



Building & Construction

Pennsylvania defines industry clusters to serve as the basis for data-driven workforce development policies. An industry cluster includes industries closely linked by common products, labor pools, technologies, supplier chains and training needs. They take on strategic importance for long-term economic planning as changes that benefit one group member will generally impact other members of the cluster.

Industry clusters are comprised of specific six-digit North American Industry Classification System, or NAICS, codes. They are mutually exclusive, so that no two clusters contain the same NAICS code. Currently, there are 12 clusters identified, along with several critical sub-clusters. Combined, these 12 industry clusters account for nearly 83 percent of all employment in the Commonwealth.

Cluster Summary

The Building and Construction (BC) cluster includes industries directly involved in the construction of housing, roadways or other physical structures. Industries such as HVAC equipment manufacturing, whose products are used exclusively in the construction of these structures, are also included. The retail industries such as Home Centers which act as a middle man between manufacturer and independent contractors are included as well. Lastly, technical firms offering drafting or architectural services are also in the cluster.

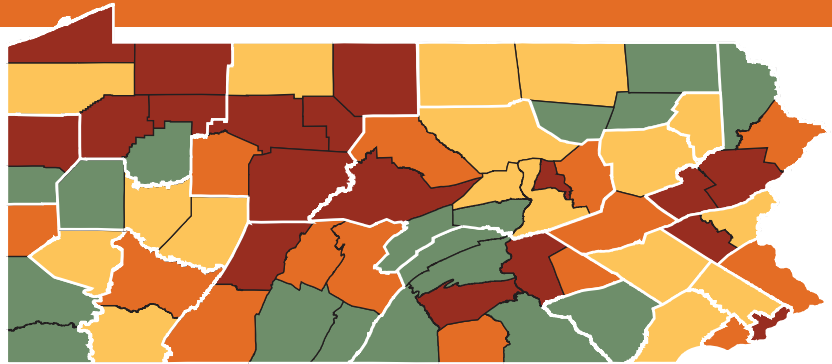
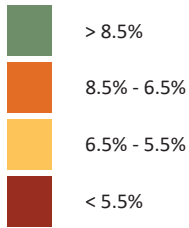
	2012	2017
Employer Units	35,244	35,406
Number of Jobs	335,596	360,878
Percent of Total Pennsylvania Jobs	6.0%	6.2%
Average Annual Wages	\$50,749	\$58,446
Location Quotient (LQ)	0.99	0.94

LQs greater than one suggest a competitive advantage.

Employment in this cluster has increased 7.5% in the last five years in Pennsylvania. However, only nine Workforce Development Areas (WDAs) have competitive Location Quotients (LQ) (as seen on page 3). Average annual wages in this cluster have jumped considerably (15%) over this same five year period.

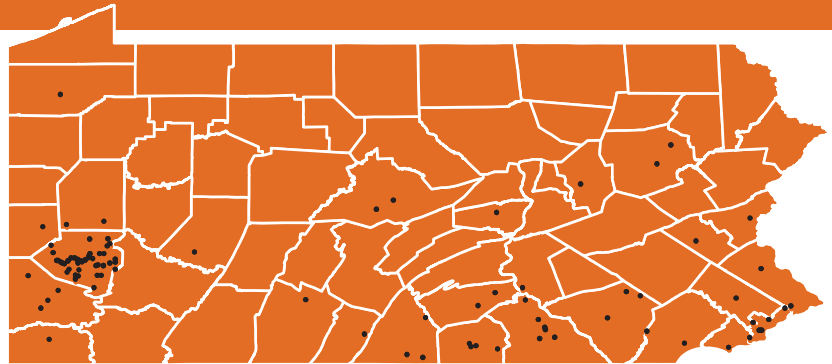
Center for Workforce Information & Analysis
651 Boas St.
Harrisburg, PA 17121
www.workstats.dli.pa.gov

Percent Employment by County



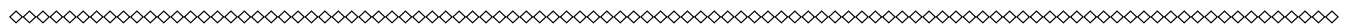
Major Employers

- Lowe's Home Centers Inc
- Home Depot USA Inc
- PA Dept of Transportation
- JLG Industries Inc
- New Enterprise Stone & Lime Company
- The Sherwin-Williams Company



