

The Good Acre Live Case

Carlson Analytics Lab

Group 8

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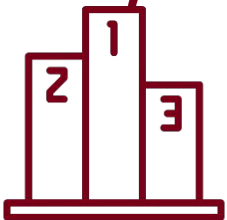
CARLSON SCHOOL
OF MANAGEMENT
UNIVERSITY OF MINNESOTA



- TGA **connects local farmers** to markets and grocers, ensuring that the economic value generated by their hard work flows back to them.
- Currently, TGA is **evaluating five potential warehouse locations** to enhance its ability to better serve both farmers and markets.
- **Mission** –As the largest nonprofit food hub in Minnesota, our approach is grounded in sustainability and community well-being and the focus is on achieving a greater good with your food purchasing dollars without compromises to farmer equity, food quality or the environment.”



- TGA faces uncertainty in determining which of these locations should be prioritized as the "best" option. This decision is **complicated by the nuanced and multi-dimensional nature of what defines a "good" location.**



- **Which factors** do we prioritize to align with TGA's mission of supporting local farmers and strengthening the supply chain?
- **How do we evaluate and rank** the best locations based on these prioritized factors?

Outcomes and Recommendations

1. Tailored recommendations for warehouse locations based on demographic factors and product priorities.
2. Interactive Tableau dashboard to assess and rank optimal locations using key metrics like farm density and commodity sales.

One-stop solution to make efficient decisions

DATA SOURCES

TGA Resources

- Food Hub Map
- Q&A with TGA

MN Resources

- Government Census

METRICS

- Farm Count
- Farmer Gender
- Top Commodity
- Share of Sale
- Small Scale Farm
- Distance

DASHBOARD

1. Metrics
2. Weightage
3. Rank

DECISION

Warehouse Location

Data-driven decisions: integral to vision

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DECISION

Warehouse Location

“What would it look like to **partner with organizations** that have some of that **supply chain capacity** so that we can aggregate outside of our facility, bringing those kinds of orders and the volume of supply together into 1 point”

