

MANUFACTURING FAST FACTS

3RD QUARTER 2014 EDITION*

Each of the following sections is a quick snapshot of labor market information for Pennsylvania's Manufacturing sector.

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*Note: For each data set included in this document, the most current data available at the time of publication are included. Data is identified as "seasonally adjusted" or "not seasonally adjusted" when applicable.

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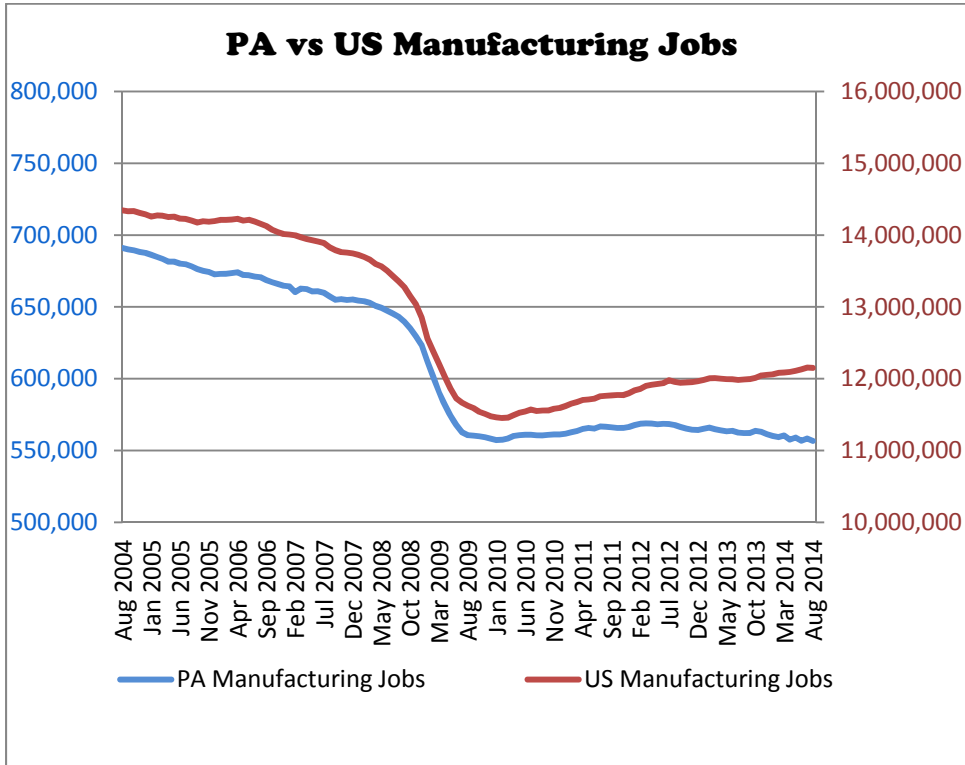
CWIA-MFG

PA ECONOMIC BACKGROUND

- **Pennsylvania's seasonally adjusted unemployment rate for August 2014 was 5.8%.**
 - This was up 0.1 percentage points from July 2014.
 - The August 2014 rate was down 1.6 from August 2013.
- **Pennsylvania's seasonally adjusted total nonfarm jobs for August 2014 were at 5,792,700.**
 - This was a net increase of 100 jobs from July 2014.
 - August 2014 jobs were 47,000 higher than August 2013.
- **Pennsylvania's new hire activity increased.**
 - There were 695,149 new hires reported across all industries in the 2nd quarter of 2014.
 - This was an increase of 63,092 over 2nd quarter 2013 (10.0 percent increase).
- **Employer demand decreased in Pennsylvania.**
 - About 212,300 job ads were posted online in August 2014.
 - This was a decrease of approximately 2,300 from August 2013 (1.1 percent decrease).
- **In Pennsylvania there were 1.8 unemployed persons for every online job posting (August 2014).**
 - The Pennsylvania rate was equal to the U.S. rate, which also stood at 1.8.
 - The Pennsylvania rate was down from a peak of 4.8 unemployed per online job posting in late 2009.

PA & US MANUFACTURING JOBS

SEASONALLY ADJUSTED



- **PA Manufacturing Employment August 2014: 691,000.**
 - Decrease of 1,700 over the month (-0.3%).
 - Decrease of 5,400 over the year (-1.0%).
 - Down 134,300 manufacturing jobs from 10 years ago (-19.4%).
- **US Manufacturing Employment August 2014: 12,099,000.**
 - Decrease of 10,000 over-the-month (-0.0%).
 - Increase of 160,000 over-the-year (+1.3%).
 - Down 2,194,000 manufacturing jobs from 10 years ago (-15.3%).

