

Coalition to Support Iowa's Farmers 2024 Iowa Agriculture Economic Contribution Study

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Prepared For:



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1 Executive Summary

The results of this study indicate that agriculture remains a vital part of Iowa's economy. Agriculture is responsible for an estimated 22% of Iowa's total value added (equivalent to Gross Domestic Product) and around one out of every five jobs. While individual industries have seen varying degrees of growth or reduction in Iowa over the past five years, agriculture as a whole has grown significantly in terms of value added and sales.

This study is based on a combination of the 2022 UDSA Census of Agriculture, USDA/NASS datasets, the IMPLAN modeling system, and the 2022 IMPLAN dataset. This analysis is patterned after the Iowa Agriculture Economic Contribution Studies previously completed by DIS in 2009, 2014, and 2019.

Key Findings

In 2024, agriculture and related industries in Iowa are estimated to contribute:

- **\$53.1 billion** in total value added
 - Value added increased from \$39.7 billion in the 2019 study
- **385,332** total jobs
 - Jobs decreased slightly from 399,631 in 2019
- **\$159.5 billion** in total sales (output)
 - Output increased from \$121.1 billion in 2019
- **\$25.8 billion** in total labor income

Of the **\$53.1 billion** in total value added and **385,332** jobs contributed by the agriculture industry and related economic activity:

- Crop production and related industries contributed:
 - \$16.2 billion in value added, up from \$11.1 billion in 2019
 - 99,271 jobs, down from 111,965 in 2019
- Livestock production and related industries contributed:
 - \$20.4 billion in value added, up from \$15.8 billion in 2019
 - 168,626 jobs, down from 185,985 in 2019
- Other agricultural industries contributed:
 - \$16.5 billion in value added, up from \$12.9 billion in 2019
 - 117,435 jobs, up from 101,681 in 2019

2 Introduction

2.1 Iowa Agriculture Rankings

The Iowa agriculture industry has continued to be a leader in crop and livestock production even during down times in the industry. Iowa is currently ranked the #1 state in the nation for¹:

- Animal Products Export Value
- Commercial Hog Slaughter
- Corn Export Value
- Corn for Grain Production
- Egg Production
- Hog and Pigs Inventory & Value
- Feeds & Other Grains Export Value
- Field & Miscellaneous Crops Value
- Total Layer Inventory
- Capacity of On-Farm Storage Facilities
- Pig Crop
- Pork Export Value
- Principal Crops Harvested Acreage
- Sows Farrowed
- Total Capacity of Storage Facilities

Iowa also ranked in the top 10 states for:

- Capacity of Off-Farm Storage Facilities
- Cash Receipts
- Farm Production Expenditures
- Net Farm Income
- Principal Crops Total Value
- Soybean Export Value
- Soybean Production
- Total Value of Agricultural Exports
- Average Value of Cropland
- Milk Goat Inventory
- Number of Farms
- Cash rent per Acre of Cropland
- Cattle on Feed Inventory
- Corn for Silage Production
- Steer 500 lbs. and over Inventory
- Alfalfa Hay Production
- Beef Export Value
- Number of USDA Certified Organic Farms
- Oat Production
- All Cattle and Calves Inventory & Value
- Market Sheep & Lamb Inventory
- Turkeys Raised
- Cheese Production
- Total Sheep and Lambs Inventory
- Breeding Sheep & Lambs Inventory
- Total Lamb Crop
- Wool Production
- Calf Crop
- Land in Farms

The lists above show Iowa's ability to be a leading producer of many crops and livestock.

¹ USDA National Agricultural Statistics Service (2023). Iowa's Rank in United State Agriculture.
www.nass.usda.gov/Statistics_by_State/Iowa/Publications/Rankings/IA-2023-Rankings.pdf

2.2 Iowa Farm Demographics

Summary statistics from the USDA 2022 Census of Agriculture are shown in Table 1. The number of farms in Iowa increased moderately from 2017, after trending down in most prior census years.

In 2022, most commodity prices were especially strong in Iowa, so the value of commodities sold per operation was sharply up from the 2017 census. A notable outlier was hogs, whose prices were lower than projected break even for most of 2022.

Additional funds in the ag sector and high inflation also pushed the value of land, buildings, and machinery in and on Iowa farms up significantly as well.

Table 1. Historical Iowa Census of Agriculture Data

Historical Iowa Census of Agriculture Data							
	1997	2002	2007	2012	2017	2022	Unit
Number of Farms							
Total Farm Operations	96,705	90,655	92,856	88,637	86,104	86,911	Operations
Average Farm Size	NA	350	331	345	355	345	Acres / Operation
Market Value							
Land and Buildings	559,678	707,730	1,122,023	2,207,220	2,506,812	3,191,520	\$ / Operation
Machinery	79,607	100,422	136,771	213,856	230,716	271,474	\$ / Operation
Commodities Sold	125,766	135,388	219,890	347,728	336,296	505,523	\$ / Operation
Livestock Inventory							
Beef Cows	1,051,178	987,670	904,100	885,568	938,818	858,556	Head
Milk Cows	222,090	206,965	215,391	204,757	223,579	238,087	Head
Cattle & Calves	3,717,394	3,535,945	3,982,344	3,893,683	3,950,920	3,517,805	Head
Hogs and Pigs	14,513,319	15,486,531	19,295,092	20,455,666	22,730,540	23,808,603	Head
Laying Chickens	21,514,768	38,650,210	53,793,712	52,218,870	56,554,774	43,137,355	Head
Turkeys	2,552,845	3,681,862	4,002,111	4,383,172	4,793,219	5,069,831	Head
Livestock Sold							
Cattle & Calves	2,936,978	2,929,704	3,635,880	3,446,109	3,595,241	3,160,223	Head
Hogs & Pigs	27,340,921	41,232,492	47,279,443	49,355,848	60,292,876	67,629,581	Head
Production							
Corn for Grain	1,581,093,092	1,851,276,224	2,292,163,101	1,835,358,239	2,583,967,870	2,511,484,113	Bu
Oats for Grain	14,451,930	10,761,952	4,481,462	3,868,538	2,786,849	3,138,018	Bu
Soybeans	459,309,682	487,380,897	430,739,578	406,951,953	553,576,064	541,748,465	Bu

Table 2 shows Iowa farm sales by commodity. The first section shows the total sales of all commodities, the second shows the percentage of sales relative to either total crop or animal sales, and the third section shows percentage of sales relative to all commodities. Note that percentages do not add to 100% due to rounding and because only the largest commodities are shown here.

Hogs make up over half of all animal sales. Cattle make up another 25% of all sales. This number has historically been closer to 30%, but lower cattle inventories and sales could not offset the fact that Iowa had the highest cattle prices seen since 2014.

Corn and soybeans dominate crop sales, making up a combined 98% of all crop sales.

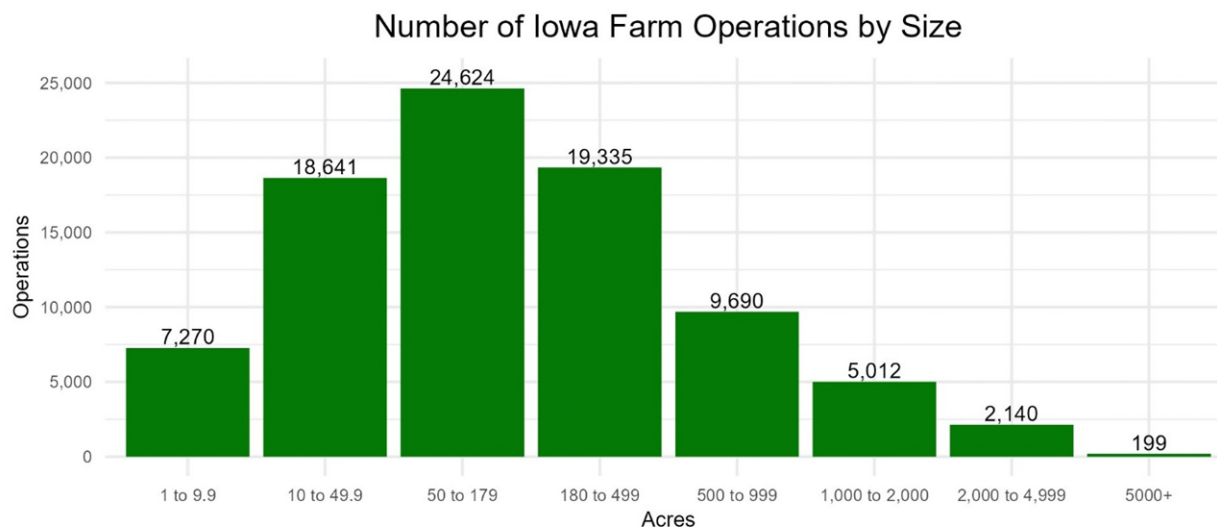
In 2022, strong crop prices helped total crop sales exceed total animal sales. The ratio of crop to animal sales was 54% to 46% in 2022. Historically this ratio is closer to 50-50. Another year crops significantly

exceeded the animal total, was 2012, when commodity prices were also higher than usual. Hogs, cattle, corn, and soybeans are the largest agricultural commodities sold in Iowa.

Table 2. Iowa Farm Sales by Source

Iowa Farm Sales by Source						
	1997	2002	2007	2012	2017	2022
Sales (mil \$)						
COMMODITY TOTALS	12,162	12,274	20,418	30,822	28,956	43,935
ANIMAL TOTALS	5,780	6,202	10,075	13,455	15,124	20,371
HOGS	3,013	3,078	4,827	6,767	7,797	11,809
CATTLE	1,886	2,120	3,607	4,504	4,760	5,017
POULTRY TOTALS	415	512	872	1,292	1,580	2,108
MILK	-	-	-	799%	868%	1,335%
SHEEP & GOATS TOTALS	-	-	-	43%	62%	58%
CROP TOTALS	6,382	6,071	10,344	17,367	13,833	23,565
CORN	-	-	6,796	11,746	8,463	15,764
SOYBEANS	-	-	3,307	5,376	5,058	7,356
% Category						
COMMODITY TOTALS	-	-	-	-	-	-
ANIMAL TOTALS	100%	100%	100%	100%	100%	100%
HOGS	52%	50%	48%	50%	52%	58%
CATTLE	33%	34%	36%	33%	31%	25%
POULTRY TOTALS	7%	8%	9%	10%	10%	10%
MILK	-	-	-	6%	6%	7%
SHEEP & GOATS TOTALS	-	-	-	0%	0%	0%
CROP TOTALS	100%	100%	100%	100%	100%	100%
CORN	-	-	66%	68%	61%	67%
SOYBEANS	-	-	32%	31%	37%	31%
% Total						
COMMODITY TOTALS	100%	100%	100%	100%	100%	100%
ANIMAL TOTALS	48%	51%	49%	44%	52%	46%
HOGS	25%	25%	24%	22%	27%	27%
CATTLE	16%	17%	18%	15%	16%	11%
POULTRY TOTALS	3%	4%	4%	4%	5%	5%
MILK	-	-	-	3%	3%	3%
SHEEP & GOATS TOTALS	-	-	-	0%	0%	0%
CROP TOTALS	52%	49%	51%	56%	48%	54%
CORN	-	-	33%	38%	29%	36%
SOYBEANS	-	-	16%	17%	17%	17%

Most Iowa farms are relatively small, and family owned. Most Iowa farms were in the 50-to-179-acre range (Figure 1). Farms in the 10-49- and 180-499-acre range were also common. Very few farms over 5000+ acres were present in Iowa.



Source: USDA-NASS

Figure 1. Number of Iowa Farm Operations by Size

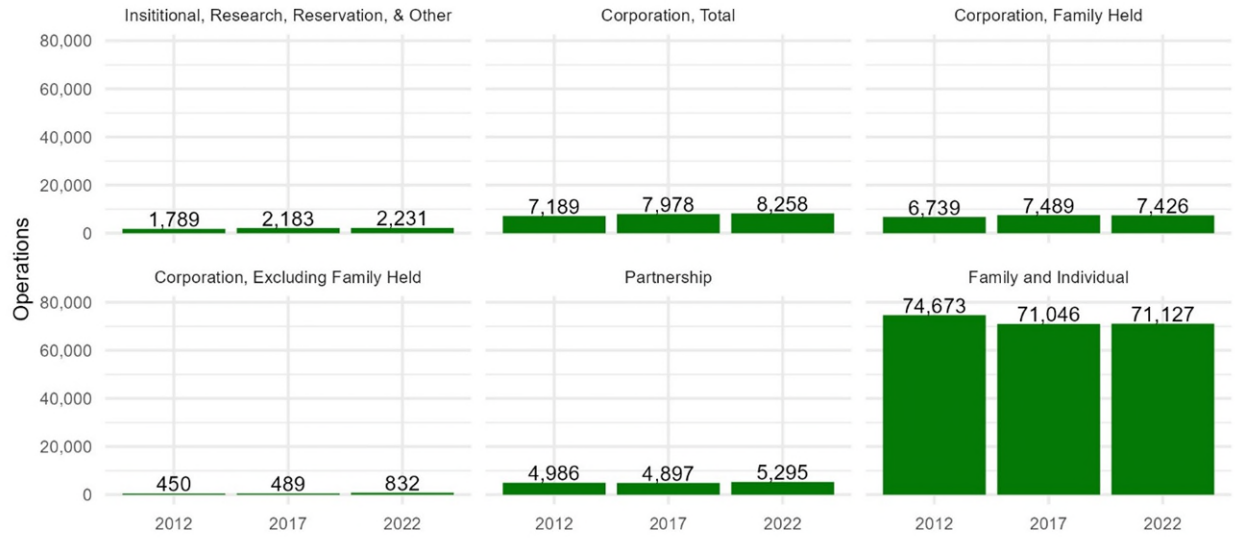
Table 3 shows the change in the composition in farms by size since 2017. While the total number of farms has increased slightly since 2017, this is not driven purely by an increase in small farms. Rather, farms with between 1 and 9 acres and between 500 and 1,999 acres have decreased, while farms of all other sizes have increased.

Table 3. Change in Farms by Size from 2017

Change in Number of Farms by Size			
Farm Size (Acres)	2022	2017	Change
1 to 10	7,270	9,120	-1,850
10 to 49	18,641	18,183	458
50 to 179	24,624	20,831	3,793
180 to 499	19,335	19,172	163
500 to 999	9,690	10,381	-691
1,000 to 1,999	5,012	6,525	-1,513
2,000 to 5,000	2,140	1,740	400
More than 5,000	199	152	47

While there has been a decline in the total number of family farms and slight increase in the number of non-family corporate farms, the majority of Iowa farms remain family owned (Figure 2). Of Iowa's 86,911 farms, 71,127 were owned by families or individuals. Another 7,426 were held in family-owned corporations. Altogether, over 90% of Iowa farms are family owned.

Iowa Operations by Farm Type



Source: USDA-NASS

Figure 2. Iowa Operations by Farm Type

2.3 Iowa's Animal Processing Plants

As we saw in the state rankings in section 2.1, Iowa is the number one state for hog production and slaughter. It is also a major cattle state. To handle all these animals a robust slaughter network is needed.

Figure 3 & Figure 4 show Iowa cattle and hog slaughter locations by estimated annual capacity and inspection entity.

Iowa is estimated to contain 8 federal and 124 state inspected facilities that process cattle. Total annual processing capacity is estimated to be approximately 691,000 head. In 2022, USDA-NASS estimated commercial cattle slaughtered in Iowa totaled 546,000 head. Expansion of some facilities since 2022 explains this difference in estimated capacity versus USDA estimated slaughter.

