



**Department of
Development**

Policy Research and Strategic Planning
A State Affiliate of the U.S. Census Bureau

A large graphic of the state of Ohio, composed of a grid of small, light gray circles. The circles are arranged to form the outline and internal features of the state, with some circles missing to create a dotted effect.

GROSS DOMESTIC PRODUCT OF OHIO

January 2010



Ted Strickland, Governor of Ohio
Lee Fisher, Lt. Governor of Ohio
Lisa Patt-McDaniel, Director, Ohio Department of Development



**Department of
Development**

Ted Strickland, Governor
Lee Fisher, Lt. Governor

Lisa Patt-McDaniel, Director

Dear Fellow Ohioan:

I am pleased to present Ohio's Gross Domestic Product Report, which contains the most current facts and statistics on the size and direction of all 20 major sectors of our state's economy.

The report shows that our Gross Domestic Product stands at \$471.5 billion, making Ohio the seventh-largest state economy and contributing 3.3 percent of the national Gross Domestic Product total. If Ohio were a separate country, it would be the 26th largest in the world.

Our manufacturing heritage continues to drive Ohio's economy into the 21st century. The manufacturing sector contributed \$84 billion to Ohio's economy in 2008, ranking the state third in the nation. Manufacturing represented 17.8 percent of the state's total economic output and 5.1 percent of the entire nation's output. Within manufacturing, the electrical equipment and appliances industries, as well as the plastics and rubber products industries were ranked first in the nation for total output.

Ohio's diversity of industries has placed our state among world market leaders. This diversity is complemented by an unmatched business environment that encourages the corporate growth and profitability necessary for success on the job, and a variety of cultural, educational, and recreational opportunities that provide a comfortable, satisfying life away from the workplace. Ohio's unique combination of life and work amenities makes our state a leader in providing the balance all people strive for in their professional and personal lives.

We invite you to review the attached report to expand your understanding of Ohio's large and diverse economy. We welcome your input. Should you have any questions or comments, please contact John Magill, Chief Strategic Officer, at (614) 466-2116.

Sincerely,

Lisa Patt-McDaniel
Director

GROSS DOMESTIC PRODUCT FROM OHIO

DECEMBER 2009

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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 – the Gross Domestic Product from Ohio.

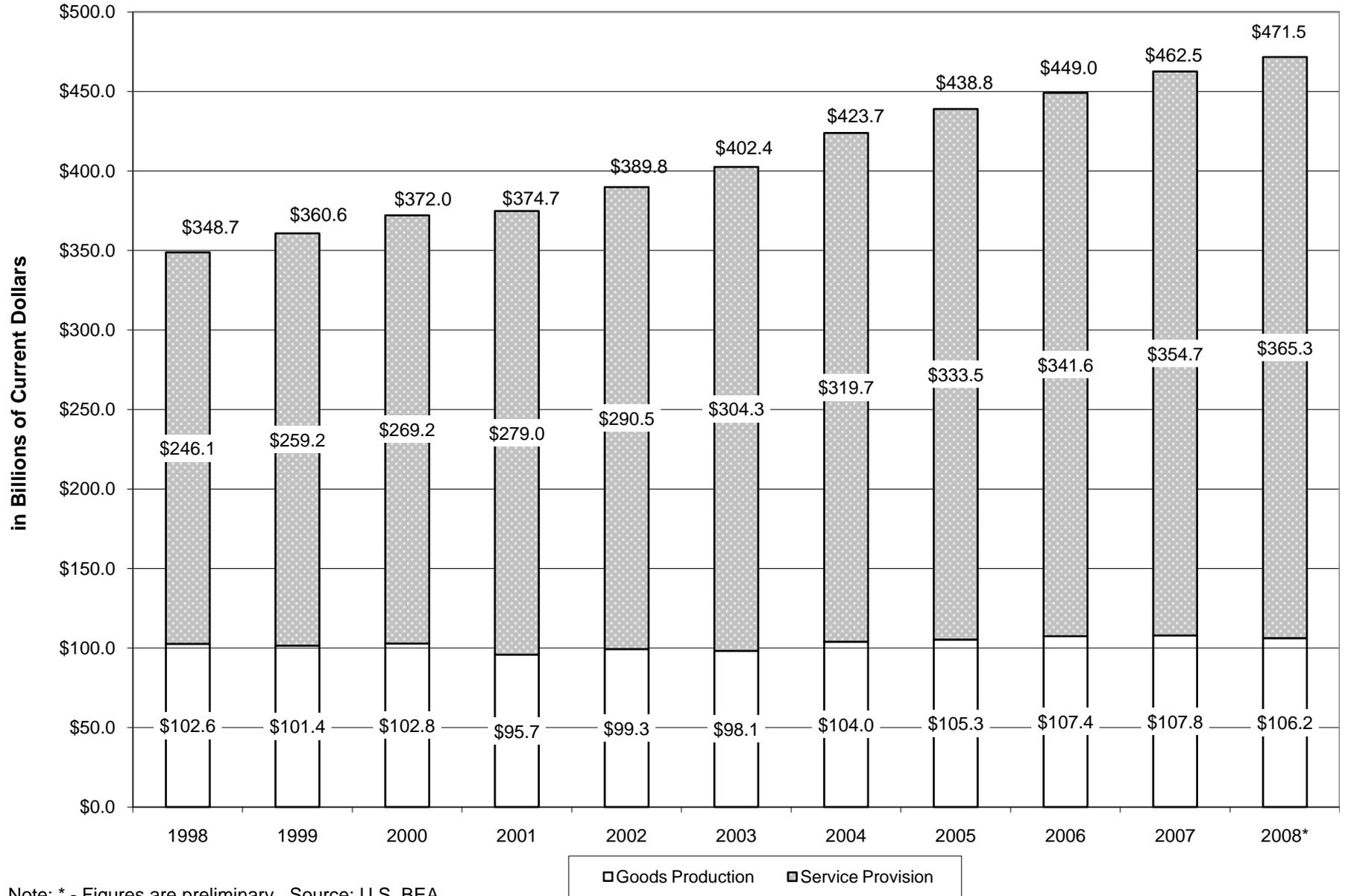
There are three major sections after this introduction and highlights. The first describes the composition of Ohio's economy, comparing it with other states and the national distribution of economic activity. The second focuses on output by sector and major industries within each sector, further probing the relative concentrations in Ohio, the key industries or groups within major industries, and 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 and recent history of economic activity here. The graphs and most of the discussions herein are based on, and refer to, the appendix tables.

