# CROP PRODUCTION

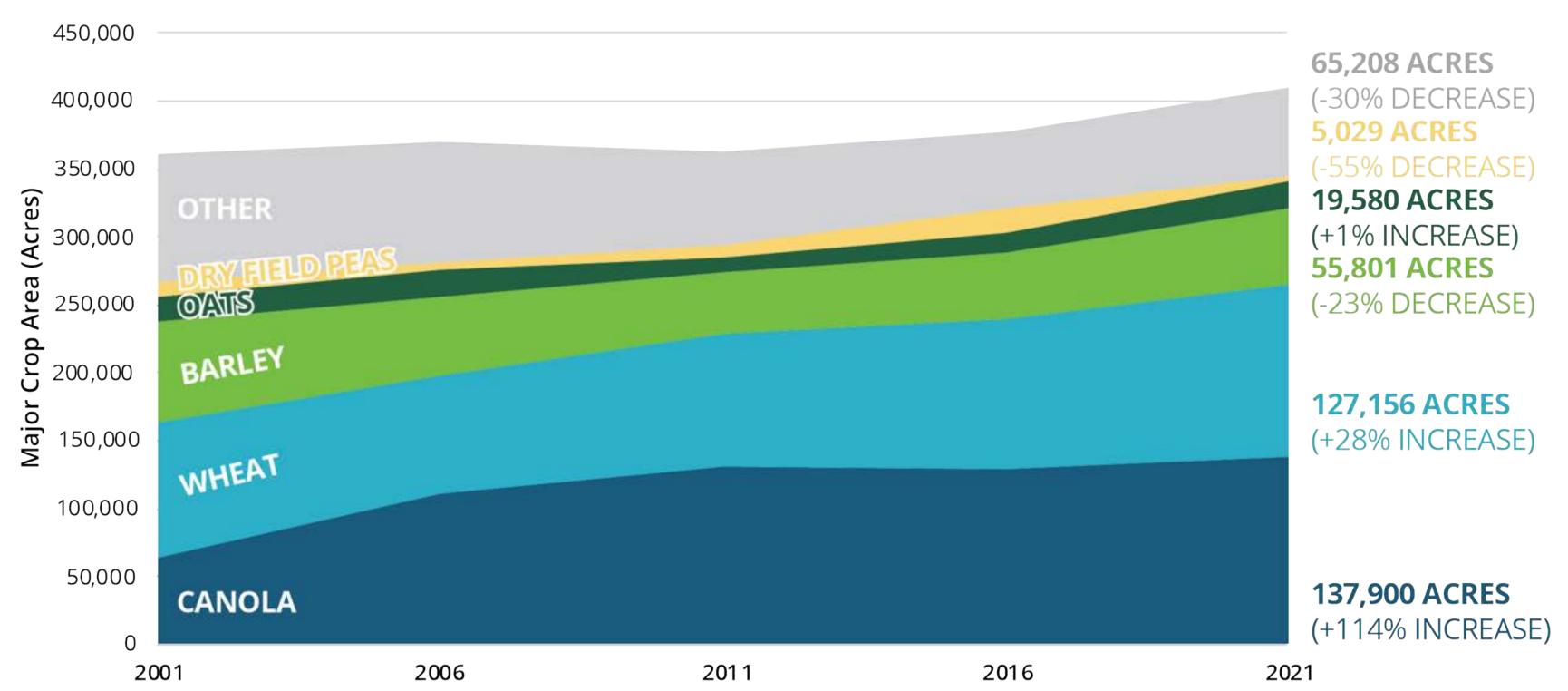


# Agriculture Master Plan 2024

### **ABOUT**

From 2001 to 2021, Sturgeon County had a 49,000 acre increase in crop production. Outlined below is a comparison of the 2001 to 2021 changes to major annual crop acreages in Sturgeon County and Alberta:

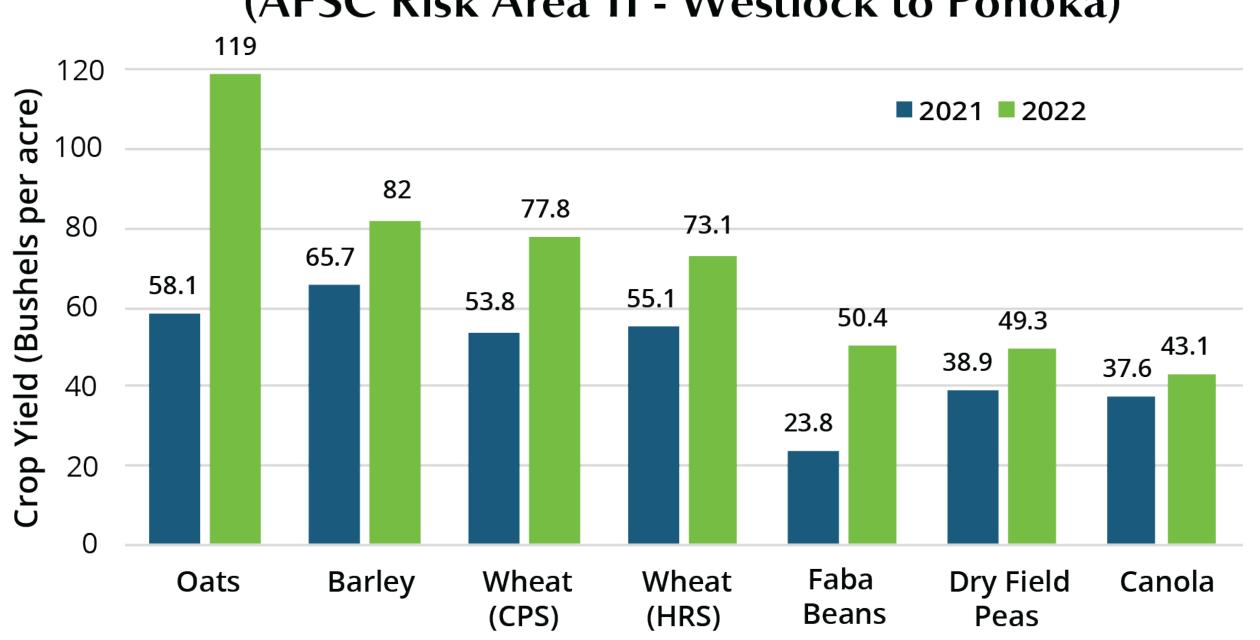




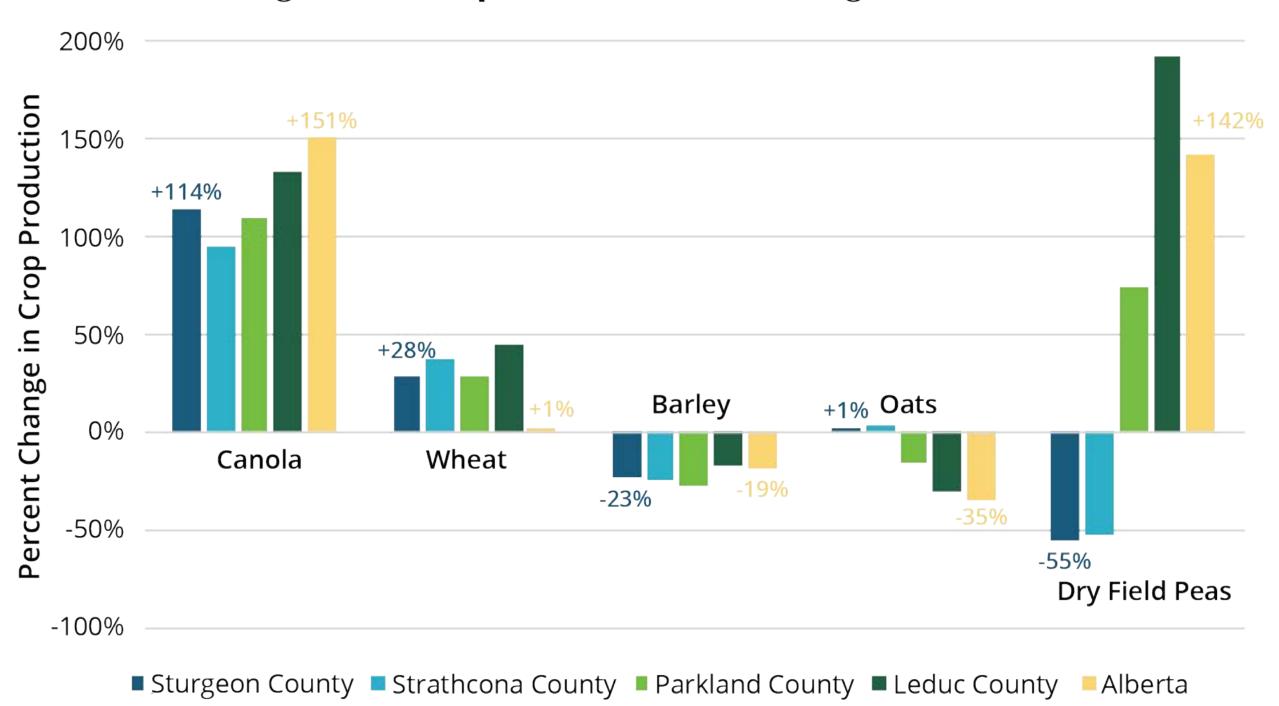
## **Specialty Crop Areas 2001 to 2021**

	2001	2006	2011	2016	2021
Forage for seed (acres)	-	-	-	818	1,615
Vegetables (acres)	71	107	89	80	-
Fruit, Berries, Nuts (acres)	172	115	191	149	-
Nursery Products (acres)	404	739	909	447	-
Sod Products (acres)	_	_	-	1,120	4,548
Greenhouse Area (ft²)	364,118	447,380	344,904	260,712	323,321

# Major Crop Yields (AFSC Risk Area 11 - Westlock to Ponoka)



## Regional Crop Production Change 2000 to 2021



### **DATA SOURCES**

Statistics Canada Census of Agriculture 2001, 2006, 2011, 2016, 2021 Agriculture and Agri-Food Canada, Annual Crop Inventory 2022 Agriculture Financial Services Canada, Yield Alberta 2023.

What may be influencing these crop changes, and what changes may occur in the future?

What other impacts are there to the agricultural system in the County resulting from these crop changes?

How might the County support the production of speciality crops (potatoes, berries, vegetables, sod)? Are there any barriers that the County may address?