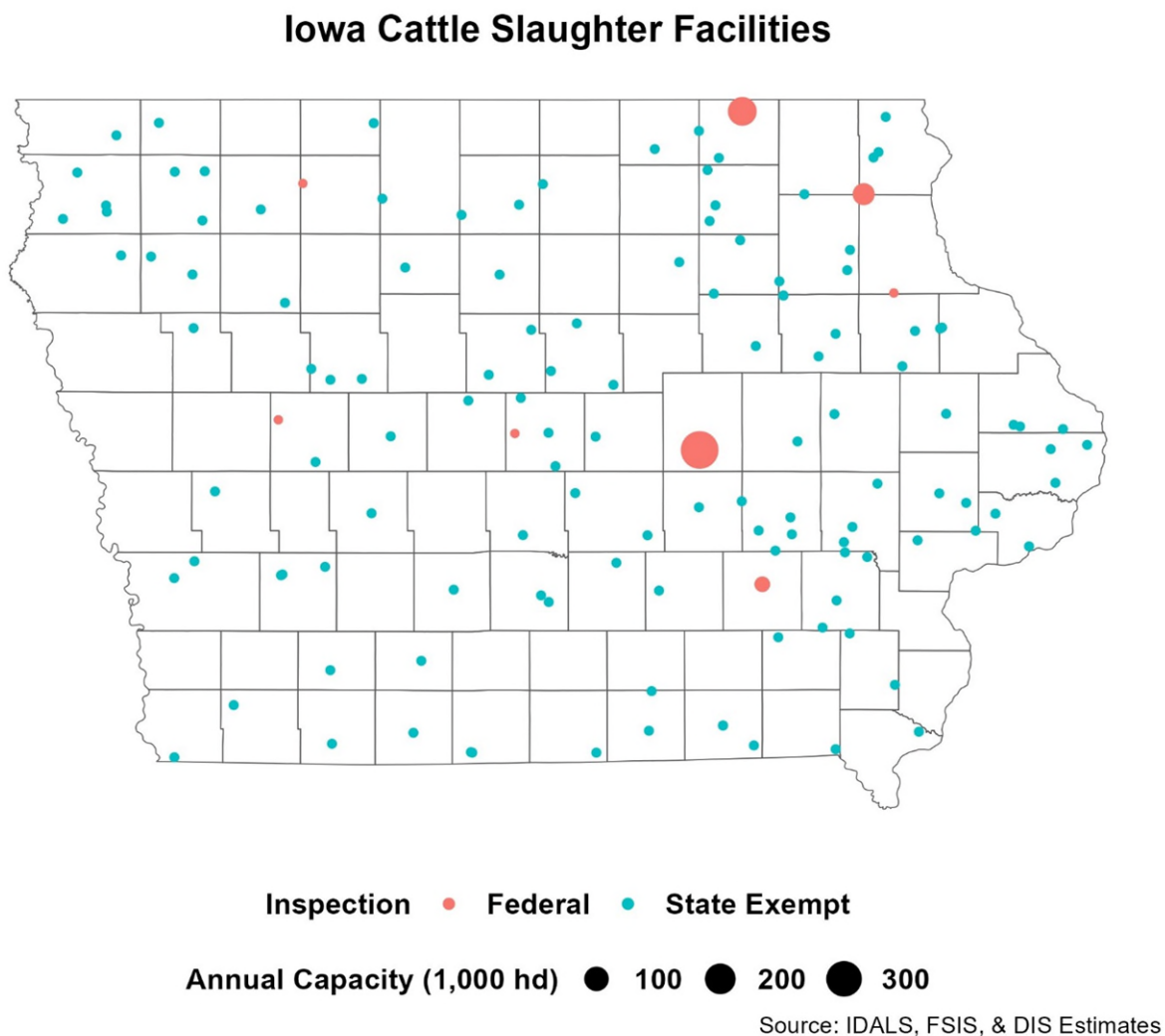
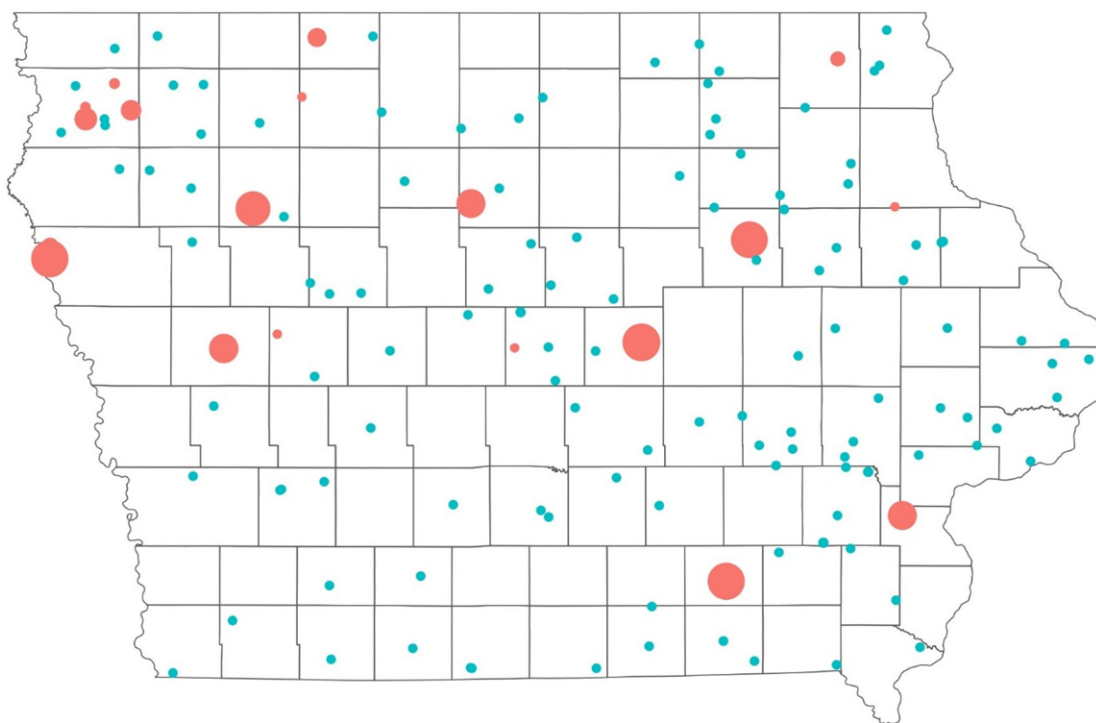


Figure 3. Iowa Cattle Slaughter Facilities

Iowa is estimated to contain 19 federal and 121 state inspected facilities that process hogs. Total annual processing capacity is estimated to be approximately 39.7 million head. From 2018-2022 the USDA-NASS annual estimate of commercial hogs slaughtered in Iowa ranged from 35.0-40.3 million. Though notably the 39.7 million estimated above excludes the Tyson Perry plant whose closure was announced in March 2024. This plant had an estimated annual capacity of 2.3 million head.

Iowa Hog Slaughter Facilities



Inspection ● Federal ● State Exempt

Annual Capacity (1,000 hd) ● 1000 ● 2000 ● 3000 ● 4000 ● 5000

Source: IDALS, FSIS, & DIS Estimates

Figure 4. Iowa Hog Slaughter Facilities

3 Methodology

3.1 Economic Contribution Methodology and Terms

The following economic contribution study was conducted using a combination of IMPLAN and Microsoft Excel. IMPLAN is an input-output model used to understand industry relationships and conduct economic assessments for specified local economies. IMPLAN datasets are constructed annually and are derived from many different sources, including the U.S. Bureau of Labor Statistics (BLS), the U.S. Bureau of Economic Analysis (BEA), the U.S. Bureau of Economic Analysis Benchmark Input-Output Account of the U.S., the BEA output estimates, the U.S. Census Bureau's economic censuses and surveys, the U.S. Department of Agriculture's census, and more.

Within IMPLAN, the effects of an economic impact or contribution event are expressed in terms of direct, indirect, and induced effects. These different effect types are defined as follows:

- **Direct Effects** – The economic activity directly attributable to the industry under analysis; in this study, the production of animal feed and pet food from a variety of inputs
- **Indirect Effects** – The effects of local inter-industry spending throughout the supply chain, for example, the seed, equipment, fertilizer, and other inputs used by a farmer to produce corn for a feed mill
- **Induced Effects** – The results of employees of the directly and indirectly affected industries spending their income throughout the local economy
- **Total Effect** – The sum of direct, indirect, and induced effects

The 2022 IMPLAN data package, which is the most recent data available, was used for this analysis. Using inflation factors inherent in the IMPLAN modeling system, all numbers within these sectors were brought forward from 2022 to 2024. The results of this analysis are presented using the following common economic modeling terms:

- **Output:** The broadest measure of economic activity – also commonly referred to as “sales.” Output refers to the total value of all sales of an industry within a study area without any deductions for the cost or origination of inputs that were used in the production process.
- **Value Added:** A component of output, this measure includes the total sales minus the costs of inputs. Alternatively, value added is calculated as the sum of labor income (further defined below), taxes on production and imports, and other property-type income. An industry's value added is equivalent to its contribution to GDP.
- **Labor Income:** A subset of value added, includes the sum of employee compensation (i.e., wages and benefits) and proprietor income (i.e., income of self-employed workers).
- **Employment (Jobs):** A measure of part- and full-time job positions, including contract workers, without regard to their full-time equivalence. Since it is not representative solely of full-time positions or full-time equivalents, care must be made when drawing comparisons to other measures of employment.

3.2 Economic Impact Study versus Economic Contribution Study

The term “Economic Impact Study” implies a change has taken place within a local economy. The change in a local economy typically comes from one of the following sources:

- Entrance/departure of a new business or industry
- Expansion/contraction of an existing business or industry

While estimating a change (economic impact study) such as the entrance or departure of industry activity is a worthwhile endeavor in many instances, this is not how the contribution of the agriculture sectors in this analysis were estimated. This analysis is an effort to evaluate the structure of existing industries within an existing economy. As a result, shocking the economy to create or eliminate parts of the industry is not appropriate. For that reason, this study is called an “economic contribution analysis”; in other words, we are interested in understanding what Iowa agriculture currently contributes to the overall economy. This is a key difference from what is traditionally termed an “economic impact study”. With a contribution analysis, the sum of individual industry estimates will never differ from the total of what actually exists in a given study area.

3.3 Defining Agriculture and Forestry

When completing an economic contribution study, there are generally questions as to what economic activity up and down the value chain should be included for a particular industry. Outlined below is the process used in this study for defining agriculture; the same guidelines have been applied to the forestry industry.

There is usually considerable discussion regarding the blurred lines between production agriculture, processing, and retail, and how agriculture should be defined. Agriculture can be defined as: 1) including only farm-level production, 2) including farm-level production, input manufacturing, and food processing, or 3) from the “farm to fork” perspective, which would also include distribution, restaurants, and retail.

To strike middle (and defensible) ground between including more than just farm level production and seeking to attribute excess economic activity to the agriculture industry, this analysis includes production agriculture plus the first round of value added to the process. For example, in addition to the production of livestock and poultry, we have also included the industries that process them (i.e., production, processing, slaughtering, and rendering). As mentioned, we have followed this same pattern of analyzing other agricultural industries (e.g., crops), forestry production and further processing (sawmills, etc.).

Using the above rationale as a guide, the IMPLAN models were created and analyzed using the recommended methodology for a Multi-Industry Contribution Analysis. The IMPLAN modeling system uses more than 20,000 industries and classifies them according to the North American Industry Classification System (NAICS) and groups them into 546 industries. There were 63 IMPLAN sectors identified for this analysis to represent agricultural economic activities in the State of Iowa. Note that additional industries were identified as agriculture but excluded from this analysis due to not existing in Iowa. A list of the identified industries and their aggregation as used throughout the report is available in Appendix A, IMPLAN Aggregation Scheme.

4 State Level Results

The 63 IMPLAN sectors identified for this study were aggregated into three main categories to provide an overview of the economic contribution of these industries. These aggregated industries are:

- Crops
- Livestock
- Other Agriculture

Further details on the industries included in each of these categories are shown in the “Detailed State Results” and “County Level Results” sections of the report and also in Appendix A, IMPLAN Aggregation Scheme.

4.1 State Value-Added

Total value added refers to the portion of total sales that actually created additional value from the economic activity in an area and/or industry and is an accurate indicator of the ability of an industry to improve economic prospects in a given area. Total value added for an industry represents the value of the industry’s total sales minus the value of any inputs used in the production process from other industries. Key components of value added are employee compensation (hired labor) and proprietor’s income (self-employed), which is collectively known as ‘household income’.

Figure 5 shows Iowa’s total value added broken out by industry. The agriculture and forestry industries and related economic activity contribute significantly to the Iowa economy with \$53.1² billion in value added, which is 22% of the state’s total. Of this amount, Crops contribute \$16.2 billion (7%), Livestock \$20.4 billion (8%) and Other Agriculture \$16.5 billion (7%).

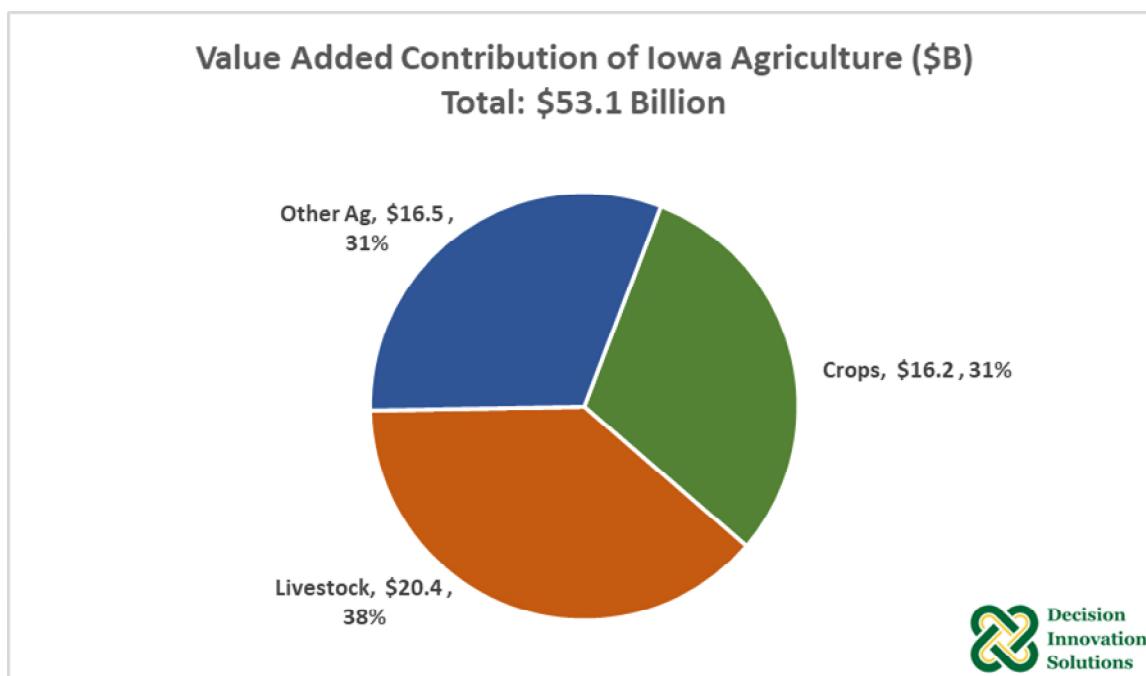


Figure 5. Iowa Value-Added Summary

² Totals throughout the report may not sum due to rounding.

4.2 State Jobs

Job numbers represent an estimate of the number of positions (jobs) currently filled in an area or industry. The estimates provided here originate from the state level IMPLAN input-output model. Jobs include positions whether they are full or part-time, so care must be used in making comparisons. “Jobs” does not count positions that are unfilled.

The agriculture and related industries in Iowa contribute a large number of jobs to the economy with more than 385,332 jobs, which is 19% of Iowa’s total (Figure 6). Of this amount, 99,271 jobs come from Crops, 168,626 come from Livestock and 117,435 come from Other Agriculture.

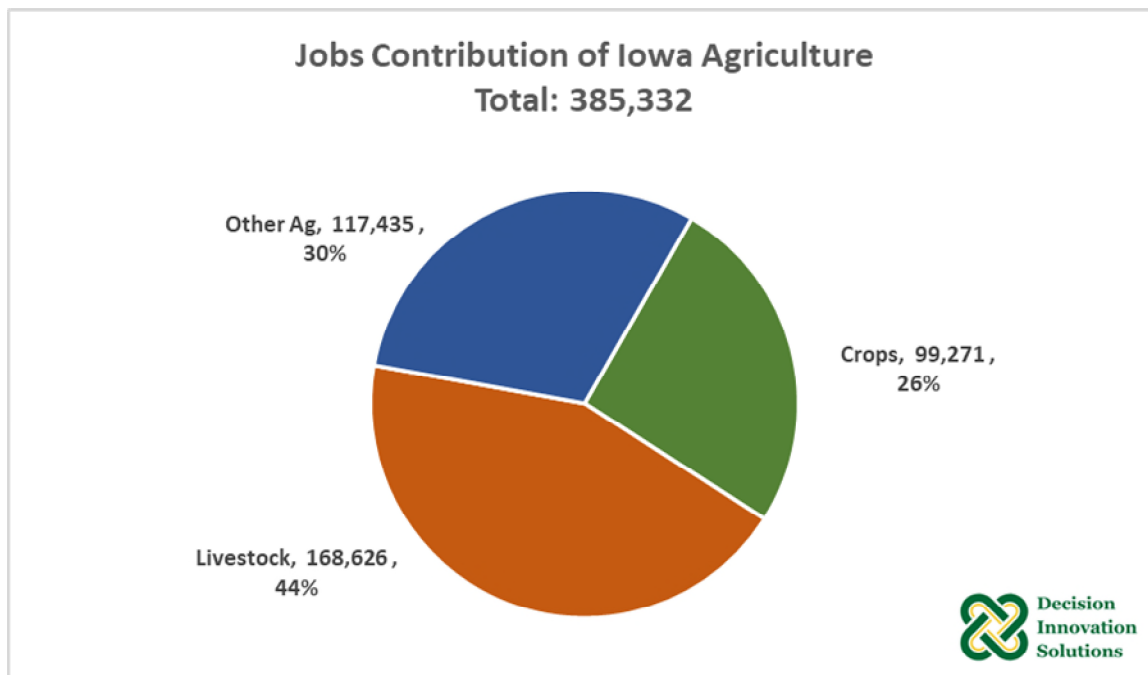


Figure 6. Iowa Jobs Summary

4.3 State Labor Income

Labor income is defined as income from all sources that accrues to individuals as payment for personal employment (proprietor income and/or labor income). The agriculture and related industries in Iowa contribute \$25.8 billion in household income. Of this amount, \$7.0 billion is contributed by Crops, \$10.5 billion by Livestock and \$8.3 billion by Other Agriculture (Figure 7).

