

LEDUC COUNTY

Rural West Economic Diversification Plan



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1. INTRODUCTION



1.1 PLAN BACKGROUND

Leduc County is undergoing a period of significant change. A shift to consider alternative energy and innovative technologies is impacting the trajectory of industries in the Rural West. The municipality faces challenges to support local industry and county businesses. With the additional consequence of phasing out of coal-fired electrical generating plants, the County identified an urgent need to explore economic diversification opportunities. A grant was awarded to Leduc County through the Coal Community Transition Fund to undertake this work. The grant had two components:

1. Rural Community Economic Development Strategy: To create and fund a Request for Proposal (RFP) for an economic development strategy specifically for the west-end of the County.
2. Agritourism and other tourism opportunities: To create and fund an RFP that aligns with recommendations from the Leduc County Agriculture Strategy and Leduc County's Economic Development and Growth Management Strategy.

Building on these components of the grant, a visioning exercise at the beginning of this project identified the project vision, goals, and objectives, which are detailed in **Section 2.0** of this report and **Appendix A, Visioning Summary**.

The Leduc County Rural West Economic Diversification Plan (the Plan) was prepared by Dillon Consulting Limited (Dillon), with the primary goal of providing clear direction for future development, growth, and employment within rural Leduc County.

The Plan summarizes the work undertaken through this project, and summarizes the economic diversification opportunities available for the County to pursue that result in the most significant increase in jobs for the County. In addition to identifying diversification opportunities, the County has also identified the goal of becoming a champion in agrifood business, including identifying value-added opportunities that can build on the existing agriculture sector in the County. The Plan focuses on the portion identified as Agricultural Area A in the County's Municipal Development Plan.

Through rigorous economic analysis and valuable consultations with industry leaders, the methodology undertaken in this Plan identified five economically tangible opportunities for economic growth and diversification. Further exploration of each opportunity within the Plan identifies the individual and cumulative potential to propel the County as a leading economic driver in the province. The Plan includes recommendations and implementation strategies for the County to consider.



1.2 INTRO TO RURAL WEST

The Rural West is a geographic area defined in the Leduc County Municipal Development Plan as 'Agricultural Area A - West'. The Rural West is delineated by Parkland and Brazeau Counties in the west, Wetaskiwin County in the south, and includes the Towns of Thorsby and Calmar, and the Village of Warburg. The Hamlets of Rural West include Telfordville and Sunnybrook. Additional information can be found within **Appendix B, Background Research and Data Report.**

Geographically, the Rural West exemplifies a quintessential prairie landscape with distinctive yellow canola fields, flowing wheat stalks, and endless blue skies. The Rural West has a proud history of agriculture, farming innovation, oil and gas, and extractive industry, which have sustained the economy and generated regional resilience through the passage of time and change. The historical intersection between nature, agriculture, and industry has shaped the landscape into its current form.

Rural West residents hold an immense appreciation for the prairie landscape and rural character, which supports the importance of protecting agricultural-based land and secondary agricultural industries, guiding the exploration of diversification opportunities.

A distinctive and long-standing feature of the Rural West landscape is the Genesee Power Plant Area. Located north and west of the hamlet of Telfordville, the Genesee Generating Station and the lands surrounding it have been a staple industry in the Rural West. As the County facilitates economic diversification, the Genesee Power Plant Area is anticipated to find synergies and new partnership opportunities to guide its operations in the future.

1.3 PLAN AT A GLANCE

The Rural West Economic Diversification Plan is broken into seven sections:

1. Introduction
2. Strategy Overview
3. Current State of the County
4. Approach
5. Opportunity Analysis
6. Indicators and Monitoring
7. Conclusion

The Plan was supported by significant background research and stakeholder engagement. The details of this work, and additional information regarding the opportunities that should be monitored have been captured in the appendices of this Plan:

- Appendix A – Visioning Summary
- Appendix B – Background Research and Data Report
- Appendix C – Leduc County Economic Assessment
- Appendix D – Engagement Assessment and Summary
- Appendix E - Additional Opportunities to Monitor
- Appendix F - Agritourism Development Strategy Report

An important component of the Rural West Economic Diversification Plan was the gap analysis which became the framework to guide the project team's efforts. The gap analysis considered the following three factors as they relate to Leduc County:

1. Desired economic state
2. Current economic state
3. Path to achieving the desired state

An understanding of the **desired economic state** was developed through direct and indirect input from stakeholders, Administration, Council, and the Project Steering Committee. The priorities identified included economic growth, a more resilient economy through economic diversification, and job creation.

Assessing the **current economic state** was a valuable exercise that allowed for insight into how each business sector contributes to the local economy. Detailed analysis was completed to evaluate economic metrics specific to Leduc County. This included GDP by sector, labour estimates and measures of the existing levels of economic diversification. These economic metrics have been produced through a consistent, repeatable approach that can be replicated in the future to measure the success of economic development efforts.

Assessing the County's current economic state positioned us to better understand how proposed economic development opportunities could help the County close the gap and **achieve the desired state**. A standardized methodology was created for this project to evaluate each sector/opportunity based on empirical data, stakeholder engagement, and conversations with subject matter experts.

This report highlights opportunities in 12 sectors of the economy that are aligned with the County's goal of economic diversification, economic growth, and job creation. These opportunities have also been tested to ensure that they are compatible with the region's existing strengths and competitive advantages. Additionally, the following 5 opportunities were identified as candidates for further review and economic analysis:

1. Grain and Oilseed Milling
2. Commercial Greenhouses
3. Meat Product Manufacturing
4. Agritourism
5. Railway Extension

The engagement process produced strong economic narratives supporting these 5 opportunities. The purpose of the economic analysis was to test these narratives quantitatively and measure potential financial feasibility. Through extensive market research and interviews with subject matter experts industry data was compiled for each opportunity to understand the following key business drivers:

- Market size
- Capital investment
- Operating costs
- Revenue
- Growth
- Risk

Financial models were built for each opportunity to estimate multi-year project cash flows and calculate investment return metrics. This information can be used to better understand the relative attractiveness of each opportunity and the potential for private investment.






The project team has applied a structured and empirical based methodology to the Rural West Economic Diversification Plan in order to filter and analyse proposed economic development opportunities. The goal of this process has been to identify the sectors of the economy that are aligned with the region's existing strengths and are anticipated to respond to economic development efforts. The result is a diversification plan that provides insight into the areas of the economy where economic development efforts should be focused.

1.4 THE PATH FORWARD

The Plan outlines recommendations for Leduc County to consider, and use as a foundation to build an economic diversification strategy. The following exhibit has been prepared to summarize the recommendations in the Plan, and proposes a path forward for Leduc County.

LEDUC COUNTY RURAL WEST ECONOMIC DIVERSIFICATION PLAN

This strategy provides clear direction for implementing the Rural West Economic Diversification Plan (Plan). The Plan was developed to assist County decisions related to future development, growth, and employment within rural Leduc County. The Plan, which focuses on Agricultural Area A in the County's MDP, evaluates the economic diversification opportunities available to the County, and identifies those that have the highest potential to encourage economic growth and create jobs in the County. The following recommendations are further detailed in **Section 5** of the Plan.

		SHORT	MEDIUM	LONG
GENERAL RECOMMENDATIONS APPLICABLE TO ALL OPPORTUNITIES	1. Business Licensing	Develop a business licensing program.	Review business licensing data on a yearly basis, and incorporate into Strategic Plan updates to Leduc County Council. Updates can be a part of the Economic Development Strategic Priority Key Performance Indicators in the Strategic Plan.	Develop a new Key Performance Indicator that shows business licensing changes in various agriculture categories, including agribusinesses, and businesses that provide local food to the region.
	2. Tax Assessment	Use existing resources in the tax assessment department to collect valuable economic data for the County. Classifying non-residential entities by business type or industry.	Refresh the Economic Assessment and the metrics to provide insight into the economy's changes over time.	None
	3. Leduc County Economic Assessment	None	Refresh the Economic Assessment and the metrics to provide insight into the economy's changes over time.	None
	4. Grant Funding	The County should research grant funding opportunities to identify how to attract investment in the agribusiness sector	None	None
FIVE OPPORTUNITIES		SHORT	MEDIUM	LONG
	Grain and Oilseed Milling Diversifying the product offering in the County through grain and oilseed milling. This opportunity could expand the number of markets, and bring value-added food processing to primary products.	<p>A: The County should initiate contact with the existing grain and oilseed mill operators identified by the Project Team, who are open to discussions about Leduc County operations to learn more about the opportunities that may be available to the County.</p> <p>B: The County should research grant funding opportunities to identify how to attract investment in the grain and oilseed milling sector.</p> <p>C: The County should establish a sector stakeholder advisory team including farmers, mill operators and government officials to advise Leduc County on the grain and oilseed milling sector.</p> <p>D: Amend the Municipal Development Plan and Land Use Bylaw to support grain and oilseed milling by providing clarity around these uses, in particular how the County defines these uses and where they should be located.</p> <p>E: Monitor research that is underway by organizations such as the Good Food Institute, which are providing strategic support to companies and researchers that are working on cultured meat and plant based meat products.</p>	F: When the cultured meat and plant based meat products gain market acceptance, identify opportunities to expand business opportunities in Leduc County.	None
	Commercial Greenhouses The development of commercial greenhouses and food production will serve to increase the contribution of agriculture to the local economy and provide the opportunity to diversify the agriculture sector further.	<p>G: Consider amendments to the Municipal Development Plan and Land Use Bylaw to support greenhouse development in the County, particularly in Rural West.</p> <p>H: The MDP calls for the development of a food and urban agriculture study to guide urban agriculture. This strategy should be developed, considering linkages and synergies to the Rural West to identify opportunities that leverage economic activity in urban areas made possible by rural agriculture.</p>	<p>I: The County should consider the competitive advantages identified in this Plan, and develop investment attraction materials for greenhouses.</p> <p>J: The County should pursue commercial greenhouse operators for an understanding of the terms they would consider for locating in Rural West.</p>	None
	Meat Product Manufacturing Market factors are present that allow hundreds of smaller Canadian abattoirs to operate successfully. These operations have identified local or niche retail segments to market their products.	<p>K: The County should identify potential operators and facilitate discussions with local cattle producers that may use the abattoir services.</p> <p>L: Consider amendments to the Municipal Development Plan (MDP), the Land Use Bylaw (LUB), and the Genesee Area Structure Plan to support abattoir development in the County, and particularly in the Rural West.</p>	None	None
	Agritourism Common characteristics of agritourism include increasing the breadth and diversity of the pool of tourism stakeholders, the addition of tools for rural economic development, diversifying farm revenue streams, and connecting locals visitors and producers.	<p>M: Consider amendments to the Municipal Development Plan (MDP) and Land Use Bylaw (LUB) to support agritourism development and opportunities in the County.</p> <p>N: Leduc County should consider the following: 1. Defining the potential of agritourism in Leduc County and 2. Streamline permitting processes.</p>	O: Develop an agritourism strategy to plan and implement the recommendations found in Appendix F: Agritourism Development Strategy Report.	None
	Rail Rural West has abundant natural resources, exporting those products to national and international markets might be possible with rail. Although viewed as a long term opportunity, Leduc County can begin to lay the foundation that is needed to support a rail extension to Rural West.	<p>P: Leduc County should undertake a strategic, opportunistic approach that might include considering new ventures that contribute to increasing demand for rail service to the necessary levels to support the rail extension's viability.</p> <p>Q: Leduc County should begin discussions with rail providers to determine if this opportunity would be of interest, and to confirm the economic drivers and thresholds required to build the rail extension.</p>	<p>R: Leduc County should develop an engagement strategy with landowners in the Rural West to identify opportunities, concerns, and those who want to be involved in pursuing this opportunity.</p> <p>S: Leduc County should begin discussions at all levels of government to gain support, funding, and approvals for a rail extension.</p>	T: The Municipal Development Plan, Land Use Bylaw, and Genesee Area Structure Plan will require updates to support the rail extension in the Rural West.

2. STRATEGY OVERVIEW



2.1 VISION

This Plan's vision emerged from a visioning session with the Project Steering Committee, and ongoing conversations with Administration throughout the project life-span. The vision's purpose was used to guide and direct the Project Team through the project, particularly at key milestones.

The following vision was developed to guide the outcomes of this Plan:

Leduc County is a provincial leader in diversifying the agricultural, manufacturing, and energy sectors. Through the Rural West Economic Diversification Plan, Leduc County aims to grow the economic resilience of its rural west businesses and area residents to withstand unpredictable changes to outside forces that cause uncertainty in the local market and leverage the County's competitive advantages.

2.2 GOALS

The project goals were developed with information from the RFP, the project kick-off meeting, and Steering Committee discussions. They include the following:

1. To create a living document that spans municipal cycles and County Councils. The document is to have highly actionable items, which County staff can use to move forward to produce economic diversification opportunities.
2. To identify economic diversification opportunities with an emphasis on meaningful medium and longer-term diversification opportunities for Leduc County.
3. To identify economic diversification opportunities that will retain existing skills, knowledge, and know-how of the current Leduc County workforce.
4. To identify economic diversification opportunities that are appropriate, take advantage of the natural and constructed resources in Leduc County, and that will attract new businesses and retain existing businesses in Leduc County.

2.3 OBJECTIVES

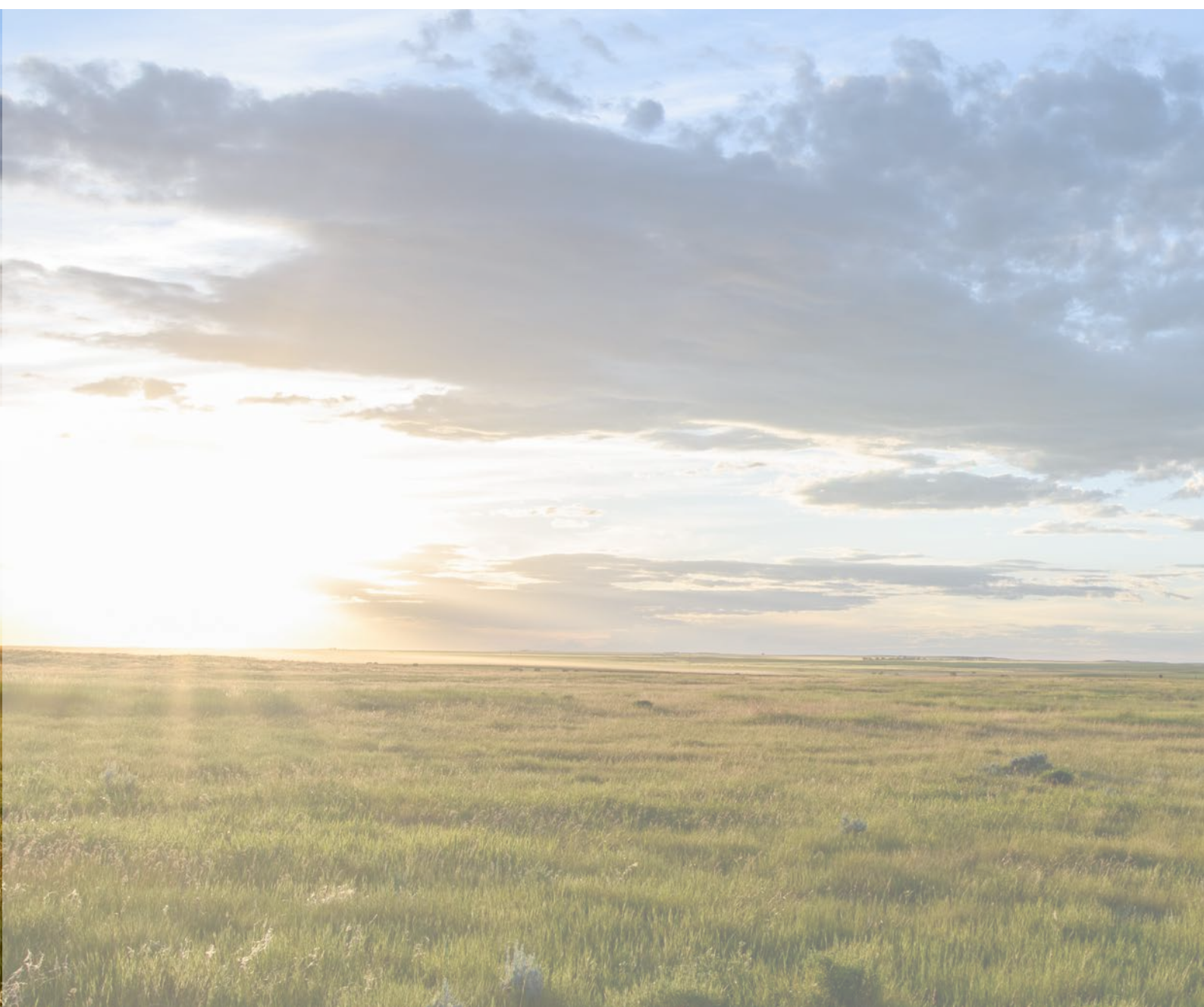
At the outset of this project, job creation in Leduc County was identified as a key success factor of this project. To support this the following project objectives were developed:

- To describe the current state and the desired future state of the County, and use this to inform the creation of actionable steps for County Council and Administration to close the gap.
- To identify Leduc County's competitive advantages that describe key features of the County, and that can be used to attract new business.
- To identify up to five diversification opportunities that will create new jobs in Leduc County, through economic diversification, through inter-industry diversification, intra-industry diversification (in both agriculture and energy sectors), and product diversification. A priority focus will be on intra-industry diversification as it will allow Leduc County to focus on their competitive advantages.

A Visioning Summary that further outlines processes to establish the vision, goals, and objectives is found in this Plan as **Appendix A, Visioning Summary**.



3. CURRENT STATE OF THE COUNTY



3.1 CANADIAN CONTEXT

The Federal Government confirmed the critical importance of energy and expanded market access with the 2018 purchase of the Trans Mountain pipeline for \$4.5 billion. The new pipeline completion cost will be an additional \$12.6 billion with an in service date for international markets of September 2022. Once complete, Alberta will experience a significant improvement in the price received for its oil, and the Leduc County energy sector will be amongst the beneficiaries of the Trans Mountain pipeline.

Trade for Canada's agricultural products has been subject to arbitrary buyer behaviour in international commodity markets. In response to the challenges, the Federal government is providing support to enhance value-add processing for export products, including plant protein circular economy opportunities, as well as in terroir and artisanal agricultural food products. This work is consistent with the opportunities being considered by Leduc County in this Plan.

Canada has entered a second wave of the pandemic which continues to be a significant threat to Canadians' health and the economy. As a result, Canada has experienced sizable drops in Gross Domestic Product (GDP), the consumer price index, as well as a substantial increase in unemployment (see **Table 3.1.1** below for the national statistics). These measures indicate considerable distress for millions of Canadians and harm to the economy, today and potentially for some time into the future. The Federal and Provincial Governments are responsible for balancing public safety with the difficult economic consequences of restrictions on personal and commercial activity introduced to reduce the spread of the virus.

The pandemic spread in the United States also significantly impacts Canada as our largest trading partner. The President of the United States has declared conquering the pandemic as a top priority; however, the consequences of any further restraint of US economic activity poses a risk to Canada's economy, including Leduc County.

Recent vaccine trials have been successful, and the World Health Organization (WHO) has forecast international distribution to commence in early 2021. However, without guidance from the WHO on the timelines required for international distribution or evidence of long term vaccine effectiveness forecasting impacts and developing an effective public policy recovery response will be a challenge for all nations.

Despite significant challenges, Canada has proven relatively resilient in the response to COVID-19. With pandemic related death rates at 29.22 per 100K of population, Canada is ranked as the country with the 40th highest death rate in the world (updated November 2020).¹

For comparison, the US ranks 13th highest with 74.1 deaths per 100K population. As a result, Canada may recover its post-pandemic economy relatively more quickly than the US. Leduc County businesses with significant export products and in an early international post-recovery phase, may be well positioned to move quickly to capture more opportunities in international markets.

As the table below indicates, Canadian economic performance is expected to recover modestly in 2021. Real GDP growth for 2020 is forecast to be -6.8%, an enormous contraction in economic performance (Alberta GDP is forecast to be even worse: a -7.1% change in 2020), with the Canadian 2021 forecast to

¹ Johns Hopkins University & Medicine, 2020

rebound due to pent-up demand to 5.5% growth.² For reference, in 2019 real GDP growth was 1.7%. The Canadian unemployment rate at the end of 2020 is forecast to be 9.8% dropping to 7.8% by Q4 2021.³ This is in sharp contrast to the Alberta forecast of 11% for the 2021 unemployment rate. The Consumer Price Index was 2.0 in 2019 and forecast to be 0.5 and 2.0 for 2020 and 2021, respectively.⁴ This inflation rate indicator shows that the CPI will rise to the Bank of Canada target level of 2% annual change next year, the same as forecast for Alberta. Moderate levels of inflation likely imply a neutral impact on Leduc County diversification projects. In other words, while a slow economy in Alberta may attract business operators who want to access an available workforce, low inflation rates will not be a competitive advantage for Alberta in Canada in the near term.

Table 3.1.1⁵ Economic Performance Summary

Canada (a)	Forecast		
	2019	2020	2021
Key Indicator			
Real GDP (annual % change)	1.7	-6.8	5.5
Unemployment Rate (annual average %)	5.7	9.8	7.8
Consumer Price Index (annual % change)	2.0	0.5	2.0

The Federal Department of Finance has noted that current economic forecasting challenges have been magnified to 'unprecedented levels' and that we are in 'uncharted territory' economically.⁶ Issues that stem indirectly from the pandemic include the disruption of supply of vital energy and agricultural markets that support our economy and demand volatility. Regulatory changes and the diminished world demand for oil due to the pandemic have impacted fossil fuel energy pricing and production, now forecast to have declined by 8.4 mb/d in 2020 (down approximately 8% from global daily production levels in 2019) according to the International Energy Agency.⁷ The ATB Financial oil price forecast sees prices remaining below \$50 until 2022. Whether lower global energy demand endures after the pandemic is undetermined, and therefore is a complicating factor in price forecasting.

In summary, Canada is not immune to the massive economic disruptions and volatility to sectors caused by the pandemic and Provincial oil prices. Implications for the Leduc County oil production sector is the unlikely recovery of oil pricing until the Trans Mountain and Keystone oil pipelines are completed in 2022 and 2023, respectively. Oil industry equipment manufacturing should expect a reasonable recovery at that time.

² Government of Canada, 2020

³ Government of Canada, 2020

⁴ Government of Canada, 2020

⁵ Government of Canada, 2020

⁶ Government of Canada, 2020

⁷ IEA, 2020

3.2 ALBERTA CONTEXT⁸

Alberta was amidst its 6th year of low energy prices when the most significant pandemic in 100 years contributed additional challenges. The Alberta economy is being tested by the pandemic and soft oil prices; however, agricultural crop production has enjoyed a positive year.

The new predominant economic factor this year further pushing our GDP into even deeper negative territory, is the pandemic. Real GDP growth in Alberta for 2020 is forecast to be -7.1% (2019 GDP growth was -0.6%). For 2021, the real GDP is forecast to be a modest 3.3% gain (forecast for Canada in 2021 is a 5.5% gain). ATB Financial forecasts that the GDP will not surpass its 2019 level until 2023, a tough testimonial to our current low economic output and predicted lengthy recovery.

The unemployment rate for 2020 is forecast to be a significantly high 11.4%, improving slightly to 11% in 2021, followed by 10% in 2022. Though a slight reduction from 2020, a 10% unemployment rate still poses significant problems for Albertans. For context, the unemployment rate in 2019 was 6.9%, itself a high rate above a typical government target rate of around 4%. County diversification plans for more economic development will be aided by available workforce talent at these high unemployment rates. This is in contrast to recent history when unemployment rates in 2006 were at 3%, reflecting a shortage of workforce talent that was considered at the time as a significant impediment to growth.

The prolonged economic slump, now exacerbated by the restrictions imposed from the pandemic provides a challenging outlook for job seekers. The complicating factor for the jobs recovery is that our oil industry rebound will depend in large part on pipeline completions (discussed below) and a recovery in world oil demand and prices.

Table 3.2.1 Economic Performance Summary⁹

Alberta (b)	Forecast		
	2019	2020	2021
Key Indicator			
Real GDP (annual % change)	-0.6	-7.1	3.3
Unemployment Rate (annual average %)	6.9	11.4	11.0
Consumer Price Index (annual % change)	1.7	0.8	2.0

The economic performance implications for the Province are especially pertinent for Leduc County. For example, crude oil and equivalents production in Alberta have dropped by 21% since February. However, crop receipts grew by 4% this year, while livestock receipts were down 9% due to meat packing capacity

⁸ ATB Financial, 2020

⁹ ATB Financial, 2020

reductions related to the pandemic.¹⁰ The relative stability of the agricultural sector compared to the energy sector provides a cushion against energy pricing volatility.

The Government of Alberta's economic strategy has included corporate tax cuts to achieve the lowest rates in Canada while providing incentives for new technology and green initiatives. Coal transition funding has been provided for local jurisdictions to ease the transition for miners and their local economies from current coal-fired power generation to natural gas. Leduc County is home to the Genesee power plant which is transitioning to natural gas.

Old oil and gas wells will be considered for geo-thermal energy production as part of renewable energy programs. The Province is also planning for Alberta to become a centre for plastics – repurposing and recycling recoverable plastic waste. In addition, the Government seeks to utilize our bountiful natural gas assets to increase our plastic making capacity. While these opportunities have not been identified as priorities for Leduc County, they should be monitored as they could become feasible for Leduc County in the long term.

In March of 2020, the Government of Alberta (GOA) announced a \$1.5 billion investment in the TC Energy Keystone XL pipeline to supply North American markets. The GOA will also support this project with a \$6 billion loan guarantee. The expected completion date is 2023. This pipeline will be a major part of gaining more access to US markets and achieving closer prices to WTI oil. Both the Federal and Provincial Governments are planning their lobbying of the US President-Elect, who unfortunately has vowed to cancel this pipeline.

The Provincial Government has also announced important new economic development programs for the agricultural sector. These include an historic expansion of Alberta's irrigation network, an Investment and Growth Strategy to increase provincial exports combined with a target of a \$1.4 billion private investment initiative to build value-added agriculture capacity.¹¹

Leduc County businesses with significant export products and in an early international post-recovery phase, may be well positioned to move quickly to capture more opportunities in international markets. Furthermore, Leduc County in a new world that is more sensitized to public health safety, can have a competitive advantage with a good reputation for food safety.

Provincial Government investments in the agricultural and energy sectors are anticipated to help stimulate the Provincial recovery and support diversification in the economy. Investments are also consistent with the economic diversification objectives of Leduc County. Even if a significant value-add food production facility is not located in Leduc County, there is the potential that markets for local grains, pulses, and oilseeds crops will become more diversified and an important part of an agrifood value-added supply chain. That supply chain foundation will be a vital enabler of future diversification activity in the County, providing an alternative market for producers of primary products.

Provincial oil prices are anticipated to recover with the completion of the Trans Mountain and Keystone oil pipelines in 2022 and 2023, respectively, coinciding with the return to 2019 GDP levels. Oil industry

¹⁰ ATB Financial, 2020

¹¹ Government of Alberta, 2020

equipment manufacturing in the County should also have a reasonable expectation of a return to more normal economic activity levels at that time.

Innovative approaches to product creation and service delivery were stimulated from the pandemic. Other positive contributors to economic diversification are associated with advances in understanding circular economy efficiencies, communications, and distribution technologies, as well as renewed interest in local, safe food production.

Taking inspiration from new pandemic driven business models will be of benefit to Leduc County in considering how best to execute their current economic diversification opportunities.

3.3 LEDUC ECONOMIC FACTORS

Leduc County is a resilient community that has survived tough economic periods in the past; however, many factors have arisen that create substantial headwinds for the local economy. The global energy sector has endured an extended period of weak energy prices and the pandemic further disrupted economic activity. While there is cautious optimism for an economic recovery, the Provincial economy GDP is expected to have contracted by 7.1% in 2020.¹²

With significant energy and agricultural resources, Leduc County can be seen as a microcosm of the Provincial economy. Notably, crude oil and equivalents production in Alberta has dropped by 21% since February.¹³

The direction of the Government of Alberta's (GOA) economic strategy is focused on strengthening the energy sector. The strategy includes corporate tax cuts to achieve the lowest rates in Canada and incentives for new technology and green initiatives. Coal transition funding is allocated to local jurisdictions to ease the transition for miners and their local economies from current coal-fired power generation to natural gas. The proposed development of a Provincial hydrogen sector offers potential for new manufacturing opportunities in the Nisku Industrial Park.

Both the Federal and Provincial Governments have confirmed the critical importance of energy, and the importance of gaining increased market access with investments in oil pipelines. As mentioned previously, in May 2018, the Federal Government purchased the Trans Mountain pipeline for \$4.5 billion, with the new pipeline completion cost of \$12.6 billion and an in service date for international markets of September 2022. In March of 2020, the GOA announced a \$1.5 billion investment in the TC Energy Keystone XL pipeline to supply North American markets. The GOA will support this project with a \$6 billion loan guarantee. The expected completion date is 2023.

12 ATB Financial, 2020

13 Government of Canada, 2020

3.4 SWOT ANALYSIS - Leduc County and the Major Sectors

Sections 3.1 to 3.3 outlined the current state of Canada, Alberta, and the County, and the impacting economic factors. Due to many of these factors, Leduc County has identified economic diversification as an important strategy to build resilience into their local economy. However, focusing on regional competitive advantages has also proven to be an effective strategy. Therefore, the best opportunities for diversification are those that will play to the County's existing strengths. A SWOT analysis was completed for Leduc County, and the attributes identified were an important component of our evaluation of the many potential economic development opportunities identified for the County.

The following sections provide SWOT assessments for Leduc County and its major sectors.

3.4.1 Leduc County General Overview

STRENGTHS	<ul style="list-style-type: none"> Contributors to Leduc County competitive advantage: <ul style="list-style-type: none"> Geographic location Infrastructure High-quality agricultural lands Large potential market with 38% of Alberta's population (1.2M people) living the Capital Region Non-renewable natural resources such as oil, gravel, and coal deposits. Large potential market with 38% of Alberta's population (1.2M people) living in the Capital Region. Transportation network that includes Highway #2 with good secondary connections, two class 1 railroads, and Edmonton International Airport. Engaged workforce with participation rates higher than the provincial average.¹⁴ Access to extensive network and development opportunities within Edmonton Global. Non-residential tax rates that are among the lowest rates in the Capital Region. Relatively low cost of living.
WEAKNESSES	<ul style="list-style-type: none"> Population with post-secondary education lower than the Provincial average¹⁵ (40% vs 47%). Proximity to larger centers can result in outflow of people. May have a smaller voice as compared to larger regional players. Difficulty raising national or international awareness of the economic potential of the County. During boom years, the high demand for skilled labour in the oil and gas sector hindered the development of other sectors of the economy. Rural west region is somewhat isolated from opportunities in Nisku, Leduc, and other centres. Rural regions of the County do not have the population to support the desired level of services Cost of real estate and access to capital financing to assist with funding projects.
OPPORTUNITIES	<ul style="list-style-type: none"> Capital Power holds 72 sq. kms of unpopulated land that has the potential for residential and business development on reclaimed land. Many economic development opportunities resulting from proximity to the airport. To enhance the interests and voice of the County through alliances and partnerships with other jurisdictions to compete with larger regional players.
THREATS	<ul style="list-style-type: none"> Population demographics show an aging population, indicating a trend for young people to move away from the region.¹⁶ Reliance on the oil and gas sector can be detrimental during economic downturns. Edmonton International Airport is a strong economic development force that can draw opportunities away from the County. Airport operates under a different regulatory framework than the rest of the County, leading to potential for an uneven playing field. Risk of future annexation of land is a potential threat to the agriculture sector and the overall local economy. Permitting and Regulatory requirements for new businesses.

14 Statistics Canada, 2016

15 Statistics Canada, 2016

16 Statistics Canada, 2016

3.4.2 Agriculture

Leduc County has many agricultural competitive advantages and assets that can be leveraged to support future growth.

STRENGTHS

- Highly productive agricultural lands with associated infrastructure.
- Access to highly efficient transportation systems that allow for international export.
- High levels of agricultural production in cattle, dairy, equine, oilseeds, grains and hay farming.
- Census Division 11 (rural region surrounding Edmonton) has over 1,200 beef cattle operations.

WEAKNESSES

- Lack of secondary production and agricultural value-added production.
- Farmland fragmentation.
- Efficient transportation network and food supply chains reduce the need for local value-added industries.

OPPORTUNITIES

- Value-added opportunities in agribusiness that capitalize on proximity to agricultural production.
- Agritourism possibilities supported by a strong agricultural base and natural beauty of the region.
- Increasing demand for products from North America due to trust factor, high quality products, traceability, etc.
- Low price of oil translates to lower fuel prices, reducing a major input cost for many agricultural products.
- Culinary tourism well positioned for success with renewed interest in food safety (COVID), appetite for local food, and proximity to a major population centre.
- Terroir approach may start the process of higher margins being achieved and establishing a 'price-maker' market.

THREATS

- Primary agriculture production can be subject to the uncertainty around commodity prices.
- Trade disputes can impact a producer's ability to access international markets. For example, China's recent suspension of Canadian canola exports.
- Having local secondary production and value-added industries does not necessarily mean that local producers will receive a premium price for their products.
- Annexation of high-quality farmland.
- High cost of inputs (fertilizer, herbicides, and seed).
- Crop yields can be highly dependent on weather.

3.4.3 Food Processing

Many Provincial and Federal policies are aligning to support growth of the value chain in food production, and the County is well positioned to capitalize on these opportunities.

STRENGTHS	<ul style="list-style-type: none"> Existing infrastructure and expertise located at the Food Processing Development Centre. Proximity to agricultural production needed as inputs in food processing. Efficient transportation network that allows agrifood products to move freely.
WEAKNESSES	<ul style="list-style-type: none"> Some food processing facilities such as abattoirs are capital intensive and must meet high environmental regulatory standards. The food processing industry is typically a low margin, highly competitive business. Attracting skilled labour can be difficult. Canada has developed a low cost, highly efficient transportation system for the export of agricultural products and in some cases it is more economical to export raw materials than process here.
OPPORTUNITIES	<ul style="list-style-type: none"> Value-added opportunities in agribusiness that capitalize on nearby agricultural production. Food centre as catalyst for innovation and investment attraction. Grants and government programs to encourage innovation and value-added production of food products. Evidence suggests that there is consumer demand for locally produced, differentiated products.
THREATS	<ul style="list-style-type: none"> Competition from jurisdictions which offer very favourable incentives (tax and other) to attract investment.

3.4.4 Manufacturing

The Nisku Industrial Park is one of the largest business parks in Western Canada and is home to over 700 different companies. Many of the businesses in the park have traditionally focused on oil and gas; however, changing economic factors pose both threats and opportunities.

STRENGTHS

- Existing advanced manufacturing sector (downstream processing and manufacturing, metal fabrication, and assembly), which includes infrastructure, expertise, and skilled labour.
- Significant energy industry 'know-how' and ecosystem will attract and support new initiatives in fuel development such as hydrogen.

WEAKNESSES

- Reliance on the oil and gas sectors.
- High cost of labour reduces local business competitiveness as compared to other jurisdictions.

OPPORTUNITIES

- Diversification of manufacturing in growing sectors of the economy such as renewable energy.
- Opportunities in the agricultural related manufacturing and value-added production sector (such as seed processing, milling, etc.).
- Energy transition to renewables, accommodated by the Municipal Development Plan, creates an opportunity for energy related manufacturing and skilled labour.
- Grants and government programs are available to encourage innovation and value-added production of raw materials.
- Capital Power is investigating nano-tube production through carbon capture at Genesee.

THREATS

- Potential for continued low price of oil.
- Pipeline constraints impact project economics for new oil infrastructure projects.

3.4.5 Transportation and Logistics

Leduc County is known for the strength of its transportation and logistics sector. Technological advancements in autonomous transportation and warehouse operations management have the potential to disrupt the sector.

STRENGTHS

- Transportation network that includes Highway #2, two class 1 railroads, and Edmonton International Airport.
- Local transportation and logistics expertise.
- Alberta's Foreign Trade Zone provides additional options for imported goods.

WEAKNESSES

- Stakeholder engagement identified a shortage of bonded warehouses and cold storage capacity gaps in this important part of the supply chain.

OPPORTUNITIES

- Local building vacancies could be present and opportunity to repurposed for warehouse and storage.
- Opportunity to leverage Amazon's Nisku location to attract other players.
- Opportunity to work with post-secondary institutions in Edmonton to begin skills training for autonomous transportation technologies.
- Capital Power is investigating nano-tube production through carbon capture at Genesee.

THREATS

- Emerging autonomous technologies in transportation and warehouse sectors will change industry needs and expectations for workforce skills.

3.4.6 Energy

The Leduc No. 1 crude oil discovery in 1947 ushered in the modern oil industry in Alberta. In spite of the current oil downcycle, traditional forms of energy will continue to be an economic driver for the region, while green energy promises new opportunities.

STRENGTHS

- The strong energy sector has historically been an economic driver for the County.
- Oil and gas sector has created high paying jobs and attracted skilled labour.

WEAKNESSES

- The energy sector has faced six years of economic downturn and low oil prices.
- Investment capital is exiting the oil and gas sector.
- Lack of renewable energy specific infrastructure – if local industry aims to capitalize on growth of the renewables industry, existing manufacturing processes may need re-tooling and other capital investment.

OPPORTUNITIES

- Energy transition to renewables creates an opportunity for energy related manufacturing and skilled labour.
- Oil prices are cyclical in nature and history indicates that prices will recover.
- More value-add petrochemical production, including hydrogen, is being invented by the Provincial Government.

THREATS

- Fluctuating oil prices create uncertainty for the energy sector and reduce the likelihood of new energy related projects.
- Climate action plan resulting in the planned closure of Westmoreland Coal mine.
- Moving to renewables may reduce the demand for oil and gas.
- Liability related to abandoned wells and inability to develop certain high value lands until remediation takes place.

4. APPROACH



4.1 RESEARCH AND ANALYSIS

4.1.1 Background Research and Data Report

At the onset of the project, the Project Team completed a background research and data report. The report is comprised of four main components:

1. Community review: An assessment of communities in Leduc County, including the Town of Thorsby, Town of Calmar, and the Village of Warburg, to understand the urban context of the Rural West and local economic drivers.
2. Document and plan review: A summary of Leduc County documents, plans, and strategies prepared by the County relevant to the Rural West Economic Diversification Plan (the Plan). These documents and plans are essential sources of information pertinent to opportunity identification and provide the Project Team with an understanding of the existing legislation and policy framework in the Rural West.
3. County initiatives: The County has already taken several steps to facilitate economic growth and diversification. These initiatives informed baseline data considered by the project to understand the County's current status of economic development.
4. A review of themes or topics relevant to the Plan: Several industries are currently operating in the County that represent important contributors to the economy and are natural starting points to assess diversification opportunities.

The information identified in this report provided the Team with a baseline understanding of current economic trends and challenges in the county and possible areas for further exploration and potential. Find the full **Background Research and Data Report in Appendix B.**

4.1.2 Economic Assessment

The Project Team undertook a data-gathering exercise to assess the County's current economic environment and diversification levels. The exercise also unearthed potential benefits that economic development and diversification can bring to Leduc County. The creation of a data model to incorporate Statistics Canada business pattern data, provincial GDP (Gross Domestic Product) data, and other Statistics Canada tables facilitated data consolidation and analysis. The model evaluates the Leduc County economy and compares it with other regions. The Economic Assessment also included a review of agriculture in Leduc County and the regional demographics. Find the full **Economic Assessment in Appendix C.**

4.2 ENGAGEMENT ASSESSMENT AND SUMMARY

The Project Team undertook a stakeholder assessment in the early phases of the project to determine the most meaningful engagement techniques. Shortly after the project kicked-off, the COVID-19 pandemic resulted in the need for physical distancing, preventing in-person sessions. Therefore, the project employed various virtual engagement International Association for Public Participation (IAP2) techniques to capture local feedback. The **Stakeholder Assessment and Summary are included in this report, as Appendix D**. The appendix contains details about the engagement that was undertaken by the Project Team.

The Project Steering Committee (Steering Committee) was established for this project and consisted of County staff. Their role included reviewing project deliverables and providing the Project Team with advice and direction at key project milestones during each phase of the engagement work plan. The Steering Committee attended four meetings hosted by the Project Team, which were held at key milestones throughout the project. The conversations with the Project Steering Committee informed the recommendations the Project Team presented for Council consideration.

The Project Team developed an Engagement Plan that employed interviews, workshops, and Steering Committee meetings designed to increase participation rates and provide value to the engagement process and project as a whole. As a part of this plan, a stakeholder list was created, which identified the level of engagement and type of activity for each stakeholder.

