



AGRI BUSINESS



Agribusiness—Definition

The Agribusiness cluster is comprised of industries supporting farm production (animal and crop), farm-related industries, and indirect agribusiness. Farming and supporting industries which provide input, processing, management, and marketing comprise the core elements of this cluster.

Missouri's Strengths

Chemical Manufacturing

The pesticide and fertilizer production industries supply much of Missouri's farm market and are key global export industries. These companies are the largest employers in the Agribusiness cluster and have seen positive growth in the last five years. Monsanto and Bayer Corporation represent Missouri businesses involved in this type of activity.

Food Manufacturing

Another large employer and exporter within the agribusiness segment in Missouri is the food manufacturing sector. These industries include meat processing, pet food manufacturing, breweries, wineries, and other food processing (dairy, soybean, and pasta). Anheuser–Busch, Conagra Foods, Kraft, Tyson, and Purina are some of the companies involved in food manufacturing.

Farm Supplies, Clothing Manufacturing, and Services

Major employers in this cluster include veterinarians and farm supply merchant wholesalers, such as MFA. Other export industries include clothing manufacturing from Missouri agricultural products, such as gloves, hats, shoes, and apparel.

Farm Production

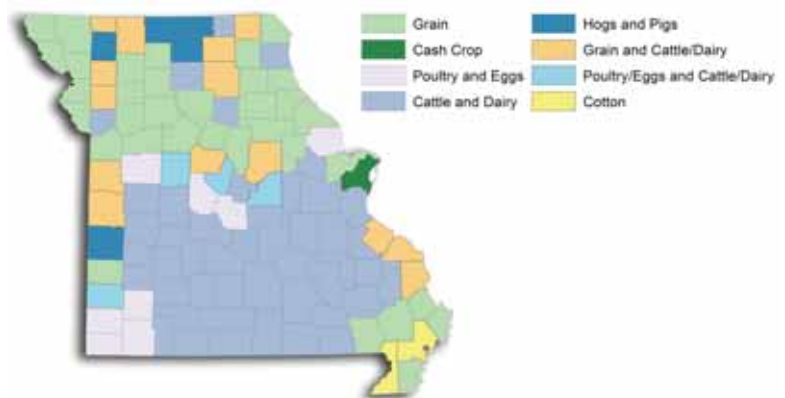
Agribusiness relies on the essential functions of crop and animal production. This group of industries encompasses more than 100,000 farms and 150,000 operators in Missouri. In terms of value of agricultural product, Missouri's farms are ranked 12th in the nation. This sector typically is not required to report employment information through the unemployment insurance system, therefore, much of the data available is estimated from census surveys.

Key Locations

The largest Agribusiness employing areas are in the St. Louis and Kansas City regions. The highest growth and export areas occur in St. Louis City and across Missouri's rural farm areas.

Factoid:

- Missouri has over 30 million acres of farmland in use; an average of 287 acres per farm.
- Of the total value of Missouri agricultural products produced, Livestock and Poultry represent 60% and Crops 40%.



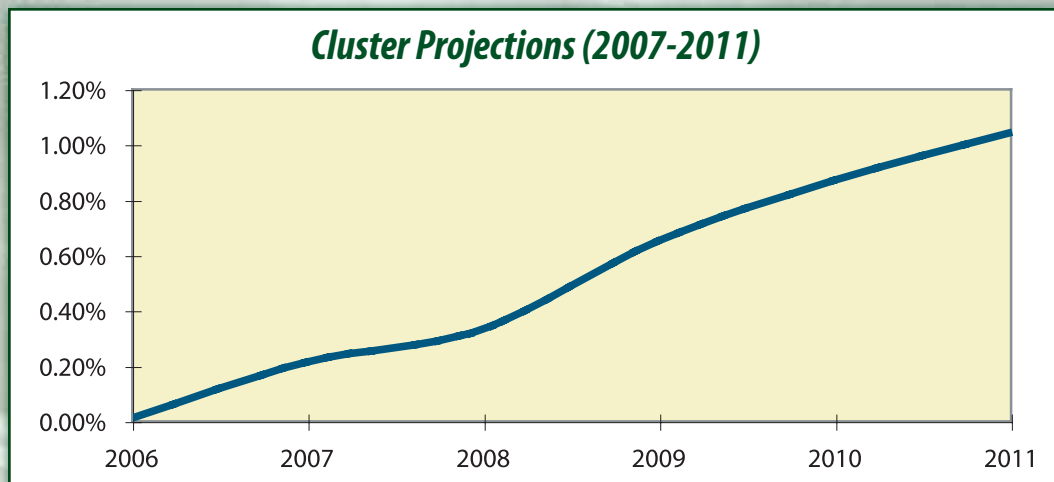
What's Next for Agribusiness?

