JOBSeQ

Industry Spotlight

Plastics and Rubber Products Manufacturing

Reading, PA MSA

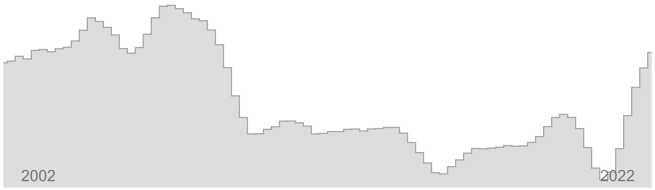
GRCA
GREATER READING
Chamber Alliance

Greater Reading Chamber Alliance
www.GreaterReading.org

Spotlight Summary

Plastics and Rubber Products Manufacturing
Reading, PA MSA – 2022Q2

EMPLOYMENT



1,941

Regional employment / **739,699** in the nation

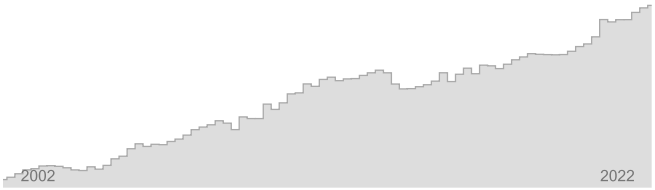
0.9% ↑

Avg Ann % Change Last 10 Years / **+1.4%** in the U.S.

1.1%

% of Total Employment / **0.5%** in the U.S.

WAGES



$64,182

Avg Wages per Worker / **$63,441** in the nation

1.7% ↑

Avg Ann % Change Last 10 Years / **+3.0%** in the U.S.

TOP OCCUPATION GROUPS

TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years

1.7 % ↑

All Other Plastics Product Manufacturing

2.5 % ↑

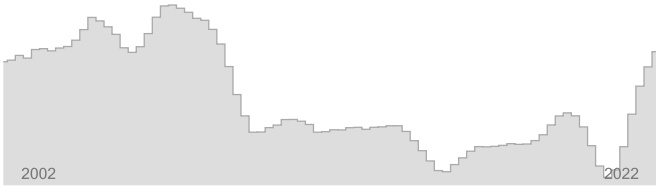
Plastics Bottle Manufacturing

-1.9 % ↓

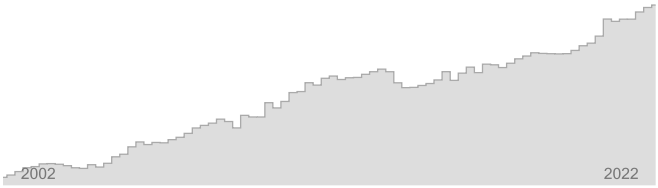
Polystyrene Foam Product Manufacturing

Industry Snapshot

EMPLOYMENT



WAGES



6-Digit Industry	Empl	Avg Ann Wages	LQ	5yr History	Annual Demand	Forecast Ann Growth
All Other Plastics Product Manufacturing	1,140	$61,857	3.22		103	-1.3%
Plastics Bottle Manufacturing	268	$64,121	6.64		24	-1.3%
Polystyrene Foam Product Manufacturing	256	$60,907	7.52		23	-1.3%
Unlaminated Plastics Profile Shape Manufacturing	124	$67,375	4.86		11	-1.3%
Tire Manufacturing (except Retreading)	99	$73,401	1.76		9	-1.2%
Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing	41	$67,307	1.85		4	-1.3%
Plastics Pipe and Pipe Fitting Manufacturing	12	$70,807	0.35		1	-1.3%
Plastics Plumbing Fixture Manufacturing	0		0.00		0	-2.1%
Plastics and Rubber Products Manufacturing	**1,941**	**$64,182**	**2.33**		**175**	**-1.3%**

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.

Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Staffing Pattern

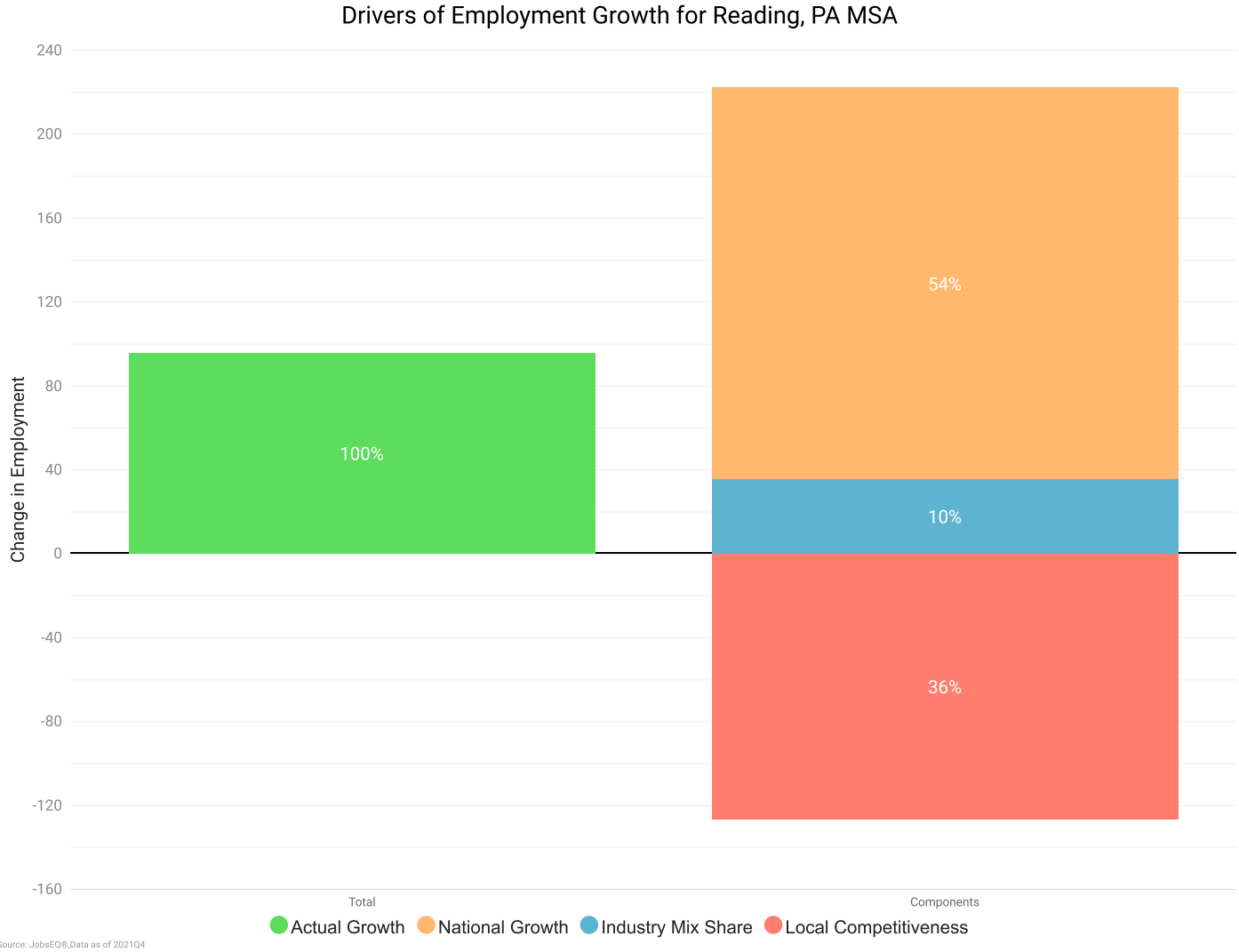
6-digit Occupation	Empl	Avg Ann Wages	Annual Demand
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	224	$40,500	17
Team Assemblers	169	$32,800	13
Inspectors, Testers, Sorters, Samplers, and Weighers	102	$38,300	8
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	96	$40,400	7
First-Line Supervisors of Production and Operating Workers	93	$62,000	8
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	82	$36,900	7
Laborers and Freight, Stock, and Material Movers, Hand	79	$37,700	9
Packers and Packagers, Hand	75	$32,000	10
Maintenance and Repair Workers, General	54	$50,200	4
Industrial Machinery Mechanics	52	$56,700	5
Remaining Component Occupations	898	$59,400	76
Total	**1,923**		

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.

Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Drivers of Employment Growth

Over the ten years ending 2021, employment in Plastics and Rubber Products Manufacturing for the Reading, PA MSA added 96 jobs. After adjusting for national growth during this period and industry mix share, the part of this employment change due to local competitiveness was a loss of 127 jobs—meaning this industry was less competitive than its national counterpart during this period.