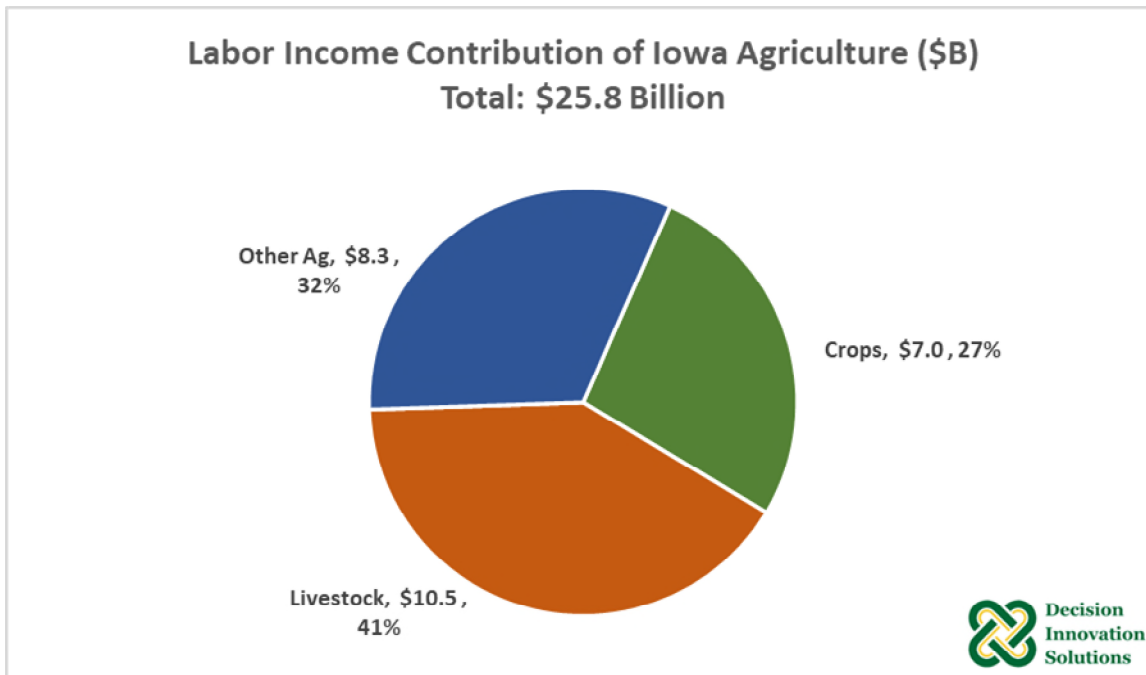


Figure 7. Iowa Labor Income Summary

4.4 State Output

Total output (sales) refers to the total value of all production or sales of the identified industries within a study area. This is a total number that does not make deductions for the cost or origination of inputs that were used in the production process, which means that there is some double counting that occurs with this measure of economic activity.

The agriculture and related industries contribute a significant amount to Iowa’s economy in terms of output with a contribution of \$159.5 billion, as shown in Figure 8. Of the \$159.4 billion contributed by agriculture and related industries, \$51.6 billion comes from Crops, \$60.5 billion from Livestock and \$47.4 billion from Other Agriculture.

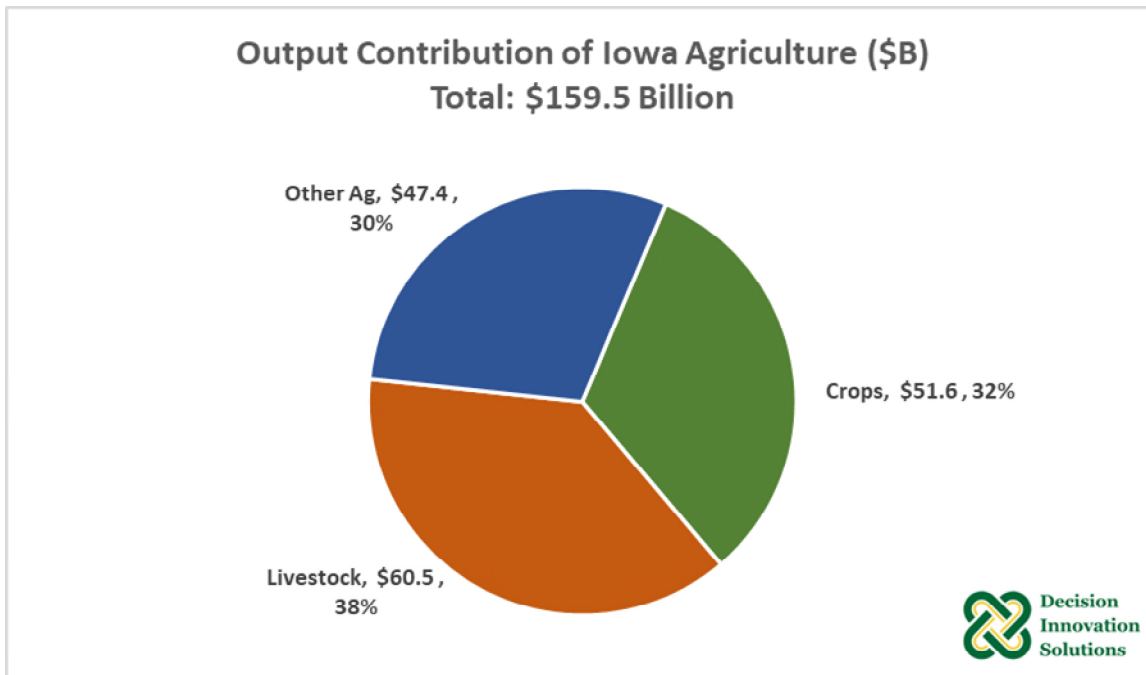


Figure 8. Iowa Output Summary

4.5 Detailed State Results

Sections 4.1-4.4 showed the state level results by the three major categories: Crops, Livestock and Other Agriculture. The following section shows the results by industry within each of the three major agriculture categories. This is done to show which specific industries are major contributors. Please note that goods and services used by the agriculture industry to operate (i.e., banking and insurance) are not specifically shown, but they are embedded as required inputs for the agriculture industry and related economic activities.

4.5.1 Crops

The Crops category includes industries such as grain and oilseed farming, as well as crop food processing industries. The total value added contribution to the Iowa economy from Crops is \$16.2 billion (Figure 9). Of this amount, crop production makes up a majority of this contribution with a total of around \$12.7 billion, while crop processing makes up the remaining amount of around \$3.5 billion. This category includes activities such as flour milling, soybean processing, and breakfast cereal manufacturing. A total of 99,271 jobs are derived from industries in the Crops category (Figure 10). Of this amount, 57,106 are derived from grain production, 16,797 from oilseed production, 4,329 from other crop production, and 21,040 from crop processing.

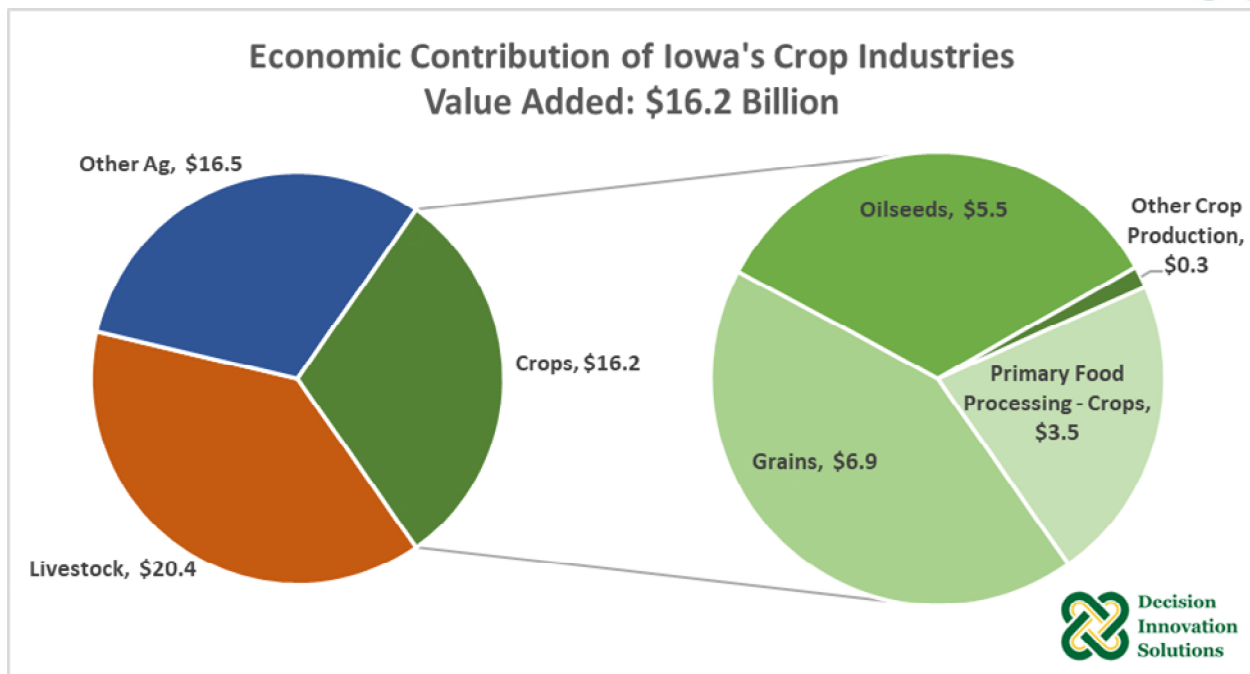


Figure 9. Economic Contribution of Iowa's Crop Industries - Value Added

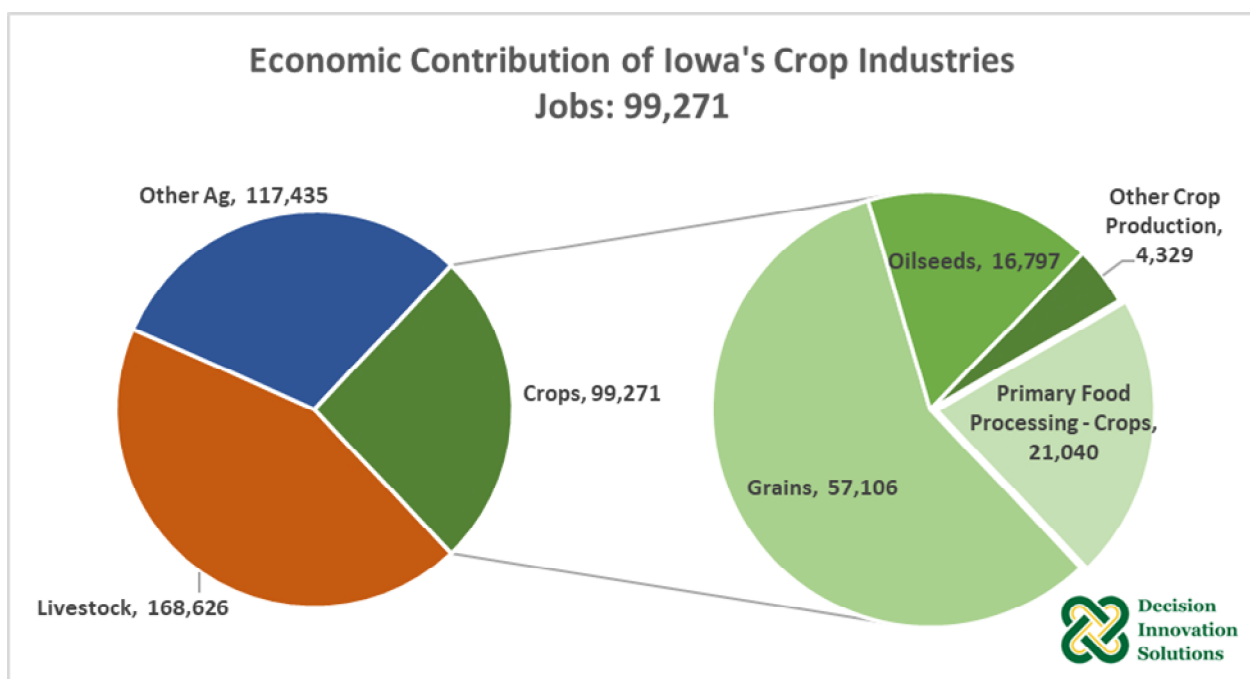


Figure 10. Economic Contribution of Iowa's Crop Industries - Jobs

4.5.2 Livestock

The Livestock category includes industries such as beef cattle production, hog production, dairy cattle, poultry production (layers (egg production), broilers and turkeys), meat/poultry processing rendering, and more. The total value added contribution to the Iowa economy from these industries is \$20.5 billion (Figure 11). The largest subcategory is hogs and other livestock with \$8.9 billion in value added. Meat

processing also contributes substantially to Iowa's economy (\$6.8 billion) which demonstrates the importance of processing to the value chain.

Livestock production and related economic activity also account for 168,626 jobs in Iowa (Figure 12). Of this amount, nearly 71,000 jobs are from meat processing, 56,642 from hogs and other livestock, 22,825 from cattle production, 8,620 from dairy processing, 5,968 from poultry, and 3,761 from dairy farms.

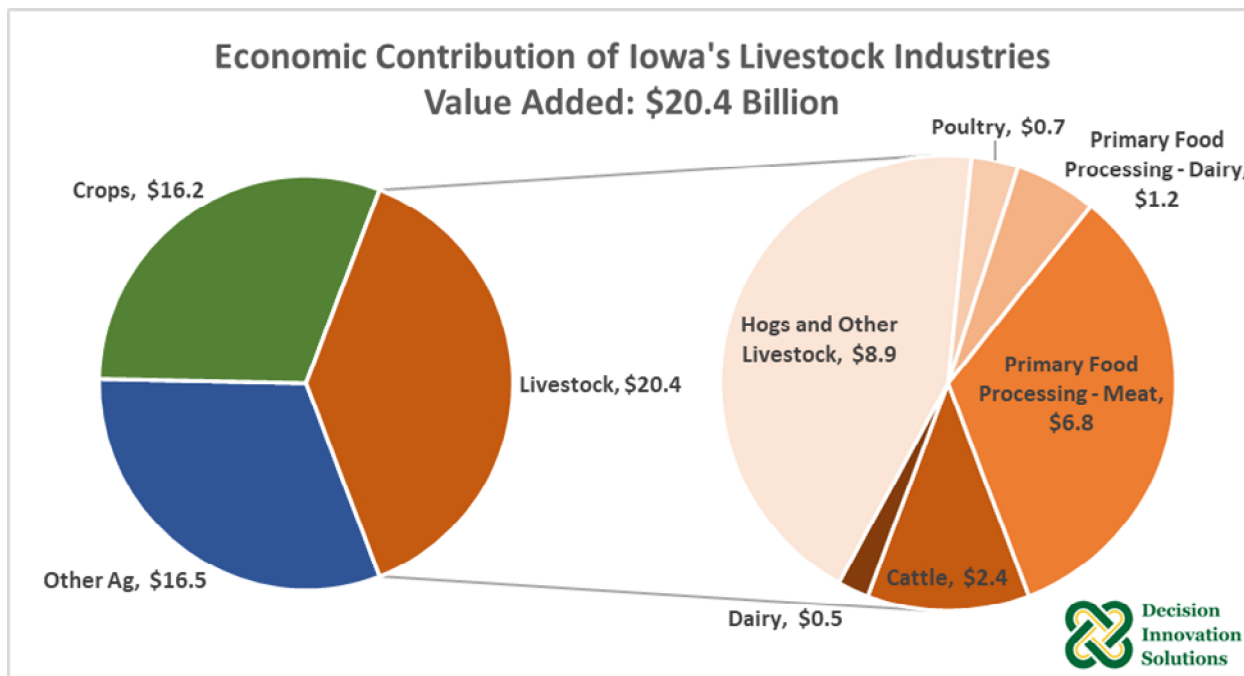


Figure 11. Economic Contribution of Iowa's Livestock Industries - Value Added

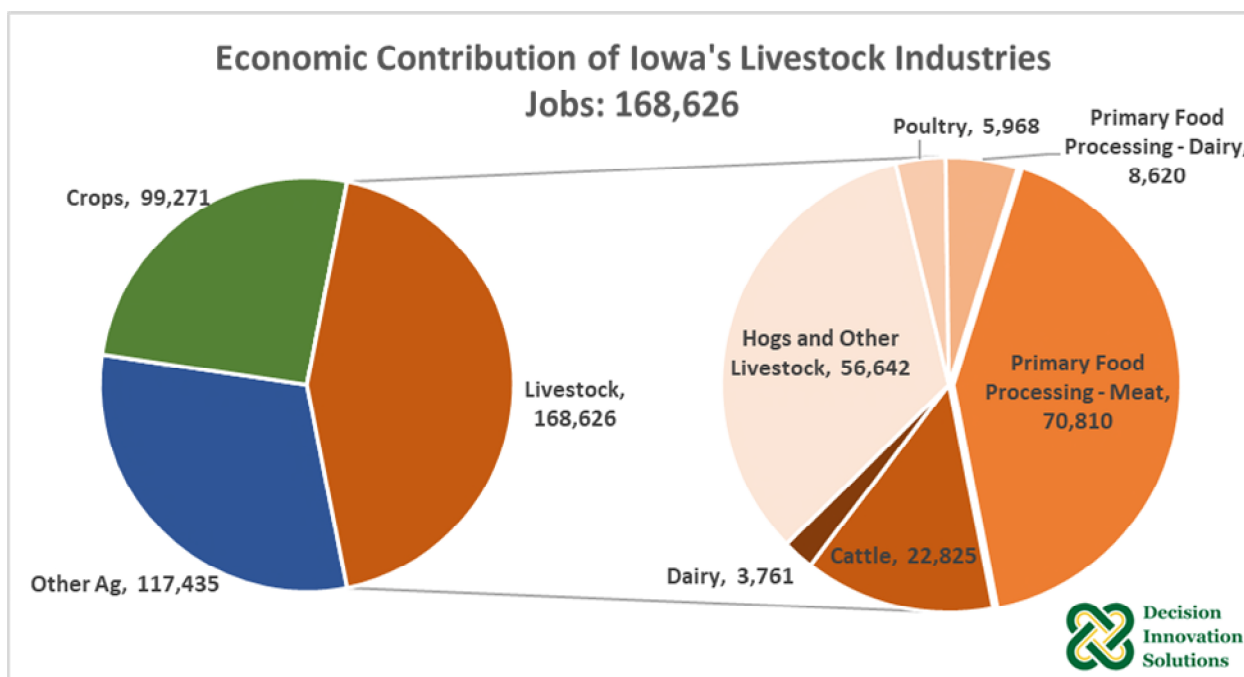


Figure 12. Economic Contribution of Iowa's Livestock Industries - Jobs

4.5.3 Other Agriculture

The Other Agriculture category includes industries such as animal feed production, farm machinery and equipment manufacturing, ethanol production, dog and cat food manufacturing, veterinary services, many food manufacturing industries and more. These Other Agricultural industries contribute a total of \$16.5 billion in value added to Iowa’s economy, as shown in Figure 13.

