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.
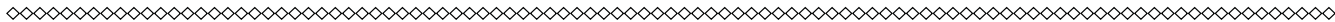
Cluster Summary

The Agriculture & Food Production (AFP) cluster begins with the growing of food crops, including grains and livestock, and ends with the wholesale distribution of these products. The cluster also includes support industries, such as refrigerated warehousing and fertilizer manufacturing, as well as public agencies that oversee agricultural programs.
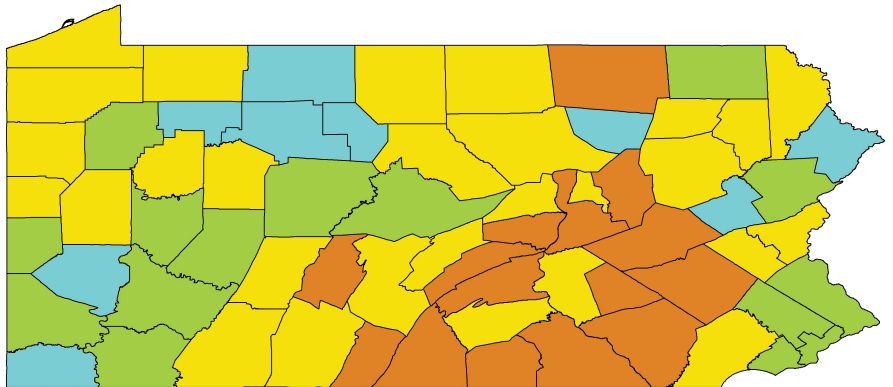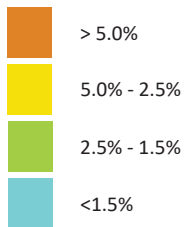
	2017	2022
Employer Units	8,088	8,781
Number of Jobs	175,340	189,958
Percent of Total Pennsylvania Jobs	3.0%	3.2%
Average Annual Wages	$45,955	$54,692
Location Quotient (LQ)	0.84	0.88

LQs greater than one suggest a competitive advantage.

AFP cluster employment in Pennsylvania has increased slightly and it is a reflection of the economy as a whole. The cluster continued to account for approximately 3.0% of total employment in the commonwealth. National employment has mirrored state employment closely as the Location Quotient (LQ) has increased just slightly. Notably, however, is the fact that this traditionally low-paying cluster has seen significant gains in average wages; about a 19 percent increase since 2017.
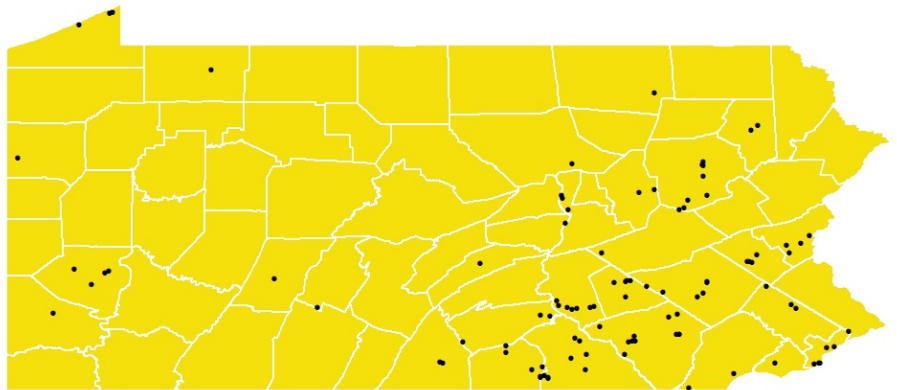
Percent Employment by County

