

MANUFACTURING FAST FACTS

4TH QUARTER 2013 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.

For additional information, please contact:
Center for Workforce Information & Analysis (CWIA)
 Call: 1-877-493-3282; Fax: 1-717-772-2168
 E-mail: workforceinfo@pa.gov
www.paworkstats.pa.gov



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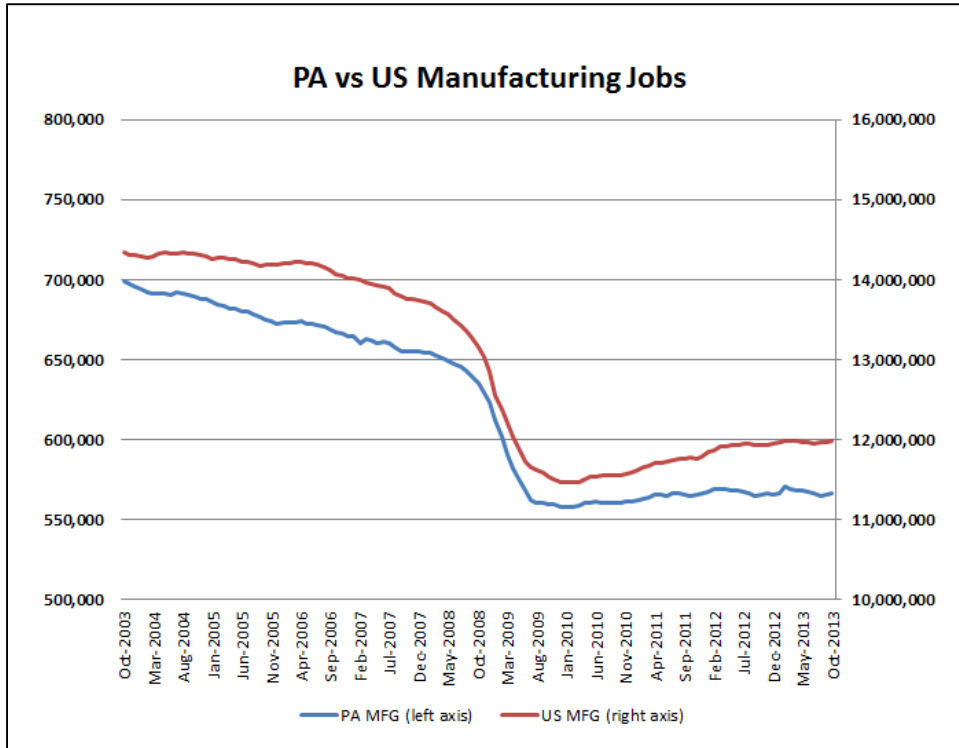
CWIA-MFG

PA ECONOMIC BACKGROUND

- **Pennsylvania's seasonally adjusted unemployment rate for October 2013 was 7.5%.**
 - This was down 0.1 percentage points from September 2013.
 - The October 2013 rate was down 0.5 from October 2012.
- **Pennsylvania's seasonally adjusted total nonfarm jobs for October 2013 were at 5,763,900.**
 - This was a net change of 0 jobs from September 2013.
 - October 2013 jobs were 29,400 higher than October 2012.
- **Pennsylvania's new hire activity increased.**
 - There were 669,100 new hires reported across all industries in the 3rd quarter of 2013.
 - This was an increase of 48,900 over 3rd quarter 2012 (8 percent increase).
- **Employer demand increased in Pennsylvania.**
 - 216,800 job ads were posted online in October 2013.
 - This was an increase of 8,600 from October 2012 (4.1 percent increase).
- **In Pennsylvania there were 2.5 unemployed persons for every online job posting (October 2013).**
 - The Pennsylvania rate was higher than the U.S. rate, which stood at 2.3.
 - 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 October 2013: 566,700.**
 - Increase of 1,300 over-the-month (0.2%).
 - Increase of 1,000 over-the-year (0.2%).
 - Down 132,000 manufacturing jobs from 10 years ago (-18.9%).
- **US Manufacturing Employment October 2013: 11,986,000.**
 - Increase of 19,000 over-the-month (0.2%).
 - Increase of 55,000 over-the-year (0.5%).
 - Down 2,348,000 manufacturing jobs from 10 years ago (-16.4%).

