

# McPherson County, Kansas

2023 ECONOMIC CONTRIBUTION REPORT NOVEMBER 15, 2023

## Overview

The Kansas Department of Agriculture's Economist creates annual economic contribution reports to estimate the impact of agriculture on the Kansas economy. The purpose of these reports is to provide information to stakeholders, policymakers, and the general public. In this report, the model analyzes the effects of agriculture on the McPherson County, Kansas, economy. For the estimated current year (2023), 32 agriculture and agriculture-related sectors directly contribute \$1.23 billion in output and 2,365 jobs to the McPherson County economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$1.42 billion in output, 3,394 jobs and 19% of the total Gross Regional Product (GRP).

# Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

#### Results

In this model, the 32 agriculture and agriculture-related sectors have a total direct output of \$1.23 billion and account for 2,365 jobs in McPherson County, as shown in the following table:

Table 1: Agriculture and Agriculture-Related Sectors' Contribution to McPherson County Economy

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	2,366	11%	\$480,079,000	16%	\$1,234,493,000
Indirect Effect	469	2%	\$49,222,000	2%	\$110,471,000
Induced Effect	561	3%	\$44,970,000	1%	\$83,808,000
Total Effect	3,395	16%	\$574,272,000	19%	\$1,428,773,000

Note: Individual effects may not equal the total effect due to rounding.

The agriculture and agriculture-related sectors provide a total estimated impact of \$1.42 billion in output. These sectors also support a total of 3,394 jobs, or 16% of the county's entire workforce. Another metric used to calculate the importance of sectors in the economy is their value added as a percentage of the Gross Regional Product. Total value added by the 32 agriculture and agriculture-related sectors is \$574 million, or 19% of the Gross Regional Product.

#### Top Ten Sectors by Output

The table below shows McPherson County's top ten sectors by output, including direct, indirect and induced effects. The *wet corn milling* sector is the top contributor in output to the McPherson County economy, with \$298 million in total output.

Table 2: Top Ten Sectors by Output, McPherson County

Sector	Total Output
Wet corn milling	\$298,767,000
Distilleries	\$156,194,000
Farm machinery and equipment manufacturing	\$122,030,000
Grain farming	\$96,200,000
Support activities for agriculture and forestry	\$60,258,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$50,731,000
Animal, except poultry, slaughtering	\$50,645,000
Other animal food manufacturing	\$44,777,000
Oilseed farming	\$31,025,000
Fertilizer mixing	\$31,025,000

#### Top Ten Sectors by Employment

Of the agriculture and agriculture-related sectors, *beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming* supports the most jobs in the county with 488 jobs. Table 3 illustrates the top ten sectors by total employment, including direct, indirect, and induced effects in McPherson County.

Table 3: Top Ten Sectors by Employment, McPherson County

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	488.66
Grain farming	440.84
Farm machinery and equipment manufacturing	300.98
Wet corn milling	179.30
Support activities for agriculture and forestry	150.60
Distilleries	137.69
Other real estate	133.68
Animal, except poultry, slaughtering	79.96
Frozen specialties manufacturing	79.40
All other crop farming	69.88

## All Direct Agriculture Sectors

Table 4 is a summary of agriculture sectors represented with output and employment levels. These values estimate the value of output and the jobs these agriculture sectors support in the McPherson County economy. Generally, this analysis includes three categories: production, manufacturing or processing, and services. Note, the model does not include ethanol production nor wholesale and retail sales of final products.

Table 4: All Direct Agriculture Sectors, McPherson County

Sector	Total Output	Total Employment
Wet corn milling	\$298,767,000	488.66
Distilleries	\$226,599,000	440.84
Farm machinery and equipment manufacturing	\$156,194,000	300.98
Grain farming	\$122,030,000	179.30
Support activities for agriculture and forestry	\$96,200,000	150.60
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$60,258,000	137.69
Animal, except poultry, slaughtering	\$50,731,000	79.96
Other animal food manufacturing	\$50,645,000	79.40
Oilseed farming	\$44,777,000	69.88
Fertilizer mixing	\$31,025,000	59.21
Frozen specialties manufacturing	\$30,304,000	56.91
Flour milling	\$23,664,000	54.42
Breweries	\$10,806,000	54.25
Animal production, except cattle and poultry and eggs	\$6,838,000	48.29
Bread and bakery product, except frozen, manufacturing	\$5,423,000	44.73
Landscape and horticultural services	\$4,847,000	37.85
Poultry and egg production	\$4,431,000	27.32
Veterinary services	\$3,477,000	19.21
All other crop farming	\$2,548,000	13.79
Frozen cakes and other pastries manufacturing	\$1,237,000	5.51
Other snack food manufacturing	\$739,000	3.52
Commercial logging	\$659,000	2.68
Tortilla manufacturing	\$563,000	2.01
Roasted nuts and peanut butter manufacturing	\$480,000	2.00
Dairy cattle and milk production	\$358,000	1.93
Vegetable and melon farming	\$352,000	1.08
Commercial hunting and trapping	\$188,000	1.06
Greenhouse, nursery, and floriculture production	\$138,000	1.02
Forestry, forest products, and timber tract production	\$93,000	0.87
Other leather and allied product manufacturing	\$52,000	0.31
Fruit farming	\$48,000	0.23
Tree nut farming	\$5,000	0.04

# Methodology

Using the economic software IMPLAN, the equilibrium displacement model calculates the estimated output and employment of all 546 different economic sectors if the current economy experiences no shocks within the agriculture and agriculture-related industries. IMPLAN sectors are based on North American Industry Classification System (NAICS) codes. The results of this model are broken down into direct, indirect and induced effects, and the IMPLAN framework avoids double counting. All agriculture and agriculture-related sectors represented in this model use the most recent IMPLAN data available (2021), adjusted for 2023 dollars. For this model, key statistics are defined as follows: total employment refers to the annual average of the sum of full and part time jobs held attributed to the 72 agricultural sectors, total gross regional product is the sum of the value added of all industries across the state, and total output is the total annual value of production for an industry or area.

## Notes and Glossary

These results are based on estimated production and employment numbers, along with estimated potential sector-, industry- and economy-wide effects. Therefore, these results will differ from actual events.

Due to confidentiality policies that exist within several agencies from which IMPLAN collects their data, some sectors in some regions may not have all data available.

The model provides results in relation to the agriculture and agriculture-related sectors. These results are not equal to the total effects of all 546 sectors but rather the total effects relative to agriculture.

The following terms are used throughout this report:

- Direct effect: the contribution from agricultural and food products
- *Indirect effect:* the contribution from farms and agricultural businesses purchasing inputs and services from supporting industries within the county
- *Induced effect:* the contribution from employees of farms, agricultural businesses, and supporting industries spending their wages on goods and services within the county
- Value added = labor income + indirect business taxes + other property type income
- Gross Regional Product = final demand of households + government expenditures + capital + exports - imports - institutional sales
- Output = intermediate inputs + value added
- *Employment:* full-time/part-time annual average, i.e., 1 job lasting 12 months = 2 jobs lasting 6 months each = 3 jobs lasting 4 months each (a job is neither full-time nor part-time)

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