

Leduc County Employment Growth Forecasts

Working Paper

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Purpose

The purpose of this analysis is to provide updated employment forecasts for Leduc County. The forecasts are correlated to expectations of economic activity in the Edmonton Region. This includes consideration the impacts of COVID-19 on the regional economy and the short-medium term recovery of many sectors to pre-pandemic levels.

In total, three growth scenarios for Leduc County were developed for this analysis. The employment forecasts in this study are classified as "Low", "Medium" and "High", and are specific to existing and potential employment areas within Leduc County. For each of these scenarios, the employment was disaggregated within the Leduc sub-region, as well as to finer level geographies within Leduc County.

This analysis includes the following:

- ▶ Employment forecasts for the period 2021 to 2050 for Leduc County.
- ▶ Sub-municipal forecasts within Leduc County.
- ▶ Growth Scenarios: including a Low, Medium and High growth scenario.

Study Area

The Study Area for this analysis is Leduc County and includes forecasts for the following employment areas within the County:

- ► Future Agriculture Hub!
- ► East Vistas²
- ► Edmonton International Airport
- Genesee
- ▶ New Sarepta
- ▶ Nisku³
 - North Nisku
 - Central Nisku
 - South Nisku
- South of Devon Industrial⁴
- ▶ Rest of Leduc County⁵

In developing these forecasts, it is important to consider the growth in employment areas within the Leduc sub-region. This will ensure that the forecasts reasonably reflect the growth that Leduc County may achieve over the forecast period.

¹ The Agriculture Hub is a proposed cluster of agriculture related business including: primary food production, agri-processing and support to the agriculture sector. It is proposed that this Agriculture Hub would be located at the intersection of Highway 39 and Highway 60.

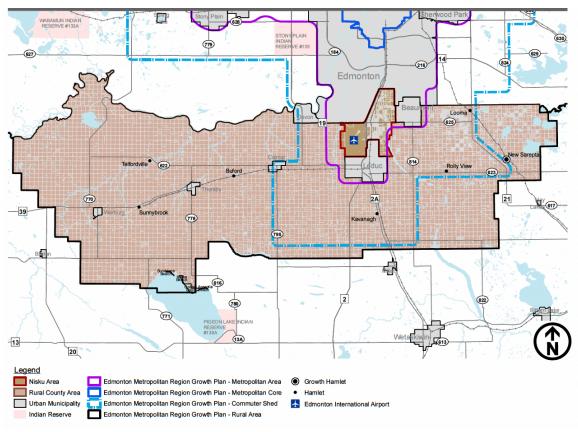
² As outlined in the East Vistas Area Structure Plan, 2022.

³ The breakdown of Nisku into North, Central and South Nisku is presented in Figure 4 of Nisku Major Employment Centre ASP. (2021).

⁴ As outlined in the South of Devon Industrial Structure Plan, 2015.

⁵ Rest of Leduc County denotes areas within Leduc County that are outside any of the employment areas identified.

Study Area Map⁶



As a result, forecasts were also prepared for employment areas within the Leduc sub-region including:

- ▶ 65th Avenue⁷
- ► Crossroads⁸
- ► Leduc Business Park⁹
- ► Telford Lake¹⁰
- ► South Beaumont Industrial II

⁶ Map 2 from Leduc County Municipal Development Plan, June 2019.

 $^{^{7}\,\}mathrm{As}$ outlined in the 65th Avenue Area Structure Plan.

⁸ This assumes a continuation of non-residential development on the lands north of the Edmonton International Airport (Crossroads).

⁹ Assumes greenfield and redevelopment in Leduc Business Park.

¹⁰ As outlined in the East Telford Lake ASP.

¹¹ Assumes non-residential, primarily industrial, development in Beaumont, south of Highway 625.

Employment Methodology

The three scenarios provide alternative views of the potential for economic growth in the Leduc sub-region. All three are based on the same base year assumptions with differences in the economic impact of the key growth industries.

Using the three scenarios allows for better foresight on the potential impact of new development and provide a range of reasonable potential growth. The three scenarios presented in the analysis are as follows:

- ▶ Low Scenario: The Low Scenario assumes the lowest rate of economic and population growth across Alberta and Leduc County.
- ▶ Medium Scenario: The Medium Scenario provides a reasonable expectation of the long-term economic and population growth within Alberta and Leduc County.
- ▶ High scenario: The High Scenario provides an upper range on the potential for economic growth across Alberta and Leduc County.

Employment growth across the major industry groups (2-digit NAICS) differ in each of the growth scenarios. The key industry growth sectors are discussed in the following section.