PA MANUFACTURING JOBS DETAIL

SEASONALLY ADJUSTED

PA Manufacturing Jobs August 2014

	Aug. 2014	Jul. 2014	Aug. 2013	Change from Jul 2014		Change from Aug. 2013	
				Vol.	Pct.	Vol.	Pct.
Manufacturing	556,700	558,400	562,100	-1,700	-0.3%	-5,400	-1.0%
Durable Goods	344,900	346,400	345,000	-1,500	-0.4%	-100	0.0%
Nondurable Goods	211,800	212,000	217,100	-200	-0.1%	-5,300	-2.4%

Source: Current Employment Statistics

- Manufacturing jobs were down 1,700 over-the-month.
 - Jobs in durable goods decreased by 1,500.
 - Jobs in nondurable goods decreased by 200.
- Manufacturing jobs were down 5,400 over-the-year.
 - Jobs in durable goods decreased by 100.
 - Jobs in nondurable goods decreased by 5,300.

PA MANUFACTURING

JOBS BY MSA¹

NOT SEASONALLY ADJUSTED

	Aug. 2014	Jul. 2014	Aug. 2013	Change from Jul 2014		Change from Aug. 2013	
				Vol.	Pct.	Vol.	Pct.
Allentown-Bethlehem-Easton	35,100	35,000	34,900	100	0.3%	200	0.6%
Altoona	6,900	6,900	7,000	0	0.0%	-100	-1.4%
Erie	22,100	22,300	22,400	-200	-0.9%	-300	-1.3%
Harrisburg-Carlisle	20,300	20,400	20,100	-100	-0.5%	200	1.0%
Johnstown	3,600	3,600	3,800	0	0.0%	-200	-5.3%
Lancaster	35,600	35,800	35,700	-200	-0.6%	-100	-0.3%
Lebanon	8,700	8,800	9,000	-100	-1.1%	-300	-3.3%
Philadelphia Metro ²	125,300	126,300	126,900	-1,000	-0.8%	-1,600	-1.3%
Pittsburgh	86,200	87,100	89,600	-900	-1.0%	-3,400	-3.8%
Reading	30,300	30,400	29,800	-100	-0.3%	500	1.7%
Scranton-Wilkes-Barre	27,400	27,500	27,500	-100	-0.4%	-100	-0.4%
State College	4,000	4,000	4,000	0	0.0%	0	0.0%
Williamsport	8,100	8,100	8,100	0	0.0%	0	0.0%
York-Hanover	30,500	30,500	31,000	0	0.0%	-500	-1.6%

Source: Current Employment Statistics

- Eight of Pennsylvania's MSAs and Philly Metro lost manufacturing jobs over-the-year, with three MSAs gaining manufacturing jobs, and two MSA remaining unchanged.
- The MSAs with the largest over-the-year job gains (percentage) in manufacturing were Reading (+1.7%), Harrisburg-Carlisle (+1.0%) and Allentown-Bethlehem-Easton (+0.6%).
- The MSAs with the largest over-the-year percentage decrease in manufacturing jobs were Johnstown (-5.3%), Pittsburgh (-3.8%), and Lebanon (-3.3%).

¹MSA: Metropolitan Statistical Area, as defined by the US Census Bureau.

²Philadelphia Metro includes the five-county portion of the MSA that lies in Pennsylvania.

PA NEW HIRES BY MANUFACTURING SECTOR

NOT SEASONALLY ADJUSTED

NAICS	Industry Title	2014 Q2 New Hires	2013 Q2 New Hires	Pct. Change
311	Food Mfg.	4,874	8,699	-44.0%
312	Beverage & Tobacco Product Mfg.	650	629	3.3%
313	Textile Mills	122	112	8.9%
314	Textile Product Mills	442	478	-7.5%
315	Apparel Mfg.	276	304	-9.2%
316	Leather & Allied Product Mfg.	36	31	16.1%
321	Wood Product Mfg.	1,671	1,658	0.8%
322	Paper Mfg.	1,213	1,166	4.0%
323	Printing & Related Support Activities	1,039	1,107	-6.1%
324	Petroleum & Coal Products Mfg.	433	243	78.2%
325	Chemical Mfg.	1,595	1,195	33.5%
326	Plastics & Rubber Products Mfg.	2,376	2,346	1.3%
327	Nonmetallic Mineral Product Mfg.	1,502	1,403	7.1%
331	Primary Metal Mfg.	1,924	2,126	-9.5%
332	Fabricated Metal Product Mfg.	5,137	4,271	20.3%
333	Machinery Mfg.	2,712	2,679	1.2%
334	Computer & Electronic Product Mfg.	1,346	1,635	-17.7%
335	Elec. Equip., App., and Component Mfg.	1,293	1,407	-8.1%
336	Transportation Equip. Mfg.	1,668	1,468	13.6%
337	Furniture & Related Product Mfg.	975	975	0.0%
339	Miscellaneous Mfg.	1,678	1,494	12.3%
Manufacturing Total		32,962	35,426	-7.0%

Source: Pennsylvania New Hire Program

From 2nd Quarter 2013 to 2nd Quarter 2014 in Pennsylvania:

- Total manufacturing new hires decreased by 7.0% (all industries, +10.0%).
- Thirteen of the 21 manufacturing subsectors experienced over-the-year growth in new hire activity, while seven experienced an over-the-year decrease and one remained the same.
- The largest over-the-year increases in new hire activity among manufacturing subsectors were in Petroleum and Coal Products Manufacturing (+78.2%), Chemical Manufacturing (+33.5%), and Fabricated Metal Product Manufacturing (+20.3%).
- The largest over-the-year decreases were in Food Manufacturing (-44.0%), Computer and Electronic Product Manufacturing (-17.7%), and Primary Metal Manufacturing (-9.5%).