The report details industry estimates, concentrating on 1998-2007, which were prepared by the U.S. Bureau of Economic Analysis (BEA). The detailed GDP estimates for those years are based on state and local taxes, value-added reports and company financial data. The BEA also has released a revised total estimate and initial sector estimates for 2008. Both of the latter will be further revised when more information becomes available. Many figures in this report have been revised from the previous report based on the BEA's incorporation of revised data from 2006 for Annual Survey of Manufactures, 2007 and 2006 state and local government finance data (produced by the Census Bureau), and routine revisions made by the BEA. See Coakley, et.al. (2009) and Woodruff, et.al. (2007) 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.

HIGHLIGHTS

- Ohio's Gross Domestic Product is initially estimated at \$471.5 billion for 2008, up 1.9 percent from the revised estimate of \$462.5 billion for 2007, and up 26.7 percent from 2000.
- Ohio is the 8th largest source for Gross Domestic Product among the 50 states and the District of Columbia, with 3.3 percent of the national total in 2008.
- If Ohio was a separate country, it would be the 26th largest national economy in the world.
- Manufacturing is the largest of the 20 sectors of Ohio's economy with 17.8 percent of total output in 2008; durable goods were 11.7 percent and non-durable goods were 6.1 percent.
- Ohio's manufacturing sector produced \$84.1 billion worth of goods – 5.1 percent of national sector production in 2008, ranking it 3rd in the nation after California and Texas.
- Ohio is the leading source in the country for plastic and rubber products as well as electrical equipment and appliances.
- Ohio ranks 2nd in manufacturing transportation equipment – particularly motor vehicles, bodies, trailers, and parts – as well as primary metal production.
- Service sectors concentrated in Ohio include the management of companies and enterprises (60 companies on For-tune magazine's list of the 1,000 largest U.S. corporations have their headquarters here), the provision of health care and social assistance, and transportation and warehousing.
- Sixty-two percent of the state's Gross Domestic Product is created in the three largest metropolitan areas: Cincinnati-Middletown, Cleveland-Elyria-Mentor, and Columbus.
- Akron has grown 12 percent since 2001, the fastest rate of metropolitan areas in Ohio.

Ohio's Gross Domestic Product, 1998-2008



Note: * - Figures are preliminary. Source: U.S. BEA.

GROSS DOMESTIC PRODUCT FROM OHIO: 1998 - 2008

The graph above shows that the value of goods and services produced in Ohio rose from \$348.7 billion in 1998 to \$471.5 billion in 2008. Goods production fluctuated around \$102 billion for three years before falling to \$95.7 billion in 2001 and rising to \$107.8 billion in 2007 and slipping to \$106.2 billion in 2008. The provision of services increased without interruption from \$246.1 billion to \$365.3 billion. Consequently, services became an even larger part of Ohio's economy, rising from 70.6 percent to 77.5 percent during this time (U.S. BEA, 2009).

What happened in Ohio was part of a larger but less-pronounced change throughout the country. The goods-producing sectors' share of total U.S. Gross Domestic Product fell from 21.8 percent in 1998 to 19.1 percent in 2008, and the complementary share of service providers rose from 78.2 percent to 80.9 percent (U.S. BEA, 2009). While both the state and national figures are consistent with the longer-term relative shift from goods production to service provision, figures in the appendix tables illustrate the more cyclical ups and downs of output from the goods-producing sectors.¹

It also is important to note that the chart above makes no adjustment for inflation. Consequently, it cannot be determined from 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. That issue is addressed later in the report.

