

Industry Spotlight

Agricultural (Chmura Cluster)

Reading, PA MSA



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Spotlight Summary

Agricultural (Chmura Cluster) Reading, PA MSA – 2023Q3

EMPLOYMENT



3,543

Regional employment / 2,183,852 in the nation

\$46,796

WAGES

Avg Wages per Worker / \$50,146 in the nation



Avg Ann % Change Last 10 Years / +0.0% in the U.S.

Region Nation 1.9%

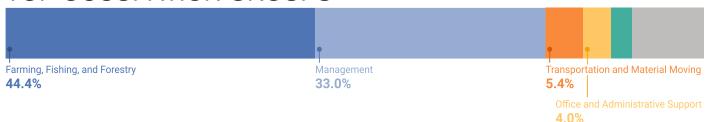
% of Total Employment / **1.3%** in the U.S.

Region Nation 2.4%

Avg Ann % Change Last 10 Years / +3.3% in the U.S.

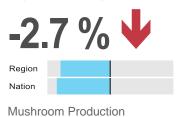
Region Nation

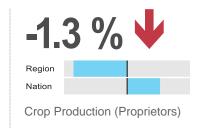
TOP OCCUPATION GROUPS



TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years







Industry Snapshot

EMPLOYMENT







| 6-Digit Industry | Empl | Avg Ann Wages | LQ | 5yr History | Annual Demand | Forecast Ann Growth |
|-----------------------------------------------------|-------|------------------|--------|-------------|------------------|---------------------------|
| Mushroom Production | 1,218 | \$42,303 | 114.49 | | 150 | -0.5% |
| Crop Production (Proprietors) | 387 | \$66,518 | 1.20 | | 32 | -1.6% |
| Farm Labor Contractors and Crew Leaders | 373 | \$38,622 | 1.83 | | 49 | -0.5% |
| Animal Production (Proprietors) | 255 | \$66,498 | 0.55 | | 21 | -1.7% |
| Chicken Egg Production | 209 | \$53,590 | 8.78 | | 24 | -1.2% |
| Dairy Cattle and Milk Production | 205 | \$24,667 | 1.73 | | 24 | -1.2% |
| Other Food Crops Grown Under Cover | 178 | \$51,470 | 4.30 | | 22 | -0.5% |
| Postharvest Crop Activities (except Cotton Ginning) | 80 | \$49,237 | 0.80 | | 11 | -0.4% |
| Fruit and Tree Nut Combination Farming | 73 | \$24,525 | 9.05 | | 9 | -0.5% |
| Support Activities for Animal Production | 73 | \$49,353 | 1.08 | | 10 | -0.1% |
| Remaining Component Industries | 492 | \$30,836 | 2.49 | | 54 | -0.5% |
| Agricultural (Chmura Cluster) | 3,543 | \$46,796 | 1.45 | | 389 | -0.8% |

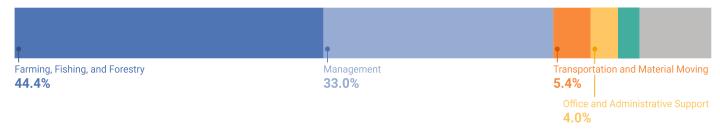


Employment is one of the broadest and most timely measures of a region's economy. Fluctuations in the number of jobs shed light on the health of an industry. A growing employment base creates more opportunities for regional residents and helps a region grow its population.



Since wages and salaries generally compose the majority of a household's income, the annual average wages of a region affect its average household income, housing market, quality of life, and other socioeconomic indicators.