PA MANUFACTURING JOBS DETAIL

SEASONALLY ADJUSTED

PA Manufacturing Jobs December 2012 (in thousands)

	Oct. 2013	Sept. 2013	Oct. 2012	Change from Sept. 2013		Change from Oct. 2012	
				Vol.	Pct.	Vol.	Pct.
Manufacturing	566,700	565,400	565,700	1,300	0.2%	1,000	0.2%
Durable Goods	347,100	347,600	347,700	-500	-0.1%	-600	-0.2%
Nondurable Goods	219,600	217,800	218,000	1,800	0.8%	1,600	0.7%

Source: Current Employment Statistics

- Manufacturing jobs were up 1,300 in October, with the gain restricted to nondurable goods (+1,800) while durables declined (-500). October was the second consecutive monthly increase, both of which were attributable to nondurable goods.
- Over-the-year, manufacturing jobs were up 1,000, which, like the over-the-month gain, was due to nondurable goods (+1,600). The increase in nondurable goods from last October was the first over-the-year increase in more than 13 years (since August 2000). Durable goods were down 600 from last October.

PA MANUFACTURING

JOBS BY MSA¹

NOT SEASONALLY ADJUSTED

	Oct. 2013	Sept. 2013	Oct. 2012	Change from Sept. 2013		Change from Oct. 2012	
				Vol.	Pct.	Vol.	Pct.
Allentown- Bethlehem-Easton	36,500	36,400	36,800	100	0.3%	-300	-0.8%
Altoona	7,600	7,600	7,500	0	0.0%	100	1.3%
Erie	23,300	23,000	22,800	300	1.3%	500	2.2%
Harrisburg-Carlisle	20,100	20,200	20,200	-100	-0.5%	-100	-0.5%
Johnstown	4,000	4,000	4,100	0	0.0%	-100	-2.4%
Lancaster	35,900	35,800	36,100	100	0.3%	-200	-0.6%
Lebanon	8,900	8,900	8,900	0	0.0%	0	0.0%
Philadelphia Metro ²	125,700	126,400	127,500	-700	-0.6%	-1,800	-1.4%
Pittsburgh	89,100	89,200	90,300	-100	-0.1%	-1,200	-1.3%
Reading	29,800	29,700	29,600	100	0.3%	200	0.7%
Scranton-Wilkes- Barre	26,600	26,600	26,900	0	0.0%	-300	-1.1%
State College	4,100	4,100	4,100	0	0.0%	0	0.0%
Williamsport	8,400	8,400	8,400	0	0.0%	0	0.0%
York-Hanover	31,000	31,100	31,400	-100	-0.3%	-400	-1.3%

Source: Current Employment Statistics

- Seven of Pennsylvania's MSAs and Philly Metro lost manufacturing jobs over-the-year, with three MSAs gaining manufacturing jobs, and three MSAs remaining unchanged.
- The MSAs with the largest over-the-year job gains in manufacturing were Erie (+2.2%), Altoona (+1.3%), and Reading (+0.7%).
- The MSA with the largest over-the-year manufacturing jobs decrease was Johnstown (-2.4%). Philadelphia Metro had the second largest decrease (-1.4%).

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	2012 Q3 New Hires	2013 Q3 New Hires	Pct. Change
311	Food Mfg.	7,404	8,044	8.6%
312	Beverage & Tobacco Product Mfg.	447	477	6.7%
313	Textile Mills	149	135	-9.4%
314	Textile Product Mills	366	386	5.5%
315	Apparel Mfg.	344	331	-3.8%
316	Leather & Allied Product Mfg.	38	36	-5.3%
321	Wood Product Mfg.	1,238	1,482	19.7%
322	Paper Mfg.	859	1,511	75.9%
323	Printing & Related Support Activities	841	822	-2.3%
324	Petroleum & Coal Products Mfg.	180	225	25.0%
325	Chemical Mfg.	1,253	1,131	-9.7%
326	Plastics & Rubber Products Mfg.	2,101	1,845	-12.2%
327	Nonmetallic Mineral Product Mfg.	1,326	1,345	1.4%
331	Primary Metal Mfg.	1,462	1,596	9.2%
332	Fabricated Metal Product Mfg.	3,935	3,894	-1.0%
333	Machinery Mfg.	2,005	2,083	3.9%
334	Computer & Electronic Product Mfg.	1,623	1,234	-24.0%
335	Elec. Equip., App., and Component Mfg.	968	1,063	9.8%
336	Transportation Equip. Mfg.	1,984	1,119	-43.6%
337	Furniture & Related Product Mfg.	824	891	8.1%
339	Miscellaneous Mfg.	1,178	1,285	9.1%
Manufacturing Total		30,525	30,935	1.3%

Source: Pennsylvania New Hire Program

From 3rd Quarter 2012 to 3rd Quarter 2013 in Pennsylvania:

- Total Manufacturing New Hires increased by 1.3% (all industries +7.9%).
- Twelve of the 21 Manufacturing subsectors experienced over-the-year growth in New Hire activity, while nine experienced an over-the-year decrease.
- The largest over-the-year increases in New Hire activity among Manufacturing subsectors were in Paper Manufacturing (+75.9%), Petroleum & Coal Products Manufacturing (+25.0%), and Wood Product Manufacturing (+19.7%).
- The largest over-the-year decreases were in Transportation Equipment Manufacturing (-43.6%), Computer & Electronic Product Manufacturing (-24.0%), and Plastics & Rubber Products Manufacturing (-12.2%).