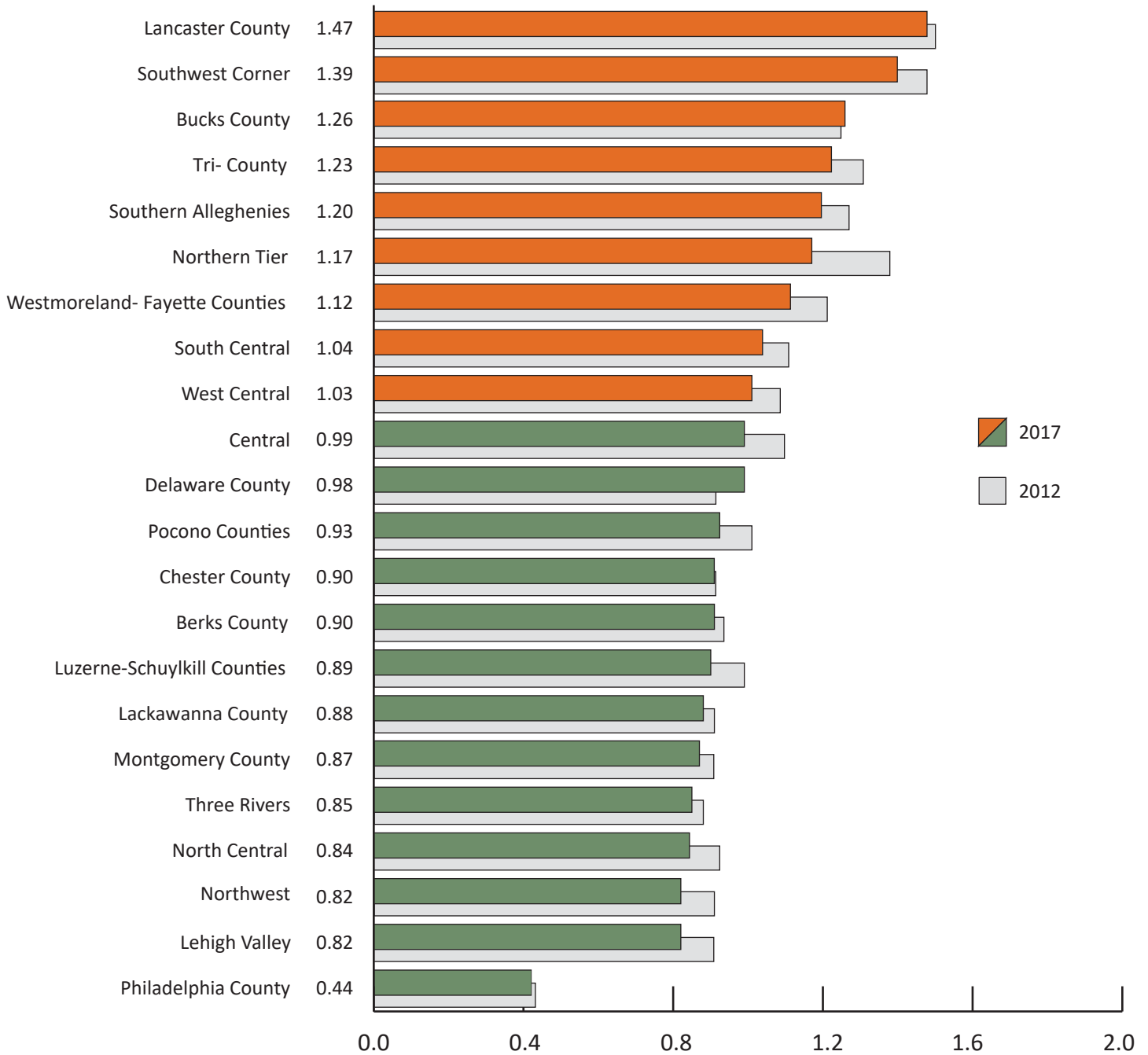
Top Industries Based on Employment

- Home Centers
- Commercial Building Construction
- Nonresidential Plumbing & HVAC Contractors
- Nonresidential Electrical Contractors
- Highway, Street & Bridge Construction
- Residential Plumbing & HVAC Contractors
- Residential Remodelers
- Nonresidential Site Preparation Contractors
- New Single-Family Housing Construction
- Residential Electrical Contractors
- Water & Sewer System Construction
- All Other Residential Trade Contractors
- Residential Site Preparation Contractors
- Architectural Services
- Hardware Stores
- All Other Nonresidential Trade Contractors
- Other Building Material Dealers
- Nonresidential Drywall Contractors
- Metal Window & Door Manufacturing
- Other Nonresidential Equip. Contractors