The intended outcome of the engagement work plan was twofold. The first outcome included identifying stakeholders' current and future needs and expectations regarding economic diversification in the County. The second outcome included establishing links between rural land uses and identifying potential economic opportunities.

Stakeholder feedback was documented, summarized, and shared by the Project Team with the Steering Committee. This feedback helped the Project Team to glean important local knowledge to inform the Plan. Based on the engagement outcomes, the Project Team developed a set of recommendations outlining economic diversification opportunities that had the most merit for further analysis by the Project Team.

Guided by the Steering Committee, the Project Team presented the plan to Leduc County Council at the end of the project.

4.3 OPPORTUNITY IDENTIFICATION AND ASSESSMENT

The project team approached the opportunity identification and investment using a four phase approach.

Phase 1: Information Gathering

This phase's goal was to gather information regarding economic diversification opportunities that could be considered by the Project Team. This phase included:

- A Steering Committee meeting; and
- The completion of stakeholder interviews (27 preliminary interviews held with subject matter experts, in addition to 15 follow-up interviews).

Phase 2: Project Visioning

This phase's goal was to continue to explore economic diversification opportunities and develop a vision for the plan. The Project Visioning phase included the following virtual sessions:

- Steering Committee meetings (2);
- A Stakeholder Workshop;
- Table Talk Session with a focus on agritourism opportunities; and
- A final presentation to Leduc County Council.

Phase 3: Plan Preparation

In advance of plan preparation, the Project Team met with the Steering Committee to share the Team's further analysis findings. The Steering Committee also confirmed the project vision, goals, and objectives reflected the project and work completed to date.

Phase 4: Plan Finalization

To conclude the project, the plan was presented to Council by the Project Team for acceptance.

4.3.1 Process

The opportunity identification process established key areas of focus and strategies to support the local economy's growth and diversification. This assessment involved evaluating each area of focus to understand where results could best be achieved.

4.3.1.1 Opportunity List

The engagement component was key to identifying economic diversification opportunities representing the County context. Interviews with local stakeholders and subject matter experts were conducted and became a significant source of information that drove the opportunity identification process. Stakeholder engagement and workshops generated an opportunity list of over 60 different economic development ideas.

The County had identified several priorities for the Rural West region, including job creation, economic development, and diversification. These priorities were the focus of the **Economic Assessment Report (Appendix C)**, and resulted in the development of an evaluation tool used to rank each identified opportunity quantitatively.

While this data-driven ranking system was an essential component of the opportunity assessment, the Project Team also considered the insight and business expertise of the Steering Committee, local stakeholders, and the Project Team's understanding by including a qualitative factors score. This combination allowed for experience, local knowledge, and business intuition to play an important role in ranking the priority sectors that merited further analysis. The qualitative factors score included several important considerations, such as supply chain, value chain, labour force, and market access.

The ranking system produced a list of 12 promising opportunities for the region. Each opportunity categorized by sub-sector, was assessed and prioritized incorporating the following factors:

Rural West (Agricultural Area A) focused on:

- Job creation potential;
- Increased economic diversification;
- Positive GDP impact; and
- Qualitative score.

The list was then further reduced to five opportunities, which were identified by the Project Team for further analysis.

4.3.1.2 Five Opportunities for Further Economic Analysis

The project's previous stages resulted in a list of five opportunities for further evaluation. This list was confirmed by Leduc County Council when the Project Team presented the recommended five opportunities for further economic analysis. **Section 5.0** of this Plan outlines the findings of the economic analysis conducted for each of the five opportunities above. The list of five includes:



4.3.1.3 Seven Opportunities to Monitor

Although the following seven opportunities were not selected for further analysis, these opportunities were identified by the Project Team for continued monitoring and potential diversification opportunities in the County. The seven opportunities the Project Team recommends for further monitoring are:

1. Mining and Quarrying;
2. Power Generation;
3. Hydrogen Production;
4. Carbon Nano-tube;
5. Food Hub;
6. Warehousing and Storage; and
7. Fibre Mills.

Details regarding these opportunities are found in **Appendix E - Additional Opportunities to Monitor**.

4.4 FINANCIAL ANALYSIS

The financial analysis complements the narrative provided by stakeholders and subject matter experts on opportunities for economic diversification in Leduc County. Publicly available data was used to anchor and test the information collected in those interviews.¹⁷ The financial analysis complements the narrative provided by stakeholders and subject matter experts on opportunities for economic diversification in Leduc County. Publicly available data was used to anchor and test the information collected in those interviews.

First, industry data was used to assess the economics of the average firm in a specific sector.¹⁸ Next, based on the specific economic attributes of the region, we considered how the average firm within a given sector would perform within Leduc County. Finally, because business investments are long term in nature, revenue growth, operating costs, and risk in the investment had to be estimated and forecast using standard financial tools.

Two commonly used financial metrics were generated to assess financial viability of investing in a specific sector:

- *Internal Rate of Return (IRR)*

Is useful for understanding the absolute profitability of a specific investment in a specific industry. The higher the IRR, the higher the returns the project could generate to providers of both debt and equity, and the more attractive the investment, all else equal.

¹⁷ For purposes of consistency, sector specific data was sourced from a single source: <https://www.canada.ca/en/services/business/research.html>

¹⁸ Where average refers to Canada-wide mean of attributes such as revenues, cost of goods sold, tax rates, etc.

- *Benefit Cost Ratio (BCR)*

Since risk differs across industries, the required rate of return also varies by industry, making cross industry comparisons using the IRR problematic. To address this, BCRs are often used. BCRs normalize capital investments around 1, and convert annual cash flows to the present year using a risk adjusted discount rate¹⁹ appropriate for the sector under consideration. The result is a metric that can be used to rank the relative merit of investment opportunities in different sectors.

A BCR greater than 1 means the investment is profitable. And, like IRRs, the higher the BCR the better. However, unlike IRRs, BCRs can be used to make comparisons of the attractiveness of investment opportunities across industry sectors.

Note, all financial projections provided are based on statistical estimates using the best publicly available data. Therefore, forecasts generated for purposes of this analysis necessarily carry a margin of error. The financial analysis methodology outlined in this section is one of the key components of the opportunity assessment in the following section. The methodology has been consistently applied to each opportunity being reviewed in order to allow for direct comparison between different economic sectors.

4.5 MUNICIPAL POLICY REVIEW

The implementation and ultimate success of economic development opportunities rely on supporting policies and processes in municipal planning. If land uses are undefined in a land use bylaw, or permitted districts are restricted, it can hinder the attraction and implementation of innovative ideas and new industries. To ensure the opportunities could be implemented, the Project Team undertook a municipal policy review and developed recommendations for the County to consider.

The recommendations are intended to close the gaps between opportunity realization and current County policy. The process included a County document review, which was supplemented by conversations with the Leduc County Planning Department.

The Project Team identified three municipal documents for review as part of this Plan. The Leduc County Municipal Development Plan (MDP), the Genesee Area Structure Plan (ASP), and the Leduc County Land Use Bylaw. While other plans and documents are important to consider, these are the primary tools that an individual prospecting future economic development opportunities will consider when conducting market research in potential regions.

- The Leduc County MDP recently underwent an update in 2019, and provides high-level policy direction for the County. The MDP delineates the boundaries of Agricultural Area A - West (Map 4), which is referred to in this Plan as the Rural West. The Rural West is largely considered agricultural, with small pockets of urban development surrounding its municipalities. Discussions with County staff acknowledged that Leduc County is typically open and supportive of new industries proposed on lesser quality agricultural land despite being labelled for agriculture.

¹⁹ Discount rates were estimated using market based metrics, measurements of the credit worthiness of each project, and the Capital Asset Pricing Model (CAPM).

- The Genesee ASP guides land use direction for the areas surrounding the Power Plant supported by the Overlay District in the Land Use Bylaw. The ASP policies designate the Genesee areas as predominantly agricultural.
- The Leduc County Land Use Bylaw guides specific land uses to designated districts in the County, which has implications for any economic development opportunity in the County. Through the municipal policy review, the Project Team identified gaps relevant to the five opportunities identified, which are outlined in **Section 5.0** under each opportunity. It is worth noting that the County is currently undertaking a Bylaw rewrite; therefore, the gaps can be considered by the County Administration for future policy development and revisions.
- Generally, the Leduc County Planning Department noted a fair amount of flexibility in their ability to identify the appropriate land use for new industries and the ability to work with applicants to manage thresholds for different scales of development on a case by case basis.

The purpose of the opportunity analysis is to further test the economic viability of diversifying different Leduc County economic sectors. The **Leduc County Economic Assessment (Appendix C)** includes data and statistics stated in this section related to GDP, labour force, and agricultural production.

5. OPPORTUNITY ANALYSIS



INTRODUCTION

The purpose of the opportunity analysis is to further test the economic viability of diversifying different Leduc County economic sectors. The Leduc County Economic Assessment (Appendix C) includes data and statistics stated in this section related to GDP, labour force, and agricultural production.

The Project Team assessed the following five opportunities using the approach identified in **Section 4.3** of this Plan. These opportunities had a good strategic fit with the County's existing competitive advantages and the Leduc County 2018-2021 Strategic Plan. This section includes opportunities in food manufacturing, agricultural production, transportation, and tourism.

The financial analysis for each opportunity provides metrics used to understand returns on investment and potential private sector response to investment attraction efforts. The Benefit Cost Ratio (BCR) calculated for each opportunity is a tool used to compare each sector's relative profitability against its peers.

For each opportunity the Project Team considered the following:

- **County Perspective:** How the opportunity aligns with the current context of Leduc County.
- **Opportunity Perspective:** The strategic alignment with the County, and the financial analysis that was completed for the opportunity.
- **Opportunity Realization:** What is needed to enable the opportunity including municipal policy support, success and risk factors that should be considered, and recommendations.

The opportunities presented in this section will be used by the County to determine the feasibility of each opportunity, and where to focus administrative resources. This section outlines recommendations, which can be used by the County to develop a path forward for each opportunity.



5.1 Grain and Oilseed Milling



Canada is an internationally recognized agriculture leader due to the world-class value-chain, from bio-engineering to transportation systems delivering primary agricultural products. However, during stakeholder interviews, the Project Team learned that there are also risk issues associated with export products' mass commoditization, including grain and canola. Selling into international commodity markets typically means Canada accepts global prices, which may not reflect the production's true costs. International market prices are also vulnerable to arbitrary trade and tariff policies from our customers, which can be disruptive. For example, China recently stopped purchases of Canadian canola, which led Canada to a search for new markets.

Diversifying the product offering, expanding the number of markets, and bringing value-added food processing to our primary products will help mitigate exposure to international commodity markets, reduce price volatility, and potentially gain enhanced margins from processing. The objective is to move some of the commodity production from the commodity price-taker model to being the value-added price-maker.

5.1.1 County Perspective

The **Leduc County Economic Assessment (Appendix C)** illustrates that agriculture production in Leduc County is heavily concentrated around traditional crop production and cattle ranching operations. While crop production such as grain and oilseed production comprise 31% of farm production, there is also significant production in other agricultural sectors. In fact, the diversity of farm types in the County is greater than what is observed at the Provincial level. This strong supply chain presents opportunities for agriculture-related value-added production.

The grain and oilseed milling classification falls within the manufacturing sector, but is also a value-added industry closely tied to the agricultural sector. The manufacturing sector is one of the largest components of the Leduc County economy, comprising 22% of GDP and 14% of the workforce. The Leduc County manufacturing sector is over-represented by oil and gas-related businesses, and building agricultural processing capacity within the County would serve to diversify this sector further and provide grain producers with a nearby processing option. Statistics Canada data shows that of the businesses with employees, the median Alberta business in the grain and oilseed sector employs an estimated 30-39 people.²⁰

Based on the 2016 census, the median annual

²⁰ Government of Alberta, 2018

income for people working in the Leduc County manufacturing sector was \$66,768 compared to \$60,750 for the manufacturing sector province wide.²¹

This higher than average median income may be due to the overrepresentation of oil and gas-related manufacturing jobs, which have traditionally paid higher. A transition to more agriculture-related manufacturing jobs may be associated with a decrease in median income but can provide job opportunities where existing ones are disappearing.

5.1.2 Opportunity Perspective

The grain and oilseed milling sector include many value-added businesses that convert primary agricultural products like grains, oilseeds, and pulses into ingredients used in food manufacturing. The crushing canola sector is one of the significant components of the grain and oilseed milling sector and includes processing facilities like Cargill's 850,000 metric tonne operation in Camrose, Alberta. Traditional canola crushing has seen healthy growth over the past decades, but the food manufacturing industry is changing with the establishment of new products and markets.

According to Allie Market Research, the global pea protein market was valued at \$32 million in 2017, and is projected to reach \$176 million by 2025.²² Pea protein isolate was the largest segment of the pea protein industry in 2018, due to its application as a food supplement in the sports nutrition industry and its use as a texturizing agent in meat products.

Numerous interviews with industry experts identified the growing demand for value-added, plant-based ingredients that are fractionated, extracted, or isolated.

Some examples of commercial operations meeting

²¹ Statistics Canada, 2016

²² Government of Canada, 2019

this demand are as follows:

- In 2019, Agrocorp International completed work on Phase 1 of a pea protein plant project in Cut Knife, Saskatchewan. The plant can handle up to 50,000 metric tonnes of pulses such as peas, lentils, and chickpeas to produce food ingredients such as protein, starch, and fibre. Plant proteins produced at the facility can be used to produce meat alternatives and health food snacks.
- Protein Industries Canada recently funded a \$11.3 million dollar project to process pea, lentil, and faba bean proteins to be used in various products such as meat replacements, dairy replacements, and tofu and pasta.

The Project Team spoke to industry experts to identify value-added agriculture as a good opportunity for financial gains and market diversification. The Provincial Government is also investing heavily in cultivating these options. The "Value-Added Products Market" grant, which closed in June 2020, offered up to \$500,000 of support for value-added agriculture projects. Similar funding opportunities are expected in the future.

Finally, from a circular economy (CE) perspective, grain and oilseed milling can provide an opportunity for other related businesses to obtain inexpensive substrates to feed into other systems. For example, this may include the use of hulls as bedding substrate or the use of oilseed cakes, which are rich in proteins, antioxidants, fibers, vitamins and minerals, as a human or animal nutritional food supplement.

Another CE intervention may include the use of anaerobic digesters to treat milling effluent, producing high value fertilizers and electricity. In addition, opportunities to revalorize agricultural by-products and sidestreams as feedstocks for plant-based meat analogues is currently being researched through the Good Food Institute, a not for profit organization providing strategic support

to companies and researchers that are working on cultured meat and plant based meat products. While still in the research phase, this may present a future opportunity for Leduc County.

5.1.2.1 Strategic Alignment

Production levels of grain, oilseed, and pulse crops for Leduc County and the surrounding regions are provided below.

Except for lentils, the region has excellent production levels needed to support the grain and oilseed milling industry. The evaluation of opportunities in this sector also considered the proximity to transportation infrastructures such as rail and highways. Leduc County also has a mature manufacturing sector. While not necessarily agriculture-related, there is value to the knowledge and expertise available in the region that may be, at least in part, transferable into other manufacturing sectors.

5.1.2.2 Financial Analysis

To better understand this sector's opportunities, a financial analysis evaluated small to medium-sized grain and oilseed milling and processing facilities across Canada with revenue less than \$5 million. The analysis included manufacturing companies that produce starch and vegetable oil, process oilseed, and mill grains and pulses. Based on industry averages, a typical investment in a grain or oilseed processing facility would achieve an IRR of 9.3% and have a profitability index of 1.35.

Also considered was how the average processing facility would perform based on Leduc County's agricultural and infrastructure-related strengths. The robust supply chain and excellent transportation network are key strengths for the region; however, these characteristics are not necessarily unique to Leduc County. Many existing and potential sites across the prairies share similar attributes. That is not to say that a facility could not succeed in Leduc County, only that it is on par with the industry average.

Table 5.1.1: Farm Counts by Predominant Production²³

	Wheat	Oats	Barley	Canola	Field Peas	Lentils
Leduc County	277	166	240	277	86	1
Wetaskiwin County	194	172	298	220	56	3
Brazeau County	16	117	31	5	2	0
Parkland County	82	142	131	91	24	1
Strathcona County	90	35	56	90	11	1
Sturgeon County	252	107	180	247	57	3

²³ Table 5.1.1 Reference: Table 32-10-0416-01 Hay and field crops, 2016 Census of Agriculture

There are, however, other factors that could make a facility more attractive from a financial feasibility perspective. Differentiated products, specialty items, and nascent products in growing demand areas may present the opportunity for premium pricing over traditional products. Artisanal canola oil is an example of this kind of product. As **Table 5.1.2** illustrates, a product differentiation strategy that could achieve pricing premiums of 20% would see reasonably higher investment returns.

The below comparison evaluated the potential cash flows of identical size and scale operations while also considering the increased revenue, operating costs, and capital associated with producing a premium or differentiated product.

Upfront capital costs have a significant impact on project profitability. Therefore an analysis was run to show the impact of government support, such as the previously mentioned Value-Added Products Market grant. A \$500,000 upfront capital contribution would improve the Leduc Specific IRR from 10% to 12% and increase the BCR from 1.44 to 1.77.

Table 5.1.2: Grain and Oilseed Milling Investment

	Industry Average (Medium Scale)	Leduc Specific (Medium Scale, Niche)
Project Cash Flow -Year 1 (1,000s)		
Capital Investment	2,348	2,465
Revenue	4,280	5,136
Expenses	3,934	4,744
Investment Return Metrics		
Internal Rate of Return (IRR)	9.3%	9.9%
Benefit Cost Ratio (BCR)	1.35	1.44

5.1.3 Opportunity Realization

5.1.3.1 Municipal Policy Review

Municipal Development Plan

The MDP directs industries that are not directly related to agriculture to Employment Growth and Business Development areas. These areas are typically located within hamlets or local employment areas. The County may benefit from defining which uses, such as Grain and Oilseed Milling are interpreted as directly or indirectly related to agriculture in order to provide consistent information to applicants seeking to initiate such development in the County.

Land Use Bylaw

The Land Use Bylaw does not directly refer to Grain and Oilseed Mills; however, an application beneath the land use definition of Agricultural Processing or Agricultural Support Service could have merit.

The Agricultural District does not include Agricultural Support Service; therefore, an application for Grain and Oilseed Milling in the Rural West is best suited for Agricultural Processing, as a discretionary use.

Where an application for development is identified to be suitable in agricultural areas, the Planning and Development Department assesses the application on a case by case basis. This assessment considers the location of the proposed development, to ensure a limited reduction of high quality agricultural land. In some cases, the applicant may be prompted to locate in an industrial district.

5.1.3.2 Success and Risk Factors

Attracting a food manufacturing operation to the western region of Leduc County would create high quality, well-paying jobs and strengthen and diversify the local manufacturing sector. Furthermore, terroir concepts, targeting the end consumer with point of origin branding, will also likely foster more food processing. The implementation of terroir concepts will help manage risk by diversifying and expanding existing markets and creating more producers' options in selling their products.

Leduc County has agricultural production and infrastructure factors, which is important in attracting a grain or oilseed milling operation. An additional competitive advantage is proximity to the Leduc Food Processing Development Centre. The food and beverage industry innovates and works to identify new ways that Canadian agricultural production can address global food challenges. Access to a fully equipped pilot plant and product development facility could be a significant factor in the decision to locate in the region.



5.1.3.3 Recommendations

There are currently two nearby processing facilities, a large canola processing plant in Camrose and a canola crushing plant in Fort Saskatchewan. Attracting a large scale grain or oilseed milling facility would have significant economic benefits to the region. Still, there are also opportunities in niche markets for small to medium size processors. There are businesses in this sector currently in operation in Alberta, some of which are looking to expand. The Project Team recommends the following:

Recommendation A: The County should initiate contact with the existing operators identified by the Project Team, who are open to discussions about Leduc County operations. Even a smaller-scale operation in the County would be an important start of an industry that will enable value-added agricultural production. For a circular economy example, an oil processing plant produces by-products such as meal used as an input in animal feed production. In a mature ecosystem, seeing one mill's by-products exchanged as inputs in another mill's manufacturing process is to be expected.

Recommendation B: The County research grant funding opportunities. As noted in the financial analysis, grant funding to support capital investment can significantly impact project economics. There are funding options that may be useful for certain milling businesses looking to establish themselves in the County. The County should monitor all new developments in the government programs available to understand its impact on attracting investment in the agribusiness sector.

Recommendation C: The County should establish a sector stakeholder advisory team including farmers, mill operators and government officials to advise Leduc County on the grain and oilseed milling sector.

Recommendation D: Amend the Municipal Development Plan and Land Use Bylaw to support grain and oilseed milling by providing clarity around these uses, in particular how the County defines these uses and where they should be located.

- Amend the Municipal Development Plan to identify locations where grain and oilseed milling uses would be suitable in Rural West. Develop policy statements that would support these uses in the County.
- Amend the Municipal Development Plan to clarify the County's interpretation of uses such as grain and oilseed milling, and outline if these uses will be considered by the County as directly or indirectly related to agriculture.
- Amend the Land Use Bylaw to include grain and oilseed milling uses to provide more certainty to applicants that want to develop these uses.

Recommendation E: Monitor research that is underway by organizations such as the Good Food Institute, which are providing strategic support to companies and researchers that are working on cultured meat and plant based meat products. When the cultured meat and plant based meat products gain market acceptance, identify opportunities to expand cultured meat and plant based meat product business opportunities in Leduc County.

Recommendation F: When the cultured meat and plant based meat products gain market acceptance, identify opportunities to expand business opportunities in Leduc County.

5.2 Commercial Greenhouses



Stakeholder interviews identified the desire for more local food production and linked the potential for commercial greenhouses. Several stakeholders raised the possibility of supporting food production through waste heat from the Genesee power generating station. This idea represents an excellent example of applying circular thinking to existing infrastructure, and the analysis considered the feasibility of this idea as well.

grown undercover) sector employs an estimated 10 - 19 people.²⁴

Based on the 2016 census, the median annual income for people working in the Leduc County agricultural sector was \$30,828 as compared to \$36,740 for the agricultural sector province-wide.²⁵ Diversifying into other areas of agriculture may allow wages in this sector to increase to levels that are on par with the Provincial average.

5.2.1 County Perspective

Agriculture production in Leduc County makes up 2.3% of the total GDP, which is above the Provincial level of 1.7%. The main focus of agriculture in the region is animal, grain, and canola production, with vegetable farming comprising less than 1% of total farm production. By way of commercial greenhouses, food production could serve to increase agriculture's contribution to the local economy and provide the opportunity to diversify the agriculture sector further.

Additionally, it could contribute more products to local consumers than grain production which is aligned with indications that consumers in Alberta are looking for opportunities to purchase more locally produced food.

Statistics Canada data for Alberta shows that of the businesses with employees, the median Alberta business in the commercial greenhouse (food crops

5.2.2 Opportunity Perspective

North American food production and distribution networks are highly efficient. Food is imported when lower costs of production more than offset the transportation costs. In the past, importing vegetables was a necessity during the winter months in many parts of Canada. However, it is becoming more common to see Alberta greenhouse-grown tomatoes, cucumbers, and peppers in the grocery store. Another growing interest area is the production of leafy greens²⁶ (salad greens, pot herbs, vegetable greens), traditionally imported from California and Mexico. Alberta imported greenhouse vegetables valued at \$22.6 million in 2017, and that includes over 36,000 tons of leafy greens.

²⁴ Government of Alberta, 2018

²⁵ Statistics Canada, 2016

²⁶ Information provided through consultation with stakeholder from the Ministry of Agriculture and Forestry.

Interviews conducted with agriculture experts raised the possibility that local greenhouses could displace some of these imported vegetable products. Understanding the economics of greenhouse production is key to determining if import substitution is possible.

There are several factors that retailers take into account when considering locally produced greenhouse vegetable products. Reducing transportation costs is a clear benefit to local production, but increased shelf life is also an important consideration. Transportation of produce from California typically takes five days, and travel disruptions can occur with unpredictable winter weather. Products grown locally can mitigate a large amount of that risk for retailers and provide them with a product that will have a longer shelf life. Locally grown products will reduce wastage for the retailer and ultimately improve their profit margins.

Despite fresh produce's potential, a retailer's choice of products is often based on long-established relationships with produce marketers. To gain access to these markets, assisting County greenhouses with networking and cultivating connections with organizations in this field is necessary. Further, large retailers, and by extension, marketers rely on a consistent flow of product. Greenhouses looking to gain lucrative contracts with larger retail/marketers will need excellent quality control and well-planned production schedules.

5.2.2.3 Strategic Alignment

To assess the potential for a commercial greenhouse located in the western region of Leduc County, competitive advantages that the region has to offer instead of other established commercial greenhouse locations should be considered, such as those in southern Alberta and British Columbia.

Proximity to market is an important consideration for vegetable products. Leduc County is close to the Calgary and Edmonton markets. Still, five of the

six major grocery retailers in Canada have large distribution centres located in Alberta, servicing Alberta and Saskatchewan, Manitoba, portions of BC, and the Yukon. A recent Canadian survey showed that 79.5% would consider paying more for locally grown produce, but only 25% actively seek it out. Local growers may be able to sell their products for a higher price, as long as they can effectively communicate their point of origin. As discussed in **Section 5.2.2**, growers will need to cultivate relationships with either produce marketers or retail buyers to gain access to these markets.

Locating a commercial greenhouse on Capital Power land near the Genesee power generation facility is also a possibility. Representatives from Capital Power indicated that they would consider proposals from commercial greenhouse growers, and they also recognize the potential for waste heat recovery from the plant. Alberta has agriculture expertise and access to agriculture technologies utilized to increase operational efficiencies further and lower costs.

5.2.2.2 Financial Analysis

The financial analysis evaluated industry data for greenhouse operations with revenue less than \$5 million to determine average profitability levels. Industry data indicates that commercial greenhouse vegetable production is a low margin business and that the average operators struggle to achieve acceptable returns on investment. As **Table 5.2.1** shows, the data set's average greenhouse investment has an estimated IRR of 7.2% and a BCR of 1.06.

It is important to stress that these results do not reflect the operating realities of every commercial greenhouse. Market research and interviews with industry experts supported the notion that certain factors can help lead to success. For instance, evidence suggests that large scale operations that support high volume production are becoming increasingly important. Available data on vegetable greenhouses in the prairies show that in the four

years from 2016 to 2019, the number of operations decreased by 12%. Over the same period, total greenhouse square footage increased by 17%.²⁷

While high volumes are important, operators also need to find innovative ways of doing so efficiently. A survey of greenhouse growers in the US showed that many of them were investing in technology such as heating innovations, alternate energy sources, irrigation systems, LED lighting, and automation. 92% of growers said that the main driver for investing in technology was to increase efficiency.

Market research and interviews with industry experts indicated that there are, in fact, benefits to large-scale operations that implement technology effectively. To substantiate these benefits, the analysis evaluated the profitability of the larger operations within the data set. This group has substantially higher invested capital and higher levels of revenue and return on investment,

Data is not available for the largest operators with revenue over \$5 million. However, it may be the case that they achieve even higher profitability levels as they reap the benefit from increased economies of scale.

The research and analysis indicate that for a commercial greenhouse to maximize profitability, it should be built for high volume production and implement technology proven to increase operating efficiency. These would be key considerations for any commercial greenhouse in Leduc County.

Stakeholder engagement also raised the possibility that a commercial greenhouse could be located adjacent to the Capital Power Genesee Generating Station in Leduc County and utilize waste heat from the plant. A conceptual desktop review specific to the Genesee plant was completed to assess the merits of a waste heat recovery system.

The technical component of the review determined the estimated cost of a waste heat recovery system and the related operating cost savings as compared to a conventional gas boiler system.

Table 5.2.1: Commercial Greenhouse Investment

	Industry Average (Medium Scale)	Leduc Specific (Medium Scale, Niche)
Project Cash Flow -Year 1 (1,000s)		
Capital Investment	1,051	2,911
Revenue	1,331	3,336
Expenses	1,211	2,969
Investment Return Metrics		
Internal Rate of Return (IRR)	7.2%	8%
Benefit Cost Ratio (BCR)	1.06	1.16

27 Statistics Canada, 2020

The preliminary conceptual review indicates that it is technically feasible to build a waste heat recovery system that would provide enough capacity to heat 30,000m² of greenhouse space. While the system is expected to be capable of reducing annual heating cost by approximately 84%, the recent low price of natural gas diminishes the impact of these energy savings.

A financial analysis was completed to determine whether the energy savings from a waste heat recovery system would be sufficient to offset the upfront capital expenditure and make the system financially viable. As **Table 5.2.2** illustrates, based on current operating factors (in 2020), a waste heat recovery system is not economic. The assessment also recognizes that there are a number of variables which could have considerable impact on feasibility. For instance, recently announced Federal carbon tax price of \$170/tonne by 2030 and a forecasted increase in natural gas prices (based on International Energy Agency projections) would both improve waste heat recovery economics significantly.

The analysis considers the central heating system only and does not include any costs associated with constructing the greenhouse structures. It also assumes that dual heating systems would be required to ensure backup during planned and unplanned power plant shutdowns.

The analysis considers the central heating system only and does not include any costs associated with constructing the greenhouse structures. It also assumes that dual heating systems would be required to ensure backup during planned and unplanned power plant shutdowns.

The analysis concludes that while not economic today, waste heat recovery economics could change based on anticipated carbon tax increases and projected natural gas commodity prices. Additionally, waste heat recovery projects are listed as an approved system under Alberta Emission Offset System (AEOS). The technical review that was completed concluded that the waste heat recovery system being proposed could result in an estimated 51% decrease in greenhouse gas emissions.

Based on forward looking projections, a future greenhouse project in the Genesee region which utilizes waste heat could offer a large competitive advantage over operations that rely on conventional heating systems. If a greenhouse located at Genesee was to qualify for carbon offset credits by meeting the technical requirements of AEOS, the economics could be further improved and the project may be feasible before 2030.

Table 5.2.2: Waste Heat Recovery System by Investment Year

	2020	2030
Waste Heat Recovery Investment Returns		
Internal Rate of Return (IRR)	-3.6%	17.4%
Benefit Cost Ratio (BCR)	0.36	1.97

5.2.3 Opportunity Realization

5.2.3.1 Municipal Policy Review

Municipal Development Plan

The MDP definition for Farm includes Greenhouse or Nursery Products. However, there are no other policy statements that directly apply to greenhouses. To better support the establishment of commercial greenhouses within agricultural land use policy, the County may consider an amendment to separate the greenhouse definition from the Farm definition.

The Agriculture, Value-Added definition addresses direct marketing such as farm gate sales, farmers markets, and distribution. This definition can support value-added activities that emerge from opportunities identified in this Plan.

The MDP calls for the development of a food and urban agriculture study to guide urban agriculture. This strategy should consider linkages and synergies to the Rural West to identify opportunities that leverage economic activity in urban areas made possible by rural agriculture.

Land Use Bylaw

The Land Use Bylaw addresses greenhouses within the Commercial Greenhouse definition and is present in several districts; however, there are inconsistencies in the definitions and districts that merit a high-level review of greenhouses' role in the County. The municipal policy review identified the following:

- Greenhouses are listed in the Market Garden definition.
- Commercial Greenhouse is excluded from the Agriculture, Horticultural definition; however, the definition does provide the opportunity for a plant nursery (not defined) and market garden (defined and includes Greenhouse in its definition).
- The Land Use Bylaw does not differentiate

between a Commercial Greenhouse and Non-Commercial Greenhouse.

- Clarification is required between the above terms to identify the threshold for Commercial Greenhouse vs. Greenhouse/Market Garden/Plant Nursery.
- There is a discrepancy between which land use districts permit a Commercial Greenhouse vs. Market Garden, which creates inconsistencies in the Administration's application of the Land Use Bylaw, and a potential workaround should an applicant discover the loophole.

5.2.3.2 Success and Risk Factors

The evaluation of the commercial greenhouse industry paints a picture of a low profitability business. This evaluation is supported by Statistics Canada data that says only 29% of companies in the Food Grown Under Cover industry were profitable in 2018.

However, there are operations in the Province that are viable and even expanding. RedHat Co-operative markets tomatoes, peppers, and lettuce to major grocery chains across western Canada. In 2012, they invested \$4.5 million to double the size of their packing facility. In 2019, Big Marble Farms announced that they were increasing production capacity from 35 to 45 acres. There are opportunities in the greenhouse industry, but the analysis would indicate that establishing a commercial greenhouse in Leduc County will require an experienced operator with the capital to invest in a large facility.

If products (such as leafy greens) can be produced at a competitive price, there is the possibility that imports from other countries can be displaced. It is also possible that local producers would charge a reasonably higher price for their products in some markets, based on consumer desire to buy local.

It is expected that this will need to be accompanied by some sort of value-add, such as leafy greens

with roots attached to increase shelf life. As noted earlier, 50% of the population is willing to buy local, but they do not actively seek out local: ease of access is a regularly reported barrier. Establishing marketing channels and relationships with retailers and consumers will be key to success in these regards.

A new generation of labour-saving technology is installed in the Coaldale facility, whereby lettuce production proceeds hands-free until harvest. Genesee is in a low-density rural area, and a minimal labour requirement in a low business cost area would be a competitive advantage.

Data on commercial greenhouses indicates that the average operation employs between 10 - 19 people. However, as noted, some growers are implementing automation technology. Automation can result in higher upfront capital investment but lower operating costs over the long term due to reduced labour costs. While a greenhouse

operation in the region would create jobs, higher automation levels would likely mean fewer jobs than the industry average, but the jobs created would be higher skill jobs traditionally associated with higher pay.



5.2.3.3 Recommendations

Capital Power indicated that they would consider proposals from commercial greenhouse growers – noting that none have been received in past years. In discussion with the Alberta Greenhouse Growers Association about power generation ‘waste heat’ capture, the observation offered was, “...however, it takes two interested parties...” for an opportunity to emerge. The Project Team recommends the following:

Recommendation G: Consider amendments to the Municipal Development Plan (MDP) and Land Use Bylaw (LUB) to support greenhouse development in the County. See **Section 5.2.3.1** for the detailed recommendations.

Recommendation H: The MDP calls for the development of a food and urban agriculture study to guide urban agriculture. This strategy should be developed, considering linkages and synergies to the Rural West to identify opportunities that leverage economic activity in urban areas made possible by rural agriculture.

Recommendation I: The market research and economic analysis that was completed as a part of this Plan provides insight into specific competitive advantages that may position certain greenhouse operators for an increased likelihood of success. The County should consider these factors if pursuing investment attraction activities in this industry and develop investment attraction materials for greenhouses.

Recommendation J: Leduc County should pursue commercial greenhouse operators for an understanding of the terms they would consider for locating in Rural West.

5.3 Meat Producing Facility



When considering abattoirs (also known as slaughterhouses), it is important to distinguish between provincially and federally regulated facilities. Provincially licensed abattoirs can sell meat only within Alberta. Federally registered facilities can export meat interprovincially and internationally.

In 2019, 3.6 million head of cattle were slaughtered in Canada,²⁸ and 70% of those animals were processed at one of two federally regulated facilities in Alberta.²⁹ These large plants are very efficient, high-volume, low-cost producers who can process over 25,000 head of cattle a week. In 2019, over 150,000³⁰ cattle were slaughtered at provincially regulated facilities, with over 20% of that amount in Alberta. Provincial facilities tend to be smaller operations that are not price competitive with large federal facilities. However, there are market factors that allow hundreds of smaller abattoirs across Canada to operate successfully. Typically, these operations have identified local or niche retail segments to market their products.

5.3.1 County Perspective

Meat processing is classified within the manufacturing sector, but it is also a value-added industry closely tied to the agricultural sector.

As previously noted, the manufacturing sector is one of the largest components of the Leduc Economy, comprising 22% of GDP and 14% of the workforce. Building beef processing capacity within the County would further diversify the sector and expand the agrifood industry. Statistics Canada data shows that of the businesses with employees, the meat slaughter and processing sector's median business employs an estimated 10-19 people.³¹

Based on the 2016 census, the median annual income for people working in the Leduc County manufacturing sector was \$66,768 as compared to \$60,750 for the manufacturing sector province-wide.³² The median income difference indicates that the County is likely more easily able to retain a workforce employed in this sector and is unlikely to see personnel leaving the County to seek higher-paying job options in other regions.

5.3.2 Opportunity Perspective

Stakeholder engagement identified concerns from some local cattle producers about access to slaughter facilities. Many suggested that the COVID-19 outbreaks at the two largest processing facilities (federally inspected) disrupted capacity

²⁸ Statistics Canada, 2020

²⁹ Edminston, 2020

³⁰ Government of Canada, 2020

³¹ Government of Alberta, 2018

³² Statistics Canada, 2016

and created backlogs for producers wanting to send their cattle to market. While current COVID-19 related processing constraints will likely be addressed in the near term, producers and industry experts also spoke of structural capacity issues.

As a result, many local producers are shipping their cattle south to Penhold or east to Vegreville or Vermillion for slaughter at provincially inspected facilities.

A Calgary Economic Development Agribusiness Value Chain Study, incorporating Provincial perspectives and including relevant material for Leduc County, forecasted the regional expansion of current beef processing and manufacturing capabilities and opportunities for niche processors and specialized meats.³³ Potential issues raised included land pressures impacting herd expansion, animal welfare issues, environmental concerns, and feedlot closures. These are significant threats to the supply chain and the meat processing industry as a whole.

5.3.2.1 Strategic Alignment

Cattle production and meat processing are complex industries that are impacted by many different market forces. Census of agriculture data and subject matter experts from the Canadian Cattlemen's Association, Government of Alberta Ministry of Agriculture and Forestry, and Canfax were instrumental in providing the industry perspective needed to support the evaluation of an abattoir opportunity in Leduc County.

Based on the 2016 Census of Agriculture, there are 254 beef cattle farms in Leduc County and 1,141 in the Counties that make up Census Division No.11. These are farms that identify predominantly as cattle operations as measured by farm receipts. The total number of estimated beef cattle on all farms is estimated to be 22,076 for Leduc County and 87,675 for Division No. 11.³⁶

Table 5.3.1: Beef Cattle Operations (Census Division No. 11)^{34,35}

	Number of Farms Beef Cattle	Total Head Beef Cattle
Leduc County	254	22,076
Wetaskiwin County	302	25,135
Brazeau County	134	12,065
Parkland County	208	17,978
Strathcona County	115	N/A
Sturgeon County	128	10,421
Total	1,141	87,675

33 Government of Alberta, 2016

34 Statistics Canada, 2020

35 Government of Alberta, 2016

36 Government of Alberta, 2016

Unfortunately, the data does not provide insight into the volume of finished cattle that are ready for slaughter, but stakeholders and industry experts indicated that the volume is sufficient to support a small to medium sized abattoir that could process in the range of 200 head per week.

Interviews with industry participants spoke of the difficulty of finding and keeping workers. According to the Canadian Meat Council, there is a shortage of labour in the meat processing industry. "There exists an industry threatening scarcity of Canadian butchers, meat cutters and labourers who are willing to accept job offers for vacancies that are situated often in smaller, more distant and rural locations."³⁷

The pandemic has exacerbated this as short term migratory workers have had limited access to the country to slow disease transmission. Firms considering locating in Leduc County will want to ensure access to a ready and willing labour force that may require the County's support to advertise jobs and promote training.

As noted throughout this Plan, the proximity to the large and diverse Edmonton market is one of Leduc County's assets. Market research and discussions with industry experts also focused on how different product offerings may appeal to the population's niche segments. The following is a list of market differentiation strategies that could be considered by potential market entrants.

Halal - Halal meat is that which is permissible to eat under Islamic Law. For observing Muslims, meat must be slaughtered in a way that adheres to prescribed Islamic slaughter practices.³⁸ However, the production of Halal meat is not straightforward. There is not a consensus amongst Muslims on the precise requirements for Halal.³⁹

37 Canadian Meat Council, 2015

38 Government of Alberta, 2005

39 A.M. Thomas et al., 2015

A study commissioned by Alberta Agriculture, Food & Rural Development found that most Muslims are willing to pay a premium for Halal certified beef. They typically purchase Halal meat products in small, privately-owned grocery stores found in larger urban centers. Each shop is responsible for acquiring its supply of Halal meat through local processors and abattoirs.⁴⁰ An abattoir producing Halal beef should work with a certification body to give consumers confidence in their product purchase.

Market research discovered some concerns amongst industry experts about the cost of certification, the risk of increases in these costs over time, and how different methods of slaughtering can have a considerable impact upon the process technologies that are employed.⁴¹ These factors create uncertainty around whether the premium received for Halal meat can justify the increased costs.

In addition to this, the Halal slaughtering of cows can raise concerns and complaints about animal welfare. Depending on the certifying body, the animals are not always rendered unconscious before exsanguination, as with traditional slaughter practices. Facilities looking to offer this service should follow rigorous certification standards that include animal welfare considerations to minimize the stress to the animal and reduce chances of community backlash.

