



**Department of
Development**

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

A large, stylized map of the state of Ohio is formed by a grid of small, light gray circles. The circles are arranged in a pattern that roughly follows the outline of the state, with some circles missing to create a dotted effect. The map is centered on the page.

GROSS DOMESTIC PRODUCT OF OHIO

January 2009



Ted Strickland, Governor of Ohio
Lee Fisher, Lt. Governor of Ohio
Director, Ohio Department of Development



Department of Development

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Director, Ohio Department of Development

Dear Fellow Ohioan:

I am pleased to present to you 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.

At \$466.3 billion, our Gross Domestic Product makes Ohio the seventh largest state economy and contributes 3.4 percent of the national 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 \$85.1 billion to Ohio's economy in 2007, ranking the state third in the nation. Manufacturing represented 18.2 percent of the state's total economic output and 5.3 percent of the entire nation's output. Within manufacturing, the electrical equipment and appliances 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 comfortable, satisfying lifestyles away from the workplace. Ohio's unique combination of life and work amenities makes Ohio a leader in providing the kind of balance employees strive for in their lives.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Lee Fisher".

Lee Fisher
Lieutenant Governor
Director, Ohio Department of Development

GROSS DOMESTIC PRODUCT FROM OHIO

JANUARY 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 – i.e., the Gross Domestic Product (GDP) from Ohio.

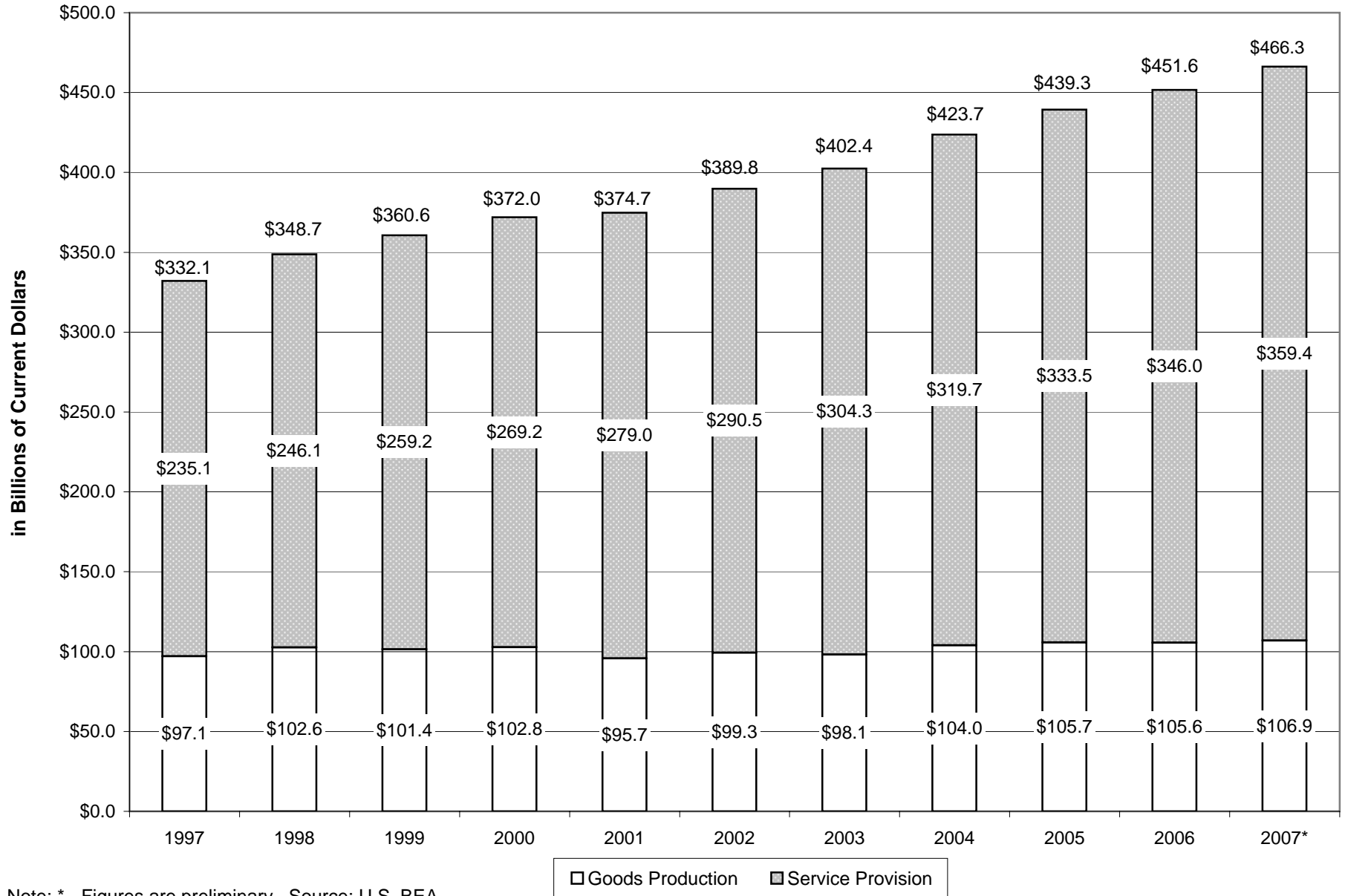
There are three major sections after this introduction and highlights. The first describes the composition of Ohio's economy, comparing it with other states and the national distribution of economic activity. The second focuses on output by sector and major industries within each sector, further probing 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 (which readers may wish to review before proceeding) 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 1997-2006, 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 2007. Both of the latter will be further revised next year when more information becomes available. Many figures in this report have been revised from previous report based on the BEA's incorporation of initial data from 2006 and revised data from 2005 for Annual Survey of Manufactures as well as 2005 State and Local Government Finance data (both Census Bureau products), as well as the routine revisions made by the BEA. See Broda and Coakley (2008) 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 GDP – the total net value of goods and services produced here – is initially estimated at \$466.3 billion (B) for 2007, up 3.3 percent from the revised estimate of \$451.6B for 2006, and up 25.4 percent from 2000.
- Ohio is the 7th largest source for GDP among the 50 states and the District of Columbia, with 3.4 percent of the national total in 2007.
- 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 18.2 percent of total output in 2007; durable goods were nearly 12.3 percent and non-durable goods were almost 6.0 percent.
- Ohio's manufacturing sector produced \$85.1 B worth of goods – 5.3 percent of national sector production in 2007, 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 (59 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.
- The faster-growing sectors in the near future are expected to be wholesale and retail trade, information, finance-insurance-real estate-leasing, professional-scientific-technical services, managing companies and enterprises, administrative support-waste management-remediation, health care-social assistance, and arts-entertainment-recreation.
- About one-half of the state's GDP is created in its three largest metropolitan areas: Cincinnati-Middletown, Cleveland-Elyria-Mentor, and Columbus.
- Akron, Huntington-Ashland, and Wheeling have grown at the fastest rates since 2001.