--- TGA Lauren

Keep your friends close and opportunities closer

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DECISION

Warehouse Location

More partners strengthens food network

Farm Count

Farmer Gender

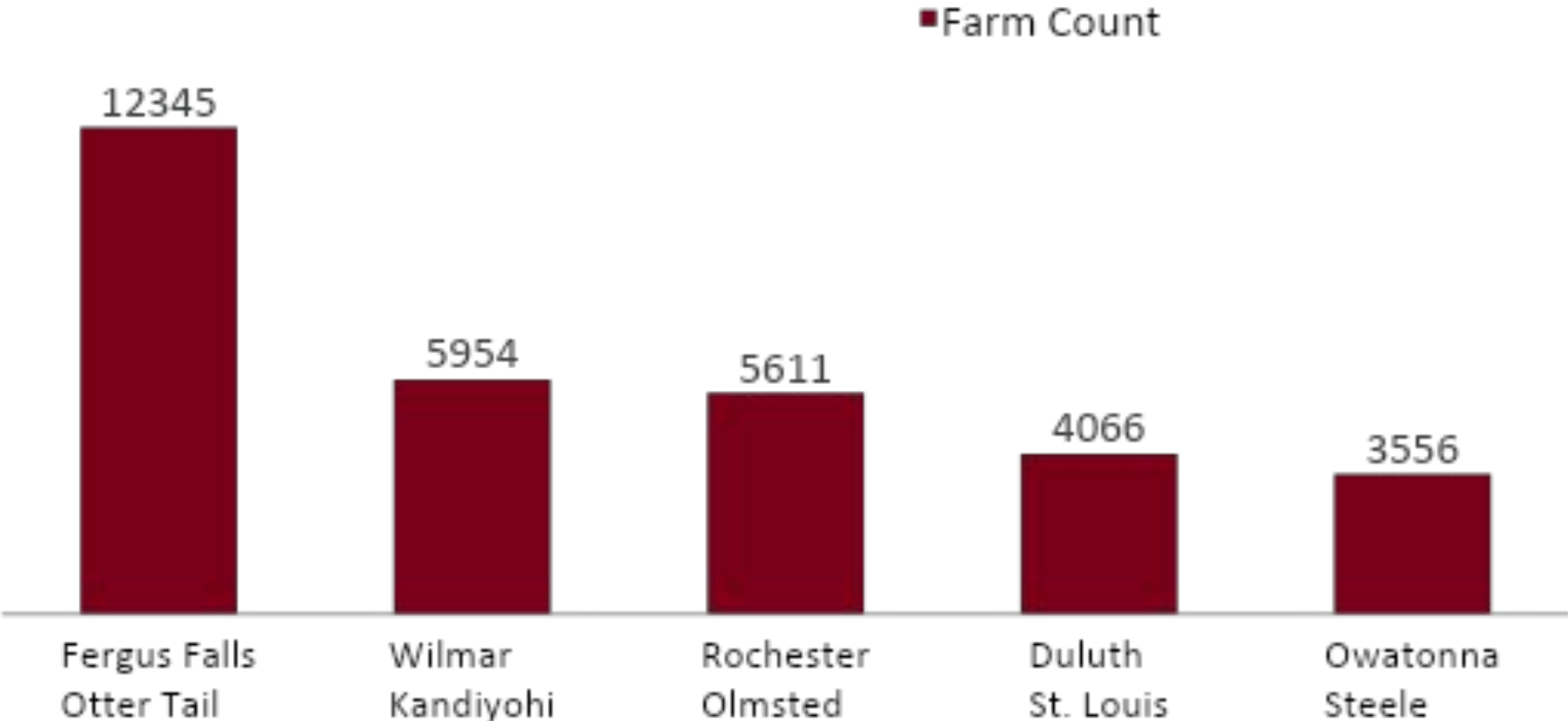
Top Commodity

Share of Sale

Small Scale Farm

Distance

