ECONOMIC IMPACT OF AGRICULTURE

MONTANA STATE UNIVERSITY

EXTENSION

Carbon County



January 2021

Carbon County is located in the southern portion of the state, just to the east of Yellowstone National Park and bordering Wyoming. Over 62% of land in Carbon County is classified as farm land.

Overview (2017 Data)	
Population	10,714
County Size (acres)	1,310,531
Land in Farms (%)	62.2
Number of Farms	725
Median Farm Size (acres)	202
Average Farm Size (acres)	1,125
Source: <u>Census of Agriculture</u> : Table 1: Cou Highlights: 2017	unty Summary

Farm Revenue

Farm revenue (which includes the market value of products sold, government payments, and farm-related income) were \$103 million while production expenses were \$79 million. Government payments were 1% of farm revenues.

Market Value of Products Sold	\$99,023,000	
Government Payments	\$1,388,000	
Farm-Related Income	\$3,045,000	
Total Farm Production Expenses	\$79,430,000	
Net Cash Farm Income	\$24,027,000	
Source: Census of Agriculture: Tables 2, 3, 4, 5 and 6, 2017		

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Taxation

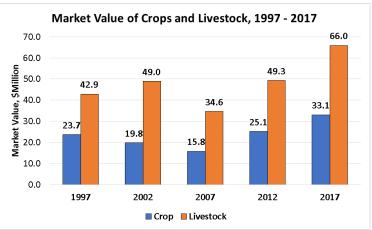
The market value of all property in Carbon County was approximately \$2 billion in 2019. The taxable value assigned by the Montana Department of Revenue was \$44 million. Agricultural Property (as defined by Montana Department of Revenue as Class 3 Property) comprised 5% of the county's taxable value.

Property Tax Summary	2019	2014
Market Value of All	\$2,061,851,663	\$1,159,313,124
Property		
Taxable Value of All	\$44,145,790	\$36,843,341
Property		
Taxable Value of	\$2,310,984	\$2,032,352
Agricultural Property		
Ag Taxable Value as %	5%	6%
of All Property		

Source: Montana Dept. of Rev. Montana Taxes by County in $\underline{2018}$ and Montana Taxes by County in $\underline{2014}$

Market Value of Crops and Livestock

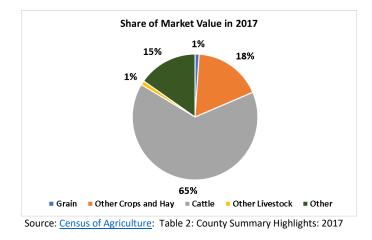
After adjusting for inflation, the market value of crops increased by 40%, while the market value of livestock increased by nearly 54%, from 1997 to 2017.



Sources: <u>Census of Agriculture</u>: Table 1: County Summary Highlights: 2017 and <u>St. Louis Fed Producer Price Index</u>

Crops and Livestock

Cattle (65%), other crops and hay (18%), and other (15%) comprised 78% of total crop and livestock sales in 2017.



Farm Size by Acres

The percentage of smaller farms, less than 500 acres, decreased slightly from 67% to 66%, while the percentage of larger farms, 500 acres or more, increased slightly from 33% to 34% from 2012 to 2017.

	2017		2012	
	Number		Number	
Farm Size by Acres	of Farms	%	of Farms	%
1 to 9	49	7	41	6
10 to 49	154	21	136	19
50 to 179	150	21	153	21
180 to 499	127	18	159	22
500 to 999	73	10	77	11
1,000 or more	172	24	160	22
TOTAL	725	100	726	100

Source: Census of Agriculture: Table 2: County Summary Highlights: 2017

Farm Size by Sales

The proportion of total sales from smallest farms with less than \$100,000 in sales decreased from 80% to 77%, while the proportion of total sales from the largest farms with sales of \$100,000 or more increased from 20% to 23% from 2012 to 2017.

	2017		201	12
Farm Size by	Number		Number	
Sales	of Farms	%	of Farms	%
Less than 2,500	196	27	220	30
2,500 to 4,999	49	7	59	8
5,000 to 9,999	62	9	68	9
10,000 to 24,999	87	12	82	11
25,000 to 49,999	91	13	79	11
50,000 to 99,999	71	10	70	10
100,000 or more	169	23	148	20
TOTAL	725	100	726	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.