Ohio's Gross Domestic Product, 1997-2007



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

GROSS DOMESTIC PRODUCT FROM OHIO: 1997 - 2007

The graph above shows that the value of goods and services produced in Ohio rose from \$332.1B in 1997 to \$466.3B in 2007. Goods production rose from \$97.1B to \$102.8B in 2000 before falling to \$95.7B in 2001 and rising to \$106.9B in 2007. The provision of services increased without interruption from \$235.1B to \$359.4B during the 10 years. Consequently, services became an even larger part of Ohio's economy, rising from 70.8 percent to 77.1 percent during this time (U.S. BEA, 2008).

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. GDP fell from 22.1 percent in 1997 to 19.0 percent in 2007, and the complementary share of service providers rose from 77.9 percent to 81.0 percent (U.S. BEA, 2008). 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

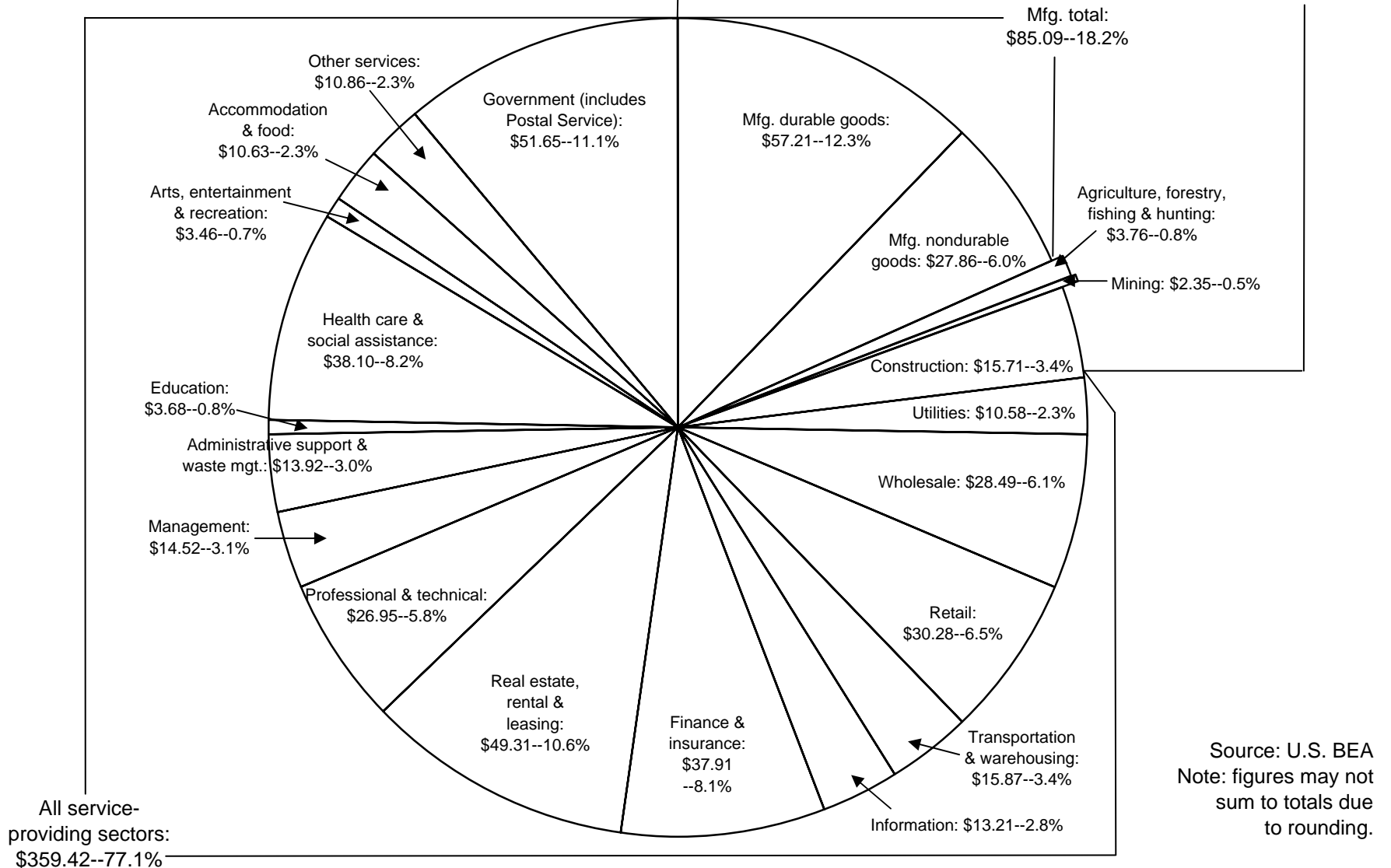
Ohio's Gross Domestic Product by Sector: Initial Figures for 2007

