



**Center for Cooperatives**

UNIVERSITY OF WISCONSIN-MADISON

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# **Economic Impacts of Cooperative Firms in Wisconsin: An Overview**

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October 1, 2014

## Background and Methodology

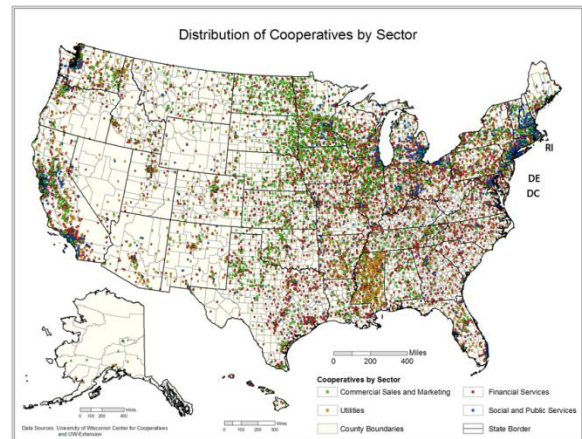
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Cooperatives have long played a role in the Wisconsin economy, and are found in a variety of business sectors across the state. As businesses owned and controlled by their member owners, and operated to meet member needs, cooperatives have been uniquely positioned to contribute to local economic well-being in both rural and urban settings.

The effects of cooperative ownership and control on business behavior, and the wider effects that result, are of interest to policy makers, economic developers, academics, and the general public. A description of the cooperative economic “footprint” can provide a starting point for understanding these cooperative impacts, but there has been a lack of regularly collected data available for analysis.

In 2009 the University of Wisconsin Center for Cooperatives released a USDA-funded report on the [Research on the Economic Impact of Cooperatives](#) (REIC) project. This study included the first-ever national economic census, which was used to gather data for an [IMPLAN analysis](#) that estimated the wider cooperative impact on the U.S. economy.

However, the scope of the study did not include impact analysis at the state level. While one comprehensive cooperative economic impact analysis for Wisconsin had been conducted in 2002, it had not been repeated.<sup>1</sup> To address the lack of current data on cooperative economic impacts in the state, the UW Center for Cooperatives conducted a simplified state impact study in 2012, using methodology similar to the 2009 national project<sup>2</sup>.



For the purposes of this study, cooperatives were defined using state incorporation and regulatory filings for cooperatives, credit unions, mutual insurance companies, and Farm Credit Administration. Using lists from these sources, cooperative firms were surveyed for data on economic activity and employment, and the results were supplemented through other data sources. IMPLAN input-output analysis was used to model the cooperative economic impacts using this data.<sup>3</sup> Results are summarized below, both in the aggregate and by sector.

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<sup>1</sup>“Measuring the Economic Impact of Cooperatives: Results from Wisconsin”; United States Department of Agriculture, [RBS Research Report 196](#)

<sup>2</sup> The Center wishes to thank Prof. Steven C. Deller, University of Wisconsin-Madison, for the IMPLAN analysis used in this report.

<sup>3</sup> For a full description of this project’s data collection methodology, see the Appendix (p. 10-15).

# Wisconsin Cooperatives: Direct Economic Activity

A final list of 773 active cooperative entities, with collected or appended data for 573 of the firms, was used for the IMPLAN input-output analysis.

Number of firms	
Cooperatives incorporated in Wisconsin	773
Cooperatives reporting (survey or supplemental data)	573
Response Rate	74%

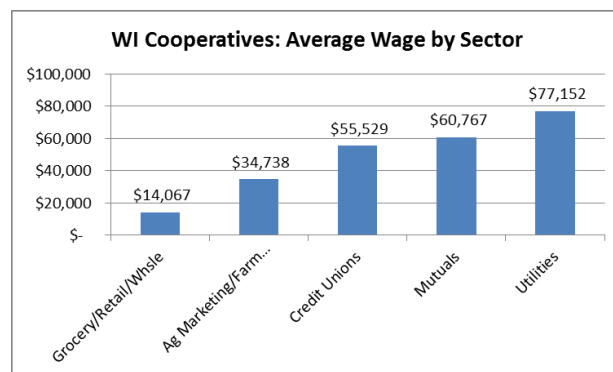
Cooperatives were grouped for analysis by business categories that were generally aligned with categories used in the national REIC project.

