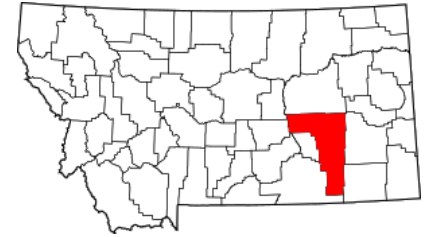


ECONOMIC IMPACT OF AGRICULTURE



Rosebud County

January 2021

Rosebud County is located in the eastern portion of the state, and contains most of the Northern Cheyenne Reservation. Over 85% of land in Rosebud County is classified as farm land.

Overview (2017 Data)

Population	9,063
County Size (acres)	3,205,206
Land in Farms (%)	85.3
Number of Farms	414
Median Farm Size (acres)	673
Average Farm Size (acres)	6,600

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 \$95 million while production expenses were \$76 million. Government payments were 4% of farm revenues.

Market Value of Products Sold	\$86,638,000
Government Payments	\$3,759,000
Farm-Related Income	\$4,631,000
Total Farm Production Expenses	\$76,352,000
Net Cash Farm Income	\$18,676,000

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

Taxation

The market value of all property in Rosebud County was approximately \$2 billion in 2019. The taxable

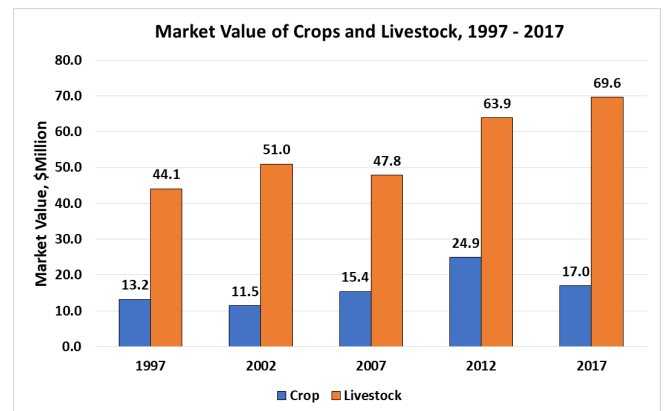
value assigned by the Montana Department of Revenue was \$88 million. Agricultural Property (as defined by Montana Department of Revenue as Class 3 Property) comprised 4% of the county's taxable value.

Property Tax Summary	2019	2014
Market Value of All Property	\$1,987,879,869	\$1,907,967,971
Taxable Value of All Property	\$87,717,508	\$90,327,505
Taxable Value of Agricultural Property	\$3,519,969	\$3,604,440
Ag Taxable Value as % of All Property	4.01%	3.99%

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

Market Value of Crops and Livestock

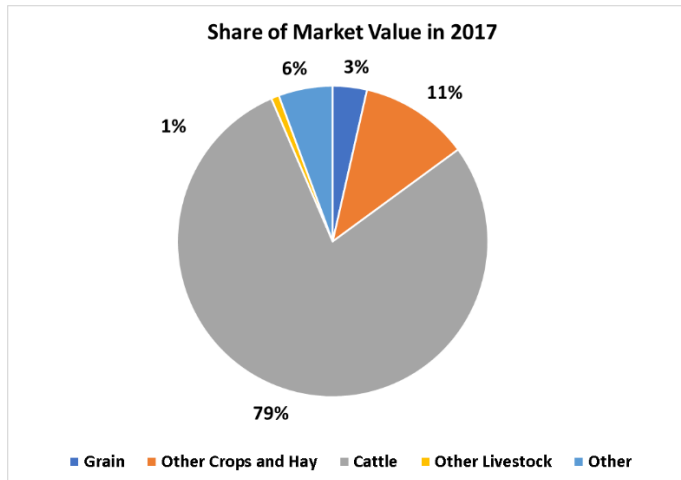
After adjusting for inflation, the market value of crops increased by 29%, while the market value of livestock increased by 58%, from 1997 to 2017.



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

Crops and Livestock

Cattle (79%) and other crops and hay (11%) comprised 90% 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, decreased from 46% to 44%, while the percentage of larger farms, 500 acres or more, increased from 54% to 56% from 2012 to 2017.

Farm Size by Acres	2017		2012	
	Number of Farms	%	Number of Farms	%
1 to 9	11	3	33	8
10 to 49	51	12	46	11
50 to 179	61	15	62	14
180 to 499	60	14	62	14
500 to 999	47	11	38	9
1,000 or more	184	44	196	45
TOTAL	414	100	437	100

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

Farm Size by Sales

The percentage of the smallest farms with less than \$100,000 in sales decreased from 72% to 69%, while the percentage of the largest farms with sales of \$100,000 or more increased from 28% to 31% from 2012 to 2017.

