

# The Contribution of Agriculture to Wisconsin County Economies

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## The Contribution of Agriculture to Wisconsin County Economies

Why did we undertake this project?

- Provides a mechanism to have a conversation at the county level about the role of agriculture in the economy.
- Provides basic information to help inform state and local economic growth and development policies.



# The Contribution of Agriculture to Wisconsin County Economies

**AGRICULTURE & NATURAL RESOURCES UNIVERSITY OF WISCONSIN-EXTENSION**

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**Economic Impact of Agriculture in Wisconsin**

Wisconsin's farms and agricultural businesses generate more than \$22.5 billion in economic activity and provide jobs for 233,021 people. This research from University of Wisconsin-Madison and UW-Extension shows how important agriculture is to the state's economy.

**Economic Impact Report:**  
Agriculture is a powerful economic force in Wisconsin. This study by Steve Deller, University of Wisconsin-Madison professor of agricultural economics and UW-Extension community development specialist, and Dana Williams, UW-Extension associate professor and assistant program leader for Agriculture and Natural Resources, measures agriculture's contribution to the state's economy.

**Wisconsin's Agricultural Resources**  
By Steven C. Deller and Dana Williams | August 10, 2011 | 11 pages

**2011 Economic Impact of Agriculture in Wisconsin Counties**  
The new study by Steve Deller, University of Wisconsin-Madison professor of agricultural economics and UW-Extension community development specialist, and Dana Williams, UW-Extension associate professor and assistant program leader for Agriculture and Natural Resources, measures agriculture's contribution to the economy in each of Wisconsin's counties.

**The Economic Impact of Agriculture in Wisconsin Counties**  
By Steven C. Deller and Dana Williams | August 10, 2011

**NOTE:** This version was generated on April 20, 2011 to reflect the following updates:

- The map titled "Agricultural Impacts on Income (02) previously showed Portage County as the top county for income (02) and is incorrect. The number has been corrected in Table 2 on page 17 and the map reflects that change.
- Three corrections were made to Table 2 on pages 10-17:  
(1) Crawford County: the percent of income was changed from 2.2 to 2.0  
(2) Grant County: the percent of income was changed from 1.2 to 2.1  
(3) Portage County: income (02) was changed from 2,507 to 2,523.

**NOTE:** County Impact Report 6.

What's the economic impact of agriculture in your county? County reports from the research will appear here as they are completed. Reports are posted as PDF.

County	Location	Area	Estimate	Range	Estimate
Ashland	Dodgeville	Square Miles	242	100-385	100-385
Barron	Wausau	Square Miles	450	300-600	300-600
Bay	Dodgeville	Square Miles	120	50-200	50-200
Beech	Stoughton	Square Miles	210	100-300	100-300
Berlin	Stoughton	Square Miles	140	70-210	70-210
Boscawen	Wausau	Square Miles	540	350-750	350-750
Bushong	Wausau	Square Miles	280	150-450	150-450
Calumet	Stoughton	Square Miles	180	90-270	90-270
Chippewa	Stoughton	Square Miles	180	90-270	90-270
Clark	Stoughton	Square Miles	120	60-180	60-180
Clinton	Stoughton	Square Miles	150	75-225	75-225
Crawford	Stoughton	Square Miles	220	110-330	110-330
Dane	Madison	Square Miles	1,250	600-1,500	600-1,500
Delafield	Stoughton	Square Miles	140	70-210	70-210
Dodge	Dodgeville	Square Miles	480	240-960	240-960

**Home, Politics**

Read the [2011 Report](#) about economic impacts of agriculture in Wisconsin Counties. (March 2011)  
Read the [2010 Report](#) (PDF), summarizing the findings of the Wisconsin and the Agricultural Economy study. (July 2010)

2004 Economic Impact report:  
Contact material relating to the 2004 Economic Impact Report. Including County Impact Reports can be found [here](#).

**UW Extension**  
Wisconsin's state-of-the-art university of Wisconsin system, using business as the driver of progressive education at university of Wisconsin-Extension.  
For more information, questions and comments, or to join this exciting research project, report the information in an electronic format or visit to register at Wisconsin Extension Extension at a meeting, contact the county program area office at your nearest extension office.

**Horticulture contributes to Adams County diversity**  
Adams County sales of Christmas trees, fruits and vegetables, greenhouse, nursery and floriculture products add up to \$52.1 million. Landscape, grounds maintenance and tree-care businesses create additional full-time jobs and many seasonal jobs.

**Direct-marketing sales add \$67,000 to economy**  
More and more Adams County farmers sell directly to consumers through roadside stands, farmers' markets, auctions, pick-your-own operations and community supported agriculture (CSA). In all, 29 farms generate \$67,000 in direct-marketing sales.

**Farmers are stewards of 28% of the county's land**  
Adams County farmers own and manage 115,343 acres, or 28 percent, of the county's land. This includes cropland, pasture, tree farms, farm forests and wetlands. As stewards of the land, farmers use conservation practices, such as crop rotation, nutrient management and integrated pest management, to protect environmental resources and provide habitat for wildlife.

**UW Extension Cooperative Extension**

**Produced in 2011 by:**  
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**Economic data (2008) provided by:**  
Steven C. Deller, professor of agricultural and applied economics, College of Agricultural and Life Sciences, University of Wisconsin-Madison; and community development specialist, University of Wisconsin-Extension, Cooperative Extension.

**Other economic data from:**  
USDA 2007 Census of Agriculture

For more information, contact:  
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**2011 AGRICULTURE – WORKING EVERY DAY FOR WISCONSIN**

**Adams County Agriculture: Value & Economic Impact**

**Agriculture works hard for Adams County every day. Family-owned farms, food processors and agriculture-related businesses generate thousands of jobs and millions of dollars of economic activity while contributing to local income and tax revenues.**

Adams County is part of the Central Sands region of Wisconsin. Flat topography, sandy soils and abundant groundwater combine to make irrigated vegetable production the major agricultural enterprise. Adams County consistently ranks among the top five Wisconsin counties in the production of potatoes, sweet corn and snap beans. Nearly half the harvested cropland in Adams County is irrigated.

Adams County has 408 farms, 1 percent fewer than in 2002, with an average size of 283 acres.

**How important is agriculture?**

- Agriculture provides 1,195 jobs in Adams County.
- Agriculture accounts for \$196 million in business sales.
- Agriculture contributes about \$72 million to county income.
- Agriculture pays about \$7 million in taxes.

**Who owns the farms?**

Ownership Type	Percentage
Individuals or families	85.3%
Family corporations	4.2%
Family partnerships	8.1%
Non-family corporations and other	2.4%

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## The Contribution of Agriculture to Wisconsin County Economies

Three parts to today's presentation:

1. Overview of agricultural trends relative to the Wisconsin economy.
2. What are the Wisconsin "agricultural clusters"?
3. What are the patterns across Wisconsin counties?



## The Contribution of Agriculture to Wisconsin County Economies

The contributions of agriculture to the Wisconsin economy were documented in 2009 (2007 data)

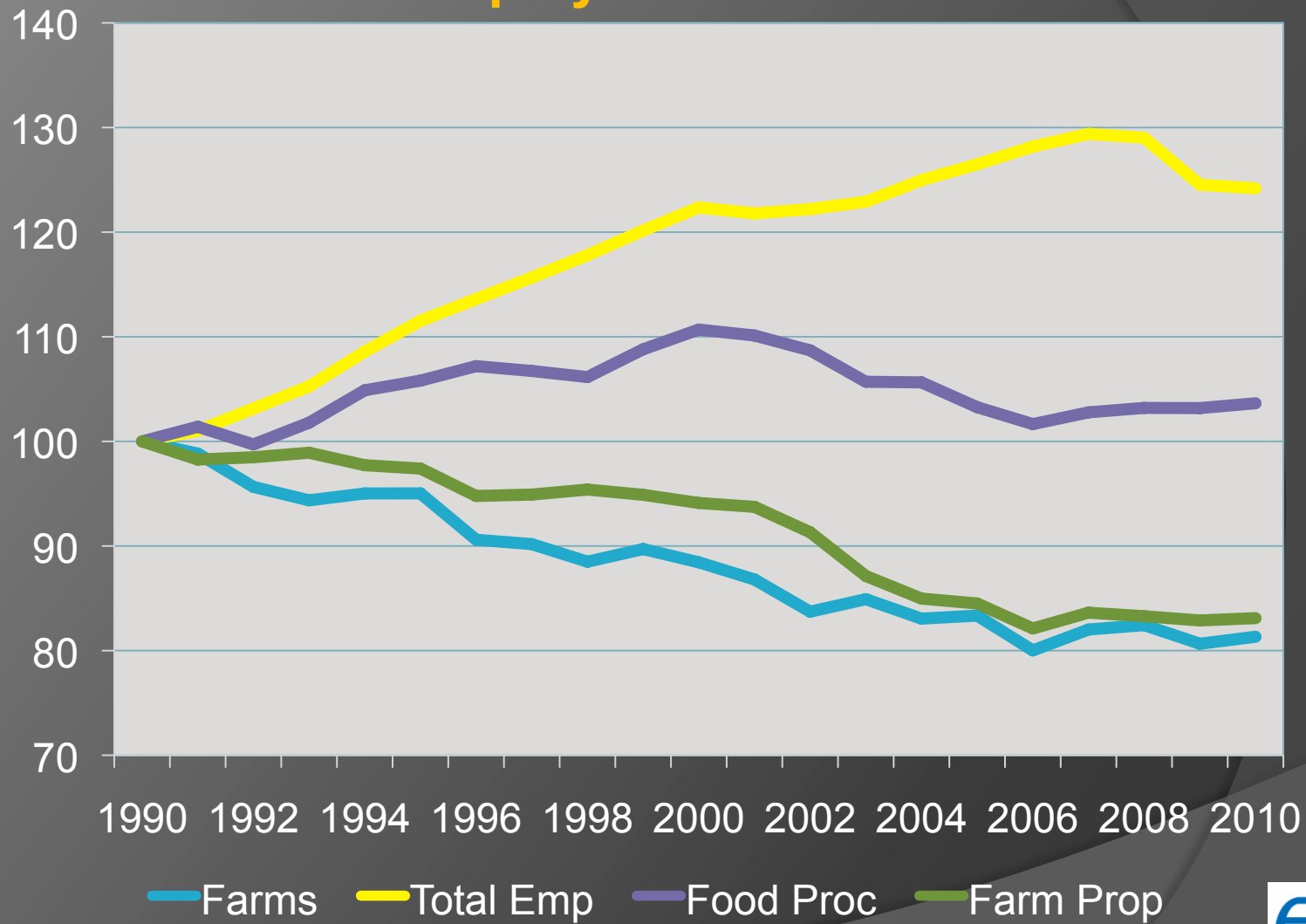
- 353,991 jobs (10% of total employment)
- \$59.16 billion in total business sales (12.5 %)
- \$20.2 billion of total income (about 9%)