The study extrapolated total direct activity from data collected through the survey, or that was appended from secondary data sources. It is estimated that Wisconsin cooperatives generate \$17.2B in annual direct sales, 35K jobs, and wages of \$1.5B.

Sector	Jobs	Wages (millions)	Revenue (millions)
Grocery/Retail/Whse	4,477	\$ 63	\$ 1,906
Ag Marketing/Farm Supply	16,565	\$ 575	\$ 9,186
Credit Unions	6,934	\$ 385	\$ 1,236
Mutuals	3,342	\$ 203	\$ 3,344
Utilities	1,979	\$ 153	\$ 842
All Other	1,737	\$ 141	\$ 712
<b>Total</b>	<b>35,034</b>	<b>\$ 1,520</b>	<b>\$ 17,227</b>

This represents approximately 1% of the jobs and 4.5% of the total revenue in Wisconsin in 2012.<sup>4</sup>

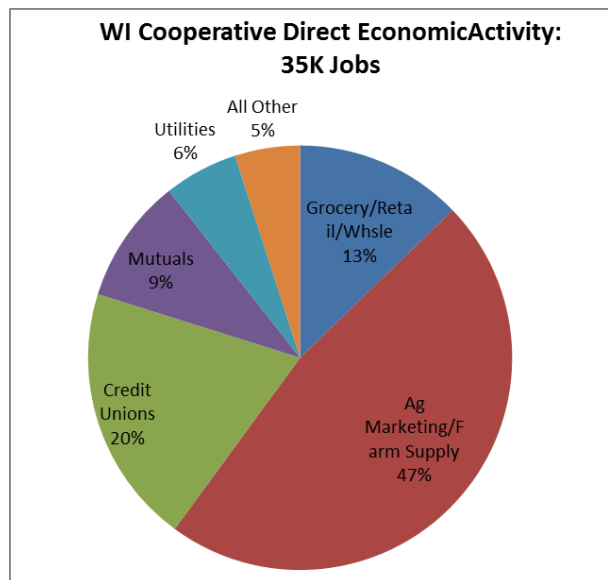
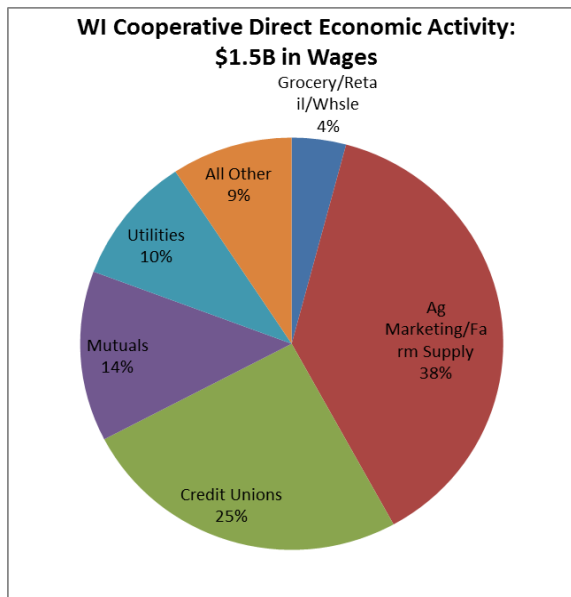
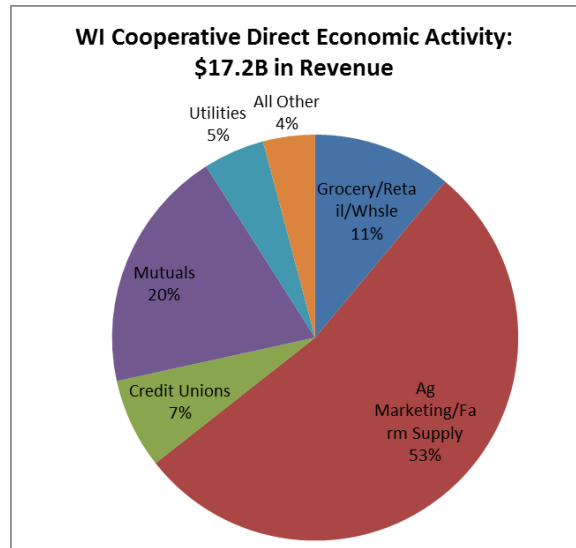
Average wages for the sector groupings were calculated using direct wages and jobs. The wide range in average wages reflects the sector-specific structural differences in employment practices and job requirements.<sup>5</sup>



<sup>4</sup> <http://youreconomy.org/index.ye>, Wisconsin data for 2012, accessed 9/26/2014.