PA EMPLOYMENT BY INDUSTRY SUBSECTOR

NOT SEASONALLY ADJUSTED¹

NAICS	Industry Title	Mar. 2012 Emp.	Mar. 2013 Emp.	Pct. Change
311	Food Mfg.	66,573	66,991	0.6%
312	Beverage & Tobacco Product Mfg.	6,294	6,656	5.8%
313	Textile Mills	3,591	3,324	-7.4%
314	Textile Product Mills	3,936	4,041	2.7%
315	Apparel Mfg.	5,832	4,838	-17.0%
316	Leather & Allied Product Mfg.	986	975	-1.1%
321	Wood Product Mfg.	17,803	19,539	9.8%
322	Paper Mfg.	23,779	23,849	0.3%
323	Printing & Related Support Activities	25,854	24,613	-4.8%
324	Petroleum & Coal Products Mfg.	6,052	5,709	-5.7%
325	Chemical Mfg.	41,322	40,874	-1.1%
326	Plastics & Rubber Products Mfg.	35,017	35,088	0.2%
327	Nonmetallic Mineral Product Mfg.	19,864	19,557	-1.5%
331	Primary Metal Mfg.	39,342	39,382	0.1%
332	Fabricated Metal Product Mfg.	81,515	81,274	-0.3%
333	Machinery Mfg.	48,737	48,309	-0.9%
334	Computer & Electronic Product Mfg.	31,834	31,332	-1.6%
335	Elec. Equip., App., and Component Mfg.	25,918	26,008	0.3%
336	Transportation Equip. Mfg.	39,031	38,626	-1.0%
337	Furniture & Related Product Mfg.	15,142	14,682	-3.0%
339	Miscellaneous Mfg.	26,590	26,208	-1.4%
Manufacturing Total		565,012	561,875	-0.6%

Source: Quarterly Census of Employment & Wages

From March 2012 to March 2013 in Pennsylvania:

- Total manufacturing employment decreased by approximately 3,100 (-0.6%).
- The largest employment gains were in Wood Product Manufacturing (+9.8%), Beverage & Tobacco Product Manufacturing (+5.8%), and Textile Product Manufacturing (+2.7%).
- The largest employment decreases were in Apparel Manufacturing (-17.0%), Textile Mills (-7.4%), and Petroleum & Coal Products Manufacturing (-5.7%).

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 2013 Location Quotient: PA vs. US
311	Food Mfg.	1.11
312	Beverage & Tobacco Product Mfg.	0.84
313	Textile Mills	0.68
314	Textile Product Mills	0.85
315	Apparel Mfg.	0.80
316	Leather & Allied Product Mfg.	0.79
321	Wood Product Mfg.	1.36
322	Paper Mfg.	1.51
323	Printing & Related Support Activities	1.30
324	Petroleum & Coal Products Mfg.	1.25
325	Chemical Mfg.	1.23
326	Plastics & Rubber Products Mfg.	1.28
327	Nonmetallic Mineral Product Mfg.	1.29
331	Primary Metal Manufacturing	2.37
332	Fabricated Metal Product Mfg.	1.37
333	Machinery Mfg.	1.05
334	Computer & Electronic Product Mfg.	0.70
335	Elec. Equip., App., and Component Mfg.	1.67
336	Transportation Equip. Mfg.	0.61
337	Furniture & Related Product Mfg.	0.99
339	Miscellaneous Mfg.	1.09
Manufacturing Total		1.13