■ (orange)	> 5.0%
■ (yellow)	5.0% - 2.5%
■ (green)	2.5% - 1.5%
■ (teal)	<1.5%

Major Employers

- Sheetz Distribution Services LLC
- Cargill Meat Solutions Corporation
- The Hershey Company
- Farmers Pride Inc
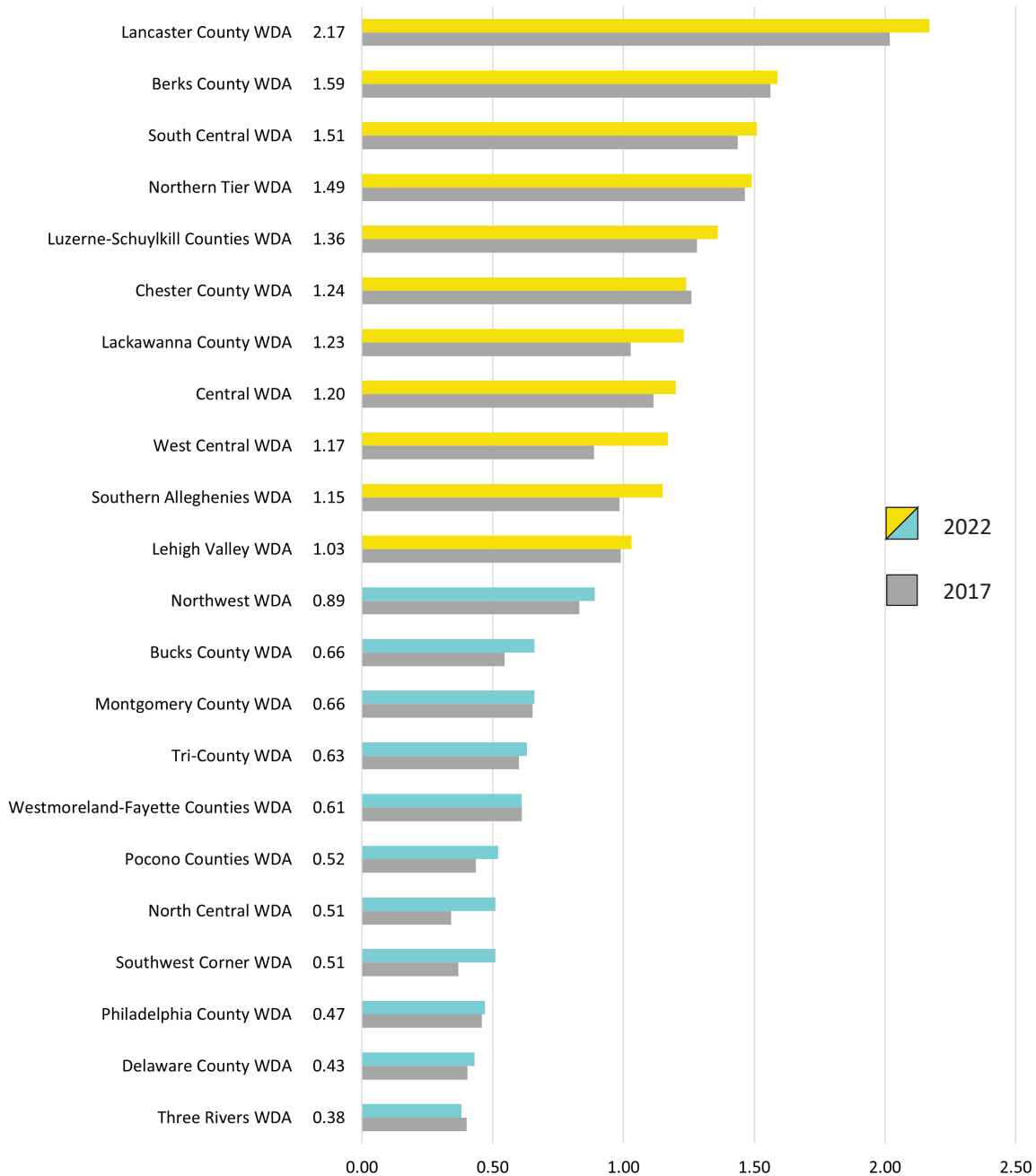- Hatfield Quality Meats Inc
- JBS Souderton Inc

Top Industries Based on Employment

- Veterinary Services
- General Line Grocery Merchant Wholesalers
- Other Grocery Product Merchant Wholesalers
- Commercial Bakeries
- Meat Processed from Carcasses
- Other Snack Food Manufacturing
- Animal, Except Poultry, Slaughtering
- Nursery, Garden & Farm Supply Retailers
- Confectionery Mfg. from Purchased Chocolate
- Breweries