For example, while a captive bolt gun that is traditionally used to incapacitate the cow prior to exsanguination may not be used, other methods such as electrical stunning may be used under some Halal guidelines. Any facility offering this service should only do so once a method is identified to render the animal unconscious before slaughter.

Non-Traditional Cuts – After slaughter, an animal is sectioned down into eight large primal cuts

40 Halal Monitoring Authority, 2005

41 A.M. Thomas et al., 2015

(chuck, rib, loin, round, flank, short plate, brisket, and shank). From there, butchers have a level of discretion into the sub-primal cuts. There are cuts of meat not readily available in Canada that are more easily found in different parts of the world. Stakeholder engagement identified the potential demand for non-traditional or cultural cuts of meat.

Non-traditional and cultural cuts present a growing market; however, market research did not uncover evidence that there is sufficient demand to support a butchering operation focused exclusively on non-traditional cuts. That said, it may be worthwhile for an existing operation to test the market and grow into the available demand.

Artisanal Butchers - Another idea raised was artisanal butcher shops. The term artisanal can mean different things to different people, and in some cases, it is merely a marketing term. On the other hand, an artisanal butcher could be considered an experienced expert that makes the best possible use of each animal and minimizes waste. Optimizing inputs to maximize end value is an important principle for any business. While there may not be a significant demand for artisanal cuts of meat, the philosophy put into practice may lead to higher profitability.

Wild Game - A representative from the Ministry of Agriculture and Forestry mentioned that they regularly receive inquiries from hunters about facilities to process wild game. There is the opportunity for businesses to supplement cattle processing operations with wild game. Many provincially regulated facilities offer this service, but the research notes that few in Leduc County advertise this service.

Attribute-Based - There is a segment of the population willing to pay a premium for beef with specific attributes. These can include natural (free from hormones and antibiotics), organic, grass-fed, dry-aged, or branded beef such as Black Angus. Except for dry-aged, the above attributes relate to how the cattle were raised. These factors are beyond

the control of the abattoir. An abattoir considering expanding into these markets should explore the existing supply chain and build relationships with producers. In many cases, producers will require a higher price for their cattle to offset the additional costs.

Industry experts that the Project Team spoke with considered the attribute-based strategy to have the best potential to allow for increased profit margins for both the local cattle producer and the abattoir. This strategy will require collaboration and relationship building between all levels of the value chain, the cattle producer, the abattoir, and the retailers, to ensure that a consistent product supply is available for consumers.

5.3.2.2 Financial Analysis

Important factors considered to complete the financial analysis for this sector include the following:

- Attribute-based beef can earn a higher price at the grocery store, but grass-fed and naturally raised animals are often smaller and come with higher production costs.
- A consistent theme that came out of discussions with industry experts was the complexities associated with feedlots. Environmental approvals and local buy-in can be difficult, and sourcing feed in certain regions can be problematic.
- A federally regulated abattoir would allow for increased access to large markets such as those in British Columbia or international, but a federally inspected facility will require a higher upfront investment and have increased ongoing operating costs. At this stage of the assessment, the above factors add unnecessary complexity to the analysis. Therefore, the financial analysis approach considers the typical firm within Canada, a medium-sized, provincially inspected facility that services local areas or specialty markets.

The financial analysis considers the factors specific to the western region of Leduc County to assess how an abattoir located there measures up to the average facility in the sector. Research indicates that the region has the supply chain and the proximity to customers to support a facility. However, these factors are not particularly unique to Leduc County. Many provincially regulated facilities are found in areas with very similar characteristics as Leduc County. Simply put, Leduc County may be well suited to support an abattoir, but the analysis did not uncover significant competitive advantages. Therefore, for this analysis, the industry average is used as a proxy for evaluating an abattoir in the County.

5.3.1 Opportunity Realization

5.3.3.1 Municipal Policy Review

Municipal Development Plan

The MDP directs industries that are not directly related to agriculture to Employment Growth and Business Development areas. These areas are typically located within hamlets or local employment areas. The County may benefit from defining which uses, such as Abattoir are interpreted as directly or indirectly related to agriculture in order to provide consistent information to applicants seeking to initiate such development in the County.

To support the development of a meat-producing facility (Abattoir), the County may consider this use as a direct control use due to the intrinsic relationship between meat processing and cattle farms' location.

A direct control district specifically written for a site will also allow the County, and ultimately Leduc County Council to include if development requirements and restrictions to ensure an Abattoir will be developed to meet the expectations of the County when locating outside of a designated

Table 5.3.2: Abattoir Investment

	Industry Average (Medium Scale)
Project Cash Flow - Year 1 (1,000s)	
Capital Investment	2,018
Revenue	4,572
Expenses	3,934
Investment Return Metrics	
Internal Rate of Return (IRR)	11.0%
Benefit Cost Ratio (BCR)	1.54

industrial, Employment Growth, or Business Development area.

Genesee ASP

Acceptable land uses in the ASP are listed as residential, recreational, agricultural, resource extraction, and conservation. To locate an Abattoir within the areas of the Genesee ASP Area would require an update to the ASP Overlay in the Land Use Bylaw and, at the discretion of Administration may also require amendment to the ASP.

Land Use Bylaw

The Land Use Bylaw suitably defines Abattoir, listed as a discretionary use in only one district, the IND - Industrial District. A review of the Land Use Bylaw's applicable policies can identify additional districts where an Abattoir is appropriate. Particularly as it relates to the merits of locating an Abattoir within Agricultural districts. Current applications for an Abattoir in the Rural West require the establishment of a Direct Control District.

To mitigate possible impacts of locating an Abattoir within the Agricultural District, the County may consider other development requirements in the Land Use Bylaw. For example, an environmental impact assessment and implementation of a wastewater management plan with the submission of development permit applications may help alleviate environmental concerns.

Due to an abattoir's noxious nature, locating this use in rural agricultural areas and away from urban areas is recommended; however, in assessing abattoir locations impacts to rural residents should be considered.

5.3.3.2 Success and Risk Factors

Public interest in local food production was growing even before the COVID-19 pandemic. After COVID-19 infections challenged large-scale meat production operations, the public need for confidence in food processing safety has become more important.

The Rural West has a strong agricultural base and the access to the cattle supply chain that an abattoir requires. However, a common issue for these operations can be the seasonality of the cattle production and the subsequent fluctuating demand for abattoir services. Capacity utilization is key to generating sufficient returns on investment, so an abattoir must have adequate throughput all year long.

In a report commissioned by the USDA on the importance of business commitments to the long term stability of the meat processing industry, it states that, "stabilizing and enhancing meat and poultry processing for local markets requires that farmers and processors build more established and predictable business relationships, shifting from convenience to longer term commitment."⁴²

The study recommends that securing half of the plant capacity will provide sufficient support for the business and leaves capacity for smaller producers throughout the year. Establishing mutually beneficial relationships with producers could be a key component of attracting a meat processing facility.

42 Gwin, L. et al., 2013

5.3.3.3 Recommendations

There is a useful parallel case to be derived from the recommendations section of Grain and Oilseed Milling. Similarly, beginning with a small to medium-sized business will start the process of establishing a business ecosystem for value-added food production. The Project Team recommends the following:

Recommendation K: The County should identify potential operators and facilitate discussions with local cattle producers that may use the abattoir services. Working with producers to identify solutions which address the seasonality and capacity utilization issues common in the meat processing industry, could be key to attracting a facility to the region. The County could contact the existing operators identified by the Project Team who are open to discussions about operations located in Leduc County.

Recommendation L: Consider amendments to the Municipal Development Plan (MDP), the Land Use Bylaw (LUB), and the Genesee Area Structure Plan to support abattoir development in the County, and particularly in the Rural West. See **Section 5.3.3.1** for the detailed recommendations.



5.4 Agritourism



The Alberta Department of Agriculture and Forestry defines agritourism as “the marriage between two of Alberta’s top industries – agriculture and tourism...present[ing] the consumer or tourist with an opportunity to engage in a direct exchange of values between themselves and the farm community – whether it is at a farmers’ market, on a farm tour, at an agriculture festival or fair, or at a country vacation farm or market garden.”⁴³

Although there are many different definitions of agritourism, common characteristics include increasing the breadth and diversity of the pool of tourism stakeholders, the addition of tools for rural economic development, diversifying farm revenue streams, and connecting locals visitors and producers.

As a part of this project, a separate report was conducted specific to Agritourism in Leduc County. This report is included as **Appendix F, Agritourism Development Strategy Report.**

5.4.1 County Perspective

The tourism industry contributes 2% of the County’s GDP and makes up 2% of the workforce. This sector is an identified opportunity for growth, focusing on leveraging the County’s agricultural base and natural beauty as a draw for tourists.

⁴³ ClearThink Group, 2019

Leduc County is already home to various unique experiences, ranging from farm-to-fork dinners to u-pick operations. Growth in this sector will lead to increased levels of economic diversification and has the potential for increases in economic growth. Statistics Canada data shows that of the businesses with employees, the median business in the Alberta tourism sector employs an estimated 5 - 9 people.⁴⁴

Based on the 2016 census, median annual income for people working in the Leduc County tourism sector was \$13,904 as compared to \$23,368 for the tourism sector Province wide.⁴⁵ The seasonal nature of the existing Leduc County tourism industry may result in the large variance.

This sector has been identified as an opportunity for growth, focusing on leveraging the County’s agricultural base and natural beauty as a draw for tourists. Growth in this sector will lead to increased levels of economic diversification and has the potential for increases in economic growth.

5.4.2 Opportunity Perspective

The research and analysis of agritourism undertaken evaluated the tourism market, types of tourists, and identified the opportunities in this sector for local farmers. The evaluation considered how farmers could increase farm income by diversifying into agritourism.

⁴⁴ Government of Alberta, 2018

⁴⁵ Statistics Canada, 2016

5.4.2.1 Strategic Alignment

Leduc County has many strengths that position it well as an agritourism destination. The County is within proximity to over 1 million permanent residents and is a relatively short drive from the Edmonton International Airport. The natural beauty of the region and diverse farm operations present many opportunities for visitors to experience the region.

A growing segment of the general population is interested in tourism opportunities that will allow them to try new experiences, learn new skills, and engage with local communities. However, to capitalize on agritourism opportunities, local farmers and producers will often need to initiate these entrepreneurial ventures. While the possibility of additional farm income is attractive, entering an unfamiliar market that requires upfront capital investment may reduce the willingness to expand into agritourism.

There are also opportunities to connect agritourism with other strategic opportunities. For example, fostering u-pick operations could be positioned as the beginning of developing a critical mass of berry production, eventually enabling value-add jams and preserves.

5.4.2.2 Financial Analysis

The agritourism analysis assessed industry data for the tourism sector to understand the return on investment of an average tourism business with revenue below \$5 million. Existing data shows that the average tourism-related investment across the sector is \$230K and has a reasonably attractive average IRR of 14%.

The Project Team’s analysis considered those factors that will impact an operation in the region to determine how a tourism operation in Leduc County would compare to the industry average. Establishing a thriving agritourism industry in Leduc County is possible. However, it is reasonable to assume the prioritization of marketing and promotion is required until the business is established.

Additionally, farmers who look to agritourism to supplement farm income may face some operational challenges and reduced efficiencies (compared to operations with a sole focus on tourism) as tourism

Table 5.4.1: Agritourism Investment

	Tourism Industry (Average Scale)	Leduc Specific (Average Scale)	Leduc Specific (Small Scale)
Project Cash Flow - Year 1 (1,000s)			
Capital Investment	231	231	29
Revenue	404	404	48
Expenses	346	353	42
Investment Return Metrics			
Internal Rate of Return (IRR)	13.7%	12.5%	10.6%
Benefit Cost Ratio (BCR)	2.10	1.85	1.53

is not their primary business. These factors can result in higher expenses and lower than average operating profits, at least in the short term, and can be magnified even further in a small scale agritourism venture. **Table 5.4.1** outlines the cash flows and investment return metrics for agritourism business opportunities. The assessment of Leduc County specific opportunities focuses on ventures that merge tourism opportunities with on-farm operations, such as farm tours. Other operations focus on tourist attraction and consumer attraction (such as a u-pick berry farm), which could likely expect returns more in line with the industry average.

5.4.3 Opportunity Realization

5.4.3.1 Municipal Policy Review

Municipal Development Plan

The MDP includes agritourism within the definition of Agriculture-Based Business and directs Agriculture-Based Business to Employment Growth and Business Development areas to create agricultural hubs' potential. However, in the interest of pursuing diversification in the Rural West, the County can leverage policies found in 4.4.0.4 to encourage agritourism activities within the Rural West agricultural context. Should agritourism be permitted as a secondary use to farming and other agricultural activities, it may promote travel to the Rural West and provide economic benefits outside of employment growth areas.

Genesee ASP

Policy provisions for outdoor tourism opportunities are present within Section 6.8.2 of the ASP, however, there is no definition for outdoor tourism or other uses associated with tourism (cottage industries). This leaves uncertainty regarding what Administration may consider as a suitable use. The amendment of policy related to tourism also provides improved policy direction for the

implementation of the Land Use Bylaw and the Genesee Overlay in the Genesee area.

Land Use Bylaw

No definition for agritourism exists in the Land Use Bylaw; however, there is a wide spectrum of activities and types of facilities associated with agritourism (permanent vs. non-permanent structures, seasonal vs. year-round) to consider. Therefore, the County may consider thresholds for permitted and discretionary agritourism uses. Once defined, the County should consider amending the Agricultural land use district to allow for agritourism activities, supplemented with technical regulations. This amendment would allow Administration to consider agritourism applications in areas where they are most suitable. Additionally, the agritourism definition that is drafted should address all related uses in the Land Use Bylaw to prevent confusion or overlap in the Bylaw's interpretation. Other related uses in the existing Land Use Bylaw that will require compatibility and consistency with new policies related to agritourism are Market Gardens, Farmers' Markets, and Rural Wedding and Agricultural Event Facility. Specificity and alignment of uses is required to prevent confusion regarding the use applied for, and the consistency of applicable districts. To address the above, the County may consider establishing a baseline definition for agritourism and outline permit application requirements to make the application process more transparent for applicants.

5.4.3.2 Success and Risk Factors

Focussing on foundational short and medium term actions will allow momentum to grow sustainably within the sector. In the context of COVID-19, this means developing and marketing agritourism to regional visitors and then gradually adapting the offering to appeal to visitor markets from further afield. This approach will allow Leduc County to implement quick wins, pilot new ideas, and lay the groundwork for establishing agritourism as a pillar of the local economy for years to come.

5.4.3.3 Recommendations

Foundational actions are recommended to capitalize on the rural economic development opportunities that agritourism offers.

Recommendation M: Identify amendments to the Municipal Development Plan (MDP) and Land Use Bylaw (LUB) to support agritourism development in the County. See **Section 5.4.3.1** for the detailed recommendations.

Recommendation N: Leduc County should consider the following:

1. Defining the potential of agritourism in Leduc County
2. Streamline permitting processes.

Recommendation O: Develop an agritourism strategy to plan and implement the recommendations found in **Appendix F: Agritourism Development Strategy Report**. As a part of the strategy Leduc County should include the following actions:

1. Awareness building;
2. Partnership development;
3. Destination development; and
4. Marketing and promotions.



5.5 Rail Extension



A rail extension is considered a facilitator of economic development, not necessarily an economic development opportunity in itself. Therefore, the approach to evaluating this possibility deviated from that completed on the previous four opportunities.

owned by Capital Power. The land around the Genesee power plant has a very low population density and could be an ideal location for industrial development. Edmonton City limits are less than 60 km away by Highway 770, and rail access would make the region even more attractive. Additionally, the western region has abundant natural resources, and exporting those products to international markets might be possible if rail access was available.

5.5.1 County Perspective

The County specific benefits that would arise from increased rail access would result from the increased potential for economic development that would be created. In this way, rail development could have an indirect, yet significant impact on employment opportunities, GDP, and diversification.

5.5.2 Financial Analysis

The proposed rail line extension does not come without its challenges. First and foremost are the significant capital costs associated with building new rail infrastructure. Due to the potential economic benefits that rail could offer for the region, the Project Team completed a high-level, break-even analysis. The analysis determined the volume of incremental rail traffic required to justify the investment. This assessment considers the economics of a \$20 million rail extension from the railway's point of view. Rail traffic revenues were based on shipments originating in Leduc County and terminating in Port of Vancouver.

5.5.2 Opportunity Perspective

While no one opportunity is specifically identified, access to the cost efficiencies that rail transportation offers has the potential to make business investment in the region more likely and also increase the prospect for exporting products around the world.

5.5.2.1 Strategic Alignment

A viewpoint expressed during stakeholder engagement was that extending the existing Canadian Pacific rail line (which terminates in Sunnybrook) would expand potential opportunities in the western regions of the County. For instance, there is potential for development on property

The analysis indicates volumes between 30 and 40 rail cars per week would likely be required to satisfy the railway's required return on capital. This estimate is based on publicly available financial data and operating metrics provided in Canadian Pacific's Annual Report. It should be noted that numerous economic and operational factors could impact the actual volume required to justify a rail extension investment.

5.5.2 Opportunity Realization

5.5.3.1 Municipal Policy Review

Stakeholder consultation is an important consideration for the implementation of rail and associated policy. Rail is often considered a nuisance to surrounding landowners, and therefore may be a restricting factor in locating and enacting rail activities. It is strongly recommended that Leduc County should develop an engagement strategy with landowners in the Rural West to identify opportunities, concerns, and those who want to be involved going forward.

Municipal Development Plan

The County's MDP is generally supportive of rail and the extension of the rail network in appropriate locations (Policy 8.1.2.1). To support the generation of business adjacent to rail corridors, the MDP will require an update to address the land use district and associated policy necessary for the development in proximity to rail.

The County may use the MDP to direct future rail development areas by identifying appropriate locations in the Land Use Bylaw, which is assessed for compatibility with surrounding uses and existing transportation networks.

Genesee ASP

Upon consideration of possible rail extension locations in the MDP, the County may require an update to the Genesee ASP if lands within the ASP are identified for rail activity.

Land Use Bylaw

There are no land use districts, or land uses dealing directly with rail or associated with rail. The absence of which may restrict the County in the ability to consider and support new development opportunities.

A review of compatible land uses and best practices in precedent Land Use Bylaws should be undertaken. This exercise can help identify areas where development adjacent to rail is appropriate and can leverage future rail extension benefits.

5.5.3.2 Success and Risk Factors

While the stakeholder engagement associated with this Plan identified a rail extension as a possible economic driver for the western region of Leduc County, significant new business development in the region would be needed to justify the investment. However, extending rail service further west in Leduc County may be the single most powerful long term driver of economic diversification. Potential new rail exports include meat, milled grain/oilseed, greenhouse products, and other industrial products.



5.5.3.3 Recommendations

Planning for this venture would engage all orders of government and a particularly broad range of stakeholders. A strategic, opportunistic approach might include considering new ventures that contribute to increasing demand for rail service to the necessary levels to support the rail extension's viability.

Recommendation P: Leduc County should undertake a strategic, opportunistic approach that might include considering new ventures that contribute to increasing demand for rail service to the necessary levels to support the rail extension's viability.

Recommendation Q: Leduc County should begin discussions with rail providers to determine if this opportunity would be of interest, and to confirm the economic drivers and thresholds required to build the rail extension.

Recommendation R: Leduc County should develop an engagement strategy with landowners in the Rural West to identify opportunities, concerns, and those who want to be involved in pursuing this opportunity.

Recommendation S: Leduc County should begin discussions at all levels of government to gain support, funding, and approvals for a rail extension.

Recommendation T: The Municipal Development Plan, Land Use Bylaw, and Genesee Area Structure Plan will require updates to support the rail extension in the Rural West. The County may use the MDP to direct future rail development areas by identifying appropriate locations, and compatible adjacent uses. New land use districts in the Land Use Bylaw could help to ensure development along the rail is compatible with agriculture in the Rural West. In addition to updates to the Genesee Area Structure Plan, a new Area Structure Plan identifying key strategic locations along the rail extension may be needed to provide policy direction and certainty for landowners and developers along the rail.

6. INDICATORS AND MONITORING



The Project Team has identified three recommendations for the County to consider to develop performance indicators that are monitored on a regular basis. These recommendations are described in this section. This Plan has put forth several strategies and recommendations to grow the economy and increase diversification. The establishment of performance indicators by the County can act as benchmarks for the current state of the economy. Establishing monitoring practices will help track performance and understand the results. Where possible, the monitoring suggestions noted below have been identified to align with the current Leduc County 2018-2021 Strategic Plan (Strategic Plan).

6.1 BUSINESS LICENSING

One of the benefits of a business licensing program is that it allows municipalities to compile valuable economic data regarding the region's economic state. Straightforward data such as industry classifications and the number of employees will provide valuable insight into changing economic growth and levels of diversification. The project team recommends that a business licensing program should be developed and encouraged. As data is collected through a program, there would be opportunities to develop indicators and monitor the formation of businesses, where the businesses are located, and the positive effects of diversification, particularly in the Rural West.

Once established, the business licensing data could be reviewed on a yearly basis, and incorporated into Strategic Plan updates to Leduc County Council. It is envisioned that this update could be a part of the *Economic Development Strategic Priority* Key Performance Indicators in the Strategic Plan. As a business licensing program was not established at the time the Strategic Plan was written, this would be a new Key Performance Indicator.

In addition to the above indicator, the *Agriculture Innovation and Support for Local Food Strategy Priority* in the Strategic Plan may be supported by a new Key Performance Indicator that shows business licensing changes in various agriculture categories, including agribusinesses, and businesses that provide local food to the region.

6.2 TAX ASSESSMENT

Another monitoring tool is the tax assessment data the County collects. Currently, the Tax Assessment Department classifies each entity in the County as residential or non-residential. This process is sufficient for required tax assessment purposes; however, there may be the opportunity to use the existing resources in this Department to collect valuable economic data for the County. Classifying non-residential entities by business type or industry would provide valuable information on the current state of the economy and provide insight into changes year over year.

One potential shortcoming to this approach is that all tax data tracks property, not individual businesses under the current configuration. In the case of a property owner that leases a building to multiple tenants, only the property owner would be registered with the Tax Assessment Department. Addressing this nuance is required to ensure reliable results. Similar to the above monitoring recommendation, it is envisioned that tax assessment data could be included in the Strategic Plan to support the *Economic Development Strategic Priority* as a Key Performance Indicator.

6.3 ECONOMIC ASSESSMENT UPDATES

Included in this Plan as **Appendix C** is the **Leduc County Economic Assessment**. The Economic Assessment provides a snapshot of employment levels, GDP, measures of County diversification, and population demographics. In the future, refreshing the Economic Assessment and the metrics within could provide insight into the economy's changes over time. The information gained by refreshing the metrics would also provide Leduc County with a view of how macroeconomic factors are changing in the County. Furthermore, the metrics would assist in understanding the local economy's response to economic development initiatives. This indicator could be included in the Strategic Plan updates to the Leduc County Council regarding *County Demographics and Growth and the Economic Development Strategic Priority* as Key Performance Indicators.

7. CONCLUSION

Dillon has prepared the Rural West Economic Diversification Plan following extensive research, stakeholder discussions, and financial analysis. This Plan provides clear direction for seven opportunities for the County to monitor, and five opportunities that we considered for further analysis. The County will use the Plan to determine the feasibility of each opportunity, and where to focus administrative resources. The Plan outlines recommendations, which can be used by the County to develop a path forward for each opportunity. This Plan will be used by the County to lay the foundation to increase job opportunities in Rural West, by encouraging economic diversification in the area.



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Appendix A

Visioning Summary

RURAL WEST ECONOMIC
DIVERSIFICATION PLAN



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1.0 Background

The purpose of this document is to outline the project vision, goals, objectives, and implementation methods that were used to form the foundation of the Rural West Economic Diversification Plan (the Plan) for Leduc County. This visioning summary outlines the process through which the project team explored and identified the overall vision statement, goals, objectives, and implementation strategies of the Plan, confirmed by administration, Council, and the Project Steering Committee.

With the phase-out of coal-fired electrical generating plants there is an urgent need for economic diversification opportunities in Leduc County. With this in mind, Leduc County was awarded a grant through the Coal Community Transition Fund that had two purposes:

1. **Rural Community Economic Development Strategy:** To create and fund an RFP for an economic development strategy specifically for the west-end of the county.
2. **Agri-tourism and other tourism opportunities:** To create and fund an RFP which aligns with recommendations from the Leduc County Agriculture Strategy or Leduc County's Economic Development and Growth Management Strategy.

1.1 Rural West Economic Diversification Plan – Request for Proposals

In December 2019, Leduc County issued Request for Proposal (RFP) 19-027, to develop the Rural West Economic Diversification Plan (the Plan). The Plan is to concentrate on the western portion of the County, while linking with other key areas and sectors throughout Leduc County. The RFP indicated that the Plan, “will assist Leduc County in the diversification and identification of emerging economic clusters, agri-business, agri-tourism, value-added agriculture, rural development, infrastructure and transportation and other areas of economic diversification within rural communities.” The Plan is to provide clear direction regarding diversification opportunities to the County, with a focus on primary features such as:

- Agricultural Area A – As defined in by the Municipal Development Plan;
- Agricultural Hubs;
- Hamlets;
- Green development and infrastructure; and
- Rural commercial and Industrial areas, nodes, and sectors.

Within the scope of work listed in the RFP, the successful proponent was to, “provide a project vision with goals, objectives and implementations methods for a clear direction of the project; ensuring focus on the enhancement of current and future investment within Agricultural Area A and other key specific areas of rural Leduc County.” This Visioning Summary has been prepared as an expected outcome and part of the scope of work associated with this project.

2.0 Visioning Process

In response to the RFP, Dillon Consulting Limited (Dillon), proposed the development of a project Visioning Summary. This phase of work kicked-off with a visioning session with the Project Steering Committee. The Steering Committee was made up of representatives of Leduc County, with the purpose of guiding and directing the project team through the course of the project at key milestones. The proposal outlined a session with County Council to follow the Steering Committee meeting; however, due to delays associated with COVID-19, the County's Project Manager provided an update to Council in place of this discussion. This report outlines the discussion with the Steering Committee, and the final project visions, goals, objectives, and implementation methods that were used for this project. This Visioning Summary is an appendix to the Plan.

2.1 Project Kick-off Meeting

The project kick-off meeting was held on March 13, 2020, and included attendance by the project team and representatives of Leduc County. This meeting explored the project background, County expectations of the Plan, governance, stakeholder engagement, and current and pending initiatives that could inform the Plan. What was learned in this meeting was used to define the project vision, goals, objectives, and implementation methods that were used when developing the Plan.

2.2 Steering Committee Meeting #1

The first of four Steering Committee meetings was held on May 15, 2020. The information documented during the meetings with the Steering Committee has been distilled into common themes and contribute to the overall direction desired for the Plan, strategies, and recommendations.

Based on this discussion, the project team's understanding of the project is:

- Economic diversification is the desired future state of the County that nurtures and grows companies and businesses that can withstand outside forces.
- Economic diversification will help the County move forward through challenges caused by uncontrollable forces, such as the pandemic, recession, and floods. If the County can develop an economy that has a broad base of business, it will create a sustainable balance.

The project team shared three types of diversification relevant to the County:

1. **Inter-industry diversification:** Involves attracting new types of business to an area that is currently dominated by a single industry.
2. **Intra-industry diversification:** Involves expanding the existing dominant industry's capacity to capture more of the value chain.



3. **Product diversification:** Involves companies in the existing dominant industry expanding their product line to facilitate entry into different sectors of the economy.

Upon consideration of the above, the Steering Committee shared how it envisions diversification in the County, in summary below:

- Economic diversification means the County has broad economic sectors that different sub-sectors can leverage within them. The County must look at which new industries can support and/or complement existing businesses in the County.
- Economic diversification means having a mix of business types. Diversifying the business portfolio in the County helps create resilience. If a company is diversified enough, though one element of a business may be doing poorly, another could be doing well at the same time.
- There may be opportunities to collaborate in different communities. Understanding these opportunities can help a business move a product from where it is stuck (undervalued or underutilized) to benefit another industry.
- At this stage, the County should explore all three types of economic diversification (inter-industry, intra-industry, project diversification).
- The concept of diversification requires long term thought, in addition to the short term. Some types of diversification will take several years to become established before returns come in.

The purpose of this meeting was to define what economic diversification means to Leduc County, and determine the type of diversification opportunities the project team should consider. This information was then used to develop the project vision, goals, and objectives.

3.0 Project Vision, Goals, Objectives, and Implementation Methods

Based on the RFP, and discussion with the Steering Committee and County Project Team, the project vision, goals, objectives, and implementation methods were identified. This section provides the foundation for the work the project team completed as the Plan was prepared.

3.1 Project Vision

The RFP issued for this project outlined the vision of the Plan as: *“an analysis to find the links between current and future rural land uses and potential economic diversification and development within the western portion of Leduc County.”*



Based on initial discussions with the County, the following vision has been developed for this project.

Leduc County is a provincial leader in diversifying the agricultural, manufacturing, and energy sectors. Through the Rural West Economic Diversification Plan, Leduc County aims to grow the economic resilience of its rural west businesses and area residents to withstand unpredictable changes to outside forces that cause uncertainty in the local market and leverage the County's competitive advantages.

3.2 Project Goals

The project goals, which were developed with information from the RFP, the project kick-off meeting, and Steering Committee discussions included the following:

- To create a living document that spans municipal cycles and County Councils. The document is to have highly actionable items, which County staff can use to move forward to produce economic diversification opportunities.
- To identify economic diversification opportunities with an emphasis on meaningful medium and longer-term diversification opportunities for Leduc County.
- To identify economic diversification opportunities that will retain existing skills, knowledge, and know-how of the current Leduc County workforce.
- To identify economic diversification opportunities that are appropriate, and take advantage of the natural and constructed resources in Leduc County, and that will attract new businesses and retain existing businesses in Leduc County.

3.3 Project Objectives

At the outset of this project, job creation in Leduc County was identified as a key success factor of this project. To support this the following project objectives were developed:

- To describe the current state and the desired future state of the County, and use this to inform the creation of actionable steps for County Council and Administration to close the gap.
- To identify Leduc County's competitive advantages that describe key features of the County, and that can be used to attract new business.
- To identify up to five diversification opportunities that will create new jobs in Leduc County, through economic diversification, through inter-industry diversification, intra-industry diversification (in both agriculture and energy sectors), and product diversification. A priority focus will be on intra-industry diversification as it will allow Leduc County to focus on their competitive advantage.



3.4 Key Messages

The Project Team developed key messages that were used to communicate with stakeholders through the engagement phases. These key messages were:

1. Leduc County will use its wealth of opportunity to identify new opportunities, understand the skills already available and learn more about the business community.
 - a. We will identify new opportunities so we can ensure the proper systems are in place for these opportunities to thrive.
 - b. We will explore the skills available in the county, and identify businesses that could put these skills to work.
 - c. We want to learn more about our business community, how it works, and how we can help to create new income streams.
2. Leduc County's future will respect the past, and will build on what has made us strong.
 - a. We will identify new opportunities and industries that will thrive in Leduc County.
 - b. We want these opportunities and industries to build on our existing strengths and advantages, like our land, our environment, our energy and our people.
3. We are looking at our industries and businesses differently, and capturing all the potential that we have to offer.
 - a. We want to keep our residents and businesses in Leduc County, and help them identify partnerships and opportunities that will allow us to work together and market the region for a stronger future.

3.5 Project Implementation

Leduc County has a respected and successful history in agriculture and energy production, resulting in a highly skilled workforce. The eco-system is available to the County to support research and development in various sectors, attracting public and private sector investment. With this in mind, the foundation on which this project has been implemented was built on two key pillars:

Agriculture – This included the consideration to investigate opportunities for agri-tourism, creating circular economies, terroir markets, a smart agri-food corridor, greenhouses, and organic/niche production to name a few.

Energy – This included being open minded to, and investigating alternative energy sources for Leduc County, based on feedback and ideas from stakeholders. The project team was to be recognize opportunities within the circular economies (e.g., nano-tubes, renewable energy), and new energy opportunities such as lithium production, and green solutions for data storage for streaming services.



4.0 How this Visioning Summary was used

This Visioning Summary was used by the project team to develop the questions we asked stakeholders, to identify the project opportunities that were identified for further analysis, and in the final formation of the Plan. In conclusion, this summary was a valuable tool that guided the project team and our discussions throughout the course of our work.



Appendix B Background Research and Data Report

RURAL WEST ECONOMIC
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Executive Summary

This report has been prepared to support the Rural West Economic Diversification Plan (the Plan). The project team, in collaboration with the County compiled a series of existing reports, studies, and strategies relevant to economic development and diversification in Leduc County (the County). A review was conducted by the project team to highlight relevant policies, guidelines, initiatives, and supporting information, that should be considered as background information for the Plan. This document is intended to be used by the project team as the foundation for the future work required to prepare the Plan.



1.0 Community Review

The following sections include a snapshot of Leduc County, and the Town of Thorsby, the Village of Warburg, and the Town of Calmar. This review provides a location and demographic overview with insight into primary economic sectors.

1.1 Leduc County

The Leduc County Rural West Economic Diversification Plan (the Plan) was prepared by Dillon Consulting Limited (Dillon) with the primary goal of providing clear direction for future development, growth, and employment within rural Leduc County. The County has identified an urgent need to identify economic diversification opportunities, particularly due to the phase out of coal-fired electric generating plants. The County has also identified the goal of becoming a champion in agri-food business and to identify value add opportunities that can build on the existing agriculture sector in the County. The Plan focuses on the portion identified as Agricultural Area A in the County's Municipal Development Plan. **Appendix B** provides the detailed economic assessment for Leduc County that was undertaken by the project team.

1.2 Town of Thorsby

A safe and friendly community offering an outstanding quality of life, diverse leisure activities, Scandinavian roots and opportunities for all. The Town of Thorsby falls within the Rural West region, and therefore is directly impacted by the Plan. The Town had 1,025 residents in 2017.

The Town of Thorsby is located 45 minutes from Edmonton on Highway 39. The Town is within a 15 minute drive to four lakes, and hosts the Haymaker Rodeo, with up to 500 visitors per year. Thorsby has invested into a superb water management facility with membrane filtration and excess capacity. The largest employer is Blue Falls Manufacturing (Arctic Spas).

The Town has developed a program to encourage business growth through the following incentives:

- **New Business Construction:** The Town of Thorsby encourages property owners to apply for a five year development incentive for new business construction.
- **New Business Established in an Existing Building:** The Town of Thorsby encourages property owners to apply for a three year development incentive for the new business owner.
- **Business Expansion Incentive:** The Town of Thorsby encourages property owners to apply for a three year development incentive for new construction, approved by the Village.
- **Business Renovation Incentive:** Any owner of commercial property, or renter carrying out renovations with the written approval of the property owner, may apply for a business renovation incentive.

1.3 Village of Warburg

The Village of Warburg has identified itself on their community website as a progressive community with a strong desire to grow with the times yet still retain its small town atmosphere. Warburg is located on Highway 39, within the Rural West region, and therefore, will be a primary focus of our work, and a location that would be positively impacted by economic diversification. The Village is home to the area RCMP detachment.

The Village of Warburg had 766 residents in 2016. The Village invested into a new RV/Water Park, opening in 2019.

1.4 Town of Calmar

The Town of Calmar has identified itself as, “The place where rural lifestyle meets urban lifestyle.” Located on Highway 39, the Town has an agricultural services centre, and oil and gas service centre, and a rail line runs through the town. Calmar is located only 15 minutes from the Edmonton International Airport, and is 30 minutes from Edmonton, resulting in the town being a bedroom community for Edmonton. The Calmar Industrial Park is located within the Town.

The Town had a Request for Proposals (RFP) out for a Community Vitalization Plan, asking for professionals to create, “urban design concepts and guidelines to promote an active and walkable space that would encourage new business investment and enhance tourism assets in the core of the community with intentions of these rippling throughout Calmar.” The proposal closed May 25, 2020, with the project expected to be completed by April 30, 2021.

The Town has been included in this document because of its location on Highway 39, which is the connector between the Rural West area and the Highway 2 corridor. The Town is not a part of the Rural West area; however, they do have staff that are focusing on economic development strategies. Economic development opportunities for the Rural West area may compliment the work being done by the Town, or could benefit from partnerships with the Town. The project team will be reaching out to Town staff to discuss their plans for economic development.

There were 2,228 residents in Calmar in 2016. The median household income was \$94,000 (2016).



2.0 Document and Plan Review

This section summarizes the Leduc County (the County) documents, plans, and strategies that have been prepared by the County that are relevant to the development of the Rural West Economic Diversification Plan (the Plan).

2.1 Leduc County Municipal Development Plan 2019

The Municipal Development Plan (MDP) was adopted by Bylaw No. 08-19 on April 23, 2019. The MDP incorporates feedback from public engagement, and recommendations and directions from supporting studies. It outlines the County's vision and commits to the implementation of guiding principles and policies. Two distinct policy areas are included in the plan – The Nisku Area and the Rural County.

The foundation for local planning is the MDP. The MDP provides the long term vision for how a community will evolve. A successful MDP effectively communicates the aspirations of a community and anticipates and plans for the future needs of people and business. For businesses and investors, reading the MDP is often the first step in a site selection process of determining where to locate or expand in an area and, therefore, a critical document supporting the Plan. The 50 year vision is:

“Leduc County is a globally competitive municipality that offers an economic advantage, a sustainable agricultural network, environmental leadership and an unsurpassed quality of life for our residential and business customers.”

Note: 150 pages, formatting for sub-clauses below preserved from MDP document itself.

Chapter 2 Goals and Structure of the Plan

- Protect agricultural land and support diversity in agriculture
- Promote economic development
- Develop complete communities
- Promote the responsible use of natural resources as an economic asset
- Protect and enhance the natural environment
- Identify and act on opportunities for recreation and tourism
- Develop efficient and cost-effective transportation and utility service infrastructure
- Collaborate and seize opportunities to create efficiencies
- Implement the policies of the Municipal Development Plan

Note: Leduc County is home to approximately 2,600 companies spread over 2,569 square kilometers



Chapter 3 Nisku Area

Vision

“The Nisku Area is an area where higher density, fully-serviced development is to be concentrated”
 “Economic competitiveness and employment growth will be driven, in large part, by the concept of Aerotropolis and the Inter-Jurisdiction Cooperation Accord.”

Principle

“The County promotes a concentrated and diverse mix of responsible and sustainable development in the Nisku Area to meet the needs of County residents and business owners.”

Policies

#3.3 Urban Agriculture

Objectives

- To promote diversity and tradition in urban agriculture.
- To encourage the development of agri-business and value added agriculture.

Chapter 4 Agriculture

Rural County

4.1 Vision for the County

Agriculture activities are the largest and most significant land use within Rural County and agricultural lands are an important aspect of the regional economy producing a wide range of agricultural products for the region and beyond.

Principle

The County supports the protection and enhancement of the existing rural landscape by allowing development that is compatible with the rural environment.

Objectives

- To provide a stable environment in which agriculture may operate freely from urban expansion and non-agricultural development.
- To promote rural communities that contain living, working, and recreation activities that respect agricultural resources.
- To retain the rural character by promoting diversification of agriculture and agribusiness.

4.2 General Rural County Policies

- 4.2.0.2 New Area Structure Plans shall be judged by short and long term viability, funding strategies, environmental impact studies as professionally prepared, rate of land



consumption, ability to provide municipal services, adverse impacts on agricultural lands, etc.

4.3 Agriculture

The County recognizes the importance of protecting the agricultural land base to ensure a range of agricultural products and/or services are provided to an accessible regional and global market. Agricultural land should not be considered simply as a holding reserve for development but as a valuable resource that needs to be protected for future generations.

Principle

The County champions the importance of agriculture and is committed to ensuring its long-term viability.

Objectives

- To conserve agricultural land on a comprehensive basis as a means of ensuring the long-term viability of agriculture.
- To minimize fragmentation of agricultural land for purposes that is not supportive to the agricultural industry.
- To minimize the loss of agricultural land by limiting the amount of land converted to a non-agricultural use.

Policies

4.3.0.1 Agricultural uses shall take precedence within all the agricultural areas - A, B, C, D

4.3.0.4 To conserve agricultural land, the amount of land converted to a non-agricultural use shall be minimized through consideration of location and site design.

Agriculture 4.3.1 Subdivision of Agricultural Land

The soil quality varies greatly in Leduc County from higher capability that supports field crops to lower capability that supports grazing and confined feeding operations. These soils, regardless of their capability are of value and allow for agriculture of different kinds. To conserve large tracts of agricultural land for future generations and limit incompatible land uses, subdivision of agricultural lands will be minimized. To provide landowners with an opportunity to grow their own food and be self-sufficient or establish an agricultural operation on a small tract of land, a smallholding agricultural area has been established.