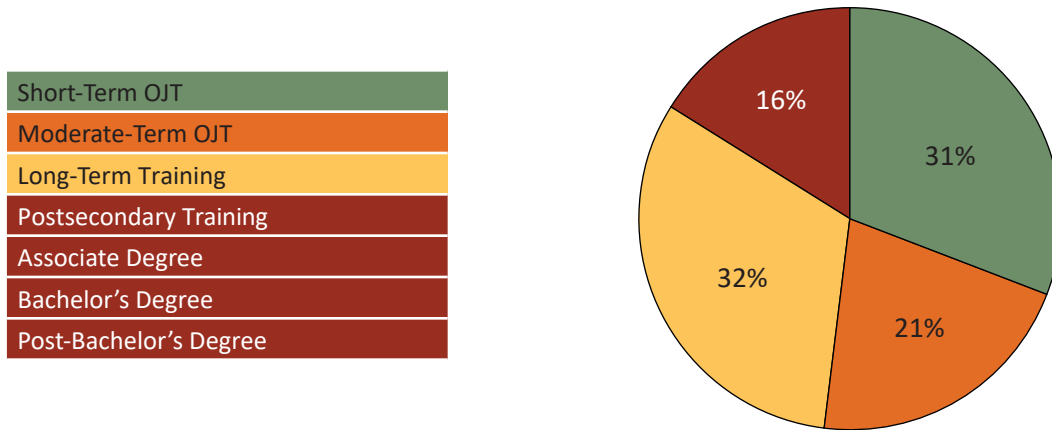
Employment Concentration

A location quotient, or LQ, compares a cluster's share of local employment to its share of national employment. This value can be used when evaluating the strength of an industry cluster within an area. An LQ greater than one indicates that the cluster has, on average, more employees locally than typically expected implying a possible competitive advantage. Almost all of the Workforce Development Areas (WDAs) have decreased their competitiveness since 2012. Bucks County and Delaware County WDAs are the exceptions.



Educational Requirements

This graph illustrates the minimum educational attainment levels for jobs found in this cluster's various industries. Approximately 84 percent of BC jobs require no formal postsecondary training. Many occupations in the cluster may still have apprenticeship programs associated with them, which would be included in the Long-Term Training category.



Occupations with Significant Employment

The following table lists occupations that employ at least 5,500 people in the BC cluster.

SOC Code	Occupation	Cluster Wage 2017	Job Openings	
			Industry Cluster	All Industries
47-2031	Carpenters	\$50,841	643	1,051
47-2061	Construction Laborers	\$38,714	917	1,530
41-2031	Retail Salespersons	\$29,727	822	7,431
47-2111	Electricians	\$62,794	493	681
47-1011	Supervisors - Construction Trades & Extraction Workers	\$71,234	226	391
47-2152	Plumbers, Pipefitters & Steamfitters	\$57,262	285	396
47-2073	Operating Engineers & Other Construction Equipment Operators	\$53,820	259	565
49-9021	Heating, A/C & Refrigeration Mechanics & Installers	\$52,148	235	356
43-6014	Secretaries	\$32,684	94	1,330
53-3032	Heavy & Tractor-Trailer Truck Drivers	\$44,127	220	2,335
41-4012	Sales Representatives	\$63,889	180	1,731
53-7062	Laborers & Freight, Stock & Material Movers	\$28,729	266	4,257
43-3031	Bookkeeping, Accounting & Auditing Clerks	\$40,395	69	698
43-9061	Office Clerks, General	\$35,467	151	3,071
13-1051	Cost Estimators	\$67,093	216	387