Note: Agriculture is defined to include on-farm production and food processing



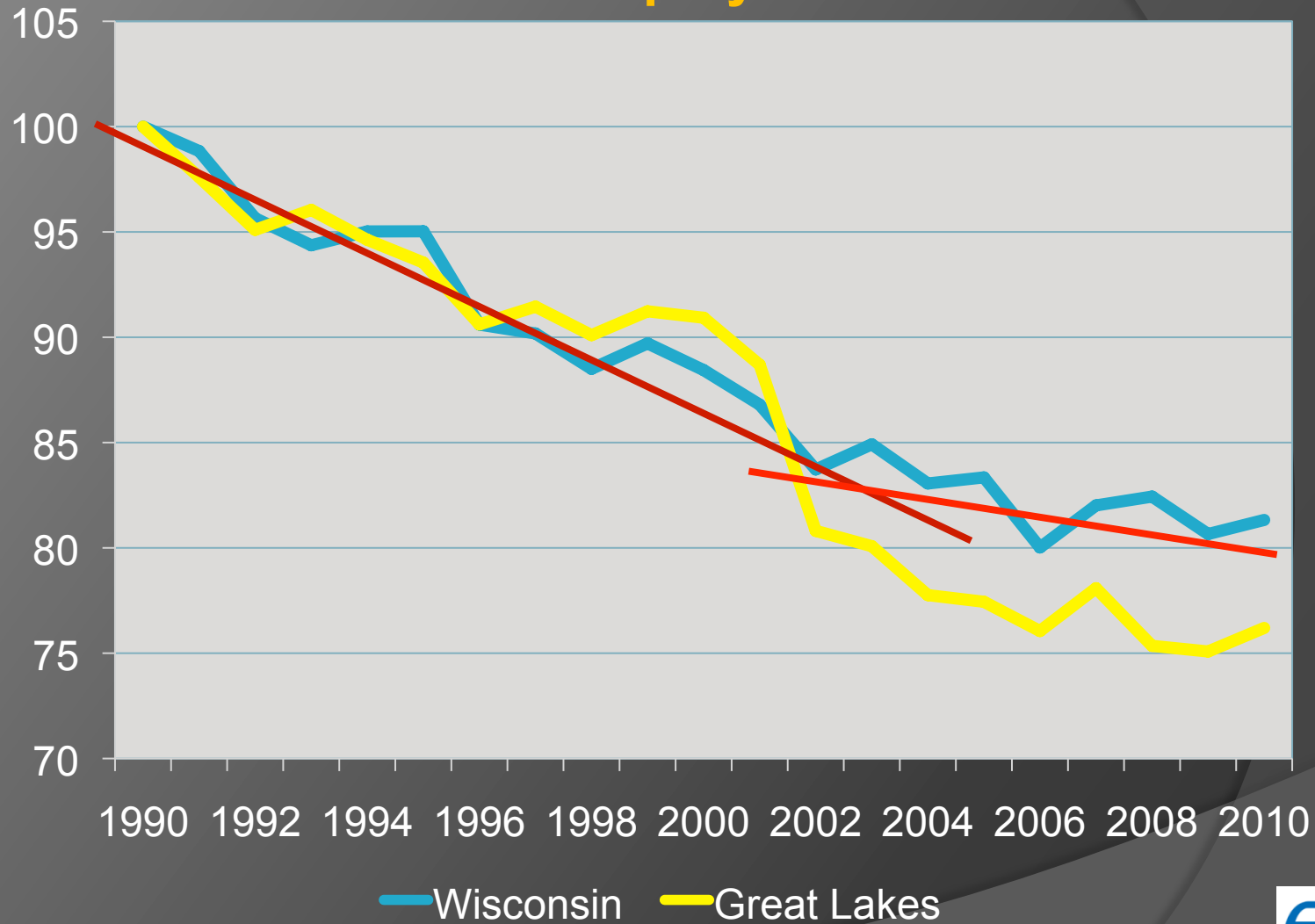
# The Contribution of Agriculture to Wisconsin County Economies

## Wisconsin Employment Growth



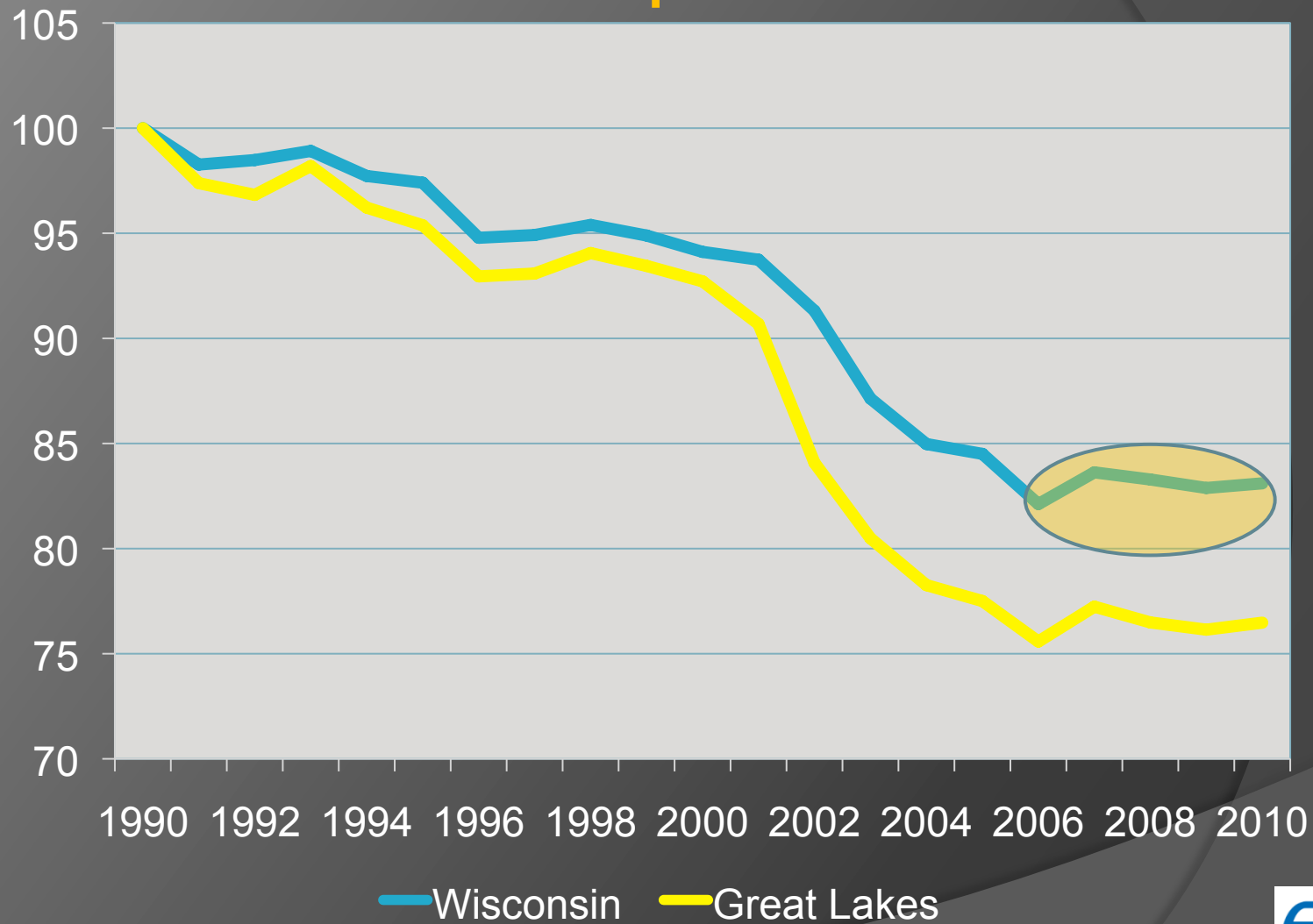
# The Contribution of Agriculture to Wisconsin County Economies

