

## West Virginia

Advanced industries employ

**46,387**

full-time workers. (2015)

These direct jobs supports an additional

**37,110**

indirect jobs in other industries in the region.

Advanced industries produce

**\$8.7**

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

Advanced industries pay, on average

**\$69,910**

dollars per year (2015).

Advanced industries directly account for

**5.8%**

of all jobs in the region.

This employment share is

**#45**

among all states.

This accounts for

**13.1%**

of all output in the region (2015).

This compares to average pay of

**\$37,936**

for all industries (2015).

Advanced industry annual average growth, 2013-2015

### OUTPUT

2.88%

RANK:  
#20

2.70%

West Virginia

U.S.

### JOBS

RANK:  
#47

2.46%

-0.40%

West Virginia

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.

# West Virginia

## Twenty-Five Largest Advanced Industries (2015)

There are 9 advanced industries in West Virginia 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
5413	Engineering	4,570	0.60	9.9%	-1.4%	0.2%	5.0%	-1.3%	-0.3%
2211	Power Generation & Supply	4,040	1.88	8.7%	-4.3%	-3.8%	8.5%	-16.3%	-11.0%
3252	Resins & Synthetic Rubbers	3,500	6.86	7.5%	6.1%	-1.0%	9.1%	-1.4%	-3.0%
5415	Computer Systems Design	3,480	0.34	7.5%	4.0%	-0.2%	3.9%	4.7%	-0.5%
5416	Management Consulting	3,220	0.47	7.0%	9.7%	-0.6%	3.7%	8.1%	-0.5%
3251	Basic Chemicals	3,110	3.85	6.7%	-5.1%	0.4%	9.0%	-11.4%	-2.8%
2111	Oil & Gas Extraction	2,750	2.63	5.9%	2.8%	6.1%	20.1%	27.7%	34.8%
3363	Motor Vehicle Parts	2,310	0.76	5.0%	12.2%	6.6%	4.3%	26.2%	5.7%
3311	Iron & Steel Products	2,030	4.21	4.4%	-0.9%	-3.0%	3.5%	30.1%	-5.7%
3364	Aircraft Products & Parts	1,950	0.74	4.2%	-4.9%	-2.4%	6.4%	9.5%	-1.2%
5417	R&D Services	1,560	0.43	3.4%	0.5%	-1.0%	2.4%	2.8%	0.3%
3313	Aluminum Products	1,430	4.42	3.1%	-0.6%	3.1%	1.9%	27.9%	0.8%
3254	Pharmaceuticals	1,200	0.79	2.6%	0.0%	1.5%	4.5%	-5.9%	0.5%
3271	Clay Product and Refractory Manufacturing	1,120	5.24	2.4%	2.3%	-2.9%	1.1%	3.3%	-4.6%
5182	Data Processing & Hosting	1,050	0.65	2.3%	-0.7%	4.9%	1.2%	0.1%	6.9%
3336	Engine & Power Equipment	1,040	1.88	2.2%	4.4%	-0.9%	0.9%	5.0%	-1.5%
3345	Precision Instruments	860	0.40	1.9%	0.1%	-3.1%	1.1%	6.0%	3.2%
3253	Pesticides & Fertilizers	820	4.08	1.8%	0.0%	1.6%	2.1%	-7.7%	0.6%
3391	Medical Equipment & Supplies	800	0.48	1.7%	-1.7%	-3.7%	0.8%	-22.8%	-3.8%
6215	Medical and Diagnostic Laboratories	780	0.55	1.7%	-3.0%	6.6%	0.7%	-2.9%	7.5%
3241	Petroleum & Coal Products	610	1.02	1.3%	-8.8%	-3.7%	3.3%	-5.5%	5.7%
3331	Agri., Constr., Mining Machinery	450	0.35	1.0%	3.9%	-0.2%	0.4%	4.2%	2.2%
3361	Motor Vehicles	430	0.39	0.9%	2.7%	2.3%	1.2%	16.2%	0.4%
3339	General Purpose Machinery	350	0.24	0.8%	5.2%	2.8%	0.3%	5.8%	4.2%
3259	Misc. Chemicals	340	0.76	0.7%	-6.9%	-17.5%	0.7%	-14.1%	-20.7%
IFG	Advanced industries manufacturing	24,460	0.81	52.7%	0.1%	-0.9%	53.0%	-0.5%	-1.3%
	Advanced industries energy	6,810	2.00	14.7%	-2.0%	-0.2%	28.8%	-2.7%	14.4%
	Advanced industries services	15,110	0.42	32.6%	1.8%	0.3%	18.2%	1.5%	0.4%
	<b>ADVANCED INDUSTRIES TOTAL</b>	<b>46,390</b>	<b>0.67</b>	<b>100.0%</b>	<b>0.3%</b>	<b>-0.4%</b>	<b>100.0%</b>	<b>-0.7%</b>	<b>2.9%</b>

† 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.