

Philadelphia, PA-NJ-DE

Advanced industries employ

246,917

full-time workers. (2015)

These direct jobs supports an additional

197,530

indirect jobs in other industries in the region.

Advanced industries produce

\$45.7

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

Advanced industries pay, on average

\$108,131

dollars per year (2015).

Advanced industries directly account for

8.6%

of all jobs in the region.

This employment share is

#51

among all large metros.

This accounts for

13.9%

of all output in the region (2015).

This compares to average pay of

\$60,017

for all industries (2015).

Advanced industry annual average growth, 2013-2015

OUTPUT

JOBS

RANK:
#66

2.70%

RANK:
#78

2.46%

1.63%

0.40%

Philadelphia, PA-NJ-DE

U.S.

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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

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DATA NOTES

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

Philadelphia, PA-NJ-DE

Twenty-Five Largest Advanced Industries (2015)

There are 7 advanced industries in Philadelphia, PA-NJ-DE 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	41,630	1.12	16.9%	3.0%	2.3%	13.8%	5.6%	5.4%
5416	Management Consulting	33,140	1.33	13.4%	4.6%	-0.4%	10.7%	3.0%	2.0%
5413	Engineering	28,630	1.04	11.6%	0.7%	1.2%	8.2%	0.4%	1.9%
5417	R&D Services	25,860	2.01	10.5%	0.7%	-0.7%	9.9%	2.5%	0.1%
3254	Pharmaceuticals	15,010	2.76	6.1%	-4.3%	-0.6%	11.9%	-10.4%	-0.2%
3345	Precision Instruments	8,410	1.08	3.4%	-2.6%	-1.2%	3.9%	-0.6%	3.5%
2211	Power Generation & Supply	8,360	1.08	3.4%	0.9%	1.6%	8.7%	-0.6%	-3.2%
5182	Data Processing & Hosting	6,560	1.13	2.7%	-4.2%	-1.7%	2.2%	-7.3%	6.7%
3364	Aircraft Products & Parts	6,520	0.68	2.6%	0.4%	-9.4%	2.3%	6.2%	-9.2%
6215	Medical and Diagnostic Laboratories	5,960	1.18	2.4%	-3.6%	4.0%	1.2%	-4.0%	4.4%
3391	Medical Equipment & Supplies	5,280	0.88	2.1%	0.1%	-3.1%	1.7%	-5.5%	2.5%
3251	Basic Chemicals	5,260	1.81	2.1%	1.2%	10.1%	3.1%	-10.7%	7.3%
3399	Misc. Manufacturing	4,420	0.80	1.8%	0.8%	-0.2%	1.0%	-2.3%	1.9%
3344	Semiconductors	4,350	0.61	1.8%	12.0%	2.1%	1.6%	16.1%	1.1%
3339	General Purpose Machinery	3,960	0.76	1.6%	-0.5%	1.6%	0.9%	0.9%	0.8%
3342	Communications Equipment	3,660	2.13	1.5%	-7.8%	-6.9%	1.0%	1.0%	-4.6%
3363	Motor Vehicle Parts	3,570	0.32	1.4%	-5.8%	5.0%	1.0%	-3.5%	2.9%
5191	Web Search Portals and Internet Publishing	3,350	0.71	1.4%	12.2%	3.1%	0.9%	15.4%	13.5%
5112	Software Products	3,270	0.50	1.3%	-6.0%	11.7%	2.6%	-3.9%	10.6%
3241	Petroleum & Coal Products	2,910	1.36	1.2%	-2.3%	-0.8%	2.2%	2.9%	8.2%
3259	Misc. Chemicals	2,000	1.26	0.8%	-3.2%	5.8%	0.9%	-12.8%	-1.5%
3341	Computer Equipment	1,760	0.56	0.7%	-9.3%	1.1%	0.8%	-3.6%	6.8%
3252	Resins & Synthetic Rubbers	1,670	0.91	0.7%	1.1%	2.2%	0.9%	-14.6%	-0.9%
3359	Misc. Electrical Equipment	1,660	0.65	0.7%	1.8%	5.1%	0.5%	-8.9%	12.6%
3366	Ships & Boats	1,560	0.60	0.6%	2.4%	5.8%	0.4%	10.7%	9.9%
IFG	Advanced industries manufacturing	86,340	0.79	35.0%	-1.8%	-0.5%	37.8%	-5.1%	0.9%
	Advanced industries energy	8,570	0.70	3.5%	0.8%	1.9%	9.1%	-0.2%	-2.5%
	Advanced industries services	152,010	1.17	61.6%	1.7%	0.9%	53.1%	2.3%	2.9%
	ADVANCED INDUSTRIES TOTAL	246,920	0.98	100.0%	0.4%	0.4%	100.0%	-1.0%	1.6%

† 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.