



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.

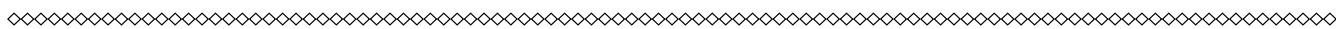
Cluster Summary

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.

	2015	2019	2020
Employer Units	4,594	4,458	4,435
Number of Jobs	106,410	98,429	90,328
Percent of Total Pennsylvania Jobs	1.9%	1.7%	1.6%
Average Annual Wages	\$50,836	\$54,677	\$58,785
Location Quotient (LQ)	1.24	1.23	1.23

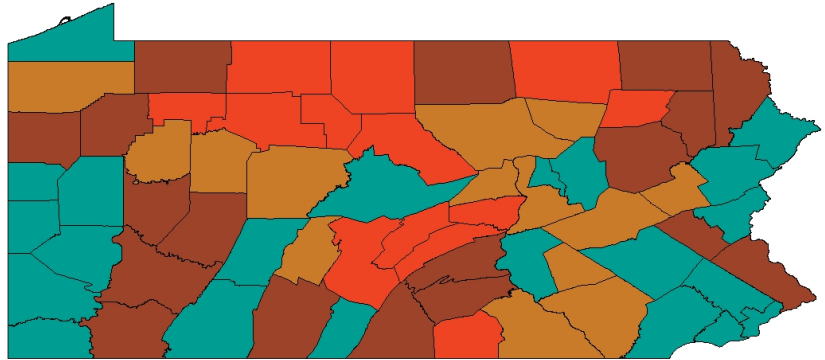
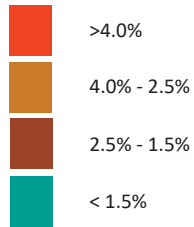
LQs greater than one suggest a competitive advantage.

While WWP cluster employment has declined by approximately 15 percent in Pennsylvania, the losses are not as great as those experienced nationwide. The state maintains a competitive Location Quotient (LQ) and, at 1.23, 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 (\$62,070).



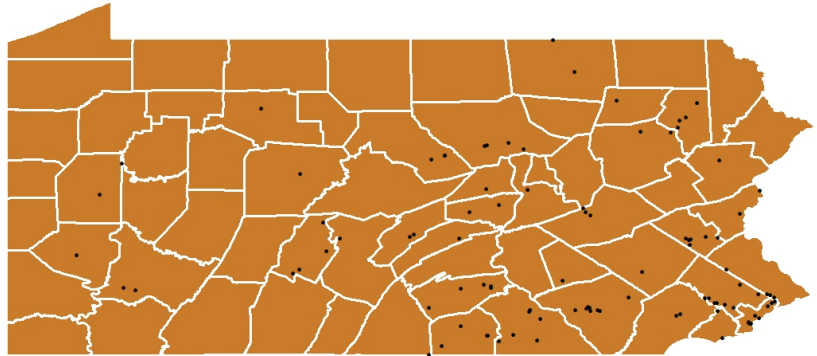
Note: The 2020 employment and wages data, as presented in this publication, reflect the effects of business and school closures implemented to mitigate the spread of Coronavirus (COVID-19).

Percent Employment by County



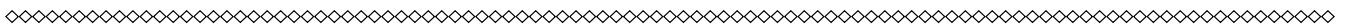
Major Employers

- The Procter & Gamble Paper Products Co.
- LSC Communications MCL LLC
- Jeld-Wen Inc
- Conestoga Wood Specialties
- Uline INC
- AC Products Inc