Source: Quarterly Census of Employment & Wages

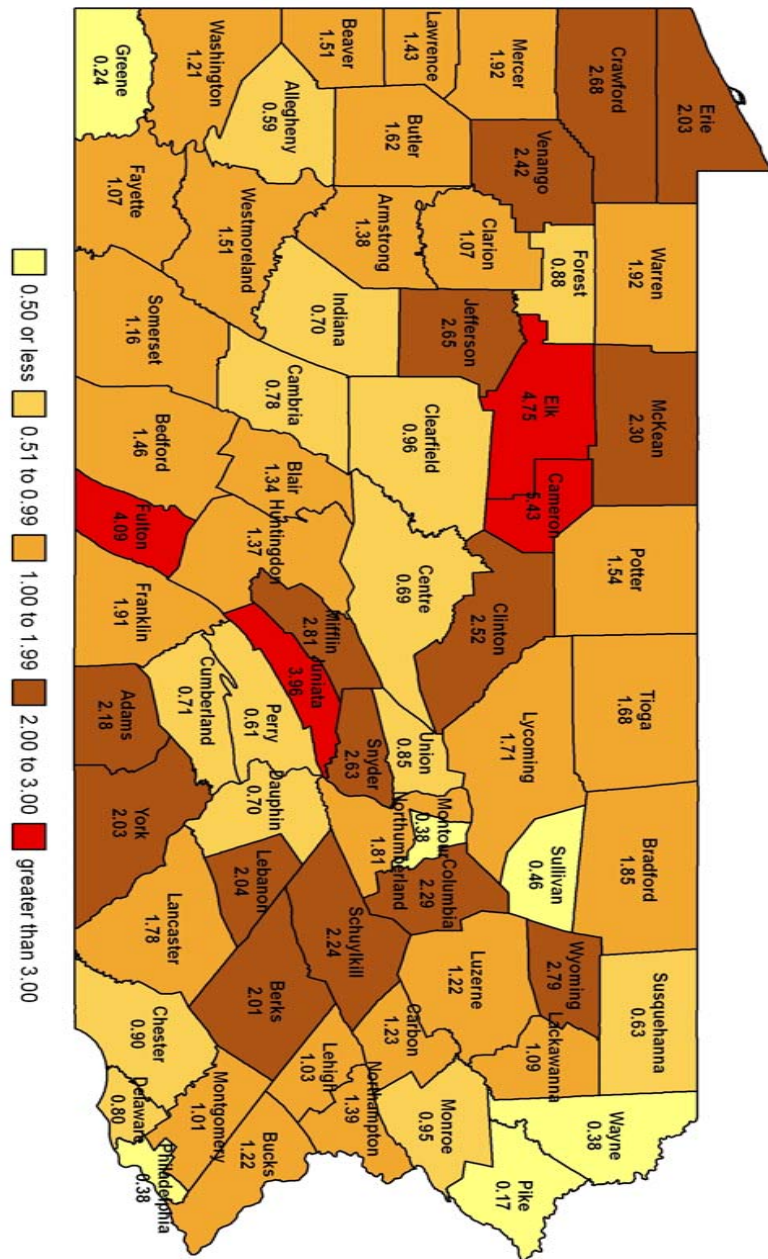
In March 2013:

- 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 (2.37), Electrical Equipment, Appliance, & Component Manufacturing (1.67), and Paper Manufacturing (1.51).
- Pennsylvania's location quotient compared to the nation was lowest in Transportation Equipment Manufacturing (0.61), Textiles Mills (0.68), and Computer & Electronic Product Manufacturing (0.70).

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 EDUCATION LEVEL¹

NAICS	Industry Title	< HS	HS	Post. Second. or Assoc.	Bach. or Higher
311	Food Mfg.	15.8%	37.6%	30.1%	16.5%
312	Beverage & Tobacco Product Mfg.	11.5%	37.1%	32.8%	18.5%
313	Textile Mills	13.7%	39.1%	29.3%	17.9%
314	Textile Product Mills	14.7%	41.7%	29.0%	14.6%
315	Apparel Mfg.	18.4%	36.0%	27.8%	17.8%
316	Leather & Allied Product Mfg.	16.1%	42.7%	28.1%	13.1%
321	Wood Product Mfg.	15.2%	43.1%	28.8%	13.0%
322	Paper Mfg.	10.7%	39.9%	31.9%	17.5%
323	Printing & Related Support Activities	10.0%	38.1%	32.5%	19.4%
324	Petroleum & Coal Products Mfg.	8.1%	34.1%	31.2%	26.6%
325	Chemical Mfg.	8.3%	27.7%	30.4%	33.6%
326	Plastics & Rubber Products Mfg.	12.7%	39.7%	30.9%	16.7%
327	Nonmetallic Mineral Product Mfg.	12.0%	40.5%	30.1%	17.4%
331	Primary Metal Manufacturing	10.4%	39.7%	31.9%	17.9%
332	Fabricated Metal Product Mfg.	11.4%	40.4%	31.5%	16.6%
333	Machinery Mfg.	9.7%	38.6%	32.0%	19.7%
334	Computer & Electronic Product Mfg.	8.5%	33.3%	32.2%	25.9%
335	Elec. Equip., App., and Component Mfg.	10.7%	36.8%	31.9%	20.6%
336	Transportation Equip. Mfg.	10.3%	35.7%	31.4%	22.6%
337	Furniture & Related Product Mfg.	13.2%	40.8%	30.1%	15.9%
339	Miscellaneous Mfg.	10.4%	35.4%	32.1%	22.1%
Manufacturing Total		11.4%	37.6%	31.2%	19.8%

Source: US Census Bureau; Local Employment Dynamics

For 2012 Quarter 4:

- Chemical Manufacturing had the highest percentage of workers with at least a bachelor's degree (33.6%), followed by Petroleum & Coal Products Manufacturing (26.6%), and Computer & Electronic Products Manufacturing (25.9%).
- Apparel Manufacturing had the highest percentage of workers with less than a high school diploma (18.4%), followed by Leather & Allied Product Manufacturing (16.1%), and Food Manufacturing (15.8%).
- Overall, approximately 89% of individuals working in manufacturing in Pennsylvania have at least a high school diploma, and more than half have completed education beyond high school.

