



# Nichols

APPLIED MANAGEMENT INC.

**MANAGEMENT & ECONOMIC CONSULTANTS**



CONWAY

Final Report:

# A Competitiveness Review of the Tri- Municipal Region

November 2020

## Table of Contents

Executive Summary .....	3
1. Introduction .....	6
1.1 Background .....	6
1.2 Competitiveness Factors .....	6
1.3 Study Focus .....	6
1.4 Approach .....	7
2. Economic Outlook and Key Trends .....	12
2.2 Emerging Trends Impacting Location Competitiveness .....	14
3. Current State Assessment .....	18
3.1 International / National Competitiveness .....	18
3.2 Regional Competitiveness .....	27
4. Competitive Positioning .....	45
4.1 Framework for Positioning .....	45
4.2 EMR Economic Drivers and Reputation .....	46
4.3 Foundations for Growth for the Tri-Municipal Region .....	46
4.4 Targeting Considerations .....	47
4.5 Foundations for Future Growth .....	51
4.6 Positioning through Differentiation .....	52
5. Appendix 1 - Economic Conditions and Outlook .....	56
5.1 Economic Outlook .....	56
5.2 Trade Environment .....	62
6. Appendix 2 – Modelling Inputs .....	66

## LIST OF FIGURES

Figure 1-1	Positioning for Regional Competitiveness .....	10
Figure 2-1	Technologies Influencing Industry 4.0 .....	14
Figure 2-2	Industry Vulnerability to International Supply and Demand Disruptions .....	16
Figure 3-1	Regional Relative Competitiveness by Sector .....	32
Figure 4-1	Positioning for Regional Competitiveness .....	45
Figure 5-1	Real GDP Growth Projections for Canada, Quarterly 2020 .....	56
Figure 5-2	Real GDP Growth and Projections for Canada, Annual .....	56
Figure 5-3	National Labour Figures .....	57
Figure 5-4	Alberta Labour Figures .....	58
Figure 5-5	Inward Greenfield FDI Index .....	59
Figure 5-6	Breakdown of Exports by Top Exporting Country and Industry .....	62

## LIST OF TABLES

Table 3-1	Overall Competitiveness Results - International .....	18
Table 3-2	Strengths and Weaknesses of Edmonton Region - Modelling Results .....	19
Table 3-3	Sector Specific Competitiveness Results - International .....	21
Table 3-4	National, Provincial and Edmonton Area Competitiveness Strengths .....	25

Table 3-5	National and Provincial and Edmonton Area Competitiveness Weaknesses .....	26
Table 3-6	Overall Competitiveness Results - Regional .....	29
Table 3-7	Other Tri-Municipal Regional Competitiveness Strengths and Weaknesses .....	30
Table 3-8	TWL SWOT Analysis.....	33
Table 3-9	Value-Add Agriculture SWOT Analysis .....	35
Table 3-10	Manufacturing SWOT Analysis .....	37
Table 3-11	Commercial SWOT Analysis .....	39
Table 3-12	Energy Services SWOT Analysis .....	41
Table 3-13	ICT Services SWOT Analysis.....	43
Table 4-1	Competitiveness Alignment by Sector – EMR and Region .....	48
Table 4-2	Region’s Positioning within the EMR by Sector and Market Focus .....	49
Table 4-3	Cross-Cutting Themes in Innovation .....	51
Table 4-4	Competitiveness Considerations to Differentiate and Sustain ...	52
Table 5-1	Top Imported and Exported Goods .....	62
Table 6-1	Modelling Inputs – International Competitiveness.....	66
Table 6-2	Modelling Inputs – Regional Competitiveness .....	72

## Executive Summary

### Objective

A key identified objective of the Regional Plan is to “coordinate and drive investment within the Tri-Municipal Region (the Region) in a manner that enables each partner municipality to both individually and collectively achieve heightened local, regional and global competitiveness.” The Competitiveness Review (the Review) is a critical element to this objective with an overall perspective of examining how the Region is expected to perform against other comparative areas, and where focus can be placed to strengthen competitiveness, from both the global and regional level.

### Approach

This review utilizes a ‘reverse site-selection’ approach which considers a multitude of competitiveness factors companies consider when making expansion or location decisions. The data-driven approach weights and ranks locations based on a variety of categories including labour markets, access to markets, infrastructure, tax environment, and incentives. Factor weighting reflects importance investors give when making actual investment decisions. Two models have been developed:

- regional - focusing on the Municipalities and the Region (Tri-Municipal combined) within the EMR
- national / international - comparing the Edmonton Metropolitan Region (EMR) versus other Western Canadian and select U.S. regions.

In a continuation of the typical site selection process, the modelling is complimented by SWOT and other analyses examining general and sector-specific business environment and contextual themes that data alone does not reveal. Economic sectors and comparator communities and regions used in the analysis are based on a review of existing economic development efforts as well as from input from Regional municipal representatives.

The competitiveness review is intended to help the Region identify its strengths and weaknesses as compared to its competitors, informing strategy in how best to capture opportunities by addressing gaps, positioning for future growth, and improving perception as it is seen by potential investors from within and outside the Region.

### Ranking Results

At the national / international level, the Edmonton Metropolitan Region ranks 4<sup>th</sup> out of 7 comparator regions in terms of general competitiveness, behind Denver, Vancouver and Calgary, and ahead of Houston, Boise and Winnipeg. Bolstering the EMRs results are factors like a young, growing population base with higher disposable incomes, solid infrastructure and access to markets, diversified workforce well-represented in trades and professional occupations and affordable housing. Some factors which result in a lower ranking than its peers include higher average wage rate, smaller trading area population, lower educational attainment rates and proportion of workers in certain occupations and industries and higher average property tax rates.

In general, the EMR measures competitively against peer groups on all sectors examined, including Transportation, Warehousing and Logistics, Manufacturing and Information, Communications and Technology. The region particularly stands out in terms of Commercial, Energy Services and Value-Add Agriculture. It is important to understand how the EMR ranks in terms of competitiveness as it represents the entry point for deal-flows to the area and is based on foundations which influence the Region's competitiveness.

At the regional level, the Region ranks 5<sup>th</sup> out of 15 municipal comparators, including 7 within the EMR and 4 others in southern Alberta in terms of general competitiveness. The relative rankings include Spruce Grove (2<sup>nd</sup>),

Stony Plain (8<sup>th</sup>) and Parkland County (11<sup>th</sup>). The Region's competitive position is generally stronger than its individual members, emphasizing the value of presenting a regional front. In many instances, Spruce Grove shows strongly on its own, however there are indicator areas as well as specific sectors in which the combined Region improves on the City's individual ranking. As well, many of the foundational competitive metrics, like labour force, benefit from a larger size, which the Regional approach presents. Modelling results indicate that the combined Region competes in the top quartile or half for all specific sectors under analysis within the EMR.

Within the EMR, the competitiveness modelling analysis suggests the Region is more competitive in Transportation, Warehousing and Logistics, Value-Add Agriculture, Commercial Services and Manufacturing. It is slightly less (but still competitive) in Energy Services and Information, Communications and Technology. While competitiveness factors drive trends in investment flows, ultimately each deal comes down to company-specific requirements, to which the Region may prove attractive, depending on their particular needs. Ultimately, location decisions are driven by specific investor needs by sector and these advantages are emphasized outside the modelling process.

For municipalities, the competitiveness environment is based on providing the right foundation for businesses to be successful. Fundamentals important to investors (including existing, or potential within or outside the region) include the regulatory setting, workforce and infrastructure, access to markets and economic networks. From there, investors define the types of sites, buildings and services they require to meet their operational needs.

### Identified Strengths and Gaps

The Region enjoys a number of competitive advantages when compared to its peers, including being a lower cost option including taxes; a business-friendly reputation; good infrastructure linkages including rail, road and telecommunications; home to a young and growing population with affordable living and good quality of life; having an existing network of businesses seen as mutually reinforcing and creating a supporting ecosystem; and historically being more diversified, with representation across a variety of sectors and not being overly 'energy-dependent'.

Weaknesses affecting the Region's competitiveness include a mix of perceived and real gaps. For instance, substantial weight is given in site selection to workforce characteristics, including the proportion involved in industries and occupations of interest. In the case of the Region, while the workforce with these skills and experience is *proximate* (already active in the broader region), it is not yet comparatively active, specifically in the Region. In other words, workforces involved in sectors of interest are active within the EMR, but not to the same extent within the Region. As jobs are created in traditionally under-represented sectors in the Region, workforce and future resident attraction will occur over time. Highlighting the EMR's total workforce, accessible through the region's good commutability, can help to address this perceived gap. Another identified weakness pertains to a lack of permitted available lands and buildings available to attract future uses, which can be addressed through a thoughtful strategy of identifying, permitting, and servicing lands for future industrial and commercial growth.

### Positioning

From a competitiveness standpoint, the Region's strongest positioning tends to be when its strengths align with those of its broader region for a particular sector. It follows that Transportation, Warehousing and Logistics, Value-Add Agriculture and Energy Services are the three predominant sectors where Regional strengths align with those of the EMR, and therefore represent logical priority areas for the Region. That said, focus is also warranted on the other sectors of interest including Energy Services, Manufacturing, Information, Communication and Technology (ICT) due to the Region's and EMR competitive positions. While the first two sectors are interlinked (and



struggling), they still represent potential growth areas and align with recognized strengths in the EMR. While the EMR is not seen as a major market for ICT, this sector's dynamic growth and role as an enabler for other sectors gives it high importance and is worth pursuing in areas which make sense.

Positioning begins with knowing and capitalizing on current strengths but must also include a focus on the future. As economic development focuses on sustaining and growing the local economy, a key tenet is understanding that things *will* change – including products, services, markets, networks, competition, regulations and trade patterns. Proactive jurisdictions constantly anticipate and plan for change, an important way of creating and maintaining a competitive edge. Key themes of importance to the Region's competitive positioning include innovation, the application of emerging technologies and internet connectivity. Another key consideration is differentiation. Creating and marketing advantages pertaining to needs of a particular sector is an effective way for the Region to differentiate itself from the competition. Through positioning its brand and identity around these relevant advantages, overall competitiveness will be enhanced.

### Roles

Understanding and achieving municipal competitiveness sits within the Economic Development functions. The key roles at the Regional level is setting the vision, coordinating individual municipal actions so they align with the Regional strategies and preparing and marketing effective messaging to appropriate targets. Coordinating unique approaches within their boundaries to address gaps is up to individual municipalities to execute. When coordinated under common strategy, these actions contribute towards a coherent picture of Regional competitiveness. It is critical for members to regard each other as partners, not competitors. To this end, it may be desirable to develop a shared resource team among the Tri-Municipalities to handle investment attraction, retention, and expansion inquiries across the region. While it may or may not make sense to establish a new organization with this responsibility, it would be helpful to have one body with the acknowledged responsibility to coordinate all such activities, which could be comprised of member municipal economic development staff.

Additionally, there is a need to establish a collaborative working relationship with other organizations who also hold mandates for investment attraction and retention in the EMR, notably Edmonton Global. Each of the member municipalities of Edmonton Global support the organization's efforts to attract new investment globally. The Region should work to ensure that Edmonton Global has a solid understanding of the Region's capabilities, readiness and targets for new investment opportunities. The Region should also actively participate when Edmonton Global reaches out to industries and target that match the Region's profile.

Actions by other departments, particularly Planning and Development, Engineering/Public Works and Finance can directly impact key elements of the Region's competitive environment. It is Economic Development's role to support or lead these departments in understanding existing or potential future issues from a business standpoint and identifying innovative and mutually beneficial solutions. Other municipal departments help shape the living environment, an important aspect of quality of life, key to talent attraction and retention and creating a vibrant commercial base. Proactive communities collaborate internally to ensure that their individual focuses collectively create a positive living and working environment.

## 1. Introduction

### 1.1 Background

#### Regional Collaboration

Over the past few years, Parkland County, Spruce Grove and Stony Plain (the Municipalities), collectively known as the Tri-Municipal Region (the Region), have been facing shifting economic conditions. The phasing-out of coal-fired generation, linked to Federal and Provincial climate-change policies, impacts core employment sectors and the municipal tax-paying base in the Region. Compounding this, a downturn in energy production in Alberta since 2015 has impacted service firms and fabricators as well as workers based in the Region. These changes are placing pressure on the Municipalities to streamline operations, reduce costs and diversify their revenue sources. On a bright note, the Acheson Industrial Park (Acheson) has seen steady growth with investor interest in light industrial, food manufacturing and other sectors.

In light of this shifting environment and resultant pressures, the Municipalities are collaborating in the development of a Regional Plan. With an aim to strengthening governance, service delivery and fiscal capacity within the Region, the Regional Plan is informed by a number of input studies, including this Competitiveness Study. By developing a common vision and through proactive, positive collaboration, the Municipalities seek to address the current situation and create the right conditions for future sustainable, diversified economic growth and enhanced quality of life for residents and businesses.

### 1.2 Competitiveness Factors

#### Business Environment

The operating environment faced by any business is dependent upon a number of factors, including workforce, land base and building, infrastructure and essential services, distance and access to raw inputs, intermediary suppliers and markets and tax and regulatory systems. A competitive business environment is one where some or all factors are seen as more advantageous than other comparable locations. Some factors are macro in nature such as corporate tax rates, trade agreements and labour laws, influenced by provincial and national policies. Other factors are at a more micro level, such as land and labour availability and cost. Competitiveness considerations apply across these factors – with the macro tending to influence outside investors first contemplating a country or broad region, before moving to the local level for specific site selection. Community-specific factors are also relevant in retaining existing investors, who seek the best location within a region where they operate.

#### Municipal Competitiveness

Municipal competitiveness considers factors which affect the local business environment. Local governments directly influence some factors, such as property taxes, municipal infrastructure and civic regulations. They indirectly influence other quality of life factors like arts, culture, housing, recreation, security – which in turn impacts workforce and consumer attraction and retention. Other factors municipalities have less ability to influence, like workforce availability and cost and regional services and infrastructure.

### 1.3 Study Focus

#### Objective

A key identified objective of the Regional Plan is to “coordinate and drive investment within the Tri-Municipal Region in a manner that enables each partner municipality to both individually and collectively achieve heightened local, regional and global competitiveness based on the philosophy of ‘shared investment for shared benefit.’” The Competitiveness Review (the Review) is a critical element to this objective with an overall perspective of examining how the Region is expected to perform against other comparative areas, and where focus can be placed to strengthen competitiveness, specifically considering:

- labour market
- development setting, including costs and levies, timelines, zoning restrictions or incentives
- key infrastructure
- socio-economic considerations and ‘liveability’ including amenities

The assessment considers comparators from both within and beyond the region. Recognizing the process investors and site selectors use in identifying potential locations, local competitiveness is very much informed by factors at the Edmonton Metropolitan Region (EMR), provincial and national levels. Therefore, this review considers both micro and macro competitiveness factors.

## 1.4 Approach

### Site Selection Perspective

The study utilizes a ‘reverse site-selection’ approach which considers a multitude of competitiveness factors. Companies making expansion or relocation decisions typically undergo a multi-phase process of selecting the location that best fits its needs. This process, the “site selection analysis,” first uses a data-driven approach to weight and rank locations based on a variety of categories such as labour markets, access to markets, infrastructure, tax environment, and incentives. The process continues to narrow down the list of potential candidates until a short list of options are selected to begin field confirmation of the business environment and contextual themes that data alone cannot reveal.

The reverse site selection analysis assesses the community from a corporate project perspective. By reversing this analysis, a community can identify its strengths and weaknesses as compared to its competitors, thereby helping it strategize how to capture opportunities by addressing threats, positioning for future growth, and improving perception as it is seen by site selectors. Weighting reflects the importance investors give for various factors when making actual investment decisions. Two models have been developed – one focusing on the Municipalities and the Region (Tri-Municipal combined) within the EMR, and the other looks at the EMR versus other Western Canadian and select U.S. comparators.



