0.56	-11.3%
	U.S.	\$61.37	\$51.11	\$52.78	\$51.03	\$52.15	\$57.35	\$53.60	\$61.44	\$56.71	\$59.66	\$61.56	\$59.09	\$57.75	-\$3.62	-5.9%
	Ohio as percent of U.S.	8.07%	7.69%	7.32%	7.41%	7.62%	6.87%	7.23%	7.47%	7.73%	7.63%	7.31%	7.68%	7.61%	-0.46%	
	Concentration ratio - Ohio::U.S.	2.35	2.29	2.19	2.17	2.27	2.04	2.13	2.24	2.34	2.34	2.27	2.39	2.37	0.02	
3361-3	Motor vehicles, bodies, trailers & parts: Ohio	\$11.08	\$3.61	\$6.71	\$9.55	\$10.69	\$9.87	\$11.26	\$10.28	\$10.19	\$9.74	\$10.05	\$10.36	\$9.71	-\$1.37	-12.4%
	U.S.	\$99.58	\$43.26	\$87.14	\$110.44	\$115.77	\$120.65	\$125.34	\$123.34	\$128.92	\$134.39	\$139.83	\$141.32	\$138.17	\$38.59	38.8%
	Ohio as percent of U.S.	11.13%	8.35%	7.70%	8.65%	9.23%	8.18%	8.98%	8.34%	7.90%	7.25%	7.19%	7.33%	7.03%	-4.10%	
	Concentration ratio - Ohio::U.S.	3.24	2.49	2.30	2.54	2.75	2.43	2.65	2.50	2.39	2.22	2.23	2.28	2.19	-1.05	
3364-9	Other transportation eqpt.: Ohio	\$5.50	\$5.22	\$4.75	\$5.14	\$4.39	\$4.71	\$5.20	\$5.55	\$6.45	\$7.34	\$6.74	\$6.77	\$5.57	\$0.07	1.3%
	U.S.	\$124.43	\$121.09	\$124.44	\$129.57	\$126.90	\$130.43	\$133.42	\$139.24	\$137.04	\$140.51	\$145.42	\$148.97	\$114.93	-\$9.50	-7.6%
	Ohio as percent of U.S.	4.42%	4.31%	3.82%	3.97%	3.46%	3.61%	3.90%	3.99%	4.71%	5.22%	4.63%	4.54%	4.85%	0.43%	
	Concentration ratio - Ohio::U.S.	1.29	1.28	1.14	1.17	1.03	1.08	1.15	1.20	1.43	1.60	1.44	1.42	1.51	0.22	
337	Furniture & related products: Ohio	\$1.28	\$0.91	\$0.81	\$0.90	\$0.80	\$0.82	\$0.94	\$0.98	\$1.01	\$0.99	\$1.05	\$1.01	\$0.97	-\$0.31	-24.5%
	U.S.	\$30.98	\$22.50	\$22.62	\$22.94	\$22.42	\$23.97	\$25.47	\$27.31	\$27.70	\$27.57	\$28.89	\$28.32	\$26.58	-\$4.40	-14.2%
	Ohio as percent of U.S.	4.13%	4.04%	3.60%	3.94%	3.57%	3.44%	3.68%	3.57%	3.66%	3.59%	3.65%	3.58%	3.64%	-0.50%	
	Concentration ratio - Ohio::U.S.	1.20	1.20	1.07	1.16	1.06	1.02	1.09	1.07	1.11	1.10	1.13	1.11	1.13	-0.07	
339	Miscellaneous mfg.: Ohio	\$2.07	\$2.00	\$2.01	\$1.95	\$2.03	\$1.94	\$2.11	\$2.07	\$2.10	\$2.28	\$2.37	\$2.31	\$2.41	\$0.34	16.6%
	U.S.	\$79.36	\$81.01	\$84.33	\$82.05	\$81.44	\$79.29	\$80.68	\$77.49	\$82.62	\$86.51	\$90.38	\$88.32	\$88.92	\$9.56	12.0%
	Ohio as percent of U.S.	2.61%	2.47%	2.38%	2.37%	2.50%	2.44%	2.62%	2.67%	2.54%	2.64%	2.63%	2.61%	2.71%	0.11%	
	Concentration ratio - Ohio::U.S.	0.76	0.74	0.71	0.70	0.74	0.73	0.77	0.80	0.77	0.81	0.82	0.81	0.85	0.09	

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).



**Table A5: Comparing Ohio and U.S. GDP by Industry - Non-durable Goods, 2008-2020**

2012 NAICS	Industry Title	Dollar figures in Billions													Nominal Net Change
		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	
<b>Non-durable Goods in Current Dollars</b>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
31 & 32p	Non-durable goods summary: Ohio	\$30.28	\$36.63	\$37.14	\$41.19	\$39.72	\$40.80	\$47.82	\$44.85	\$43.61	\$44.88	\$48.61	\$49.04	\$47.71	
	U.S.	\$801.85	\$820.47	\$834.26	\$855.70	\$869.45	\$892.81	\$917.90	\$946.60	\$915.08	\$963.83	\$1,035.27	\$1,043.05	\$1,003.13	
	Ohio as percent of U.S.	3.78%	4.46%	4.45%	4.81%	4.57%	4.57%	5.21%	4.74%	4.77%	4.66%	4.70%	4.70%	4.76%	0.98%
	Concentration ratio - Ohio::U.S.	1.12	1.34	1.34	1.42	1.36	1.36	1.54	1.41	1.43	1.41	1.44	1.45	1.47	0.34
311-2	Food, beverage & tobacco products: Ohio	\$8.16	\$9.85	\$9.32	\$8.86	\$9.57	\$10.69	\$11.62	\$11.92	\$11.82	\$12.01	\$11.42	\$11.60	\$12.32	
	U.S.	\$199.28	\$237.65	\$223.52	\$209.80	\$220.06	\$228.45	\$238.87	\$261.92	\$264.65	\$267.43	\$265.18	\$277.76	\$289.76	
	Ohio as percent of U.S.	4.09%	4.15%	4.17%	4.22%	4.35%	4.68%	4.87%	4.55%	4.47%	4.49%	4.31%	4.18%	4.25%	0.16%
	Concentration ratio - Ohio::U.S.	1.22	1.24	1.25	1.25	1.29	1.39	1.43	1.36	1.34	1.36	1.33	1.29	1.31	0.09
313-4	Textile & textile product mills: Ohio	\$0.36	\$0.30	\$0.36	\$0.35	\$0.32	\$0.38	\$0.39	\$0.38	\$0.33	\$0.34	\$0.37	\$0.38	\$0.37	
	U.S.	\$17.84	\$15.12	\$15.55	\$15.07	\$15.97	\$16.77	\$17.84	\$17.94	\$18.58	\$17.68	\$16.73	\$16.76	\$15.30	
	Ohio as percent of U.S.	2.00%	1.95%	2.29%	2.32%	1.99%	2.28%	2.16%	2.09%	1.78%	1.93%	2.19%	2.27%	2.41%	0.41%
	Concentration ratio - Ohio::U.S.	0.60	0.59	0.69	0.69	0.59	0.68	0.64	0.62	0.53	0.58	0.67	0.70	0.74	0.15
315-6	Apparel, leather & allied products: Ohio	\$0.20	\$0.17	\$0.14	\$0.13	\$0.12	\$0.14	\$0.14	\$0.14	\$0.17	\$0.14	\$0.18	\$0.19	\$0.23	
	U.S.	\$11.57	\$9.87	\$10.39	\$10.13	\$10.01	\$10.22	\$9.92	\$9.69	\$9.61	\$9.41	\$9.30	\$9.32	\$9.80	
	Ohio as percent of U.S.	1.77%	1.75%	1.35%	1.33%	1.16%	1.36%	1.42%	1.43%	1.73%	1.49%	1.94%	2.01%	2.30%	0.53%
	Concentration ratio - Ohio::U.S.	0.53	0.52	0.41	0.39	0.35	0.40	0.42	0.43	0.52	0.45	0.60	0.62	0.71	0.18
322	Paper: Ohio	\$2.11	\$2.19	\$2.15	\$2.13	\$1.89	\$1.92	\$2.14	\$2.18	\$2.15	\$2.07	\$2.23	\$2.33	\$2.35	
	U.S.	\$51.40	\$59.23	\$56.38	\$53.84	\$53.16	\$56.45	\$56.81	\$59.70	\$58.40	\$55.43	\$59.19	\$59.72	\$59.74	
	Ohio as percent of U.S.	4.10%	3.70%	3.81%	3.96%	3.55%	3.39%	3.77%	3.65%	3.69%	3.74%	3.76%	3.90%	3.94%	-0.16%
	Concentration ratio - Ohio::U.S.	1.22	1.11	1.15	1.17	1.06	1.01	1.11	1.09	1.11	1.13	1.16	1.20	1.21	0.00
323	Printing & related support activities: Ohio	\$2.18	\$2.04	\$1.90	\$1.85	\$1.83	\$1.79	\$1.89	\$1.99	\$2.10	\$2.01	\$1.90	\$1.89	\$1.81	
	U.S.	\$45.20	\$39.64	\$39.46	\$38.79	\$38.44	\$39.01	\$39.07	\$40.23	\$41.22	\$40.61	\$41.35	\$41.29	\$39.60	
	Ohio as percent of U.S.	4.82%	5.15%	4.81%	4.76%	4.75%	4.60%	4.83%	4.94%	5.09%	4.95%	4.60%	4.58%	4.57%	-0.26%
	Concentration ratio - Ohio::U.S.	1.43	1.55	1.45	1.41	1.41	1.37	1.42	1.47	1.53	1.50	1.42	1.41	1.41	-0.03
324	Petroleum & coal products: Ohio	\$2.47	\$5.89	\$6.64	\$9.95	\$7.63	\$9.41	\$13.74	\$7.76	\$4.18	\$5.76	\$8.25	\$7.20	\$5.14	
	U.S.	\$154.84	\$110.63	\$123.81	\$159.06	\$159.14	\$151.31	\$158.18	\$145.56	\$85.71	\$132.03	\$185.85	\$163.58	\$113.68	
	Ohio as percent of U.S.	1.59%	5.32%	5.36%	6.26%	4.80%	6.22%	8.69%	5.33%	4.88%	4.36%	4.44%	4.40%	4.52%	2.93%
	Concentration ratio - Ohio::U.S.	0.47	1.60	1.61	1.85	1.43	1.85	2.56	1.59	1.46	1.32	1.37	1.36	1.39	0.92
325	Chemicals: Ohio	\$10.58	\$11.52	\$11.97	\$12.88	\$12.91	\$10.99	\$12.61	\$14.51	\$16.99	\$16.82	\$17.89	\$19.28	\$19.54	
	U.S.	\$265.66	\$287.96	\$303.30	\$305.96	\$304.97	\$321.47	\$330.02	\$333.26	\$357.05	\$362.92	\$375.76	\$390.96	\$394.62	
	Ohio as percent of U.S.	3.98%	4.00%	3.95%	4.21%	4.23%	3.42%	3.82%	4.35%	4.76%	4.63%	4.76%	4.93%	4.95%	0.97%
	Concentration ratio - Ohio::U.S.	1.18	1.20	1.19	1.24	1.26	1.02	1.13	1.30	1.43	1.41	1.47	1.52	1.53	0.34
326	Plastic & rubber products: Ohio	\$4.22	\$4.67	\$4.66	\$5.04	\$5.47	\$5.48	\$5.29	\$5.99	\$5.87	\$5.72	\$6.38	\$6.16	\$5.95	
	U.S.	\$56.06	\$60.37	\$61.84	\$63.06	\$67.71	\$69.13	\$67.20	\$78.30	\$79.86	\$78.31	\$81.91	\$83.67	\$80.62	
	Ohio as percent of U.S.	7.52%	7.73%	7.54%	7.99%	8.08%	7.92%	7.88%	7.64%	7.35%	7.31%	7.79%	7.36%	7.38%	-0.14%
	Concentration ratio - Ohio::U.S.	2.24	2.32	2.27	2.36	2.41	2.35	2.32	2.28	2.21	2.22	2.40	2.27	2.28	0.04

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).



**Table A5: Comparing Ohio and U.S. GDP by Industry - Non-durable Goods, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS	Industry Title	2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	Numeric	Percent
<b>Non-durable Goods in Constant Dollars</b>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
31 & 32p	Non-durable goods summary: Ohio	\$40.19	\$45.50	\$44.35	\$43.97	\$39.72	\$41.46	\$48.58	\$44.81	\$44.86	\$44.91	\$46.83	\$48.18	\$48.50	\$8.31	20.7%
	U.S.	\$1,023.73	\$992.24	\$974.82	\$911.49	\$869.45	\$901.37	\$916.98	\$922.20	\$913.98	\$934.92	\$964.93	\$994.08	\$989.93	-\$33.80	-3.3%
	Ohio as percent of U.S.	3.93%	4.59%	4.55%	4.82%	4.57%	4.60%	5.30%	4.86%	4.91%	4.80%	4.85%	4.85%	4.90%	0.97%	
	Concentration ratio - Ohio::U.S.	1.14	1.37	1.36	1.42	1.36	1.37	1.56	1.46	1.49	1.47	1.51	1.51	1.53	0.38	
311-2	Food, beverage & tobacco products: Ohio	\$9.92	\$10.24	\$9.76	\$9.59	\$9.57	\$10.51	\$10.97	\$10.68	\$10.19	\$10.78	\$10.59	\$10.51	\$10.43	\$0.51	5.1%
	U.S.	\$242.33	\$247.07	\$234.03	\$227.11	\$220.06	\$224.68	\$225.40	\$234.71	\$228.14	\$239.97	\$245.92	\$251.58	\$245.22	\$2.88	1.2%
	Ohio as percent of U.S.	4.09%	4.15%	4.17%	4.22%	4.35%	4.68%	4.87%	4.55%	4.47%	4.49%	4.31%	4.18%	4.25%	0.16%	
	Concentration ratio - Ohio::U.S.	1.19	1.24	1.25	1.24	1.29	1.39	1.43	1.37	1.35	1.37	1.34	1.30	1.33	0.13	
313-4	Textile & textile product mills: Ohio	\$0.43	\$0.33	\$0.38	\$0.34	\$0.32	\$0.39	\$0.38	\$0.36	\$0.31	\$0.33	\$0.35	\$0.37	\$0.35	-\$0.08	-17.9%
	U.S.	\$21.49	\$16.66	\$16.63	\$14.74	\$15.97	\$16.92	\$17.69	\$17.28	\$17.61	\$17.21	\$16.21	\$16.13	\$14.68	-\$6.82	-31.7%
	Ohio as percent of U.S.	2.00%	1.95%	2.29%	2.32%	1.99%	2.28%	2.16%	2.09%	1.78%	1.93%	2.19%	2.27%	2.41%	0.41%	
	Concentration ratio - Ohio::U.S.	0.58	0.58	0.68	0.68	0.59	0.68	0.64	0.63	0.54	0.59	0.68	0.71	0.75	0.17	
315-6	Apparel, leather & allied products: Ohio	\$0.21	\$0.17	\$0.14	\$0.14	\$0.12	\$0.14	\$0.14	\$0.13	\$0.15	\$0.13	\$0.16	\$0.16	\$0.20	-\$0.01	-5.8%
	U.S.	\$11.82	\$9.62	\$10.60	\$10.47	\$10.01	\$10.02	\$9.58	\$8.97	\$8.74	\$8.53	\$8.36	\$8.14	\$8.56	-\$3.26	-27.6%
	Ohio as percent of U.S.	1.77%	1.75%	1.35%	1.33%	1.16%	1.36%	1.42%	1.44%	1.73%	1.49%	1.94%	2.01%	2.30%	0.53%	
	Concentration ratio - Ohio::U.S.	0.51	0.52	0.40	0.39	0.35	0.40	0.42	0.43	0.52	0.46	0.60	0.62	0.72	0.20	
322	Paper: Ohio	\$2.37	\$2.24	\$2.13	\$2.13	\$1.89	\$1.81	\$2.03	\$1.99	\$1.97	\$1.83	\$1.94	\$2.03	\$2.17	-\$0.20	-8.3%
	U.S.	\$57.81	\$60.51	\$55.84	\$53.76	\$53.16	\$53.48	\$53.84	\$54.58	\$53.38	\$48.89	\$51.50	\$52.08	\$55.20	-\$2.61	-4.5%
	Ohio as percent of U.S.	4.10%	3.70%	3.81%	3.96%	3.55%	3.39%	3.77%	3.65%	3.69%	3.74%	3.76%	3.90%	3.94%	-0.16%	
	Concentration ratio - Ohio::U.S.	1.19	1.10	1.14	1.16	1.06	1.01	1.11	1.10	1.12	1.14	1.17	1.22	1.23	0.03	
323	Printing & related support activities: Ohio	\$2.07	\$1.90	\$1.81	\$1.84	\$1.83	\$1.80	\$1.87	\$1.86	\$1.94	\$1.88	\$1.79	\$1.73	\$1.62	-\$0.45	-21.8%
	U.S.	\$42.92	\$36.94	\$37.56	\$38.59	\$38.44	\$39.10	\$38.73	\$37.59	\$38.19	\$37.87	\$38.97	\$37.69	\$35.43	-\$7.50	-17.5%
	Ohio as percent of U.S.	4.82%	5.15%	4.81%	4.76%	4.75%	4.60%	4.83%	4.94%	5.09%	4.95%	4.60%	4.58%	4.57%	-0.26%	
	Concentration ratio - Ohio::U.S.	1.40	1.53	1.44	1.40	1.41	1.37	1.42	1.49	1.54	1.52	1.43	1.43	1.42	0.02	
324	Petroleum & coal products: Ohio	\$4.34	\$13.46	\$11.43	\$10.99	\$7.63	\$10.98	\$17.04	\$10.58	\$8.33	\$8.86	\$9.96	\$10.76	\$11.13	\$6.80	156.7%
	U.S.	\$271.98	\$253.01	\$213.04	\$175.75	\$159.14	\$176.57	\$196.10	\$198.49	\$170.71	\$203.07	\$224.49	\$244.31	\$246.12	-\$25.87	-9.5%
	Ohio as percent of U.S.	1.59%	5.32%	5.36%	6.26%	4.80%	6.22%	8.69%	5.33%	4.88%	4.36%	4.44%	4.40%	4.52%	2.93%	
	Concentration ratio - Ohio::U.S.	0.46	1.59	1.60	1.84	1.43	1.85	2.56	1.60	1.48	1.34	1.38	1.37	1.41	0.95	
325	Chemicals: Ohio	\$13.48	\$13.06	\$13.71	\$13.69	\$12.91	\$10.74	\$11.96	\$13.13	\$15.00	\$14.38	\$14.88	\$15.91	\$16.22	\$2.74	20.4%
	U.S.	\$338.36	\$326.43	\$347.54	\$325.08	\$304.97	\$314.22	\$312.95	\$301.67	\$315.15	\$310.36	\$312.65	\$322.62	\$327.58	-\$10.77	-3.2%
	Ohio as percent of U.S.	3.98%	4.00%	3.95%	4.21%	4.23%	3.42%	3.82%	4.35%	4.76%	4.63%	4.76%	4.93%	4.95%	0.97%	
	Concentration ratio - Ohio::U.S.	1.16	1.19	1.18	1.24	1.26	1.02	1.13	1.31	1.44	1.42	1.48	1.54	1.54	0.38	
326	Plastic & rubber products: Ohio	\$4.87	\$4.93	\$5.10	\$5.31	\$5.47	\$5.34	\$5.29	\$5.66	\$5.53	\$5.55	\$6.19	\$5.78	\$5.57	\$0.70	14.3%
	U.S.	\$64.77	\$63.79	\$67.73	\$66.40	\$67.71	\$67.39	\$67.19	\$74.02	\$75.28	\$75.97	\$79.41	\$78.52	\$75.49	\$10.72	16.6%
	Ohio as percent of U.S.	7.52%	7.73%	7.54%	7.99%	8.08%	7.92%	7.88%	7.64%	7.35%	7.31%	7.79%	7.36%	7.38%	-0.14%	
	Concentration ratio - Ohio::U.S.	2.19	2.31	2.25	2.35	2.41	2.36	2.32	2.30	2.23	2.24	2.42	2.29	2.30	0.11	

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A6: Comparing Ohio and U.S. GDP by Industry - Natural Resources, 2008-2020**

2012 NAICS	Industry Title	Dollar figures in Billions													Nominal Net Change
		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	
<u>Natural Resources in Current Dollars</u>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
11	Agriculture, forestry, fishing, etc.: Ohio	\$2.75	\$3.00	\$2.95	\$4.41	\$3.77	\$5.03	\$4.36	\$3.04	\$2.74	\$3.53	\$4.02	\$2.88	\$3.92	
	U.S.	\$145.96	\$129.05	\$144.93	\$179.16	\$178.69	\$214.29	\$198.91	\$180.14	\$165.85	\$175.95	\$175.63	\$162.58	\$174.53	
	Ohio as percent of U.S.	1.88%	2.33%	2.04%	2.46%	2.11%	2.35%	2.19%	1.69%	1.65%	2.00%	2.29%	1.77%	2.24%	0.36%
	Concentration ratio - Ohio::U.S.	0.56	0.70	0.61	0.73	0.63	0.70	0.65	0.50	0.50	0.61	0.70	0.55	0.69	0.13
111-2	Crop & animal production (farms): Ohio	\$2.44	\$2.70	\$2.66	\$4.07	\$3.38	\$4.61	\$3.87	\$2.52	\$2.22	\$2.98	\$3.45	\$2.29	\$3.36	
	U.S.	\$118.18	\$102.20	\$116.23	\$150.40	\$147.98	\$183.26	\$166.00	\$145.23	\$129.89	\$139.40	\$137.11	\$123.00	\$134.66	
	Ohio as percent of U.S.	2.06%	2.64%	2.29%	2.71%	2.29%	2.51%	2.33%	1.74%	1.71%	2.14%	2.52%	1.86%	2.49%	0.43%
	Concentration ratio - Ohio::U.S.	0.61	0.79	0.69	0.80	0.68	0.75	0.69	0.52	0.51	0.65	0.78	0.57	0.77	0.16
113-5	Forestry, fishing & related activities: Ohio	\$0.31	\$0.30	\$0.29	\$0.34	\$0.39	\$0.42	\$0.48	\$0.52	\$0.53	\$0.55	\$0.56	\$0.58	\$0.56	
	U.S.	\$27.78	\$26.85	\$28.70	\$28.75	\$30.71	\$31.02	\$32.91	\$34.91	\$35.96	\$36.55	\$38.52	\$39.59	\$39.87	
	Ohio as percent of U.S.	1.12%	1.12%	1.01%	1.19%	1.28%	1.37%	1.47%	1.49%	1.46%	1.50%	1.46%	1.47%	1.39%	0.27%
	Concentration ratio - Ohio::U.S.	0.33	0.34	0.30	0.35	0.38	0.41	0.43	0.44	0.44	0.45	0.45	0.45	0.43	0.10
21	Mining: Ohio	\$3.52	\$3.16	\$3.06	\$3.51	\$3.12	\$4.27	\$5.58	\$4.91	\$4.36	\$4.57	\$4.95	\$4.94	\$4.07	
	U.S.	\$392.52	\$275.43	\$306.36	\$357.78	\$360.52	\$387.75	\$417.04	\$261.70	\$218.08	\$276.87	\$320.15	\$295.66	\$182.10	
	Ohio as percent of U.S.	0.90%	1.15%	1.00%	0.98%	0.87%	1.10%	1.34%	1.88%	2.00%	1.65%	1.55%	1.67%	2.23%	1.34%
	Concentration ratio - Ohio::U.S.	0.27	0.34	0.30	0.29	0.26	0.33	0.39	0.56	0.60	0.50	0.48	0.52	0.69	0.42
211	Oil & gas extraction: Ohio	\$1.61	\$1.19	\$1.08	\$1.26	\$1.18	\$2.30	\$3.36	\$2.83	\$2.69	\$2.83	\$3.08	\$3.09	\$2.57	
	U.S.	\$271.76	\$172.57	\$189.12	\$219.02	\$224.92	\$255.99	\$278.73	\$158.12	\$138.57	\$176.72	\$205.94	\$182.73	\$97.65	
	Ohio as percent of U.S.	0.59%	0.69%	0.57%	0.58%	0.52%	0.90%	1.21%	1.79%	1.94%	1.60%	1.49%	1.69%	2.63%	2.04%
	Concentration ratio - Ohio::U.S.	0.18	0.21	0.17	0.17	0.16	0.27	0.36	0.53	0.58	0.49	0.46	0.52	0.81	0.64
212	Mining, exc. oil & gas: Ohio	\$1.23	\$1.47	\$1.56	\$1.82	\$1.50	\$1.39	\$1.32	\$1.40	\$1.24	\$1.13	\$1.13	\$1.17	\$1.08	
	U.S.	\$61.34	\$61.51	\$69.65	\$76.72	\$66.99	\$62.34	\$58.85	\$50.02	\$47.41	\$56.79	\$58.45	\$59.16	\$56.74	
	Ohio as percent of U.S.	2.01%	2.40%	2.24%	2.38%	2.24%	2.23%	2.25%	2.80%	2.61%	1.98%	1.93%	1.98%	1.90%	-0.11%
	Concentration ratio - Ohio::U.S.	0.60	0.72	0.67	0.70	0.67	0.66	0.66	0.83	0.78	0.60	0.59	0.61	0.59	-0.01
213	Support activities for mining: Ohio	\$0.68	\$0.49	\$0.42	\$0.43	\$0.44	\$0.58	\$0.89	\$0.69	\$0.43	\$0.61	\$0.74	\$0.68	\$0.42	
	U.S.	\$59.42	\$41.35	\$47.58	\$62.04	\$68.62	\$69.43	\$79.46	\$53.56	\$32.11	\$43.35	\$55.75	\$53.77	\$27.70	
	Ohio as percent of U.S.	1.15%	1.19%	0.89%	0.69%	0.64%	0.83%	1.12%	1.28%	1.33%	1.41%	1.33%	1.26%	1.50%	0.35%
	Concentration ratio - Ohio::U.S.	0.34	0.36	0.27	0.20	0.19	0.25	0.33	0.38	0.40	0.43	0.41	0.39	0.46	0.12

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A6: Comparing Ohio and U.S. GDP by Industry - Natural Resources, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS	Industry Title	2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	Numeric	Percent
<b>Natural Resources in Constant Dollars</b>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
11	Agriculture, forestry, fishing, etc.: Ohio	\$3.37	\$4.76	\$4.02	\$4.55	\$3.77	\$4.88	\$4.61	\$3.81	\$3.97	\$4.71	\$5.56	\$4.04	\$5.88	\$2.5	74.3%
	U.S.	\$177.57	\$197.38	\$191.60	\$184.28	\$178.69	\$207.51	\$208.57	\$221.86	\$234.55	\$231.02	\$237.90	\$223.34	\$254.65	\$77.1	43.4%
	Ohio as percent of U.S.	1.90%	2.41%	2.10%	2.47%	2.11%	2.35%	2.21%	1.72%	1.69%	2.04%	2.34%	1.81%	2.31%	0.41%	
	Concentration ratio - Ohio::U.S.	0.55	0.72	0.63	0.72	0.63	0.70	0.65	0.52	0.51	0.62	0.73	0.56	0.72	0.17	
111-2	Crop & animal production (farms): Ohio	\$3.00	\$4.44	\$3.73	\$4.21	\$3.38	\$4.47	\$4.16	\$3.30	\$3.47	\$4.23	\$5.13	\$3.47	\$5.51	\$2.5	83.7%
	U.S.	\$145.69	\$168.09	\$162.71	\$155.31	\$147.98	\$177.88	\$178.29	\$189.97	\$203.03	\$198.20	\$203.62	\$186.19	\$221.02	\$75.3	51.7%
	Ohio as percent of U.S.	2.06%	2.64%	2.29%	2.71%	2.29%	2.51%	2.33%	1.74%	1.71%	2.14%	2.52%	1.86%	2.49%	0.43%	
	Concentration ratio - Ohio::U.S.	0.60	0.79	0.68	0.80	0.68	0.75	0.69	0.52	0.52	0.65	0.78	0.58	0.78	0.18	
113-5	Forestry, fishing & related activities: Ohio	\$0.35	\$0.33	\$0.30	\$0.34	\$0.39	\$0.41	\$0.44	\$0.48	\$0.47	\$0.49	\$0.50	\$0.52	\$0.49	\$0.1	41.2%
	U.S.	\$30.93	\$29.71	\$29.14	\$29.00	\$30.71	\$29.65	\$30.25	\$31.95	\$32.41	\$32.99	\$34.27	\$35.12	\$35.18	\$4.3	13.8%
	Ohio as percent of U.S.	1.12%	1.12%	1.01%	1.19%	1.28%	1.37%	1.47%	1.49%	1.46%	1.50%	1.46%	1.47%	1.39%	0.27%	
	Concentration ratio - Ohio::U.S.	0.33	0.33	0.30	0.35	0.38	0.41	0.43	0.45	0.44	0.46	0.45	0.46	0.43	0.11	
21	Mining: Ohio	\$3.22	\$3.90	\$3.18	\$3.28	\$3.12	\$4.27	\$5.76	\$8.60	\$8.62	\$7.26	\$6.82	\$8.23	\$10.19	\$7.0	216.0%
	U.S.	\$305.85	\$349.75	\$309.92	\$322.26	\$360.52	\$374.02	\$414.50	\$451.23	\$427.23	\$436.02	\$436.72	\$488.27	\$438.57	\$132.7	43.4%
	Ohio as percent of U.S.	1.05%	1.11%	1.03%	1.02%	0.87%	1.14%	1.39%	1.91%	2.02%	1.66%	1.56%	1.69%	2.32%	1.27%	
	Concentration ratio - Ohio::U.S.	0.31	0.33	0.31	0.30	0.26	0.34	0.41	0.57	0.61	0.51	0.48	0.53	0.72	0.42	
211	Oil & gas extraction: Ohio	\$1.01	\$1.59	\$1.04	\$1.05	\$1.18	\$2.13	\$3.24	\$6.49	\$7.45	\$5.76	\$4.96	\$6.77	\$10.81	\$9.8	971%
	U.S.	\$170.92	\$230.13	\$182.07	\$182.77	\$224.92	\$237.20	\$268.92	\$363.31	\$383.44	\$360.26	\$331.91	\$399.54	\$410.25	\$239.3	140.0%
	Ohio as percent of U.S.	0.59%	0.69%	0.57%	0.58%	0.52%	0.90%	1.21%	1.79%	1.94%	1.60%	1.49%	1.69%	2.63%	2.04%	
	Concentration ratio - Ohio::U.S.	0.17	0.21	0.17	0.17	0.16	0.27	0.36	0.54	0.59	0.49	0.46	0.53	0.82	0.65	
212	Mining, exc. oil & gas: Ohio	\$1.59	\$1.77	\$1.69	\$1.79	\$1.50	\$1.53	\$1.51	\$1.74	\$1.57	\$1.28	\$1.22	\$1.28	\$1.14	-\$0.4	-28.2%
	U.S.	\$78.78	\$73.80	\$75.47	\$75.45	\$66.99	\$68.47	\$67.17	\$62.09	\$60.07	\$64.39	\$63.30	\$64.49	\$59.91	-\$18.9	-24.0%
	Ohio as percent of U.S.	2.01%	2.40%	2.24%	2.38%	2.24%	2.23%	2.25%	2.80%	2.61%	1.98%	1.93%	1.98%	1.90%	-0.11%	
	Concentration ratio - Ohio::U.S.	0.59	0.71	0.67	0.70	0.67	0.66	0.66	0.84	0.79	0.61	0.60	0.62	0.59	0.01	
213	Support activities for mining: Ohio	\$0.72	\$0.55	\$0.46	\$0.45	\$0.44	\$0.57	\$0.86	\$0.66	\$0.43	\$0.61	\$0.81	\$0.73	\$0.48	-\$0.2	-33.2%
	U.S.	\$62.62	\$46.50	\$52.43	\$65.58	\$68.62	\$68.22	\$76.90	\$51.48	\$32.34	\$43.34	\$61.09	\$58.32	\$31.98	-\$30.6	-48.9%
	Ohio as percent of U.S.	1.15%	1.19%	0.89%	0.69%	0.64%	0.83%	1.12%	1.28%	1.33%	1.41%	1.33%	1.26%	1.50%	0.35%	
	Concentration ratio - Ohio::U.S.	0.33	0.35	0.26	0.20	0.19	0.25	0.33	0.39	0.40	0.43	0.41	0.39	0.47	0.13	

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A7: Comparing Ohio and U.S. GDP by Industry - Transportation and Warehousing, 2008-2020**

