

## Minnesota Agriculture Economic Contribution Study

### Project Update – June 2020

Over the past three weeks our team has been working to construct a framework and analyze the preliminary results of the 2020 Economic Contribution Study of Minnesota Agriculture and Forestry. By using 2018 data from the IMPLAN modeling system, the USDA 2017 Census of Agriculture, and other USDA/NASS datasets, we have completed the background section of the report and obtained IMPLAN results for the state and county level contributions.

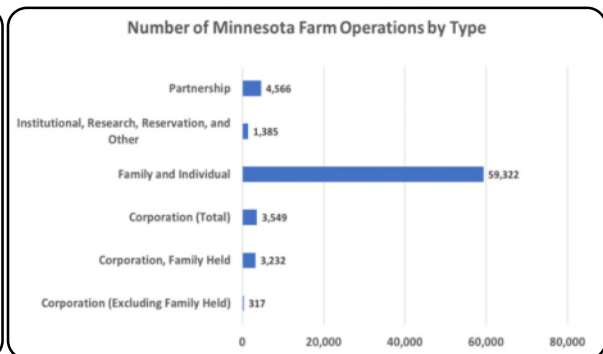
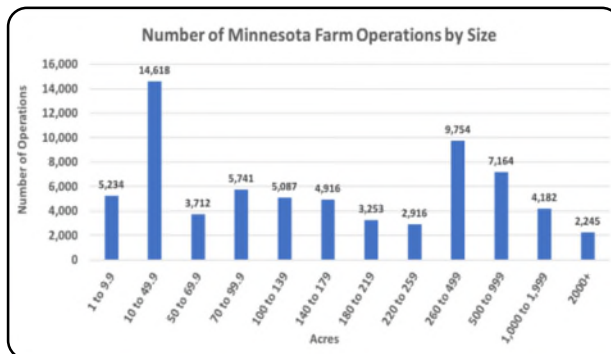
The background section of the report gives an overview of farm sales, inventories, demographics, forestry acres, and national rankings for the State of Minnesota. Using 2019 data from the USDA NASS, we identified 30 areas in which Minnesota ranks in the top 10 nationally. Examples include:

- Number of Turkeys Raised (#1)
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- Vegetables Area Harvested (#3)
- Red Meat Production (#6)
- Hogs and Pigs Value (#2)
- Soybean Production (#3)
- Corn for Grain Production (#4)
- Cattle on Feed Inventory (#8)
- Sweet Corn Production (#2)
- Sugar Beet Production (#1)
- Milk Production (#8)

Farm demographic and sales data was obtained from USDA/NASS sources and is represented in various charts and tables (see examples below).

#### Historical Minnesota USDA Census of Agriculture Data

	<u>2017</u>	<u>2012</u>	<u>2007</u>	<u>2002</u>	<u>1997</u>
Number of Minnesota farms	68,822	74,542	80,992	80,839	78,755
Average Minnesota farm size (acres)	371	349	332	340	350
Market Value (per farm)					
Land and Buildings (\$)	\$1,799,201	\$1,474,057	\$853,968	\$517,132	\$398,576
Machinery and equipment (\$)	\$223,666	\$197,715	\$131,698	\$86,369	\$81,809
Farm products sold (\$)	\$267,289	\$285,479	\$162,738	\$106,083	\$106,720
Livestock Inventory					
Cattle and calves	2,337,505	2,412,684	2,395,217	2,265,997	2,399,617
Beef cows	368,214	357,286	399,768	403,594	395,059
Milk cows	457,801	463,312	459,752	478,248	554,274
Hogs and pigs	8,467,361	7,606,785	7,652,284	6,440,067	5,665,364
Laying chickens	10,849,607	9,693,648	10,596,573	11,576,411	11,969,935
Broilers	11,068,267	765,172	8,649,569	4,885,619	4,158,369
Turkeys	18,110,298	19,449,992	18,298,316	15,512,346	16,220,767
Cattle and calves sold	1,683,259	1,537,782	1,586,705	1,356,142	1,334,446
Hogs and pigs sold	27,228,111	22,154,443	22,815,512	18,618,300	12,814,319
Production (bushels)					
Corn for grain	1,464,241,562	1,297,767,570	1,138,660,229	989,887,877	796,829,406
Oats for grain	6,494,938	7,812,393	10,494,120	12,958,117	16,667,790
Soybeans	376,505,537	293,830,150	259,891,979	303,069,928	239,041,962
Wheat	79,313,793	76,133,135	82,488,109	64,609,805	83,878,930



In addition to background data and trends, we have created an IMPLAN model to report economic contributions of 97 different industry sectors related to agriculture and forestry. These industries have been aggregated into four main categories (Crops, Livestock, Forestry, and Other Agriculture) and then sorted further into sub-categories.

Crops	Forestry
Oilseeds	Forestry Production (2 industries)
Grain Farming	Forestry Product Manufacturing (19 industries)
Other Crop Production (8 industries)	Sawmill, Woodworking, and Paper Machinery
Primary Processing- Crops (9 industries)	
Other Agriculture	Livestock
Ag Support (2 industries)	Beef Cattle
Ag Chemical & Fertilizer (8 industries)	Dairy cattle
Animal & Pet Foods (2 industries)	Poultry and Eggs
Other Food Processing (9 industries)	Hogs and Other (3 industries)
Farm Machinery	Primary Processing- Dairy (5 industries)
Food Product Machinery	Primary Processing- Meat (5 industries)

IMPLAN provides results on the direct, indirect, induced, and total effects that each industry and sub-sector has on the number of jobs, household income, value-added, and output (sales) for each region. This data has been extracted from IMPLAN and will be used to create visual representations of the economic contribution for each area. In the next few weeks, we will continue to use a combination of pie charts, bar graphs, maps, combo charts, and data tables to interpret and present the results from our IMPLAN models. We will use those graphics to highlight the major contributing industries for Minnesota and each of the counties in the state. Once all the data have been compiled, results will be added to the report and we will be working on getting the written report added to the graphics.



The Decision Innovation Solutions Project Team  
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