PA EMPLOYMENT BY INDUSTRY SUBSECTOR

NOT SEASONALLY ADJUSTED¹

NAICS	Industry Title	Mar. 2014 Emp.	Mar. 2013 Emp.	Pct. Change
311	Food Mfg.	69,559	66,952	3.9%
312	Beverage & Tobacco Product Mfg.	7,517	6,664	12.8%
313	Textile Mills	3,389	3,276	3.4%
314	Textile Product Mills	3,963	4,043	-2.0%
315	Apparel Mfg.	4,590	4,838	-5.1%
316	Leather & Allied Product Mfg.	928	975	-4.8%
321	Wood Product Mfg.	20,992	19,519	7.5%
322	Paper Mfg.	23,718	23,835	-0.5%
323	Printing & Related Support Activities	24,720	24,579	0.6%
324	Petroleum & Coal Products Mfg.	5,875	5,705	3.0%
325	Chemical Mfg.	39,722	40,773	-2.6%
326	Plastics & Rubber Products Mfg.	35,813	35,103	2.0%
327	Nonmetallic Mineral Product Mfg.	19,416	19,548	-0.7%
331	Primary Metal Mfg.	39,044	39,487	-1.1%
332	Fabricated Metal Product Mfg.	80,347	81,257	-1.1%
333	Machinery Mfg.	48,003	48,306	-0.6%
334	Computer & Electronic Product Mfg.	31,186	31,326	-0.4%
335	Elec. Equip., App., and Component Mfg.	25,910	25,978	-0.3%
336	Transportation Equip. Mfg.	38,039	38,635	-1.5%
337	Furniture & Related Product Mfg.	14,889	14,661	1.6%
339	Miscellaneous Mfg.	26,102	26,113	0.0%
Manufacturing Total		563,722	561,573	0.4%

Source: Quarterly Census of Employment & Wages

From March 2013 to March 2014 in Pennsylvania:

- Total manufacturing employment increased by 2,149 (+0.4%).
- The largest percentage employment gains were in Beverage & Tobacco Product Manufacturing (+12.8%), Wood Product Manufacturing (+7.5%) and Food Manufacturing (+3.9%).
- The largest employment percentage decreases were in Apparel Manufacturing (-5.1%), Leather & Allied Product Manufacturing (-4.8%), and Chemical Manufacturing (-2.6%).

¹Although QCEW data are not seasonally adjusted, comparing the same month in different years eliminates seasonal patterns in the data.

LOCATION QUOTIENTS¹ BY INDUSTRY SUBSECTOR

PA vs. US

NAICS	Industry Title	March 2014 Location Quotient: PA vs. US
311	Food Mfg.	1.15
312	Beverage & Tobacco Product Mfg.	0.91
313	Textile Mills	0.70
314	Textile Product Mills	0.85
315	Apparel Mfg.	0.78
316	Leather & Allied Product Mfg.	0.76
321	Wood Product Mfg.	1.40
322	Paper Mfg.	1.54
323	Printing & Related Support Activities	1.32
324	Petroleum & Coal Products Mfg.	1.32
325	Chemical Mfg.	1.21
326	Plastics & Rubber Products Mfg.	1.30
327	Nonmetallic Mineral Product Mfg.	1.28
331	Primary Metal Manufacturing	2.39
332	Fabricated Metal Product Mfg.	1.35
333	Machinery Mfg.	1.04
334	Computer & Electronic Product Mfg.	0.72
335	Elec. Equip., App., and Component Mfg.	1.67
336	Transportation Equip. Mfg.	0.58
337	Furniture & Related Product Mfg.	0.99
339	Miscellaneous Mfg.	1.09
Manufacturing Total		1.13

