

# Industry Spotlight

# Manufacturing

Fauquier County, Virginia

Spotlight Summary	
Industry Snapshot	
Staffing Pattern	5
Drivers of Employment Growth	6
Employment Distribution by Type	7
Establishments	8
GDP & Productivity	g
Supply Chain: Top Suppliers	10
Sector Strategy Pathways	11
Fauquier County, Virginia Regional Map	12
Data Notes	13
FAQ	13

## **Spotlight Summary**

Manufacturing Fauquier County, Virginia – 2021Q4

#### **EMPLOYMENT**



1,033

Regional employment / 12,617,986 in the nation

WAGES



\$47,856

Avg Wages per Worker / \$75,133 in the nation

1.8%

Avg Ann % Change Last 10 Years / +0.5% in the U.S.



4.1%

% of Total Employment / **8.1%** in the U.S.



1.2%

Avg Ann % Change Last 10 Years / +2.5% in the U.S.



#### TOP OCCUPATION GROUPS



#### TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years

9.7 % n

Wineries

Region Nation
Other Concrete Product

Manufacturing

2.5 % n

Custom Architectural Woodwork and Millwork Manufacturing

## **Industry Snapshot**

#### **EMPLOYMENT**



#### **WAGES**



6-Digit Industry	Empl	Avg Ann Wages	LQ	5yr History	Annual Demand	Forecast Ann Growth
Wineries	250	\$25,535	21.50		33	1.2%
Other Concrete Product Manufacturing	119	\$39,672	13.41		12	-0.2%
Custom Architectural Woodwork and Millwork Manufacturing	89	\$70,536	20.95		10	0.6%
Food Product Machinery Manufacturing	61	\$46,430	19.45		6	0.4%
Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	55	\$76,559	2.60		5	0.3%
Breweries	46	\$25,505	3.04	~~~	6	1.1%
Commercial Printing (except Screen and Books)	39	\$47,889	0.87		3	-2.0%
Machine Shops	31	\$42,567	0.71		3	0.7%
Glass Product Manufacturing Made of Purchased Glass	29	\$37,462	3.97		3	-0.2%
Distilleries	28	\$32,685	8.05		4	1.2%
Remaining Component Industries	267	\$27,526	0.86		25	0.1%
Manufacturing	1,033	\$47,856	0.51		112	0.5%



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



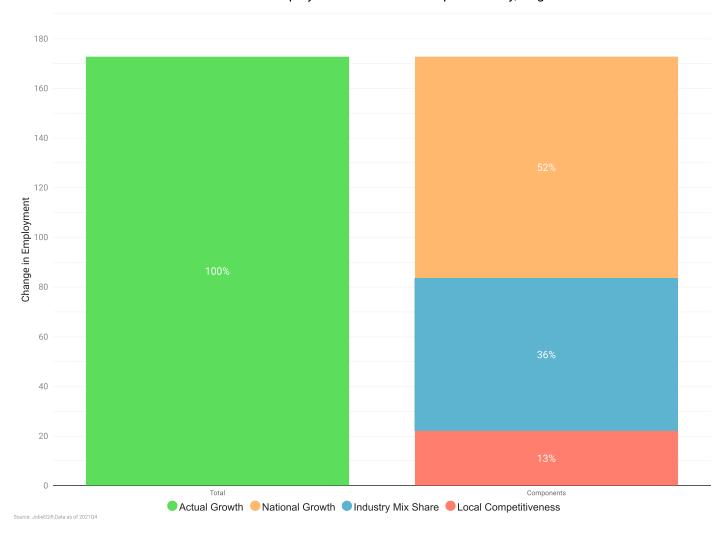
6-digit Occupation	Empl	Avg Ann Wages	Annual Demand
Team Assemblers	48	\$32,000	5
Packaging and Filling Machine Operators and Tenders	40	\$31,800	5
Heavy and Tractor-Trailer Truck Drivers	35	\$46,800	4
First-Line Supervisors of Production and Operating Workers	34	\$64,700	3
Cabinetmakers and Bench Carpenters	30	\$40,000	3
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	29	\$69,800	3
Laborers and Freight, Stock, and Material Movers, Hand	27	\$30,500	4
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	22	\$44,900	2
Bartenders	21	\$31,800	4
Machinists	19	\$52,700	2
Remaining Component Occupations	695	\$59,400	80
Total	999		

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.

## **Drivers of Employment Growth**

Over the ten years ending 2021, employment in Manufacturing for Fauquier County, Virginia added 173 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 gain of 22 jobs—meaning this industry was more competitive than its national counterpart during this period.

#### Drivers of Employment Growth for Fauquier County, Virginia





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 Manufacturing for Fauquier County, Virginia. 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).

	93.0%			7.0%
		Empl	%	
Private		961	93.0%	
Self-Employment		73	7.0%	

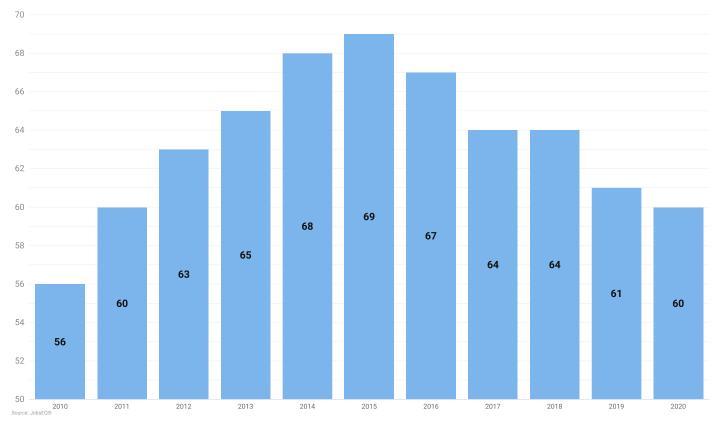
Source: JobsEQ®



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 2020, there were 60 Manufacturing establishments in Fauquier County, Virginia (per covered employment establishment counts), an increase from 56 establishments ten years earlier in 2010.



