

2025 OHIO

MANUFACTURING COUNTS

The Economic Impact of Ohio Manufacturing



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FACTS ABOUT OHIO MANUFACTURING'S ECONOMIC IMPACT

Ohio is a manufacturing powerhouse for the United States and the rest of the world. The sector is responsible for **16.5%** of Ohio's Gross Domestic Product (GDP) as of 2024, leading among Ohio's 19 private economic sectors. The manufacturing sector contributes to Ohioans' quality of life by providing:

- A payroll totaling \$49.9 billion, the highest total annual wages of any Ohio sector;
- \$55.8 billion in exported products to 210 countries and territories; and
- A cleaner environment through decreased emissions and increased recycling.

Ohio remained **third in the nation** in total manufacturing jobs, at **687,345** in 2023 – trailing only California and Texas, both of which have significantly larger populations than the Buckeye State.

As of 2024, Ohio's manufacturing GDP was \$137.9 billion, ranking fifth in the nation. Previously, Ohio trailed only California, Texas, and Illinois. Indiana overtook Ohio very slightly in 2024 at \$138.7 billion in manufacturing GDP.

In 2024, durable goods manufacturing accounted for **53%** (\$70.0 billion) of all production, while nondurable goods made up **47%** (\$61.1 billion) of production.

The average annual pay for Ohio manufacturing workers in 2023 was \$76,493. Their average hourly earnings were \$33.12 as of 2024.

The Ohio Manufacturers' Association (OMA) prepares Manufacturing Counts to help Ohioans understand the importance of manufacturing to the state's economic future. The data in this publication were the most current available as of June 2025.

The OMA thanks Dr. Ned Hill and Kathryn Kelley of the Ohio State University's Ohio Manufacturing Institute, the staff of the Ohio Department of Development, and the staff of the Ohio Environmental Protection Agency for their assistance with data collection, validation, and review for this publication.

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This publication draws on datasets from various sources, including the U.S. Department of Labor's Bureau of Labor Statistics and the U.S. Department of Commerce's Bureau of Economic Analysis. Data reported on similar variables will vary slightly from table to table if they are derived from different sources. Reporting years may also vary from table to table if the collection and release schedules for their source datasets are different. Some public datasets are updated retroactively, changing values for previous years; this may cause apparent data mismatches across Manufacturing Counts publications from different years. Each table is internally consistent because the values are from the same dataset.

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OHIO MANUFACTURING AND THE

STATE ECONOMY



Table 1: Manufacturing Gross Domestic Product (GDP) Ranking by State (in Billions USD)

FACT:

As of 2024, Ohio's manufacturing GDP approached \$138 billion, growing by 2.9%.

Total U.S. Manufacturing GDP by Year (in Billions USD)

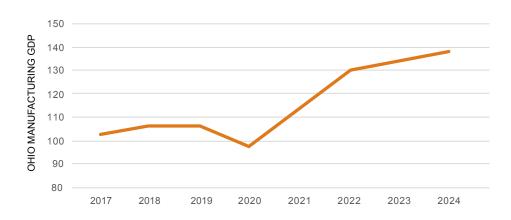
2024 - \$2,913.1 2023 - \$2,840.4 2022 - \$2,684.5

2021 - \$2,408.8

Donk		2024			2023			
Rank	State	MFG GDP	% of US	State	MFG GDP	% of US		
1	CA	\$405.6	13.9%	CA	\$411.8	14.5%		
2	TX	\$300.3	10.3%	TX	\$292.6	10.3%		
3	IL	\$139.1	4.78%	IL	\$135.1	4.76%		
4	IN	\$138.7	4.76%	ОН	\$134.0	4.72%		
5	ОН	\$137.9	4.73%	IN	\$129.1	4.5%		
6	MI	\$115.2	4.0%	MI	\$111.2	3.91%		
7	PA	\$111.1	3.8%	PA	\$110.3	3.88%		
8	NC	\$108.1	3.7%	NC	\$104.8	3.7%		
9	NY	\$90.1	3.1%	NY	\$85.9	3.0%		
10	GA	\$86.6	3.0%	GA	\$82.6	2.9%		

		2022		2021			
Rank	State	MFG GDP	% of US	State	MFG GDP	% of US	
1	CA	\$397.6	14.8%	CA	\$371.1	15.4%	
2	TX	\$275.4	10.3%	TX	\$224.1	9.3%	
3	IL	\$130.1	4.85%	IL	\$115.7	4.8%	
4	ОН	\$129.8	4.83%	ОН	\$113.1	4.7%	
5	IN	\$124.3	4.6%	IN	\$109.0	4.5%	
6	PA	\$105.1	3.9%	PA	\$93.63	3.887%	
7	MI	\$102.8	3.8%	MI	\$93.61	3.886%	
8	NC	\$98.4	3.7%	NC	\$92.5	3.84%	
9	NY	\$82.5	3.1%	NY	\$76.6	3.2%	
10	GA	\$75.0	2.8%	GA	\$68.0	2.8%	

Figure 1: Ohio Manufacturing GDP by Year (in Billions USD)



Source: U.S. Department of Commerce



Table 2: Ohio Gross Domestic Product (GDP) by Sector (as of 2024 in Billions USD and Percentage)

FACT:

At 16.5%, the manufacturing sector retained a significant lead in contribution to Ohio's GDP in 2024 across all private industries.

Sector	Contribution to Ohio GDP	Percentage of Ohio GDP
All Industry Total	\$927.7	100.0%
All Private Industries	\$836.0	90.1%
Manufacturing	\$137.9	14.9%
Real estate and rental and leasing	\$108.7	11.7%
Finance and insurance	\$102.8	11.1%
Health care and social assistance	\$79.6	8.6%
Retail trade	\$61.2	6.6%
Wholesale trade	\$57.1	6.2%
Professional, scientific, and technical services	\$52.5	5.7%
Construction	\$38.2	4.1%
Transportation and warehousing	\$29.6	3.2%
Administrative and support and waste management and remediation services	\$28.5	3.1%
Management of companies and enterprises	\$28.1	3.0%
Accommodation and food services	\$25.6	2.8%
Information	\$21.2	2.3%
Other services (except government and government enterprises)	\$19.9	2.1%
Utilities	\$16.0	1.7%
Arts, entertainment, and recreation	\$9.3	1.0%
Educational services	\$7.6	0.8%
Agriculture, forestry, fishing and hunting	\$6.2	0.7%
Mining, quarrying, and oil and gas extraction	\$6.0	0.6%