Source: Quarterly Census of Employment & Wages

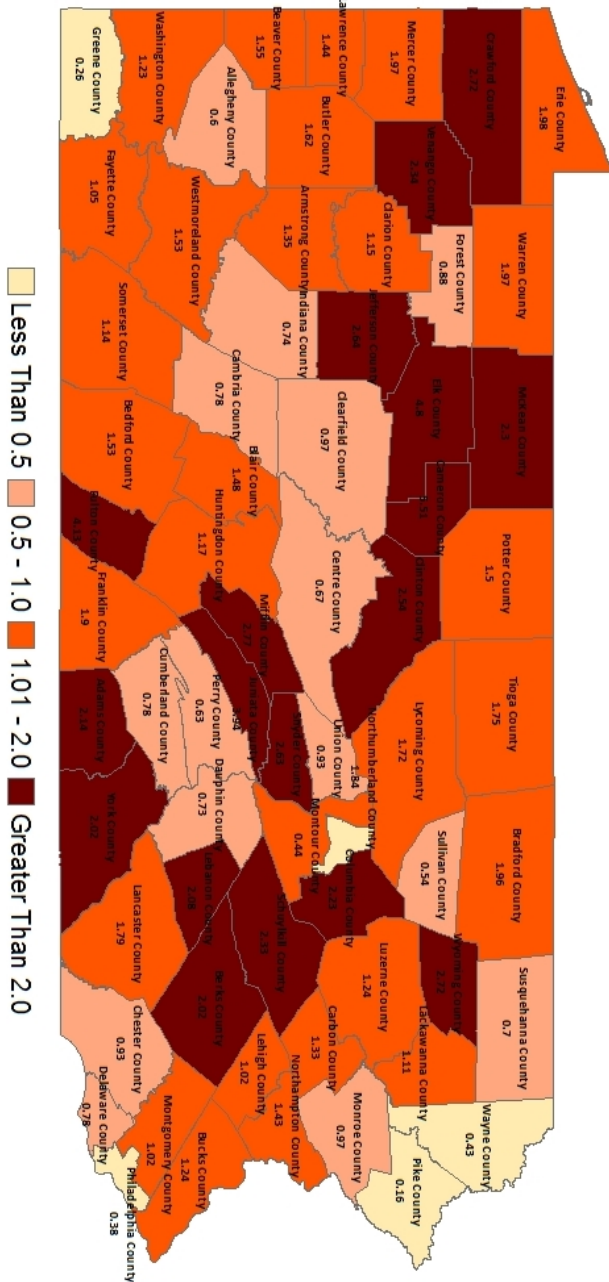
In March 2014:

- Pennsylvania had a location quotient greater than 1.0, indicating that a larger share of Pennsylvania's workers are employed in manufacturing industries than the national average.
- Pennsylvania's location quotient compared to the nation was highest in Primary Metal Manufacturing (2.39), Electrical Equipment, Appliance, & Component Manufacturing (1.67), and Paper Manufacturing (1.54).
- Pennsylvania's location quotient compared to the nation was lowest in Transportation Equipment Manufacturing (0.58), Textiles Mills (0.70), and Computer & Electronic Product Manufacturing (0.72).

¹For a detailed explanation of location quotients, please refer to the definitions section of this document.

MANUFACTURING LOCATION QUOTIENT COUNTY MAP¹

County vs. US



PA MANUFACTURING QUARTERLY WORKFORCE INDICATORS - DEMOGRAPHICS BY AGE GROUP

NAICS	Industry Title	14-24	25-34	35-54	55+
311	Food Mfg.	10.6%	17.4%	46.5%	25.4%
312	Beverage & Tobacco Product Mfg.	10.0%	24.4%	45.8%	19.7%
313	Textile Mills	5.9%	13.1%	44.9%	36.0%
314	Textile Product Mills	6.3%	14.9%	48.0%	30.9%
315	Apparel Mfg.	6.7%	13.3%	41.1%	38.8%
316	Leather & Allied Product Mfg.	11.1%	21.6%	45.3%	22.0%
321	Wood Product Mfg.	12.2%	20.3%	47.1%	20.4%
322	Paper Mfg.	4.9%	15.3%	53.2%	26.6%
323	Printing & Related Support Activities	5.6%	15.3%	51.8%	27.3%
324	Petroleum & Coal Products Mfg.	3.8%	15.8%	49.3%	31.1%
325	Chemical Mfg.	4.1%	16.8%	54.3%	24.8%
326	Plastics & Rubber Products Mfg.	7.1%	17.3%	50.9%	24.7%
327	Nonmetallic Mineral Product Mfg.	6.6%	16.7%	47.6%	29.2%
331	Primary Metal Manufacturing	4.9%	14.6%	49.6%	31.0%
332	Fabricated Metal Product Mfg.	7.2%	16.3%	47.8%	28.7%
333	Machinery Mfg.	6.1%	16.1%	48.0%	29.8%
334	Computer & Electronic Product Mfg.	4.4%	16.3%	49.0%	30.3%
335	Elec. Equip., App., and Component Mfg.	7.9%	18.3%	47.3%	26.5%
336	Transportation Equip. Mfg.	5.8%	17.9%	48.5%	27.8%
337	Furniture & Related Product Mfg.	7.5%	17.7%	48.2%	26.6%
339	Miscellaneous Mfg.	6.0%	17.4%	49.0%	27.6%
All NAICS Subsectors		12.6%	20.9%	43.1%	23.4%

Source: US Census Bureau; Local Employment Dynamics

For 2013 Quarter 4:

- The Manufacturing subsectors with the highest percentage of workers aged 14-24 are Wood Product Mfg. (12.2%), Leather and Allied Product Mfg. (11.1%), and Food Mfg. (10.6%). The average percentage across all Manufacturing subsectors is 6.9%.
- The manufacturing subsectors with the highest percentage of workers 55+ are Apparel Mfg. (38.8%), followed by Textile Mills (36.0%) and Petroleum and Coal Products Mfg. (31.1%). The average percentage across all Manufacturing subsectors is 27.9%.
- Across all NAICS subsectors, 12.6% of workers are age 14-24 and 23.4% are 55+.

¹Based on 2013 March QCEW Employment.