KEY GROWTH SECTORS

Prior to the COVID pandemic and its worldwide impact on the economy and employment, Alberta's economy was in a state of transition. Post COVID, this transition is expected to continue. As global energy markets transition from carbon based fuel sources, the investment and income generated by this section in Alberta is expected to not be the driver of economic activity as it has historically. Alberta's reliance on this sector for economic growth is shifting to alternative energy projects and other sectors. Economic diversification efforts are expected to focus on leveraging existing strengths into new products and markets.

- ▶ Energy: The energy sector is diversifying with new investments in alternative energy projects, including: solar, wind, hydrogen, geothermal, bioenergy and discussions about the potential for nuclear energy.
- Agriculture and Food Products: Agriculture has been a mainstay of the Alberta economy and in recent years there has been significant growth in value added food production for local markets and food processing for export markets. While traditional crop farming has largely been corporatized, smaller farming operations that produce fruits, vegetables and protein for local markets have emerged. These operations are expanding their market reach beyond local markets.
- ▶ **Tourism**: Alberta has several world class tourist destination sites and the province is investing in improvements in marketing, air access and destination development to expand this sector.
- ▶ **Technology**: Technology is affecting every other economic sector at a rapid pace. Software, hardware and digital services have evolved and are expected to continue to grow in every major economy. Interactive digital media which involves gaming, esports, animation/FX, immersive technologies and digital media are targeted to grow.
- ▶ Life Sciences: Alberta has established itself as a leader in research and technology in several life sciences fields, including: diagnostics, digital health and medical devices and cancer research.

▶ Transportation & Logistics: The transportation and logistics sector is vital to the Alberta economy moving goods in and out of the province.

The specific economic opportunities expected to drive growth in the Leduc sub-region are outlined below. In particular for Leduc County, the key growth sectors include: energy, transportation & logistics, manufacturing, agriculture/food production and processing

ENERGY

Oil and gas is expected to continue to be major employer in Alberta and the Edmonton region. However, future growth of this sector will be dominated by a shift to alternate energy forms, including: solar, wind, hydrogen, geothermal and bioenergy. There is also the possibility of nuclear energy as Canada has announced a plan to develop small modular reactors.

It is expected that there will be opportunities related to technology development and manufacturing related to parts and maintenance of various alternative energy production. This will create opportunities for some businesses in the Leduc sub-region to reposition themselves from oil and gas to alternate energy products.

The Edmonton region is home to the first hydrogen hub in Canada. Touted as a \$100 billion opportunity, the region's access to low cost natural gas and world scale production technologies, hydrogen production holds a key opportunity to replace carbon based energy with new fuel markets that offer 90% lower green-house-gas emissions. While the Industrial Heartland is expected to host major hydrogen production facilities, there are numerous opportunities for support manufacturing and services in the Leduc sub-region.

A number of provinces, including Alberta, have agreed to participate in the national Small Nuclear Reactors (SMR) initiative. Canada's first SMR is planned for Darlington (Ontario) for 2028 followed by other units in New Brunswick (2030) and Saskatchewan (2032). This is a longer term opportunity for the Leduc sub-region to provide support manufacturing and services.

AGRICULTURE/FOOD PRODUCTION AND PROCESSING

The Leduc sub-region is already a major food producer and has a base of existing secondary processing operations. This is expected to expand as the demand for locally produced food products expands. The Leduc sub-region is ideally situated to support the export of food products with multi-modal transportation access. The location of the Food Processing Development Centre in the City of Leduc creates an immediate opportunity for expansion of this sector into agri-food research and production.

TRANSPORTATION & LOGISTICS

The Leduc sub-region is also a multi-modal transportation centre with access to air, rail and trucking and support logistics activities to move a wide range of products. The increase in consumer preferences for online shopping has resulted in the development of several warehouse operations in the sub-region in the past 5 years. Transportation and warehousing development has recently taken place and is expected to continue to support local manufacturing and product distribution in the region. It is expected that transportation and logistics services will continue to grow as export markets for locally produced products expands to markets elsewhere in Alberta, Canada and abroad.

MANUFACTURING

While a significant share of manufacturing activity in the Leduc sub-region has concentrated on support the traditional energy sector and oil sands projects in northern Alberta, this is shifting. It is expected there will be some diversification of alternate energy manufacturing that will consume

both greenfield lands as well as re-purposed lands in Nisku. This activity will take advantage of existing manufacturing experience and expertise and apply it to new emerging energy technologies.

Also, as noted above, the advent of additional food process and manufacturing can be expected to take advantage of existing agriculture product production and the transportation services in the region to access out of region markets.