Staffing Pattern



| 6-digit Occupation | Empl | Avg Ann Wages | Annual Demand |
|------------------------------------------------------------------|-------|------------------|------------------|
| Farmworkers and Laborers, Crop, Nursery, and Greenhouse | 1,083 | \$32,200 | 144 |
| Farmers, Ranchers, and Other Agricultural Managers | 992 | \$84,200 | 88 |
| Farmworkers, Farm, Ranch, and Aquacultural Animals | 236 | \$30,400 | 30 |
| Agricultural Equipment Operators | 108 | \$37,700 | 16 |
| Chief Executives | 77 | \$215,400 | 4 |
| First-Line Supervisors of Farming, Fishing, and Forestry Workers | 76 | \$53,200 | 10 |
| Landscaping and Groundskeeping Workers | 58 | \$35,400 | 7 |
| Heavy and Tractor-Trailer Truck Drivers | 47 | \$55,700 | 5 |
| Packers and Packagers, Hand | 45 | \$36,500 | 7 |
| Managers, All Other | 40 | \$136,100 | 3 |
| Remaining Component Occupations | 760 | \$61,800 | 80 |
| Total | 3,522 | | |



The mix of occupations points to the ability of a region to support an industry and its flexibility to adapt to future demand. Industry wages are a component of the cost of labor for regional employers.



Employment Distribution by Type

The table below shows the employment mix by ownership type for Agricultural (Chmura Cluster) for the Reading, PA MSA. Four of these ownership types — federal, state, and local government and the private sector — together constitute "Covered Employment" (employment covered by the Unemployment Insurance programs of the United States and reported via the Quarterly Census of Employment and Wages).

"Self-Employment" refers to unincorporated self-employment and represents workers whose primary job is self-employment (that is, these data do not include workers whose primary job is a wage-and-salary position that is supplemented with self-employment).

| 79.1% | | | 20.9% |
|-----------------|-------|-------|-------|
| | Empl | % | |
| Private | 2,803 | 79.1% | |
| Self-Employment | 740 | 20.9% | |

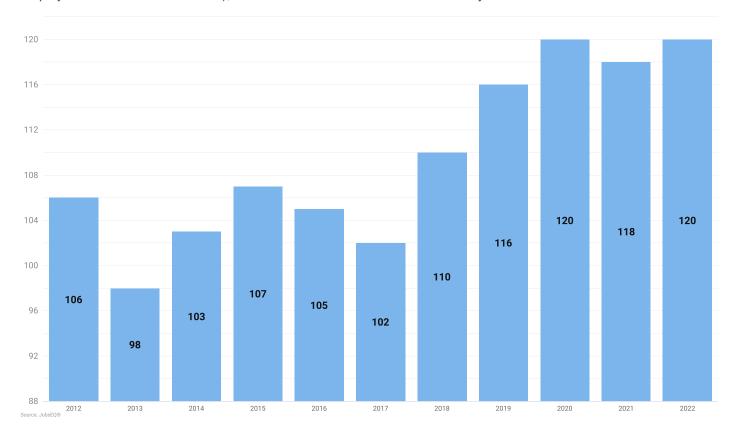
Source: JobsEQ®



Strong entrepreneurial activity is indicative of growing industries. Using self-employment as a proxy for entrepreneurs, a higher share of self-employed individuals within a regional industry points to future growth.

Establishments

In 2022, there were 120 Agricultural (Chmura Cluster) establishments in the Reading, PA MSA (per covered employment establishment counts), an increase from 106 establishments ten years earlier in 2012.





New business formations are an important source of job creation in a regional economy, spurring innovation and competition, and driving productivity growth. Establishment data can provide an indicator of growth in businesses by counting each single location (such as a factory or a store) where business activity takes place, and with at least one employee.

Sector Strategy Pathways

| First-Line Supervisors of Farming, Fishing, and Forestry Workers | Farmers, Ranchers, and Other Agricultural Managers |
|------------------------------------------------------------------|---------------------------------------------------------|
| Landscaping and Groundskeeping Workers | |
| Cleaners of Vehicles and Equipment | Farmworkers and Laborers, Crop, Nursery, and Greenhouse |
| Animal Caretakers | |
| Farmworkers, Farm, Ranch, and Aquacultural Animals | |
| Slaughterers and Meat Packers | |
| Farmworkers and Laborers, Crop, Nursery, and Greenhouse | Farmworkers, Farm, Ranch, and Aquacultural Animals |
| Tire Repairers and Changers | |
| Automotive and Watercraft Service Attendants | |
| Fishing and Hunting Workers | |



The graphics on this page illustrate relationships and potential movement (from left to right) between occupations that share similar skill sets. Developing career pathways as a strategy promotes industry employment growth and workforce engagement.