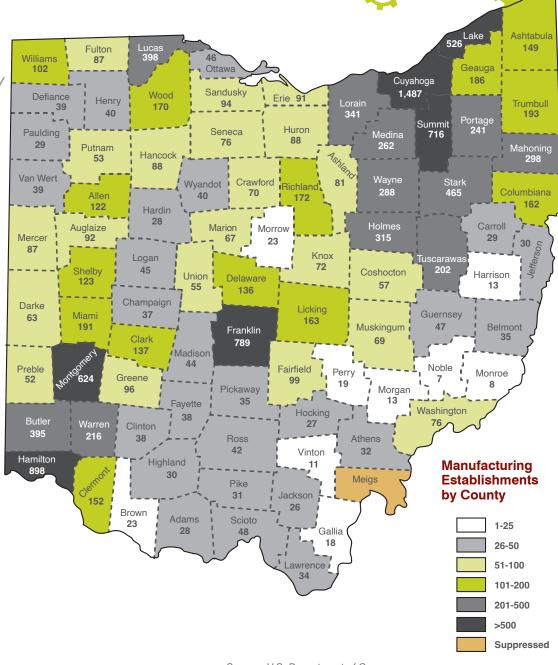
Source: U.S. Department of Commerce



OHIO MANUFACTURING AND THE

STATE ECONOMY

Figure 2: Map of
Manufacturing
Establishment Density
by County
(as of 2023)



Source: U.S. Department of Commerce

FACT:

Approximately 50% of Ohio's 13,307 manufacturing establishments in 2023 were in ten manufacturing-dense counties: **Cuyahoga** (11.2%), **Hamilton** (6.8%), **Franklin** (5.9%), **Summit** (5.4%), **Montgomery** (4.7%), **Lake** (4.0%), **Stark** (3.5%), **Lucas** (2.99%), **Butler** (2.97%), and **Lorain** (2.6%).



Table 3: Number of Ohio Manufacturing Investment Projects¹

Year Announced	Number of Total Qualifying Projects in Ohio	Number of Manufacturing Projects in Ohio	Percentage Manufacturing Projects in Ohio		
2023	539	222	41.2%		
2022	479	223	46.6%		
2021	501	260	51.9%		

Table 4: Jobs and Value of Ohio Manufacturing Projects by Year

Year	Number of New Jobs Expected at	Value of Manufacturing Investment Projects (in Billions USD)			
Announced	Announcement	New	Expansion	Total	
2023	11,278	\$2.5	\$5.1	\$7.7	
2022	20,333	\$26.1	\$6.5	\$32.6	
2021	13,454	\$3.4	\$2.6	\$5.9	

Table 5: Number of Ohio Manufacturing Projects by Subsector

(ranked based on 2023 values)

FACT:

Manufacturing projects announced in 2023 were expected to produce 11,278 new jobs. Usually about half of Ohio's new qualifying projects are in the manufacturing sector.

Rank	Manufacturing Subsector	2023	2022	2021
1	Fabricated Metal Products	34	25	35
2	Foods and Beverages	29	42	32
3	Machinery	28	22	27
4	Plastic and Rubber Products	27	26	35
5	Chemicals	21	19	27
6	Transportation	20	33	34
7	Primary Metals	12	4	10
8	Miscellaneous Goods	10	9	8
9	Nonmetallic Mineral Products	9	5	5
10	Computers and Electronics	8	5	8
11	Appliances and Electrical Equipment	7	11	10
12	Wood Products	4	6	3
13	Textiles, Apparel, and Leather	4	2	6
14	Paper and Related Products	3	6	10
15	Furniture and Related Products	3	2	5
16	Printing and Support	3	2	3
17	Petroleum and Coal Products	0	4	2

¹To qualify for listing in the Ohio Department of Development's Private Investment Survey, projects must meet at least one of three criteria:

1) minimum investment of \$1,000,000, 2) new square footage of 20,000 or more, or 3) job creation of 20 or more (however, projects with no investment and no square footage data do not qualify). Projects are generally credited to the year they are announced.



Source: Ohio Department of Development

OHIO MANUFACTURING AND

JOBS



Table 6: Manufacturing Jobs Ranking by State (as of 2023)

Rank	State	Number of Statewide Manufacturing Jobs	Percentage of Total US Manufacturing Jobs
1	CA	1,329,590	10.3%
2	TX	955,403	7.4%
3	ОН	687,345	5.3%
4	MI	613,227	4.8%
5	⊒	578,638	4.5%
6	PA	566,154	4.4%
7	IN	533,046	4.1%
8	WI	474,437	3.7%
9	NC	469,557	3.6%
10	GA	424,388	3.3%

Table 7: Ohio Manufacturing Jobs by Year

Year	Number of Statewide Manufacturing Jobs	Year-to-Year Change
2023	687,345	4,197
2022	683,148	17,424
2021	665,724	12,696
2020	653,028	-47,758
2019	700,786	1,836

Table 8: U.S. Manufacturing Jobs by Year

FACT:

In 2023, Ohio remained the third-ranking state in manufacturing jobs at 5.3% of all U.S. manufacturing jobs.

Year	Number of Manufacturing Jobs	Year-to-Year Change
2023	12,868,061	108,932
2022	12,759,129	456,472
2021	12,302,657	219,178
2020	12,083,479	-692,678
2019	12,776,157	128,257

Source: U.S. Department of Labor



Figure 3: Ohio Manufacturing Jobs by Year (in thousands)



 Table 9: Ohio Manufacturing Jobs by Month and Year (in thousands)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2024	684.1	684.6	684.3	682.7	683.5	687.6	681.8	683.0	680.8	674.9	679.0	680.9
2023	686.5	687.5	687.6	687.0	687.4	692.8	691.5	690.5	687.0	678.3	684.2	688.0
2022	673.6	678.9	680.8	681.6	682.2	685.0	687.7	685.5	683.0	684.8	685.9	688.7
2021	659.6	661.5	663.2	659.9	660.3	666.0	667.9	667.6	664.6	668.1	673.4	676.6
2020	693.1	692.2	689.8	580.8	601.5	649.6	649.0	650.3	652.3	655.1	658.3	664.4
2019	701.5	702.9	701.1	700.5	701.7	706.1	705.2	703.2	698.1	693.8	697.3	698.0
2018	689.7	694.7	694.7	694.9	696.9	703.2	701.1	702.2	698.9	700.6	703.5	706.9
2017	682.6	680.6	682.1	681.1	682.7	689.5	685.0	689.2	683.2	688.4	691.9	695.0
2016	683.0	682.9	682.5	683.2	684.7	687.6	687.5	687.9	684.9	684.2	685.5	687.1
2015	680.4	680.9	681.3	684.0	688.0	691.3	687.6	690.1	686.3	686.2	687.1	688.4
2014	662.4	663.9	665.2	668.1	673.3	678.3	673.6	680.3	678.1	680.1	683.0	684.5

Source: U.S. Department of Labor

FACT:

Ohio manufacturing employment averaged about 680,000 jobs per month in 2024 — roughly a 3.4% increase over the COVID-19 lockdown-era averages (2020 and 2021).