PA MANUFACTURING INDUSTRIES OF INTEREST

Industries of Interest (IOIs) are identified as either Hi-Growth or Growth.

Hi-Growth: Industries that have had four consecutive quarters of employment growth totaling at least 10 percent over-the-year, with an employment gain of at least 25.

Growth: Industries that have had over-the-year employment growth of at least 10 percent, with an employment gain of at least 25.

Industry Code	Industry Description	Emp. Mar. 2014	Emp. Gain from Mar. 2013	Pct. Gain from Mar. 2013	Type of Change
311612	Meat Processed from Carcasses	5,457	638	13.2%	Growth
312111	Soft Drink Manufacturing	2,735	587	27.3%	Growth
335313	Switchgear and Switchboard Apparatus Manufacturing	2,557	246	10.6%	Growth
321911	Wood Window and Door Manufacturing	2,276	354	18.4%	Hi-Growth
324199	All Other Petroleum and Coal Products Manufacturing	2,121	226	11.9%	Growth
312120	Breweries	1,652	226	15.8%	Hi-Growth
322219	Other Paperboard Container Manufacturing	1,620	258	18.9%	Growth
333515	Cutting Tool and Machine Tool Accessory Manufacturing	1,599	465	41.0%	Growth
336212	Truck Trailer Manufacturing	1,348	200	17.4%	Growth
321991	Manufactured Home (Mobile Home) Manufacturing	1,319	163	14.1%	Growth
327991	Cut Stone and Stone Product Manufacturing	984	108	12.3%	Growth
314120	Curtain and Linen Mills	866	80	10.2%	Growth
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	798	82	11.5%	Growth
325199	All Other Basic Organic Chemical Manufacturing	746	245	48.9%	Growth
326211	Tire Manufacturing (except Retreading)	662	79	13.6%	Hi-Growth
326212	Tire Retreading	641	88	15.9%	Growth
321912	Cut Stock, Resawing Lumber, and Planing	534	79	17.4%	Growth
321213	Engineered Wood Member (except Truss) Manufacturing	509	54	11.9%	Growth
325411	Medicinal and Botanical Manufacturing	483	236	95.5%	Growth
311930	Flavoring Syrup and Concentrate Manufacturing	426	106	33.1%	Growth

Source: Quarterly Census of Employment & Wages (QCEW) and the Center for Workforce Information & Analysis

Note: Not all changes in industry employment counts are necessarily due to employment growth; non-economic codes changes may impact the identification of IOIs.

HELP WANTED ONLINE ADS MANUFACTURING INDUSTRY SUBSECTORS IN PA

NAICS	Industry Title	Aug. 2014	Aug. 2013	Pct. Change
311	Food Mfg.	823	939	-12.4%
312	Beverage & Tobacco Product Mfg.	135	129	4.7%
313	Textile Mills	16	19	-15.8%
314	Textile Product Mills	33	24	37.5%
315	Apparel Mfg.	44	26	69.2%
316	Leather & Allied Product Mfg.	62	17	264.7%
321	Wood Product Mfg.	122	109	11.9%
322	Paper Mfg.	260	287	-9.4%
323	Printing & Related Support Activities	276	329	-16.1%
324	Petroleum & Coal Products Mfg.	37	29	27.6%
325	Chemical Mfg.	1744	1407	24.0%
326	Plastics & Rubber Products Mfg.	414	408	1.5%
327	Nonmetallic Mineral Product Mfg.	257	212	21.2%
331	Primary Metal Manufacturing	788	541	45.7%
332	Fabricated Metal Product Mfg.	870	677	28.5%
333	Machinery Mfg.	1303	961	35.6%
334	Computer & Electronic Product Mfg.	1289	989	30.3%
335	Elec. Equip., App., and Component Mfg.	516	503	2.6%
336	Transportation Equip. Mfg.	471	292	61.3%
337	Furniture & Related Product Mfg.	180	145	24.1%
339	Miscellaneous Mfg.	597	636	-6.1%
Total Manufacturing Postings by Subsector		10,237	8,679	18.0%

Source: Help Wanted Online; The Conference Board

From August 2013 to August 2014:

- Sixteen industry subsectors showed over-the-year increases in job posting activity. The largest percentage increases were seen in Leather & Allied Product Manufacturing (+264.7%), Apparel Manufacturing (+69.2%) and Transportation Equipment Manufacturing, (+60.0%).
- Five industry subsectors showed over-the-year decreases in job posting activity. The largest over-the-year decreases by percentage were in Printing & Related Support Activities (-16.1%), Textile Mills (-15.8) and Food Manufacturing (-12.4%).
- Overall, manufacturing job postings were up 18.0% over-the-year.