2012 NAICS	Industry Title	Dollar figures in Billions													Nominal Net Change
		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020**	
<b>Transportation and Warehousing in Current Dollars</b>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
48#-49	Transportation# & warehousing: Ohio	\$15.82	\$14.35	\$14.62	\$15.60	\$15.74	\$15.99	\$16.99	\$19.60	\$19.38	\$20.00	\$21.66	\$23.07	\$22.12	
	U.S.	\$426.99	\$404.37	\$433.52	\$452.50	\$473.31	\$492.11	\$522.51	\$566.10	\$582.37	\$609.38	\$648.13	\$685.70	\$572.02	
	Ohio as percent of U.S.	3.70%	3.55%	3.37%	3.45%	3.33%	3.25%	3.25%	3.46%	3.33%	3.28%	3.34%	3.36%	3.87%	0.16%
	Concentration ratio - Ohio::U.S.	1.10	1.07	1.01	1.02	0.99	0.97	0.96	1.03	1.00	1.00	1.03	1.04	1.19	0.09
481	Air: Ohio	\$1.68	\$1.58	\$1.57	\$1.72	\$1.72	\$1.79	\$1.89	\$2.16	\$2.24	\$2.37	\$2.34	\$2.54	\$1.68	
	U.S.	\$68.70	\$71.64	\$84.26	\$84.82	\$88.05	\$94.23	\$102.99	\$117.75	\$129.18	\$134.82	\$136.10	\$146.31	\$57.91	
	Ohio as percent of U.S.	2.44%	2.20%	1.86%	2.02%	1.95%	1.90%	1.84%	1.83%	1.73%	1.76%	1.72%	1.73%	2.90%	0.46%
	Concentration ratio - Ohio::U.S.	0.73	0.66	0.56	0.60	0.58	0.57	0.54	0.55	0.52	0.53	0.53	0.53	0.89	0.17
482	Rail: Ohio	\$1.25	\$1.07	\$1.14	\$1.25	\$1.38	\$1.41	\$1.52	\$1.56	\$1.37	\$1.40	\$1.46	\$1.40	\$1.26	
	U.S.	\$37.27	\$32.90	\$33.77	\$36.57	\$39.74	\$40.99	\$43.92	\$44.34	\$40.08	\$41.34	\$43.68	\$42.42	\$37.56	
	Ohio as percent of U.S.	3.35%	3.25%	3.38%	3.41%	3.48%	3.45%	3.47%	3.52%	3.42%	3.39%	3.33%	3.31%	3.36%	0.01%
	Concentration ratio - Ohio::U.S.	1.00	0.98	1.01	1.01	1.04	1.02	1.02	1.05	1.03	1.03	1.03	1.02	1.04	0.04
483	Water: Ohio	\$0.15	\$0.11	\$0.12	\$0.10	\$0.09	\$0.11	\$0.11	\$0.11	\$0.11	\$0.11	\$0.14	\$0.15	\$0.11	
	U.S.	\$16.44	\$15.61	\$14.66	\$14.11	\$13.17	\$16.47	\$16.21	\$15.80	\$13.47	\$13.02	\$14.16	\$14.42	\$9.60	
	Ohio as percent of U.S.	0.90%	0.72%	0.79%	0.72%	0.70%	0.69%	0.67%	0.70%	0.79%	0.87%	0.98%	1.06%	1.10%	0.20%
	Concentration ratio - Ohio::U.S.	0.27	0.22	0.24	0.21	0.21	0.21	0.20	0.21	0.24	0.26	0.30	0.33	0.34	0.07
484	Truck: Ohio	\$6.00	\$5.26	\$5.49	\$5.87	\$6.17	\$6.19	\$6.67	\$7.16	\$7.19	\$7.57	\$7.94	\$8.16	\$7.82	
	U.S.	\$120.52	\$109.46	\$113.52	\$122.00	\$128.40	\$131.08	\$140.82	\$149.11	\$148.86	\$156.32	\$167.70	\$173.00	\$164.72	
	Ohio as percent of U.S.	4.97%	4.80%	4.83%	4.81%	4.80%	4.72%	4.74%	4.80%	4.83%	4.84%	4.73%	4.72%	4.75%	-0.23%
	Concentration ratio - Ohio::U.S.	1.48	1.44	1.45	1.42	1.43	1.40	1.40	1.43	1.45	1.47	1.46	1.45	1.46	-0.01
485	Transit & ground passengers: Ohio	\$0.43	\$0.45	\$0.46	\$0.52	\$0.55	\$0.56	\$0.59	\$0.64	\$0.63	\$0.65	\$0.63	\$0.64	\$0.45	
	U.S.	\$28.14	\$29.40	\$31.40	\$34.20	\$36.46	\$37.99	\$40.59	\$42.23	\$42.69	\$45.42	\$47.56	\$53.90	\$37.38	
	Ohio as percent of U.S.	1.51%	1.54%	1.47%	1.53%	1.51%	1.49%	1.45%	1.51%	1.47%	1.43%	1.33%	1.19%	1.19%	-0.32%
	Concentration ratio - Ohio::U.S.	0.45	0.46	0.44	0.45	0.45	0.44	0.43	0.45	0.44	0.44	0.41	0.37	0.37	-0.08
486	Pipelines: Ohio	\$0.29	\$0.38	\$0.58	\$0.81	\$0.44	\$0.39	\$0.57	\$1.73	\$1.41	\$1.26	\$1.46	\$1.63	\$1.61	
	U.S.	\$16.29	\$14.61	\$20.23	\$21.59	\$25.33	\$26.99	\$30.21	\$36.83	\$39.19	\$40.98	\$44.52	\$43.27	\$41.19	
	Ohio as percent of U.S.	1.75%	2.59%	2.85%	3.75%	1.75%	1.44%	1.87%	4.68%	3.59%	3.09%	3.28%	3.76%	3.92%	2.17%
	Concentration ratio - Ohio::U.S.	0.52	0.78	0.86	1.11	0.52	0.43	0.55	1.40	1.08	0.94	1.01	1.16	1.21	0.69
487-8, 492	Other modes & support activities: Ohio	\$3.48	\$3.08	\$2.81	\$2.91	\$2.88	\$2.99	\$3.15	\$3.63	\$3.66	\$3.83	\$4.24	\$4.80	\$5.08	
	U.S.	\$94.40	\$85.61	\$90.51	\$94.04	\$94.94	\$97.06	\$99.96	\$108.11	\$110.86	\$115.07	\$124.49	\$136.33	\$143.80	
	Ohio as percent of U.S.	3.69%	3.60%	3.11%	3.10%	3.04%	3.08%	3.15%	3.36%	3.31%	3.33%	3.40%	3.52%	3.53%	-0.16%
	Concentration ratio - Ohio::U.S.	1.10	1.08	0.94	0.92	0.90	0.91	0.93	1.00	0.99	1.01	1.05	1.09	1.09	-0.01
493	Warehousing & storage: Ohio	\$2.55	\$2.42	\$2.46	\$2.42	\$2.50	\$2.54	\$2.49	\$2.61	\$2.78	\$2.80	\$3.46	\$3.75	\$4.11	
	U.S.	\$45.25	\$45.15	\$45.17	\$45.17	\$47.22	\$47.30	\$47.82	\$51.95	\$58.03	\$62.40	\$69.93	\$76.06	\$79.86	
	Ohio as percent of U.S.	5.64%	5.37%	5.44%	5.36%	5.30%	5.36%	5.21%	5.03%	4.80%	4.48%	4.95%	4.93%	5.14%	-0.50%
	Concentration ratio - Ohio::U.S.	1.68	1.61	1.64	1.58	1.58	1.59	1.54	1.50	1.44	1.36	1.52	1.52	1.59	-0.09

Notes: # - excludes the U.S. Postal Service; ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A7: Comparing Ohio and U.S. GDP by Industry - Transportation and Warehousing, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS	Industry Title	2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020**	Numeric	Percent
<b>Transportation and Warehousing in Constant Dollars</b>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
48#-49	Transportation# & warehousing: Ohio	\$17.06	\$15.30	\$15.46	\$16.14	\$15.74	\$15.68	\$16.23	\$17.81	\$17.37	\$17.86	\$18.62	\$19.13	\$18.71	\$1.65	9.7%
	U.S.	\$467.93	\$438.77	\$460.96	\$469.97	\$473.31	\$479.89	\$494.36	\$507.12	\$514.68	\$537.13	\$556.37	\$566.13	\$490.27	\$22.35	4.8%
	Ohio as percent of U.S.	3.65%	3.49%	3.35%	3.43%	3.33%	3.27%	3.28%	3.51%	3.37%	3.32%	3.35%	3.38%	3.82%	0.17%	
	Concentration ratio - Ohio::U.S.	1.06	1.04	1.00	1.01	0.99	0.97	0.97	1.06	1.02	1.02	1.04	1.05	1.19	0.13	
481	Air: Ohio	\$1.96	\$1.75	\$1.72	\$1.87	\$1.72	\$1.76	\$1.76	\$1.87	\$1.91	\$2.07	\$2.08	\$2.12	\$1.73	-\$0.23	-11.9%
	U.S.	\$80.30	\$79.59	\$92.29	\$92.52	\$88.05	\$92.44	\$96.10	\$101.69	\$110.46	\$117.98	\$120.58	\$122.52	\$59.55	-\$20.74	-25.8%
	Ohio as percent of U.S.	2.44%	2.20%	1.86%	2.02%	1.95%	1.90%	1.84%	1.83%	1.73%	1.76%	1.72%	1.73%	2.90%	0.46%	
	Concentration ratio - Ohio::U.S.	0.71	0.66	0.56	0.59	0.58	0.57	0.54	0.55	0.52	0.54	0.53	0.54	0.90	0.19	
482	Rail: Ohio	\$1.45	\$1.25	\$1.29	\$1.32	\$1.38	\$1.35	\$1.41	\$1.44	\$1.29	\$1.29	\$1.31	\$1.18	\$1.02	-\$0.43	-29.8%
	U.S.	\$43.27	\$38.54	\$38.34	\$38.62	\$39.74	\$39.09	\$40.64	\$41.02	\$37.68	\$38.17	\$39.30	\$35.75	\$30.28	-\$13.00	-30.0%
	Ohio as percent of U.S.	3.35%	3.25%	3.38%	3.41%	3.48%	3.45%	3.47%	3.52%	3.42%	3.39%	3.33%	3.31%	3.36%	0.01%	
	Concentration ratio - Ohio::U.S.	0.98	0.97	1.01	1.00	1.04	1.03	1.02	1.06	1.03	1.04	1.04	1.03	1.05	0.07	
483	Water: Ohio	\$0.11	\$0.11	\$0.10	\$0.09	\$0.09	\$0.12	\$0.10	\$0.09	\$0.08	\$0.08	\$0.09	\$0.10	\$0.11	\$0.00	0.2%
	U.S.	\$11.76	\$14.78	\$12.13	\$12.89	\$13.17	\$16.61	\$15.10	\$12.50	\$10.76	\$9.33	\$9.37	\$9.19	\$9.66	-\$2.10	-17.8%
	Ohio as percent of U.S.	0.90%	0.72%	0.79%	0.72%	0.70%	0.69%	0.67%	0.70%	0.79%	0.87%	0.98%	1.06%	1.10%	0.20%	
	Concentration ratio - Ohio::U.S.	0.26	0.22	0.24	0.21	0.21	0.21	0.20	0.21	0.24	0.27	0.30	0.33	0.34	0.08	
484	Truck: Ohio	\$6.26	\$5.51	\$5.88	\$6.12	\$6.17	\$6.04	\$6.27	\$6.30	\$6.24	\$6.62	\$6.45	\$6.39	\$6.22	-\$0.04	-0.6%
	U.S.	\$125.77	\$114.69	\$121.60	\$127.34	\$128.40	\$127.92	\$132.41	\$131.17	\$129.21	\$136.71	\$136.24	\$135.59	\$130.94	\$5.18	4.1%
	Ohio as percent of U.S.	4.97%	4.80%	4.83%	4.81%	4.80%	4.72%	4.74%	4.80%	4.83%	4.84%	4.73%	4.71%	4.75%	-0.23%	
	Concentration ratio - Ohio::U.S.	1.45	1.43	1.44	1.41	1.43	1.41	1.40	1.44	1.46	1.48	1.47	1.47	1.48	0.03	
485	Transit & ground passengers: Ohio	\$0.53	\$0.50	\$0.49	\$0.53	\$0.55	\$0.54	\$0.56	\$0.59	\$0.56	\$0.58	\$0.58	\$0.59	\$0.43	-\$0.10	-18.7%
	U.S.	\$34.84	\$32.54	\$33.25	\$34.66	\$36.46	\$36.53	\$38.99	\$38.84	\$38.08	\$40.60	\$43.64	\$49.72	\$35.89	\$1.05	3.0%
	Ohio as percent of U.S.	1.51%	1.54%	1.47%	1.53%	1.51%	1.49%	1.45%	1.51%	1.47%	1.43%	1.33%	1.19%	1.19%	-0.32%	
	Concentration ratio - Ohio::U.S.	0.44	0.46	0.44	0.45	0.45	0.44	0.43	0.45	0.44	0.44	0.41	0.37	0.37	-0.07	
486	Pipelines: Ohio	\$0.35	\$0.46	\$0.62	\$0.83	\$0.44	\$0.36	\$0.52	\$1.58	\$1.22	\$1.08	\$1.22	\$1.25	\$1.18	\$0.83	238.6%
	U.S.	\$19.92	\$17.69	\$21.80	\$22.10	\$25.33	\$25.00	\$27.55	\$33.68	\$34.08	\$34.91	\$37.10	\$33.11	\$30.11	\$10.20	51.2%
	Ohio as percent of U.S.	1.75%	2.59%	2.85%	3.75%	1.75%	1.44%	1.87%	4.68%	3.59%	3.09%	3.28%	3.76%	3.92%	2.17%	
	Concentration ratio - Ohio::U.S.	0.51	0.77	0.85	1.10	0.52	0.43	0.55	1.41	1.09	0.94	1.02	1.17	1.22	0.71	
487-8, 492	Other modes & support activities: Ohio	\$4.22	\$3.65	\$3.15	\$3.07	\$2.88	\$2.85	\$2.89	\$3.15	\$3.13	\$3.24	\$3.52	\$3.79	\$3.94	-\$0.28	-6.6%
	U.S.	\$114.30	\$101.54	\$101.34	\$98.95	\$94.94	\$92.70	\$91.71	\$93.75	\$94.82	\$97.26	\$103.55	\$107.69	\$111.55	-\$2.74	-2.4%
	Ohio as percent of U.S.	3.69%	3.60%	3.11%	3.10%	3.04%	3.08%	3.15%	3.36%	3.31%	3.33%	3.40%	3.52%	3.53%	-0.16%	
	Concentration ratio - Ohio::U.S.	1.07	1.07	0.93	0.91	0.90	0.92	0.93	1.01	1.00	1.02	1.06	1.10	1.10	0.03	
493	Warehousing & storage: Ohio	\$2.27	\$2.12	\$2.23	\$2.32	\$2.50	\$2.67	\$2.72	\$2.77	\$2.92	\$2.86	\$3.41	\$3.77	\$4.18	\$1.91	83.8%
	U.S.	\$40.29	\$39.53	\$41.05	\$43.24	\$47.22	\$49.81	\$52.15	\$55.12	\$60.86	\$63.85	\$68.80	\$76.53	\$81.31	\$41.02	101.8%
	Ohio as percent of U.S.	5.64%	5.37%	5.44%	5.36%	5.30%	5.36%	5.21%	5.03%	4.80%	4.48%	4.95%	4.93%	5.14%	-0.50%	
	Concentration ratio - Ohio::U.S.	1.64	1.60	1.62	1.58	1.58	1.60	1.54	1.51	1.45	1.37	1.54	1.53	1.60	-0.04	

Notes: # - excludes the U.S. Postal Service; ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A8: Comparing Ohio and U.S. GDP by Industry - Information, 2008-2020**

2012 NAICS	Industry Title	Dollar figures in Billions													Nominal Net Change
		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	
<u>Information in Current Dollars</u>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
51	Information: Ohio	\$15.27	\$17.27	\$19.69	\$21.46	\$20.41	\$20.55	\$17.35	\$16.94	\$16.80	\$16.81	\$17.13	\$17.58	\$17.12	
	U.S.	\$743.82	\$721.41	\$754.93	\$763.01	\$762.71	\$831.36	\$844.37	\$907.82	\$970.27	\$1,004.69	\$1,064.60	\$1,134.49	\$1,167.92	
	Ohio as percent of U.S.	2.05%	2.39%	2.61%	2.81%	2.68%	2.47%	2.05%	1.87%	1.73%	1.67%	1.61%	1.55%	1.47%	-0.59%
	Concentration ratio - Ohio::U.S.	0.61	0.72	0.78	0.83	0.80	0.73	0.61	0.56	0.52	0.51	0.50	0.48	0.45	-0.16
511	Publishing (inc. software, exc. Internet): Ohio	\$4.91	\$4.80	\$5.11	\$5.24	\$5.22	\$5.43	\$5.15	\$5.23	\$5.31	\$5.26	\$5.38	\$5.21	\$5.26	
	U.S.	\$189.23	\$178.34	\$187.14	\$195.30	\$202.24	\$210.82	\$217.78	\$223.74	\$234.52	\$252.43	\$274.16	\$293.06	\$319.99	
	Ohio as percent of U.S.	2.60%	2.69%	2.73%	2.68%	2.58%	2.58%	2.36%	2.34%	2.26%	2.08%	1.96%	1.78%	1.64%	-0.95%
	Concentration ratio - Ohio::U.S.	0.77	0.81	0.82	0.79	0.77	0.77	0.70	0.70	0.68	0.63	0.60	0.55	0.51	-0.27
512	Motion pictures & sound recordings: Ohio	\$0.39	\$0.42	\$0.38	\$0.37	\$0.38	\$0.42	\$0.48	\$0.49	\$0.48	\$0.50	\$0.45	\$0.49	\$0.26	
	U.S.	\$79.79	\$82.20	\$91.27	\$85.13	\$82.79	\$83.03	\$82.33	\$87.64	\$93.82	\$94.31	\$87.21	\$86.94	\$70.14	
	Ohio as percent of U.S.	0.49%	0.51%	0.42%	0.43%	0.46%	0.51%	0.58%	0.56%	0.51%	0.53%	0.52%	0.57%	0.37%	-0.12%
	Concentration ratio - Ohio::U.S.	0.14	0.15	0.13	0.13	0.14	0.15	0.17	0.17	0.15	0.16	0.16	0.17	0.11	-0.03
515,	Broadcasting & telecommunications: Ohio	\$8.23	\$10.26	\$12.17	\$13.59	\$12.68	\$12.25	\$9.23	\$8.71	\$8.36	\$8.44	\$8.43	\$8.55	\$8.20	
517	U.S.	\$391.94	\$374.61	\$375.50	\$367.80	\$372.35	\$405.85	\$394.84	\$426.62	\$446.69	\$445.36	\$460.21	\$469.22	\$459.47	
	Ohio as percent of U.S.	2.10%	2.74%	3.24%	3.69%	3.40%	3.02%	2.34%	2.04%	1.87%	1.89%	1.83%	1.82%	1.78%	-0.32%
	Concentration ratio - Ohio::U.S.	0.62	0.82	0.97	1.09	1.01	0.90	0.69	0.61	0.56	0.58	0.56	0.56	0.55	-0.07
518,	Data prcsng., hosting, other info. (inc. Internet): Ohio	\$1.74	\$1.78	\$2.03	\$2.26	\$2.13	\$2.44	\$2.50	\$2.51	\$2.65	\$2.61	\$2.86	\$3.33	\$3.40	
519	U.S.	\$82.86	\$86.28	\$101.02	\$114.78	\$105.33	\$131.67	\$149.43	\$169.81	\$195.24	\$212.59	\$243.01	\$285.26	\$318.32	
	Ohio as percent of U.S.	2.10%	2.07%	2.01%	1.97%	2.02%	1.86%	1.67%	1.48%	1.36%	1.23%	1.18%	1.17%	1.07%	-1.03%
	Concentration ratio - Ohio::U.S.	0.62	0.62	0.60	0.58	0.60	0.55	0.49	0.44	0.41	0.37	0.36	0.36	0.33	-0.29

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/21).

**Table A8: Comparing Ohio and U.S. GDP by Industry - Information, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS	Industry Title	2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	Numeric	Percent
<b>Information in Constant Dollars</b>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
51	Information: Ohio	\$15.00	\$16.89	\$19.55	\$21.44	\$20.41	\$20.48	\$17.45	\$17.52	\$17.76	\$18.30	\$18.97	\$19.54	\$19.14	\$4.14	27.6%
	U.S.	\$729.77	\$709.61	\$751.82	\$764.25	\$762.71	\$830.34	\$851.06	\$939.25	\$1,022.04	\$1,087.20	\$1,171.41	\$1,252.86	\$1,296.53	\$566.76	77.7%
	Ohio as percent of U.S.	2.05%	2.38%	2.60%	2.81%	2.68%	2.47%	2.05%	1.86%	1.74%	1.68%	1.62%	1.56%	1.48%	-0.58%	
	Concentration ratio - Ohio::U.S.	0.60	0.71	0.78	0.82	0.80	0.73	0.60	0.56	0.53	0.51	0.50	0.49	0.46	-0.14	
511	Publishing (inc. software, exc. Internet): Ohio	\$4.98	\$4.81	\$5.17	\$5.27	\$5.22	\$5.37	\$5.06	\$5.22	\$5.40	\$5.45	\$5.70	\$5.54	\$5.61	\$0.63	12.6%
	U.S.	\$191.97	\$178.70	\$189.40	\$196.41	\$202.24	\$208.28	\$214.18	\$223.48	\$238.30	\$261.47	\$290.35	\$311.76	\$341.55	\$149.59	77.9%
	Ohio as percent of U.S.	2.60%	2.69%	2.73%	2.68%	2.58%	2.58%	2.36%	2.34%	2.26%	2.08%	1.96%	1.78%	1.64%	-0.95%	
	Concentration ratio - Ohio::U.S.	0.76	0.80	0.82	0.79	0.77	0.77	0.70	0.70	0.69	0.64	0.61	0.55	0.51	-0.24	
512	Motion pictures & sound recordings: Ohio	\$0.37	\$0.43	\$0.39	\$0.37	\$0.38	\$0.43	\$0.49	\$0.51	\$0.49	\$0.51	\$0.46	\$0.51	\$0.27	-\$0.10	-26.3%
	U.S.	\$75.97	\$83.88	\$92.48	\$86.99	\$82.79	\$84.56	\$84.73	\$91.44	\$94.74	\$95.52	\$87.79	\$89.45	\$74.15	-\$1.83	-2.4%
	Ohio as percent of U.S.	0.49%	0.51%	0.42%	0.43%	0.46%	0.51%	0.58%	0.56%	0.51%	0.53%	0.52%	0.57%	0.37%	-0.12%	
	Concentration ratio - Ohio::U.S.	0.14	0.15	0.12	0.13	0.14	0.15	0.17	0.17	0.16	0.16	0.16	0.18	0.11	-0.03	
515, 517	Broadcasting & telecommunications: Ohio	\$7.96	\$9.92	\$11.98	\$13.53	\$12.68	\$12.21	\$9.34	\$9.20	\$9.08	\$9.55	\$9.68	\$9.85	\$9.58	\$1.62	20.4%
	U.S.	\$378.96	\$362.04	\$369.75	\$366.38	\$372.35	\$404.59	\$399.58	\$450.47	\$485.04	\$504.10	\$528.39	\$540.41	\$536.91	\$157.95	41.7%
	Ohio as percent of U.S.	2.10%	2.74%	3.24%	3.69%	3.40%	3.02%	2.34%	2.04%	1.87%	1.89%	1.83%	1.82%	1.78%	-0.32%	
	Concentration ratio - Ohio::U.S.	0.61	0.82	0.97	1.08	1.01	0.90	0.69	0.61	0.57	0.58	0.57	0.57	0.56	-0.06	
518, 519	Data prcsng., hosting, other info. (inc. Internet): Ohio	\$1.73	\$1.75	\$2.02	\$2.26	\$2.13	\$2.47	\$2.55	\$2.58	\$2.78	\$2.78	\$3.13	\$3.63	\$3.66	\$1.93	111.1%
	U.S.	\$82.70	\$84.79	\$100.27	\$114.50	\$105.33	\$133.05	\$152.87	\$174.71	\$204.96	\$226.63	\$265.46	\$310.89	\$342.47	\$259.76	314.1%
	Ohio as percent of U.S.	2.10%	2.07%	2.01%	1.97%	2.02%	1.86%	1.67%	1.48%	1.36%	1.23%	1.18%	1.17%	1.07%	-1.03%	
	Concentration ratio - Ohio::U.S.	0.61	0.62	0.60	0.58	0.60	0.55	0.49	0.44	0.41	0.38	0.37	0.36	0.33	-0.28	

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A9: Comparing Ohio and U.S. GDP by Industry - Finance-Insurance-Real Estate, 2008-2020**

2012 NAICS	Industry Title	Dollar figures in Billions													Nominal Net Change
		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	
<b>Finance-Insurance-Real Estate in Current Dollars</b>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
52	Finance & insurance: Ohio	\$38.24	\$38.19	\$37.87	\$38.98	\$41.74	\$43.31	\$50.84	\$54.88	\$58.90	\$58.74	\$67.42	\$73.20	\$76.44	
	U.S.	\$887.29	\$980.96	\$1,006.22	\$1,033.53	\$1,172.45	\$1,156.45	\$1,295.96	\$1,384.46	\$1,474.98	\$1,512.08	\$1,626.73	\$1,682.86	\$1,787.75	
	Ohio as percent of U.S.	4.31%	3.89%	3.76%	3.77%	3.56%	3.74%	3.92%	3.96%	3.99%	3.88%	4.14%	4.35%	4.28%	-0.03%
	Concentration ratio - Ohio::U.S.	1.28	1.17	1.13	1.11	1.06	1.11	1.16	1.18	1.20	1.18	1.28	1.34	1.32	0.04
521-2	Federal reserve/credit intermediation: Ohio	\$22.43	\$20.84	\$19.47	\$20.28	\$21.03	\$23.12	\$24.64	\$25.52	\$27.62	\$27.73	\$32.19	\$36.93	\$41.29	
	U.S.	\$415.44	\$408.96	\$419.52	\$461.54	\$519.69	\$508.28	\$559.85	\$581.55	\$617.21	\$641.58	\$693.60	\$723.28	\$780.96	
	Ohio as percent of U.S.	5.40%	5.10%	4.64%	4.39%	4.05%	4.55%	4.40%	4.39%	4.48%	4.32%	4.64%	5.11%	5.29%	-0.11%
	Concentration ratio - Ohio::U.S.	1.60	1.53	1.40	1.30	1.21	1.35	1.30	1.31	1.34	1.31	1.43	1.57	1.63	0.03
523	Securities, etc.: Ohio	\$1.29	\$2.35	\$2.44	\$2.31	\$3.08	\$3.58	\$3.13	\$3.20	\$3.77	\$4.04	\$4.60	\$4.86	\$4.96	
	U.S.	\$99.95	\$190.39	\$196.72	\$173.42	\$232.82	\$249.49	\$228.10	\$230.95	\$267.43	\$297.10	\$314.14	\$329.79	\$341.38	
	Ohio as percent of U.S.	1.29%	1.23%	1.24%	1.33%	1.32%	1.43%	1.37%	1.38%	1.41%	1.36%	1.47%	1.47%	1.45%	0.16%
	Concentration ratio - Ohio::U.S.	0.38	0.37	0.37	0.39	0.39	0.43	0.40	0.41	0.42	0.41	0.45	0.45	0.45	0.06
524	Insurance carriers & related activities: Ohio	\$14.25	\$14.85	\$15.73	\$16.18	\$17.32	\$16.35	\$22.70	\$25.91	\$27.25	\$26.75	\$30.41	\$31.24	\$29.98	
	U.S.	\$349.44	\$365.72	\$373.41	\$385.44	\$406.91	\$386.07	\$487.37	\$554.57	\$571.60	\$550.74	\$590.68	\$604.48	\$640.30	
	Ohio as percent of U.S.	4.08%	4.06%	4.21%	4.20%	4.26%	4.24%	4.66%	4.67%	4.77%	4.86%	5.15%	5.17%	4.68%	0.60%
	Concentration ratio - Ohio::U.S.	1.21	1.22	1.27	1.24	1.27	1.26	1.37	1.39	1.43	1.47	1.58	1.59	1.44	0.23
525	Funds-trusts-other financial vehicles: Ohio	\$0.26	\$0.15	\$0.23	\$0.20	\$0.32	\$0.26	\$0.37	\$0.25	\$0.26	\$0.21	\$0.21	\$0.17	\$0.22	
	U.S.	\$22.46	\$15.90	\$16.58	\$13.12	\$13.03	\$12.62	\$20.64	\$17.39	\$18.74	\$22.66	\$28.31	\$25.31	\$25.11	
	Ohio as percent of U.S.	1.15%	0.97%	1.37%	1.55%	2.43%	2.05%	1.78%	1.42%	1.40%	0.95%	0.75%	0.69%	0.86%	-0.30%
	Concentration ratio - Ohio::U.S.	0.34	0.29	0.41	0.46	0.73	0.61	0.52	0.42	0.42	0.29	0.23	0.21	0.26	-0.08
53	Real estate, rental & leasing: Ohio	\$59.51	\$58.93	\$60.00	\$62.02	\$64.19	\$66.58	\$68.10	\$69.10	\$71.59	\$73.59	\$75.49	\$78.97	\$77.31	
	U.S.	\$1,928.85	\$1,922.18	\$1,984.21	\$2,047.26	\$2,116.80	\$2,205.51	\$2,264.72	\$2,329.30	\$2,408.25	\$2,508.16	\$2,631.03	\$2,768.65	\$2,804.36	
	Ohio as percent of U.S.	3.09%	3.07%	3.02%	3.03%	3.03%	3.02%	3.01%	2.97%	2.97%	2.93%	2.87%	2.85%	2.76%	-0.33%
	Concentration ratio - Ohio::U.S.	0.92	0.92	0.91	0.89	0.90	0.90	0.89	0.88	0.89	0.89	0.88	0.88	0.85	-0.07
531	Real estate: Ohio	\$53.35	\$53.28	\$55.20	\$57.79	\$60.06	\$62.09	\$63.24	\$63.64	\$65.37	\$67.08	\$69.52	\$72.77	\$71.96	
	U.S.	\$1,750.21	\$1,759.28	\$1,823.91	\$1,883.91	\$1,943.04	\$2,022.38	\$2,073.85	\$2,123.13	\$2,187.62	\$2,279.52	\$2,386.67	\$2,500.43	\$2,563.06	
	Ohio as percent of U.S.	3.05%	3.03%	3.03%	3.07%	3.09%	3.07%	3.05%	3.00%	2.99%	2.94%	2.91%	2.91%	2.81%	-0.24%
	Concentration ratio - Ohio::U.S.	0.91	0.91	0.91	0.91	0.92	0.91	0.90	0.89	0.90	0.89	0.90	0.90	0.87	-0.04
532-3	Rental & leasing (inc. intangible assets): Ohio	\$6.16	\$5.65	\$4.80	\$4.23	\$4.13	\$4.49	\$4.86	\$5.46	\$6.22	\$6.51	\$5.97	\$6.20	\$5.35	
	U.S.	\$178.64	\$162.90	\$160.30	\$163.35	\$173.76	\$183.14	\$190.86	\$206.16	\$220.63	\$228.65	\$244.36	\$268.22	\$241.30	
	Ohio as percent of U.S.	3.45%	3.47%	3.00%	2.59%	2.37%	2.45%	2.55%	2.65%	2.82%	2.85%	2.44%	2.31%	2.22%	-1.23%
	Concentration ratio - Ohio::U.S.	1.03	1.04	0.90	0.76	0.71	0.73	0.75	0.79	0.85	0.86	0.75	0.71	0.68	-0.34

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).



