



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.

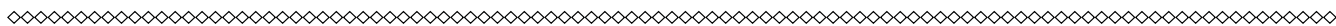
## Cluster Summary

The Wood, Wood Products & Publishing (WWP) cluster incorporates a supply line from raw material to finished product. It includes logging and lumber production through the production of paper to the publishing of magazines and newspapers. Industries found within the cluster include sawmills, truss manufacturing, stationery product manufacturing, printing machinery & equipment manufacturing, book stores and greeting card publishers.

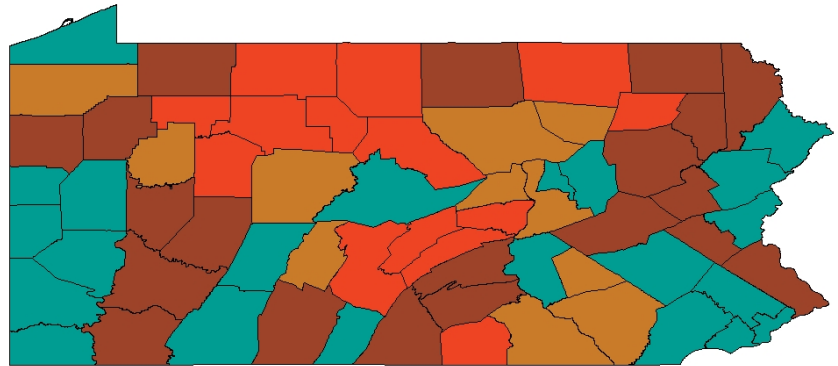
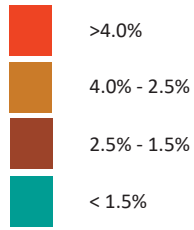
	2017	2022
Employer Units	4,563	4,707
Number of Jobs	102,985	90,799
Percent of Total Pennsylvania Jobs	1.8%	1.5%
Average Annual Wages	\$52,528	\$63,485
Location Quotient (LQ)	1.24	1.21

LQs greater than one suggest a competitive advantage.

While WWP cluster employment has declined by approximately 12 percent in Pennsylvania, the losses are not as great as those experienced nationwide. The state maintains a competitive Location Quotient (LQ) and, at 1.21, it is the third highest among industry clusters. Many of the local areas remain competitive (as seen on page 3) regardless of the cluster’s small size. The cluster still pays a reasonable average wage and is very close to the statewide average for all jobs (\$67,300).

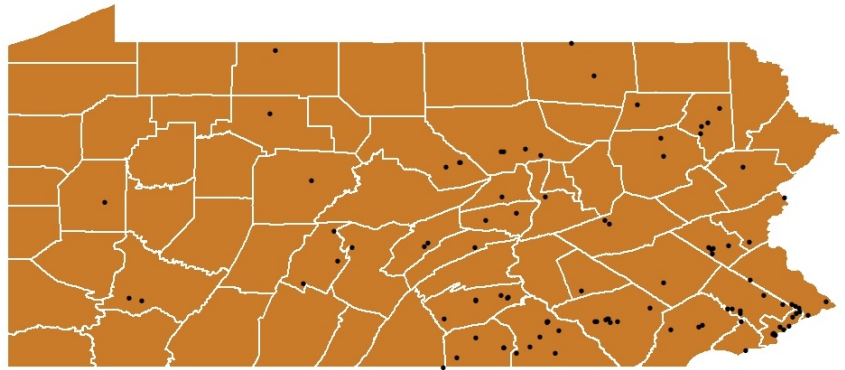


## Percent Employment by County



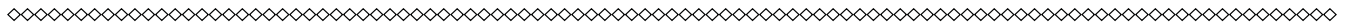
## Major Employers

- The Procter & Gamble Paper Products Co.
- Packaging Corporation of America
- Jeld-Wen Inc
- Uline INC
- First Quality Retail Services
- Conestoga Wood Specialties