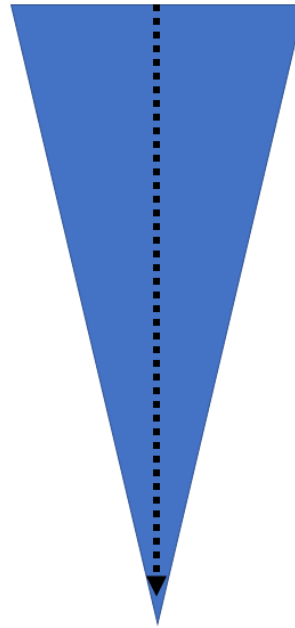
Key location requirements and related competitiveness Indicators considered include the following:

- population and population change
- labour force and unemployment
- average hourly wages
- employment by occupation and industry
- workforce education levels
- education attainment within the region
- access to transportation
- access to consumer or customer markets
- land and building costs
- tax climate
- housing costs
- crime, climate, and natural hazards

While all factors are important to some extent, experience dictates that certain categories and indicators typically have more weighting for investors. These tend to be:

- existing relevant business networks and clusters
- transportation and logistics connectivity
- labour availability, capability and cost

#### THE SITE SELECTION PROCESS



**Strategic Location with access to markets, materials, and partners**

#### **Resources/Business Environment:**

- Operating costs and incentives
- Sites/buildings, labour/skills, training, utilities, etc.
- Does the community embrace specific business objectives?

#### **Feasibility (Cost/Risk) Analysis**

- land or building availability and development costs
- infrastructure, utilities and telecommunications capacity, reliability, connectivity timelines and cost
- tax rates, potential incentives or other supports

For many businesses, the size of the local final market is important, while for others that either export production or are integrated into production chains, cost-effective and timely shipping is critical. Liveability factors including housing are important to some degree. However, due to the integrated nature of the EMR where the workforce pool lives and commutes across the region, local liveability and housing conditions are less critical. Correspondingly, the Review focus emphasizes factors identified as having more weight or influence in investment decision-making.

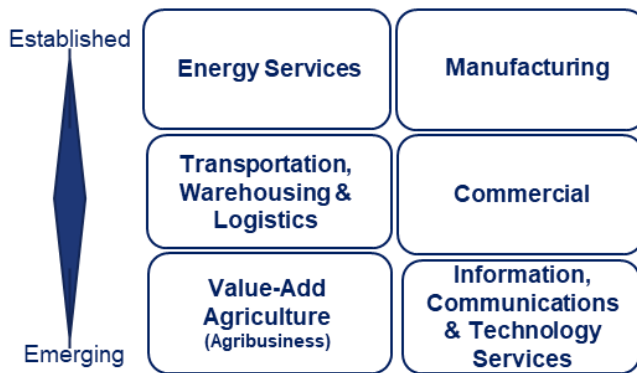
#### **Sector-Specific Analyses**

Beyond general competitiveness, the Review also considers sector-specific assessments, based on different weightings applied to factors of higher relative importance in those respective sectors. For instance, Plastics Manufacturing might weight labour force availability more heavily, while logistics firms will emphasize transportation infrastructure and access to markets. Engineering and construction firms similarly emphasize access to markets from a population growth perspective, as does food processing.

Sectors of interest were identified based on existing economic development strategies, expressed areas of interest in municipal literature including websites and one-on-one interviews with the Region's Economic Development Officers (EDO). The sectors of focus for this Regional study were subsequently confirmed in a joint EDO workshop.

The following industry scenarios were chosen for modelling purposes.

## Economic Sectors Assessed



- **Manufacturing** – weightings for this sector reflect increased importance on labour force availability, industry-and occupation-specific employment, and transportation and market access. Within these categories, factors that are relevant to manufacturing are also given higher weighting
- **Transportation, Warehousing & Logistics (TWL)** – weightings for this sector reflect more importance on transportation and market access and industry-and occupation-specific employment. Within these categories, factors that are relevant to logistics are given higher weighting
- **Commercial** – weightings for this sector reflect

more importance on population and demographics, transportation and market access and industry-and occupation-specific employment. Within these categories, factors that are relevant to retail and wholesale are given higher weighting

- **Information, Communications, and Technology (ICT)** – weightings for this sector reflect more importance on the presence of specific occupations in the sector as well as telecom infrastructure and quality of life (for recruitability)
- **Energy Services** – energy services span several activities. In order to account for this, weighing emphasizes industry and occupation indicators, but also factors influencing logistics and some manufacturing
- **Value-Added Agriculture** – weightings for this sector reflect more importance on transportation and market access and industry-and occupation-specific employment, with additional commentary regarding knowledge of specific commodities in market

## Comparator Selection

In that same EDO workshop, comparators of interest were identified both within the EMR, elsewhere in Alberta and select U.S. centres. Comparator selection considered factors such as proximity to the Region, population size and similar economic profile. The selection consists of a mix of urban and rural centres, as outlined in the figure. The review considers 17 comparators as well as the Municipalities including the combined Region, totalling 21 comparator sets.

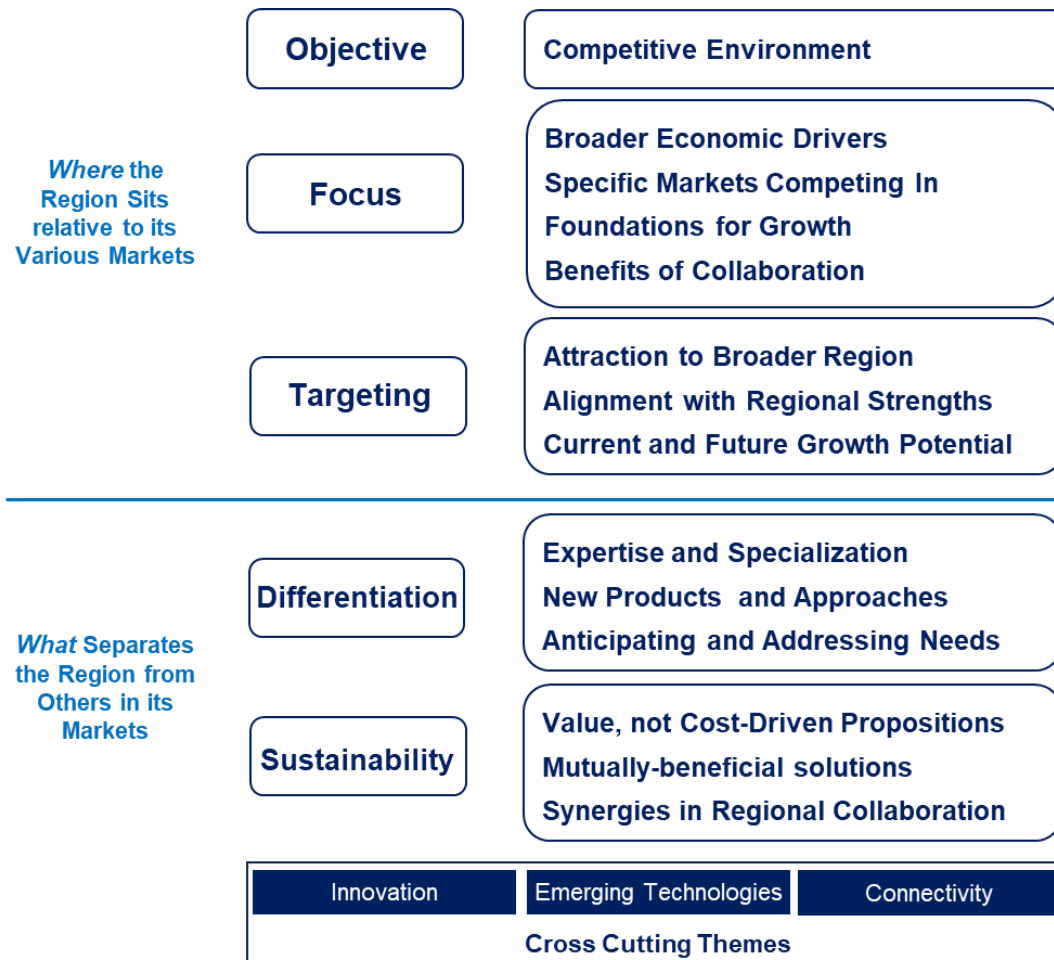
## Comparator Jurisdictions



## Opportunity Identification, Value Proposition and Positioning

Through the modelling exercise, factors are identified that contribute to either strong or weak results for a region's apparent competitiveness. These inform Strengths, Weaknesses, Opportunities and Threats (SWOT) analyses focusing on general and sector-specific conditions. Based on those analyses, key competitiveness factors underpinning value propositions for investment in specific sectors are identified, as well as key gaps which require addressing. From there, actions within the Municipality's ability to control are identified (i.e. such as development approval timelines) as well as supporting actions which can benefit the overall competitiveness landscape (i.e. provincially established tax rates). Recognizing perception or lack of awareness can influence potential investors' interest in the Region, the analysis also contemplates supportive actions which can be taken including marketing, communication and participation in broader lobbying efforts.

Figure 1-1 Positioning for Regional Competitiveness



### Key Trends and Economic Outlook

Addressing competitiveness within the Region occurs within a broader economic context. Global trends impact both local operating conditions as well as investment flows. As such, the Review commences with key take-aways of the economic outlook given impacts from the Covid-19 pandemic as well as material changes to key trade pacts affecting Canada. It also discusses key trends affecting business investment globally, which influences the context in which the Region competes.

### Scope and Limitations

The study is a review of the Region's Competitiveness from an investment perspective. It is not an evaluation of economic development practices or performance. Nor is it the complete roadmap for enhancing overall competitiveness and economic sustainability for the region (that will come from the Economic Development Plan). The focus is on factors that influence the perspective of the Region's competitiveness, highlighting elements which underpin value propositions within key sectors and indicates positioning considerations for how the Municipalities can collectively differentiate themselves. The study output is meant to inform the regional economic development strategy, which will identify the specific roadmap of initiatives to improve competitiveness and further retain and attract economic activity. That roadmap ties into other components of the Regional Plan, particularly the Land Use and Infrastructure and Services studies.

## 2. Economic Outlook and Key Trends

### 2.1.1 Regional Economic Outlook

Economic outlooks are by nature uncertain, as a variety of factors can influence future outcomes in ways difficult to predict. Uncertainty in these economic times is heightened given the Coronavirus Pandemic's impacts occurring on top of existing effects in the local economy from lower oil demand and prices. However, as time under pandemic conditions proceed, economic opportunities are evident as certain sectors of the economy respond to spiking demand to meet existing and newly identified needs. Acknowledging the heightened uncertainty, this section provides a sense of key trends and forecasts available during this study preparation, intended to add to the context within which competitiveness is considered in the region and beyond. Given the current situation, each of the specific forecasts should be regarded with a healthy dose of scepticism, noting they do provide a useful, directional starting point for planning.

#### GDP

Out of the 13 largest metropolitan regions across the country, the Edmonton CMA is projected to experience the greatest real GDP contraction in 2020 at 5.6 percent.<sup>1</sup> This contraction may not last long however, as the region is projected to rebound by next year, growing by 6.2% in 2021 and 3.2% in 2022.<sup>2</sup> The Conference Board of Canada projects Edmonton to lead real GDP growth out of the major CMAs between 2021-2024 at 4.3 percent.<sup>3</sup>

#### Employment

The mandatory closure of non-essential businesses has resulted in many layoffs for the City and surrounding area. By the end of 2020, the Edmonton CMA is forecasted to lose 50,600 jobs, wiping out employment gains of the past two years. The unemployment rate for the region, which was already the highest of major CMAs in the country before the pandemic, is projected to reach 11.1% in 2020. However, a slight recovery is projected, with the unemployment rate falling to 9.2% in 2021. The Conference Board is forecasting employment in Edmonton to contract by 6.4% in 2020 but grow by 4.1% in 2021 and 2.2% in 2022.<sup>4</sup>

#### Investment

Although there will likely be a reduction in private investment over the next few years due to the uncertainty surrounding oil prices and the pandemic, there are still many major projects currently underway in the Edmonton region. In 2020, there were 70 projects under construction in the region with a cumulative value of more than \$22 billion. There are also 40 proposed projects with a total investment value exceeding \$11 billion. The two largest projects underway in the Region include the Telus 5G network and Inter Pipeline's Heartland Petrochemical Complex.<sup>5</sup> Proponents of the Heartland complex indicate a likely project cost overrun of \$500 million and a half-year delay attributable to pandemic-related effects<sup>6</sup>.

<sup>1</sup> Conference Board of Canada. (2020). Major City Insights, Cross-City Comparison. Source: <https://www.conferenceboard.ca/focus-areas/canadian-economics/major-city-insights/appendix-a>

<sup>2</sup> Conference Board of Canada. (2020). Major City Insights Edmonton. Source: <https://www.conferenceboard.ca/focus-areas/canadian-economics/major-city-insights/edmonton>

<sup>3</sup> Conference Board of Canada. (2020). Major City Insights, Cross-City Comparison. Source: <https://www.conferenceboard.ca/focus-areas/canadian-economics/major-city-insights/appendix-a>

<sup>4</sup> Conference Board of Canada. (2020). Major City Insights Edmonton. Source: <https://www.conferenceboard.ca/focus-areas/canadian-economics/major-city-insights/edmonton>

<sup>5</sup> Edmonton Global. (July 13 2020). Data Trends with Tomas. Source: <https://edmontonglobal.ca/data-and-trends-with-tomas/>

<sup>6</sup> Global News Edmonton (May 7, 2020). Inter Pipeline Warns of Higher Costs, Delays for Alberta Petrochemical Project. <https://globalnews.ca/news/6919543/alberta-heartland-petrochemical-complex-delays-covid/>

Key takeaways from those discussions impacting municipal competitiveness are presented below.

**Key Pandemic Impacts on the Current Economic Outlook:**

- This event is global with unprecedented economic ramifications. Advanced economies (to-date) are being harder hit. Global economic recovery is very much dependent upon the virus trajectory including impacts from second or more waves
- The hit to Canada's and Alberta's economies, labour markets and consumer and business confidence is massive. Any economic development activities at present are occurring from deeply challenging positions. Employment recovery is a welcome sign, and bright spots exist for certain sectors. However, the drag on core economic sectors is likely to persist for the short-to-medium term
- As debt piles up and domestic growth in danger of being stagnant, the Federal and Provincial governments will likely increase existing efforts for investment attraction, including diversifying target sectors seeking new sources of growth and tax revenues. Both higher levels of government will look for ways to assist existing business in diversifying their products and active markets.
- Local governments will continue to experience upheaval in their business base, with bankruptcies and closures as well as churn in their population base as employment levels adjust. Managing change will be necessary with limited funds while looking for opportunities created by this disruption. These challenges and opportunities will be compounded by the evolving municipal policy setting.

**Key Considerations for the Region Given Evolving Trade Relationships:**

- The new CUSMA agreement is not expected to radically alter the trade environment with the U.S. Trade with the U.S. relative to other destinations for Canadian exporters has been declining since 2014
- Factors to watch for include the upcoming Presidential election as well as the pandemic's progress which may lead to potential economic shutdowns
- Ongoing trade tension between the U.S. and China are expected to continue reducing bilateral trade between the two countries. Canadian trade may provide new opportunities for addressing the needs of both nations
- Two years in, not all Canadian exporters and importers are taking advantage of CETA when trading with Europe. The utilization rate of preferential tariffs is 53% for eligible Canadian exports, and 46% for Canadian imports. Rates are up from 2018 but there is still room for growth

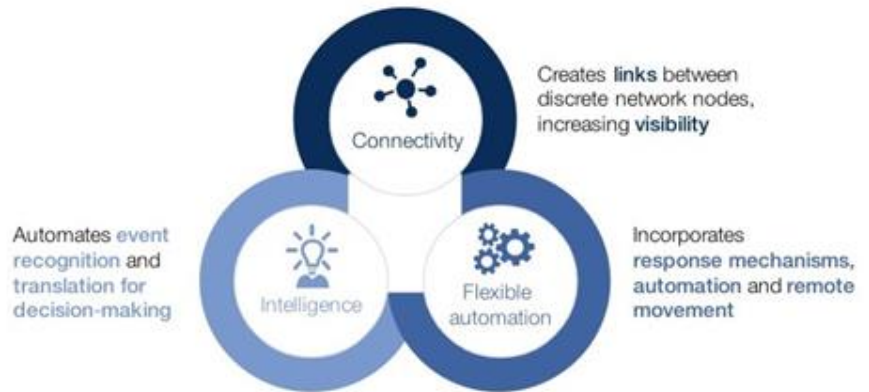
Appendix 1 contains a more detailed examination of current economic conditions and outlook as well as the latest in trade agreements for Canada, as of the fall of 2020.