Top Industries Based on Employment

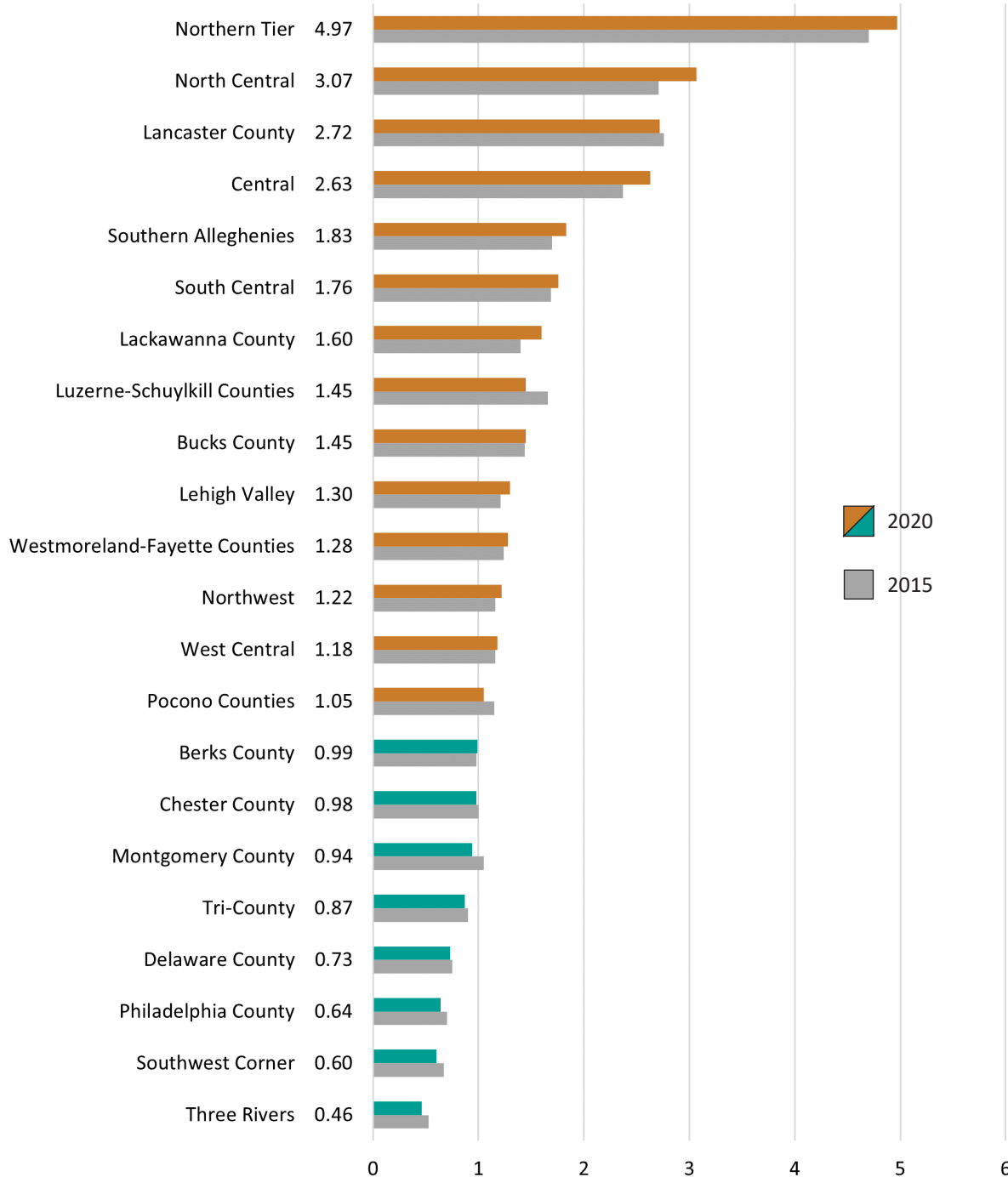
- | | |
|---|--|
| <ul style="list-style-type: none"> • Printing • Corrugated & Solid Fiber Box Manufacturing • Wood Kitchen Cabinet & Countertop Manufacturing • Newspaper Publishers • Lumber & Wood Merchant Wholesalers • Sanitary Paper Product Manufacturing • Periodical Publishers • Sawmills • Wood Container & Pallet Manufacturing • All Other Miscellaneous Wood Product Mfg | <ul style="list-style-type: none"> • Industrial Paper Merchant Wholesalers • Paper, Except Newsprint, Mills • Paper Bag & Coated & Treated Paper Manufacturing • Stationery Product Manufacturing • Book Publishers • Book Stores • Book & Periodical Merchant Wholesalers • Wood Window & Door Manufacturing • All Other Converted Paper Product Manufacturing • Other Millwork, Including Flooring |
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Employment Concentration