<sup>5</sup> Because of the wide variety of sectors included in the "All Other", it is too broad a category for an average wage to be meaningful.

Agricultural and farm supply cooperatives accounted for just over half of direct cooperative revenue activity. Agriculture also accounted for 53% of the wages and 47% of the jobs generated by cooperatives in Wisconsin.



Sectors each contribute varying percentages to overall cooperative wages, jobs and revenue. The relationships between these metrics may be indicative of sector practices and requirements, and not by cooperative structure. As an example, credit unions account for 25% of the wages paid by cooperatives, and 20% of the cooperative jobs, they contribute only 7% to revenue activity.

# Wisconsin Cooperatives: The Multiplier Effect

The direct activity economic activity of Wisconsin cooperatives also ripples through the broader state economy to generate additional economic activity. This IMPLAN analysis uses a Wisconsin-specific model to estimate this flow of economic activity.

Expenses for one business generate revenue for other firms, and the wages generated in both types of business activities generate additional economic activity through household spending. IMPLAN modeling estimates these effects and categorizes them as indirect and induced activities, respectively. These broader effects also can be described as numerical multipliers that reflect the downstream impact of direct economic activity.

Business sectors have different profiles of input expenses and wages. For example, a credit union and an agricultural marketing co-op typically purchase products and services from very different types of businesses in order to provide and sell their own products and services. The number of employees, and the average wages paid, will also differ significantly. IMPLAN accounts for these differences by using profiles associated with NAICS codes, the federal classification system of business types. Using these modeling assumptions, the multiplier effects are estimated.

However, commonly used cooperative business categories can sometimes straddle NAICS classifications. This was the case with the original business categories described in the direct economic activity table above. The revenue impacts of the cooperative activity, when analyzed using these categories, is 14% larger than if the analysis is run using categories more aligned with NAICS classifications. The difference in employment and labor income were 0% and -2%, respectively.

Impact Type	Jobs	Wages (millions)	Revenue (millions)
Direct Effect	35,034	\$ 1,520.1	\$ 17,226.6
Indirect Effect	12,969	\$ 510.5	\$ 4,790.8
Induced Effect	15,954	\$ 536.6	\$ 5,122.0
<b>Total Effect</b>	<b>63,957</b>	<b>\$ 2,567.2</b>	<b>\$ 27,139.3</b>
<i>Multiplier</i>	<i>1.826</i>	<i>1.689</i>	<i>1.575</i>
Sales Taxes	\$ 209.1		
Property Taxes	\$ 273.6		
Income Taxes	\$ 70.6		
Other	\$ 99.6		
<b>Total S&amp;L Govt</b>	<b>\$ 653.0</b>		

Given the inherent limitations of data collection and modeling assumptions, this report conservatively presents the lower estimate, derived from NAICS categories, in the table to the right.

These results estimate that cooperatives in Wisconsin drive over \$27B in sales, \$2.5B in wages, and almost 64K jobs. Multipliers for labor income and revenue are almost 1.7 and 1.6, respectively. The cooperative multiplier for jobs is estimated at 1.8. In addition, this total activity is estimated to generate almost \$653M in state and local revenue.

# Wisconsin Cooperatives: Sector Impacts

Cooperative impacts by sector present another view of cooperative activity in the state. These estimates include the multiplier effects that are derived from the direct economic activity of the cooperative business sectors summarized at the beginning of the report. These results are meant to provide some insight into the sector-specific impact that cooperatives have at the state level.