## Wisconsin Farm Employment Growth



# The Contribution of Agriculture to Wisconsin County Economies

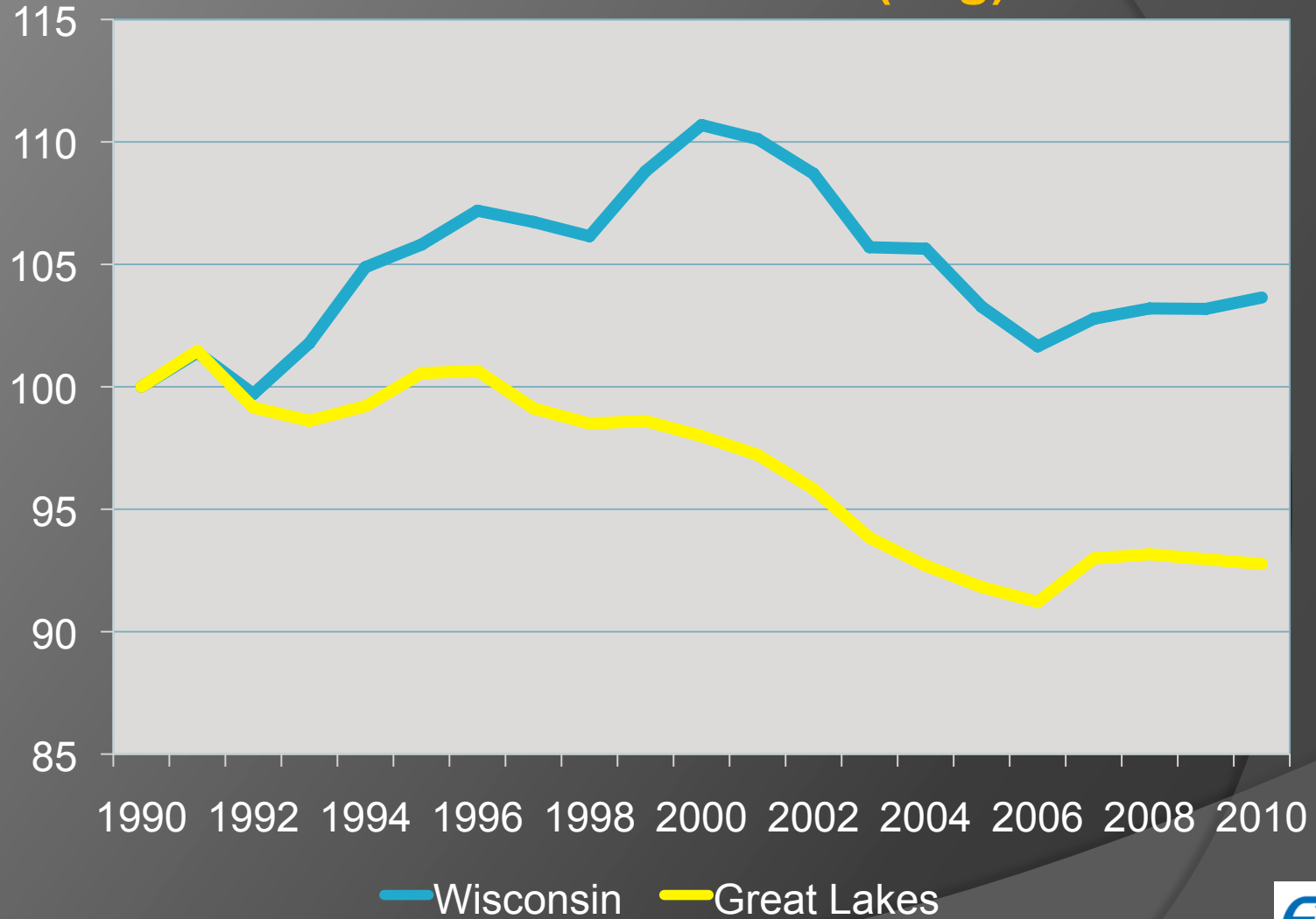
## Wisconsin Farm Proprietors Growth





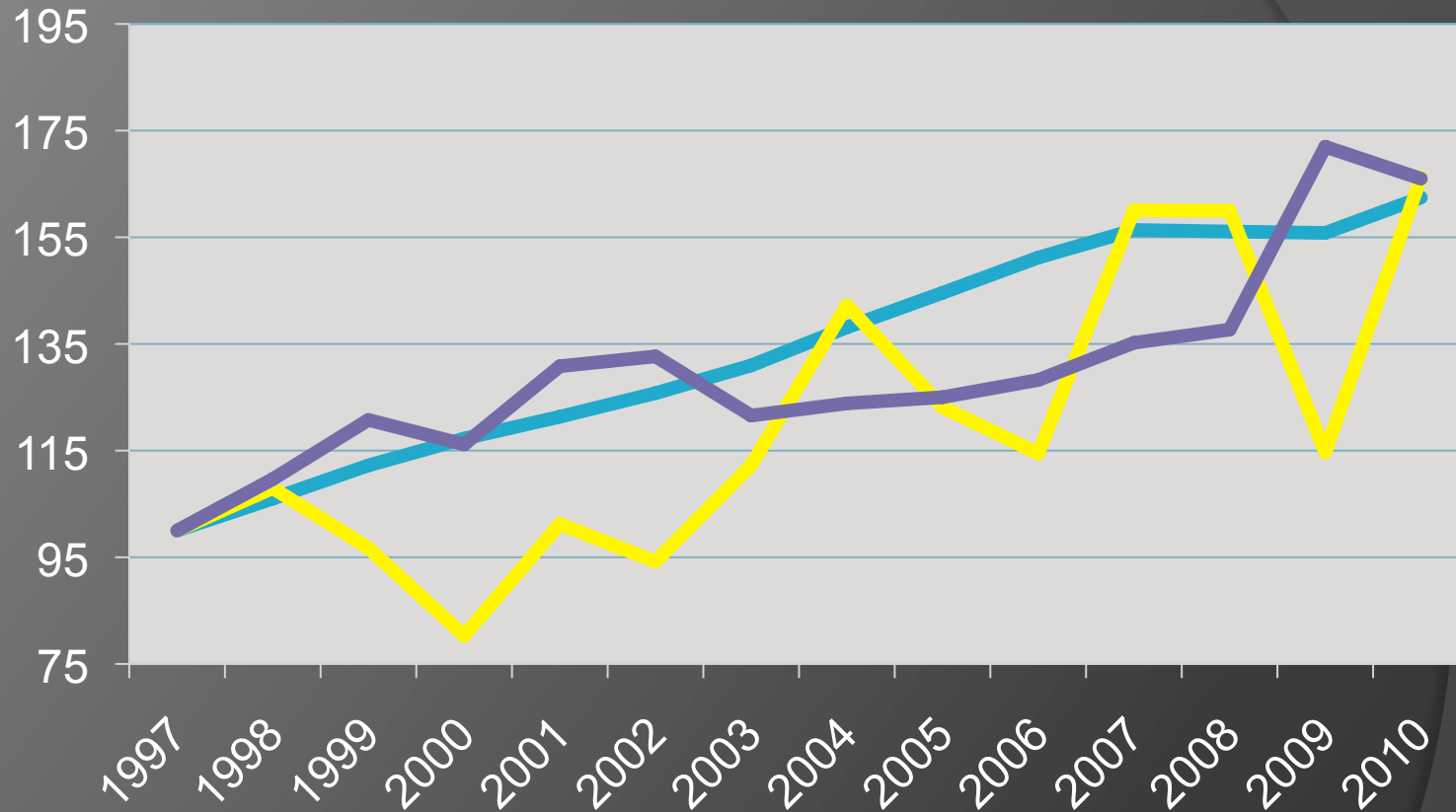
# The Contribution of Agriculture to Wisconsin County Economies