Number of Farm by States | Count



Uncover more sales in high-profit products

Farm Count

Farmer Gender

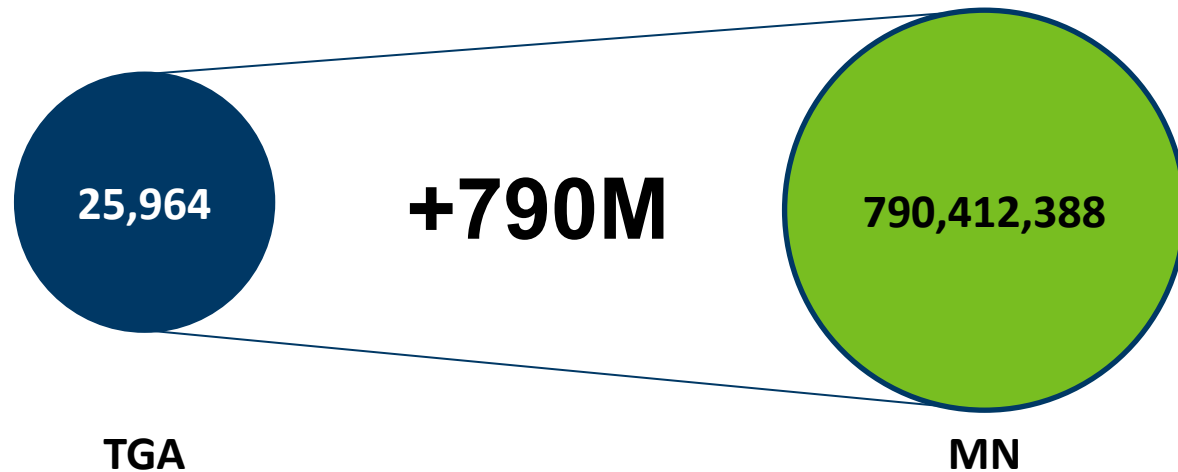
Top Commodity

Share of Sale

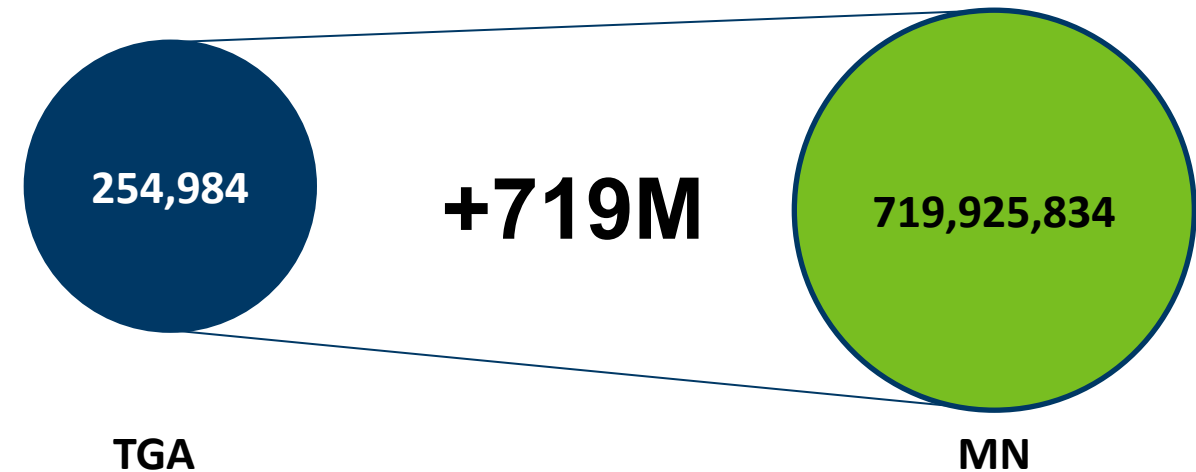
Small Scale Farm

Distance

Shell eggs | Quantity



Vegetable | Sales, Measured in \$



One action, two gains

Farm Count

