

Advanced Materials and Diversified Manufacturing

Analysis for Columbiana County, Ohio

Industries Included in the Advanced Materials and Diversified Manufacturing Cluster³

- Automobile manufacturing
- Copper wire, except mechanical, drawing
- Iron and steel mills
- All other plastics product manufacturing
- Iron, steel pipe and tube from purchase steel
- Aluminum extruded product manufacturing
- Iron and steel forging
- Machine shops
- Rolled steel shape manufacturing
- Nonferrous metal, except CU and AL, shaping
- Miscellaneous fabricated metal product mfg.
- Metal coating and nonprecious engraving
- Special tool, die, jig, and fixture mfg.

Top 5 Employing Industries

36.96% of Cluster Jobs (2006)

- All other plastics product manufacturing
- Enameled iron and metal sanitary ware mfg.
- Special tool, die, jig, and fixture mfg.
- Machine shops
- Rubber and plastics hose and belting mfg.

(1) Number of individual establishments or physical locations of a certain economic activity.

(2) Location Quotient (LQ) is 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. An LQ of greater than 1.0 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 or services. An LQ of less than one suggests that an industry is falling behind local demand and is importing the good or service.

(3) Industries included in the five-county Pennsylvania and Ohio region. Not all industries may be present in each individual county.

Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	Columbiana County
Employer Units ¹ (2006)	159
Number of Jobs (2006)	4,753
Net Change in Job Volume (2002-2006)	-357
Percent Change in Job Volume (2002-2006)	-6.98%
Percent of Total Region Jobs (2006)	10.21%
Average Annual Wages (2006)	\$47,786
Estimated Cluster Payroll (2006)	\$227,127,000
State Location Quotient ² (2006)	1.33
Percent Change from 2002 State Location Quotient	7.09%
National Location Quotient ² (2006)	1.84
Percent Change from 2002 National Location Quotient	7.76%

Percent of County Employment (2006)

Advanced Materials and Diversified Manufacturing	10.21%
Building and Construction	8.29%
Business and Financial Services	13.53%
Information and Communication Services	1.27%
Life Sciences	11.19%
Logistics and Transportation	3.72%
Non-Targeted Industries	51.79%

Five Most Common Occupations (2006) and Wages*

West Central Regional high priority occupations are shown in *italics*.

<i>First-line supervisors/managers of production and operating workers</i>	\$21.91
<i>Machinists</i>	\$14.77
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	\$13.62
<i>Computer-controlled machine tool operators, metal and plastic</i>	\$13.11
<i>Team assemblers</i>	\$11.70

Competitive Industries by National LQ (2006)

Individual industries could demonstrate a high LQ due to the uniqueness of the business's primary function rather than competitiveness factors.

Enameled iron and metal sanitary ware mfg.	94.94
Rolling mill machinery and equipment mfg.	59.59
Clay refractory manufacturing	58.57
Industrial pattern manufacturing	44.70
Nonclay refractory manufacturing	36.96

*Top occupations determined by a staffing pattern provided by Economic Modeling Specialists, Inc. (EMSI). Staffing patterns are based on the available NAICS codes at the 6-digit level. Hourly wages are reflective of 2006 averages for Columbiana County, Ohio.

OH/PA 5 County Interstate Region Project:
Columbiana, Lawrence, Mahoning,
Mercer and Trumbull Counties

West Central Job Partnership
44 South Beaver Street
New Castle, PA 16101
724.658.2501 (P)
724.658.4252 (F)

All data was provided by Economic Modeling Specialists, Inc., 2008 (EMSI) for the period 2002 to 2006 and calculated by Central Pennsylvania Workforce Development Corporation, using the Pennsylvania statewide cluster definitions.