Sector	Jobs	Multipliers	
		Wages	Revenue
Grocery/Retail/Whsle	1.911	1.539	1.648
Ag Marketing/Farm Supply	1.183	1.328	1.958
Credit Unions	2.542	2.059	1.610
Mutuals	2.333	1.830	1.616
Utilities	3.573	1.819	1.357
All Other	1.936	1.429	1.822

## Agricultural Marketing, Manufacturing and Farm Supply

Cooperatives in this category included agricultural marketing, farm supply, dairy marketing and manufacturing, and livestock marketing, transportation, and services. This sector is estimated to generate \$764M in wages, over 19000 jobs, and almost \$18B in revenue.

Number of firms	
Cooperatives incorporated in Wisconsin	173
Cooperatives reporting (survey or supplemental data)	115
Response Rate	66%

Impact Type	Jobs	Wages (millions)	Revenue (millions)
Direct Effect	16,565	\$ 575.4	\$ 9,185.6
Indirect Effect	373	\$ 30.5	\$ 1,895.7
Induced Effect	2,654	\$ 158.2	\$ 6,907.1
<b>Total Effect</b>	<b>19,592</b>	<b>\$ 764.1</b>	<b>\$ 17,988.5</b>
<i>Multiplier</i>	<i>1.183</i>	<i>1.328</i>	<i>1.958</i>
Sales Taxes	\$ 10.0		
Property Taxes	\$ 13.2		
Income Taxes	\$ 11.9		
Other	\$ 5.6		
<b>Total S&amp;L Govt</b>	<b>\$ 40.7</b>		

## Mutual Insurance

Cooperatives in this category included all organizations registered with the Wisconsin Commissioner of Insurance that reported a mutual ownership structure. It is estimated that they drive almost 8K jobs, and generate almost \$372M in wages and over \$5.4B in revenue.

Number of firms	
Cooperatives incorporated in Wisconsin	92
Cooperatives reporting (survey or supplemental data)	92
Response Rate	100%

Impact Type	Jobs	Wages (millions)	Revenue (millions)
Direct Effect	3,342	\$ 203.1	\$ 3,344.0
Indirect Effect	2,043	\$ 90.6	\$ 1,019.8
Induced Effect	2,410	\$ 78.0	\$ 1,040.0
<b>Total Effect</b>	<b>7,795</b>	<b>\$ 371.7</b>	<b>\$ 5,403.7</b>
<i>Multiplier</i>	<i>2.333</i>	<i>1.830</i>	<i>1.616</i>
Sales Taxes	\$ 22.2		
Property Taxes	\$ 29.1		
Income Taxes	\$ 10.6		
Other	\$ 12.4		
<b>Total S&amp;L Govt</b>	<b>\$ 74.3</b>		

## Utilities

Cooperatives in this category included rural electric, distribution, telephone, and water utilities. They account for 7K jobs, and drive almost \$278M in wages and \$1.1B in revenue.

Number of firms	
Cooperatives incorporated in Wisconsin	45
Cooperatives reporting (survey or supplemental data)	41
Response Rate	91%

Impact Type	Jobs	Wages (millions)	Revenue (millions)
Direct Effect	1,979	\$ 152.7	\$ 842.0
Indirect Effect	2,489	\$ 67.3	\$ 152.9
Induced Effect	2,603	\$ 57.8	\$ 147.5
<b>Total Effect</b>	<b>7,071</b>	<b>\$ 277.8</b>	<b>\$ 1,142.4</b>
<i>Multipliers</i>	<i>3.573</i>	<i>1.819</i>	<i>1.357</i>
Sales Taxes	\$ 96.7		
Property Taxes	\$ 126.0		
Income Taxes	\$ 11.5		
Other	\$ 35.6		
<b>Total S&amp;L Govt</b>	<b>\$ 269.7</b>		

### Credit Unions

Cooperatives in this category included federally chartered credit unions headquartered in Wisconsin. They account for over 17K jobs, and generate almost \$793 in wages and almost \$2B in revenue.