Farm Size by Sales	2017		2012	
	Number of Farms	%	Number of Farms	%
Less than 2,500	126	30	137	31
2,500 to 4,999	18	4	20	5
5,000 to 9,999	24	6	33	8
10,000 to 24,999	31	7	44	10
25,000 to 49,999	40	10	33	8
50,000 to 99,999	46	11	49	11
100,000 or more	129	31	121	28
TOTAL	414	100	437	100

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

Tillage and Land Use

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

Tillage	2017		2012	
	Number of Farms	%	Number of Farms	%
No tillage	40	10	37	8
Reduced tillage	24	6	21	5
Intensive tillage	69	17	86	20
Cover crops	24	6	23	5
TOTAL FARMS	414		437	

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

Producer Profile

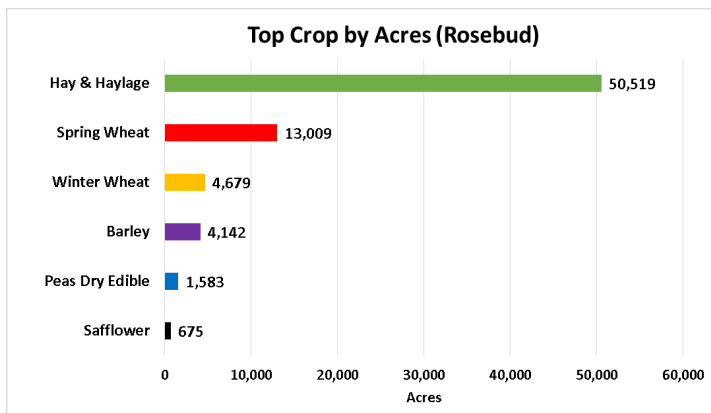
The county producer population was younger than the Montana producer population. Thirty-six percent of county producers were under 55 years of age, while 30% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Sixty-one percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 54% 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	1	0	570	1
25 to 34	92	12	3,285	7
35 to 44	54	7	5,179	11
45 to 54	140	18	7,309	15
55 to 64	250	32	13,838	29
65 to 74	166	21	11,469	24
75 and older	68	9	5,587	12
Sex				
Male	487	61	28,563	60
Female	306	39	18,673	40
Primary Occupation				
Yes	425	54	23,847	50
No	368	46	24,314	50
TOTAL PRODUCERS	793	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, winter wheat, barley, peas dry edible, and safflower.



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

Top Livestock

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

Livestock	Number of Head
Cattle	91,559
Sheep	3,710
Chicken-Layers	697
Hogs	637
Turkeys	12

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

Employment Impact

Agricultural production employed 807 workers, or 20% of the county's labor force. According to IMPLAN, economic impact model, 644 of the workers were directly employed in production agriculture. An additional 156 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 7 workers were employed in other related businesses, such as grocery and drugs 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	4,020	
Direct Impact	644	
Indirect Impact	156	0.24
Induced Impact	7	0.01
Total Impact	807	0.25
Agriculture's Share (%)	20	

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

Value Added Impacts

Farms and ranches generated \$43.5 million of value-added, or 5% of the county's total gross domestic product of \$901 million in 2017. According to IMPLAN, \$33.7 million was directly contributed by farmers and ranchers. An additional \$9.1 million was generated by businesses supporting agricultural production and \$0.7 million was generated by other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an additional \$0.29 of value-added in other sectors of the county's economy.

Impact Type	Value-Added (\$1 million)	Impact Multipliers
County GDP*	901.0	
Direct Impact**	33.7	
Indirect Impact**	9.1	0.27
Induced Impact**	0.7	0.02
Total Impact**	43.5	0.29
Agriculture's Share (%)	5	

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>
- Dept. of Revenue “Montana Taxes by County in 2018” <https://mtrevenue.gov/wp-content/uploads/2020/02/2018-Taxes-by-County.pdf>
- 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#>
- St. Louis Federal Reserve Bank (2020). Producer price index for all commodities, St. Louis Federal Reserve Bank, retrieved from <https://fred.stlouisfed.org/series/PPIACO>
- Bureau of Labor Statistics (2017), Montana labor force, retrieved from <https://bls.gov/lau/#cntyaa>

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