Fiscal Agent and Point of Contact for
OH/PA 5 County Interstate Region Project

February 2008

Building and Construction

Analysis for Columbiana County, Ohio

Industries Included in the Building and Construction Cluster³

- Site preparation contractors
- Plumbing and HVAC contractors
- Electrical contractors
- Painting and wall covering contractors
- All other specialty trade contractors
- New single-family general contractors
- Residential remodelers
- Commercial building construction
- Masonry contractors
- Roofing contractors
- Finish carpentry contractors
- Drywall and insulation contractors
- Fabricated structural metal manufacturing
- Highway, street, and bridge construction
- Poured concrete structure contractors
- Plumbing equip. merchant wholesalers

Top 5 Employing Industries

38.15% of Cluster Jobs (2006)

- Site preparation contractors
- Vitreous china and earthenware articles mfg.
- Painting and wall covering contractors
- Plumbing and HVAC contractors
- Ceramic wall and floor tile manufacturing

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Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	Columbiana County
Employer Units ¹ (2006)	301
Number of Jobs (2006)	3,861
Net Change in Job Volume (2002-2006)	-656
Percent Change in Job Volume (2002-2006)	-14.52%
Percent of Total Region Jobs (2006)	8.29%
Average Annual Wages (2006)	\$36,158
Estimated Cluster Payroll (2006)	\$139,606,000
State Location Quotient ² (2006)	1.20
Percent Change from 2002 State Location Quotient	-18.10%
National Location Quotient ² (2006)	1.10
Percent Change from 2002 National Location Quotient	-21.39%

Percent of County Employment (2006)

Advanced Materials and Diversified Manufacturing	10.21%
Building and Construction	8.29%
Business and Financial Services	13.53%
Information and Communication Services	1.27%
Life Sciences	11.19%
Logistics and Transportation	3.72%
Non-Targeted Industries	51.79%

Five Most Common Occupations (2006) and Wages*

West Central Regional high priority occupations are shown in *italics*.

<i>Construction managers</i>	\$40.41
<i>First-line supervisors/managers of construction trades and extraction</i>	\$28.53
<i>Construction laborers</i>	\$17.94
<i>Carpenters</i>	\$14.75
<i>Painters, construction and maintenance</i>	\$13.59

Competitive Industries by National LQ (2006)

Individual industries could demonstrate a high LQ due to the uniqueness of the business's primary function rather than competitiveness factors.

Vitreous china and earthenware articles mfg.	89.44
Ceramic wall and floor tile manufacturing	81.16
Masonry material merchant wholesalers	8.65
Metal window and door manufacturing	5.31
Heating equipment, except warm air furnaces	3.36

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Business and Financial Services

Analysis for Columbiana County, Ohio

Industries Included in the Business and Financial Services Cluster³

- Janitorial services
- Temporary help services
- Lessors of residential buildings
- Insurance agencies and brokerages
- Telemarketing bureaus
- Commercial banking
- Managing offices
- Landscaping services
- Offices of real estate agents and brokers
- All other professional and technical services
- Offices of lawyers
- Lessors of nonresidential buildings
- Office administrative services
- Other activities related to real estate
- Other accounting services
- Direct property and casualty insurers

Top 5 Employing Industries

31.02% of Cluster Jobs (2006)

- Temporary help services
- Janitorial services
- Commercial banking
- Landscaping services
- Offices of real estate agents and brokers

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(3) Industries included in the five-county Pennsylvania and Ohio region. Not all industries may be present in each individual county.

Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	Columbiana County
Employer Units ¹ (2006)	388
Number of Jobs (2006)	6,300
Net Change in Job Volume (2002-2006)	1,030
Percent Change in Job Volume (2002-2006)	19.55%
Percent of Total Region Jobs (2006)	13.53%
Average Annual Wages (2006)	\$30,873
Estimated Cluster Payroll (2006)	\$194,500,000
State Location Quotient ² (2006)	0.75
Percent Change from 2002 State Location Quotient	12.11%
National Location Quotient ² (2006)	0.69
Percent Change from 2002 National Location Quotient	12.69%

Percent of County Employment (2006)

Advanced Materials and Diversified Manufacturing	10.21%
Building and Construction	8.29%
Business and Financial Services	13.53%
Information and Communication Services	1.27%
Life Sciences	11.19%
Logistics and Transportation	3.72%
Non-Targeted Industries	51.79%

Five Most Common Occupations (2006) and Wages*

West Central Regional high priority occupations are shown in *italics*.