## Wisconsin Food Processors (Mfg) Growth



# The Contribution of Agriculture to Wisconsin County Economies

## Wisconsin Gross State Product Growth

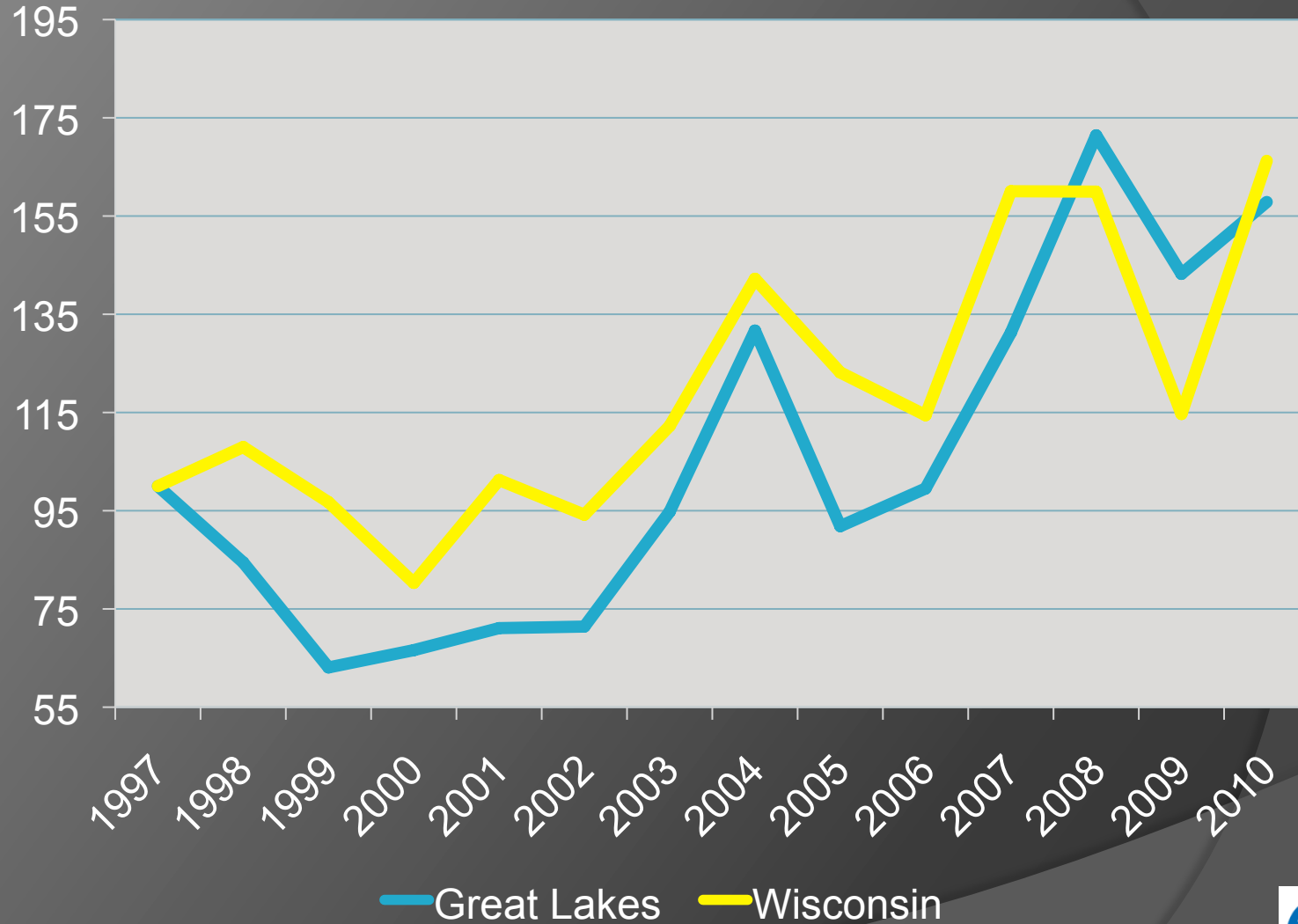


- All industry total
- Crop and animal production (Farms)
- Food and beverage and tobacco product manufacturing



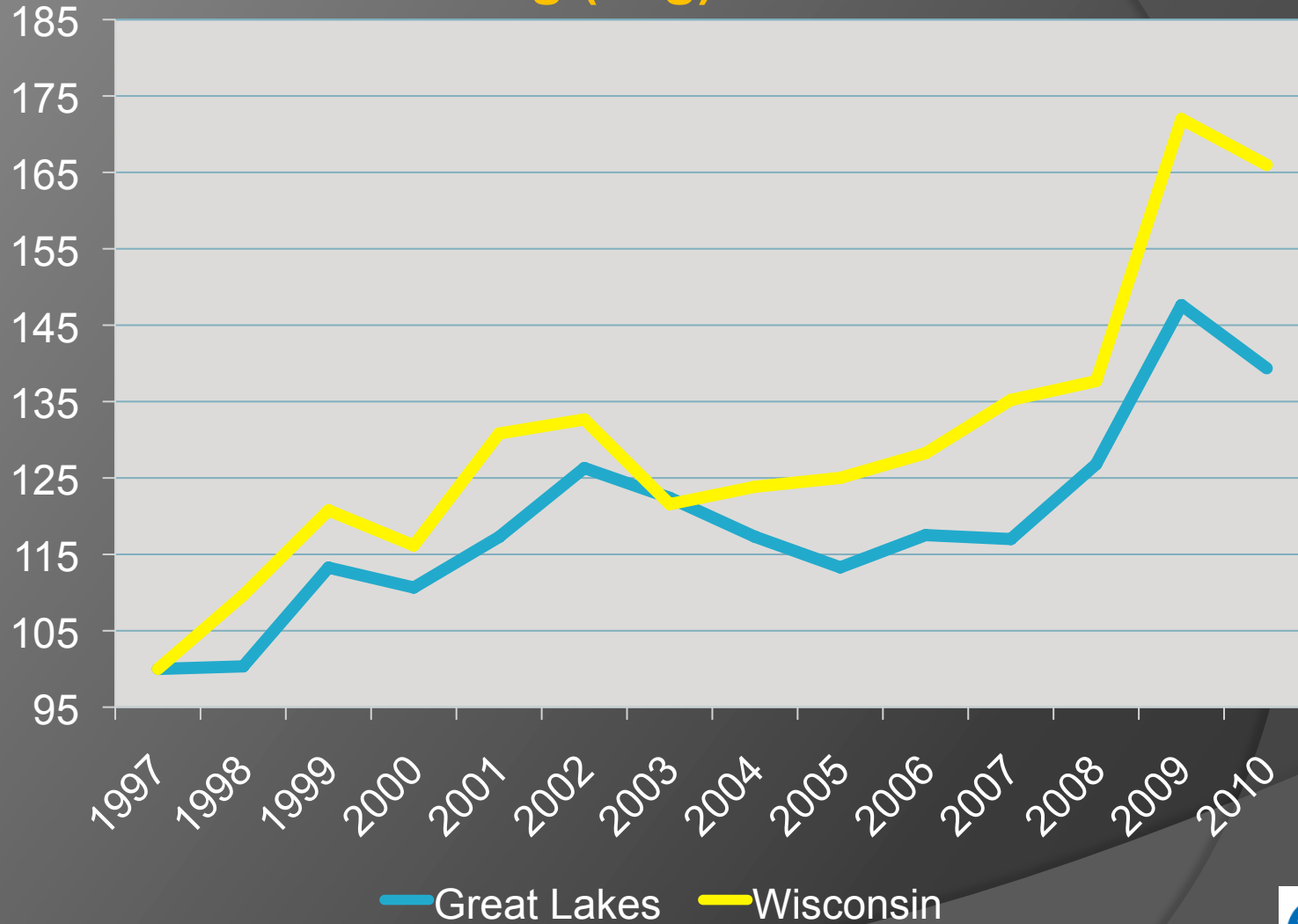
# The Contribution of Agriculture to Wisconsin County Economies

## Farm Gross State Product Growth



# The Contribution of Agriculture to Wisconsin County Economies

## Food Processing (Mfg) State Product Growth



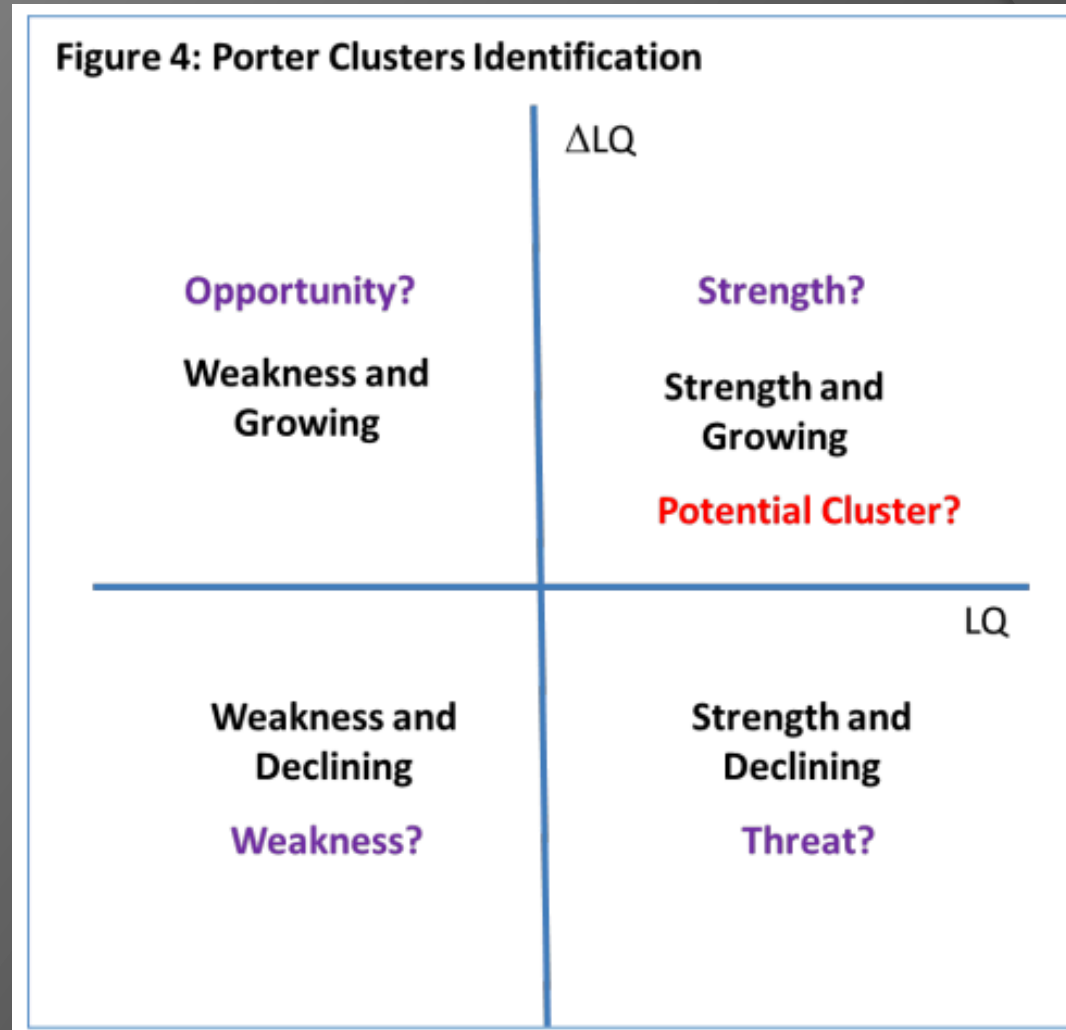
## The Contribution of Agriculture to Wisconsin County Economies

