

Cleveland, OH

Advanced industries employ

94,396

full-time workers. (2015)

These direct jobs supports an additional

75,520

indirect jobs in other industries in
the region.

Advanced industries produce

\$14.1

billion dollars in output in the region.
(2015, 2009 Chained)

Advanced industries pay, on average

\$80,605

dollars per year (2015).

Advanced industries directly
account for

8.9%

of all jobs in the region.

This employment share is

#41

among all large metros.

This accounts for

13.3%

of all output in the region (2015).

This compares to average pay of

\$51,744

for all industries (2015).

Advanced industry annual average growth, 2013-2015

OUTPUT

RANK:
#94

2.70%

JOBS

RANK:
#87

2.46%

-0.63%

Cleveland, OH

U.S.

-0.13%

Cleveland, OH

U.S.

What are Advanced Industries?

The Metropolitan Policy Program at Brookings defines advanced industries as those that: 1) Spend at least \$450 per worker per year on R&D and 2) employ at least 20 percent of their workforce in STEM-intensive occupations. The definition identifies 50 4-digit NAICS industries across the manufacturing, energy, and services sectors that together constitute the advanced industries super-sector.

Why do Advanced Industries Matter?

Advanced industries encompass the nation's "tech" sector at its broadest and most consequential. They represent a sizable economic anchor for the U.S. economy and have led the post-recession employment recovery. Their competitiveness and growth are prerequisites for any future broadly shared prosperity. As such, the sector encompasses the country's best shot at supporting innovative, inclusive, and sustainable growth. Advanced industries are present in nearly every U.S. region, but the sector's geography is uneven.

For More Information

VIEW THE FULL REPORT

www.brookings.edu/advancedindustries

SEE THE INTERACTIVE

www.brookings.edu/advancedindustries

FOLLOW US ON TWITTER

@BrookingsMetro | @MarkMuro1 | #AdvIndustries

DATA NOTES

All figures reflect Brookings analysis of data from Moody's Analytics.

Cleveland, OH

Twenty-Five Largest Advanced Industries (2015)

There are 14 advanced industries in Cleveland, OH with LQs over 1.5. LQs over 1.5 indicate specialization †

Industry 4-Digit NAICS Code	Industry Title	Industry Employment (2015)	Industry Location Quotient (LQ) † 2015	Industry Share of Total Advanced Industries Employment (2015)	Industry Employment Annual Growth		Industry Share of Total Advanced Industries Output (2015)	Industry Output Annual Growth	
					2010- 2013	2013- 2015		2010- 2013	2013- 2015
5415	Computer Systems Design	12,470	0.91	13.2%	6.7%	3.6%	11.6%	4.4%	7.0%
5413	Engineering	8,870	0.88	9.4%	2.3%	-1.4%	6.9%	0.6%	-1.7%
5416	Management Consulting	8,080	0.88	8.6%	7.9%	4.4%	6.9%	4.6%	3.2%
3363	Motor Vehicle Parts	7,610	1.88	8.1%	4.2%	0.7%	6.0%	9.3%	1.1%
3339	General Purpose Machinery	6,370	3.32	6.7%	6.3%	2.3%	4.8%	10.3%	-0.7%
3345	Precision Instruments	3,880	1.35	4.1%	0.3%	9.8%	2.7%	9.7%	-3.1%
3391	Medical Equipment & Supplies	3,700	1.68	3.9%	4.2%	-0.8%	2.4%	-3.5%	0.4%
3311	Iron & Steel Products	3,590	5.61	3.8%	11.7%	-4.4%	3.0%	16.7%	-7.8%
3364	Aircraft Products & Parts	2,980	0.85	3.2%	1.8%	4.8%	5.4%	12.6%	3.0%
3353	Electrical Equipment	2,860	2.78	3.0%	0.0%	-2.2%	2.9%	-3.6%	-5.3%
3399	Misc. Manufacturing	2,810	1.39	3.0%	-1.0%	-1.3%	1.2%	-8.4%	2.8%
3251	Basic Chemicals	2,790	2.61	3.0%	0.9%	3.8%	5.4%	-6.9%	2.5%
3315	Foundries	2,600	2.91	2.7%	-3.9%	-0.6%	1.7%	2.3%	-4.8%
5417	R&D Services	2,170	0.46	2.3%	0.9%	-1.1%	2.2%	4.4%	-1.3%
3361	Motor Vehicles	1,960	1.33	2.1%	2.8%	0.4%	1.9%	7.3%	-5.1%
2211	Power Generation & Supply	1,960	0.69	2.1%	-2.2%	-3.1%	8.3%	7.0%	-5.8%
3359	Misc. Electrical Equipment	1,940	2.07	2.0%	9.0%	-2.3%	1.9%	2.8%	-2.0%
3252	Resins & Synthetic Rubbers	1,630	2.41	1.7%	1.1%	-1.6%	2.7%	-6.3%	-3.6%
3259	Misc. Chemicals	1,480	2.53	1.6%	1.4%	-4.1%	1.7%	-9.1%	-6.5%
3344	Semiconductors	1,440	0.54	1.5%	2.4%	-11.1%	1.3%	5.3%	-3.3%
3279	Stone & Mineral Products	1,390	2.61	1.5%	9.5%	1.2%	1.2%	14.3%	-0.1%
5182	Data Processing & Hosting	1,180	0.55	1.3%	0.0%	8.4%	1.1%	5.4%	16.2%
3333	Commercial & Service Machinery	1,140	1.78	1.2%	5.6%	4.7%	0.9%	6.6%	0.5%
3336	Engine & Power Equipment	1,040	1.42	1.1%	1.8%	-2.6%	0.7%	3.4%	-3.6%
3352	Household Appliances	1,010	2.28	1.1%	13.5%	-1.4%	0.8%	8.6%	-4.0%
IFG	Advanced industries manufacturing	56,620	1.41	60.0%	2.9%	-1.1%	57.6%	1.6%	-2.1%
	Advanced industries energy	2,030	0.45	2.1%	-2.2%	-3.3%	8.4%	7.0%	-5.5%
	Advanced industries services	35,750	0.75	37.9%	4.6%	1.8%	34.0%	3.6%	3.4%
ADVANCED INDUSTRIES TOTAL		94,400	1.02	100.0%	3.4%	-0.1%	100.0%	2.7%	-0.6%

† Location quotients are a measure of specialization for an industry using employment. A LQ of over 1 indicates that an industry employs more workers, as a share of total employment, than the nation as a whole.