<i>Real estate sales agents</i>	\$26.03
<i>Accountants and auditors</i>	\$24.95
<i>Insurance sales agents</i>	\$24.25
Real estate brokers	\$23.76
Tellers	\$9.45

Competitive Industries by National LQ (2006)

Individual industries could demonstrate a high LQ due to the uniqueness of the business's primary function rather than competitiveness factors.

Solid waste landfill	16.39
Hazardous waste treatment and disposal	3.34
Commercial machinery repair and maintenance	3.27
Payroll services	3.23
Facilities support services	3.14

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Information and Communication Services

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Industries Included in the Information and Communication Services Cluster³

- Wired telecommunications carriers
- Engineering services
- Newspaper publishers
- Custom computer programming services
- Data processing and related services
- Computer systems design services
- Cellular and other wireless carriers
- Other computer related services
- Cable and other program distribution
- Television broadcasting
- Telecommunications resellers
- Other technical consulting services
- Testing laboratories
- Internet publishing and broadcasting
- Radio stations
- Internet service providers
- Periodical publishers

Top 5 Employing Industries 70.05% of Cluster Jobs (2006)

- Engineering services
- Newspaper publishers
- Wired telecommunications carriers
- Computer systems design services
- Testing laboratories

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Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	Columbiana County
Employer Units ¹ (2006)	42
Number of Jobs (2006)	591
Net Change in Job Volume (2002-2006)	-140
Percent Change in Job Volume (2002-2006)	-19.15%
Percent of Total Region Jobs (2006)	1.27%
Average Annual Wages (2006)	\$43,306
Estimated Cluster Payroll (2006)	\$25,594,000
State Location Quotient ² (2006)	0.41
Percent Change from 2002 State Location Quotient	-17.37%
National Location Quotient ² (2006)	0.34
Percent Change from 2002 National Location Quotient	-17.55%

Percent of County Employment (2006)

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Building and Construction	8.29%
Business and Financial Services	13.53%
Information and Communication Services	1.27%
Life Sciences	11.19%
Logistics and Transportation	3.72%
Non-Targeted Industries	51.79%

Six Most Common Occupations (2006) and Wages*

West Central Regional high priority occupations are shown in *italics*.

Managers, all other	\$41.65
<i>Computer software engineers, applications</i>	<i>\$34.54</i>
<i>Management analysts</i>	<i>\$31.67</i>
Civil engineers	\$28.83
<i>Telecommunications equipment installers and repairers, except line installers</i>	<i>\$21.59</i>
Door-to-door sales workers, news and street vendors, and related workers	\$12.04

Competitive Industries by National LQ (2006)

Individual industries could demonstrate a high LQ due to the uniqueness of the business's primary function rather than competitiveness factors.

Motion picture and video distribution	3.83
Other surveying and mapping services	1.10

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Industries Included in the Life Sciences Cluster³

- General medical and surgical hospitals
- Nursing care facilities
- Offices of physicians, except mental health
- Home health care services
- Offices of dentists
- Pharmacies and drug stores
- Offices of specialty therapists
- Continuing care retirement communities
- Residential mental retardation facilities
- Outpatient mental health centers
- Homes for the elderly
- Ambulance services
- Other residential care facilities
- Residential mental and substance abuse care

Top 5 Employing Industries

77.27% of Cluster Jobs (2006)

- General medical and surgical hospitals
- Nursing care facilities
- Home health care services
- Offices of physicians, except mental health
- Pharmacies and drug stores