Farmer Gender

Top Commodity

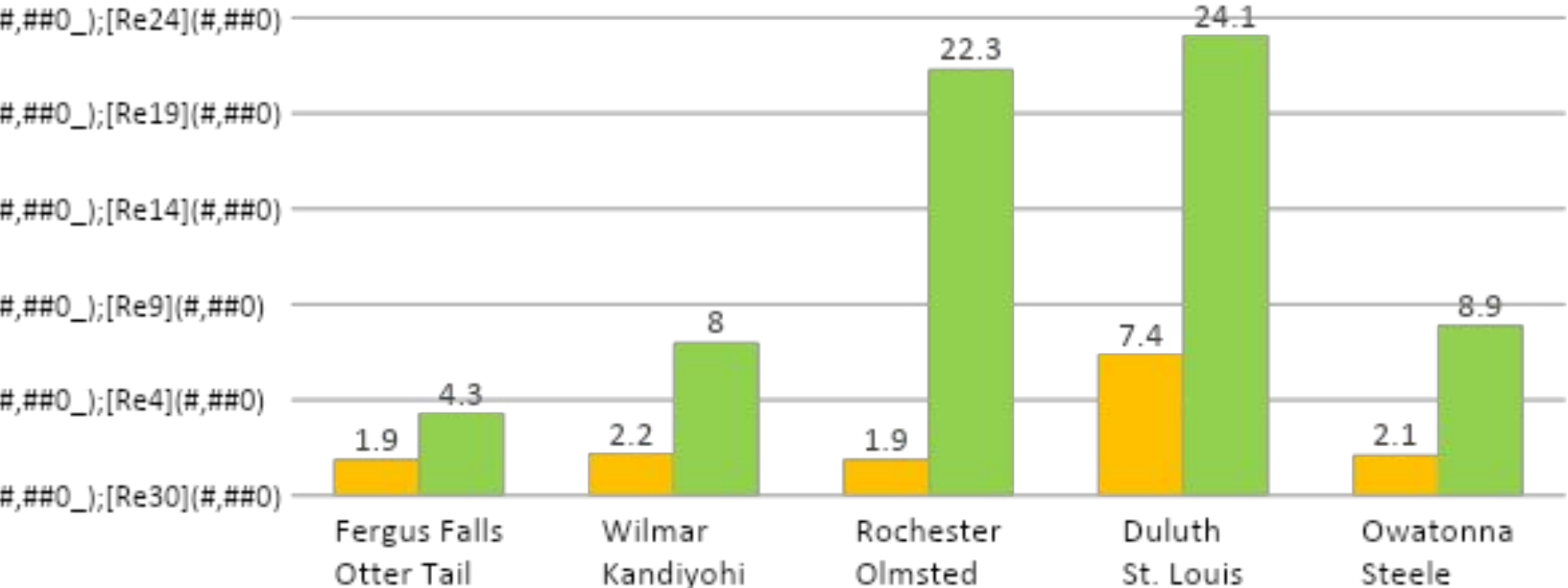
Share of Sale

Small Scale Farm

Distance

Farms with Eggs or Vegetables | Count Percentage%

Eggs Vegetables



Government policies support female farmers

Farm Count

Farmer Gender

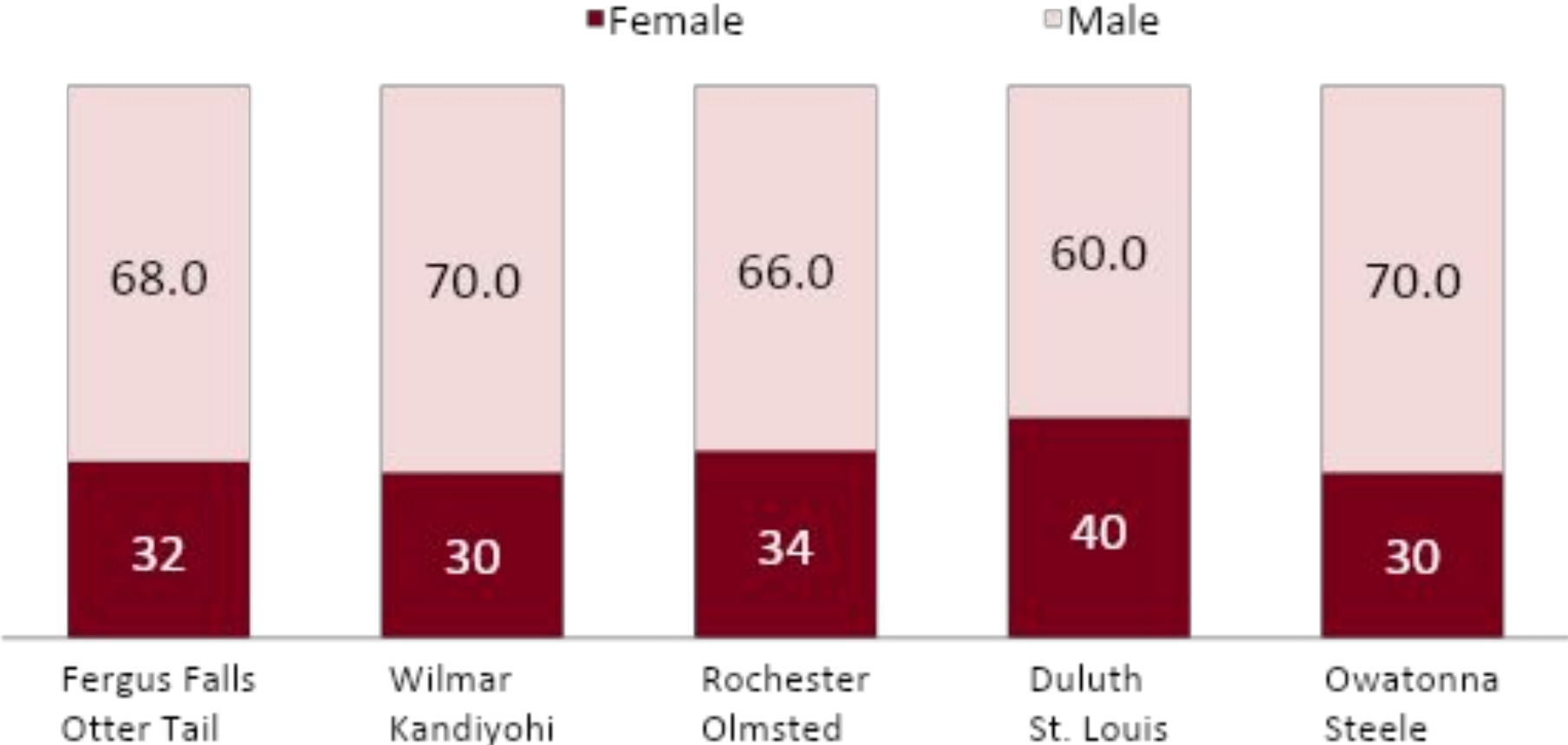
Top Commodity

Share of Sale

Small Scale Farm