**Table A9: Comparing Ohio and U.S. GDP by Industry - Finance-Insurance-Real Estate, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS	Industry Title	2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	Numeric	Percent
<b>Finance-Insurance-Real Estate in Constant Dollars</b>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
52	Finance & insurance: Ohio	\$37.76	\$42.63	\$39.65	\$40.36	\$41.74	\$41.70	\$46.31	\$48.50	\$49.52	\$47.47	\$50.65	\$54.18	\$55.05	\$17.29	45.8%
	U.S.	\$900.78	\$1,111.26	\$1,070.99	\$1,075.40	\$1,172.45	\$1,107.52	\$1,165.14	\$1,205.74	\$1,224.31	\$1,203.80	\$1,203.12	\$1,223.08	\$1,259.55	\$358.77	39.8%
	Ohio as percent of U.S.	4.19%	3.84%	3.70%	3.75%	3.56%	3.77%	3.98%	4.02%	4.05%	3.94%	4.21%	4.43%	4.37%	0.18%	
	Concentration ratio - Ohio::U.S.	1.22	1.14	1.11	1.10	1.06	1.12	1.17	1.21	1.22	1.21	1.31	1.38	1.36	0.14	
521-2	Federal reserve/credit intermediation: Ohio	\$20.55	\$23.90	\$20.25	\$21.19	\$21.03	\$21.91	\$21.61	\$21.37	\$21.04	\$19.26	\$20.02	\$22.12	\$24.58	\$4.03	19.6%
	U.S.	\$380.68	\$468.85	\$436.36	\$482.26	\$519.69	\$481.74	\$491.00	\$486.98	\$470.21	\$445.68	\$431.42	\$433.24	\$464.97	\$84.29	22.1%
	Ohio as percent of U.S.	5.40%	5.10%	4.64%	4.39%	4.05%	4.55%	4.40%	4.39%	4.48%	4.32%	4.64%	5.11%	5.29%	-0.11%	
	Concentration ratio - Ohio::U.S.	1.57	1.52	1.39	1.29	1.21	1.35	1.30	1.32	1.35	1.32	1.44	1.59	1.65	0.08	
523	Securities, etc.: Ohio	\$1.40	\$3.02	\$2.91	\$2.46	\$3.08	\$3.28	\$2.53	\$2.51	\$2.97	\$2.99	\$3.19	\$3.30	\$3.21	\$1.80	128.6%
	U.S.	\$108.40	\$244.88	\$234.08	\$184.41	\$232.82	\$228.56	\$184.41	\$181.52	\$210.68	\$219.61	\$217.83	\$224.27	\$220.50	\$112.10	103.4%
	Ohio as percent of U.S.	1.29%	1.23%	1.24%	1.33%	1.32%	1.43%	1.37%	1.38%	1.41%	1.36%	1.47%	1.47%	1.45%	0.16%	
	Concentration ratio - Ohio::U.S.	0.38	0.37	0.37	0.39	0.39	0.43	0.40	0.42	0.43	0.42	0.46	0.46	0.45	0.08	
524	Insurance carriers & related activities: Ohio	\$15.52	\$15.65	\$16.26	\$16.43	\$17.32	\$16.16	\$22.01	\$24.83	\$25.89	\$25.81	\$28.34	\$29.46	\$26.87	\$11.35	73.2%
	U.S.	\$380.36	\$385.42	\$385.84	\$391.23	\$406.91	\$381.45	\$472.53	\$531.36	\$543.15	\$531.50	\$550.34	\$569.90	\$573.87	\$193.51	50.9%
	Ohio as percent of U.S.	4.08%	4.06%	4.21%	4.20%	4.26%	4.24%	4.66%	4.67%	4.77%	4.86%	5.15%	5.17%	4.68%	0.60%	
	Concentration ratio - Ohio::U.S.	1.19	1.21	1.26	1.23	1.27	1.26	1.37	1.40	1.44	1.49	1.60	1.61	1.46	0.27	
525	Funds-trusts-other financial vehicles: Ohio	\$0.29	\$0.17	\$0.26	\$0.28	\$0.32	\$0.33	\$0.54	\$0.30	\$0.20	\$0.21	\$0.19	\$0.14	\$0.17	-\$0.12	-40.0%
	U.S.	\$24.92	\$17.58	\$19.23	\$17.97	\$13.03	\$16.09	\$30.15	\$20.87	\$14.38	\$22.56	\$25.82	\$20.63	\$20.10	-\$4.82	-19.4%
	Ohio as percent of U.S.	1.15%	0.97%	1.37%	1.55%	2.43%	2.05%	1.78%	1.42%	1.40%	0.95%	0.75%	0.69%	0.86%	-0.30%	
	Concentration ratio - Ohio::U.S.	0.34	0.29	0.41	0.46	0.73	0.61	0.52	0.43	0.42	0.29	0.23	0.21	0.27	-0.07	
53	Real estate, rental & leasing: Ohio	\$61.77	\$59.76	\$61.49	\$63.01	\$64.19	\$65.36	\$65.44	\$64.35	\$64.93	\$65.20	\$65.58	\$66.55	\$63.43	\$1.66	2.7%
	U.S.	\$2,001.27	\$1,949.51	\$2,033.32	\$2,080.08	\$2,116.80	\$2,165.55	\$2,177.62	\$2,171.82	\$2,187.70	\$2,225.92	\$2,289.30	\$2,338.31	\$2,306.83	\$305.56	15.3%
	Ohio as percent of U.S.	3.09%	3.07%	3.02%	3.03%	3.03%	3.02%	3.01%	2.96%	2.97%	2.93%	2.86%	2.85%	2.75%	-0.34%	
	Concentration ratio - Ohio::U.S.	0.90	0.91	0.90	0.89	0.90	0.90	0.89	0.89	0.90	0.90	0.89	0.89	0.86	-0.04	
531	Real estate: Ohio	\$55.14	\$54.02	\$56.54	\$58.72	\$60.06	\$60.91	\$60.61	\$58.86	\$58.65	\$58.66	\$59.59	\$60.37	\$57.99	\$2.84	5.2%
	U.S.	\$1,809.13	\$1,783.57	\$1,868.29	\$1,914.46	\$1,943.04	\$1,983.86	\$1,987.57	\$1,963.87	\$1,962.63	\$1,993.42	\$2,045.73	\$2,074.33	\$2,065.30	\$256.17	14.2%
	Ohio as percent of U.S.	3.05%	3.03%	3.03%	3.07%	3.09%	3.07%	3.05%	3.00%	2.99%	2.94%	2.91%	2.91%	2.81%	-0.24%	
	Concentration ratio - Ohio::U.S.	0.89	0.90	0.90	0.90	0.92	0.91	0.90	0.90	0.90	0.90	0.90	0.91	0.88	-0.01	
532-3	Rental & leasing (inc. intangible assets): Ohio	\$6.65	\$5.75	\$4.95	\$4.29	\$4.13	\$4.46	\$4.84	\$5.54	\$6.44	\$6.74	\$6.08	\$6.29	\$5.44	-\$1.21	-18.2%
	U.S.	\$192.72	\$165.98	\$165.04	\$165.61	\$173.76	\$181.72	\$190.25	\$209.40	\$228.52	\$236.59	\$248.61	\$272.23	\$245.11	\$52.40	27.2%
	Ohio as percent of U.S.	3.45%	3.47%	3.00%	2.59%	2.37%	2.45%	2.55%	2.65%	2.82%	2.85%	2.44%	2.31%	2.22%	-1.23%	
	Concentration ratio - Ohio::U.S.	1.00	1.03	0.89	0.76	0.71	0.73	0.75	0.80	0.85	0.87	0.76	0.72	0.69	-0.31	

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A10: Comparing Ohio and U.S. GDP by Industry - Professional/Business Services, 2008-2020**

2012 NAICS	Industry Title	Dollar figures in Billions													Nominal Net Change
		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020**	
<b>Professional/Business Services in Current Dollars</b>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
54	Prfsl.-scntfc.-tchncl. svcs.: Ohio	\$27.58	\$26.48	\$27.05	\$29.06	\$29.01	\$29.60	\$30.56	\$31.63	\$32.67	\$33.61	\$35.46	\$37.12	\$35.48	
	U.S.	\$1,082.82	\$1,030.86	\$1,065.15	\$1,127.16	\$1,191.79	\$1,210.74	\$1,269.03	\$1,349.25	\$1,395.48	\$1,458.52	\$1,559.39	\$1,645.01	\$1,627.76	
	Ohio as percent of U.S.	2.55%	2.57%	2.54%	2.58%	2.43%	2.44%	2.41%	2.34%	2.34%	2.30%	2.27%	2.26%	2.18%	-0.37%
	Concentration ratio - Ohio::U.S.	0.76	0.77	0.76	0.76	0.73	0.73	0.71	0.70	0.70	0.70	0.70	0.70	0.67	-0.08
5411	Legal svcs.: Ohio	\$5.53	\$4.96	\$4.73	\$4.96	\$4.90	\$4.85	\$4.93	\$5.24	\$5.51	\$5.66	\$5.88	\$6.22	\$6.09	
	U.S.	\$240.84	\$212.06	\$204.75	\$216.13	\$217.48	\$219.40	\$225.83	\$238.77	\$252.14	\$258.75	\$268.65	\$282.84	\$281.74	
	Ohio as percent of U.S.	2.30%	2.34%	2.31%	2.29%	2.25%	2.21%	2.18%	2.19%	2.18%	2.19%	2.19%	2.20%	2.16%	-0.13%
	Concentration ratio - Ohio::U.S.	0.68	0.70	0.70	0.68	0.67	0.66	0.64	0.65	0.66	0.66	0.67	0.68	0.67	-0.02
5415	Computer systems & related svcs.: Ohio	\$5.60	\$5.83	\$6.15	\$6.90	\$6.46	\$6.66	\$6.83	\$6.98	\$7.35	\$7.64	\$8.25	\$8.53	\$8.00	
	U.S.	\$181.39	\$188.87	\$202.94	\$224.84	\$252.74	\$255.21	\$266.11	\$284.85	\$304.86	\$322.76	\$353.45	\$370.52	\$366.63	
	Ohio as percent of U.S.	3.09%	3.08%	3.03%	3.07%	2.56%	2.61%	2.57%	2.45%	2.41%	2.37%	2.33%	2.30%	2.18%	-0.91%
	Concentration ratio - Ohio::U.S.	0.92	0.93	0.91	0.91	0.76	0.78	0.76	0.73	0.72	0.72	0.72	0.71	0.67	-0.24
5412-4, 5416-9	Other prfsl.-scntfc.-tchncl. svcs.: Ohio	\$16.45	\$15.70	\$16.17	\$17.20	\$17.66	\$18.08	\$18.79	\$19.41	\$19.81	\$20.31	\$21.32	\$22.38	\$21.40	
	U.S.	\$660.59	\$629.94	\$657.46	\$686.19	\$721.57	\$736.13	\$777.09	\$825.62	\$838.49	\$877.01	\$937.29	\$991.66	\$979.40	
	Ohio as percent of U.S.	2.49%	2.49%	2.46%	2.51%	2.45%	2.46%	2.42%	2.35%	2.36%	2.32%	2.28%	2.26%	2.18%	-0.31%
	Concentration ratio - Ohio::U.S.	0.74	0.75	0.74	0.74	0.73	0.73	0.71	0.70	0.71	0.70	0.70	0.70	0.67	-0.07
55	Enterprise mgt.: Ohio	\$14.09	\$13.32	\$14.42	\$15.20	\$18.82	\$19.51	\$20.30	\$19.99	\$20.24	\$21.08	\$21.29	\$22.37	\$22.81	
	U.S.	\$256.36	\$244.97	\$265.33	\$277.90	\$302.14	\$319.63	\$332.81	\$347.91	\$350.95	\$372.70	\$392.43	\$411.84	\$410.46	
	Ohio as percent of U.S.	5.50%	5.44%	5.43%	5.47%	6.23%	6.10%	6.10%	5.75%	5.77%	5.66%	5.42%	5.43%	5.56%	0.06%
	Concentration ratio - Ohio::U.S.	1.63	1.63	1.63	1.62	1.86	1.81	1.80	1.71	1.73	1.72	1.67	1.68	1.71	0.08
56	Administrative & waste mgt. svcs.: Ohio	\$15.44	\$14.28	\$15.21	\$16.13	\$17.23	\$18.22	\$19.16	\$19.56	\$19.06	\$19.98	\$20.23	\$20.98	\$20.04	
	U.S.	\$438.76	\$412.25	\$437.98	\$454.97	\$474.95	\$489.78	\$518.39	\$540.58	\$559.72	\$603.04	\$635.12	\$674.45	\$651.55	
	Ohio as percent of U.S.	3.52%	3.46%	3.47%	3.54%	3.63%	3.72%	3.70%	3.62%	3.41%	3.31%	3.18%	3.11%	3.08%	-0.44%
	Concentration ratio - Ohio::U.S.	1.05	1.04	1.04	1.05	1.08	1.11	1.09	1.08	1.02	1.01	0.98	0.96	0.95	-0.10
561	Administrative & support svcs.: Ohio	\$14.18	\$13.02	\$13.64	\$14.68	\$15.72	\$16.41	\$17.17	\$17.46	\$17.06	\$17.68	\$17.83	\$18.55	\$17.66	
	U.S.	\$401.84	\$373.84	\$390.17	\$412.43	\$432.13	\$446.50	\$472.19	\$492.65	\$511.67	\$549.26	\$577.67	\$614.95	\$591.72	
	Ohio as percent of U.S.	3.53%	3.48%	3.50%	3.56%	3.64%	3.68%	3.64%	3.54%	3.33%	3.22%	3.09%	3.02%	2.98%	-0.55%
	Concentration ratio - Ohio::U.S.	1.05	1.05	1.05	1.05	1.08	1.09	1.07	1.06	1.00	0.98	0.95	0.93	0.92	-0.13
562	Waste mgt. & remediation svcs.: Ohio	\$1.25	\$1.26	\$1.56	\$1.45	\$1.51	\$1.81	\$1.99	\$2.10	\$2.00	\$2.29	\$2.39	\$2.43	\$2.39	
	U.S.	\$36.92	\$38.41	\$47.81	\$42.55	\$42.82	\$43.28	\$46.20	\$47.93	\$48.05	\$53.78	\$57.45	\$59.50	\$59.84	
	Ohio as percent of U.S.	3.39%	3.29%	3.27%	3.40%	3.53%	4.19%	4.31%	4.38%	4.16%	4.27%	4.16%	4.09%	3.99%	0.60%
	Concentration ratio - Ohio::U.S.	1.01	0.99	0.98	1.00	1.05	1.24	1.27	1.31	1.25	1.29	1.28	1.26	1.23	0.22

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A10: Comparing Ohio and U.S. GDP by Industry - Professional/Business Services, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS	Industry Title	2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	Numeric	Percent
<b>Professional/Business Services in Constant Dollars</b>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
54	Prfsl.-scntfc.-tchncl. svcs.: Ohio	\$28.65	\$27.26	\$27.74	\$29.41	\$29.01	\$29.20	\$30.03	\$30.54	\$31.41	\$31.98	\$33.46	\$34.67	\$32.85	\$4.20	14.7%
	U.S.	\$1,131.12	\$1,066.13	\$1,094.62	\$1,142.32	\$1,191.79	\$1,193.85	\$1,245.29	\$1,299.70	\$1,338.14	\$1,383.53	\$1,466.73	\$1,530.38	\$1,501.18	\$370.06	32.7%
	Ohio as percent of U.S.	2.53%	2.56%	2.53%	2.57%	2.43%	2.45%	2.41%	2.35%	2.35%	2.31%	2.28%	2.27%	2.19%	-0.34%	
	Concentration ratio - Ohio::U.S.	0.74	0.76	0.76	0.76	0.73	0.73	0.71	0.71	0.71	0.71	0.71	0.71	0.68	-0.06	
5411	Legal svcs.: Ohio	\$6.31	\$5.63	\$5.15	\$5.15	\$4.90	\$4.65	\$4.53	\$4.63	\$4.75	\$4.70	\$4.75	\$4.81	\$4.44	-\$1.87	-29.6%
	U.S.	\$275.01	\$240.74	\$222.82	\$224.63	\$217.48	\$209.99	\$207.45	\$211.16	\$217.53	\$214.79	\$217.05	\$218.92	\$205.62	-\$69.39	-25.2%
	Ohio as percent of U.S.	2.30%	2.34%	2.31%	2.29%	2.25%	2.21%	2.18%	2.19%	2.18%	2.19%	2.19%	2.20%	2.16%	-0.13%	
	Concentration ratio - Ohio::U.S.	0.67	0.70	0.69	0.67	0.67	0.66	0.64	0.66	0.66	0.67	0.68	0.68	0.67	0.01	
5415	Computer systems & related svcs.: Ohio	\$5.22	\$5.49	\$6.03	\$6.80	\$6.46	\$6.72	\$6.99	\$7.24	\$7.76	\$8.21	\$9.01	\$9.35	\$8.88	\$3.66	70.2%
	U.S.	\$168.97	\$177.95	\$199.05	\$221.46	\$252.74	\$257.62	\$272.29	\$295.64	\$321.74	\$346.83	\$385.84	\$406.40	\$407.04	\$238.07	140.9%
	Ohio as percent of U.S.	3.09%	3.08%	3.03%	3.07%	2.56%	2.61%	2.57%	2.45%	2.41%	2.37%	2.33%	2.30%	2.18%	-0.91%	
	Concentration ratio - Ohio::U.S.	0.90	0.92	0.91	0.90	0.76	0.78	0.76	0.74	0.73	0.72	0.73	0.72	0.68	-0.22	
5412-4, 5416-9	Other prfsl.-scntfc.-tchncl. svcs.: Ohio	\$17.32	\$16.24	\$16.58	\$17.46	\$17.66	\$17.84	\$18.54	\$18.69	\$18.96	\$19.18	\$19.90	\$20.72	\$19.77	\$2.45	14.1%
	U.S.	\$695.46	\$651.60	\$674.05	\$696.74	\$721.57	\$726.41	\$766.43	\$794.89	\$802.35	\$828.27	\$874.55	\$918.14	\$904.82	\$209.37	30.1%
	Ohio as percent of U.S.	2.49%	2.49%	2.46%	2.51%	2.45%	2.46%	2.42%	2.35%	2.36%	2.32%	2.28%	2.26%	2.18%	-0.31%	
	Concentration ratio - Ohio::U.S.	0.73	0.74	0.73	0.74	0.73	0.73	0.71	0.71	0.72	0.71	0.71	0.70	0.68	-0.04	
55	Enterprise mgt.: Ohio	\$15.00	\$13.69	\$14.65	\$15.36	\$18.82	\$19.35	\$20.64	\$19.96	\$20.29	\$21.35	\$21.95	\$23.55	\$24.44	\$9.44	62.9%
	U.S.	\$272.95	\$251.82	\$269.68	\$280.72	\$302.14	\$317.02	\$338.35	\$347.29	\$351.74	\$377.47	\$404.62	\$433.48	\$439.80	\$166.85	61.1%
	Ohio as percent of U.S.	5.50%	5.44%	5.43%	5.47%	6.23%	6.10%	6.10%	5.75%	5.77%	5.66%	5.42%	5.43%	5.56%	0.06%	
	Concentration ratio - Ohio::U.S.	1.60	1.62	1.62	1.61	1.86	1.82	1.80	1.73	1.75	1.73	1.69	1.69	1.73	0.13	
56	Administrative & waste mgt. svcs.: Ohio	\$15.92	\$14.41	\$15.45	\$16.31	\$17.23	\$17.93	\$18.48	\$18.36	\$17.31	\$17.90	\$17.90	\$18.10	\$16.86	\$0.93	5.8%
	U.S.	\$452.86	\$416.18	\$445.12	\$460.19	\$474.95	\$481.83	\$500.20	\$507.46	\$508.58	\$540.74	\$563.19	\$583.07	\$549.77	\$96.91	21.4%
	Ohio as percent of U.S.	3.52%	3.46%	3.47%	3.54%	3.63%	3.72%	3.70%	3.62%	3.40%	3.31%	3.18%	3.10%	3.07%	-0.45%	
	Concentration ratio - Ohio::U.S.	1.02	1.03	1.04	1.04	1.08	1.11	1.09	1.09	1.03	1.01	0.99	0.97	0.96	-0.07	
561	Administrative & support svcs.: Ohio	\$14.52	\$13.07	\$13.83	\$14.84	\$15.72	\$16.16	\$16.61	\$16.43	\$15.56	\$15.93	\$15.95	\$16.19	\$15.09	\$0.58	4.0%
	U.S.	\$411.29	\$375.17	\$395.61	\$416.86	\$432.13	\$439.67	\$456.76	\$463.57	\$466.57	\$494.81	\$516.51	\$536.72	\$505.79	\$94.51	23.0%
	Ohio as percent of U.S.	3.53%	3.48%	3.50%	3.56%	3.64%	3.68%	3.64%	3.54%	3.33%	3.22%	3.09%	3.02%	2.98%	-0.55%	
	Concentration ratio - Ohio::U.S.	1.03	1.04	1.04	1.05	1.08	1.09	1.07	1.06	1.01	0.99	0.96	0.94	0.93	-0.10	
562	Waste mgt. & remediation svcs.: Ohio	\$1.40	\$1.34	\$1.62	\$1.47	\$1.51	\$1.77	\$1.87	\$1.92	\$1.75	\$1.96	\$1.95	\$1.91	\$1.76	\$0.37	26.1%
	U.S.	\$41.23	\$40.90	\$49.63	\$43.34	\$42.82	\$42.17	\$43.46	\$43.91	\$42.09	\$45.96	\$46.79	\$46.66	\$44.23	\$3.00	7.3%
	Ohio as percent of U.S.	3.39%	3.29%	3.27%	3.40%	3.53%	4.19%	4.31%	4.38%	4.16%	4.27%	4.16%	4.09%	3.99%	0.60%	
	Concentration ratio - Ohio::U.S.	0.99	0.98	0.98	1.00	1.05	1.25	1.27	1.32	1.26	1.31	1.29	1.27	1.24	0.25	

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A11: Comparing Ohio and U.S. GDP by Industry - Health Care and Social Assistance, 2008-2020**

2012 NAICS	Industry Title	Dollar figures in Billions													Nominal Net Change
		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	
<b>Health Care and Social Assistance in Current Dollars</b>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
62	Health care & social assistance#: Ohio	\$41.80	\$43.68	\$44.58	\$46.01	\$47.91	\$49.72	\$50.78	\$52.98	\$55.09	\$56.72	\$58.35	\$60.62	\$58.65	
	U.S.	\$1,017.20	\$1,078.77	\$1,112.33	\$1,149.94	\$1,195.07	\$1,230.77	\$1,266.43	\$1,337.79	\$1,406.43	\$1,461.53	\$1,523.02	\$1,596.39	\$1,547.29	
	Ohio as percent of U.S.	4.11%	4.05%	4.01%	4.00%	4.01%	4.04%	4.01%	3.96%	3.92%	3.88%	3.83%	3.80%	3.79%	-0.32%
	Concentration ratio - Ohio::U.S.	1.22	1.22	1.21	1.18	1.19	1.20	1.18	1.18	1.17	1.18	1.18	1.17	1.17	-0.05
621	Ambulatory health care svcs. #: Ohio	\$17.79	\$18.63	\$19.07	\$19.85	\$20.81	\$21.45	\$22.02	\$22.85	\$23.70	\$24.80	\$25.51	\$26.52	\$25.18	
	U.S.	\$481.07	\$507.20	\$532.05	\$555.76	\$574.62	\$594.28	\$611.77	\$644.39	\$682.94	\$712.42	\$741.64	\$780.84	\$738.50	
	Ohio as percent of U.S.	3.70%	3.67%	3.58%	3.57%	3.62%	3.61%	3.60%	3.55%	3.47%	3.48%	3.44%	3.40%	3.41%	-0.29%
	Concentration ratio - Ohio::U.S.	1.10	1.10	1.08	1.05	1.08	1.07	1.06	1.06	1.04	1.06	1.06	1.05	1.05	-0.05
622	Hospitals#: Ohio	\$15.40	\$16.30	\$16.64	\$17.20	\$18.03	\$18.85	\$19.19	\$20.27	\$21.08	\$21.29	\$21.90	\$22.75	\$22.54	
	U.S.	\$339.91	\$367.41	\$369.92	\$382.33	\$398.47	\$405.93	\$416.26	\$443.72	\$461.01	\$477.12	\$495.21	\$513.56	\$513.02	
	Ohio as percent of U.S.	4.53%	4.44%	4.50%	4.50%	4.53%	4.64%	4.61%	4.57%	4.57%	4.46%	4.42%	4.43%	4.39%	-0.14%
	Concentration ratio - Ohio::U.S.	1.35	1.33	1.35	1.33	1.35	1.38	1.36	1.36	1.37	1.35	1.36	1.37	1.35	0.01
623	Nursing & residential care facilities#: Ohio	\$5.73	\$5.85	\$5.93	\$6.01	\$6.04	\$6.21	\$6.23	\$6.34	\$6.55	\$6.65	\$6.84	\$6.98	\$6.85	
	U.S.	\$110.53	\$116.42	\$120.66	\$123.20	\$125.96	\$129.08	\$132.45	\$137.62	\$142.95	\$146.08	\$152.44	\$157.23	\$155.00	
	Ohio as percent of U.S.	5.18%	5.03%	4.91%	4.88%	4.79%	4.81%	4.71%	4.60%	4.58%	4.55%	4.48%	4.44%	4.42%	-0.76%
	Concentration ratio - Ohio::U.S.	1.54	1.51	1.48	1.44	1.43	1.43	1.39	1.37	1.37	1.38	1.38	1.37	1.36	-0.18
624	Social assistance#: Ohio	\$2.88	\$2.90	\$2.94	\$2.94	\$3.03	\$3.22	\$3.33	\$3.53	\$3.76	\$3.99	\$4.10	\$4.37	\$4.08	
	U.S.	\$85.69	\$87.74	\$89.70	\$88.66	\$96.02	\$101.48	\$105.95	\$112.07	\$119.54	\$125.91	\$133.73	\$144.76	\$140.77	
	Ohio as percent of U.S.	3.36%	3.31%	3.28%	3.32%	3.16%	3.17%	3.15%	3.15%	3.15%	3.17%	3.07%	3.02%	2.90%	-0.46%
	Concentration ratio - Ohio::U.S.	1.00	0.99	0.99	0.98	0.94	0.94	0.93	0.94	0.94	0.96	0.94	0.93	0.89	-0.10

Notes: # - these are private sector services and exclude those supported by tax dollars; ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A11: Comparing Ohio and U.S. GDP by Industry - Health Care and Social Assistance, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS	Industry Title	2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	Numeric	Percent
<b>Health Care and Social Assistance in Constant Dollars</b>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
62	Health care & social assistance#: Ohio	\$45.72	\$46.20	\$46.11	\$46.93	\$47.91	\$49.11	\$49.67	\$51.09	\$51.90	\$52.58	\$53.33	\$54.30	\$51.21	\$5.49	12.0%
	U.S.	\$1,111.61	\$1,140.35	\$1,149.98	\$1,172.55	\$1,195.07	\$1,215.86	\$1,239.35	\$1,292.48	\$1,329.22	\$1,360.26	\$1,398.86	\$1,438.53	\$1,359.30	\$247.69	22.3%
	Ohio as percent of U.S.	4.11%	4.05%	4.01%	4.00%	4.01%	4.04%	4.01%	3.95%	3.90%	3.87%	3.81%	3.77%	3.77%	-0.35%	
	Concentration ratio - Ohio::U.S.	1.20	1.21	1.20	1.18	1.19	1.20	1.18	1.19	1.18	1.18	1.18	1.18	1.17	-0.02	
621	Ambulatory health care svcs. #: Ohio	\$19.33	\$19.58	\$19.57	\$20.14	\$20.81	\$21.37	\$21.83	\$22.75	\$23.38	\$24.33	\$24.96	\$25.74	\$24.06	\$4.72	24.4%
	U.S.	\$522.66	\$533.02	\$546.03	\$563.86	\$574.62	\$591.97	\$606.43	\$641.51	\$673.76	\$699.05	\$725.45	\$757.82	\$705.58	\$182.91	35.0%
	Ohio as percent of U.S.	3.70%	3.67%	3.58%	3.57%	3.62%	3.61%	3.60%	3.55%	3.47%	3.48%	3.44%	3.40%	3.41%	-0.29%	
	Concentration ratio - Ohio::U.S.	1.08	1.09	1.07	1.05	1.08	1.07	1.06	1.07	1.05	1.07	1.07	1.06	1.06	-0.01	
622	Hospitals#: Ohio	\$16.89	\$17.36	\$17.34	\$17.67	\$18.03	\$18.48	\$18.55	\$19.06	\$19.21	\$18.98	\$19.16	\$19.38	\$18.75	\$1.86	11.0%
	U.S.	\$372.82	\$391.22	\$385.44	\$392.65	\$398.47	\$397.98	\$402.47	\$417.37	\$420.17	\$425.37	\$433.30	\$437.54	\$426.79	\$53.97	14.5%
	Ohio as percent of U.S.	4.53%	4.44%	4.50%	4.50%	4.53%	4.64%	4.61%	4.57%	4.57%	4.46%	4.42%	4.43%	4.39%	-0.14%	
	Concentration ratio - Ohio::U.S.	1.32	1.32	1.34	1.32	1.35	1.38	1.36	1.37	1.38	1.37	1.37	1.38	1.37	0.05	
623	Nursing & residential care facilities#: Ohio	\$6.33	\$6.17	\$6.13	\$6.11	\$6.04	\$6.15	\$6.14	\$6.07	\$6.03	\$5.95	\$5.92	\$5.82	\$5.43	-\$0.91	-14.3%
	U.S.	\$122.25	\$122.77	\$124.76	\$125.25	\$125.96	\$127.89	\$130.46	\$131.76	\$131.60	\$130.72	\$131.93	\$131.06	\$122.73	\$0.48	0.4%
	Ohio as percent of U.S.	5.18%	5.03%	4.91%	4.88%	4.79%	4.81%	4.71%	4.60%	4.58%	4.55%	4.48%	4.44%	4.42%	-0.76%	
	Concentration ratio - Ohio::U.S.	1.51	1.50	1.47	1.43	1.43	1.43	1.39	1.38	1.39	1.39	1.39	1.38	1.38	-0.13	
624	Social assistance#: Ohio	\$3.16	\$3.09	\$3.08	\$3.01	\$3.03	\$3.11	\$3.15	\$3.22	\$3.30	\$3.40	\$3.41	\$3.51	\$3.11	-\$0.05	-1.7%
	U.S.	\$94.04	\$93.54	\$93.84	\$90.78	\$96.02	\$98.07	\$100.11	\$102.30	\$105.02	\$107.26	\$111.00	\$116.32	\$107.10	\$13.05	13.9%
	Ohio as percent of U.S.	3.36%	3.31%	3.28%	3.32%	3.16%	3.17%	3.15%	3.15%	3.15%	3.17%	3.07%	3.02%	2.90%	-0.46%	
	Concentration ratio - Ohio::U.S.	0.98	0.99	0.98	0.97	0.94	0.94	0.93	0.95	0.95	0.97	0.95	0.94	0.90	-0.07	

Notes: # - these are private sector services and exclude those supported by tax dollars; ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A12: Comparing Ohio and U.S. GDP by Industry - Leisure and Hospitality, 2008-2020**

2012 NAICS	Industry Title	Dollar figures in Billions													Nominal Net Change
		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	
<u>Leisure and Hospitality in Current Dollars</u>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
71	Arts-entertainment-recreation: Ohio	\$4.13	\$4.41	\$4.97	\$5.14	\$5.91	\$6.56	\$6.57	\$6.60	\$7.20	\$7.35	\$7.46	\$7.31	\$5.69	
	U.S.	\$143.24	\$144.54	\$152.42	\$158.70	\$171.78	\$177.77	\$189.34	\$193.56	\$207.22	\$216.84	\$230.00	\$240.98	\$163.36	
	Ohio as percent of U.S.	2.88%	3.05%	3.26%	3.24%	3.44%	3.69%	3.47%	3.41%	3.48%	3.39%	3.24%	3.03%	3.48%	0.60%
	Concentration ratio - Ohio::U.S.	0.86	0.92	0.98	0.96	1.02	1.10	1.02	1.02	1.04	1.03	1.00	0.94	1.07	0.22
711-2	Performing arts, museums etc.: Ohio	\$1.75	\$1.68	\$1.70	\$1.89	\$2.22	\$2.09	\$2.36	\$2.39	\$2.82	\$3.30	\$3.38	\$3.16	\$2.49	
	U.S.	\$81.50	\$84.81	\$87.86	\$93.01	\$101.76	\$104.55	\$112.54	\$112.92	\$122.23	\$129.90	\$138.98	\$145.37	\$91.30	
	Ohio as percent of U.S.	2.15%	1.98%	1.93%	2.03%	2.18%	2.00%	2.10%	2.11%	2.30%	2.54%	2.44%	2.17%	2.72%	0.57%
	Concentration ratio - Ohio::U.S.	0.64	0.59	0.58	0.60	0.65	0.59	0.62	0.63	0.69	0.77	0.75	0.67	0.84	0.20
713	Amusements-gambling-recreation: Ohio	\$2.38	\$2.73	\$3.27	\$3.26	\$3.69	\$4.47	\$4.21	\$4.21	\$4.39	\$4.05	\$4.08	\$4.15	\$3.20	
	U.S.	\$61.74	\$59.73	\$64.56	\$65.70	\$70.02	\$73.23	\$76.79	\$80.63	\$84.99	\$86.94	\$91.03	\$95.61	\$72.06	
	Ohio as percent of U.S.	3.85%	4.57%	5.07%	4.96%	5.27%	6.11%	5.49%	5.22%	5.16%	4.66%	4.48%	4.34%	4.44%	0.60%
	Concentration ratio - Ohio::U.S.	1.14	1.37	1.52	1.46	1.57	1.82	1.62	1.56	1.55	1.41	1.38	1.34	1.37	0.23
72	Accommodation & food srvc.: Ohio	\$10.52	\$10.38	\$10.77	\$11.36	\$12.28	\$13.39	\$14.27	\$15.55	\$16.26	\$16.68	\$17.01	\$17.86	\$14.42	
	U.S.	\$399.64	\$388.47	\$403.81	\$423.24	\$450.96	\$474.51	\$502.60	\$553.47	\$583.24	\$611.34	\$639.56	\$673.22	\$508.72	
	Ohio as percent of U.S.	2.63%	2.67%	2.67%	2.68%	2.72%	2.82%	2.84%	2.81%	2.79%	2.73%	2.66%	2.65%	2.84%	0.20%
	Concentration ratio - Ohio::U.S.	0.78	0.80	0.80	0.79	0.81	0.84	0.84	0.84	0.84	0.83	0.82	0.82	0.87	0.09
721	Accommodation: Ohio	\$1.59	\$1.44	\$1.47	\$1.53	\$1.65	\$2.12	\$2.33	\$2.47	\$2.51	\$2.34	\$2.28	\$2.51	\$1.55	
	U.S.	\$123.48	\$107.35	\$112.14	\$122.03	\$128.89	\$136.88	\$143.13	\$157.56	\$160.21	\$167.98	\$176.24	\$185.02	\$115.77	
	Ohio as percent of U.S.	1.29%	1.34%	1.32%	1.25%	1.28%	1.55%	1.63%	1.57%	1.57%	1.39%	1.29%	1.35%	1.34%	0.05%
	Concentration ratio - Ohio::U.S.	0.38	0.40	0.40	0.37	0.38	0.46	0.48	0.47	0.47	0.42	0.40	0.42	0.41	0.03
722	Food srvc. & drinking places: Ohio	\$8.94	\$8.94	\$9.30	\$9.83	\$10.63	\$11.27	\$11.94	\$13.09	\$13.75	\$14.35	\$14.73	\$15.36	\$12.87	
	U.S.	\$276.16	\$281.12	\$291.68	\$301.21	\$322.07	\$337.63	\$359.46	\$395.90	\$423.04	\$443.36	\$463.32	\$488.20	\$392.95	
	Ohio as percent of U.S.	3.24%	3.18%	3.19%	3.26%	3.30%	3.34%	3.32%	3.31%	3.25%	3.24%	3.18%	3.15%	3.28%	0.04%
	Concentration ratio - Ohio::U.S.	0.96	0.96	0.96	0.96	0.98	0.99	0.98	0.98	0.97	0.98	0.98	0.97	1.01	0.05