## 2.2 Emerging Trends Impacting Location Competitiveness

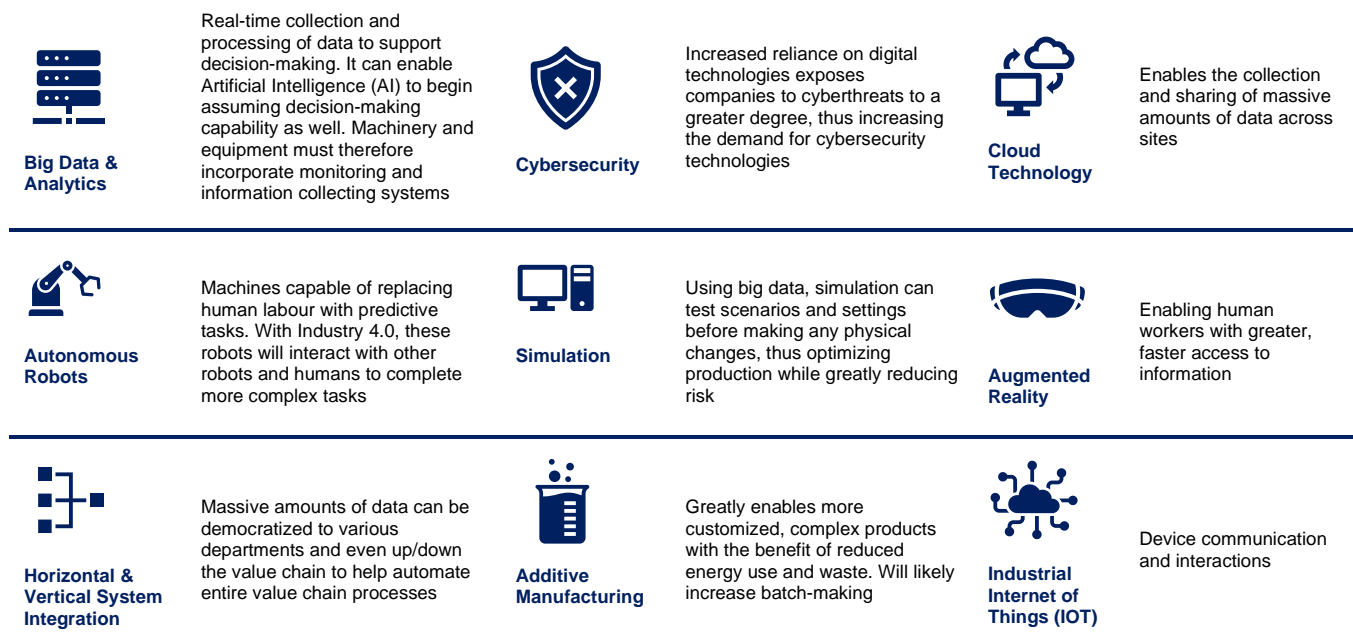
### 2.2.1 Industry 4.0

Another global trend which is impacting business operations and with implications to the competitiveness environment faced by investors is that of Industry 4.0. Used to define the Fourth Industrial Revolution, Industry 4.0 is characterized by interconnected machinery and equipment. It essentially incorporates digital technologies with automated equipment, thus reducing the need for manual tasks even further while greatly increasing speed, efficiency, quality, and information during the production process. Three mega-trends associated with Industry 4.0 are Connectivity, Intelligence and Flexible Automation. A number of technologies are combining to spurt the fourth industrial revolution (see Figure 2-1).



Source: World Economic Forum and McKinsey & Company

Figure 2-1 Technologies Influencing Industry 4.0



Source: Information from Boston Consulting Group

### Relation to Location Strategy

Contrary to assumptions, Industry 4.0 has not appeared to greatly replace human labour in early adopting firms. In fact, Industry 4.0 adoption augmented existing production roles.<sup>3</sup> While the Third Industrial Revolution (automation) has greatly replace labour with machinery, the companies that take the natural next step have not seen as great a labour disruption as expected. This is because while Industry 4.0 automates tasks, it does not eliminate entire roles which still depend on human decision-making and creativity.

When considering the impact of automation, any predictable physical labour and routine data collection & processing are highly automatable tasks and thus have a larger potential for being disrupted. Considerations related to Industry 4.0 for the Region include:

- the Region's nascent position hosting data servers aligns with the broader movement to big data analytics and information hosting
- augmented reality and simulation are being actively pursued within the EMR and have engineering construction applications in design and execution as well as training
- University of Alberta also provides both a talent pipeline and a partner for data and information technology research
- high speed internet corridor through the Region provides a 'backbone' upon which data-based activities, IOT, knowledge sharing for systems integration and simulations can be built

#### 2.2.2 Supply Chain Disruption

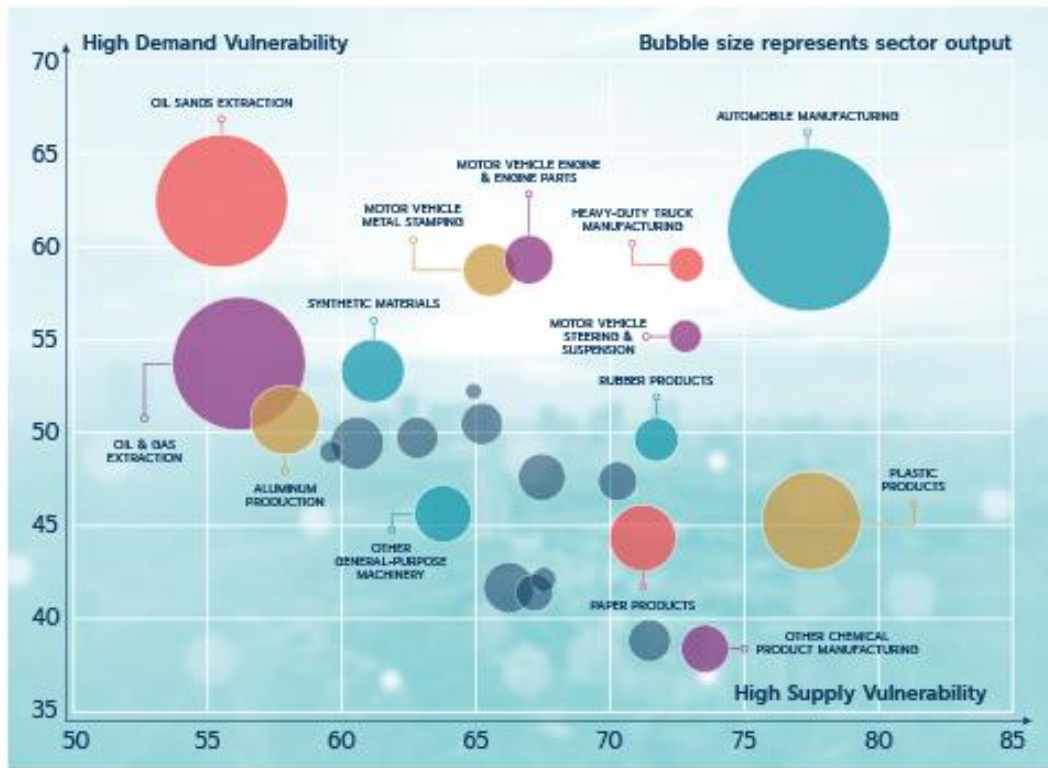
The trend of business process outsourcing (BPO), popular over the past number of decades, has largely been driven by companies' efforts to reduce labour costs, especially in low-skilled occupations, despite the risk of extending supply chains. However, under the influence of Industry 4.0, these same roles which have been outsourced (manufacturing and BPO roles) are now the most susceptible to automation disruption. As Industry 4.0 demands higher levels of skills and largely negates the need for large amounts of cheap labor, the trend of *re-shoring* operations back to home countries is emerging, welcome news for North America and Europe.<sup>7</sup> Given that the Tri-Municipalities have strong manufacturing and IT capabilities themselves and are also proximate to additional value chains throughout the EMR, the municipalities should expressly count Industry 4.0 opportunities as key targets for the region.

The recent experience of Covid-impacts to global production and trade have highlighted some interesting findings regarding the degree of vulnerability of Canadian supply chains. Figure 2-2 shows industries vulnerable to international supply and demand disruptions, both linked to trade disputes as well as the pandemic.

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<sup>7</sup> "Make at home or abroad? Manufacturing reshoring through a GPN lens: A Norwegian case study". Lund and Sheen. Geoforum, 2020.

Figure 2-2 Industry Vulnerability to International Supply and Demand Disruptions



Source: Canada's State of Trade 2020, Global Affairs Canada

Of note, oil sands and conventional oil and gas extraction are both identified as having high vulnerability to demand levels, evidenced by the plummeting oil price and production cuts observed in the first half of the year. Auto and motor vehicle parts are seen as vulnerable to both demand and supply factors. Plastic products are identified as vulnerable to supply upsets, including factors such as geographical clustering and limited number of intermediate suppliers.

Small and medium enterprises (SMEs), defined as less than 500 employees, experienced higher impacts to export volumes than larger enterprises within Canada. Companies with lower export value products were the first to reduce their activities. Exporting to the U.S., while down 10%, remained less affected than volumes to China, France and Italy, which were down 20% respectively.<sup>8</sup>

<sup>8</sup> Global Affairs Canada. Canada's State of Trade 2020. <https://www.international.gc.ca/gac-amc/publications/economist-economiste/state-of-trade-commerce-international-2020.aspx?lang=eng#32>

<b>Key Takeaways from Emerging Trends and the Regional Economy:</b>	
<b>Manufacturing</b>	The manufacturing sector in Canada continues to go through a challenging process, as it has over the past decade. Auto, truck and other machinery parts are flagged as being the most susceptible subsectors to international supply chain shocks. Many subsectors and functions, including food processing have high potential for increased automation and reshoring. In this sense, Canada's proximity to the U.S. may lend an advantage of increasing insertion into North American based supply chains, although Mexico's positioning has been more successful of late.
<b>Transportation, Warehousing and Logistics</b>	Data interface, processing and space management have high potential for automation. Ongoing trade tension between the U.S. and China may provide new opportunities for Canadian trade. Likewise, emphasis on supply chain resiliency may provide new opportunities for Canadian suppliers serving both Canadian and US markets.
<b>Energy Services</b>	Sector still subject to major uncertainty, but a continuing focus on lowering discovery and production costs remains. Increased use of automation and exploration of potential AI applications to reduce labour and safety risks being explored, particularly in more remote and higher cost locations, driving greater overlap with ICT and smart manufacturing.
<b>Information, Communications and Technology</b>	Many work functions in this sector show high potential for automation. ICT can enable companies to achieve increased exports, for instance in commercial and professional services. Remote-work requirements is accelerating communication technology adoption and leading to strong growth for the sector.
<b>Value-Add Agriculture</b>	In addition to food processing, large opportunities for continued automation exists, increasing ability to replace some lower cost offshore growing, including through controlled environments including cannabis operations and greenhouses. Export demand for a number of products has increased during 2020, in spite of or due to pandemic impacts.
<b>Commercial</b>	Data management in retail is ripe for automation, as are various functions within commercial support services including real estate, finance and insurance, professional and management functions. This ties into the ICT sector. A number of retail commercial and food and grocery operations are identified as having lower risk of supply chain disruption versus other sectors.

### 3. Current State Assessment

This section assesses the Region's current competitiveness. It commences with the 'big picture' of how the Edmonton census metropolitan region aligns with other Western Canadian and identified U.S. comparators of interest. Assessing the broader region is the first step outside investors take before landing on any particular community within, including the Tri-Municipal Region. Once at the regional level, local factors such as land ability and cost and tax rates come into play. Investors compare regional offerings to options available elsewhere in the province, hence the Regional analysis includes other comparators within the EMR and elsewhere in Alberta.

The current state assessment commences with ranking results and strengths and weaknesses identified through the Reverse Site Selection modelling process and complete the SWOT analyses with input from other data sources and observations. Regional results are presented by individual communities as well as for the Region (Tri-Municipal communities combined). Note that ranking exercise is relative to comparators and different ranking results within categories may appear larger than the actual differences.

#### 3.1 International / National Competitiveness

##### 3.1.1 Modelling Results

For the purpose of this assessment, the Edmonton region has been compared against identified peer locations within the United States as well as in western Canada. Edmonton ranks 4<sup>th</sup> overall in terms of general competitiveness factors, behind Houston and ahead of Winnipeg and Boise. Denver, Calgary and Vancouver comprise the top three rankings.

Table 3-1 Overall Competitiveness Results - International

Categories	Denver	Vancouver	Calgary	Edmonton	Houston	Boise	Winnipeg
Population and Demographics	5	7	4	2	1	2	6
Household Statistics	4	2	4	1	2	7	6
Labour Force Availability	1	1	6	5	3	7	3
Educational Attainment	1	4	2	5	7	2	6
Occupation-Specific Employment	4	2	3	6	1	5	7
Industry-Specific Employment	6	1	2	4	3	7	5
Wages and Salaries	2	1	2	4	4	7	6
Transportation and Market Access	4	5	2	2	1	7	6
Tax Regime	2	1	4	5	7	2	5
Quality and Cost of Living	5	2	1	4	2	6	7
<b>Overall Rank</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

Notes: Numbers represent rankings within each category between 1 and 7 comparators, with 1 being most favourable. Same numbers represent ties, which become more frequent for categories with fewer distinct indicators or data gaps.

The following table highlights factors which influence the Edmonton region's sub-ranking in each category as well overall rank. Factors that positively impact the ranking are read as strengths ("advantages") while factors which

negatively impact the EMR's ranking are read as weaknesses ("disadvantages") in the reverse site selection modelling process.

