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

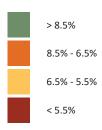
The Building and Construction (BC) cluster includes industries directly involved in the construction of housing, roadways or other physical structures. Industries such as HVAC equipment manufacturing, whose products are used exclusively in the construction of these structures, are also included. The 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.

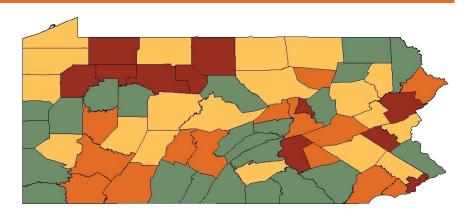
	2017	2022
Employer Units	35,406	37,823
Number of Jobs	360,878	382,722
Percent of Total Pennsylvania Jobs	6.2%	6.5%
Average Annual Wages	\$58,446	\$69,410
Location Quotient (LQ)	0.94	0.92
LQs greater than one suggest a co	mpetitive advantage	2.

Employment in this cluster has increased 6.1% in the last five years in Pennsylvania. However, only 11 Workforce Development Areas (WDAs) have competitive Location Quotients (LQ) (as seen on page 3). Average annual wages in this cluster have jumped considerably (18.8%) over this same five-year period.

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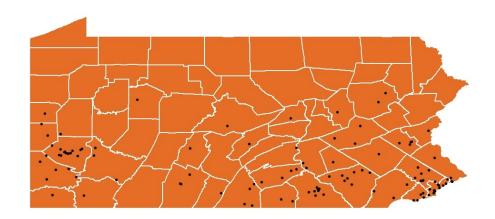
Percent Employment by County





Major Employers

- Lowe's Home Centers Inc
- Home Depot USA Inc
- PA Dept of Transportation
- City of Philadelphia
- JLG Industries Inc
- Kinsley Construction Inc



Top Industries Based on Employment

- Home Centers
- Commercial Building Construction
- Nonresidential Plumbing & HVAC Contractors
- Nonresidential Electrical Contractors
- Residential Plumbing & HVAC Contractors
- Residential Remodelers
- Highway, Street & Bridge Construction
- Nonresidential Site Preparation Contractors

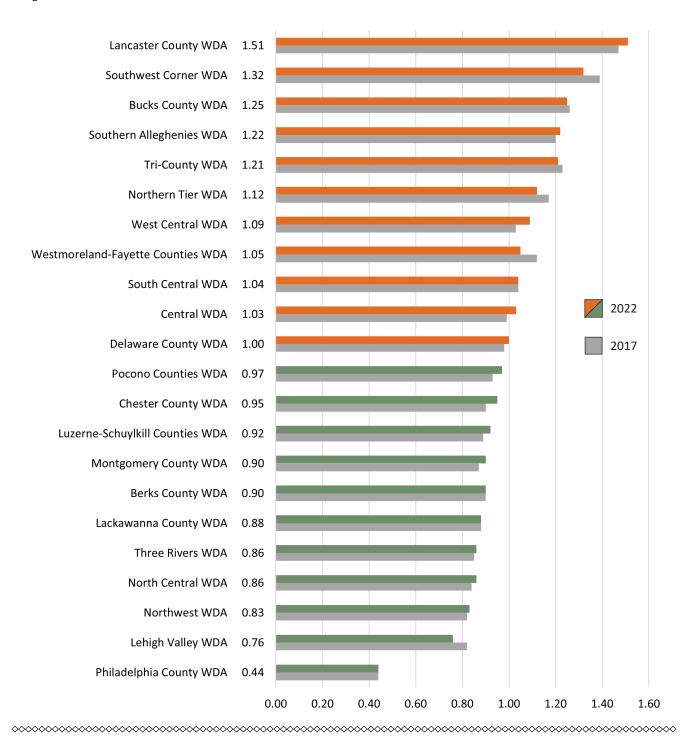
- New Single-Family Housing Construction
- Residential Electrical Contractors

- All Other Residential Trade Contractors
- All Other Nonresidential Trade Contractors
- Water & Sewer System Construction
- Architectural Services
- Residential Site Preparation Contractors
- Hardware Retailers
- Other Building Material Dealers
- Other Nonresidential Equip. Contractors
- Construction Machinery Manufacturing
- Metal Window & Door Manufacturing

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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. The majority of the Workforce Development Areas (WDAs) have slightly increased their competitiveness since 2017. Lancaster County, West Central, Central and Delaware WDAs have increased their competitiveness by more than two percent and have an LQ greater than one.



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Educational Requirements

This graph illustrates the minimum educational attainment levels for jobs found in this cluster's various industries. Approximately 72 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.

Short-Term OJT

Moderate-Term OJT

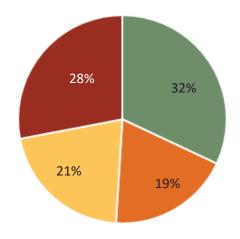
Long-Term Training

Work Experience/Some PS Training

Associate Degree

Bachelor's Degree

Advanced Degree



Occupations with Significant Employment

The following table lists occupations that employ at least 4,400 people in the BC cluster.

			Annual Demand	
SOC Code	Occupation	Average Wage	All Industries	Industry Cluster
47-2061	Construction Laborers	\$52,290	5,274	3,256
41-2031	Retail Salespersons	\$34,410	19,990	2,558
47-2031	Carpenters	\$59,860	3,576	2,437
47-2111	Electricians	\$73,100	2,496	1,744
47-1011	Supervisors - Construction & Extraction Workers	\$82,580	2,374	1,374
43-9061	Office Clerks, General	\$43,230	16,622	1,371
47-2073	Operating Engineers	\$60,010	2,359	1,207
47-2152	Plumbers, Pipefitters & Steamfitters	\$69,670	1,664	1,171
49-9021	Heating, A/C & Refrigeration Mechanics & Installers	\$58,920	1,641	1,125
53-3032	Heavy & Tractor-Trailer Truck Drivers	\$56,530	10,434	1,072
53-7062	Laborers & Freight/Stock/Material Movers	\$41,130	20,297	967
53-7065	Stockers & Order Fillers	\$37,170	17,163	944
41-2011	Cashiers	\$28,160	22,138	935
11-1021	General & Operations Managers	\$121,610	7,891	757
41-3091	Sales Representatives- Services	\$76,810	4,130	586

^{*}The 2023 average annual wage reflects wages across all industries and is not specific to the cluster.