Trends show recent stability in farm and food processing employment

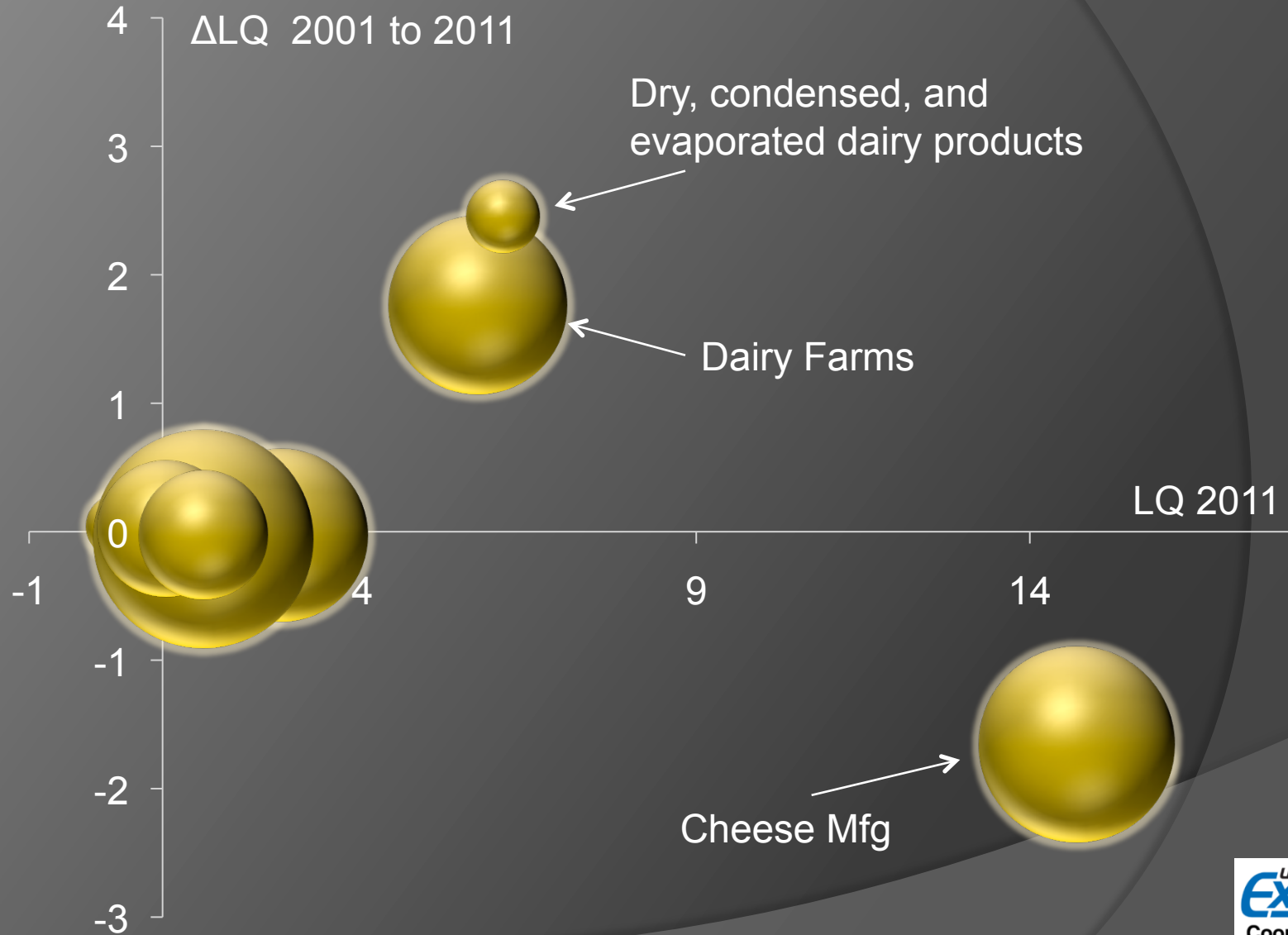
- Advances in technology have allowed farmers and food processors to gain significant cost savings independent of scale
- Many advances from labor-saving technologies
- Trends suggest that agriculture is not a declining industry, but that it is becoming less labor intensive – modest cushion during recession
- What role does the local food movement play into these patterns?

# The Contribution of Agriculture to Wisconsin County Economies

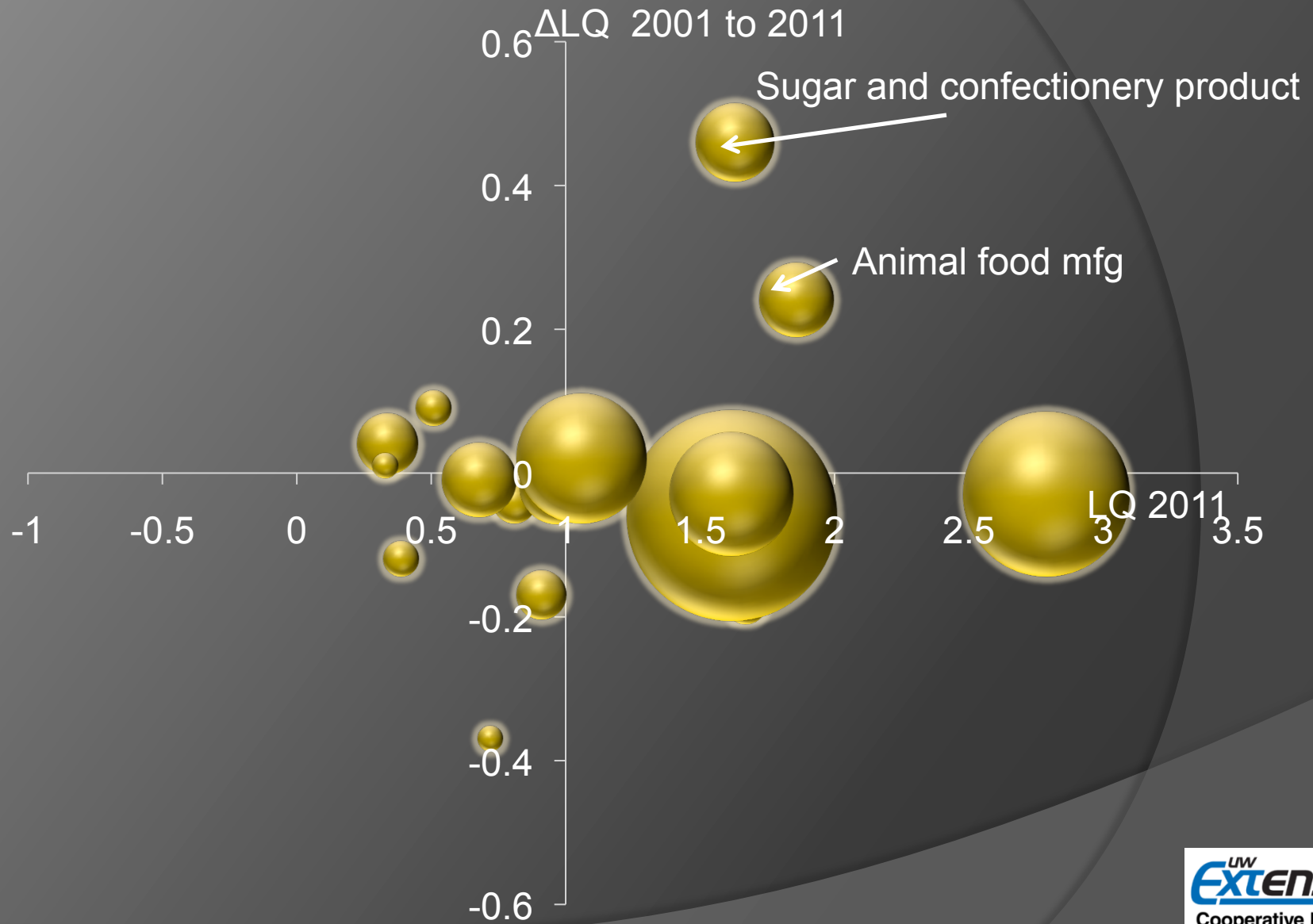
Figure 4: Porter Clusters Identification