Missouri Agriculture is a major industry for the state with over \$4.9 billion in sales from approximately 105,000 farms. Over \$1.5 billion in sales comes from Grains, Oilseeds, Dry Beans, and Peas. Cattle and calf sales are estimated at \$1.3 billion.

The farm related and indirect agricultural businesses comprising the Agribusiness cluster are integrally associated with upcoming developments in agriculture. Programs emphasizing higher crop prices, branding, and greater exports are expected to have a positive effect on farmer incomes and bolster the supporting industries within the Agribusiness cluster.

Upcoming investments in ethanol and biodiesel plants, along with efforts to recruit feed mills, are expected to increase demand for local corn and soybean crops. The Department of Agriculture estimates increases to farmers of \$.40 per corn bushel and \$.12 per soybean bushel.

The increasing popularity of Farmers' Markets is expected to drive up the local production of higher value crops, such as fruits, vegetables, and organic foods. Missouri is also involved in establishing a brand and certification for its corn and cotton industry. The corn will be marketed locally to the Missouri poultry industry for feed and the pet food industry. The cotton brand is expected to attract international buyers. The production of specialty crops is another trend expected to increase export sales. Wine grapes, Adzuki beans, Tofu, and Natto Soybeans, are examples of current and future specialty crops in Missouri.



Cluster Statistics

- Number of Businesses (2006) 3,040
- Number of Jobs (2006) 88,645
- Percent of Total Missouri Jobs (2006) 3.86%
- Average Annual Wages (2005) \$39,605
- Location Quotient (2006) 1.19
- Percent Change from 2001 Location Quotient 5.25%
- Percent Change in Jobs (2001-2006) -8.9%

- Total Change in Jobs (2001-2006) -8,654
Employment Change from 2001 attributed to:
 - National Growth 2,498
 - Industry Growth -14,590
 - Missouri's Competitiveness 3,438

Top Five Industries

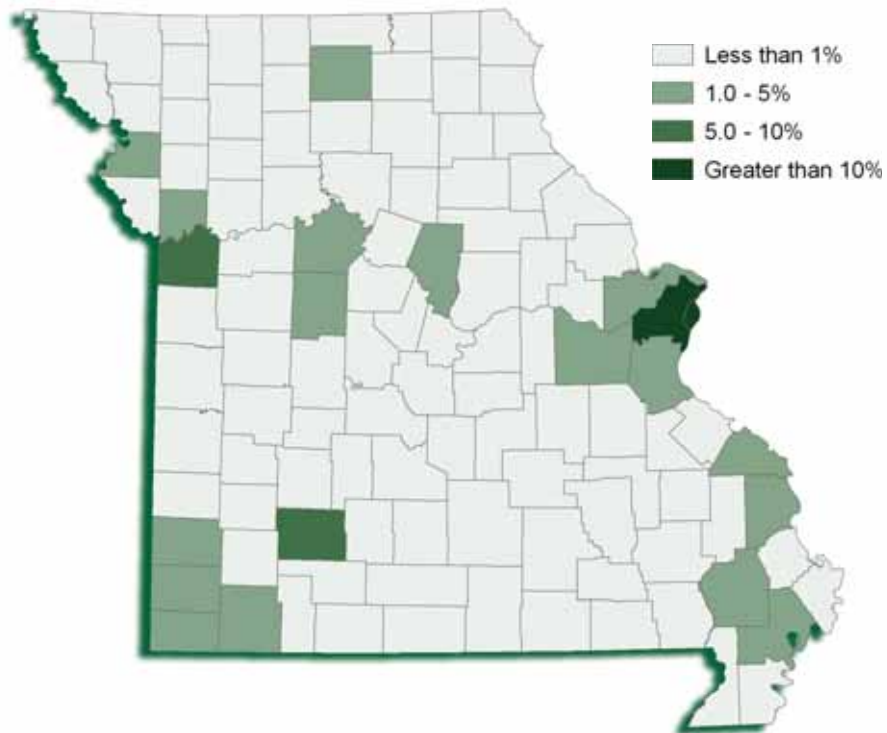
- Pesticide and other ag. chemical mfg.
- Farm supplies merchant wholesalers
- Meat processed from carcasses
- Poultry processing
- Veterinary services