**Table 3-2 Strengths and Weaknesses of Edmonton Region - Modelling Results**

Strengths	Weaknesses
<b>Population and Demographics – Rank: 2<sup>nd</sup></b>	
<b>Factors: Population base, growth rate and age</b>	
<ul style="list-style-type: none"> <li>Comparatively high annual population growth rate, projected to continue to 2023 (<b>2.09%</b>)</li> <li>Comparatively low median age (<b>36.50</b>), only slightly higher than top-ranked peer, Houston (34.40)</li> </ul>	<ul style="list-style-type: none"> <li>While relatively high, growth rate is lower than Calgary 2.22% and Boise 2.18%</li> </ul>
<b>Household Statistics – Rank: 1<sup>st</sup></b>	
<b>Factors: Housing ownership and growth in stock, household and individual incomes and growth</b>	
<ul style="list-style-type: none"> <li>Moderate household income and high household income growth</li> <li>High percentage of home ownership (69.5% - average is 64.8%)</li> </ul>	<ul style="list-style-type: none"> <li>No evident weakness</li> <li>High household income growth rate may spur local inflation over time eroding cost of living advantage.</li> </ul>
<b>Labour Force Availability - Rank: 5<sup>th</sup></b>	
<b>Factors: Workforce, unemployment rate</b>	
<ul style="list-style-type: none"> <li>Unemployment in mid-range of peers (6.10%)</li> </ul>	<ul style="list-style-type: none"> <li>Slightly lower level labour force availability (864,000) versus median (876,000)</li> </ul>
<b>Educational Attainment - Rank: 6<sup>th</sup></b>	
<b>Factors: Working age educational attainment by level</b>	
<ul style="list-style-type: none"> <li>High percentage workforce with a technical certification (10.87%), beneficial for key industries such as manufacturing, construction, and engineering</li> <li>High percentage of population with high school diploma or equivalency certification (24.80%), representing a growing skilled labour force</li> </ul>	<ul style="list-style-type: none"> <li>Comparatively high percentage of the population has no certificate, diploma or degree (9.74%)</li> <li>Lowest relative percentage of population with university certificate, diploma or degree (19.96%) beneficial for professional and business service-related jobs – in addition to other white-collar level work</li> <li>Low rate of population with postgraduate degree (8.91%)</li> </ul>
<b>Occupation-Specific Employment – Rank: 3<sup>rd</sup></b>	
<b>Factors: Employment by Occupation</b>	
<ul style="list-style-type: none"> <li>Comparatively high proportion of workforce in Trades, Transport/Equipment (19.90%), Sales and Service (17.68%) and Management Occupations (26.44%)</li> </ul>	<ul style="list-style-type: none"> <li>Comparatively low proportion of workforce in Manufacturing and Utilities (2.16%) and Business, Finance and Administration (26.40%)</li> </ul>
<b>Industry-Specific Employment – Rank: 7<sup>th</sup></b>	



### Factors: Employment by Industry

- High percentage of the population in Construction (9.96) and Transportation & Warehousing (6.00%)
- Relatively high percentage in Utilities (6.00%), Mining, Quarrying, Oil & Gas Extraction industry (4.47%) and Manufacturing (6.55%)
- Comparatively high percentage of the population in the wholesale and retail trade industry (4.90% and 10.59% respectively)
- Relatively low percentage of workers in Finance and Insurance and Professional, Scientific and Technical Services (5.73% and 41.72% respectively)

### Wages and Salaries – Rank: 4<sup>th</sup>

#### Factors: Minimum living hourly wage

- Medium-ranked average wage rate (\$16.31 per hour), lower than Calgary and Vancouver
- Higher than some markets including Houston, Winnipeg, Boise
- \*\*Data issue - low availability of detailed salary surveys for Canadian locations<sup>9</sup>

### Transportation and Market Access – Rank: 3<sup>rd</sup>

#### Factors: Population, households and average household income within 4-hour drive time, time to major airport, time to Intermodal/Transload rail

- Well-connected to major highways and rail intermodal yards in terms of distance and drive-time
- Located close to both regional and international airports which provide easy access to distribution networks
- Relatively high population base within a 4-hour drive time (3.86M) for Canada
- High annual percentage household growth within a 4-hour radius (1.86%), and high average household income growth projected (2.31%)
- Compared to US peer competitors, lower population within a 4-hour radius (Houston 21M, Denver 5.8M) with exception of Boise (1.5M)

### Tax Regime – Rank: 5<sup>th</sup>

#### Factors: Property tax rates, availability of local incentives, federal corporate income tax rate

- Federal corporate income tax (15%) is lower compared to that of US locations (21%)
- Local incentives available depending on jurisdiction
- Comparatively high median property tax<sup>10</sup> (2.08% per \$1000 of commercial assessment), above Calgary (1.77%), Vancouver (1.24%) and Denver (0.70%) but in line with Houston

### Quality and Cost of Life – Rank: 4<sup>th</sup>

<sup>9</sup> This data gap presents a risk, as the selection process looks for comparable data with other locations. Note the Alberta Ministry of Labour offers Labour Market Partnership grants that may be used to fund regional labour market studies to address this shortcoming. Area labour market studies, for example undertaken by the Tri-Municipal region help present a custom look specific to the Region including wage levels. Unfortunately, a data gap with other comparators prevents consistent comparison across the EMR.

<sup>10</sup> Property tax rate expressed as a percentage per \$1000 of assessment.

### Factors: Safety, housing costs and affordability, weather, general purchasing power, environment, commuting, health care

- High housing unit growth from 2019-2024 compared to other competitor locations (9.63%)
- Good comparability on quality of life index; housing affordability and income levels strong
- High average level of home ownership (70%) which influences stability and purchasing power
- Below median results on quality of life index, influenced by purchasing power and climate
- Housing affordability lower than Calgary (slightly) and Winnipeg

### 3.1.2 Sector-Specific Results

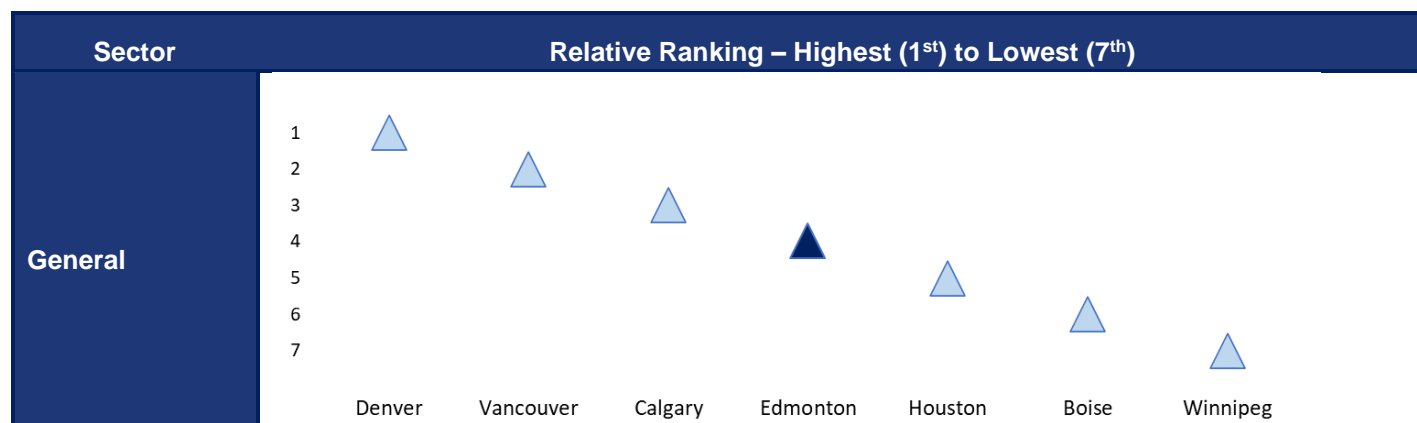
The following table presents the Edmonton region's ranking by specific subsectors of interest.

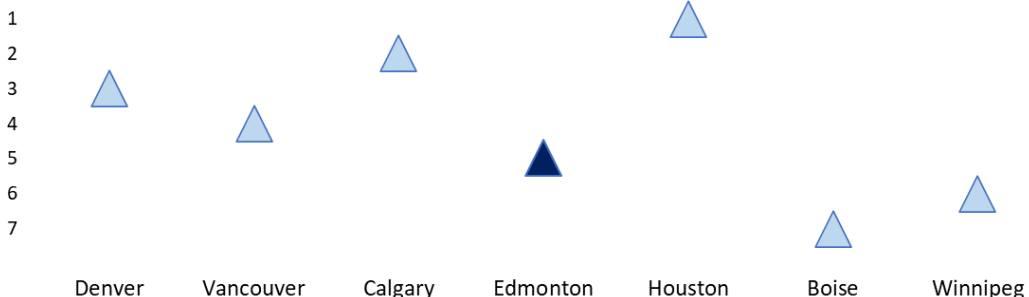


Its general competitiveness ranking of 4<sup>th</sup> remains consistent in Value-Added Agriculture. The region's relative rank moves to 1<sup>st</sup> for Commercial (Retail and Wholesale) sector. The ranking moves down to 5<sup>th</sup> in terms of Manufacturing, Transportation, Warehousing and Logistics and Information, Communication and Technology sectors.

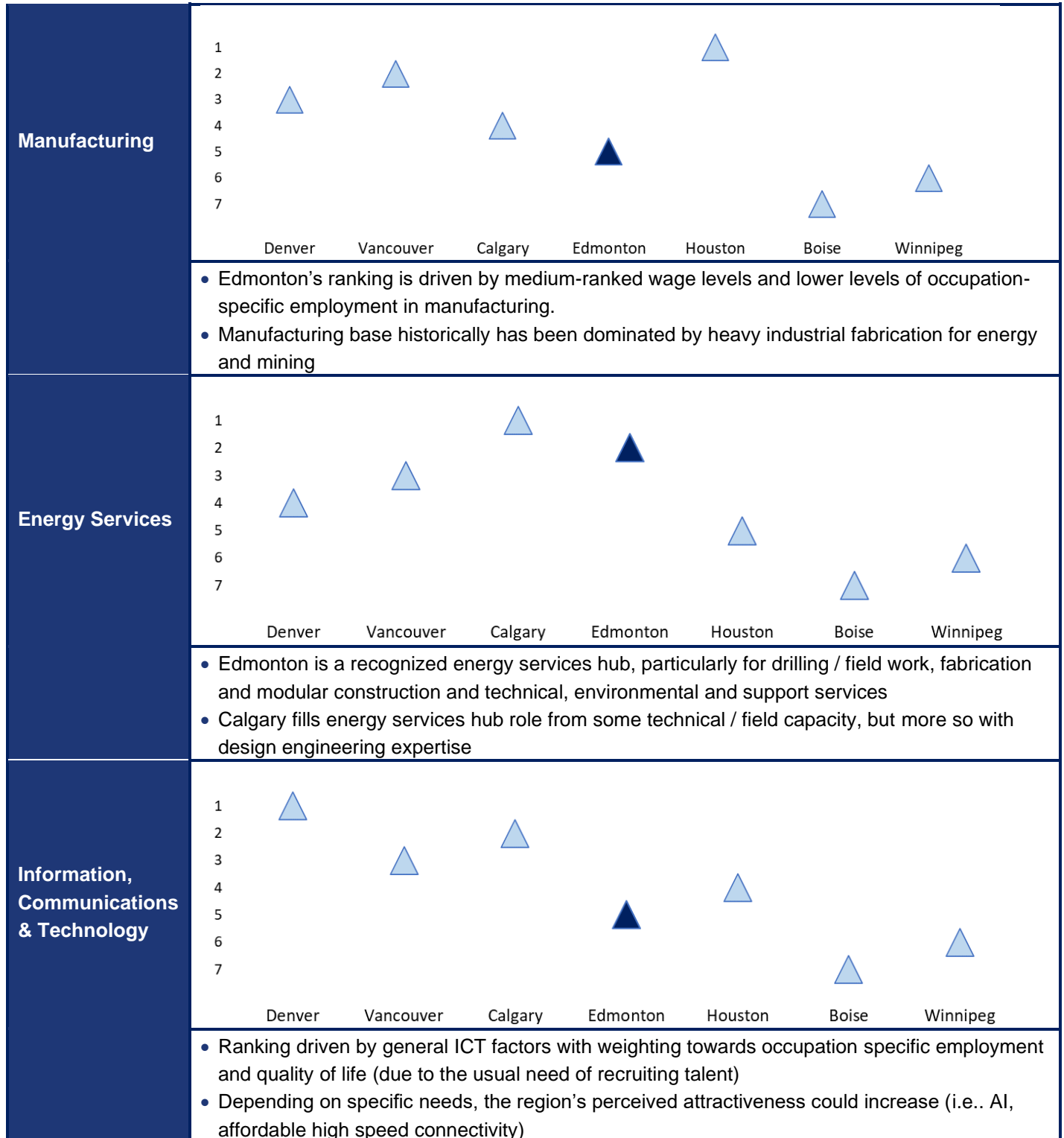
Table 3-3 Sector Specific Competitiveness Results - International

Categories	Denver	Vancouver	Calgary	Edmonton	Houston	Boise	Winnipeg
General Results	1	2	3	4	5	6	7
Transportation, Warehousing and Logistics	3	4	2	5	1	7	6
Value-Added Agriculture	3	2	1	4	5	7	6
Commercial (Retail / Wholesale)	4	5	2	1	3	6	7
Manufacturing	3	2	4	5	1	7	6
Energy Services	4	3	1	2	5	7	6
Information, Communication and Technology	1	3	2	5	4	7	6

Notes: Numbers represent rankings within each category between 1 and 7 comparators, with 1 being most favourable.



<b>Transportation, Warehousing &amp; Logistics</b>	 <ul style="list-style-type: none"> <li>Edmonton's central location and proximity to crucial transportation and logistics infrastructure reinforce its strengths in TWL. Access to other major markets is at a disadvantage versus higher ranked regions</li> <li>Historically TWL has been more influenced by energy sector needs, now shifting to broader commercial</li> </ul>
<b>Value-Added Agriculture</b>	 <ul style="list-style-type: none"> <li>Regional activity in cannabis, hemp, canola, beef, barley, and other products can provide new or enhanced value streams</li> <li>Weakness relate to access to transportation and final markets</li> </ul>
<b>Retail / Wholesale (Commercial)</b>	 <ul style="list-style-type: none"> <li>Region's relatively strong growth in population and household formation indicates need for future commercial services</li> <li>Comparatively high occupation-specific employment levels in both retail and wholesale trade</li> <li>Linkages to transportation, warehousing and logistics strengths</li> </ul>



### Comment on Modelling Results

Weighted modelling of indicators for specific sectors of interest is a commonly-used approach by site selectors in shortlisting potential investment locations. Through this process, decision-makers rely on data availability and often a generalized approach to weighting factors of importance to specific sectors. Advantages to the modelling process include accounting for a myriad of indicators that collectively influence the competitive environment of a particular location, and an ability to weight factors of higher relevance to particular sectors. The modelling approach does have its drawbacks, namely bluntness in terms of differentiating between locations (differences can be exaggerated) and a reliance on publicly-available generalized information which lack sensitivity to local factors and may not accurately reflect an area's strengths. It is an imperfect, but widely adopted process.

It is important to note that *any* ranking of this nature is just one way of looking at information on a region. Weightings simulate what would be the first pass by any company using such an analysis and tend to be followed up by further examination of the data to explain unexpected results and evaluating the results against their own organization's strategic needs. Important factors to consider regarding the benchmarking process includes:

- general competitiveness factors tend to dominate – a business environment with strong baseline indicators of competitiveness (labour availability, population growth, income level, tax rates, education level) tends to remain competitive under a variety of sectors. This underscores the imperative of 'getting the foundations right', enabling potential growth across a variety of sectors
- availability of comparable data is important – consistent datasets across communities and countries allows for more equivalent comparisons. Data gaps can end up hurting a region's evaluation, and if difficult to fill, can result in exclusion by prospective investors which will not invest the time to address these gaps
- sectors definitions, such as energy services and value-add agriculture, can be challenging to define as they involve numerous occupations and industries across multiple NAICS categories. Sector weightings used in modelling may not fully reflect nuances and under-value actual strengths

While the Edmonton region varies in relative rankings by sector, it is important to note that it shows competitive across all sectors against an array of competitive comparators. In other words, while the modelling results suggest potentially lower relative stances in some areas versus other areas, ***the Edmonton region is very much 'in the game' for all the sectors.*** This is proven by businesses investing within the region. Ultimately, decisions rest on the factors given most weight by individual companies, for which many, the Edmonton area meets.

#### 3.1.3 Other Strengths and Weaknesses

As stated earlier, site selection begins at the highest level (national) and works its way down to specific communities. For international investors, including from the U.S., national and provincial-level considerations, such as access to raw materials, tax, trade, political stability and market size are critical. While these factors are not within direct control of local governments, they dictate whether a region makes it on the radar of potential investors. The key is identifying the factors which most influence decisions, and ensuring good information is available to prospective groups. This is often an area where a regional group, like Edmonton Global, can support. The objective is ensuring the 'pipeline of potential projects' coming to the Edmonton region is as big as possible.

Providing clarity regarding key influencing factors can help municipalities prioritize in terms of providing indirect supports (messaging and supporting lobbying initiatives). A number of these factors are not necessarily included

in site selection models, but are rather considered either beforehand, afterwards or are included in on-site investigation rather than through modelling.

The following table outlines perceived strengths Canada and Alberta that investors observe when evaluating locations, many of which are outside the scope of typical site-selection modelling.