	2017		2012	
	Number		Number	
Tillage	of Farms	%	of Farms	%
No tillage	49	7	38	5
Reduced tillage	82	11	40	6
Intensive tillage	107	15	157	22
Cover crops	39	5	31	4
TOTAL FARMS	725		726	

Source: Census of Agriculture: Table 41 Land Use Practices

Producer Profile

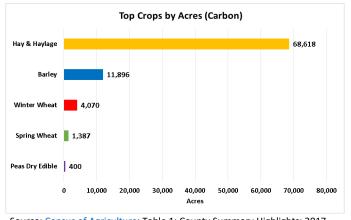
The county producer population was slightly older than the Montana producer population. Thirty-six percent of county producers were under 55 years of age, while 37% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Sixty-two percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 53% of county producers, while farming was the primary occupation for 50% of Montana producers.

	County		State	
	Number of		Number of	
Characteristics	Producers	%	Producers	%
Age				
18 – 25	22	2	570	1
25 to 34	87	7	3,285	7
35 to 44	179	14	5,179	11
45 to 54	184	14	7,309	15
55 to 64	342	26	13,838	29
65 to 74	343	26	11,469	24
75 and older	131	10	5,587	12
Sex				
Male	803	62	28,563	60
Female	494	38	18,673	40
Primary Occupation				
Yes	685	53	23,847	50
No	612	47	24,314	50
TOTAL PRODUCERS	1,297	100	48,161	100

Source: <u>Census of Agriculture</u>: Table 45 Selected Operation and Producer Characteristics

Top Crops by Acres

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



Source: Census of Agriculture: Table 1: County Summary Highlights: 2017

Top Livestock

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

Livestock	Number of Head
Cattle	78,558
Chickens-Layers	1,680
Chickens-Broilers	263
Hogs	154
Turkeys	64
Source: Census of Agriculture	: Tables 11 (Cattle), 13 Sheep.

Source: <u>Census of Agriculture</u>: Tables 11 (Cattle), 13 Sheep, and 19 (Poultry).

Employment Impact

Agricultural production employed 1,785 workers, or 32% of the county's labor force. According to IMPLAN, economic impact model, 1,228 of the workers were directly employed in production agriculture. An additional 523 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 34 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	5,499	
Direct Impact	1,228	
Indirect Impact	523	0.43
Induced Impact	34	0.03
Total Impact	1,785	0.45
Agriculture's Share (%)	32	

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

Value Added Impacts

Farms and ranches generated \$59.3 million of valueadded, or 21% of the county's total gross domestic product of \$286 million in 2017. According to IMPLAN, \$37.8 million was directly contributed by farmers and ranchers. An additional \$19.7 million was generated by businesses supporting agricultural production and \$1.8 million was generated by other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an additional \$0.57 of value-added in other sectors of the county's economy.

Value-Added (\$1 million)	Impact Multipliers
286.0	
37.8	
19.7	0.52
1.8	0.05
59.3	0.57
21	
	(\$1 million) 286.0 37.8 19.7 1.8 59.3

References

 2017 Census of Agriculture, National Agricultural Statistic Service, Montana, State and County Data, Volume 1, Geographic Area Series, part 26 <u>https://www.nass.usda.gov/Publications/AgCensus/2017/Full</u> <u>Report/Volume 1, Chapter 1 State Level/Montana/mtv1.</u> <u>pdf</u>

- Dept. of Revenue "Montana Taxes by County in 2014" <u>https://mtrevenue.gov/wp-</u> content/uploads/2018/01/2014-Taxes-by-County.pdf
- Dept. of Revenue "Montana Taxes by County in 2018" <u>https://mtrevenue.gov/wp-</u> <u>content/uploads/2020/02/2018-Taxes-by-County.pdf</u>
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- 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 <u>https://bls.gov/lau/#cntyaa</u>

Report produced by MSU Extension:

- George Haynes, MSU Extension, Professor and Specialist
- Joel Schumacher, MSU Extension, Associate Specialist
- Jeff Peterson, Economic Impact Analyst, Impacts
 Montana

Contact Us:

MSU Extension Economics P.O. Box 172800 Bozeman, MT 5971 406-994-3511



For more information: www.montana.edu/agimpact