26.8% of
Cluster Jobs

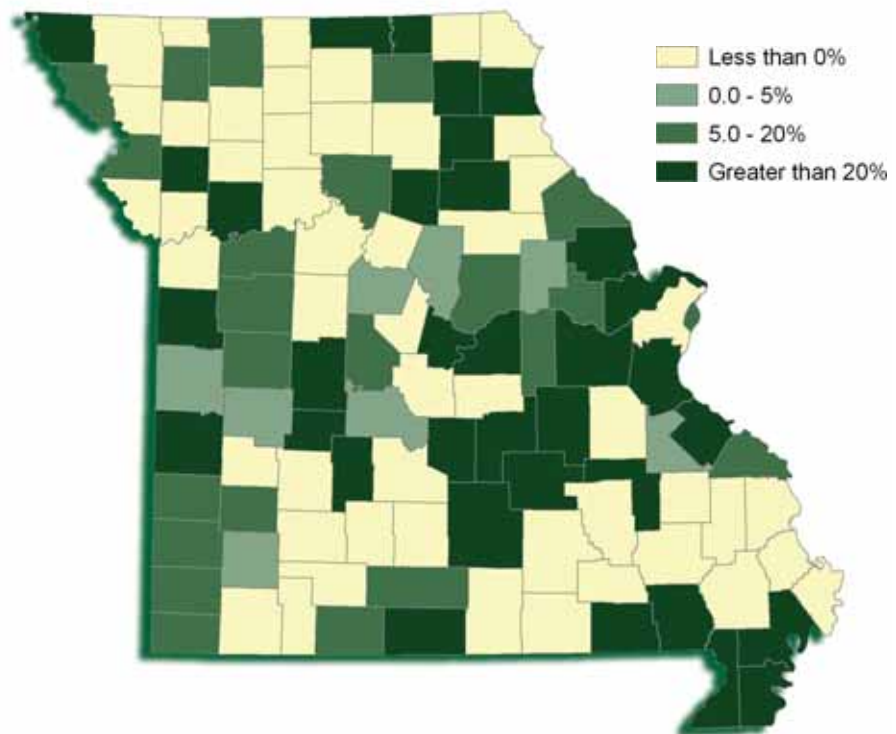
Targeted Occupations with Projected Growth and Current Wage

<i>15% of Cluster Occupations</i>	<i>Current Wage</i>	<i>Projected Growth 2004–2014</i>
Slaughterers and Meat Packers	\$20,800	12.30%
Maintenance and Repair Workers, General	\$32,410	10.30%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Production	\$54,960	9.50%
First-Line Supervisors/Managers of Production and Operating Workers	\$47,950	4.40%
Team Assemblers	\$28,570	4.30%

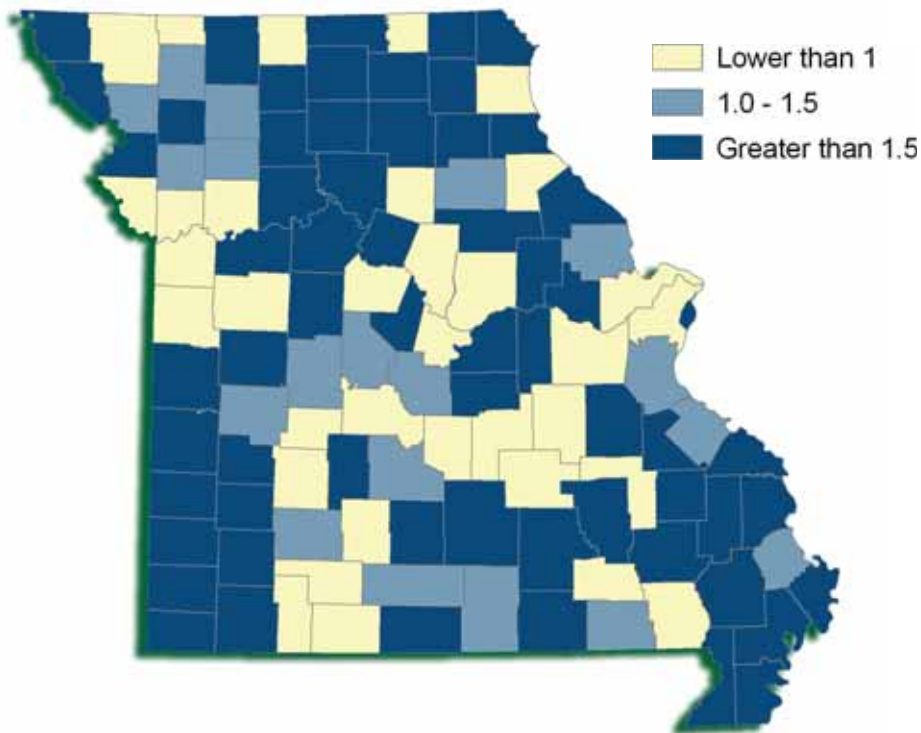
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