The industries in the Other Agriculture category account for 117,435 jobs (Figure 14). Other food processing contributed the most with 35,491 jobs, followed by farm machinery with 31,821 jobs, agriculture support with 22,598 jobs and agriculture chemical and fertilizer manufacturing with 15,081 jobs. Animal and pet food manufacturing rounds out the category with a contribution of 12,444 jobs.

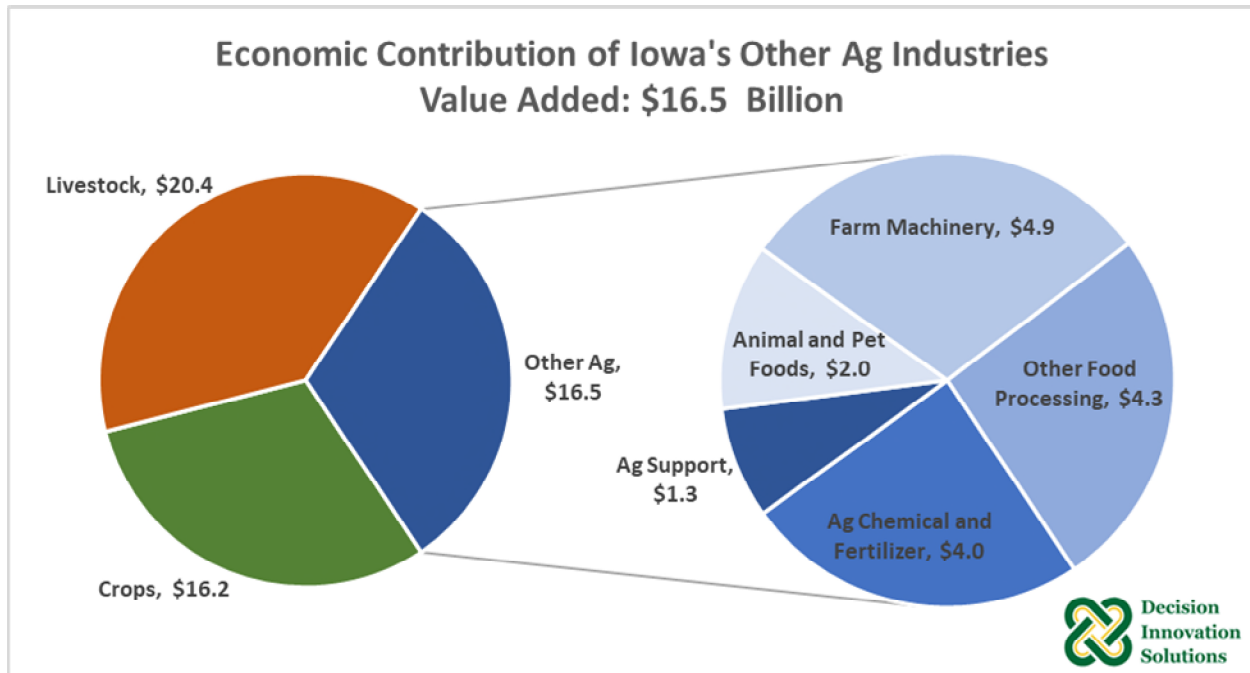


Figure 13. Economic Contribution of Iowa's Other Agriculture Industries - Value Added

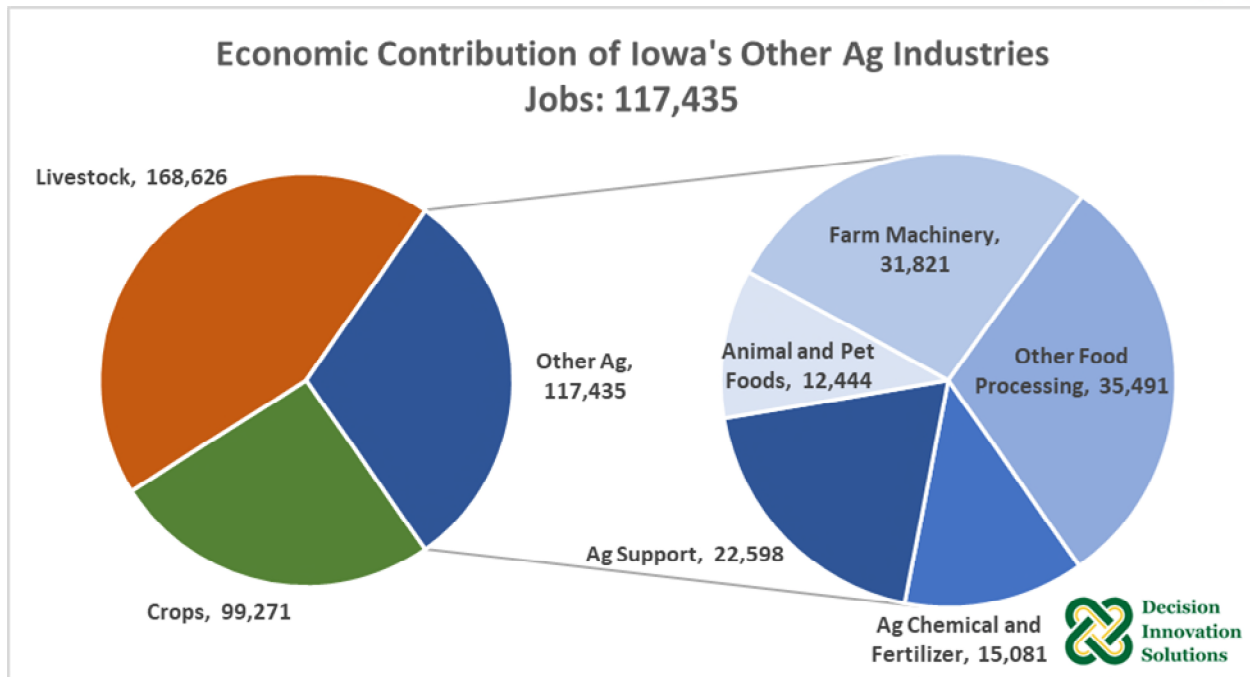


Figure 14. Economic Contribution of Iowa's Other Agriculture Industries - Jobs

5 County Level Results

The results presented so far in this report have been focused on the state level; however similar analyses have been performed for all of Iowa's 99 counties. The following section shows the value added and jobs derived from all agricultural activities in each county. For more detailed maps showing the contribution of the crops, livestock, and other agriculture sectors, see Appendix B, Detailed County Maps.

5.1 County Value Added

Figure 15 shows the estimated value added contribution from agriculture in each of Iowa's counties. This value ranges from \$71 million in Lucas County to more than \$3.2 billion in Polk County. The counties that derive the most value added from agriculture are Polk, Black Hawk, Linn, Sioux, and Woodbury. Agriculture contributes more than \$1 billion in value added to 9 counties (Figure 16).

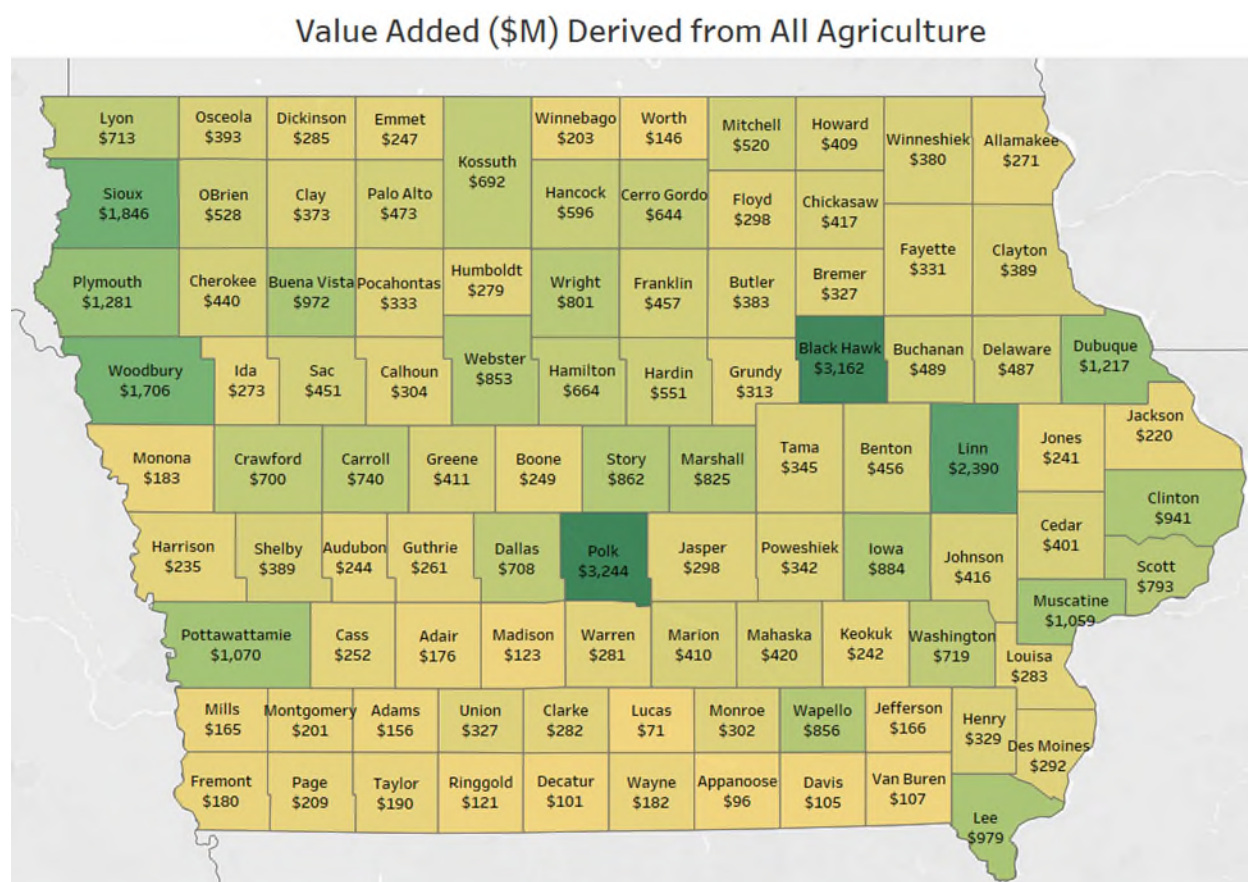


Figure 15. Value Added Derived from All Agriculture by County

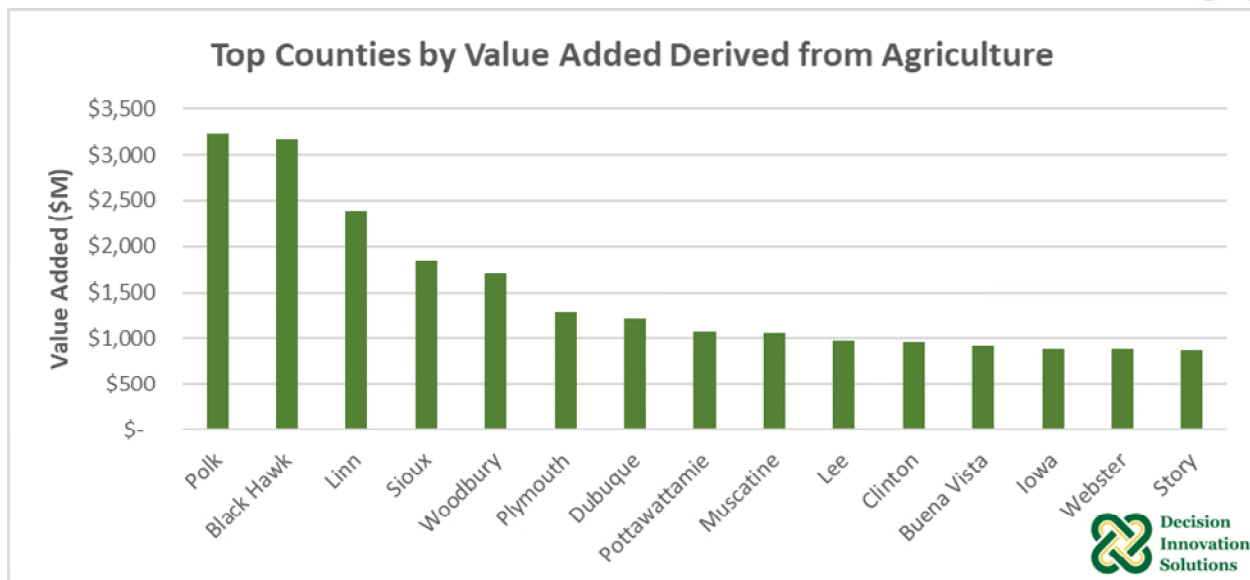


Figure 16. Top Counties by Value Added Derived from Agriculture

The relative share of each county's total value added that is contributed by agriculture is shown in Figure 17. While urban counties tend to have high absolute values for activity derived from agriculture, rural counties typically derive a high share of their total economic activity from agriculture.

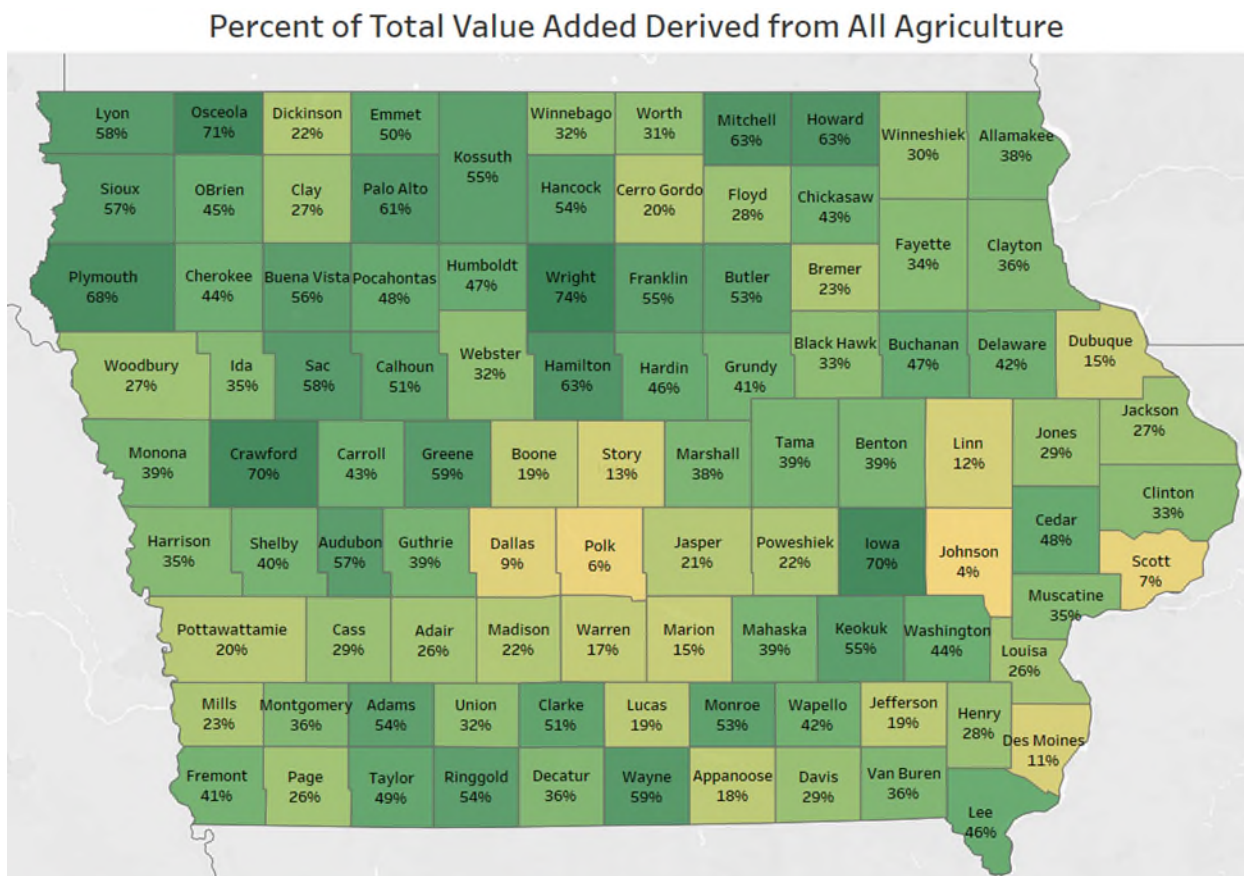


Figure 17. Percent of Total Value Added Derived from All Agriculture by County

Figure 18 shows the number of counties by their portion of value added derived from agriculture. As shown, there are 35 counties that derive more than 45% of their total value added from agriculture, while just 8 counties derive less than 15% from agriculture.