# The Contribution of Agriculture to Wisconsin County Economies



# The Contribution of Agriculture to Wisconsin County Economies





## The Contribution of Agriculture to Wisconsin County Economies

	LQ 2011	Change In LQ 2001-2011	Share of State Employment
<b>Strength and Growing</b>			
Dairy cattle and milk production	6.11	2.45	0.08%
Vegetable and melon farming	5.73	1.76	0.48%
Grain and oilseed milling	1.86	0.24	0.09%
Hog and pig farming	1.63	0.46	0.10%
Animal food manufacturing	1.06	0.02	0.28%
<b>Strength and Declining</b>			
Creamery butter manufacturing	15.78	-1.79	0.03%
Poultry and egg production	14.71	-1.66	0.58%
Cheese manufacturing	2.79	-0.03	0.45%
Bakeries and tortilla manufacturing	1.67	-0.18	0.03%
Animal slaughtering and processing	1.62	-0.06	0.73%
Fruit and tree nut farming	1.62	-0.03	0.25%
<b>Weakness but Growing</b>			
Sugar and confectionery product manufacturing	0.51	0.09	0.02%
Greenhouse and nursery production	0.34	0.04	0.06%
Other food manufacturing	0.33	0.01	0.01%
Dry, condensed, and evaporated dairy products	0.12	0.07	0.00%
<b>Weakness and Declining</b>			
Ice cream and frozen dessert manufacturing	0.97	-0.02	0.09%
Fluid milk manufacturing	0.91	-0.17	0.04%
Oilseed and grain farming	0.81	-0.04	0.03%
Other animal production	0.72	-0.37	0.01%
Fruit and vegetable preserving and specialty	0.68	-0.01	0.09%
Seafood product preparation and packaging	0.39	-0.12	0.02%

## The Contribution of Agriculture to Wisconsin County Economies

### Methodology

- Using input-output analysis small changes in one part of the economy can be tracked through the entire economy
- For example, the expansion of dairy farms (or food processor) in the local economy introduces new or additional levels of spending in the local economy
  - Direct, indirect and induced impacts



## The Contribution of Agriculture to Wisconsin County Economies

For the analysis of county level economic impacts, IMPLAN (Impact analysis for PLANning) was used

- Minnesota IMPLAN Group provides detailed data bases that include county level data (2008 data)
- Databases include 19 on-farm sectors and 33 agricultural processing sectors
- Data comes from BEA-REIS, County Business Patterns and the Economic Censuses (including the Census of Agriculture)



## The Contribution of Agriculture to Wisconsin County Economies

### County Ag Economic Impacts - Broad Conclusions

1. In some, mostly larger, more urban counties, impacts (jobs, business sales and income) are large but as a percentage of the entire county economy, not as large as many more rural counties
2. In many, more rural counties economic impacts may or not be large, but as a percentage of the local county economy they are large



## The Contribution of Agriculture to Wisconsin County Economies

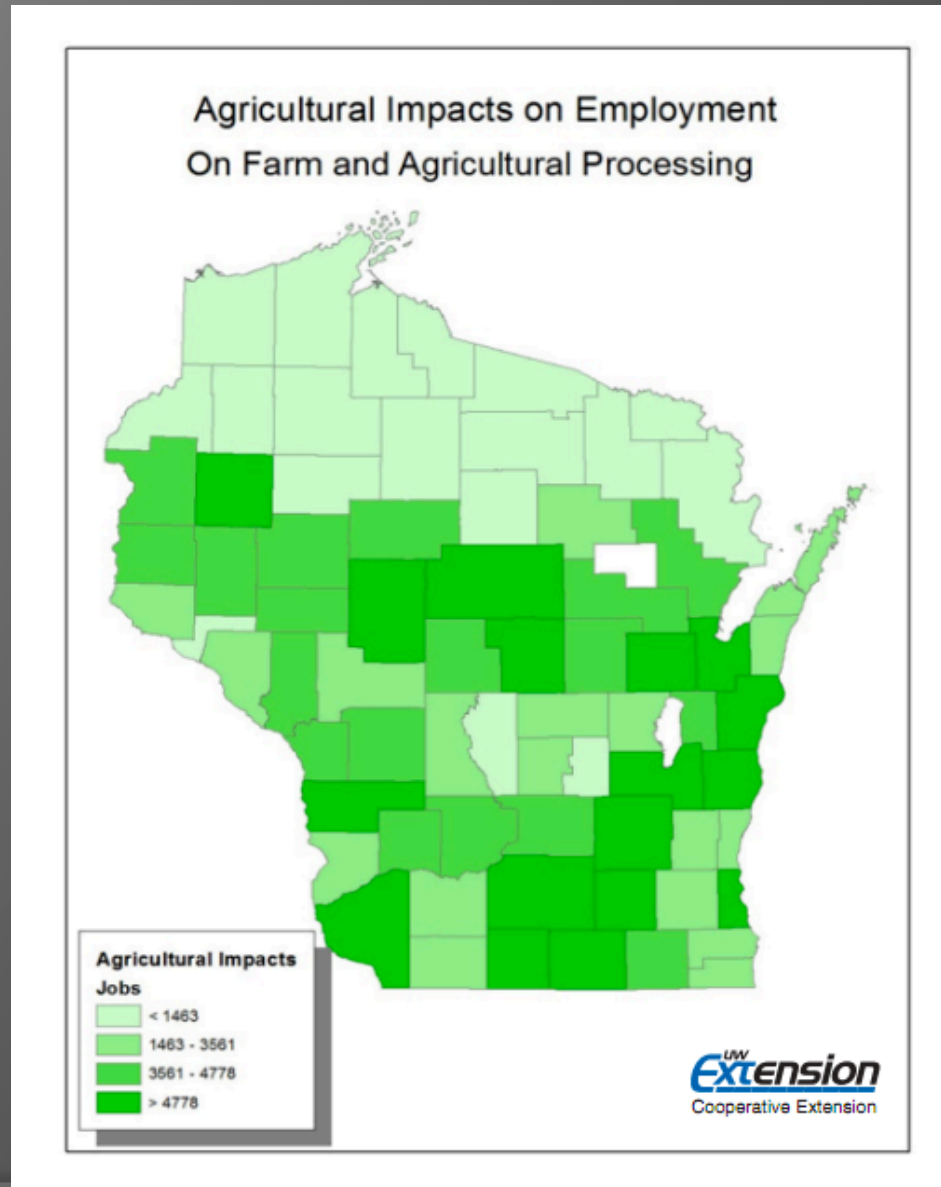
### County Ag Economic Impacts - Broad Conclusions

#### Food Processing is Very Important!

- Dairy (cheese, yogurt, fluid milk, evaporated milk, cheese packaging, etc.)
- Meat (slaughtering and processing)
- Bakeries
- Breweries
- Vegetables (beans, corn, peas, etc.)
- Fruit (cranberry, cherry, apple, etc.)




# The Contribution of Agriculture to Wisconsin County Economies



## The Contribution of Agriculture to Wisconsin County Economies

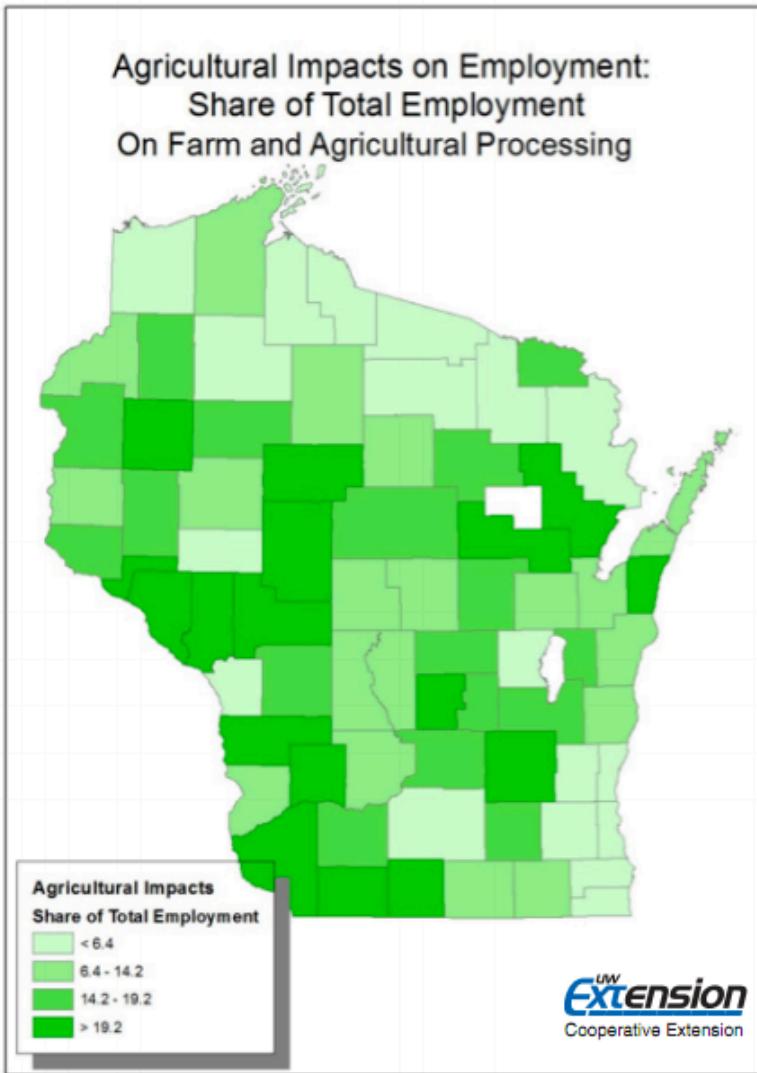
### Top 10 Counties 2008

	County	 Jobs	Percent of all Jobs
1.	Brown	21,037	11.6
2.	Dane	16,766	4.4
3.	Milwaukee	14,228	2.2
4.	Marathon	13,266	14.9
5.	Outagamie	11,592	9.3
6.	Dodge	9,608	20.0
7.	Jefferson	8,732	18.1
8.	Fond du Lac	8,691	14.7
9.	Barron	8,231	28.6
10.	Sheboygan	8,137	10.8