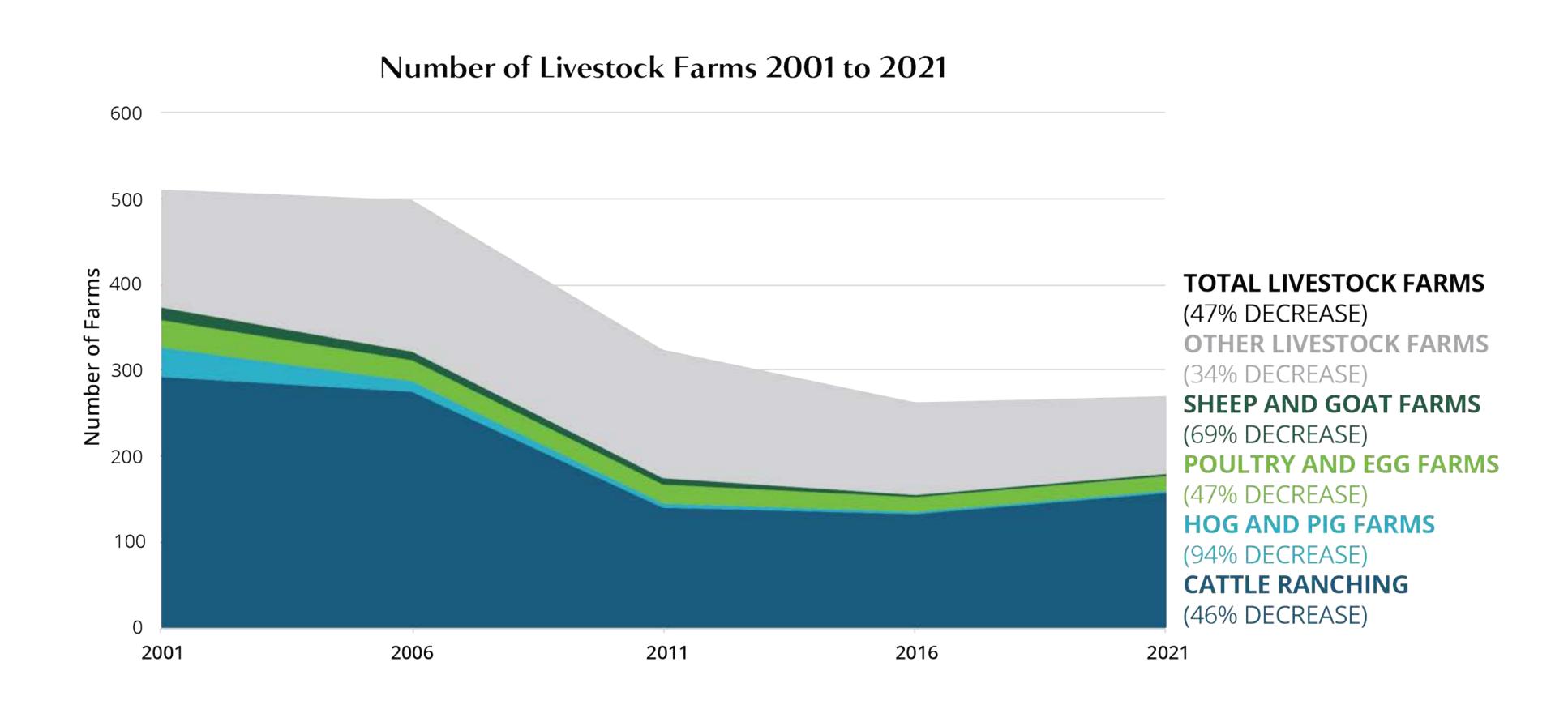
# LIVESTOCK FARMS

Agriculture Master Plan 2024

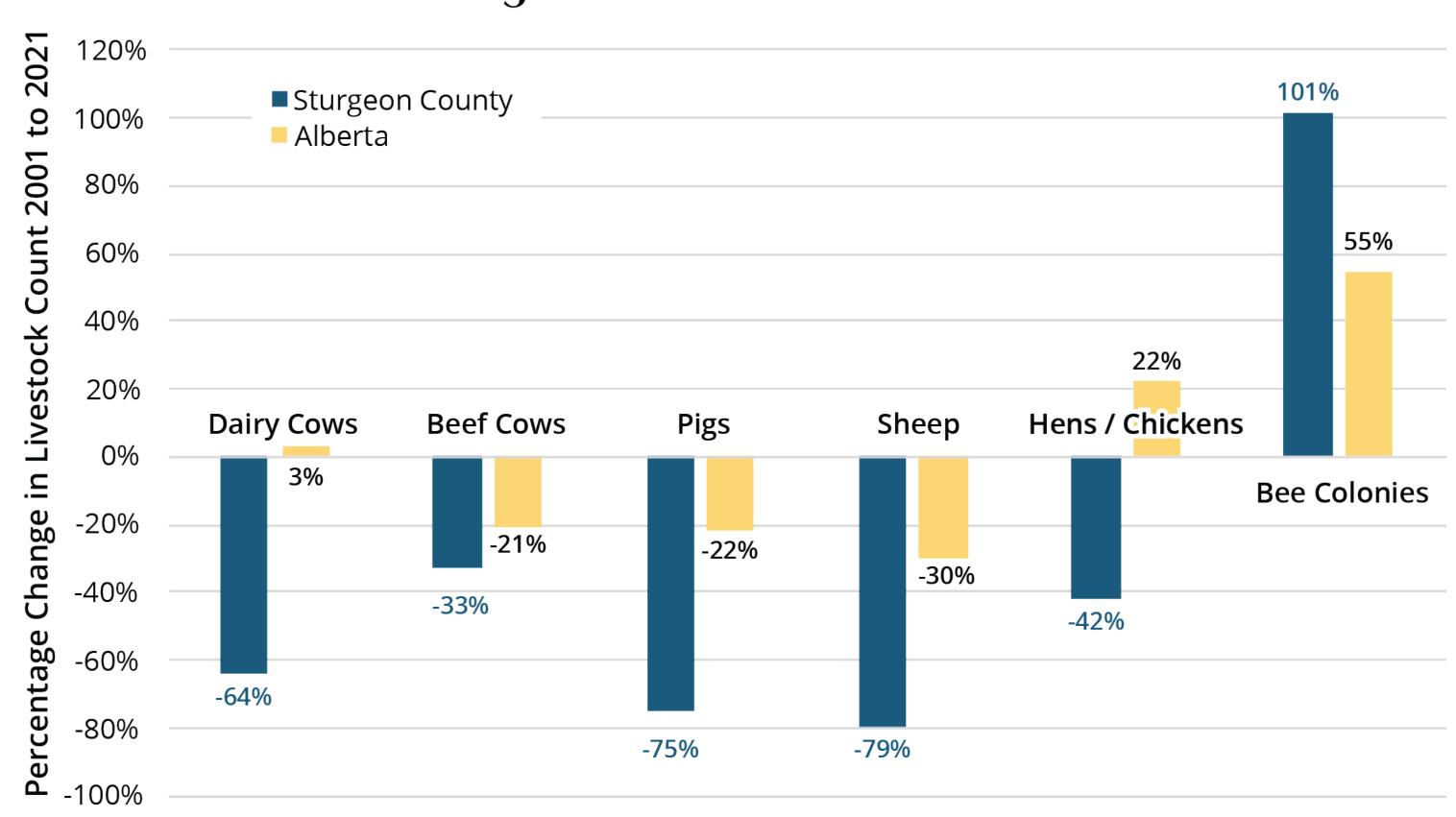


### **ABOUT**

The number of livestock farms in Sturgeon County substantially decreased each year between 2001 to 2021. While there were 511 farms in 2001, that number dropped to 271 farms by 2021.



## Change in Livestock Count 2001 to 2021



### **DATA SOURCES**

What might be influencing the decrease in number of livestock farms?
How might the County support livestock production?