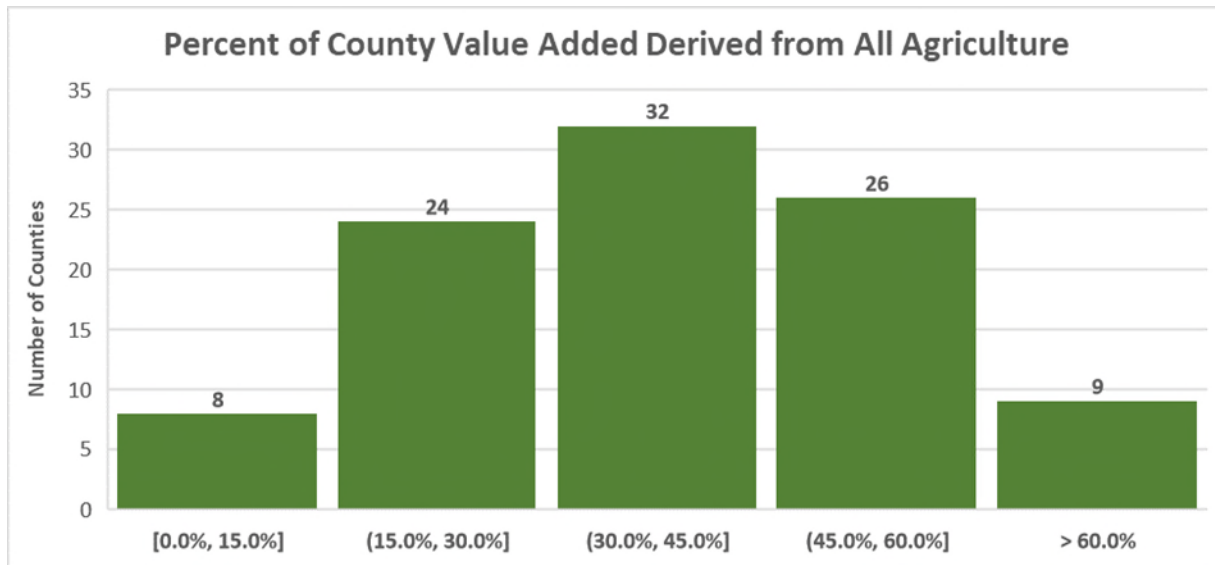


Figure 18. Counties by Percent of Total Value Added from Agriculture

5.2 County Jobs

Figure 19 shows the estimated jobs contribution from agriculture in each of Iowa's counties, which ranges from 887 in Lucas County to nearly 24,000 in Polk County. Agriculture drives a significant portion of employment across the state, with all of the 15 top counties deriving more than 6,000 jobs from agriculture (Figure 20).

Jobs Derived from All Agriculture

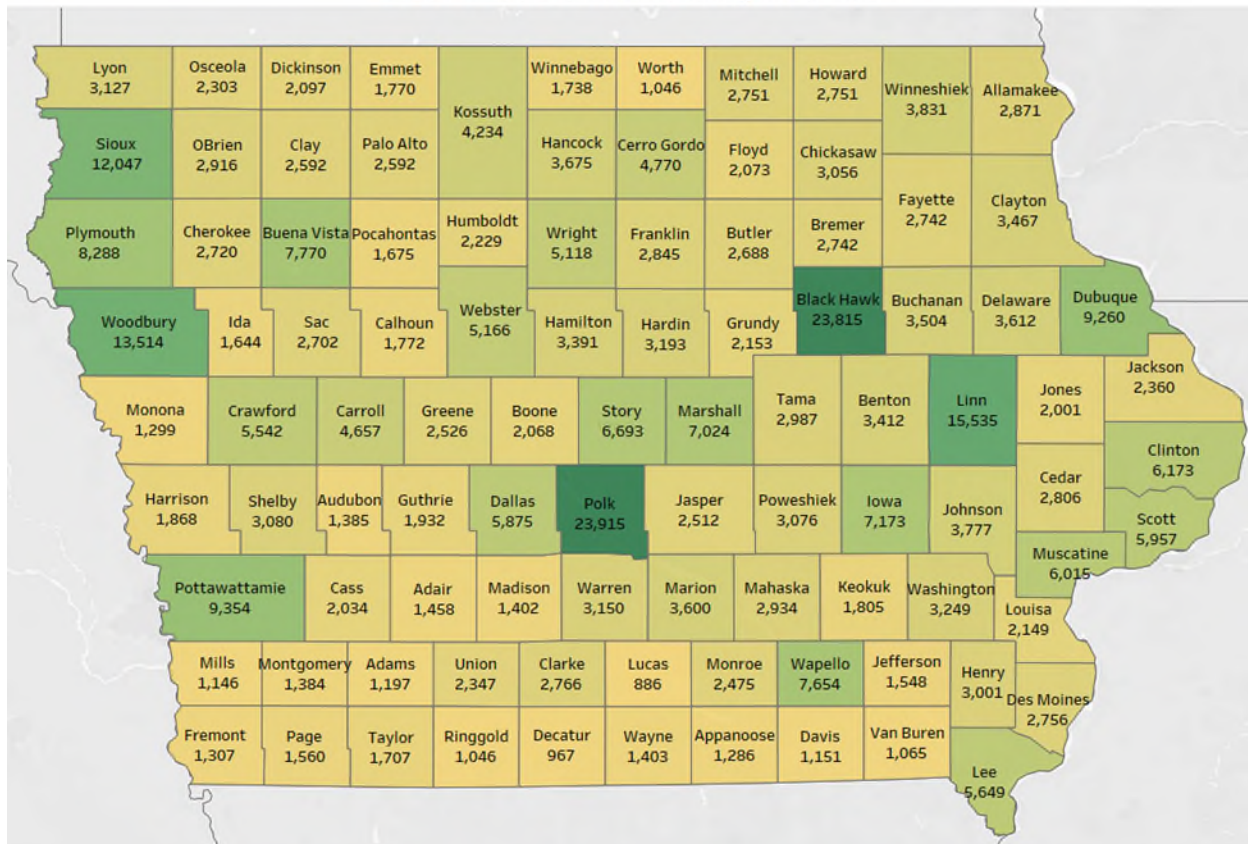


Figure 19. Jobs Derived from All Agriculture by County

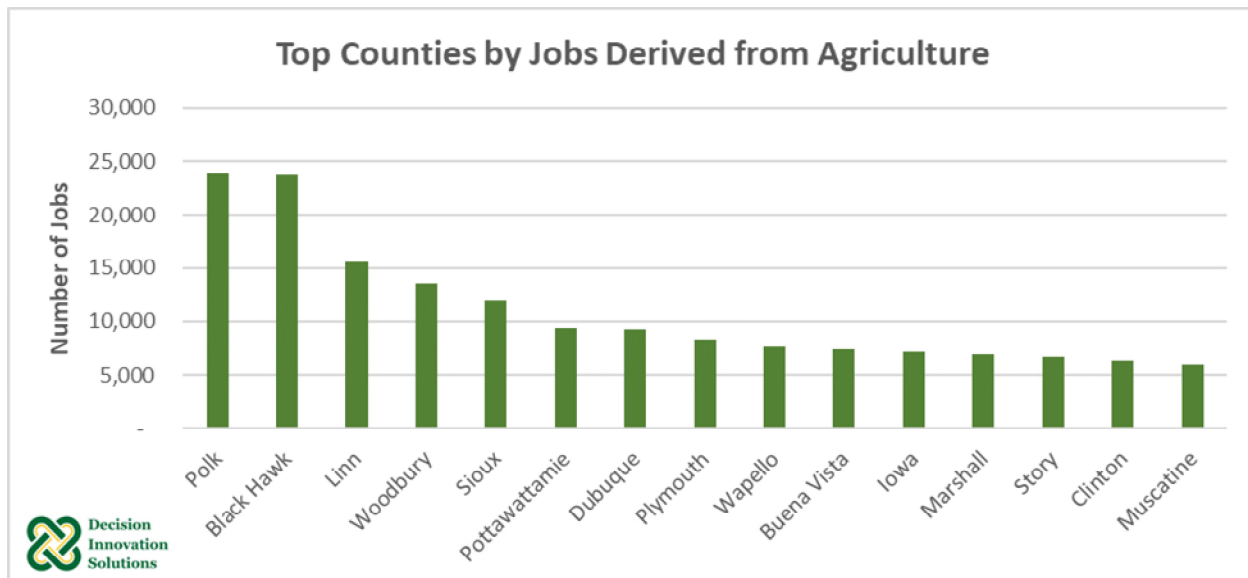


Figure 20. Top Counties by Jobs Derived from Agriculture

The relative share of each county's total employment that is contributed by agriculture is shown in Figure 21. The five counties that most heavily rely on agriculture as a percent of total jobs are Wright, Crawford, Iowa, Buena Vista, and Adams.

Percent of Total Jobs Derived from All Agriculture

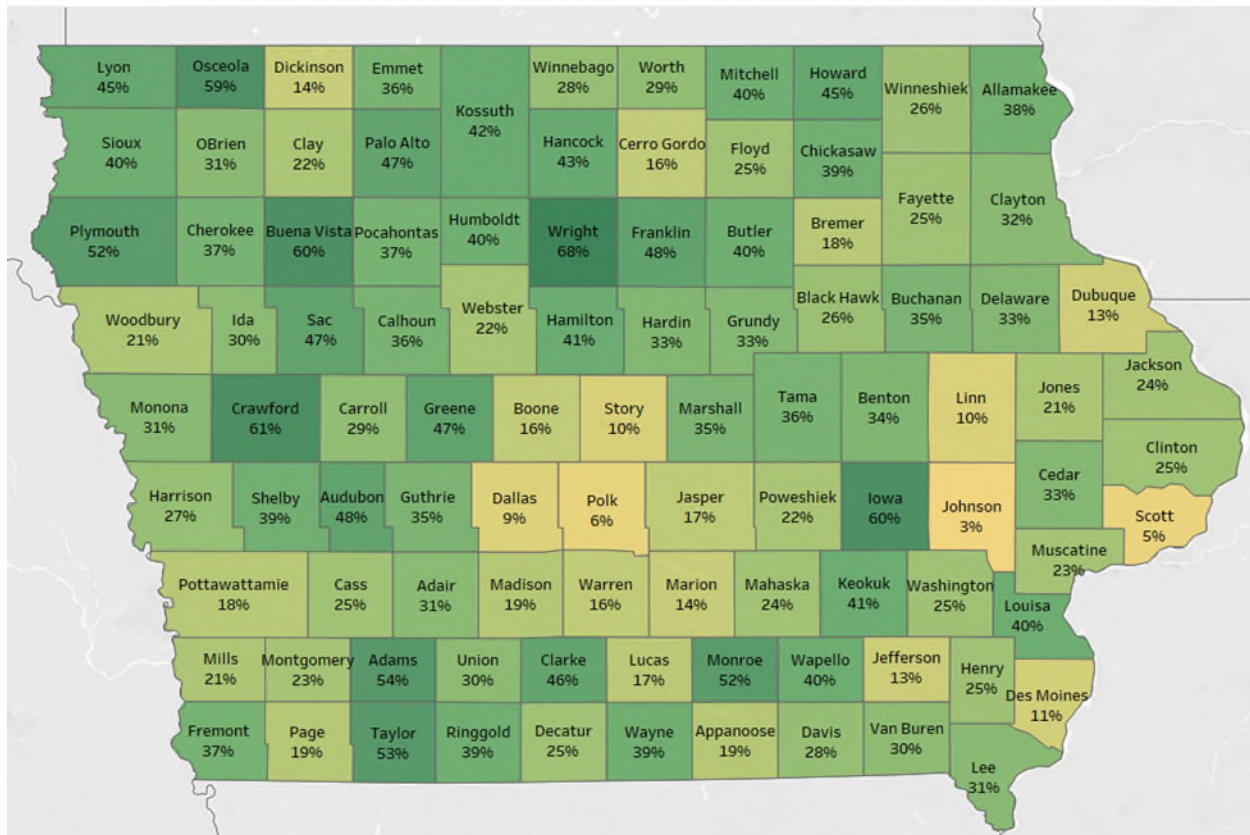


Figure 21. Percent of Total Jobs Derived from All Agriculture by County

Figure 22 shows the number of counties by their portion of jobs derived from agriculture. There are 16 counties that derive more than 45% of their total jobs from agriculture, and 72 counties derive between 15% and 45% of their total jobs from agriculture.

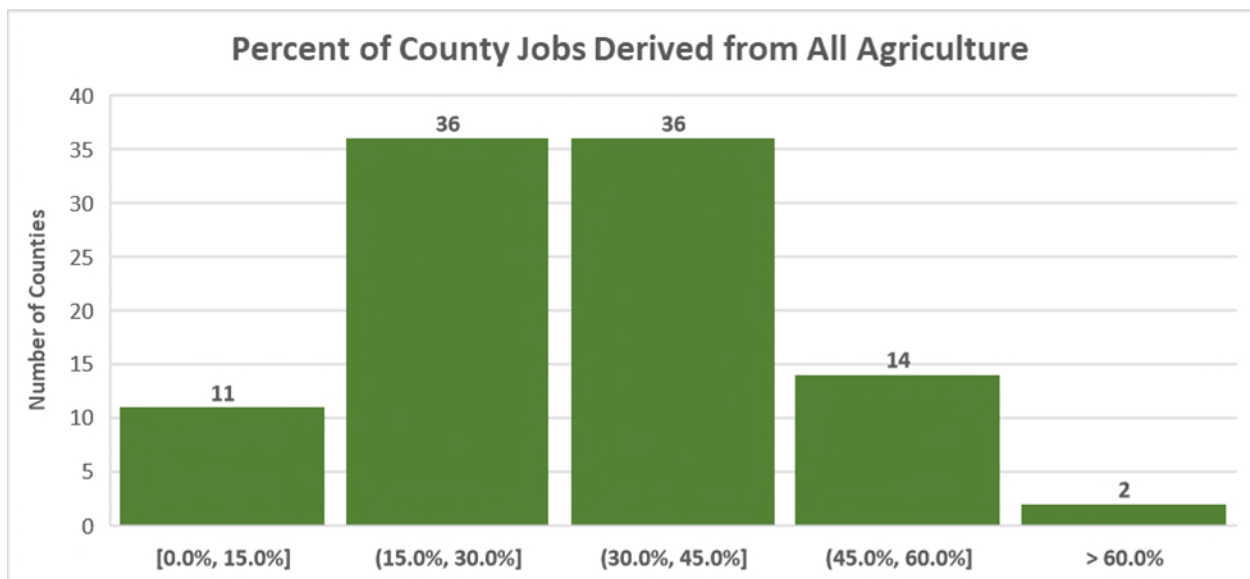


Figure 22. Counties by Percent of Total Jobs from Agriculture

6 Congressional District Results

The following maps show the value added and jobs derived from agriculture at the congressional district level.

6.1 Congressional District Value Added

Figure 23 shows the estimated value added derived from agriculture in each congressional district, which ranges from \$8.5 billion in the 3rd congressional district to \$20.8 billion in the 4th congressional district.

