

Economic Impact of a Sample of Montana Cooperatives Report October 31, 2018

Introduction

Based on a study by the University of Wisconsin's Center for Cooperatives, in 2009 there were 209 cooperatives operating in Montana.¹ By 2018 when this study was conducted, the number of cooperative establishments had dropped to 151, which were those surveyed for this report. This study is based data compiled in 2017 by 100 cooperatives that responded to the survey individually or through their industry associations. These cooperative firms represent agricultural marketing, services and supply (17); credit unions (51); utilities (28); and, other (4).

Direct Impacts and Average Wages and Benefits

This sample of cooperatives generated \$1.835 billion in direct sales, more than 4,000 jobs, and wages of \$344 million (Table 1). This represents approximately 1.3% of total revenue and 0.9% of jobs in the state of Montana.² Total membership in these cooperatives exceeds 659,000, which undoubtedly overestimates the actual number of discrete individuals since those living in Montana's smallest rural communities often belong to more than one cooperative.

More than 50% of direct revenue from this sample of cooperatives was generated by agricultural cooperatives; utility coops contributed 32% and credit unions contributed 12%. More than 30% of cooperative jobs were created by credit unions, with agricultural co-ops creating 28% and utility co-ops creating 26%. Utility cooperatives accounted for 36% of total wages paid to cooperative employees, with credit unions contributing 23%. The "Other" category includes the CHS refinery in Laurel , which explains why this group accounted for the last 20% of total wages paid.

¹ Pittman, L. (2014). UWCC 2009 Report: Research on the Impact of Cooperatives, <http://reic.uwcc.wisc.edu>. This report includes several other types of cooperatives, including arts and crafts, corporate finance (such as Northwest Farm Credit Services), daycare, education, healthcare, media, mutual insurance, and water and waste.

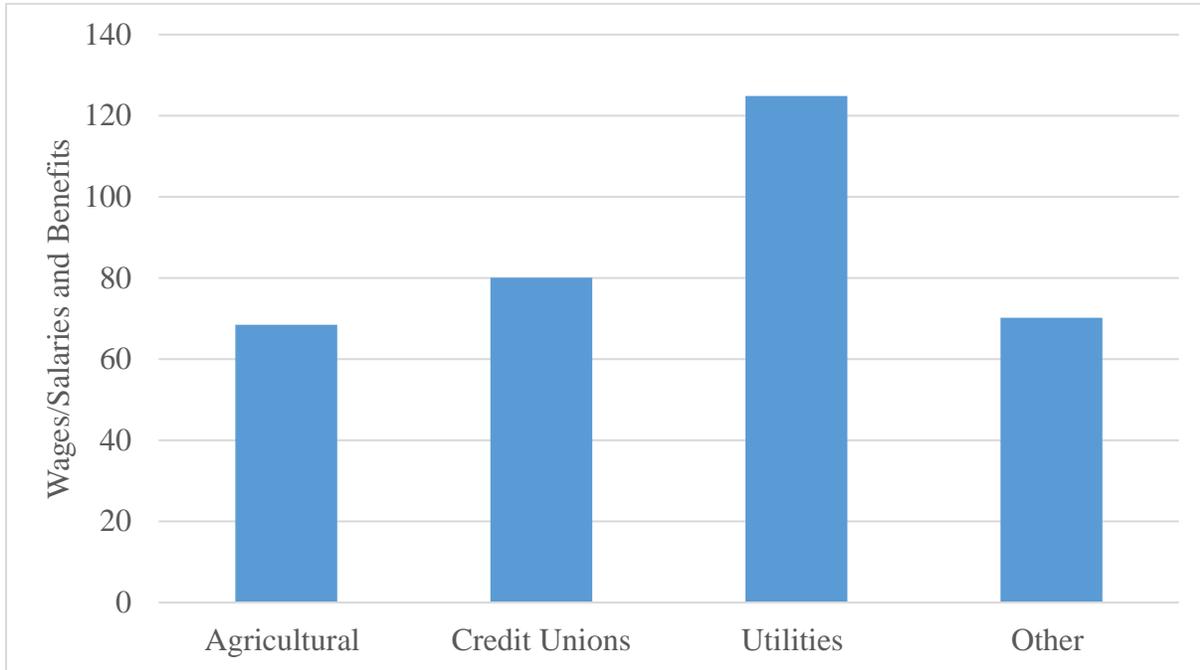
² Montana revenue (2017), <http://youreconomy.org/> for the revenue comparison; Montana jobs (2017) and wages (2017), Bureau of Labor Statistics, https://www.bls.gov/oes/current/oes_mt.htm#00-0000