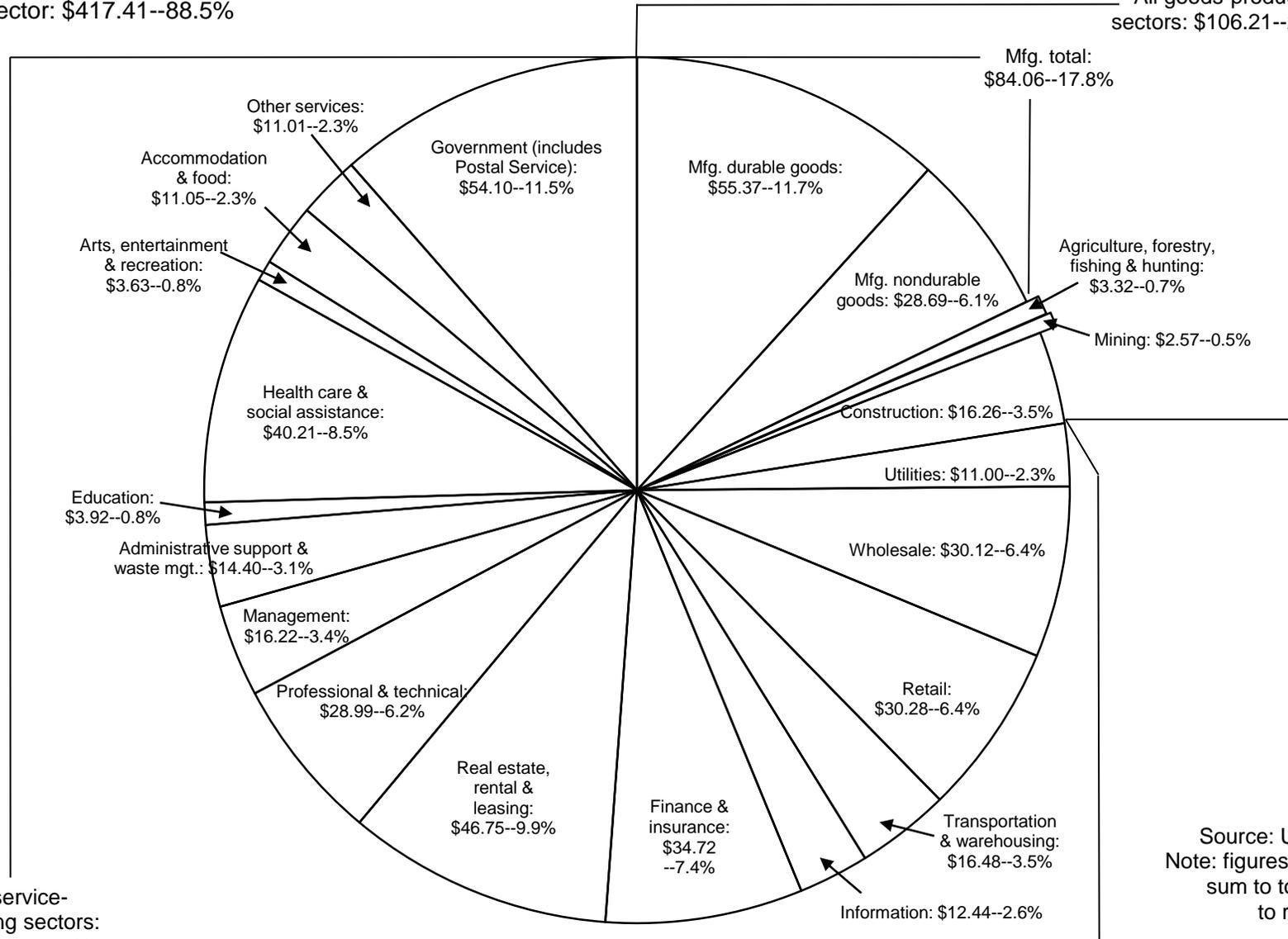
See Tables A1, A3, A4, A7 & A8

Ohio's Gross Domestic Product by Sector: Initial Figures for 2008

(in billions, except percentages)

Total: \$471.51--100.0%
Private sector: \$417.41--88.5%

All goods-producing sectors: \$106.21--22.5%



All service-providing sectors: \$365.30--77.5%

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

THE COMPOSITION OF OHIO'S ECONOMY IN 2008

The chart above illustrates the distribution of economic activity in Ohio under the North American Industry Classification System (NAICS). Ohio's total economic output of \$471.51 billion in 2008 is divided into 20 sectors of varying sizes. (Durable and non-durable goods manufacturing are two parts of one sector).

Manufacturing is the largest single sector, with such establishments producing a total of \$84.06 billion worth of goods that year, or 17.8 percent of the state's total economic output. Manufacturers are subdivided into producers of durable and non-durable goods, with the former producing nearly twice as much as the latter: \$55.37 billion or 11.7 percent, compared with \$28.69 billion or 6.1 percent. (Generally, durable goods are made to last at least three years, while non-durables are expected to last less than three years.) Other private goods-producing sectors play smaller roles in Ohio's economy. They include construction: \$16.26 billion – 3.5 percent; agriculture, forestry, fishing and hunting: \$3.32 billion – 0.7 percent; and mining: \$2.57 billion – .5 percent. Goods production in the state totaled \$106.21 billion, or 22.5 percent of the total Gross Domestic Product from Ohio.

Services provided by public and private sectors in Ohio were \$365.30 billion, or 77.5 percent of its economy. Total private sector services (*i.e.*, excluding government services) were \$311.20 billion, or 66.0 percent of the total. Real estate, rental and leasing is the largest private sector service with a value of \$46.75 billion, or 9.9 percent of the economy. Its size indicates the role home-ownership plays in the economy as well as the activity of real estate agents, landlords, lessors, etc. Health care-and-social assistance is the next largest sector, contributing \$40.21 billion – 8.5 percent – to the economy, followed by finance-and-insurance at \$34.72 billion and 7.4 percent. The only other private service sectors providing at least 5.0 percent of Ohio's economic output were wholesale and retail trade – about 6.4 percent each – and professional-and-technical services – 6.2 percent. Other sectors played smaller roles. These include transportation-and-warehousing, information, the management of enterprises, administrative-support-and-waste-management, education, arts-entertainment-recreation, accommodation-and-food services, and the catch-all category of other services. Services provided by federal, state, and local governments amounted to 11.5 percent of the economy.

See Table A1

Gross Domestic Products for Metropolitan Areas in Ohio, 2008 (in millions, except percentages)