Postsecondary Programs Linked to Agricultural (Chmura Cluster)

| Program | Awards |
|-----------------------------------------------------------------|--------|
| Albright College | |
| Biology/Biological Sciences, General | 22 |
| Alvernia University | |
| Non-Profit/Public/Organizational Management | 55 |
| American Barber and Beauty Academy | |
| Aesthetician/Esthetician and Skin Care Specialist | 54 |
| Kutztown University of Pennsylvania | |
| Biochemistry | 15 |
| Biology/Biological Sciences, General | 44 |
| Business Administration and Management, General | 240 |
| Digital Communication and Media/Multimedia | 53 |
| Miller-Motte College-Berks Technical Institute | |
| Mechatronics, Robotics, and Automation Engineering | 9 |
| Truck and Bus Driver/Commercial Vehicle Operator and Instructor | 76 |
| Pennsylvania State University-Penn State Berks | |
| Biochemistry | 19 |

Source: JobsEQ®

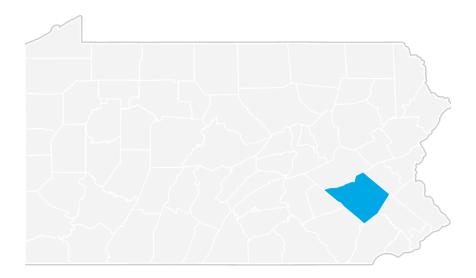


The number of graduates from postsecondary programs in the region identifies the pipeline of future workers as well as the training capacity to support industry demand.



Among postsecondary programs at schools located in the Reading, PA MSA, the sampling above identifies those most linked to occupations relevant to Agricultural (Chmura Cluster). For a complete list see JobsEQ®, http://www.chmuraecon.com/jobseq

Reading, PA MSA Regional Map



Data Notes

- Industry employment and wages (including total regional employment and wages) are as of 2023Q3 and are based upon BLS QCEW data, imputed by Chmura where necessary, and supplemented by additional sources including Census ZBP data. Employment forecasts are modeled by Chmura and are consistent with BLS national-level 10-year forecasts.
- Occupation employment is as of 2023Q3 and is based on industry employment and local staffing patterns
 calculated by Chmura and utilizing BLS OEWS data. Wages by occupation are as of 2023, utilizing BLS OEWS
 data and imputed by Chmura.
- GDP is derived from BEA data and imputations by Chmura. Productivity (output per worker) is calculated by Chmura using industry employment and wages as well as GDP and BLS output data. Supply chain modeling including purchases by industry are developed by Chmura.
- Postsecondary awards are per the NCES and are for the 2021-2022 academic year.
- Establishment counts are per the BLS QCEW data.
- Figures may not sum due to rounding.

Industry Definition

Agricultural (Chmura Cluster) is defined as the following NAICS industries:

| Code | Description |
|--------|---------------------------------------------------|
| 111000 | Crop Production (Proprietors) |
| 111110 | Soybean Farming |
| 111120 | Oilseed (except Soybean) Farming |
| 111130 | Dry Pea and Bean Farming |
| 111140 | Wheat Farming |
| 111150 | Corn Farming |
| 111160 | Rice Farming |
| 111191 | Oilseed and Grain Combination Farming |
| 111199 | All Other Grain Farming |
| 111211 | Potato Farming |
| 111219 | Other Vegetable (except Potato) and Melon Farming |
| 111310 | Orange Groves |
| 111320 | Citrus (except Orange) Groves |
| 111331 | Apple Orchards |
| 111332 | Grape Vineyards |
| 111333 | Strawberry Farming |
| 111334 | Berry (except Strawberry) Farming |
| 111335 | Tree Nut Farming |
| 111336 | Fruit and Tree Nut Combination Farming |
| 111339 | Other Noncitrus Fruit Farming |
| 111411 | Mushroom Production |
| 111419 | Other Food Crops Grown Under Cover |
| 111421 | Nursery and Tree Production |
| 111422 | Floriculture Production |
| 111910 | Tobacco Farming |
| 111920 | Cotton Farming |
| 111930 | Sugarcane Farming |
| 111940 | Hay Farming |
| 111991 | Sugar Beet Farming |
| 111992 | Peanut Farming |
| 111998 | All Other Miscellaneous Crop Farming |
| 112000 | Animal Production (Proprietors) |
| 112111 | Beef Cattle Ranching and Farming |
| 112112 | Cattle Feedlots |
| 112120 | Dairy Cattle and Milk Production |
| 112130 | Dual-Purpose Cattle Ranching and Farming |
| 112210 | Hog and Pig Farming |
| 112310 | Chicken Egg Production |
| 112320 | Broilers and Other Meat Type Chicken Production |
| 112330 | Turkey Production |
| 112340 | Poultry Hatcheries Other Poultry Production |
| 112390 | Other Poultry Production |
| 112410 | Sheep Farming Coat Farming |
| 112420 | Goat Farming First Carming and Fish Hatcheries |
| 112511 | Finfish Farming and Fish Hatcheries |
| 112512 | Shellfish Farming Other Associations |
| 112519 | Other Aquaculture |

Agricultural (Chmura Cluster) is defined as the following NAICS industries:

| Code | Description |
|--------|---------------------------------------------------------|
| 112910 | Apiculture |
| 112920 | Horses and Other Equine Production |
| 112930 | Fur-Bearing Animal and Rabbit Production |
| 112990 | All Other Animal Production |
| 114111 | Finfish Fishing |
| 114112 | Shellfish Fishing |
| 114119 | Other Marine Fishing |
| 114210 | Hunting and Trapping |
| 115111 | Cotton Ginning |
| 115112 | Soil Preparation, Planting, and Cultivating |
| 115113 | Crop Harvesting, Primarily by Machine |
| 115114 | Postharvest Crop Activities (except Cotton Ginning) |
| 115115 | Farm Labor Contractors and Crew Leaders |
| 115116 | Farm Management Services |
| 115210 | Support Activities for Animal Production |
| 115310 | Support Activities for Forestry |
| 311111 | Dog and Cat Food Manufacturing |
| 311119 | Other Animal Food Manufacturing |
| 311211 | Flour Milling |
| 311212 | Rice Milling |
| 311213 | Malt Manufacturing |
| 311221 | Wet Corn Milling and Starch Manufacturing |
| 311224 | Soybean and Other Oilseed Processing |
| 311225 | Fats and Oils Refining and Blending |
| 311230 | Breakfast Cereal Manufacturing |
| 325311 | Nitrogenous Fertilizer Manufacturing |
| 325312 | Phosphatic Fertilizer Manufacturing |
| 325314 | Fertilizer (Mixing Only) Manufacturing |
| 325315 | Compost Manufacturing |
| 325320 | Pesticide and Other Agricultural Chemical Manufacturing |

Region Definition

Reading, PA MSA is defined as the following counties:

Berks County, Pennsylvania

FAQ

What is (LQ) location quotient?

Location quotient is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

What is annual demand?

Annual demand is a of the sum of the annual projected growth demand and separation demand. Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. Growth demand is the increase or decrease of jobs expected due to expansion or contraction of the overall number of jobs.

What is the difference between industry wages and occupation wages?

Industry wages and occupation wages are estimated via separate data sets, often the time periods being reported do not align, and wages are defined slightly differently in the two systems (for example, certain bonuses are included in the industry wages but not the occupation wages). It is therefore common that estimates of the average industry wages and average occupation wages in a region do not match exactly.