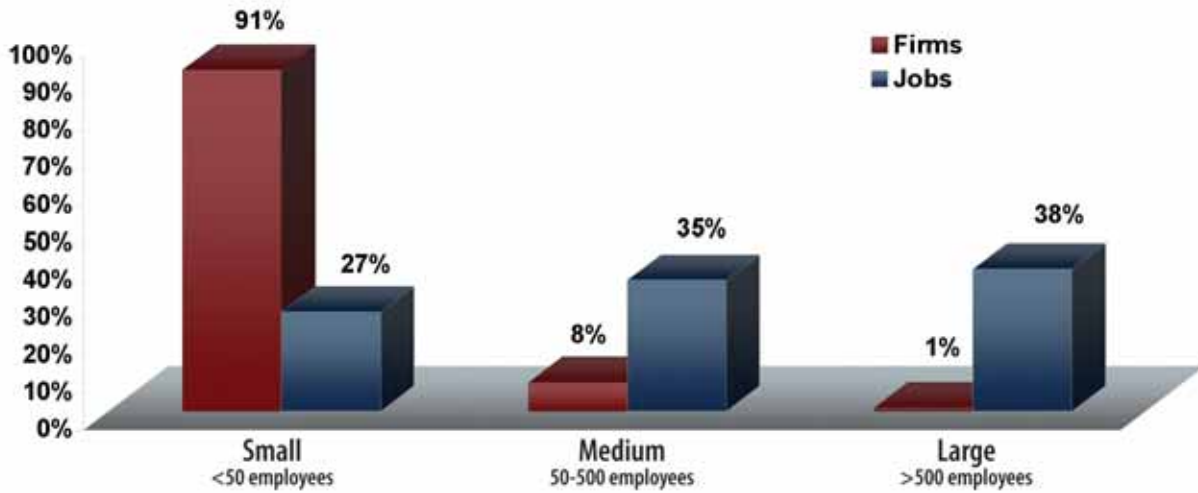
Location Quotient by County (2006)



Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
325320	Pesticide and other ag. chemical mfg.	10.50	1.85%
316214	Women's nonathletic footwear manufacturing	9.28	33.40%
312120	Breweries	6.74	15.56%
311111	Dog and cat food manufacturing	6.36	0.06%
315291	Infants' cut and sew apparel manufacturing	6.05	243.39%
316213	Men's nonathletic footwear manufacturing	4.74	61.32%
314911	Textile bag mills	4.49	223.66%
311514	Dry, condensed, and evaporated dairy products	4.12	76.72%
311823	Dry pasta manufacturing	3.73	2.44%
325314	Fertilizer, mixing only, manufacturing	3.65	12.93%
311513	Cheese manufacturing	3.62	-8.79%
315991	Hat, cap, and millinery manufacturing	3.54	-28.21%
311222	Soybean processing	3.08	-19.96%
315992	Glove and mitten manufacturing	3.05	-3.38%
311520	Ice cream and frozen dessert manufacturing	2.86	63.35%
322224	Uncoated paper and multiwall bag mfg.	2.73	-0.51%
333294	Food product machinery manufacturing	2.65	29.18%
315299	All other cut and sew apparel manufacturing	2.58	86.59%
424520	Livestock merchant wholesalers	2.51	-1.89%
316110	Leather and hide tanning and finishing	2.46	33.02%

Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

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
212391	Potash, Soda, and Borate Mineral Mining
212392	Phosphate Rock Mining
212393	Other Chemical and Fertilizer Mineral Mining
311111	Dog and Cat Food Manufacturing
311119	Other Animal Food Manufacturing
311211	Flour Milling
311212	Rice Milling
311213	Malt Manufacturing
311221	Wet Corn Milling
311222	Soybean Processing
311223	Other Oilseed Processing
311225	Fats and Oils Refining and Blending
311230	Breakfast Cereal Manufacturing
311311	Sugarcane Mills
311312	Cane Sugar Refining
311313	Beet Sugar Manufacturing
311320	Chocolate and Confectionery Manufacturing from Cacao Beans
311330	Confectionery Manufacturing from Purchased Chocolate
311340	Nonchocolate Confectionery Manufacturing
311411	Frozen Fruit, Juice, and Vegetable Manufacturing
311412	Frozen Specialty Food Manufacturing
311421	Fruit and Vegetable Canning

311422	Specialty Canning
311423	Dried and Dehydrated Food Manufacturing
311511	Fluid Milk Manufacturing
311512	Creamery Butter Manufacturing
311513	Cheese Manufacturing
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing
311520	Ice Cream and Frozen Dessert Manufacturing
311611	Animal (except Poultry) Slaughtering
311612	Meat Processed from Carcasses
311613	Rendering and Meat By-product Processing
311615	Poultry Processing
311711	Seafood Canning
311712	Fresh and Frozen Seafood Processing
311812	Commercial Bakeries
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing
311821	Cookie and Cracker Manufacturing
311822	Flour Mixes and Dough Manufacturing from Purchased Flour
311823	Dry Pasta Manufacturing
311830	Tortilla Manufacturing
311911	Roasted Nuts and Peanut Butter Manufacturing
311919	Other Snack Food Manufacturing
311920	Coffee and Tea Manufacturing
311930	Flavoring Syrup and Concentrate Manufacturing
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing
311942	Spice and Extract Manufacturing
311991	Perishable Prepared Food Manufacturing
311999	All Other Miscellaneous Food Manufacturing
312111	Soft Drink Manufacturing
312112	Bottled Water Manufacturing
312113	Ice Manufacturing

NAICS industries included in targeted cluster (continued)

