



CENTRAL PENNSYLVANIA WORKFORCE INVESTMENT BOARD'S INDUSTRY CLUSTER INITIATIVE

The Central Pennsylvania Workforce Development Corporation's (CPWDC) *Industry Cluster Initiative* is designed to identify, support and grow the region's most competitive key industries within four key clusters: *Diversified Manufacturing, Lumber and Wood Products, Health Care and Education*.

What is the "Industry Cluster Initiative"? Guided by the CPWDC's private sector Board of Directors, which is the region's Workforce Investment Board, and a broad array of regional partners, the *Industry Cluster Initiative* seeks to align workforce and economic development investment to support the region's key industries and ensure their long term success. The implementation of the initiative has far reaching impacts on how the region coordinates workforce development, business retention and attraction efforts and marketing.

How are "key industries" identified? Through a partnership with the Pennsylvania Department of Labor and Industry, the CPWDC routinely analyzes industry groupings or clusters prevalent within Central Pennsylvania as compared to state and national trends. The ongoing process involves input and analysis from industry, as well as local and regional economic, workforce and education entities. Through the process of research, consensus building and validation, the region's key industry clusters are identified.

What kind of information is generated by the project? Most importantly, the project is designed to identify individual industries, and then clusters, at the county and regional levels that appear to have a competitive advantage. The Central Pennsylvania WIB has identified **Diversified Manufacturing, Lumber and Wood Products, Health Care and Education** as the four leading industry clusters. These four clusters account for about 50 percent of the region's employment. These clusters represent hundreds of individual employers (large and small) and tens of thousands of employees and occupations. Research and analysis is continuing and the CPWDC has mapped the remaining 50% of the region's industries into twelve key economic sectors:

Agriculture	Professional Services
Construction	Public Administration
Entertainment	Retail
Finance	Transportation
Information	Unclassified
Miscellaneous Manufacturing	Wholesale

Additionally, industry data can be applied to a regional staffing pattern to derive occupational estimates, which can be combined with wage and skill set data.

How will the Industry Cluster information be used? To date the CPWDC has worked with the Pennsylvania Heartland Partnership, a network of regionally based economic development, workforce development, education, business association organizations and representatives of local elected officials and the private sector, to validate and build consensus around these key industry groups. In this process the WIB has engaged most of the major workforce and economic development agencies in the region, as well as post-secondary institutions, manufacturing associations and representatives from the specific industry clusters.

The CPWDC, **Ben Franklin Technology Partners**, and the **Industrial Modernization Center** matched grant funds awarded by DCED to fully integrate this initiative into county and regional planning efforts. Specifically the information generated will assist the region in meeting the following objectives:

- Encourage the creation of industry-led partnerships to identify common needs and appropriate strategies.
- Identify demand occupations, essential skill-sets and training required by these industries today and in the future.
- Provide the information needed in Central Pennsylvania to align workforce, economic development and educational resources in a manner that will allow for the maximum positive impact to retain and grow existing industry and to attract new opportunity.
- Offer the opportunity to engage the K-12 system, including Career and Technical Centers, by forecasting the region's key industries and the demand occupations of the future and communicating this information to parents, students and educators.
- Allow for more strategic targeting of private and public funds toward investment to provide the highest possible return for the region.

All across the Commonwealth, Workforce Investment Boards dominated by private sector membership, as enabled through the Workforce Investment Act of 1998, are developing strategic agendas that extend beyond the one-stop system to fully engage communities, residents and industries and break new ground in workforce and economic development planning. The *Industry Cluster Initiative* represents only a fraction of the projects and sector specific initiatives being managed by local Workforce Investment Boards across Pennsylvania.