OHIO MANUFACTURING AND **JOBS**



Table 10: Ohio Jobs by Sector (as of 2023)

FACT:

Approximately 14.4% of Ohio's jobs were in manufacturing in 2023. Health care and social assistance was the only private sector with a greater number of jobs.

Rank	Sector	Number of Annual Jobs	Percentage of Ohio Jobs
Total, a	Il private industries	4,757,108	100.0%
1	Health care and social assistance	818,108	17.2%
2	Manufacturing	687,345	14.4%
3	Retail trade	545,362	11.5%
4	Accommodation and food services	479,683	10.1%
5	Administrative and support and waste management	308,007	6.5%
6	Professional, scientific, and technical services	291,084	6.1%
7	Transportation and warehousing	249,057	5.2%
8	Wholesale trade	241,605	5.1%
9	Finance and insurance	239,144	5.03%
10	Construction	238,101	5.01%
11	Other services (except public administration)	155,592	3.3%
12	Management of companies and enterprises	142,664	3.0%
13	Educational services	91,906	1.9%
14	Arts, entertainment, and recreation	85,431	1.8%
15	Real estate and rental and leasing	69,009	1.5%
16	Information	68,032	1.4%
17	Agriculture, forestry, fishing and hunting	18,731	0.39%
18	Utilities	18,151	0.38%
19	Mining, quarrying, and oil and gas extraction	9,062	0.2%

Source: U.S. Department of Labor



Table 11: Number of Ohio Manufacturing Jobs by Subsector

FACT:

The transportation subsector boasted 17.0% of all Ohio manufacturing jobs in 2023, leading among durable goods manufacturing. In nondurable goods manufacturing, the food and beverages subsector led with 11.1% of total Ohio manufacturing jobs.

Manufacturing Subsector	2023	2022	2021	2020	Percentage of Total Ohio Manufacturing Jobs (as of 2023)		
	Durable Goods Manufacturing						
Transportation	117,068	114,909	114,578	113,054	17.0%		
Fabricated Metal Products	97,808	96,697	93,356	92,171	14.2%		
Machinery	78,741	77,592	74,825	74,399	11.5%		
Primary Metals	35,937	35,164	34,064	34,241	5.2%		
Appliances and Electrical Equipment	26,743	26,391	26,472	25,437	3.9%		
Nonmetallic Mineral Products	26,298	26,552	26,104	25,512	3.8%		
Miscellaneous Goods	21,707	22,125	21,652	20,807	3.2%		
Computers and Electronics	21,507	21,267	20,275	20,664	3.1%		
Furniture and Related Products	14,659	15,461	15,396	14,580	2.1%		
Wood Products	13,785	13,923	13,169	12,545	2.0%		
	Nondurable Goods Manufacturing						
Food and Beverages	76,362	73,887	70,762	69,039	11.1%		
Plastic and Rubber Products	56,186	57,489	56,850	54,518	8.2%		
Chemicals	48,240	48,750	47,158	45,874	7.0%		
Paper and Related Products	21,766	21,932	20,784	20,275	3.2%		
Printing and Support	18,643	19,117	18,597	18,507	2.7%		
Textiles, Apparel, and Leather	6,695	6,954	7,007	6,665	1.0%		
Petroleum and Coal Products	5,202	4,939	4,675	4,738	0.8%		

Source: U.S. Department of Labor



OHIO MANUFACTURING AND JOBS



Table 12: Top Ohio Manufacturing Employers by Headcount

Headcount (2025)	Rank	Company Name	Headquarters	Industry
> 10,000	1	Honda	Tokyo, Japan	Automobiles and Light Duty Motor Vehicles
>10,000	2	The Procter & Gamble Company	Cincinnati, OH	Detergents and Consumer Products
	3	The General Electric Company	Evendale, OH	Aircraft Engines and Engine Parts
	4	The Sherwin-Williams Company	Cleveland, OH	Paints and Coatings
	5	Ford Motor Company	Dearborn, MI	Automobiles and Light Duty Motor Vehicles
000	6	Whirlpool Corporation	Benton Harbor, MI	Major Household Appliances
3,000 - 10,000	7	The Goodyear Tire & Rubber Company	Akron, OH	Tires
00	8	Stellantis	Auburn Hills, MI	Automobiles and Light Duty Motor Vehicles
3,00	9	Swagelok Company	Solon, OH	Fluid Power Valves and Hose Fittings
	10	Cleveland-Cliffs	West Chester, OH	Iron and Steel Mills and Ferroalloys
	11	Marathon Petroleum Corporation	Findlay, OH	Petroleum Refineries
	12	General Motors	Detroit, MI	Motor Vehicle Transmissions and Power Train Parts
	13	The Lincoln Electric Company	Cleveland, OH	Welding and Soldering Equipment
	14	First Solar	Tempe, AZ	Semiconductor and Related Devices
	15	ArcelorMittal	Luxembourg, LXM	Iron and Steel Mills and Ferroalloys
	16	Parker-Hannifin Corporation	Cleveland, OH	Fluid Power Valves and Hose Fittings
	17	Abbott	North Chicago, IL	Dry, Condensed, and Evaporated Dairy Products
	18	Luxottica Of America Inc	Paris, France	Ophthalmic Goods
666	19	Nestle USA	Rosslyn, VA	Dry, Condensed, and Evaporated Dairy Products
2,000 - 2,999	20	PACCAR Inc.	Bellevue, WA	Heavy Duty Trucks
000	21	PPG Industries, Inc.	Cleveland, OH	Paints and Coatings
9,0	22	Owens Corning	Toledo, OH	Glass Products
	23	Crown Equipment Corporation	New Bremen, OH	Industrial Trucks, Tractors, Trailers, and Stacker Machinery
	24	Coca Cola Consolidated, Inc.	Charlotte, NC	Soft Drinks
	25	PCC Airfoils, LLC/ Berkshire Hathaway Inc.	Beachwood, OH	Other Nonferrous Metal Foundries
	26	Fuyao Glass America Inc.	Moraine, OH	Glass Products

FACT:

Global industrial enterprises employ large numbers of Ohioans. More than half of the largest Ohio manufacturing employers are headquartered in the state.