HELP WANTED ONLINE ADS BY MANUFACTURING INDUSTRY IN PA- TOP 25 BY VOLUME

NAICS	Industry Title	Aug. 2014	Aug. 2013	Pct. Change
325412	Pharmaceutical Preparation Manufacturing	675	517	30.6%
331111	Iron and Steel Mills	317	188	68.6%
334516	Analytical Laboratory Instrument Manufacturing	262	174	50.6%
334417	Electronic Connector Manufacturing	259	174	48.9%
326199	All Other Plastics Product Mfg.	253	230	10.0%
325414	Biological Product (except Diagnostic) Mfg.	196	136	44.1%
325120	Industrial Gas Mfg.	190	204	-6.9%
325510	Paint & Coating Mfg.	179	103	73.8%
339112	Surgical & Medical Instrument Mfg.	176	159	10.7%
335314	Relay & Industrial Control Mfg.	170	137	24.1%
332312	Fabricated Structural Metal Mfg.	165	76	117.1%
333298	All Other Industrial Machinery Mfg.	157	146	7.5%
331315	Aluminum Sheet, Plate, & Foil Mfg.	156	74	110.8%
333132	Oil & Gas Field Machinery & Equipment Mfg.	148	58	155.2%
333120	Construction Machinery Mfg.	142	92	54.3%
336411	Aircraft Mfg.	130	64	103.1%
339999	All Other Miscellaneous Mfg.	123	215	-42.8%
332813	Electroplating, Plating, Polishing, Anodizing, & Coloring	119	87	36.8%
323110	Commercial Lithographic Printing	118	138	-14.5%
311320	Chocolate & Confectionery Mfg. fr. Cacao Beans	117	219	-46.6%
334512	Automatic Environmental Control Mfg. for Residential, Commercial, & Appliance Use	116	110	5.5%
311812	Commercial Bakeries	113	77	46.8%
335312	Motor & Generator Mfg.	110	26	323.1%
333415	Air-Conditioning & Warm Air Heating Equip. & Commercial & Industrial Refrigeration Equip. Mfg.	108	45	140.0%
339113	Surgical Appliance & Supplies Mfg.	101	82	23.2%

Source: Help Wanted Online; The Conference Board

From August 2013 to August 2014:

- The largest over-the-year percentage gains in job posting activity by industry were in Motor and Generator Mfg. (+323.1%) Oil & Gas Field Machinery & Equipment Mfg. (+155.2%), and Air-Conditioning & Warm Air Heating Equip. & Commercial & Industrial Refrigeration Equip. Mfg. (+140.0%)
- The largest over-the-year decreases by industry were in Chocolate & Confectionery Manufacturing from Cacao Beans (-46.6%), All other Miscellaneous Mfg. (-42.8%), and Commercial Lithographic Printing (-14.5%).

HELP WANTED ONLINE ADS BY MANUFACTURING OCCUPATION IN PA - TOP 25 BY VOLUME

SOC	Occupation Title	Aug. 2014	Aug. 2013	Pct. Change
17-2112	Industrial Engineers	714	563	26.8%
51-1011	Supervisors of Production and Operating Workers	628	492	27.6%
49-9071	Maintenance and Repair Workers, General	354	236	50.0%
11-2021	Marketing Managers	333	333	0.0%
15-1121	Computer Systems Analysts	226	187	20.9%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	203	369	-45.0%
13-2011	Accountants	203	156	30.1%
43-4051	Customer Service Representatives	189	151	25.2%
11-2022	Sales Managers	183	191	-4.2%
17-2141	Mechanical Engineers	180	156	15.4%
15-1132	Software Developers, Applications	172	87	97.7%
51-9198	Helpers--Production Workers	155	98	58.2%
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	153	198	-22.7%
15-1151	Computer User Support Specialists	143	119	20.2%
51-4041	Machinists	140	134	4.5%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	139	108	28.7%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	137	105	30.5%
17-2071	Electrical Engineers	135	125	8.0%
53-3032	Heavy and Tractor-Trailer Truck Drivers	128	179	-28.5%
11-1021	General and Operations Managers	118	79	49.4%
13-1161	Market Research Analysts and Marketing Specialists	117	89	31.5%
11-9199	Managers, All Other	113	80	41.3%
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	106	79	34.2%
11-3121	Human Resources Managers	106	101	5.0%
15-1199	Information Technology Project Managers	102	64	59.4%

Source: Help Wanted Online; The Conference Board

From August 2013 to August 2014:

- The largest over-the-year percentage gains in job posting activity by occupation were for Software Developers, Applications (+97.7%), Information Technology Project Managers (+59.4%) and Helpers--Production Workers (+58.2%).
- The largest over-the-year decreases were for Sales Representatives, Wholesale & Mfg., Except Tech. & Scientific Prdcts. (-45.0%), Heavy and Tractor-Trailer Truck Drivers (-28.5%), and Sales Reps., Wholesale and Mfg., Tech. & Scientific Prdcts. (-22.7%).

HELP WANTED ONLINE ADS BY MANUFACTURING EMPLOYER IN PA - TOP 30

Company	Aug. 2014 Postings
Tyco	268
Teva	239
United States Steel Corporation	211
Alcoa Inc.	191
Thermo Fisher Scientific Inc.	173
TE Connectivity	166
Ppg Industries	152
Johnson Controls, Inc	145
Air Products	141
Sanofi	122
Mylan Inc	113
Bimbo Bakeries	113
Lockheed Martin	110
Baker Hughes Incorporated	93
Merck & Co.	91
Creative Circle	90
System One	88
THE HERSHEY COMPANY	87
Bayer	77
RR Donnelley	77
Elliott Group	74
Eaton Corporation.	69
Trinity Industries, Inc.	66
General Electric	64
CSL Behring	62
Armstrong World Industries	62
United Technologies	60
Lutron Electronics	59
Kennametal, Inc.	58
Oshkosh Corporation	58

Source: Help Wanted Online; The Conference Board.