¹ Please note these education levels apply only to Local Employment Dynamics Data, and do not correspond to the educational attainments in the definition section of this document.

¹ Based 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. March 2013	Emp. Gain from March 2012	Pct. Gain from March 2012	Type of Change
326140	Polystyrene Foam Product Manufacturing	2,339	1,672	251%	Growth
321999	All Other Miscellaneous Wood Product Manufacturing	2,502	985	65%	Hi-Growth
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	1,127	416	59%	Growth
337215	Showcase, Partition, Shelving, and Locker Manufacturing	2,199	371	20%	Growth
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	1,850	302	20%	Growth
331513	Steel Foundries (except Investment)	1,728	301	21%	Hi-Growth
311811	Retail Bakeries	2,409	244	11%	Hi-Growth
333517	Machine Tool Manufacturing	1,982	241	14%	Growth
325130	Synthetic Dye and Pigment Manufacturing	1,544	233	18%	Growth
312120	Breweries	1,420	208	17%	Hi-Growth
331318	Other Aluminum Rolling, Drawing, and Extruding	1,891	184	11%	Hi-Growth
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing	1,021	180	21%	Growth
332410	Power Boiler and Heat Exchanger Manufacturing	1,824	170	10%	Growth
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing	1,346	155	13%	Growth
336212	Truck Trailer Manufacturing	1,147	155	16%	Growth
312112	Bottled Water Manufacturing	1,317	148	13%	Growth
333132	Oil and Gas Field Machinery and Equipment Manufacturing	568	136	31%	Growth
326191	Plastics Plumbing Fixture Manufacturing	278	133	92%	Growth
327310	Cement Manufacturing	970	129	15%	Growth
332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing	917	127	16%	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	Oct. 2012	Oct. 2013	Pct. Change
311	Food Mfg.	814	920	13.0%
312	Beverage & Tobacco Product Mfg.	121	125	3.3%
313	Textile Mills	19	24	26.3%
314	Textile Product Mills	21	28	33.3%
315	Apparel Mfg.	34	72	111.8%
316	Leather & Allied Product Mfg.	47	29	-38.3%
321	Wood Product Mfg.	113	77	-31.9%
322	Paper Mfg.	208	301	44.7%
323	Printing & Related Support Activities	231	308	33.3%
324	Petroleum & Coal Products Mfg.	31	37	19.4%
325	Chemical Mfg.	1,421	1,456	2.5%
326	Plastics & Rubber Products Mfg.	395	375	-5.1%
327	Nonmetallic Mineral Product Mfg.	192	213	10.9%
331	Primary Metal Manufacturing	517	622	20.3%
332	Fabricated Metal Product Mfg.	664	745	12.2%
333	Machinery Mfg.	1,039	1,147	10.4%
334	Computer & Electronic Product Mfg.	1,006	1,048	4.2%
335	Elec. Equip., App., and Component Mfg.	316	367	16.1%
336	Transportation Equip. Mfg.	468	307	-34.4%
337	Furniture & Related Product Mfg.	108	191	76.9%
339	Miscellaneous Mfg.	636	555	-12.7%
Total Manufacturing Postings by Subsector		8,401	8,947	6.5%

Source: Help Wanted Online; The Conference Board

From October 2012 to October 2013:

- 16 industry subsectors showed over-the-year increases in job posting activity. The largest increases were seen in Apparel Manufacturing (+111.8%), Furniture & Related Product Manufacturing (+76.9%), and Paper Manufacturing (+44.7%).
- The largest over-the-year decreases by percentage were in Leather & Allied Product Manufacturing (-38.3%), Transportation Equipment Manufacturing (-34.4%), and Wood Product Manufacturing (-31.9%).
- Overall, Manufacturing job postings were up 6.5% over-the-year.