Number of firms	
Cooperatives incorporated in Wisconsin	203
Cooperatives reporting (survey or supplemental data)	202
Response Rate	100%

Impact Type	Jobs	Wages (millions)	Revenue (millions)
Direct Effect	6,934	\$ 385.0	\$ 1,236.4
Indirect Effect	6,142	\$ 240.6	\$ 461.6
Induced Effect	4,553	\$ 167.0	\$ 292.2
<b>Total Effect</b>	<b>17,629</b>	<b>\$ 792.6</b>	<b>\$ 1,990.2</b>
<i>Multiplier</i>	<i>2.542</i>	<i>2.059</i>	<i>1.610</i>
Sales Taxes	\$ 27.8		
Property Taxes	\$ 36.6		
Income Taxes	\$ 20.0		
Other	\$ 25.2		
<b>Total S&amp;L Govt</b>	<b>\$ 109.6</b>		

### Grocery/Retail/Wholesale

Cooperatives in this category included retail including grocery, and business-to-business wholesale and services. They account for over 8K jobs, almost \$97M in wages, and over \$3.1B in revenue.

Number of firms	
Cooperatives incorporated in Wisconsin	129
Cooperatives reporting (survey or supplemental data)	69
Response Rate	53%

Impact Type	Jobs	Wages (millions)	Revenue (millions)
Direct Effect	4,477	\$ 63.0	\$ 1,906.4
Indirect Effect	1,456	\$ 13.7	\$ 449.1
Induced Effect	2,623	\$ 20.3	\$ 785.6
<b>Total Effect</b>	<b>8,556</b>	<b>\$ 96.9</b>	<b>\$ 3,141.0</b>
<i>Multiplier</i>	<i>1.911</i>	<i>1.539</i>	<i>1.648</i>
Sales Taxes	\$ 48.3		
Property Taxes	\$ 63.1		
Income Taxes	\$ 11.6		
Other	\$ 18.0		
<b>Total S&amp;L Govt</b>	<b>\$ 141.1</b>		



### All Other Sectors

Cooperatives in this category included transportation, healthcare, housing, and some membership associations that provided services. This very broad category accounts for close to 3K jobs, \$200M in wages, and almost \$1.3B in revenue.

Number of firms	
Wisconsin incorporated cooperatives	68
Cooperatives reporting (survey or supplemental data)	36
Response Rate	53%

Impact Type	Jobs	Wages (millions)	Revenue (millions)
Direct Effect	1,637	\$ 140.4	\$ 709.3
Indirect Effect	448	\$ 18.6	\$ 163.6
Induced Effect	1,084	\$ 41.6	\$ 419.7
<b>Total Effect</b>	<b>3,169</b>	<b>\$ 200.7</b>	<b>\$ 1,292.5</b>
<i>Multipliers</i>	<i>1.936</i>	<i>1.429</i>	<i>1.822</i>
Sales Taxes	\$ 4.1		
Property Taxes	\$ 5.4		
Income Taxes	\$ 4.8		
Other	\$ 2.7		
<b>Total S&amp;L Govt</b>	<b>\$ 17.1</b>		

# APPENDIX

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## Economic Impacts of Cooperative Firms in Wisconsin: Data Collection

### *Cooperative Census*

To analyze the economic impact of cooperatives on the Wisconsin state economy, cooperatives in the state needed to be identified, and basic data on sales, employment, and wages needed to be gathered for the analysis. However, there is no existing central source for this type of cooperative data. Thus the study's working definition of a cooperative needed to take into consideration the existence of accurate data sources for those organizations.

The Center adapted the methodology for identifying cooperatives for this study that it developed for compiling the Wisconsin Cooperative Directory in 2011<sup>6</sup>. Since incorporation of a business firm is a state-governed function, incorporation records are maintained by WI Department of Financial Institutions (<https://www.wdfi.org/corporations>). From this source, staff obtained the names and addresses of firms with principle offices in Wisconsin that were incorporated under one of two cooperative business statutes in the state, or as a state chartered credit unions.<sup>7</sup> Firms that had since gone out of business, or had an "In Bad Standing" status prior to the last five years, were omitted.

