

THE Agricultural Business Council of Kansas City

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 9/8/2016

This study was commissioned by the Agricultural Business Council of Kansas City and the American Royal and performed by the Kansas Department of Agriculture.

Using the most recent IMPLAN data available (2014) adjusted for 2016, 74 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the economy¹ supported by the Kansas City Agribusiness Council.

These 74 sectors have a total direct output of approximately **\$ 18.7 billion** and create **53,223 jobs** in the Greater Kansas City² area. Running the model for all 74 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution						
Impact Type ³	Employment	% Employment	Total Value Added ⁴	% of Gross Regional Product ⁵	Output ⁶	% of Gross Regional Product
Direct Effect	53,223.3	3.56%	5,157,461,686	3.86%	18,747,743,275	14.04%
Indirect Effect	30,745.2	2.06%	3,472,254,382	2.60%	6,197,694,722	4.64%
Induced Effect	30,535.0	2.04%	2,545,505,561	1.91%	4,353,262,666	3.26%
Total Effect	114,503.5	7.66%	11,175,221,629	8.37%	29,298,700,662	21.94%

As shown in the above table, agriculture, food, and food processing supports **114,503 jobs, or 7.7%** of the entire workforce in the area. These industries provide a total economic contribution of approximately **\$ 29.3 billion, roughly 21.9% of the economy.**

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 74 agriculture, food, and food processing sectors is approximately **\$ 11.2 billion, or 8.4%** of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for **8.4%** 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.

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

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Greater Kansas City area includes: Atchison, Jefferson, Leavenworth, Douglas, Johnson, Franklin, Linn, Miami, and Wyandotte counties in Kansas and Buchanan, Clinton, Caldwell, Clay, Cass, Bates, Ray, Lafayette, Johnson, Jackson, and Platte counties in Missouri.

³ 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.

⁴ Value added = labor income + indirect business taxes + other property type income

⁵ GRP = final demand of households + government expenditures + capital + exports – imports – institutional sales

⁶ Output = intermediate inputs + value added

In the top ten by employment, Landscape and horticultural services is the top employer in the agriculture industry with 9,965.5 employees. This table also shows the amount of jobs that are created by the agriculture industry in Kansas City.

Description	Total Employment	Total Output
Landscape and horticultural services	9,965.5	566,803,698
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	8,438.3	555,877,684
Wholesale trade	6,707.3	1,631,089,273
Animal production, except cattle and poultry	4,070.5	199,343,887
Management of companies and enterprises	3,844.8	864,864,300
Animal, except poultry, processing	3,403.3	2,127,036,425
Veterinary services	2,990.0	287,577,165
Truck transportation	2,967.2	492,535,554
Grain farming	2,725.5	397,328,200
Real estate	2,482.7	527,388,217

The Animal, except poultry, processing industry directly contributes approximately \$ 2.1 billion to the Kansas City economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Description	Total Employment	Total Output
Animal, except poultry, processing	3,403.3	2,127,036,425
Pesticide and other animal chemical manufacturing	1,074.1	1,894,159,979
Wholesale trade	6,707.3	1,631,089,273
Other animal food manufacturing	880.8	1,317,231,319
Soybean and other oilseed processing	198.3	1,066,465,187
Flour milling	632.6	1,037,800,270
Pharmaceutical preparation manufacturing	606.4	976,741,834
Management of companies and enterprises	3,844.8	864,864,300
Fats and oils refining and blending	414.5	838,591,412
Biological product (except diagnostic) manufacturing	1,103.6	811,363,597

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 the Kansas City economy.