HELP WANTED ONLINE ADS

BY MANUFACTURING

INDUSTRY IN PA- TOP 25

NAICS	Industry Title	Oct. 2012	Oct. 2013	Pct. Change
325412	Pharmaceutical Preparation Manufacturing	584	575	-1.5%
334417	Electronic Connector Manufacturing	81	264	225.9%
326199	All Other Plastics Product Manufacturing	245	233	-4.9%
325120	Industrial Gas Manufacturing	294	212	-27.9%
331111	Iron and Steel Mills	155	199	28.4%
311320	Chocolate and Confectionery Manufacturing from Cacao Beans	135	187	38.5%
333298	All Other Industrial Machinery Manufacturing	109	165	51.4%
335314	Relay and Industrial Control Manufacturing	128	146	14.1%
334516	Analytical Laboratory Instrument Manufacturing	90	144	60.0%
339112	Surgical and Medical Instrument Manufacturing	141	140	-0.7%
331315	Aluminum Sheet, Plate, and Foil Manufacturing	88	135	53.4%
333311	Automatic Vending Machine Manufacturing	9	135	1400.0%
339999	All Other Miscellaneous Manufacturing	113	131	15.9%
311812	Commercial Bakeries	69	125	81.2%
325510	Paint and Coating Manufacturing	64	116	81.3%
332312	Fabricated Structural Metal Manufacturing	40	108	170.0%
325181	Alkalies and Chlorine Manufacturing	90	103	14.4%
312111	Soft Drink Manufacturing	95	100	5.3%
332813	Electroplating, Plating, Polishing, Anodizing, and Coloring	77	97	26.0%
311830	Tortilla Manufacturing	96	97	1.0%
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	107	93	-13.1%
333120	Construction Machinery Manufacturing	102	89	-12.7%
339113	Surgical Appliance and Supplies Manufacturing	62	86	38.7%
336411	Aircraft Manufacturing	138	83	-39.9%
325414	Biological Product (except Diagnostic) Manufacturing	115	83	-27.8%

Source: Help Wanted Online; The Conference Board

From October 2012 to October 2013:

- The largest over-the-year gains in job posting activity by industry were in Automatic Vending Machine Manufacturing (+1400.0%), Electronic Connector Manufacturing (+225.6%), and Fabricated Structural Metal Manufacturing (+153.6%).
- The largest over-the-year decreases by industry were in Aircraft Manufacturing (-39.9%), Industrial Gas Manufacturing (-27.9%), and Biological Product (except Diagnostic) Manufacturing (-21.3%).

HELP WANTED ONLINE ADS

BY MANUFACTURING

OCCUPATION IN PA - TOP 25

SOC	Occupation Title	Oct. 2012	Oct. 2013	Pct. Change
17-2112	Industrial Engineers	571	630	10.3%
51-1011	First-Line Supervisors of Production and Operating Workers	450	494	9.8%
11-2021	Marketing Managers	328	321	-2.1%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	198	237	19.7%
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	193	223	15.5%
49-9071	Maintenance and Repair Workers, General	239	213	-10.9%
15-1121	Computer Systems Analysts	180	194	7.8%
17-2141	Mechanical Engineers	207	188	-9.2%
13-2011	Accountants	199	185	-7.0%
11-2022	Sales Managers	160	183	14.4%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	97	163	68.0%
43-4051	Customer Service Representatives	128	142	10.9%
15-1151	Computer User Support Specialists	110	126	14.5%
11-3121	Human Resources Managers	99	126	27.3%
53-3032	Heavy and Tractor-Trailer Truck Drivers	91	124	36.3%
17-2071	Electrical Engineers	109	119	9.2%
51-4041	Machinists	159	118	-25.8%
11-9199	Managers, All Other	59	105	78.0%
13-1161	Market Research Analysts and Marketing Specialists	71	103	45.1%
51-9198	Helpers--Production Workers	79	102	29.1%
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	103	101	-1.9%
11-3061	Purchasing Managers	90	101	12.2%
15-1132	Software Developers, Applications	126	100	-20.6%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	108	100	-7.4%
11-1021	General and Operations Managers	161	88	-45.3%

Source: Help Wanted Online; The Conference Board

From October 2012 to October 2013:

- The largest over-the-year gains in job posting activity by occupation were for Managers, All Other (+78.0%), First-Line Supervisors of Office and Administrative Support Workers (+68.0%), and Market Research Analysts and Marketing Specialists (+45.1%).
- The largest over-the-year decreases were for General and Operations Managers (-45.3%), Machinists (-25.8%), and Software Developers, Applications (-20.6%).

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

Company	Oct. 2013 Postings
Tyco	271
Alcoa Inc.	177
THE HERSHEY COMPANY	169
Air Products	166
System One	141
Enterprise	135
TE Connectivity	132
Bimbo Bakeries	123
Ppg Industries	106
Teva	106
Bayer	88
United States Steel Corporation	77
Eaton Corporation.	73
Lockheed Martin	69
Lutron Electronics	64
Creative Circle	64
Thermo Fisher Scientific Inc.	64
L-3 Communications	63
RR Donnelley	63
Sanofi Pasteur Inc.	62
Johnson Controls, Inc	61
Superior Lamp Inc.	61
Merck & Co.	60
Fmc Corporation	57
United Technologies	56
Bristol Myers Squibb	55
FedEx	52
H.J. Heinz	51
Coca-Cola Refreshments	51
ARKEMA	50

Source: Help Wanted Online; The Conference Board.