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A12: Comparing Ohio and U.S. GDP by Industry - Leisure and Hospitality, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS	Industry Title	2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	Numeric	Percent
<u>Leisure and Hospitality in Constant Dollars</u>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
71	Arts-entertainment-recreation: Ohio	\$4.44	\$4.63	\$5.23	\$5.33	\$5.91	\$6.45	\$6.35	\$6.12	\$6.47	\$6.54	\$6.50	\$6.21	\$4.59	\$0.16	3.5%
	U.S.	\$153.51	\$151.29	\$159.16	\$163.78	\$171.78	\$174.92	\$182.69	\$179.42	\$185.70	\$191.86	\$199.44	\$204.26	\$132.05	-\$21.45	-14.0%
	Ohio as percent of U.S.	2.89%	3.06%	3.29%	3.25%	3.44%	3.69%	3.47%	3.41%	3.48%	3.41%	3.26%	3.04%	3.48%	0.59%	
	Concentration ratio - Ohio::U.S.	0.84	0.91	0.98	0.96	1.02	1.10	1.02	1.03	1.06	1.04	1.01	0.95	1.08	0.24	
711-2	Performing arts, museums etc.: Ohio	\$1.87	\$1.75	\$1.75	\$1.93	\$2.22	\$2.05	\$2.27	\$2.21	\$2.51	\$2.88	\$2.91	\$2.67	\$2.02	\$0.16	8.4%
	U.S.	\$86.81	\$88.31	\$90.45	\$95.20	\$101.76	\$102.88	\$108.47	\$104.50	\$109.02	\$113.48	\$119.57	\$123.00	\$74.29	-\$12.52	-14.4%
	Ohio as percent of U.S.	2.15%	1.98%	1.93%	2.03%	2.18%	2.00%	2.10%	2.11%	2.30%	2.54%	2.44%	2.17%	2.72%	0.57%	
	Concentration ratio - Ohio::U.S.	0.63	0.59	0.58	0.60	0.65	0.59	0.62	0.64	0.70	0.78	0.76	0.68	0.85	0.22	
713	Amusements-gambling-recreation: Ohio	\$2.57	\$2.88	\$3.49	\$3.40	\$3.69	\$4.40	\$4.07	\$3.91	\$3.96	\$3.65	\$3.58	\$3.53	\$2.56	\$0.00	-0.2%
	U.S.	\$66.75	\$62.99	\$68.79	\$68.60	\$70.02	\$72.04	\$74.22	\$74.93	\$76.68	\$78.35	\$79.81	\$81.19	\$57.69	-\$9.06	-13.6%
	Ohio as percent of U.S.	3.85%	4.57%	5.07%	4.96%	5.27%	6.11%	5.49%	5.22%	5.16%	4.66%	4.48%	4.34%	4.44%	0.60%	
	Concentration ratio - Ohio::U.S.	1.12	1.36	1.51	1.46	1.57	1.82	1.62	1.57	1.56	1.42	1.39	1.35	1.38	0.26	
72	Accommodation & food srvc.: Ohio	\$11.93	\$11.06	\$11.40	\$11.92	\$12.28	\$12.99	\$13.52	\$14.01	\$14.03	\$14.03	\$13.85	\$14.06	\$10.64	-\$1.29	-10.8%
	U.S.	\$445.96	\$412.84	\$427.24	\$443.73	\$450.96	\$460.59	\$475.85	\$499.29	\$504.92	\$515.81	\$521.17	\$530.93	\$383.58	-\$62.37	-14.0%
	Ohio as percent of U.S.	2.68%	2.68%	2.67%	2.69%	2.72%	2.82%	2.84%	2.81%	2.78%	2.72%	2.66%	2.65%	2.77%	0.10%	
	Concentration ratio - Ohio::U.S.	0.78	0.80	0.80	0.79	0.81	0.84	0.84	0.84	0.84	0.83	0.83	0.82	0.86	0.09	
721	Accommodation: Ohio	\$1.64	\$1.51	\$1.56	\$1.59	\$1.65	\$2.06	\$2.19	\$2.25	\$2.21	\$2.01	\$1.87	\$2.00	\$1.33	-\$0.31	-18.9%
	U.S.	\$127.43	\$112.54	\$118.84	\$127.24	\$128.89	\$133.25	\$134.75	\$143.55	\$141.15	\$144.38	\$144.71	\$147.78	\$99.31	-\$28.12	-22.1%
	Ohio as percent of U.S.	1.29%	1.34%	1.32%	1.25%	1.28%	1.55%	1.63%	1.57%	1.57%	1.39%	1.29%	1.35%	1.34%	0.05%	
	Concentration ratio - Ohio::U.S.	0.37	0.40	0.39	0.37	0.38	0.46	0.48	0.47	0.47	0.43	0.40	0.42	0.42	0.04	
722	Food srvc. & drinking places: Ohio	\$10.29	\$9.56	\$9.83	\$10.33	\$10.63	\$10.93	\$11.33	\$11.76	\$11.82	\$12.02	\$11.97	\$12.05	\$9.29	-\$1.01	-9.8%
	U.S.	\$318.16	\$300.32	\$308.40	\$316.48	\$322.07	\$327.34	\$341.10	\$355.75	\$363.71	\$371.37	\$376.38	\$383.08	\$283.54	-\$34.62	-10.9%
	Ohio as percent of U.S.	3.24%	3.18%	3.19%	3.26%	3.30%	3.34%	3.32%	3.31%	3.25%	3.24%	3.18%	3.15%	3.28%	0.04%	
	Concentration ratio - Ohio::U.S.	0.94	0.95	0.95	0.96	0.98	0.99	0.98	0.99	0.98	0.99	0.99	0.98	1.02	0.08	

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A13: Comparing Ohio and U.S. GDP by Industry - Government, 2008-2020**

2012 NAICS	Industry Title	Dollar figures in Billions													Nominal Net Change
		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020**	
<b>Government in Current Dollars</b>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
92, 491#	Government, all levels: Ohio	\$58.22	\$59.09	\$61.86	\$61.95	\$63.25	\$64.33	\$65.53	\$67.12	\$68.68	\$70.41	\$72.25	\$74.43	\$75.66	
	U.S.	\$1,981.61	\$2,045.05	\$2,107.96	\$2,137.06	\$2,159.49	\$2,212.51	\$2,271.37	\$2,339.44	\$2,384.20	\$2,447.07	\$2,546.27	\$2,621.80	\$2,670.61	
	Ohio as percent of U.S.	2.94%	2.89%	2.93%	2.90%	2.93%	2.91%	2.88%	2.87%	2.88%	2.88%	2.84%	2.84%	2.83%	-0.10%
	Concentration ratio - Ohio::U.S.	0.87	0.87	0.88	0.86	0.87	0.86	0.85	0.85	0.86	0.87	0.87	0.88	0.87	0.00
92f, 491#	Federal govt. total GDP: Ohio	\$12.89	\$13.31	\$14.10	\$14.18	\$14.19	\$13.98	\$14.35	\$14.75	\$15.03	\$15.45	\$16.06	\$16.66	\$17.61	
	U.S.	\$632.21	\$663.33	\$697.45	\$712.25	\$713.89	\$703.81	\$715.83	\$731.28	\$743.01	\$761.73	\$789.42	\$811.46	\$848.35	
	Ohio as percent of U.S.	2.04%	2.01%	2.02%	1.99%	1.99%	1.99%	2.00%	2.02%	2.02%	2.03%	2.03%	2.05%	2.08%	0.04%
	Concentration ratio - Ohio::U.S.	0.61	0.60	0.61	0.59	0.59	0.59	0.59	0.60	0.61	0.62	0.63	0.63	0.64	0.03
92fc & 491#	Federal civilian (inc. Postal Service): Ohio	\$9.07	\$9.25	\$9.94	\$9.95	\$9.93	\$9.73	\$10.17	\$10.62	\$10.91	\$11.37	\$11.88	\$12.21	\$12.82	
	U.S.	\$346.67	\$362.70	\$384.76	\$391.39	\$391.42	\$386.06	\$401.19	\$420.19	\$433.95	\$451.40	\$469.52	\$481.98	\$506.38	
	Ohio as percent of U.S.	2.62%	2.55%	2.58%	2.54%	2.54%	2.52%	2.53%	2.53%	2.51%	2.52%	2.53%	2.53%	2.53%	-0.08%
	Concentration ratio - Ohio::U.S.	0.78	0.77	0.78	0.75	0.76	0.75	0.75	0.75	0.75	0.76	0.78	0.78	0.78	0.00
92811	Federal military: Ohio	\$3.82	\$4.06	\$4.16	\$4.23	\$4.26	\$4.25	\$4.18	\$4.13	\$4.12	\$4.08	\$4.18	\$4.45	\$4.79	
	U.S.	\$285.54	\$300.63	\$312.69	\$320.86	\$322.47	\$317.75	\$314.64	\$311.09	\$309.06	\$310.33	\$319.90	\$329.49	\$341.97	
	Ohio as percent of U.S.	1.34%	1.35%	1.33%	1.32%	1.32%	1.34%	1.33%	1.33%	1.33%	1.31%	1.31%	1.35%	1.40%	0.06%
	Concentration ratio - Ohio::U.S.	0.40	0.41	0.40	0.39	0.39	0.40	0.39	0.40	0.40	0.40	0.40	0.42	0.43	0.03
92sl	State & local: Ohio	\$45.33	\$45.78	\$47.76	\$47.77	\$49.06	\$50.35	\$51.18	\$52.36	\$53.66	\$54.96	\$56.19	\$57.77	\$58.06	
	U.S.	\$1,349.40	\$1,381.73	\$1,410.52	\$1,424.81	\$1,445.60	\$1,508.70	\$1,555.54	\$1,608.16	\$1,641.19	\$1,685.34	\$1,756.86	\$1,810.33	\$1,822.25	
	Ohio as percent of U.S.	3.36%	3.31%	3.39%	3.35%	3.39%	3.34%	3.29%	3.26%	3.27%	3.26%	3.20%	3.19%	3.19%	-0.17%
	Concentration ratio - Ohio::U.S.	1.00	0.99	1.02	0.99	1.01	0.99	0.97	0.97	0.98	0.99	0.98	0.98	0.98	-0.02
92sl	State & local in Ohio as a percentage of all government activity in Ohio (92sl/(92, 491#))	77.87%	77.47%	77.20%	77.11%	77.57%	78.27%	78.11%	78.02%	78.12%	78.06%	77.77%	77.61%	76.73%	-1.13%

Notes: # - 491 - the U.S. Postal Service; ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).



**Table A13: Comparing Ohio and U.S. GDP by Industry - Government, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS	Industry Title	2008 <sup>^</sup>	2009 <sup>^</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 <sup>^*</sup>	Numeric	Percent
<b>Government in Constant Dollars</b>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
92, 491 <sup>#</sup>	Government, all levels: Ohio	\$63.91	\$62.81	\$64.13	\$63.18	\$63.25	\$62.14	\$61.47	\$61.13	\$61.98	\$62.53	\$62.16	\$62.55	\$61.75	-\$2.16	-3.4%
	U.S.	\$2,170.16	\$2,171.50	\$2,182.73	\$2,175.79	\$2,159.49	\$2,144.29	\$2,139.64	\$2,142.19	\$2,163.35	\$2,184.63	\$2,203.00	\$2,216.26	\$2,195.49	\$25.33	1.2%
	Ohio as percent of U.S.	2.94%	2.89%	2.94%	2.90%	2.93%	2.90%	2.87%	2.85%	2.86%	2.86%	2.82%	2.82%	2.81%	-0.13%	
	Concentration ratio - Ohio::U.S.	0.86	0.86	0.88	0.85	0.87	0.86	0.85	0.86	0.87	0.88	0.88	0.88	0.88	0.02	
92f, 491 <sup>#</sup>	Federal govt. total GDP: Ohio	\$13.90	\$14.05	\$14.49	\$14.28	\$14.19	\$13.85	\$13.89	\$14.00	\$14.16	\$14.29	\$14.43	\$14.66	\$15.24	\$1.34	9.6%
	U.S.	\$681.95	\$700.03	\$716.41	\$717.49	\$713.89	\$697.27	\$693.04	\$694.02	\$699.98	\$704.78	\$709.20	\$714.06	\$734.30	\$52.35	7.7%
	Ohio as percent of U.S.	2.04%	2.01%	2.02%	1.99%	1.99%	1.99%	2.00%	2.02%	2.02%	2.03%	2.03%	2.05%	2.08%	0.04%	
	Concentration ratio - Ohio::U.S.	0.59	0.60	0.60	0.58	0.59	0.59	0.59	0.61	0.61	0.62	0.63	0.64	0.65	0.05	
92fc & 491 <sup>#</sup>	Federal civilian (inc. Postal Service): Ohio	\$9.78	\$9.77	\$10.21	\$10.03	\$9.93	\$9.64	\$9.84	\$10.08	\$10.28	\$10.52	\$10.67	\$10.74	\$11.09	\$1.32	13.4%
	U.S.	\$373.94	\$382.77	\$395.22	\$394.27	\$391.42	\$382.47	\$388.42	\$398.78	\$408.82	\$417.65	\$421.81	\$424.12	\$438.31	\$64.37	17.2%
	Ohio as percent of U.S.	2.62%	2.55%	2.58%	2.54%	2.54%	2.52%	2.53%	2.53%	2.51%	2.52%	2.53%	2.53%	2.53%	-0.08%	
	Concentration ratio - Ohio::U.S.	0.76	0.76	0.77	0.75	0.76	0.75	0.75	0.76	0.76	0.77	0.79	0.79	0.79	0.03	
92811	Federal military: Ohio	\$4.12	\$4.28	\$4.28	\$4.26	\$4.26	\$4.21	\$4.05	\$3.92	\$3.88	\$3.77	\$3.75	\$3.92	\$4.15	\$0.02	0.6%
	U.S.	\$308.01	\$317.26	\$321.19	\$323.22	\$322.47	\$314.80	\$304.62	\$295.24	\$291.16	\$287.13	\$287.40	\$289.94	\$296.00	-\$12.01	-3.9%
	Ohio as percent of U.S.	1.34%	1.35%	1.33%	1.32%	1.32%	1.34%	1.33%	1.33%	1.33%	1.31%	1.31%	1.35%	1.40%	0.06%	
	Concentration ratio - Ohio::U.S.	0.39	0.40	0.40	0.39	0.39	0.40	0.39	0.40	0.40	0.40	0.41	0.42	0.44	0.05	
92sl	State & local: Ohio	\$50.01	\$48.76	\$49.65	\$48.90	\$49.06	\$48.29	\$47.59	\$47.15	\$47.83	\$48.25	\$47.76	\$47.92	\$46.59	-\$3.42	-6.8%
	U.S.	\$1,488.73	\$1,471.67	\$1,466.39	\$1,458.32	\$1,445.60	\$1,446.83	\$1,446.31	\$1,447.89	\$1,463.05	\$1,479.40	\$1,493.28	\$1,501.72	\$1,462.44	-\$26.28	-1.8%
	Ohio as percent of U.S.	3.36%	3.31%	3.39%	3.35%	3.39%	3.34%	3.29%	3.26%	3.27%	3.26%	3.20%	3.19%	3.19%	-0.17%	
	Concentration ratio - Ohio::U.S.	0.98	0.99	1.01	0.98	1.01	0.99	0.97	0.98	0.99	1.00	0.99	0.99	0.99	0.01	
92sl	State & local in Ohio as a percentage of all government activity in Ohio (92sl/(92, 491 <sup>#</sup> ))	78.26%	77.63%	77.41%	77.39%	77.57%	77.70%	77.41%	77.12%	77.18%	77.16%	76.83%	76.61%	75.45%	-2.81%	

Notes: # - 491 - the U.S. Postal Service; ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A14: Comparing Ohio and U.S. GDP by Industry - Infrastructure, Trade, Education and Other Services, 2008-2020**

2012 NAICS	Industry Title	Dollar figures in Billions													Nominal Net Change
		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	
<b>Infrastructure, Trade, Education and Other Services in Current Dollars</b>															
11-92	Total GDP: Ohio	\$496.9	\$482.3	\$500.5	\$528.2	\$545.7	\$566.5	\$595.6	\$611.0	\$623.3	\$641.7	\$667.0	\$693.2	\$677.6	
	U.S.	\$14,769.9	\$14,478.1	\$15,049.0	\$15,599.7	\$16,254.0	\$16,843.2	\$17,550.7	\$18,206.0	\$18,695.1	\$19,479.6	\$20,527.2	\$21,372.6	\$20,893.7	
	Ohio as percent of U.S.	3.36%	3.33%	3.33%	3.39%	3.36%	3.36%	3.39%	3.36%	3.33%	3.29%	3.25%	3.24%	3.24%	-0.12%
22	Utilities: Ohio	\$8.79	\$9.53	\$10.04	\$10.17	\$9.94	\$10.14	\$10.53	\$10.58	\$10.65	\$10.54	\$10.61	\$10.79	\$10.91	
	U.S.	\$241.67	\$257.82	\$279.11	\$288.28	\$280.65	\$286.91	\$298.35	\$299.23	\$302.01	\$311.58	\$319.04	\$333.29	\$341.72	
	Ohio as percent of U.S.	3.64%	3.70%	3.60%	3.53%	3.54%	3.53%	3.53%	3.53%	3.53%	3.38%	3.33%	3.24%	3.19%	-0.45%
	Concentration ratio - Ohio::U.S.	1.08	1.11	1.08	1.04	1.06	1.05	1.04	1.05	1.06	1.03	1.02	1.00	0.98	-0.10
23	Construction: Ohio	\$17.25	\$15.95	\$14.54	\$15.61	\$17.24	\$18.17	\$19.29	\$20.47	\$21.72	\$23.93	\$24.61	\$26.22	\$26.08	
	U.S.	\$649.28	\$565.42	\$525.74	\$525.62	\$554.94	\$588.68	\$637.65	\$695.32	\$747.71	\$800.61	\$847.11	\$903.61	\$895.86	
	Ohio as percent of U.S.	2.66%	2.82%	2.76%	2.97%	3.11%	3.09%	3.03%	2.94%	2.90%	2.99%	2.91%	2.90%	2.91%	0.26%
	Concentration ratio - Ohio::U.S.	0.79	0.85	0.83	0.88	0.93	0.92	0.89	0.88	0.87	0.91	0.89	0.89	0.90	0.11
42	Wholesale trade: Ohio	\$31.90	\$29.60	\$31.27	\$32.32	\$34.07	\$35.74	\$37.59	\$39.14	\$39.16	\$40.46	\$41.80	\$43.58	\$41.73	
	U.S.	\$884.83	\$833.83	\$889.98	\$937.09	\$1,000.29	\$1,042.25	\$1,089.60	\$1,143.57	\$1,135.85	\$1,165.67	\$1,217.45	\$1,275.01	\$1,243.27	
	Ohio as percent of U.S.	3.61%	3.55%	3.51%	3.45%	3.41%	3.43%	3.45%	3.42%	3.45%	3.47%	3.43%	3.42%	3.36%	-0.25%
	Concentration ratio - Ohio::U.S.	1.07	1.07	1.06	1.02	1.01	1.02	1.02	1.02	1.03	1.05	1.06	1.05	1.03	-0.04
44-45	Retail trade: Ohio	\$29.93	\$29.49	\$29.93	\$31.10	\$31.79	\$33.50	\$34.55	\$36.25	\$36.81	\$38.07	\$37.87	\$39.27	\$40.68	
	U.S.	\$848.85	\$827.25	\$852.05	\$873.11	\$910.01	\$950.58	\$975.14	\$1,020.33	\$1,052.99	\$1,081.64	\$1,119.69	\$1,166.67	\$1,202.20	
	Ohio as percent of U.S.	3.53%	3.57%	3.51%	3.56%	3.49%	3.52%	3.54%	3.55%	3.50%	3.52%	3.38%	3.37%	3.38%	-0.14%
	Concentration ratio - Ohio::U.S.	1.05	1.07	1.06	1.05	1.04	1.05	1.04	1.06	1.05	1.07	1.04	1.04	1.04	0.00
61	Educational srvc <sup>#</sup> : Ohio	\$4.94	\$5.44	\$5.66	\$5.83	\$5.86	\$5.81	\$5.94	\$5.94	\$6.18	\$6.06	\$6.17	\$6.39	\$5.69	
	U.S.	\$167.78	\$188.21	\$198.96	\$206.29	\$214.19	\$217.64	\$226.16	\$233.45	\$246.21	\$249.21	\$261.14	\$275.04	\$251.32	
	Ohio as percent of U.S.	2.95%	2.89%	2.84%	2.82%	2.74%	2.67%	2.63%	2.54%	2.51%	2.43%	2.36%	2.32%	2.27%	-0.68%
	Concentration ratio - Ohio::U.S.	0.88	0.87	0.86	0.83	0.81	0.79	0.77	0.76	0.75	0.74	0.73	0.72	0.70	-0.18
81	Other srvc <sup>s</sup> : Ohio	\$10.64	\$10.37	\$10.44	\$10.83	\$11.40	\$11.56	\$12.22	\$12.71	\$12.93	\$13.43	\$14.04	\$14.55	\$13.43	
	U.S.	\$330.33	\$326.37	\$328.19	\$333.54	\$348.58	\$356.66	\$376.81	\$391.64	\$400.46	\$413.49	\$436.52	\$454.39	\$418.99	
	Ohio as percent of U.S.	3.22%	3.18%	3.18%	3.25%	3.27%	3.24%	3.24%	3.25%	3.23%	3.25%	3.22%	3.20%	3.20%	-0.02%
	Concentration ratio - Ohio::U.S.	0.96	0.95	0.96	0.96	0.97	0.96	0.96	0.97	0.97	0.99	0.99	0.99	0.99	0.03

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

**Table A14: Comparing Ohio and U.S. GDP by Industry - Infrastructure, Trade, Education and Other Services, 2008-2020**

		Dollar figures in billions, standardized on 2012													Real Net Change	
2012 NAICS		2008^	2009^	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020^*	Numeric	Percent
<b>Infrastructure, Trade, Education and Other Services in Constant Dollars</b>																
11-92	Total GDP: Ohio	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$52.8	9.8%
	U.S.	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,741.7	17.5%
	Ohio as percent of U.S.	3.43%	3.35%	3.35%	3.41%	3.36%	3.36%	3.39%	3.33%	3.30%	3.27%	3.22%	3.21%	3.21%	-0.23%	
22	Utilities: Ohio	\$9.14	\$8.75	\$9.58	\$9.77	\$9.94	\$9.79	\$9.40	\$9.42	\$9.90	\$9.61	\$9.41	\$9.28	\$9.53	\$0.39	4.3%
	U.S.	\$251.29	\$236.78	\$266.35	\$276.94	\$280.65	\$277.16	\$266.29	\$266.39	\$280.73	\$284.09	\$283.11	\$286.55	\$298.56	\$47.27	18.8%
	Ohio as percent of U.S.	3.64%	3.70%	3.60%	3.53%	3.54%	3.53%	3.53%	3.53%	3.53%	3.38%	3.33%	3.24%	3.19%	-0.45%	
	Concentration ratio - Ohio::U.S.	1.06	1.10	1.07	1.04	1.06	1.05	1.04	1.06	1.07	1.04	1.03	1.01	0.99	-0.06	
23	Construction: Ohio	\$17.89	\$16.28	\$15.16	\$16.04	\$17.24	\$17.54	\$17.52	\$17.81	\$18.25	\$19.44	\$19.34	\$19.58	\$18.94	\$1.05	5.9%
	U.S.	\$673.38	\$576.92	\$548.34	\$539.95	\$554.94	\$568.27	\$579.08	\$605.09	\$628.16	\$650.56	\$665.69	\$674.74	\$650.44	-\$22.94	-3.4%
	Ohio as percent of U.S.	2.66%	2.82%	2.76%	2.97%	3.11%	3.09%	3.03%	2.94%	2.90%	2.99%	2.91%	2.90%	2.91%	0.26%	
	Concentration ratio - Ohio::U.S.	0.77	0.84	0.83	0.87	0.93	0.92	0.89	0.88	0.88	0.91	0.90	0.90	0.91	0.13	
42	Wholesale trade: Ohio	\$36.66	\$31.68	\$33.20	\$33.34	\$34.07	\$35.01	\$36.59	\$37.85	\$37.65	\$38.10	\$38.11	\$37.76	\$36.38	-\$0.28	-0.8%
	U.S.	\$1,016.80	\$892.40	\$944.96	\$966.66	\$1,000.29	\$1,021.01	\$1,060.62	\$1,105.85	\$1,091.90	\$1,097.62	\$1,109.82	\$1,104.63	\$1,083.85	\$67.05	6.6%
	Ohio as percent of U.S.	3.61%	3.55%	3.51%	3.45%	3.41%	3.43%	3.45%	3.42%	3.45%	3.47%	3.43%	3.42%	3.36%	-0.25%	
	Concentration ratio - Ohio::U.S.	1.05	1.06	1.05	1.01	1.01	1.02	1.02	1.03	1.04	1.06	1.07	1.06	1.05	0.00	
44-45	Retail trade: Ohio	\$32.49	\$31.41	\$31.65	\$32.17	\$31.79	\$33.05	\$33.84	\$35.20	\$35.92	\$37.38	\$37.05	\$37.80	\$36.90	\$4.41	13.6%
	U.S.	\$921.43	\$880.98	\$901.12	\$903.25	\$910.01	\$937.73	\$955.11	\$990.74	\$1,027.57	\$1,061.80	\$1,095.55	\$1,122.90	\$1,090.50	\$169.07	18.3%
	Ohio as percent of U.S.	3.53%	3.57%	3.51%	3.56%	3.49%	3.52%	3.54%	3.55%	3.50%	3.52%	3.38%	3.37%	3.38%	-0.14%	
	Concentration ratio - Ohio::U.S.	1.03	1.06	1.05	1.05	1.04	1.05	1.04	1.07	1.06	1.08	1.05	1.05	1.05	0.03	
61	Educational svcs <sup>#</sup> : Ohio	\$5.62	\$5.95	\$6.04	\$6.03	\$5.86	\$5.62	\$5.59	\$5.46	\$5.53	\$5.28	\$5.26	\$5.31	\$4.60	-\$1.02	-18.1%
	U.S.	\$190.63	\$205.89	\$212.14	\$213.68	\$214.19	\$210.66	\$212.93	\$214.67	\$220.55	\$217.36	\$222.69	\$228.86	\$203.03	\$12.40	6.5%
	Ohio as percent of U.S.	2.95%	2.89%	2.84%	2.82%	2.74%	2.67%	2.63%	2.54%	2.51%	2.43%	2.36%	2.32%	2.27%	-0.68%	
	Concentration ratio - Ohio::U.S.	0.86	0.86	0.85	0.83	0.81	0.79	0.77	0.76	0.76	0.74	0.73	0.72	0.71	-0.15	
81	Other svcs.: Ohio	\$12.07	\$11.20	\$11.01	\$11.15	\$11.40	\$11.20	\$11.53	\$11.61	\$11.46	\$11.59	\$11.86	\$11.81	\$10.35	-\$1.72	-14.3%
	U.S.	\$374.93	\$352.48	\$346.17	\$343.32	\$348.58	\$345.70	\$355.71	\$357.72	\$354.81	\$357.03	\$368.81	\$368.84	\$322.97	-\$51.96	-13.9%
	Ohio as percent of U.S.	3.22%	3.18%	3.18%	3.25%	3.27%	3.24%	3.24%	3.25%	3.23%	3.25%	3.22%	3.20%	3.20%	-0.02%	
	Concentration ratio - Ohio::U.S.	0.94	0.95	0.95	0.95	0.97	0.96	0.96	0.98	0.98	0.99	1.00	1.00	1.00	0.06	

Notes: ^ - a recession year for the nation as a whole; \* - initial; prior years may have been revised.

Source: U.S. BEA (2021). Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

Table A15: Ohio's GDP by Industry - Sorted by 2020 Concentration Ratio

2012 NAICS Codes	Industry Titles	Concentration Ratio 2020 <sup>1</sup>	GDP 2020 <sup>1</sup>	Percent Change '08-'20 <sup>2</sup>	2012 NAICS Codes	Industry Titles	Concentration Ratio 2020 <sup>1</sup>	GDP 2020 <sup>1</sup>	Percent Change '08-'20 <sup>2</sup>
11-92	Total	1.00	\$677,561	9.8%	81	Other services (exc. governments & their enterprises)	0.99	\$13,429	-14.3%
					22	Utilities	0.98	\$10,907	4.3%
					92sl	State & local governments	0.98	\$58,058	-6.8%
<b>331</b>	<b>Primary metal mfg.</b>	<b>2.52</b>	<b>\$4,761</b>	<b>25.1%</b>	22, 42-81*	Private services-providing industries	0.97	\$462,529	13.2%
<b>335</b>	<b>Electrical eqpt., appliance &amp; component mfg.</b>	<b>2.35</b>	<b>\$4,841</b>	<b>-11.3%</b>	56	Administrative/support & waste mgt./remediation services	0.95	\$20,043	5.8%
<b>326</b>	<b>Plastics &amp; rubber products mfg.</b>	<b>2.28</b>	<b>\$5,949</b>	<b>14.3%</b>	561	Administrative & support services	0.92	\$17,656	4.0%
<b>3361-3363</b>	<b>Motor vehicles, bodies, trailers &amp; parts mfg.</b>	<b>2.17</b>	<b>\$10,867</b>	<b>-12.4%</b>	23	Construction	0.90	\$26,084	5.9%
<b>332</b>	<b>Fabricated metal product mfg.</b>	<b>2.15</b>	<b>\$10,154</b>	<b>-36.4%</b>	481	Air transportation	0.89	\$1,681	-11.9%
<b>327</b>	<b>Nonmetallic mineral product mfg.</b>	<b>1.96</b>	<b>\$4,248</b>	<b>11.0%</b>	624	Social assistance	0.89	\$4,085	-1.7%
<b>336</b>	<b>Transportation eqpt.</b>	<b>1.86</b>	<b>\$17,191</b>	<b>-7.8%</b>	72	Accommodation & food services	0.87	\$14,424	-10.8%
<b>55</b>	<b>Mgt. of companies &amp; enterprises</b>	<b>1.71</b>	<b>\$22,808</b>	<b>62.9%</b>	92, 491	Governments & their enterprises	0.87	\$75,664	-3.4%
<b>333</b>	<b>Machinery mfg.</b>	<b>1.65</b>	<b>\$8,433</b>	<b>-14.0%</b>	531	Real estate	0.87	\$71,962	5.2%
<b>521-2</b>	<b>Monetary authorities, credit intermediation, etc.</b>	<b>1.63</b>	<b>\$41,290</b>	<b>19.6%</b>	53	Real estate & rental & leasing	0.85	\$77,313	2.7%
<b>493</b>	<b>Warehousing &amp; storage</b>	<b>1.59</b>	<b>\$4,107</b>	<b>83.8%</b>	711-2	Performing arts, spectator sports, museums & related activities	0.84	\$2,486	8.4%
<b>325</b>	<b>Chemical mfg.</b>	<b>1.53</b>	<b>\$19,541</b>	<b>20.4%</b>	339	Miscellaneous mfg.	0.84	\$2,728	16.6%
<b>3364-3369</b>	<b>Other transportation eqpt. mfg.</b>	<b>1.49</b>	<b>\$6,325</b>	<b>1.3%</b>	211	Oil & gas extraction	0.81	\$2,573	970.6%
<b>311-6, 322-6</b>	<b>Nondurable goods mfg.</b>	<b>1.47</b>	<b>\$47,709</b>	<b>20.7%</b>	92fc, 491	Federal, civilian	0.78	\$12,817	13.4%
<b>484</b>	<b>Truck transportation</b>	<b>1.46</b>	<b>\$7,821</b>	<b>-0.6%</b>	111-12	Farms	0.77	\$3,359	83.7%
<b>524</b>	<b>Insurance carriers &amp; related activities</b>	<b>1.44</b>	<b>\$29,975</b>	<b>73.2%</b>	313-14	Textile mills & textile product mills	0.74	\$369	-17.9%
<b>31-33</b>	<b>Mfg.</b>	<b>1.43</b>	<b>\$105,303</b>	<b>0.0%</b>	315-16	Apparel, leather & allied product mfg.	0.71	\$225	-5.8%
<b>323</b>	<b>Printing &amp; related support activities</b>	<b>1.41</b>	<b>\$1,809</b>	<b>-21.8%</b>	61	Educational services	0.70	\$5,693	-18.1%
<b>321, 327-39</b>	<b>Durable goods mfg.</b>	<b>1.40</b>	<b>\$57,594</b>	<b>-10.8%</b>	11	Agriculture, forestry, fishing & hunting	0.69	\$3,915	74.3%
<b>324</b>	<b>Petroleum &amp; coal products mfg.</b>	<b>1.39</b>	<b>\$5,142</b>	<b>156.7%</b>	21	Mining, quarrying & oil & gas extraction	0.69	\$4,066	216.0%
<b>713</b>	<b>Amusement, gambling &amp; recreation industries</b>	<b>1.37</b>	<b>\$3,202</b>	<b>-0.2%</b>	532-3	Rental/leasing services & lessors of nonfinancial intangible assets	0.68	\$5,351	-18.2%
<b>623</b>	<b>Nursing &amp; residential care facilities</b>	<b>1.36</b>	<b>\$6,855</b>	<b>-14.3%</b>	5412-4, 5416-9	Other professional, scientific & technical services	0.67	\$21,397	14.1%
<b>622</b>	<b>Hospitals</b>	<b>1.35</b>	<b>\$22,537</b>	<b>11.0%</b>	5415	Computer systems design & related services	0.67	\$7,997	70.2%
<b>52</b>	<b>Finance &amp; insurance</b>	<b>1.32</b>	<b>\$76,445</b>	<b>45.8%</b>	54	Professional, scientific & technical services	0.67	\$35,484	14.7%
<b>311-12</b>	<b>Food, beverage &amp; tobacco products mfg.</b>	<b>1.31</b>	<b>\$12,322</b>	<b>5.1%</b>	5411	Legal services	0.67	\$6,090	-29.6%
<b>562</b>	<b>Waste mgt. &amp; remediation services</b>	<b>1.23</b>	<b>\$2,387</b>	<b>26.1%</b>	92fc, fm, 491	Federal total	0.64	\$17,606	9.6%
<b>11, 21, 23 &amp; 33</b>	<b>Private goods-producing industries</b>	<b>1.22</b>	<b>\$139,369</b>	<b>7.0%</b>	212	Mining (exc. oil & gas)	0.59	\$1,078	-28.2%
<b>322</b>	<b>Paper mfg.</b>	<b>1.21</b>	<b>\$2,353</b>	<b>-8.3%</b>	515, 517	Broadcasting (exc. Internet) & telecommunications	0.55	\$8,199	20.4%
<b>486</b>	<b>Pipeline transportation</b>	<b>1.21</b>	<b>\$1,614</b>	<b>238.6%</b>	511	Publishing industries (exc. Internet)	0.51	\$5,259	12.6%
<i>48-49</i>	<i>Transportation &amp; warehousing</i>	<i>1.19</i>	<i>\$22,116</i>	<i>9.7%</i>	213	Support activities for mining	0.46	\$416	-33.2%
<i>62</i>	<i>Health care &amp; social assistance</i>	<i>1.17</i>	<i>\$58,655</i>	<i>12.0%</i>	51	Information	0.45	\$17,117	27.6%
<i>337</i>	<i>Furniture &amp; related product mfg.</i>	<i>1.12</i>	<i>\$1,146</i>	<i>-24.5%</i>	523	Securities, commodity contracts, other financial investments, etc.	0.45	\$4,963	128.6%
<i>487-88, 492</i>	<i>Other transportation &amp; support activities</i>	<i>1.09</i>	<i>\$5,081</i>	<i>-6.6%</i>	92811 (fm)	Federal, military	0.43	\$4,789	0.6%
<i>71</i>	<i>Arts, entertainment &amp; recreation</i>	<i>1.07</i>	<i>\$5,688</i>	<i>3.5%</i>	113-15	Forestry, fishing & related activities	0.43	\$556	41.2%
<i>621</i>	<i>Ambulatory health care services</i>	<i>1.05</i>	<i>\$25,179</i>	<i>24.4%</i>	721	Accommodation	0.41	\$1,550	-18.9%
<i>44-45</i>	<i>Retail trade</i>	<i>1.04</i>	<i>\$40,682</i>	<i>13.6%</i>	485	Transit & ground passenger transportation	0.37	\$446	-18.7%
<i>482</i>	<i>Rail transportation</i>	<i>1.04</i>	<i>\$1,261</i>	<i>-29.8%</i>	483	Water transportation	0.34	\$106	0.2%
<i>42</i>	<i>Wholesale trade</i>	<i>1.03</i>	<i>\$41,728</i>	<i>-0.8%</i>	518, 519	Data processing, hosting & other information services	0.33	\$3,401	111.1%
<i>11-81*</i>	<i>Private industries</i>	<i>1.02</i>	<i>\$601,898</i>	<i>11.6%</i>	334	Computer & electronic product mfg.	0.27	\$2,730	6.2%
<i>722</i>	<i>Food services &amp; drinking places</i>	<i>1.01</i>	<i>\$12,874</i>	<i>-9.8%</i>	525	Funds, trusts, & other financial vehicles	0.26	\$216	-40.0%
<i>321</i>	<i>Wood product mfg.</i>	<i>0.99</i>	<i>\$1,363</i>	<i>11.9%</i>	512	Motion picture & sound recording industries	0.11	\$258	-26.3%

Notes: 1 - based on current dollars; 2 - based on chained dollars standardized on 2012; \* - excludes U.S. Postal Service (NAICS code 491); *italicized* - mildly concentrated in Ohio; **bold** - quite concentrated in Ohio.