PENNSYLVANIA MANUFACTURING INDUSTRY EMPLOYMENT 2010-2020 LONG-TERM PROJECTIONS

NAICS	Industry Title	Employment		Change		Avg. Annual Change
		2012	2022	Level	Percent	
31-33	Manufacturing	566,890	563,890	-3,000	-0.5%	-300
311	Food Mfg.	66,860	65,760	-1,100	-1.6%	-110
312	Beverage & Tobacco Product Mfg.	6,620	6,910	290	4.4%	29
313	Textile Mills	3,550	2,180	-1,370	-38.6%	-137
314	Textile Product Mills	4,190	3,370	-820	-19.6%	-82
315	Apparel Mfg.	5,780	3,170	-2,610	-45.2%	-261
316	Leather & Allied Product Mfg.	990	990	0	0.0%	0
321	Wood Product Mfg.	18,300	21,960	3,660	20.0%	366
322	Paper Mfg.	23,870	23,240	-630	-2.6%	-63
323	Printing & Related Support Activities	25,480	22,380	-3,100	-12.2%	-310
324	Petroleum & Coal Products Mfg.	6,010	5,440	-570	-9.5%	-57
325	Chemical Mfg.	41,280	39,430	-1,850	-4.5%	-185
326	Plastics & Rubber Products Mfg.	35,110	35,730	620	1.8%	62
327	Nonmetallic Mineral Product Mfg.	20,180	21,290	1,110	5.5%	111
331	Primary Metal Manufacturing	39,500	39,420	-80	-0.2%	-8
332	Fabricated Metal Product Mfg.	81,620	86,650	5,030	6.2%	503
333	Machinery Mfg.	48,870	47,810	-1,060	-2.2%	-106
334	Computer & Electronic Product Mfg.	31,760	28,610	-3,150	-9.9%	-315
335	Elec. Equip., App., and Component Mfg.	26,050	27,550	1,500	5.8%	150
336	Transportation Equip. Mfg.	39,140	40,640	1,500	3.8%	150
337	Furniture & Related Product Mfg.	15,310	16,040	730	4.8%	73
339	Miscellaneous Mfg.	26,430	25,300	-1,130	-4.3%	-113

Source: The Center for Workforce Information & Analysis

IMPLAN MULTIPLIERS FOR MANUFACTURING INDUSTRY SUBSECTORS

NAICS	Industry Title	IMPLAN Multiplier
311	Food Mfg.	3.77
312	Beverage & Tobacco Product Mfg.	4.19
313	Textile Mills	1.85
314	Textile Product Mills	2.05
315	Apparel Mfg.	N/A
316	Leather & Allied Product Mfg.	2.04
321	Wood Product Mfg.	2.06
322	Paper Mfg.	3.66
323	Printing & Related Support Activities	1.99
324	Petroleum & Coal Products Mfg.	11.14
325	Chemical Mfg.	6.62
326	Plastics & Rubber Products Mfg.	2.13
327	Nonmetallic Mineral Product Mfg.	2.74
331	Primary Metal Manufacturing	5.28
332	Fabricated Metal Product Mfg.	2.27
333	Machinery Mfg.	2.71
334	Computer & Electronic Product Mfg.	2.86
335	Elec. Equip., App., and Component Mfg.	2.76
336	Transportation Equip. Mfg.	2.74
337	Furniture & Related Product Mfg.	2.07
339	Miscellaneous Mfg.	2.25

Source: Minnesota IMPLAN Group (MIG)

Whenever a job is added in any industry, it causes additional jobs, both indirect and induced, to be generated in other industries. Direct, indirect, and induced jobs are defined as follows:

Direct: Jobs added into the industry itself.

Indirect: Jobs added to industries that are suppliers to, or customers of, the direct industry.

Induced: Jobs added to industries such as retail trade and healthcare that are affected due to increased spending from workers in direct and indirect industries.

The **multiplier effect** is the sum of the total number of new jobs that can be expected for each job added into a direct industry. For example, for each job added in Food Manufacturing, an additional 2.77 jobs are expected to be added into indirect and induced industries, for a resulting multiplier of 3.77.