Source: JobsEQ®,Data as of 2021Q4

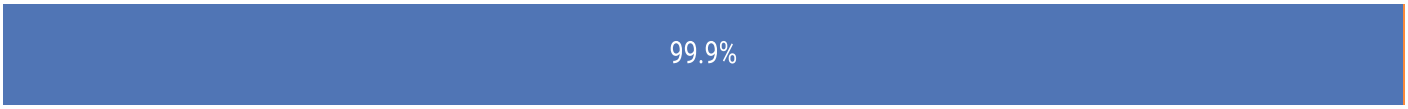
Shift-share analysis sheds light on the factors that drive regional employment growth in an industry. A positive change in local competitiveness indicates advantages that may be due to factors such as superior technology, management, and labor pool, etc.

National growth is due to the overall growth or contraction in the national economy. Industry mix share is the growth attributable to the specific industries examined (based on national industry growth patterns and the industry mix of the region).

Employment Distribution by Type

The table below shows the employment mix by ownership type for Plastics and Rubber Products Manufacturing 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).



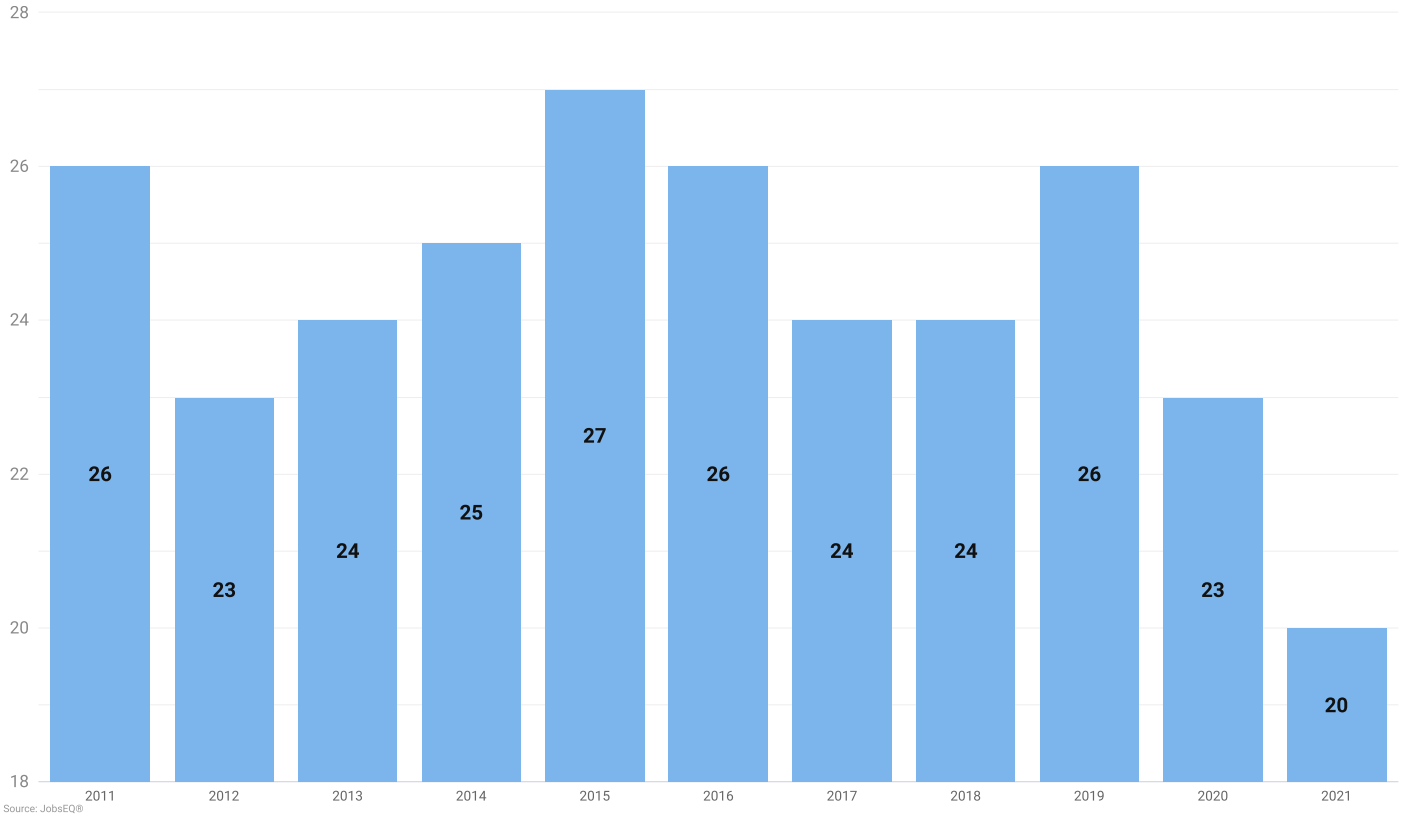
	Empl	%
Private	1,939	99.9%
Self-Employment	2	0.1%
Other Non-Covered	0	0.0%