 Table 12: Top Ohio Manufacturing Employers by Headcount (continued)

Headcount (2025)	Rank	Company Name	Headquarters	Industry
	27	Metallus Inc.	Canton, OH	Iron and Steel Mills and Ferroalloys
	28	Cabinetworks Group	Livonia, MI	Wood Kitchen Cabinets and Countertops
	29	Clopay Corporation	Mason, OH	Metal Windows and Doors
	30	Vertiv Corporation	Westerville, OH	HVAC & Commercial/Industrial Refrigeration Equipment
o	31	The Kraft Heinz Company	Pittsburgh, PA	Fruit and Vegetable Canning
1,500 - 1,999	32	Avery Dennison Corporation	Mentor, OH	Paper Bags and Coated and Treated Paper
1-0	33	Maker's Pride	Downers Grove, IL	Cookies and Crackers
,500	34	Ariel Corporation	Mount Vernon, OH	Air and Gas Compressors
_	35	Schaeffler Transmission Systems, LLC	Herzogenaurach, GER	Motor Vehicle Transmissions and Power Train Parts
	36	STERIS Corporation	Mentor, OH	Surgical and Medical Instruments
	37	BWXT Nuclear Operations Group	Lynchburg, VA	Heavy Gauge Metal Tanks
	38	International Motors, LLC	Lisle, IL	Heavy Duty Trucks
	39	The J.M. Smucker Company	Orrville, OH	Fruit and Vegetable Preserves
	40	T. Marzetti Company	Westerville, OH	Dressings and Sauces
	41	Conagra Brands, Inc.	Omaha, NE	Frozen Specialty Foods
42		G&J Pepsi-Cola Bottlers, Inc.	Cincinnati, OH	Soft Drinks
	43	Graphic Packaging International, LLC	Atlanta, GA	Paperboard Containers
	44	Shearer's Foods	Massillon, OH	Snack Foods
	45	Johns Manville/ Berkshire Hathaway Inc.	Denver, CO	Mineral Wool
	46	Teijin Automotive Technologies/CSP	Auburn Hills, MI	Motor Vehicle Parts
66	47	SugarCreek Packing Company	Cincinnati, OH	Meat Processing
4,1	48	Cenovus Energy	Calgary, CAN	Petroleum Refining
1,000 - 1,499	49	Lubrizol/ Berkshire Hathaway Inc.	Wickliffe, OH	Basic Organic Chemicals
	50	Charter Next Generation	Chicago, IL	Plastics Bags and Pouches
	51	GOJO Industries	Akron, OH	Soaps and Detergents
	52	The Campbell's Company	Napoleon, OH	Fruit and Vegetable Canning
	53	Illuminate USA	Pataskala, OH	Photovoltaic Cells
	54	Cargill, Inc.	Wayzata, MN	Soybean and Corn Processing
	55	Hikma Pharmaceuticals	London, UK	Pharmaceutical Preparations
	56	Worthington Steel	Columbus, OH	Rolled Steel Shapes
	57	ScottsMiracle-Gro Company	Marysville, OH	Nitrogenous Fertilizers

Locations in red denote Ohio-based headquarters. Employee count and ranking may change frequently. The OMA utilized the best available proprietary data sources at the time of publication to create this list.



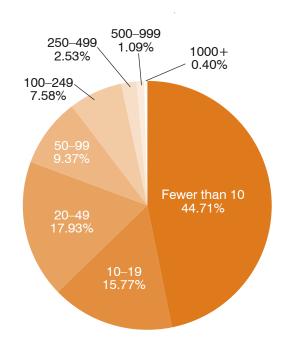
OHIO MANUFACTURING AND

JOBS

Table 13: Number of Ohio Manufacturing Establishments by Size and Year

Number of			Year		
Employees	2023	2022	2021	2020	2019
Fewer than 10	5,987	6,069	6,248	6,207	6,330
10-19	2,112	2,164	2,138	2,155	2,217
20-49	2,401	2,379	2,331	2,366	2,404
50-99	1,254	1,258	1,168	1,241	1,231
100-249	1015	983	963	1,005	1,038
250-499	339	351	344	338	344
500-999	146	134	125	135	137
1,000+	53	52	52	46	53
Total	13,307	13,390	13,369	13,493	13,754

Figure 4: Distribution of Ohio Manufacturing Establishments by Size (as of 2023)



Source: U.S. Department of Commerce

FACT:

While manufacturing firms include many of Ohio's largest private employers, most manufacturers are smaller employers, with 88% employing fewer than 100 associates.



Table 14: Ohio Manufacturing Establishment Size and Employment (as of 2023)

Number of employees	Number of Establishments	Total Number of Employees in Establishments	Percentage of Total Ohio Manufacturing Employees in Establishments
Fewer than 10	5,987	22,907	3.3%
10 - 19	2,112	28,859	4.2%
20 - 49	2,401	75,707	11.0%
50 - 99	1,254	88,418	12.8%
100 - 249	1,015	155,835	22.6%
250 - 499	339	116,044	16.9%
500 - 999	146	97,144	14.1%
1000+	53	104,219	15.1%
Total	13,307	689,133	100.0%