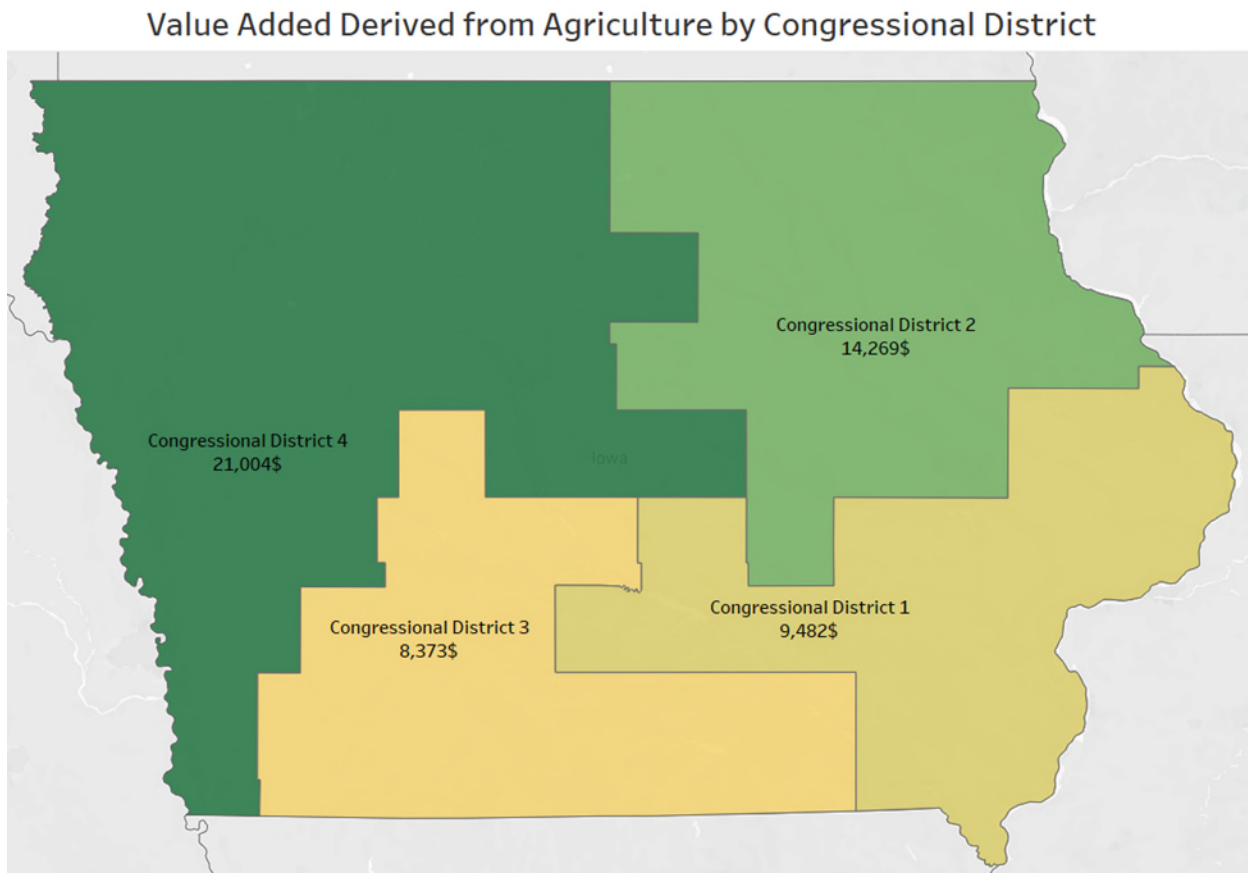


Figure 23. Value Added Derived from Agriculture by Congressional District

The percent of each district's total value added derived from agriculture ranges from 11% in the 3rd congressional district to 38% in the 4th congressional district (Figure 24).

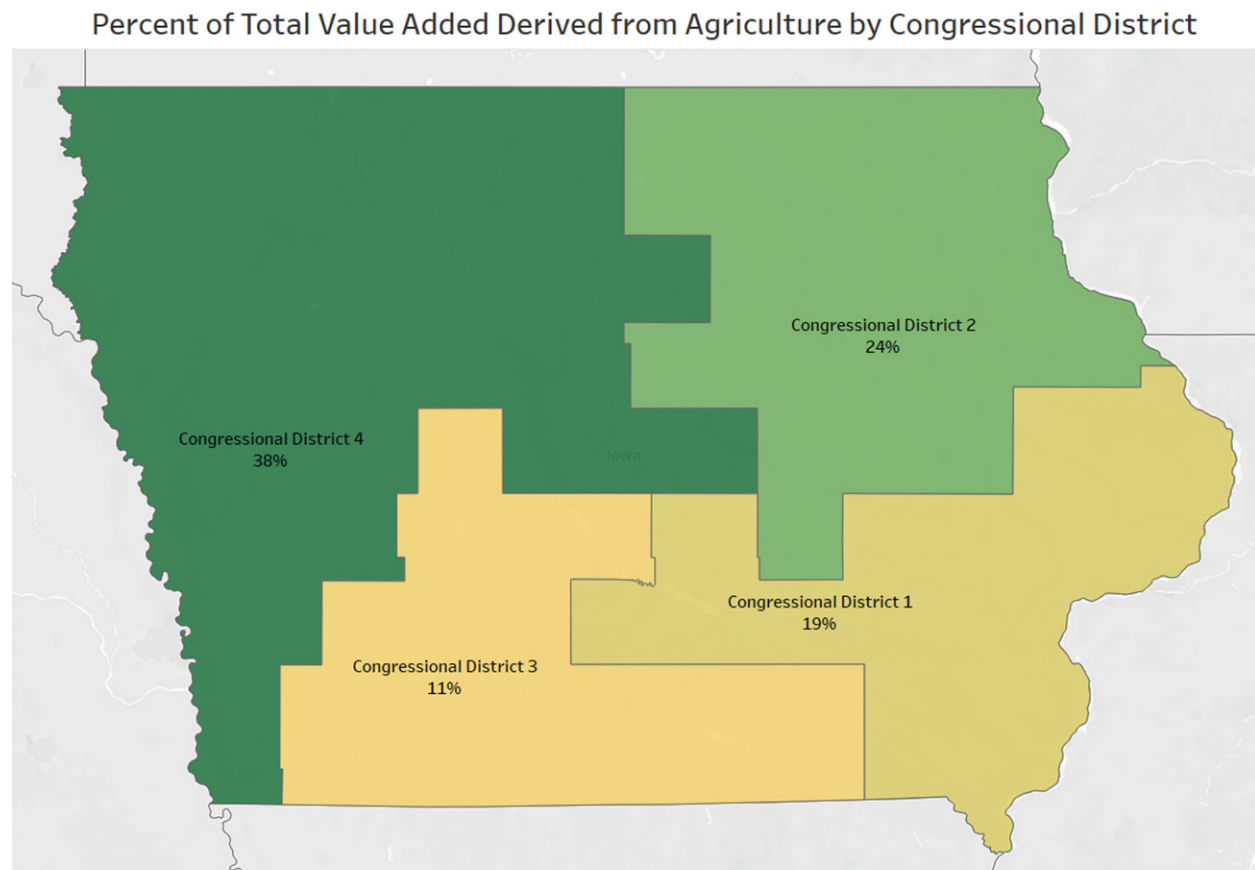


Figure 24. Percent of Total Value Added Derived from Agriculture by Congressional District

6.2 Congressional District Jobs

The estimated number of jobs derived from agriculture ranges from nearly 68,000 in the 3rd congressional district to more than 142,000 in the 4th congressional district (Figure 25).

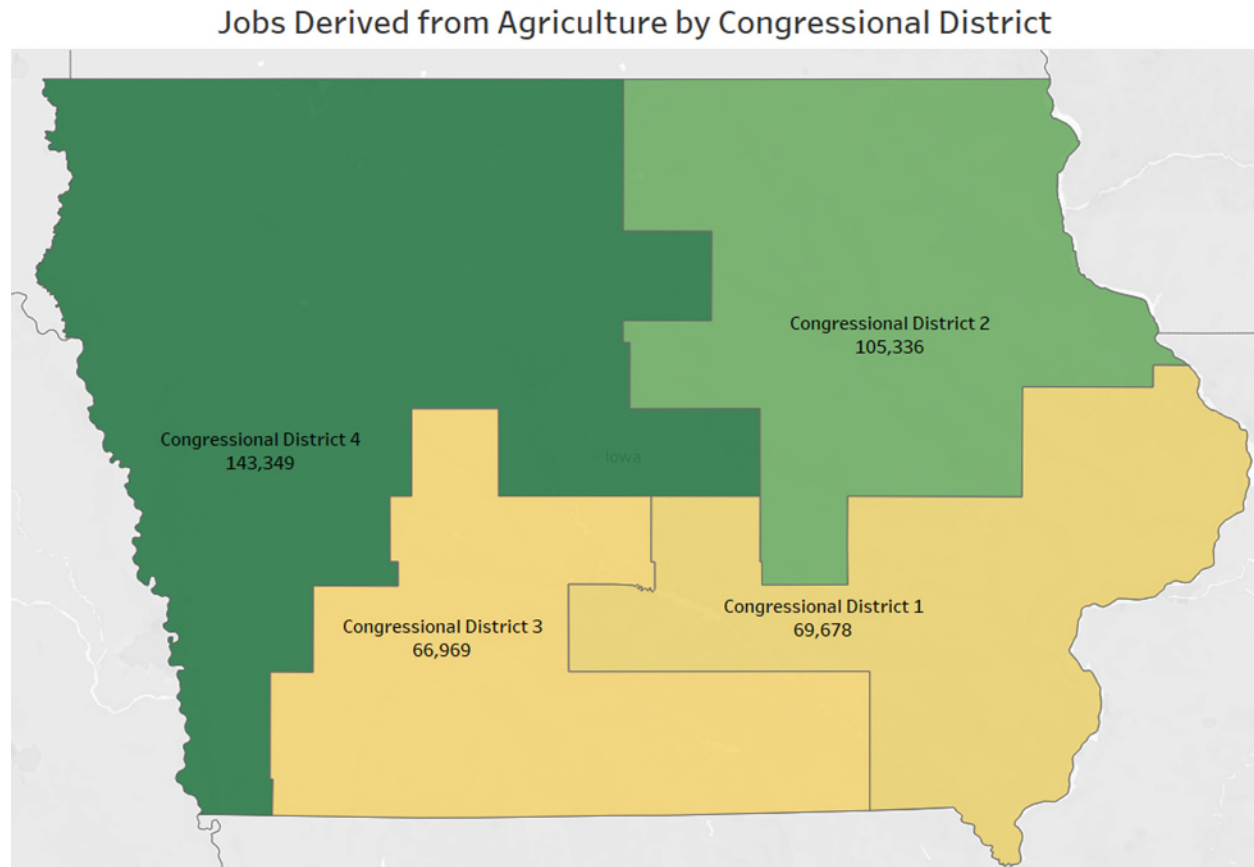


Figure 25. Jobs Derived from Agriculture by Congressional District

Agriculture supports an estimated 14% of jobs in the 1st congressional district, 20% in the 2nd district, 12% in the 3rd district, and 29% in the 4th district (Figure 26).

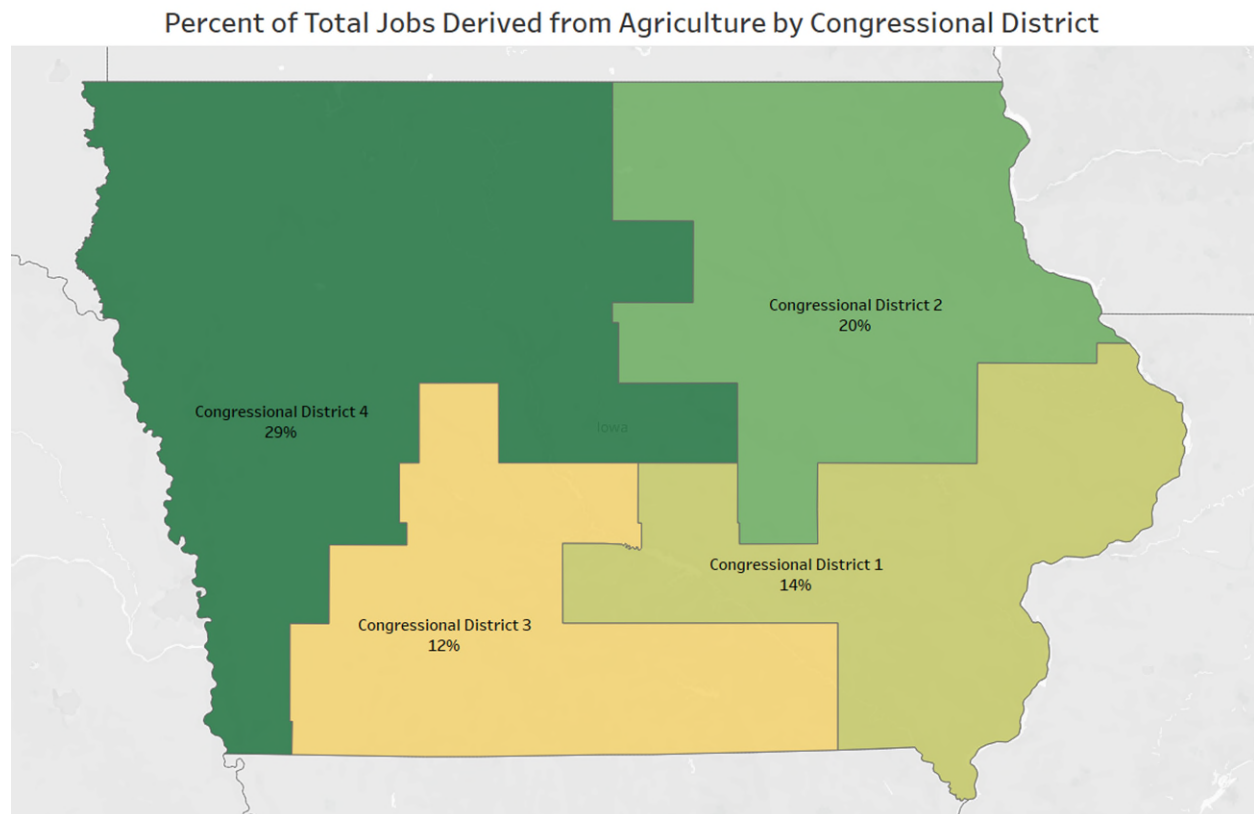


Figure 26. Percent of Total Jobs Derived from Agriculture by Congressional District

7 Appendix A, IMPLAN Aggregation Scheme

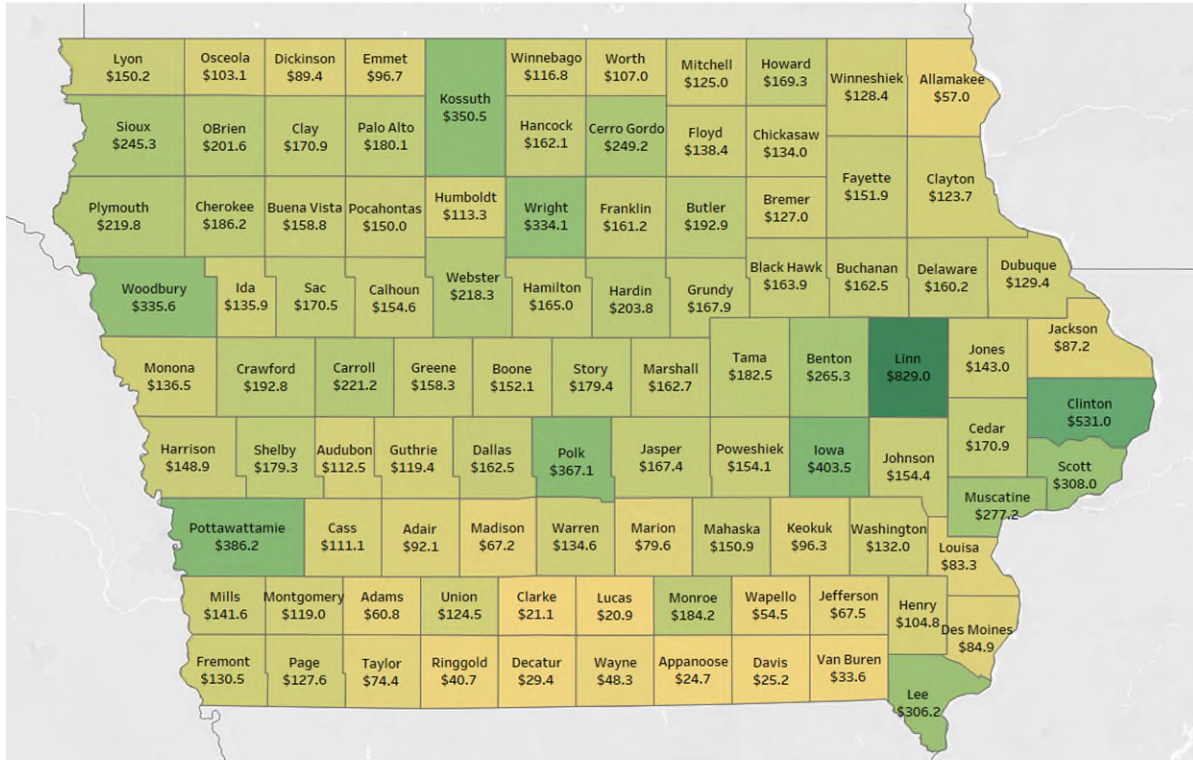
Event Name	Aggregation Description
Oilseed farming	Oilseeds
Grain farming	Grains
Vegetable and melon farming	Other Crop Production
Fruit farming	Other Crop Production
Tree nut farming	Other Crop Production
Greenhouse, nursery, and floriculture production	Other Crop Production
All other crop farming	Other Crop Production
Beef cattle ranching and farming	Cattle
Dairy cattle and milk production	Dairy
Poultry and egg production	Poultry
Animal production, except cattle and poultry and eggs	Hogs and Other Livestock
Forestry, forest products, and timber tract production	Other Crop Production
Commercial logging	Other Crop Production
Commercial fishing	Hogs and Other Livestock
Commercial hunting and trapping	Hogs and Other Livestock
Support activities for agriculture and forestry	Ag Support
Potash, soda, and borate mineral mining	Ag Chemical and Fertilizer
Phosphate rock mining	Ag Chemical and Fertilizer
Other chem and fert mineral mining	Ag Chemical and Fertilizer
Dog and cat food manufacturing	Animal and Pet Foods
Other animal food manufacturing	Animal and Pet Foods
Flour milling	Primary Food Processing - Crops
Wet corn milling	Primary Food Processing - Crops
Soybean and other oilseed processing	Primary Food Processing - Crops
Fats and oils refining and blending	Other Food Processing
Breakfast cereal manufacturing	Other Food Processing
Nonchocolate confectionery manufacturing	Other Food Processing
Chocolate and confectionery manufacturing from cacao beans	Other Food Processing
Confectionery manufacturing from purchased chocolate	Other Food Processing
Frozen specialties manufacturing	Other Food Processing
Canned fruits and vegetables manufacturing	Primary Food Processing - Crops
Cheese manufacturing	Primary Food Processing - Dairy
Dry, condensed, and evaporated dairy product manufacturing	Primary Food Processing - Dairy
Fluid milk manufacturing	Primary Food Processing - Dairy
Ice cream and frozen dessert manufacturing	Primary Food Processing - Dairy
Frozen cakes and other pastries manufacturing	Other Food Processing
Poultry processing	Primary Food Processing - Meat
Animal, except poultry, slaughtering	Primary Food Processing - Meat
Meat processed from carcasses	Primary Food Processing - Meat
Rendering and meat byproduct processing	Primary Food Processing - Meat