Distance

MN Farmer Gender | Count%



High revenue products shine in different places

Farm Count

Farmer Gender

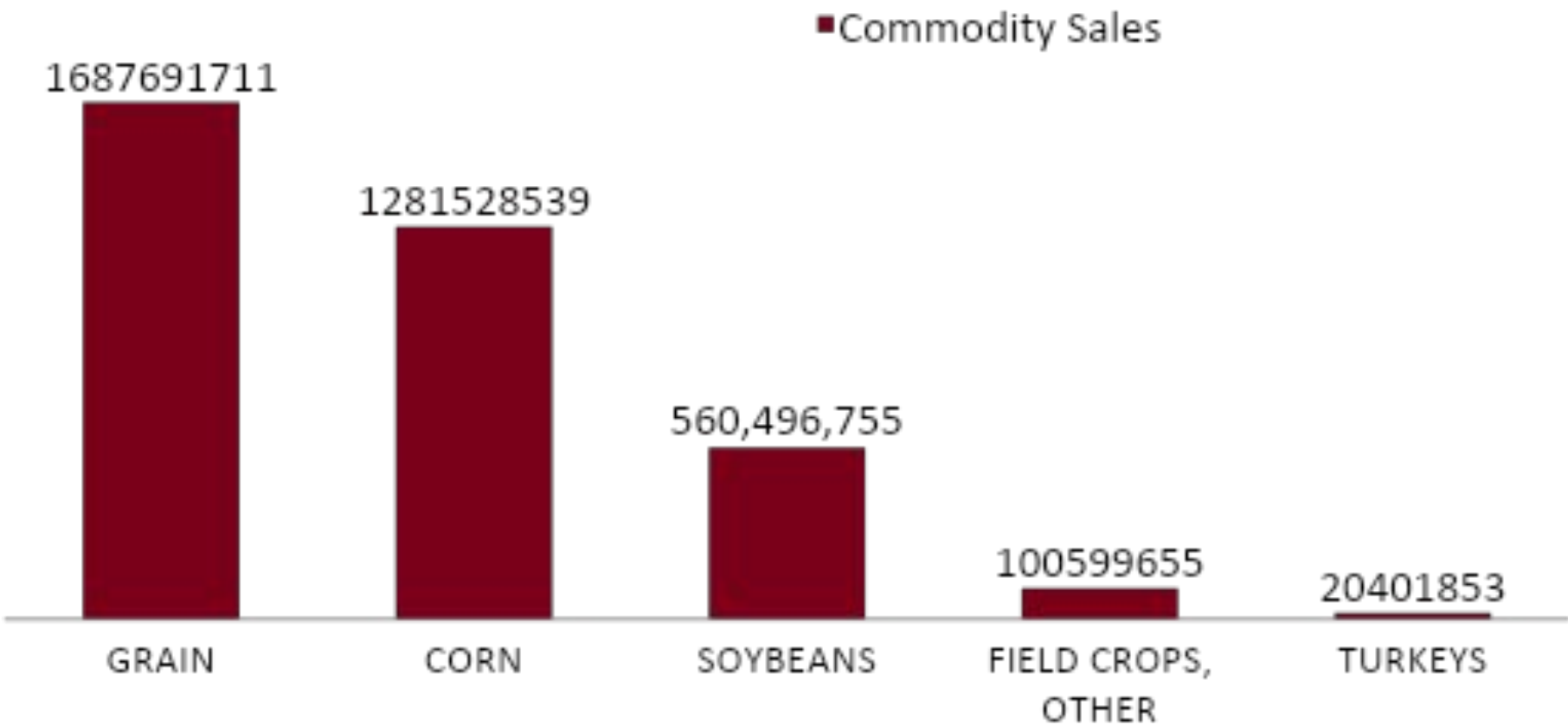
Top Commodity

Share of Sale

Small Scale Farm

Distance

Top 5 Commodity Sales in 5 counties | Sales



The higher, the better

Farm Count

Farmer Gender

Top Commodity

