



Industry Spotlight

Advanced Manufacturing (Brookings)

Greater Lexington Bluegrass Alliance Region



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Spotlight Summary

Advanced Manufacturing (Brookings)
Greater Lexington Bluegrass Alliance Region – 2024Q1

EMPLOYMENT



25,963

Regional employment / **6,045,676** in the nation

WAGES



\$82,421

Avg Wages per Worker / **\$102,709** in the nation

1.0% ↑

Avg Ann % Change Last 10 Years / **+0.8%** in the U.S.



6.7%

% of Total Employment / **3.7%** in the U.S.



1.3% ↑

Avg Ann % Change Last 10 Years / **+2.9%** in the U.S.



TOP OCCUPATION GROUPS



TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years

4.0% ↑



Automobile and Light Duty Motor Vehicle Manufacturing

1.2% ↑



Other Motor Vehicle Parts Manufacturing

-4.1% ↓



Computer Terminal and Other Computer Peripheral Equipment Manufacturing

Industry Snapshot


EMPLOYMENT



WAGES



6-Digit Industry	Empl	Avg Ann Wages	LQ	5yr History	Annual Demand	Forecast Ann Growth
Automobile and Light Duty Motor Vehicle Manufacturing	9,419	\$95,870	15.76		1,127	1.4%
Other Motor Vehicle Parts Manufacturing	2,178	\$64,698	6.06		181	-1.8%
Computer Terminal and Other Computer Peripheral Equipment Manufacturing	1,217	\$133,522	16.16		95	-0.2%
Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	1,113	\$51,558	14.28		94	-1.7%
Motor Vehicle Seating and Interior Trim Manufacturing	993	\$56,170	5.64		91	-1.0%
Pharmaceutical Preparation Manufacturing	935	\$106,649	1.75		90	0.4%
Aircraft Manufacturing	862	\$85,058	1.50		73	0.1%
Motor Vehicle Transmission and Power Train Parts Manufacturing	859	\$56,961	4.60		72	-1.7%
Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	743	\$62,105	9.98		74	0.4%
Construction Machinery Manufacturing	741	\$82,760	4.22		70	-0.1%
Remaining Component Industries	6,898	\$77,620	1.08		658	-0.2%
Advanced Manufacturing (Brookings)	25,963	\$82,421	1.84		2,505	0.3%


 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.