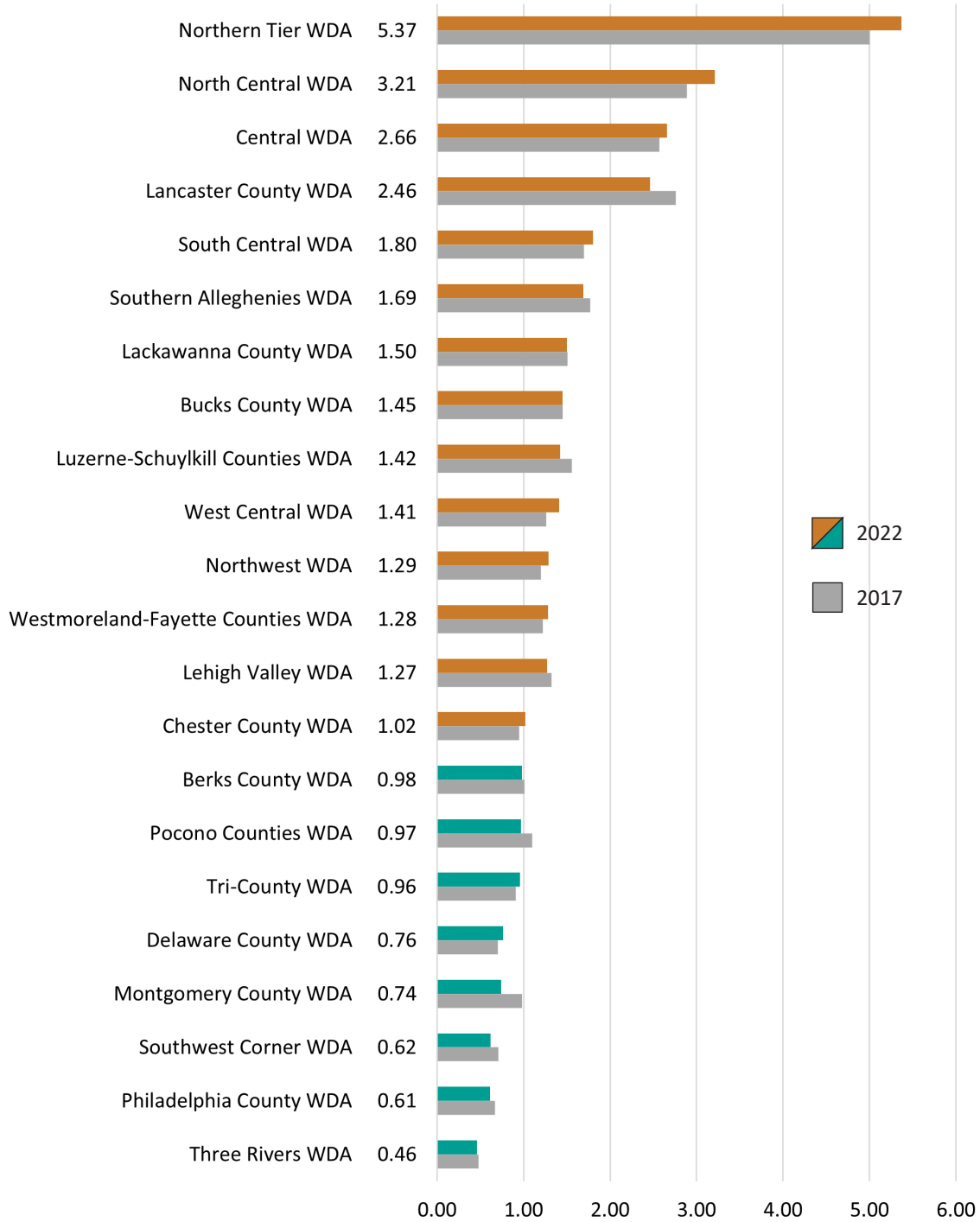
## Top Industries Based on Employment

- Printing
- Corrugated & Solid Fiber Box Manufacturing
- Wood Kitchen Cabinet & Countertop Manufacturing
- Lumber & Wood Merchant Wholesalers
- Newspaper Publishers
- Sanitary Paper Product Manufacturing
- Wood Container & Pallet Manufacturing
- Sawmills
- Periodical Publishers
- All Other Miscellaneous Wood Product Mfg
- Industrial Paper Merchant Wholesalers
- Paper Bag & Coated & Treated Paper Manufacturing
- Book Retailers & News Dealers
- Book Publishers
- Paper Mills
- Stationery Product Manufacturing
- Wood Window & Door Manufacturing
- All Other Converted Paper Product Manufacturing
- Other Millwork, Including Flooring
- Engineered Wood Member Manufacturing



## Employment Concentration

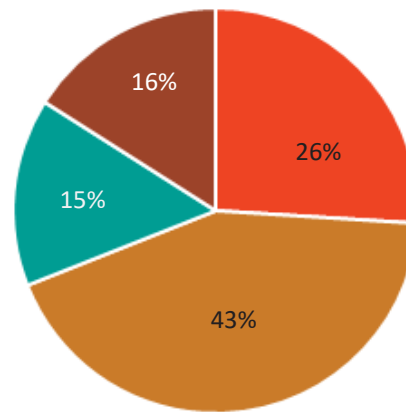
A location quotient, or LQ, compares a cluster's share of local employment to its share of national employment. This value can be used when evaluating the strength of an industry cluster within an area. An LQ greater than one indicates that the cluster has, on average, more employees locally than typically expected implying a possible competitive advantage. Fourteen Workforce Development Areas (WDAs) have LQs greater than or equal to one with Northern Tier WDA the highest at 5.37. Nine of those 14 areas also increased their competitiveness since 2017.



## Educational Requirements

This graph illustrates the minimum educational attainment levels for jobs found in this cluster's various industries. Almost 70 percent of WWP jobs require less than one year of on-the-job training to enter employment. Many of these jobs still fall into the skilled trades category and do not suffer from the high turnover and lower wages found in the Hospitality, Leisure & Entertainment cluster.

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 1,300 people in the WWP cluster.

SOC Code	Occupation	Average Wage	Annual Demand	
			All Industries	Industry Cluster
51-9196	Paper Goods Machine Setters/Oprs/Tenders	\$46,750	752	657
53-7062	Laborers & Freight/Stock/Material Movers	\$41,130	20,297	604
51-5112	Printing Press Operators	\$45,070	862	585
51-2090	Misc. Assemblers & Fabricators	\$41,500	4,434	458
41-4012	Sales Representatives	\$89,330	5,875	402
51-7042	Woodworking Machine Setters/Oprs/Tenders	\$41,930	459	297
43-4051	Customer Service Representatives	\$45,130	15,067	283
51-1011	Supervisors - Production & Operating Workers	\$72,330	2,804	276
51-9198	Helpers--Production Workers	\$40,750	1,288	248
43-9061	Office Clerks, General	\$43,230	16,622	246
51-7011	Cabinetmakers & Bench Carpenters	\$45,970	490	229
53-7051	Industrial Truck & Tractor Operators	\$46,510	4,219	228
53-3032	Heavy & Tractor-Trailer Truck Drivers	\$56,530	10,434	228
51-7041	Sawing Machine Setters/Oprs/Tenders, Wood	\$38,830	263	194
41-2031	Retail Salespersons	\$34,410	19,990	188

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

