

ECONOMIC IMPACT OF AGRICULTURE



Dawson County

January 2021

Dawson County is a rural county located in the eastern part of the state. Over 74% of land in Dawson County is classified as farm land.

Overview (2017 Data)

Population	8,680
County Size (acres)	1,518,028
Land in Farms (%)	74.6
Number of Farms	487
Median Farm Size (acres)	640
Average Farm Size (acres)	2,326

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

Farm Revenue

Farm revenue (which includes the market value of products sold, government payments, and farm-related income) were over \$75 million while production expenses were nearly \$61 million. Government payments were 10% of farm revenues.

Market Value of Products Sold	\$58,188,000
Government Payments	\$7,569,000
Farm-Related Income	\$9,855,000
Total Farm Production Expenses	\$60,952,000
Net Cash Farm Income	\$14,659,000

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

Taxation

The market value of all property in Dawson County was approximately \$1 billion in 2019. The taxable value assigned by the Montana Department of Revenue was \$26 million. Agricultural Property (as defined by Montana Department of Revenue as Class

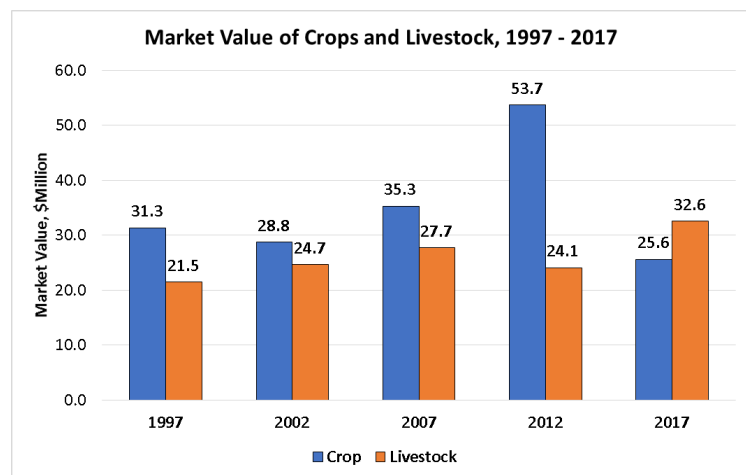
3 property) comprised 14% of the county's taxable value.

Property Tax Summary	2019	2014
Market Value of All Property	\$1,027,096,437	\$609,442,373
Taxable Value of All Property	\$26,143,232	\$3,598,177
Taxable Value of Agricultural Property	\$3,691,344	\$20,223,995
Ag Taxable Value as % of All Property	14.1%	17.7%

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

Market Value of Crops and Livestock

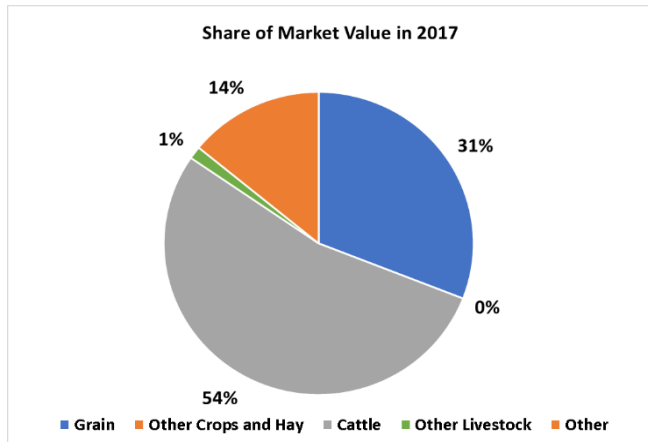
After adjusting for inflation, the market value of crops decreased by 18%, while the market value of livestock increased by 51%, from 1997 to 2017.



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

Crops and Livestock

Cattle (54%) and grain (31%) comprised 85% 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, increased from 39% to 44%, while the percentage of larger farms, 500 acres or more, decreased from 61% to 56% from 2012 to 2017.

Farm Size by Acres	2017		2012	
	Number of Farms	%	Number of Farms	%
1 to 9	16	3	33	7
10 to 49	44	9	29	6
50 to 179	68	14	58	12
180 to 499	89	18	67	14
500 to 999	66	14	54	11
1,000 or more	204	42	244	50
TOTAL	487	100	485	100

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

Farm Size by Sales

The proportion of total sales from the smallest farms with less than \$100,000 in sales increased from 63% to 69%, while the proportion of total sales from the largest farms with sales of \$100,000 or more decreased from 37% to 31% from 2012 to 2017.

