AMERICA'S ADVANCED INDUSTRIES



Indiana

Advanced industries employ

365,425

full-time workers. (2015)

These direct jobs supports an additional

292,340

indirect jobs in other industries in the region.

Advanced industries directly account for

11.7%

of all jobs in the region.

This employment share is

#2

among all states.

Advanced industries produce

\$74.3

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

This accounts for

25.4%

of all output in the region (2015).

Advanced industries pay, on average

This compares to average pay of

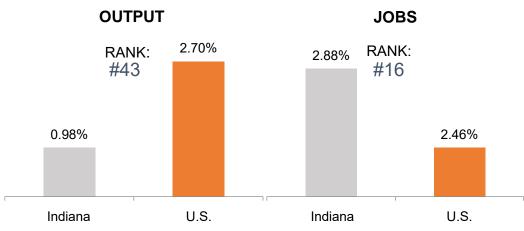
\$71,786

dollars per year (2015).

\$44,111

for all industries (2015).

Advanced industry annual average growth, 2013-2015



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

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DATA NOTES

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

Indiana Twenty-Five Largest Advanced Industries (2015)

There are 16 advanced industries in Indiana with LQs over 1.5. LQs over 1.5 indicate specialization †

Industry 4-Digit NAICS	Industry Title	Industry Employment	Industry Location Quotient	Industry Share of Total Advanced Industries	Industry Employment Annual Growth		Advanced	Industry Output Annual Growth	
Code		(2015)	(LQ) † 2015	Employment (2015)	2010- 2013	2013- 2015	Industries Output (2015)	2010- 2013	2013- 2015
3363	Motor Vehicle Parts	60,330	5.03	16.5%	6.6%	3.8%	12.4%	4.5%	3.6%
3362	2 Motor Vehicle Body & Trailers		11.09	9.7%	8.9%	6.2%	6.1%	4.1%	7.6%
5415	Computer Systems Design	24,250	0.60	6.6%	7.1%	8.0%	4.0%	11.3%	9.6%
3311	Iron & Steel Products	19,490	10.31	5.3%	1.9%	0.1%	4.7%	9.5%	-5.3%
3391	Medical Equipment & Supplies	18,270	2.80	5.0%	1.6%	1.0%	3.6%	-21.0%	5.8%
5413	Engineering	18,260	0.61	5.0%	-2.2%	2.4%	2.7%	-3.2%	0.9%
3254	Pharmaceuticals	17,470	2.95	4.8%	-3.2%	0.5%	20.9%	-4.0%	-2.2%
3361	Motor Vehicles	15,920	3.65	4.4%	2.3%	5.1%	4.7%	0.7%	4.2%
5416	Management Consulting	14,890	0.55	4.1%	6.4%	5.8%	2.3%	3.6%	4.9%
3336	Engine & Power Equipment	13,380	6.15	3.7%	7.1%	4.3%	2.3%	4.5%	-0.5%
3339	General Purpose Machinery	11,640	2.05	3.2%	7.8%	5.2%	1.8%	5.3%	2.2%
2211	Power Generation & Supply	10,910	1.30	3.0%	-0.7%	-0.3%	5.3%	-2.5%	-5.5%
3399	Misc. Manufacturing	10,410	1.74	2.8%	1.8%	3.2%	1.5%	-20.3%	6.1%
3315	Foundries	9,920	3.76	2.7%	2.6%	4.4%	1.6%	8.3%	-1.2%
3345	Precision Instruments	6,670	0.79	1.8%	-1.6%	1.7%	1.4%	6.2%	3.0%
3364	Aircraft Products & Parts	6,340	0.61	1.7%	1.7%	-5.3%	2.3%	2.0%	-2.9%
6215	Medical and Diagnostic Laboratories	5,680	1.03	1.6%	-0.7%	-0.5%	0.7%	-0.3%	0.2%
3313	Aluminum Products	5,570	4.40	1.5%	3.2%	2.4%	1.0%	8.6%	-2.5%
5417	R&D Services	4,660	0.33	1.3%	5.2%	-0.4%	1.0%	6.4%	-0.1%
3344	Semiconductors	3,960	0.51	1.1%	1.0%	-1.3%	0.9%	10.7%	2.6%
3279	Stone & Mineral Products	3,520	2.24	1.0%	9.1%	2.7%	0.4%	11.6%	-0.4%
3366	Ships & Boats	3,350	1.17	0.9%	13.9%	5.0%	0.8%	13.8%	7.2%
3241	Petroleum & Coal Products	3,220	1.38	0.9%	0.7%	-4.4%	3.5%	-7.2%	9.1%
3353	Electrical Equipment	3,120	1.03	0.9%	1.8%	1.3%	0.4%	-2.6%	-1.0%
5182	Data Processing & Hosting	3,090	0.49	0.8%	2.7%	8.4%	0.5%	12.1%	6.9%
1FG	Advanced industries manufacturing	276,670	2.34	75.7%	3.6%	2.7%	81.6%	-1.0%	0.9%
	Advanced industries energy	11,140	0.83	3.0%	-0.5%	-0.3%	5.4%	-2.4%	-5.6%
	Advanced industries services	77,610	0.55	21.2%	3.0%	4.0%	13.1%	3.9%	4.6%
	ADVANCED INDUSTRIES TOTAL	365,430	1.34	100.0%	3.4%	2.9%	100.0%	-0.5%	1.0%