Agriculture 4.3.2

The Province of Alberta defines, approves, and regulates Confined Feeding Operations under the Agricultural Operation Practices Act. The County supports the development of new or expanded Confined Feeding Operations where the operation is compatible with the surrounding land uses.



4.4 Economic Competitiveness and Employment

Principle

The County encourages a wide range of employment development in the Rural County that is appropriately located to minimize land use conflicts with agriculture and support economic diversity within the rural landscape.

Objectives

- To minimize the conversion and fragmentation of agricultural lands and manage land use conflict by directing non-agricultural (commercial and industrial) businesses to defined areas.
- To encourage the growth of agriculture-based businesses through the creation of agricultural hubs.
- To support employment growth in comprehensively planned business parks (i.e. Local Employment Areas) and hamlets to create synergies and enhance services in the local area.

Policies

Employment growth and business development in the Rural County that is not directly related to agriculture, other than home-based businesses shall be directed to hamlets (subject to the policies within Section 4.4.2) or Local Employment Areas (subject to policies within Section 4.4.1) to create synergies, prevent the conversion and fragmentation of agricultural land and minimize conflict with agricultural operations.

Local Employment Areas

Local Employment Areas accommodate a concentration of industrial, commercial, and institutional land uses in the Rural County. Local Employment Areas may include developments that require lower levels of municipal servicing or have significant outdoor storage requirements.

Policies

Local employment is encouraged in the Local Employment Area as illustrated on Map 4: Rural County Land Use Concept

- 4.4.1.4 Local Employment Areas shall not adversely impact agriculture lands, existing agricultural operations, and neighbouring land uses.
- 4.4.2 Hamlet Employment Hamlet business provides local economic and employment opportunities and services within the County's existing hamlets.

The Growth Hamlet of New Sarepta is distinct from other hamlets because it offers a higher level of municipal servicing and therefore presents an opportunity for higher residential and non-residential growth rates.



Communities and Housing

Rural living offers benefits that many residents in the region value including the provision of space, connection to the land and the agricultural community, and the strong sense of rural character. A goal of this Plan is to provide for housing in Rural County in a sustainable way that reduces the conversion of land to non-agricultural uses, minimizes agricultural land fragmentation, is cost-effective, and encourages a compact form of development.

Home Based Business

- 4.5.4.1 Home-based businesses shall be secondary to the established principal residential use of the property and should not detract from the rural or residential character of the surrounding area.

Chapter 5 Natural Resources

Leduc County has significant natural resources including, but not limited to: sand, gravel, oil, gas, coal, soil and forests. The County supports resource- related activities provided the activities do not have significant impact on adjacent land uses and the environment.

5.12 Natural Resource Extraction

Principle

The County promotes land use patterns that minimize land use conflict associated with natural resource extraction.

Objectives

- To minimize conflict between natural resource extraction activities and neighbouring land uses.
- To encourage the safe and efficient integration of natural resource extraction with other compatible uses.
- To encourage the timely and appropriate reclamation of lands used for natural resource extraction.
- To assist the natural resource sector and provincial agencies in making land use decisions related to natural resources.

5.2 Oil and Gas Facilities and Pipelines

Principle

The County promotes land use patterns that minimize the potential conflict between development and oil and gas facilities and pipelines.

5.3 Genesee Power Plant Area

The Genesee Power Plant Area is a significant feature within the County. The Genesee Generating Station is located in the western area of the County in a predominately agricultural area. With the



introduction of Alberta’s new Climate Leadership Plan, coal-fired plants will be phased out and replaced by natural gas-fired electricity or other technology.

To support these initiatives, opportunities made possible by new technologies will be considered in the Genesee Power Plant Area to provide employment opportunities and encourage growth within this community.

Principle

Leduc County encourages the redevelopment of the Genesee Power Plant Area for energy-related and agricultural uses, and where appropriate, accommodate recreational and park uses.

Objectives

- To support the repurposing and/or redevelopment of the existing infrastructure systems in the Genesee Power Plant Area.
- To support the growth of energy-related or agricultural employment opportunities within the Genesee Power Plant Area.
- To allow for recreational and park opportunities where compatible with energy-related and agricultural uses.

Policies

5.3.0.1 Previously mined lands within the Genesee Power Plant Area should be returned to their natural state or be used for agricultural purposes.

5.3.0.2 The Genesee Power Plant Area as identified on Map 4: Rural County Land Use Concept shall be protected for resource extraction, energy related uses and new technology, including green technology, to provide electricity.

5.4 Soil

Soil is the basis for food, feed, fuel and fibre production as well as many ecosystems. As the population continues to grow, there will be an increasing demand to satisfy these needs. To ensure these needs can be met now and into the future, steps will be taken to conserve this valuable non-renewable resource.

Chapter 6 Natural Environment

County residents have a strong connection to the natural environment and value the protection of important environmental features.

Chapter 7 Recreation, Open Space and Community Assets

Art, culture, heritage, education, and recreational activities are important to the residents of Leduc County.



Chapter 8 Infrastructure

Development patterns in the County will be concentrated in nodes to reduce the cost to build, maintain, and operate infrastructure and services.

Chapter 9 Collaboration with Neighbours and Regional Partners

Leduc County is a leading municipality in working collaboratively with other municipalities and agencies for the good of the County and the region.

Chapter 10 Plan Implementation

Implementation of this Municipal Development Plan will occur through a number of mechanisms and processes.

2.2 Leduc County Economic Development & Growth Management Strategy (EDGMS)

This Strategy (2016) is a planning tool provided to both the County and Leduc-Nisku EDA for managing economic development and growth. It recognizes the ‘critical’ importance of maintaining the success of the community through current economic development initiatives and by ensuring that environmental, social, and cultural needs are met to support sustainability.

With a 30 year vision, key areas identified for economic resilience were economic diversification, improving workforce availability, maintaining residential population, providing County servicing, and more effective planning and monitoring.

2.2.1 Leduc County Economic Development and Growth Management Strategy – 2016 - 2021

This Summary, a part of the EDGMS Strategy above, is presented to provide a succinct and comprehensive guide for identifying the goals of County Initiatives, the rationale for action, and informing strategic planning and policy development.

The Strategy establishes a framework to achieve innovative, responsible, and efficient growth and development, with a study area that encompasses the entire County. The implementation of the Strategy is designed to occur over five years with short, medium, and long term implementation phases. The Strategy incorporates a number of initiatives for County consideration, such as the following:



Section 2 – Economic Strategy Direction, p. 4

- 2.4 Monitor the Agriculture sector: highly productive land being lost to EIA, Nisku Business Park, residential
- 2.6 Develop a Workforce Strategy: understand the balance of costs of infrastructure for attracting new and diverse industries

Section 3 - Diversification and Expansion, p. 14

- 3.4 Align agricultural economic development strategies for promotional synergies
- 3.5 Explore agricultural diversification, 'manufacture consumables i.e. ink, cosmetics
- 3.5 identify new national and international opportunities to further local product sales

Section 5 - Collaboration, p. 16

- 5.1 Maintain strong relationship with City of Leduc and Leduc Region
- 5.2 Maintain strong relationship with Capital Region (Edmonton Global)
- 5.3 Partner for economic growth

Section 6 – Marketing, p. 19

- 6.1 Market the County, attracting business, economic growth, skilled workers maintain growth

Key takeaways from public consultations and interviews that took place in 2015:

- Stakeholders identified the proposed annexation by the City of Edmonton as a threat to the health of the regional economy and a motive to identify and re-designate existing lands for future industrial development.
- In order to remain competitive, the County should maintain its comparatively low tax rates.
- Prevent the ongoing development of residential subdivisions from encroaching upon lands better suited for future industrial uses or prime agriculture activities.
- Council and County staff similarly acknowledge the need for a plan that clearly describes the locations of future residential, commercial and industrial land uses, as well as a master transportation plan to address the various road network deficiencies identified by all attendees.
- Concerns that Strategic Plans that were developed were not being adhered to in implementation.
- The need for planning documents to be regularly monitored and updated to reflect the changing environments and tracking to determine if recommendations were being implemented.
- Stakeholders identified the County's current low taxes along with its surrounding assets as a critical element for the growth of the business sector.
- Participants expressed the need to monitor the County's performance based on its tax rates compared to other municipalities in the Capital Region.
- Challenges around the cost of real estate and access to capital financing to assist with funding projects.



- Shortage of industrial land available in the Nisku area.
- Concerns were expressed regarding the need for suitable locations for laydown yards to service the O&G industry. These operations use land while producing lower industrial taxation revenue than developments that involve a larger capital investment.
- Lack of municipal investment in infrastructure to support development in the area and too much reliance on the private sector to take the lead in providing the infrastructure to service developments.
- Conversely, agricultural industry respondents frequently reported that the current price decline has little bearing on their operations apart from the cost of fuel for farming machinery.
- Congestion that forms at the entrance and exit ramps connecting Highway 2 and Airport Road needs to be addressed, because it is both a safety concern and an impediment to existing and future development of the Nisku Industrial Park.

Economic Development

The County's areas of economic influence includes policy levers that can be used to incentivise industry are as follows:

1. Policies and Regulations:

- Agricultural or environmental protection.
- Appropriate forms and locations for future residential, commercial and industrial development.
- Business licensing.
- Agricultural or Environmental Tourism.

2. Fiscal initiatives:

Taxation rates

- Lower residential tax rates would position the County as an attractive location for new residential development while maintaining the burden on the industrial sector; or
- The County could also decide to offer incentives to specific industrial sectors in order to encourage specific industrial development (e.g. agri-business).

Development levies

- Development levies are a mechanism to recover or mitigate capital costs where large infrastructure investments benefit more than one land owner. The County currently has a number of areas where off-site development levies apply. These are used to pay for upstream or downstream road and municipal utility systems improvements required that serve the development.



Revitalization Levy zone(s)

- Community Revitalization Levy (CRL) allows municipalities to borrow against future property tax revenues to help pay for infrastructure required to spur new development in a specific area.

Local Improvement Zones (levies)

3. Administrative and Operational decisions:

- Capital projects.
- Infrastructure improvements.
- Staffing levels.
- Permit processing times.

Balance must be sought between the areas that conflict with each other. For example, agricultural policies could negatively impact residential developers and vice versa.

The report states that the majority of the economic development opportunities are around the Nisku Business Park and in the agricultural sector. There are also other, smaller initiatives that could be further explored such as a promotion of agri / eco – tourism in the Beaverhills Moraine, or partnerships with Capital Power on their Post-Combustion Carbon Capture and Storage Pond Project at Keephills 3.

Transportation Infrastructure

The development of local roadways should take into account short, medium, and long term access to industrial areas. The County should require all new development to provide adequate transportation infrastructure with the capacity to accommodate the growth of heavy transportation and the development and protection of high load corridor access while incorporating a balance of other transportation modes.

Marketing

The County should monitor the implementation of the *Investment Attraction Strategy* strategic objectives as outlined in the 2019 Leduc County Economic Development Plan.

Business Permitting

Business permitting will aid in providing metrics to Council on yearly growth and development as well as provide an approved database to access for business engagement and promotion.



Diversification and Expansion

WSP identified the following key areas for diversification opportunities:

- Energy
 - Support activities for mining and oil and gas extraction
- Advanced manufacturing
 - Machinery manufacturing
- Agri-business sectors
- Transportation and logistics
 - Air transportation
 - Truck transportation
 - Support activities for transportation

2.3 Leduc County Strategic Plan 2018 - 2021

County Council led the development of the Strategic Plan, which outlines strategic priorities to bring the County forward amidst the changes occurring in the Edmonton Metropolitan Region and carry on important discussions regarding the prosperity of the region. The mission, vision, values, and commitments are outlined. The vision is for Leduc County to offer ‘an economic advantage, sustainable agricultural network, environment leadership and unsurpassed quality of life.’ Strategic priorities include agricultural innovation and support for local food production, economic development, and regional leadership. Infographics identify the amenities and services Leduc County enjoys.

The following exemplify three of the five strategic priorities, which also outline individual Focus Areas.

Priority 2. Agricultural Innovation and support for local food, p.13

- 2.1 Develop a plan framework for the re-visioning of smallholding agricultural
- 2.2 Support integration of agri-science and innovation in agricultural production
- 2.3 Support local food initiatives
- 2.4 Be an advocate for agriculture and foster agri-tourism
- 2.5 Develop a phased roll-out plan for the 2016 Agricultural Strategy

Priority 4. Economic Development, p.15

- 4.2 Build new partnerships
- 4.3 Reduce barriers to commercial growth
- 4.4 Develop a county brand

Priority 5. Regional Leadership, p. 16

- 5.1 Relationships with other municipalities maintained and strengthened
- 5.2 Remains Leader in regional initiatives through work with partners
- 5.3 Recognized by other orders of gov't as a leading example of good municipal practice



Key Performance Indicators are also provided for each of the five strategic priorities.

2.4 Leduc County 2020 Corporate Plan and Operational Plans

The Corporate Plan has a detailed list of strategic priorities, goals, and action plans for 2020 across all operating departments. Included in the 2020 Plan is the creation of an updated policy and regulatory framework to implement the recently approved MDP. Also in the plan is the development of a rural west economic diversification strategy which will be aligned with stakeholder interests, including the agriculture community and County administration corporate plans.

A review was conducted of the following corporate and operational plans:

1. **Corporate Plan, County Managers office**
2. **Agricultural Services 2020 Operational Plan**
3. **Planning and Development 2020 Operational Plan**
4. **Public Works and Engineering 2020 Operational Plan**

2.4.1 Corporate Plan, County Managers office

The plan outlines six Strategic and Corporate Priorities, Action Plans, Goals, and Strategies.

Strategic Priority – All

Goal 1:

Strategic Priority - Economic Development:

- Promote the county's enriched quality of life and business opportunities.

Action Plan

Strategy 1.1

- Deliver on our brand strategy to enhance, promote and market the county's philosophy, corporate culture and brand.

Strategy 1.2

- Ensure efficient use of resources to maximize economic development opportunities.

Strategy 1.3

- Promote Leduc County's services and recreational opportunities to residents.

Goal 2:

Strategic Priority - Regional leadership:

- Relationships with Municipal and Provincial partners.



Action Plan

Strategy 2.2

- Advocate and build relationships with other levels of government and agencies to raise awareness for Leduc County initiatives.

Goal 3:**Strategic Priority - Enriched Quality of Life:**

- Engage citizens and businesses to influence municipal services, programs and practices.

Action Plan

Strategy 3.1

- Develop plans and strategies for regional initiatives to support economic development.

2.4.2 Agricultural Services 2020 Operational Plan

Section 1: Department Services outlines the various services areas in Leduc County. Relevant services identified include:

Leadership and administration

- Recognizes and champions the importance of agriculture for its economic, environmental and community contributions and commit to its long-term viability in the county, region and province.

Local food and horticulture

- Supports Leduc County residents by being a resource to develop and strengthen their capacities as local food producers.
- Advocate and supports agricultural educational opportunities for youth.

The plan outlines three Strategic Priorities Action Plans, Goals, and Strategies.

Section 2: Identifies Strategic PrioritiesGoal 1:**Strategic Priority - Agricultural Innovation and Support for Local Food**

- Develop a plan framework for supporting local food initiatives, small-holding agricultural activity and be an advocate for the agricultural industry.

Action Plan

Strategy 1.1



- Work with Planning and Development and Parks and Recreation to promote agri-tourism in Leduc County.
- Coordinate seven local food workshops within Leduc County.

Strategy 1.2

- Be an advocate for the agricultural industry by continuing to roll out tactics that are embedded within the Agricultural Strategy and support the re-visioning of small-holding agriculture in Leduc County.
 - Establish an advocacy group to promote agriculture on a county-wide basis.

Goal 3:

Strategic Priority – Regional Leadership

- Work with regional partners (Sturgeon County and Parkland County) and implement a targeted education and communication strategy focused.
- Work with regional partners to elevate agriculture, protect agricultural land and support regional agricultural initiatives.
- Working with members of the Edmonton Metropolitan Regional Board (EMRB), support the regional agricultural industry.

2.4.3 Planning and Development 2020 Operational Plan

Mission:

Planning and Development strives to facilitate positive change in the community, to deliver quality development services to our customers, to foster a stable and diverse regional economy, and to build and maintain strong regional partnerships.

Service Areas included:

Economic Development

- Focuses on growing a diverse non-residential tax base in the county through investment attraction and business retention and expansion activities.
- Communicates and coordinates with regional partners, including Edmonton Global, on regional economic development activities and opportunities.
- Provides advice to council on matters related to the county's state of investment readiness, and executes the direction set out in the county's Economic Development Plan.

Section 2: Strategic Priorities

Goal 1:

Strategic priority – Regional leadership



- Planning and Development will continue to lead the county's efforts in regional collaboration and inter-municipal partnerships.

Goal 2:

Strategic priority – Economic development

- Planning and Development will lead economic development activities for the county to grow the non-residential tax base.

Strategy 2.1

- Undertake County broadband and rural economic development strategies.

Strategy 2.2

- Develop a community profile for Leduc County to aid in investment attraction activities.
- Execute coal phase out strategy; pursue available grant opportunities to support strategic objectives aimed at economic diversification in a post-coal economy.
- Complete phase one of Investment Readiness and Implementation Strategy.

Strategy 2.3

- Develop a business-licensing program jointly with the Leduc Regional Chamber of Commerce.

Goal 3:

Strategic priority – Agricultural innovation and support for local food

- Planning and Development will support the county's advocacy for the preservation of high quality agricultural land, both at the regional and local levels. We will strive to foster increased opportunities and access to markets for new and expanded agricultural products.

Strategy 3.2

- Seek supply-chain development opportunities for agricultural products in the county, including access to global markets.

Strategy 3.2 Actions

- Undertake an agri-tourism strategy.
- Update county's Land Use Bylaw to reflect the direction of the county's Agriculture Strategy and Municipal Development Plan.
- We will create an up-to-date policy and regulatory framework to implement the county's new Municipal Development Plan.

2.4.4 Public Works and Engineering 2020 Operational Plan

Goal 3:



Strategic Priority – Economic Development

- Develop and implement a fiscally responsible service area expansion option for rural water and wastewater.

Goal 4:

Strategic Priority – Economic Development

- Investigate alternative strategies to maintain affordable Leduc County utility rates and/or maintenance.

Goal 5:

Strategic Priority – Regional Leadership

- Relationships with other municipalities are maintained and strengthened.

2.5 Genesee Area Structure Plan

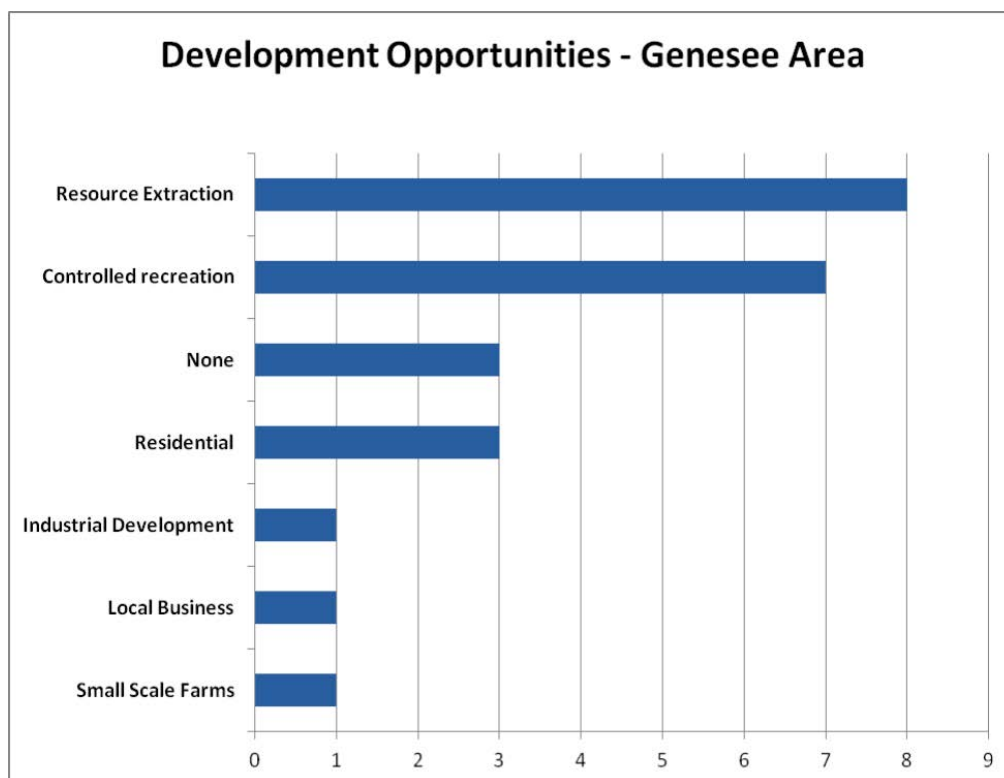
In June 2013, Leduc County Council approved the Genesee Area Structure Plan (ASP). The purpose of the ASP was to, “identify suitable land use that will respect the existing community while providing for the accommodation of future rural and resource development.”

The vision of the Genesee Area, as identified in the ASP is (page 6):

- A place where the natural environment is cherished and protected, a place where people can live, farm, and recreate, in a way that is safe, and conserves the health of natural eco-systems and wildlife.
- The Genesee Area is a place with a strong community and identity, which derives from the character of the natural setting, and the relationships, connections, disposition, and layout of homes, farms, conservation lands, trails, and recreational areas.
- The Genesee Area is a place for healthy and safe recreation, including a wide range of activities, passive and active, water-based and land-based which serve local and regional communities.

The ASP identifies Guiding Principles for Council to consider in regards to the Genesee Area (Page 7). In 2012, public engagement to support the writing of the ASP identified the following development opportunities (Page 16):





The ASP encourages the preservation of any high capacity agricultural land for continued agricultural use.

The North Saskatchewan River has been recognized as a popular recreational destination. The ASP identifies that the County should do the following to maintain and enhance recreational areas within the plan area, while minimizing the impact of development on the biophysical environment:

- Assess the feasibility of boat launch construction or bank stabilization where existing users are camping and boating in order to control erosion and sediment delivery.
- Assess the feasibility of developing some recreational opportunities at one of the public access points to the river.
- Assess the feasibility of recreational campgrounds.

The ASP states that the Genesee area is primarily a farming region, and contains oil and gas reserves including abandoned wells. There are also significant sand and gravel resources in the region. Capital Power operates a powers station in proximity to the plan area, and owns a significant amount of land (Page 40).

The ASP includes the following policies that relate to economic development in the plan area and methods to enable these policies to be met (Page 41):



6.8.1 Objective

To enhance the local Genesee economy and inform the community about the County's economic revenue and where it is invested within the community.

6.8.2 Policies

- 1) Leduc County shall encourage the development of agricultural, cottage industries, home based businesses, tourism, recreational activities.
- 2) Leduc County shall provide the public with information on where revenue is generated and spent within the County in context to the Genesee Area Structure Plan.

6.8.3 Methods

- ✓ Municipal Development Plan
- ✓ Land Use Bylaw
- ✓ County Website (www.leduc-county.com) and brochure material
- ✓ Development of a monitoring program
- ✓ Review of existing application process

Aggregates are recognized as a precious, non-renewable resource that must be protected and respected (Page 50). The ASP outlines ways to minimize the potential impacts of gravel extraction. The following policies apply to aggregate resources in the Genesee Area (Pages 50-51):

- 1) Leduc County shall develop a Genesee Aggregate Phasing Plan within the Genesee Area Structure Plan to manage the rate of the extraction from the area.
- 2) Leduc County shall require the aggregate operator to carry out groundwater monitoring for both quality and quantity of neighbouring wells within the aquifer area of the quarry during the life of extraction.
- 3) Leduc County shall require the aggregate operator to carry out an environmental impact assessment approved by Leduc County if located in an environmentally significant area.
- 4) Leduc County shall impose strict design, buffering and reclamation standards, and the (extraction) operation will not be allowed where any adverse environmental impacts cannot be mitigated to the satisfaction of the County.
- 5) Leduc County shall require the aggregate operator to limit the exposed aggregate quarry area and carry out remediation progressively through the life of the quarry.



- 6) Leduc County shall develop a Genesee Remediation Plan that creates cohesion between different lands owners and incorporates future recreational opportunities.
- 7) Leduc County shall require the aggregate operator to prepare a remediation plan that is consistent with the Genesee Remediation Plan.
- 8) Leduc County shall require aggregate operators to demonstrate how they will minimize the visual, noise, smell and dust impacts on adjoining landowners arising from the operation. For instance, the use of potential remediation methods including, but not limited to berming, landscape and vegetative buffering.
- 9) Leduc County shall implement operational working days and hours on aggregate extraction.

2.6 Bioindustrial Directory

This document (2017) includes a list of 44 companies that use biological feedstocks, biological materials or organisms as a key part of their process, and/or produces a product with a high biological materials content. The directory also includes service companies and consulting companies with expertise in biological materials and processes, and industry associations supporting numerous companies in this industry.

This directory indexes companies by categories and sub-categories of feedstocks, processes, and products, as self-selected by company representatives. This directory may be beneficial when preparing the stakeholder list for the engagement required to support the Plan.

Leduc County and regional area companies listed include:

- Alberta Rhodiola Rosea Growers Organization (ARRGO)
- Biofuels Inc., Edmonton
- Canadian Wood Waste Recycling, Business Group
- CETC, Drayton Valley business incubator
- Cielo Waste Solutions Corp. Red Deer County
- Dapp Power LP, Westlock, Alberta
- FORGE Hydrocarbons Corp., Edmonton
- Green Analytics, Edmonton
- H&W Biogenic Ltd., Edmonton
- Hempco Canada Superfoods Inc., Nisku
- IRSI Pyrolysis Systems, Edmonton
- Nova Green Inc., Killam
- Permolex, Red Deer
- SBI BioEnergy Inc., Edmonton
- The XY Hemp Corporation, Edmonton
- TTS Inc., Edmonton



- Valley Power LP, Drayton Valley
- Western Archrib, Edmonton

2.7 Ag SMART Calgary-Olds Corridor

This information was sourced from the Calgary Economic Development website. The purpose for including this information is to identify other opportunities that are being explored on Highway 2.

What will the Corridor do?

- Grow the agribusiness ecosystem with an industry-led response to growing Canada's share of the global agri-food market.
- Map the agri-food value chain and identify constraints.
- Target collaborative innovation at pain points to leverage system wide impact.
- Attract corporate, Small and Medium Enterprise (SME) and start-up companies, creating a critical mass of investment, expertise and highly skilled net-new jobs.
- Provide companies and entrepreneurs access to a world-class agriculture environment that supports the development, scaling and commercialization of new technologies throughout the food value chain (not just production).
- Diversify the economy.
- Position Alberta and the Corridor as leaders in agri-food production.

How does this partnership work?

Calgary Economic Development

- Leverage Calgary's corporate and investment depth.
- Leverage Calgary's world class distribution hub.
- Grow Calgary as a global hub for ag by leveraging our existing ecosystem of anchor firms, SMEs and start-ups.
- Utilize Calgary's affordable and available industrial and commercial space.

Olds College

- Utilize Olds College's Werklund Growth Centre Ag Innovation Lab for collaboration and scaling of the smart ag ecosystem.
- Use the Olds College Smart Farm as a demonstration farm for cutting edge learning, innovation, incubation, acceleration, and commercialization.
- Smart ag academic instruction and applied skills and research.
- Provide access to high value farmland with proximity to Calgary

Source: <https://calgaryeconomicdevelopment.com/calgary-olds-smart-agri-food-corridor/>



2.8 Leduc County Economic Development Plan

Growth and diversification of investment in Leduc County is recognized as one of the keys to their future. The Economic Development Plan outlines a multi-year strategy (2018-2021) to advance the County's economic development agenda. It includes:

- Establishing and growing a new economic development function.
- Ensuring Leduc County is investment ready.
- Rolling out priority recommendations from the Economic Development & Growth Management Strategy.
- Seeking out supply chain development opportunities to add value to agricultural products locally.

This economic development plan has two main components, the strategic objectives as outlined in the Investment Readiness Plan and the tactical objectives provided in the Business Retention & Expansion Plan.

1. Investment Readiness

- a. **Workforce Gap Analysis** – workforce needs to support growth.
- b. **Airport Accord Economic Development Framework** - inform the directions taken in the Land Use/ Transportation & Servicing Framework and the Shared Investment for Shared Benefit model.
- c. **Broadband Strategy** - development of high capacity broadband infrastructure throughout Leduc County.
- d. **Rural Economic Development Strategy** - an implementation strategy which will provide clear direction for future growth and employment in crucial areas of rural development, agriculture, commercial and industrial growth within Leduc County.

This project is part of the County's Coal Transition Strategy. It must be a well aligned and integrated component of a broadly-scoped economic development strategy that takes advantage of the assets of both Nisku and the County's rural areas. Accordingly, the coal transition initiative will focus on identifying strengths and opportunities in Leduc County's rural areas that are already or can become competitive advantages for Leduc County's economic future.

- e. **Web Resource Development/Site Selection Tools** – Develop economic development website.
- f. **Community Profile** – Leduc County's value proposition and competitive advantage in the key sectors identified in the Airport Accord Economic Development Framework and the Rural Economic Development Strategy.

2. Business Retention & Expansion (tactical objectives)

- g. Support local businesses so they can grow, create jobs and stay in the community.



- h. Write and implement an action plan to foster business development, investment and job creation.
- i. Collect business and market data to support economic development planning.

2.9 Airport Accord Economic Development Framework

The Inter-jurisdictional Airport Accord (“the Accord”) is a consensus based partnership between the four Accord partners – the City of Edmonton (“Edmonton”), City of Leduc, Leduc County, and the Edmonton International Airport (“the Airport” or “EIA”) – who are collectively “the Partners”.

In 2018, the Accord partnership was established through the Airport Accord Program Charter (“the Charter”). The Charter identifies two planning phases (Phase 1 and Phase 2) followed by an ‘implementation phase’ that will last 5-15 years (Phase 3). The Accord is currently in Phase 1, which focuses on developing an economic development roadmap to outline a path forward.

Economic Vision

- Stronger alignment between the Edmonton International Airport, the City of Edmonton, Leduc County, and the City of Leduc, leading to efficiencies and optimization of land use in the Accord sub-region.
- Enhanced investment in the Transportation/Logistics sector leading to greater competitiveness.

Primary Economic Segment

1. Transportation, Logistics and Distribution

Multi-modal movement, distribution, and storage of goods between point of origin and consumers. Growth in this segment can enable development of other economic segments, as identified in the Edmonton Global sector strategy.

Examples include freight and distribution services.

2.10 Leduc County Agricultural Strategy

The Strategy (2016) is intended to provide a framework for agriculture and land use planning in the County and intended to be one of the key aspects of the Municipal Development Plan and is reflective of stakeholder feedback. It is intended to be implemented as a guide for future County decisions and actions as they relate to communication, education, infrastructure, and regulations. Following the public consultation process, the vision, definition of agriculture, principles, and agricultural policy were established. The vision for Leduc County’s agricultural strategy was, “A vibrant and resilient agri-food future built on a proud agriculture history”. The report advocates for the protection of farmland and



seeks to infuse agricultural strategies into many areas including land use, environmental, and economic development policies.

The strategy outlines common language related to agriculture terminology.

The strategy includes the following principles related to economic development in Section 4.0:

Basics

- Agriculture should have targeted support to promote understanding and more certainty for the agricultural sector.

Principle 1

- Formally recognize and champion agriculture's important role in Leduc County.
- Foster agriculture as a stated key policy area in the County's Strategic Plan.
- Development specific agriculture-supportive policies.
- Facilitate establishing a comprehensive advocacy group to promote agriculture on a county-wide basis.

Principle 2

- Recognize and protect the priority agricultural land.
- Establish firm long term boundaries for priority agriculture areas.
- Current policies and zoning should provide for a broad variety of agriculture.
- Work with the Capital Region Board to have priority agriculture areas designated in the Regional Growth Plan.

Principle 3

- Limit land fragmentation in priority agricultural areas.

Section 5.0 includes the strategic actions:

- Land Use Bylaw in the agricultural priority areas be amended to limit subdivision and dwellings.
- Formal agricultural impact assessment be required for subdivision identified.
- Actively send a clear and consistent message to all parties that agriculture is of high on-going importance in the County.
- Introduce broad education programs to give the community a better appreciation of agriculture.
- Leduc County needs to follow up on its message by working with other stakeholders to support agriculture in the County and the Capital Region: the farmers, food processors and other agri-food related value added enterprises, agri-food input and service suppliers, its residents, other municipalities, the Capital Region Board, and the Provincial Government.



- Facilitate the formation of a comprehensive advocacy group to provide leadership and promote agriculture on a county-wide basis.
- Facilitate an annual agricultural forum aimed at assisting and promoting the agriculture sector in the county.
- Dedicate resources to economic development initiatives for food and agriculture whether it's for events, promotion of local food, developing value added clusters, farmers markets, community gardens, agri-tourism, etc.
- Pursue funding opportunities for agricultural community development projects. Such funds typically available from provincial or federal programs.

2.11 Aerotropolis Viability Study

Aerotropolis defined: "In the Aerotropolis concept, a core "Airport City" area on and adjacent to the airport brings together aviation and air cargo -focused businesses, along with retail, office, accommodation, educational, recreational, and business amenities in a dynamic hub of activity." (2015) Conversations with County staff have led the project team to include this Study in our summary; however, it is recognized that this Study will not greatly influence the work we do given that it has been superseded by other plans.

The concept of an 'Airport City' is defined broadly as bringing together aviation and air cargo activity with business generated in retail, office, accommodation, education, recreation, and business amenities in a 'dynamic' hub of activity. A broad range of economic clusters of interest often include energy, advanced manufacturing, agri-business, aerospace, and information communication technology. The City of Leduc and Leduc County are 'strongly encouraged' under the Intermunicipal Development Plan to work with the EIA to maximize economic potential for all three parties.

3.0 County Initiatives

3.1 Leduc Broadband Project

In 2010 and 2011, Leduc County completed two studies outlining potential options to develop a fully integrated broadband network connecting Leduc County's Nisku Business Park and rural areas to fiber optic and wireless services.

The broadband studies identified a course of action that would connect the rural areas of the county, Nisku and area, and the smaller municipalities within the county's borders to high-speed broadband infrastructure.



The effect of this work will position Leduc County and its partners to establish transformative technologies that rely on mobile data infrastructure. These technologies require ubiquitous, high-capacity throughput of fixed and mobile broadband infrastructure.

The development of a regional broadband utility requires community buy-in; businesses and residents need to understand the need for municipal involvement in the planning of broadband digital infrastructure, similar to municipal delivery of other essential services such as water and public roads.

The Phase I study will be to update the 2010 and 2011 Leduc County regional broadband studies.

Phase II of the project will be the selection of a governance model and planning for the network infrastructure. The governance model will be developed in collaboration with the cities of Leduc and Beaumont, the towns of Calmar, Devon and Thorsby, and the Village of Warburg.

The 2010/11 studies indicated the three following possibilities for the provision of broadband infrastructure: a private/public partnership model, a broadband utility model, and a communications utility model.

Note: There will be a ‘broad-scale engagement’ process.

The project kick-off was on February 5, 2020; both phases to be completed by April 2021.

3.2 Leduc-Nisku Final FDI Report 2019

The investment readiness gap analysis conducted identified location factors (e.g., Available Talent Pool, Operating Costs, Land and Buildings Availability, Infrastructure and Transportation, Raw Materials/inputs, R&D Access and Availability, Business Support, Marketing & Digital, as well as Inquiry Handling, Nurturing and Fulfillment).

The Investment Readiness Assessment revealed the following potential hurdles for investment attraction:

- A lack of public transportation hinders the available talent pool and pipeline, especially unskilled labour in agribusiness, logistics and distribution, and advanced manufacturing.
- Limited broadband capacity impedes technology-driven companies.
- Improved and centrally located marketing and digital content could be improved to promote quality of life, housing, etc.
- Sector-specific issues include the cost of regulations around wastewater and certification for agribusiness.



- Shipping costs could be a deterrent to businesses in manufacturing and agribusiness, and inhibit growth in the logistics and distribution sector.
- There are a range of government support programs, including technology adaptation, diversification, and small business support. Still, there appears to be awareness of these programs and confusion over the multiple support resources. Shortfall in technology adoption by both labour and companies is an opportunity for potential investors.
- A gap in small office space exists.

The exercise also identified significant strengths in the region:

- Projected labour supply shows growth in the manufacturing sector, and a strong education and training infrastructure can mitigate potential shortages.
- A good business support network, which is highly thought of by stakeholders.
- Ample supply of land and buildings for all target clusters, despite low quantities in standalone office space.
- Cluster supply chains are robust.

Source: Bryan S., & Hatton, G. 2019. Leduc-Nisku Final FDI Report 2019. WAVETEQ, Location Strategies. January 30, 2019

3.3 Investment Readiness and Implementation Strategy - Planning Consulting Services - RFP

The primary output of the IRIS RFP (RFP 19-023) is a long term economic and planning strategy, which starts with current data, then looks into the future (2-5 years) to determine the most effective area(s) of the county to diversify its economy to continue to grow and develop. IRIS must be robust; this requires the project to be rooted in data.

The Phase I study is written to include a land use analysis, marketing strategy, and final summary report to evaluate Leduc County's readiness for current and future investment through the lens of both planning and economic development.

A minimum of seven primary land use and economic focus areas within the county would be confirmed and analyzed as part of the work, defined in Leduc County's MDP as:

1. Agriculture areas A, B, C and D;
2. Agricultural Hubs;
3. Hamlets;
4. Residential areas;
5. Industrial areas;
6. Commercial areas; and



7. Natural resource and/or extraction areas.

These seven focus areas are specific parts of the county which have direct influence(s) on current and future economic diversification and land use in Leduc County and the region. The analysis would also include an inventory of undeveloped, underdeveloped, developed, and vacant parcels within the Nisku and other non-residential areas of the county.

The seven focus areas and analysis will be summarized in a Land Use Analysis Findings and Recommendations Report. The report will consist of an analysis of key statutory and non-statutory Planning and Development and Economic Development documents and may include specific documents from Public Works/Engineering, Agriculture, Parks, and Recreation departments.

A marketing strategy for Leduc County will be also developed to develop and identify key communities or areas of the county and how to position them in both a regional and global environment.

Phase II of the study will use the analysis in Phase I to further develop specific land use, environmental and economic policies and procedures to ensure the county is ready for future investment, subdivision, and development. Phase II includes preparing various policy and procedure documents based on best practice ready for Council review, including:

- Subdivision and development applications and documents;
- Agricultural hubs;
- Commercial and industrial development applications and documents;
- Enhancement and/or protection of agricultural land type documents (to be identified during project development);
- Open space(s), Municipal Reserve /Environmental Reserve /Environmental Reserve Easements, Environmental Significant Areas, wetlands, waterbodies and watercourses type documents (to be identified during project development for County and developer use); and
- Marketing guidelines for:
 - Subdivision/development of residential areas;
 - Agricultural hubs; and
 - Commercial/industrial areas.

(Amendments to MDPs, IDPS, and LUB not included)



3.4 Leduc-Nisku Business Retention and Expansion Project – Final Report 2018 Leduc-Nisku Economic Development Association

The consultants performed an informal survey conducted with 90 businesses in the Leduc Region during 2017-2018, which holds Canada's largest Energy Services Industrial Park, a prominent part of the oilfield services supply chain delivering goods contributing to oilfield innovation worldwide.

The purpose was to learn about challenges and opportunities faced by businesses and grow awareness of the Leduc-Nisku Economic Development Association. Analysis based on quantitative data found the following:

- The highest number of respondents' businesses are classified as Industrial Machinery Manufacturing and Oil and Gas Equipment and Supplies'.
- Corporate entities in the region vastly outnumber the 1.5% sole proprietor/partnership models.
- Most businesses are well established (43% present for 20+ years).
- International businesses are prominent (only 14% of businesses confirm their office as the primary Canadian office).
- The majority of businesses employed between 26 - 100 individuals.
- Adequate talent is hard to find due to an ageing workforce and the negative view of careers in the prominent oil and gas sectors.
- Most businesses (73%) do not have an online platform - sales are relationship/ connection based. A good number reported that sales are limited to the community and region.
- Less than half of the business expected their sales to grow by 11 and 25% over the next year.
- Several businesses reported that most of their sales are to customers within the community or region.
- Centrally located, easy access to vendors and customers, low municipal tax rate, cheap operating cost, and less overhead cost were the most frequently cited reason given as the biggest benefit to having their business located in this region.
- The majority of the businesses unanimously agreed that economic downturn and Government red tape, local zoning bylaws, and business approval processes are cited as barriers to new business development or growth.
- Leduc region's businesses tend to purchase their supplies from outside the region, may contribute to the shrinking supply chain processes and local economy.
- A substantial majority of respondents identified that the expansion of the workforce is essential to their company's competitiveness, and recruitment support is anticipated to improve the region's economic climate.



