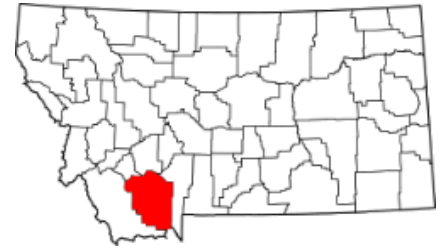


ECONOMIC IMPACT OF AGRICULTURE



Madison County

January 2021

Madison County is a rural county located in the far southwestern part of the state. Over 40% of land in Madison County is classified as farm land.

(as defined by Montana Department of Revenue as Class 3 property) comprised 1.9% of the county's taxable value.

Overview (2017 Data)

Population	8,768
County Size (acres)	2,296,422
Land in Farms	40.2
Number of Farms	605
Median Farm Size (acres)	220
Average Farm Size (acres)	1,526

Source: [Census of Agriculture](#): Table 1: County Summary
Highlights: 2017

Property Tax Summary	2019	2014
Market Value of All Property	\$8,843,805,607	\$3,434,852,261
Taxable Value of All Property	\$146,959,805	\$83,576,708
Taxable Value of Agricultural Property	\$2,796,937	\$2,641,218
Ag Taxable Value as % of All Property	1.9%	3.16%

Source: Montana Dept. of Rev. Montana Taxes by County in [2018](#) and Montana Taxes by County in [2014](#)

Farm Revenue

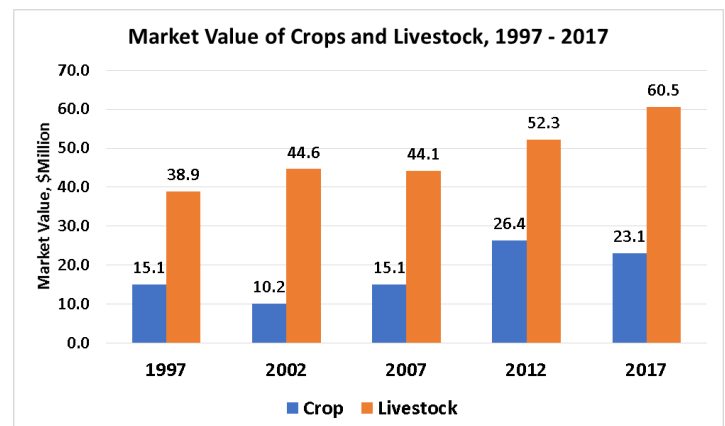
Farm revenue (which includes the market value of products sold, government payments, and farm-related income) were \$92 million while production expenses were over \$71 million. Government payments were 1.6% of farm revenues.

Market Value of Crops and Livestock

After adjusting for inflation, the market value of crops increased by 54%, while the market value of livestock increased by 56%, from 1997 to 2017.

Market Value of Products Sold	\$83,635,000
Government Payments	\$1,458,000
Farm-Related Income	\$7,097,000
Total Farm Production Expenses	\$71,436,000
Net Cash Farm Income	\$20,754,000

Source: [Census of Agriculture](#): Tables 2, 3, 4, 5 and 6: 2017



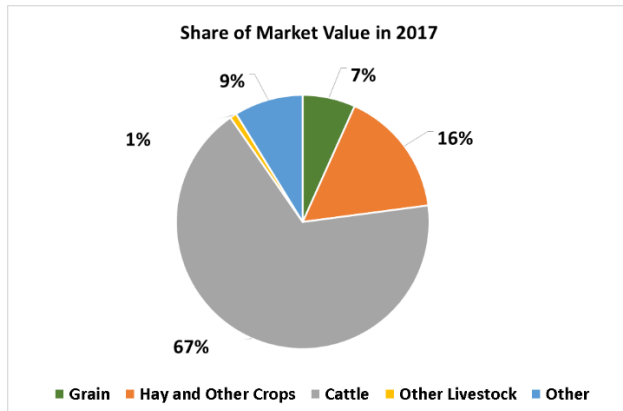
Sources: [Census of Agriculture](#): Table 1: County Summary Highlights: 2017 and [St. Louis Fed Producer Price Index](#)

Taxation

The market value of all property in Madison County was approximately \$8 billion in 2019. The taxable value assigned by the Montana Department of Revenue was \$146 million. Agricultural Property

Crops and Livestock

Cattle (67%) and hay and other crops (16%) comprised 83% of total crop and livestock sales in 2017.



Source: [Census of Agriculture](#): Table 2: County Summary Highlights: 2017

Farm Size by Acres

The percentage of smaller farms, less than 500 acres, larger farms, 500 acres or more, remained virtually unchanged from 2012 to 2017.

Farm Size by Acres	2017		2012	
	Number of Farms	%	Number of Farms	%
1 to 9	53	9	49	9
10 to 49	125	21	114	20
50 to 179	95	16	93	16
180 to 499	112	19	101	18
500 to 999	48	8	50	9
1,000 or more	172	28	164	29
TOTAL	605	100	571	100

Source: [Census of Agriculture](#): Table 1: County Summary Highlights: 2017

Farm Size by Sales

The proportion of total sales from the smallest farms with less than \$100,000 in sales decreased from 77% to 74%, while the proportion of total sales from the largest farms with sales of \$100,000 or more increased from 23% to 26% from 2012 to 2017.