Area	Private Sector*								Government*	
	Total	Goods-Producing				Service-Providing			Amount	Percent
		Amount	Percent	Manufacturing		Amount	Percent			
				Amount	Percent					
U.S.	\$14,165,600	\$2,702,245	19.1%	\$1,637,670	11.6%	\$9,722,415	68.6%	\$1,740,940	12.3%	
Ohio	\$471,508	\$106,213	22.5%	\$84,058	17.8%	\$311,197	66.0%	\$54,098	11.5%	
Akron, OH	\$28,052	\$6,140	21.9%	\$5,018	17.9%	\$18,811	67.1%	\$3,101	11.1%	
Canton-Massillon, OH	\$13,125	\$4,045	30.8%	\$3,106	23.7%	\$7,822	59.6%	\$1,258	9.6%	
Cincinnati-Middletown, OH-KY-IN	\$98,750	\$20,123	20.4%	D	D	\$69,555	70.4%	\$9,072	9.2%	
Cleveland-Elyria-Mentor, OH	\$104,425	\$21,512	20.6%	\$17,502	16.8%	\$72,293	69.2%	\$10,620	10.2%	
Columbus, OH	\$89,829	\$12,546	14.0%	\$9,212	10.3%	\$66,094	73.6%	\$11,189	12.5%	
Dayton, OH	\$33,778	\$6,203	18.4%	\$5,100	15.1%	\$21,781	64.5%	\$5,794	17.2%	
Huntington-Ashland, WV-KY-OH	\$9,408	\$2,336	24.8%	\$1,639	17.4%	\$5,710	60.7%	\$1,362	14.5%	
Lima, OH	\$4,165	\$1,452	34.9%	\$1,287	30.9%	\$2,288	54.9%	\$425	10.2%	
Mansfield, OH	\$3,805	D	D	\$1,029	27.0%	D	D	\$531	14.0%	
Parkersburg-Marietta-Vienna, WV-OH	\$5,682	\$1,675	29.5%	D	D	\$3,214	56.6%	\$792	13.9%	
Sandusky, OH	\$2,979	\$843	28.3%	\$750	25.2%	\$1,791	60.1%	\$345	11.6%	
Springfield, OH	\$3,529	\$828	23.5%	\$660	18.7%	\$2,243	63.6%	\$457	12.9%	
Toledo, OH	\$26,106	D	D	\$5,235	20.1%	D	D	\$3,191	12.2%	
Weirton-Steubenville, WV-OH	\$3,692	\$1,095	29.7%	\$850	23.0%	\$2,229	60.4%	\$367	9.9%	
Wheeling, WV-OH	\$5,019	\$1,226	24.4%	\$580	11.6%	\$3,164	63.0%	\$629	12.5%	
Youngstown-Warren-Boardman, OH-PA	\$17,092	\$4,684	27.4%	\$3,821	22.4%	\$10,475	61.3%	\$1,933	11.3%	

Note: * - components may not sum to total due to rounding; D - suppressed to maintain confidentiality.

Source: U.S. BEA (2009).

Prepared by: Policy Research & Strategic Planning, Ohio Dept. of Development. Telephone 800/848-1300, or 614/466-2116 (DL, 9/09).

THE DISTRIBUTION OF GROSS DOMESTIC PRODUCTS IN METROPOLITAN AREAS, 2008

The U.S. Bureau of Economic Analysis (BEA) publishes Gross Domestic Product data for metropolitan areas. The table above shows the Gross Domestic Product for the 16 metropolitan areas wholly or partially in Ohio. Cleveland-Elyria-Mentor is the largest in the state, followed by Cincinnati-Middletown – including the portions in Kentucky and Indiana, and Columbus. The three are by far the largest, and combine to produce a value equal to 62 percent of Ohio's Gross Domestic Product. Other metropolitan areas contributing at least \$10 billion to Ohio's Gross Domestic Product include, in descending order, Dayton, Akron, Toledo, and Youngstown-Warren-Boardman – including the portion in Pennsylvania, and Canton-Massillon.

The table above also displays the amounts and percentages of Gross Domestic Product derived from the private sector goods-producing and service-providing subdivisions, as well as the government sector. (Private sector data occasionally are suppressed to maintain confidentiality.) Two phenomena seem notable in this regard. First, Cleveland, Cincinnati, and Columbus are the three largest goods-producing metropolitan areas in the state. Second, their portions of Gross Domestic Product derived from goods-production are less than the state average. In the case of Cincinnati and Cleveland, the portions are closer to the national average of 19.1 percent than they are to the state average of 22.5 percent. Columbus is the only metropolitan area in Ohio whose portion of Gross Domestic Product from goods-production is less than the national average.

On the other hand, goods-production plays a much more prominent role in many of Ohio's smaller metropolitan areas. This is especially true of manufacturing. Metropolitan areas in which manufacturing contributes at least 20 percent of Gross Domestic Product include Canton-Massillon, Lima, Mansfield, Sandusky, Toledo, Weirton-Steubenville, and Youngstown-Warren-Boardman. When compared with the national average, manufacturing is still a relatively important part of the economy in Akron, Cleveland-Elyria-Mentor, Dayton, Huntington-Ashland, and Springfield.

Federal, state and local government contributions to the metropolitan areas' Gross Domestic Products ranged from 9.2 percent in Cincinnati to 17.2 percent in Dayton. The relatively high percentage for Dayton may reflect the importance of Wright-Patterson Air Force base.

DESCRIPTION OF OHIO'S ECONOMY

The Top 30 Economies in the World and the U.S.