INDUSTRY CLUSTERS

Definition of Industry Clusters: The industry cluster concept was popularized by Michael Porter in *Competitive Advantages of Nations* (1990). Porter claimed that the competitiveness of a region is based on the competitiveness of the industries, which is enhanced if an industry is embedded in a deep network. Rosenfeld (1997) defined an industry cluster as “a geographically bounded concentration of similar, related or complementary businesses, with active channels for business transactions, communications and dialogue, that share specialized infrastructure, labor markets and services, and that are faced with common opportunities and threats.”

Location Quotient (LQ): A statistical measure that compares the concentration of employment in a local industry cluster to the concentration of employment in the same cluster statewide or nationally. A LQ of greater than one suggests that a locale has a competitive advantage within a cluster and is producing goods or services in excess of the local consumption, thus resulting in exportation of goods and services.

Components of Industry Growth: Changes in employment and relative effects on LQs over a specified time period can be attributed to three factors:

- National Economic Growth – growth or decline attributable to overall national economic conditions.
- National Industry Growth – growth or decline attributable to economic conditions of the defined cluster.
- Local Competitive Advantage – the unexplained residual that suggests how local factors, such as workforce, availability of raw materials, transportation, etc., affect industry growth.

Cluster Summary Sheets: The attached Industry Cluster Summary sheets were created to succinctly present information about each of the four clusters: *Diversified Manufacturing, Lumber and Wood Products, Health Care and Education*. The information summarizes data on the North American Industry Classification System (NAICS) industries that make up each of the clusters. Information on the four cluster summary sheets is organized as follows:

Cluster Statistics: Summarizes a basic representation of each cluster based on its performance between 1995 and 2002. Key statistics include number of jobs, net change in job volume, state and national LQ, average annual wage and percent of area employment.

Top Five Employing Industries: The individual industry segments within the cluster that represent the top five by employment volume. This section also identifies the percentage of the total cluster jobs accounted for in the top five industries.

Job Volume by County: The dispersion of employment within the cluster across each of the nine counties.

Five Most Common Occupations and Annual Wages: Estimates significant occupations within the cluster by applying a regional staffing pattern to the regional employment numbers. Ranking is based on prevalence, not wage or training. The Occupational Employment Statistics survey data is applied to these occupations to show annual average wages for the Central Region.

Competitive Industries by State Location Quotient: Identifies the specific cluster industry segments with greatest competitive advantage based on their individual LQs. It is important to note that one company could drive an industry LQ so more detailed analysis is required before making assumptions about competitiveness.

What is the Central Region? The Central Pennsylvania Workforce Development Corporation (CPWDC) governs workforce development policy for a nine-county region of Centre, Clinton, Columbia, Lycoming, Mifflin, Montour, Northumberland, Snyder and Union counties. However, due to the flexibility of the *Industry Cluster Initiative*, industry clusters can be analyzed using any combination of counties to develop a more accurate understanding of labor market areas, commuting patterns and relationships with neighboring workforce investment areas.