# FARM OPERATOR DEMOGRAPHICS

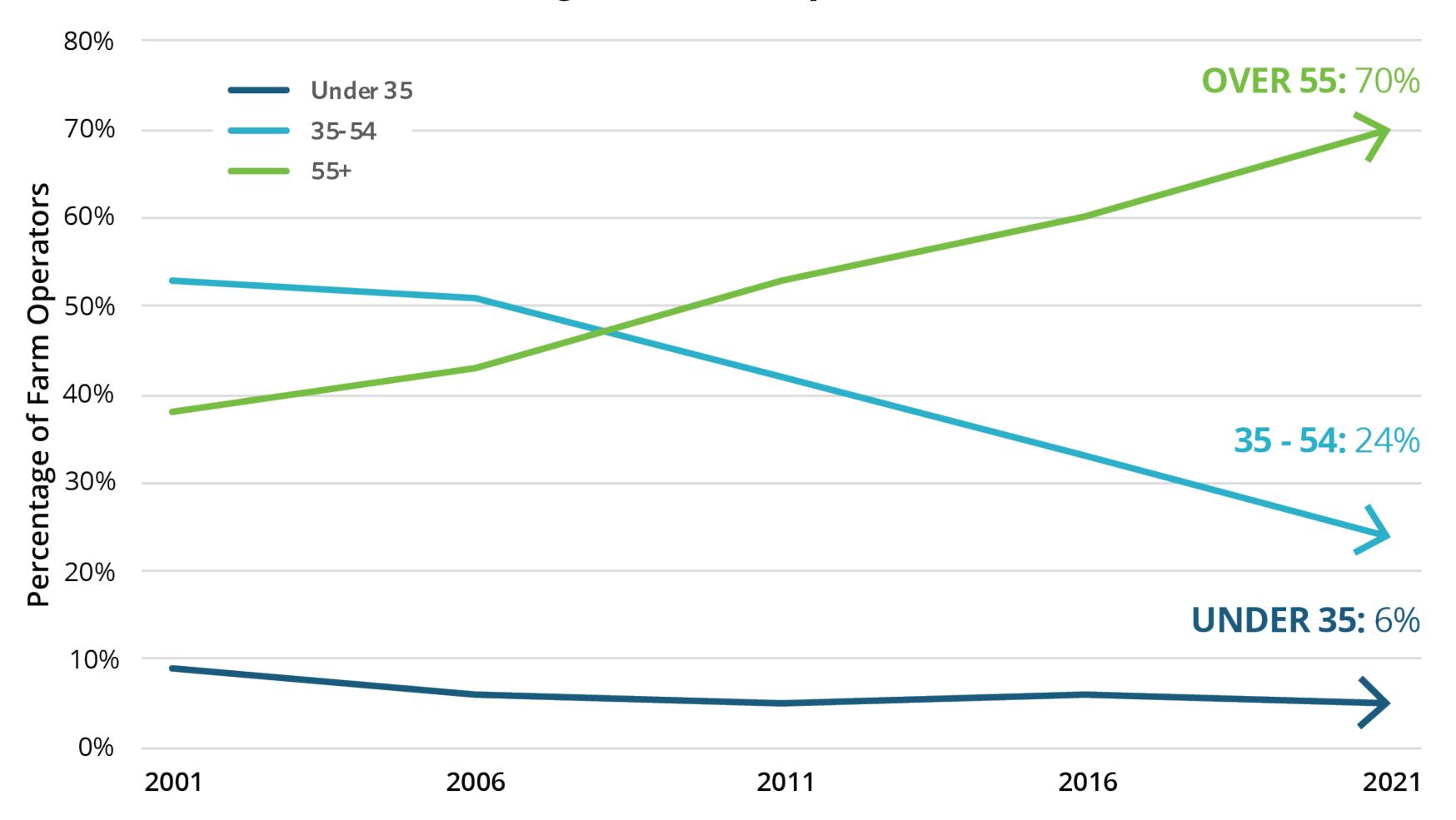
Agriculture Master Plan 2024



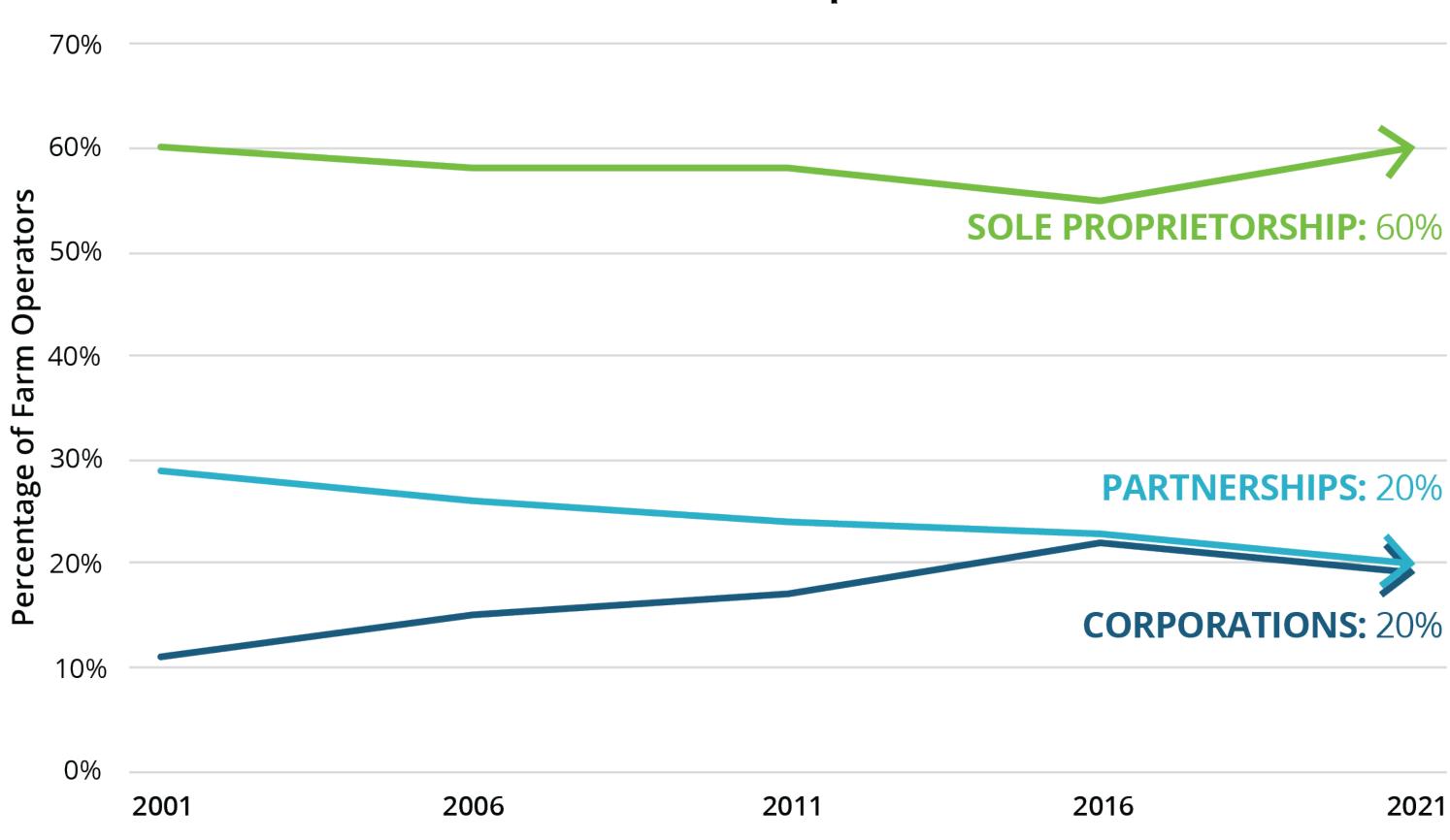
### **ABOUT**

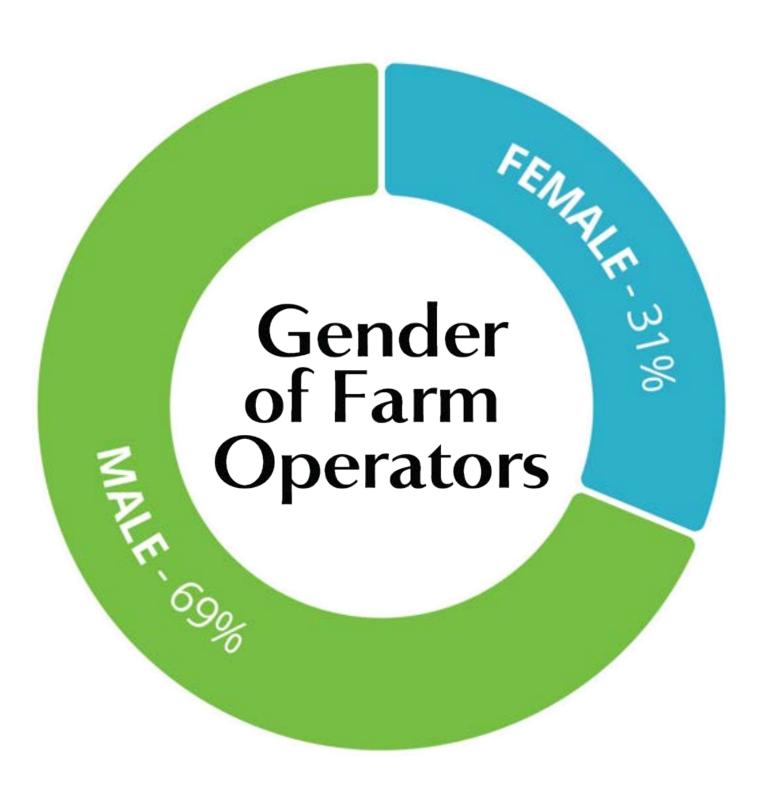
Farm operators in Sturgeon County are aging. Between 2001 and 2021, farm operators aged 35-54 years old decreased by 29%, while farm operators 55 and older increased by 32%. At the same time, Sturgeon County's population has grown by 2,492 residents over the last 20 years. The most growth was been seen in the 65-79 and 80+ age groups.

# **Age of Farm Operators**



## Farm Ownership Structure





### **DATA SOURCES**

Statistics Canada, Population Estimates (custom data request) and Alberta Municipal Affairs Population Lists.

What impact do these changing demographics have on the agricultural community in Sturgeon County?

How might the County support the development of the agricultural workforce?

How might the County support new entrants into farming?