Table 1 Montana Revenue, Jobs, and Wages Created and Membership in Cooperatives

Type	n	Revenue	%	Jobs	%	Wages/Benefits	%	Members	%
		(million \$)		(#)		(million \$)			
Agricultural marketing, services, & supply	17	1,009	55	1,122	28	68	20	39,404	6
Credit Unions	51	216	12	1,266	31	80	23	388,319	59
Utilities (electric and communication)	28	580	32	1,044	26	125	36	194,007	29
Other	4	30	2	613	15	70	20	37,277	6
Total	100	1,835	100	4,045	100	344	100	659,007	100
Montana		146,443		460,740					
Cooperative Percentage		1.25		0.88					

Average wages vary by type of cooperative (Figure 1). The highest average wages and benefits were paid the utility cooperatives (over \$120,000), while the lowest average wages and benefits were paid in agricultural cooperatives (over \$68,000).

Figure 1 Average Wages and Benefits by Sector



Note: Average wages by sector include wages and estimated benefits (33% of total wages/).

In addition, these cooperatives paid \$29.6 million in property taxes; \$2.1 million in scholarships, education funds, and communication contributions; and \$58.7 million in member dividends and patronage.

Multiplier Effect

Direct economic activity from cooperatives ripples through the broader state economy to generate additional economic activity. This study utilizes multiplier estimates from a similar study in the state of Wisconsin to estimate this additional economic activity, which is reported as indirect and induced effects. Indirect effects are changes in revenue, jobs, and wages in sectors within the state that supply goods and services to these cooperatives. Induced effects are the increased revenue, jobs, and wages within the state from household spending of the income earned in cooperatives and supporting sectors. These broader effects are estimated using numerical multipliers, which are summarized for each type of cooperative in Table 2.

Table 2 Multipliers used in Wisconsin Study

Type of Cooperative and Effect	Multipliers		
	Revenue	Jobs	Wages
Agricultural			
Indirect	1.21	1.02	1.05
Induced	1.75	1.16	1.27
Credit Union			
Indirect	1.37	1.89	1.62
Induced	1.24	1.66	1.43
Utility			
Indirect	1.18	2.26	1.44
Induced	1.18	2.32	1.38
Others			
Indirect	1.23	1.27	1.13
Induced	1.59	1.66	1.30

Agricultural Cooperatives

Agricultural cooperatives in this section include marketing, service and supply cooperatives. Using the multipliers derived from the University of Wisconsin study, the cooperatives reporting information for this sector generate an estimated \$2 billion of revenue, 1,326 jobs, and \$90 million in wages and benefits. (Table 3). Agricultural cooperatives make their most significant contribution in the amount total revenue generated by sales.

Table 3 Total Impact of Agricultural Cooperatives

Impact Type	Revenue (millions)	Jobs	Wages and Benefits (millions)
Direct	1,009	1,122	68
Indirect	208	25	4
Induced	759	180	19
Total Effect	1,976	1,326	90
Multiplier	1.96	1.18	1.33

Credit Unions

There are 51 credit unions that operate throughout Montana. Applying all multipliers, they account for nearly \$350 million in revenue, more than 3,200 jobs, and \$165 million in wages and benefits. (Table 4). Credit Unions make their most significant contributions in terms of jobs and wages.

Table 4 Total Impact of Credit Unions

Impact Type	Revenue (millions)	Jobs	Wages and Benefits (millions)
Direct	216	1,266	80
Indirect	81	1,121	50
Induced	51	831	35
Total Effect	348	3,219	165
Multiplier	1.61	2.54	2.06

Utility Cooperatives

Cooperatives considered to be utilities include those engaged in electricity distribution, generation and transmission of electricity (G&T) and telephone/communications services. They account for \$787 million in revenue, 3,730 jobs, and \$227 million in wages, salaries, and benefits. Utility cooperatives make a very substantial contribution to jobs, where they create over 2.5 indirect and induced jobs for every direct job with the utility.

Table 5 Total Impact of Utility Cooperatives

Impact Type	Revenue (millions)	Jobs	Wages and Benefits (millions)
Direct	580	1,044	125
Indirect	105	1,313	55
Induced	102	1,373	47
Total Effect	787	3,730	227
Multiplier	1.36	3.57	1.82

Other Cooperatives

Cooperatives in this section include grocery stores, transportation, and oil refining. This very broad category of cooperatives accounts for \$54 million of revenue, nearly 1,200 jobs, and \$100 million in wages and benefits. These other cooperatives make a very substantial contribution to jobs, where they create nearly one indirect and induced job for every direct job.