Estimates, 2008		Totals, 2008			Manufacturing, 2008			Durable Goods, 2008			
Rank	Area	GDP* (billions)	Area	GDP^ (billions)	Percent of U.S.	Area	GDP^ (billions)	Percent of U.S.	Area	GDP^ (billions)	Percent of U.S.
			U.S.	\$14,165.6	100.00%	U.S.	\$1,637.7	100.00%	U.S.	\$914.7	100.00%
1	United States	\$14,290.0	California	\$1,846.8	13.04%	California	\$181.1	11.06%	California	\$100.3	10.96%
2	China	\$7,800.0	Texas	\$1,223.5	8.64%	Texas	\$158.8	9.70%	Texas	\$77.2	8.43%
3	Japan	\$4,348.0	New York	\$1,144.5	8.08%	Ohio	\$84.1	5.13%	Ohio	\$55.4	6.05%
4	India	\$3,267.0	Florida	\$744.1	5.25%	Illinois	\$78.8	4.81%	Michigan	\$45.9	5.01%
5	Germany	\$2,863.0	Illinois	\$633.7	4.47%	North Carolina	\$78.0	4.76%	Illinois	\$45.6	4.98%
6	United Kingdom	\$2,231.0	Pennsylvania	\$553.3	3.91%	Pennsylvania	\$75.5	4.61%	Pennsylvania	\$42.2	4.61%
7	Russia	\$2,225.0	New Jersey	\$474.9	3.35%	New York	\$69.1	4.22%	Indiana	\$38.4	4.20%
8	France	\$2,097.0	Ohio	\$471.5	3.33%	Indiana	\$63.8	3.89%	North Carolina	\$31.0	3.39%
9	Brazil	\$1,990.0	North Carolina	\$400.2	2.83%	Michigan	\$61.8	3.77%	New York	\$30.3	3.32%
10	Italy	\$1,821.0	Georgia	\$397.8	2.81%	Wisconsin	\$48.9	2.98%	Wisconsin	\$29.3	3.20%
11	Mexico	\$1,559.0	Virginia	\$397.0	2.80%	New Jersey	\$43.9	2.68%	Oregon	\$25.4	2.78%
12	Spain	\$1,378.0	Michigan	\$382.5	2.70%	Georgia	\$43.3	2.64%	Tennessee	\$24.5	2.68%
13	Canada	\$1,307.0	Massachusetts	\$365.0	2.58%	Tennessee	\$40.6	2.48%	Florida	\$24.1	2.64%
14	Korea, South	\$1,278.0	Washington	\$322.8	2.28%	Louisiana	\$40.5	2.48%	Massachusetts	\$23.6	2.59%
15	Indonesia	\$915.9	Maryland	\$273.3	1.93%	Florida	\$35.7	2.18%	Washington	\$23.3	2.55%
16	Turkey	\$906.5	Minnesota	\$262.8	1.86%	Massachusetts	\$34.8	2.13%	Minnesota	\$21.0	2.30%
17	Iran	\$842.0	Indiana	\$254.9	1.80%	Virginia	\$34.1	2.08%	Georgia	\$18.4	2.01%
18	Australia	\$800.5	Tennessee	\$252.1	1.78%	Minnesota	\$33.7	2.06%	Alabama	\$18.2	1.99%
19	Taiwan	\$738.8	Arizona	\$248.9	1.76%	Missouri	\$32.0	1.96%	Connecticut	\$17.9	1.95%
20	Netherlands	\$670.2	Colorado	\$248.6	1.75%	Washington	\$32.0	1.95%	Kentucky	\$16.6	1.82%
21	Poland	\$667.4	Wisconsin	\$240.4	1.70%	Oregon	\$30.2	1.84%	Missouri	\$16.3	1.78%
22	Saudi Arabia	\$582.8	Missouri	\$237.8	1.68%	Alabama	\$29.3	1.79%	Arizona	\$16.2	1.77%
23	Argentina	\$575.6	Louisiana	\$222.2	1.57%	Connecticut	\$28.9	1.76%	Virginia	\$15.7	1.71%
24	Thailand	\$553.4	Connecticut	\$216.2	1.53%	Kentucky	\$28.8	1.76%	Iowa	\$15.3	1.67%
25	South Africa	\$489.7	Alabama	\$170.0	1.20%	Iowa	\$28.2	1.72%	South Carolina	\$15.1	1.65%
26	Ohio	\$471.5	Oregon	\$161.6	1.14%	South Carolina	\$25.2	1.54%	New Jersey	\$13.9	1.52%
27	Pakistan	\$452.7	Kentucky	\$156.4	1.10%	Arizona	\$19.5	1.19%	Kansas	\$11.9	1.30%
28	Egypt	\$442.6	South Carolina	\$156.4	1.10%	Kansas	\$18.6	1.14%	Oklahoma	\$9.7	1.06%
29	Colombia	\$399.4	Oklahoma	\$146.4	1.03%	Arkansas	\$17.1	1.04%	Colorado	\$9.5	1.03%
30	Belgium	\$390.5	Iowa	\$135.7	0.96%	Colorado	\$15.9	0.97%	Utah	\$9.4	1.03%

Notes: * - Purchasing Power Parity basis, except Ohio; source for 2008 estimates except Ohio is the CIA (2009); source for Ohio is U.S. BEA (2009);
 ^ - preliminary; source is U.S. BEA (2009).

Sources: CIA (2009), U.S. BEA (2009).

Prepared by: Policy Research & Strategic Planning, Ohio Dept. of Development. Phone 614/466-2116 (DL, 7/09).

OHIO'S RANK AMONG THE STATES AND THE WORLD

If Ohio were a separate country, it would have the 26th largest economy in the world. The U.S. BEA's (2009) preliminary estimate of \$471.5 billion for 2008 places Ohio between the Union of South Africa (\$489.7 billion) and Pakistan (\$452.7 billion). Ohio's rank between these two countries reflects the size of their (2009) populations – about 49,052,000 and 176,243,000, respectively, vs. 11,486,000 – as well as their levels of economic development (CIA, 2009; U.S. Bureau of the Census, 2009b).²

The table above also shows that Ohio ranked 8th in America with 3.33 percent of U.S. GDP. This 8th rank is not, however, uniformly characteristic of every aspect of Ohio's economy. Most notably, Ohio was the 3rd greatest source of manufactured goods in America during 2008. The \$84.1 billion output was 5.13 percent of the corresponding national total. Ohio also ranked 3rd in durable goods production with \$55.4 billion, or 6.05 percent, of the national total. It is noteworthy that in both instances manufacturing output from Ohio exceeded the corresponding totals of the more populous states: Florida, Illinois, New York, and Pennsylvania.

The table following on pages 14-16 highlights the major industries with large contributions to Ohio's high overall rank in manufacturing during 2007. They include electrical equipment and appliances (\$4.7 billion, 8.10 percent of the national total, making Ohio the largest source in the country), plastic and rubber products (\$5.1 billion, 7.67 percent, also ranked 1st), the production of motor vehicles, bodies, trailers, and parts (\$12.6 billion, 12.80 percent, ranked 2nd), and primary metal production (\$6.4 billion, 10.39 percent, also ranked 2nd). Other manufacturing industries with comparatively large contributions to Ohio's total economic output include fabricated metal products (\$11.8 billion, 8.38 percent, ranked 3rd), machinery (\$6.8 billion, 5.38 percent, 4th), other transportation equipment (\$5 billion, 5.22 percent, 6th), nonmetallic mineral products (\$2.7 billion, 5.01 percent, 5th), printing and related support activities (\$2.4 billion, 4.99 percent, 8th), furniture and related products (\$1.7 billion, 4.66 percent, also 6th), food products (\$7.2 billion, 4.10 percent, 9th), paper (\$2.1 billion, 4.05 percent, 7th), and chemicals (\$8.8 billion, 3.52 percent, 10th).