Farm Size by Sales	2017		2012	
	Number of Farms	%	Number of Farms	%
Less than 2,500	160	33	132	27
2,500 to 4,999	17	3	13	3
5,000 to 9,999	21	4	23	5
10,000 to 24,999	37	8	37	8
25,000 to 49,999	45	9	43	9
50,000 to 99,999	55	11	58	12
100,000 or more	152	31	179	37
TOTAL	487	100	485	100

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

Tillage and Land Use

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

Tillage	2017		2012	
	Number of Farms	%	Number of Farms	%
No tillage	99	20	123	25
Reduced tillage	79	16	90	19
Intensive tillage	53	11	77	16
Cover crops	29	6	17	4
TOTAL FARMS	487		485	

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

Producer Profile

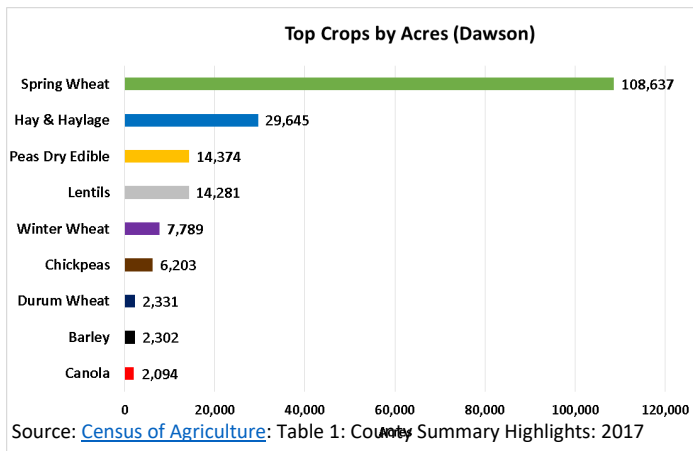
The county producer population was older than the Montana producer population. Thirty percent of county producers were under 55 years of age, while 39% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Sixty-four percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 49% 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	3	0	1	0
25 to 34	48	6	16	3
35 to 44	91	10	44	9
45 to 54	120	14	83	16
55 to 64	262	30	146	28
65 to 74	215	25	128	25
75 and older	121	14	95	19
Sex				
Male	553	64	28,563	60
Female	317	36	18,673	40
Primary Occupation				
Yes	424	49	23,847	50
No	446	51	24,314	50
TOTAL PRODUCERS	870	100	48,161	100

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

Top Crops by Acres

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



Top Livestock

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

Livestock	Number of Head
Cattle	36,427
Sheep	2,065
Chickens-Layers	722
Chickens-Broilers	375
Hogs	48

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

Employment Impact

Agricultural production employed 585 workers, or 13% of the county's labor force. According to IMPLAN, economic impact model, 461 of the workers were directly employed in production agriculture. An additional 114 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 10 workers were employed in other related businesses, such as grocery and drug stores. For every 10 jobs on farms and ranches, 3 additional jobs are generated in the county.

Impact Type	Labor Force	Impact Multipliers
County Labor Force	4,678	
Direct Impact	461	
Indirect Impact	114	0.25
Induced Impact	10	0.02
Total Impact	585	0.27
Agriculture's Share (%)	13	

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

Value Added Impacts

Farms and ranches generated \$28.8 million of value-added, or 7% of the county's total gross domestic product of \$436 million in 2017. According to IMPLAN, \$18.2 million was directly contributed by farmers and ranchers. An additional \$9.8 million was generated by businesses supporting agricultural production and \$0.8 million was generated by other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an additional \$0.58 of value-added in other sectors of the county's economy.

Impact Type	Value-Added (\$1 million)	Impact Multipliers
County GDP*	436.0	
Direct Impact**	18.2	
Indirect Impact**	9.8	0.54
Induced Impact**	0.8	0.05
Total Impact**	28.8	0.58
Agriculture's Share (%)	7	

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
- Dept. of Revenue “Montana Taxes by County in 2014” <https://mtrevenue.gov/wp-content/uploads/2018/01/2014-Taxes-by-County.pdf>

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- St. Louis Federal Reserve Bank (2017). Current dollar gross domestic product by county for Montana, retrieved from <https://fred.stlouisfed.org/release/tables?rid=397&eid=1062609&od=2017-01-01#>
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