[†] 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.

AMERICA'S ADVANCED INDUSTRIES



Indianapolis, IN

Advanced industries employ

96,698

full-time workers. (2015)

These direct jobs supports an additional

77,360

indirect jobs in other industries in the region.

Advanced industries produce

\$23.6

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

223 6

23.0%

. of all output in the region (2015).

This accounts for

Advanced industries directly

This employment share is

account for

Advanced industries pay, on average

This compares to average pay of

\$89,394

dollars per year (2015).

\$49,321

9.4%

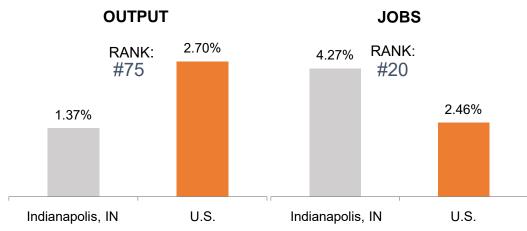
#34

of all jobs in the region.

among all large metros.

for all industries (2015).

Advanced industry annual average growth, 2013-2015



What are Advanced Industries?

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Why do Advanced Industries Matter?

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Indianapolis, IN
Twenty-Five Largest Advanced Industries (2015)

There are 6 advanced industries in Indianapolis, IN with LQs over 1.5. LQs over 1.5 indicate specialization †