Source: U.S. Department of Commerce

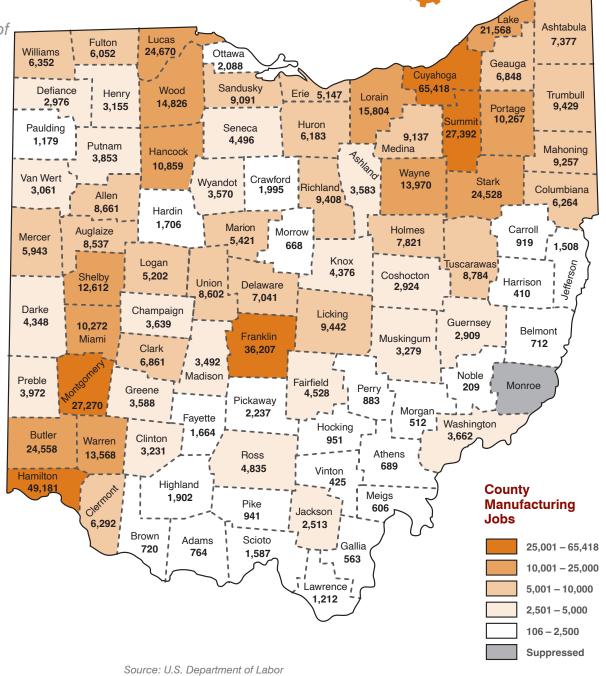
FACT:

Though small manufacturing establishments were most numerous in Ohio in 2023, 39.5% of employees worked at mid-sized manufacturing facilities (100-499 employees). Manufacturers with 100-249 employees had the most total employees at 155,835.



JOBS

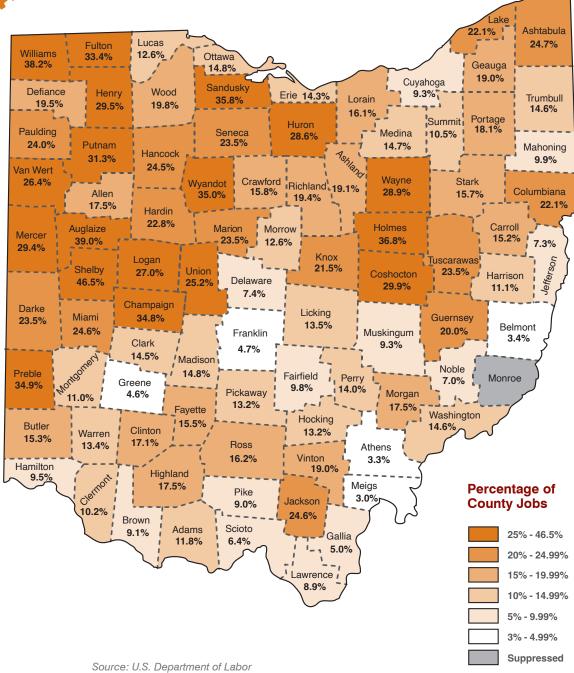
Figure 5: Map of Manufacturing Jobs by County (as of 2023)



FACT:

In 2023, **Cuyahoga** County continued to lead in manufacturing jobs at 65,418 – followed by **Hamilton** (49,181), **Franklin** (36,207), **Summit** (27,392), **Montgomery** (27,270), **Lucas** (24,670), **Butler** (24,558), **Stark** (24,528), **Lake** (21,568), and **Lorain** (15,804) counties.

Figure 6: Map of Manufacturing Jobs as Percentage of All County Jobs (as of 2023)



FACT:

In 2023, **Shelby** County retained its lead in manufacturing jobs density, with 46.5% of all jobs being in the manufacturing sector. **Auglaize** (39.0%), **Williams** (38.2%), **Holmes** (36.8%), **Sandusky** (35.8%), **Wyandot** (35.0%), **Preble** (34.9%), **Champaign** (34.8%), **Fulton** (33.4%), and **Putnam** (31.3%) rounded out the Top 10 counties.



OHIO MANUFACTURING

EARNINGS AND WAGES



Table 15: Ohio Wages and Pay by Sector (ranked by Total Annual Wages as of 2023)

Rank	Sector	Total Annual Wages (in billions USD)	Average Annual Pay (in USD)
Total, all sectors		\$298.3	\$65,536
1	Manufacturing	\$49.9	\$76,493
2	Health care and social assistance	\$49.5	\$62,284
3	Professional, scientific, and technical services	\$27.8	\$100,611
4	Finance and insurance	\$23.9	\$105,440
5	Wholesale trade	\$21.3	\$91,873
6	Retail trade	\$20.0	\$37,562
7	Management of companies and enterprises	\$18.4	\$137,160
8	Construction	\$17.7	\$79,741
9	Administrative and support and waste management	\$15.1	\$50,364
10	Transportation and warehousing	\$14.9	\$61,662
11	Accommodation and food services	\$10.8	\$23,359
12	Other services (except public administration)	\$6.8	\$45,507
13	Information	\$6.2	\$100,098
14	Real estate and rental and leasing	\$4.24	\$64,229
15	Educational services	\$4.20	\$47,249
16	Arts, entertainment, and recreation	\$3.7	\$43,636
17	Utilities	\$2.1	\$125,942
18	Agriculture, forestry, fishing and hunting	\$0.9	\$48,205
19	Mining, quarrying, and oil and gas extraction	\$0.8	\$87,609

Source: U.S. Department of Labor

FACT:

The Ohio manufacturing sector leads year after year in total annual wages.



Table 16: Ohio Manufacturing Establishments, Jobs, and Wages by Subsector (as of 2023)

Manufacturing Subsector	Number of Establishments	Number of Jobs	Total Annual Wages (in Billions USD)	Average Annual Pay (in USD)
Food and Beverages	1,639	76,362	\$4.6	\$57,607
Textiles, Apparel, and Leather	378	6,695	\$0.4	\$56,449
Wood Products	658	13,785	\$0.74	\$53,928
Paper and Related Products	327	21,766	\$1.5	\$70,523
Printing and Support	1,120	18,643	\$1.0	\$53,805
Petroleum and Coal Products	115	5,202	\$0.66	\$126,289
Chemicals	895	48,240	\$4.9	\$101,453
Plastic and Rubber Products	890	56,186	\$3.4	\$60,793
Nonmetallic Mineral Products	713	26,298	\$1.90	\$72,391
Primary Metals	444	35,937	\$3.0	\$84,141
Fabricated Metal Products	3,465	97,808	\$6.6	\$67,060
Machinery	1,789	78,741	\$6.1	\$77,318
Computers and Electronics	561	21,507	\$1.7	\$79,058
Appliances and Electrical Equipment	370	26,743	\$1.94	\$72,687
Transportation	836	117,068	\$9.3	\$79,058
Furniture and Related Products	720	14,659	\$0.8	\$56,383
Miscellaneous Goods	1,024	21,707	\$1.3	\$60,335

Source: U.S. Department of Labor

FACT:

The average annual pay in manufacturing grew from \$70,003 in 2022 to \$76,493 in 2023, a 9.3% increase.