Event Name	Aggregation Description
Bread and bakery product, except frozen, manufacturing	Other Food Processing
Cookie and cracker manufacturing	Other Food Processing
Dry pasta, mixes, and dough manufacturing	Other Food Processing
Tortilla manufacturing	Other Food Processing
Roasted nuts and peanut butter manufacturing	Other Food Processing
Other snack food manufacturing	Other Food Processing
Coffee and tea manufacturing	Other Food Processing
Flavoring syrup and concentrate manufacturing	Other Food Processing
Mayonnaise, dressing, and sauce manufacturing	Other Food Processing
Spice and extract manufacturing	Other Food Processing
All other food manufacturing	Other Food Processing
Bottled and canned soft drinks & water	Other Food Processing
Manufactured ice	Other Food Processing
Breweries	Other Food Processing
Wineries	Other Food Processing
Distilleries	Other Food Processing
Other basic organic chemical manufacturing	Ag Chemical and Fertilizer
Nitrogenous fertilizer manufacturing	Ag Chemical and Fertilizer
Phosphatic fertilizer manufacturing	Ag Chemical and Fertilizer
Fertilizer mixing	Ag Chemical and Fertilizer
Pesticide and other agricultural chemical manufacturing	Ag Chemical and Fertilizer
Farm machinery and equipment manufacturing	Farm Machinery
Veterinary services	Ag Support

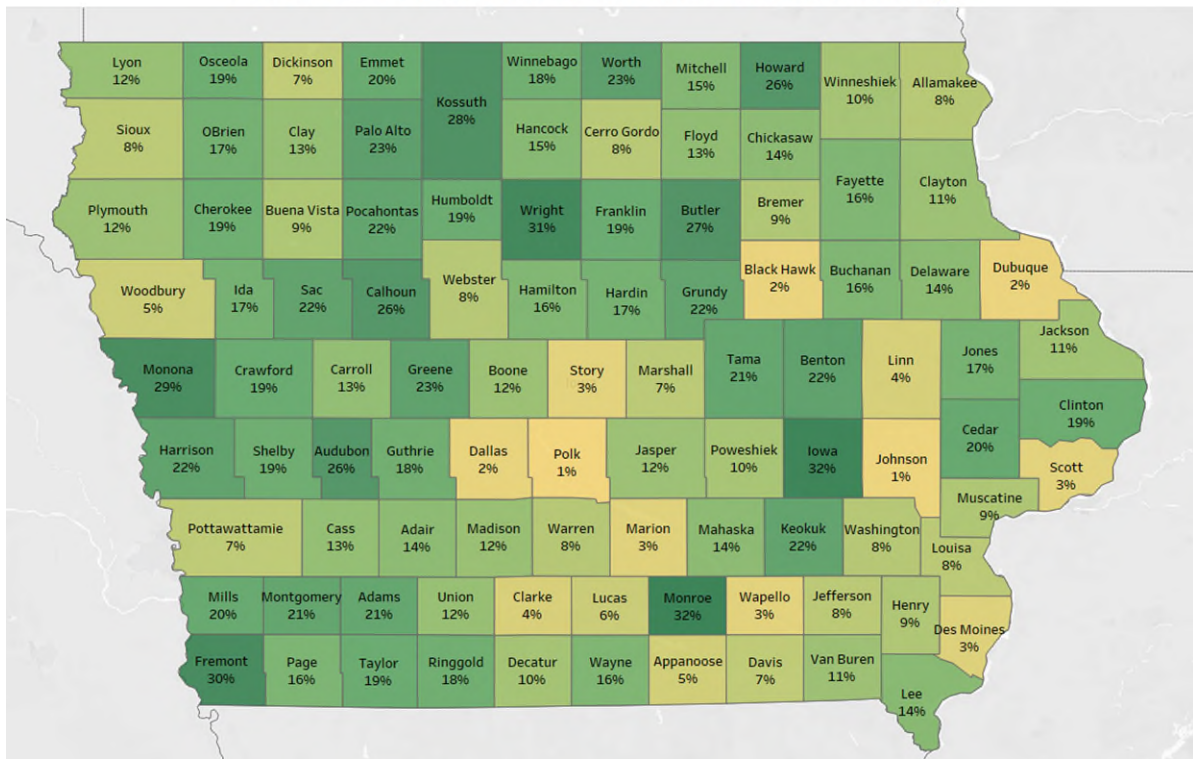
8 Appendix B, Detailed County Maps

Value Added

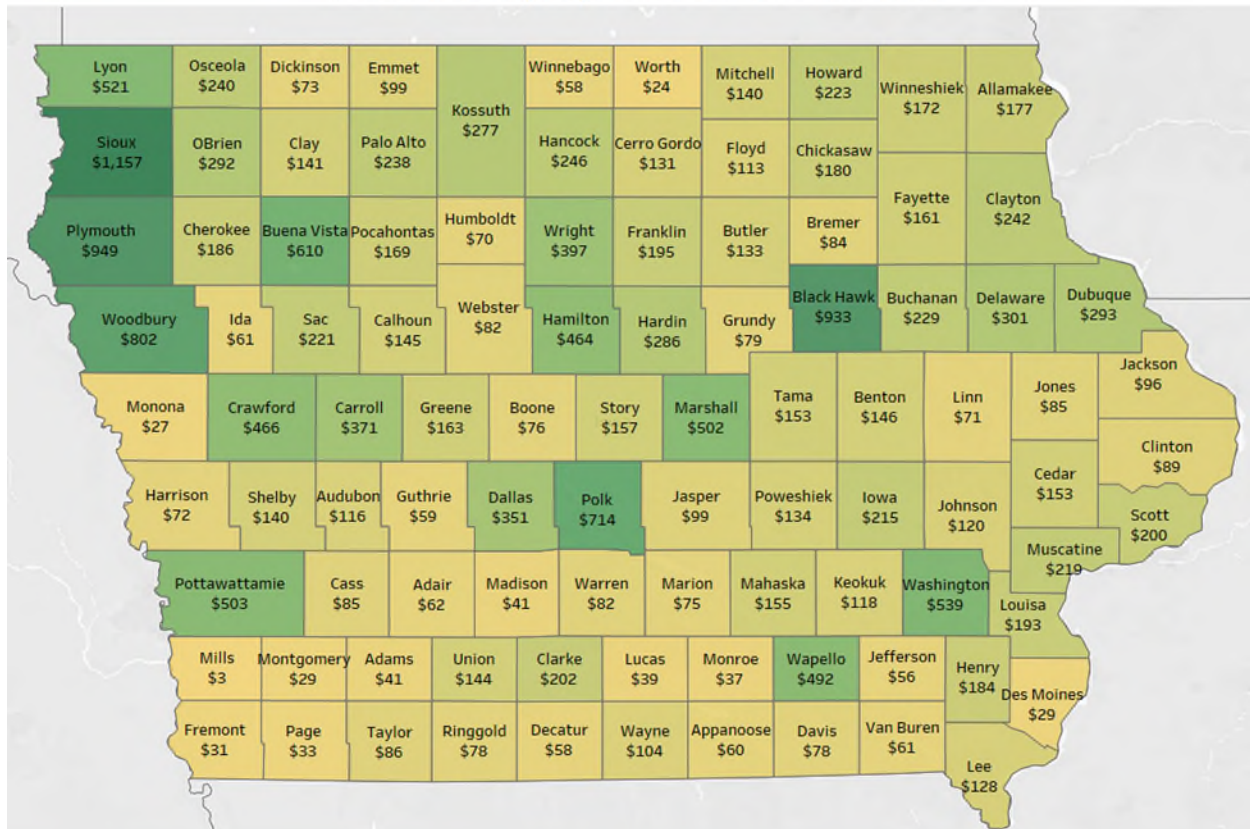
Value Added (\$M) Derived from Crops



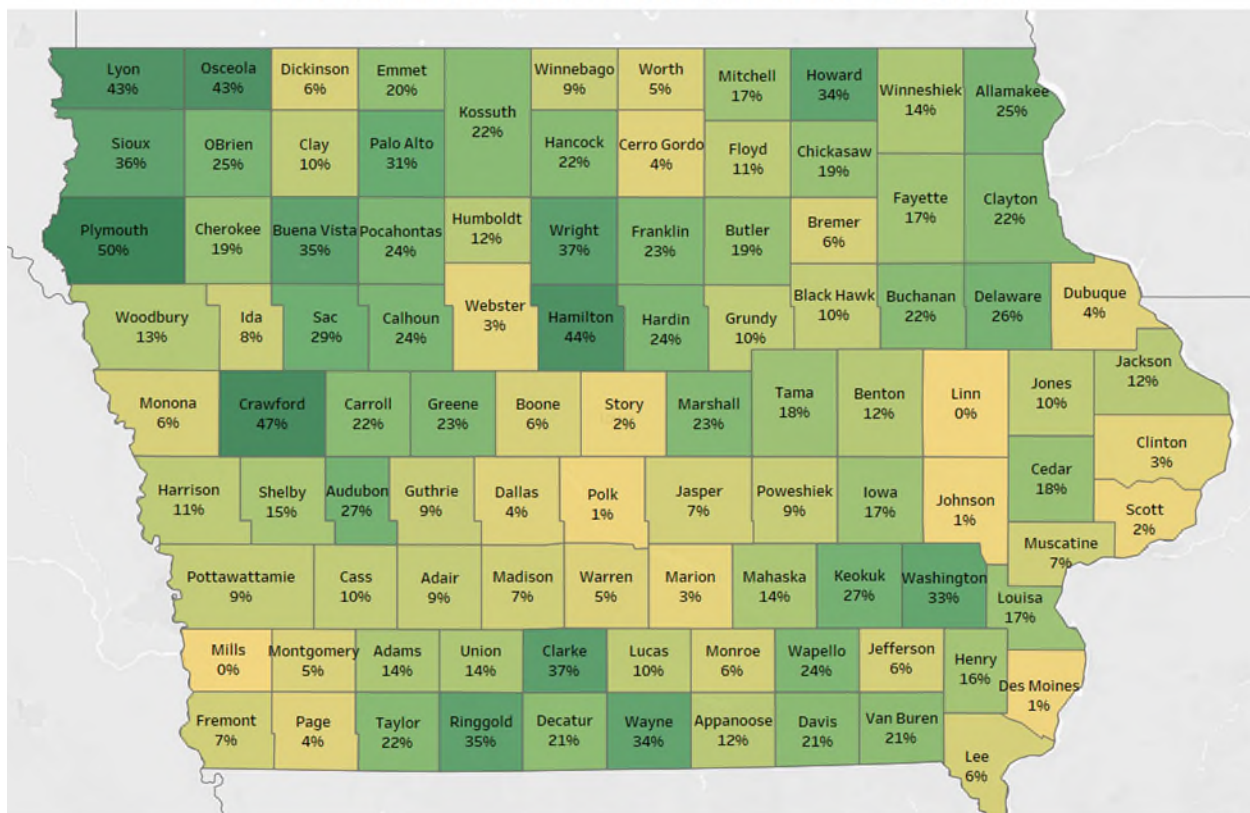
Percent of Total Value Added Derived from Crops



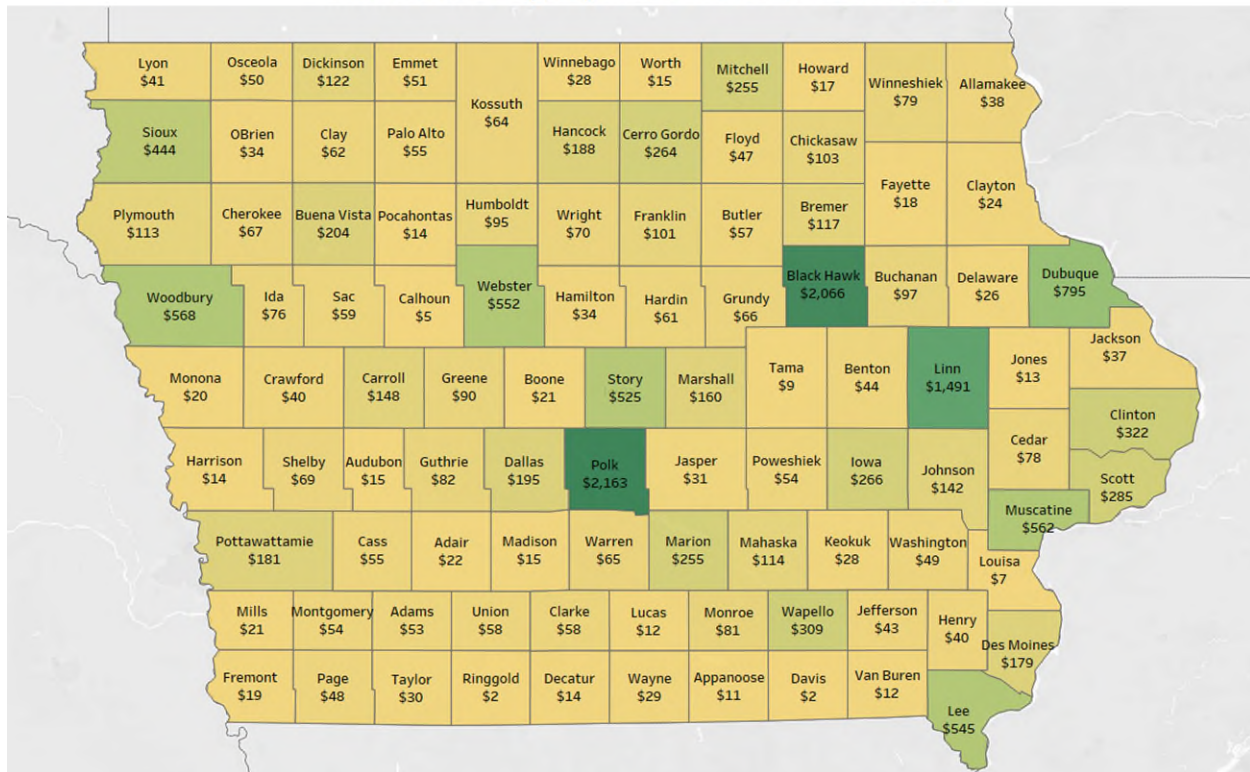
Value Added (\$M) Derived from Livestock



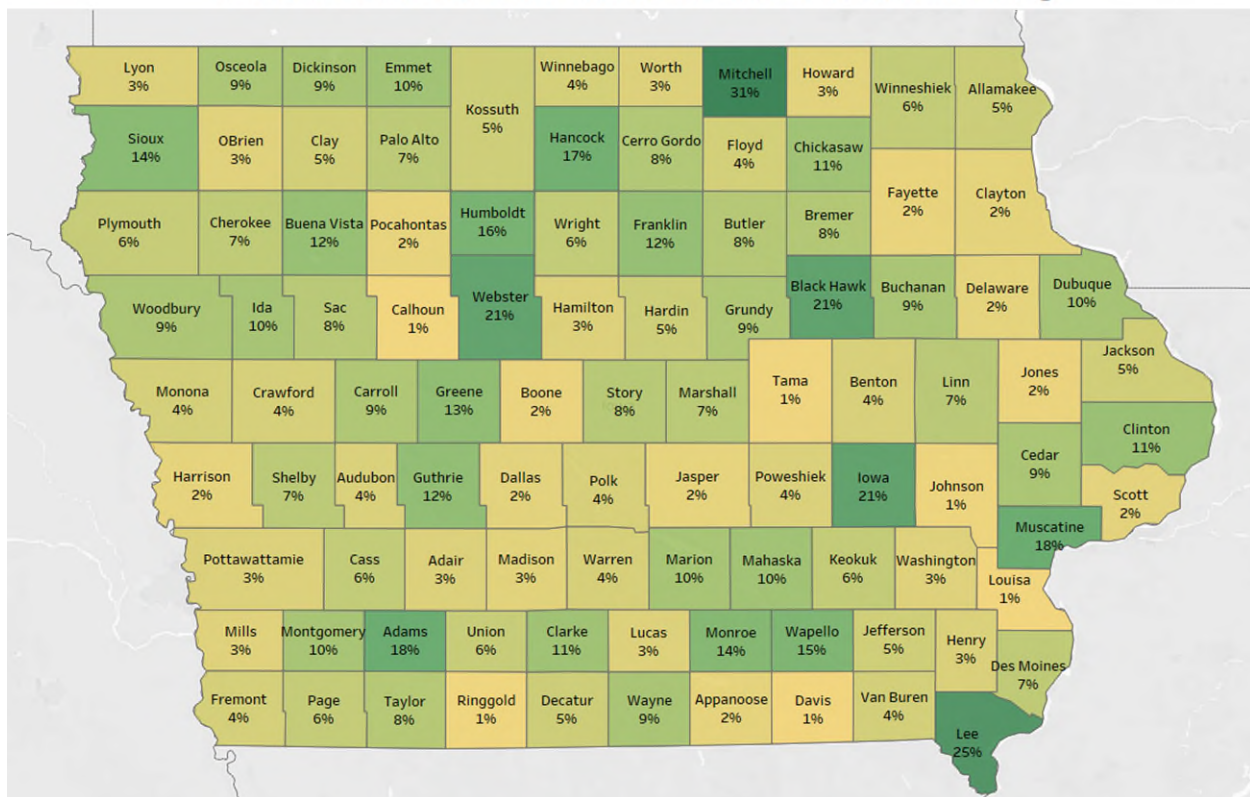
Percent of Total Value Added Derived from Livestock



