

Michigan

Advanced industries employ

535,256

full-time workers. (2015)

These direct jobs supports an additional

428,200

indirect jobs in other industries in
the region.

Advanced industries produce

\$95.1

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

Advanced industries pay, on average

\$82,128

dollars per year (2015).

Advanced industries directly
account for

12.3%

of all jobs in the region.

This employment share is

#1

among all states.

This accounts for

22.6%

of all output in the region (2015).

This compares to average pay of

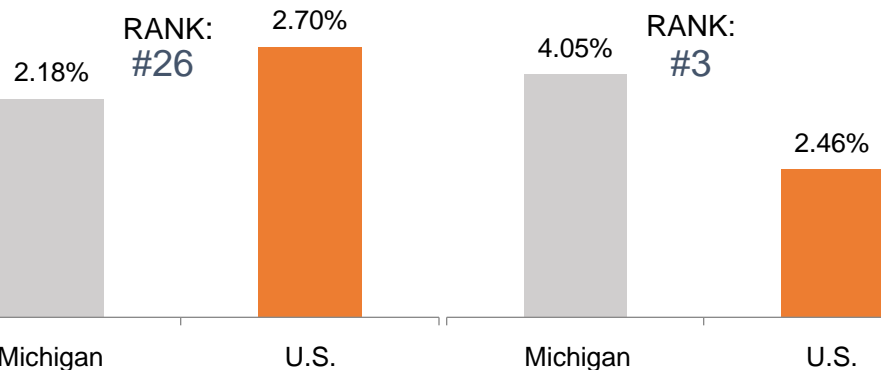
\$49,178

for all industries (2015).

Advanced industry annual average growth, 2013-2015

OUTPUT

JOB



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.

Michigan

Twenty-Five Largest Advanced Industries (2015)

There are 11 advanced industries in Michigan 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
3363	Motor Vehicle Parts	122,420	7.35	22.9%	9.1%	5.2%	26.9%	12.9%	2.3%
5413	Engineering	85,580	2.06	16.0%	7.8%	4.5%	9.8%	5.2%	6.8%
5415	Computer Systems Design	48,530	0.86	9.1%	5.2%	3.4%	6.2%	4.9%	7.8%
3361	Motor Vehicles	36,530	6.03	6.8%	8.2%	2.9%	14.7%	12.1%	-0.9%
5416	Management Consulting	29,870	0.79	5.6%	9.5%	4.2%	3.8%	5.1%	6.4%
5417	R&D Services	25,150	1.29	4.7%	3.7%	6.6%	4.1%	3.4%	10.1%
2211	Power Generation & Supply	16,710	1.43	3.1%	-0.2%	0.9%	7.1%	-0.5%	-3.8%
3339	General Purpose Machinery	15,830	2.01	3.0%	8.2%	4.6%	1.6%	9.7%	0.7%
3391	Medical Equipment & Supplies	11,200	1.24	2.1%	3.0%	-2.1%	1.6%	-0.8%	2.3%
3315	Foundries	10,410	2.84	1.9%	5.4%	1.3%	1.1%	12.3%	-4.7%
3399	Misc. Manufacturing	9,290	1.12	1.7%	1.9%	12.4%	1.0%	-1.3%	15.4%
3345	Precision Instruments	9,000	0.76	1.7%	3.0%	2.1%	0.9%	5.2%	-0.7%
3254	Pharmaceuticals	8,740	1.06	1.6%	4.2%	-0.2%	1.9%	-0.2%	-2.1%
3344	Semiconductors	8,610	0.79	1.6%	3.5%	7.2%	0.9%	7.4%	6.9%
3362	Motor Vehicle Body & Trailers	8,110	1.83	1.5%	2.3%	9.6%	1.5%	3.3%	9.0%
3252	Resins & Synthetic Rubbers	6,880	2.48	1.3%	2.6%	-1.0%	1.0%	-3.0%	-3.9%
3352	Household Appliances	6,380	3.52	1.2%	2.3%	8.1%	1.0%	-3.4%	-1.8%
5112	Software Products	6,230	0.63	1.2%	5.4%	3.3%	2.4%	4.7%	1.1%
5182	Data Processing & Hosting	6,150	0.70	1.1%	9.1%	15.3%	0.8%	6.4%	21.2%
3332	Industrial Machinery	6,090	1.83	1.1%	7.6%	4.6%	0.7%	8.7%	2.6%
3311	Iron & Steel Products	5,540	2.11	1.0%	5.6%	-3.6%	0.9%	14.6%	-10.0%
5191	Web Search Portals and Internet Publishing	4,640	0.65	0.9%	23.2%	20.2%	0.6%	13.0%	20.2%
3336	Engine & Power Equipment	4,500	1.49	0.8%	2.7%	5.0%	0.5%	4.1%	-0.9%
3364	Aircraft Products & Parts	4,340	0.30	0.8%	10.0%	5.2%	1.7%	16.5%	5.0%
6215	Medical and Diagnostic Laboratories	3,470	0.45	0.6%	2.9%	-11.9%	0.3%	1.5%	-11.7%
IFG	Advanced industries manufacturing	302,670	1.84	56.5%	6.6%	4.1%	63.1%	9.7%	1.0%
	Advanced industries energy	18,640	1.00	3.5%	0.1%	0.3%	7.7%	-0.3%	-3.9%
	Advanced industries services	213,940	1.09	40.0%	6.5%	4.3%	29.2%	4.3%	6.8%
ADVANCED INDUSTRIES TOTAL		535,260	1.41	100.0%	6.3%	4.0%	100.0%	7.2%	2.2%

† 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.