**Table 3-4 National, Provincial and Edmonton Area Competitiveness Strengths**

National, Provincial and Regional Strengths / Assets		
Canada	Alberta	Edmonton Region
<ul style="list-style-type: none"> <li>Abundant supply of natural resources</li> </ul>	<ul style="list-style-type: none"> <li>Population base of 4.3 million – approaching critical mass of being its own market for consumer and other goods</li> <li>Strong market awareness for anything related to energy sector</li> </ul>	<ul style="list-style-type: none"> <li>Population base of 1+ million</li> </ul>
<ul style="list-style-type: none"> <li>Straightforward immigration policy, allows for leveraging global talent base</li> </ul>	<ul style="list-style-type: none"> <li>Emerging cleantech sector</li> </ul>	<ul style="list-style-type: none"> <li>International airport – EIA recognized as having a number of key U.S., Asia Pacific and other international connections and cargo capabilities</li> </ul>
<ul style="list-style-type: none"> <li>Skilled labour, noticeable with borderless work (i.e.. data centres, technology / R&amp;D)</li> </ul>	<ul style="list-style-type: none"> <li>Cold-weather expertise</li> </ul>	<ul style="list-style-type: none"> <li>Developing reputation for certain technology applications (simulation, cleantech, AI) – driven by U of A and NAIT</li> </ul>
<ul style="list-style-type: none"> <li>Cost effectiveness for labour (lower than some U.S. locations when including health care, insurance, taxes)</li> </ul>	<ul style="list-style-type: none"> <li>Tax position</li> </ul>	<ul style="list-style-type: none"> <li>Energy-related expertise (service, manufacturing, research, logistics)</li> </ul>
<ul style="list-style-type: none"> <li>Access to North American market and trade agreements</li> </ul>	<ul style="list-style-type: none"> <li>Business Friendly reputation</li> </ul>	<ul style="list-style-type: none"> <li>AIHA – heavy industrial cluster, puts the region on the map for petroleum and petrochemical processing</li> </ul>
<ul style="list-style-type: none"> <li>Lower exchange rate</li> </ul>	<ul style="list-style-type: none"> <li>Incentive programs (to some extent)</li> </ul>	<ul style="list-style-type: none"> <li>Housing, cost of living, quality of life (given cold climate)</li> </ul>
<ul style="list-style-type: none"> <li>More uniformity of regulatory and tax environment across provinces versus between U.S. states</li> </ul>	<ul style="list-style-type: none"> <li>Entrepreneurial focus</li> </ul>	<ul style="list-style-type: none"> <li>Stability, diversified employment base</li> </ul>
<ul style="list-style-type: none"> <li>Robust transportation infrastructure – access for product movement and ability to handle extreme weather</li> </ul>		<ul style="list-style-type: none"> <li>EMR seen as a supportive and collaborative environment, not hyper-competitive</li> </ul>
<ul style="list-style-type: none"> <li>Multilingual capabilities</li> </ul>		<ul style="list-style-type: none"> <li>Municipal Property Tax and evolving M&amp;E Incentives Act</li> </ul>
<ul style="list-style-type: none"> <li>Peaceful, stable, good quality of life and security</li> </ul>		



Based on observation of site selection, the strengths which most influence decisions to invest in Canada include:

- access to natural resources or other raw materials
- labour cost, driven by exchange rate and health care
- access to markets across North America and a more open bridge to some international markets than the US

Aside from natural resources, the strengths which most influence decisions to invest in Alberta and the Edmonton region center on the workforce, specifically:

- diversified economy active across a variety of sectors
- well-educated workforce with varied skillsets
- strong in construction and logistics – good understanding of cold weather, transportation and product movement

Many of these strengths have been due to the region's legacy with the energy sector, which has driven creative solutions in logistics as well as workforce development in varied skillsets, both trades-based as well as scientific and technical.

#### Considerations for the Tri-Municipal Region:

- the mixed skillset within the Tri-Municipal region reflects the broader region's labour force, combining mix of skilled labour and technical/professional workers. Local labour availability benefits from access to the EMR labour pool and commutability within the region
- Region's strengths in transportation linkages and logistics expertise align with the EMRs strengths in this sector
- housing affordability and a young and growing population base, present in the Region drive quality of life and community attractiveness measures

The following table outlines real and perceived weaknesses Canada, Alberta and the Region present to investors when contemplating potential locations.

**Table 3-5 National and Provincial and Edmonton Area Competitiveness Weaknesses**

National, Provincial and Regional Weaknesses / Gaps		
Canada	Alberta	Edmonton Region
<ul style="list-style-type: none"> <li>• Awareness level – often lower than other investment destinations, particularly the U.S.</li> </ul>	<ul style="list-style-type: none"> <li>• More remote – further from population density in Eastern Canada</li> </ul>	<ul style="list-style-type: none"> <li>• Perceptions: <ul style="list-style-type: none"> <li>• Limited to being a government or blue-collar energy city</li> <li>• Lack of awareness of assets</li> <li>• Climate / cold, dark in the winter</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Distance - remoteness to markets</li> </ul>	<ul style="list-style-type: none"> <li>• Landlocked – no access to coast</li> </ul>	<ul style="list-style-type: none"> <li>• Economy subject to boom-bust cycles (albeit within a more diversified economy)</li> </ul>
<ul style="list-style-type: none"> <li>• Sparseness - less population density</li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory issues regarding pipeline approvals</li> </ul>	

<ul style="list-style-type: none"><li>• Perceived interdependence with the US (economic, uncertainty with shifting trade agreements)</li></ul>	<ul style="list-style-type: none"><li>• Fossil fuel dependency and related questions of economic robustness and growth prospects</li></ul>	<ul style="list-style-type: none"><li>• 300 KM north of Calgary and primary east-west national transportation road and rail routes</li></ul>
<ul style="list-style-type: none"><li>• Demographics - aging population</li></ul>	<ul style="list-style-type: none"><li>• Higher construction costs</li></ul>	
<ul style="list-style-type: none"><li>• Perception of universities as less commercial research-driven when compared to their American peers</li></ul>		

Based on observation of site selection, the weaknesses which most influence decisions to not invest in Canada include:

- market size limited when compared to U.S. centres
- lack of clarity and understanding regarding regulatory setting, causing investors to default to areas more familiar or stable in appearance
- transportation and logistics – while robust, do not match the U.S. including higher density of airports, container ports and rail connections
- global market awareness – other markets such as U.S. are seen to have more cache

The perceived weaknesses that most influence decisions to *not* invest in Alberta include:

- uncertainty regarding economic stability, linked to the historic boom/bust cycles and effects to business costs, particularly labour availability and cost, rental rates, and land and building costs
- limited domestic market size and distances to other major centres
- remoteness and northern climate

The above reasons apply to the Edmonton region as well, in addition to a perception challenge or lack of awareness of the region's vibrancy, which struggles to be noticed on the national level. A number of these factors are shared with other comparators in Canada; however, Vancouver and Toronto regions are seen as less remote and due to location and market size, tend to capture the majority of attention.

#### Considerations for the Tri-Municipal Region:

- regional strengths in transportation and logistics relate to products with natural markets in northern Canada
- overcoming constraints such as being land-locked as well as improving metrics to be more competitive with U.S. performance indicators overcome real or perceived weaknesses
- supporting initiatives to raise the Edmonton region's profile is critical, such as sharing investor and worker reactions and stories who discover the region's benefits versus other jurisdictions

## 3.2 Regional Competitiveness

### 3.2.1 Modelling Results – Overall Competitiveness within EMR

In the local benchmarking model, the Municipalities and the Region were compared to other EMR communities. The relative rankings amongst 15 comparators is Spruce Grove (2<sup>nd</sup>), Stony Plain (8<sup>th</sup>) and Parkland County (11<sup>th</sup>). Combined, the Tri-Municipal Region is ranked 5<sup>th</sup>. This supports the notion of presenting a regional front, as the Tri-Municipal competitive position is generally stronger than its individual members. In many instances Spruce Grove shows strongly on its own, however there are areas and sectors in which the combined Region improves

on its individual ranking. As well, many of the foundational competitive metrics, like labour force, benefit from a larger size, which the Regional approach achieves.

Based on the modelling results, the top ranked communities in the Edmonton region are Edmonton, Spruce Grove and Leduc in terms of overall competitiveness. The Edmonton region communities tend to rank above southern communities of Red Deer, Rocky View County and Red Deer County; the exception is Airdrie which comes in 6<sup>th</sup> overall.

The modelling process tends to favour urban over rural centres, due to general density factors, including but not limited to labour force, market size, and transportation infrastructure. Obviously rural locations like counties, municipal districts and specialized municipalities have their own competitive advantages, including typically larger available land bases, ability to host heavy industry and agribusiness which requires larger setbacks from residents, and often a stronger tax base and lower property taxes. The strengths of rural locations present real competitive advantages – ultimately desirability comes down to specific investor needs by sector and these advantages are discovered outside the modelling process.

#### Key Findings in Modelling Results:

The Tri-Municipal Region shows good **competitiveness** in the following categories:

- Taxation – lower property tax rates versus majority of comparators, and various investment incentives.
- Security and quality of life – influenced by affordable housing costs (ownership and rental) and availability
- Industry-specific workforce in transportation, trades, sales and service
- Educational attainment – a good mix of technical certifications and postsecondary diplomas and degrees
- Infrastructure - good connectivity to major east-west highways and transportation routes northbound, as well as proximity to major rail intermodal facility
- Land prices – lower than many other comparators

The region's principal **weaknesses** identified include:

- Workforce size: On an industry-specific basis, the workforce size is smaller when compared to some of the larger centres. Similarly, while the Region's occupational mix is varied, some comparators have specific concentrations in some of the desired occupations
- Buildings – The lower ranking in part is driven by actual available inventory of space, the other factor being a lack of available data, particularly for Parkland County. Having a more thorough census of properties will enhance the local ranking

Table 3-6 Overall Competitiveness Results - Regional

Categories	Edmonton	Spruce Grove	Leduc	Strathcona County	Tri-Municipal Region	Airdrie	Beaumont	Stony Plain	Red Deer	St. Albert	Parkland County	Sturgeon County	Leduc County	Rocky View County	Red Deer County
Population and Demographics	2	2	5	10	6	1	2	9	6	10	12	8	12	12	12
Household Statistics	2	2	4	10	7	9	15	5	7	10	1	13	6	12	13
Educational Attainment	8	2	10	2	4	9	1	4	15	4	12	11	13	4	14
Industry-Specific Employment	1	10	7	2	4	4	15	13	3	6	13	12	10	8	9
Occupation-Specific Employment	2	9	9	2	9	6	7	15	4	1	12	7	12	5	14
Transportation and Market Access	4	8	8	14	4	1	3	7	6	12	2	15	13	8	8
Tax Regime	15	1	1	7	1	7	7	1	14	13	1	7	11	1	12
Security and Quality of Life	10	4	6	6	3	2	1	5	8	9	12	10	14	13	15
Land, Buildings and Utilities	3	9	5	2	14	7	11	15	6	10	8	4	13	12	1
<b>Overall Rank</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>

Notes: Numbers represent rankings within each category between 1 and 15 comparators, with 1 being most favourable. Same numbers represent ties, which become more frequent for categories with fewer distinct indicators or data gaps.

### 3.2.2 Other Strengths and Weaknesses

A broader array of strengths and weaknesses for the Tri-Municipal Region which are important to potential investors are presented in the following table.

**Table 3-7 Other Tri-Municipal Regional Competitiveness Strengths and Weaknesses**

Tri-Municipal Strengths and Weaknesses	
Strengths / Assets	Weaknesses / Gaps
<ul style="list-style-type: none"> <li>• Reputation within market as being a lower cost location for land and rental rates</li> </ul>	<ul style="list-style-type: none"> <li>• Internet connections / final kilometer to businesses and residences is uneven – lagging other Alberta municipalities in addressing</li> </ul>
<ul style="list-style-type: none"> <li>• Reputation as more responsive regulatory environment – Municipalities seen as proactive in supporting and working with businesses</li> </ul>	<ul style="list-style-type: none"> <li>• Distance to EIA (some businesses require closer distances)</li> </ul>
<ul style="list-style-type: none"> <li>• Location on national highway, and location on major rail line and direct interface with CN through proximity to intermodal yard</li> </ul>	<ul style="list-style-type: none"> <li>• Located outside the capital (i.e.. Technology firms likely drawn to core / university area, research parks)</li> </ul>
<ul style="list-style-type: none"> <li>• Western location north of river, seen as desirable access for east/west, as well as north (west and east)</li> </ul>	<ul style="list-style-type: none"> <li>• Insufficient market density for certain retail / commercial firms</li> </ul>
<ul style="list-style-type: none"> <li>• Acheson industrial area – allows for partnering / clustering among numerous, varied firms</li> </ul>	<ul style="list-style-type: none"> <li>• Region lacks a ‘calling card’ or identifiable label for what it is known for (i.e.. Leduc agriculture incubation and airport, AIH heavy industrial), with the exception of Acheson as an active industrial park.</li> </ul>
<ul style="list-style-type: none"> <li>• Combined population base of 93,000 and catchment of over 220,000 within a 20-minute drive of Spruce Grove. Reasonably-sized local labour force plus easy commutability for workers elsewhere in the EMR</li> </ul>	<ul style="list-style-type: none"> <li>• Early stages of formalized collaboration within the Tri-Municipal Region, lack of definition and awareness for what forms it will take</li> </ul>
<ul style="list-style-type: none"> <li>• Internet – ability to access main trunk line</li> </ul>	
<ul style="list-style-type: none"> <li>• Living conditions / quality of life – region has been experiencing strong population growth, driven by housing options</li> </ul>	

The strengths which most influence decisions to invest in the Region include:

- ease of doing business and reduced regulatory barriers
- overall cost of doing business
- access to readily developable land (i.e.. established industrial parks)
- overall readiness (regulatory, land, team understands business, self-awareness of strengths/weaknesses, experienced in executing projects)
- young and fast-growing urban centres
- tax regime

Identified weaknesses that most influence decisions to *not* invest in the Region include:

- distances, such as the airport, downtown core, universities and research centres
- perception of being outside the centre of activity

#### Considerations for the Tri-Municipal Region:

- Region enjoys a pre-existing reputation as being a lower cost and business-friendly region – this is a foundation which can be further highlighted and strengthened
- internet connectivity including leveraging on proximity to major trunk line and ‘final kilometer’ household connectivity presents both opportunities as well as challenges
- perception exists of Region being ‘outside the action’ due to distance to the EMR core. One potential means to addressing this is strengthening degree of innovation and technology adoption, involving innovation hubs in the core and communicating successes
- currently, Regional collaboration is at the planning stage - the full strength of collaboration between the Tri-municipalities will not be evident until operationalized, turning the expressed willingness to cooperate into tangible actions and market awareness
- the Region should make more efforts to maintain a database of available sites and buildings that meet the need profile of likely industry and functional targets. The lack of this information is a current weakness and one that can be addressed fairly quickly to provide a competitive advantage
- the Region does not have a clearly defined regional identity like some other parts of the EMR. An opportunity exists to further develop an identity, clarify and amplify regional strengths and unique fit within the EMR and beyond

### 3.2.3 Sector Specific Analysis

#### Overview

As part of the regional competitiveness analysis, the Region was modelled against comparators on a sector-by-sector basis. The reverse site-selection model is not sensitive enough, due to lack of specific, comparable data across all communities, to provide definitive rankings within sectors – as a tool, this model is better suited for benchmarking sector performance at the national/international level, hence the presentation of results in Section 3.1.2.

That said, modelling at the regional level can provide a sense of which comparators appear to be likely more competitive by sector of analysis. While the international ranking explores how big the ‘pipeline’ of potential projects might be for the EMR given competitive results against other comparators, regional rankings provide an indication of where the first calls might be likely made once investors are looking for potential sites within the EMR.