Table 6 Total Impact of Other Cooperatives

Impact Type	Revenue (millions)	Jobs	Wages and Benefits (millions)
Direct	30	613	70
Indirect	7	168	9
Induced	17	406	21
Total Effect	54	1,187	100
Multiplier	1.82	1.94	1.43

Conclusions

This impact study uses all the responses to a questionnaire mailed to cooperative managers in May 2018. The aggregate estimates provide a useful assessment of the direct, indirect, and induced impacts of the sampled cooperatives on the Montana economy. These impacts were measured by estimated changes in revenue, jobs, and wages. Agricultural cooperatives had the largest direct effects on revenue, while credit unions had the largest direct effects on jobs and utility cooperatives had the largest direct effect on wages.

Using multipliers employed in Wisconsin, the analysis was extended to consider the impact of indirect and induced effects. When employing these multipliers, the largest indirect and induced revenue effects were generated by agricultural cooperatives, while the largest indirect and induced job and wage effects were generated by utility cooperatives.

The estimates provide an interesting preliminary assessment of the economic impact of cooperatives in Montana. Unfortunately, this study can only be generalized to this partial sample of cooperatives and additional analysis is needed to incorporate multipliers based on Montana, not Wisconsin, data. Please use caution in reporting these preliminary economic impacts.

Methods

The cooperatives included in this study were identified by the Montana Cooperative Development Center (MCDC) in 2018. The MCDC sent a cover letter and questionnaire to cooperatives in Montana. The cooperative managers were given the option of completing the questionnaire and returning it to the MCDC or using a web-based version of the questionnaire in Qualtrics. Nearly all respondents used the web-based questionnaire. The study only includes those cooperative firms that are chartered or incorporated as cooperatives under Montana law. The study did not include entities that may be operating under cooperative principles, but are incorporated under a different type of organizational statute (e.g. as an LLC or nonprofit corporation).

The questionnaire, patterned after a survey instrument used by the Center for Cooperatives at the University of Wisconsin's Center for Cooperatives (UWCC), was used for this study. The questionnaire was designed to be used with IMPLAN to estimate statewide economic impacts. Given budget considerations, economic multipliers used by the UWCC in Wisconsin are employed in this study. Better regional economic impacts could be made by using Montana, rather than Wisconsin, data for generating these estimates. A copy of the cover letter and questionnaire are included in Appendix A.

The cover letter and questionnaire were mailed on May 16, 2018, to 75 cooperatives. The 25 electric cooperatives and 51 credit unions were not included in this mailing. Their surveys were completed by their association staff (Montana Electric Cooperatives Association and Montana's Credit Unions). Thus the response rate was 46% (17 of 37) for agricultural cooperatives, 100% for credit unions (51 of 51), 89% for electric cooperatives (25 of 28), and 38% for telephone and communication cooperatives (3 of 8). Responses to questions on revenue, membership, employment, revenue, wages and salaries, worker benefits, assets, and membership were complete. Full-time employees are counted as 1 while part-time employees are assumed work half-time and are counted as 0.5. Since, benefits were inconsistent in the data reported, benefits are assumed to be 33% of total wages and salaries for all cooperatives. Responses to expenditures, such as property taxes, patronage, dividends, scholarships, and other community expenditures were less complete.

Cooperatives engaged in agricultural marketing or processing (except dairy), agricultural services, agricultural supply, credit unions, grocery, telephone and communications, transportation, utility distribution, utility generation, and wholesale/retail responded to the questionnaire. Given the few number of observations grocery, refinery (transportation), and wholesale/retail were classified as other.

The analysis of the survey data only included reporting aggregate revenue, jobs, and wages. No additional analysis was performed on these data because some entries were "rolled-up" entries where several cooperatives were reported as a single observation.

Appendix A



May 16, 2018

Dear General Manager:

Every two years, the Montana Cooperative Development Center and the Montana Council of Cooperatives jointly survey all of Montana's cooperatives to document the contributions co-ops make to the state's overall economy. The resulting economic impact report will be published by October and shared with our legislators and other government officials to emphasize the importance of co-ops to rural Montana. As in past years, the survey may be completed anonymously; no information associated with your name or your cooperative's name will be released publicly.

George Haynes, Ph.D., of the MSU Ag Economics Department, has assisted MCDC in updating the enclosed survey form and will help analyze the raw data at no cost to the cooperative community. As a result of MSU's assistance, we have streamlined the survey form this year and you may choose to complete the survey electronically. The URL for the survey is:

https://montana.qualtrics.com/jfe/form/SV_80TSg4PAynTwZrn

Note that all financial data reported on the survey should reflect your most recently completed fiscal year.