Mutual insurance companies were obtained from the Office of the Commissioner of Insurance. Firms with an ownership type listed as "mutual, with principal offices located in Wisconsin, were selected. <http://oci.wi.gov/>

Farm credit firms with headquarters in Wisconsin were taken from the US Farm Credit Administration. <http://www.fca.gov/apps/instit.nsf/Active%20Institutions%20Page?OpenPage>

The cooperative names obtained totaled 863. Because there was no known, readily accessible source for cooperative firms incorporated under another state's law but operating in Wisconsin, they were not included in this list. However, several exceptions were made to supplement data in the agricultural sector after the survey data was gathered, given the role of cooperatives in that sector, and in the Wisconsin state economy (see below).

This group of cooperative firms by definition also did not include entities that operate on a cooperative basis, but are incorporated under a different type of organizational statute. (See a discussion on this topic in the Report on the Economic Impact of Cooperatives <http://reic.uwcc.wisc.edu/issues/>)

### *Survey Instrument*

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<sup>6</sup> See "Defining the Cooperative", Research on the Economic Impact of Cooperatives, <http://reic.uwcc.wisc.edu/issues/>

<sup>7</sup> Cooperatives can incorporate under state statutes Chapter 185 and 193; credit unions can be state chartered under Chapter 186.

A survey instrument was developed to gather data required for a basic economic impact analysis using the IMPLAN model for Wisconsin: sales, wages and salaries, and number of jobs. Because some firms conducted business across state lines, the survey also instructed respondents to provide the percentage of wages and salaries, and sales transactions, occurring in Wisconsin.

So that results could be analyzed by member-owner type and economic sector, the survey gathered data on these characteristics, as well membership numbers.

The survey was tested on over 50 cooperatives that were chosen from the list of cooperatives at random and then adjusted to assure that a variety of sectors were represented. Each survey was mailed to the cooperative with a cover letter. Each survey was personalized with the cooperative firm's name and address, and a unique survey ID which linked to an online personalized version of the survey.

The surveys were personalized to help maintain naming consistency and future data matching issues (e.g. Cooperative v. Co-op). The unique survey ID was assigned so that the respondent could choose to respond online or by mail, which perhaps could boost response rate.

The surveys were mailed on May 23<sup>rd</sup>, 2012. A portion of non-respondents for whom email addresses could be located were sent a follow-up email on August 28. The email contained the personalized survey ID linking to an online personalized version of the survey.

The initial response rate to the pilot survey was 40%. Based on the results, several of the questions on the survey instrument were modified for clarity before mailing out to the full list of cooperatives in Wisconsin.

#### *Survey Rollout*

The personalized survey and cover letter were mailed out to the remaining Wisconsin cooperative firms on September 19. The list was further refined, omitting additional cooperatives that had gone out of business, had merged, or had incorrect address information. Non-respondents for whom email addresses could be found were sent a follow-up email with the personalized survey ID linking to an online personalized version of the survey. These emails were sent out several times beginning in mid-November. The online survey was closed on January 24, 2013.

#### *Survey Response*

A total of 863 surveys were distributed, with an initial unadjusted response rate of 32%. This list was subsequently refined to omit demutualized or co-ops in bad standing in 2007 or prior, however, which identified 794 active co-ops. Supplemental data from Hoovers business data, Cooperative Network, the Office of the Commissioner of Insurance, online annual reports and the [National Credit Union Administration](#) were used to supplement the survey data set. While not all supplemental sources provided all the data requested in the survey, some data for 453 co-ops were obtained, or 57% of the active 794 co-ops identified.

### *IMPLAN Data Set*

The survey response data set was further refined before it was used for the IMPLAN analysis. Categories were adjusted so that there would be an aggregated data set that could provide a more meaningful response, and duplicate reporting among associated cooperatives were eliminated. A total of 773 records were used for the analysis; 573, or 74%, included survey or appended data. Within categories, results were extrapolated to the non-respondents to provide the final results.



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Friday May 16, 2012

Dear Cooperative Leader,

As a member or employee of a Wisconsin cooperative, you participate in a unique part of our state's economy. Cooperatives are owned and operated to meet the needs of their member-owners, and can have significant impacts on state and local economies. These impacts are difficult to describe without current data on cooperative economic activity.

To enable reporting on cooperative economic impact, the University of Wisconsin Center for Cooperatives is conducting a survey of all firms incorporated as cooperatives in the state. We hope that you will take a few minutes to fill out the brief survey that is enclosed. You can also complete the survey online using the link provided on the survey.