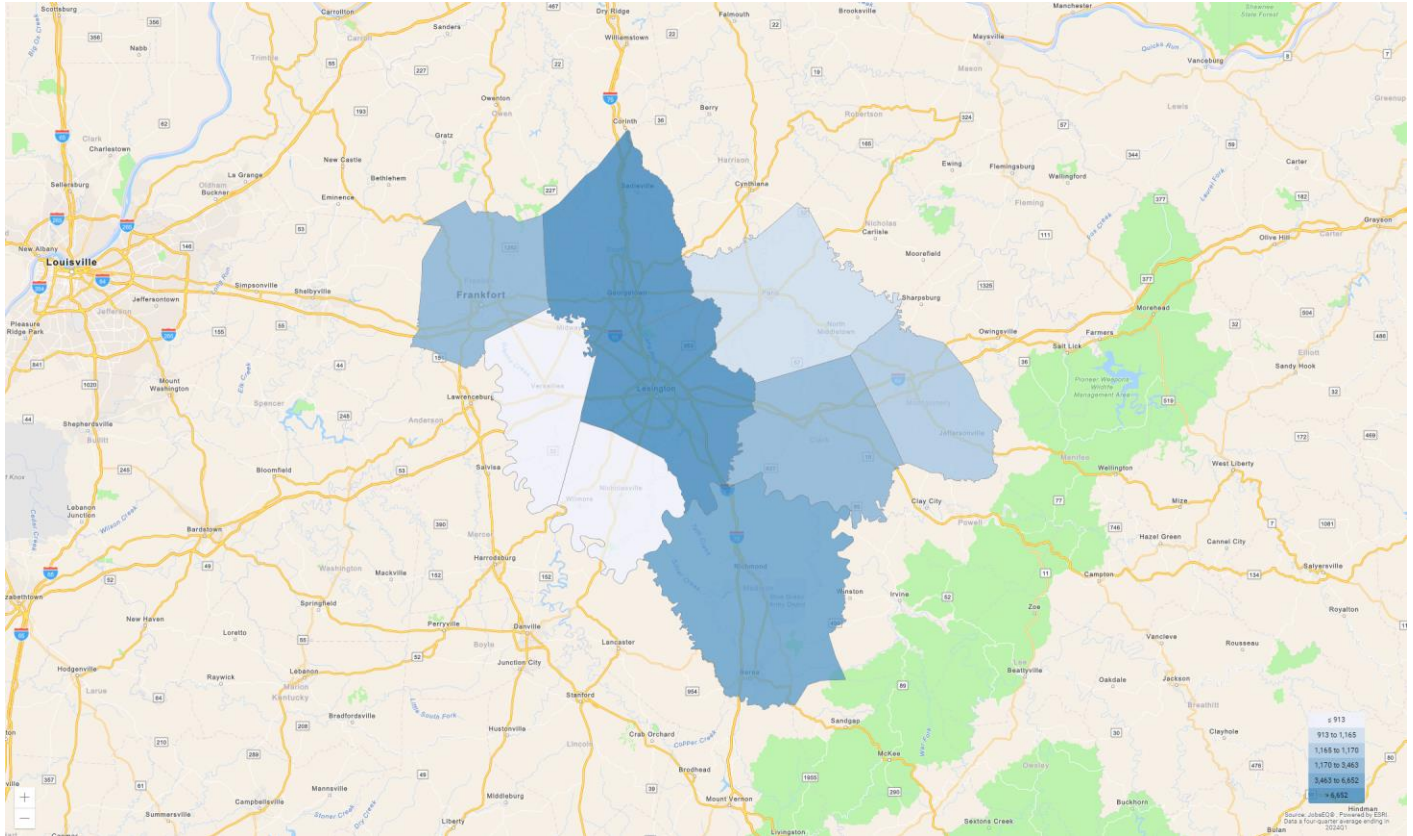
Staffing Pattern



6-digit Occupation	Empl	Avg Ann Wages	Annual Demand
Team Assemblers	7,061	\$50,400	879
First-Line Supervisors of Production and Operating Workers	953	\$78,900	90
Assemblers and Fabricators, All Other	883	\$51,000	110
Inspectors, Testers, Sorters, Samplers, and Weighers	820	\$51,700	92
Industrial Engineers	688	\$100,500	49
Electrical, Electronic, and Electromechanical Equipment Assemblers, Except Coil Winders, Tapers, and Finishers	618	\$47,700	67
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	604	\$48,000	46
Laborers and Freight, Stock, and Material Movers, Hand	561	\$43,600	72
Welders, Cutters, Solderers, and Brazers	558	\$49,300	55
Industrial Machinery Mechanics	478	\$71,400	51
Remaining Component Occupations	12,706	\$68,900	1,157
Total	25,930		

 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.

Geographic Distribution



Region	Empl	Region	Empl
Scott County, Kentucky	10,538	Montgomery County, Kentucky	1,165
Fayette County, Kentucky	6,652	Bourbon County, Kentucky	913
Madison County, Kentucky	3,463	Jessamine County, Kentucky	514
Franklin County, Kentucky	1,308	Woodford County, Kentucky	238
Clark County, Kentucky	1,171		

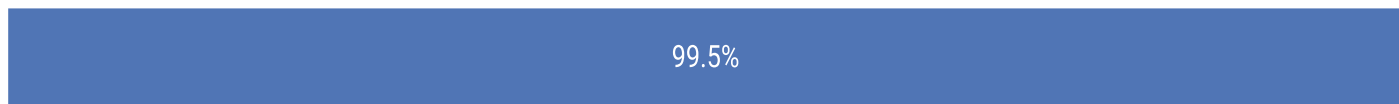
Source: JobsEQ®



 The geographic distribution of industry employment by place of work illustrates the impact on labor force demand and commuting patterns.

Employment Distribution by Type

The table below shows the employment mix by ownership type for Advanced Manufacturing (Brookings) for the Greater Lexington Bluegrass Alliance Region. 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).