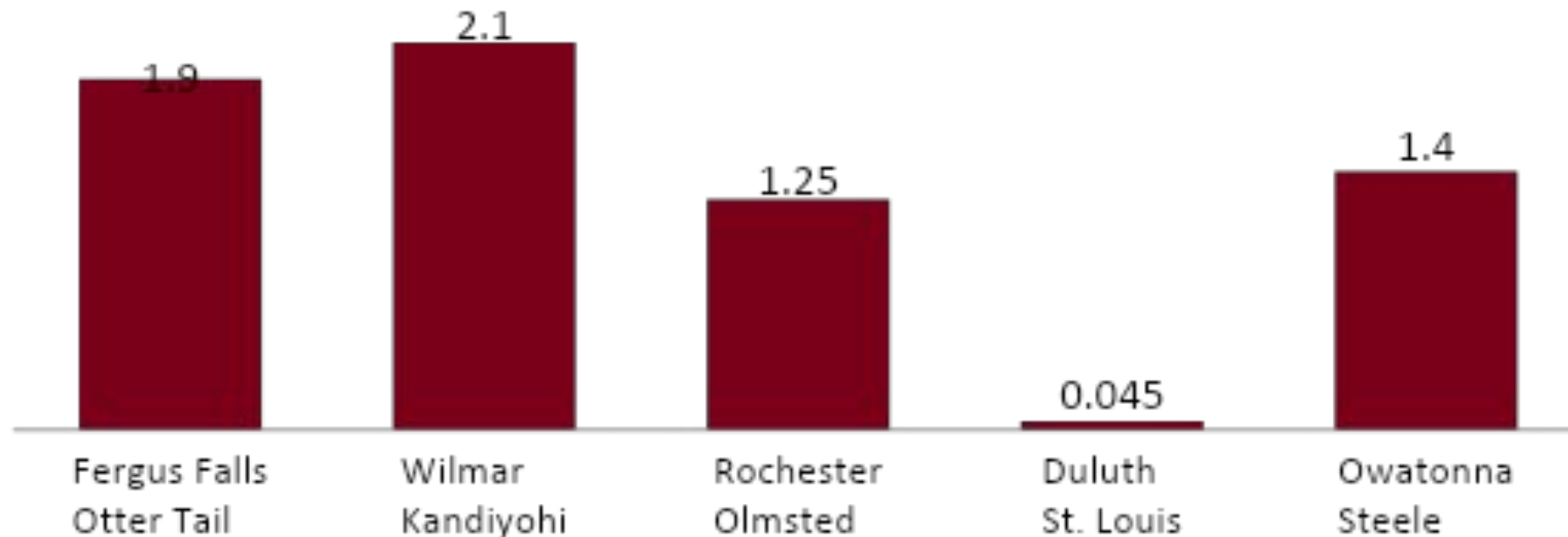
Share of Sale

Small Scale Farm

Distance

County Sales | Proportion of Sales% | MN Total Sale = 100%

■ Proportion of Sales%



Small investment, big return

Farm Count

Farmer Gender

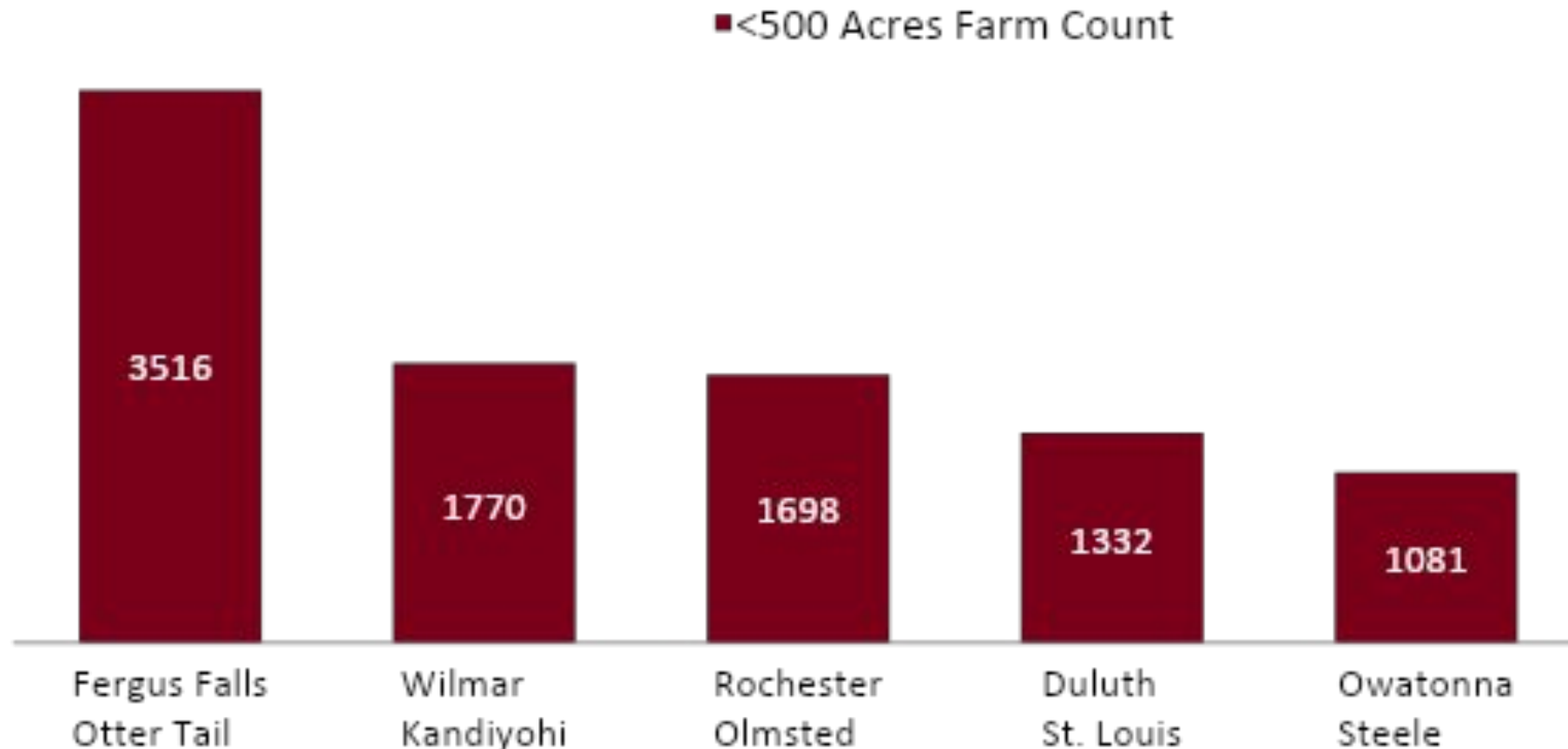
Top Commodity

Share of Sale

Small Scale Farm

Distance