# The Contribution of Agriculture to Wisconsin County Economies


Agricultural Impacts on Employment:  
Share of Total Employment  
On Farm and Agricultural Processing





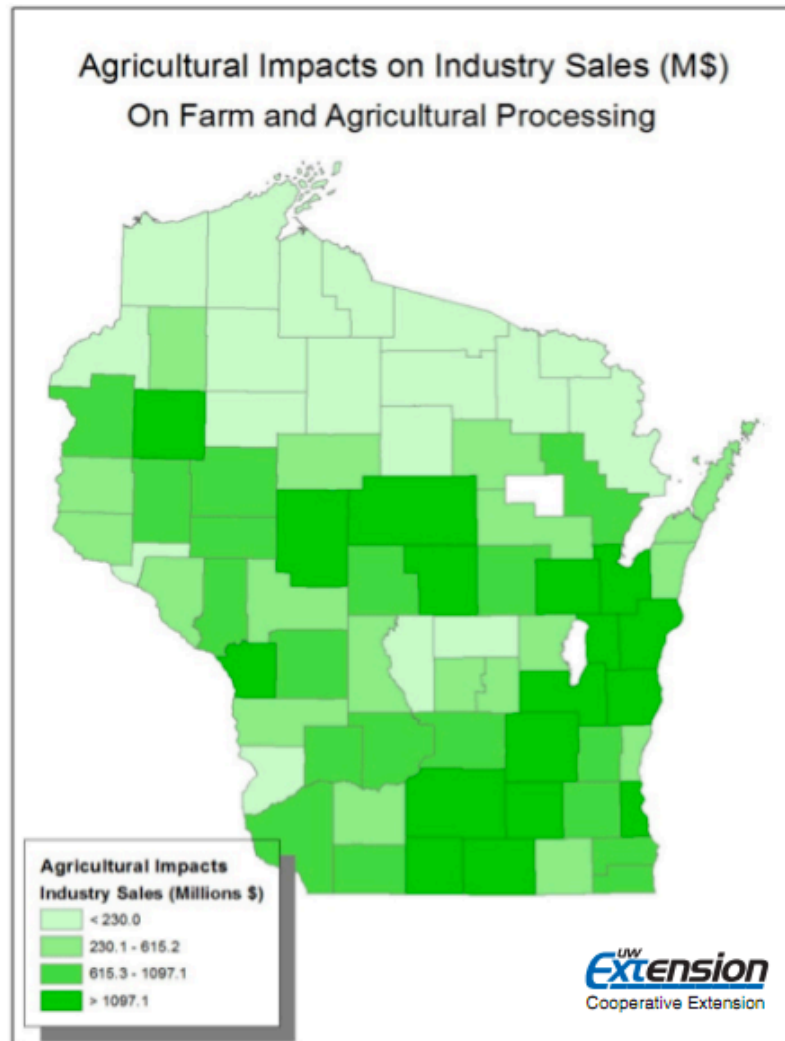
## The Contribution of Agriculture to Wisconsin County Economies

### Top 10 Counties 2008

	County	Jobs	Percent of all Jobs
1.	Lafayette	3,561	54.2 
2.	Clark	7,697	45.5
3.	Richland	3,699	41.0
4.	Vernon	5,371	37.0
5.	Buffalo	3,045	36.1
6.	Marquette	1,935	34.9
7.	Taylor	3,744	33.1
8.	Pepin	1,035	31.7
9.	Oconto	3,997	30.1
10.	Trempealeau	4,778	28.3



# The Contribution of Agriculture to Wisconsin County Economies



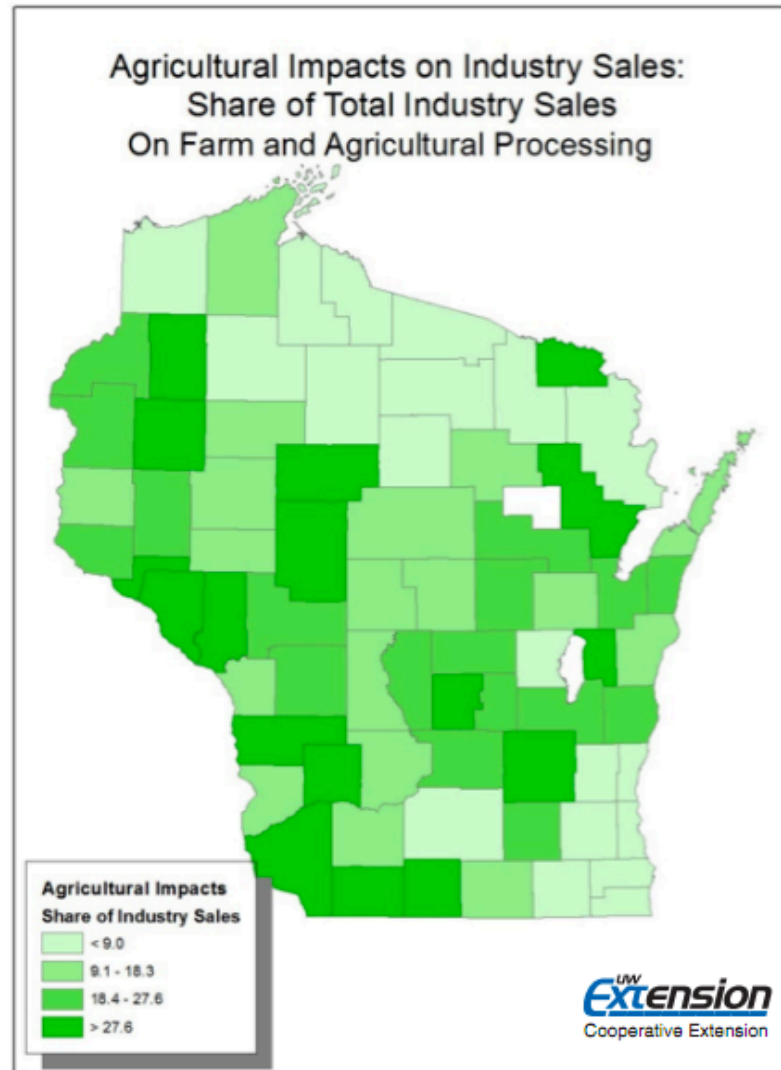
## The Contribution of Agriculture to Wisconsin County Economies

### Top 10 Counties 2008

	County	Industrial Sales (M\$)	Share of Total Industry Sales (%)
1.	Milwaukee	6,031.79	6.4
2.	Brown	5,711.49	20.4
3.	Dane	3,450.50	6.6
4.	Sheboygan	3,151.69	23.7
5.	Outagamie	2,797.48	13.8
6.	Marathon	2,411.10	17.6
7.	Dodge	2,317.14	32.4
8.	Fond du Lac	2,305.81	21.6
9.	Jefferson	2,141.12	27.0
10.	Clark	1,546.52	63.1





# The Contribution of Agriculture to Wisconsin County Economies



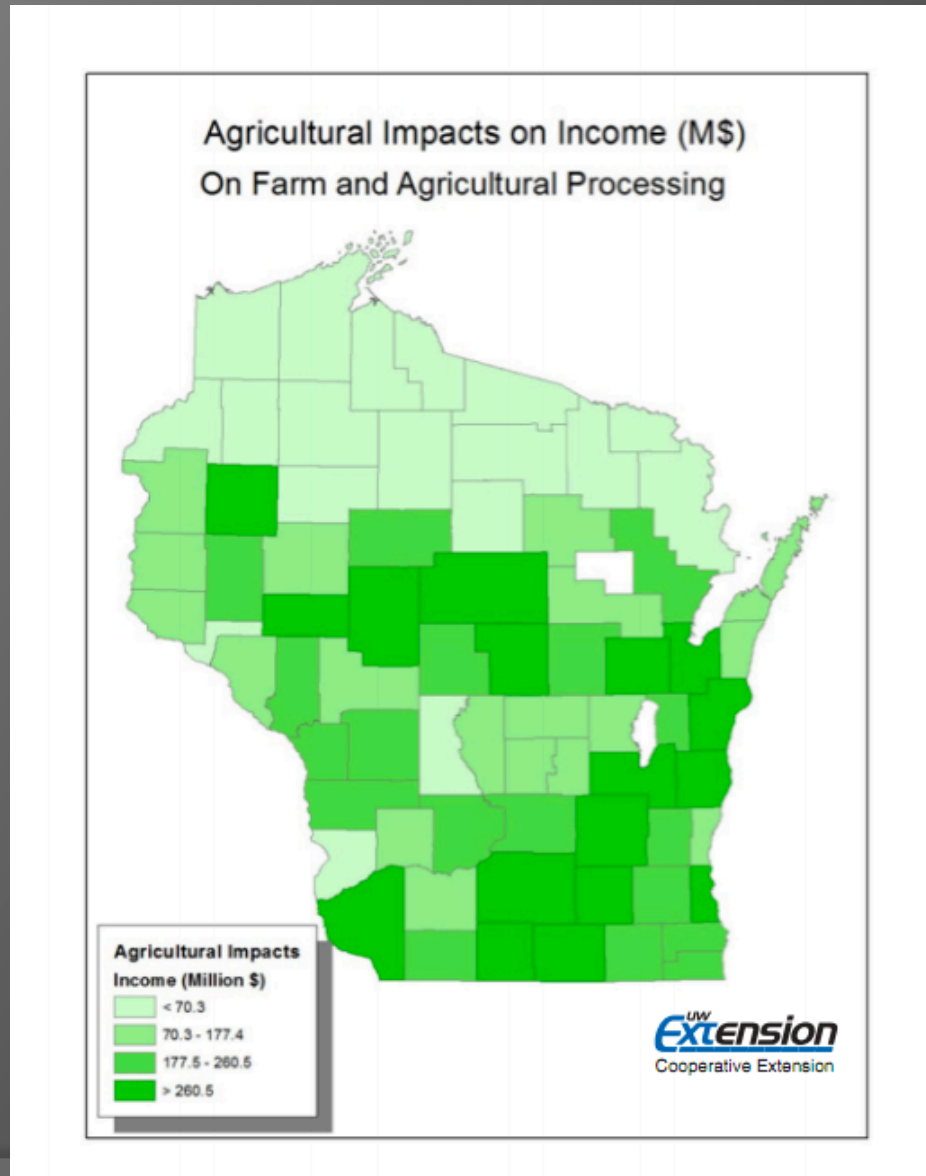
# The Contribution of Agriculture to Wisconsin County Economies