4.0 Review of Themes or Topics that are Relevant to the Plan

4.1 Energy Park

Consistent with the Leduc County MDP policy 5.3.0.2, the Genesee Power Plant area as identified on Map 4: Rural County Land Use Concept shall be protected for resource extraction, energy related uses and new technology, including green technology, to provide electricity. (MDP summarized earlier)

Capital Power has announced (Dec 2019) a capital investment of \$70 million to advance dual-fuel capacity (coal/natural gas) at all three generating units by 2021.

Capital Power also announced plans to build the Genesee Carbon Conversion Centre (GC3) to enable commercial scale production of carbon nanotubes from carbon dioxide emissions. The capital investment in this facility will be \$20-\$25 million. Nano-tubes can be used as an additive to increase the strength of concrete, steel, and aluminum. This Centre may create R&D opportunities to develop circular economy businesses.

There may also be opportunities to consider green and renewables including solar, wind, geothermal, and lithium projects at this site. Advantages include an established access to the grid.

4.2 Edmonton Research Park

Source document: <http://www.edmontonresearchpark.com/>

Biotechnology

The biotech industry in Alberta is growing, with approximately 75% of the sector focused on innovative health treatments and products. This includes 38% of companies in the business of creating medical devices and 23% in the business of biotechnology and pharmaceuticals.

Just over 60% of firms in the biotech business call Edmonton home, making the city the biotech hub for the province. The pharmaceutical industry is specifically noteworthy as an emerging industry in the city with the entry of large pharmaceutical players such as Gilead, Naeja, McKesson Pharmaceutical, and Aurinia Pharmaceuticals Inc.



Overall, the province of Alberta is recognized nationally and internationally for expertise in neurology, diabetes and islet transplantation research, cardiology, cancer research and treatment, bone and joint research, and vaccines for infection diseases.

Nanotechnology

Nanotechnology involves manipulating and controlling atoms and molecules to create useful materials, devices, and systems that have new and different properties from what we normally see in our everyday world.

Alberta has had significant success in the commercialization of nanotechnology with leading companies in the areas of circuits/chips, calibration systems, and bio-detection as well as nano-biotechnology.

Edmonton plays a large role in the development of nanotechnology in Alberta and is home to The National Institute of Nanotechnology — a joint initiative between the University of Alberta, The National Research Council of Canada, and the Government of Alberta. The institute conducts innovative research on nanotechnology solutions with some of the largest and most technologically-advanced nanotechnology facilities in western Canada.

Energy Technology

Oil & Gas

The energy industry is the largest contributor to Alberta's GDP, capital investments and exports, making it the province's key engine of growth.

Alberta has the third largest crude oil reserves in the world and is home to 98% of Canada's total oil reserves, and in 2014, Alberta produced approximately 78% of Canada's crude oil and 67% of its natural gas.

Edmonton is the closest major centre to Alberta's Oil Sands, making it a strategic base for many industries that support the oil and gas sector such as manufacturing, construction, and engineering. In addition, two of Alberta's four refineries are located in the Edmonton Metropolitan Region.

The Strathcona Imperial Oil Refinery produces ultra-low sulphur diesel at a capacity of 187,200 barrels of crude oil per day. Suncor's Edmonton Refinery produces a high yield of light oils from oil sands-based feedstocks at a capacity of 142,000 barrels per day (Canadian Centre for Energy Information, 2014).

The oil and gas industry is always evolving and innovating. The University of Alberta, located in Edmonton, is a main source for technical innovation in the industry in areas such as emission reduction, water treatment, and land reclamation, along with new extraction techniques.



Alternative Energies

The alternative energy industry is on the rise, creating new opportunities for a more sustainable future and greater control over energy supply, costs, and environmental impact for the Edmonton Metropolitan Region.

Through Edmonton's Renewable Energy Task Force, the City is taking steps to engage and encourage alternative energy industry growth, creating a welcoming climate for anyone interested in entering the field.

Biomass

Within Canada, biomass is the third largest source of renewable energy after hydroelectricity and wind, with consumption more than doubling in Alberta from 1990 to 2014.

Edmonton is home to the world's first industrial-scale municipal waste-to-biofuel facility that converts approximately 100,000 tonnes of sorted municipal solid waste into 38 million litres of ethanol annually. In addition to Edmonton's recycling and composting programs, this waste-to-biofuel facility enables the city to have a waste diversion rate of 90%.

With large resources in forestry and agriculture, Alberta's biomass growth potential is promising. Alberta has approximately 20 million tonnes of annual waste in potential feedstock, which could be converted to biofuel. With the growing demand for energy, biomass could lead the way for Alberta's alternative energy source.

Solar

Alberta has a high potential for solar energy and Edmonton's solar potential exceeds most Canadian cities and many areas of the world. Northern Alberta municipalities are regularly ranked as some of the sunniest in Canada, with Edmonton consistently in the top three for major Canadian cities that have the greatest percentage of sunshine each day (Environment Canada, 2010). Additionally, an opportunity exists in Edmonton as cold temperatures make solar photovoltaic more efficient.

Alternative Energies Education & Innovation

The North Alberta Institute of Technology (NAIT), located in Edmonton, offers a two-year Alternative Energy Technology program, which educates students on a broad range of alternative energy sources including solar, geothermal, biofuels, hydro, and wind. The program's goal is to create an educated workforce that will be able to design and install a broad range of green technologies to help meet the increasing demand for renewable energy.



4.3 Agriculture

4.3.1 Terroir

Terroir means to taste the land or imbibe the essence of what makes a location unique. It is a concept with French origins but has travelled across the world as a means to describe a unique experience one can have because of the location a food item is produced in.

The food system in North America has for a long time valued same-ness and conformity but recently there has been a move in introducing unique and varied products. For example, supermarket shelves are no longer stocked with only a couple types of apples or one type of carrot. Stores are responding to consumer trends and are offering large variations of food products that have not been seen in the past. This interest in unique, interesting, and new food products goes along with the creation of an experience for the consumer. Consumers are seeking out new food opportunities. In addition, producers (both growers and manufactures) can be responsible for introducing consumers to new varieties of products or educating them on the health benefits and flavour profiles of existing unique products.

Terroir provides an excellent opportunity to provide a value add to existing and new Leduc County agriculture products. If pursued this strategy should involve a public education initiative and product branding work that explains the Terroir of specific products from Leduc County. Importantly, this description appears to provide best returns for higher value products where items are being consumed not only to address hunger but also to create an experience that includes maximizing health or creating a new, unique experience. For example, wine has been successfully associated with terroir for quite a while. Other products have been tried with this strategy such as beef, coffee, chocolate, etc. but the most successful products seem to be those that are uncommon and distinguishable from competitors. For example, a purple carrot would have an easier time describing the terroir associated with its flavour profile and making it a desirable product than an orange carrot that is indistinguishable from other common carrots.

In order to leverage this concept, Leduc County needs to identify unique and distinguishable products that could be branded to describe the valuable features of Leduc production that are cultivated in the products produced there. Specific products that may provide this opportunity are identified below.

Source Documents:

<https://www.theglobeandmail.com/life/food-and-wine/food-trends/food-scientists-try-to-pin-down-exactly-what-influences-the-taste-of-beef/article36694753/>

<https://www.sacmag.com/magazine/food-drink/the-terroir-of-beef/>

<https://www.perfectdailygrind.com/2018/03/what-is-terroir-and-why-does-it-matter/>



4.3.2 Circular Economy

Circular economy is a rethinking of the traditional approach to supply chains of ‘take-make-dispose’. It reframes supply chains to model a natural system where products are not wasted and instead feed into new systems. A circular economy extracts the maximum value from a product possible which has the effect of reducing the environmental burden of the supply chain and in many cases saves money across the whole system.

Application of this concept can be used in many different types of systems. Traditionally it is often considered and used by manufacturers of expensive industrial equipment such as generators where remanufacturing technology can be used to extend the life of the equipment by many times its lifespan if left unaltered. This concept has also been applied to food systems where the products that end up in waste streams are re-evaluated and then redirected to higher value end points. For example, food products that have not been traditionally deemed aesthetically pleasing enough to move to supermarket shelves can end up as waste. Using a circular economy approach these items would be re-evaluated and redirected to primary consumption, processing, animal feed, or composting instead of instead of landfill waste.

In Leduc County, a circular economy approach could be encouraged for agriculture production. It would require an analysis of where products are produced and where they are flowing to in order to create recommendations on how to best redirect waste to higher value end points. Dillon is completing a similar analysis for the City of Guelph and Wellington County in Ontario and could help Leduc complete this process to show the best opportunities to extract the maximum value out of their supply chains moving Leduc produced food products while also decreasing the environmental footprint of these food supply chains.

Additionally, this concept can be applied to Leduc County’s industry. The County could provide support in terms of information and financial incentives to manufacturing companies that offer refurbishment and remanufacturing services for their products. These activities are associated with a skilled labour force and if manufacturing companies in the County are incentivized to offer this feature it can be associated with increased employment opportunities for a skilled labour force of technicians and service personnel.

4.3.3 Agri-Tourism

In the past decades, food production in the industrialized world has been following a trend of larger farm sizes, and fewer farms. Agriculture production facilities have been bought and amalgamated into larger operations. This allows the businesses to take advantage of economies of scale by decreasing the production costs of each unit produced.



Leduc County is also seeing this trend with data from Statistics Canada indicating that the number of farms in Leduc County are decreasing while the average farm size is increasing. These larger production facilities are not typically as useful for agri-tourism. The larger facilities are typically focused on profit through efficiency and maximize unit sale prices. Inviting community members and tourists into their operations detracts from this model.

While agri-tourism may not be a viable strategy for these larger facilities, it is likely a useful model for smaller farms. We suggest that Leduc County encourage small to medium size farms to consider an approach to their business that involves a combination of alternative production strategies, agri-tourism, terroir, and unique or unusual products.

4.3.4 Alternative Production Strategies

Organically produced food has seen a large increase with market share gaining year-over-year. As of 2016, Statistics Canada indicates that Leduc County currently had four farms reporting as certified organic and two additional farms transitioning to organic farming. While this number has increased from 2011, there is room for further growth to take advantage of the increasing interest in purchasing organic food products. Organic products are increasingly seen as standard offerings for consumers and in order to meet this demand Leduc County should assist their farmers to transition to organic production if desired. The path to organic certification is long and can be complicated to navigate. The County can offer services to help farmers move through the steps to become certified organic by the Canadian Organic Standards which will ease the transition and help Leduc farmers be more competitive.

Additionally, organic certification would be a nice compliment to other strategies outlined in this document. Although we believe that in many cases an organic production strategy could prove to be lucrative on its own, by combining organic production status with agri-tourism, and/or terroir marketing, Leduc farmers can target a unique segment of the market that is looking for higher value products and are willing to pay value added prices.

Beyond organic production, there are many other production strategies that can add value to the agricultural products produced in Leduc County. Some examples include lunar farming, integrative farming, and holistic farming. The financial implications of these strategies are less well understood and would likely be best used to compliment the other value add strategies mentioned above.

Source Document:

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210041401&pickMembers%5B0%5D=1.1970>

4.3.5 Agri-Food Corridor

Leduc County is ideally located to be part of an agri-food corridor. The access to the highway, rail, and air transportation as well as an abundance of agricultural land makes the County an ideal location to



leverage these features to become a major agri-food corridor. The County could leverage these features to connect with key partners to create lasting agricultural jobs for their residents.

The City of Edmonton recognizes the need for a food hub for local production. This has been proposed as a physical structure but also potentially as a digital system that connects and distributes food – as a smart agri-food distribution system. Calgary-Olds has already employed this model. Leduc County could work with the City of Edmonton to create a smart food hub that allows that County to become a smart agri-food corridor. Furthermore, by connecting with Calgary-Olds, the County could take lessons from their experience to more efficiently replicate the model. Food and agricultural products could then flow more easily between Leduc County, Calgary-Olds, and the rest of the province.

Because of the recognized need for some sort of means to aggregate and connect small and medium food producers to distribution systems and consumers in the province, there are likely grants that can be applied for to help fund the creation of a smart agri-food corridor. Dillon has experience identifying and applying for these types of grants and could assist in this process if Council decides this is an option worth pursuing.

Note: The COVID-19 crisis is increasing the interest in mobilization around virtually connecting local food producers with consumers. The Edmonton Food Council and other groups around the greater Edmonton Metropolitan Region are regularly discussing and producing material suggesting ways to make this happen. Now would be an excellent time to seize on this momentum and connect with these groups to streamline efforts and provide a service that is needed to help local farmers maintain their livelihood and reach more local (provincial) consumers, which is strongly desired by consumers as interest in consuming local food peaks in association with this crisis.

Source Document:

<https://calgaryeconomicdevelopment.com/calgary-olds-smart-agri-food-corridor/>

4.3.6 Canola Production

Canola is a staple crop in Leduc County and much of Alberta. The current COVID-19 crisis has highlighted some of the vulnerabilities of the system with large volumes being imported to China and other countries. When imports are disrupted it can have a very negative impact on the economic stability of individual farmers and whole farming communities.

While global exports are important, there may be increased opportunities for canola growth to feed biofuel production. Biofuels are seen as a greener alternative to petroleum fuels and provide a benefit of feeding spin-off industries that process the canola to produce the biofuel. Further investigations into production costs and associated sale prices are needed but the argument has been made by many, such as Dr. David Bressler that oilseeds are a viable and competitive alternative source of fuel. If Council is interested in pursuing this route, it is recommended that they reach out to experts such as Dr. Bressler



to determine the value of the long term value of the canola seed as fuel source as well as processing options – Dr. Bressler is currently heavily involved with an alternative fuel production company – before proceeding.

Source Documents:

https://www.country-guide.ca/daily/china-to-resume-imports-of-canadian-canola-sources-report/?utm_source=GFM+Publications&utm_campaign=c91c47e5b2-Country+Guide+daily+enews+west+Apr+01%2C+2020&utm_medium=email&utm_term=0_2da8244677-c91c47e5b2-89243836

<https://www.newswire.ca/news-releases/lockheed-martin-invests-in-forge-hydrocarbons-lipid-to-hydrocarbons-technology-701790561.html>

4.3.7 Berry Production

In general, Leduc County does not have the ideal climate for large scale berry production. There are many small and medium sized operations with many u-pick options. These operations produce a range of fruit including strawberries, raspberries, and blueberries. They provide a viable option for the agri-tourism market but likely are not the best option for high volume production.

There are some less-common fruits that may provide opportunities for both the agri-tourism market and larger scale commercial production. A good example is the haskap berry the does well in the colder temperatures with lower moisture content. These berries are similar to blueberries in many ways including taste and high antioxidant content making them appealing for health reasons and taste. The haskap berry could be promoted as a superfood that is grown locally in Leduc County and take advantage of some other strategies to promote it including meeting the interest in local food, connection to the farmers producing the product, and looking for added health benefits. To date, haskap berry production has not been proven as a viable crop, or accepted by berry producers in the county.

The Saskatoon berry is another successful fruit crop in central Alberta. Similar to the haskap berry, it grows well in a colder and drier climate. Additionally, because of its ability to perform well at cooler temperatures, it presents opportunities for agri-tourism and larger scale production.

These two fruits might provide a good opportunity to combine multiple strategies described above. Leduc County farmers could be encouraged through education, and planning assistance, to grow these products using alternative production methods, as well as including agri-tourism elements that educates visitors on the health value of the fruit.

Source Document:

<https://haskap.ca/about-haskap/>



4.3.8 Wheat

Farming of specialty wheat for bread and specialty baking might also offer an opportunity for Leduc County. Again, it is very difficult to predict what a post COVID-19 world will look like but since the start of the crisis, sales of flour have spiked and anecdotal evidence indicating that many people are attempting to make their own bread is high. To fully understand what is currently happening with this flour purchasing and home bread making trend, more time is needed to collect and review data. There are early predictions though that this crisis is going to propel people to become more literate in the kitchen and will lead to long term increase in home cooking and baking.

Jim McCarthy, president of the North American Millers' Association, is encouraging farmers to plant more wheat due to the expectation that there will be a sustained interest in home baking². If this proves to be true, this represents an opportunity for Leduc County farmers. In order to safeguard against potentially adding to a surplus of grains if production elsewhere ramps up and demand does not stay as high as predicted, it would be advisable to pursue a value add strategy where Leduc County farmers are not just encouraged to grow wheat but they are instead encouraged to grow wheat that tells a story and that provides additional incentives to consumption beyond what other wheat can offer. This may mean slotting wheat under the umbrella of the terroir of the products farmed in Leduc County or encouraging alternative production strategies that are already experiencing high demand. For example, organically grown food has seen an increase in sales by over 40% between 2012 and 2017. Also, use of sustainable farming systems such as integrated farming are becoming more widely used and of interest.

Between 2011 and 2016, Leduc County saw an almost doubling of the number of wheat farmers in the county. While the numbers are not high, an increase from 48 farmers to 85 farmers, this provides evidence that interest in this crop is increasing. Extra support from the County may be a welcomed boost to the existing farmers and attract more land owners to produce wheat.

Source Documents:

<https://www.producer.com/2020/04/covid-19-shifts-flour-sales/>

<http://theconversation.com/making-and-breaking-bread-during-the-coronavirus-pandemic-home-cooking-could-make-a-comeback-134504>

<http://www.canadiangrocer.com/blog/with-covid-19-home-cooking-may-get-its-mojo-back-93580>

<https://www.cog.ca/home/about-organics/organic-statistics/>

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210040301&pickMembers%5B0%5D=1.1970>

4.3.9 Honeybees

Honeybees could be an excellent complement to haskap berries, Saskatoon berries, as well as using alternative production methods and agri-tourism. These approaches are best for small to medium sized producers and can be explored more if deemed valuable.



4.3.10 Cannabis

There could be a good agri-tourism opportunity here. There is an interesting opportunity to create marijuana region with growers and influencers much like Napa Valley or Niagara Region is for wine. The County Council has also discussed the potential for the region to become a 'cluster' for the cannabis and hemp industry.

4.3.11 Pulses

This section may be developed after speaking with stakeholders about opportunities related to this topic.

4.4 Geo-Thermal

This will be explored further after speaking with stakeholders and could be an integral part of an energy park.



Appendix C

Economic Assessment

RURAL WEST ECONOMIC
DIVERSIFICATION PLAN



LEDUC
COUNTY



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1.0 Introduction

To understand the potential benefit that economic development and diversification can bring to Leduc County, a data gathering exercise was undertaken to assess the current economic environment and levels of diversification. Macro-economic data such as GDP (Gross Domestic Product), business and employment composition, and income by industry have been collected and used to generate relevant summary statistics.

The data contained in this report is intended to be foundational to the Leduc Rural West Economic Diversification Plan and guide opportunity identification and analysis.

2.0 Methodology

2.1 Data

Wherever possible, data has been acquired in a format that is consistent with the North American Industry Classification System (NAICS). The NAICS classification system allows for data to be represented in varying degrees of detail – from 2 to 6 digits - the more digits in the code signifying greater classification detail (i.e., narrower industry view). However, in some cases, due to data limitations or where additional insight could be gained, higher levels such as the 2-digit economic sector code were used.

The approach taken has been to provide the data in the most relevant form for the data set. Leduc County is represented within Statistics Canada data as a Census Subdivision (CSD) and wherever possible, this level of data has been used. Where it has not been possible to obtain data at the CSD level (as is the case with GDP), we have used the most applicable proxy data and utilized statistical methods to regionalize the data for the Leduc County CSD. In these instances, further explanation has been provided regarding the approach.

2.2 Diversification Measures

Diversification metrics have been provided using a Diversity Index (DI) which is based on the Herfindahl-Hirschman Index (HHI). This approach is consistent with the Government of Canada approach to measuring economic diversity¹

¹ Canadian Northern Economic Development Agency.
<https://www.cannor.gc.ca/eng/1388762115125/1388762170542>



DI has been employed because of its appropriateness for the task at hand and simplicity of use. The intent has been to utilize a measurement tool that provides an accurate snapshot of the current state of affairs, and one that can be replicated in the future to measure economic progress against current benchmarks.

In **Section 3.2**, GDP for Leduc County has been provided by 2-Digit NAICS code (i.e., 20 distinct economic sectors). The level of diversification in the Leduc County economy has then been measured by evaluating each economic sector's contribution to total GDP. The DI has a scale from 0 to 1 and the closer to 1 the index is, the higher the level of diversification.

For example, in an economy with only one economic sector, that sector would make up 100% of the economy and the DI would be 0. On the other hand, in an economy where each of the 20 economic sectors contributed an equivalent proportion of GDP, the DI would approach 1. DI has been used throughout this report to calculate the level of diversification of various components of the Leduc economy.

3.0 Economic Assessment

In order to identify the most appropriate data to evaluate the economic position of Leduc County, a review of available data resources was completed. This includes internal sources such as tax assessment data as well as publicly available resources. It should be noted that there are often limitations to the types of economic indicators that are available at the CSD level of granularity. Therefore, data types have been chosen based on their ability to provide estimates that are geographically relevant, stable over time, and that support a consistent methodology which can be applied across different data sets.

To facilitate data consolidation and analysis, a forecast model has been created to incorporate Statistics Canada business pattern data, provincial GDP (Gross Domestic Product) data, and other Statistics Canada tables. This tool has been used to evaluate the Leduc County economy and compare it with other regions.

3.1 Establishment and Labour Counts

Canadian business patterns data which provides establishment counts by NAICS industry (6 Digits) has been utilized for our analysis. The data source is the Federal Business Register, which is a repository of Canadian business population information. Within this context, an **establishment** is defined as a level of production for which a business maintains accounting records and reports payroll remittance and business profile information to Canada Revenue Agency.



Establishment count and labour information provided in the following section is from 2018, is produced by Statistics Canada, and has been distributed by the Government of Alberta² free of charge. Data updates are produced semi-annually and can be purchased from Statistics Canada.

Due to limited availability of labour force data at the CSD level, business pattern data has been used to produce labour force estimates for Leduc County. The data has been calibrated based on known parameters that are available at the provincial level from the Labour Force Survey³ (produced by Statistics Canada).

Based on this methodology, the Leduc County labour force is estimated to be 20,325 people.⁴

The chart on the follow page illustrates the estimated level of business and labour concentration within each economic sector (2- digit NAICS code) of the Leduc County economy.

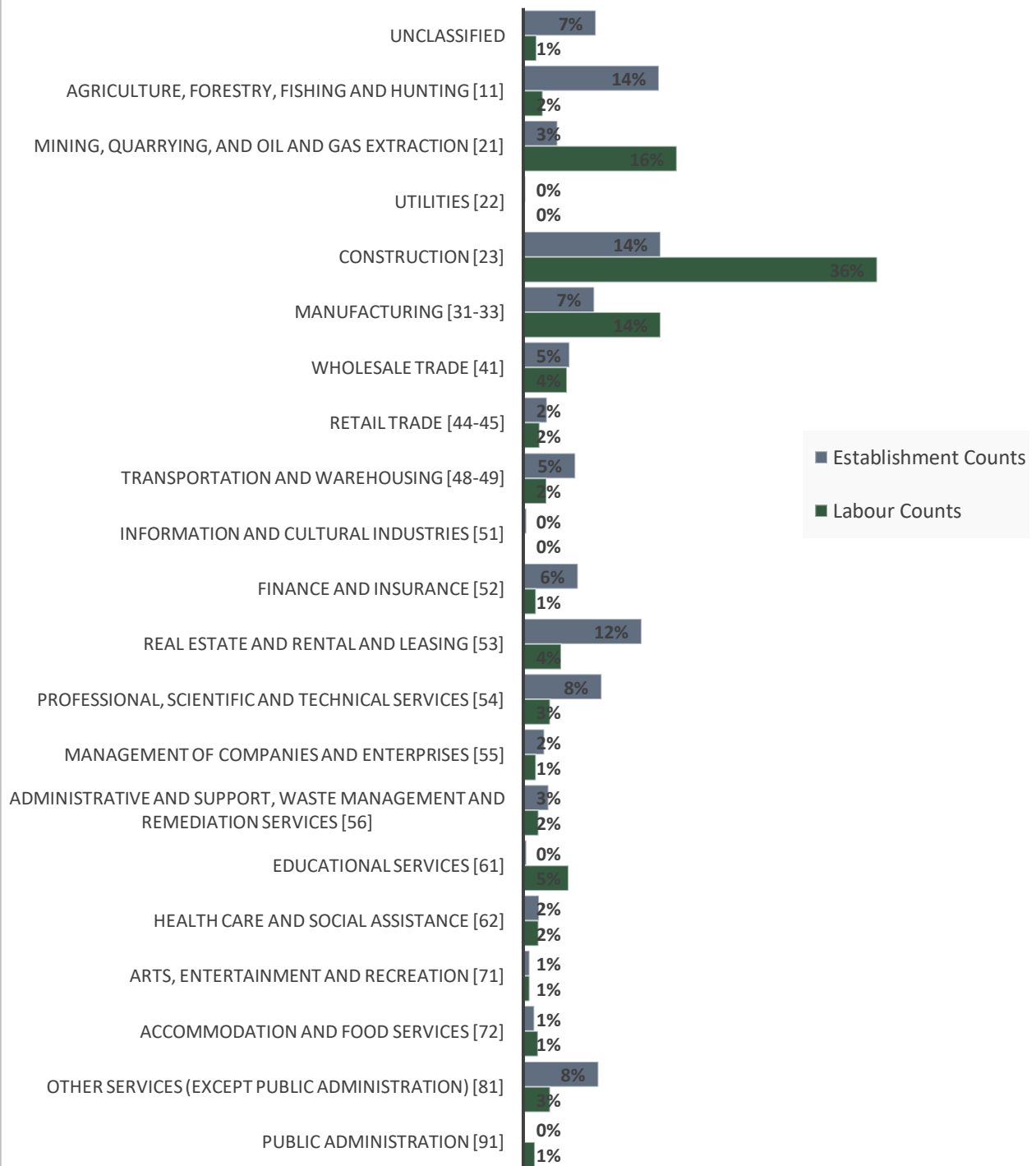
² Alberta Government. <https://open.alberta.ca/opendata/establishment-counts-by-naics-6-digits-and-employment-size-ranges-alberta-csd-december-2018#summary>

³ 2018 Alberta Labour Market Review. <https://open.alberta.ca/publications/1704-2925>

⁴ Those who live and work in the County as well as those who commute into the County for work



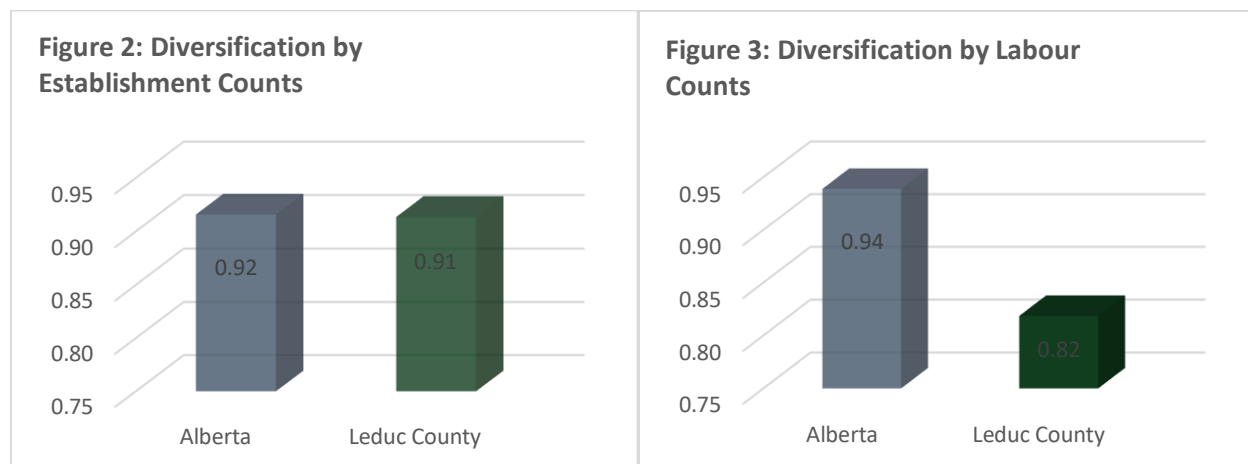
Figure 1: Establishment and Labour Composition by Economic Sector



The chart on the previous page provides the following insights:

- Over 45% of all businesses establishments fall into four economic sectors (agriculture, construction, manufacturing, and real estate).
- Over 65% of all employment is generated from three economic sectors (mining and oil and gas extraction, construction, and manufacturing).
- Economic activity in labour intensive industries such as construction and manufacturing represent a large component of the Leduc County labour force.
- Agriculture has a high number of establishment counts, yet overall labour counts are only 2% of the total labour force (which is in line with the National average of 1.8%⁵). This indicates that a large number of farm operations require a low amount of labour as compared to other industries.
- In terms of employment, a greater impact may be realized by focussing economic development efforts on certain sectors of the economy.

Continuing to evaluate the establishment count and labour estimates by calculating the DI, confirms what is already evident in **Figure 1** – Leduc County has a high level of business diversification. In fact, it is on par with the provincial level of diversity. However, labour is highly concentrated in a few specific labour-intensive industries. **Figure 3** illustrates this with the low DI for Leduc County that is well below the provincial level.



3.2 GDP

GDP data is available for the province of Alberta and sub-regions; however, not at the CSD level for Leduc County. To estimate GDP for Leduc County, a top-down approach has been applied whereby provincial GDP is regionalized based on the relationship between provincial and County business

⁵ <https://www150.statcan.gc.ca/n1/pub/11-402-x/2011000/chap/ag/ag-eng.htm>



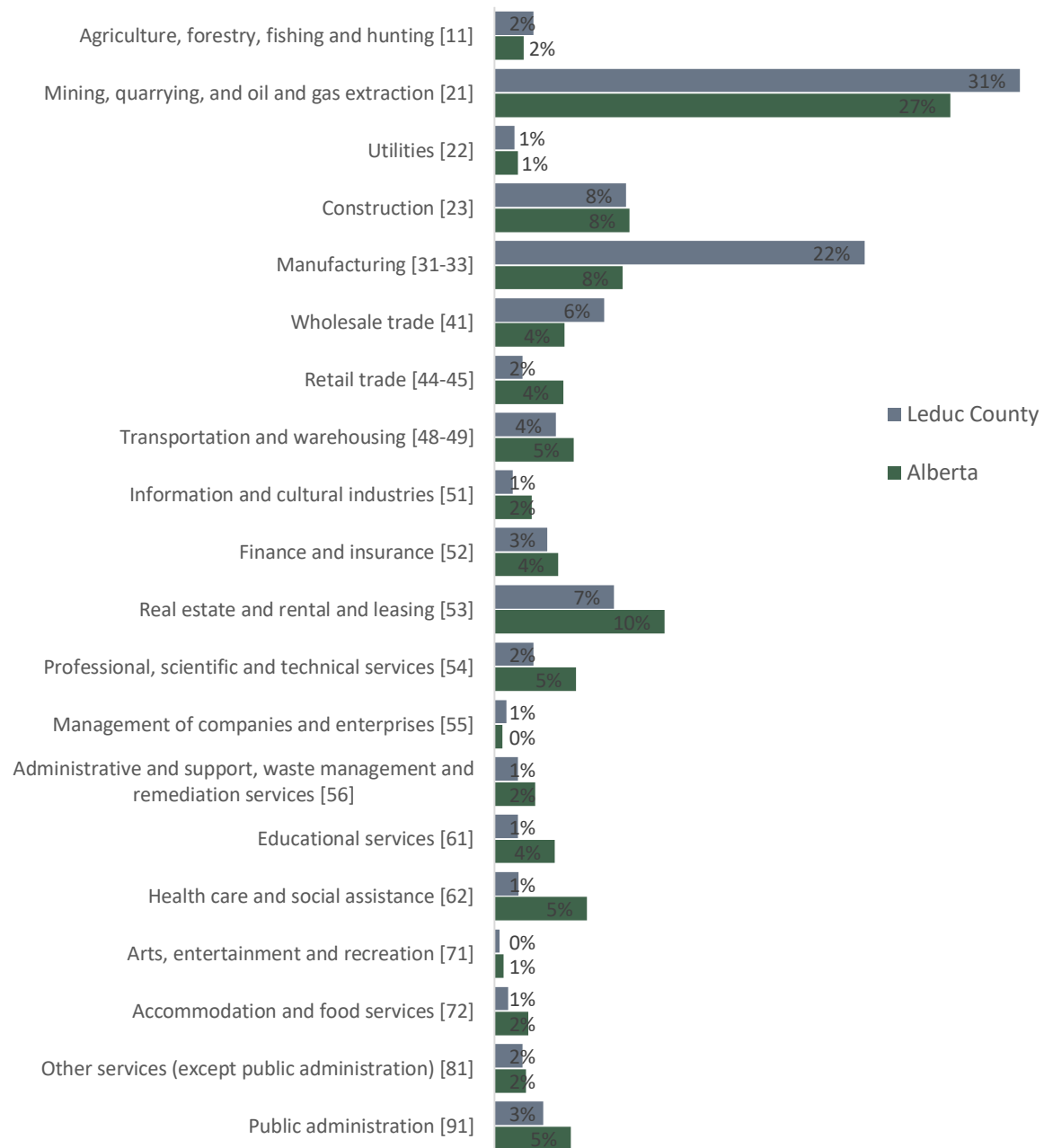
activity. In other words, GDP is allocated to the County based on its proportion of total provincial business activity (as indicated by establishment count data). This approach assumes that businesses within a sector have equivalent economic output at both the provincial and County level.

The dataset to complete our GDP estimates is based on Statistics Canada data for 2018⁶. In order to maintain a consistent approach, the data used to regionalize GDP is the same establishment count and labour data used in **Section 3.1**. **Figure 4** below presents the estimated GDP for Leduc County by economic sectors as compared to the province of Alberta.

⁶ Statistics Canada. Table 36-10-0402-01 Gross domestic product (GDP) at basic prices, by industry, provinces and territories (x 1,000,000)



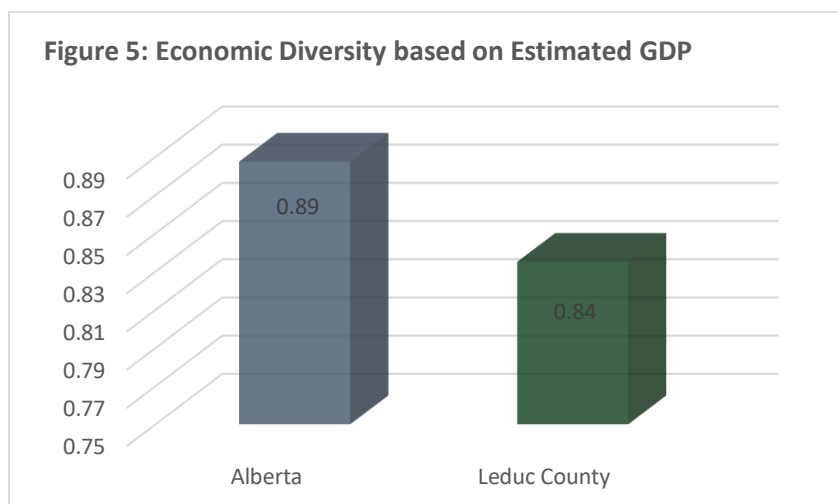
Figure 4: Estimated GDP by Economic Sector



2018 Gross domestic product (GDP), by NAICS (2- Digits) at basic prices, chained 2012 dollars



Two predominant economic segments contribute substantially to Leduc County GDP. However, based on DI calculations, the County still has a moderate level of diversification as compared to the provincial level.



Estimating key economic indicators such as GDP is important to develop an understanding of the local economy and as a benchmark for the County to measure the success of economic development efforts. Following the same methodology used in the preceding section, projects or initiatives can be evaluated to determine the impact to County GDP and how these initiatives can support the goal of increased economic diversification.

4.0 Agricultural Assessment

Leduc County has been blessed with rich agricultural land that can successfully produce many different types of agricultural products. Data from the 2011 and 2016 Census of Agriculture has been compiled to provide a clear perspective of farm operations and agricultural production.

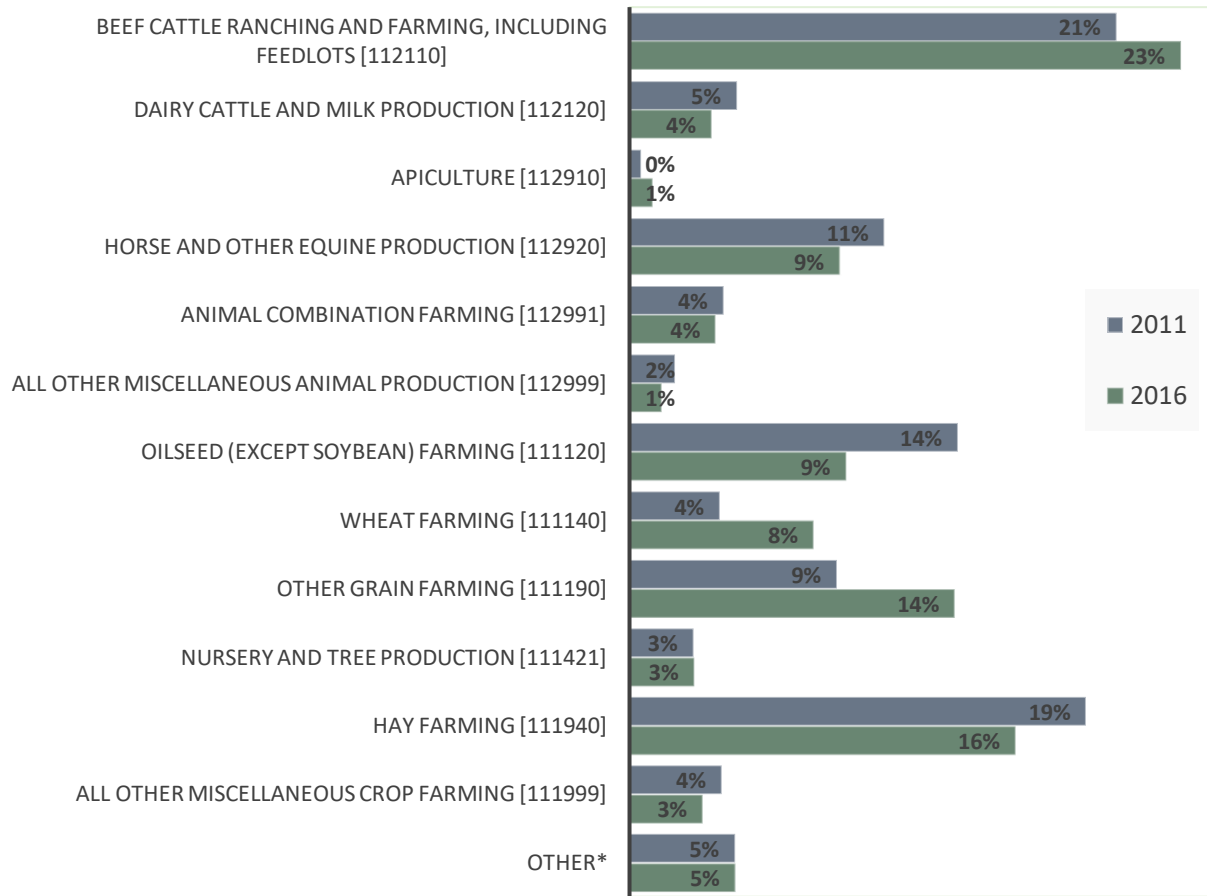
4.1 Farm Types

Figure 6 on the following page provides a view of the type of farm operations in Leduc County by 6-digit industry code ⁷. This chart illustrates the breadth of agricultural production taking place in the County.