Description	Employment	Output
Oilseed farming	1,413.88	450,063,675.33
Grain farming	2,725.54	397,328,199.86
Vegetable and melon farming	37.68	4,564,568.20
Fruit farming	101.10	6,626,477.47
Tree nut farming	9.22	982,737.57
Greenhouse, nursery, and floriculture production	390.71	46,887,407.03
Tobacco farming	10.72	1,032,744.92
All other crop farming	1,953.25	64,189,180.70
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	8,438.28	555,877,684.37
Dairy cattle and milk production	219.33	83,793,075.38
Poultry and egg production	175.47	68,870,338.29
Animal production, except cattle and poultry and eggs	4,070.52	199,343,886.91
Forestry, forest products, and timber tract production	41.65	2,685,393.73
Commercial logging	212.07	10,924,741.16
Commercial hunting and trapping	99.64	3,313,378.05
Support activities for agriculture and forestry	1,339.14	123,766,786.32
Dog and cat food manufacturing	559.98	789,479,977.94
Other animal food manufacturing	880.81	1,317,231,319.02
Flour milling	632.57	1,037,800,270.46
Rice milling	28.36	27,170,531.64
Malt manufacturing	33.32	61,413,939.10
Soybean and other oilseed processing	198.25	1,066,465,186.82
Fats and oils refining and blending	414.51	838,591,412.47
Breakfast cereal manufacturing	52.72	47,026,209.76
Nonchocolate confectionery manufacturing	36.49	14,090,300.16
Chocolate and confectionery manufacturing from cacao beans	23.42	17,192,656.23
Confectionery manufacturing from purchased chocolate	126.23	44,299,588.99
Frozen fruits, juices and vegetables manufacturing	315.81	153,817,862.53
Frozen specialties manufacturing	58.97	23,366,535.79
Canned fruits and vegetables manufacturing	156.81	90,596,682.28
Canned specialties	6.05	5,746,555.49
Dehydrated food products manufacturing	19.63	8,901,554.56
Fluid milk manufacturing	27.47	20,549,675.81
Cheese manufacturing	186.08	186,712,102.53
Dry, condensed, and evaporated dairy product manufacturing	5.65	9,225,859.15
Ice cream and frozen dessert manufacturing	55.71	21,140,993.91
Animal, except poultry, processing	3,403.31	2,127,036,424.95
Meat processed from carcasses	1,343.01	667,199,966.45
Rendering and meat byproduct processing	127.69	75,740,381.04
Poultry processing	3.31	1,048,370.50
Bread and bakery product, except frozen, manufacturing	2,359.27	314,106,432.63

Frozen cakes and other pastries manufacturing	90.48	14,104,874.99
Cookie and cracker manufacturing	365.50	127,415,888.41
Dry pasta, mixes, and dough manufacturing	582.26	331,913,743.92
Tortilla manufacturing	8.23	1,920,010.25
Roasted nuts and peanut butter manufacturing	18.90	10,225,162.37
Other snack food manufacturing	122.60	89,301,390.41
Coffee and tea manufacturing	32.09	23,944,226.90
Flavoring syrup and concentrate manufacturing	2.27	6,029,591.48
Mayonnaise, dressing, and sauce manufacturing	197.35	128,229,795.64
Spice and extract manufacturing	411.63	249,253,948.70
All other food manufacturing	411.63	156,109,998.52
Bottled and canned soft drinks & water	437.75	422,768,571.14
Breweries	306.90	286,947,581.96
Wineries	80.0	18,987,629.68
Distilleries	122.71	154,297,430.32
Tobacco product manufacturing	6.72	19,795,010.38
Sawmills	236.69	66,481,525.59
Paper mills	486.95	428,039,202.16
Paperboard mills	0.45	1,315,712.38
Nitrogenous fertilizer manufacturing	147.86	242,768,501.82
Phosphatic fertilizer manufacturing	1.44	6,753,760.14
Fertilizer mixing	21.25	15,300,363.09
Pesticide and other agricultural chemical manufacturing	1,074.14	1,894,159,978.88
Medicinal and botanical manufacturing	65.01	37,577,423.60
Pharmaceutical preparation manufacturing	606.45	976,741,834.27
In-vitro diagnostic substance manufacturing	219.63	80,915,795.45
Biological product (except diagnostic) manufacturing	1,103.56	811,363,597.21
Farm machinery and equipment manufacturing	225.30	133,088,160.09
Lawn and garden equipment manufacturing	113.01	57,885,217.31
Food product machinery manufacturing	215.32	63,647,350.58
All other industrial machinery manufacturing	148.99	39,878,068.61
Veterinary services	2,989.98	287,577,164.64
Landscape and horticultural services	9,965.50	566,803,698.28
TOTAL	114,503.50	29,298,700,662.33

****Calculations Including Food Retail and Restaurants****

Estimated Impact of Agriculture, Food, Food Processing and Food Retail Sectors on the Kansas City Economy

The agriculture and agribusiness industry makes up a substantial part of Kansas City’s overall economy. 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 the Greater Kansas City area, the retail sector was omitted. If we were to include the food retail sector, the contribution to agriculture increases to **\$39.5 billion**, represents **16.2% of the jobs**, and increases total value added to **\$ 16.9 billion** in Kansas.

Agriculture, Food, Food Processing, and Food Retail Sector Contribution						
Impact Type⁷	Employment	% Employment	Total Value Added⁸	% of Gross Regional Product⁹	Output¹⁰	% of Gross Regional Product
Direct Effect	159,761.0	10.69%	8,432,116,706	6.32%	24,810,760,351	18.58%
Indirect Effect	42,024.7	2.81%	4,759,060,514	3.56%	8,374,186,850	6.27%
Induced Effect	39,698.8	2.66%	3,695,129,571	2.77%	6,294,724,749	4.71%
Total Effect	241,484.5	16.15%	16,886,306,790	12.65%	39,479,671,949	29.57%

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