OHIO MANUFACTURING HIGHLIGHTS

TOP SUBSECTORS AS OF 2023

Table 17: Ohio Manufacturing Jobs by Top Subsectors

Manufacturing Subsector	Number of Jobs
Transportation	117,068
Fabricated Metal Products	97,808
Machinery	78,741
Food and Beverages	76,362
Plastic and Rubber Products	56,186

Table 18: Ohio Manufacturing Establishments by Top Subsectors

Manufacturing Subsector	Number of Establishments
Fabricated Metal Products	3,465
Machinery	1,789
Food and Beverages	1,639
Printing and Support	1,120
Miscellaneous Goods	1,024

Table 19: Ohio Manufacturing Average Annual Pay by Top Subsectors

Manufacturing Subsector	Average Annual Pay (in USD)
Petroleum and Coal Products	\$126,289
Chemicals	\$101,453
Primary Metals	\$84,141
Computers and Electronics	\$79,058
Transportation	\$79,058

Table 20: Ohio Manufacturing Total Annual Wages by Top Subsectors

Manufacturing Subsector	Total Annual Wages (in Billions USD)
Transportation	\$9.3
Fabricated Metal Products	\$6.6
Machinery	\$6.1
Chemicals	\$4.9
Food and Beverages	\$4.6

Source: U.S. Department of Labor



OHIO MANUFACTURING AND THE GLOBAL ECONOMY

Table 21: Top Ten States Ranked by Total Exports (in Billions USD)

FACT:

In 2023, Ohio was the tenth-largest exporting state, with industrial machinery continuing to be the top exported good.

This series covers direct exports only. A direct export consists of final goods shipped to a destination outside of the United States. So-called indirect exports are excluded from the data. Indirect exports are typically intermediate goods, parts, or other inputs that are shipped within the United States, and subsequently incorporated in final export goods. Such shipments represent domestic transactions – they are not considered exports in U.S. trade statistics.

Rank	2023			
nalik	State	Exports	Top Export	
1	TX	\$444.6	Mineral Fuel, Oil, etc.	
2	CA	\$178.7	Electric Machinery	
3	LA	\$100.2	Mineral Fuel, Oil, etc.	
4	NY	\$97.8	Prec. Stones; Jewelry	
5	IL	\$78.7	Industrial Machinery	
6	FL	\$68.9	Electric Machinery	
7	MI	\$64.9	Vehicles and Parts	
8	WA	\$61.2	Aircraft and Parts	
9	IN	\$56.1	Pharmaceutical Products	
10	ОН	\$55.8	Industrial Machinery	

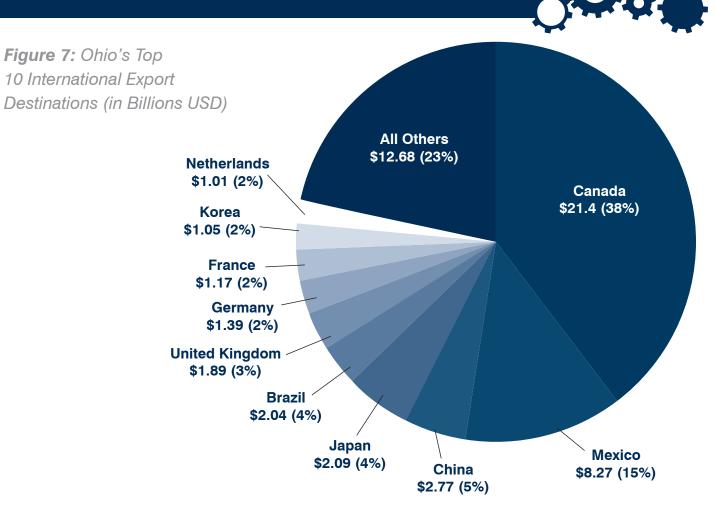
Rank	2022					
папк	State Exports		Top Export			
1	TX	\$487.4	Mineral Fuel, Oil, etc.			
2	CA	\$186.2	Electric Machinery			
3	LA	\$121.4	Mineral Fuel, Oil, etc.			
4	NY	\$109.5	Prec. Stones; Jewelry			
5	IL	\$78.7	Industrial Machinery			
6	FL	\$67.7	Electric Machinery			
7	MI	\$61.4	Vehicles and Parts			
8	WA	\$61.2	Aircraft and Parts			
9	ОН	\$56.8	Industrial Machinery			
10	IN	\$45.3	Pharmaceutical Products			

Source: Ohio Department of Development



OHIO MANUFACTURING AND THE

GLOBAL ECONOMY



Source: Ohio Department of Development

FACT:

In 2023, Ohio exported \$55.8 billion in goods to 210 countries and territories, a 1.8% decrease in value from 2022. For comparison, U.S. exports overall experienced a decrease of 2.2% from 2022 to 2023. Over half of Ohio's exports went to Canada and Mexico, as they usually do.



Table 22: Ohio's Top Manufactured Export Commodities

FACT:

- Industrial machinery again led Ohio's exports at 17.2% of the total in 2023 – valued at \$9.6 billion. Ohio was fifth among states in this category with 4.1% of the U.S. total.
- Ohio's top five export categories (industrial machinery, vehicles, aircraft, electric machinery, and plastics) accounted for 54.2% (\$30.3 billion) of state total exports.
- Ohio widened its national lead in exports of soaps, cleaning preparations, and waxes to 17.3% of U.S. total – and its national lead in paints, dyes, and putty to 9.3%.
- Cosmetics, perfumery, and essential oils exports increased 15.4% in 2023, bringing Ohio to second in the nation in that category.