(in billions, except percentages)

Total: \$466.31--100.0%

Private sector: \$414.66--88.9%

All goods-producing sectors: \$106.89--22.9%



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

THE COMPOSITION OF OHIO'S ECONOMY IN 2007

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 \$466.31 billion (B) in 2007 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 \$85.09B worth of goods that year, or 18.2 percent of the state's total economic output. Manufacturers are subdivided into producers of durable and non-durable goods, with the former producing about twice as much as the latter: \$57.21B or 12.3 percent, compared with \$27.86B or 6.0 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: \$15.71B – 3.4 percent; agriculture, forestry, fishing and hunting: \$3.76B – 0.8 percent; and mining: \$2.35B – .5 percent. Goods production in the state totaled \$106.89B, or 22.9 percent of the total GDP from Ohio.

Services provided by public and private sectors in Ohio were \$359.42B, or 77.1 percent of its economy. Total private sector services (i.e., excluding government services) were \$307.77B, or 66.0 percent of total GDP from Ohio. Real estate, rental and leasing is the largest private sector service with a value of \$49.31B, or 10.6 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 and finance-and-insurance are the next largest sectors, each contributing about \$38B – 8.1 percent – to the economy. The only other private service sectors providing at least 5.0 percent of Ohio's economic output were wholesale and retail trade – 6.1 and 6.5 percent, respectively, and professional-and-technical services – 5.8 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 11.1 percent of the economy.

See Table A1

Gross Domestic Products for Metropolitan Areas in Ohio, 2006 (in millions, except percentages)

Area	Private Sector*								Government*	
	Total	Goods-Producing				Service-Providing			Amount	Percent
		Amount	Percent	Manufacturing		Amount	Percent			
				Amount	Percent					
U.S.	\$13,119,938	\$2,567,537	19.6%	\$1,549,725	11.8%	\$8,988,507	68.5%	\$1,563,894	11.9%	
Ohio	\$451,600	\$105,608	23.4%	\$82,878	18.4%	\$296,282	65.6%	\$49,710	11.0%	
Akron, OH	\$26,179	\$6,155	23.5%	\$4,975	19.0%	\$17,207	65.7%	\$2,817	10.8%	
Canton-Massillon, OH	\$12,541	\$3,742	29.8%	\$2,869	22.9%	\$7,633	60.9%	\$1,166	9.3%	
Cincinnati-Middletown, OH-KY-IN	\$93,370	\$19,491	20.9%	D	D	\$65,427	70.1%	\$8,452	9.1%	
Cleveland-Elyria-Mentor, OH	\$101,605	\$20,506	20.2%	\$16,597	16.3%	\$71,420	70.3%	\$9,680	9.5%	
Columbus, OH	\$85,514	\$12,505	14.6%	\$8,881	10.4%	\$63,058	73.7%	\$9,950	11.6%	
Dayton, OH	\$33,547	\$7,042	21.0%	\$5,891	17.6%	\$21,065	62.8%	\$5,440	16.2%	
Huntington-Ashland, WV-KY-OH	\$8,713	\$2,203	25.3%	\$1,634	18.8%	\$5,266	60.4%	\$1,243	14.3%	
Lima, OH	\$4,126	\$1,565	37.9%	\$1,364	33.1%	\$2,161	52.4%	\$400	9.7%	
Mansfield, OH	\$3,801	D	D	\$1,191	31.3%	D	D	\$497	13.1%	
Parkersburg-Marietta-Vienna, WV-OH	\$5,240	\$1,499	28.6%	D	D	\$3,023	57.7%	\$718	13.7%	
Sandusky, OH	\$2,960	\$1,064	35.9%	\$940	31.8%	\$1,576	53.2%	\$319	10.8%	
Springfield, OH	\$3,384	D	D	\$675	19.9%	D	D	\$419	12.4%	
Toledo, OH	\$25,582	\$6,809	26.6%	\$5,278	20.6%	\$15,794	61.7%	\$2,978	11.6%	
Weirton-Steubenville, WV-OH	\$3,375	\$1,047	31.0%	\$893	26.5%	\$1,988	58.9%	\$339	10.0%	
Wheeling, WV-OH	\$4,595	\$1,187	25.8%	\$562	12.2%	\$2,837	61.7%	\$572	12.4%	
Youngstown-Warren-Boardman, OH-PA	\$17,199	\$5,325	31.0%	\$4,462	25.9%	\$10,046	58.4%	\$1,828	10.6%	

