

July 2015

## **Scott County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Scott County economy. These 17 sectors have a total direct output of approximately \$584 million and support 542.1 jobs in Scott County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture Contribution in Scott County

				% of Gross		% of Gross
		% of Total	Total	Regional		Regional
Impact Type <sup>2</sup>	Employment	Employment	Value Added <sup>3</sup>	Product <sup>4</sup>	Output <sup>5</sup>	Product
Direct Effect	542.1	19%	\$208,678,024	61%	\$584,020,562	171%
Indirect Effect	293.5	10%	\$25,190,583	7%	\$44,675,932	13%
Induced Effect	276.1	10%	\$18,901,006	6%	\$32,820,191	10%
Total Effect	1,111.7	39%	\$252,769,612	74%	\$661,516,684	194%

As shown in the above table, agriculture, food, and food processing supports 1,111.7 jobs, or 39% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$662 million, roughly 194% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

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 17 agriculture, food, and food processing sectors is approximately \$253 million, or 74% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 74% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="https://implan.com/index.php?option=com\_content&view=category&id=19">https://implan.com/index.php?option=com\_content&view=category&id=19</a>

<sup>2</sup> 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.

<sup>3</sup> Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

<sup>4</sup> GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

<sup>5</sup> Output = Intermediate Inputs + Value Added

In the top ten by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 369.8 employees. This table also shows the amount of jobs that are created by the agriculture industry in Scott County.

Top 10 Industries Affected by Employment

	Total	Total
Sector Description:	Employment	Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	369.8	\$409,249,486
Wholesale trade	83.2	\$17,344,970
Animal production, except cattle and poultry and eggs	50.4	\$21,817,942
Support activities for agriculture and forestry	45.4	\$2,720,398
Grain farming	44.7	\$66,843,773
Monetary authorities and depository credit intermediation	42.8	\$6,697,615
Hospitals	36.6	\$4,841,918
Truck transportation	31.0	\$5,948,288
Limited-service restaurants	27.8	\$1,617,483
Nursing and community care facilities	15.9	\$913,719

The Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming industry directly contributes approximately \$409 million to Scott County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

	Total	Total
Sector Description:	Employment	Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	369.8	\$409,249,486
Grain farming	44.7	\$66,843,773
Soybean and other oilseed processing	7.5	\$38,779,009
Animal production, except cattle and poultry and eggs		\$21,817,942
Wholesale trade	83.2	\$17,344,970
Phosphatic fertilizer manufacturing	6.1	\$12,758,096
Other animal food manufacturing	6.9	\$9,924,359
Owner-occupied dwellings	0.0	\$8,023,863
Flour milling	4.6	\$6,885,883
Monetary authorities and depository credit intermediation	42.8	\$6,697,615

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 sector and the output they contributed to Scott County's economy.

Sector Description:	Employment	Output
Grain farming	44.7	\$66,843,773
Greenhouse, nursery, and floriculture production	0.3	\$199,925
All other crop farming	11.0	\$5,943,002
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	369.8	\$409,249,486
Dairy cattle and milk production	7.6	\$6,060,507
Poultry and egg production	0.2	\$413,406
Animal production, except cattle and poultry and eggs	50.4	\$21,817,942
Other animal food manufacturing	6.9	\$9,924,359
Flour milling	4.6	\$6,885,883
Soybean and other oilseed processing	7.5	\$38,779,009
Animal, except poultry, slaughtering		\$758,413
Bread and bakery product, except frozen, manufacturing		\$394,897
Frozen cakes and other pastries manufacturing		\$35,436
Bottled and canned soft drinks & water		\$2,097,432
Phosphatic fertilizer manufacturing		\$12,758,096
Veterinary services	14.0	\$1,281,793
Landscape and horticultural services	11.0	\$577,204

All 105 counties in Kansas have IMPLAN models with an agriculture 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 Kansas, the retail sector was omitted.