Farm Size by Sales	2017		2012	
	Number of Farms	%	Number of Farms	%
Less than 2,500	212	35	212	37
2,500 to 4,999	30	5	35	6
5,000 to 9,999	81	13	44	8
10,000 to 24,999	43	7	52	9
25,000 to 49,999	44	7	37	6
50,000 to 99,999	38	6	57	10
100,000 or more	157	26	134	23
TOTAL	605	100	571	100

Source: [Census of Agriculture](#): Table 1: County Summary Highlights: 2017

Tillage and Land Use

The percentage of farms using reduced tillage or cover crops increased, while the percentage of farms using no till or intensive tillage decreased from 2012 to 2017.

Tillage	2017		2012	
	Number of Farms	%	Number of Farms	%
No tillage	18	3	42	7
Reduced tillage	45	7	28	5
Intensive tillage	82	14	94	16
Cover crops	41	7	37	6
TOTAL FARMS	605		571	

Source: [Census of Agriculture](#): Table 41 Land Use Practices

Producer Profile

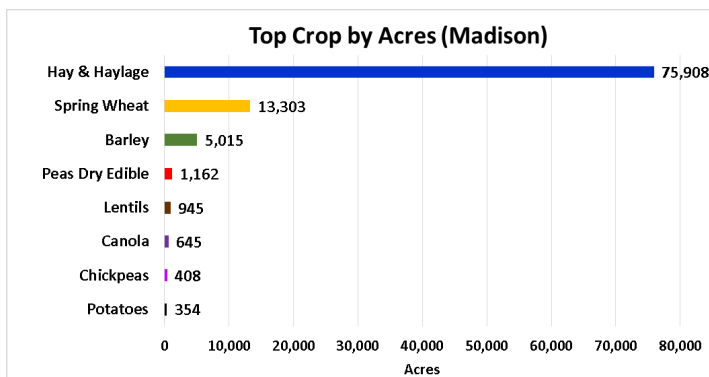
The county producer population was slightly older than the Montana producer population. Thirty-one percent of county producers were under 55 years of age, while 36% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Sixty-one percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 50% of county producers, while farming was the primary occupation for 50% of Montana producers.

Characteristics	County		State	
	Number of Producers	%	Number of Producers	%
Age				
18 – 25	18	2	570	1
25 to 34	83	7	3,285	7
35 to 44	123	11	5,179	11
45 to 54	133	12	7,309	15
55 to 64	341	30	13,838	29
65 to 74	262	23	11,469	24
75 and older	150	13	5,587	12
Sex				
Male	691	61	28,563	60
Female	443	39	18,673	40
Primary Occupation				
Yes	564	50	23,847	50
No	570	50	24,314	50
TOTAL PRODUCERS	1,134	100	48,161	100

Source: [Census of Agriculture](#): Table 45 Selected Operation and Producer Characteristics

Top Crops by Acres

The top crops were hay and haylage, spring wheat, barley, peas dry edible, lentils, canola, chickpeas and potatoes.



Source: [Census of Agriculture](#): Table 1: County Summary Highlights: 2017

Top Livestock

The top livestock were cattle, sheep, poultry (chickens-layers), and hogs.

Livestock	Number of Head
Cattle	80,763
Sheep	4,435
Chickens-Layers	902
Hogs	97

Source: [Census of Agriculture](#): Tables 11 (Cattle), 13 (Sheep) and 19 (Poultry)

Employment Impact

Agricultural production employed 958 workers, or 22% of the county's labor force. According to IMPLAN, economic impact model, 632 of the workers were directly employed in production agriculture. An additional 258 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 68 workers were employed in other related businesses, such as grocery and drugs stores. For every 10 jobs on farms and ranches, 5 additional jobs are generated in the county.

Impact Type	Labor Force	Impact Multipliers
County Labor Force	4,393	
Direct Impact	632	
Indirect Impact	258	0.41
Induced Impact	68	0.11
Total Impact	958	0.52
Agriculture's Share (%)	22	

Source: [Bureau of Labor Statistics](#), www.bls.gov/#cntyaa and IMPLAN Estimates

Value Added Impacts

Farms and ranches generated \$54.8 million of value-added, or 15% of the county's total gross domestic product of \$364 million in 2017. According to IMPLAN, \$35.1 million was directly contributed by farmers and ranchers. An additional \$15.3 million was generated by businesses supporting agricultural production and \$4.4 million was generated by other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an additional \$0.56 of value-added in other sectors of the county's economy.

Impact Type	Value-Added (\$1 million)	Impact Multipliers
County GDP*	364.0	
Direct Impact**	35.1	
Indirect Impact**	15.3	0.44
Induced Impact**	4.4	0.13
Total Impact**	54.8	0.56
Agriculture's Share (%)	15	

Sources: * [St. Louis Federal Reserve Bank](#), ** IMPLAN Estimates

References

- 2017 Census of Agriculture, National Agricultural Statistics Service, Montana, State and County Data, Volume 1, Geographic Area Series, part 26 https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_State_Level/Montana/mtv1.pdf
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