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Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	Columbiana County
Employer Units ¹ (2006)	218
Number of Jobs (2006)	5,210
Net Change in Job Volume (2002-2006)	-94
Percent Change in Job Volume (2002-2006)	-1.77%
Percent of Total Region Jobs (2006)	11.19%
Average Annual Wages (2006)	\$35,073
Estimated Cluster Payroll (2006)	\$182,730,000
State Location Quotient ² (2006)	0.92
Percent Change from 2002 State Location Quotient	-5.06%
National Location Quotient ² (2006)	1.15
Percent Change from 2002 National Location Quotient	-4.30%

Percent of County Employment (2006)

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Building and Construction	8.29%
Business and Financial Services	13.53%
Information and Communication Services	1.27%
Life Sciences	11.19%
Logistics and Transportation	3.72%
Non-Targeted Industries	51.79%

Five Most Common Occupations (2006) and Wages*

West Central Regional high priority occupations are shown in *italics*.

<i>Registered nurses</i>	\$23.02
<i>Licensed practical and licensed vocational nurses</i>	\$15.77
<i>Medical secretaries</i>	\$11.03
<i>Nursing aides, orderlies, and attendants</i>	\$9.62
<i>Home health aides</i>	\$8.71

Competitive Industries by National LQ (2006)

Individual industries could demonstrate a high LQ due to the uniqueness of the business's primary function rather than competitiveness factors.

Offices of podiatrists	7.18
Nursing care facilities	3.04
Optical instrument and lens manufacturing	2.56
Homes for the elderly	2.23
Ambulance services	2.17

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Logistics and Transportation

Analysis for Columbiana County, Ohio

Industries Included in the Logistics and Transportation Cluster³

- General freight trucking, long-distance TL
- Other specialized trucking, local
- General freight trucking, local
- General freight trucking, long-distance LTL
- Couriers
- General warehousing and storage
- Line-haul railroads
- Process and logistics consulting services
- Other specialized trucking, long-distance
- Other warehousing and storage
- Freight transportation arrangement
- Used household and office goods moving
- Miniwarehouse and self-storage unit operators

Top 5 Employing Industries 81.98% of Cluster Jobs (2006)

- General freight trucking, long-distance TL
- General freight trucking, local
- Other specialized trucking, long-distance
- Line-haul railroads
- General warehousing and storage

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Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	Columbiana County
Employer Units ¹ (2006)	69
Number of Jobs (2006)	1,731
Net Change in Job Volume (2002-2006)	-278
Percent Change in Job Volume (2002-2006)	-13.86%
Percent of Total Region Jobs (2006)	3.72%
Average Annual Wages (2006)	\$42,383
Estimated Cluster Payroll (2006)	\$73,365,000
State Location Quotient ² (2006)	1.26
Percent Change from 2002 State Location Quotient	-20.02%
National Location Quotient ² (2006)	1.44
Percent Change from 2002 National Location Quotient	-16.50%

Percent of County Employment (2006)

Advanced Materials and Diversified Manufacturing	10.21%
Building and Construction	8.29%
Business and Financial Services	13.53%
Information and Communication Services	1.27%
Life Sciences	11.19%
Logistics and Transportation	3.72%
Non-Targeted Industries	51.79%

Seven Most Common Occupations (2006) and Wages*

West Central Regional high priority occupations are shown in *italics*.

Mobile heavy equipment mechanics, except engines	\$18.68
Rail car repairers	\$18.39
<i>Truck drivers, heavy and tractor-trailer</i>	<i>\$16.74</i>
Farm equipment mechanics	\$14.95
<i>Truck drivers, light or delivery services</i>	<i>\$13.65</i>
<i>Driver/sales workers</i>	<i>\$11.60</i>
<i>Laborers and freight, stock, and material movers, hand</i>	<i>\$10.23</i>

Competitive Industries by National LQ (2006)

Individual industries could demonstrate a high LQ due to the uniqueness of the business's primary function rather than competitiveness factors.

Other support activities for water transport.	11.45
Other specialized trucking, long-distance	4.33
General freight trucking, local	4.32
General freight trucking, long-distance TL	2.91
Short line railroads	2.30

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