TOURISM

Tourism has been identified as a key diversification sector by the province. The Leduc sub-region offers opportunities to support this initiative through expansion of tourism services and related activities. The Edmonton International Airport provides access to many national and international markets that bring tourists to the region and beyond. Associated with this activity has been the development accommodation and food services businesses around the airport. In addition, Edmonton Airports has facilitated the development and relocation of various attractions and shopping opportunities, including: a casino, horse racing facility, golf course and motorsports facility.

Leduc Sub-Region Employment

Future employment within Leduc County is impacted by the provincial and regional economies. Economic opportunities in the Leduc sub-region are projected to drive employment growth in some existing and future employment areas.

Employment within each of these areas is identified by scenario in the table below.

Leduc Sub-Region Employment Forecasts

EMPLOYMENT AREA	2021	LOW 2050	MEDIUM 2050	HIGH 2050
65th Avenue	-	289	826	1,121
Agri Hub	40	315	575	704
Central Nisku	7,811	9,049	10,044	10,902
Crossroads	200	3,404	6,161	6,987
East Vistas	20	109	218	346
Edmonton International	5,310	7,211	8,721	9,171
Genesee	200	75	75	75
Leduc Business Park	3,104	4,387	5,061	5,671
New Sarepta	260	305	378	448
North Nisku	1,477	3,437	5,003	5,943
Rest of Leduc County	2,124	2,300	2,500	2,700
South Nisku	-	339	571	814
South of Devon	40	194	284	326
Telford Lake	2	389	604	806
South Beaumont Industrial	-	52	135	179
Leduc County sub-region	20,588	31,855	41,156	46,193

SUMMARY OF EMPLOYMENT FORECASTS

- ▶ Overall employment in the Leduc sub-region is projected to grow at an annual average growth rate of between 1.5% in the Low Scenario, 2.4% in the Medium Scenario and 2.8% in the High Scenario.
- ▶ This includes employment growth in existing major employment areas and potential for development in greenfield areas (65th Avenue, East Vistas, Telford Lake, South Beaumont Industrial, South of Devon).
- ▶ It is expected that employment areas along the QEII corridor and access to major transportation corridors will be the primary locus for future non-residential growth. This includes development within Nisku, Edmonton International Airport, Crossroads.

BASE YEAR EMPLOYMENT

In this analysis, the employment forecast is projected for the period 2021 to 2050. The 2021 base year employment by 2- digit NAICS for Leduc County was estimated based on 2016 Statistics Canada Federal Census data¹². The 2021 estimated employment takes into consideration the following:

- ► The COVID-19 pandemic and a persisting decline in employment associated with a reduction of staff during the pandemic.
- ▶ An estimate of employment associated with non-residential growth in Leduc County between 2016 and 2021¹³.

The following table provides the estimated 2021 employment by 2-digit NAICS for Leduc County.

^{12 2016} Statistics Canada Place of Work by 2 Digit NAICS for sub-municipal geographies within Leduc County.

¹³ This includes aviation and non-aviation related development in Nisku and the Edmonton International Airport.

Estimated Employment by 2-D NAICS, Leduc County, 2021

2-DIGIT NAICS	2021 EMPLOYMENT ESTIMATE
I I Agriculture, forestry, fishing and hunting	1,116
21 Mining, quarrying, and oil and gas extraction	1,946
22 Utilities	369
23 Construction	1,848
31-33 Manufacturing	2,271
41 Wholesale trade	1,256
44-45 Retail trade	1,164
48-49 Transportation and warehousing	2,642
51 Information and cultural industries	15
52 Finance and insurance	47
53 Real estate and rental and leasing	329
54 Professional, scientific and technical services	308
55 Management of companies and enterprises	28
56 Administrative and support, waste management and remediation services	573
61 Educational services	302
62 Health care and social assistance	123
71 Arts, entertainment and recreation	309
72 Accommodation and food services	1,723
81 Other services (except public administration)	658
91 Public administration	256
Total	17,282

Leduc County Employment Forecasts

This analysis estimates geography-specific employment growth across three different scenarios. Based on this analysis, employment in Leduc County increase from 17,282 in 2021 to 23,334 in the Low Scenario, an average annual growth rate of 1.0%. In the Medium Scenario, employment in Leduc County is assumed to increase to 28,369, an average annual growth rate of 1.7%. In the High Scenario, employment in Leduc County is assumed to increase to 31,429, an average annual growth rate of 2.1%.

EMPLOYMENT FORECASTS BY SCENARIO

The employment associated with each scenario, allocated according to employment area, are presented in the table below. Also displayed are the estimated base year (2021) employment estimates for each geography.