<500 Acres Farm Count by County



Reduce barrier of distance

Farm Count

Farmer Gender

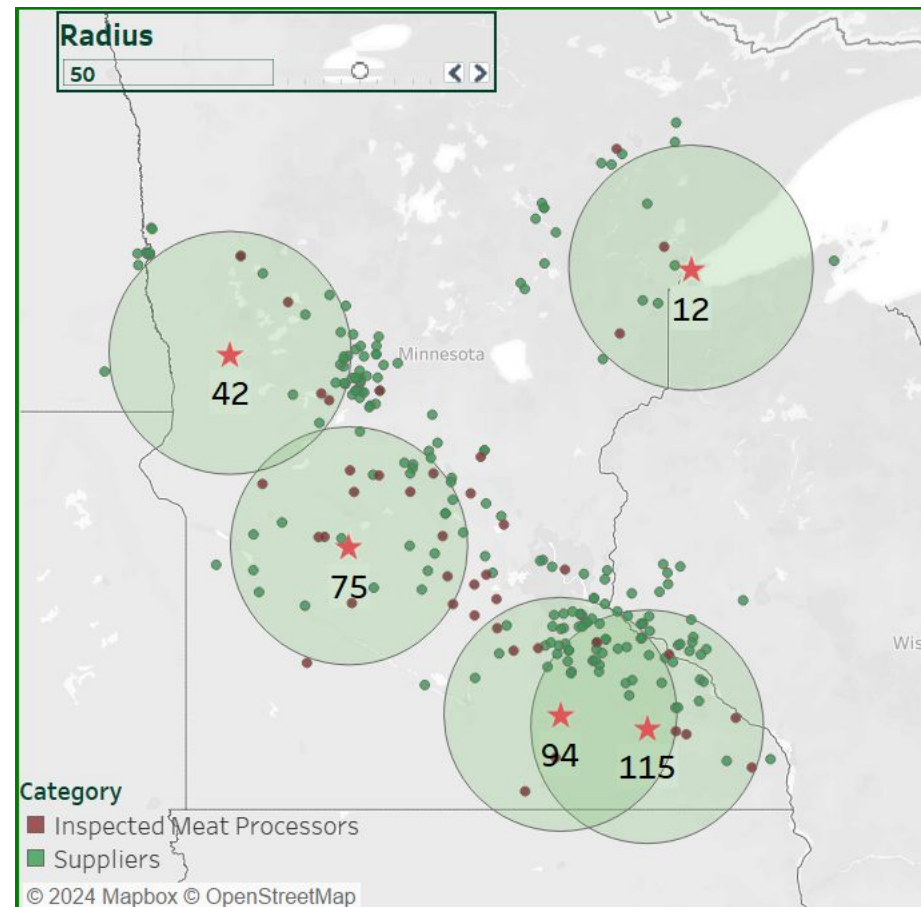
Top Commodity

Share of Sale

Small Scale Farm

Distance

We will look at existing suppliers average distance in 5 counties in 50 radius.
The shorter the distance, the better TGA can reduce supply chain cost