The table also shows service-providing sectors and major industries making large contributions to Ohio's 7th overall rank in 2007. These include the management of companies and enterprises (\$15.1 billion, 5.56 percent, 5th), truck transportation (\$6.3 billion, 4.97 percent, 4th), and rail transportation (\$1.8 billion, 4.47 percent, also 4th). (2008 data for major industries are not yet available.)

Ohio and U.S. Gross Domestic Products by Industry, 2007 (in millions of current dollars, except percentages, concentration ratios, and ranks)

1997 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	All Industries	\$462,506	\$13,715,700	3.37%	1.00	7	CA, TX, NY, FL, IL
11-81	Private industries	\$410,857	\$12,064,600	3.41%	1.01	8	CA, TX, NY, FL, IL
11	Agriculture, forestry, fishing & hunting	\$3,367	\$167,907	2.01%	0.59	17	CA, TX, IA, WA, FL
111-112	Crop & animal production (farms)	\$3,043	\$137,251	2.22%	0.66	16	CA, TX, IA, NE, IL
113-115	Forestry, fishing & related activities	\$325	\$30,656	1.06%	0.31	27	CA, WA, FL, TX, OR
21	Mining	\$2,245	\$275,012	0.82%	0.24	18	TX, LA, OK, CA, AK
211	Oil & gas extraction	\$1,023	\$164,678	0.62%	0.18	13	TX, LA, AK, OK, CA
212	Mining, exc. oil & gas	\$976	\$45,310	2.15%	0.64	19	AZ, WV, KY, WY, NV
213	Support activities for mining	\$245	\$65,025	0.38%	0.11	21	TX, LA, OK, CA, WY
22	Utilities	\$9,766	\$281,424	3.47%	1.03	7	TX, CA, NY, PA, IL
23	Construction	\$17,195	\$610,842	2.81%	0.83	11	CA, TX, FL, NY, IL
31-33	Manufacturing	\$84,986	\$1,616,830	5.26%	1.56	3	CA, TX, OH , NC, IL
32p & 33	Durable goods	\$56,950	\$921,964	6.18%	1.83	3	CA, TX, OH , MI, IL
321	Wood products	\$984	\$31,449	3.13%	0.93	13	OR, CA, TX, NC, PA
327	Nonmetallic mineral products	\$2,728	\$54,421	5.01%	1.49	5	TX, CA, FL, PA, OH
331	Primary metals	\$6,483	\$62,387	10.39%	3.08	2	PA, OH , IN, TX, IL
332	Fabricated metal products	\$11,758	\$140,391	8.38%	2.48	3	TX, CA, OH , IL, PA
333	Machinery	\$6,767	\$125,680	5.38%	1.60	4	TX, IL, CA, OH , WI
334	Computer & electronic products	\$2,338	\$146,294	1.60%	0.47	15	CA, TX, OR, MA, NC
335	Electrical equipment & appliances	\$4,726	\$58,381	8.10%	2.40	1	OH , IL, CA, NC, WI
336	Transportation equipment	\$17,630	\$194,594	9.06%	2.69	2	MI, OH , CA, IN, WA
3361-3363	Motor vehicles, bodies, trailers & parts	\$12,607	\$98,454	12.80%	3.80	2	MI, OH , IN, KY, TN
3364-3369	Other transportation equipment	\$5,023	\$96,140	5.22%	1.55	6	CA, WA, CT, KS, TX
337	Furniture & related products	\$1,650	\$35,383	4.66%	1.38	6	CA, MI, NC, IN, TX
339	Miscellaneous mfg.	\$1,886	\$72,984	2.58%	0.77	11	CA, IN, IL, NY, FL
31 & 32p	Nondurable goods (leather & allied products not shown)	\$28,036	\$694,861	4.03%	1.20	9	TX, CA, NC, NY, PA
311-312	Food products	\$7,162	\$174,696	4.10%	1.22	9	NC, CA, TX, VA, IL
313-314	Textile & textile product mills	\$341	\$19,783	1.72%	0.51	13	GA, NC, SC, CA, AL
315	Apparel	\$196	\$16,077	1.22%	0.36	15	CA, NY, NC, AL, NJ
322	Paper	\$2,051	\$50,659	4.05%	1.20	7	WI, PA, GA, CA, AL
323	Printing & related support activities	\$2,388	\$47,854	4.99%	1.48	8	CA, IL, PA, NY, WI
324	Petroleum & coal products	\$2,045	\$70,412	2.90%	0.86	4	CA, LA, TX, OH , IL
325	Chemical	\$8,775	\$249,195	3.52%	1.04	10	TX, CA, NY, NJ, NC
326	Plastics & rubber products	\$5,079	\$66,186	7.67%	2.28	1	OH , CA, IL, TX, PA
42	Wholesale trade	\$29,487	\$805,319	3.66%	1.09	9	CA, TX, NY, FL, IL
44-45	Retail trade	\$30,577	\$892,522	3.43%	1.02	7	CA, TX, FL, NY, IL

Ohio and U.S. Gross Domestic Products by Industry, 2007 (in millions of current dollars, except percentages, concentration ratios, and ranks)