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

Source: U.S. BEA (2008).

Prepared by: Policy Research & Strategic Planning, Ohio Dept. of Development. Telephone 800/848-1300, or 614/466-2116 (DL, 12/08).

THE DISTRIBUTION OF GROSS DOMESTIC PRODUCTS IN METROPOLITAN AREAS, 2006

The U.S. Bureau of Economic Analysis (BEA) publishes gross domestic product (GDP) data for metropolitan areas (MAs). The table above shows the GDP for the 16 MAs 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, despite the uncertainty of how much of Cincinnati's GDP originates in Ohio, it is probably safe to say that these three MAs combine to account for roughly one-half of the state's GDP. Other MAs contributing at least \$10 billion to the GDP include, in descending order, Dayton, Akron, Toledo, Youngstown-Warren-Boardman – including the portion in Pennsylvania, and Canton-Massillon.

The table above also displays the amounts and percentages of GDP derived from 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 MAs in the state. Second, their portions of GDP 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 19.6 percent than they are to the state average of 23.4 percent. Columbus is the only MA in Ohio whose portion of GDP from goods-production is less than the national average. Conversely put, the emphasis on services means these MAs more closely resemble the national economy than the state's economy.

On the other hand, goods-production plays a much more prominent role in many of Ohio's smaller MAs. This is especially true of manufacturing. MAs in which manufacturing contributes at least 20 percent of GDP 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, Springfield, and Wheeling.

Federal, state and local government contributions to the MAs' GDPs ranged from 9.1 percent in Cincinnati to 16.2 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, 2007		Totals, 2007			Manufacturing, 2007			Durable Goods, 2007			
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.
	World	\$65,610.0	U.S.	\$13,743.0	100.00%	U.S.	\$1,615.8	100.00%	U.S.	\$926.7	100.00%
1	United States	\$13,780.0	California	\$1,813.0	13.19%	California	\$179.0	11.08%	California	\$102.7	11.08%
2	China	\$7,099.0	Texas	\$1,142.0	8.31%	Texas	\$153.2	9.48%	Texas	\$77.0	8.31%
3	Japan	\$4,272.0	New York	\$1,103.0	8.03%	Ohio	\$85.1	5.26%	Ohio	\$57.2	6.17%
4	India	\$2,966.0	Florida	\$734.5	5.34%	Illinois	\$76.6	4.74%	Michigan	\$49.4	5.33%
5	Germany	\$2,807.0	Illinois	\$609.6	4.44%	Pennsylvania	\$75.2	4.65%	Illinois	\$45.7	4.93%
6	United Kingdom	\$2,130.0	Pennsylvania	\$531.1	3.86%	North Carolina	\$74.3	4.60%	Pennsylvania	\$41.9	4.52%
7	Russia	\$2,097.0	Ohio	\$466.3	3.39%	New York	\$66.4	4.11%	Indiana	\$40.2	4.34%
8	France	\$2,075.0	New Jersey	\$465.5	3.39%	Michigan	\$64.5	3.99%	North Carolina	\$31.0	3.34%
9	Brazil	\$1,849.0	North Carolina	\$399.4	2.91%	Indiana	\$62.7	3.88%	New York	\$30.0	3.24%
10	Italy	\$1,800.0	Georgia	\$396.5	2.89%	Louisiana	\$49.7	3.07%	Wisconsin	\$29.2	3.15%
11	Spain	\$1,361.0	Virginia	\$383.0	2.79%	Wisconsin	\$47.7	2.95%	Oregon	\$25.7	2.77%
12	Mexico	\$1,353.0	Michigan	\$382.0	2.78%	Georgia	\$43.6	2.70%	Florida	\$25.4	2.74%
13	Canada	\$1,271.0	Massachusetts	\$351.5	2.56%	New Jersey	\$40.8	2.53%	Massachusetts	\$24.6	2.65%
14	South Korea	\$1,206.0	Washington	\$311.3	2.26%	Tennessee	\$39.4	2.44%	Tennessee	\$24.3	2.62%
15	Turkey	\$853.9	Maryland	\$268.7	1.96%	Florida	\$36.6	2.26%	Washington	\$22.5	2.43%
16	Indonesia	\$843.7	Minnesota	\$255.0	1.86%	Massachusetts	\$34.7	2.15%	Minnesota	\$21.2	2.29%
17	Australia	\$773.0	Arizona	\$247.0	1.80%	Virginia	\$33.9	2.10%	Georgia	\$19.1	2.07%
18	Iran	\$762.9	Indiana	\$246.4	1.79%	Minnesota	\$33.9	2.10%	Alabama	\$18.2	1.96%
19	Taiwan	\$698.6	Tennessee	\$243.9	1.77%	Washington	\$31.1	1.92%	Kentucky	\$17.4	1.88%
20	Netherlands	\$645.5	Colorado	\$236.3	1.72%	Missouri	\$30.6	1.89%	Connecticut	\$17.4	1.88%
21	Poland	\$623.1	Wisconsin	\$232.3	1.69%	Oregon	\$30.2	1.87%	Arizona	\$16.6	1.80%
22	Saudi Arabia	\$546.0	Missouri	\$229.5	1.67%	Kentucky	\$29.1	1.80%	Missouri	\$16.5	1.78%
23	Argentina	\$526.4	Connecticut	\$216.3	1.57%	Alabama	\$28.6	1.77%	Virginia	\$16.1	1.74%
24	Thailand	\$521.5	Louisiana	\$216.1	1.57%	Connecticut	\$27.4	1.69%	Iowa	\$15.4	1.66%
25	South Africa	\$467.8	Alabama	\$165.8	1.21%	Iowa	\$26.1	1.61%	South Carolina	\$14.8	1.60%
26	Ohio	\$466.3	Oregon	\$158.2	1.15%	South Carolina	\$24.5	1.52%	New Jersey	\$13.7	1.48%
27	Pakistan	\$411.9	Kentucky	\$154.2	1.12%	Arizona	\$19.6	1.21%	Kansas	\$11.2	1.21%
28	Egypt	\$405.4	South Carolina	\$152.8	1.11%	Kansas	\$17.7	1.10%	Arkansas	\$9.6	1.03%
29	Belgium	\$376.5	Oklahoma	\$139.3	1.01%	Arkansas	\$16.9	1.05%	Oklahoma	\$9.6	1.03%
30	Malaysia	\$361.2	Iowa	\$129.0	0.94%	Oklahoma	\$15.5	0.96%	Colorado	\$9.5	1.02%