Abbreviations used: eqpt. - equipment; exc. - excluding; fc - federal civilian; fm - federal military; inc. - including; info. - information; mfg. - manufacturing; p - part; prcsng. - processing; sl - state & local; srvcs. - services.

Source: U.S. BEA (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 2/22).

**Table A16: Ohio's GDP by Industry - Sorted by Percentage Change, 2008-2020**

2012 NAICS Codes	Industry Titles	Percent Change '08-'20 <sup>2</sup>	GDP 2020 <sup>1</sup>	Concentration Ratio 2020 <sup>1</sup>	2012 NAICS Codes	Industry Titles	Percent Change '08-'20 <sup>2</sup>	GDP 2020 <sup>1</sup>	Concentration Ratio 2020 <sup>1</sup>
11-92	Total	9.83%	\$677,561	1.00	56	Administrative/support & waste mgt./remediation services	5.8%	\$20,043	0.95
					531	Real estate	5.2%	\$71,962	0.87
					<b>311-12</b>	<b>Food, beverage &amp; tobacco products mfg.</b>	<b>5.1%</b>	<b>\$12,322</b>	<b>1.31</b>
211	Oil & gas extraction	970.6%	\$2,573	0.81	22	Utilities	4.3%	\$10,907	0.98
<b>486</b>	<b>Pipeline transportation</b>	<b>238.6%</b>	<b>\$1,614</b>	<b>1.21</b>	561	Administrative & support services	4.0%	\$17,656	0.92
21	Mining, quarrying & oil & gas extraction	216.0%	\$4,066	0.69	71	Arts, entertainment & recreation	3.5%	\$5,688	1.07
<b>324</b>	<b>Petroleum &amp; coal products mfg.</b>	<b>156.7%</b>	<b>\$5,142</b>	<b>1.39</b>	53	Real estate & rental & leasing	2.7%	\$77,313	0.85
523	Securities, commodity contracts, other financial investments, etc.	128.6%	\$4,963	0.45	<b>3364-3369</b>	<b>Other transportation eqpt. mfg.</b>	<b>1.3%</b>	<b>\$6,325</b>	<b>1.49</b>
518, 519	Data processing, hosting & other information services	111.1%	\$3,401	0.33	92811 (fm)	Federal, military	0.6%	\$4,789	0.43
<b>493</b>	<b>Warehousing &amp; storage</b>	<b>83.8%</b>	<b>\$4,107</b>	<b>1.59</b>	483	Water transportation	0.2%	\$106	0.34
111-12	Farms	83.7%	\$3,359	0.77	<b>31-33</b>	<b>Mfg.</b>	<b>0.0%</b>	<b>\$105,303</b>	<b>1.43</b>
11	Agriculture, forestry, fishing & hunting	74.3%	\$3,915	0.69	<b>713</b>	<b>Amusement, gambling &amp; recreation industries</b>	<b>-0.2%</b>	<b>\$3,202</b>	<b>1.37</b>
<b>524</b>	<b>Insurance carriers &amp; related activities</b>	<b>73.2%</b>	<b>\$29,975</b>	<b>1.44</b>	<b>484</b>	<b>Truck transportation</b>	<b>-0.6%</b>	<b>\$7,821</b>	<b>1.46</b>
5415	Computer systems design & related services	70.2%	\$7,997	0.67	42	Wholesale trade	-0.8%	\$41,728	1.03
<b>55</b>	<b>Mgt. of companies &amp; enterprises</b>	<b>62.9%</b>	<b>\$22,808</b>	<b>1.71</b>	624	Social assistance	-1.7%	\$4,085	0.89
<b>52</b>	<b>Finance &amp; insurance</b>	<b>45.8%</b>	<b>\$76,445</b>	<b>1.32</b>	92, 491	Governments & their enterprises	-3.4%	\$75,664	0.87
113-15	Forestry, fishing & related activities	41.2%	\$556	0.43	315-16	Apparel, leather & allied product mfg.	-5.8%	\$225	0.71
51	Information	27.6%	\$17,117	0.45	487-88, 492	Other transportation & support activities	-6.6%	\$5,081	1.09
<b>562</b>	<b>Waste mgt. &amp; remediation services</b>	<b>26.1%</b>	<b>\$2,387</b>	<b>1.23</b>	92sl	State & local governments	-6.8%	\$58,058	0.98
<b>331</b>	<b>Primary metal mfg.</b>	<b>25.1%</b>	<b>\$4,761</b>	<b>2.52</b>	<b>336</b>	<b>Transportation eqpt.</b>	<b>-7.8%</b>	<b>\$17,191</b>	<b>1.86</b>
621	Ambulatory health care services	24.4%	\$25,179	1.05	<b>322</b>	<b>Paper mfg.</b>	<b>-8.3%</b>	<b>\$2,353</b>	<b>1.21</b>
<b>311-6, 322-6</b>	<b>Nondurable goods mfg.</b>	<b>20.7%</b>	<b>\$47,709</b>	<b>1.47</b>	722	Food services & drinking places	-9.8%	\$12,874	1.01
515, 517	Broadcasting (exc. Internet) & telecommunications	20.4%	\$8,199	0.55	<b>321, 327-39</b>	<b>Durable goods mfg.</b>	<b>-10.8%</b>	<b>\$57,594</b>	<b>1.40</b>
<b>325</b>	<b>Chemical mfg.</b>	<b>20.4%</b>	<b>\$19,541</b>	<b>1.53</b>	72	Accommodation & food services	-10.8%	\$14,424	0.87
<b>521-2</b>	<b>Monetary authorities, credit intermediation, etc.</b>	<b>19.6%</b>	<b>\$41,290</b>	<b>1.63</b>	<b>335</b>	<b>Electrical eqpt., appliance &amp; component mfg.</b>	<b>-11.3%</b>	<b>\$4,841</b>	<b>2.35</b>
339	Miscellaneous mfg.	16.6%	\$2,728	0.84	481	Air transportation	-11.9%	\$1,681	0.89
54	Professional, scientific & technical services	14.7%	\$35,484	0.67	<b>3361-3363</b>	<b>Motor vehicles, bodies, trailers &amp; parts mfg.</b>	<b>-12.4%</b>	<b>\$10,867</b>	<b>2.17</b>
<b>326</b>	<b>Plastics &amp; rubber products mfg.</b>	<b>14.3%</b>	<b>\$5,949</b>	<b>2.28</b>	<b>333</b>	<b>Machinery mfg.</b>	<b>-14.0%</b>	<b>\$8,433</b>	<b>1.65</b>
5412-4, 5416-9	Other professional, scientific & technical services	14.1%	\$21,397	0.67	81	Other services (exc. governments & their enterprises)	-14.3%	\$13,429	0.99
44-45	Retail trade	13.6%	\$40,682	1.04	<b>623</b>	<b>Nursing &amp; residential care facilities</b>	<b>-14.3%</b>	<b>\$6,855</b>	<b>1.36</b>
92fc, 491	Federal, civilian	13.4%	\$12,817	0.78	313-14	Textile mills & textile product mills	-17.9%	\$369	0.74
22, 42-81*	Private services-providing industries	13.2%	\$462,529	0.97	61	Educational services	-18.1%	\$5,693	0.70
511	Publishing industries (exc. Internet)	12.6%	\$5,259	0.51	532-3	Rental/leasing services & lessors of nonfinancial intangible assets	-18.2%	\$5,351	0.68
62	Health care & social assistance	12.0%	\$58,655	1.17	485	Transit & ground passenger transportation	-18.7%	\$446	0.37
321	Wood product mfg.	11.9%	\$1,363	0.99	721	Accommodation	-18.9%	\$1,550	0.41
11-81*	Private industries	11.6%	\$601,898	1.02	<b>323</b>	<b>Printing &amp; related support activities</b>	<b>-21.8%</b>	<b>\$1,809</b>	<b>1.41</b>
<b>622</b>	<b>Hospitals</b>	<b>11.0%</b>	<b>\$22,537</b>	<b>1.35</b>	337	Furniture & related product mfg.	-24.5%	\$1,146	1.12
<b>327</b>	<b>Nonmetallic mineral product mfg.</b>	<b>11.0%</b>	<b>\$4,248</b>	<b>1.96</b>	512	Motion picture & sound recording industries	-26.3%	\$258	0.11
48-49	Transportation & warehousing	9.7%	\$22,116	1.19	212	Mining (exc. oil & gas)	-28.2%	\$1,078	0.59
92fc, fm, 491	Federal total	9.6%	\$17,606	0.64	5411	Legal services	-29.6%	\$6,090	0.67
711-2	Performing arts, spectator sports, museums & related activities	8.4%	\$2,486	0.84	482	Rail transportation	-29.8%	\$1,261	1.04
<b>11, 21, 23 &amp; 33</b>	<b>Private goods-producing industries</b>	<b>7.0%</b>	<b>\$139,369</b>	<b>1.22</b>	213	Support activities for mining	-33.2%	\$416	0.46
334	Computer & electronic product mfg.	6.2%	\$2,730	0.27	<b>332</b>	<b>Fabricated metal product mfg.</b>	<b>-36.4%</b>	<b>\$10,154</b>	<b>2.15</b>
23	Construction	5.9%	\$26,084	0.90	525	Funds, trusts, & other financial vehicles	-40.0%	\$216	0.26

Notes: 1 - based on current dollars; 2 - based on chained dollars standardized on 2012; \* - excludes U.S. Postal Service (NAICS code 491); *italicized* - mildly concentrated in Ohio; **bold** - quite concentrated in Ohio. Abbreviations used: eqpt. - equipment; exc. - excluding; fc - federal civilian; fm - federal military; inc. - including; info. - information; mfg. - manufacturing; p - part; prcsng. - processing; sl - state & local; srvcs. - services.

Source: U.S. BEA (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 2/22).

Table A17: Ohio's GDP by Industry - Sorted by Size in 2020

2012 NAICS Codes	Industry Titles	GDP 2020 <sup>1</sup>	Percent Change '08-'20 <sup>2</sup>	Concentration Ratio 2020 <sup>1</sup>	2012 NAICS Codes	Industry Titles	GDP 2020 <sup>1</sup>	Percent Change '08-'20 <sup>2</sup>	Concentration Ratio 2020 <sup>1</sup>
11-92	Total	\$677,561	9.83%	1.00	<b>623</b>	<b>Nursing &amp; residential care facilities</b>	<b>\$6,855</b>	<b>-14.3%</b>	<b>1.36</b>
					<b>3364-3369</b>	<b>Other transportation eqpt. mfg.</b>	<b>\$6,325</b>	<b>1.3%</b>	<b>1.49</b>
					5411	Legal services	\$6,090	-29.6%	0.67
11-81*	Private industries	\$601,898	11.6%	1.02	<b>326</b>	<b>Plastics &amp; rubber products mfg.</b>	<b>\$5,949</b>	<b>14.3%</b>	<b>2.28</b>
22, 42-81*	Private services-providing industries	\$462,529	13.2%	0.97	61	Educational services	\$5,693	-18.1%	0.70
<b>11, 21, 23 &amp; 33</b>	<b>Private goods-producing industries</b>	<b>\$139,369</b>	<b>7.0%</b>	<b>1.22</b>	71	Arts, entertainment & recreation	\$5,688	3.5%	1.07
<b>31-33</b>	<b>Mfg.</b>	<b>\$105,303</b>	<b>0.0%</b>	<b>1.43</b>	532-3	Rental/leasing services & lessors of nonfinancial intangible assets	\$5,351	-18.2%	0.68
53	Real estate & rental & leasing	\$77,313	2.7%	0.85	511	Publishing industries (exc. Internet)	\$5,259	12.6%	0.51
<b>52</b>	<b>Finance &amp; insurance</b>	<b>\$76,445</b>	<b>45.8%</b>	<b>1.32</b>	<b>324</b>	<b>Petroleum &amp; coal products mfg.</b>	<b>\$5,142</b>	<b>156.7%</b>	<b>1.39</b>
92, 491	Governments & their enterprises	\$75,664	-3.4%	0.87	487-88, 492	Other transportation & support activities	\$5,081	-6.6%	1.09
531	Real estate	\$71,962	5.2%	0.87	523	Securities, commodity contracts, other financial investments, etc.	\$4,963	128.6%	0.45
62	Health care & social assistance	\$58,655	12.0%	1.17	<b>335</b>	<b>Electrical eqpt., appliance &amp; component mfg.</b>	<b>\$4,841</b>	<b>-11.3%</b>	<b>2.35</b>
92sl	State & local governments	\$58,058	-6.8%	0.98	92811 (fm)	Federal, military	\$4,789	0.6%	0.43
<b>321, 327-39</b>	<b>Durable goods mfg.</b>	<b>\$57,594</b>	<b>-10.8%</b>	<b>1.40</b>	<b>331</b>	<b>Primary metal mfg.</b>	<b>\$4,761</b>	<b>25.1%</b>	<b>2.52</b>
<b>311-6, 322-6</b>	<b>Nondurable goods mfg.</b>	<b>\$47,709</b>	<b>20.7%</b>	<b>1.47</b>	<b>327</b>	<b>Nonmetallic mineral product mfg.</b>	<b>\$4,248</b>	<b>11.0%</b>	<b>1.96</b>
42	Wholesale trade	\$41,728	-0.8%	1.03	<b>493</b>	<b>Warehousing &amp; storage</b>	<b>\$4,107</b>	<b>83.8%</b>	<b>1.59</b>
<b>521-2</b>	<b>Monetary authorities, credit intermediation, etc.</b>	<b>\$41,290</b>	<b>19.6%</b>	<b>1.63</b>	624	Social assistance	\$4,085	-1.7%	0.89
44-45	Retail trade	\$40,682	13.6%	1.04	21	Mining, quarrying & oil & gas extraction	\$4,066	216.0%	0.69
54	Professional, scientific & technical services	\$35,484	14.7%	0.67	11	Agriculture, forestry, fishing & hunting	\$3,915	74.3%	0.69
<b>524</b>	<b>Insurance carriers &amp; related activities</b>	<b>\$29,975</b>	<b>73.2%</b>	<b>1.44</b>	518, 519	Data processing, hosting & other information services	\$3,401	111.1%	0.33
23	Construction	\$26,084	5.9%	0.90	111-12	Farms	\$3,359	83.7%	0.77
621	Ambulatory health care services	\$25,179	24.4%	1.05	<b>713</b>	<b>Amusement, gambling &amp; recreation industries</b>	<b>\$3,202</b>	<b>-0.2%</b>	<b>1.37</b>
<b>55</b>	<b>Mgt. of companies &amp; enterprises</b>	<b>\$22,808</b>	<b>62.9%</b>	<b>1.71</b>	334	Computer & electronic product mfg.	\$2,730	6.2%	0.27
<b>622</b>	<b>Hospitals</b>	<b>\$22,537</b>	<b>11.0%</b>	<b>1.35</b>	339	Miscellaneous mfg.	\$2,728	16.6%	0.84
48-49	Transportation & warehousing	\$22,116	9.7%	1.19	211	Oil & gas extraction	\$2,573	970.6%	0.81
5412-4, 5416-9	Other professional, scientific & technical services	\$21,397	14.1%	0.67	711-2	Performing arts, spectator sports, museums & related activities	\$2,486	8.4%	0.84
56	Administrative/support & waste mgt./remediation services	\$20,043	5.8%	0.95	<b>562</b>	<b>Waste mgt. &amp; remediation services</b>	<b>\$2,387</b>	<b>26.1%</b>	<b>1.23</b>
<b>325</b>	<b>Chemical mfg.</b>	<b>\$19,541</b>	<b>20.4%</b>	<b>1.53</b>	<b>322</b>	<b>Paper mfg.</b>	<b>\$2,353</b>	<b>-8.3%</b>	<b>1.21</b>
561	Administrative & support services	\$17,656	4.0%	0.92	<b>323</b>	<b>Printing &amp; related support activities</b>	<b>\$1,809</b>	<b>-21.8%</b>	<b>1.41</b>
92fc, fm, 491	Federal total	\$17,606	9.6%	0.64	481	Air transportation	\$1,681	-11.9%	0.89
<b>336</b>	<b>Transportation eqpt.</b>	<b>\$17,191</b>	<b>-7.8%</b>	<b>1.86</b>	<b>486</b>	<b>Pipeline transportation</b>	<b>\$1,614</b>	<b>238.6%</b>	<b>1.21</b>
51	Information	\$17,117	27.6%	0.45	721	Accommodation	\$1,550	-18.9%	0.41
72	Accommodation & food services	\$14,424	-10.8%	0.87	321	Wood product mfg.	\$1,363	11.9%	0.99
81	Other services (exc. governments & their enterprises)	\$13,429	-14.3%	0.99	482	Rail transportation	\$1,261	-29.8%	1.04
722	Food services & drinking places	\$12,874	-9.8%	1.01	337	Furniture & related product mfg.	\$1,146	-24.5%	1.12
92fc, 491	Federal, civilian	\$12,817	13.4%	0.78	212	Mining (exc. oil & gas)	\$1,078	-28.2%	0.59
<b>311-12</b>	<b>Food, beverage &amp; tobacco products mfg.</b>	<b>\$12,322</b>	<b>5.1%</b>	<b>1.31</b>	113-15	Forestry, fishing & related activities	\$556	41.2%	0.43
22	Utilities	\$10,907	4.3%	0.98	485	Transit & ground passenger transportation	\$446	-18.7%	0.37
<b>3361-3363</b>	<b>Motor vehicles, bodies, trailers &amp; parts mfg.</b>	<b>\$10,867</b>	<b>-12.4%</b>	<b>2.17</b>	213	Support activities for mining	\$416	-33.2%	0.46
<b>332</b>	<b>Fabricated metal product mfg.</b>	<b>\$10,154</b>	<b>-36.4%</b>	<b>2.15</b>	313-14	Textile mills & textile product mills	\$369	-17.9%	0.74
<b>333</b>	<b>Machinery mfg.</b>	<b>\$8,433</b>	<b>-14.0%</b>	<b>1.65</b>	512	Motion picture & sound recording industries	\$258	-26.3%	0.11
515, 517	Broadcasting (exc. Internet) & telecommunications	\$8,199	20.4%	0.55	315-16	Apparel, leather & allied product mfg.	\$225	-5.8%	0.71
5415	Computer systems design & related services	\$7,997	70.2%	0.67	525	Funds, trusts, & other financial vehicles	\$216	-40.0%	0.26
<b>484</b>	<b>Truck transportation</b>	<b>\$7,821</b>	<b>-0.6%</b>	<b>1.46</b>	483	Water transportation	\$106	0.2%	0.34

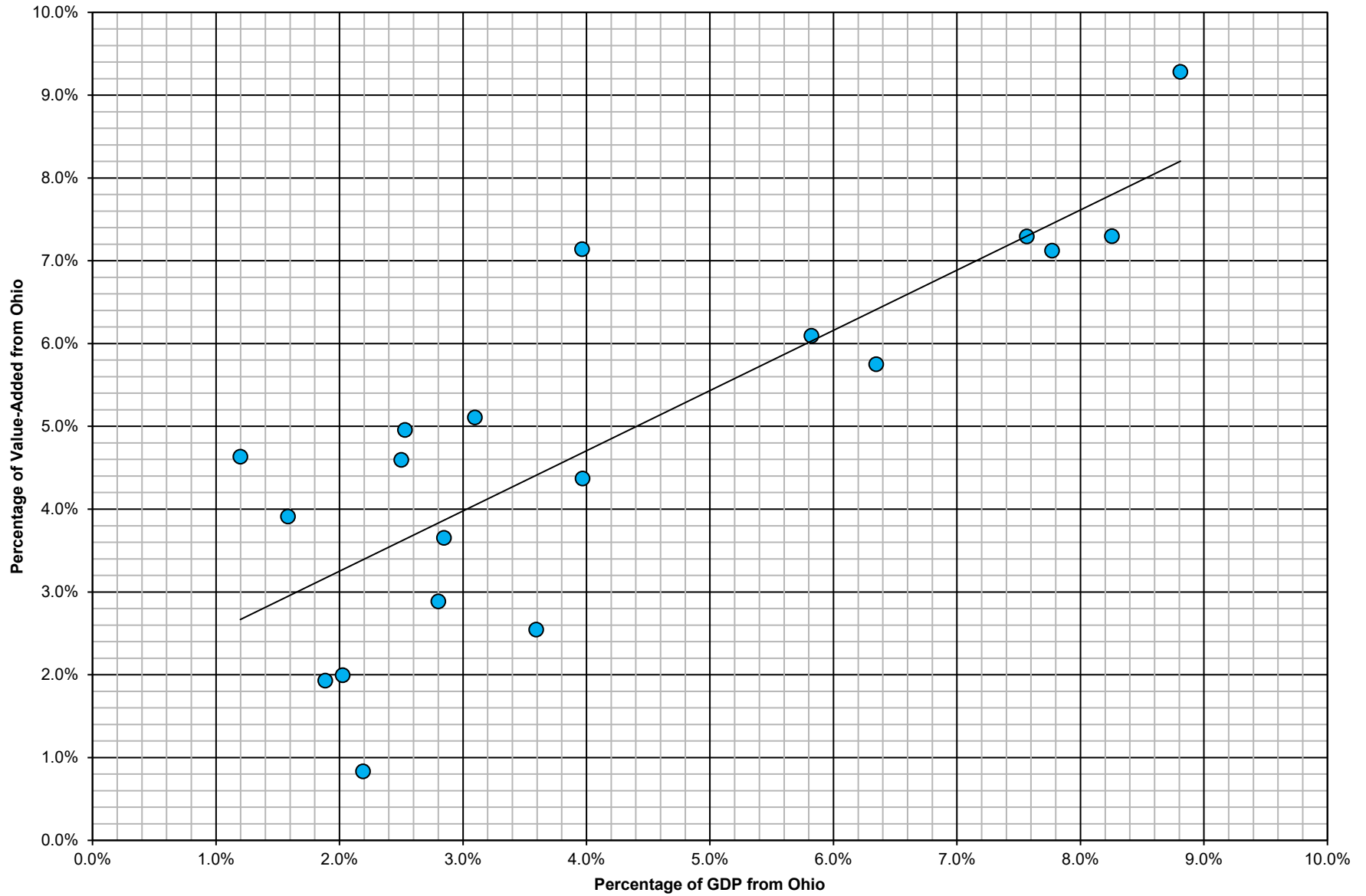
Notes: 1 - based on current dollars; 2 - based on chained dollars standardized on 2012; \* - excludes U.S. Postal Service (NAICS code 491); *italicized* - mildly concentrated in Ohio; **bold** - quite concentrated in Ohio. Abbreviations used: eqpt. - equipment; exc. - excluding; fc - federal civilian; fm - federal military; inc. - including; info. - information; mfg. - manufacturing; p - part; prcsng. - processing; sl - state & local; srvcs. - services.

Source: U.S. BEA (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 2/22).

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## Comparing U.S. Percentages of Manufacturing Value-Added and GDP from Ohio, 2019



Sources: U.S. BEA and U.S. Census Bureau



**Table A18: Value-Added and GDP in Manufacturing Industries in Ohio and the U.S., 2019**

NAICS Codes*	Industry Title	Value Added (millions)			GDP (millions)		
		Ohio	U.S.	Ohio as Percent of U.S.	Ohio	U.S.	Ohio as Percent of U.S.
321	Wood products	\$1,290	\$46,081	2.80%	\$1,191	\$41,243	2.89%
327	Nonmetallic mineral products	\$4,704	\$74,122	6.35%	\$3,737	\$64,968	5.75%
331	Primary metals	\$7,521	\$85,369	8.81%	\$5,961	\$64,220	9.28%
332	Fabricated metal products	\$15,610	\$206,344	7.57%	\$11,756	\$161,184	7.29%
333	Machinery	\$11,176	\$192,009	5.82%	\$9,909	\$162,609	6.09%
334	Computer & electronic products	\$3,954	\$180,471	2.19%	\$2,530	\$303,924	0.83%
335	Electrical eqpt., appliances, & components	\$5,110	\$65,763	7.77%	\$4,692	\$65,879	7.12%
3361-3	Transportation eqpt. (motor vehicles)	\$14,909	\$180,621	8.25%	\$11,969	\$164,006	7.30%
3364-9	Transportation eqpt. (all other types)	\$4,522	\$180,817	2.50%	\$7,573	\$164,847	4.59%
337	Furniture & related products	\$1,201	\$42,192	2.85%	\$1,139	\$31,151	3.65%
339	Miscellaneous	\$3,537	\$98,452	3.59%	\$2,462	\$96,736	2.55%
311-2	Food, beverage & tobacco products^	\$16,322	\$411,274	3.97%	\$11,579	\$265,007	4.37%
313-4	Textile & textile product mills	\$464	\$22,901	2.03%	\$344	\$17,242	1.99%
315-6	Apparel, leather & allied products	\$146	\$7,731	1.89%	\$180	\$9,304	1.93%
322	Paper	\$3,015	\$190,415	1.58%	\$2,394	\$61,217	3.91%
323	Printing & related support activities	\$2,514	\$81,225	3.10%	\$2,058	\$40,286	5.11%
324	Petroleum & coal products	\$7,132	\$595,704	1.20%	\$7,326	\$158,066	4.64%
325	Chemicals	\$18,224	\$720,178	2.53%	\$19,374	\$390,784	4.96%
326	Plastic & rubber products	\$9,773	\$246,580	3.96%	\$5,938	\$83,174	7.14%

Notes: \* - The Value Added figures use the 2017 NAICS; GDP figures use the 2012 NAICS; ^ - the amount of tobacco products manufactured in Ohio is nil or non-existent, depending on the sources used.

Sources: U.S. Bureau of the Census (2021), U.S. BEA (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 4/21).

**Table A19: Value-Added in Manufacturing by Industry in Ohio and the U.S., 2019**

2017 NAICS Code	Industry Title	Value Added (millions)		Ohio as Percent of U.S.	Con- cen- trated in Ohio
		Ohio	U.S.		
31-33	All manufacturing	\$131,125.2	\$2,579,381.8	5.08%	*
32p-33	Durable Goods	\$73,535.1	\$1,352,240.7	5.44%	*
321	Wood products	\$1,290.2	\$46,081.4	2.80%	
3211	Sawmills & wood preservation	\$171.8	\$11,101.7	1.55%	
3212	Veneer, plywood, & engineered wood products	\$221.7	\$9,677.4	2.29%	
3219	Other wood products	\$896.7	\$25,302.3	3.54%	
327	Nonmetallic mineral products	\$4,703.9	\$74,122.3	6.35%	*
3271	Clay & refractory products	\$699.3	\$5,339.4	13.10%	*
3272	Glass & glass products	\$1,329.1	\$16,674.9	7.97%	*
3273	Cement & concrete products	\$1,111.2	\$33,069.7	3.36%	
3274	Lime & gypsum products	\$123.5	\$4,210.1	2.93%	
3279	Other nonmetallic mineral products	\$1,440.8	\$14,828.2	9.72%	*
331	Primary metals	\$7,520.8	\$85,368.9	8.81%	*
3311	Iron & steel mills & ferroalloys	\$2,889.9	\$29,969.5	9.64%	*
3312	Steel products from purchased steel	\$1,288.9	\$9,434.5	13.66%	*
3313	Alumina & aluminum products & processing	\$727.7	\$13,382.8	5.44%	*
3314	Nonferrous metal (exc. aluminum) products & processing	\$615.4	\$16,004.0	3.85%	
3315	Foundries	\$1,998.9	\$16,578.1	12.06%	*
332	Fabricated metal products	\$15,610.0	\$206,343.6	7.57%	*
3321	Forging & stamping	\$2,068.9	\$15,336.0	13.49%	*
3322	Cutlery & handtools	\$652.2	\$6,338.6	10.29%	*
3323	Architectural & structural metals	\$2,479.6	\$51,780.1	4.79%	*
3324	Boilers, tanks, & shipping containers	\$1,485.1	\$16,195.9	9.17%	*
3325	Hardware	\$463.8	\$5,203.0	8.91%	*
3326	Spring & wire products	\$367.5	\$5,147.9	7.14%	*

**Table A19: Value-Added in Manufacturing by Industry in Ohio and the U.S., 2019**

2017 NAICS Code	Industry Title	Value Added (millions)		Ohio as Percent of U.S.	Con- cen- trated in Ohio
		Ohio	U.S.		
3327	Machine shops; turned products; & screws, nuts, & bolts	\$3,822.0	\$45,098.6	8.47%	*
3328	Coating, engraving, heat treating, & allied activities	\$2,043.9	\$17,367.4	11.77%	*
3329	Other fabricated metal products	\$2,226.9	\$43,876.2	5.08%	*
333	Machinery	\$11,176.1	\$192,009.3	5.82%	*
3331	Agriculture, construction, & mining machinery	\$818.4	\$38,571.5	2.12%	
3332	Industrial machinery	\$1,387.9	\$19,450.8	7.14%	*
3333	Commercial & service industry machinery	\$512.0	\$14,472.3	3.54%	
3334	Ventilation, heating, air-conditioning, & commercial refrigeration eqpt.	\$1,100.1	\$23,589.6	4.66%	*
3335	Metalworking machinery	\$1,908.8	\$19,486.5	9.80%	*
3336	Engine, turbine, & power transmission eqpt.	\$925.6	\$20,908.2	4.43%	*
3339	Other general purpose machinery	\$4,523.3	\$55,530.4	8.15%	*
334	Computer & electronic products	\$3,954.2	\$180,470.7	2.19%	
3341	Computer & peripheral eqpt.	\$87.8	\$9,648.3	0.91%	
3342	Communications eqpt.	\$179.2	\$19,376.4	0.92%	
3343	Audio & video eqpt.	\$27.9	\$1,868.5	1.50%	
3344	Semiconductors & other electronic components	\$984.7	\$52,579.4	1.87%	
3345	Navigational, measuring, electromedical, & control instruments	\$2,598.8	\$96,224.9	2.70%	
3346	Mfg. & reproducing magnetic & optical media	\$75.7	\$773.3	9.79%	*
335	Electrical eqpt., appliances, & components	\$5,110.4	\$65,762.8	7.77%	*
3351	Electric lighting eqpt.	n.a.	\$7,608.1	n.a.	
3352	Household appliances	n.a.	\$11,444.8	n.a.	
3353	Electrical eqpt.	n.a.	\$20,231.5	n.a.	
3359	Other electrical eqpt. & components	n.a.	\$26,478.4	n.a.	
336	Transportation eqpt.	\$19,431.0	\$361,438.5	5.38%	*
3361	Motor vehicles	\$4,012.5	\$79,182.9	5.07%	*

**Table A19: Value-Added in Manufacturing by Industry in Ohio and the U.S., 2019**

2017 NAICS Code	Industry Title	Value Added (millions)		Ohio as Percent of U.S.	Con- cen- trated in Ohio
		Ohio	U.S.		
3362	Motor vehicle bodies & trailers	\$848.6	\$17,527.1	4.84%	*
3363	Motor vehicle parts	\$10,047.5	\$83,911.1	11.97%	*
3364	Aerospace products & parts	\$3,941.3	\$148,583.2	2.65%	
3365	Railroad rolling stock	\$40.4	\$3,805.7	1.06%	
3366	Ship & boat building	\$19.2	\$19,950.4	0.10%	
3369	Other transportation eqpt.	\$521.4	\$8,478.0	6.15%	*
337	Furniture & related products	\$1,201.2	\$42,191.7	2.85%	
3371	Household & institutional furniture & kitchen cabinets	\$718.8	\$20,703.9	3.47%	
3372	Office furniture (inc. fixtures)	\$382.6	\$16,649.3	2.30%	
3379	Other furniture related products	\$99.8	\$4,838.6	2.06%	
339	Miscellaneous	\$3,537.4	\$98,451.6	3.59%	
3391	Medical eqpt. & supplies	\$1,781.3	\$61,585.0	2.89%	
3399	Other miscellaneous	\$1,756.1	\$36,866.6	4.76%	*
31-32p	Non-durable goods	\$57,590.2	\$2,276,006.8	2.53%	
311	Food	\$14,130.0	\$313,412.7	4.51%	*
3111	Animal food	\$894.4	\$20,957.4	4.27%	*
3112	Grain & oilseed milling	\$841.1	\$22,705.7	3.70%	
3113	Sugar & confectionery products	\$195.0	\$17,198.5	1.13%	
3114	Fruit & vegetable preserving & specialty foods	\$3,577.0	\$34,211.0	10.46%	*
3115	Dairy products	\$1,816.1	\$40,220.1	4.52%	*
3116	Animal slaughtering & processing	\$1,516.5	\$69,018.8	2.20%	
3117	Seafood products preparation & packaging	\$0.0	\$4,994.3	0.00%	
3118	Bakeries & tortilla	\$1,387.3	\$41,866.3	3.31%	
3119	Other foods	\$3,902.6	\$62,240.7	6.27%	*
312	Beverage & tobacco products	\$2,192.0	\$97,861.2	2.24%	

**Table A19: Value-Added in Manufacturing by Industry in Ohio and the U.S., 2019**

2017 NAICS Code	Industry Title	Value Added (millions)			Con- cen- trated in Ohio
		Ohio	U.S.	Ohio as Percent of U.S.	
3121	Beverages	n.a.	\$58,347.2	n.a.	
3122	Tobacco products^	n.a.	\$39,514.0	n.a.	
313	Textile mills	\$87.6	\$11,683.9	0.75%	
3131	Fiber, yarn, & thread mills	\$0.8	\$2,093.8	0.04%	
3132	Fabric mills	\$41.6	\$6,471.2	0.64%	
3133	Textile & fabric finishing & fabric coating mills	\$45.2	\$3,118.9	1.45%	
314	Textile products mills	\$376.5	\$11,217.0	3.36%	
3141	Textile furnishings mills	\$231.3	\$5,598.9	4.13%	*
3149	Other textile products mills	\$145.2	\$5,618.1	2.59%	
315	Apparel	\$40.0	\$5,615.5	0.71%	
3151	Apparel knitting mills	n.a.	\$541.8	n.a.	
3152	Cut & sew apparel	n.a.	\$4,495.7	n.a.	
3159	Apparel accessories & other apparel	n.a.	\$578.0	n.a.	
316	Leather & allied products	\$105.8	\$2,115.4	5.00%	*
3161	Leather & hide tanning & finishing	n.a.	\$394.0	n.a.	
3162	Footwear	n.a.	\$843.1	n.a.	
3169	Other leather & allied products	\$94.1	\$878.3	10.72%	*
322	Paper	\$3,014.9	\$190,414.6	1.58%	
3221	Pulp, paper, & paperboard mills	n.a.	\$76,297.0	n.a.	
3222	Converted paper products	n.a.	\$114,117.6	n.a.	
323	Printing & related support activities	\$2,514.3	\$81,224.8	3.10%	
32311	Printing	n.a.	n.a.	n.a.	
32312	Support activities for printing	n.a.	n.a.	n.a.	
324	Petroleum & coal products	\$7,131.8	\$595,704.4	1.20%	
32411	Petroleum refineries	n.a.	n.a.	n.a.	