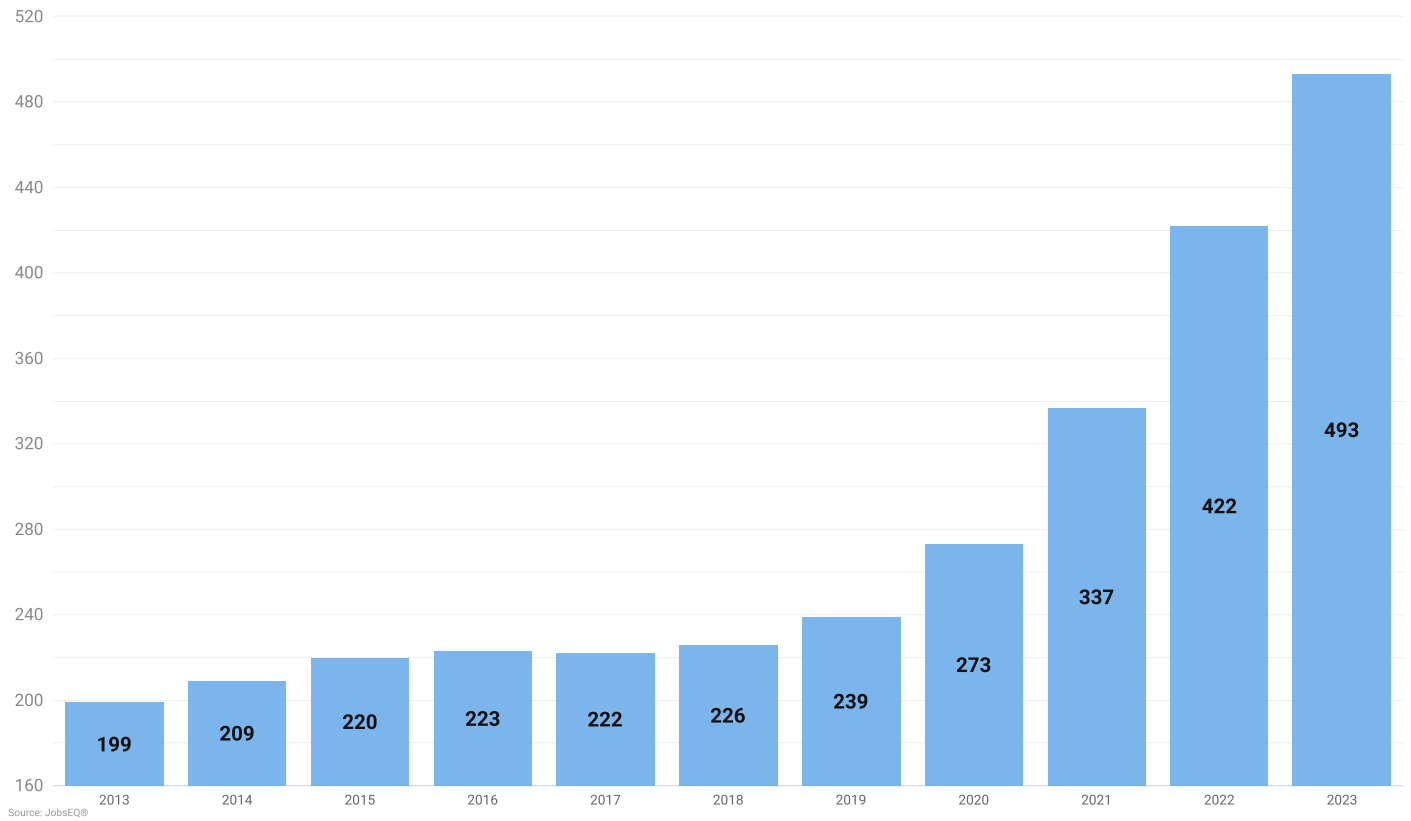
	Empl	%
 Private	25,831	99.5%
 Self-Employment	132	0.5%


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 2023, there were 493 Advanced Manufacturing (Brookings) establishments in the Greater Lexington Bluegrass Alliance Region (per covered employment establishment counts), an increase from 199 establishments ten years earlier in 2013.





 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.

Postsecondary Programs Linked to Advanced Manufacturing (Brookings)

Program	Awards
Bluegrass Community and Technical College	
Electrical/Electronic Engineering Technologies/Technicians, Other	62
Electrician	296
Industrial Mechanics and Maintenance Technology/Technician	333
Welding Technology/Welder	303
Eastern Kentucky University	
Industrial Safety Technology/Technician	120
Industrial Technology/Technician	22
University of Kentucky	
Electrical and Electronics Engineering	73
Industrial Engineering	40
Industrial Production Technologies/Technicians, Other	34
Mechanical Engineering	196