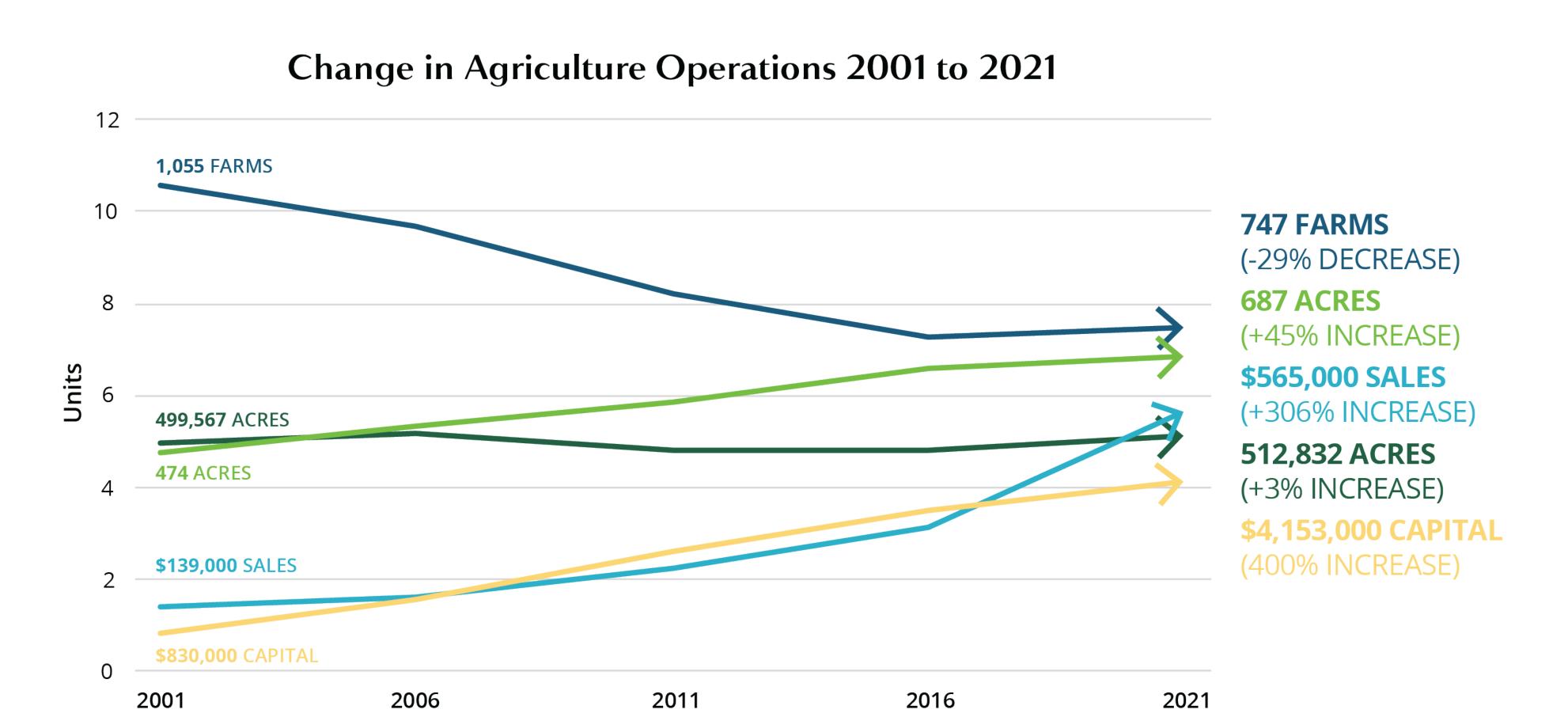
# FARM OPERATIONS

Agriculture Master Plan 2024



### **ABOUT**

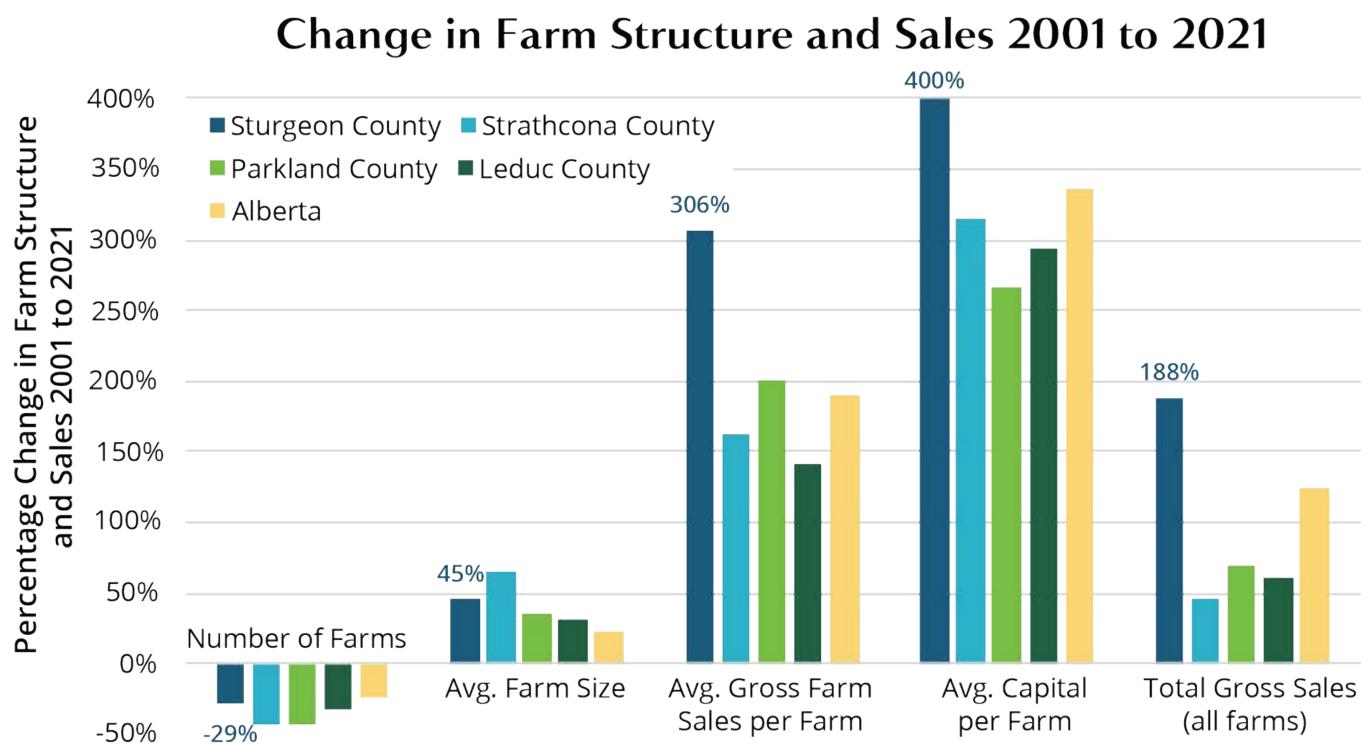
Farms size continues to grow, and although there was a decline in the number of farms between 2001 and 2016, there was an increase of 17 farms in 2021. Sturgeon County's average gross farm sales growth is outpacing neighbouring counties.



Total Area of Farms (100,000's acres)

Average Capital per Farm (\$1,000,000's)

Average Gross Farm Sales per Farm (\$100,000's)



### **DATA SOURCES**

Number of Farms (100's)

Average Farm Size (100's acres)

What impact do changes in farm structure (size, sales, etc.) have on the agricultural community in Sturgeon County?

What trends do you expect to see in Sturgeon County over the next 10 years that may influence the future number of farms?



# AGRICULTURAL TECHNOLOGY

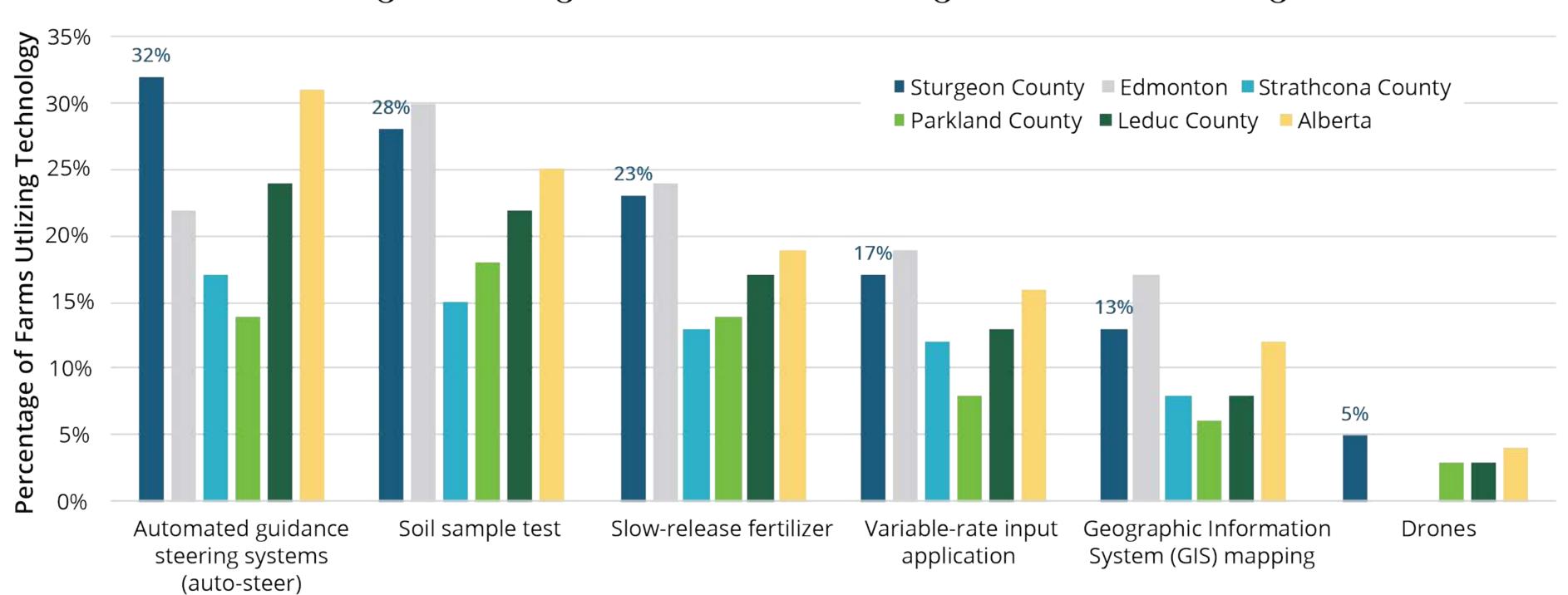
# Agriculture Master Plan 2024



### **ABOUT**

Agricultural technology adoption in Sturgeon County leads the Edmonton Region, and is higher than the provincial rates. In addition to this strong level of investment on farms, Sturgeon County has a long history of strong value-added agricultural operations.

### Regional Integration of Innovative Agricultural Technologies



## Value Added Agriculture Opportunities

EXISTING	Oat	Faba Bean	Alfalfa	Fertilizer	Grain	Canola	Meat
OPERATIONS	Processing	Processing	Pelletizing	Production	Elevators	Crushing	Processing
Identified Opportunities	Agriculture technology	Controlled environment agriculture	Plant protein fractionation	Specialty meat processing	Hemp fibre	Oat milk or fractionation processing	Frozen foods, Ethinc foods, Premium foods

### **EXAMPLES OF AGRICULTURAL TECHNOLOGY INNOVATIONS**



**AUTOMATED GUIDANCE STEERING SYSTEMS** 



**SLOW-RELEASE FERTILIZER** 



GEOGRAPHIC INFORMATION SYSTEMS (GIS) MAPPING



**SOIL SAMPLE TEST** 



VARIABLE-RATE INPUT APPLICATION



DRONES

What challenges have you observed with new technologies in your agricultural practices, or that of your community?

What value-added activities do you think are best suited for Sturgeon County?