⁷ Statistics Canada. Table 32-10-0403-01 Farms classified by farm type



Figure 6: Agricultural Production by Farm Type



Number of farms classified by farm type, NAICS 6-digit industry code for Leduc County census subdivision (CSD)

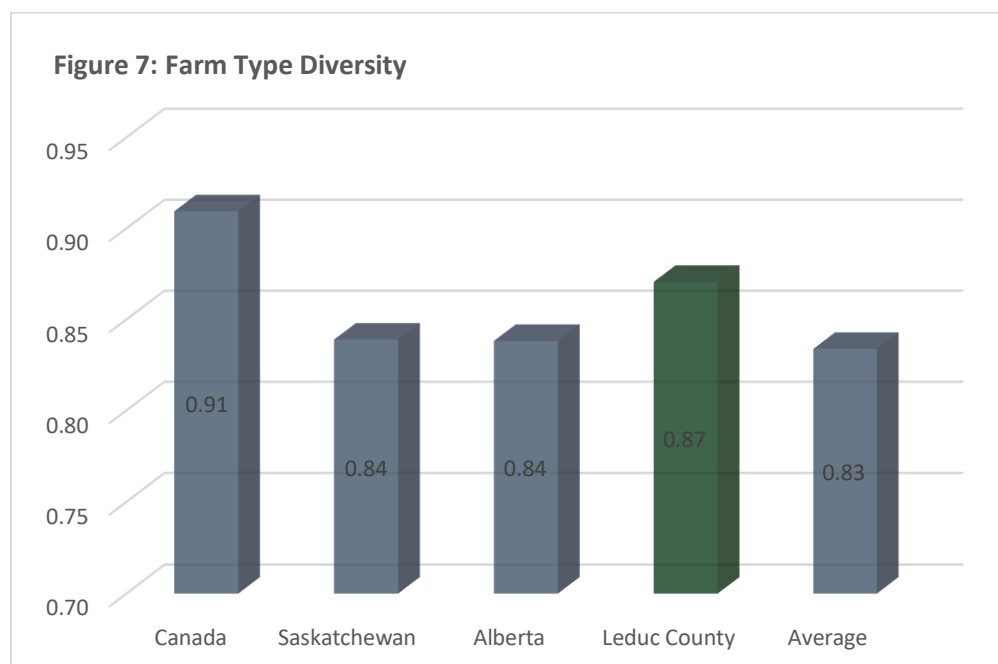
Summarizing the data by 4-digit industry group, shows that traditional crop production such as oilseed, grain, and hay operations comprise over 51% of production. Beef, dairy, and horse production are responsible for 41%.



Table 1: Farm Type (Industry Group)

	2011	2016	Change
<i>Oilseed and grain farming [1111]</i>	27.0%	32.1%	5.1%
<i>Cattle ranching and farming [1121]</i>	25.1%	26.8%	1.7%
<i>Other crop farming [1119]</i>	23.5%	19.6%	-3.9%
<i>Other animal production [1129]</i>	17.1%	15.0%	-2.1%
<i>Greenhouse, nursery and floriculture [1114]</i>	3.1%	3.2%	0.1%
<i>Sheep and goat farming [1124]</i>	1.4%	1.0%	-0.3%
<i>Poultry and egg production [1123]</i>	1.0%	0.8%	-0.1%
<i>Vegetable and melon farming [1112]</i>	0.9%	0.8%	0.0%
<i>Fruit and tree nut farming [1113]</i>	0.6%	0.5%	-0.2%
<i>Hog and pig farming [1122]</i>	0.3%	0.2%	-0.1%

Census of Agriculture data has been used to calculate the agricultural diversity across Canada using DI to evaluate agricultural production at the 6-digit industry level. Included in this comparison is the average of a random sample of 15 Canadian municipalities (at the CSD level) with total number of farms greater than 500. While agriculture production in Leduc County is heavily concentrated around five or six industries, the diversity of farm types is greater than the average agricultural municipality and even greater than what is seen on the provincial level.

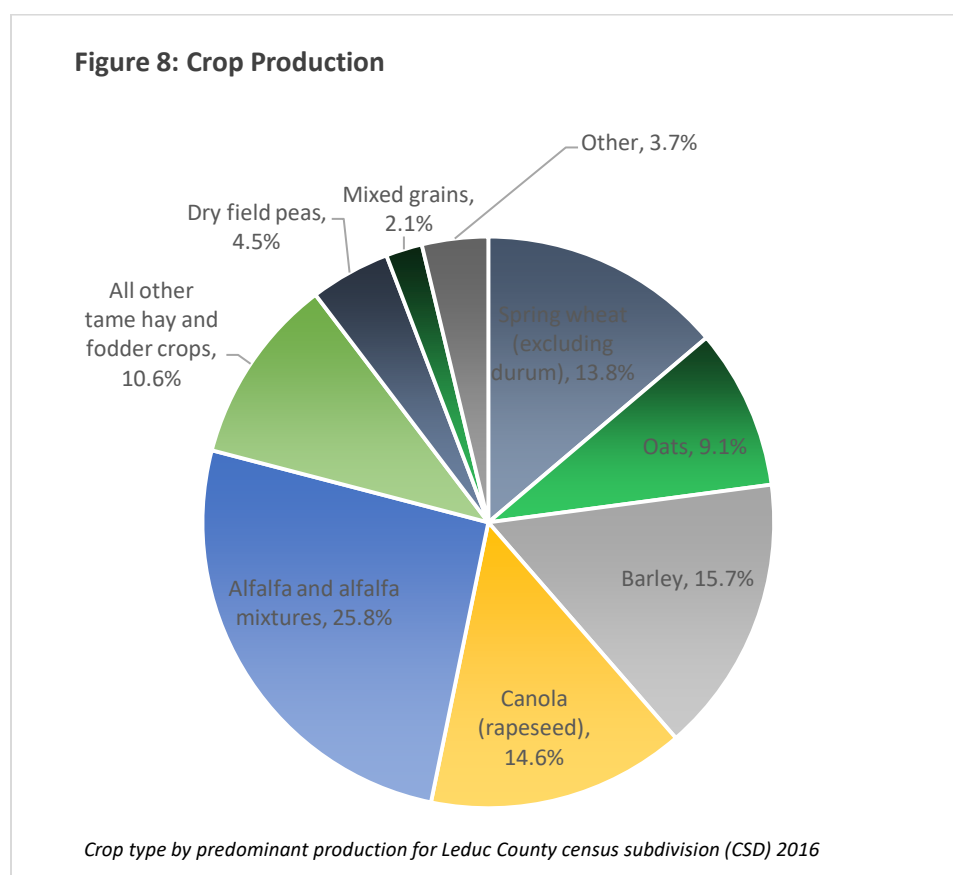


4.2 Crop Production

As previously illustrated, traditional crops such as oilseed, grain, and hay operations comprise over 51% of production in Leduc County. The Census of Agriculture provides detailed data on the number and acreages of hay and field crops⁸. This data facilitates a view of the predominant local crops as well as a comparison between regions.

Farm count data from the 2016 the Census of Agriculture indicates that five crop types contribute over 80% of all agricultural production:

- Alfalfa and hay are over 35%;
- Barley, wheat, and canola each individually contribute approximately 15% to total production; and
- Pulses are less than 5% (and almost entirely comprised of dry field peas).



⁸ Statistics Canada. Table 32-10-0416-01 Hay and field crops



While Leduc County's crop production diversity is less than Alberta as a whole, it is slightly greater than the average of a random sample of 15 Canadian municipalities.

4.3 Farm Profitability

Farm profitability can be measured by the expense to receipts ratio. Simply put, this is the cost to produce a commodity divided by what the farmer can sell it for. A lower ratio represents higher profitability.

Many factors can impact profit margins on the farm, commodity markets, input costs, and each individual farm's level of productivity to name a few. However, the below table indicates that there may be structural differences between different types of farm production, ultimately resulting in varying levels of profitability.

Table 2: Expense to Receipts Ratio by Farm Operation

	2010	2015
Livestock		
<i>Dairy cattle and milk production</i>	0.73	0.77
<i>Beef and feedlot</i>	0.93	0.90
<i>Hog and pig</i>	0.92	0.90
<i>Poultry and egg</i>	0.84	0.84
<i>Sheep and goat</i>	1.01	0.96
<i>Other animal</i>	0.88	0.88
Crop		
<i>Oilseed and grain</i>	0.76	0.79
<i>Vegetable and melon</i>	0.84	0.83
<i>Fruit and tree nut</i>	0.90	0.84
<i>Greenhouse</i>	0.86	0.85
<i>Other crops</i>	0.89	0.83

Included within the "Other Crop" category are specialty crops - dry pea and bean type farms that had a very favourable ratio in 2015 at 0.71. According to Statistics Canada, this was due to an increase in commodity prices that outpaced increases in input costs over the same time period.⁹

⁹ Statistics Canada. <https://www150.statcan.gc.ca/n1/pub/95-640-x/2016001/article/14815-eng.htm>



5.0 Regional Demographics

The Statistics Canada Census Program is completed every five years to provide a statistical portrait of the country. The data from the 2016 Census has been used as the source data in the following sections. While demographics may have shifted since the last census was completed, that does not mean that this data is outdated. Valuable insight can be gained into the demographic structure of the region and comparisons can be made between Leduc County and the province as a whole.

5.1 Age

At the time of the 2016 census, the average age in Leduc County is 40.3 years. Of the other regions included, only Warburg has an older average.

Table 3: Age Demographics

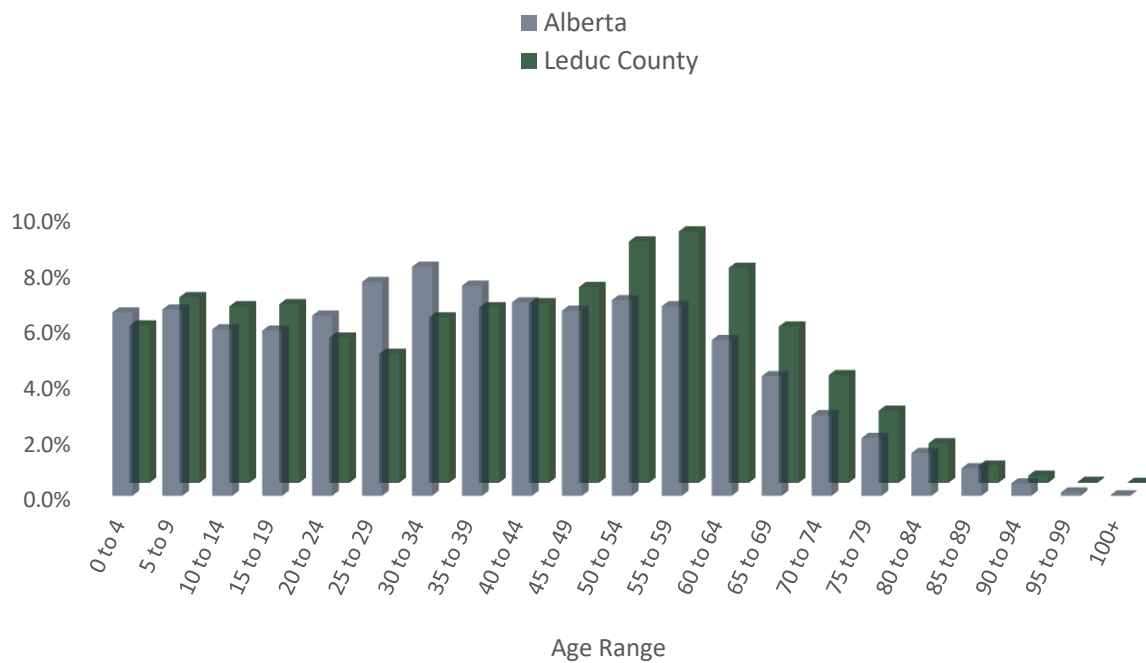
	Alberta	Leduc County	Calmar	Thorsby	Warburg
<i>Average age</i>	37.8	40.3	36.5	37.6	42.7
<i>Median Age</i>	36.7	42.3	36.6	43.7	37.4
<i>Population within Working Age</i>	68.5%	67.0%	70.1%	58.1%	57.7%

Statistics Canada Catalogue no. 98-316-X2016001

An expanded view of the age distribution within Leduc County shows that the working age population (age 15 to 65) is skewed to the older end of the working population as compared to the province of Alberta.



Figure 9: Population Distribution by Age Group



Statistics Canada Catalogue no. 98-316-X2016001

5.2 Labour Force Participation

Leduc County's labour statistics show an engaged workforce higher than the provincial average and a slightly more favourable unemployment rate.

While female participation rates are lower than male, the rates are higher than the provincial average and the female unemployment rate is very low as well.

It is important to acknowledge the high rates of unemployment rates (especially for men) in Calmar, Thorsby, and Warburg.



Table 4: Labour Participation

	Alberta	Leduc County	Calmar	Thorsby	Warburg
<i>Labour Participation (Total)</i>	72%	73%	71%	75%	56%
<i>Labour Participation (Male)</i>	77%	80%	75%	83%	59%
<i>Labour Participation (Female)</i>	66%	66%	66%	66%	50%
<i>Employment Rate (Total)</i>	65%	68%	62%	62%	49%
<i>Employment Rate (Male)</i>	70%	73%	65%	67%	53%
<i>Employment Rate (Female)</i>	61%	63%	59%	60%	46%
<i>Unemployed Rate (Total)</i>	9%	8%	12%	15%	10%
<i>Unemployed Rate (Male)</i>	10%	9%	15%	19%	9%
<i>Unemployed Rate (Female)</i>	8%	5%	10%	11%	8%

Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016365

5.3 Income

Both average and median incomes in Leduc County are above the provincial levels.

Table 5: Income

	Alberta	Leduc County	Calmar	Thorsby	Warburg
<i>Median Income</i>	\$44,845	\$46,551	\$45,580	\$44,692	\$38,979
<i>Average Income</i>	\$61,171	\$62,954	\$53,281	\$55,830	\$47,443

Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016261

5.4 Education

Over 40% of the Leduc County population have attained some form of post-secondary education as compared to 47% of the Alberta population. While there are over 1,400 people in Leduc County that have a university degree, people with training in trades and certificate programs make up the majority of those with post-secondary education.

Table 6: Post-Secondary Education

	Alberta	Leduc County	Calmar	Thorsby	Warburg
<i>Apprenticeship or Trades</i>	8.3%	13.4%	11%	10%	12%
<i>College/University Certificate</i>	19.0%	18.1%	20%	27%	16%
<i>University Degree</i>	20.0%	10.7%	3%	3%	6%

Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016261



Appendix D Engagement Assessment and Summary

RURAL WEST ECONOMIC DIVERSIFICATION
PLAN



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1.0 Introduction

The purpose of this Engagement and Assessment Summary (Summary) is to outline the stakeholder engagement assessment and techniques used throughout the course of the development of the Rural West Economic Diversification Plan (the Plan).

A stakeholder assessment was undertaken in the early phases of the engagement process, and determined the most meaningful engagement techniques that were utilized in this assignment. The stakeholder assessment is summarized in this document.

The engagement techniques that were identified are based on the role of stakeholders, and the goals and objectives established for this project by the Leduc County (the County) and the Project Team. Stakeholder information and feedback gathered through the engagement process informed the Plan and diversification opportunities that were identified. As a component of the project work plan, the Project Team is committed to reporting what we learned and capturing the information in this Summary.

1.1 Background

The County hired Dillon Consulting Limited (Dillon) to complete the necessary stakeholder engagement required to support the preparation of the Plan. The Plan will assist the County in the diversification and identification of emerging economic opportunities the County should monitor and explore further.

“Leduc County is strategically located within major air, rail and road networks. Leduc County is home to the Nisku Business Park, Edmonton International Airport and Genesee Generating Station, all of which provide thousands of jobs to people in the region.”

Source: Leduc County 2018-2021 Strategic Plan

1.2 Project Overview

Economic Development:
“Leduc County encourages business and employment growth and diversification through key relationship building and by creating an environment that fosters development.”

Source: Leduc County 2018-2021 Strategic Plan

Dillon assembled a Project Team that could assess the agri-business, agri-tourism, value added agriculture, rural development, infrastructure, and transportation and logistics sectors, as well as others that were of interest to the County. These other sectors included opportunities in: corridor concepts given the proximity to air, rail and land transportation, renewable energy, geothermal energy, advanced manufacturing, green solutions for streaming service data storage centres, smart production technologies, lithium extraction, and agricultural production technologies.

These opportunities were discussed with stakeholders during the engagement phase of this project, to determine if there was merit in pursuing these sectors.

While the focus of the efforts during the stakeholder engagement concentrated on identifying economic opportunities for the western portion of the County, it was understood that potential links and advantages in other key areas and sectors in the County should also be considered.

1.3 Purpose of Stakeholder Engagement

The purpose of the stakeholder engagement was to find links between the current and future rural land uses, and potential economic diversification and development opportunities within the western portion of the County.

1.4 Methods

Dillon recognized the need to connect with stakeholders using a variety of techniques and through a series of engagement sessions, which allowed stakeholders to participate in their own time. This was particularly important given the emergence of COVID-19 as the project kicked off, including two waves of cases throughout the course of the project. By using a variety of techniques, such as interviews, workshops, and one-on-one meetings, with each designed for the stakeholders involved, the participation rate increased, providing value to the engagement process and project as a whole. Stakeholders were able to participate from the safety of their homes or workplaces, rather than at in-person sessions.

1.4.1 International Association for Public Participation

The International Association for Public Participation (IAP2) is an association that trains and certifies members in the field of public participation. Dillon's team includes two IAP2 members with training from this organization, who developed and executed this engagement plan. Techniques were used that were tailored to the needs of the County and the stakeholders that were engaged, and considered provincial and municipal physical distancing requirements.



2.0 Key Messages

The Project Team developed key messages that were used to communicate with stakeholders through the engagement phases. These key messages were:

1. Leduc County will use its wealth of opportunity to identify new opportunities, understand the skills already available, and learn more about the business community.
 - a. We will identify new opportunities so we can ensure the proper systems are in place for these opportunities to thrive.
 - b. We will explore the skills available in the county, and identify businesses that could put these skills to work.
 - c. We want to learn more about our business community, how it works, and how we can help to create new income streams.
2. Leduc County's future will respect the past, and will build on what has made us strong.
 - a. We will identify new opportunities and industries that will thrive in Leduc County.
 - b. We want these opportunities and industries to build on our existing strengths and advantages, like our land, our environment, our energy, and our people.
3. We are looking at our industries and businesses differently, and capturing all the potential that we have to offer.
 - a. We want to keep our residents and businesses in Leduc County, and help them identify partnerships and opportunities that will allow us to work together and market the region for a stronger future.



3.0 Pre-Consultation Assessment

3.1 Decision Scope

3.1.1 Opportunities for Further Exploration

What we heard through the engagement process was used to inform the development of the Plan. What we learned was shared with the County's Project Steering Committee (Steering Committee), including a set of recommendations for what opportunities could be further explored by the Project Team. These recommendations were discussed with the Steering Committee, with a final recommendation to the Leduc County Council. The Leduc County Council made the final decision on what opportunities were further evaluated by the Project Team.

3.1.2 Approval of the Rural West Economic Diversification Plan

Leduc County Council is the decision maker who will decide if the Plan will be supported by the County. This decision was supported by a presentation that was made by the Project Team, including representatives from the County's Administration. The recommendation to take forward the Plan to Council was made by the Steering Committee.

3.1.3 How the Rural West Economic Diversification Plan will be used

The Plan summarizes the work undertaken through the course of this project. The Plan identifies the economic diversification opportunities available for the County to pursue that will yield the greatest increase in jobs for the County. The opportunities that were identified were a result of conversations with the stakeholders, the Steering Committee, and County Council. The Plan summarizes the recommendations and implementation strategies for the County to consider to create economic diversification opportunities.

3.2 Engagement Considerations

3.2.1 External Factors: COVID-19 & Broadband Limitations

The engagement plan and timeline for engagement was impacted by the current COVID-19 response and physical distancing requirements. The engagement plan was adjusted to ensure a respectful and transparent engagement process was followed to support the development of the Plan. In many cases virtual meetings and telephone conversations were hosted by the Project Team. Broadband limitations in the rural network were a consideration when planning for these sessions.



3.2.2 Engagement Timeline

The project timeline resulted in the Plan being presented to County Council in January 2021. Engagement was conducted throughout the project; however, a reduced level of engagement was undertaken during July and August. In addition, the engagement timelines and interviews were planned to avoid peak business periods, and other business focus areas such as calving and seeding schedules. With the addition of the Culinary Tourism Alliance, a table talk discussion was held in September, which did pose some challenges to participation due to the harvest taking place during this time.

3.3 IAP2 Level of Public Participation (Spectrum)

For the purpose of the Plan development, the majority of stakeholders were consulted, which means the engagement team obtained public feedback on the analysis, alternatives, and/or decisions.

3.4 Stakeholder Engagement Goals

The Project Team used the International Association for Public Participation (IAP2) principles and methods for this engagement plan. The engagement associated with developing the Plan fell into three areas on the IAP2 Public Participation Spectrum, as described below.

3.4.1 Stakeholder Engagement

Inform

The IAP2 Spectrum identifies the following goal and promise when informing stakeholders.

Inform	
Public Participation Goal	To provide the public with balanced and objective information to assist them in understanding the problems, alternatives and/or solutions.
Promise to the Public	We will keep you informed.

Consult

The Project Team consulted with the majority of the stakeholders identified. For the most part, the techniques used to consult stakeholders were telephone (or video) interviews and workshops.

Consult	
Public Participation Goal	To obtain public feedback on analysis, alternatives and/or decision.
Promise to the Public	We will keep you informed, listen to and acknowledge concerns, and provide feedback on how public input influenced the decision.

Collaborate

The Project Team collaborated with the Project Steering Committee. At various stages of the project, the Project Team presented options, and requested direction from the Project Steering Committee.



Collaborate*	
Stakeholder Engagement Goal	To partner with the stakeholders in each aspect of the decision making process, including the development of alternatives and the identification of the preferred solution.
Promise to the Stakeholders	We will look to you for advice and innovation in formulating solutions, and incorporate your advice and recommendations into the decisions to the maximum extent possible.

*Adapted from the IAP2 Spectrum to reflect our Steering Committee goals and our promise to the Committee.

3.4.2 Stakeholder Engagement Goals

At the beginning of this project the following stakeholder engagement goals were identified specifically for this project:

- To reach a broad range of stakeholders representing the various sectors in the County;
- To learn from Councillors and County Administration;
- To use engagement tools and methods to engage stakeholders online and over the phone, particularly during the initial stages of the engagement plan when social distancing requirements must be met;
- To identify and engage stakeholders based their level of engagement and influence in the decisions that will be made regarding the economic diversification opportunities that will be explored further; and
- To learn from our stakeholders what economic diversification opportunities exist in the County.

3.5 Stakeholder Engagement Process Decisions

The Project Team listened to stakeholders and captured what we heard in a reporting template or meeting minutes. At various stages of the project, the Project Team met with the Project Steering Committee to request feedback and direction to move forward with particular initiatives, such as the economic diversification opportunities that were pursued further by the Project Team. These opportunities were presented to the Leduc County Council (Council), who provided the final decision regarding the economic diversification opportunities that were be further investigated by the Project Team.

The Plan was presented to the Council, who determined that the Plan was acceptable. The project timeline identified points to check-in with the Council (e.g., memos, presentations, monthly updates by Administrative) to ensure the work being done was supported by the Council.



4.0 Stakeholder Identification and Assessment

4.1 Stakeholder Levels of Engagement

A stakeholder list has been prepared by the Project Team and was approved by the County's Project Manager. The stakeholder list is attached to this engagement plan. It is important to note that although a stakeholder was identified, they may not have agreed to an interview or to participate in the stakeholder workshop. Each of these stakeholders was assigned a level of engagement, which was dependent on the information they could provide, their level of influence in the outcome, or their input into the decisions that were made. Subject matter experts were also consulted as diversification opportunities emerged.

4.1.1 Stakeholders Requiring Significant Engagement (High Level of Engagement)

Stakeholders that were identified in this category have a high level of influence on the outcomes and the decisions to be made regarding the Plan.

Leduc County Council

Council approved the Plan. For this reason, monthly updates were delivered to Council by the County's Project Manager. At key project milestones memos to Council and presentations by the Project Team were made to Council.

Project Steering Committee

A Project Steering Committee was established in the project, and was made up of County staff. The Project Steering Committee reviewed the project deliverables, and provided advice and direction at key project milestones.

4.1.2 Stakeholders Identified for Discussion (Moderate Level of Engagement)

Stakeholders who could provide insight into economic diversification opportunities were identified as having a moderate level of engagement. In addition, and in collaboration with Leduc County, an agritourism stakeholder database was developed with 74 contacts including: key informants, current agritourism businesses, and potential agritourism businesses. Opportunities for interviews, workshop sessions, and table talk sessions were provided to these stakeholders, with the purpose of learning about emerging trends, and what economic diversification opportunities should be identified for consideration and possibly further study by the Project Team.



4.1.3 Stakeholders to be informed of the Project (Low Level of Engagement)

The Plan identified economic diversification opportunities for the County. Stakeholders, not identified as falling in the high or moderate level of engagement, were informed of the project work by County Administration through other updates.



5.0 Stakeholder Engagement

5.1 Values Assessment

5.1.1 Stakeholder Values

The County has identified an urgent need for economic diversification in the County. With the phase-out of coal-fired electrical generation, the County continues to diversify. The stakeholders that were identified to contribute to this project included representatives from the energy, manufacturing, and agriculture sectors. Stakeholders also included organizations and institutions dedicated to advancing these sectors. The communities in 'Area A', or the rural west region of the County were also contacted through the engagement process. These stakeholders generally have similar values in that they want to see the County be successful, with a high quality of life and an economic advantage.

The communities that fall within the rural west region include the Village of Warburg and the Town of Thorsby.

Village of Warburg

The Village of Warburg describes itself on its website (<https://www.warburg.ca/History>), "as a progressive community with a strong desire to grow with the times yet still retains its small town atmosphere." On Warburg's main page (<https://www.warburg.ca>), they welcome visitors and say the Village, "strives to maintain a high level of services to residents while maintaining a commitment to environmental and social sustainability."

Town of Thorsby

The Planning and Development department in the Town of Thorsby has identified the vision and mission for the town (<https://www.thorsby.ca/Planning-Development>), which are as follows:

Vision – Striving together for a better community!

Mission – Building a sustainable community where everyone can live, work and play!

5.1.2 Client Values

The County has defined and published their vision, values and commitments, which are as follows:

Our Vision:

Leduc County is a leading member of the Edmonton Metropolitan Region. Leduc County offers an economic advantage, sustainable agricultural network, environmental leadership and an unsurpassed quality of life.



Values and Commitments:

Leduc County believes in:

- our citizens
- serving our communities
- making ethical decisions
- seeking fairness and equitability
- pursuing innovation

By being true to these core beliefs, we will realize our commitment to:

- working for our citizens
- leading by example
- achieving positive results
- maintaining balanced and responsive budgets

Although not an exhaustive list, the general values held by the County, which were identified by the Project Team included:

- Community
- Democracy
- Leadership
- Transparent Communication
- Economic Vitality
- Environmental Quality
- Quality of Life
- Sustainability
- Access to basic needs
- Security

5.1.3 Process Values

Process values are the underlying philosophy of effective stakeholder engagement held by the County. These values are reflected in the stakeholder engagement approach developed for this project. These values will be applied to this project, directing the implementation and guiding all interaction with stakeholders. In addition to the client values identified above, the Project Team identified the following process values, which were integrated the development of this engagement plan and the approach used when engaging with stakeholders:

- Transparent Communication
- Inclusivity for all stakeholders
- Economic Vitality
- Community
- Accountability
- Open mindedness
- Collaboration
- Curiosity
- Professionalism
- Respect

5.2 Engagement Work Plan**5.2.1 Phase 1: Information Gathering**

The goal of this phase was to gather information regarding economic diversification opportunities that should be considered by the Project Team. Initially the Project Plan identified the project visioning as



Phase 1; however, with physical distancing requirements, it was decided to focus on information gathering in the early stages, which could then be used to develop the vision for the project.

Stakeholder Engagement Process and Reporting

Steering Committee Meeting #1

With social distancing requirements, this meeting was held virtually in a workshop setting. The type of economic diversification the County wanted to focus on was discussed, as well as new sectors or industries the project team should explore. The stakeholders that were identified by the team were discussed with the Steering Committee, and additional stakeholders and specific contacts were noted.

Interviews

A total of 27 interviews with stakeholders were conducted by the Project Team, with the purpose of identifying diversification opportunities that should be explored further as well as to identify potential partnerships for diversification. The stakeholders were grouped based on their background and expertise, and Project Team members were then assigned to groups so each member could learn from each interview, as well as build upon these conversations. Interview guides were created for each stakeholder group so questions could be tailored to the industry. The Project Team also used a phased approach for these interviews, starting with institutions, then industry representatives, moving onto smaller groups and finally local businesses. What we learned through these interviews was captured in a reporting template and shared with the County.

5.2.2 Phase 2: Project Visioning

The goal of this phase was to continue to explore economic diversification opportunities and to develop a vision for the Plan.

Stakeholder Engagement

Steering Committee Meeting #2

This meeting was held virtually, also in a workshop setting. The project team provided a project update and shared what we had learned so far from the stakeholder interviews. A Jamboard was created, and the Steering Committee built on the opportunities identified through the stakeholder interviews. The key messages for the project were also developed by the Project Team and shared with the Steering Committee. Finally, the engagement plans for the stakeholder workshop were shared with the Steering Committee, who agreed to the format and questions that would be asked.

Stakeholder Workshop

The purpose of this workshop was to discuss and identify economic diversification opportunities for further analysis by the Project Team. The Jamboard used in Steering Committee Meeting #2 was duplicated and built upon in virtual breakout rooms through the course of the workshop.



Table Talk Session

One table talk session was held virtually in September, lasting 1.5hrs. The virtual table talk is a method used to gather insight from current and prospective agritourism businesses in Leduc County regarding what agritourism development could look like in Leduc County. It is a casual conversation with the project team that attempts to answer the following questions:

- What does agritourism mean to you?
- How would you define agritourism in the context of Leduc County?
- What challenges and/or barriers need to be overcome in order for agritourism development to be pursued?
- What do you think the biggest opportunity for growing agritourism is in Leduc County?

Forty-two businesses were invited, with a total of 10 businesses attending and 13 businesses requesting to answer the questions by email.

Key Informant Interviews

Thirteen key informant interviews were conducted from September 22, 2020 to September 25, 2020. These included key individuals working at the local and provincial level including Leduc County, Alberta Association of Agricultural Societies, The Chamber, Explore Edmonton, NAIT, Open Farm Days, and the Government of Alberta.

Project Steering Committee Meeting #3

The Project Team met with the Project Steering Committee at the end of this phase to share the project vision that has been developed and what economic diversification opportunities have been identified. The Project Team asked the Project Steering Committee to provide direction regarding the economic diversification opportunities that should be further explored by the Project Team in Phase 3: Plan Preparation.

Presentation to Leduc County Council

The five economic diversification opportunities that were agreed to by the Steering Committee were presented to Council. Council provided the Project Team direction regarding the economic diversification opportunities that would be considered for further analysis.

5.2.3 Phase 3: Plan Preparation

Stakeholder Engagement

Project Steering Committee Meeting #4

A meeting was held with the Project Steering Committee to present the economic diversification opportunities identified by the team and the results of the subsequent economic analysis. The Project Team shared what was learned and provided the Steering Committee the opportunity to discuss these findings before the Plan was shared in draft for review and comment.



Leduc County Council Memo

A formal memo was prepared by the Project Team for distribution to the Leduc County Council. The purpose of this memo was to update Council on the economic diversification opportunities that were identified.

5.2.4 Phase 4: Plan Finalization

The Plan is the final report, and includes recommendations and implementations strategies for County Council and Administration to consider.

Stakeholder Engagement

Leduc County Council

In collaboration with the County's Project Manager, the Project Team presented the draft Plan to the Leduc County Council for consideration.



6.0 Evaluation

6.1 Stakeholder Engagement Evaluation

This Engagement Assessment and Summary includes the engagement process that was used for this project. Through the course of the project if a stakeholder identified that additional communication with the Project Team was needed, a representative from the Project Team reached out to the stakeholder to learn more. A debrief with Leduc County Administration is planned after the Council presentation to discuss the process that was used and to identify what worked, and what could be improved in future projects.





Stakeholder Engagement List

No.	Stakeholder	Stakeholder Role	Level of Engagement	Involvement	Objectives	Engagement Techniques	Communication Methods	Timeline
	Leduc County Council	Decision Maker	High	Will determine if the Rural West Economic Diversification Plan is acceptable to Leduc County.	To collaborate	Presentation Project Updates	Presentations Memos Monthly updates	On-going
	Project Steering Committee	Provides Recommendations	High	Will provide direction and recommendations regarding opportunities the project team will explore further and analyze.	To collaborate	Virtual Meetings In-person Meetings (if provincial and municipal rules permit)	Meetings Updates	On-going
1st Round of Interviews								
1	Olds College	Agriculture / Agriculture Technology / Cannabis Production	Medium	Could provide details about programs and course offerings including graduation numbers and expected employment percentages, as well as future plans for programs.	To consult	Interview	Video Chat / Phone Interview	Phase 1
2	University of Alberta	Agricultural, Life and Environmental Sciences	Medium	May provide an expert opinion on the ag sector potential, opportunities, and training. The U of A may also provide valuable input regarding the idea of the ag smart corridor for their input.	To consult	Interview	Video Chat / Phone Interview	Phase 1
3	Northern Alberta Institute of Technology	Petroleum Engineering / Value added food development	Medium	Could provide details about programs and course offerings including graduation numbers and expected employment percentages, as well as future plans for programs.	To consult	Interview	Video Chat / Phone Interview	Phase 1
4	University of Lethbridge – Ag Studies	Agricultural Studies Agricultural Biotechnology	Medium	Could provide details about programs and course offerings including graduation numbers and expected employment percentages, as well as future plans for programs.	To consult	Interview	Video Chat / Phone Interview	Phase 1
5	NorQuest	Cannabis and Hemp	Medium	Could provide details about programs and course offerings including graduation numbers and expected employment percentages, as well as future plans for programs.	To consult	Interview	Video Chat / Phone Interview	Phase 1
6	Leduc Regional Chamber of Commerce	Business	Medium	May be able to provide additional insight or data to assist Lonni in his analysis.	To consult	Interview	Video Chat / Phone Interview	Phase 1
7	Genesee Generating Station - Capital Power	Power Generation	Medium	Capital Power is proceeding with plans to build the world's first commercial scale production facility of carbon nanotubes.	To consult	Interview	Video Chat / Phone Interview	Phase 1
8	Westmoreland Mining LLC	Mining	Medium	Changes taking place in the energy business as a result of economic conditions, environmental regulation, shifts and disruptions among other companies and markets within the sector and new technologies, may create opportunities for new acquisitions and investments that are attractive. https://westmoreland.com/	To consult	Interview	Video Chat / Phone Interview	Phase 1
Organizations Representing Industries – 2nd Round of Interviews								
Transportation, Logistics and Distribution								
9	Edmonton International Airport	Future plans for EIA	Medium	Can provide details about the future plans for EIA. Also may be able to identify gaps in transportation, logistics, and distribution. Challenge is that EIA is not in close proximity to 'Area A'.	To consult	Interview	Video Chat / Phone Interview	Phase 1
10	Amazon	Fulfillment centre and distribution	Medium	Discuss rationale for moving into the region; plans for future growth.	To consult	Interview	Video Chat / Phone Interview	Phase 1
11	Rosenau Transport	Shipping Services Carrier	Medium	Largest Transportation facility in the region; motivation to build at the airport. Future plans.	To consult	Interview	Video Chat / Phone Interview	Phase 1
12	FFAF Cargo Logistics	Flying Fresh Air Freight	Medium	Prospects for freight forwarders; connections to the regional economy.	To consult	Interview	Video Chat / Phone Interview	Phase 1
13	Inkubate Packaging	Graphic design, carton printing, custom packaging	Medium	What do they see for business development in the County; where and what are the best opportunities.	To consult	Interview	Video Chat / Phone Interview	Phase 1
Agri-business								
14	Alberta Canola Producers Commission	Subject Matter Expert - Canola	Medium	May provide details about emerging trends in canola growing and opportunities in this agricultural sector and help us learn about the potential for growth in new canola products and marketing opportunities (i.e., terroir).	To consult	Interview	Video Chat / Phone Interview	Phase 1

No.	Stakeholder	Stakeholder Role	Level of Engagement	Involvement	Objectives	Engagement Techniques	Communication Methods	Timeline
15	Alberta Farm Fresh Producers Association	Supporting and growing a profitable and sustainable local farm direct marketing industry	Medium	Is dedicated to supporting the production of farm direct market vegetable crops, berry and fruit crops, bedding plants, perennials, herbs, flowers, meats, poultry, eggs, wines, meads, and other specialty items in Alberta. https://albertafarmfresh.com/about/about-affpa	To consult	Interview	Video Chat / Phone Interview	Phase 1
16	Alberta Wheat Commission	Subject Matter Expert – Wheat	Medium	To increase the long-term profitability of wheat and Alberta wheat producers through innovative research, market development, policy development, communications, and extension.	To consult	Interview	Video Chat / Phone Interview	Phase 1
17	Progressive Foods	Barley Growers and Processors	Medium	Working to create sustainable opportunities for barley growers and processors.	To consult	Interview	Video Chat / Phone Interview	Phase 1
18	Alberta Barley	Subject Matter Expert – Barley	Medium	To advance the interests of Alberta barley farmers through leadership and investment in innovation and development.	To consult	Interview	Video Chat / Phone Interview	Phase 1
19	Alberta Pulse Growers	Subject Matter Expert – Pulse	Medium	Based in Leduc, Alberta Pulse Growers Commission is a non-profit organization that supports over 6,000 Alberta farmers who grow pulses, including dried peas, beans, chickpeas, lentils, soybeans, and fava beans.	To consult	Interview	Video Chat / Phone Interview	Phase 1
20	Manitoba Canola Growers Association	3 rd largest canola producer in Canada- maximizing sustainable net incomes	Medium	Prepared research on canola terroir marketing.	To consult	To interview	Video Chat / Phone Interview	Phase 1
21	Plant Protein Alliance of Alberta	Subject Matter Expert – Protein Industries	Medium	They facilitate the development of a diverse, profitable, and sustainable plant-protein and plant-ingredient processing industry in Alberta. https://ppaa.ca/about-ppaa/	To consult	Interview	Video Chat / Phone Interview	Phase 1
22	Protein Innovations Canada	Subject Matter Expert – Protein Industries	Medium	Protein Industries Canada (PIC) is an industry-led, not-for-profit organization created to position Canada as a global source of high-quality plant protein and plant-based co-products. We are one of Canada's five innovation Superclusters.	To consult	Interview	Video Chat / Phone Interview	Phase 1
23	Alberta Rhodiola Rosea Growers Organization (ARRGO) – Thorsby	Subject Matter Expert – Rhodiola Rosea	Medium	The Alberta Rhodiola Rosea Growers Organization (ARRGO) is a new generation cooperative that provides its customers and member/growers with a single-stop support organization for the production and sale of Canadian-grown bulk Rhodiola rosea and high-quality herbal products based on Rhodiola rosea. Also speaks to circular economy (or similar) on-site.	To consult	Interview	Video Chat / Phone Interview	Phase 1
24	Natural Fibre Tech	Hemp Industry	Medium		To consult	Interview	Video Chat / Phone Interview	Phase 1
Tourism								
25	Alberta Tourism	Information	Medium	Promotes tourism to, and within Alberta.	To consult	Interview	Video Chat / Phone Interview	Phase 1
26	Canadian Energy Museum Formerly Leduc #1	Tourism	Medium	What is the future for Tourism in the County? How can the museum tie into West Leduc?	To consult	Interview	Video Chat / Phone Interview	Phase 1
Value Add								
27	Natural Products Canada	Delivers a suite of strategic programs and services to help promising Canadian natural products achieve their full growth potential.	Medium		To consult	Interview	Video Chat / Phone Interview	Phase 1
28	PEI Bio Alliance	Subject Matter Expert: Bioscience sector	Medium	Responsible for developing and coordinating the strategy for the growth of the Prince Edward Island Bioscience Cluster. Since 2005, the Bio Alliance has facilitated the work of businesses, academic and research institutions, and federal and provincial government agencies in establishing the bioscience sector as a key pillar in the economic foundation of the province and Atlantic Canada.	To consult	Interview	Video Chat / Phone Interview	Phase 1

No.	Stakeholder	Stakeholder Role	Level of Engagement	Involvement	Objectives	Engagement Techniques	Communication Methods	Timeline
Emerging Industries								
29	Energy Research Park	Biotechnology, nanotechnology, clean energy, and oil and gas support	Medium	The Edmonton Research Park (ERP) is home to more than 1,500 members at 55+ companies working in diverse fields, from biotechnology to energy. Start-ups and growing companies can access a variety of workspaces; on-site programs, access to soft-landing programs; personalized referrals to support and funding agencies; and facilitated access and collaboration with local, national and international communities of accelerators, science parks, and incubators.	To consult	Interview	Video Chat / Phone Interview	Phase 1
30	Canadian Geothermal Energy Association (CanGEA)	Geothermal Energy	Medium	Mission: to 'Accelerate Canadian exploration and development of geothermal resources in order to provide secure, clean, and sustainable energy.'	To consult	Interview	Video Chat / Phone Interview	Phase 1
31	Energy Futures Labs	Sustainable energy systems	Medium	Sustainable energy futures and emerging trends and industries. Consider that they may be able to provide information on the hydrogen economy.	To consult	Interview	Video Chat / Phone Interview	Phase 1
32	CanmetENERGY (Devon)	Development of cleaner fossil fuels and related environmental technologies	Low	Focuses on the development of cleaner fossil fuels and related environmental technologies with a focus on oil sands and heavy oil.	To consult	Interview	Video Chat / Phone Interview	Phase 1
Economic Development								
33	Calgary Economic Development	Alberta opportunities	Medium	Calgary Economic Development works with business, government, and community partners to position Calgary as the location of choice for the purpose of attracting business investment, fostering trade and growing Calgary's workforce.	To consult	Interview	Video Chat / Phone Interview	Phase 1
34	Central Alberta Economic Partnership	Central Alberta Regional Knowledge	Medium	To empower our communities to advance sustainable regional economic development.	To consult	Interview	Video Chat / Phone Interview	Phase 1
35	Brazeau County	Economic Development Officer	Medium	Can share more about their economic development initiatives and we can discuss opportunities for alignment.	To consult	Interview	Video Chat / Phone Interview	Phase 1
36	Parkland County	Director of Economic Development	Medium	Can share more about their economic development initiatives and we can discuss opportunities for alignment.	To consult	Interview	Video Chat / Phone Interview	Phase 1
37	Edmonton Global	Our work promotes the region globally and we're focused on attracting and retaining business investment and trade right here	Medium	Key sectors: Life sciences, manufacturing, food and agriculture, energy They also help with emerging industries: Agri-tech, alternative energy, artificial intelligence, autonomous vehicles, cannabis and hemp, clean technology, nanotechnology, videogames and digital media.	To consult	Interview ***May require a combined call / workshop with several representatives from different sectors they represent – Richard to ask Malcom and discuss with the team the best way to engage this group.	Video Chat / Phone Interview	Phase 1
38	Edmonton Economic Development Corporation (EEDC)	Assists in attracting business to the region	Medium	Includes: Innovate Edmonton, Edmonton Tourism, Edmonton Convention Centre, Edmonton EXPO Centre, EEDC Corporate Services Division	To consult	Interview	Video Chat / Phone Interview	Phase 1
39	Invest Alberta	Invest Alberta works with local and international investment attraction partners and stakeholders to bring investment to Alberta	Medium	We support partners with business relationships, business contacts, market intelligence, and information on provincial programs. https://investalberta.ca/about-invest-alberta/	To consult	Interview	Video Chat / Phone Interview	Phase 1
Communities and Area Councillors – 3rd Round of Interviews								
40	Leduc County – Area Councillors (3 of them)	Represent their constituents in the 'Agricultural Area A'	Medium	Will provide ideas for what residents may or may not want to see in this region.	To consult	Interview	Video Chat / Phone Interview	Phase 1 and on-going
41	Village of Warburg	Represent their constituents and their communities, can share economic development initiatives	Medium	Can share more about their economic development initiatives and we can discuss opportunities for alignment. Will provide ideas for what residents may or may not want to see in this region.	To consult	Interview	Video Chat / Phone Interview	Phase 1
42	Town of Thorsby	Represent their constituents and their communities, can share economic development initiatives	Medium	Can share more about their economic development initiatives and we can discuss opportunities for alignment. Will provide ideas for what residents may or may not want to see in this region.	To consult	Interview	Video Chat / Phone Interview	Phase 1

No.	Stakeholder	Stakeholder Role	Level of Engagement	Involvement	Objectives	Engagement Techniques	Communication Methods	Timeline
				Close to Nisku – challenge to compete with business park.				
43	Town of Devon	Represent their constituents and their communities, can share economic development initiatives	Medium	Can share more about their economic development initiatives and we can discuss opportunities for alignment. Will provide ideas for what residents may or may not want to see in this region.	To consult	Interview	Video Chat / Phone Interview	Phase 1
44	Town of Calmar	Represent their constituents and community	Medium	Can share more about their economic development initiatives and we can discuss opportunities for alignment. Can provide resident viewpoints.	To consult	Interview	Video Chat / Phone Interview	Phase 1
Businesses 4th Round of Interviews								
45	Botaneco	Novel plant-based separation and purification technology for food, feed, and personal care	Medium	Maintains a low carbon footprint and enables the recovery of high quality oleosomes and proteins in their natural state.	To consult	Interview	Video Chat / Phone Interview	Phase 1
46	Bioneutra	Their product line provides ingredients for various food systems, contributing to advanced human nutrition and wellness in functional and healthy foods.	Medium	To learn more about ingredients and products that could help their customers.	To consult	Interview	Video Chat / Phone Interview	Phase 1
Additional Stakeholders Identified during interviews								
47	Professor		Low		To consult	Interview	Video Chat / Phone Interview	Phase 1
48	Professor	Forge Hydro-carbons	Low	Likely a good source of info on barriers and opportunities available in regions for academics to get their ideas off the ground.	To consult	Interview	Video Chat / Phone Interview	Phase 1
49	Individual		Low	Set up the OLDs corridor.	To consult	Interview	Video Chat / Phone Interview	Phase 1
50	Individual		Medium	A driver of a new terroir canola oil processor, Pleasant Valley Oil Mills, east of Red Deer.	To consult	Interview	Video Chat / Phone Interview	Phase 1
51	Renewables Capital Power		Medium		To consult	Interview	Video Chat / Phone Interview	Phase 1
52	EAVOR			Geothermal	To consult	Interview	Video Chat / Phone Interview	Phase 1

Appendix E Additional Opportunities to Monitor

RURAL WEST ECONOMIC DIVERSIFICATION
PLAN



LEDUC
COUNTY



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1.0 Introduction

The ranking system identified in Section 4.0 of the Plan was used to produce a list of 12 promising opportunities for the region. To rank the 12 opportunities each was categorized by sub sector, assessed and prioritized. The list was then further reduced to five opportunities that were identified for further analysis, which was supported by Leduc County Council.