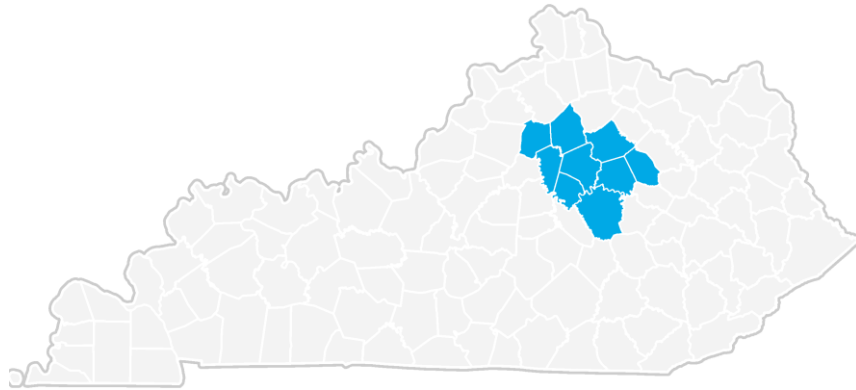
Source: [JobsEQ®](#)

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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.
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Among postsecondary programs at schools located in the Greater Lexington Bluegrass Alliance Region, the sampling above identifies those most linked to occupations relevant to Advanced Manufacturing (Brookings). For a complete list see JobsEQ®, <http://www.chmuraecon.com/jobseq>

Greater Lexington Bluegrass Alliance Region Regional Map



Data Notes

- Industry employment and wages (including total regional employment and wages) are as of 2024Q1 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 2024Q1 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OEWS data. Wages by occupation are as of 2024, 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

Advanced Manufacturing (Brookings) is defined as the following NAICS industries:

Code	Description
324110	Petroleum Refineries
324121	Asphalt Paving Mixture and Block Manufacturing
324122	Asphalt Shingle and Coating Materials Manufacturing
324191	Petroleum Lubricating Oil and Grease Manufacturing
324199	All Other Petroleum and Coal Products Manufacturing
325110	Petrochemical Manufacturing
325120	Industrial Gas Manufacturing
325130	Synthetic Dye and Pigment Manufacturing
325180	Other Basic Inorganic Chemical Manufacturing
325193	Ethyl Alcohol Manufacturing
325194	Cyclic Crude, Intermediate, and Gum and Wood Chemical Manufacturing
325199	All Other Basic Organic Chemical Manufacturing
325211	Plastics Material and Resin Manufacturing
325212	Synthetic Rubber Manufacturing
325220	Artificial and Synthetic Fibers and Filaments Manufacturing
325311	Nitrogenous Fertilizer Manufacturing
325312	Phosphatic Fertilizer Manufacturing
325314	Fertilizer (Mixing Only) Manufacturing
325315	Compost Manufacturing
325320	Pesticide and Other Agricultural Chemical Manufacturing
325411	Medicinal and Botanical Manufacturing
325412	Pharmaceutical Preparation Manufacturing
325413	In-Vitro Diagnostic Substance Manufacturing
325414	Biological Product (except Diagnostic) Manufacturing
325910	Printing Ink Manufacturing
325920	Explosives Manufacturing
325991	Custom Compounding of Purchased Resins
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing
327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing
327120	Clay Building Material and Refractories Manufacturing
327910	Abrasive Product Manufacturing
327991	Cut Stone and Stone Product Manufacturing
327992	Ground or Treated Mineral and Earth Manufacturing
327993	Mineral Wool Manufacturing
327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing
331110	Iron and Steel Mills and Ferroalloy Manufacturing
331313	Alumina Refining and Primary Aluminum Production
331314	Secondary Smelting and Alloying of Aluminum
331315	Aluminum Sheet, Plate, and Foil Manufacturing
331318	Other Aluminum Rolling, Drawing, and Extruding
331511	Iron Foundries
331512	Steel Investment Foundries
331513	Steel Foundries (except Investment)
331523	Nonferrous Metal Die-Casting Foundries
331524	Aluminum Foundries (except Die-Casting)
331529	Other Nonferrous Metal Foundries (except Die-Casting)

Advanced Manufacturing (Brookings) is defined as the following NAICS industries:

Code	Description
333111	Farm Machinery and Equipment Manufacturing
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing
333120	Construction Machinery Manufacturing
333131	Mining Machinery and Equipment Manufacturing
333132	Oil and Gas Field Machinery and Equipment Manufacturing
333241	Food Product Machinery Manufacturing
333242	Semiconductor Machinery Manufacturing
333243	Sawmill, Woodworking, and Paper Machinery Manufacturing
333248	All Other Industrial Machinery Manufacturing
333310	Commercial and Service Industry Machinery Manufacturing
333611	Turbine and Turbine Generator Set Units Manufacturing
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing
333613	Mechanical Power Transmission Equipment Manufacturing
333618	Other Engine Equipment Manufacturing
333912	Air and Gas Compressor Manufacturing
333914	Measuring, Dispensing, and Other Pumping Equipment Manufacturing
333921	Elevator and Moving Stairway Manufacturing
333922	Conveyor and Conveying Equipment Manufacturing
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing
333991	Power-Driven Handtool Manufacturing
333992	Welding and Soldering Equipment Manufacturing
333993	Packaging Machinery Manufacturing
333994	Industrial Process Furnace and Oven Manufacturing
333995	Fluid Power Cylinder and Actuator Manufacturing
333996	Fluid Power Pump and Motor Manufacturing
333998	All Other Miscellaneous General Purpose Machinery Manufacturing
334111	Electronic Computer Manufacturing
334112	Computer Storage Device Manufacturing
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing
334210	Telephone Apparatus Manufacturing
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
334290	Other Communications Equipment Manufacturing
334310	Audio and Video Equipment Manufacturing
334412	Bare Printed Circuit Board Manufacturing
334413	Semiconductor and Related Device Manufacturing
334416	Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing
334417	Electronic Connector Manufacturing
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing
334419	Other Electronic Component Manufacturing
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables
334514	Totalizing Fluid Meter and Counting Device Manufacturing
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals
334516	Analytical Laboratory Instrument Manufacturing
334517	Irradiation Apparatus Manufacturing
334519	Other Measuring and Controlling Device Manufacturing

Advanced Manufacturing (Brookings) is defined as the following NAICS industries:

Code	Description
334610	Manufacturing and Reproducing Magnetic and Optical Media
335131	Residential Electric Lighting Fixture Manufacturing
335132	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing
335139	Electric Lamp Bulb and Other Lighting Equipment Manufacturing
335210	Small Electrical Appliance Manufacturing
335220	Major Household Appliance Manufacturing
335311	Power, Distribution, and Specialty Transformer Manufacturing
335312	Motor and Generator Manufacturing
335313	Switchgear and Switchboard Apparatus Manufacturing
335314	Relay and Industrial Control Manufacturing
335910	Battery Manufacturing
335921	Fiber Optic Cable Manufacturing
335929	Other Communication and Energy Wire Manufacturing
335931	Current-Carrying Wiring Device Manufacturing
335932	Noncurrent-Carrying Wiring Device Manufacturing
335991	Carbon and Graphite Product Manufacturing
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing
336110	Automobile and Light Duty Motor Vehicle Manufacturing
336120	Heavy Duty Truck Manufacturing
336211	Motor Vehicle Body Manufacturing
336212	Truck Trailer Manufacturing
336213	Motor Home Manufacturing
336214	Travel Trailer and Camper Manufacturing
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing
336340	Motor Vehicle Brake System Manufacturing
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing
336360	Motor Vehicle Seating and Interior Trim Manufacturing
336370	Motor Vehicle Metal Stamping
336390	Other Motor Vehicle Parts Manufacturing
336411	Aircraft Manufacturing
336412	Aircraft Engine and Engine Parts Manufacturing
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing
336414	Guided Missile and Space Vehicle Manufacturing
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing
336510	Railroad Rolling Stock Manufacturing
336611	Ship Building and Repairing
336612	Boat Building
336991	Motorcycle, Bicycle, and Parts Manufacturing
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing
336999	All Other Transportation Equipment Manufacturing
339112	Surgical and Medical Instrument Manufacturing
339113	Surgical Appliance and Supplies Manufacturing
339114	Dental Equipment and Supplies Manufacturing
339115	Ophthalmic Goods Manufacturing
339116	Dental Laboratories
339910	Jewelry and Silverware Manufacturing

Advanced Manufacturing (Brookings) is defined as the following NAICS industries:

Code	Description
339920	Sporting and Athletic Goods Manufacturing
339930	Doll, Toy, and Game Manufacturing
339940	Office Supplies (except Paper) Manufacturing
339950	Sign Manufacturing
339991	Gasket, Packing, and Sealing Device Manufacturing
339992	Musical Instrument Manufacturing
339993	Fastener, Button, Needle, and Pin Manufacturing
339994	Broom, Brush, and Mop Manufacturing
339995	Burial Casket Manufacturing
339999	All Other Miscellaneous Manufacturing

Region Definition

Greater Lexington Bluegrass Alliance Region is defined as the following counties:

Bourbon County, Kentucky

Clark County, Kentucky

Fayette County, Kentucky

Franklin County, Kentucky

Jessamine County, Kentucky

Madison County, Kentucky

Montgomery County, Kentucky

Scott County, Kentucky

Woodford County, Kentucky

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.