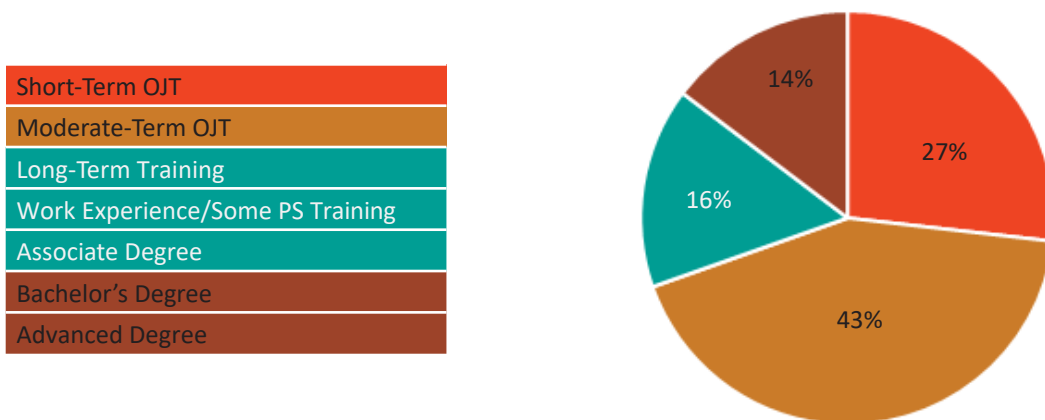
A location quotient, or LQ, compares a cluster's share of local employment to its share of national employment. This value can be used when evaluating the strength of an industry cluster within an area. An LQ greater than one indicates that the cluster has, on average, more employees locally than typically expected implying a possible competitive advantage. Fourteen Workforce Development Areas (WDAs) have LQs greater than or equal to one with Northern Tier WDA the highest at 4.97. Eleven of those 14 areas also increased their competitiveness since 2015.



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Educational Requirements

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



Occupations with Significant Employment

The following table lists occupations that employ at least 1,800 people in the WWP cluster.

SOC Code	Occupation	Average Wage	Annual Demand	
			All Industries	Industry Cluster
53-7062	Laborers & Freight/Stock/Material Movers	\$33,910	23,346	653
51-5112	Printing Press Operators	\$41,220	912	618
51-9196	Paper Goods Machine Setters/Oprs/Tenders	\$43,570	633	610
51-2098	Assemblers & Fabricators, All Other	\$35,730	4,558	545
51-9198	Helpers--Production Workers	\$33,630	2,546	523
41-4012	Sales Representatives	\$75,360	6,857	461
43-4051	Customer Service Representatives	\$38,760	16,186	370
51-5113	Print Binding & Finishing Workers	\$35,040	378	355
51-7042	Woodworking Machine Setters/Oprs/Tenders	\$34,140	555	346
51-1011	Supervisors - Production & Operating Workers	\$64,400	2,995	324
41-2031	Retail Salespersons	\$29,580	24,101	321
43-9061	Office Clerks, General	\$38,360	19,111	258
51-7011	Cabinetmakers & Bench Carpenters	\$40,140	548	250
53-3032	Heavy & Tractor-Trailer Truck Drivers	\$49,850	10,865	224
11-1021	General & Operations Managers	\$131,060	7,980	205

*The 2020 average annual wage reflects wages across all industries and is not specific to the cluster.

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