Notes: * - Purchasing Power Parity basis, except Ohio; source for 2007 estimates except Ohio is the CIA (2008); source for Ohio is U.S. BEA (2008);

^ - preliminary; source is U.S. BEA (2008).

Sources: CIA (2008), U.S. BEA (2008).

Prepared by: Policy Research & Strategic Planning, Ohio Dept. of Development. Phone 614/466-2116 (DL, 12/08).

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 (2008) preliminary estimate of \$466.3 billion (B) for 2007 places Ohio between the Union of South Africa (\$467.8B) and Pakistan (\$411.9B). Ohio's rank between these two countries reflects the size of their (2008) populations – 48,783,000 and 172,800,000, respectively, vs. 11,486,000 – as well as their levels of economic development (CIA, 2008; U.S. Bureau of the Census, 2006b).²

The table above also shows that Ohio ranks 7th in America with 3.39 percent of U.S. GDP. This 7th 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 2007. The \$85.1B of output was 5.26 percent of the corresponding national total. Ohio also ranked 3rd in durable goods production with \$57.2B, or 6.17 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 2006. They include electrical equipment and appliances (\$3.6B, 7.99 percent of the national total, making Ohio the largest source in the country), plastic and rubber products (\$5.6B, 7.90 percent, also ranked 1st), the production of motor vehicles, bodies, trailers, and parts (almost \$13B, 13.39 percent, ranked 2nd), and primary metal production (\$6.8B, 10.71 percent, also ranked 2nd). Other manufacturing industries with comparatively large contributions to Ohio's total economic output include fabricated metal products (\$11B, 8.40 percent, ranked 3rd), machinery (\$7B, 5.68 percent, 4th), nonmetallic mineral products (\$2.9B, 5.34 percent, also 4th), other transportation equipment (\$4.8B, 5.32 percent, 6th), printing and related support activities (\$2.4B, 5.29 percent, 7th), furniture and related products (\$1.4B, 4.30 percent, also 7th), food products (\$6.6B, 4.12 percent, 8th), and paper (\$2.1B, 4.06 percent, also 8th).

The table also shows service-providing sectors and major industries making large contributions to Ohio's 7th overall rank in 2006. These include the management of companies and enterprises (\$13.8B, 5.68 percent, 4th), truck transportation (\$6.1B, 4.91 percent, also 4th), and rail transportation (\$1.7B, 4.54 percent, again 4th). (2007 data for major industries are not yet available.)