The following seven opportunities were not selected for inclusion in the Plan but were identified by the Project Team for continued monitoring and potential diversification opportunities in the County.

1.1 Mining and Quarrying

Leduc County is rich in mineral resources, and increased mining and mineral extraction could have a significant impact on the County in terms of job creation and economic impact. However, new development in this sector was viewed as being contingent on increased rail access. Therefore, our approach was to assess the potential for a rail extension in the western region of Leduc County as a driver of economic development in a number of different sectors. The rail extension evaluation is included in Section 5.0 Opportunity Analysis of the Plan.

1.2 Power Generation

Leduc County Council recognizes the importance of electrical power generation in the County, particularly for the Rural West. Power generation is acknowledged to be an important enabler of strategically valuable opportunities. The Leduc County Municipal Development Plan Policy 5.3.0.2 permits, "...energy related uses and new technology, including green technology, to provide electricity." at Genesee.

Through two interviews, Capital Power was clear that they would be open to considering new power generation opportunities. Among the apparent advantages of the Genesee site is its remote location from population centres and robust connections to transportation, natural gas, and electrical networks. Grid tie-in capital investments for new power generation can be significant and would be mitigated at this site.

While the top five opportunities were judged to have more near term impact, continued power production at Genesee may offer strategic opportunities in the future for chemical production due to availability of local hydrocarbon resources. Greenhouse development may qualify for government incentives programs as this opportunity is important to the circular economy, and could turn the waste heat by-product of burning fossil fuels into heat for local greenhouse food production.

1.3 Hydrogen Production

There is renewed international interest in hydrogen as a green energy source. Locally, the Alberta Industrial Heartland Hydrogen Task Force was launched earlier this year to develop a framework to implement a 'hydrogen economy' in the Heartland. Their goal is to 'advance a zero-based emission fuel economy in Alberta's Industrial Heartland.' (CNW news release: <https://www.newswire.ca/news-releases/new-task-force-to-create-framework-to-advance-hydrogen-economy-in-alberta-s-industrial-heartland-825718319.html> May 14, 2020) Hydrogen production will likely be centered in the Heartland, as implicitly recognized by the area members and proponents. Low costs and skilled labour are important elements of the Heartland's highly evolved petro-chemical production ecosystems.

The possible advancement of the hydrogen economy also presents an excellent opportunity for the Leduc County manufacturing sector to diversify into other areas of the energy sector that are disassociated from oil prices.

Manufacturing infrastructure is in place but shifting to hydrogen related manufacturing and fabrication will likely require re-tooling and re-training for existing businesses. There may be grants and incentives to support these businesses.

In the longer term, if Leduc County and the local manufacturing sector can position themselves as hydrogen industry experts, they can create the opportunity to export that expertise nationally and internationally.

Finally, 'blue hydrogen' production from natural gas may stimulate demand for the manufacturing of production equipment. With proximity to the Heartland and current energy industry equipment production capacity, the Nisku Industrial Park steel fabrication operations will be well positioned to contribute to this new economy.

1.4 Carbon Nanotubes

In December 2019, Capital Power announced carbon nanotube (CNT) production was scheduled to start in the first half of 2021 generating 11-20 new jobs. This new investment ranks well for economic diversification and also qualitatively for using carbon capture to create new products. However, while CNT production testing is proceeding successfully at the Shepard Energy Centre in Calgary, and end user markets are being established, other opportunities were considered to rank more highly. Furthermore, this opportunity is being successfully advanced by Capital Power.¹

¹ Capital Power, 2019



The ultimate value of this opportunity to Leduc County may be in the access to CNTs to be used in existing product manufacturing in the Nisku Industrial Park and new product fabrication.

CNTs will enhance the strength, lessen weight, and reduce carbon footprints of products. For example, a strategic linkage for Capital Power might include testing and building heavy precast concrete products reinforced by carbon nanotubes at Genesee. Rail service would provide a competitive advantage to locate here.

1.5 Food Hub

The QEII highway transportation corridor through the County provides a significant traffic volume and opportunity. If highway access and land use challenges could be resolved to enable more sales of agricultural products produced in Leduc County. The location of the airport, highway, and rail transportation makes Leduc County a strategic location for a food hub for business to business (B2B) product marketing and sales.

The arrival of the global pandemic causing shutdowns and food supply chain instability starting in March 2020. The result was increased consumer interest in purchasing locally produced foods. This has led to many small and medium sized producers reporting record sales, and governments have been moving to incentivise and strengthen the local food economy. A food hub is a B2B market for local food, particularly for small and medium-sized producers that connects local producers with nearby and further away markets via Leduc County's transportation corridor. A food hub in Leduc County should target small and medium sized producers as it would provide them with the maximum advantage, compared to large producers who typically have established and more stable sales networks. It would provide small and medium sized producers in the County the opportunity to increase the stability of their sales by providing a reliable outlet for products. It would also allow producers to focus more effort on growing or raising their products and less effort on marketing.

A reliable food hub that reduces marketing efforts for producers may also attract more agricultural business to the County, particularly if the food hub is positioned to supply products all across Alberta. This would be a unique development in Alberta, and many in the food community have expressed interest in this type of development. Further strengthening the opportunity for a food hub is the location of the County. As mentioned, the County is in an ideal transportation corridor, and is close to one of Alberta's largest City centers, providing access to the other major population centers in the province.

If the County wishes to pursue the option of a food Hub it is recommended that efforts be made to engage with the Northlands as they endeavor to create a first step to a food hub - a virtual platform to connect food supply chain members. Further, a connection could be made with the City of Edmonton and the Edmonton Food Council as a report has been written in the past on this need, and more recently



the Edmonton Food Council created a subcommittee to discuss this opportunity and produced a report to inform next steps.

1.6 Warehousing and Storage

A shortage of bonded warehouses and cold storage capacity gaps in this important part of the supply chain were identified by sector stakeholders who participated in the engagement process. These challenges were considered; however, ultimately opportunities with more of a Rural West focus were selected.

The entire warehouse market is vital to the economy of Leduc County. The entry of the Amazon fulfillment centre may well stimulate more interest in this sector. Issues to monitor include current warehouse space inventory, including new standards for ceiling height, yard space for trailers, and docking options, which are increasingly in demand by operators seeking competitive efficiencies. With significant Federal and Provincial Government financing announced, it is reasonable to expect value-add food production to grow. The associated inputs and by-products may well create demand for more storage space for this sector, providing opportunities to enhance Rural West linkages.

1.7 Fibre Mills

Hemp and flax processing are in early stages of development in Central Alberta. Recent challenges have included buyer market stability and regulatory challenges related to THC content limits on hemp fibre. Eventually the legalization of cannabis and stabilized production levels will have a positive impact. Portable decorticators are providing flexibility for producers and fibre markets; however, there are also challenges. Hemp producers have been disappointed in the past when buyer commitments have not materialized. The value chain will be more reliable when a permanent processing operation is established. There are circular economy opportunities in the use of plant fibre to strengthen products in packaging.

However, the challenges in this sector also include venture financing and recruiting management talent. These issues, combined with the current scale of activity, suggest that the County should monitor this opportunity for future consideration.

References

Capital Power (2019). Capital Power announces slate of strategic investments. Media Release. Retrieved from: https://www.capitalpower.com/media/media_releases/capital-power-announces-slate-of-strategic-investments/





LEDUC
COUNTY



Report
**Agritourism Development
Strategy**

This strategy report compiles research relevant to agritourism development in Leduc County. It explores agritourism as a growth opportunity for Leduc County and makes recommendations for future action. Data for the report was collected through both primary and secondary research methods, including a background document review, secondary research, market research, key informant and stakeholder engagement, and a solutions scan.

This report is divided into seven parts:

- Part 1 – Background and Context
- Part 2 – Agritourism and Leduc County
- Part 3 – Trends
- Part 4 – The Visitor
- Part 5 – Finding the Visitor
- Part 6 – Growing Agritourism in Leduc County
- Part 7 – Recommendations and Conclusion

Findings in this report will be used to augment the Leduc County Rural West Economic Diversification Plan.

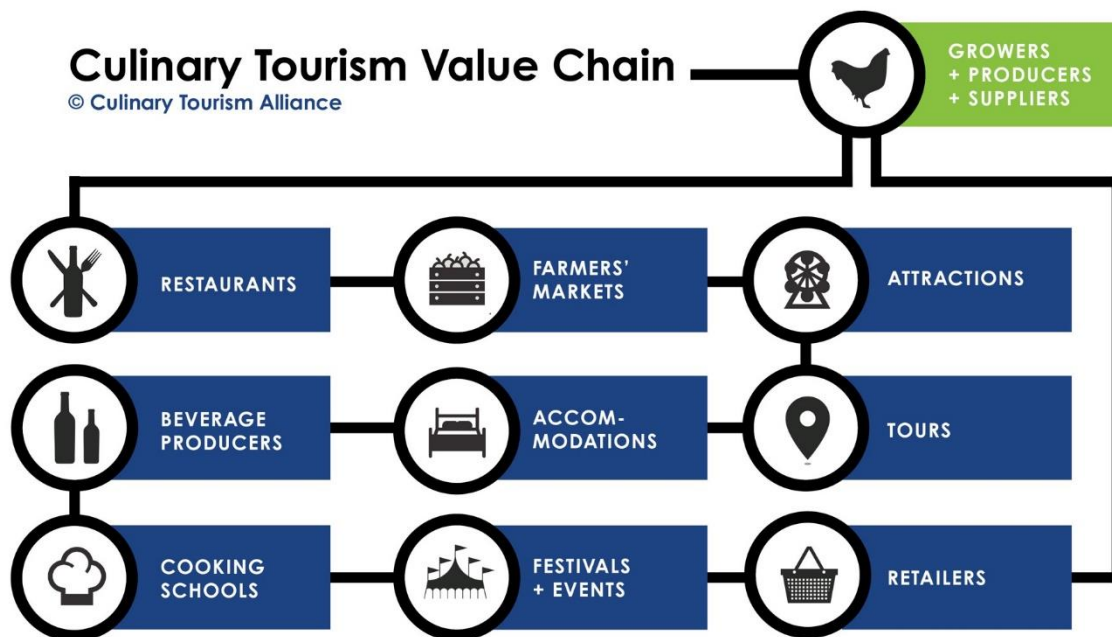


This report was prepared by a select team at the Culinary Tourism Alliance, including Caroline Morrow, James Arteaga, Trevor Jonas Benson, and Caroline Millar. Special thanks go to the project team at Leduc County, including Mark Gallant, Bryanna Kumpula-Yung, and Sharon Faye.

PART 1: BACKGROUND AND CONTEXT

CULINARY TOURISM

Culinary tourism includes any tourism experience where a person interacts with food & drink that reflects the history, heritage, and culture of a place. There are countless activities that can be associated with culinary tourism, from harvesting berries at a u-pick to practicing cooking techniques to learning about fishing cultures. Other types of alternative tourism, such as rural tourism, eco-tourism, cultural tourism, and outdoor tourism, are all well positioned to be connected to culinary tourism.



Food & drink products and experiences can be used by a diversity of tourism businesses, to capitalize on the growing popularity of culinary tourism. In fact, any tourism-related business that includes a taste of place or culinary experience as part of their offer is considered to be part of the culinary tourism value chain.

AGRITOURISM IS CULINARY TOURISM

Although agritourism looks different around the world, one commonality is that it always brings together the tourism and agricultural sectors. There is much debate around how to define the term and there are many competing definitions. The types of activities that qualify as agritourism depend on the regional context. For example, in Europe, agritourism is closely tied to working farms and farm-based accommodations, while in North America, agritourism often focusses on domestic markets and building local awareness around the food system. Agritourism in Asia, on the other hand, often invites visitors to participate in farming-related activities and to celebrate the harvest. Similarly, individual businesses take approach agritourism in different ways. Therefore, when deciding what definition of agritourism to use, it is important to be genuine, featuring the people, places, and processes that make local agriculture unique.

This diversity in understandings of agritourism is also seen within the province of Alberta, where the Department of Culture and Tourism unofficially defines “ag-tourism” as “nearly any activity in which a visitor to the farm or other agricultural setting contemplates the farm landscape or participates in an agricultural process for recreation or leisure purposes”¹, while the Department of Agriculture and Forestry define the term as “the marriage between

two of Alberta's top industries – agriculture and tourism...present[ing] the consumer or tourist with an opportunity to engage in a direct exchange of values between themselves and the farm community – whether it is at a farmers' market, on a farm tour, at an agriculture festival or fair, or at a country vacation farm or market gardens.”² The Department of Agriculture and Forestry also provides some examples of “ag-based attractions, events and services” including: attractions, heritage farms and ranches, farm recreation and visits, ag industry tours, events, festivals, fairs, and rodeos.³

Additionally, the Government of Alberta defines “agriculture tourism” as presenting the opportunity for people from the city to experience rural Alberta.⁴ The province views agritourism as an effective way to inform young people about where their food comes from and the important work people do at each stage of food production. As a result of this, the province has supported the Classroom Agriculture Program for K-12 students, a presentation of where food comes from in Alberta.⁵ The province has also identified “educational agriculture tourism” as an opportunity for teachers, “ag tourism operators”, and producers to collaborate in offering educational content through first-hand rural experiences.⁶ To assist, the province developed guidance materials for teachers and farmers interested in making educational agritourism a part of their programs.⁷

Overall, some common characteristics of agritourism include the ability to increase the breadth and diversity of the pool of tourism stakeholders, add tools for rural economic development, diversify revenue streams, and connect locals, visitors, and producers. Although agritourism is similar to culinary tourism, they are not the same. An agritourism experience, for example, does not need to incorporate a taste element as part of the offering. Many experiences, however, can be categorized as both a culinary tourism and agritourism experience.

Food & drink are innately linked to the history, heritage, cultures, and geography of place. All of these aspects lead back to the people of the place, how their food culture evolved to shape their landscape, traditions, and livelihoods. This relationship is called “foodways”. **Foodways address the who, what, where, when, why, and how around food becoming part of a community.** For example, the migration and settlement stories of different peoples in the area, such as Leduc County's Eastern European heritage, and how this influences the food and food traditions of the community. Knowing the long history of dairy farming in Leduc County and its transition to increasingly diverse farming types and its connection to today's dairy farmers could provide insight into the long history dairy farming families have to the area. Knowing the agricultural context of local food production is important to consider when mapping out local foodways.

Even the economic context, such as the discovery of oil in Leduc County, has an influence on population patterns which then affect local foodways. These local stories behind the food & drink of the community add value to the visitor experience, and help visitors feel more connected to the destination. As such, successful agritourism businesses put foodways at the centre of experience development.

When it comes to defining agritourism in Leduc County, it is key to come up with a broader definition that allows for a wide range of businesses, and therefore a larger number of marketable tourism assets, to be considered as providers. This means including all places of where food production takes place and/or where food experiences can be had that connect visitors to food producing peoples and processes. Considering that the local food system is not fixed to jurisdictional boundaries, it is also important not to limit agritourism to a set geographical place. Visitors do not pay attention to such boundaries, and any efforts to bridge urban-rural connections is worthwhile. This includes growing collaborations between Leduc County farms and agritourism stakeholders in adjacent municipalities.

What we heard in relation to defining agritourism...

When asked about the definition of agritourism, the following characteristics were mentioned by key informants:

- **Education:** it has an educational component to build awareness of where food comes from and how food products are made in a specific place. This can include educational programming, school trips, outreach, and advocacy work.
- **Rural-urban connections:** there is a connection between the farms and restaurants, farmers and chefs, and food production and food consumption through partnerships featuring local products. There are also cross-promotion opportunities.
- **Attracting people:** it is a tool to build relationships in the community, attract visitors and locals to the area, and bring economic growth.
- **Connection to the land:** it is a way to share the story of the land and the connection between people, food, and place.
- **Producing local food** – it focusses on sharing the stories behind local food production in the area.
- **Diverse frequency** – it can be a full-time endeavour, a part-time hobby, or a onetime event.
- **Local/regional visitors** – geared towards day-trippers and local or regional tourism.

Most common examples of agritourism activities provided: farmers' markets (n=5)¹; on-farm sales (n=5); corn mazes (n=3); farm tours (n=3); meals on a farm (n=3); rodeos (n=2); farm events (n=2); distillery tours (n=2); u-picks (n=2)

When industry members were asked to define agritourism, there was no consensus as to what the term meant in Leduc County; however, similar concepts to the ones mentioned by key informants emerged including: **education, producing local food, connection to the land and rural life, and connection of agriculture to culture.**

¹ n corresponds to the number of responses

PART 2: AGRITOURISM AND LEDUC COUNTY

GEOGRAPHY

Leduc County, Alberta is located approximately 30 minutes south of Edmonton, and spans 105 km east-to-west and 32 km north-to-south.⁸ It is bordered by Parkland County, Brazeau County, Wetaskiwin County, Camrose County, Beaver County, and Strathcona County.⁹

Leduc County is home to seven hamlets, including Buford, Kavanagh, Looma, New Sarepta, Rolly View, Sunnybrook, and Telfordville, and three localities: Glen Park, Michigan, and St. Francis.¹⁰ Within its borders, there are also six self-governing municipalities, including City of Beaumont, City of Leduc, Town of Calmar, Town of Devon, Town of Thorsby, and the Village of Warburg.¹¹ There are three summer villages governed by their own elected officials, including Golden Day, Itaska Beach, and Sundance Beach.¹² Leduc County is also home to Edmonton International Airport, Nisku Business Park, and the Genesee Generation Station.¹³ These are all important because the geography of a place has a significant influence on the foods that are produced, processed, prepared, consumed, and shared. Put differently, the diversity of cities, towns, villages, and summer villages found within Leduc County may provide some opportunities to leverage the unique histories and cultures that each locality has developed over the years in the development of agritourism.

DEMOGRAPHICS

- Although there are no Indigenous communities within the borders of Leduc County, with the closest First Nation community to Leduc County is Enoch Cree Nation, the area is located on the traditional territories of the peoples of Treaty 6, which covers central Alberta and Saskatchewan.¹⁴ This means, the land on which Leduc County is located is the homeland of the Metis Nation of Alberta, whose population accounts for 21.4% of all Metis people in Canada.¹⁵ There are also approximately 410 Métis, 185 First Nations, and 10 Inuk peoples residing in Leduc County.¹⁶
- According to the 2016 Census, the population of the county is 13,172 people, and this includes adjustments for 8,260 hectares of land annexed to the City of Edmonton from Leduc County in 2019.¹⁷ Approximately 88% of the people in Leduc County identify as having European origins.¹⁸ Of the 88%, 52% have origins from the British Isles (England, Scotland, Ireland), 51% from Western Europe (German, Dutch), 33% from Eastern Europe (Ukrainian, Polish), and 13% from North Europe (Norwegian, Swedish, Danish).¹⁹ There are also 320 visible minorities living in the Leduc County, with the largest population being from South Asia, followed by the Philippines and Latin American.²⁰

Understanding the diversity of peoples in the community can identify the unique context of the place and the unique opportunities present for agritourism development as a result of the diverse histories and cultures connected to food.

LOCAL AGRICULTURE

As of 2016, over 50% of Leduc County's farm operators were "over 55", with "35-54" being the second largest group, and "under 35" being the smallest.²¹ A changing demographic may indicate an opportunity to leverage agritourism as a driver of youth retention in a farming community. Additionally, understanding the general trend of farm sizes can indicate the level of opportunity available since agritourism often takes place on smaller farms.

Between 1996 and 2016, a number of significant changes were observed in Leduc County:

- **A decrease of 71% in farm operators under 35 from 390 to 115 operators.**²²
- A decrease of 57% in farm operators 35-54 from 1,305 to 560 operators.²³
- An increase of 14% in farm operators over 55 from 805 to 915 operators.²⁴

- A decrease of 36% in the total number of farms from 1,703 to 1,088 farms.²⁵
- An increase of 47% in the average farm size from 348 acres to 511 acres.²⁶
- **A decrease of 36% in the number of farms with less than 240 acres from 894 to 575 farms.**²⁷
- A decrease of 46% in the number of farms with 240-759 acres from 613 to 330 farms.²⁸
- A decrease of 42% in the number of farms with 760-1,119 acres from 118 to 69 farms.²⁹
- An increase of 46% in the number of farms with over 1,120 acres from 78 to 114 farms.³⁰

Leduc County has a variety of farm types including: oilseed and grain farming; cattle farming (including feedlots); wheat farming; greenhouse, nursery, and floriculture production; farms with fruits, berries, and nuts; dairy production; sheep and goat farming; poultry and egg production; hog farming; other crop farming; and other animal production. The breadth and diversity of farm types in Leduc County points to opportunities to develop agritourism experiences that are specific to unique industries, such as floriculture production, as well as partnerships between different farms.

The following is a breakdown of common farm types in Leduc County as of 2016:

- Oilseed and grain farming (349 farms)³¹
- Cattle farming (incl. feedlots) (254 farms)³²
- Other crop farming (213 farms)³³
- Other animal production (163 farms)³⁴
- Wheat farming (85 farms)³⁵
- Dairy production (38 farms)³⁶
- Greenhouse, nursery, floriculture production (35 farms)³⁷
- Farms with fruits, berries, nuts (15 farms)³⁸
- Sheep and goat farming (11 farms)³⁹
- Poultry and egg production (9 farms)⁴⁰
- Hog farming (2 farms)⁴¹

Between 2001 and 2016, a number of important changes were observed in Leduc County:

- A decrease in the number of farms in dairy production; cattle farming (including feedlots); hog farming; poultry and egg production; farm with fruits, berries, and nuts; sheep and goat farming; and other animal production.⁴²
- An increase of 130% in the number of farms farming wheat from 37 to 85 farms.⁴³
- An increase of 65% in the number of farms farming oilseed and grain from 212 to 349 farms.⁴⁴
- An increase of 40% in the number of farms farming other crops from 152 to 213 farms.⁴⁵
- **An increase of 21% in the number of farms with greenhouse, nursery, and floriculture production from 29 to 35 farms.**⁴⁶

The diversity of crop acreage in Leduc County includes wheat, canola, alfalfa, barley, dry field peas, hay, oats, and mixed grains, as well as 585 acres of nursery production, 102 acres of fruits, berries, and nuts, and 134,836 square feet of greenhouse area. Additionally, the livestock inventory of Leduc County includes dairy cows, beef cows, cattle and calves, sheep, horses/ponies, goats, bison, and colonies of bees. The largest crop acreages in the county are wheat, canola, alfalfa, and barley, while the largest livestock inventory are poultry, cattle and calves, and beef cows. Similar to knowing the farm types in a community, knowing the general trend of farming activities can provide insights into which products may present unique opportunities for agritourism either because of their increasing presence, such as fruits, berries, and nut farming, or because of their slow decline despite their significance to the food history of the community, such as dairy farming.

Between 1996 and 2016, a number of significant changes were observed in Leduc County agriculture:

- A decrease in oats, barley, alfalfa, and hay acreage.⁴⁷
- A decrease in greenhouse area in square feet.⁴⁸
- **A decrease in dairy cows, beef cows, cattle and calves, horses/ponies, bison, and colonies of bees.**⁴⁹

- An increase of 633% in dry field peas acreage from 2,634 to 19,304 acres.⁵⁰
- An increase of 126% in canola acreage from 36,049 to 81,322 acres.⁵¹
- An increase of 79% in nursery products from 327 to 585 acres.⁵²
- An increase of 54% in wheat acreage from 53,985 to 83,242 acres.⁵³
- An increase of 46% in mixed grain acreage from 3,172 to 4,631 acres.⁵⁴
- An increase of 42% in goat inventory from 594 to 844.⁵⁵
- An increase of 36% in sheep inventory from 2,497 to 3,386.⁵⁶
- **An increase of 19% in fruits, berries, and nut acreage from 86 to 102 acres.**⁵⁷
- An increase of 6% in poultry inventory from 225,756 to 238,316.⁵⁸

AGRITOURISM ATTRACTIONS

Leduc County is home to a variety of unique agritourism experiences, ranging from farm-to-fork dinners to u-pick operations. The Leduc and Wetaskiwin Regional Chamber of Commerce, in partnership with Leduc County, the City of Leduc, the Town of Devon and the Town of Calmar, manage the Regional Visitor Information Centre as well as a platform called Discover Leduc Region. Discover Leduc Region positions itself as “the collective voice of tourism, dedicated to regional promotion around Leduc, and [it] is committed to connecting visitors and locals alike to discover the Leduc Region.”⁵⁹

Discover Leduc Region lists the following agritourism experiences in Leduc County:

- **Black Pine Pastures:** “Experience a family farm that wants you to feel good about where your food comes from. Black Pine Pastures is a small, diverse farm that specializes in raising grass & grain fed lamb, pastured chicken, turkey, and Berkshire pork.”⁶⁰
- **The Bloom ‘n Bucket:** “Experience a wide variety of seasonal plants and flowers for purchase in two different greenhouses.”⁶¹
- **Diamond B Ranch:** “A professional, insured provider of horse-drawn sleigh and carriage rides. Experience a family-owned business based out of Thorsby, AB that caters to weddings, municipal and corporate events, private functions, and more.”⁶²
- **East Gate Farms:** “Experience a full farm experience complete with flowers, eggs, and lambs.”⁶³
- **Farm Fresh Florals:** “Experience the Leduc Region’s premier U-Pick Flower Garden and Farm.”⁶⁴
- **Good Note Community Farm:** “Experience a family-owned and operated farm that strives to connect people to food, to each other, and to the land. Good Note Community Farm focuses on food production, regenerative agriculture, and offers cooking and basketry workshops.”⁶⁵
- **Gruger Family Fungi:** “A locally grown, hemp-based, vertical mushroom farm unique to the Leduc Region. Experience a family business committed to delivering diverse, freshly grown, and ethically cultivated mushrooms from their farm to your table.”⁶⁶
- **Hahn Family Farm:** “A family-owned agri-business passionate about supporting their community. Hahn Family Farm believes in the value farming adds to their family’s lives and has been supplying the surrounding area with fresh broiler chickens for over 20 years.”⁶⁷
- **Haywire Farms:** “a small town-certified organic family farm.”⁶⁸
- **Sunnybrook Hill Orchard:** “Experience a U-Pick cherry orchard! ...Cherry pie, ice cream, & beverages are also available for purchase – enjoy these tasty treats as you gaze out over the orchard!”⁶⁹
- **The Old Red Barn:** “Opened in 2017 with a simple vision – for all consumers to trust and prefer Canadian made food products. Delight your taste-buds and experience one of their farm-to-table events or select them as your venue of choice for your next celebratory event.”⁷⁰

What we heard about agritourism in Leduc County...

When asked about the main elements that make agritourism special in Leduc County, the following were mentioned by industry members:

- A real working farm that allows visitors to experience how farmers make food.
- People are interested where their food comes from, what goes into their food.
- Food production is special, especially for visitors who aren't involved in it every day.
- People spending time to learn more from producers.
- Connecting people to food; also connecting the aspect to rural life and nature that is intrinsically connected to agriculture.
- Taking that tourism conversation and show how agriculture is related to culture.
- Examples of agritourism activities in Leduc County: farmers markets; events - day events or partial-day events (e.g. Open Farm Days); u-picks; wedding venues; some culinary pieces tied in; farm tours (e.g. tasting the product, and learning to make something like butter from milk); workshops, skills courses; trail rides; farm product sales; on-farm restaurant; dude ranch farm stay; cut-your-own Christmas tree.
- Examples of agritourism activities not related to food: looking at llamas; mazes; flower shops (and flower u-picks on farms).

It is worth noting that Rig Hand Craft Distillery, which is not listed as an agritourism experience but instead listed as a food & drink experience, is a grain-to-glass distillery offering locally sourced and distributed vodka, rum, whiskey, gin, moonshine, and coffee cream liquor.⁷¹ Discover Leduc Region also lists other agritourism experiences that are outside its boundaries but within the Leduc Region:

- **The Amazing Corn Maze:** "Offers visitors the chance to get lost, get found, and more! Experience farm animals, challenge family and friends to a game of horseshoes, or bring along a picnic lunch and enjoy sitting around a campfire with marshmallows, hot dogs, and popcorn."⁷²
- **Brix and Berries:** "Calling all Saskatoon Berry lovers! Experience a top-quality U-Pick right in the Leduc Region."⁷³
- **The Devon Lions Farmers Market:** "Called a few different venues home over the last 26 years before settling in at the Devon Community Center. Experience indoor and outdoor spaces for baked goods, fresh produce, handmade crafts, and more! Visit us every Thursday from 2-5 PM."⁷⁴
- **Leduc Farmers Market:** "Leduc Farmers Market is dedicated to providing Leduc and surrounding area with locally produced goods and fostering a sense of community. Experience a great selection of vendors selling everything from fresh produce and meat, to candles and jewelry. Our vendor list changes each week."⁷⁵
- **Leduc Heritage Grain Elevator:** "Built in 1978 and operational up until 2000, this is one of the last single composite wood crib elevators in Alberta. After receiving Registered Historic Site status in 2003, the Leduc Heritage Grain Elevator has been operating as a museum. Experiencing the Interpretive Centre is a Leduc Region must-see, seeing as the elevator is open for tours year round."⁷⁶

What we heard about assets to leverage in Leduc County...

Some assets or unique selling points mentioned by key informants that could be leveraged in attracting visitors to partake in agritourism experiences include the following:

- North shore of pigeon lake (cottage area)
- Beaver Hills UNESCO Biosphere Reserve
- Leduc Grain Elevator
- Leduc West Antique Society
- Huckleberry Farm
- Rig Hand Distillery
- Bar Estate Winery (although not in Leduc County, this asset was mentioned multiple times)

When asking industry members to share something we wouldn't know about agriculture and Leduc County, the following things were mentioned:

- Rickson Berries Glenpark Road has a u-pick
- Flower farms around the county are great to visit
- Tin forest farm – educational program (12-20 kids come visit) they get their hands dirty and learn
- Have people come visit to interact w nature, so much potential for agritourism
- National airport
- Lakes: Saunders Lake, Wizard Lake, there is also a paddler wheeler river boat, attract people to use lake and have agritourism experiences around it
- Wonderful county with a great urban influence

PART 3: TRENDS

Interest in responsible consumption is growing and people are keener than ever to better understand where their food comes from. This shift is becoming even more important in the context of the COVID-19 pandemic, which has laid bare shortcomings in our food systems. Interest in agriculture and support for local businesses is also growing amongst consumers, along with a desire to feel connected to place. Even before the pandemic, there was a shift in visitor demand towards leisure in the country, also known as soft adventures.⁷⁷ Again, this trend is being strengthened by current circumstances. Urbanites are looking to escape the city, disconnect from daily life, reconnect with nature, and explore the rural areas around them on short trips, close to home, in uncrowded, open spaces. These trends present an important opportunity for agritourism development, especially in rural spaces like Leduc County, near urban hubs like the City of Edmonton.

What we heard in relation to agritourism development outcomes...

When asking key informants what role(s) they see agritourism playing for a local community or the outcomes that they expect from developing agritourism, the following responses were collected:

- Economic Diversification for Producers: (n=8)
- Economic Development for the County: (n=7)
- Economic Impact on Other Businesses: (n=7)
- Attract People to the Area: (n=6)
- Local Food Awareness: (n=5)
- Community Development: (n=4)
- Youth Retention/Attraction: (n=4)
- Storytelling: (n=3)
- Partnerships: (n=3)
- Job Creation: (n=2)
- Community Brand/Profile: (n=2)

RELEVANT TOURISM TRENDS

Purposeful Travel

Travel can teach many things and for some visitors, learning is a key motivation to travel. In fact, gaining new skills and engaging with local communities to learn about different cultures is a goal for many travellers.⁷⁸ From cooking classes to beer tastings, and from mushroom foraging to local restaurant dining, food tourism empowers locals to share their stories. Food tourism, and agritourism specifically, presents opportunities for learning and connection. When done right, this can be transformative for visitors, leading to personal growth. In the wake of the COVID-19 pandemic, many people are reevaluating their priorities and looking for meaningful experiences and connection. “Purpose-driven travel” is one way to deliver this. Visitors do not need to travel far to learn something new- an important point when considering the potential role of agritourism in post-pandemic recovery. Agritourism experiences can be geared to locals and those from neighbouring regions, serving to reconnect people to the products and experiences available in their own backyards.

Food tours and cooking classes are among the top-five fastest growing tour categories on TripAdvisor and are important ways visitors pursue purposeful travel⁷⁹. As seen in the Prince Edward County case study [see insert], food tours are featured prominently and include strong links to local landscapes and cultures, allowing participants to leave the experience feeling more connected to place. Whether it involves sampling local wines in Prince Edward or berry picking and pie making in Leduc County, hands-on learning and experimenting are

projected to be big growth areas⁸⁰. In fact, food & drink activities are some of the most popular “Airbnb experiences”, comprising nearly 30% of the platform’s bookings in 2018⁸¹. When thinking about agritourism development in Leduc County, consider how offerings can deliver locally inspired learnings to purpose-driven travellers.

At the business level, it means providing visitors with experiences that have meaning allowing for learning and personal growth. More and more travellers want to feel like they are having a genuine and transformative experience, that they will leave a better person, and that they will leave the destination feeling a sense of connection to the place and its people. By building relationships with guests, businesses can facilitate this connection.

Exploratory Travel

Travel to off-the-beaten-path destinations in search of unique, one-of-a-kind experiences is a priority for a growing number of travellers, for whom, VIP experiences are appealing. They like to feel as though they are discovering something new that few others have experienced before. In developing tourism experiences for these visitors, a key step is identifying points of differentiation that tie the experience to place.

Fortunately, Canada’s federal tourism strategy identifies growing tourism in rural and remote destinations as a primary developmental pillar for 2019 to 2021⁸². Dispersing visitors away from areas of critical mass is important for preventing the negative effects of over-tourism, sharing the benefits the industry brings, and restarting the industry post-pandemic. The development of agritourism experiences and other rural food tourism experiences are ways that tourism benefits can be spread outside of urban centres. Many global travellers are interested in reducing over-tourism and are open to switching to lesser-known destinations with similar traits if they are made aware of the positive impact they can have on the environment and destination⁸³.

As a business, this means thinking about what makes a given experience and rural destination unique. Something as simple as eating fresh fruit at a roadside farm stand can be elevated with a great view or an engaging conversation. How can these local assets be leveraged to make a visitor understand that what they are experiencing in Leduc County, is something that they could never find anywhere else, something that cannot be replicated?

Sustainable Destinations

“The best food and drink experiences for travelers today consider environmental sustainability as well as community and economic impact.”⁸⁴ A key strategic consideration for destinations is the extent to which they incorporate sustainability into their management and marketing efforts. There is a connection between purposeful travel and an awareness of social and environmental issues. Visitors with this awareness wish to have a positive impact on destination communities through visitation. Sustainability initiatives can take many forms- from banning single-use plastics to promoting locally owned businesses. For agritourism this means stressing the environmental benefits of local food or calling out sustainable farming practices when possible.

Portland, Oregon for example, encourages sustainability by promoting low-carbon transportation options. Whereas, in Tucson, Arizona, destination-wide efforts to build a stronger food system and strengthen local food heritage are celebrated. By letting prospective visitors know about these initiatives, destinations are able to connect with discerning travellers looking to go somewhere that aligns with their values.

