

Advanced Materials and Diversified Manufacturing

Analysis for the Pennsylvania counties of Lawrence and Mercer and the Ohio counties of Columbiana, Mahoning and Trumbull

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 mfg.
- Iron and steel forging
- Machine shops
- Rolled steel shape manufacturing
- Nonferrous metal, except CU and AL, shaping
- Miscellaneous fabricated metal product manufacturing
- Metal coating and nonprecious engraving
- Special tool, die, jig, and fixture mfg.

Top 5 Employing Industries

30.93% of Cluster Jobs (2006)

- Automobile manufacturing
- Copper wire, except mechanical, drawing
- Iron and steel mills
- All other plastics product manufacturing
- Iron, steel pipe and tube from purchase steel

(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)	5-County Region (Pennsylvania and Ohio)
Employer Units ¹ (2006)	920
Number of Jobs (2006)	42,697
Net Change in Job Volume (2002-2006)	-5,997
Percent Change in Job Volume (2002-2006)	-12.32%
Percent of Total Region Jobs (2006)	10.78%
Average Annual Wages (2006)	\$75,603
Estimated Cluster Payroll (2006)	\$3,228,000,000
State Location Quotient ² (2006)	1.41
Percent Change from 2002 State Location Quotient	1.08%
National Location Quotient ² (2006)	1.94
Percent Change from 2002 National Location Quotient	1.71%

County Job Volume (2006)

Lawrence County, PA	7.26%
Mercer County, PA	16.33%
Columbiana County, OH	11.13%
Mahoning County, OH	20.16%
Trumbull County, OH	45.13%

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>	\$25.18
<i>Machinists</i>	\$17.50
<i>Maintenance and repair workers, general</i>	\$15.50
Cutting, punching, & press machine setters, operators, & tenders, metal & plastic	\$14.20
<i>Team assemblers</i>	\$12.37

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.

Copper wire, except mechanical, drawing	68.60
Rolling mill machinery and equipment manufacturing	46.32
Nonferrous metal, except CU and AL, shaping	33.83
Rolled steel shape manufacturing	23.39
Iron, steel pipe and tube from purchase steel	23.16

*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 the five-county Pennsylvania and Ohio region.

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 the Pennsylvania counties of Lawrence and Mercer and the Ohio counties of Columbiana, Mahoning and Trumbull

Industries Included in the Building and Construction Cluster³

- Site preparation contractors
- Plumbing and HVAC contractors
- Electrical contractors
- Painting & 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 mfg.
- Highway, street & bridge construction
- Poured concrete structure contractors
- Plumbing equipment merchant wholesalers

Top 5 Employing Industries 35.94% of Cluster Jobs (2006)

- Site preparation contractors
- Plumbing and HVAC contractors
- Electrical contractors
- Painting & wall covering contractors
- All other specialty trade contractors

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Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	5-County Region (Pennsylvania and Ohio)
Employer Units ¹ (2006)	2,207
Number of Jobs (2006)	27,640
Net Change in Job Volume (2002-2006)	264
Percent Change in Job Volume (2002-2006)	0.96%
Percent of Total Region Jobs (2006)	6.98%
Average Annual Wages (2006)	\$42,578
Estimated Cluster Payroll (2006)	\$1,177,000,000
State Location Quotient ² (2006)	1.01
Percent Change from 2002 State Location Quotient	-3.15%
National Location Quotient ² (2006)	0.93
Percent Change from 2002 National Location Quotient	-7.04%

County Job Volume (2006)

Lawrence County, PA	15.79%
Mercer County, PA	13.09%
Columbiana County, OH	13.97%
Mahoning County, OH	34.61%
Trumbull County, OH	22.55%

Five Most Common Occupations (2006) and Wages*

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

<i>Construction managers</i>	\$37.12
<i>First-line supervisors/managers of construction trades and extraction</i>	\$25.17
<i>Carpenters</i>	\$17.21
<i>Construction laborers</i>	\$17.19
<i>Painters, construction and maintenance</i>	\$15.31

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 manufacturing	14.02
Industrial and commercial fan and blower manufacturing	11.82
Ceramic wall and floor tile manufacturing	9.54
Cement manufacturing	6.26
Flat glass manufacturing	5.81

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Business and Financial Services

Analysis for the Pennsylvania counties of Lawrence and Mercer and the Ohio counties of Columbiana, Mahoning and Trumbull

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
- 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 26.97% of Cluster Jobs (2006)

- Janitorial services
- Temporary help services
- Lessors of residential buildings
- Insurance agencies and brokerages
- Telemarketing bureaus

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Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	5-County Region (Pennsylvania and Ohio)
Employer Units ¹ (2006)	3,569
Number of Jobs (2006)	59,891
Net Change in Job Volume (2002-2006)	5,848
Percent Change in Job Volume (2002-2006)	10.82%
Percent of Total Region Jobs (2006)	15.13%
Average Annual Wages (2006)	\$34,804
Estimated Cluster Payroll (2006)	\$2,084,000,000
State Location Quotient ² (2006)	0.84
Percent Change from 2002 State Location Quotient	4.05%
National Location Quotient ² (2006)	0.78
Percent Change from 2002 National Location Quotient	4.59%

County Job Volume (2006)

Lawrence County, PA	11.71%
Mercer County, PA	12.10%
Columbiana County, OH	10.52%
Mahoning County, OH	39.87%
Trumbull County, OH	25.81%