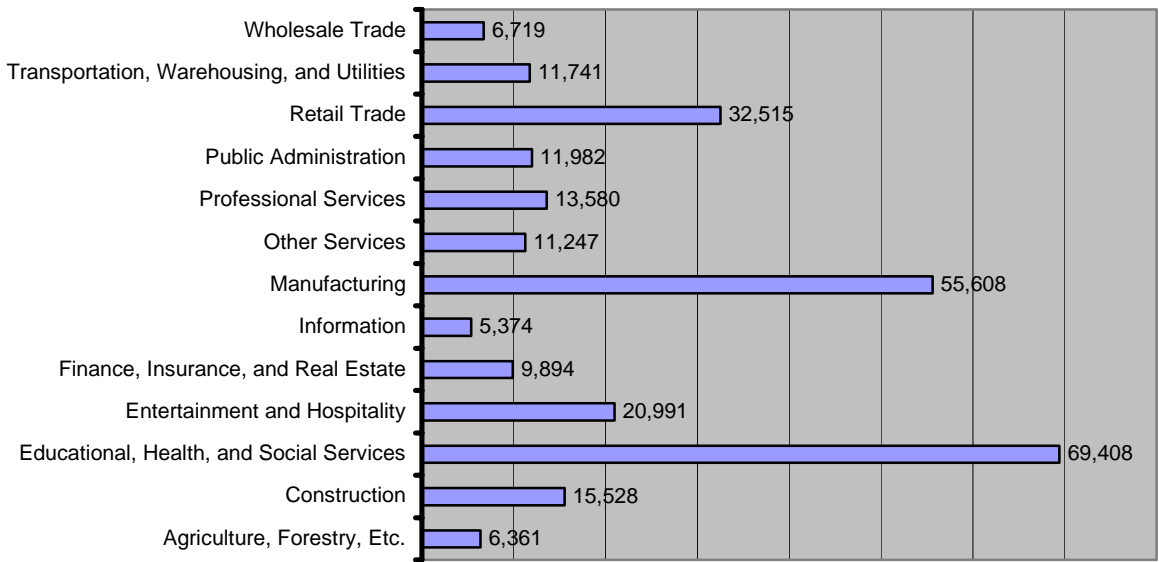
Central Pennsylvania

What is the Pennsylvania Heartland Partnership? The Pennsylvania Heartland Partnership is a network of regionally based economic development, workforce development, education, business association organizations and representatives of local elected officials and the private sector. One of the primary goals of the Heartland Partnership is to engage true community collaboration that will drive the systemic changes necessary to combine resources and to increase socioeconomic competitiveness as a region. The partnership is continuing its outreach efforts to market the “Pennsylvania’s Heartland” brand. For more information, visit the Pennsylvania’s Heartland web site at www.pennsylvaniashartland.com



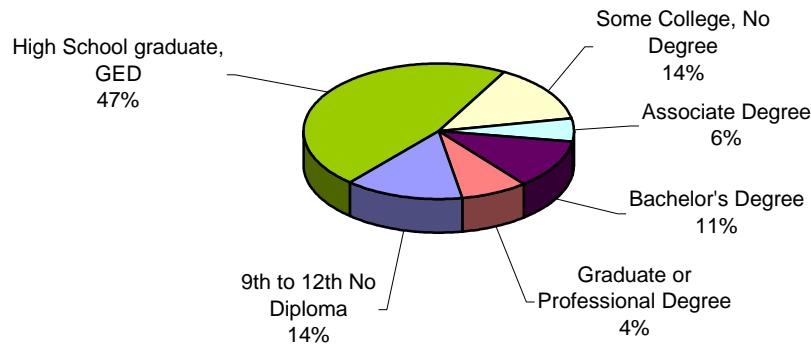
WHERE DO CENTRAL REGION RESIDENTS WORK?

According to 2000 US Census Data, Central Region residents are employed in these general industry clusters:



EDUCATIONAL ATTAINMENT IN THE CENTRAL REGION

According to 2000 US Census Data, Central Region residents, 25 and older, have achieved these educational levels:



SELF SUFFICIENCY AND SUSTAINABLE WAGES

The **Self-Sufficiency Standard** measures the minimum income needed, for a family of a given composition in a given place, to adequately meet its basic needs — without public or private assistance. The Standard was developed by the Pennsylvania Family Economic Self-Sufficiency Project, a collaborative effort of more than 1,800 stakeholders from state and local organizations and government agencies that are involved in economic development. The Standard includes the following components: Housing, Child Care, Food, Transportation, Health Care, Miscellaneous Expenses and Taxes (Minus Applicable Tax Credits).

Sustainable Wages in Central Region
Based on the Self-Sufficiency Standard for a Family with One Parent and One Pre-School aged Child, 2004.

Centre	\$28,013
Clinton	\$20,522
Columbia	\$22,853
Lycoming	\$21,054
Mifflin	\$22,042
Montour	\$23,235
Northumberland	\$20,593
Snyder	\$20,437
Union	\$24,971