When presented with similar choices, sustainable travel options are important decision-making considerations for today’s trip planners. Leaving a destination and feeling as though their visit and money will benefit the local community, people, and the environment is the goal for a growing number of travellers. Rural and remote destinations, like Leduc County, have an opportunity to educate potential visitors on the economic and social

benefits of travelling to places that are looking to increase visitation as opposed to those that are already overrun by visitors.

At the business level, this means leveraging sustainable practices to attract visitors, but never green washing. In agritourism, this can include talking about the farm ethos for example, whether its organic, biodynamic, family-run, etc. Talking about the people that the business employs, connections to the community and the land, and any efforts taken towards sustainability.

TRENDS IN RURAL CULINARY AND AGRITOURISM DEVELOPMENT

Opportunity – Airbnb

When searching key terms on Airbnb including: “Leduc County + agritourism”, “Leduc County + food and drink” or “best agritourism experiences around Edmonton”, **only five experiences were listed**. Four were found in Edmonton and one in Half Moon Bay. Of the five, **two were food-related experiences**- “Multivitamin Vegan Salad Cooking Class”, and “Sylvan Ice Angling Charters Fishing Experience”. Using existing platforms like Airbnb to advertise and promote food tourism experiences in Leduc County, may be an opportunity for the county to be a pioneer in this regard.

There are also several trends to note in culinary tourism development specific to rural destinations. These are of particular relevance to agritourism development.

- Rural and remote tourism development leans heavily on the natural environment as a primary motivator for visitation and as a clear point of differentiation from urban areas. For Leduc County, this means thinking about how rural landscapes and natural features such as lakes can be leveraged as part of the visitor experience or how food and agritourism can be tied into outdoor tourism activities.
- In these destinations, culture is a secondary asset that enables visitors to connect more deeply with place such as museums, and cultural heritage resources like a grain elevator, etc. Food & drink are important parts of a cultural tourism offering, especially *experiential* cultural tourism. For Leduc County, this means thinking about how agritourism can be used to strengthen links between food, farming, and culture.
- The types of food tourism experiences on offer in rural destinations differ around the world. Food trails, farm stays, festivals, and guided tours are a few examples. At present, Airbnb experiences have yet to take off in a meaningful way across most rural and remote destinations. Rural destinations tend to highlight their unique food & drink specialties as points of differentiation. They also celebrate designations when applicable, such as, UNESCO designations or Protected Designations of Origin.
- Transportation challenges around tourism development are common in rural destinations where public transit is limited. This influences the types of visitors that are able to enjoy the destination (i.e. independent, mobile travellers with access to a personal vehicle). Travellers visiting Edmonton for business or to attend a specific event, especially those arriving by air, are not always keen to rent a car. There is an opportunity for Leduc County and other rural destinations to respond with unique transportation solutions that add value to the tourism experience (e.g. trains, bicycles, horses, etc.) to make the destination accessible to wider visitor segments.

What we heard about developing agritourism destinations...

When asked about what differentiates an agritourism destination from other types of destinations, or what makes agritourism destinations unique or difficult to replicate, the following were the most common answers provided by key informants:

- Stories: (n=9)
- Local History & Culture: (n=7)
- Taste of Place: (n=7)
- Natural Landscape/Environment: (n=5)
- The People: (n=4)
- Interactive Experiences: (n=4)
- Educational Component: (n=2)

Prince Edward County, Ontario (pop: 25,000)

Prince Edward County, located in Southeastern Ontario along the shores of Lake Ontario, a 2-h drive from Toronto. “The County”, as it is known, is made up of towns, villages, and hamlets surrounded by a rural agricultural landscape. Known for its wineries, cideries, restaurants, and B&Bs, the County has gained a reputation as a gastronomy capital of Ontario because of its concentration of local culinary products and experiences. There is an emphasis on production, with visitors travelling to the places where food and drink are produced, to engage in agritourism activities. Prince Edward County has a collaborative destination marketing approach between local food & drink businesses and the destination marketing organization. This was primarily done through the development of its Taste Trail, a self-guided driving tour that connects multiple local food & drink businesses and experiences. Celebrating its rural landscape, the destination has focused on its agritourism offerings especially wine and wine tours. The destination marketing organization makes it easy to plan visits and find food tourism products and experiences through its website.

Prince Edward County offers a variety of food tourism products and experiences. The destination marketing organization developed the self-guided Taste Trail to promote local businesses. The trail includes restaurants, wineries, farms and markets, craft breweries, and distilleries. In addition to the trail, Prince Edward County offers a variety of festivals and events where food & drink are a significant part of the experience. Some of these festivals include: the Ontario Fermentation Festival, Uncork Canada, True North Beer Festival, Picton Poutine Fest and Taste Community Grown, to name a few.

As a result of this diversity, local tour operators offer unique food & drink experiences for individuals, couples, groups, and corporate retreats. Among others, these experiences include tastings, pairings, dinners with entertainment, farm-to-table meals, and farm tours. Additionally, many local businesses provide their own food & drink experiences such as cooking classes, u-pick, samplings, specialty food-making workshops, beeswax product making, guided estate tours, brewery tours, and distillery tours. The availability of these experiences varies by season and by business. Some experiences such as tastings, samplings, cooking classes or workshops are offered year-round, while other experiences are offered seasonally.

Popular strategies for growing culinary and agritourism in rural destinations

- Introducing food & drink products and experiences into non-food events or festivals.
- Offering signature experiences connected to local cultural heritages and landscapes.
- Tour operators play a key role connecting products and experiences, encouraging visitors to explore the destination and spend more at local businesses.
- Experiences are changing, impermanent, flexible, and mobile, with products and experiences that are unique and multifunctional.

- Growing focus on outdoor food & drink products and experiences that connect visitors to the landscapes where the ingredients were grown, such as farm-to-fork, foraging, outdoor cooking or dining, while incorporating local history as an added value.

Opportunity – Alberta Craft Tours in Edmonton

When going to “Things to do” and clicking on “Food & Drink” on Explore Edmonton, the destination marketing organization of the city, “Spirit of Leduc Distillery Tours” was listed as an activity. This tour is coordinated by **the tour operator Alberta craft Tours that takes visitors in Edmonton to** multiple distilleries in the area including **Rig Hand Distillery** in Leduc County. Promoting these types of partnerships between exiting tour operators in Edmonton and also between destination marketing organizations like Explore Edmonton may be an opportunity for the county to grow its visitor market.

Opportunity – The Old Red Barn

When searching “Leduc County + agritourism” on Google, The Old Red Barn was the only agritourism business in Leduc County that appeared on the first page of the results. It was listed on the “Agri-tourism Destinations” page of Discover Leduc Region’s website where it was promoted as, “experience one of their farm-to-table events...” Additionally, when searching “Leduc County + food and drink” on Google, “Tip to Tail at the Old Red Barn in Leduc County” appeared as **an event on Eventbrite** where there was a farm tour add-on to their **farm-to-table experience**. Visitors could **tour the Glen Park Holsteins family dairy farm** and learn where their milk comes from in addition to their farm-to-table dinner. Promoting the use of platforms like Eventbrite and cross promoting activities and partnerships between neighbouring farms is an opportunity to attract new and returning visitors by pooling resources together to offer a unique culinary experience.

What we heard about the conditions needed before developing agritourism...

When asking key informants what minimum conditions or criteria need to be met for a community to seriously consider developing agritourism, the following were the most common responses:

- Institutional Support/Partnerships: (n=6)
- Local Business Partnerships: (n=5)
- Unique Selling Points: (n=5)
- Multiple Experiences/Products: (n=5)
- Network Formation: (n=4)
- Taste/Eating Component: (n=3)
- Development Plan: (n=3)
- Local Champions: (n=3)
- Storytelling: (n=2)
- Community Support: (n=2)
- Capacity-Building: (n=2)
- Tourism Infrastructure: (n=2)

PART 4: THE VISITOR

Defining visitor segments is not a simple task. There are many ways that profiles can be broken down- based on demographic data, interests, behaviour, etc. Often, there is considerable overlap between various visitor segmentation strategies. The following section breaks down some of the ways that Leduc County can think about who to target in order to grow agritourism.

CULINARY TOURISTS

Food tourists

Food tourists are “visitors who plan their trips partially or totally in order to taste the cuisine of a place.”⁸⁵ They plan some, but not necessarily all, trips around food & drink experiences, including agritourism experiences. When food tourists travel for other reasons, they look for ways to incorporate local tastes into their trip. For instance, a food tourist travelling on business or visiting family may stop by a craft brewery or incorporate a day trip to an agricultural region into their itinerary. These are important behaviours to keep in mind in planning for agritourism development in Leduc County.

According to the UNWTO, food tourists have a “higher average expenditure, are demanding and appreciative.”⁸⁶ Food tourists are motivated by experiential travel and include visitors looking to sip local wine at a vineyard as well as those hoping to participate in a local cooking class. They also want to connect meaningfully with the places they visit. While there are different types of food tourists, as described below, a key feature that sets them apart is considering food and beverage to be about more than sustenance. Instead, it is something worth investing in. Furthermore, since food tourism is a subset of cultural tourism, many food tourists are also cultural tourists.

Agritourism is a niche type of food tourism focussed on the people, places, and practices behind the production of food & drink. The profiles of those who participate in agritourism activities are broad – from parents looking to send their children loose in a pumpkin patch to honeymooners touring a winery. The below section outlines four categories of food tourists as potential markets for the agritourism experiences on offer in Leduc County.

Foodies

Perhaps, the best-known food tourist is the archetype “foodie”. The word might conjure images of a high-end restaurant, lavender foam mousse, and a lot of Instagram photos, but foodies are more complex than the stereotype. They can be motivated by the food itself or by the experiences surrounding it. They may plan a trip around visiting a specific winery or they might travel to enjoy rural landscapes, picking one accommodation over another because of the food offering. Either way, food motivates them and plays a key role in their trip planning, decision-making, and spending habits. Foodies like to get to the bottom of a food story, making them a great market for agritourism. Participating in a cheese-making workshop or attending a long table dinner organized by local farmers are two agritourism activities likely to appeal to foodies.

Since they plan around food & drink, foodies are informed. They often know which experiences they want to have in a destination in advance of arrival, and book these ahead of time to ensure that they happen. When a foodie visits a restaurant, they have likely scoped out the menu in advance and identified local specialities. When it comes to attracting food tourists, online assets should clearly articulate ties to local culture, unique culinary experiences, and any links to experiential tourism. Advertising these features makes it easy for foodies to add these experiences to their itinerary. That said, foodies also value local tips and insider recommendations and they will change their itineraries to incorporate these while in destination.

Opportunity – Leverage Online Platforms

Because foodies often know which experiences they want to have in a destination in advance of their arrival, and prefer to book these experiences ahead of time, it is important to have a strong and well-informed online presence that tells prospective visitors what culinary experiences are present in the area. When reviewing the websites of businesses in Leduc County listed as “agritourism experiences” on the Discover Leduc Region, only The Old Reb Barn had information about an agritourism experience. The other businesses only provided information on purchasing produce and did not provide information about farm tours, facility tours, tastings, etc. In many cases, only an email or a telephone number was available to place an order for local produce with no possibility to book a visit or make a purchase on the website. Additionally, when searching for agritourism activities on TripAdvisor, no culinary or agritourism experiences were listed in the Leduc Region. Finally, as mentioned previously, when searching on Airbnb, only five experiences were listed; however, none were located in Leduc County.

There is also an opportunity leverage the marketing and promotion power destination marketing organization like Explore Edmonton, Discover Leduc Region or even travel website like TripAdvisor and Airbnb have to attract culinary tourists to Leduc County. Perhaps the most significant opportunity available are the websites of the businesses. If the websites do not provide information about existing agritourism experiences offered, prospective visitors will not choose Leduc County as a destination, as they would have no knowledge of what unique culinary experiences are present in the area.

Food-connected consumers

The 2019 Skift report, *The New Era of Food Tourism*, proposes that foodies aren’t the only people interested in food tourism. Instead, acknowledging the “food-connected consumer”, someone who makes informed choices about their food and drink consumption, including the production processes behind it. This shift amplifies the potential growth that food tourism, and specifically agritourism, can bring by targeting broader markets.⁸⁷

A key point is that, many food tourists do not think of themselves as food tourists, and this often includes food-connected-consumers. Food & drink can motivate travel, but it can also act as an add-on that elevates a travel experience. Visitors that stop by a farmers’ market after their B&B host recommended, for instance, didn’t seek out the experience, but it added a multisensory element that made the trip more memorable. Food-connected consumers haven’t planned all of their activities in advance, so they are a great market to attract spontaneously to agritourism business.

Agritourists

Agritourism is steadily growing in importance within the world of food tourism. This opens opportunities for agricultural businesses to participate in tourism, for destinations to work with a broader set of food tourism stakeholders, and for visitors to access more diverse food tourism experiences in a destination. Since agritourism is a subset of food tourism, agritourists are a type of food tourists. However, that said, all food tourists can have an interest in agritourism activities. Meaning that foodies and food-connected consumers also enjoy agritourism activities, like berry picking, shopping farm stands, or learning from a head brewer about the local barley used in beer production. In her report entitled *Selling the Farm Experience*, Caroline Millar points to the market demand for agritourism from a public willing to pay for a chance to experience interaction with a farmer.⁸⁸ The agritourist seeks “experiential, life-enriching vacations that involve culture, nature, the outdoors and learning.”⁸⁹

Although eating and drinking are not primary motivators for participating in agritourism, food & drink can be used to enhance agritourism experiences and increase visitor interactions with agricultural spaces. Some additional motivations for participating in agritourism include:

- Searching for authentic experiences (e.g. participation in farm activities, traditional setting).
- Wanting to explore their region.⁹⁰
- Seeking to engage with family, learning, and relaxing.⁹¹
- Seeking experiential, life-enriching vacations that involve culture, nature, the outdoors, and learning.⁹²
- Valuing experiential travel (e.g. participation, eating, purchasing).⁹³
- Looking to engage with tradition and receive a rural welcome.⁹⁴

These motivations support the classification of agritourism as a contributor to the preservation of agricultural land, cultures and heritage, for sustainable tourism offerings,⁹⁵ and for the continued demand and production of local food and drink. With all this in mind, agritourism is a “priority sector for sustainable development at all levels.”⁹⁶

Agritourists in Canada

Based on a review of relevant academic literature and leveraging key insights from the first World Congress on Agritourism, the agritourist in Canada is predominantly defined by the following characteristics:

- Mostly urban, residing close to the farm visited.
- Highly educated.
- In their early 40s, with a small family (average of 3 family members).
- Earning average national income.
- Travelling independently instead of as part of a group.
- Predominantly domestic travelers.
- Cares about the environmental quality.

These characteristics are important to keep in mind. For instance, knowing that most agritourists are exploring their own backyards, can help to define target markets. It also makes clear that, to attract national or international markets, agritourism activities need to be one-of-a-kind experiences that visitors cannot experience back home.

Furthermore, Canadian agritourism market segments are primarily those looking to escape the city for family time, learning experiences, and relaxation.⁹⁷ An agritourist is often interested in discovering where their food comes from first-hand, by participating in a workshop, harvesting produce, joining a farm tour, or volunteering to stomp grapes at a winery, for example. Agritourists are interested in food production and want to learn about the people, places, and practices behind it.

In order to attract agritourists, clearly indicated operating hours are essential. Visitors need guarantees when planning trips, especially in rural areas. It is incredibly disappointing to make a long journey to a farm and then find out that it is closed for the day. Urbanites are not accustomed to “calling ahead” and strategies that may work with locals will not necessarily work for out-of-town guests. That said, there still ways to attract agritourists spontaneously such as advertising in local maps or guides, selling products roadside, or communicating offerings to local accommodations.

What we heard about the ideal or archetype agritourism destination

When asked to describe the ideal agritourism destination, including what types of businesses and/or experiences you might find there, the following were the most commonly mentioned elements by key informants:

- Educational components (n=6)
- Selling products/experiences (n=5)
- Products/experiences connected to local people, place and culture (n=4)
- Geographic clusters of agritourism products/experience (n=3)
- Local food production components (n=3)
- Storytelling components (n=2)
- Add-on industry and not the main source of income (n=2)
- Partnerships between local businesses and assets (n=2)

The following were the most commonly mentioned types of experiences that an ideal agritourism destination would have:

- Events (n=5)
- Tours (n=4)
- Farmers' Markets (n=3)
- Corn Maze (n=3)
- Accommodations (n=2)
- Long-table Dinners (n=2)
- U-picks (n=2)

Everyone else

And finally, and maybe most importantly, there is another type of food tourist– everyone else! All tourists eat, and there is the potential for businesses and destination to leverage this. When you think like this, everyone becomes a food tourist. If you expand the food tourism definition, this opens opportunities to localize dollars in communities. Sometimes it is as easy as using good storytelling to explain to a visitor why it's worth paying a dollar extra to try the local beer on tap. Even if someone's primary reason to visit is having an outdoor or rural experience, as a business, there are ways you can enhance their trip (and get them to spend more money locally) through food & drink. The spaces where agritourism takes place are often, but not always, more rural than other food tourism experiences. For this reason, inspiring the "everyone else" market to participate in agritourism activities spontaneously involves a bit more planning on the business side. A key strategy is collaborating with in-town businesses and tourism organizations to increase word-of-mouth referrals and online presence.

DESTINATION CANADA'S MARKET SEGMENTS

The Canadian Tourism Commission leveraged social values-based market research to develop customer profiles called EQ types. Destinations and businesses can use these to enhance customer targeting, product development, and marketing efforts. The three profiles that Canada is focussing on attracting Globally are: Free Spirits, Cultural Explorers, and Authentic Experiencers⁹⁸. From within Canada, four additional target markets have been identified: Personal History Explorers, No Hassle Travellers, Rejuvenators, and Gentle Explorers.

None of the personas descriptions specifically describe agritourism as an interest; however, a potential interest in agritourism could be suspected from other interests of the personas. For example, for all three of the Global target markets, "Dining at restaurants offering local ingredients" was a top-rated appealing activity. For Authentic Experiencers and Cultural Explorers, "Visiting small towns and villages" was also listed as an appealing activity.

The chart below compiles findings from the EQ profiles. For more information, please access the document directly, noting that the data is from 2012 and as such preferences may have shifted. Agritourism is usually an activity undertaken by visitors exploring closer to home, so it is worthwhile looking at the EQ profiles specific to the Canadian market and their interest in food & drink related activities. The tables below show a widespread interest in tasting local ingredients across Canadian target markets, whereas activities such as farm stays are less appealing to certain groups. Based on the type of experience offered, agritourism can appeal to broader, higher paying international markets as well, but appealing to these markets is dependent upon a “wow” factor and uniqueness. The below table also illustrates potential activities to incorporate into agritourism, such as on-farm wildlife and bird viewing, capitalizing on the rural landscapes and interest in eco-tourism activities.

EQ Profile (as % of Canadian market)	Experience Appeal
Free Spirits (12%)	<p><u>10 Most Appealing Activities (in descending order)</u></p> <ol style="list-style-type: none"> 1. Marine life viewing (whale watching, other marine life) 2. Wildlife viewing - land based animals & bird watching 3. Visiting national, provincial/state parks to view wildlife and surrounding nature and/or to participate in adventure 4. Dining at restaurants offering local ingredients 5. Viewing Northern/Southern Lights/Aurora 6. Visiting aquariums/zoos 7. Visiting well known historic sites and buildings 8. Visiting amusement/theme parks 9. Staying at an international brand hotel 10. Visiting national, provincial/state parks to visit interpretative centres/museums <p><u>3 Least Appealing Activities</u></p> <ol style="list-style-type: none"> 1. Farm stays 2. Undertaking travel philanthropy/voluntourism 3. Staying at a hostel
Cultural Explorers (9%) <i>strong interest in several food and drink related activities</i>	<p><u>10 Most Appealing Activities (in descending order)</u></p> <ol style="list-style-type: none"> 1. Marine life viewing (whale watching, other marine life) 2. Attending farmers’ markets 3. Dining at restaurants offering local ingredients 4. Visiting national, provincial/state parks to visit interpretative centres/museums 5. Wildlife viewing - land based animals & bird watching 6. Visiting national, provincial/state parks to view wildlife and surrounding nature and/or to participate in adventure experiences 7. Viewing outdoor street performances (free) 8. Viewing Northern/Southern Lights/Aurora 9. Visiting small towns, villages 10. Food related factory tours (Cheese, chocolate, etc.) <p><u>3 Least Appealing Activities</u></p> <ol style="list-style-type: none"> 1. Participating in multi-day guided group tours by bus 2. Golfing 3. Hunting
Authentic Experiencers (12%)	<p><u>10 Most Appealing Activities (in descending order)</u></p> <ol style="list-style-type: none"> 1. Marine life viewing (whale watching, other marine life) 2. Wildlife viewing - land based animals & bird watching

EQ Profile (as % of Canadian market)	Experience Appeal
	<p>3. Visiting small towns, villages 4. Visiting national, provincial/state parks to view wildlife and surrounding nature and/or to participate in adventure experiences 5. Seeing beautiful coastlines, beaches 6. Visiting national, provincial/state parks to visit interpretative centres/museums 7. Visiting well known historic sites and buildings 8. Dining at restaurants offering local ingredients 9. Mountain and glacier viewing 10. Visiting well-known natural wonders <u>3 Least Appealing Activities</u> 1. Attending nightclubs/lounges 2. Motorcycling 3. Snowmobiling as an overnight touring trip</p>
<p>Personal History Explorers (13%)</p>	<p><u>10 Most Appealing Activities (in descending order)</u> 1. Marine life viewing (whale watching, other marine life) 2. Wildlife viewing - land based animals & bird watching 3. Seeing beautiful coastlines, beaches 4. Taking a day cruise 5. Visiting national, provincial/state parks to visit interpretative centres/museums 6. Viewing Northern/Southern Lights/Aurora 7. Dining at restaurants offering local ingredients 8. Visiting national, provincial/state parks to view wildlife and surrounding nature and/or to participate in adventure experiences 9. Attending farmers' markets 10. Seeing autumn leaves <u>3 of the Least Appealing Activities</u> 1. Participating in vocational learning 2. Undertaking travel philanthropy/voluntourism 3. Attending literary festivals or events</p>
<p>No Hassle Travellers (10%)</p>	<p><u>10 Most Appealing Activities (in descending order)</u> 1. Marine life viewing (whale watching, other marine life) 2. Seeing beautiful coastlines, beaches 3. Dining at restaurants offering local ingredients 4. Wildlife viewing - land based animals & bird watching 5. Visiting well known historic sites and buildings 6. Visiting well-known natural wonders 7. Visiting aquariums/zoos 8. Visiting national, provincial/state parks to visit interpretative centres/museums 9. Staying at a waterfront resort 10. Viewing Northern/Southern Lights/Aurora <u>3 Least Appealing Activities</u> 1. Staying at a hostel 2. Motorcycling 3. Hunting</p>

EQ Profile (as % of Canadian market)	Experience Appeal
Rejuvenators (5%)	<p><u>10 Most Appealing Activities (in descending order)</u></p> <ol style="list-style-type: none"> 1. Marine life viewing (whale watching, other marine life) 2. Wildlife viewing - land based animals & bird watching 3. Mountain and glacier viewing 4. Visiting national, provincial/state park to view wildlife and surrounding nature and/or to participate in adventure experiences 5. Visiting aquariums/zoos 6. Viewing Northern/Southern Lights/Aurora 7. Seeing beautiful coastlines, beaches 8. Seeing autumn leaves 9. Visiting well-known natural wonders 10. Visiting national, provincial/state parks to visit interpretative centres/museums <p><u>3 of the Least Appealing Activities</u></p> <ol style="list-style-type: none"> 1. Farm Stays 2. Undertaking travel philanthropy/Voluntourism 3. Staying at a hostel
Gentle Explorers (25%)	<p><u>10 Most Appealing Activities (in descending order)</u></p> <ol style="list-style-type: none"> 1. Marine life viewing (whale watching, other marine life) 2. Dining at restaurants offering local ingredients 3. Wildlife viewing - land based animals & bird watching 4. Visiting national, provincial/state parks to view wildlife and surrounding nature and/or to participate in adventure experiences 5. Seeing beautiful coastlines, beaches 6. Visiting aquariums/zoos 7. Visiting well-known natural wonders 8. Food related factory tours (Cheese, chocolate, etc.) 9. Taking a day cruise 10. Sunbathing <p><u>3 Least Appealing Activities</u></p> <ol style="list-style-type: none"> 1. Participating in vocational learning 2. Undertaking travel philanthropy/Voluntourism 3. Attending literary festivals or events

TOURISM ALBERTA MARKET SEGMENTS

Tourism Alberta has expanded on Destination Canada’s EQ Segments, grouped certain profiles together, and identified two key future traveller markets for the province– *Curious Adventurers* and *Hotspot Hunters*⁹⁹. Travel Alberta refers to these visitors as their Ultimate Traveller personas, because the interests of those visitors match the experiences on offer in the province. If the marketing initiatives of Tourism Alberta are successful, more of these visitors will be coming to the province, and this provides important context that Leduc County should be aware of in developing agritourism as an economic development opportunity. For instance, both segments, spend time learning about the destination in advance of travel, which underlines the importance of inspiring online assets linked to the destination. Another point to note is that, Cultural Adventurers leave time for spontaneous additions to their itinerary. This presents an additional on-the-ground opportunity to attract visitors to farmers’ markets, farm stands, and other agritourism activities that they may not learn about in advance of

arrival. Both groups are looking for local expertise to guide them, and this means that recommendations from business owners and other local ambassadors can influence their behaviour. An interest in food was not directly mentioned as a motivator; however, by focussing on how food ties visitors to place and provides authentic one-of-a-kind experiences, agritourism can appeal to both personas. The below descriptions are adapted from Travel Alberta's website.

Curious Adventurers

- Rooted in the EQ Learner segment – Cultural Explorers, Authentic Experiencers, Personal History Explorers, Cultural History Buffs.
- Looking for a different perspective on the world, to discover new places, explore, connect
- They use editorial sources for inspiration over social media.
- Motivated by discovery, exploration and rich experiences. They want to learn about the destination through it's "landscapes, authentic culture and the people they meet".
- Looking for smaller activities to complement must see attractions.
- Spontaneous and open-minded, they know that organic moments can provide the best experiences.
- They are planners, taking time before their trip to do research, forging connections with the destination in advance.

Hotspot Hunters

- Rooted in the Enthusiastic Indulgers EQ segment – Free Spirits, Social Samplers, Group Tourists.
- For them, travel is a way of life about conquest and accomplishment.
- They have an aspirational self-image, want to collect stories, and are influenced by social media.
- They visit top attractions, take part in one-of-a-kind experiences, and connect with local experts.
- They're driven to make the most of every minute and they plan accordingly, leaving little to chance and even deprioritizing sleep.

PART 5: FINDING THE VISITOR

Taking into account the visitor personas and profiles described in the above section, an important question emerges, where can Leduc County find these visitors? This understanding will be essential to informing future marketing efforts.

LOCAL RESIDENTS

Local residents make up a key market for agritourism activities. Many people already engage in seasonal agritourism activities, perhaps without ever thinking of them as such. Participating in a corn maze, visiting a u-pick berry farm, or shopping at a roadside farm stand are the kinds of activities that often resonate with local visitors. There are opportunities to diversify the kinds of agritourism activities on offer in Leduc to grow local interest in agritourism. Across all market segments, including those closer to home, hands-on activities like cooking classes and workshops that allow for learning are becoming increasingly popular. Focussing product development on these kinds of activities will offer something new to local residents, help to connect them to food production spaces in their communities, while also appealing to broader visitor markets.

DAY-TRIPPERS FROM EDMONTON

Edmonton is home to around 1 million inhabitants. This presents a large potential visitor market at the doorstep of Leduc County- from families, to friends, to couples. Visitors looking to escape the city for an afternoon have several rural destinations to choose from within driving distance. Many destinations are prioritizing and expanding their agritourism offerings, including Flagstaff which partnered with Battle River Trains and the Ellis Bird Farm to offer a unique Open Farm Days farm-to-fork event, and Strathcona County which prioritizes agritourism product development in its 2020 Tourism Strategy and Implementation Plan¹⁰⁰. School trips are another important local day trip market to consider that presented the added benefit of supporting Leduc County's simultaneous goals of advocating for local food by connecting people to where their food comes from. Partnering with Explore Edmonton is a way to get on people's radars especially for blog posts, etc.

Opportunity Scan – Leveraging Urban Interest in Rural Destinations

When searching “best agritourism experiences around Edmonton” on Google, there were no results in Leduc County or the larger Leduc Region. Based on the search results, most agritourism experiences around Edmonton were located in the north end of the city in Sturgeon County. There is an opportunity to leverage existing interest by Edmonton residents, especially those residing on the southern end of the city, to visit Leduc County and participate in agritourism experiences.

OUT-OF-TOWN DAY-TRIPPERS

Edmonton Economic Development's Connecting Edmonton 2019 Report to the Community, shows that prior to COVID-19, Explore Edmonton was actively working to bring meetings, conventions, and events to town¹⁰¹. This focus has potential benefits for Leduc County when it comes to agritourism development. When visitors are looking to add on a day or two of travel after attending a festival, conference, or event in Edmonton, Leduc County can position agritourism activities as worthwhile options. Making these kinds of add-ons easy to organize is essential to capitalizing on these markets. Similarly, with limited time, these visitors will be more discerning with the experiences they add to their itinerary. Offering unique, one-of-a-kind experiences tied to place will be key. This means that seasonal activities that might appeal to an Edmontonian, such as berry picking, would need to be elevated in order to also appeal to an out-of-towner.

OVERNIGHT VISITORS

By staying longer and spending more, overnight visitors bring considerably more money into communities than day-trippers. They are a market worth going after. Those travelling to visit friends and relatives are an important market for overnight stays across the country. By getting such visitors to stay in local accommodations, their trip spend can be increased. Similarly, by increasing familiarity amongst local residents of the agritourism experiences on offer in Leduc County, it becomes more likely that hosts will bring their family and friends to these activities. Moving day-trippers to overnight guests can also dramatically increase visitor spend. Turning day trips into weekend getaways or encouraging an overnight stay for visitors on a longer road trip are some examples of how this can be done.

PART 6: GROWING AGRITOURISM IN LEDUC COUNTY

What we heard about the challenges and potential solutions...

When asked about what challenges and/or barriers need to be overcome in order for agritourism development to be pursued, the following are sample responses given by industry:

- Limited awareness of what is available in the Leduc County (by locals and potential visitors)
- Few on-farm accommodations
- No clear definition of what counts as agritourism, including amongst Leduc County staff
- Unclear rules around agritourism
- Permitting process can be slow (e.g. building code, fire code, commercial licensing, road surveys)
- Funding & financial sustainability
- Transportation challenges (i.e. car-centric visitation, driving distances)
- Capacity challenges faced by businesses (e.g. technology challenges, don't know how to advertise, don't know how to develop visitor experiences)
- Time constraints as a farmer make agritourism difficult
- Farm safety, doing on-farm activities on a working farm

When asked about solutions to agritourism challenges, the following were common responses by key informants:

- Partnering with organization that can provide workshops for agritourism education
- Identify local champions/ambassadors: specific person at Leduc County pushing agritourism development, identifying key industry players
- Build a network of local industry members to support business collaboration
- Develop partnerships for marketing and promotions
- Invest in tourism infrastructure
- Support businesses in posting/finding employees with needed skills

What we heard about the opportunities

When asked about the biggest opportunity for growing agritourism is in Leduc County, the following are common responses provided by industry:

- **Education** – teach people where their food comes from, combat disconnect between consumers and producers
- Attract any customers you can, including Edmontonians
- **Diversity** of agriculture in the region, natural assets (e.g. lakes)
- **Product Development**: a circle tour, map, brochure, info package
- Leverage **Tourism Edmonton/Discover Leduc marketing** reach, etc.
- **Turn day trips into overnight trips** (incl. camping)
- More Open Farm Days
- More added-value products
- Add local bus service offered during the summer between tourism spots – **transportation**
- Position Leduc as a **starting point** for people coming to Alberta (leverage airport proximity)
- **Partnerships** to manage tourism experiences when farmers can't prioritize that kind of work
- Increase distribution channels for small businesses, increase **direct sales**
- Collaborative marketing website, newsletter, etc. across broader region

Some of the most common opportunities identified by key informants were the following:

- **Developing Partnerships:** Partner with existing tourism organizations (e.g. Explore Edmonton, Travel Alberta, Tourism Industry Association of Canada), as well as local municipalities and other counties in the area to collaboratively market and promote agritourism assets (n=6)
- **Leverage the presence of the airport:** Large number of visitors coming and going from the airport, use that space to showcase the local foodways of Leduc County and entice visitors to partake in agritourism experiences in the County (n=4)
- **Leverage existing natural assets:** Connect agritourism products/experiences with outdoor/natural attractions in the areas (e.g. Beaver Hills UNESCO Biosphere Reserve) and leverage the access to large open spaces, in response to COVID-19, to attract visitors from the urban centres (n=3)
- **Leverage existing assets:** Leverage assets in the county and region for agritourism development (i.e. community halls, Travel Alberta grants, NAIT Centre micro-credentials) (n=3)
- **Leverage existing agricultural assets for products/experiences development:** Leveraging the Food Processing Development Centre to support the development of innovative artisan food products to sell to agritourists (n=2)

SWOC

The below SWOC table summarizes the strengths, weaknesses, opportunities, and challenges for growing agritourism in Leduc County.

<p><u>Strengths</u></p> <ul style="list-style-type: none"> • Proximity to Edmonton (and it's visitor base) • Presence of Edmonton International Airport • Access to outdoor spaces that can accommodate people safely during the COVID-19 pandemic • Presence of farmland landscapes and diverse crops • Some existing businesses are connecting farming to the visitor experience • Assets base that can be leveraged for agritourism development in the region • High level of interest from visitors for agritourism activities 	<p><u>Weaknesses</u></p> <ul style="list-style-type: none"> • No consensus on what agritourism means and the types of activities that should be included • Aging farmer population • Shrinking number of small farms • Focus on commodity crops • No strong highlight of cultural assets • Few tour operators • Few on-farm accommodations • Existing agritourism activities mostly geared to local audiences • Limited online information about agritourism products • Limited knowledge of existing agritourism products in the county • Limited knowledge of online platform uses for agritourism industry members • Limited capital for agritourism products • No clear industry champions to lead and coordinate agritourism development • Cultural barriers between farmers and city people
<p><u>Opportunities</u></p> <ul style="list-style-type: none"> • Connect locals to where their food comes from • Build knowledge of agritourism amongst diverse stakeholders • Develop and sell value-added agritourism products and experiences with industry members towards relevant travel trends (e.g. purposeful travel) • Grow partnerships between Discover Leduc Region, key stakeholders, and tourism industry members • Leverage local cultural heritage and environmental resources in agritourism experience development (e.g. heritage suppers, historic barns, bird watching on farms, swimming in lakes) • Utilize non-tourism community assets for agritourism purposes (e.g. community hall events) • Grow agritourism businesses through direct sales and economic diversification • Strengthen Leduc County's destination value proposition by integrating agritourism as part of every visitor's experience 	<p><u>Challenges</u></p> <ul style="list-style-type: none"> • Limited awareness of the breadth and diversity of tourism businesses (e.g. farms) • Limited awareness of permitting process for agritourism development • Limited connections amongst agritourism industry members • Concerns with working-farm safety for visitors • Overlap between visitor and farming season • Sentiment of NIMBYism • Concerns around environmental impact • Limited access to reach/move around Leduc County using alternative modes of transportation • Competition for visitors from other rural regions surrounding Edmonton • Uncertainty related to COVID-19

PART 7: RECOMMENDATIONS AND CONCLUSION

Below is a list of short- to medium-term (<1 – 3 years) recommendations for agritourism development in Leduc County. The recommendations focus on actions that can be taken by Leduc County staff to grow agritourism. It is important to note that the COVID-19 pandemic presents an opportunity for creative approaches in implementing these recommendations.

AGRITOURISM AWARENESS

1. Review regulatory and policy barriers to agritourism development in Leduc County as identified in the Rural West Economic Development Strategy and reach out to any relevant external government organizations (e.g. public health) to better understand policy context.
2. Host a meeting (or series of meetings) with Leduc County staff in all departments that overlap with agritourism (e.g. planning, economic development, engineering, agriculture, etc.) to come to a common understanding/definition of agritourism, discuss permitting processes for agritourism businesses, and identify opportunities to streamline these processes as well as develop clear, communicable instructions for businesses on what the permitting process of agritourism diversification includes.
3. Develop a cheat-sheet for Leduc County staff to streamline the delivery of information to businesses around the permitting processes related to agritourism.
4. Develop an agritourism toolkit for current and prospective agritourism businesses, especially those in the Rural West that, in addition to defining agritourism in Leduc County, includes steps for developing an agritourism experience, identifies the resources available, such as permitting processes, risk assessments, marketing partnerships, product development partnerships, funding opportunities, etc.
5. Develop workshops to increase awareness of agritourism and its benefits amongst diverse stakeholder, including industry members, council members, and community members.
6. Connect agritourism industry members, especially those in the Rural West, to existing tools and capacity building resources (e.g. TIAC Elevating Canadian Experiences Agritourism Webinar – 2021).

PARTNERSHIPS

7. Continue existing partnership with Discover Leduc Region to collaboratively market and promote agritourism assets in the region, especially those in the Rural West.
8. Explore additional ways to collaborate with existing tourism initiatives and organizations (e.g. Explore Edmonton, Travel Alberta, Destination Canada, and other local destination marketing organizations) to collaboratively market and promote agritourism assets in the region, especially those in the Rural West.
9. Develop new or strengthen existing partnerships with NAIT Centre for Culinary Innovation, Food Processing Development Centre, The Chamber, and the Nisku Rec Centre on agritourism development (i.e. business development, product development, menu development, capacity-building around online presence etc.).
10. Partner with local, regional school boards to promote agritourism as learning and field trip opportunities.
11. Form an agritourism industry task force to support the implementation of the agritourism strategy and drive agritourism development especially in the Rural West, providing task force members with leadership skills development opportunities as part of the process.
12. Foster industry collaborations in agritourism development especially industry in the Rural West (e.g. hosting regular industry meet-and-greets, linking Leduc County grant funding to collaborative applications, supporting industry learning journeys, etc.).

DESTINATION DEVELOPMENT

13. Develop a comprehensive inventory of agritourism assets in Leduc County and surrounding area to leverage in agritourism product/experience development as well as marketing and promotions (e.g. unique food and beverage products, producers, agricultural built heritage and cultural landscapes [e.g. Leduc Grain Elevator, etc.], cultural spaces [e.g. Leduc West Antique Society, community halls], growing practices, cooking practices and food sharing practices).
14. Leverage the natural landscapes in experience development (Beaver Hills UNESCO Biosphere Reserve, lakes, rural landscapes) by connecting outdoor spaces with agritourism assets especially those in the Rural West.
15. Celebrate diversity of agritourism producers in the region especially those in the Rural West (e.g. flower farms, vegetables, fruit, animals, cannabis, etc.).
16. Develop a series of easy-to-participate in agritourism activations that businesses, especially those in the Rural West, can sign up for to test out agritourism as a business opportunity, and consider how best to leverage provincial initiatives, such as Open Farm Days, as part of the process.
17. Identify aspirational agritourism destinations for Leduc County and facilitate learning trips to these destinations for select industry members, and/or organize virtual networking sessions for local businesses and their peers in the aspirational destination.
18. Establish a supportive regulatory/policy/funding environment to foster the piloting and development of overnight accommodations in the region, especially those in the Rural West, starting with low impact options such as, on-farm glamping, yurts, etc.

MARKETING AND PROMOTIONS

19. Develop an agritourism marketing plan targeting market segments identified in this strategy report (i.e. day-trippers from Edmonton and Visiting Friends and Relatives) leveraging the list of agritourism assets especially those in the Rural West.
20. Explore collaborative marketing opportunities (e.g. Edmonton International Airport, farmers' markets, etc.).
21. Explore opportunities to package agritourism experiences into marketable products for visitors.

CONCLUSION

Agritourism development presents a real economic diversification opportunity for Leduc County. In the context of COVID-19, more and more people are looking to connect to where their food comes from. They are also showing a preference for leisure activities in rural outdoor spaces. As the economy reopens, Leduc County's proximity to a large visitor base in Edmonton will be a key strength. Developing and marketing an agritourism offering to regional visitors, and then gradually growing and refining this to appeal to markets from further afield is strategic. To achieve this kind of growth, the actions outlined in this report are geared to the short and medium-term. They focus on the foundations for agritourism development, such as streamlining regulatory processes, building industry networks, and developing the destination's agritourism offering. These recommendations will allow Leduc County to implement quick wins, pilot new ideas, and lay the groundwork for establishing agritourism as a pillar of the local economy for years to come.

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