Value Added (\$M) Derived from Other Ag

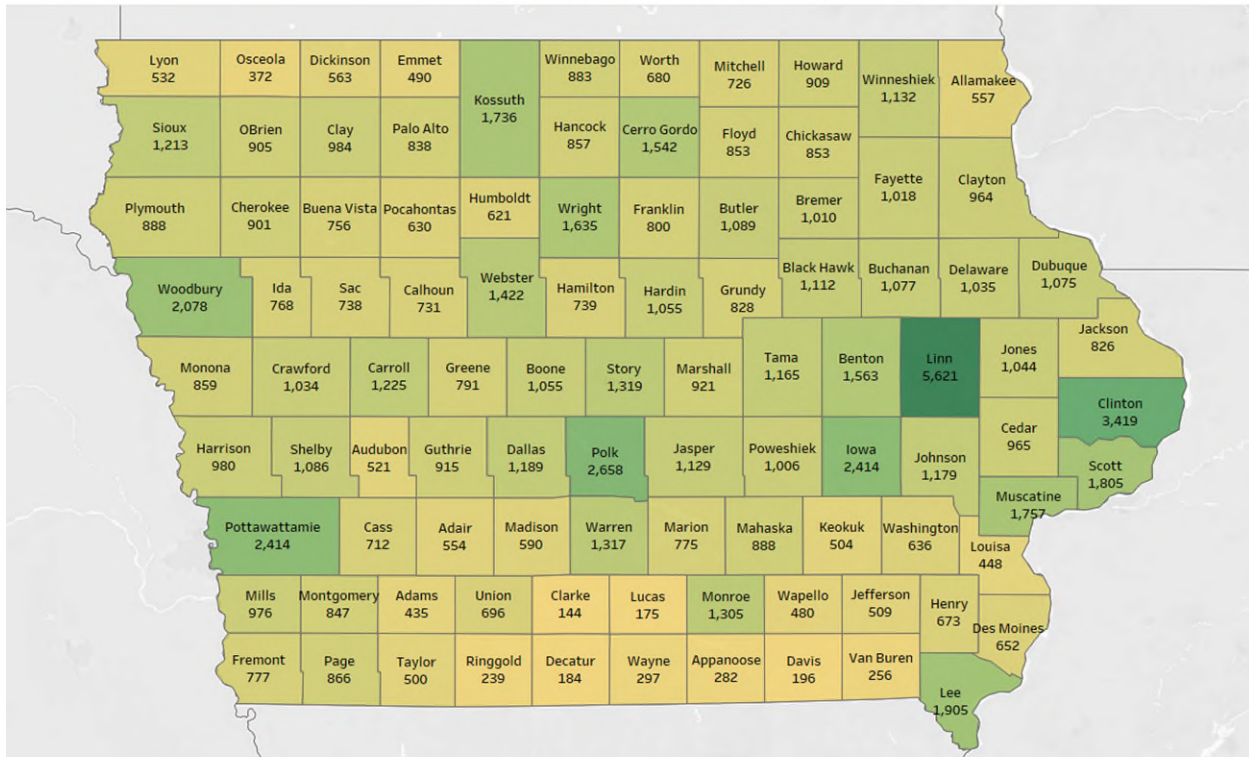


Percent of Total Value Added Derived from Other Ag

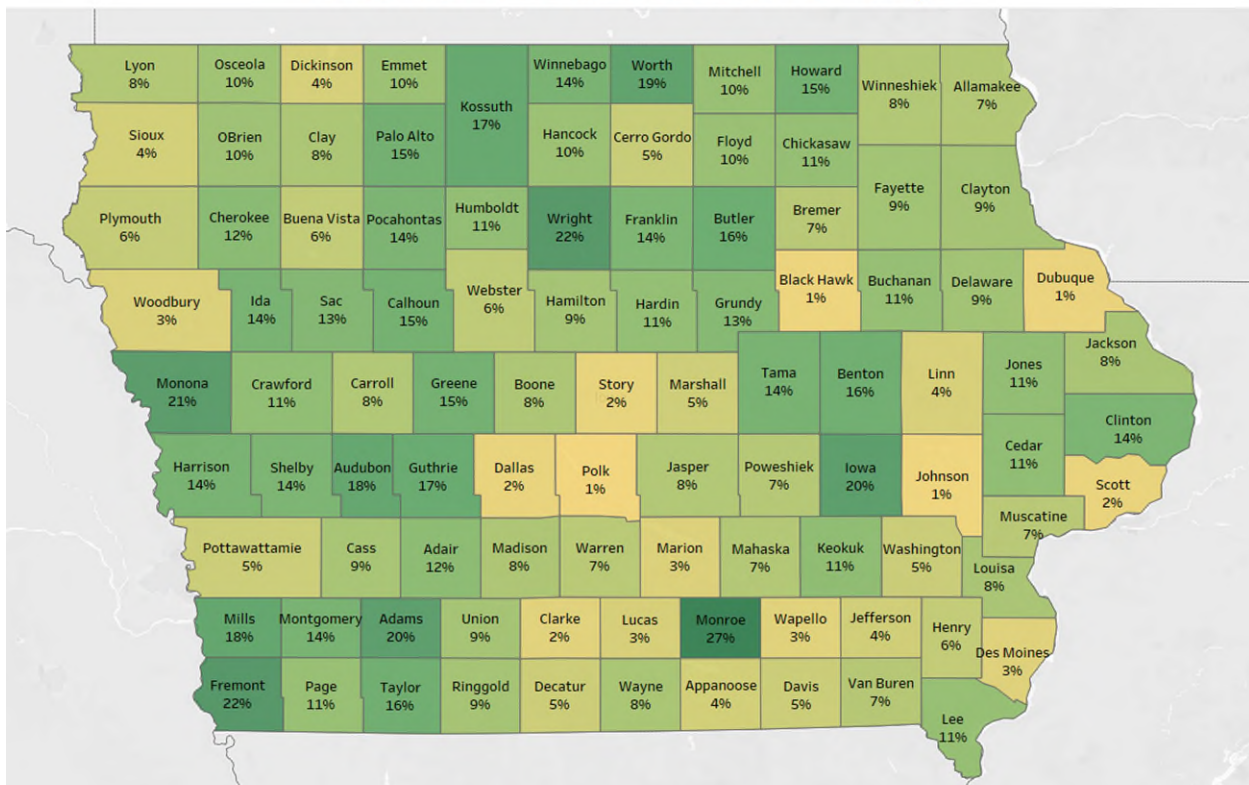


Jobs

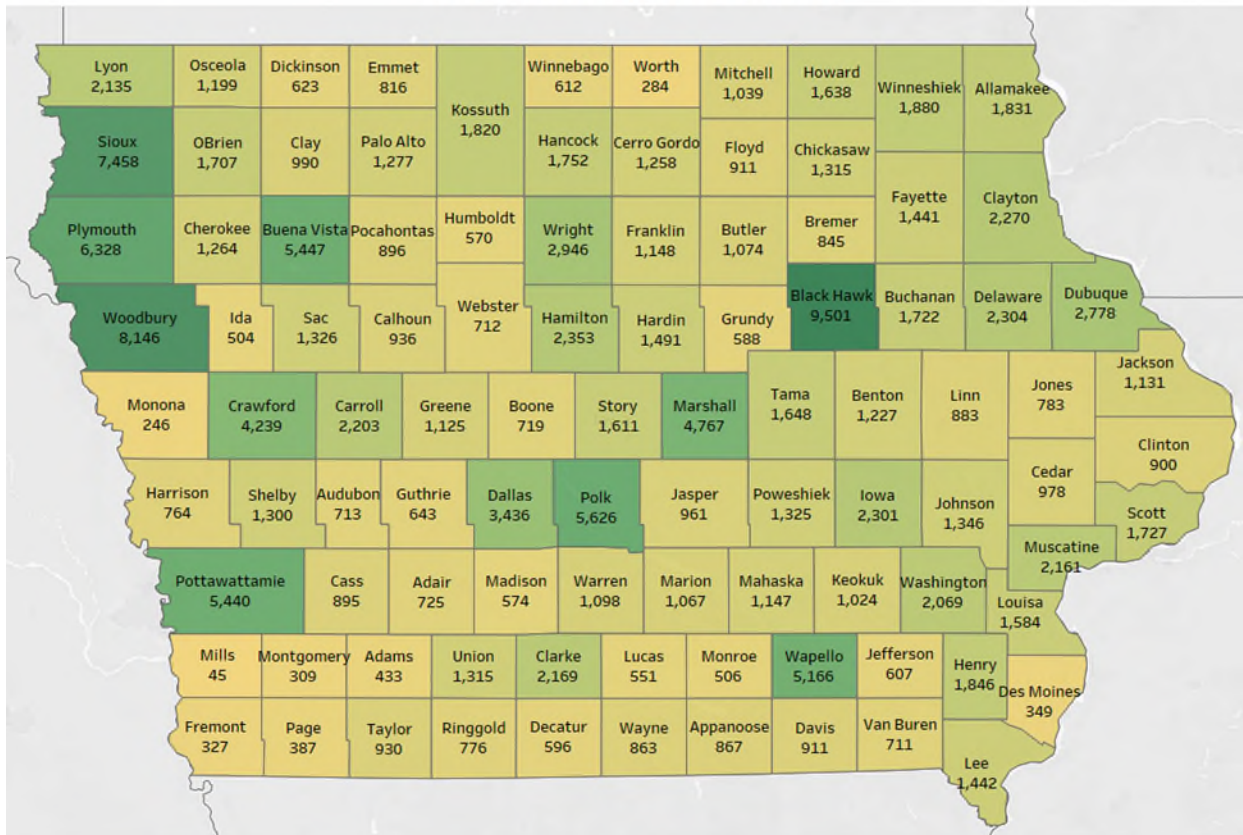
Jobs Derived from Crops



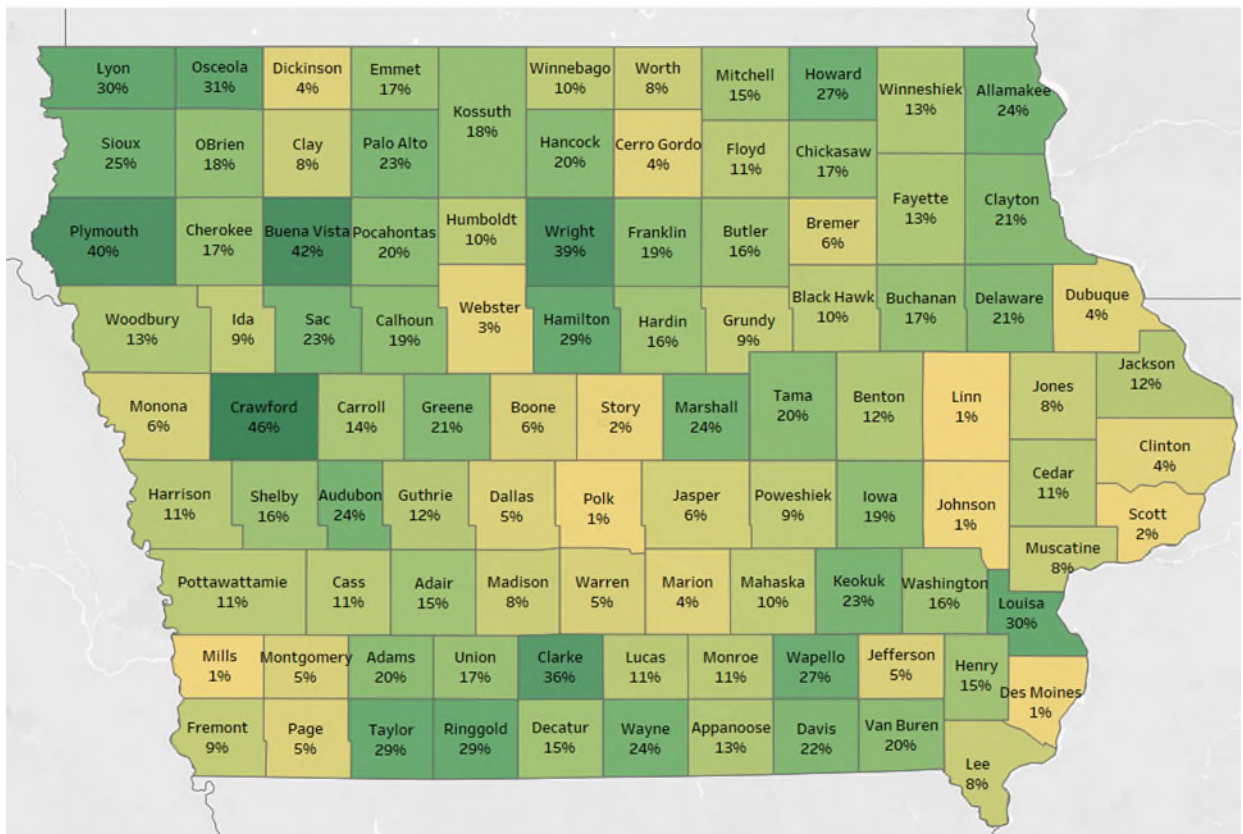
Percent of Total Jobs Derived from Crops



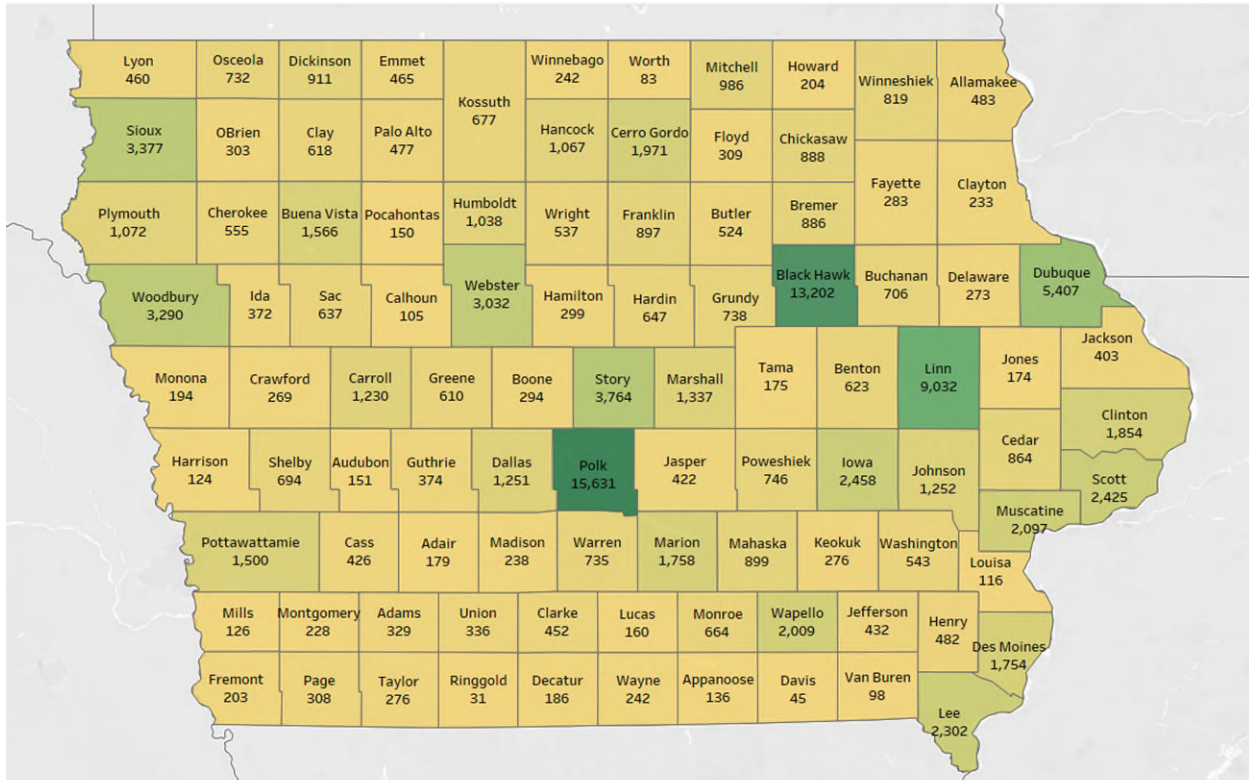
Jobs Derived from Livestock



Percent of Total Jobs Derived from Livestock



Jobs Derived from Other Ag



Percent of Total Jobs Derived from Other Ag