PENNSYLVANIA MANUFACTURING INDUSTRY EMPLOYMENT 2010-2020 LONG-TERM PROJECTIONS

NAICS	Industry Title	Employment		Change		Avg. Annual
		2010	2020	Level	Percent	Change
31-33	Manufacturing	560,440	557,760	-2,680	-0.5%	-268
311	Food Mfg.	66,440	65,140	-1,300	-2.0%	-130
312	Beverage & Tobacco Product Mfg.	6,740	6,650	-90	-1.3%	-9
313	Textile Mills	3,780	2,610	-1,170	-31.0%	-117
314	Textile Product Mills	4,010	2,550	-1,460	-36.4%	-146
315	Apparel Mfg.	6,740	3,470	-3,270	-48.5%	-327
316	Leather & Allied Product Mfg.	820	510	-310	-37.8%	-31
321	Wood Product Mfg.	19,410	18,200	-1,210	-6.2%	-121
322	Paper Mfg.	24,820	22,700	-2,120	-8.5%	-212
323	Printing & Related Support Activities	28,260	26,390	-1,870	-6.6%	-187
324	Petroleum & Coal Products Mfg.	6,320	5,940	-380	-6.0%	-38
325	Chemical Mfg.	42,970	42,610	-360	-0.8%	-36
326	Plastics & Rubber Products Mfg.	35,160	36,470	1,310	3.7%	131
327	Nonmetallic Mineral Product Mfg.	21,380	21,660	280	1.3%	28
331	Primary Metal Manufacturing	36,000	37,210	1,210	3.4%	121
332	Fabricated Metal Product Mfg.	77,800	83,830	6,030	7.8%	603
333	Machinery Mfg.	45,300	47,830	2,530	5.6%	253
334	Computer & Electronic Product Mfg.	31,970	29,560	-2,410	-7.5%	-241
335	Elec. Equip., App., and Component Mfg.	24,680	28,090	3,410	13.8%	341
336	Transportation Equip. Mfg.	36,790	38,930	2,140	5.8%	214
337	Furniture & Related Product Mfg.	14,820	13,950	-870	-5.9%	-87
339	Miscellaneous Mfg.	26,230	23,460	-2,770	-10.6%	-277

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.

2013 PA HIGH PRIORITY OCCUPATIONS IN ADVANCED MANUFACTURING

SOC Code	Occupation	Educational Attainment	Industry Cluster Wage, 2012
11-3051	Industrial Production Managers	BD+	\$97,258
13-1023	Purchasing Agents	LT OJT	\$59,133
17-2112	Industrial Engineers	BD	\$76,006
17-2141	Mechanical Engineers	BD	\$71,967
17-3026	Industrial Engineering Technicians	AD	\$53,012
41-2022	Parts Salespersons	MT OJT	\$32,728
41-4012	Sales Representatives	MT OJT	\$61,673
43-4051	Customer Service Representatives	ST OJT	\$40,054
43-5061	Production, Planning & Expediting Clerks	MT OJT	\$48,014
43-5071	Shipping, Receiving & Traffic Clerks	ST OJT	\$34,272
49-1011	Supervisors - Mechanics, Installers & Repairers	WK EXP	\$64,151
49-3023	Automotive Service Technicians & Mechanics	LT OJT	\$36,412
49-9041	Industrial Machinery Mechanics	LT OJT	\$45,594
49-9043	Maintenance Workers, Machinery	MT OJT	\$39,711
49-9071	Maintenance & Repair Workers, General	MT OJT	\$40,847
51-1011	Supervisors - Production & Operating Workers	PS	\$58,134
51-4011	Computer-Controlled Machine Tool Operators, Metal & Plastic	MT OJT	\$37,755
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal & Plastic	MT OJT	\$46,086
51-4021	Extruding & Drawing Machine Setters, Oprs & Tenders, Metal & Plastic	MT OJT	\$37,375
51-4041	Machinists	LT OJT	\$40,080
51-4081	Multiple Machine Tool Setters, Operators & Tenders, Metal & Plastic	MT OJT	\$35,299
51-4121	Welders, Cutters, Solderers & Brazers	MT OJT	\$37,574
51-4191	Heat Treating Equipment Setters, Operators & Tenders, Metal & Plastic	MT OJT	\$37,122
51-9061	Inspectors, Testers, Sorters, Samplers & Weighers	MT OJT	\$39,257

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).

DEFINITIONS:

EDUCATIONAL ATTAINMENT - The Bureau of Labor Statistics (BLS) provides information about entry-level education, related work experience, and typical on-the-job training requirements for each of several hundreds of occupations.

