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 85 percent of all employment in the commonwealth.

Cluster Summary

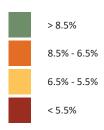
The Building and Construction (BC) cluster includes industries directly involved in the construction of housing, roadways or other physical structures. Industries such as HVAC equipment manufacturing, whose products are used exclusively in the construction of these structures, are also included. The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

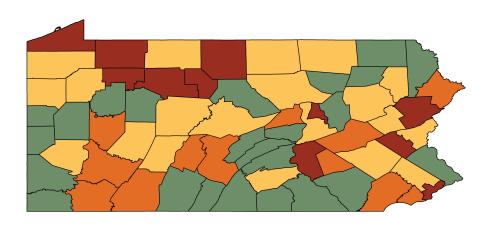
	2018	2023
Employer Units	35,794	37,768
Number of Jobs	368,522	385,258
Percent of Total Pennsylvania Jobs	6.3%	6.5%
Average Annual Wages	\$59,820	\$72,628
Location Quotient (LQ)	0.92	0.91
LQs greater than one suggest a co	mpetitive advantage	2.

Employment in this cluster has increased 4.5% 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 (21.4%) over this same five-year period.

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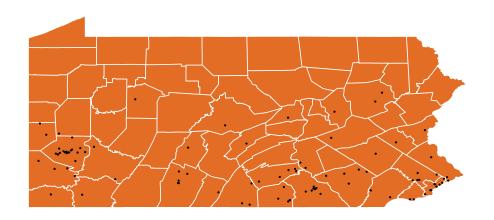
Percent Employment by County





Major Employers

- Lowe's Home Centers Inc
- Home Depot USA Inc
- PA Dept of Transportation
- City of Philadelphia
- JLG Industries Inc
- New Enterprise Stone & Lime Co Inc



Top Industries Based on Employment

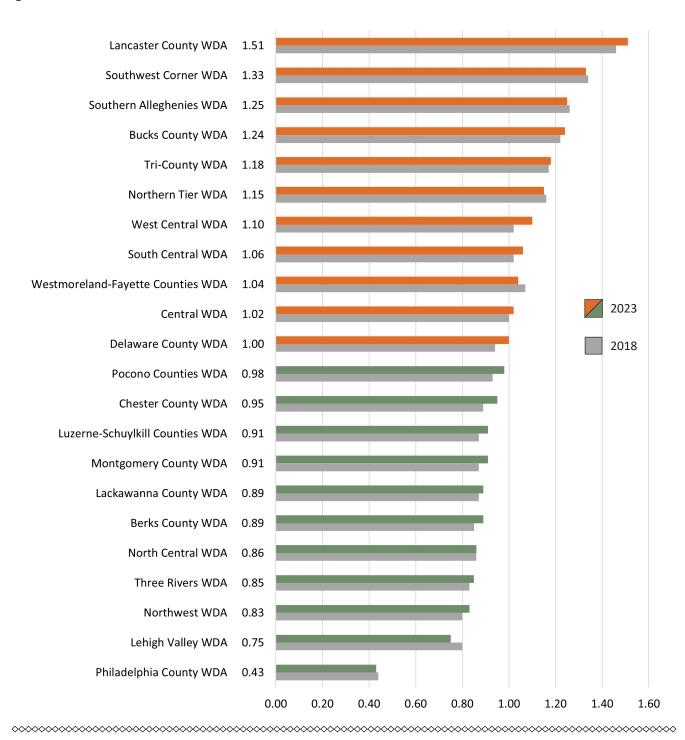
- Commercial Building Construction
- Home Centers
- Highway, Street & Bridge Construction
- Nonresidential Plumbing & HVAC Contractors
- Nonresidential Electrical Contractors
- Residential Plumbing & HVAC Contractors
- Residential Remodelers
- Nonresidential Site Preparation Contractors
- New Single-Family Housing Construction
- All Other Residential Trade Contractors

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

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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 2018. Lancaster County, West Central, and South Central WDAs have increased their competitiveness by more than four percent and have an LQ greater than one.



Educational Requirements

This graph illustrates the minimum educational attainment levels for jobs found in this cluster's various industries. Approximately 68 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

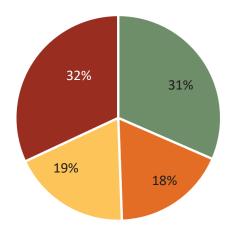
Long-Term Training

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 4,800 people in the BC cluster.

			Annual Demand	
SOC Code	Occupation	Average Wage	All Industries	Industry Cluster
41-2031	Retail Salespersons	\$34,320	22,324	4,090
47-2061	Construction Laborers	\$53,140	4,488	2,739
47-2031	Carpenters	\$62,660	3,136	2,085
47-2111	Electricians	\$73,510	2,198	1,609
47-1011	Supervisors - Construction & Extraction Workers	\$86,940	2,386	1,529
11-1021	General & Operations Managers	\$121,150	10,874	1,293
41-2011	Cashiers	\$29,170	22,739	1,258
49-9021	Heating, A/C & Refrigeration Mechanics & Installers	\$63,250	1,719	1,217
53-7062	Laborers & Freight/Stock/Material Movers	\$42,240	20,336	1,084
53-3032	Heavy & Tractor-Trailer Truck Drivers	\$58,620	10,255	1,038
47-2073	Operating Engineers	\$62,350	2,095	972
47-2152	Plumbers, Pipefitters & Steamfitters	\$73,950	1,446	964
53-7065	Stockers & Order Fillers	\$37,680	17,641	842
13-1051	Cost Estimators	\$79,420	779	451
47-2141	Painters, Construction & Maintenance	\$53,060	815	390

^{*}The 2024 average annual wage reflects wages across all industries and is not specific to the cluster.