How might technology change the way we plan for the future of agriculture in Sturgeon County?



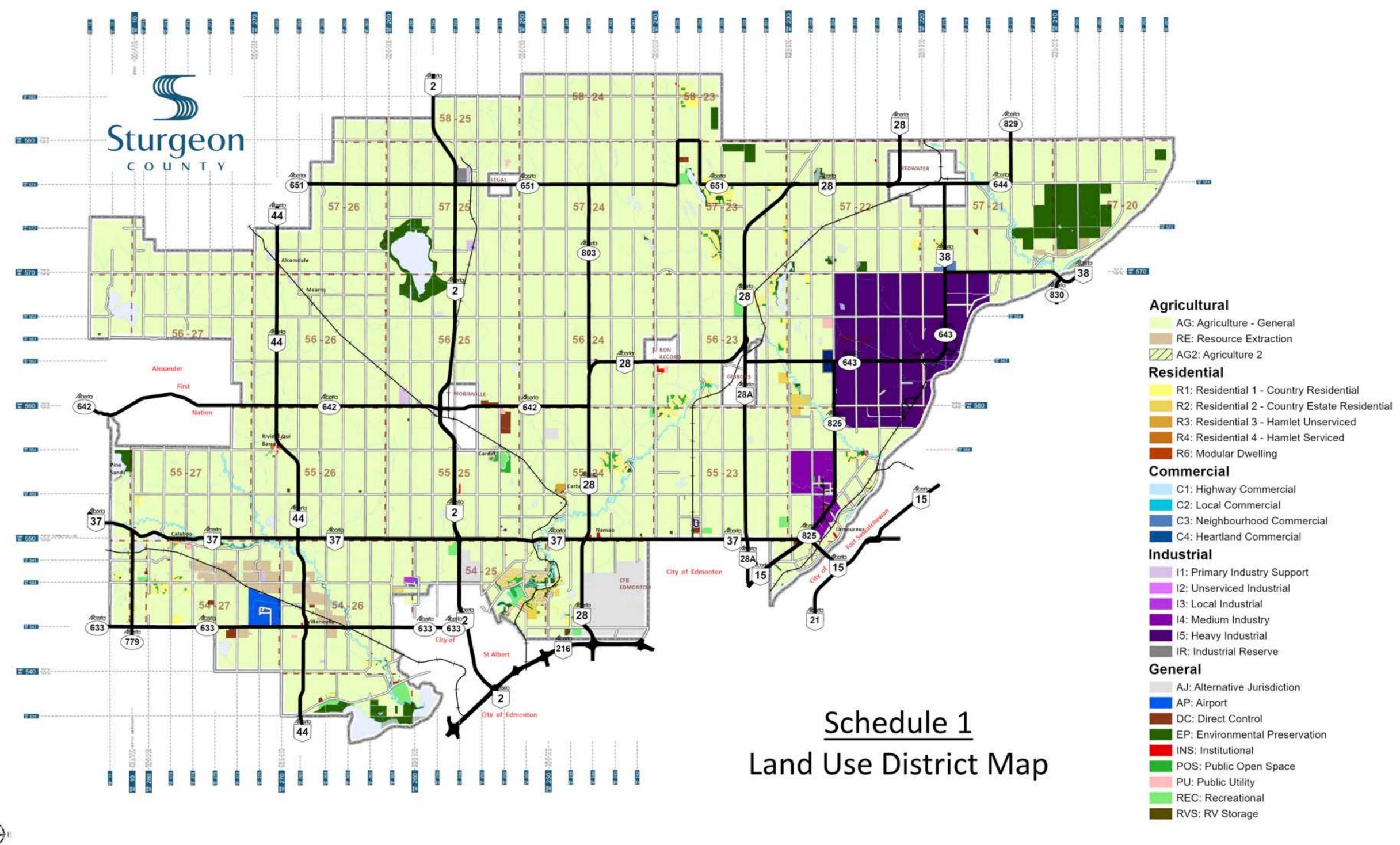
# AGRICULTURAL LAND USE

Agriculture Master Plan 2024



### **ABOUT**

The Sturgeon County Land Use Bylaw has been updated to permit AG and AG2 diversified agricultural uses, accommodating 'an agricultural use that brings additional traffic or impacts to the parcel than activities anticipated in the extensive livestock or extensive and intensive agricultural ones.'





**DATA SOURCES** 

Which areas in Sturgeon County have land use designations that support agricultural opportunities?

Which areas in Sturgeon County have land use designations which constrain or conflict with agricultural opportunities?

How might the County support growth and diversity in agricultural uses?