Ohio and U.S. Gross Domestic Products by Industry, 2006 (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	\$451,600	\$13,119,938	3.44%	1.00	7	CA, TX, NY, FL, IL
11-81	Private industries	\$401,890	\$11,556,044	3.48%	1.01	8	CA, TX, NY, FL, IL
11	Agriculture, forestry, fishing & hunting	\$2,603	\$125,398	2.08%	0.60	15	CA, TX, FL, WA, IA
111-112	Crop & animal production (farms)	\$2,302	\$95,678	2.41%	0.70	13	CA, TX, IA, NC, FL
113-115	Forestry, fishing & related activities	\$301	\$29,720	1.01%	0.29	27	CA, WA, FL, TX, OR
21	Mining	\$2,282	\$262,383	0.87%	0.25	17	TX, LA, OK, CA, AK
211	Oil & gas extraction	\$1,052	\$159,440	0.66%	0.19	11	TX, LA, OK, AK, CA
212	Mining, exc. oil & gas	\$967	\$43,492	2.22%	0.65	16	AZ, WV, KY, NV, WY
213	Support activities for mining	\$262	\$59,452	0.44%	0.13	24	TX, LA, OK, CA, WY
22	Utilities	\$9,783	\$273,397	3.58%	1.04	7	TX, CA, NY, PA, IL
23	Construction	\$17,845	\$630,031	2.83%	0.82	11	CA, TX, FL, NY, IL
31-33	Manufacturing	\$82,878	\$1,549,725	5.35%	1.55	3	CA, TX, OH , IL, PA
32p & 33	Durable goods	\$55,553	\$882,845	6.29%	1.83	3	CA, TX, OH , MI, IL
321	Wood products	\$1,133	\$37,448	3.03%	0.88	13	CA, OR, NC, TX, PA
327	Nonmetallic mineral products	\$2,919	\$54,690	5.34%	1.55	4	TX, CA, FL, OH , PA
331	Primary metals	\$6,789	\$63,390	10.71%	3.11	2	PA, OH , IN, TX, IL
332	Fabricated metal products	\$11,012	\$131,083	8.40%	2.44	3	CA, TX, OH , IL, PA
333	Machinery	\$7,003	\$123,204	5.68%	1.65	4	TX, IL, CA, OH , WI
334	Computer & electronic products	\$1,985	\$139,708	1.42%	0.41	16	CA, TX, OR, MA, NC
335	Electrical equipment & appliances	\$3,593	\$44,986	7.99%	2.32	1	OH , IL, WI, CA, NC
336	Transportation equipment	\$17,778	\$187,263	9.49%	2.76	2	MI, OH , CA, IN, WA
3361-3363	Motor vehicles, bodies, trailers & parts	\$12,969	\$96,859	13.39%	3.89	2	MI, OH , IN, KY, TN
3364-3369	Other transportation equipment	\$4,809	\$90,404	5.32%	1.55	6	CA, WA, CT, TX, KS
337	Furniture & related products	\$1,351	\$31,385	4.30%	1.25	7	MI, CA, NC, IN, TX
339	Miscellaneous mfg.	\$1,989	\$69,690	2.85%	0.83	11	CA, IN, IL, NY, FL
31 & 32p	Nondurable goods (leather & allied products not shown)	\$27,325	\$666,879	4.10%	1.19	8	CA, TX, NC, LA, NY
311-312	Food products	\$6,617	\$160,660	4.12%	1.20	8	NC, CA, TX, VA, GA
313-314	Textile & textile product mills	\$317	\$19,457	1.63%	0.47	13	GA, NC, SC, CA, AL
315	Apparel	\$230	\$16,413	1.40%	0.41	15	CA, NY, NC, AL, TX
322	Paper	\$2,130	\$52,460	4.06%	1.18	8	WI, PA, GA, CA, AL
323	Printing & related support activities	\$2,444	\$46,188	5.29%	1.54	7	CA, IL, NY, PA, TX
324	Petroleum & coal products	\$2,418	\$86,341	2.80%	0.81	4	LA, CA, TX, OH , IL
325	Chemical	\$7,527	\$213,956	3.52%	1.02	10	TX, NY, CA, NJ, NC
326	Plastics & rubber products	\$5,643	\$71,404	7.90%	2.30	1	OH , CA, IL, TX, PA
42	Wholesale trade	\$27,521	\$762,206	3.61%	1.05	9	CA, TX, NY, FL, IL
44-45	Retail trade	\$29,345	\$847,985	3.46%	1.01	7	CA, TX, FL, NY, IL