**Table A19: Value-Added in Manufacturing by Industry in Ohio and the U.S., 2019**

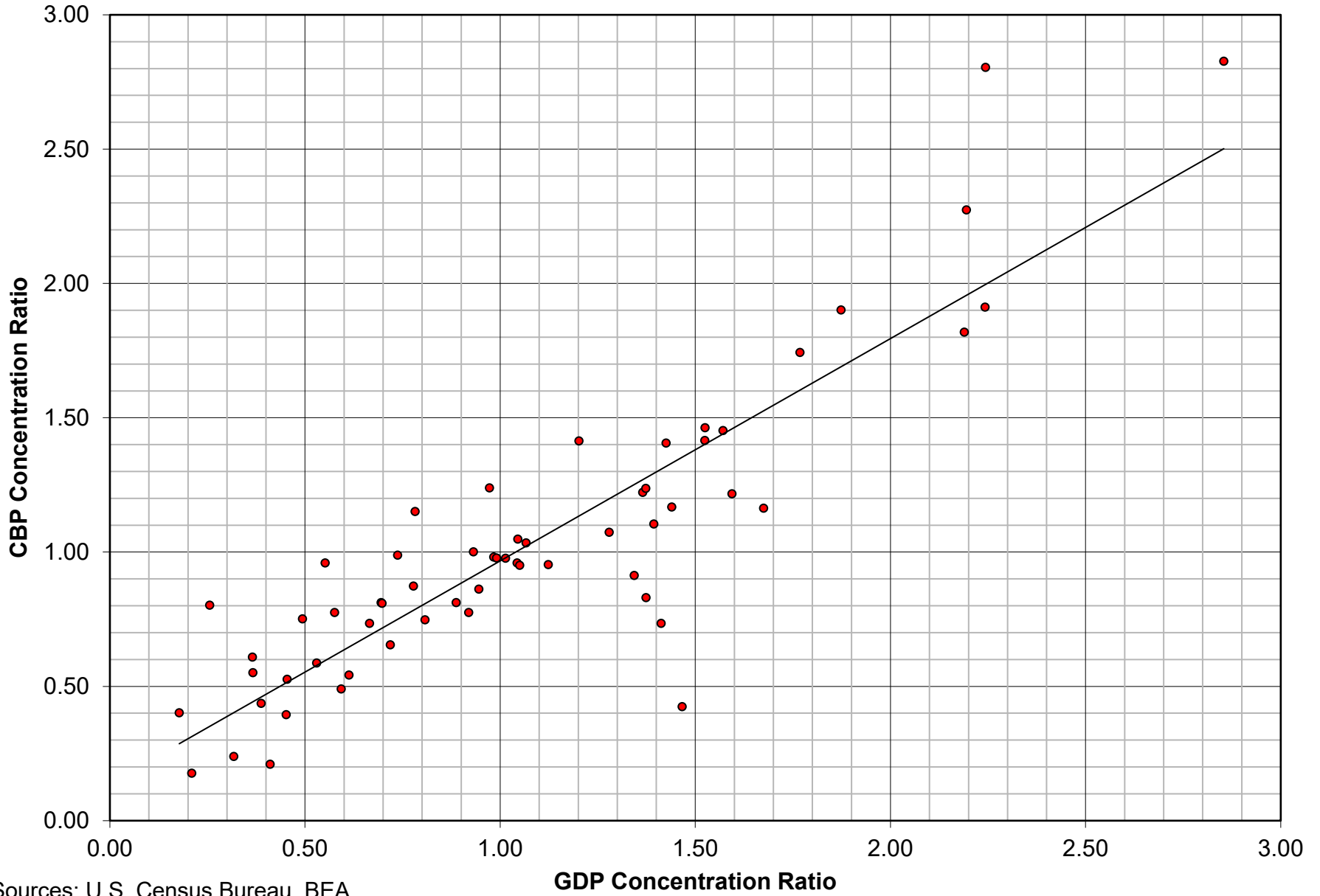
2017 NAICS Code	Industry Title	Value Added (millions)		Ohio as Percent of U.S.	Con- cen- trated in Ohio
		Ohio	U.S.		
32412	Asphalt paving, roofing & saturated materials	n.a.	n.a.	n.a.	
32419	Other petroleum & coal products	n.a.	n.a.	n.a.	
325	Chemicals	\$18,224.3	\$720,177.6	2.53%	
3251	Basic chemicals	\$2,740.4	\$206,315.5	1.33%	
3252	Resin, synthetic rubber, & artificial synthetic fibers & filaments	\$1,677.4	\$95,740.5	1.75%	
3253	Pesticide, fertilizer, & other agricultural chemicals	\$613.7	\$31,464.5	1.95%	
3254	Pharmaceuticals & medicines	\$1,885.4	\$210,743.5	0.89%	
3255	Paints, coatings & adhesives	\$2,889.2	\$41,984.0	6.88%	*
3256	Soaps, cleaning compounds & toilet preparations	\$7,407.5	\$89,253.8	8.30%	*
3259	Other chemical products & preparations	\$1,010.7	\$44,675.8	2.26%	
326	Plastic & rubber products	\$9,773.0	\$246,579.6	3.96%	
3261	Plastics products	\$7,717.1	\$201,195.4	3.84%	
3262	Rubber products	\$2,055.9	\$45,384.2	4.53%	*

Notes: \* - Concentrated in Ohio with at least 4.00% of the U.S. total; ^ - the amount of tobacco products manufactured in Ohio is nil or non-existent, depending on the source; eqpt. - equipment; exc. - except; inc. - including; n.a. - not available.

Source: U.S. Census Bureau (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 4/21).

# The Association of GDP and CBP Concentration Ratios in Ohio, 2019



Sources: U.S. Census Bureau, BEA

**Table A20: Ohio::U.S. GDP and County Business Patterns Concentration Ratios**  
(GDP in millions of current dollars, except concentration ratio)

NAICS Codes	Industry Titles	2019 GDP <sup>^</sup>			2019 CBP Employment <sup>~</sup>		
		(current, in millions)		Ohio::U.S. Concentra- tion Ratio*	Ohio		Ohio::U.S. Concentra- tion Ratio*
		Ohio	done U.S.		Ohio	U.S.	
11-81	Private industries*	\$691,199	\$21,252,219	1.00	4,916,956	132,989,428	1.00
113-5	Forestry, fishing & related activities	\$525	\$39,293	0.41	1,278	164,567	0.21
211	Oil & gas extraction	\$9,208	\$193,101	1.47	1,696	108,128	0.42
212	Mining, exc. oil & gas	\$977	\$60,842	0.49	4,934	177,656	0.75
213	Support activities for mining	\$817	\$55,526	0.45	4,970	340,956	0.39
23	Construction	\$26,705	\$892,684	0.92	201,697	7,043,901	0.77
321	Wood products mfg.	\$1,191	\$41,243	0.89	12,476	415,757	0.81
327	Nonmetallic mineral products mfg.	\$3,737	\$64,968	1.77	25,906	402,095	1.74
331	Primary metals mfg.	\$5,961	\$64,220	2.85	40,297	385,544	2.83
332	Fabricated metal products mfg.	\$11,756	\$161,184	2.24	103,672	1,466,779	1.91
333	Machinery mfg.	\$9,909	\$162,609	1.87	75,868	1,079,338	1.90
334	Computer & electronic products mfg.	\$2,530	\$303,924	0.26	23,561	794,764	0.80
335	Electrical equipment & appliances mfg.	\$4,692	\$65,879	2.19	23,490	349,329	1.82
3361-3	Motor vehicles, bodies, trailers & parts mfg.	\$11,969	\$164,006	2.24	105,399	1,016,650	2.80
3364-9	Other transportation equipment mfg.	\$7,573	\$164,847	1.41	16,942	624,287	0.73
337	Furniture & related products mfg.	\$1,139	\$31,151	1.12	12,947	367,408	0.95
339	Miscellaneous mfg.	\$2,462	\$96,736	0.78	23,542	553,452	1.15
311-2	Food, beverage & tobacco products	\$11,579	\$265,007	1.34	62,443	1,850,155	0.91
313-4	Textile & textile product mills mfg.	\$344	\$17,242	0.61	3,995	199,310	0.54
315-6	Apparel, leather & allied products	\$180	\$9,304	0.59	1,938	107,038	0.49
322	Paper mfg.	\$2,394	\$61,217	1.20	18,149	347,386	1.41
323	Printing & related support activities	\$2,058	\$40,286	1.57	23,038	429,253	1.45
324	Petroleum & coal products mfg.	\$7,326	\$158,066	1.43	5,587	107,509	1.41
325	Chemical mfg.	\$19,374	\$390,784	1.52	42,760	817,229	1.42
326	Plastics & rubber products mfg.	\$5,938	\$83,174	2.20	66,940	796,520	2.27
22	Utilities	\$11,056	\$335,264	1.01	23,181	641,700	0.98
42	Wholesale trade	\$43,798	\$1,262,290	1.07	236,265	6,181,224	1.03
44-45	Retail trade	\$39,445	\$1,162,239	1.04	556,445	15,693,290	0.96
481	Air transportation	\$2,534	\$147,066	0.53	10,873	501,344	0.59
483	Water transportation	\$155	\$15,037	0.32	548	62,183	0.24
484	Truck transportation	\$8,193	\$174,974	1.44	68,292	1,581,947	1.17
485	Transit & ground passenger transportation	\$659	\$55,277	0.37	10,428	511,843	0.55
486	Pipeline transportation	\$1,599	\$50,534	0.97	2,161	47,189	1.24
487-8, 492	Other transportation & support activities	\$4,570	\$133,814	1.05	59,106	1,682,418	0.95
493	Warehousing & storage	\$3,722	\$75,027	1.53	55,247	1,021,448	1.46
511	Publishing (inc. software, exc. Internet)	\$5,443	\$303,226	0.55	35,841	1,010,819	0.96
512	Motion pictures & sound recordings	\$508	\$87,863	0.18	4,864	328,152	0.40
515, 517	Broadcasting & telecommunications	\$8,742	\$466,648	0.58	38,467	1,343,505	0.77



**Table A20: Ohio::U.S. GDP and County Business Patterns Concentration Ratios**  
(GDP in millions of current dollars, except concentration ratio)

NAICS Codes	Industry Titles	2019 GDP <sup>^</sup>			2019 CBP Employment <sup>~</sup>		
		(current, in millions)		Ohio::U.S. Concentra- tion Ratio*	Ohio::U.S.		Concentra- tion Ratio*
		Ohio	U.S.		Ohio	U.S.	
518, 519	Data prcsng., hosting, other info. (inc. Internet)	\$3,204	\$269,789	0.37	20,011	889,876	0.61
521-2	Federal Reserve, credit intermediation, & related srvcs.	\$32,138	\$708,906	1.39	117,944	2,888,533	1.10
523	Securities, commodity contracts, investments	\$4,620	\$312,481	0.45	18,044	927,216	0.53
524	Insurance carriers & related activities	\$31,881	\$615,010	1.59	122,778	2,729,762	1.22
525	Funds, trusts & other financial vehicles	\$201	\$29,401	0.21	50	7,655	0.18
531	Real estate	\$68,664	\$2,614,208	0.81	46,326	1,676,886	0.75
532-3	Rental & leasing srvcs., leasing intangible assets	\$6,622	\$261,778	0.78	18,173	563,262	0.87
5411	Legal srvcs.	\$6,051	\$279,455	0.67	31,191	1,149,095	0.73
5415	Computer systems design & related srvcs.	\$8,810	\$376,767	0.72	46,565	1,924,248	0.65
5412-4, 6-9	Other professional, scientific & technical srvcs.	\$22,208	\$982,209	0.70	186,373	6,211,148	0.81
55	Management of companies & enterprises	\$22,414	\$411,364	1.68	151,456	3,523,278	1.16
561	Administrative & support srvcs.	\$18,404	\$598,408	0.95	388,741	12,203,451	0.86
562	Waste management & remediation srvcs.	\$2,602	\$62,527	1.28	17,399	438,566	1.07
61	Educational srvcs.	\$6,124	\$269,858	0.70	113,913	3,808,801	0.81
621	Ambulatory health care srvcs.	\$26,481	\$778,813	1.05	302,961	7,820,262	1.05
622	Hospitals	\$22,852	\$514,557	1.37	274,622	6,078,477	1.22
623	Nursing & residential care facilities	\$7,059	\$158,033	1.37	161,772	3,538,496	1.24
624	Social assistance	\$4,369	\$144,158	0.93	126,760	3,427,575	1.00
711-2	Performing arts, museums & related activities	\$3,443	\$143,552	0.74	25,678	703,081	0.99
713	Amusements, gambling & recreation	\$4,248	\$95,062	1.37	55,291	1,801,314	0.83
721	Accommodation	\$2,359	\$186,992	0.39	34,859	2,161,388	0.44
722	Food srvcs. & drinking places	\$15,404	\$481,600	0.98	447,423	12,330,989	0.98
81	Other srvcs., exc. government	\$14,862	\$461,262	0.99	203,128	5,619,240	0.98

Notes: <sup>^</sup> - includes the self-employed with no employees; industry figures sum to within rounding error of the totals; \* - figures exclude farms, rail transportation and government services; <sup>~</sup> all County Business Patterns (CBP) figures should be regarded as estimates of the number of employees, and relatively tiny percentages could not be classified in any industry; therefore, components will not sum to the total.

Abbreviations used: exc. - except; inc. including; info. - information; mfg. - manufacturing; prcsng. - processing; srvcs. - services.

Sources: U.S. Bureau of the Census (2021b), U.S. BEA (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 4/21).

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
-----	Total (exc. farms, railroads & government)	4,916,956	132,989,428	1.00
Goods producing groups (exc. farms)				
1131	Timber tract operations	11	3,647	0.08
1132	Forest nurseries & gathering forest products	15	1,008	0.40
1133	Logging	350	47,273	0.20
1141	Fishing	12	5,637	0.06
1142	Hunting & trapping	37	1,679	0.60
1151	Crop production support activities	300	70,902	0.11
1152	Animal production support activities	531	21,416	0.67
1153	Forestry support activities	22	13,005	0.05
21112	Crude petroleum	739	75,596	0.26
21113	Natural gas	957	32,532	0.80
2121	Coal mining	1,780	50,288	0.96
2122	Metal ore mining	0	37,671	0.00
2123	Nonmetallic mineral mining & quarrying	3,154	89,697	0.95
213111	Drilling oil & gas wells	1,697	69,820	0.66
213112	Supporting oil & gas operations	3,081	259,480	0.32
213113	Supporting coal mining	74	4,734	0.42
213114	Supporting metal mining	20	3,810	0.14
213115	Supporting non-metallic minerals	98	3,112	0.85
2361	Residential building construction	17,740	753,227	0.64
2362	Nonresidential building construction	25,157	698,677	0.97
2371	Utility system construction	14,054	640,400	0.59
2372	Land subdivision	458	21,718	0.57

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
2373	Highway, street & bridge construction	8,573	303,785	0.76
2379	Other heavy & civil engineering	1,320	72,980	0.49
2381	Foundation, structure, & building exterior contractors	26,578	896,212	0.80
2382	Building eqpt. contractors	66,754	2,150,857	0.84
2383	Building finishing contractors	22,009	844,496	0.70
2389	Other specialty trade contractors	19,054	661,549	0.78
31-33	Manufacturing			
32p & 33	Durable goods			
3211	Sawmills & wood preservation	1,733	91,111	0.51
3212	Veneer, plywood & engineered wood product mfg.	1,991	78,071	0.69
3219	Other wood product mfg.	8,752	246,575	0.96
3271	Clay product & refractory mfg.	5,149	36,504	3.82
3272	Glass & glass product mfg.	9,150	90,541	2.73
3273	Cement & concrete product mfg.	5,536	176,809	0.85
3274	Lime & gypsum product mfg.	505	14,534	0.94
3279	Other nonmetallic mineral product mfg.	5,566	83,707	1.80
3311	Iron & steel mills & ferroalloy mfg.	11,606	90,066	3.49
3312	Steel product mfg. from purchased steel	6,661	51,785	3.48
3313	Alumina & aluminum production & processing	4,090	62,755	1.76
3314	Nonferrous (exc. aluminum) production & processing	4,423	59,574	2.01
3315	Foundries	13,517	121,364	3.01
3321	Forging & stamping	11,207	108,965	2.78
3322	Cutlery & handtool mfg.	3,772	35,175	2.90
3323	Architectural & structural metals mfg.	16,363	387,042	1.14
3324	Boiler, tank & shipping container mfg.	6,954	88,607	2.12
3325	Hardware mfg.	2,551	28,444	2.43

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
3326	Spring & wire product mfg.	2,645	37,995	1.88
3327	Machine shops, turn products, screw, nut & bolt mfg.	30,623	386,450	2.14
3328	Coating, engrave, heat treating & other activity	12,433	133,271	2.52
3329	Other fabricated metal product mfg.	17,124	260,830	1.78
3331	Agricultural, construction & mining machinery mfg.	6,259	197,375	0.86
3332	Industrial machinery mfg.	8,220	112,079	1.98
3333	Commercial & service industry machinery mfg.	3,221	74,832	1.16
3334	HVAC & commercial refrigeration eqpt. mfg.	7,415	130,182	1.54
3335	Metalworking machinery mfg.	17,202	150,753	3.09
3336	Engine, turbine & power transmission eqpt. mfg.	5,066	101,428	1.35
3339	Other general purpose machinery mfg.	28,485	312,689	2.46
3341	Computer & peripheral eqpt. mfg.	534	39,505	0.37
3342	Communications eqpt. mfg.	1,022	77,046	0.36
3343	Audio & video eqpt. mfg.	210	9,265	0.61
3344	Semiconductor & other electronic component mfg.	7,202	265,543	0.73
3345	Navigation, measuring, medical, control instruments mfg.	14,342	397,015	0.98
3346	Mfg. & reproducing magnetic & optical media	251	6,390	1.06
3351	Electric lighting eqpt. mfg.	1,381	41,703	0.90
3352	Household appliance mfg.	10,751	52,100	5.58
3353	Electrical eqpt. mfg.	5,241	118,816	1.19
3359	Other electrical eqpt. & component mfg.	6,117	136,710	1.21
3361	Motor vehicle mfg.	22,606	236,160	2.59
3362	Motor vehicle body & trailer mfg.	6,888	164,682	1.13
3363	Motor vehicle parts mfg.	75,905	615,808	3.33
3364	Aerospace product & parts mfg.	15,029	422,335	0.96
3365	Railroad rolling stock mfg.	549	30,822	0.48

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
3366	Ship & boat building	117	137,065	0.02
3369	Other transportation eqpt. mfg.	1,247	34,065	0.99
3371	Household & institutional furniture & kitchen cabinet mfg.	9,318	221,448	1.14
3372	Office furniture (including fixtures) mfg.	3,037	114,947	0.71
3379	Other furniture related product mfg.	592	31,013	0.52
3391	Medical eqpt. & supplies mfg.	10,151	289,566	0.95
3399	Other miscellaneous mfg.	13,391	263,886	1.37
31 & 32p	Nondurable goods			
3111	Animal food mfg.	2,429	56,889	1.15
3112	Grain & oilseed milling	1,999	58,623	0.92
3113	Sugar & confectionery product mfg.	2,274	81,524	0.75
3114	Fruit & vegetable preserving & specialty food mfg.	8,737	162,402	1.46
3115	Dairy product mfg.	5,993	151,698	1.07
3116	Animal slaughtering & processing	12,012	532,575	0.61
3117	Seafood product preparation & packaging	2	31,026	0.00
3118	Bakeries & tortilla mfg.	10,870	296,341	0.99
3119	Other food mfg.	10,478	222,882	1.27
3121	Beverage mfg.	7,646	243,534	0.85
3122	Tobacco mfg.	3	12,661	0.01
3131	Fiber, yarn & thread mills	12	21,194	0.02
3132	Fabric mills	602	46,421	0.35
3133	Textile, fabric finishing, fabric coating mills	574	25,642	0.61
3141	Textile furnishings mills	1,097	47,837	0.62
3149	Other textile product mills	1,710	58,216	0.79
3151	Apparel knitting mills	30	10,390	0.08
3152	Cut & sew apparel mfg.	574	61,992	0.25
3159	Apparel accessories & other apparel mfg.	216	8,315	0.70

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
3161	Leather & hide tanning & finishing	103	3,269	0.85
3162	Footwear mfg.	9	11,396	0.02
3169	Other leather & allied product mfg.	1,006	11,676	2.33
3221	Pulp, paper & paperboard mills	1,223	99,448	0.33
3222	Converted paper product mfg.	16,926	247,938	1.85
32311	Printing	21,992	407,834	1.46
32312	Support activities for printing	1,046	21,419	1.32
32411	Petroleum refineries	2,057	64,334	0.86
32412	Asphalt paving mfg., roof shingles, etc.	1,950	26,614	1.98
32419	Other petroleum & coal products	1,580	16,561	2.58
3251	Basic chemical mfg.	7,767	155,488	1.35
3252	Resin, synthetic rubber, artificial & synthetic fibers, filling mfg.	6,261	108,118	1.57
3253	Pesticide, fertilizer & other agricultural chemical mfg.	2,059	33,764	1.65
3254	Pharmaceutical & medicine mfg.	4,456	265,800	0.45
3255	Paint, coating & adhesive mfg.	8,379	64,423	3.52
3256	Soap, cleaners & toilet preparation mfg.	8,661	104,691	2.24
3259	Other chemical product & preparation mfg.	5,177	84,945	1.65
3261	Plastics product mfg.	52,812	655,529	2.18
3262	Rubber product mfg.	14,128	140,991	2.71
Service-providing groups				
2211	Electric power generation, transmission & distribution	17,276	502,660	0.93
2212	Natural gas distribution	5,012	92,694	1.46
2213	Water, sewage & other systems	893	46,346	0.52
4231	Motor vehicles, parts & supply merchant whsl.	20,105	418,748	1.30
4232	Furniture & home furnishing merchant whsl.	6,303	167,751	1.02

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
4233	Lumber & other construction materials merchant whsl.	8,350	262,921	0.86
4234	Professional & commercial eqpt. & supplies merchant whsl.	25,095	644,158	1.05
4235	Metal & mineral (exc. petroleum) merchant whsl.	9,390	153,559	1.65
4236	Appliances, electrical & electronic goods merchant whsl.	16,244	519,895	0.85
4237	Hardware, plumb & heating eqpt. & supplies merchant whsl.	12,227	260,658	1.27
4238	Machinery, eqpt. & supplies merchant whsl.	40,842	786,505	1.40
4239	Miscellaneous durable goods merchant whsl.	13,157	326,304	1.09
4241	Paper & paper product merchant whsl.	5,287	147,159	0.97
4242	Drugs & druggists' sundries merchant whsl.	9,063	301,213	0.81
4243	Apparel, piece goods & notions merchant whsl.	4,123	192,924	0.58
4244	Grocery & related product merchant whsl.	26,388	859,013	0.83
4245	Farm product raw material merchant whsl.	2,183	62,655	0.94
4246	Chemical & allied products merchant whsl.	9,114	161,055	1.53
4247	Petroleum & petroleum products merchant whsl.	2,794	102,087	0.74
4248	Beer, wine, distilled alcoholic beverage merchant whsl.	6,474	206,338	0.85
4249	Miscellaneous nondurable goods merchant whsl.	10,407	335,276	0.84
42511	Business to business electronic markets	79	4,425	0.48
42512	Wholesale trade agents & brokers	8,640	268,580	0.87
4411	Automobile dealers	52,364	1,333,853	1.06
4412	Other motor vehicle dealers	4,908	152,709	0.87
4413	Automotive parts, accessories & tire stores	20,133	536,376	1.02
4421	Furniture stores	7,251	205,167	0.96
4422	Home furnishings stores	8,019	267,814	0.81
443141	Household appliance stores	1,733	54,341	0.86
443142	Electronics stores	7,592	239,152	0.86

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
4441	Building material & supplies dealers	44,733	1,184,402	1.02
4442	Lawn & garden eqpt. & supplies stores	6,389	155,155	1.11
4451	Grocery stores	95,957	2,779,707	0.93
4452	Specialty food stores	5,492	162,564	0.91
4453	Beer, wine & liquor stores	3,084	174,277	0.48
44611	Pharmacies & drug stores	23,879	675,766	0.96
44612	Cosmetics, beauty supplies & perfume stores	4,751	159,625	0.81
44613	Optical goods stores	2,355	81,920	0.78
44619	Other health & personal care stores	3,950	104,899	1.02
44711	Gasoline stations with convenience stores	32,642	848,444	1.04
44719	Other gasoline stores	5,248	145,890	0.97
4481	Clothing stores	36,281	1,325,045	0.74
4482	Shoe stores	6,668	222,520	0.81
4483	Jewelry, luggage & leather goods stores	3,944	118,793	0.90
4511	Sporting goods, hobby, musical instrument stores	14,233	413,277	0.93
4512	Book, periodical & music stores	1,968	64,185	0.83
4522	Department stores	15,415	425,888	0.98
4523	General merchandise stores, inc. warehouse clubs & supercenters	87,878	2,307,946	1.03
4531	Florists	2,584	54,582	1.28
4532	Office supplies, stationery & gift stores	6,419	203,823	0.85
4533	Used merchandise stores	8,822	201,337	1.19
4539	Other miscellaneous store retailers	10,907	308,837	0.96
4541	Electronic shopping & mail-order houses	20,419	560,585	0.99
4542	Vending machine operators	6,175	43,264	3.86
4543	Direct selling establishments	4,252	181,147	0.63
4811	Scheduled air transportation	4,746	457,050	0.28
4812	Nonscheduled air transportation	6,127	44,294	3.74



**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
4831	Deep sea, coastal & Great Lakes water transportation	378	42,027	0.24
4832	Inland water transportation	170	20,156	0.23
4841	General freight trucking	49,061	1,078,098	1.23
4842	Specialized freight trucking	19,231	503,849	1.03
4851	Urban transit systems	434	55,855	0.21
4852	Interurban & rural bus transportation	283	18,471	0.41
4853	Taxi & limousine service	1,575	71,745	0.59
4854	School & employee bus transportation	4,162	235,391	0.48
4855	Charter bus industry	816	30,885	0.71
4859	Other transit & ground passenger transportation	3,158	99,496	0.86
4861	Pipeline transportation of crude oil	1,016	11,318	2.43
4862	Pipeline transportation of natural gas	637	27,294	0.63
4869	Other pipeline transportation	508	8,577	1.60
4871	Scenic & sightseeing transportation, land	180	11,116	0.44
4872	Scenic & sightseeing transportation, water	35	14,979	0.06
4879	Scenic & sightseeing transportation, other	2	3,578	0.02
4881	Air transportation support activities	4,958	224,269	0.60
4882	Rail transportation support activities	2,566	42,192	1.64
4883	Water transportation support activities	877	102,472	0.23
4884	Road transportation support activities	4,017	113,949	0.95
4885	Freight transportation arrangement	11,358	295,673	1.04
4889	Other transportation support activities	1,148	19,031	1.63
4921	Couriers	31,810	779,591	1.10
4922	Local messengers & local delivery	2,155	75,568	0.77
49311	General warehousing & storage	49,256	890,947	1.50
49312	Refrigerated warehousing & storage	1,535	58,851	0.71
49313	Farm products	174	6,513	0.72
49319	Other warehousing & storage	4,282	65,137	1.78

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentration Ratio
5111	Newspaper, periodical, book, database publishers	24,554	320,795	2.07
5112	Software publishers	11,287	690,024	0.44
5121	Motion picture & video industries	4,738	305,420	0.42
5122	Sound recording industries	126	22,732	0.15
5151	Radio & television broadcasting (exc. internet)	6,039	212,773	0.77
5152	Cable & other subscription programming (exc. internet)	116	54,103	0.06
5173	Wired & wireless telecommunications carriers (exc. satellite)	30,469	1,007,877	0.82
5174	Satellite communications	56	7,932	0.19
5179	Other telecommunications	1,787	60,820	0.79
5182	Data processing, hosting & related services^	13,684	552,937	0.67
51911	News syndicates	196	6,353	0.83
51912	Libraries & archives	279	26,101	0.29
51913	Internet publishing, broadcasting & web search portals	5,817	295,295	0.53
51919	All other information services	35	9,190	0.10
5211	Monetary authorities - central bank^	1,061	19,989	1.44
5221	Depository credit intermediation	91,213	1,953,737	1.26
5222	Nondepository credit intermediation	14,896	603,723	0.67
5223	Activities related to credit intermediation	10,774	311,084	0.94
5231	Security & commodity contracts intermediation & brokerage	6,879	350,734	0.53
5232	Securities & commodity exchanges	0	5,937	0.00
5239	Other financial investment activities	11,165	570,545	0.53
5241	Insurance carriers	84,350	1,552,478	1.47
5242	Agencies & other insurance related activities	38,428	1,177,284	0.88
52591	Open-end investment funds	8	1,565	0.14
52599	Other financial vehicles	42	6,090	0.19

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
5311	Lessors of real estate	18,393	604,181	0.82
5312	Offices of real estate agents & brokers	6,983	349,243	0.54
5313	Activities related to real estate	20,950	723,462	0.78
5321	Automotive eqpt. rental & leasing	6,697	177,598	1.02
5322	Consumer goods rental	4,685	131,163	0.97
5323	General rental centers	796	19,552	1.10
5324	Commercial, industrial eqpt. rental & leasing	4,910	199,212	0.67
5331	Lessors of other nonfinancial intangible asset^	1,085	35,737	0.82
5411	Legal services	31,191	1,149,095	0.73
5412	Accounting, tax preparation, bookkeeping, payroll services	38,340	1,159,229	0.89
5413	Architectural, engineering & related services	46,075	1,568,935	0.79
5414	Specialized design services	3,485	122,531	0.77
5415	Computer systems design & related services	46,565	1,924,248	0.65
5416	Management, scientific & technical consulting services	38,153	1,384,830	0.75
5417	Scientific research & development services	20,329	804,597	0.68
5418	Advertising & related services	11,369	469,558	0.65
5419	Other professional, scientific, technical service	28,622	701,468	1.10
551111	Bank holding companies	95	8,482	0.30
551112	Other holding companies	2,955	102,895	0.78
551114	Corporate & subsidiary managing offices	148,406	3,411,901	1.18
5611	Office administrative services	17,249	527,236	0.88
5612	Facilities support services	11,723	294,462	1.08
5613	Employment services	225,915	7,012,453	0.87
5614	Business support services	27,633	797,759	0.94

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
5615	Travel arrangement & reservation services	4,408	225,769	0.53
5616	Investigation & security services	22,497	1,014,487	0.60
5617	Services to buildings & dwellings	66,137	2,026,572	0.88
5619	Other support services	13,179	304,713	1.17
5621	Waste collection	8,550	229,442	1.01
5622	Waste treatment & disposal	2,876	59,383	1.31
5629	Remediation & other waste management services	5,973	149,741	1.08
6111	Elementary & secondary schools	35,557	1,096,859	0.88
6112	Junior colleges	1,548	59,073	0.71
6113	Colleges, universities & professional schools	58,236	1,904,857	0.83
6114	Business schools & computer & management training	1,135	71,630	0.43
6115	Technical & trade schools	3,247	103,935	0.84
6116	Other schools & instruction	12,198	467,338	0.71
6117	Educational support services	1,992	105,109	0.51
6211	Offices of physicians	106,315	2,550,425	1.13
6212	Offices of dentists	32,575	975,666	0.90
6213	Offices of other health practitioners	34,451	963,091	0.97
6214	Outpatient care centers	41,868	1,172,186	0.97
6215	Medical & diagnostic laboratories	6,696	286,388	0.63
6216	Home health care services	69,260	1,528,844	1.23
6219	Other ambulatory health care services	11,796	343,662	0.93
6221	General medical & surgical hospitals	245,127	5,586,027	1.19
6222	Psychiatric & substance abuse hospitals	19,877	251,237	2.14
6223	Other specialty hospitals	9,618	241,213	1.08

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentration Ratio
6231	Nursing care facilities	81,491	1,623,081	1.36
6232	Residential mental retardation, health facilities	33,889	791,849	1.16
6233	Community care facilities for the elderly	43,040	999,070	1.17
6239	Other residential care facilities	3,352	124,496	0.73
6241	Individual & family services	64,223	1,935,648	0.90
6242	Community, emergency & other relief services	7,340	214,634	0.92
6243	Vocational rehabilitation services	18,902	275,482	1.86
6244	Child day care services	36,295	1,001,811	0.98
7111	Performing arts companies	3,099	126,775	0.66
7112	Spectator sports	9,017	138,466	1.76
7113	Promoters of entertainment events	4,793	197,920	0.65
7114	Agents, managers for artists & other public figures	739	23,092	0.87
7115	Independent artists, writers & performers	1,010	57,011	0.48
71211	Museums	4,325	97,775	1.20
71212	Historical sites	410	12,964	0.86
71213	Zoos & gardens	2,049	41,212	1.34
71219	Nature parks, etc.	236	7,884	0.81
7131	Amusement parks & arcades	6,367	239,963	0.72
7132	Gambling industries	4,487	137,201	0.88
7139	Other amusement & recreation industries	44,437	1,424,150	0.84
7211	Traveler accommodation	33,641	2,102,377	0.43
7212	RV parks & recreational camps	932	48,269	0.52
7213	Rooming & boarding houses	286	10,742	0.72
7223	Special food services	22,620	849,063	0.72
7224	Drinking places (alcoholic beverages)	12,627	382,725	0.89
7225	Restaurants & other eating places	412,176	11,099,201	1.00

**Table A21: Group or Sub-group Employment Concentration Ratios Based on 2019 CBP Employment\***

2017 NAICS Code	Industry Titles	Ohio	U.S.	Ohio::U.S. Concentra- tion Ratio
8111	Automotive repair & maintenance	31,975	929,573	0.93
8112	Electronic & precision eqpt. repair & maintenance	2,967	100,236	0.80
8113	Commercial eqpt. (exc. auto & electric) repair & maintenance	9,272	204,445	1.23
8114	Personal & household goods repair & maintenance	2,147	72,292	0.80
8121	Personal care services	28,995	762,196	1.03
8122	Death care services	7,055	134,057	1.42
8123	Drycleaning & laundry services	9,394	281,712	0.90
8129	Other personal services	11,646	362,205	0.87
8131	Religious organizations	63,428	1,682,903	1.02
8132	Grantmaking & giving services	5,649	198,105	0.77
8133	Social advocacy organizations	4,098	183,576	0.60
8134	Civic & social organizations	10,741	221,389	1.31
8139	Business, labor, political, like organizations	15,761	486,551	0.88

Notes: \* - all County Business Patterns (CBP) figures should be regarded as estimates, and may not sum to totals for that reason; ^ - no further details are available. Abbreviations used: eqpt. - equipment; exc. - except; mfg. - manufacturing; mgt. - management; whsl. - wholesale.

