

Rush County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/28/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 13 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Rush County economy.¹

These 13 sectors have a total direct output of approximately **\$127.7 million** and support **605 jobs** in Rush County. Running the model for all 13 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Rush County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	605.1	26.04%	\$28,589,157	23.80%	\$127,748,492
Indirect Effect	89.2	3.84%	\$4,875,253	4.06%	\$11,570,440
Induced Effect	29.5	1.27%	\$1,596,852	1.33%	\$3,351,752
Total Effect	723.8	31.14%	\$35,061,262	29.19%	\$142,670,684

As shown in the above table, agriculture, food, and food processing sectors support **724 jobs**, or **31.14%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 13 agriculture, food, and food processing sectors is approximately **\$35.1 million**, or **29.19% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **317 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Rush County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	317.3	\$36,082,478
Grain farming	97.0	\$34,722,214
Meat processed from carcasses	69.8	\$34,687,907
Animal production, except cattle and poultry and eggs	39.9	\$4,780,376
All other crop farming	35.6	\$2,717,669
Wholesale trade	23.3	\$3,996,288
Farm machinery and equipment manufacturing	21.4	\$8,273,096
Marketing research and all other miscellaneous professional, scientific, and technical services	14.6	\$403,054
Greenhouse, nursery, and floriculture production	8.5	\$1,350,245
Monetary authorities and depository credit intermediation	8.1	\$1,424,489

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$36.1 million** to the Rush County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	317.3	\$36,082,478
Grain farming	97.0	\$34,722,214
Meat processed from carcasses	69.8	\$34,687,907
Farm machinery and equipment manufacturing	21.4	\$8,273,096
Animal production, except cattle and poultry and eggs	39.9	\$4,780,376
Wholesale trade	23.3	\$3,996,288
Oilseed farming	3.5	\$3,602,951
All other crop farming	35.6	\$2,717,669
Monetary authorities and depository credit intermediation	8.1	\$1,424,489
Greenhouse, nursery, and floriculture production	8.5	\$1,350,245

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Rush County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	3.5	\$3,602,951.29
Grain farming	97.0	\$34,722,213.75
Greenhouse, nursery, and floriculture production	8.5	\$1,350,244.52
All other crop farming	35.6	\$2,717,669.49
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	317.3	\$36,082,477.57
Poultry and egg production	0.9	\$813,992.26
Animal production, except cattle and poultry and eggs	39.9	\$4,780,375.96
Commercial hunting and trapping	0.8	\$15,931.18
Support activities for agriculture and forestry	3.9	\$198,931.72
Meat processed from carcasses	69.8	\$34,687,908.17
Bread and bakery product, except frozen, manufacturing	1.4	\$157,458.95
Farm machinery and equipment manufacturing	21.4	\$8,273,096.08
Veterinary services	5.0	\$345,241.81

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Rush County, the retail sector was omitted.