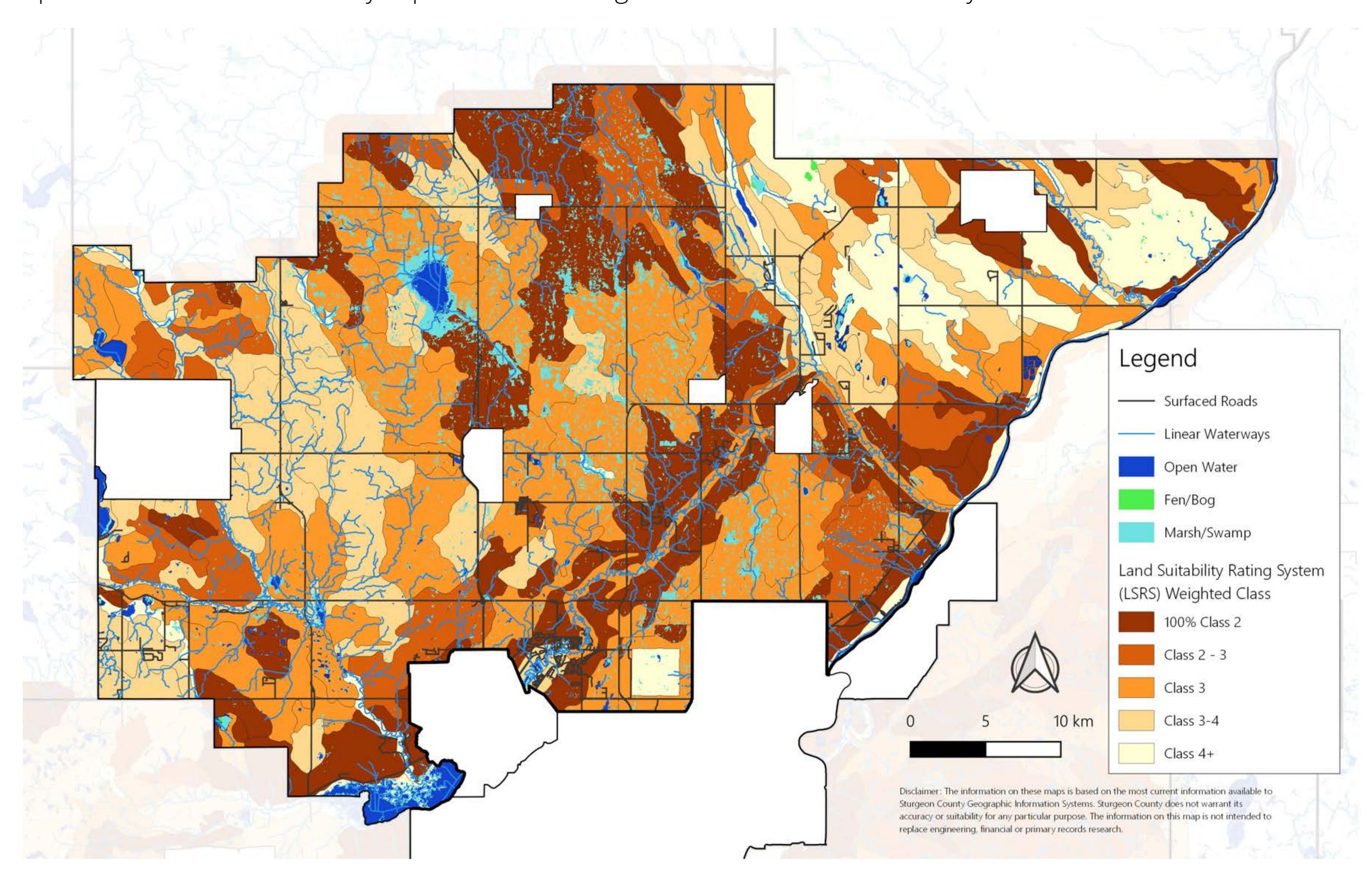
# NATURAL ENVIRONMENT

Agriculture Master Plan 2024



### **ABOUT**

Sturgeon County has highly productive soils, alongside environmentally productive wetlands and riparian areas. Water is critically important for both agricultural and environmental systems.



### **DATA SOURCES**

Alberta Biodiversity Monitoring Institute. Wetland Inventory 2021. Government of Alberta. AGRASID 4.1. Land Suitability Rating System. Spring-Seeded Annual Crops. How does water availability impact your farm or land use practices?

Can you identify soil, water, or other land characteristics that limit certain types of agriculture?

What are the most significant agrienvironmental issues that could impact agricultural production?

What actions could be taken to address agri-environmental issues that are important to you?



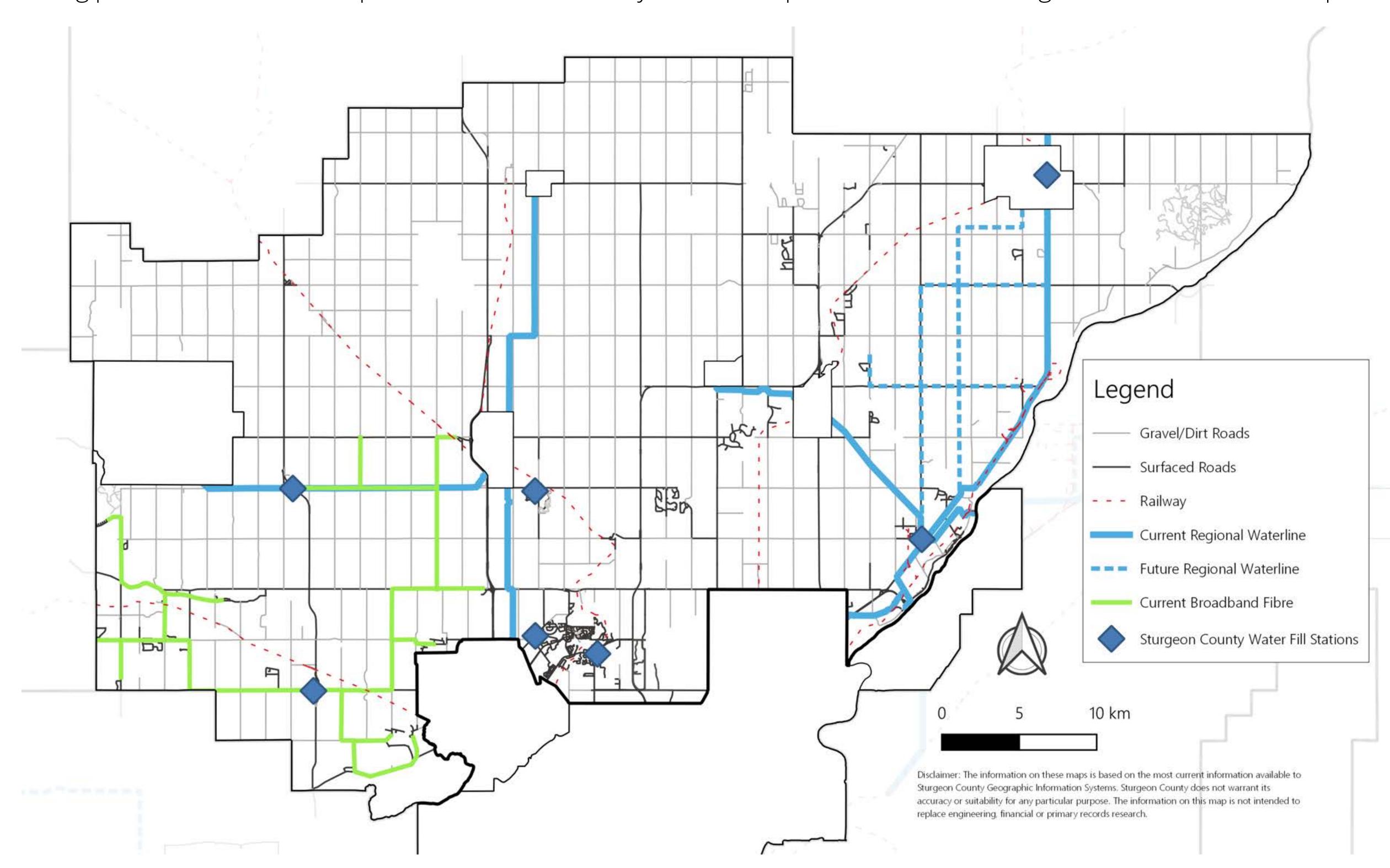
# INFRASTRUCTURE & SERVICES

Agriculture Master Plan 2024



### **ABOUT**

Sturgeon County has an extensive set of roadways, regional waterlines, and a developing broadband fibre network. Broadband network expansion is taking place to address inadequate internet connectivity, and municipal waterlines are being added to service municipal and industrial development.



### **DATA SOURCES**

Sturgeon County. Transportation Network. January 2024. Sturgeon County. Broadband Fibre Network Progress. February 2024. Have available roadways or water access limited any of your farm operations, and if so, how?

What services could the County offer to support current and future agricultural operations?

What impact has insufficient internet connectivity had on farm operations in Sturgeon County?

What opportunities might exist for agriculture with an expansion of specific infrastructure?

