

San Francisco, CA

Advanced industries employ

347,802

full-time workers. (2015)

These direct jobs supports an additional

278,240

indirect jobs in other industries in the region.

Advanced industries produce

\$88.1

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

Advanced industries pay, on average

\$158,493

dollars per year (2015).

Advanced industries directly account for

15.3%

of all jobs in the region.

This employment share is

#4

among all large metros.

This accounts for

25.9%

of all output in the region (2015).

This compares to average pay of

\$85,272

for all industries (2015).

Advanced industry annual average growth, 2013-2015

OUTPUT

JOB

9.00%

RANK:
#3

2.70%

7.92%

RANK:
#2

2.46%

San Francisco, CA

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.

San Francisco, CA

Twenty-Five Largest Advanced Industries (2015)

There are 16 advanced industries in San Francisco, CA 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	96,210	3.26	27.7%	12.1%	12.4%	20.5%	13.8%	16.1%
5416	Management Consulting	40,970	2.07	11.8%	8.3%	2.9%	7.9%	3.9%	7.9%
5417	R&D Services	36,810	3.60	10.6%	4.7%	2.8%	8.8%	5.3%	9.0%
5413	Engineering	30,320	1.39	8.7%	0.6%	5.2%	4.9%	-1.6%	7.9%
5191	Web Search Portals and Internet Publishing	20,930	5.55	6.0%	37.6%	18.3%	9.2%	51.3%	10.1%
5112	Software Products	20,870	4.05	6.0%	6.0%	6.4%	11.0%	8.5%	10.3%
3254	Pharmaceuticals	14,710	3.41	4.2%	1.9%	9.8%	9.3%	5.2%	7.7%
3341	Computer Equipment	8,610	3.43	2.5%	5.0%	11.3%	4.0%	13.7%	9.8%
5182	Data Processing & Hosting	8,090	1.75	2.3%	12.3%	27.0%	1.6%	2.2%	23.0%
3345	Precision Instruments	7,820	1.26	2.2%	3.2%	2.1%	1.9%	8.8%	0.1%
3344	Semiconductors	7,640	1.34	2.2%	-1.8%	-3.4%	2.3%	5.7%	0.2%
3391	Medical Equipment & Supplies	5,520	1.16	1.6%	1.5%	-2.6%	1.1%	-0.9%	-0.8%
3241	Petroleum & Coal Products	4,670	2.75	1.3%	-3.3%	-10.4%	5.3%	-17.2%	-4.2%
2211	Power Generation & Supply	4,660	0.76	1.3%	1.8%	95.1%	0.9%	-7.0%	49.6%
6215	Medical and Diagnostic Laboratories	4,160	1.03	1.2%	2.6%	0.9%	0.4%	2.6%	-2.0%
5152	Cable and Other Subscription Programming	3,620	3.77	1.0%	-11.6%	4.6%	2.4%	-2.6%	5.4%
3332	Industrial Machinery	3,320	1.90	1.0%	3.0%	2.9%	0.5%	5.5%	-1.1%
3361	Motor Vehicles	2,510	0.79	0.7%	-13.2%	155.1%	0.9%	-5.0%	54.0%
5172	Wireless Telecom Carriers	2,440	1.17	0.7%	-1.3%	5.6%	1.5%	4.4%	21.8%
3399	Misc. Manufacturing	2,120	0.49	0.6%	-2.7%	-5.5%	0.3%	-6.7%	-4.4%
3342	Communications Equipment	2,070	1.51	0.6%	-3.1%	-14.4%	0.7%	4.4%	-5.9%
5179	Other telecommunications	1,930	1.53	0.6%	-32.8%	-11.5%	1.5%	-28.6%	12.9%
3366	Ships & Boats	1,790	0.86	0.5%	0.4%	43.0%	0.3%	19.5%	65.6%
3364	Aircraft Products & Parts	1,730	0.23	0.5%	4.1%	23.4%	0.1%	-20.4%	42.7%
3315	Foundries	1,720	0.90	0.5%	1.4%	-5.6%	0.1%	11.2%	-9.0%
IFG	Advanced industries manufacturing	76,370	0.88	22.0%	0.5%	5.0%	28.9%	-1.8%	3.7%
	Advanced industries energy	4,900	0.50	1.4%	-0.3%	74.3%	1.2%	-6.3%	6.3%
	Advanced industries services	266,540	2.58	76.6%	7.1%	8.2%	69.8%	8.2%	11.5%
	ADVANCED INDUSTRIES TOTAL	347,800	1.74	100.0%	5.3%	7.9%	100.0%	4.3%	9.0%

† 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.