Source: U.S. Bureau of the Census (2021b).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 4/21).

**Table A22: Changes in GDP for Ohio and Counties, 2007-2020 (in billions, standardized on 2012)**

Area name	'07	'08^	'09^	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20^*	Percentage Changes			
															'07-'09	'09-'19	'19-'20	'07-'20
Ohio	\$546.7	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	-6.5%	19.6%	-3.5%	7.9%
Adams	\$1.38	\$1.31	\$1.48	\$1.44	\$1.56	\$1.45	\$1.48	\$1.34	\$1.42	\$1.55	\$1.38	\$0.88	\$0.68	\$0.68	6.7%	-54.2%	0.8%	-50.7%
Allen	\$6.04	\$6.06	\$7.50	\$7.82	\$7.93	\$7.28	\$6.92	\$7.60	\$7.37	\$7.66	\$7.50	\$7.56	\$7.61	\$7.48	24.0%	1.5%	-1.7%	23.8%
Ashland	\$1.61	\$1.59	\$1.53	\$1.53	\$1.58	\$1.55	\$1.59	\$1.56	\$1.54	\$1.52	\$1.55	\$1.57	\$1.57	\$1.58	-5.0%	2.6%	0.5%	-1.9%
Ashtabula	\$2.93	\$2.87	\$2.66	\$2.84	\$2.91	\$2.87	\$2.77	\$2.82	\$2.74	\$2.78	\$2.71	\$2.84	\$2.84	\$2.71	-9.4%	7.0%	-4.6%	-7.5%
Athens	\$1.77	\$1.72	\$1.74	\$1.79	\$1.78	\$1.79	\$1.85	\$1.83	\$1.87	\$1.86	\$1.96	\$1.89	\$1.92	\$1.81	-1.6%	10.5%	-6.1%	2.1%
Auglaize	\$1.88	\$1.85	\$1.63	\$1.76	\$1.88	\$1.99	\$2.08	\$2.07	\$2.03	\$2.09	\$2.20	\$2.19	\$2.13	\$1.99	-13.4%	30.5%	-6.5%	5.7%
Belmont	\$2.19	\$2.25	\$2.19	\$2.22	\$2.24	\$2.21	\$2.38	\$2.82	\$3.40	\$3.54	\$3.61	\$3.35	\$3.49	\$3.68	-0.2%	59.5%	5.4%	67.8%
Brown	\$0.82	\$0.82	\$0.82	\$0.85	\$0.88	\$0.85	\$0.85	\$0.84	\$0.82	\$0.85	\$0.83	\$0.82	\$0.79	\$0.76	-0.9%	-3.2%	-4.1%	-8.0%
Butler	\$15.06	\$14.86	\$13.88	\$14.57	\$15.02	\$15.19	\$15.58	\$16.94	\$17.94	\$18.92	\$19.60	\$19.75	\$20.35	\$19.35	-7.8%	46.6%	-4.9%	28.5%
Carroll	\$0.64	\$0.56	\$0.51	\$0.68	\$1.25	\$0.70	\$1.29	\$1.67	\$1.95	\$1.84	\$1.59	\$1.63	\$1.75	\$1.71	-20.2%	241.5%	-2.4%	166.0%
Champaign	\$1.10	\$1.02	\$0.88	\$0.93	\$0.97	\$1.01	\$1.07	\$1.08	\$1.03	\$1.00	\$1.05	\$1.07	\$1.06	\$1.10	-20.1%	20.0%	3.8%	-0.4%
Clark	\$4.36	\$4.23	\$4.02	\$4.03	\$4.14	\$4.10	\$4.13	\$4.16	\$4.18	\$4.13	\$4.14	\$4.16	\$4.17	\$3.96	-7.9%	3.8%	-5.0%	-9.2%
Clermont	\$6.58	\$6.31	\$6.07	\$6.45	\$6.69	\$6.52	\$6.78	\$7.00	\$7.61	\$7.44	\$7.64	\$7.84	\$8.00	\$7.79	-7.7%	31.7%	-2.6%	18.4%
Clinton	\$2.67	\$2.57	\$2.22	\$1.87	\$1.85	\$1.80	\$1.78	\$1.76	\$1.87	\$1.89	\$1.98	\$2.02	\$2.01	\$2.05	-17.1%	-9.4%	2.0%	-23.4%
Columbiana	\$2.86	\$2.62	\$2.55	\$2.60	\$2.70	\$2.70	\$2.80	\$2.93	\$2.94	\$2.89	\$2.79	\$2.81	\$2.84	\$2.76	-11.1%	11.4%	-2.8%	-3.7%
Coshocton	\$1.63	\$1.53	\$1.43	\$1.48	\$1.56	\$1.43	\$1.55	\$1.67	\$1.57	\$1.45	\$1.37	\$1.39	\$1.28	\$1.21	-12.3%	-10.8%	-5.4%	-26.0%
Crawford	\$1.38	\$1.31	\$1.22	\$1.20	\$1.26	\$1.24	\$1.24	\$1.26	\$1.26	\$1.26	\$1.23	\$1.17	\$1.21	\$1.22	-11.5%	-1.1%	0.9%	-11.7%
Cuyahoga	\$84.17	\$83.66	\$78.17	\$77.97	\$78.77	\$79.92	\$80.65	\$82.27	\$82.79	\$83.06	\$84.09	\$86.19	\$88.09	\$84.38	-7.1%	12.7%	-4.2%	0.3%
Darke	\$1.54	\$1.74	\$1.58	\$1.64	\$1.65	\$1.68	\$1.77	\$1.98	\$1.96	\$1.88	\$2.05	\$2.21	\$1.94	\$1.94	2.8%	22.6%	0.0%	26.0%
Defiance	\$1.63	\$1.61	\$1.38	\$1.45	\$1.52	\$1.59	\$1.67	\$1.67	\$1.64	\$1.75	\$1.65	\$1.58	\$1.61	\$1.54	-15.5%	16.9%	-4.6%	-5.7%
Delaware	\$7.28	\$7.44	\$7.44	\$7.93	\$8.48	\$8.88	\$9.27	\$9.47	\$9.61	\$9.79	\$10.36	\$10.83	\$11.65	\$11.27	2.3%	56.5%	-3.2%	55.0%
Erie	\$4.46	\$4.33	\$4.58	\$4.94	\$5.19	\$5.22	\$5.44	\$5.46	\$4.80	\$4.87	\$4.76	\$4.66	\$4.19	\$3.77	2.6%	-8.5%	-10.0%	-15.5%
Fairfield	\$3.41	\$3.40	\$3.27	\$3.48	\$3.59	\$3.67	\$3.70	\$3.80	\$3.75	\$3.91	\$4.01	\$3.97	\$4.15	\$4.07	-4.0%	26.9%	-1.8%	19.6%
Fayette	\$1.05	\$0.98	\$0.98	\$0.94	\$0.98	\$0.99	\$1.40	\$1.73	\$2.05	\$2.35	\$2.53	\$2.36	\$2.04	\$1.99	-7.0%	108.9%	-2.5%	89.3%
Franklin	\$71.86	\$71.11	\$68.82	\$70.48	\$72.99	\$76.16	\$78.34	\$80.94	\$82.18	\$84.02	\$85.75	\$87.17	\$88.62	\$86.19	-4.2%	28.8%	-2.7%	20.0%
Fulton	\$1.97	\$1.75	\$1.46	\$1.60	\$1.74	\$1.72	\$1.77	\$1.77	\$1.88	\$1.96	\$1.91	\$1.86	\$1.86	\$1.87	-25.7%	27.3%	0.4%	-5.0%
Gallia	\$2.06	\$2.20	\$2.23	\$2.29	\$2.34	\$2.32	\$2.11	\$2.08	\$1.99	\$2.10	\$2.20	\$2.08	\$2.01	\$1.87	8.1%	-9.9%	-6.8%	-9.3%
Geauga	\$3.75	\$3.59	\$3.47	\$3.58	\$3.77	\$3.72	\$3.86	\$3.86	\$3.99	\$3.90	\$3.86	\$4.02	\$4.00	\$3.78	-7.4%	15.4%	-5.5%	0.9%
Greene	\$7.19	\$7.08	\$7.26	\$7.56	\$8.06	\$7.89	\$7.88	\$8.02	\$8.29	\$8.53	\$8.82	\$8.90	\$9.22	\$9.12	1.0%	27.0%	-1.1%	26.9%
Guernsey	\$1.29	\$1.21	\$1.19	\$1.21	\$1.25	\$1.25	\$1.38	\$1.60	\$1.98	\$1.96	\$2.00	\$2.05	\$2.18	\$2.15	-7.6%	83.7%	-1.8%	66.8%
Hamilton	\$61.33	\$61.42	\$59.41	\$60.64	\$63.35	\$63.86	\$64.10	\$64.72	\$64.99	\$66.95	\$66.76	\$67.26	\$69.80	\$66.91	-3.1%	17.5%	-4.1%	9.1%
Hancock	\$3.99	\$3.85	\$3.66	\$3.78	\$3.92	\$4.28	\$4.49	\$4.99	\$5.59	\$5.33	\$5.05	\$4.94	\$4.91	\$4.78	-8.4%	34.2%	-2.7%	19.7%
Hardin	\$0.85	\$0.89	\$0.89	\$0.90	\$0.90	\$0.86	\$0.86	\$0.93	\$0.82	\$0.85	\$0.83	\$0.89	\$0.85	\$0.84	5.5%	-4.2%	-2.3%	-1.2%
Harrison	\$0.39	\$0.39	\$0.41	\$0.43	\$0.46	\$0.44	\$0.72	\$0.96	\$1.48	\$1.56	\$1.29	\$1.14	\$1.34	\$1.61	6.0%	225.5%	20.5%	315.8%
Henry	\$1.21	\$1.11	\$1.08	\$1.07	\$1.12	\$1.14	\$1.24	\$1.30	\$1.31	\$1.23	\$1.15	\$1.13	\$1.32	\$1.36	-11.1%	22.6%	2.6%	11.8%
Highland	\$1.11	\$0.99	\$1.00	\$1.01	\$1.03	\$1.02	\$1.01	\$1.03	\$1.03	\$1.01	\$1.08	\$1.11	\$1.15	\$1.18	-9.6%	14.4%	2.9%	6.5%

**Table A22: Changes in GDP for Ohio and Counties, 2007-2020 (in billions, standardized on 2012)**

Area name															Percentage Changes				
	'07	'08^	'09^	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20^*	'07-'09	'09-'19	'19-'20	'07-'20	
Ohio	\$546.7	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	-6.5%	19.6%	-3.5%	7.9%	
Hocking	\$0.62	\$0.58	\$0.57	\$0.58	\$0.58	\$0.58	\$0.58	\$0.56	\$0.59	\$0.56	\$0.60	\$0.58	\$0.59	\$0.56	-7.4%	2.3%	-5.3%	-10.3%	
Holmes	\$1.55	\$1.49	\$1.51	\$1.57	\$1.70	\$1.69	\$1.79	\$1.96	\$2.09	\$2.03	\$2.19	\$2.30	\$2.33	\$2.24	-2.9%	54.4%	-3.8%	44.1%	
Huron	\$2.35	\$2.13	\$2.08	\$2.08	\$2.13	\$2.07	\$2.12	\$2.08	\$1.98	\$1.98	\$1.99	\$2.10	\$2.07	\$2.04	-11.5%	-0.7%	-1.6%	-13.5%	
Jackson	\$1.00	\$0.94	\$0.94	\$0.94	\$0.94	\$0.91	\$0.94	\$0.94	\$0.94	\$0.94	\$0.93	\$0.96	\$0.92	\$0.91	\$0.90	-5.7%	-2.6%	-1.6%	-9.7%
Jefferson	\$3.25	\$3.39	\$2.97	\$3.08	\$2.97	\$2.91	\$3.49	\$4.05	\$4.27	\$3.18	\$3.21	\$3.07	\$3.38	\$3.57	-8.6%	13.9%	5.6%	9.9%	
Knox	\$1.82	\$1.80	\$1.75	\$1.85	\$1.96	\$1.95	\$1.95	\$1.99	\$1.95	\$1.92	\$1.96	\$2.00	\$1.96	\$1.86	-4.2%	12.5%	-5.5%	1.9%	
Lake	\$11.35	\$11.37	\$10.34	\$10.90	\$11.15	\$10.78	\$10.08	\$10.28	\$10.22	\$10.26	\$10.11	\$10.31	\$10.48	\$10.05	-8.9%	1.4%	-4.1%	-11.4%	
Lawrence	\$1.05	\$1.04	\$1.11	\$1.21	\$1.38	\$1.52	\$1.41	\$1.52	\$1.66	\$1.70	\$1.53	\$1.53	\$1.64	\$1.63	6.3%	47.4%	-0.4%	56.0%	
Licking	\$4.86	\$4.88	\$4.77	\$4.85	\$5.04	\$5.03	\$5.05	\$5.21	\$5.38	\$5.46	\$5.56	\$5.78	\$6.14	\$6.26	-1.8%	28.7%	1.9%	28.8%	
Logan	\$2.12	\$1.89	\$1.60	\$1.74	\$1.85	\$1.91	\$1.97	\$2.01	\$1.82	\$1.84	\$1.90	\$1.93	\$1.91	\$1.82	-24.6%	19.2%	-4.8%	-14.5%	
Lorain	\$9.83	\$9.44	\$8.69	\$9.19	\$9.62	\$9.90	\$9.71	\$9.57	\$9.58	\$9.51	\$9.61	\$9.63	\$9.80	\$9.34	-11.7%	12.8%	-4.7%	-5.1%	
Lucas	\$23.40	\$21.67	\$21.16	\$21.91	\$22.87	\$22.35	\$23.10	\$25.01	\$23.11	\$22.94	\$22.93	\$23.71	\$24.34	\$22.94	-9.6%	15.1%	-5.7%	-1.9%	
Madison	\$1.40	\$1.36	\$1.24	\$1.32	\$1.45	\$1.55	\$1.57	\$1.62	\$1.61	\$1.66	\$1.75	\$1.72	\$1.73	\$1.78	-12.0%	40.1%	2.6%	26.5%	
Mahoning	\$9.09	\$9.11	\$8.50	\$8.47	\$8.62	\$8.61	\$8.65	\$8.52	\$8.47	\$8.38	\$8.34	\$8.42	\$8.61	\$8.16	-6.5%	1.3%	-5.3%	-10.3%	
Marion	\$2.60	\$2.53	\$2.41	\$2.35	\$2.45	\$2.46	\$2.53	\$2.51	\$2.62	\$2.58	\$2.59	\$2.60	\$2.57	\$2.49	-7.3%	6.4%	-3.0%	-4.3%	
Medina	\$6.12	\$6.04	\$5.95	\$6.03	\$6.32	\$6.13	\$6.43	\$6.93	\$6.63	\$6.82	\$6.92	\$7.10	\$7.02	\$6.75	-2.7%	17.9%	-3.8%	10.4%	
Meigs	\$0.38	\$0.34	\$0.39	\$0.40	\$0.38	\$0.37	\$0.40	\$0.36	\$0.37	\$0.35	\$0.34	\$0.34	\$0.36	\$0.35	2.2%	-6.7%	-3.0%	-7.5%	
Mercer	\$1.60	\$1.74	\$1.54	\$1.63	\$1.72	\$1.77	\$2.03	\$2.13	\$2.44	\$2.27	\$2.34	\$2.57	\$2.25	\$2.14	-3.7%	45.8%	-5.0%	33.4%	
Miami	\$3.74	\$3.74	\$3.38	\$3.58	\$3.79	\$3.93	\$3.88	\$3.80	\$3.76	\$3.79	\$4.00	\$4.01	\$4.02	\$3.91	-9.7%	18.9%	-2.8%	4.4%	
Monroe	\$0.47	\$0.51	\$0.52	\$0.52	\$0.61	\$0.66	\$0.72	\$0.81	\$1.07	\$1.32	\$1.19	\$1.28	\$1.58	\$1.90	10.4%	205.5%	20.5%	306.5%	
Montgomery	\$26.25	\$25.39	\$23.57	\$23.96	\$24.25	\$24.09	\$24.23	\$24.53	\$24.64	\$24.91	\$25.49	\$26.32	\$26.95	\$25.74	-10.2%	14.3%	-4.5%	-1.9%	
Morgan	\$0.24	\$0.24	\$0.25	\$0.25	\$0.26	\$0.26	\$0.25	\$0.26	\$0.28	\$0.27	\$0.28	\$0.28	\$0.30	\$0.29	1.5%	21.8%	-2.5%	20.5%	
Morrow	\$0.63	\$0.57	\$0.56	\$0.58	\$0.62	\$0.65	\$0.61	\$0.62	\$0.65	\$0.65	\$0.58	\$0.59	\$0.63	\$0.63	-10.4%	12.4%	-0.6%	0.0%	
Muskingum	\$3.12	\$2.92	\$2.91	\$2.86	\$3.00	\$2.95	\$3.32	\$3.45	\$3.43	\$3.43	\$3.45	\$3.41	\$3.50	\$3.44	-6.9%	20.5%	-1.7%	10.3%	
Noble	\$0.34	\$0.32	\$0.31	\$0.32	\$0.34	\$0.35	\$0.47	\$0.66	\$0.91	\$0.85	\$0.73	\$0.64	\$0.64	\$0.64	-8.0%	105.1%	-0.7%	87.3%	
Ottawa	\$1.76	\$1.67	\$1.71	\$1.63	\$1.79	\$1.92	\$1.91	\$1.77	\$1.90	\$1.86	\$1.91	\$1.87	\$1.92	\$1.85	-2.8%	12.2%	-3.4%	5.4%	
Paulding	\$0.46	\$0.51	\$0.49	\$0.49	\$0.51	\$0.52	\$0.50	\$0.54	\$0.47	\$0.46	\$0.51	\$0.55	\$0.54	\$0.59	5.3%	11.7%	7.7%	26.7%	
Perry	\$0.66	\$0.59	\$0.60	\$0.66	\$0.72	\$0.68	\$0.69	\$0.68	\$0.67	\$0.68	\$0.74	\$0.70	\$0.69	\$0.68	-9.3%	15.6%	-1.6%	3.2%	
Pickaway	\$1.63	\$1.63	\$1.65	\$1.69	\$1.70	\$1.60	\$1.56	\$1.46	\$1.54	\$1.53	\$1.56	\$1.56	\$1.63	\$1.68	1.2%	-1.5%	3.2%	2.9%	
Pike	\$0.98	\$0.96	\$0.99	\$0.94	\$0.86	\$1.05	\$0.98	\$0.93	\$0.92	\$0.94	\$1.06	\$1.05	\$1.03	\$0.98	0.6%	4.2%	-5.1%	-0.6%	
Portage	\$5.35	\$5.22	\$4.94	\$5.13	\$5.28	\$5.41	\$5.50	\$5.47	\$5.54	\$5.52	\$5.76	\$5.85	\$5.82	\$5.51	-7.7%	17.8%	-5.3%	3.0%	
Preble	\$1.04	\$1.04	\$0.95	\$0.98	\$1.01	\$1.02	\$1.02	\$1.00	\$1.05	\$1.00	\$1.03	\$1.07	\$1.06	\$1.08	-8.7%	10.6%	2.7%	3.8%	
Putnam	\$1.21	\$1.34	\$1.22	\$1.23	\$1.23	\$1.25	\$1.24	\$1.23	\$1.18	\$1.15	\$1.18	\$1.17	\$1.16	\$1.17	0.9%	-5.4%	1.0%	-3.6%	
Richland	\$4.70	\$4.55	\$3.86	\$4.09	\$4.22	\$4.28	\$4.20	\$4.30	\$4.24	\$4.19	\$4.20	\$4.29	\$4.26	\$4.12	-17.8%	10.3%	-3.2%	-12.3%	
Ross	\$2.52	\$2.39	\$2.29	\$2.29	\$2.45	\$2.40	\$2.43	\$2.49	\$2.50	\$2.41	\$2.46	\$2.52	\$2.57	\$2.52	-9.1%	12.3%	-1.7%	0.3%	
Sandusky	\$2.45	\$2.32	\$2.19	\$2.23	\$2.34	\$2.55	\$2.66	\$2.64	\$2.81	\$2.74	\$2.81	\$2.80	\$2.72	\$2.63	-10.7%	24.3%	-3.4%	7.2%	



**Table A22: Changes in GDP for Ohio and Counties, 2007-2020 (in billions, standardized on 2012)**

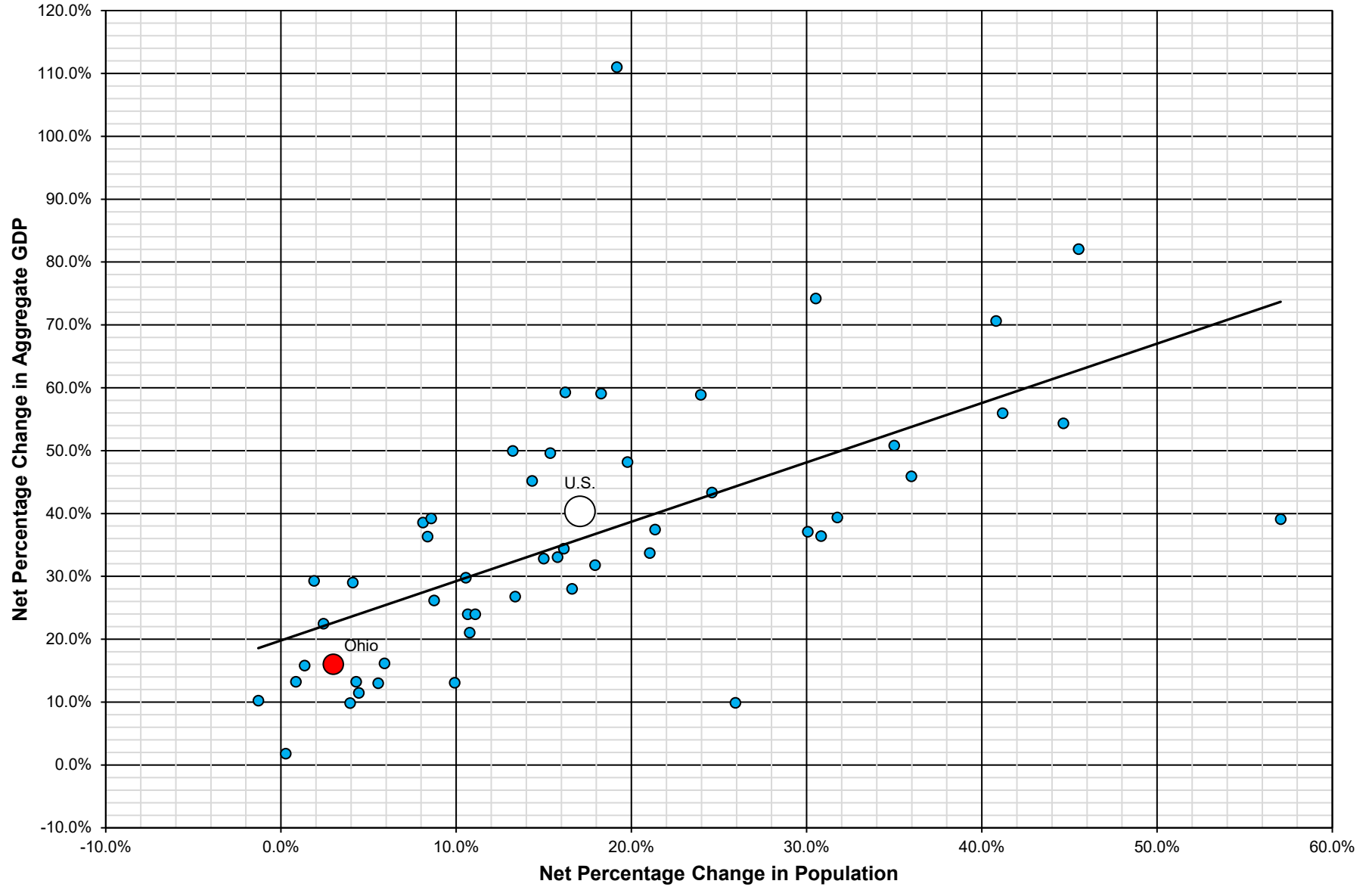
Area name	`07	`08^	`09^	`10	`11	`12	`13	`14	`15	`16	`17	`18	`19	`20^*	Percentage Changes			
															`07-`09	`09-`19	`19-`20	`07-`20
Ohio	\$546.7	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	-6.5%	19.6%	-3.5%	7.9%
Scioto	\$2.12	\$2.17	\$2.26	\$2.14	\$2.17	\$2.30	\$3.00	\$4.01	\$3.31	\$2.65	\$2.65	\$2.64	\$2.84	\$2.76	6.4%	25.4%	-2.6%	30.1%
Seneca	\$1.88	\$1.77	\$1.64	\$1.65	\$1.71	\$1.57	\$1.58	\$1.62	\$1.70	\$1.81	\$1.71	\$1.71	\$1.81	\$1.78	-12.6%	10.5%	-1.8%	-5.2%
Shelby	\$3.00	\$2.85	\$2.39	\$2.58	\$2.82	\$2.87	\$2.91	\$2.95	\$2.86	\$2.88	\$2.91	\$2.93	\$2.94	\$2.94	-20.4%	23.3%	-0.3%	-2.2%
Stark	\$14.37	\$14.21	\$13.36	\$13.93	\$14.40	\$14.63	\$15.07	\$15.72	\$15.56	\$15.39	\$15.64	\$15.53	\$15.52	\$14.74	-7.0%	16.2%	-5.0%	2.6%
Summit	\$26.82	\$26.51	\$24.86	\$25.41	\$25.38	\$25.54	\$25.90	\$26.55	\$26.64	\$26.72	\$26.88	\$27.43	\$27.90	\$26.38	-7.3%	12.2%	-5.4%	-1.6%
Trumbull	\$8.61	\$8.05	\$6.80	\$7.22	\$7.59	\$7.33	\$7.26	\$7.10	\$6.94	\$6.88	\$6.59	\$6.57	\$6.63	\$6.36	-21.0%	-2.6%	-4.0%	-26.1%
Tuscarawas	\$3.13	\$3.05	\$2.91	\$3.09	\$3.23	\$3.16	\$3.25	\$3.44	\$3.52	\$3.43	\$3.54	\$3.49	\$3.52	\$3.40	-6.9%	20.7%	-3.2%	8.7%
Union	\$3.56	\$3.09	\$2.80	\$2.93	\$3.02	\$3.04	\$3.20	\$3.37	\$3.43	\$3.55	\$3.92	\$4.05	\$4.07	\$4.03	-21.2%	45.2%	-0.9%	13.4%
Van Wert	\$1.09	\$1.02	\$0.95	\$0.99	\$0.99	\$1.04	\$1.06	\$1.11	\$1.17	\$1.21	\$1.27	\$1.31	\$1.21	\$1.15	-12.9%	27.6%	-4.5%	6.2%
Vinton	\$0.26	\$0.24	\$0.24	\$0.25	\$0.27	\$0.26	\$0.22	\$0.22	\$0.22	\$0.25	\$0.25	\$0.27	\$0.28	\$0.25	-7.7%	15.2%	-12.8%	-7.3%
Warren	\$7.95	\$7.87	\$7.67	\$8.05	\$8.30	\$8.54	\$8.64	\$9.07	\$9.34	\$10.08	\$10.36	\$10.71	\$11.58	\$11.26	-3.5%	50.9%	-2.7%	41.7%
Washington	\$2.76	\$2.83	\$2.82	\$2.95	\$3.04	\$3.11	\$3.01	\$3.27	\$3.44	\$3.39	\$3.21	\$3.11	\$3.29	\$3.20	2.3%	16.4%	-2.5%	16.1%
Wayne	\$4.78	\$4.62	\$4.35	\$4.49	\$4.65	\$4.74	\$5.05	\$5.32	\$5.30	\$5.19	\$5.53	\$5.75	\$5.99	\$5.74	-9.1%	38.0%	-4.3%	20.1%
Williams	\$1.58	\$1.55	\$1.35	\$1.44	\$1.50	\$1.54	\$1.57	\$1.58	\$1.59	\$1.61	\$1.61	\$1.60	\$1.68	\$1.59	-14.3%	24.6%	-5.4%	1.0%
Wood	\$6.28	\$6.23	\$5.38	\$5.62	\$5.86	\$5.89	\$5.92	\$6.20	\$6.11	\$6.21	\$6.34	\$6.56	\$6.88	\$6.75	-14.4%	27.8%	-1.9%	7.4%
Wyandot	\$0.88	\$0.82	\$0.77	\$0.77	\$0.82	\$0.85	\$0.84	\$0.89	\$0.84	\$0.86	\$0.90	\$0.96	\$0.96	\$0.94	-12.2%	24.3%	-2.7%	6.2%

Note: ^ - a recession year; \* - initial; earlier years may be revised.

Source: U.S. BEA, Table CAGDP9 (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 1/22).