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 2021, there were 20 Plastics and Rubber Products Manufacturing establishments in the Reading, PA MSA (per covered employment establishment counts), a decrease from 26 establishments ten years earlier in 2011.

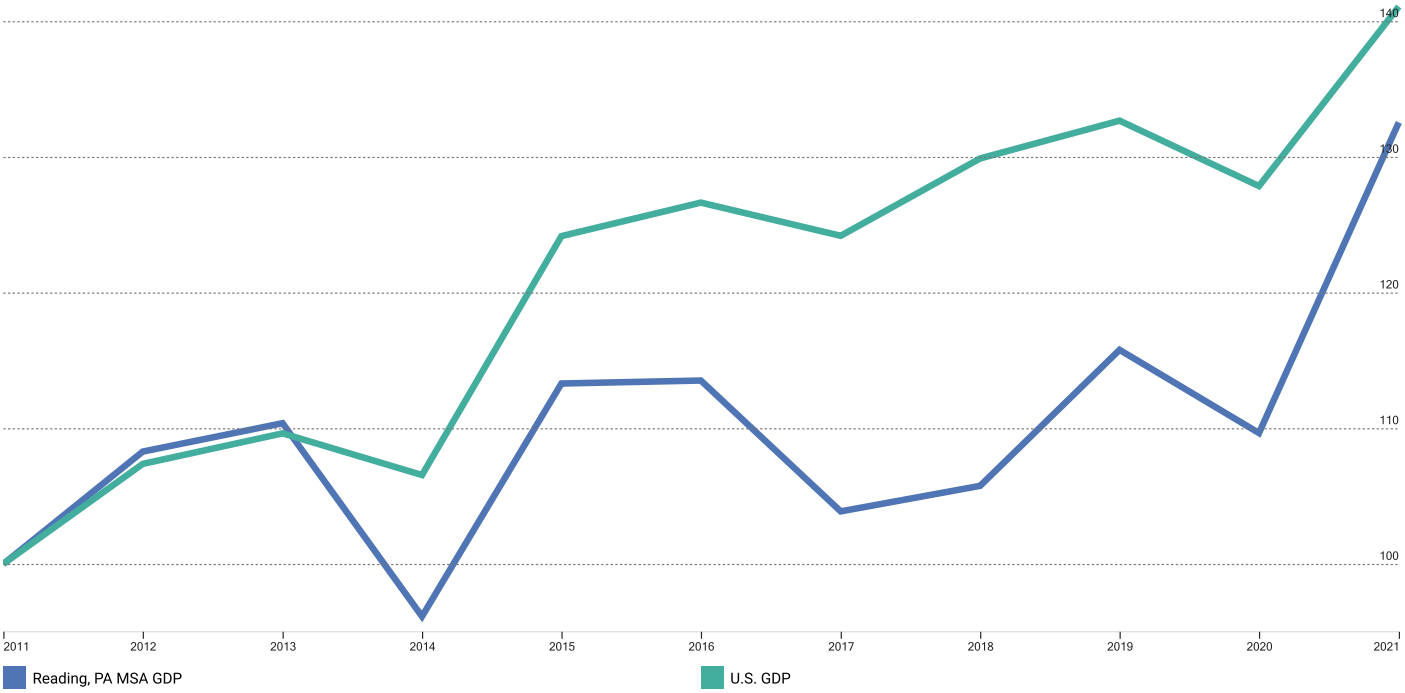


New business formations are an important source of job creation in a regional economy, spurring innovation and competition, and driving productivity growth. Establishment data can provide an indicator of growth in businesses by counting each single location (such as a factory or a store) where business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

GDP & Productivity

In 2021, Plastics and Rubber Products Manufacturing produced $0.2 billion in GDP for the Reading, PA MSA.