Looking ahead, please save the dates of **January 14-15, 2019**, for the 59th annual meeting of the Montana Council of Cooperatives. Given it will be a legislative year, the annual meeting will be held in Helena followed by the Council's traditional legislative dinner/dance. All cooperatives are welcome to attend whether or not you are currently active in the Montana Council of Cooperatives. Results of the economic impact study will be released well before this event, so all co-ops represented will be well-versed in what the survey has disclosed.

Please respond to this survey no later than JUNE 15, 2018. I look forward to our future conversations on the importance of cooperatives to Montana's overall economy.

Sincerely,



The signature is written in blue ink and reads 'Jamie M. Brown'.

Janice M. Brown, Executive Director

Economic Impact of Montana’s Cooperative Businesses Survey
Conducted by Montana Cooperative Development Center

The purpose of this survey is to gather business information about Montana cooperatives. The study is voluntary. If you agree to participate, your responses will be anonymous and confidential. The information collected will be used to educate our legislators and the public about the economic impact our cooperatives have in Montana. The information will be presented in aggregate form as not to single out one business. Please use data from your most recently reported fiscal year to complete this survey.

1. **What is the ending date of your fiscal year?**

2. **Membership:** Enter the total number of your co-op’s members
(Note: a business, cooperative, or other organizational entity counts as one member)

Month / Day / Year

3. **Employment:**
Enter the number of full-time employees
Enter the number of part-time employees

4. **Revenue:** Provide the total dollar value of sales from your most recently reported fiscal year. Include revenue from all business activities, whether or not payment was received

5. **Wages and Salaries:** Provide total wages and salaries paid to full-time and part-time employees

6. **Worker Benefits:** Provide total worker benefits paid to full-time and part-time employees

7. **Assets:** Provide the total dollar value of assets from your most recently reported fiscal year

Answer the following questions about your cooperative economic sector and membership:

Continued on next page

Patronage paid to members		\$
Dividends paid to stockholders		\$
Scholarships/Co-Op Education		\$
Other community contributions (event sponsorships, etc.)		\$
Other (please specify): _____		\$
9. Please specify the economic sector(s) in which your cooperative conducts business: (check all that apply)		
<input type="checkbox"/> Agricultural marketing or processing, except dairy	<input type="checkbox"/> Hospitality (Food/Lodging)	<input type="checkbox"/> Mutual Insurance
<input type="checkbox"/> Agricultural services	<input type="checkbox"/> Day care or elder care	<input type="checkbox"/> Telephone/communications
<input type="checkbox"/> Agricultural supply	<input type="checkbox"/> Farm credit	<input type="checkbox"/> Transportation
<input type="checkbox"/> Artisan/Cultural	<input type="checkbox"/> Forestry	<input type="checkbox"/> Utility distribution
<input type="checkbox"/> Biofuels	<input type="checkbox"/> Grocery	<input type="checkbox"/> Utility generation
<input type="checkbox"/> Credit Union	<input type="checkbox"/> Healthcare	<input type="checkbox"/> Wholesale or retail
<input type="checkbox"/> Dairy marketing or processing	<input type="checkbox"/> Housing	<input type="checkbox"/> Worker co-op
<input type="checkbox"/> Manufacturing		
10. Who are your member-owners? (check all that apply)		
<input type="checkbox"/> Cooperative businesses	<input type="checkbox"/> Farmers/ranchers or farm operations	
<input type="checkbox"/> Business (that are not cooperatives)	<input type="checkbox"/> Workers/employees	
<input type="checkbox"/> Individuals (non-farm)	<input type="checkbox"/> Other (specify)	
11. If not a worker cooperative, do your member-owners primarily use your co-op's goods and service for: (choose one)		
<input type="checkbox"/> For personal use	<input type="checkbox"/> To support their business activities	
12. If not a worker cooperative, does your cooperative . . .		
<input type="checkbox"/> Sell goods or services to members	<input type="checkbox"/> Provide housing services to your members?	
<input type="checkbox"/> Provide financial services to your members?	<input type="checkbox"/> Process or manufacture for your members?	
<input type="checkbox"/> Market and sell goods or services on behalf of your members		

	<input type="checkbox"/> Other (specify): _____ _____
--	---

If you have any questions, please contact Janice Brown, Montana Cooperative Development Center, at (406) 727-1517