- Fruit & Vegetable Canning
- Mushroom Production
- Fruit & Vegetable Merchant Wholesalers
- Poultry Processing
- Refrigerated Warehousing & Storage
- Retail Bakeries
- Chocolate & Confectionery Mfg. from Cacao Beans
- Perishable Prepared Food Mfg.
- Fluid Milk Manufacturing
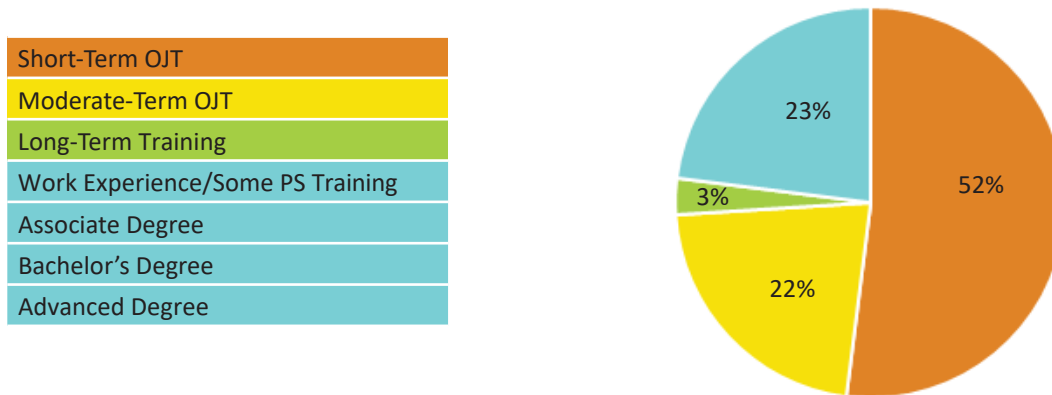- Dairy Cattle & Milk Production

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 Lancaster Workforce Development Area (WDA) has the highest LQ of any area and it has increased by 7.5% in recent years. Only Lackawanna, Southern Alleghenies and West Central WDAs have both LQs greater than one and have also increased their competitiveness by more than 10 percent since 2017.

WDA	LQ
Lancaster County WDA	2.17
Berks County WDA	1.59
South Central WDA	1.51
Northern Tier WDA	1.49
Luzerne-Schuylkill Counties WDA	1.36
Chester County WDA	1.24
Lackawanna County WDA	1.23
Central WDA	1.20
West Central WDA	1.17
Southern Alleghenies WDA	1.15
Lehigh Valley WDA	1.03
Northwest WDA	0.89
Bucks County WDA	0.66
Montgomery County WDA	0.66
Tri-County WDA	0.63
Westmoreland-Fayette Counties WDA	0.61
Pocono Counties WDA	0.52
North Central WDA	0.51
Southwest Corner WDA	0.51
Philadelphia County WDA	0.47
Delaware County WDA	0.43
Three Rivers WDA	0.38

Legend: 2022, 2017

This graph illustrates the minimum educational attainment levels for jobs found in this cluster's various industries. Seventy-four percent of AFP jobs require less than one year of on-the-job training to enter employment. The lower-skilled occupations that make up this cluster will most likely remain, with technological advancement only requiring slightly more training.

| Short-Term OJT |
| Moderate-Term OJT |
| Long-Term Training |
| Work Experience/Some PS Training |
| Associate Degree |
| Bachelor's Degree |
| Advanced Degree |

23%
3%
52%
22%

Occupations with Significant Employment

The following table lists occupations that employ at least 3,000 people in the AFP cluster.

SOC Code	Occupation	Average Wage	Annual Demand	
			All Industries	Industry Cluster
45-2092	Farmworkers & Laborers: Crop, Nursery & Greenhouse	$33,460	3,564	3,105
45-2093	Farmworkers: Farm, Ranch & Aquacultural Animals	$38,550	1,771	1,631
53-7062	Laborers & Freight/Stock/Material Movers	$41,130	20,297	1,620
51-9111	Packaging & Filling Machine Operators/Tenders	$43,670	2,255	1,366
53-7065	Stockers & Order Fillers	$37,170	17,163	968
41-2031	Retail Salespersons	$34,410	19,990	943
53-7064	Packers & Packagers	$37,790	3,565	845
53-3032	Heavy & Tractor-Trailer Truck Drivers	$56,530	10,434	743
51-3092	Food Batchmakers	$41,410	793	712
11-9013	Farmers, Ranchers & Other Agricultural Managers	$87,810	3,248	639
41-4012	Sales Representatives	$89,330	5,878	576
41-2011	Cashiers	$28,160	22,138	517
43-9061	Office Clerks, General	$43,230	16,622	464
53-7051	Industrial Truck & Tractor Operators	$46,510	4,219	454
53-3033	Light Truck Drivers	$42,610	5,503	447

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