EDUCATIONAL ATTAINMENT LEVEL ABBREVIATIONS -

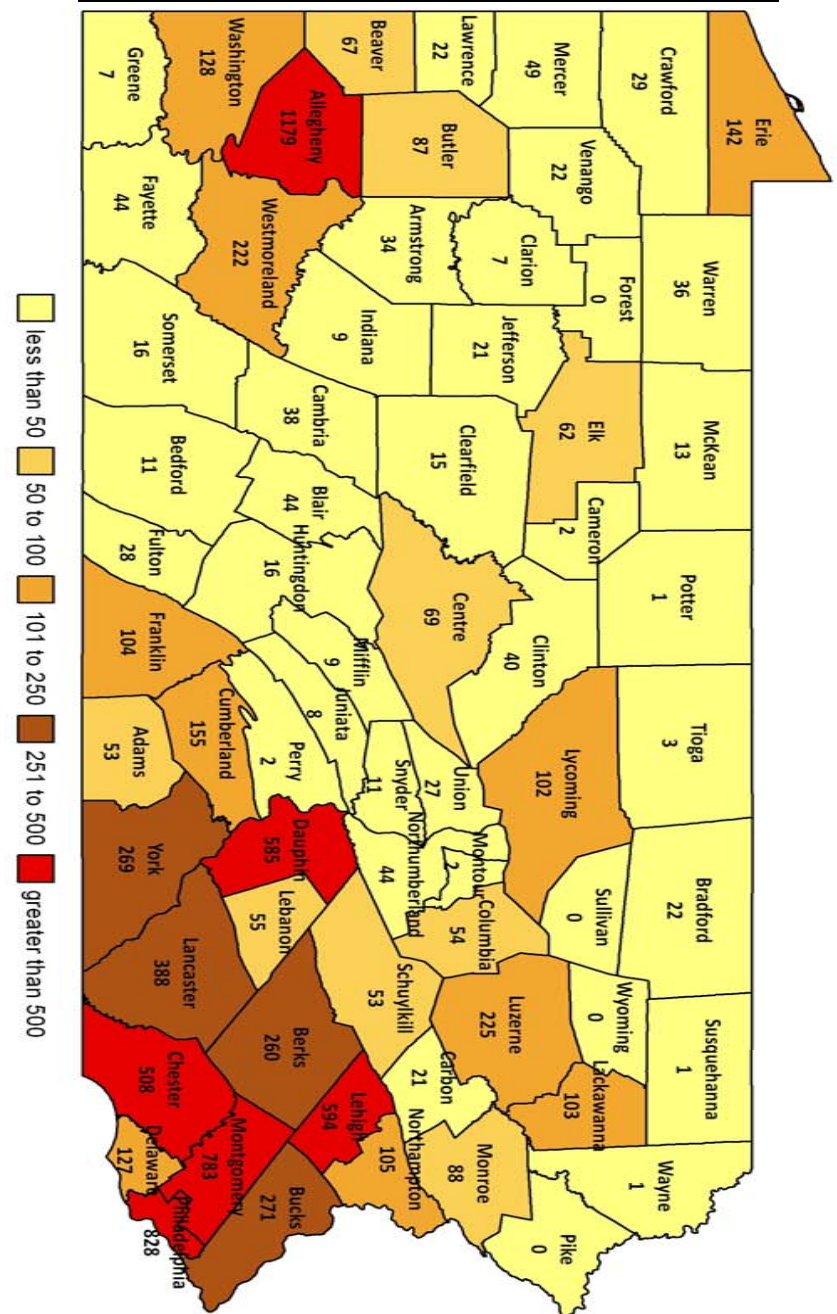
- Short-term or Moderate-term OJT – basic tasks and skills are learned through a period of on-the-job training lasting up to one year. A high school diploma may be required.
- Long-term training – a high school diploma and at least one year of on-the-job training or an apprenticeship.
- HS diploma plus experience – a high school diploma and training gained through hands-on work in a similar occupation.
- Postsecondary training – training is gained through a postsecondary training program. Some period of related work experience may be required.
- Associate degree – degree completed after two years of full-time schooling beyond high school. Some period of related work experience may be required.
- Bachelor's degree – degree completed after four years of full-time schooling beyond high school. Some period of related work experience may be required.
- Master's Degree – degree completed after two years of full-time schooling beyond a bachelor's degree. Some period of related work experience may be required.
- Doctoral, or Professional degree – degree programs requiring 3-6 years of education at the college or university level beyond a four-year bachelor's degree.

QUARTERLY WORKFORCE INDICATORS

Source: U.S. Census Bureau, Local Employment Dynamics

The Quarterly Workforce Indicators (QWI) are a set of economic indicators that can be queried by different levels of geography as well as by industry, gender, and age of workers. The QWI are built upon wage records in the Unemployment Insurance (UI) system and information from state Quarterly Census of Employment and Wages (QCEW) data.

MFG JOB POSTINGS BY COUNTY - OCTOBER 2013



Source: Help Wanted Online; The Conference Board