#### Key general findings from the Sector-Specific Analysis include:

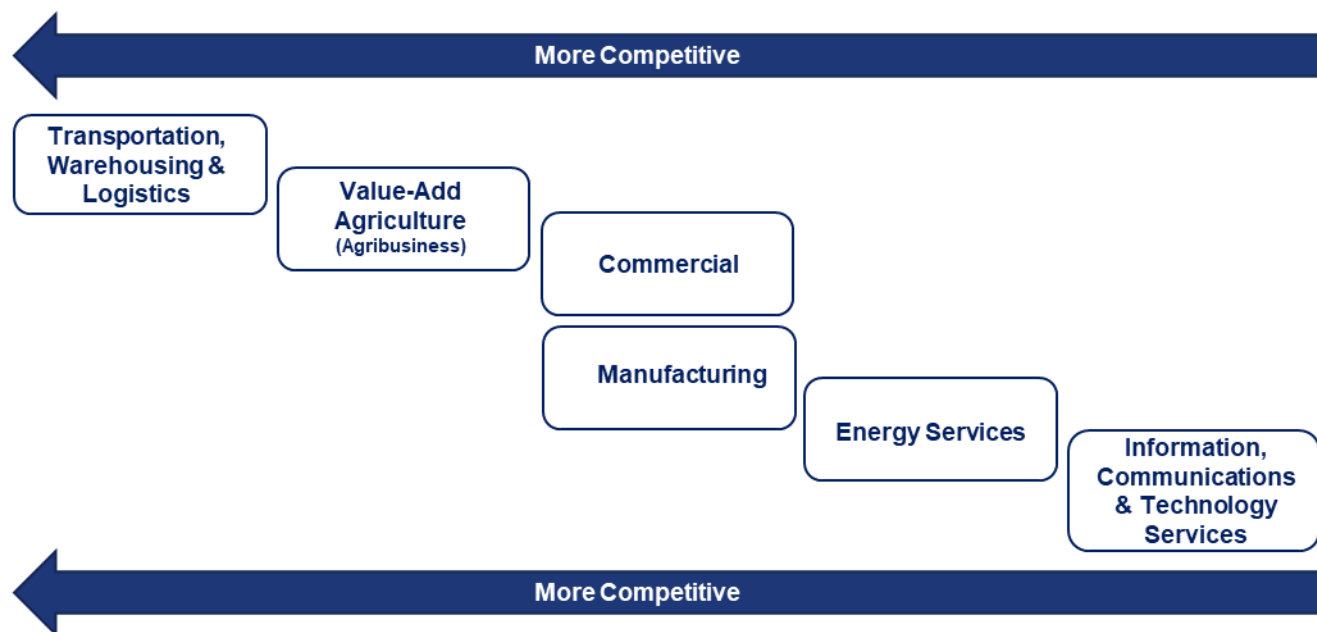
- The Tri-Municipal Region is competitive within the EMR in all of the identified sectors
- The Region places within the top half of comparators in all sectors



- Through combining the three member Municipalities, the selection process shows the Region to be stronger in a number of sectors than the individual member Municipalities
- While competitive in all sectors, the modelling suggests particular competitiveness in TWL, value-add agriculture, commercial (retail/wholesale) and manufacturing

The figure below shows, based on the modelling exercise, the relative assessment of the Region, ranging from more to less relative competitiveness. A discussion of each sector, including specific SWOT assessments follow.

Figure 3-1 Regional Relative Competitiveness by Sector



#### Transportation, Warehouse and Logistics (TWL)

The Tri-Municipal Region falls within the top quartile of comparators and shows to be very competitive in TWL. In the reverse site selection modelling, this result is driven by employment figures in relevant occupations to transport and logistics and good connectivity and market access via existing infrastructure. Other comparators which show strongly based on the modelling results include Edmonton, Red Deer, Red Deer County.

This sector comprises establishments engaged in transporting, warehousing and logistics services for goods. It includes trucking, rail, air and marine transportation modes as well as postal and courier services. This is one of the fastest growing sectors within the Region in terms of economic activity (GDP), forecasted to expand by 2.1% annually between 2017 and 2022.<sup>11</sup> Completion of the northwest segment of the Anthony Henday ring road has improved highway connectivity. That combined with the presence of CN's intermodal facility in west Edmonton have accelerated commercial and industrial activity in northwest Edmonton and Acheson.<sup>12</sup> Spruce Grove experienced 5.2% annual growth in number of transportation and warehousing businesses and 2.6% in annual related employment growth between 2001 and 2016.<sup>13</sup>

<sup>11</sup> Tri-Municipal Region: Labour Market Strategy & Action Plan, Applications Management Consulting Ltd, 2018.

<sup>12</sup> Parkland County, Employment and Industrial Lands Strategy, MDB/Watson and Associates, 2014.

<sup>13</sup> Here We Grow Industrial, Invest Spruce Grove.

TWL firms in the Region include Kal Tire Distribution, CWT Logistics, Pakratz, Winalta, Rebel Transport, Manitoulin Transport, Noranco, BLE and Extreme Hauling.

The following table presents a SWOT analysis of the TWL sector within the EMR.

**Table 3-8 TWL SWOT Analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Good air-cargo access to foreign markets via EIA, with over ten airlines, eight integrated couriers and freight carriers, over 25 freight forwarders and customs brokers, and multiple cargo-handling facilities including access to cold-chain logistics capabilities</li> <li>• Good access to ground transportation to the United States via a variety of highways and the Canamex and Ports to Plains routes connect Edmonton to key markets in the United States</li> <li>• Rail routes include CN and CP national lines, including three pacific tidewater ports, providing a shipping advantage to Asia over many U.S. locations</li> </ul>	<ul style="list-style-type: none"> <li>• Bridges on the west side of the Anthony Henday ring road reportedly have lower maximum weight restrictions, dictating that major module construction continues in the east side of the region</li> <li>• Lack of smaller sized parcels and lack of amenities and services seen as weakness in Acheson</li> <li>• Not located on the provincial over-dimensional load corridor, an attractant for large-scale fabrication and equipment companies</li> <li>• Distance to EIA outside of close radius expectations of fulfillment centres (although within range for some other potential investors)</li> <li>• Acheson at the edge of travel distance for a number of destinations due to transport time-out legislation, particularly south and north east. This affects interest from warehousing and logistics firms</li> <li>• Rail track location impacts access to and from Spruce Grove business park</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• The Spruce Grove Transportation Master Plan indicates a potential connection of Highway 628 and the Whitemud Freeway. If successfully completed, access constraints in the Spruce Grove business park would be addressed</li> <li>• Growth in online retail, accelerated by the pandemic will drive TWL globally</li> <li>• Reshoring supply chains brought on by pandemic-influenced challenges, particularly involving essential goods, could drive growth of domestic TWL market</li> <li>• Proposed extension by Alberta Transportation of the over-dimensional load corridor on Highway 60 to Highway 44 north of the Yellowhead would open fabrication, logistics and support service opportunities</li> <li>• Larger, affordable laydown sites servicing Highway 43-based industrial activity</li> </ul>	<ul style="list-style-type: none"> <li>• Potential closure of US supply chains to foreign suppliers for essential goods</li> <li>• Ongoing growth of Calgary region TWL network, located on key east-west transportation routes and closer in proximity to ports</li> <li>• Environmental regulations targeting emissions are challenging the transportation market nationally</li> <li>• Tariffs and regulations governing cross-border movements can present difficulties for service providers</li> <li>• Big data including real time monitoring requirements drive business to locations with dependable high speed internet, creating challenges for locations unable to access</li> <li>• Leduc/Nisku pivoting from energy services to logistics</li> </ul>

### **TWL Competitiveness Considerations for the Tri-Municipal Region:**

- TWL has natural tie-in and is an important enabler to manufacturing, energy services, value-added agriculture including food processing and commercial sectors
- land requirement consists of large-size competitively priced parcels with a mix of urban and rural infrastructure standards, which aligns with Region's offerings
- the inter-connected nature of this sector means demand in this sector is driven by local factors as well as supply and demand factors in Calgary and Vancouver
- distances are critical, as rules dictating drive times in the transportation sector continue to evolve. Provides advantage to locations to the northwest, but potentially challenging in servicing north east Alberta including Fort McMurray
- time to airport critical for some shippers and may exclude the region due to distance. Need to promote region for to users for which region meets their market needs
- lack of a major intermodal rail facility within Region is a potential gap; current proximity to West Edmonton adequate but not as strong. The OCTS intermodal facility, located in Acheson, provides some capacity
- technology trends including Industry 4.0 concepts are driving sector, including growth in online retail and required fulfilment centres, automating of supply chains (inventory monitoring/reordering) and autonomous vehicles. Affordable and dependable high-speed internet will become a mandatory requirement for sites
- eventual connection of Highway 628 from Spruce Grove's industrial park to the Whitemud Freeway would increase connectivity in region and avoid barrier of railway crossing for businesses within the park

### **Value-Add Agriculture**

The Tri-Municipal Region falls within the top quartile of comparators and shows a relatively strong competitive position in value-add agriculture. In the reverse site selection modelling, this result is driven by employment figures in relevant occupations to transport and logistics, access to consumer populations, and good connectivity and market access via existing infrastructure. Other comparators which show strongly based on the modelling results include Edmonton, Red Deer County and Rocky View County.

Value-add agriculture or agribusiness defined as including farms, food processing, greenhouses and nurseries, beverage processing, support activities for agriculture and niche agri-product processing (natural health products, cosmetic ingredients, functional food, plant ingredients).

The agribusiness sector in the Region consists of primary production and value-added processing. There are over 3,200 farms using approximately 1.7 million acres of land in the Edmonton region, resulting in agriculture being the single largest user of land. Value-added processing is a key and growing component of the agribusiness sector. Employment in the agribusiness sector is split almost evenly between primary production and value-added processing.

There are 165 food processing firms in the region, including bakeries, meat processing facilities, and frozen food manufacturing facilities. Gross farm receipts have been on the rise, as have food and beverage sales receipts. There are numerous farm equipment suppliers, several grain and oilseed elevators, including Viterra in Acheson. Parkland County has identified the objective of establishing a cluster of agricultural producers in support of a

vibrant agricultural and food producing economy.<sup>14</sup> Other food producing and agriculture-based companies include Champion Pet Foods, Cargill Value Added Meats, Beemaid Honey, Sandyview Farms, EarthApples and RayAgro.

The following table presents a SWOT analysis of the value-add agriculture sector within the EMR.

**Table 3-9 Value-Add Agriculture SWOT Analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>Proximity to agricultural land provides good access to local inputs; excellent soil quality in the region</li> <li>Food Processing Development Centre provides research and development support for agricultural processing including piloting of experimental products. The Agri-Food Processing Business Incubator supports startups in commercialization, product launch and graduation. Both organizations are in the same facility in Leduc.</li> <li>Good supply of trades required to maintain equipment and access to educated processionalists in the food sciences</li> <li>Strong rail linkages with CN and CP, including 16 intermodal and storage facilities and providing access to markets on both of Canada's coasts, through the US Midwest and Gulf coast</li> <li>One of the strongest agricultural research programs in the country at the University of Alberta, Dairy, Poultry, Swine and Rangeland research institutes</li> <li>Industry-led research centres, including DuPont Pioneer's seed research facility in Strathcona County</li> </ul>	<ul style="list-style-type: none"> <li>Relatively small economic sector, employing 1.5% of regional labour force</li> <li>Many of the region's food processors are small scale and lack capacity for export development. Harmonized standard requirements prohibitive, many firms remain focused on local market with some U.S. exposure</li> <li>Lack of co-packing facilities inhibits growth of startups facing barriers in packaging and shipping product</li> <li>Lack of acceleration supports specifically targeting established small agri-businesses, including access to capital targeted to this sector</li> <li>Many available facilities in region do not meet CFIA standards</li> <li>Lack of training programs in region which prepare individuals to work in a food processing facility</li> <li>Higher cost land than other agricultural areas of the province outside urban areas</li> <li>Shipping challenges due to competition with oil by rail</li> <li>Barriers to market access, including differences in product preferences, customs processing times and perishability</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>Local craft brewing and distilling due to regulatory shift</li> <li>Requirement for lower cost, less skilled workforce, aligning with segment of workforce underutilized in energy services and manufacturing</li> <li>Some existing success in backhauling on shipments; and creation of local company Food Processors Logistics to improve shipping efficiencies through collaboration</li> <li>Increase clustering within producers, encouraging use of by-products/waste for input in other production</li> <li>Digital agriculture, which involves a variety of Industry 4.0 concepts in production, aligns with regional strengths</li> <li>Hemp and cannabis production, including edibles and oils</li> <li>Identified need for a pulse fractionation facility in the region</li> </ul>	<ul style="list-style-type: none"> <li>Mid-sized food processors in region are regularly approached by U.S. state level economic developers with offers to relocate operations in exchange for generous incentives such as tax breaks and subsidized labour costs</li> <li>Land fragmentation in the EMR brought on by urbanization and removal of high-quality lands from production</li> <li>Increasing land values in the region spurred by population growth</li> <li>Aging farmer demographic and lack of young entrepreneurs</li> <li>Market access and impacts from tariffs in major export destinations</li> <li>Climate-change related impacts, including more extreme weather events</li> </ul>

<sup>14</sup> Parkland Integrated Community Sustainability Plan, 2017.

#### Value-Added Agriculture Competitiveness Considerations for the Tri-Municipal Region:

- larger-scale production (like Champion Pet Foods) requires affordable, larger land parcels, which aligns with the Region's offering
- food and beverage producers require access to stable power, water and wastewater, and connectivity with highway transportation. Regional water and wastewater rates above average for EMR.
- building requirements for small producers often satisfied in industrial bays, of which the Region's inventory offers options. Understanding of CFIA standards for buildings and how inventory space aligns with requirements is important in promoting region to producers
- EMR recognized as well-suited for pet food production due to plentiful supply of primary protein and plant inputs, as well as transportation corridor for other inputs and output shipments. Champion's investment in Acheson underscores these advantages, which can be marketed to other similar markets
- identified need in region for more flexible shipment methods, such as smaller 20-foot shipping containers for specialty exporting. Ability of shippers within the Region to provide such service such as the existing intermodal facility should be explored to strengthen that competitive position
- cannabis expansion in Canada has been rapid and aggressive. While the industry is now going through post-launch normalization, plant and derivative products are likely to present future opportunities

#### Manufacturing

The Tri-Municipal Region falls within the top half of comparators for competitiveness in manufacturing. In the reverse site selection modelling, this result is driven by employment figures in the manufacturing industry, relevant occupations in manufacturing as well as supporting activities, access to major infrastructure, and good connectivity and market access via existing infrastructure. Availability and cost of developable space was also considered. Other comparators which show strongly based on the modelling results include Edmonton, Red Deer and Red Deer County.

The EMR has strong manufacturing expertise in metal fabrication, which evolved over the decades to meet the needs of upstream oil and gas development. Given the energy downturn since 2015 and compounded by the current economic outlook, activity levels in the fabricated metal and machinery subsectors remain low. A major rationalization in the sector occurred with firms now primarily focused on servicing the maintenance activities of existing oilsands projects while also reducing costs by automating basic tasks. Fabricators in Leduc/Nisku report having hit bottom, with the survivors emerging leaner and including new markets in their focus. Current fabrication attention is on maintenance and capital projects for debottlenecking and improvement in upstream production, both on the oil and gas side as well as new projects in petrochemical and LNG.

An example of manufacturers in the Region include Cam Tran, Rozen Steelworks, Sandhills Manufacturing, Stinger Fabrication, Filterboxx, Airland, Dematco, W North, Edmonton Trailers and Omnisport.

Plastics production represents another important manufacturing subsector within the EMR. Historically focused on an array of products and markets, the market is seen new projects emerge, like Inter-Pipeline and Pembina / Canada Kuwait polypropylene (PP) projects. This combined with Dow's longstanding polyethylene (PE) production means the EMR is now host to two major producers of principal plastic feedstocks which serve as

building blocks for plastics and other product manufacturing. While the current plastics industry has not benefited from Dow's PE production in terms of direct supply chain involvement, there is heightened focus on opportunities to lever new PP production into value-added manufacturing in the region. Investment in the EMR by Quebec-based Polykar represents major new entrant, with potential to open additional production chain opportunities

The following table presents a SWOT analysis of the manufacturing sector within the EMR.