## Population and Aggregate GDP Growth Rates, 2000-2020



Sources: U.S. BEA and U.S. Census Bureau

**Table A23: GDP and Population in Ohio and the U.S., 2000-2020**

Variable	Area	2000	2001 <sup>^</sup>	2002	2003	2004	2005	2006	2007	2008 <sup>^</sup>	2009 <sup>^</sup>	2010	2011	2012
GDP (in billions, standardized on 2012)	U.S.	\$13,138.0	\$13,263.4	\$13,488.4	\$13,865.5	\$14,399.7	\$14,901.3	\$15,315.9	\$15,623.9	\$15,643.0	\$15,236.3	\$15,649.0	\$15,891.5	\$16,254.0
	Ohio	\$509.9	\$503.0	\$513.2	\$519.9	\$534.1	\$546.0	\$545.5	\$546.7	\$537.1	\$511.1	\$524.0	\$541.2	\$545.7
Per Capita GDP (standardized on 2012)	U.S.	\$46,562	\$46,543	\$46,896	\$47,794	\$49,178	\$50,424	\$51,330	\$51,867	\$51,441	\$49,666	\$50,591	\$51,007	\$51,792
	Ohio	\$44,876	\$44,169	\$44,988	\$45,470	\$46,634	\$47,627	\$47,513	\$47,540	\$46,644	\$44,330	\$45,408	\$46,877	\$47,255
Absolute GDP - Indexed	U.S.	100.0	101.0	102.7	105.5	109.6	113.4	116.6	118.9	119.1	116.0	119.1	121.0	123.7
Per Capita GDP - Indexed	U.S.	100.0	100.0	100.7	102.6	105.6	108.3	110.2	111.4	110.5	106.7	108.7	109.5	111.2
Absolute GDP - Indexed	Ohio	100.0	98.6	100.6	102.0	104.7	107.1	107.0	107.2	105.3	100.2	102.8	106.1	107.0
Per Capita GDP - Indexed	Ohio	100.0	98.4	100.2	101.3	103.9	106.1	105.9	105.9	103.9	98.8	101.2	104.5	105.3

Variable	Area	2013	2014	2015	2016	2017	2018	2019	2020 <sup>^*</sup>	Net Change: '00-'07		Net Change: '07-'09	
										Number	Percent	Number	Percent
GDP (in billions, standardized on 2012)	U.S.	\$16,553.3	\$16,932.1	\$17,390.3	\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$2,485.8	18.9%	-\$387.6	-2.5%
	Ohio	\$556.2	\$574.2	\$578.9	\$583.9	\$590.7	\$598.9	\$611.1	\$589.9	\$36.8	7.2%	-\$35.7	-6.5%
Per Capita GDP (standardized on 2012)	U.S.	\$52,385	\$53,195	\$54,237	\$54,748	\$55,630	\$56,956	\$57,984	\$55,798	\$5,304.7	11.4%	-\$2,200.2	-4.2%
	Ohio	\$48,046	\$49,487	\$49,826	\$50,191	\$50,665	\$51,293	\$52,283	\$50,448	\$2,663.8	5.9%	-\$3,209.7	-6.8%
Absolute GDP - Indexed	U.S.	126.0	128.9	132.4	134.6	137.6	141.6	144.9	139.9	18.9		-3.0	
Per Capita GDP - Indexed	U.S.	112.5	114.2	116.5	117.6	119.5	122.3	124.5	119.8	11.4		-4.7	
Absolute GDP - Indexed	Ohio	109.1	112.6	113.5	114.5	115.8	117.4	119.8	115.7	7.2		-7.0	
Per Capita GDP - Indexed	Ohio	107.1	110.3	111.0	111.8	112.9	114.3	116.5	112.4	5.9		-7.2	

Variable	Area	Net Change: '09-'19		Change: '19-'20 <sup>*</sup>		Net Change: '00-'20 <sup>*</sup>	
		Number	Percent	Number	Percent	Number	Percent
GDP (in billions, standardized on 2012)	U.S.	\$3,796.4	24.9%	-\$648.0	-3.4%	\$5,246.7	39.9%
	Ohio	\$100.1	19.6%	-\$21.2	-3.5%	\$79.9	15.7%
Per Capita GDP (standardized on 2012)	U.S.	\$8,317.6	16.7%	-\$2,185.7	-3.8%	\$9,236.4	19.8%
	Ohio	\$7,953.3	17.9%	-\$1,835.5	-3.5%	\$5,572.0	12.4%
Absolute GDP - Indexed	U.S.	28.9		-4.9		39.9	
Per Capita GDP - Indexed	U.S.	17.9		-4.7		19.8	
Absolute GDP - Indexed	Ohio	19.6		-4.2		15.7	
Per Capita GDP - Indexed	Ohio	17.7		-4.1		12.4	

Note: <sup>^</sup> - a recession year for the nation; \* - initial, earlier years may be revised. Sources: U.S. Bureau of the Census (2021), U.S. BEA (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 2/22).

**Table A24: Growth and Industry Concentration in Ohio's Economy, 2000-2020**

2012 NAICS Codes	Major Industry Titles	Ohio			U.S.			2000 Ohio::U.S. Concentration Ratio <sup>1</sup>
		2000 Value (in millions) <sup>1</sup>	2000 Percent of the Economy <sup>1</sup>	Real Growth to 2020 <sup>2</sup>	2000 Value (in millions) <sup>1</sup>	2000 Percent of the Economy <sup>1</sup>	Real Growth to 2020 <sup>2</sup>	
11-92	Total	\$343,467	100.00%	15.7%	\$8,577,552	100.00%	39.9%	1.00
<u>Slower-Growing/Declining Industries<sup>2</sup> Not Concentrated in Ohio in 2000</u>		<u>\$116,188</u>	<u>29.62%</u>	<u>-10.0%</u>	<u>\$3,564,473</u>	<u>34.77%</u>	<u>4.0%</u>	<u>0.85</u>
212	Mining, exc. oil & gas	\$1,006	0.26%	-65.1%	\$28,506	0.28%	-35.2%	0.92
81	Other svcs., exc. government	\$10,537	2.69%	-36.3%	\$279,672	2.73%	-25.1%	0.98
313-4	Textile & textile product mills	\$502	0.13%	-35.9%	\$27,980	0.27%	-52.3%	0.47
721	Accommodation	\$1,485	0.38%	-33.7%	\$93,319	0.91%	-21.2%	0.42
23	Construction	\$16,257	4.14%	-31.3%	\$461,244	4.50%	-16.8%	0.92
5411	Legal svcs.	\$3,224	0.82%	-24.7%	\$129,128	1.26%	-13.0%	0.65
722	Food svcs. & drinking places	\$7,104	1.81%	-14.7%	\$194,178	1.89%	-4.7%	0.96
485	Transit & ground passenger transportation	\$289	0.07%	-13.0%	\$18,451	0.18%	14.3%	0.41
92sl	State & local government	\$34,392	8.77%	-10.0%	\$899,491	8.77%	8.0%	1.00
321	Wood products	\$1,052	0.27%	-2.5%	\$28,304	0.28%	12.2%	0.97
61	Educational svcs.	\$2,893	0.74%	-0.7%	\$95,224	0.93%	33.2%	0.79
92fc, 491	Federal civilian (inc. Postal Service)	\$7,091	1.81%	6.2%	\$248,425	2.42%	19.8%	0.75
711-2	Performing arts, museums & related activities	\$1,303	0.33%	6.9%	\$49,295	0.48%	3.8%	0.69
92811	Military	\$2,532	0.65%	11.2%	\$175,111	1.71%	14.8%	0.38
523	Securities, commodity contracts, investments	\$2,034	0.52%	16.8%	\$133,374	1.30%	22.5%	0.40
42	Wholesale trade	\$23,326	5.95%	20.9%	\$622,520	6.07%	35.0%	0.98
481	Air transportation	\$1,003	0.26%	32.0%	\$58,099	0.57%	-21.5%	0.45
315-6	Apparel, leather & allied products	\$159	0.04%	37.1%	\$22,152	0.22%	-57.1%	0.19
<u>Slower-Growing/Declining Industries<sup>2</sup> Concentrated in Ohio in 2000</u>		<u>\$140,459</u>	<u>35.81%</u>	<u>3.0%</u>	<u>\$2,673,912</u>	<u>26.08%</u>	<u>15.4%</u>	<u>1.37</u>
525	Funds, trusts & other financial vehicles	\$1,008	0.26%	-86.1%	\$15,236	0.15%	7.4%	1.73
337	Furniture & related products	\$1,489	0.38%	-45.7%	\$33,513	0.33%	-33.6%	1.16
482	Rail transportation	\$902	0.23%	-36.8%	\$23,289	0.23%	-27.1%	1.01
332	Fabricated metal products	\$10,436	2.66%	-35.8%	\$121,278	1.18%	-20.7%	2.25
713	Amusements, gambling & recreation	\$2,827	0.72%	-31.6%	\$49,677	0.48%	-12.4%	1.49
322	Paper	\$2,594	0.66%	-26.4%	\$62,173	0.61%	-22.1%	1.09
3361-3	Motor vehicles, bodies, trailers & parts	\$17,962	4.58%	-25.3%	\$137,497	1.34%	38.9%	3.41
326	Plastics & rubber products	\$5,953	1.52%	-20.3%	\$65,527	0.64%	-1.9%	2.37
327	Nonmetallic mineral products	\$3,317	0.85%	-17.8%	\$42,610	0.42%	0.6%	2.03
335	Electrical eqpt. & appliances	\$4,354	1.11%	-15.1%	\$45,661	0.45%	6.3%	2.49
323	Printing & related support activities	\$2,173	0.55%	-13.6%	\$43,678	0.43%	-5.9%	1.30
333	Machinery	\$6,780	1.73%	-11.9%	\$113,059	1.10%	-1.2%	1.57
22	Utilities	\$7,377	1.88%	-9.9%	\$180,060	1.76%	15.7%	1.07

**Table A24: Growth and Industry Concentration in Ohio's Economy, 2000-2020**

2012 NAICS Codes	Major Industry Titles	Ohio			U.S.			2000 Ohio::U.S. Concen- tration Ratio <sup>1</sup>
		2000 Value (in millions) <sup>1</sup>	2000 Per- cent of the Economy <sup>1</sup>	Real Growth to 2020 <sup>2</sup>	2000 Value (in millions) <sup>1</sup>	2000 Per- cent of the Economy <sup>1</sup>	Real Growth to 2020 <sup>2</sup>	
<u>Slower-Growing/Declining Industries<sup>2</sup> Concentrated in Ohio in 2000 (continued)</u>								
623	Nursing & residential care facilities	\$3,784	0.96%	-8.09%	\$69,124	0.67%	13.76%	1.41
487-8, 492	Other transportation & support activities	\$2,621	0.67%	-6.98%	\$65,846	0.64%	4.79%	1.31
484	Truck transportation	\$4,973	1.27%	-5.0%	\$98,022	0.96%	1.5%	1.45
3364-9	Other transportation eqpt.	\$3,837	0.98%	8.4%	\$71,099	0.69%	20.7%	1.61
44-45	Retail trade	\$28,350	7.23%	8.8%	\$685,404	6.69%	33.0%	1.10
311-2	Food, beverage & tobacco products	\$6,494	1.66%	16.7%	\$163,183	1.59%	9.2%	0.87
562	Waste management & remediation svcs.	\$1,070	0.27%	18.6%	\$26,137	0.25%	21.7%	1.07
325	Chemical	\$7,477	1.91%	41.2%	\$187,845	1.83%	13.5%	1.00
324	Petroleum & coal products	\$2,033	0.52%	57.0%	\$52,680	0.51%	33.9%	1.12
521-2	Federal Reserve banks, credit intermediation, etc.	\$12,651	3.22%	68.0%	\$321,314	3.13%	25.1%	1.06
<u>Faster-Growing Industries<sup>2</sup> Not Concentrated in Ohio in 2000</u>		<u>\$87,942</u>	<u>22.42%</u>	<u>49.7%</u>	<u>\$3,014,901</u>	<u>29.41%</u>	<u>95.4%</u>	<u>0.76</u>
483	Water transportation	\$254	0.06%	-31.1%	\$8,046	0.08%	97.7%	0.79
512	Motion pictures & sound recordings	\$400	0.10%	-18.6%	\$54,142	0.53%	63.6%	0.89
532-3	Rental & leasing svcs. & lessors of intangible assets	\$4,760	1.21%	-10.1%	\$135,812	1.32%	42.1%	0.78
339	Miscellaneous mfg.	\$1,955	0.50%	19.8%	\$59,212	0.58%	45.8%	0.82
531	Real estate	\$37,777	9.63%	23.0%	\$1,094,490	10.68%	51.2%	0.86
5412-4, 6-9	Other professional, scientific & technical svcs.	\$11,830	3.02%	25.4%	\$408,522	3.99%	66.2%	0.40
624	Social assistance	\$1,656	0.42%	30.0%	\$52,604	0.51%	41.0%	0.20
561	Administrative & support svcs.	\$9,482	2.42%	35.1%	\$255,924	2.50%	67.7%	0.64
515, 517	Broadcasting & telecommunications	\$7,379	1.88%	60.3%	\$276,899	2.70%	139.3%	0.83
113-5	Forestry, fishing & related activities	\$263	0.07%	65.4%	\$22,262	0.22%	40.4%	0.40
111-2	Crop & animal production (farms)	\$1,771	0.45%	75.3%	\$76,044	0.74%	61.7%	0.71
511	Publishing (inc. software, exc. Internet)	\$2,774	0.71%	86.1%	\$115,874	1.13%	171.1%	0.49
334	Computer & electronic products	\$3,493	0.89%	188.6%	\$225,333	2.20%	420.0%	1.04
5415	Computer systems design & related svcs.	\$2,984	0.76%	295.6%	\$114,079	1.11%	374.5%	0.69
213	Support activities for mining	\$80	0.02%	344.3%	\$13,824	0.13%	70.6%	0.43
486	Pipeline transportation	\$125	0.03%	451.2%	\$9,361	0.09%	88.1%	0.77
518, 519	Data prcsng., hosting, other info. (inc. Internet)	\$502	0.13%	650.3%	\$24,262	0.24%	1353.5%	0.70
211	Oil & gas extraction	\$456	0.12%	1076.5%	\$68,211	0.67%	198.4%	0.36

**Table A24: Growth and Industry Concentration in Ohio's Economy, 2000-2020**

2012 NAICS Codes	Major Industry Titles	Ohio			U.S.			2000 Ohio::U.S. Concen- tration Ratio <sup>1</sup>
		2000 Value (in millions) <sup>1</sup>	2000 Per- cent of the Economy <sup>1</sup>	Real Growth to 2020 <sup>2</sup>	2000 Value (in millions) <sup>1</sup>	2000 Per- cent of the Economy <sup>1</sup>	Real Growth to 2020 <sup>2</sup>	
<u>Faster-Growing Industries<sup>2</sup> Concentrated in Ohio in 2000</u>		<u>\$47,688</u>	<u>12.16%</u>	<u>63.1%</u>	<u>\$997,663</u>	<u>9.73%</u>	<u>70.5%</u>	<u>1.25</u>
331	Primary metals	\$6,511	1.66%	-11.5%	\$47,029	0.46%	50.2%	3.62
622	Hospitals	\$8,831	2.25%	44.6%	\$190,078	1.85%	53.0%	1.21
621	Ambulatory health care svcs.	11632.5	2.97%	59.34%	\$288,334	2.81%	88.55%	1.05
524	Insurance carriers & related activities	\$12,029	3.07%	79.8%	\$274,434	2.68%	68.4%	1.15
55	Management of companies & enterprises	\$7,565	1.93%	99.2%	\$171,128	1.67%	58.5%	1.16
493	Warehousing & storage	\$1,118	0.29%	264.0%	\$26,660	0.26%	197.0%	1.10

Notes: 1 - in or based on current dollars, but components may not sum to totals due to rounding; 2 - based on *national* industry change figures after adjusting for inflation, then grouped on slower or faster than the national average of 56.7 percent.

Abbreviations used: eqpt. - equipment; exc. - except; inc. - including; info. - information; mfg. - manufacturing; prcsng. - processing; svcs. - services.

Source: U.S. BEA (2021).

Prepared by: Office of Research, Ohio Dept. of Development. Telephone 614-466-2116 (DL, 2/22).

**Table A25: Percentage Changes in Ohio and U.S. GDP by Industry, 2000-2020 (standardized on 2012)**

2012 NAICS Codes	Industry Titles	U.S.			Ohio		
		Real GDP (millions)		Percent Change 2000-2020	Real GDP (millions)		Percent Change 2000-2020
		2000	2020		2000	2020	
11-92	Total	\$13,138,035	\$18,384,687	39.9%	\$509,949	\$589,898	15.7%
111-2	Crop & animal production (farms)	\$136,645	\$221,020	61.7%	\$3,145	\$5,514	75.3%
113-5	Forestry, fishing & related activities	\$25,064	\$35,180	40.4%	\$297	\$490	65.4%
211	Oil & gas extraction	\$137,484	\$410,248	198.4%	\$919	\$10,808	1076.5%
212	Mining, exc. oil & gas	\$92,490	\$59,909	-35.2%	\$3,264	\$1,138	-65.1%
213	Support activities for mining	\$18,746	\$31,979	70.6%	\$108	\$480	344.3%
23	Construction	\$781,608	\$650,436	-16.8%	\$27,549	\$18,938	-31.3%
321	Wood products	\$25,333	\$28,436	12.2%	\$941	\$917	-2.5%
327	Nonmetallic mineral products	\$49,064	\$49,351	0.6%	\$3,820	\$3,140	-17.8%
331	Primary metals	\$60,671	\$91,099	50.2%	\$8,400	\$7,438	-11.5%
332	Fabricated metal products	\$155,446	\$123,262	-20.7%	\$13,376	\$8,584	-35.8%
333	Machinery	\$129,797	\$128,182	-1.2%	\$7,783	\$6,860	-11.9%
334	Computer & electronic products	\$67,491	\$350,963	420.0%	\$1,046	\$3,020	188.6%
335	Electrical eqpt. & appliances	\$54,315	\$57,752	6.3%	\$5,180	\$4,396	-15.1%
3361-3	Motor vehicles, bodies, trailers & parts	\$99,496	\$138,171	38.9%	\$12,997	\$9,709	-25.3%
3364-9	Other transportation eqpt.	\$95,217	\$114,928	20.7%	\$5,138	\$5,572	8.4%
337	Furniture & related products	\$40,032	\$26,577	-33.6%	\$1,778	\$966	-45.7%
339	Miscellaneous mfg.	\$60,970	\$88,916	45.8%	\$2,013	\$2,412	19.8%
311-2	Food, beverage & tobacco products	\$224,573	\$245,216	9.2%	\$8,937	\$10,428	16.7%
313-4	Textile & textile product mills	\$30,761	\$14,675	-52.3%	\$552	\$354	-35.9%
315-6	Apparel, leather & allied products	\$19,960	\$8,562	-57.1%	\$144	\$197	37.1%
322	Paper	\$70,826	\$55,195	-22.1%	\$2,955	\$2,174	-26.4%
323	Printing & related support activities	\$37,657	\$35,426	-5.9%	\$1,874	\$1,618	-13.6%
324	Petroleum & coal products	\$183,781	\$246,115	33.9%	\$7,092	\$11,132	57.0%
325	Chemical	\$288,703	\$327,581	13.5%	\$11,492	\$16,221	41.2%
326	Plastics & rubber products	\$76,930	\$75,490	-1.9%	\$6,988	\$5,570	-20.3%
22	Utilities	\$258,035	\$298,558	15.7%	\$10,571	\$9,529	-9.9%
42	Wholesale trade	\$803,120	\$1,083,851	35.0%	\$30,093	\$36,378	20.9%
44-45	Retail trade	\$820,161	\$1,090,497	33.0%	\$33,924	\$36,902	8.8%
481	Air transportation	\$75,866	\$59,553	-21.5%	\$1,309	\$1,728	32.0%

**Table A25: Percentage Changes in Ohio and U.S. GDP by Industry, 2000-2020 (standardized on 2012)**

2012 NAICS Codes	Industry Titles	U.S.			Ohio		
		Real GDP (millions)		Percent Change 2000-2020	Real GDP (millions)		Percent Change 2000-2020
		2000	2020		2000	2020	
482	Rail transportation	\$41,506	\$30,278	-27.1%	\$1,608	\$1,016	-36.8%
483	Water transportation	\$4,887	\$9,662	97.7%	\$154	\$106	-31.1%
484	Truck transportation	\$129,003	\$130,943	1.5%	\$6,545	\$6,218	-5.0%
485	Transit & ground passenger transportation	\$31,405	\$35,886	14.3%	\$493	\$429	-13.0%
486	Pipeline transportation	\$16,011	\$30,112	88.1%	\$214	\$1,180	451.2%
487-8, 492	Other transportation & support activities	\$106,457	\$111,553	4.8%	\$4,237	\$3,941	-7.0%
493	Warehousing & storage	\$27,380	\$81,308	197.0%	\$1,149	\$4,181	264.0%
511	Publishing (inc. software, exc. Internet)	\$125,978	\$341,554	171.1%	\$3,016	\$5,614	86.1%
512	Motion pictures & sound recordings	\$45,327	\$74,145	63.6%	\$334	\$272	-18.6%
515, 517	Broadcasting & telecommunications	\$224,342	\$536,907	139.3%	\$5,979	\$9,581	60.3%
518, 519	Data prcsng., hosting, other info. (inc. Internet)	\$23,561	\$342,465	1353.5%	\$488	\$3,659	650.3%
521-2	Federal Reserve banks, credit intermediation, etc.	\$371,714	\$464,973	25.1%	\$14,635	\$24,584	68.0%
523	Securities, commodity contracts, investments	\$179,961	\$220,503	22.5%	\$2,745	\$3,206	16.8%
524	Insurance carriers & related activities	\$340,799	\$573,870	68.4%	\$14,938	\$26,865	79.8%
525	Funds, trusts & other financial vehicles	\$18,715	\$20,101	7.4%	\$1,238	\$173	-86.1%
531	Real estate	\$1,366,151	\$2,065,295	51.2%	\$47,154	\$57,987	23.0%
532-3	Rental & leasing srvcs. & lessors of intangible assets	\$172,508	\$245,113	42.1%	\$6,046	\$5,436	-10.1%
5411	Legal srvcs.	\$236,347	\$205,616	-13.0%	\$5,900	\$4,444	-24.7%
5415	Computer systems design & related srvcs.	\$85,786	\$407,044	374.5%	\$2,244	\$8,879	295.6%
5412-4, 6-9	Other professional, scientific & technical srvcs.	\$544,268	\$904,824	66.2%	\$15,761	\$19,768	25.4%
55	Management of companies & enterprises	\$277,524	\$439,795	58.5%	\$12,269	\$24,438	99.2%
561	Administrative & support srvcs.	\$301,609	\$505,794	67.7%	\$11,175	\$15,092	35.1%
562	Waste management & remediation srvcs.	\$36,337	\$44,233	21.7%	\$1,488	\$1,764	18.6%
61	Educational srvcs.	\$152,461	\$203,025	33.2%	\$4,631	\$4,599	-0.7%
621	Ambulatory health care srvcs.	\$374,218	\$705,576	88.5%	\$15,097	\$24,056	59.3%
622	Hospitals	\$278,998	\$426,791	53.0%	\$12,963	\$18,749	44.6%
623	Nursing & residential care facilities	\$107,886	\$122,727	13.8%	\$5,906	\$5,428	-8.1%
624	Social assistance	\$75,947	\$107,097	41.0%	\$2,391	\$3,108	30.0%
711-2	Performing arts, museums & related activities	\$71,547	\$74,286	3.8%	\$1,891	\$2,022	6.9%
713	Amusements, gambling & recreation	\$65,824	\$57,688	-12.4%	\$3,746	\$2,564	-31.6%
721	Accommodation	\$126,038	\$99,310	-21.2%	\$2,006	\$1,330	-33.7%



**Table A25: Percentage Changes in Ohio and U.S. GDP by Industry, 2000-2020 (standardized on 2012)**

2012 NAICS Codes	Industry Titles	U.S.			Ohio		
		Real GDP (millions)		Percent Change 2000-2020	Real GDP (millions)		Percent Change 2000-2020
		2000	2020		2000	2020	
722	Food srvcs. & drinking places	\$297,660	\$283,537	-4.7%	\$10,891	\$9,289	-14.7%
81	Other srvcs., exc. government	\$431,283	\$322,972	-25.1%	\$16,249	\$10,351	-36.3%
92fc, 491	Federal civilian (inc. Postal Service)	\$365,943	\$438,306	19.8%	\$10,445	\$11,094	6.2%
92811	Military	\$257,948	\$295,999	14.8%	\$3,729	\$4,145	11.2%
92sl	State & local government	\$1,354,270	\$1,462,444	8.0%	\$51,781	\$46,594	-10.0%

Notes: \* - exc. - except; inc. - including; info. - information; mfg. - manufacturing; prcsng. - processing; srvcs. - services; figures do not sum to totals due to rounding and/or different inflators or deflators used for different industries.

Source: U.S. BEA (2021).

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## NOTES

- 1 S. Africa's higher rank is due to the combination of its larger population – about 51,835,000 in 2020 (U.S. CIA, 2020) – and its economic development level; the U.A.E.'s rank largely reflects its status as a one of the world's major oil and gas producers. Including the European Union (EU) would place it third on the county list with a GDP of \$20,918.1 billion (the United Kingdom is no longer a member), lowering other countries and Ohio a notch. While the EU is not a nation, it is far more than a free-trade association such as the USMCA (NAFTA's successor), Mercosur or ASEAN. It has some national characteristics: a flag, law-making abilities – including import customs – diplomatic representation, and a common foreign and security policy in its dealings with external partners. Its economy is an internal single market with free movement for goods, services, capital and labor, with a common currency for most members (principally drawn from Wikipedia, 2020, which cites other sources). All international GDP figures use a Purchasing Power Parity (PPP) basis expressed in international dollars. The CIA explains:

"A nation's GDP at [PPP] exchange rates is the sum value of all goods and services produced in the country valued at prices prevailing in the United States... This is the measure most economists prefer when looking at per-capita welfare and when comparing living conditions or use of resources across countries. The measure is difficult to compute, as a US dollar value has to be assigned to all goods and services in the country regardless of whether these goods and services have a direct equivalent in the United States (for example, the value of an oxcart or non-US military equipment); as a result, PPP estimates for some countries are based on a small and sometimes different set of goods and services. In addition, many countries do not formally participate in the World Bank's PPP project that calculates these measures, so the resulting GDP estimates for these countries may lack precision. For many developing countries, PPP-based GDP measures are multiples of the official exchange rate (OER) measure. The differences between the OER- and PPP-denominated GDP values for most of the wealthy industrialized countries are generally much smaller" (U.S. CIA, 2020).

Another reason PPPs are preferred over OERs is because the latter are subject to international and domestic financial forces not capturing the value of domestic output. University of Pennsylvania Professors Summers and Heston and their colleagues pioneered research in PPP figures.

- 2 County ranks for sectors may be apparent because figures are not always published for all 88 counties; some are unpublished to maintain confidentiality of local producers and/or suppliers.
- 3 The choice of start and end points for a period can affect how changes during that time are viewed. What looks like a trend with one set of points for one time-period may appear as a random fluctuation with another set of points.

for another, overlapping time-period. This is particularly true when the time periods are short. Furthermore, initial figures usually are revised when additional information becomes available later, and interpretations of figures may consequently change. (Appelbaum, 2011, has an illustrating, more detailed discussion.) Caution is warranted.

4 Table A17 and the related graph on page 154 illustrate the strong association between the percentages of GDP and value-added (VA – essentially the value of shipments minus the costs of labor and materials) coming from Ohio for the 19 major manufacturing industries and clusters used by the BEA. The association is strong because GDP calculations start with the Census Bureau’s VA estimates; they differ a bit because the BEA subtracts additional costs such as purchased services, which may vary by industry. The strength of this association means that the VA percentages calculated *for manufacturing industry groups*, shown in Appendix Table A18, are very good proxies for percentages of GDP. Similarly, and more widely applicable, Appendix Table A19 and the related graph on page 161 show the association between concentration ratios based on the private sector GDP and correspond-ing County Business Patterns (CBP) employment figures (farms and railroads are excluded from both). This strong association means CBP concentration ratios *for industry groups* shown in Appendix Table A20 generally are good proxies for GDP data. VA and CBP data specify our understanding of sectors and major industries concentrated in Ohio and may point to groups that are exceptions in sectors and major industries not concentrated here. More specific (i.e., 5- and 6-digit) industry data are available from CBP and the quinquennial Census of Manufactures, but space limitations, data suppression and timeliness issues usually preclude their use herein.

5 The engines-turbines-power transmission group includes all diesel engines (333618) – even those for motor vehicles – but otherwise excludes motor vehicle parts. It also excludes equipment for transmitting electricity.

6 Comparing food-beverage-tobacco product output in Ohio with the nation is subject to the caveat that the Census Bureau finds no or a vanishingly small level of tobacco product manufacturing in Ohio, depending on the source. This difference is minor, though, because tobacco product (3122) value-added and employment figures were 9.6 and 0.7 percent, respectively, of the encompassing U.S. food-beverage-tobacco product (311-2) cluster figures in 2019 (U.S. Census Bureau, 2021a, 2021b).

7 Examples of support activities include fee or contract-based exploring, drilling, coring, testing and/or making geological observations independently from the companies extracting the material.

8 The rise in construction activity from 1997 through 1999 also is consistent with the rising number of building permits during the same years (U.S. BEA, 2021; U.S. Bureau of the Census, n.d.).

- 9 The U.S. BEA (2021) groups the U.S. Postal Service (491), which may be seen as a specialized transportation service, with the civilian side of the federal government (92c) in its industry statistics.
- 10 Sightseeing establishments (487) serve tourists, and therefore are not part of the logistical cluster. However, those services are a tiny fraction of this cluster as judged by employment; the vast majority of employees work either for courier and delivery services (492), which use any transportation mode (but depend heavily on trucks), or support establishments (488). The last include arranging freight transportation, airport operations, air traffic control, crating-packing and cargo-handling, port operations, towing, and navigational, courier and railroad car services, etc. (Office of Management and Budget, 2007).
- 11 Rail and water transportation services carry some passengers, but the Association of American Railroads (2019) emphasizes moving freight, and CBP data for water transportation show most are employed in moving cargo (U.S. Bureau of the Census, 2021b). Commuter rail and ship-based sightseeing services are classified in 485 and 487 (Office of Management and Budget, 2007).
- 12 Amazon shifted some operations to Cincinnati International (CVG) in northern Kentucky in 2017 (Wikipedia, 2019) while continuing using facilities and services at Wilmington Air Park (Livingston, 2019).
- 13 Rail services include maintaining and repairing equipment as well as terminal operations. Other transportation support activities include packing and crating, arranging van and carpools, operating independent pipeline terminal facilities, stockyards, etc. (Office of Management and Budget, 2007).
- 14 County Business Patterns data show most people employed in air transportation work in the passenger side of the industry rather than in air freight (U.S. Bureau of the Census, 2021b).
- 15 Lenze (2016: 4) notes *improved geo-coding* and editing of source data from IRS Form 1065 (partnership returns) and Form 1040 Schedule C (sole proprietor returns). (Thanks to Lam Cao of the BEA for this reference.) This explains why the pattern differs from the corresponding national pattern of expansion from 2007 to 2008, a trough from 2009 through 2011, followed by expansion to 2017. Employment trends may bolster the argument this is an accounting anomaly. BEA Ohio employment data show jobs in broadcasting and telecommunications (NAICS 515 and 517) *decreasing over the decade almost without interruption*, roughly from 9,900 to 7,700 and 36,500 to 28,700, respectively (U.S. BEA, 2021).

- 16 The BEA imputes the rental value of owner-occupied housing, treating homeowners as businesses paying rent to themselves. Therefore, homeowners contribute to the real estate industry's GDP even if not employed by the industry. In addition, like businesses, homeowners' property taxes paid to state and local governments are included as part of taxes on production and imports for the real estate industry (U.S. BEA, 2021).
- 17 The presence of Federal Reserve Bank (5211) offices in Cleveland and Cincinnati guarantees the concentration of monetary authority and central banking here given the absence of offices from most states. However, the small employment numbers compared to credit intermediation (522) indicate a minor role in sector concentration (U.S. Bureau of the Census, 2021b).
- 18 Managing offices differ from holding companies; the latter hold an equity interest to control or influence company management, but do not manage specific company establishments (Office of Management and Budget, 2007).
- 19 2019 employment data from the U.S. Bureau of Labor Statistics (2021) provide further insight into government activities (NAICS code 92). Government employment across federal, state and local levels averaged 791,300. Of that number, 711,700 – 89.9 percent – worked for state or local government agencies. 395,200 – 55.5 percent of the 711,700 – worked for taxpayer-supported elementary, secondary and post-secondary educational organizations. Most of the remaining 316,500 state and local government employees worked in law and public safety (corrections, judicial, legal, police and firefighters), public welfare/social insurance, transportation-related services, utilities, health care and general administration. Private sector provision of the same or similar services are classified in parts of other sectors: utilities (22), transportation (48), administrative-support/waste management-remediation (56), education (61), and health care and social assistance (62).
- 20 The chart covers at least 94.7 percent of either economy at the most detailed levels available from the BEA. The exceptions not shown are outliers where growth was extreme and/or differences in magnitude were striking:

	<u>in Ohio</u>	<u>in the U.S.</u>
211: Oil and gas extraction	1,076.5%	198.4%
213: Support activities for mining	344.3%	70.6%
334: Computer and electronic products manufacturing	188.6%	420.0%
486: Pipeline transportation	451.2%	88.1%
518-9: Data processing, hosting and other information services	650.3%	1,353.5%

These contrasts are remarkable and indicate the largest structural changes in the respective economies, but the collective contribution of the five was less than 3.9 percent of either economy (U.S. BEA, 2021).

- 21 Moody's (2021) also notes the high degree of similarity between economic changes in Ohio and the U.S.
- 22 Economic forecasts, though, are often imprecise due to any number of factors. Among them are the impacts of technological advances and unforeseeable events, limited data, an incomplete understanding of the economy, and assumptions about the economy that may not be entirely justified. This imprecision also means that recessions are difficult to predict.
- 23 Other factors to consider are variations in capacity utilization rates – particularly important in goods-producing sectors – and the number of hours worked. Both affect output even if the number of employees does not change. In a similar vein, the increase in real estate-rental-leasing may be more indicative of growing home ownership than anything else, which has little to do with industry jobs.
- 24 Projections and forecasts are based on explicit and implicit assumptions that may or may not be justified. Furthermore, variations in expansion and contraction cycles and unforeseen developments can impact growth rates – and the last may vary in their impact between the national and local levels. Consequently, it is advisable to think of projections and forecasts as contingent possibilities extrapolated from the recent past and not as precise certainties. In that sense, percentage changes may be more useful than the absolute unrounded numbers (unlike previous projections) because the former facilitate state and national comparisons and the latter give an unwarranted sense of precision.

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