Five Most Common Occupations (2006) and Wages*

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

<i>Insurance sales agents</i>	\$26.75
Real estate brokers	\$23.93
<i>Accountants and auditors</i>	\$22.97
<i>Real estate sales agents</i>	\$22.94
Janitors and cleaners, except maids and housekeeping cleaners	\$10.05

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	6.24
Telemarketing bureaus	3.27
Investigation services	3.10
Telephone answering services	2.63
Home health equipment rental	2.12

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Information and Communication Services

Analysis for the Pennsylvania counties of Lawrence and Mercer and the Ohio counties of Columbiana, Mahoning and Trumbull

Industries Included in the Information and Communication Services Cluster³

- Wired telecommunications carriers
- Engineering services
- Newspaper publishers
- Custom computer programming
- 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

52.29% of Cluster Jobs (2006)

- Wired telecommunications carriers
- Engineering services
- Newspaper publishers
- Custom computer programming
- Data processing and related services

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Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	5-County Region (Pennsylvania and Ohio)
Employer Units ¹ (2006)	436
Number of Jobs (2006)	7,349
Net Change in Job Volume (2002-2006)	-494
Percent Change in Job Volume (2002-2006)	-6.30%
Percent of Total Region Jobs (2006)	1.86%
Average Annual Wages (2006)	\$48,102
Estimated Cluster Payroll (2006)	\$353,500,000
State Location Quotient ² (2006)	0.59
Percent Change from 2002 State Location Quotient	-4.10%
National Location Quotient ² (2006)	0.49
Percent Change from 2002 National Location Quotient	-4.31%

County Job Volume (2006)

Lawrence County, PA	12.70%
Mercer County, PA	10.72%
Columbiana County, OH	8.04%
Mahoning County, OH	48.27%
Trumbull County, OH	20.26%

Five Most Common Occupations (2006) and Wages*

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

<i>Computer software engineers, systems software</i>	\$34.40
<i>Telecommunications equipment installers and repairers, except line installers</i>	\$23.69
<i>Telecommunications line installers and repairers</i>	\$20.72
<i>Computer support specialists</i>	\$18.25
<i>Customer service representatives</i>	\$13.62

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.

Internet publishing and broadcasting	2.02
Sound recording studios	1.45

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Life Sciences

Analysis for the Pennsylvania counties of Lawrence and Mercer and the Ohio counties of Columbiana, Mahoning and Trumbull

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

65.26% of Cluster Jobs (2006)

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

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Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	5-County Region (Pennsylvania and Ohio)
Employer Units ¹ (2006)	2,136
Number of Jobs (2006)	50,975
Net Change in Job Volume (2002-2006)	1,225
Percent Change in Job Volume (2002-2006)	2.46%
Percent of Total Region Jobs (2006)	12.88%
Average Annual Wages (2006)	\$39,992
Estimated Cluster Payroll (2006)	\$2,034,000,000
State Location Quotient ² (2006)	1.06
Percent Change from 2002 State Location Quotient	-0.84%
National Location Quotient ² (2006)	1.32
Percent Change from 2002 National Location Quotient	-0.05%

County Job Volume (2006)

Lawrence County, PA	9.74%
Mercer County, PA	19.07%
Columbiana County, OH	10.22%
Mahoning County, OH	35.28%
Trumbull County, OH	25.69%

Five Most Common Occupations (2006) and Wages*

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

Physicians and surgeons	\$67.43
<i>Registered nurses</i>	\$25.08
<i>Licensed practical and licensed vocational nurses</i>	\$16.56
<i>Nursing aides, orderlies, and attendants</i>	\$10.14
<i>Home health aides</i>	\$9.36

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	3.31
Outpatient mental health centers	3.12
Ophthalmic goods manufacturing	2.92
Family planning centers	2.83
Diagnostic imaging centers	2.34

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Logistics and Transportation

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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

73.00% of Cluster Jobs (2006)

- General freight trucking, long-distance TL
- Other specialized trucking, local
- General freight trucking, local
- General freight trucking, long-distance LTL
- Couriers

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Cluster Statistics

Based on the North American Industrial Classification System (NAICS)	5-County Region (Pennsylvania and Ohio)
Employer Units ¹ (2006)	447
Number of Jobs (2006)	12,335
Net Change in Job Volume (2002-2006)	1,004
Percent Change in Job Volume (2002-2006)	8.86%
Percent of Total Region Jobs (2006)	3.12%
Average Annual Wages (2006)	\$42,104
Estimated Cluster Payroll (2006)	\$519,000,000
State Location Quotient ² (2006)	1.05
Percent Change from 2002 State Location Quotient	1.22%
National Location Quotient ² (2006)	1.20
Percent Change from 2002 National Location Quotient	5.67%

County Job Volume (2006)

Lawrence County, PA	7.99%
Mercer County, PA	13.84%
Columbiana County, OH	14.03%
Mahoning County, OH	35.72%
Trumbull County, OH	28.42%

Five Most Common Occupations (2006) and Wages*

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

<i>Truck drivers, heavy and tractor-trailer</i>	\$17.22
<i>Truck drivers, light or delivery services</i>	\$13.44
<i>Laborers and freight, stock, and material movers, hand</i>	\$12.12
<i>Driver/sales workers</i>	\$11.75
Couriers and messengers	\$9.69

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.

All other support activities for transportation	2.82
Other specialized trucking, local	2.75
Support activities for rail transportation	2.26
General freight trucking, long-distance TL	2.22
Other warehousing and storage	1.97

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