Leduc County Employment Forecasts

EMPLOYMENT AREA	2021	LOW 2050	MEDIUM 2050	HIGH 2050
Agriculture Hub	40	315	575	704
East Vistas	20	109	218	346
EIA	5,310	7,211	8,721	9,171
Genesee	200	75	75	75
New Sarepta	260	305	378	448
North Nisku	1,477	3,437	5,003	5,943
Central Nisku	7,811	9,049	10,044	10,902
South Nisku	-	339	571	814
South of Devon	40	194	284	326
Rest of Leduc County	2,124	2,300	2,500	2,700
Leduc County	17,282	23,334	28,369	31,429

SUMMARY OF EMPLOYMENT FORECASTS

- ▶ Within Leduc County, Nisku and the Edmonton International Airport are projected to have the highest employment growth, across all three scenarios.
- ▶ Over the forecast period, Nisku employment is projected to grow between 3,536 in the Low Scenario, 6,330 in the Medium Scenario and 8,370 in the High Scenario. It has been assumed that more than half of this growth would be accommodated in North Nisku.
- ▶ Edmonton International Airport employment is projected to grow between 1,901 in the Low Scenario, 3,411 in the Medium Scenario and 3,861 in the High Scenario.

- ▶ The East Vistas employment is projected to grow between 89 in the Low Scenario and 326 in the High Scenario.
- ▶ A new Agriculture Hub has been included that is projected to grow by one 600 jobs in the High Scenario.
- ▶ In addition, employment has also been considered for other parts of Leduc County including: South of Devon and New Sarepta.

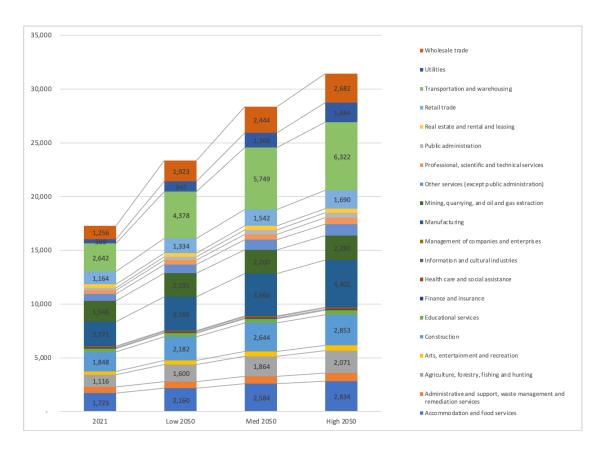
ADDITIONAL CONSIDERATIONS

- ▶ The Edmonton International Airport is projected to have passenger related employment recover within the next 1-3 years. The forecast assumes aviation related employment will growth at a rate similar to population growth. In addition, it is expected the airport lands will continue to attract aviation and retail/food/accommodation related development.
- ▶ The Nisku area is a large employment base for Leduc County and the Edmonton Region. This area is projected to continue to develop over the forecast period.
 - ▶ It has been assumed that North Nisku would continue to grow and attract logistics and distribution/light manufacturing/business park type development.
 - ► Central Nisku is projected to grow and intensify through redevelopment of areas with existing low density development.
- ▶ It has been assumed the Genesee coal power plant will be transitioned to natural gas by approximately 2025. This results in an assumed reduction of operating employment.
- ▶ An Agriculture Hub has been assumed for Leduc County at the intersection of Highway 39 and Highway 60. This location already has a few agriculture related businesses. It is assumed the Agriculture Hub will attract businesses related to food processing, agri-business and support services to the agriculture sector.
- ▶ It is assumed that East Vistas will develop commercial and non-commercial services to provide amenities to the local population growth.

EMPLOYMENT FORECASTS BY INDUSTRY

For each of the three scenarios the employment for 2050 is presented in the chart below.

Leduc County Employment Forecast by Industry



SUMMARY OF EMPLOYMENT FORECASTS BY INDUSTRY

In each of the three scenarios, there are different levels of projected industry growth.

- ▶ Overall total employment growth in each of the three scenarios ranges from an average annual growth rate of 1.0% in the Low Scenario, 1.7% in the Medium Scenario and 2.1% in the High Scenario.
- ▶ Transportation and warehousing is projected to have the largest increase in employment, with a projected increase of 1,736 jobs in the Low Scenario, 3,107 in the Medium Scenario and 3,680 in the High Scenario.
- ▶ Manufacturing is projected to have an increase in employment of 895 in the Low Scenario, 1,695 in the Medium Scenario and 2,131 in the High Scenario.
- ▶ Wholesale Trade is projected to have an increase of employment of 667 in the Low Scenario, 1,188 in the Medium Scenario and 1,426 in the High Scenario.
- ▶ Utilities related to alternative energy, is projected to have an increase of employment of 576 in the Low Scenario, 999 in the Medium Scenario and 1,475 in the High Scenario.
- ▶ Many of the other industries that support the local population are expected to grow at a rate closer to population growth.