There a	re o advanced industries in indianapons, na with	Les over 1.5.	LQ3 OVE	1.5 maicate	Specializa	ation i			
Industry 4-Digit NAICS	Industry Title	Industry Employment	Industry Location Quotient	Industry Share of Total Advanced Industries	Employment Annual Growth		Advanced	Industry Output Annual Growth	
Code		(2015)	(LQ) † 2015	Employment (2015)	2010- 2013	2013- 2015	Industries Output (2015)	2010- 2013	2013- 2015
5415	Computer Systems Design	15,940	1.19	16.5%	9.8%	8.9%	8.4%	13.8%	9.4%
3254	Pharmaceuticals	13,710	7.01	14.2%	-3.6%	0.8%	44.4%	-4.6%	-1.0%
3363	Motor Vehicle Parts	9,050	2.29	9.4%	4.2%	4.1%	5.1%	1.3%	2.8%
5413	Engineering	8,920	0.90	9.2%	-0.9%	2.5%	4.0%	-2.0%	1.0%
5416	Management Consulting	8,720	0.97	9.0%	6.9%	8.2%	4.3%	5.0%	5.5%
3364	Aircraft Products & Parts	3,370	0.98	3.5%	-2.9%	-8.2%	3.7%	-0.9%	-4.9%
6215	Medical and Diagnostic Laboratories	3,110	1.71	3.2%	-1.6%	2.7%	1.0%	-1.1%	1.1%
2211	Power Generation & Supply	3,060	1.10	3.2%	-2.5%	2.4%	4.7%	-5.6%	-1.0%
5417	R&D Services	2,840	0.61	2.9%	8.8%	6.1%	1.4%	13.8%	1.3%
3339	General Purpose Machinery	2,560	1.37	2.6%	4.1%	3.7%	1.5%	3.2%	2.7%
5182	Data Processing & Hosting	2,340	1.12	2.4%	11.0%	27.2%	1.2%	15.8%	19.6%
3391	Medical Equipment & Supplies	2,250	1.04	2.3%	3.7%	-1.4%	1.7%	-18.9%	7.0%
3399	Misc. Manufacturing	1,970	1.00	2.0%	5.6%	4.8%	0.8%	-17.2%	8.7%
3345	Precision Instruments	1,950	0.70	2.0%	-2.6%	0.9%	1.2%	2.2%	5.1%
5191	Web Search Portals and Internet Publishing	1,800	1.06	1.9%	2.1%	176.3%	0.8%	0.2%	150.1%
5112	Software Products	1,740	0.75	1.8%	11.7%	1.0%	1.9%	14.3%	-10.1%
3361	Motor Vehicles	1,410	0.98	1.5%	-3.7%	-3.1%	1.0%	-10.4%	2.0%
3315	Foundries	1,220	1.40	1.3%	4.1%	1.7%	0.7%	9.7%	0.7%
3253	Pesticides & Fertilizers	1,170	4.46	1.2%	4.2%	0.1%	2.9%	1.8%	-0.4%
3279	Stone & Mineral Products	890	1.71	0.9%	6.4%	-0.1%	0.4%	13.3%	1.1%
3251	Basic Chemicals	870	0.83	0.9%	2.8%	5.1%	1.9%	5.1%	-0.4%
3336	Engine & Power Equipment	840	1.16	0.9%	-7.7%	-2.3%	0.6%	-8.9%	-5.1%
5172	Wireless Telecom Carriers	670	0.72	0.7%	3.6%	-19.7%	0.7%	-3.1%	16.1%
3346	Magnetic & Optical Media	600	5.11	0.6%	5.0%	8.5%	0.3%	12.0%	-8.9%
3341	Computer Equipment	530	0.46	0.5%	8.0%	2.3%	0.5%	14.7%	4.4%
G	Advanced industries manufacturing	47,220	1.21	48.8%	0.2%	0.9%	71.2%	-3.6%	0.0%
	Advanced industries energy	3,080	0.70	3.2%	-2.6%	2.4%	4.7%	-5.6%	-1.0%
	Advanced industries services	46,400	0.99	48.0%	5.5%	8.3%	24.1%	7.2%	6.2%
	ADVANCED INDUSTRIES TOTAL	96,700	1.07	100.0%	2.3%	4.3%	100.0%	-1.7%	1.4%

[†] 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.

Advanced Industries sectors aligned with CICP initiatives

AgriNovus Indiana	BioCrossroads	Conexus Indiana		Energy Systems Network	TechPoint	
Agriculture, Construction & Mining Machinery	Basic Chemicals	Aerospace Products and Parts	Foundaries	Electric Power Generation, Trans & Distribution	Mgmt, Scientific & Technical Consulting	
Basic Chemicals	Other Chemical Products	Agriculture, Construction & Mining Machinery	Other Miscellaneous Machinery	Oil and Gas Extraction	Cable and Other Subscription Programming	
Other Chemical Products	Pharmaceuticals and Medicine	Aluminum Production & Processing	Industrial Machinery		Computer Systems Design	
Pesticides, Fertilizers & Other Agricultural Chemicals	Medical Equipment & Supplies	Audio & Video Equipment	Iron, Steel & Ferroalloys		Data Processing and Hosting	
Mgmt, Scientific & Technical Consulting	Mgmt, Scientific & Technical Consulting	Commercial & Service Industry Machinery	Motor Vehicle Bodies & Trailers		Other Information Services	
Scientific Research and Development	Scientific Research and Development	Communications Equipment	Motor Vehicle Parts		Software Publishers	
		Computers & Peripheral Equipment	Motor Vehicles		Wireless Telecommunication Carriers	
		Electrical Equipment	Other Electrical Equipment & Components			
		Engines, Turbines & Power Trans. Equip	Other General Purpose Machinery			
		Other Transportation Equipment				