**Table 3-10 Manufacturing SWOT Analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Sizeable workforce with metalworking / machining and welding skillsets, supported by well-recognized education and training programs at NAIT</li> <li>• Formation of Manufacturing Advisory Council and work with Alberta Economic Development on sector-specific supports including advanced techniques</li> <li>• The Alberta Metal Fabrication Innovation Program (AMFI), through InnoTech Alberta and National Research Council focuses on accelerating adoption of advanced manufacturing and fabrication solutions</li> <li>• NAIT Productivity Improvement Centre (PIC) including hub for applied research</li> <li>• Alberta Centre for Advanced MNT Products (ACAMP), an industry-led product development centre focused on electronics hardware development, embedded systems and firmware, sensors, control systems, and autonomous transportation technologies</li> <li>• Lower electricity and natural gas costs in the EMR</li> </ul>	<ul style="list-style-type: none"> <li>• Less depth in high volume repetitive processes typical of other manufacturing sectors, affecting potential clustering and mentoring</li> <li>• Higher costs and expected margins, and reticence by firms to invest in automation and focus on single market, influenced by energy sector manufacturing experience</li> <li>• Smaller firms lacking resources to meet substantial investment requirements for advanced processes or even significant pivoting within standard processes</li> <li>• Lack of awareness and significant connections between firms and research institutions for the research, development and commercialization of new products and knowledge</li> <li>• Shallow investor pool and lack of angel investors for manufacturing in region, particularly after energy downturn; government financial support focused on startups or mature companies, resulting in a scale-up funding gap</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Strong existing metal fabrication cluster and existing supply chains; need to pivot to complimentary markets</li> <li>• Interest in region for advanced manufacturing processes, but will require confirmation of business case and technical support</li> <li>• Alberta population size approaching critical mass, a factor influencing manufacturers market selection</li> <li>• Existing manufacturing of complex equipment in region meeting intensive quality assurance standards (temperature, pressure) which can benefit from rapid real-time analytical capabilities of IoT technology</li> <li>• Federal government policy now permitting immediate write-off the full cost of manufacturing or processing goods, to spur adoption of advanced technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Significant risk investing in advanced manufacturing, particularly in light of major shifts in traditional industries, and uncertain investment climate (trade, pandemic)</li> <li>• Plastics sector continues to be in flux, including challenges in recycling and potential toxic categorization proposed by Federal Government in move against single-use products</li> <li>• Lack of investment nationally in equipment and machinery, with Canadian investments decreasing while U.S. investments have increased over the past decade</li> <li>• Impacts of tariffs on steel and aluminum with the U.S., raising prices and increasing cost uncertainty</li> <li>• Relocation (actual and contemplating) by energy sector fabricators to the U.S. due to more upbeat view on exploration and production</li> </ul>



- Increasing need for advanced real-time monitoring systems in petroleum and petrochemical facilities across the province and beyond, including sensors and other monitoring products for quality, longevity, safety, and predictive maintenance
- Provincial Government's newly stated goal of becoming Western Canada's centre of excellence in plastics recycling can provide momentum to this sector

### Manufacturing Competitiveness Considerations for the Tri-Municipal Region:

- Making available the highest internet speeds possible for industrial business parks critical
- Support inclusion of manufacturers in region in innovation clusters, applied research and development projects with education institutions (NAIT, University of Alberta) to ensure exposure to latest initiatives and technologies, as well as showing Region remains within the centre of EMR innovation
- Highlight existing relationship with NAIT in Spruce Grove and look for opportunities to lever into other initiatives within the institution
- Regional business parks are the closest in location within the EMR to northwest Alberta / British Columbia, including Duvernay and Montney gas fields, offering a shipping time and cost advantage
- Highlight presence of younger population comfortable with technology and skilled and semi-skilled workforce located in Region
- Champion Pet Food's investment in Region in part influenced by municipal efforts to facilitate front end utility installation. Opportunities for how to replicate this approach for other potential investors should be explored.
- Look for opportunities to lever on TWL capacities for supply chain advantages for manufacturers (inputs and shipment of output)

### Commercial

The Tri-Municipal Region falls within the top half of comparators for competitiveness in commercial, particularly examining retail and wholesale. In the reverse site selection modelling, this result is driven by such factors as household income and related growth in spending power, employment in related fields, and access to consumer markets. Availability of rentable and development space was also considered. Other comparators which show strongly based on the modelling results include Edmonton, Airdrie and Leduc.

Commercial services are defined in this report as including retail trade, hospitality (accommodation, food and drinking establishments) and personal/professional services, with related demand for office space. The majority of Regional commercial services are located in the urban centres of Spruce Grove and Stony Plain. This sector services the local resident base including a larger trading area, acting as the first major commercial hub for visitors from the west. There are a number of commercial centres located throughout Spruce Grove and Stony Plain, providing a mix of office and retail space. Spruce Grove commissioned a Retail and Market Analysis study in 2017, which found a growing regional retail market (trading area) of 138,000 people, increasing to 164,000 by



2027. The local market is characterized as highly mobile in shopping patterns and seeking opportunities to spend more locally on frequent purchases.<sup>15</sup> The following table presents a SWOT analysis of the commercial sector within the EMR.

**Table 3-11 Commercial SWOT Analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>Edmonton region seen as a strong retail market –young and fast-growing population base and high disposable incomes</li> <li>Strong reputation, many chains entering Canada use region as a testing zone</li> <li>Office space – comment on strength – was good growth</li> <li>Population growth in general</li> </ul>	<ul style="list-style-type: none"> <li>Edmonton region office market overbuilt. The west end is one of the weaker segments of the Edmonton office market</li> <li>Retail challenges given economic downturn, now exacerbated by pandemic, including big box chains</li> <li>Generally low inventory of retail space in the Tri-Municipalities at the present time. Stock is generally viewed as lower class by market</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>Commercial growth tends to follow employment and population growth, bringing demand for personal and professional services and retail and office space demand</li> <li>Hospitality services supporting business activity in the region (meals, meeting hosting space, hotels)</li> <li>Food and accommodation needs related to tourism, like tournament hosting in region, capturing more visitor spending</li> <li>Opportunities for new destination retail and associated hospitality could act as a general draw to the region and catalyse further commercial opportunity</li> <li>Westwind project has potential for a variety of commercial and entertainment development</li> <li>Meridian lands (2500 gross developable acres) being explored for a variety of potential uses including commercial, agri-tech, professional / office, retail, hospitality and tourism. Investment is required to bring product to market.</li> <li>Gap of retail and convenience services in Acheson</li> </ul>	<ul style="list-style-type: none"> <li>Move to online retail, accelerated by pandemic</li> <li>Shift to work at home due to pandemic and emerging telecommunications technology impacting the traditional office sector</li> <li>Lack of currently available development areas for retail may cause opportunities to locate in neighbouring communities</li> <li>Existing challenges in western Canadian retail market pre-pandemic, with Alberta and Saskatchewan reportedly off the radar for national and international retail investors</li> <li>New retail and office developments in west Edmonton and elsewhere creating competition in trading area</li> <li>EIA Outlet Mall struggling (pre-pandemic) offering extremely low rents to fill space</li> </ul>

<sup>15</sup> Spruce Grove Retail & Office Market Analysis, Cushing Terrell, 2017.

### Commercial Competitiveness Considerations for the Tri-Municipal Region:

- Regional catchment area of approximately 70,000 (15-minute drive) and 530,000 (30-minute drive) is sizeable as a secondary market to Edmonton (core)
- distances discourage shopping with multitude of alternative options nearer to the majority of population base, including power centres like Currents of Windemere, South Edmonton Common, Sunwapta and Mayfield, and West Edmonton Mall
- population growing in EMR faster on west side. Highway 16 traffic volumes have increased by 4.8% annually west of Edmonton and are now higher than on east side. Traffic flows on Highway 16 represent 44,000 daily vehicle movements through Region
- in the absence of a local connection or need to locate, the Region is not on the radar for destination shopping or office space needs in the EMR
- Spruce Grove, and to a lesser extent Stony Plain service a broad trading area to the west, successfully capturing expenditures beyond their resident base. Spruce Grove's retail base is moving towards self-sufficiency
- Parkland County is exploring opportunities with its sizeable Meridian lands, located at key intersection of Highways 779 and 16, with existing interchange. This parcel offers a variety of potential uses.
- the proposed Westwind Centre development in Spruce Grove offers an alternative new retail, hospitality and entertainment district in the Region. The community is in the process of verifying market interest

### Energy Services

The Tri-Municipal Region falls within the top half of comparators for competitiveness in energy services. In the reverse site selection modelling, this result is driven by employment in energy and related industries (manufacturing and transport), supporting occupations, availability and cost of industrial lands, and general market access. Other comparators which show strongly based on the modelling results include Edmonton, Strathcona County and Red Deer County.

The Edmonton region is the closest major service centre to the oil sands deposits and many of the conventional fields, coal mine and electrical generation sites in Alberta. Service companies can reach nearly all major markets in the province within a one-day's drive and many locations within a return daily trip. Edmonton area refining and petrochemical and pipeline hubs (Strathcona and AIHA) provide abundant source of local service opportunities. Core competencies, including in the Region include expertise in vessel and pipe skid design and fabrication, materials, coatings, valves, instrumentation, downhole/drilling, engineering and heavy construction capabilities as well support services – environmental and waste management services.

Key energy services firms (or actively involved in the sector), include North American Construction Group, Midwest Pipelines, Absolute Crossings, Schlumberger, W-Five Seismic, Site Resources, Caliber Control, KB Industrial Mechanics and Technichrome Industries. The following table presents a SWOT analysis of the energy services sector within the EMR.

Table 3-12 Energy Services SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Strong relationships between producers and service companies including collaboration on equipment and processes</li> <li>• Very well-developed supply chain in region, serving as an international logistics hub for energy services</li> <li>• Large-scale fabrication and modular construction capacity</li> <li>• Deep labour pool of skilled trades and professional</li> <li>• Cluster development between companies, academia and applied researchers on energy. Regional institutions (NAIT, University of Alberta) have various centres focused on applied research and training in the sector</li> </ul>	<ul style="list-style-type: none"> <li>• Lower commodity prices restrict investment and growth prospects. Bitumen differential impacting Canadian producers as well as government revenues</li> <li>• Higher cost market, driven by wages</li> <li>• Lack of access to corporate decisionmakers with majority of head office locations in Calgary or beyond</li> <li>• Regulatory uncertainty and carbon tax have negatively impacted investor interest in Alberta for major projects</li> <li>• Alberta is perceived as a higher-cost jurisdiction for energy projects</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Conversion of electrical generating plants within the region to gasification could create opportunities for local suppliers</li> <li>• Downstream investment in value-add production, like petrochemical processing in AIHA diversifying production base and creates new supply chain opportunities</li> <li>• Cleantech, leveraging on existing core competencies in energy services with focus on lowered costs and environmental footprint</li> <li>• Grid scale geothermal, a growing international market, which allows for leveraging on region's deep knowledge of <i>in situ</i> drilling and field servicing</li> </ul>	<ul style="list-style-type: none"> <li>• Access to markets and regulatory approval process, primarily relating to pipelines, restricts growth of energy sector and related demand for services</li> <li>• Shifting perspectives regarding energy sector, future need for conventional fuels and reputational issues</li> <li>• Cessation of coal-fired generation in the region results in future mine closures and impacts to employment in the region and reduced municipal tax revenue</li> <li>• Growth in U.S. shale production has impacted investment in Alberta, with some firms relocating south</li> </ul>

### Energy Services Competitiveness Considerations for the Tri-Municipal Region:

- Region is host to a number of service firms, including in Acheson and other regional industrial and business parks. Parcel size requirements typically align with Regional offerings
- Acheson's positioning in the market now on par with the traditional leader Leduc/Nisku, with potential tenants seeing them as interchangeable
- location north of the river, and proximity to the west end is an asset, particularly for servicing Duvernay and Montney plays via Highway 43
- synergy potential with various crane and energy service companies in Region and NAITs Spruce Grove Campus focusing on crane and hoisting equipment operation and drilling rig training
- sector experiencing growth in cleantech implementation, including for example increased automation and remote monitoring with a natural tie-in to manufacturing. Service companies require workforce comfortable with technology and benefit from workforce located close to work – factors which align with Regional characteristics
- companies require dependable high-speed internet – currently mixed availability in Region

### Information, Communications and Technology (ICT)

The Tri-Municipal Region falls within the top half of comparators for competitiveness in ICT. In the reverse site selection modelling, this result is driven by employment in related industries, in information and communications occupations, and in quality of life factors as these uses are very often talent driven and therefore reliant on the need to attract workers from a broad geography. Other comparators which show strongly based on the modelling results include Strathcona County, Edmonton, St. Albert and Beaumont.

The Information, Communications, and Technology (ICT) sector refers to different types of communications networks and the technologies used in them. The sector supports output and productivity growth.

A rapidly growing area within the sector are data centres, required to house the enormous and ever-increasing information generated in our interconnected world. From an international perspective, data centers are well located along significant telecommunication infrastructure and in regions where natural cooling for at least part of the year can ameliorate electricity costs.

Data centres present a specific, near-term opportunity in the Region. These large telecommunications and energy using facilities then often become the first step in expansion into other value-added technology uses over time. The Tri-Municipalities already host at least one data center in the Acheson area and at least other developer has plans to develop a second site once a user is identified. The region is well-suited for such development due to the availability of land directly adjacent to a major telecommunications trunk line which lies along the CN rail line across the municipalities.

At a regional perspective, technology development is already well-established in the Edmonton region in the areas of artificial intelligence and automation, with significant research being done at the University of Alberta. Having low-latency data and related processing nearby would be a desired asset.

Table 3-13 ICT Services SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Direct location along significant telecommunications trunk line (Supernet, available for private connections)</li> <li>• Electricity advantage as compared to other North American locations</li> <li>• Proximity to new artificial intelligence and technology clusters in Edmonton</li> <li>• Proximity to University of Alberta innovation cluster</li> <li>• Good quality and cost of living, enabling recruitment to the Tri-Municipalities</li> <li>• Some companies in Region active with applied and innovative technology, creating examples of local success</li> <li>• Region has access to fibreoptics competitive at a North American level in speed and price</li> </ul>	<ul style="list-style-type: none"> <li>• Businesses note that broadband access is currently insufficient; gaps exist in various areas of the Region, particularly the case further into rural areas</li> <li>• Lack of a current technology workforce in the Region</li> <li>• Challenges in attracting top talent to EMR; if they come, preference is to work and reside in the urban core</li> <li>• Connectivity points to the Supernet line are limited to lone location each in Spruce Grove, Stony Plain and Duffield.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Modern manufacturing techniques are highly reliant on information technology and require reliable high-speed internet connectivity. Once The pursuit of these manufacturing opportunities should be pursued only once high-speed internet connectivity is widely available in Regional industrial lands</li> <li>• Younger population base provides potential source of IT workforce, given appropriate training. Partnerships with area schools, NAIT and employers can increase skill development and recruitment opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Continued economic impact of pandemic</li> <li>• Telecomm providers plans may not align with Regional needs</li> <li>• Global overbuilding of data capabilities, resulting in potential oversupply of server capacities</li> </ul>

#### ICT Competitiveness Considerations for the Tri-Municipal Region:

- potential for additional server farms in the Region, experienced area entrepreneur already interested
- need to coordinate with fibreoptic providers to determine how to bring full capability into development areas
- opportunities for enabling existing manufacturing and services base in the Region through connectivity. Natural tie-ins to manufacturing and Industry 4.0 -related production in the area
- while telecommunications along the main line is exemplary, connectivity across the Region is required in achieving full potential
- ICT and other worker-driven sectors stress talent attraction activities as being as or more important than company investment attraction

### Specific Details Regarding the Internet Transport Line in the Region:

- Axia (Bell) operates a “transport” line (Supernet line) which runs near to the CN right-of-way through the Region. The line is available for connecting on a fee-for-service basis for private sector use. Factors include:
  - Current configuration is a 5 gigabyte (GB), with up to 5 GB upload and download capability
  - The line is reportedly near 80% of capacity – additional major draws would require upgrades to the line
  - It is a ‘pure fibre’ line (no copper / legacy from existing phone / cable), with essentially unlimited bandwidth (no cap on total data used / 100% capacity use 24/7 possible), less maintenance issues and allows for redundancies
  - the line is similar in capacity to other branches of the Supernet within the EMR, connecting to communities like St. Albert, Leduc, Sherwood Park, Fort Saskatchewan, and is adequate to support high speed needs for a variety of businesses. It may not be seen as particularly unique or substantive from a heavy user point of view; as a comparison, Axia operates a number of “dark fibre” lines each of 100 GB capacity around Calgary and connecting between major centres including Edmonton
- Three points of contact on the transport line exists within the Region, located<sup>16</sup> roughly at:
  - Highway 16A and Westgrove Drive in Spruce Grove
  - Highway 16A and South Park Drive in Stony Plain
  - Duffield, near Lake Wabamun
- The cost of servicing connection requests are lower the closer the fibre run is to these three connection points. No other new connection points along the line are being considered by Axia. Land use planning considerations of internet connectivity (municipal, business park, other use) should factor in these connection point locations if connecting to the transport line is desired
- Other providers including Telus and Shaw also have fibre optic networks in the region and build, connect and service commercial clients – specific inquiries can be directed to these companies for evaluation

<sup>16</sup> GPS Coordinates are: SG: 53.54096, -113.91923; SP: 53.53899, -113.97755; Duffield: 53.5254, -114.34434. Note another location exists at Enoch Cree Nation; no access point is located in proximity to Acheson.