312120	Breweries
312130	Wineries
312140	Distilleries
312210	Tobacco Stemming and Redrying
312221	Cigarette Manufacturing
312229	Other Tobacco Product Manufacturing
313111	Yarn Spinning Mills
313112	Yarn Texturing, Throwing, and Twisting Mills
313113	Thread Mills
313210	Broadwoven Fabric Mills
313221	Narrow Fabric Mills
313222	Schiffli Machine Embroidery
313230	Nonwoven Fabric Mills
313241	Weft Knit Fabric Mills
313249	Other Knit Fabric and Lace Mills
313311	Broadwoven Fabric Finishing Mills
313312	Textile and Fabric Finishing (except Broadwoven Fabric) Mills
314911	Textile Bag Mills
314999	All Other Miscellaneous Textile Product Mills
315111	Sheer Hosiery Mills
315119	Other Hosiery and Sock Mills
315191	Outerwear Knitting Mills
315192	Underwear and Nightwear Knitting Mills
315211	Men's and Boys' Cut and Sew Apparel Contractors
315212	Women's, Girls', and Infants' Cut and Sew Apparel Contractors
315221	Men's & Boys' Cut and Sew Underwear and Nightwear Manufacturing
315222	Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing
315223	Men's & Boys' Cut and Sew Shirt (except Work Shirt) Manufacturing
315224	Men's and Boys' Cut and Sew Trouser, Slack and Jean Manufacturing
315225	Men's and Boys' Cut and Sew Work Clothing Manufacturing
315228	Men's and Boys' Cut and Sew Other Outerwear Manufacturing
315231	Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing
315232	Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing
315233	Women's and Girls' Cut and Sew Dress Manufacturing
315234	Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing
315239	Women's and Girls' Cut and Sew Other Outerwear Manufacturing
315291	Infants' Cut and Sew Apparel Manufacturing
315292	Fur and Leather Apparel Manufacturing
315299	All Other Cut and Sew Apparel Manufacturing
315991	Hat, Cap, and Millinery Manufacturing
315992	Glove and Mitten Manufacturing
315993	Men's and Boys' Neckwear Manufacturing
315999	Other Apparel Accessories and Other Apparel Manufacturing
316110	Leather and Hide Tanning and Finishing
316211	Rubber and Plastics Footwear Manufacturing
316212	House Slipper Manufacturing
316213	Men's Footwear (except Athletic) Manufacturing
316214	Women's Footwear (except Athletic) Manufacturing
316219	Other Footwear Manufacturing
316991	Luggage Manufacturing
316992	Women's Handbag and Purse Manufacturing
316993	Personal Leather Good (except Women's Handbag and Purse) Manufacturing
316999	All Other Leather Good Manufacturing
321920	Wood Container and Pallet Manufacturing
322130	Paperboard Mills
322211	Corrugated and Solid Fiber Box Manufacturing
322212	Folding Paperboard Box Manufacturing
322213	Setup Paperboard Box Manufacturing
322214	Fiber Can, Tube, Drum, and Similar Products Manufacturing
322215	Non-Folding Sanitary Food Container Manufacturing
322221	Coated and Laminated Packaging Paper and Plastics Film Manufacturing
322222	Coated and Laminated Paper Manufacturing
322223	Plastics, Foil, and Coated Paper Bag Manufacturing
322224	Uncoated Paper and Multiwall Bag Manufacturing
322225	Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses
322226	Surface-Coated Paperboard Manufacturing
322291	Sanitary Paper Product Manufacturing
325311	Nitrogenous Fertilizer Manufacturing
325312	Phosphatic Fertilizer Manufacturing
325314	Fertilizer (Mixing Only) Manufacturing
325320	Pesticide and Other Agricultural Chemical Manufacturing
326111	Plastics Bag Manufacturing
326112	Plastics Packaging Film and Sheet (including Laminated) Manufacturing
326160	Plastics Bottle Manufacturing
327213	Glass Container Manufacturing
332115	Crown and Closure Manufacturing
332431	Metal Can Manufacturing
333111	Farm Machinery and Equipment Manufacturing
333294	Food Product Machinery Manufacturing
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers
424510	Grain and Field Bean Merchant Wholesalers
424520	Livestock Merchant Wholesalers
424590	Other Farm Product Raw Material Merchant Wholesalers
424910	Farm Supplies Merchant Wholesalers
493120	Refrigerated Warehousing and Storage
493130	Farm Product Warehousing and Storage
523130	Commodity Contracts Dealing
523140	Commodity Contracts Brokerage
541940	Veterinary Services

The Missouri Wine Industry



Missouri's wine industry is having great success, with state winemakers winning top honors for their products and sales of Missouri-made wines on the rise. Our state has more than 1,200 bearing acres of grapes producing millions of dollars in wine sales and supporting jobs for Missourians.

Missouri's sun-drenched rolling hills and long growing season are perfect for realizing the full potential of grapes like the Norton/Cynthiana, which is the official state grape.

More than 50 wineries operate in Missouri.

Locations

A large concentration of the state's commercial winemaking takes place alongside or in close proximity to the Missouri River, and roads that run along the river, like State Highways 94 or 100, are known as "Wine Trails."

Sales on the Rise

More and more people from within the state, across the country, and around the world are enjoying our locally made wines. Sales of Missouri wine recently topped 700,000 gallons.



These trends in sales have translated into increased market share. Wine sold from winery retail locations and in-state wholesalers show a jump in market share for Missouri wines to over 7 percent of the state's total wine market.

Missouri wineries are winning over new consumers by offering a wide variety of great-tasting products. The industry has now set a goal to sell one million gallons of Missouri wine by 2010.

Economic Value

Inside every bottle of Missouri wine are the agriculture, manufacturing, packaging, transportation, advertising, retail, and tourism industries.

All of these are necessary for commercial winemaking. A growing Missouri wine industry means more job opportunities and income for Missourians and more revenue for our state and local governments.



An important entity within the state's wine industry is the Missouri Wine and Grape Board. The board works to strengthen interest in and patronage of our state's grape and wine businesses.

Funded by a twelve cents-per-gallon tax on wine sales, the Wine and Grape Board coordinates the marketing and public relations activities for Missouri-made wines, hosts wine competitions and trade and educational seminars, and funds research efforts.