2014 PA HIGH PRIORITY OCCUPATIONS IN ADVANCED MANUFACTURING

SOC Code	Occupation	Educational Attainment	Industry Cluster Wage, 2013
11-3051	Industrial Production Managers	BD+	\$102,990
13-1023	Purchasing Agents	LT OJT	\$63,330
17-2112	Industrial Engineers	BD	\$81,520
17-2141	Mechanical Engineers	BD	\$83,010
41-4012	Sales Representatives	MT OJT	\$63,690
43-5061	Production, Planning & Expediting Clerks	MT OJT	\$48,730
43-5071	Shipping, Receiving & Traffic Clerks	ST OJT	\$32,890
49-1011	Supervisors - Mechanics, Installers & Repairers	WK EXP	\$65,510
49-3021	Automotive Body & Related Repairers	MT OJT	\$40,430
49-3023	Automotive Service Technicians & Mechanics	LT OJT	\$37,260
49-9041	Industrial Machinery Mechanics	LT OJT	\$46,680
51-1011	Supervisors - Production & Operating Workers	PS	\$58,980
51-4011	CNC Machine Tool Operators	MT OJT	\$38,790
51-4012	CNC Machine Tool Programmers	LT OJT	\$47,270
51-4021	Extruding & Drawing Machine Oprs & Tenders	MT OJT	\$36,680
51-4041	Machinists	LT OJT	\$40,130
51-4081	Multiple Machine Tool Oprs & Tenders	MT OJT	\$36,440
51-4121	Welders, Cutters, Solderers & Brazers	MT OJT	\$39,020
51-4191	Heat Treating Equipment Oprs & Tenders	MT OJT	\$37,050
51-9061	Inspectors, Testers, Sorters, Samplers & Weighers	MT OJT	\$39,690

Source: Center for Workforce Information & Analysis

¹For educational attainment acronyms please refer to the definitions section.

DEFINITIONS:

LABOR FORCE STATISTICS

Source: Pennsylvania Local Area Unemployment Statistics (LAUS)

The labor force and unemployment data are based on the same concepts and definitions as those used for the official national estimates obtained from the Current Population Survey (CPS). The LAUS program measures employment and unemployment on a place-of-residence basis and produces estimates using equations based on regression techniques. This method utilizes data from several sources, including the CPS, the Current Employment Statistics (CES) program, and state unemployment insurance (UI) programs. The LAUS program does not produce estimates for any demographic groups.

Unemployment Rate: The number of unemployed as a percent of the labor force.

Unemployment: All persons aged 16 years and older who had no employment during the reference week (contains the 12th day of the month), were available for work (except for temporary illness), and had made specific efforts to find employment sometime during the four-week period ending with the reference week. Persons who were waiting to be recalled to jobs from which they had been laid off need not to have been looking for work to be classified as unemployed.

Employment: All persons who, during the week which includes the 12th day of the month, (a) did any work as paid employees, worked in their own businesses or professions or on their own farm, or worked 15 hours or more as unpaid workers in enterprises operated by members of their families, or (b) were not working but who had jobs from which they were temporarily absent. Each employed person is counted only once, even if the person holds more than one job. Included are the self-employed, unpaid family workers, agricultural workers, and private household workers, who are excluded by the CES survey.

Labor Force: All persons either working or looking for work or classified as employed or unemployed.

SEASONALLY ADJUSTED DATA - Seasonal adjustment removes the change in employment that is due to normal seasonal hiring or layoffs (holidays, weather, etc.), thus leaving an over-the-month change that reflects only employment changes due to trend and irregular movements.

HIGH PRIORITY OCCUPATIONS - Occupations identified as in demand by employers, have higher skills needs, and are most likely to provide family sustaining wages, as determined by the Pennsylvania Department of Labor & Industry processes and analyses.

DEFINITIONS:

JOBS

Source: Pennsylvania Department of Labor & Industry, Current Employment Statistics (CES)

Each month the CES program surveys about 140,000 national businesses and government agencies in order to provide detailed industry data on employment, hours, and earnings of workers on non-farm payrolls. This is a collaborative effort between BLS and the states. CES produces a count of jobs, not of people.

Nonfarm Jobs: The total number of persons on establishment payrolls employed full or part time who received pay for any part of the pay period that includes the 12th day of the month. Temporary and intermittent employees are included, as are any employees who are on paid sick leave, on paid holiday, or who work during only part of the specified pay period. A striking employee who only works a small portion of the survey period, and is paid, would be included as employed under the CES definitions. Persons on the payroll of more than one establishment are counted in each establishment. Data exclude proprietors, self-employed, unpaid family or volunteer workers, farm workers, and domestic workers. Persons on layoff, strike, or leave without pay for the entire pay period, or who have not yet reported for work are not counted as employed. Government employment covers only civilian employees.

HELP WANTED ONLINE ADS

Source: The Conference Board Help Wanted OnLine™ (HWOL) data set

The Conference Board HWOL data set provides real-time insight into the employment marketplace through the world's largest database of online job ads. Jobs ads can be classified by industry, occupation, employer, and geographic area. Data are analyzed for employment trends and to forecast economic conditions. The underlying data for The Conference Board HWOL are provided by Wanted Technologies Corporation.

LONG-TERM INDUSTRY EMPLOYMENT PROJECTIONS - Estimates of current and projected employment levels by 4-digit industry code for various geographical areas (statewide, Metropolitan Statistical Areas and Workforce Investment Areas). Data supporting the industry projections were derived from a monthly survey of employers (Current Employment Statistics Program) and a quarterly tax report from employers (QCEW program).