		2023	2022		
Commodity	State Rank	Exported Goods (in Billions USD)	Percent of All Ohio Exports	Exported Goods (in Billions USD)	Percent of All Ohio Exports
Industrial Machinery, Including Computers	5	\$9.6	17.2%	\$8.7	15.4%
Vehicles and Parts	7	\$8.6	15.4%	\$8.4	14.8%
Aircraft and Parts	9	\$5.1	9.2%	\$4.8	8.4%
Electric Machinery; Sound Equip.; TV Equip.	15	\$3.5	6.4%	\$3.1	5.4%
Plastics and Articles Thereof	3	\$3.4	6.0%	\$3.4	6.0%
Optic / Photo / Medical Instruments	20	\$1.72	3.1%	\$1.76	3.1%
Cosmetics, Perfumery, Essential Oils, etc.	2	\$1.68	3.0%	\$1.45	2.6%
Iron and Steel Products	3	\$1.64	2.9%	\$1.7	2.9%
Iron and Steel	4	\$1.57	2.8%	\$1.48	2.6%
Pharmaceutical Products	12	\$1.5	2.7%	\$3.8	6.7%
Soap, Waxes, Lubricating Preparations, etc.	1	\$1.4	2.5%	\$1.3	2.3%
Mineral Fuel, Oil, etc.	17	\$1.2	2.2%	\$1.83	3.2%
Miscellaneous Chemical Products	11	\$1.1	2.1%	\$1.2	2.2%
Rubber and Articles Thereof	3	\$1.0	1.9%	\$1.1	1.9%
Total Exports (includes unlisted commodities)	10th	\$55.8	100.0%	\$56.8	100.0%

Source: Ohio Department of Development



ENVIRONMENT



Table 23: Solid Waste Reduction and Recycling by Supersector²

Year	Tons Reduced / Recycled by Supersector			% of Total Reduced / Recycled by Supersector		
	Residential/ Commercial	Industrial	Total	Residential/ Commercial	Industrial	Total
1990	2,260,000	2,186,000	4,446,000	19.4	38.2	25.6
1995	1,942,000	6,523,000	8,465,000	17.0	42.8	31.7
2000	2,712,535	12,199,869	14,912,404	20.0	65.6	46.3
2005	3,745,758	9,474,260	13,220,018	25.7	56.9	42.3
2010	3,500,240	8,985,171	12,485,411	27.4	51.4	41.3
2015	3,728,582	8,546,359	12,274,941	27.3	53.5	41.4
2020	4,386,564	6,550,058	10,936,622	30.0	52.6	40.4
2021	4,263,786	8,110,789	12,374,575	27.9	53.4	40.6
2022	4,552,735	6,623,750	11,176,485	29.0	44.9	36.7
2023	4,665,245	6,388,552	11,053,797	29.5	67.3	43.7

Source: Ohio Environmental Protection Agency

FACT:

Industry broadly continues to lead the way in solid waste reduction and recycling. The manufacturing sector is also an enormous consumer of recycled materials, including metals, glass, paper, and plastics, which drives demand for products from recycling systems in Ohio and across the United States.

Reduction and recycling include source reduction activities, reuse, recycling, composting and incineration. Ohio's 52 Solid Waste Management Districts (SWMDs) survey businesses yearly about the amount and type of materials being recycled. This yields a statewide picture of recycling trends and opportunities.

Since 2020, Ohio no longer sets a solid waste recycling goal for the industrial sector. As a result, some SWMDs have stopped surveying the sector, likely resulting in a decrease in material being reported. Year-to-year changes may vary based on economic factors – and on response rates to SMWD district surveys since reporting is voluntary. Consequently, the Ohio Environmental Protection Agency (EPA) generally focuses on trends over several years when evaluating changes in recycling activity rather than changes from one year to the next.

The Ohio EPA offers grants, technical assistance and recognition to businesses that want to increase recycling or develop markets for recycled products. Their online platform, the Ohio Materials Marketplace, provides Ohio businesses a venue to advertise and acquire scrap and by-product materials that might otherwise be destined for landfills.

² The OMA uses the term "supersector" to describe the large categories of "residential/commercial" and "industrial."



Table 24: Total Industrial Facility Emissions by Type and Year (in tons)

Y ear	Sulfur Dioxide (SO ₂)	Nitrogen Oxides (NO _x)	Particulate Matter	Organic Compounds	Carbon Monoxide (CO)
1980	2,659,612	690,195	174,250	169,515	329,700
2010	619,267	150,891	66,303	36,284	243,864
2019	96,862	80,094	21,963	35,463	101,753
2020	105,725	79,160	21,232	31,668	111,448
2021	106,965	77,271	22,176	32,365	137,674
2022	96,637	70,357	21,524	32,224	167,467
2023	66,356	61,221	20,892	30,144	122,133
% Change Over Time					
1980 - 2010	-76.7%	-78.1%	-61.9%	-78.6%	-26.0%
2010 - 2023	-89.3%	-59.4%	-68.5%	-16.9%	-49.9%

Table 25: Ohio Emissions Concentrations by Type and Year

Year	Ozone (O ₃) (in ppb)	Sulfur Dioxide (SO ₂) (in ppb)	Particulate Matter <2.5 μm (PM2.5) (in μg/m³)		
1982	115	24.07	19.70		
2012	91	5.25	12.31		
2019	72	1.81	11.93		
2020	76	2.14	10.79		
2021	75	2.74	12.68		
2022	76	1.04	11.00		
2023	75	1.93	28.70		
% Change Over Time					
1982 - 2012	-20.9%	-78.2%	-37.5%		
2012 - 2023	-17.6%	-63.2%	133.1%		

Source: Ohio Environmental Protection Agency

FACT:

In 2023, a major increase interrupted the long downward trend in particulate matter emissions in Ohio. This huge uptick likely reflects the Canadian wildfires that raged during the summer of that year.³

³Dinavahi, S. and Archer, C.L. Air quality in the U.S. during the 2023 wildfire season. Bull. of Atmos. Sci.& Technol. 6, 6 (2025). https://doi.org/10.1007/s42865-025-00093-2



ENVIRONMENT



Table 26: Total Industrial Release of 1988 Core Chemicals by Type and Year (in pounds)

Year	Air Emissions	Surface Water Discharges	Underground Injections	On-Site Land Releases	All Off-Site and On-Site Disposal and Other Releases	
1988	104,341,351	1,043,905	11,538,544	29,291,941	188,489,950	
1999	37,672,554	458,895	12,077,836	19,036,238	113,789,099	
2019	15,045,485	184,353	8,059,626	10,638,310	56,048,641	
2020	13,057,541	193,397	5,208,933	8,900,372	45,355,421	
2021	13,008,666	159,460	10,285,056	8,948,769	49,189,441	
2022	12,428,706	144,182	4,958,410	6,908,577	44,297,317	
2023	11,312,245	157,768	3,498,532	7,999,246	46,846,548	
Percentage Change Over Time						
1988 - 2023	-89.2%	-84.9%	-69.7%	-72.7%	-75.1%	
1999 - 2023	-70.0%	-65.6%	-71.0%	-58.0%	-58.8%	