Ohio and U.S. Gross Domestic Products by Industry, 2006 (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.				
48-49 (exc. 491)	Transportation & warehousing, exc. Postal Service	\$15,319	\$385,444	3.97%	1.15	7	CA, TX, IL, FL, NY
481	Air transportation	\$1,331	\$49,985	2.66%	0.77	13	TX, CA, IL, GA, NY
482	Rail transportation	\$1,703	\$37,496	4.54%	1.32	4	NE, TX, IL, OH, PA
483	Water transportation	\$126	\$9,936	1.27%	0.37	16	FL, LA, CA, TX, NY
484	Truck transportation	\$6,119	\$124,702	4.91%	1.43	4	CA, TX, IL, OH, PA
485	Transit & ground passenger transportation	\$283	\$18,056	1.57%	0.46	16	NY, CA, NJ, PA, IL
486	Pipeline transportation	\$175	\$11,285	1.55%	0.45	11	TX, AK, CA, PA, OK
487, 488, 492	Other transportation & support activities	\$3,621	\$96,863	3.74%	1.09	8	CA, TX, FL, NY, TN
493	Warehousing & storage	\$1,962	\$37,123	5.29%	1.54	5	CA, PA, TX, IL, OH
51	Information	\$12,545	\$598,770	2.10%	0.61	13	CA, NY, TX, FL, GA
511	Publishing including software	\$4,382	\$150,282	2.92%	0.85	10	CA, NY, WA, MA, TX
512	Motion picture & sound recording industries	\$209	\$43,071	0.49%	0.14	16	CA, NY, TX, FL, TN
513	Broadcasting & telecommunications	\$6,813	\$336,936	2.02%	0.59	13	CA, NY, TX, FL, GA
514	Information & data processing services	\$1,141	\$68,481	1.67%	0.48	16	CA, TX, NY, VA, NJ
52	Finance & insurance	\$38,501	\$1,093,733	3.52%	1.02	9	NY, CA, TX, IL, FL
521-522	Federal Reserve banks, credit intermediation & related services	\$24,470	\$569,742	4.29%	1.25	7	CA, NY, NC, TX, FL
523	Securities, commodity contracts, investments	\$2,659	\$217,772	1.22%	0.35	14	NY, CA, MA, IL, NJ
524	Insurance carriers & related activities	\$11,165	\$280,862	3.98%	1.15	8	CA, NY, IL, TX, CT
525	Funds, trusts & other financial vehicles	\$208	\$25,357	0.82%	0.24	23	PA, CA, NY, TX, MA
53	Real estate, rental & leasing	\$47,360	\$1,662,826	2.85%	0.83	9	CA, NY, FL, TX, NJ
531	Real estate	\$44,365	\$1,557,072	2.85%	0.83	10	CA, NY, FL, TX, IL
532-533	Rental & leasing services & lessors of intangible assets	\$2,995	\$105,754	2.83%	0.82	10	CA, TX, FL, NJ, NY
54	Professional & technical services	\$24,914	\$925,333	2.69%	0.78	12	CA, NY, TX, IL, FL
5411	Legal services	\$4,736	\$186,785	2.54%	0.74	11	CA, NY, TX, IL, FL
5415	Computer systems design & related services	\$4,459	\$146,493	3.04%	0.88	12	CA, VA, TX, NY, MA
5412-5414, 5416-5419	Other professional, scientific & technical services	\$15,719	\$592,054	2.65%	0.77	12	CA, NY, TX, IL, FL
55	Management of companies & enterprises	\$13,755	\$242,095	5.68%	1.65	4	CA, NY, IL, OH, TX
56	Administrative & waste services	\$13,178	\$393,477	3.35%	0.97	9	CA, FL, TX, NY, IL
561	Administrative & support services	\$11,883	\$359,294	3.31%	0.96	9	CA, FL, TX, NY, IL
562	Waste management & remediation services	\$1,295	\$34,183	3.79%	1.10	9	CA, TX, NY, FL, WA
61	Educational services	\$3,533	\$120,946	2.92%	0.85	9	NY, CA, PA, MA, IL
62	Health care & social assistance	\$36,618	\$901,366	4.06%	1.18	7	CA, NY, TX, FL, PA
621	Ambulatory health care services	\$17,246	\$464,519	3.71%	1.08	7	CA, TX, NY, FL, PA
622-623	Hospitals & nursing & residential care facilities	\$16,883	\$358,319	4.71%	1.37	7	CA, NY, PA, TX, FL
624	Social assistance	\$2,489	\$78,528	3.17%	0.92	9	NY, CA, PA, TX, FL

Ohio and U.S. Gross Domestic Products by Industry, 2006 (in millions of current dollars, except percentages, concentration ratios, and ranks)