## Top 10 Counties 2008

	County	Industrial Sales (\$M)	Share of Total Industrial Sales (%)
1.	Lafayette	840.61	85.3 
2.	Clark	1,546.52	63.1 
3.	Marquette	356.68	52.0
4.	Buffalo	527.64	48.7
5.	Richland	774.29	48.6
6.	Pepin	165.64	44.8
7.	Oconto	788.21	44.6
8.	Taylor	615.22	43.5
9.	Green	1,386.66	41.1
10.	Vernon	575.81	38.9




# The Contribution of Agriculture to Wisconsin County Economies



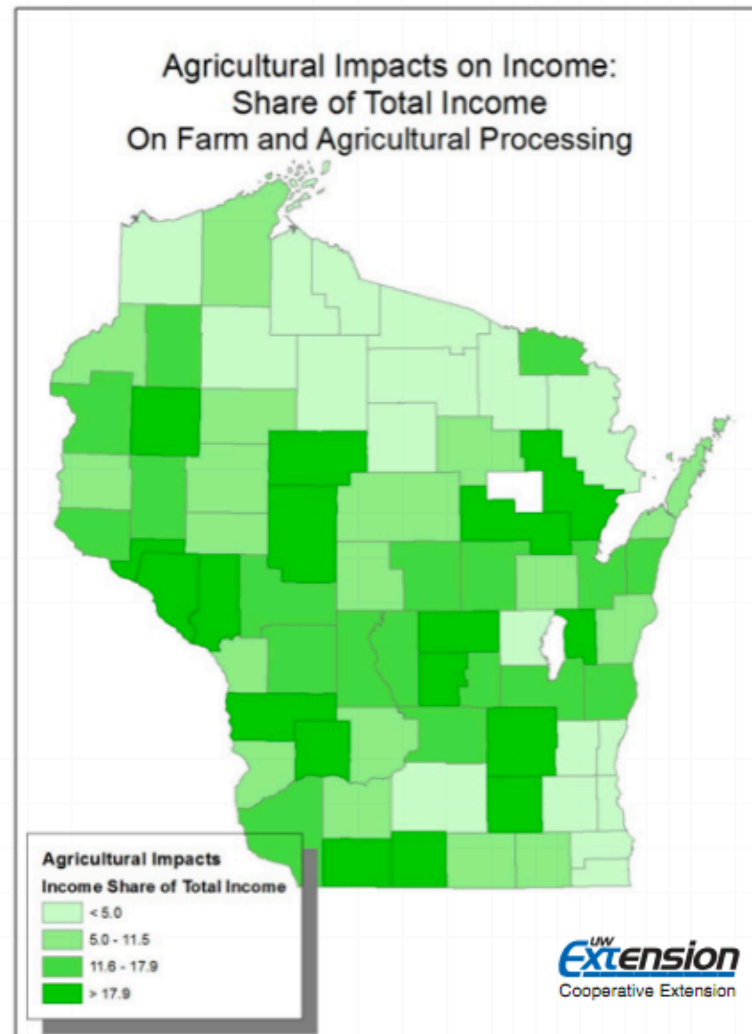
## The Contribution of Agriculture to Wisconsin County Economies

### Top 10 Counties 2008

	County	Income (M\$)	Share of Total Income (%)
1.	Brown	 1,557.50	11.8
2.	Milwaukee	1,389.83	2.9
3.	Dane	1,205.66	4.2
4.	Outagamie	704.55	7.8
5.	Marathon	629.60	11.0
6.	Sheboygan	596.77	11.6
7.	Fond du Lac	576.44	14.4
8.	Jefferson	563.87	18.3
9.	Dodge	558.72	19.7
10.	Rock	444.58	7.5



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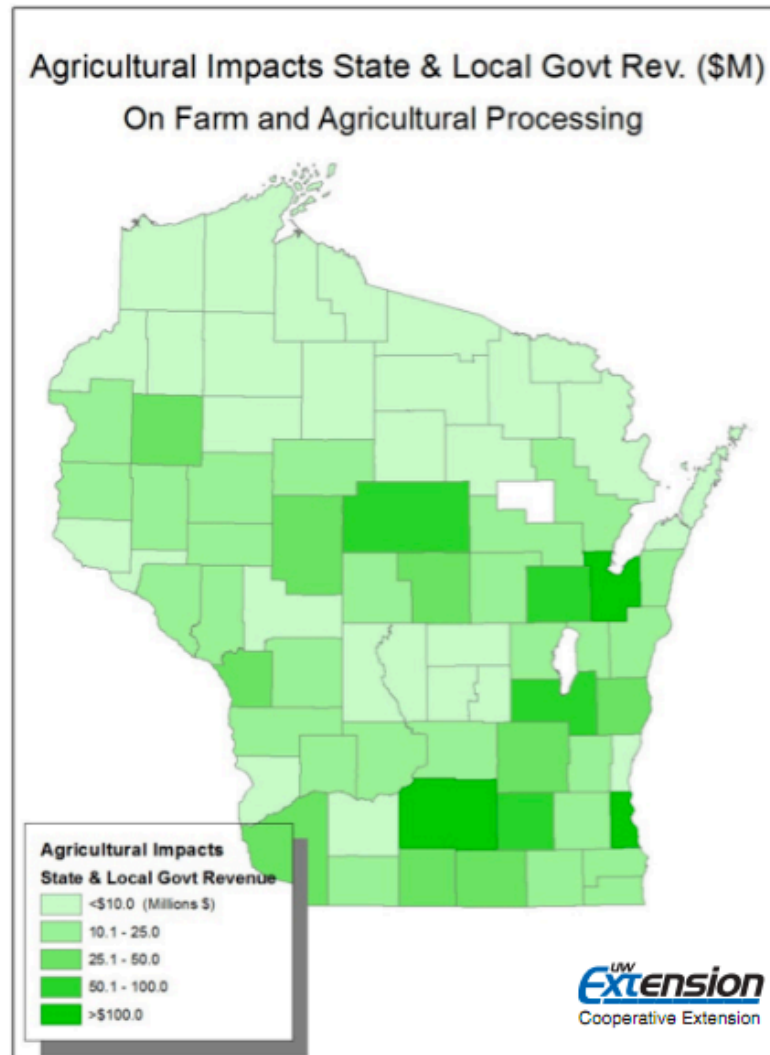
## The Contribution of Agriculture to Wisconsin County Economies

### Top 10 Counties 2008

	County	Income (\$M)	Share of Total Income (%)
1.	Lafayette	214.61	62.6
2.	Clark	403.52	47.2
3.	Marquette	107.49	39.2
4.	Taylor	192.44	32.9
5.	Richland	158.24	32.9
6.	Pepin	50.37	29.9
7.	Buffalo	140.85	28.2
8.	Oconto	181.36	27.7
9.	Vernon	185.99	26.1
10.	Green	328.18	26.0



# The Contribution of Agriculture to Wisconsin County Economies



## The Contribution of Agriculture to Wisconsin County Economies

### Top 10 Counties 2008

	County	State and Local Government Revenue (\$M)
1.	Milwaukee	220.91
2.	Brown	138.75
3.	Dane	117.15
4.	Jefferson	62.71
5.	Outagamie	58.04
6.	Marathon	57.89
7.	Fond du Lac	52.08
8.	La Crosse	48.57
9.	Dodge	47.38
10.	Sheboygan	46.51



## The Contribution of Agriculture to Wisconsin County Economies

### Summary:

Stability in farm & food processing employment

Some subsectors are strengths for Wisconsin

- Are there subsectors we could be supporting more to improve linkages between production and processing?

Agriculture is very important in most WI Counties

- Rural and urban
- Food processing is really important!



The Contribution of Agriculture to Wisconsin County Economies

# Questions



<http://www.uwex.edu/ces/ag/wisag/>