Table 27: Total Industrial Release of 2001 Core Chemicals by Type and Year (in pounds)

Year	Air Emissions	Surface Water Discharges	Underground Injections	On-Site Land Releases	All Off-Site and On-Site Disposal and Other Releases		
2001	119,894,999	10,006,806	31,985,954	66,020,183	279,328,530		
2019	34,602,668	8,354,387	16,208,245	17,028,051	104,619,249		
2020	30,856,540	7,552,567	12,013,728	14,434,555	92,181,026		
2021	31,053,441	5,943,112	18,115,096	14,894,343	95,941,280		
2022	30,293,349	5,909,175	12,000,640	12,454,240	88,346,375		
2023	25,294,491	6,427,207	10,932,268	13,011,153	86,056,243		
	Percentage Change Over Time						
2001 - 2023	-78.9%	-35.8%	-65.8%	-80.3%	-69.2%		

Source: U.S. Environmental Protection Agency

FACT:

Ohio's toxic releases have been on a downward trend across the board for decades.

The U.S. Environmental Protection Agency requires an annual Toxic Release Inventory from facilities. Chemicals can be added or delisted in any year. Thus, base year core chemical amounts vary.



SOURCES AND METHODOLOGY

Most tables and figures in this publication are derived from publicly available datasets and reports. All sources used were the most recent available when creating the final draft of this publication. Some sources were used to develop multiple tables and figures by sorting at different geographic or sectoral levels, and these sources are noted below.

Sectors, Subsectors, and Industries

Throughout this document, we use terms like "industry" and "sector" frequently. These terms are based on the North American Industry Classification System (NAICS) from the U.S. Department of Commerce's Census Bureau. NAICS uses a hierarchical structure, with national industries at the lowest level (6 digits) nesting all the way up to sectors at the highest level (2 digits). Most of the analysis within this document is conducted at the sector and subsector level. When discussing "sectors", the OMA is referring to the 19 nongovernment 2-digit sectors described in the NAICS. When describing "subsectors", the OMA uses the 21 3-digit manufacturing subsectors described in the NAICS. However, we combine the following subsectors to create a set of 17 manufacturing subsectors:

Food and Beverages comprises two combined subsectors: Food Manufacturing (NAICS 311) and Beverage and Tobacco Product Manufacturing (NAICS 312). Textiles, Apparel, and Leather comprises four combined subsectors: Textile Mills (NAICS 313), Textile Product Mills (NAICS 314), Apparel Manufacturing (NAICS 315), and Leather and Allied Product Manufacturing (NAICS 316).

Sources Used for Multiple Tables

Ohio Department of Development, Office of Research, Private Investment Survey

• Tables 3, 4, 5

Ohio Department of Development, Office of Research, Ohio Export Report

• Tables 21, 22; Figure 7

U.S. Department of Commerce, Bureau of Economic Analysis, SAGDP2 Gross domestic product (GDP) by industry in current dollars

• Tables 1, 2; Figure 1

U.S. Department of Commerce, Bureau of the Census, County Business Patterns

• Tables 13,14; Figures 2, 4

U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages

• Tables 6, 7, 8, 9, 10, 11, 15, 16, 17, 18, 19, 20; Figures 3, 5, 6

Table 23: Solid Waste Reduction and Recycling by Supersector

Annual District Reports can be accessed via the Ohio Environmental Protection Agency's (EPA's) Office of Environmental Innovation Solid Waste Management page. Data for this table are obtained from the relevant year's SWMD Disposal, Recycling, and Generation Report on the page below:

 $\underline{\text{https://epa.ohio.gov/divisions-and-offices/environmental-innovation/solid-waste-management-planning/annual-district-reports}$

Table 24: Total Industrial Facility Emissions by Type and Year

Facility emissions for 1980 were derived from a 1995 Ohio EPA publication, "Emission Trends Report for Stationary Air Contaminant Sources within the State of Ohio 1980-1990." Emissions data for 2010 and later are calculated from information provided to Ohio EPA from Title V and Synthetic Minor permitted facilities and can be accessed via the Ohio EPA Emissions Inventory System (EIS) at:

https://epa.ohio.gov/divisions-and-offices/air-pollution-control/reports-and-data/download-eis-data-and-reports

It is difficult to compare historical and current figures due to changes in how the emissions data are reported. Particulate matter (PM) emissions in 1980 accounted for filterable particulate matter only. PM emissions from 2010 onward accounted for filterable and condensable particulate matter. The PM reduction from 1980 emissions would have been significantly larger if the condensable fraction was inventoried. Only volatile hydrocarbon compounds (VOCs) were included in the 1980 inventory. Both VOCs and organic compounds (OCs) were inventoried from 2010 onward; VOCs are a fraction of OCs. For illustration purposes, the 1980 report assumed VOCs emissions and OC emissions were equal. The OC reduction from 1980 emissions would have been significantly larger if the OC emissions were inventoried alongside the VOC emissions. The number of facilities included in the Ohio EPA's EIS varies from 1980 to 2010 and later. In 1980, only large emission units were inventoried. In 2010 and later, emission units with greater than one ton for any of the criteria pollutants were inventoried.

Table 25: Ohio Emissions Concentrations by Type and Year

Ozone reported is the highest annual 4th-highest daily maximum eight-hour concentration of O₃ across Ohio's O₃ monitoring sites. Sulfur dioxide reported is the highest annual average concentration of SO₂ across Ohio's SO₂ monitoring sites. Particulate matter of less than 2.5 microns reported is the highest annual average concentration of PM2.5 across Ohio's PM2.5 monitoring sites. These measures can be found in the Ohio EPA's Annual Air Quality Reports, available by following the link below:

https://epa.ohio.gov/divisions-and-offices/air-pollution-control/reports-and-data/air-monitoring

Table 26 (and 27): Total Industrial Release of 1988 (and 2001) Core Chemicals by Type and Year

Data for these tables can be accessed via the U.S. EPA's Toxics Release Inventory (TRI) Tracker by following the link below:

https://enviro.epa.gov/triexplorer/tri_release.chemical





The mission of The Ohio Manufacturers' Association is to protect and grow Ohio manufacturing.

For more information about the services and activities of the OMA, contact us at **(800) 662-4463** or **oma@ohiomfg.com** or visit **ohiomfg.com**.

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