Of course, all financial data that you provide about your cooperative will remain absolutely confidential. Data will be aggregated for reporting, and will not be identifiable by firm. We hope to have the report completed and published by the end of the summer, and will send you a copy.

The United Nations declared this year the International Year of Cooperatives, and our state has long been a national leader in the development and support of the cooperative business structure. This report will help mark the event by describing how cooperatives contribute to the economic well-being of Wisconsin.

Thank you for your participation. If you have any questions about the survey or the project, please don't hesitate to contact me.

With best regards,

Brent Hueth

# Economic Impact of Wisconsin Cooperative Businesses

## Conducted by the UW Center for Cooperatives

Please correct any inaccurate information. You may also go to <http://data.uwcc.wisc.edu/WISurvey2012> to fill in this form online. Use the Survey ID at the bottom right of this page.

<b>Name of Cooperative:</b> Dodge County Dairy Testing Association (Cooperative)		
<b>Headquarters Address:</b> Po Box 122 244 S Fairfield Ave	<b>City:</b> Juneau	<b>Zip:</b> 53039-0122
<b>Phone:</b>	<b>Website:</b>	

All answers will be kept strictly confidential.

Please use data from your most recently reported fiscal year to complete this survey.

**Enter the dates of fiscal year being used**.....

/	/
fiscal start (mm/yy) – fiscal end (mm/yy)	

**Membership:** Enter the total number of your co-op's members.....

(Note: A business, cooperative, or other organizational entity counts as one member.)

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

Enter the total number of part-time employees.....

**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.....

Enter percentage (%) of these sales transacted in WI.....

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

Enter percentage (%) of these wages and salaries paid to WI employees.....

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

continued on reverse

Survey ID: 3Psy

Answer the following questions about your cooperative's economic sector and membership.

<b>Please specify the economic sector(s) in which your cooperative conducts business:</b> (check all that apply)		
<input type="checkbox"/> Agricultural Marketing/Processing (except Dairy)	<input type="checkbox"/> Farm Credit	<input type="checkbox"/> Manufacturing
<input type="checkbox"/> Agricultural Services	<input type="checkbox"/> Forestry	<input type="checkbox"/> Mutual Insurance
<input type="checkbox"/> Agricultural Supply	<input type="checkbox"/> Grocery	<input type="checkbox"/> Telephone/Communications
<input type="checkbox"/> Biofuels	<input type="checkbox"/> Healthcare	<input type="checkbox"/> Transportation
<input type="checkbox"/> Credit Union	<input type="checkbox"/> Housing	<input type="checkbox"/> Utility Distribution
<input type="checkbox"/> Dairy Marketing/Processing	<input type="checkbox"/> Land Co-op	<input type="checkbox"/> Utility Generation
<input type="checkbox"/> Daycare/Eldercare	<input type="checkbox"/> Other (please specify) _____	<input type="checkbox"/> Wholesale/Retail (except Grocery)
<b>Who are your member-owners?</b> (check all that apply)		
<input type="checkbox"/> Non-cooperative businesses	<input type="checkbox"/> Cooperative businesses	<input type="checkbox"/> Farmers or farm operations
<input type="checkbox"/> Other (please specify) _____	<input type="checkbox"/> Non-farm individuals	<input type="checkbox"/> Workers/employees
<b>If not a worker cooperative, do your member-owners primarily use your co-op's goods and services:</b> (choose one)		
<input type="checkbox"/> For personal use?	<input type="checkbox"/> To support their business activities?	
<b>If not a worker cooperative, does your cooperative:</b> (check all that apply)		
<input type="checkbox"/> Buy goods or services for (and then sell to) your members?	<input type="checkbox"/> Sell goods or services for (or on behalf of) your 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"/> Other (please specify) _____		

Please provide your name and contact information in case we need to contact you with follow-up questions or to clarify an answer. Feel free to share any comments you have about the survey or additional information. Thank you.

<b>Name:</b>	<b>Email:</b>	<b>Phone:</b>
<b>Comments:</b>		

If you have any further comments or questions please contact Michael Chronister at (608) 262-3382 or mjchroni@wisc.edu

Survey ID: 3Psy