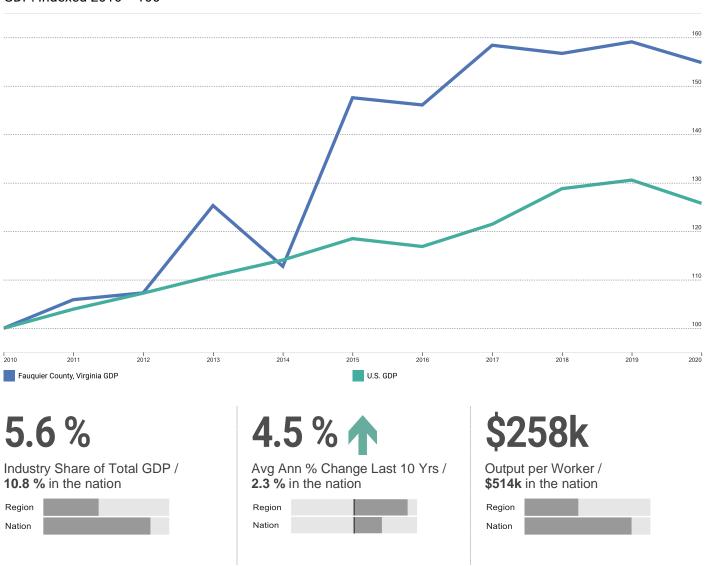


New business formations are an important source of job creation in a regional economy, spurring innovation and competition, and driving productivity growth. Establishment data can provide an indicator of growth in businesses by counting each single location (such as a factory or a store) where business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

## **GDP & Productivity**

In 2020, Manufacturing produced \$0.2 billion in GDP for Fauquier County, Virginia.

GDP: Indexed 2010 = 100





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

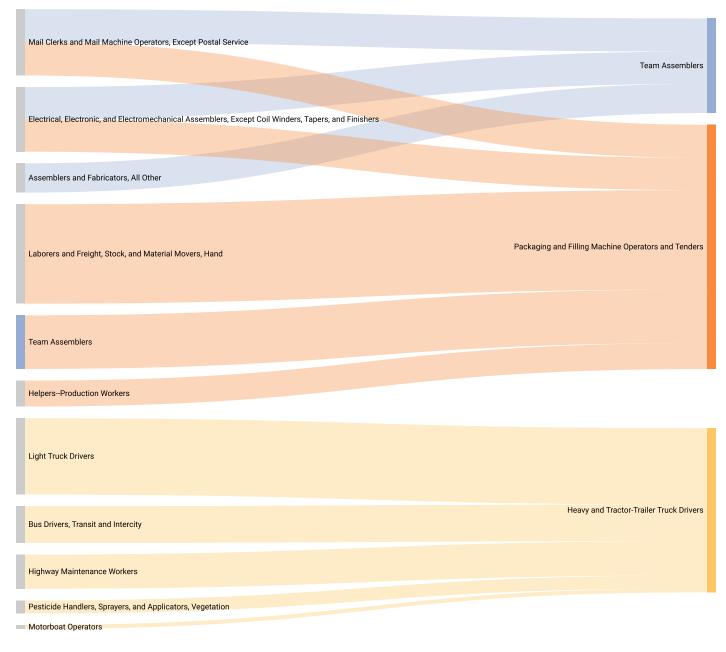
As of 2021Q4, Manufacturing in Fauquier County, Virginia are estimated to make \$159.6 million in annual purchases from suppliers in the United States with about 16% or \$25.1 million of these purchases being made from businesses located in Fauquier County, Virginia.

6-digit Supplier Industries	Purchases from In- Region (\$000s)	Purchases from Out-of-Region (\$000s)
Corporate, Subsidiary, and Regional Managing Offices	\$2,085.0	\$6,297.0
Packaging Machinery Manufacturing	<\$0.1	\$5,440.0
Iron and Steel Mills and Ferroalloy Manufacturing	<\$0.1	\$2,720.0
Petroleum Refineries	<\$0.1	\$2,689.0
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	<\$0.1	\$2,258.0
Remaining Supplier Industries	\$23,062.0	\$115,049.0
Total	\$25,147.0	\$134,453.0



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.

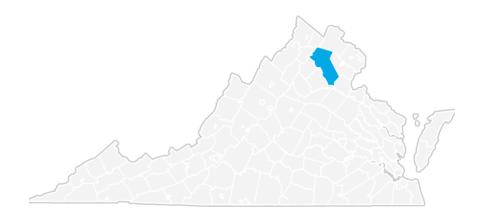
## Sector Strategy Pathways





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.

## Fauquier County, Virginia Regional Map



#### **Data Notes**

- Industry employment and wages (including total regional employment and wages) are as of 2021Q4 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 2021Q4 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
  2020.
- 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 2019-2020 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.