Wine Research

Continued research is critical to compete in the highly competitive national and international wine marketplaces. Our state's wine industry must grow superior quality grapes to make superior quality wines.

The Midwest Viticulture Center in Mountain Grove Missouri is one research asset helping our local grape growers and wine producers. The Center, operated by Missouri State University, provides invaluable research, information, education, and services to grape and wine businesses.



A second research center to assist Missouri's grape and wine industry has now been started at the University of Missouri-Columbia.

Expansion to the new MU location offers additional opportunities for collaboration with top level researchers, a direct link to Cooperative Extension services, and additional funding options.

With these investments, the future looks bright for grape and wine research in Missouri.

Definition of Terms

Location Quotient

Location Quotient (LQ) measures the employment concentration of an industry within a specified area relative to the nation as a whole. It is calculated by dividing the region's industry employment share by the nation's industry employment share. A LQ of 1.00 or greater means that there is a higher concentration in the region for an industry than exists nationally. The Location Quotient is a quick guide to understanding key industries within an area, especially when coupled with employment growth trends that shift-share analysis can reveal.

What Does the Location Quotient (LQ) Mean?		
	Low Employment Growth	High Employment Growth
High LQ	Important industries that may require attention	Important growth industries
Low LQ	Industries with lower potential for local economy	Potential emerging industries

Statewide Location Quotients are provided by cluster in the summary section and in each cluster and sub-cluster section. Top industry and county Location Quotients are included in each cluster and sub-cluster section.

Shift Share Analysis

Shift Share analysis measures employment changes in an industry, cluster, or regional industry mix. It breaks out employment changes into three components: National Share (NS), Industry Mix (IM), and Regional Shift (RS).

National Share (NS)—is the share of regional employment changes attributed to factors in the national economy.

Industry Mix (IM)—identifies local industry employment changes attributed to national industry employment changes.

Regional Shift (RS)—identifies a region's lagging or leading industries. This is also considered a measure of a region's competitiveness.

The shift share analysis is provided in the summary section and in each cluster and sub-cluster section under the heading Cluster Statistics.

Summary of Clusters

	Agribusiness	Automotive	Defense Homeland Security	Energy	Finance	Information Technology	Life Sciences	Transportation Logistics	All Clusters
Employer Units (2006)	3,040	258	348	696	9,769	2,345	1,034	12,468	29,349
Employment (2006)	88,645	36,223	16,922	20,275	132,036	38,604	31,295	175,064	519,316
Average Employment per Establishment (2006)	29	140	49	29	14	16	30	14	18
Percent of Total Missouri Jobs (2006)	3.86%	1.58%	0.74%	0.88%	5.75%	1.68%	1.36%	7.62%	22.62%
Average Annual Wages (2005)	\$39,605	\$54,167	\$77,935	\$58,053	\$52,206	\$70,938	\$66,505	\$43,374	\$51,285
Location Quotient (2006)	1.19	1.65	0.78	1.29	1.04	0.79	0.91	1.05	1.06
Percent Change from 2001 Location Quotient	5.25%	3.91%	38.25%	-1.91%	-2.34%	8.69%	11.95%	0.11%	1.22%
Projected Employment Change (2011)	1.03%	-1.43%	4.61%	1.72%	0.12%	9.25%	11.41%	3.81%	2.88%
Percentage of Firms with less than 50 Employees	91%	66%	88%	93%	92%	93%	91%	94%	93%
Net Percentage Change in Jobs (2001-2006)	-8.9%	-12.2%	42.2%	-17.6%	1.4%	10.8%	17.4%	0.3%	-3.40%
Employment Change in Jobs (2001-2006) Total Change	-8,654	-5,051	5,024	-4,320	1,798	3,760	4,629	446	-18,482
Employment Change from 2001 attributed to National Factors	2,498	1,059	305	631	3,343	894	685	4,482	13,805
Employment Change from 2001 attributed to Industry Factors	-14,590	-7,066	180	-4,315	3,204	195	932	-2,178	-32,559
Employment Change from 2001 attributed to Missouri's Competitiveness	3,438	956	4,538	-637	-4,749	2,670	3,013	-1,858	272

Note: Some industries are in more than one cluster, so the sum of individual clusters will not equal the total for all clusters.