What if one metric is more important

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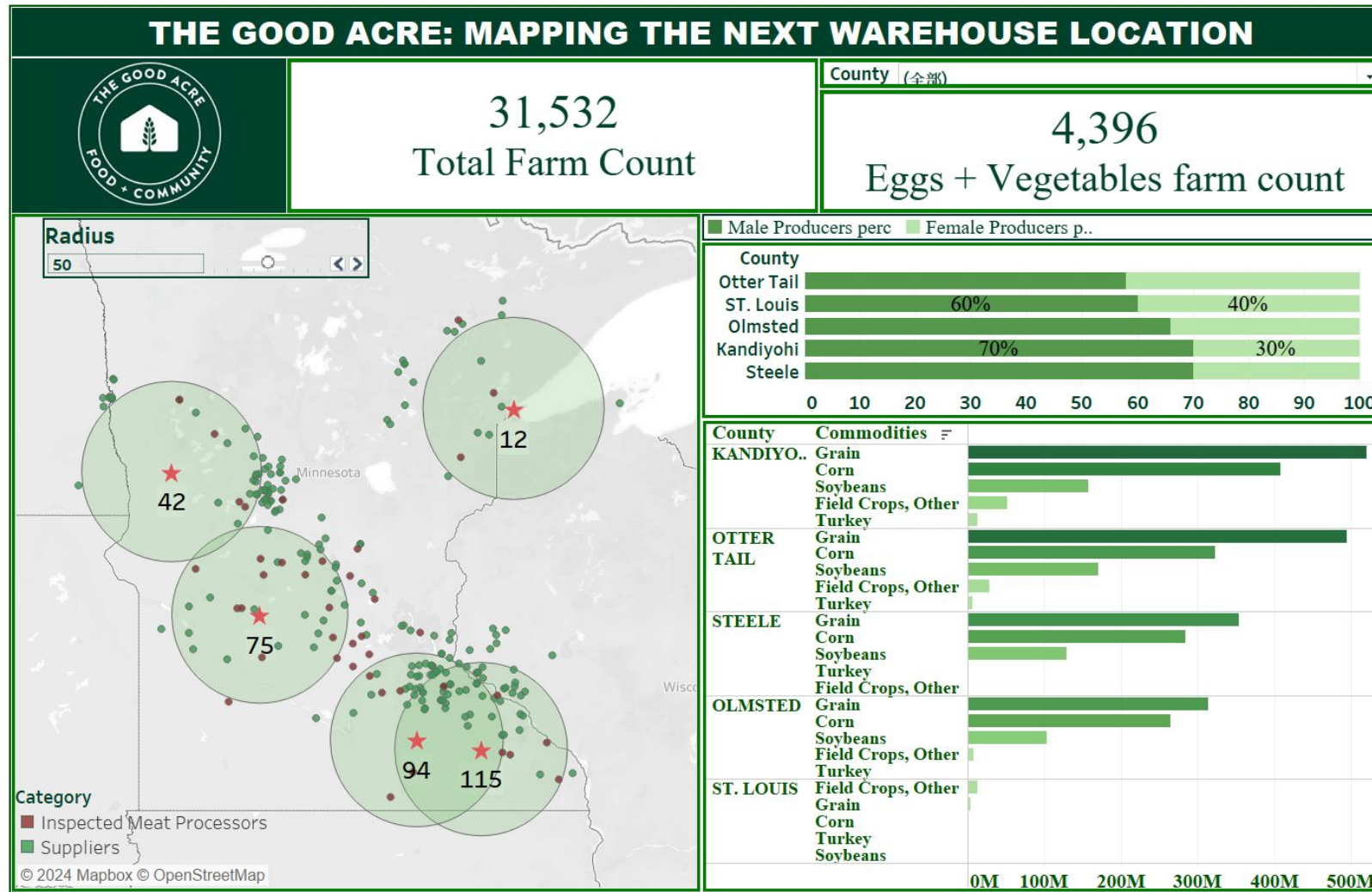
DASHBOARD

1. Metrics
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DECISION

Warehouse Location

Demonstration of Tableau



Rank will be assigned based on given factors

What if one metric is more important

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DECISION

Warehouse Location

We recommend XYZ as new location

		Score (5 the highest, 1 the lowest)				
	Weightage	Fergus Falls Otter Tail	Wilmar Kandiyohi	Rochester Olmsted	Duluth St. Louis	Owatonna Steele
Farm Count	1	5	4	3	2	1
Farmer Gender	1	3	2	4	5	2
Top Commodity	1	5	4	3	2	1
Share of Sale	1	4	5	2	1	3
Small Scale Farm	1	5	4	3	2	1
Distance	1					
Total		22	19	15	12	8
Rank		1	2	3	4	5

Thank You

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