1997 NAICS Codes	Industry Titles	GDP		Ohio as a Percent of the U.S.	Ohio::U.S. Concentra- tion Ratio	Ohio's Rank	Ohio's Top Five States
		Ohio	U.S.				
48-49 (exc. 491)	Transportation & warehousing, exc. Postal Service	\$15,972	\$407,188	3.92%	1.16	7	CA, TX, IL, FL, NY
481	Air transportation	\$1,393	\$55,244	2.52%	0.75	13	TX, CA, GA, IL, NY
482	Rail transportation	\$1,812	\$40,548	4.47%	1.33	4	NE, TX, IL, OH , PA
483	Water transportation	\$106	\$10,700	0.99%	0.29	22	FL, LA, NY, TX, CA
484	Truck transportation	\$6,343	\$127,622	4.97%	1.47	4	CA, TX, IL, OH , PA
485	Transit & ground passenger transportation	\$304	\$19,316	1.57%	0.47	16	NY, CA, NJ, IL, PA
486	Pipeline transportation	\$170	\$12,018	1.41%	0.42	11	TX, AK, CA, OK, PA
487, 488, 492	Other transportation & support activities	\$3,653	\$101,484	3.60%	1.07	9	CA, TX, FL, NY, TN
493	Warehousing & storage	\$2,191	\$40,255	5.44%	1.61	5	CA, PA, TX, IL, OH
51	Information	\$11,937	\$586,269	2.04%	0.60	13	CA, NY, TX, FL, GA
511	Publishing including software	\$3,862	\$138,792	2.78%	0.83	12	CA, NY, WA, MA, TX
512	Motion picture & sound recording industries	\$204	\$43,430	0.47%	0.14	18	CA, NY, TX, FL, TN
513	Broadcasting & telecommunications	\$6,959	\$342,391	2.03%	0.60	12	CA, NY, TX, FL, GA
514	Information & data processing services	\$912	\$61,656	1.48%	0.44	18	CA, NY, TX, FL, NJ
52	Finance & insurance	\$36,548	\$1,091,420	3.35%	0.99	9	NY, CA, TX, IL, FL
521-522	Federal Reserve banks, credit intermediation & related services	\$20,574	\$504,425	4.08%	1.21	7	CA, NY, TX, NC, FL
523	Securities, commodity contracts, investments	\$2,837	\$237,501	1.19%	0.35	15	NY, CA, IL, MA, NJ
524	Insurance carriers & related activities	\$13,002	\$332,486	3.91%	1.16	8	NY, CA, IL, TX, PA
525	Funds, trusts & other financial vehicles	\$135	\$17,003	0.79%	0.24	22	PA, CA, NY, TX, CT
53	Real estate, rental & leasing	\$45,995	\$1,719,800	2.67%	0.79	10	CA, NY, FL, TX, IL
531	Real estate	\$42,246	\$1,586,550	2.66%	0.79	10	CA, NY, FL, TX, IL
532-533	Rental & leasing services & lessors of intangible assets	\$3,749	\$133,253	2.81%	0.83	10	CA, TX, FL, NJ, NY
54	Professional & technical services	\$26,838	\$1,007,780	2.66%	0.79	12	CA, NY, TX, IL, VA
5411	Legal services	\$4,868	\$198,351	2.45%	0.73	11	NY, CA, TX, IL, FL
5415	Computer systems design & related services	\$5,230	\$169,262	3.09%	0.92	12	CA, VA, TX, NY, NJ
5412-5414, 5416-5419	Other professional, scientific & technical services	\$16,740	\$640,168	2.61%	0.78	12	CA, NY, TX, IL, FL
55	Management of companies & enterprises	\$15,084	\$271,251	5.56%	1.65	5	NY, CA, TX, IL, OH
56	Administrative & waste services	\$13,887	\$415,113	3.35%	0.99	8	CA, TX, FL, NY, IL
561	Administrative & support services	\$12,735	\$381,215	3.34%	0.99	8	CA, TX, FL, NY, IL
562	Waste management & remediation services	\$1,152	\$33,898	3.40%	1.01	10	CA, TX, NY, FL, WA
61	Educational services	\$3,687	\$129,531	2.85%	0.84	9	NY, CA, PA, MA, IL
62	Health care & social assistance	\$38,115	\$957,440	3.98%	1.18	7	CA, NY, TX, FL, PA
621	Ambulatory health care services	\$18,237	\$498,101	3.66%	1.09	7	CA, TX, NY, FL, PA
622-623	Hospitals & nursing & residential care facilities	\$17,135	\$373,681	4.59%	1.36	7	CA, NY, TX, PA, FL
624	Social assistance	\$2,743	\$85,658	3.20%	0.95	9	NY, CA, PA, TX, FL

Ohio and U.S. Gross Domestic Products by Industry, 2007 (in millions of current dollars, except percentages, concentration ratios, and ranks)