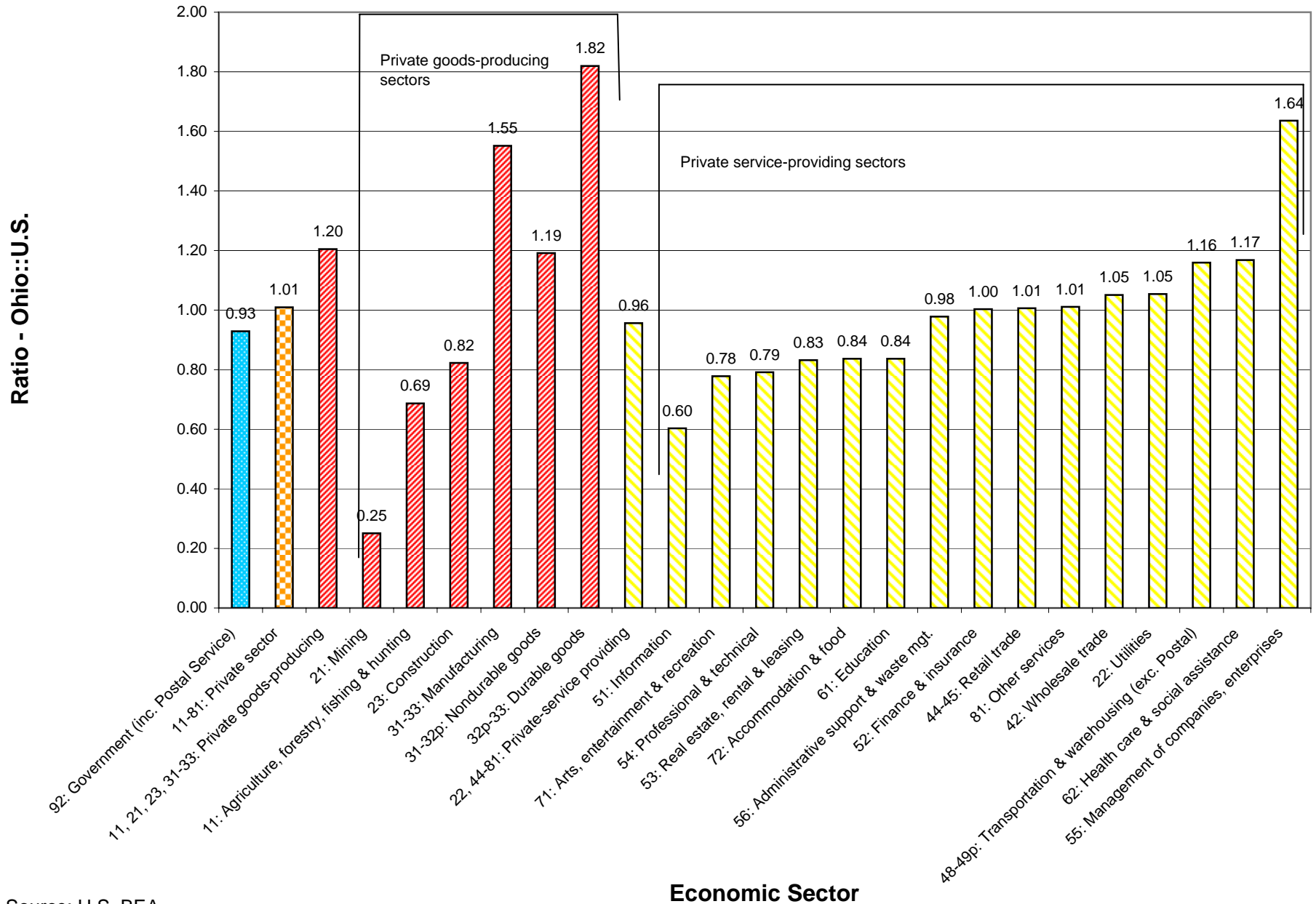
1997 NAICS Codes	Industry Titles	GDP		Ohio as a Percent of the U.S.	Ohio:U.S. Concentra- tion Ratio	Ohio's Rank	Top Five States
		Ohio	U.S.				
71	Arts, entertainment & recreation	\$3,326	\$126,182	2.64%	0.77	10	CA, FL, NY, TX, IL
711-712	Performing arts, museums & related activities	\$1,636	\$60,390	2.71%	0.79	7	CA, NY, FL, TX, IL
713	Amusements, gambling & recreation	\$1,690	\$65,792	2.57%	0.75	14	CA, FL, TX, NY, IL
72	Accommodation & food services	\$10,032	\$353,643	2.84%	0.82	10	CA, FL, TX, NY, NV
721	Accommodation	\$1,523	\$112,358	1.36%	0.39	23	NV, CA, FL, NY, TX
722	Food services & drinking places	\$8,510	\$241,285	3.53%	1.02	6	CA, TX, FL, NY, IL
81	Other services, exc. government	\$10,553	\$301,103	3.50%	1.02	7	CA, TX, NY, FL, IL
92	Government	\$49,710	\$1,563,894	3.18%	0.92	8	CA, TX, NY, FL, VA
92a & 92b	Federal government	\$9,997	\$440,959	2.27%	0.66	13	CA, VA, TX, DC, MD
92a	Civilian (inc. Postal Service)	\$7,861	\$285,948	2.75%	0.80	11	DC, CA, VA, MD, TX
92b	Military	\$2,136	\$155,011	1.38%	0.40	23	CA, VA, TX, NC, FL
92c	State & local	\$39,713	\$1,122,935	3.54%	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 (2008).

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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 18.24 percent of GDP in 2007, while mining was the smallest with 0.50 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 11.76 percent and 2.01 percent, respectively, of U.S. GDP in 2007. When compared with those for Ohio, these yield ratios of 1.55 for manufacturing (18.24 percent divided by 11.76 percent) and .25 for mining (0.50 percent divided by 2.01 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 (1.20), this reflects the concentration of manufacturing activity here (1.55), 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 (.25, .69, and .82, respectively) are more or less sparse.

The preceding section showed that service-providing industries collectively account for most economic activity in Ohio (77.08 percent with government, 66.00 percent without); yet the graph above shows that, as a whole, they contribute relatively less to GDP 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 (1.64). The provision of health care and social assistance (1.17) and transportation-and-warehousing (1.16) also are concentrated in Ohio. Other service sectors in Ohio's economy roughly proportional with their national contribution to GDP include administrative support-waste management, wholesale and retail trade, finance and insurance, utilities, and other non-governmental services specified in NAICS 81.

See Table A1