GDP: Indexed 2011 = 100



1.1 %

Industry Share of Total GDP / **0.4 %** in the nation

2.9 %

Avg Ann % Change Last 10 Yrs / **3.5 %** in the nation

$374k

Output per Worker / **$376k** in the nation

Gross domestic product (GDP) is the most comprehensive measure of regional economic activity, and an industry's contribution to GDP is an important indicator of regional industry strength. It is a measure of total value-added to a regional economy in the form of labor income, proprietor's income, and business profits, among others. GDP values shown on this page are nominal GDP data.

Growth in productivity (output per worker) leads to increases in wealth and higher average standards of living in a region.

Supply Chain: Top Suppliers

As of 2022Q2, Plastics and Rubber Products Manufacturing in the Reading, PA MSA are estimated to make $441.9 million in annual purchases from suppliers in the United States with about 36% or $161.0 million of these purchases being made from businesses located in the Reading, PA MSA.

6-digit Supplier Industries	Purchases from In-Region ($000s)	Purchases from Out-of-Region ($000s)
Plastics Material and Resin Manufacturing	$65,916.0	$120.0
All Other Basic Organic Chemical Manufacturing	$1,699.0	$15,940.0
General Warehousing and Storage	$12,029.0	$409.0
Petrochemical Manufacturing	<$0.1	$12,298.0
Other Basic Inorganic Chemical Manufacturing	<$0.1	$11,885.0
Remaining Supplier Industries	$81,356.0	$240,273.0
Total	**$161,000.0**	**$280,925.0**

Supplier-buyer networks can indicate local linkages between industries, regional capacity to support growth in an industry, and potential leakage of sales out of the region.

Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Sector Strategy Pathways

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.

Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Postsecondary Programs Linked to Plastics and Rubber Products Manufacturing

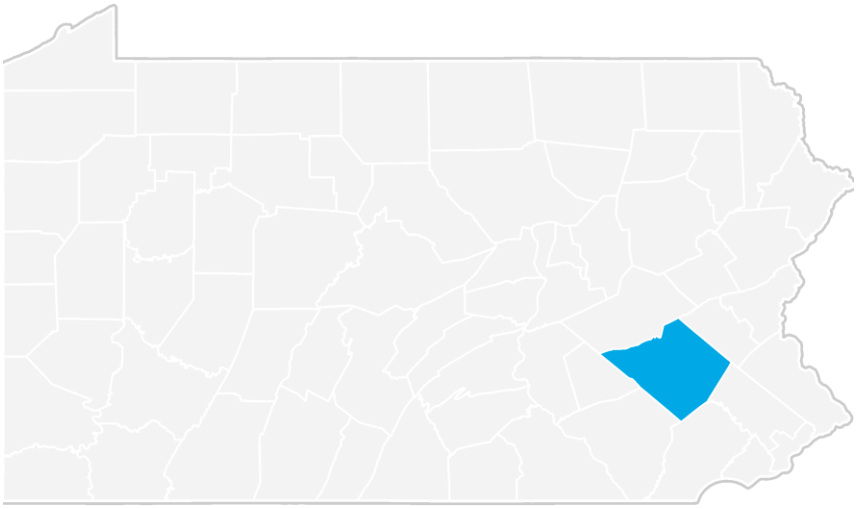
Program	Awards
Albright College	
Business Administration and Management, General	100
Kutztown University of Pennsylvania	
Business Administration and Management, General	275
Chemistry, General	12
Commercial and Advertising Art	72
Computer and Information Sciences, General	73
Educational/Instructional Technology	25
Miller-Motte College-Berks Technical Institute	
Mechatronics, Robotics, and Automation Engineering	7
Reading Area Community College	
Business Administration and Management, General	58
Computer/Computer Systems Technology/Technician	16
Electrical and Power Transmission Installation/Installer, General	24

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 Plastics and Rubber Products Manufacturing. For a complete list see JobsEQ®, http://www.chmuraecon.com/jobseq

Reading, PA MSA Regional Map



Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Region Definition

Reading, PA MSA is defined as the following counties:

Berks County, Pennsylvania

Data Notes

- Industry employment and wages (including total regional employment and wages) are as of 2022Q2 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 2022Q2 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OES data. Occupation wages are per the BLS OES data and are as of 2021.
- 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 2020-2021 academic year.
- Establishment counts are per the BLS QCEW data.
- Figures may not sum due to rounding.

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.