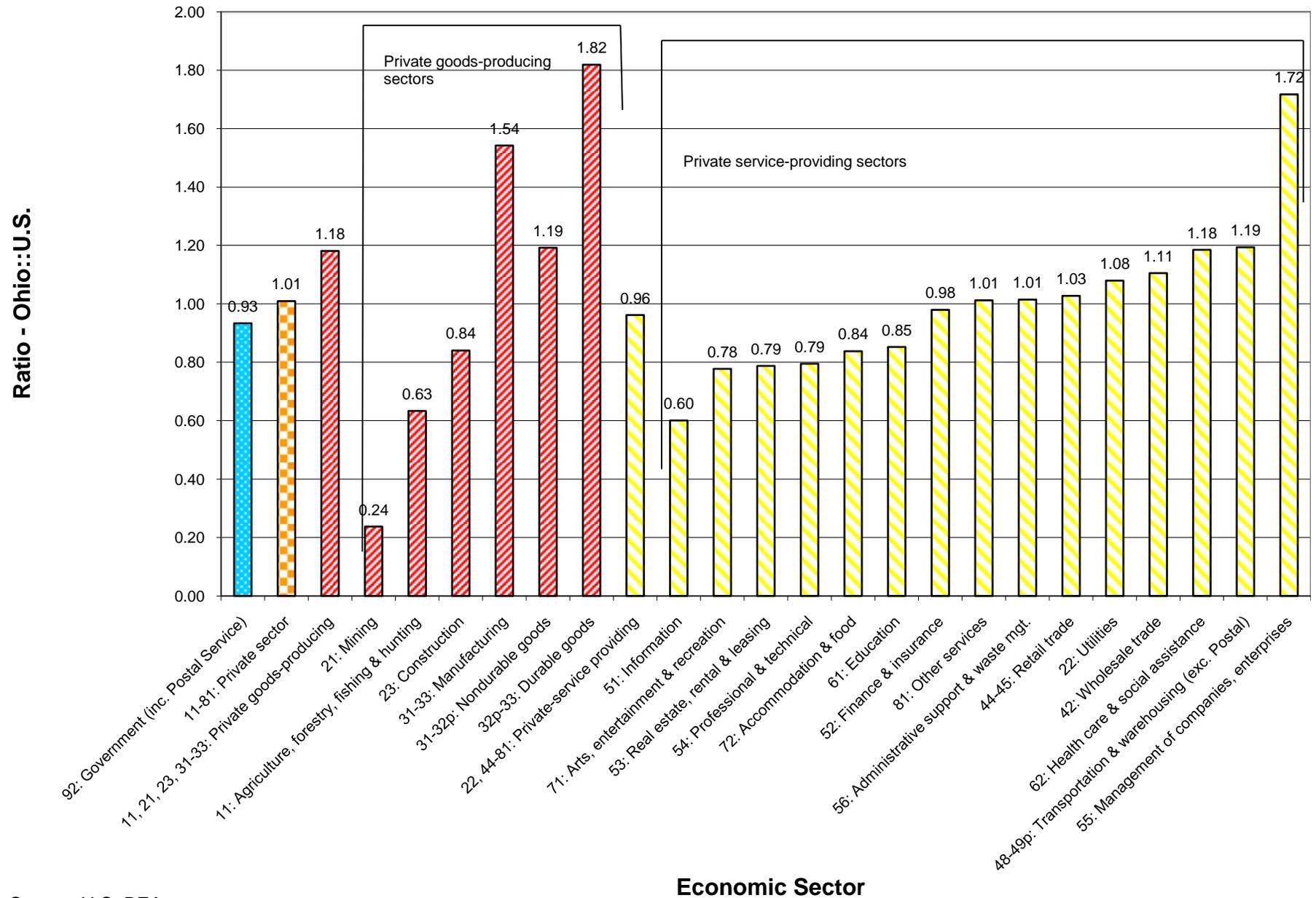
1997 NAICS Codes	Industry Titles	GDP		Ohio as a Percent of the U.S.	Ohio::U.S. Concentra- tion Ratio	Ohio's Rank	Top Five States
		Ohio	U.S.				
71	Arts, entertainment & recreation	\$3,478	\$133,847	2.60%	0.77	11	CA, FL, NY, TX, IL
711-712	Performing arts, museums & related activities	\$1,690	\$61,808	2.73%	0.81	8	CA, NY, FL, TX, IL
713	Amusements, gambling & recreation	\$1,788	\$72,038	2.48%	0.74	14	CA, FL, TX, NY, IL
72	Accommodation & food services	\$10,738	\$379,489	2.83%	0.84	10	CA, FL, TX, NY, NV
721	Accommodation	\$1,579	\$120,894	1.31%	0.39	23	NV, CA, FL, NY, TX
722	Food services & drinking places	\$9,159	\$258,594	3.54%	1.05	6	CA, TX, FL, NY, IL
81	Other services, exc. government	\$10,955	\$315,634	3.47%	1.03	7	CA, TX, NY, FL, IL
92	Government	\$51,649	\$1,651,130	3.13%	0.93	10	CA, TX, NY, FL, VA
92a & 92b	Federal government	\$10,415	\$462,212	2.25%	0.67	13	CA, VA, TX, DC, MD
92a	Civilian (inc. Postal Service)	\$8,226	\$299,283	2.75%	0.82	11	CA, DC, VA, MD, TX
92b	Military	\$2,189	\$162,929	1.34%	0.40	23	CA, VA, TX, NC, FL
92c	State & local	\$41,235	\$1,188,920	3.47%	1.03	6	CA, NY, TX, FL, IL

Notes: exc. - except; inc. - including; p - part. Components may not sum to totals due to rounding.

Sources: U.S. Bureau of Economic Analysis (2009).

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The Relative Concentration of U.S. Economic Activity in Ohio, 2007



Source: U.S. BEA

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

A previous section showed the distribution of economic activity in Ohio across sectors of the economy. For example, manufacturing was the largest sector in Ohio with 17.83 percent of Gross Domestic Product in 2008, while mining was the smallest with 0.54 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 mining comprised 11.56 percent and 2.30 percent, respectively, of U.S. Gross Domestic Product in 2008. When compared with those for Ohio, these yield ratios of 1.54 for manufacturing (17.83 percent divided by 11.56 percent) and .24 for mining (0.54 percent divided by 2.30 percent). 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 mining than the American economy. The other way is to note that manufacturing in America is concentrated in Ohio, while mining is not. (A ratio of 1.00 indicates proportional activity, neither concentrated nor sparse.)

The concentration of one sector or industry here means that another must be relatively sparse. In this sense, Ohio's economy is characterized in broad terms by the graph above. It is driven a bit more by private sector activity than by government activity, as evidenced by the concentration ratios of 1.01 and .93, respectively. Although goods-production is concentrated in the state (1.18), this reflects the concentration of manufacturing activity here (1.54), particularly durable goods production (1.82). Non-durable goods production is also concentrated in Ohio (1.19). On the other hand, mining, agriculture-forestry-fishing-hunting, and construction activity (.24, .63, and .84, respectively) are more or less sparse.

The preceding section showed that service-providing industries collectively account for most economic activity in Ohio (77.47 percent with government, 66.00 percent without); yet the graph above shows that, as a whole, they contribute relatively less to the Gross Domestic Product from Ohio than is true for the nation (.96). There are exceptions to this generalization. The most notable departure is the concentration of company and enterprise management (1.72). The provision of health care and social assistance (1.18) and transportation-and-warehousing (1.19) also are concentrated in Ohio. To a lesser extent so are utilities and wholesale trade (1.08 and 1.11, respectively). Other service sectors in Ohio's economy roughly proportional with their national contribution to the Gross Domestic Product include administrative support-waste management, retail trade, finance and insurance, and other non-governmental services specified in NAICS 81.

See Table A1