## 4. Competitive Positioning

### 4.1 Framework for Positioning

Competitive positioning involves:

- examining the Region's specific characteristics, strengths, weaknesses, networks, and other factors directly relevant to business investment or operation
- comparing this profile to the needs of industries and functions that are likely in play
- evaluating these against likely competitors
- identifying strategies including key messaging that portrays the region's unique advantages and differentiates it from other competitors

Figure 4-1 is represented below as a reminder to the competitiveness positioning framework considered in this Review.

Figure 4-1 Positioning for Regional Competitiveness





## 4.2 EMR Economic Drivers and Reputation

The Edmonton region economy is diversified. Traditional core sectors like agriculture, support to oil and gas exploration and production and petroleum processing are complimented by health, education and government activities. Emerging value-add agriculture including food and beverage processing, information technologies, and expansion of the transportation, warehousing and logistics sector moving beyond serving local needs and energy services to broader supply chains. This diversity has helped the EMR weather economic contraction and suggests a more resilient economy than some comparators, like Calgary which has more acutely experienced the energy sector slowdown. Multi-faceted efforts at innovation and startup support, adoption of advanced technologies and productivity improvement are showing some fruits in further diversifying the EMR economy.

The region has long worked at promoting itself as a destination for talent and investment. Historically this promotional role has fallen to provincial trade representatives, to some of the larger municipalities led by the City of Edmonton and the EEDC, to industry associations like the AIHA and LNEDA and to individual, larger companies. With the more recent formation of Edmonton Global (EG), the region now has a group focused on specifically championing the EMR, with an ability and mandate to conduct proactive promotion as well as coordinate incoming inquiries. Through EG, individual municipalities have more input into regional promotion for investment attraction than previously; many communities also undertake individual promotional initiatives in parallel.

This recent collective action is showing early but promising results in terms of influencing market perception and further putting the region 'on the map' for global investors. Some examples of this include:

- appearance of the EMR in Site Selection and Area Development, two of the three journals of record for corporate real estate
- increasing awareness in North America regarding overlooked quality of life advantages in the community, including housing affordability, vibrant food, music and festival scenes and a deep professional sports market
- the breadth of destinations, particularly international available through the Edmonton International Airport, exceeds expectations for a centre of this size

The Region's strong entrepreneurial base is also becoming known, which creates an opportunity for enticing emerging talent including graduates and incubated businesses, both homegrown and from away, to locate here. Of note, the patchwork approach to entrepreneurship support in the region poses a risk when compared to other jurisdictions, which do a better job of coordinating and attracting and retaining talent.

## 4.3 Current Position of the Tri-Municipal Region

For municipalities, the competitiveness environment is based on providing the right foundation for businesses to be successful. Fundamentals important to investors (including existing, or potential within or outside the region) include the **regulatory setting, workforce and infrastructure, access to markets and economic networks**. From there, investors define the **types of sites, buildings and services** they require to meet their operational needs.

The EMR is a competitive business environment, standing up well to a number of other strong competitors in Western Canada and competing markets in the U.S., as demonstrated in the international ranking exercise. Similarly, the Region and individual member municipalities show relatively well within the EMR in terms of regional ranking. Modelling results indicate that the combined Region competes in the top quartile or half for all specific sectors under analysis within the EMR.

**In terms of general competitiveness, the Region's advantages are summarized as:**

- ✓ being a lower cost option within EMR
- ✓ a reputation of business-friendly environment, including taxes
- ✓ having strong access and infrastructure linkages including rail, road and telecommunications
- ✓ home to a young and growing population base with affordable living and good quality of life
- ✓ having an existing network of businesses seen as mutually reinforcing and creating a supporting ecosystem
- ✓ historically being more diversified, with representation across a variety of sectors and not overly 'energy-dependent'

The peer comparison analysis indicates the Region is likely perceived as more competitive in some specific sectors than others, namely TWL, value-add agriculture, commercial (serving growing local market) and manufacturing. That said, the results indicate the Region is also competitive in any of the identified sectors of interest, including energy services and ICT, based on individual deal parameters and investor interest.

A number of weaknesses have been identified – some of which may in fact be due to a lack of historical activity rather than a true weakness. For instance, substantial weight is given in site selection to workforce characteristics, including the proportion involved in industries and occupations of interest. In the case of the Region, while the workforce with these skills and experience is *proximate* (already active in the City of Edmonton and other adjacent municipalities), it is not yet comparatively active specifically in the Region. As jobs are created in traditionally under-represented sectors, workforce and future resident attraction will occur over time. Other weaknesses pertain to a lack of permitted available lands and buildings available to attract future uses. The above will either change through natural growth (in the case of workforce and attraction) or through a thoughtful strategy of identifying, permitting, and servicing lands for future industrial growth.

## 4.4 Targeting Considerations

### 4.4.1 Alignment with EMR Strengths

Competitiveness positioning for an individual community or subregion is heavily interrelated with its broader regional competitiveness stance, as:













- the location selection process typically starts at a city-region level or beyond and subsequently narrows down to specific communities and sites
- strong fundamentals at a regional level typically translate to many of the same strengths at the sub-regional level (location, major infrastructure, workforce, demographics,)

From a competitiveness standpoint, a community or subregion's strongest positioning tends to be when its particular strengths align with those of its broader region for a particular sector. In this way, the community stands a better chance of generating interest within a pipeline of potential inquiries coming to the region. A weaker competitive position is one where the region is seen as competitive and generates interest, but the sub-region or community within is not seen to be competitive in that sector within the region. In that case, addressing particular gaps as able is required, as is marketing to ensure its name is 'in the mix'. The least competitive positioning is where the region is not seen as competitive for a particular sector and the subregion or community is as well not seen as competitive within the region in that sector. In that case, the community is really fighting against the tide,

as less interest is likely forthcoming to the region, and even when it appears, it is challenging to be included in the conversation.

Based on this perspective, the following table presents the EMR's competitiveness as well as the Region's relative competitiveness within the EMR, based on the sectors of focus. The simple analysis is qualitative in nature, intended to present visually how these two points of reference align – triangle size represents perceived competitiveness as per sector-specific requirements, with larger meaning more competitive. The results are informed by the findings from the reverse site selection/ranking exercise as well as general observations based on experience undertaking competitiveness analysis in the EMR and beyond.




**Table 4-1 Competitiveness Alignment by Sector – EMR and Region**


Sector	Perceived Competitiveness		Comments
	EMR	Region (Within EMR)	
<b>TWL</b>			<ul style="list-style-type: none"> <li>• Growth sector for EMR</li> <li>• Region is competitive player within EMR</li> <li>• Opportunities lay beyond local servicing to broader supply chains</li> </ul>
<b>Value-Add Agriculture</b>			<ul style="list-style-type: none"> <li>• Growth sector for EMR</li> <li>• Region is competitive within EMR</li> <li>• Local players in place, competitive to attract more</li> </ul>
<b>Commercial</b>			<ul style="list-style-type: none"> <li>• EMR is attractive retail market within Canada driven by population growth, household demographics and disposable incomes</li> <li>• Retail and office markets in Region serve local-driven growth</li> <li>• Destination retail possible (aspirational)</li> </ul>
<b>Manufacturing</b>			<ul style="list-style-type: none"> <li>• Relatively limited sector in EMR outside of energy-driven fabrication/machining</li> <li>• Region has foundations to be competitive within EMR</li> </ul>
<b>Energy Services</b>			<ul style="list-style-type: none"> <li>• EMR (and province) has very strong reputation globally for energy services; current state of sector worldwide is challenging</li> <li>• Region developing reputation within EMR as competitive location</li> <li>• Opportunities lie with pivoting on strengths to growth areas within the sector</li> </ul>
<b>ICT</b>			<ul style="list-style-type: none"> <li>• Key future-focused sector, experiencing strong growth globally</li> <li>• EMR reputation not strong</li> <li>• Regional reputation within EMR not strong, perception of 'outside the core', potential assets to lever (aspirational)</li> </ul>

#### 4.4.2 Positioning in Areas of Strength

The representation above indicates that TWL, value-add agriculture and energy services are the three predominant sectors where Regional strengths align with those of the EMR, and therefore represent logical priority areas for the Region. The following table outlines sector-specific commentary on the Region's fit within the EMR from a perceived competitiveness position, as well as current and future markets of relevance.

Table 4-2 Region's Positioning within the EMR by Sector and Market Focus

Regional Fit Within EMR	Market Focus:	
	Existing	Future
 <b>TWL</b> <ul style="list-style-type: none"> <li>EMR's and the Region's TWL strengths are rooted in servicing value-add agriculture and energy activity in the province and beyond as well as serving local commercial needs. The EMR's status is climbing with regards to broader TWL value chains and the Region is part of this growth. As more interest and leads come to the EMR, the Region is a natural location consideration for many, particularly north of the river and access to the Yellowhead Highway and places north / west. Distance to the core and EIA will be a barrier for some requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Local distribution</li> <li>Energy Services, value-add agriculture, general commerce</li> <li>Some clustering with local manufacturing and processing</li> </ul>	<ul style="list-style-type: none"> <li>E-commerce / fulfilment centres</li> <li>Mega distribution</li> <li>Further cross-over with manufacturing, value add agriculture (food processing)</li> </ul>
 <b>Value-Add Agriculture</b> <ul style="list-style-type: none"> <li>The EMR is fairly competitive in value-add agriculture, but there is substantial room to grow, particularly in food, beverage and pet food production, product innovation, cannabis extracts, industrial hemp application and nutraceuticals. The Region shows competitively within the EMR and has many of the right fundamentals in place to support proactive growth in this sector. Regional collaboration can bring benefits such as rural land base for site locations in seamless proximity to urban centres with available workforce and transit services.</li> </ul>	<ul style="list-style-type: none"> <li>Primary production (conventional and organic)</li> <li>Food, beverage, pet food processing</li> <li>Farmers Markets</li> </ul>	<ul style="list-style-type: none"> <li>Co-packing / processing and startups</li> <li>Pulses and canola processing</li> <li>Craft brewing / distilleries</li> <li>Tourism crossovers / local food</li> <li>Hemp / cannabis</li> </ul>
 <b>Commercial</b> <ul style="list-style-type: none"> <li>The EMR has traditionally attracted strong commercial activity while within the Region, relatively less so. Commercial activity in the EMR is driven by retail and personal and professional services responding to strong population growth and attractive household demographics and incomes. This combined with energy-sector growth has driven strong office demand in the region up until recently. The Region has seen growth in the commercial sector, led by retail demand in Spruce Grove and to a lesser extent, Stony Plain. Office demand is driven by growth in the resident population base and need for services, as has retail demand, also driven by catchment of a growing trading area. Growth in the Region's commercial sector is predominantly based on local population growth. As core sectors grow in the Region, the relative competitiveness of this sector will increase. Destination retail with potential linkages to tourism initiatives has potential; it is currently seen as aspirational in nature.</li> </ul>	<ul style="list-style-type: none"> <li>General retail, personal and professional services, serving local trading area</li> </ul>	<ul style="list-style-type: none"> <li>Hospitality – targeting tourism / visitors</li> <li>Destination retail</li> <li>Tourism, including lakefront and other area developments</li> <li>Recreation and cultural events, artisan markets</li> <li>Mixed-use development (retail / office / residential)</li> </ul>

Regional Fit Within EMR	Market Focus:	
	Existing	Future
 <b>Manufacturing</b> <ul style="list-style-type: none"> <li>The EMR's competitiveness in the manufacturing sector, outside of energy service-based fabrication and machining, is not particularly strong versus comparators. The Region's perceived competitiveness within the EMR however is fairly strong. This represents a positioning challenge of competing for investment in a sector which may not be strongly attracted to the broader region. Creating supportive conditions for advanced manufacturing for ventures not tied to energy services, as well as supporting energy service fabricators and machining businesses pivot to future applications in their fields is key to positioning in this sector.</li> </ul>	<ul style="list-style-type: none"> <li>Food / beverage / pet food processing</li> <li>Energy services and agricultural fabrication</li> </ul>	<ul style="list-style-type: none"> <li>Machinery / Customization</li> <li>Plastics production and recycling</li> <li>Future-focused energy services fabrication</li> <li>Value-add agriculture food / other processing</li> </ul>
 <b>Energy Services</b> <ul style="list-style-type: none"> <li>It is important to note that while energy services has traditionally been a strong sector for the EMR and a growing sector within the Region, recent conditions reflect its current extreme state of flux. Energy services represents a strong existing base upon which the Region can compete for investment, but this sector must also continue to evolve if it is to remain an important base into the future. Growth areas aligning with provincial, national strategy and international demand includes cleantech (levering on conventional energy production strengths while achieving lowered environmental footprint), geothermal (grid-based electricity production using in situ production expertise, with local and export potential) and hydrogen-based energy applications.</li> </ul>	<ul style="list-style-type: none"> <li>Logistics, services, professional services</li> <li>Engineering/Construction services</li> </ul>	<ul style="list-style-type: none"> <li>Cleantech</li> <li>Geothermal</li> <li>Hydrogen-based transport</li> <li>Renewable energy</li> </ul>
 <b>ICT</b> <ul style="list-style-type: none"> <li>The EMR has some presence in the ICT sector but is seen as less competitive as compared to many other markets. Capturing market within this sector is challenging, as it sees fierce competition due to its strong growth track record and future potential, its ability to serve as an enabler unlocking growth in other core sectors and less ties to physical requirements as typical to other sectors. The Region's relative position within the EMR for this sector is also somewhat limited, primarily as it is seen as being outside the core of innovation, as well as talent preferences for living in larger urbanized centres. Challenges notwithstanding, the enduring growth prospects of this sector make it critical to be aware of and pursue - collaboration within the EMR will be important to further strengthen the Edmonton area's reputation within this sector, as well as building capacities, such as technology development and AI with spillover applications with the Region's existing sectors and companies.</li> </ul>	<ul style="list-style-type: none"> <li>Professional services</li> <li>Data storage</li> </ul>	<ul style="list-style-type: none"> <li>Data storage and processing centres</li> <li>Programming, innovation applications</li> </ul>

## 4.5 Foundations for Future Growth

Positioning begins with knowing and capitalizing on current strengths but must also include a focus on the future. As economic development focuses on sustaining and growing the local economy, a key tenet is understanding that things *will* change – including products, services, markets, networks, competition, regulations and trade patterns. Proactive jurisdictions constantly anticipate and plan for change, an important way of creating and maintaining a competitive edge.

A key concept in the development of future-focused positioning strategy is innovation. Innovation, particularly linked to the applications of emerging technologies, are impacting competitiveness fundamentals in all sectors, including infrastructure, workforce and access to markets. A variety of cross-cutting themes emerge when considering innovation, including the following:

**Table 4-3 Cross-Cutting Themes in Innovation**

Innovation Theme	Implications to Business	Implications to Municipal Competitiveness Positioning
<b>Industry 4.0</b>		
<ul style="list-style-type: none"> <li>While the 3rd industrial revolution digitized the economy and led to robotics and automation, Industry 4.0 describes a stage where devices, sensors, robots, data, and artificial intelligence become fully interconnected within business functions</li> <li>Examples include automation, AI, 3D printing and rapid prototyping, vertical systems integration, augmented reality and simulation, big data analytics, cloud computing (see Section 2.2.1 for further detail)</li> </ul>	<ul style="list-style-type: none"> <li>Market and supply chain disruptions (e.g. 3D printing allows for change in manufacturing location, opportunities for producing raw material used in processes)</li> <li>Intellectual property, including design for processes</li> <li>Creating future uses is ideal competitive position</li> </ul>	<ul style="list-style-type: none"> <li>Understand how key trends are impacting sectors and company operations and investor views</li> <li>Telecommunications – high speed reliable and affordable internet is critical across all commercial and industrial spaces</li> <li>Educated workforce comfortable with technology application across production functions including blue-collar</li> <li>Nimble local land use regulations that can accommodate mixes and forms of land use that may differ from purely traditional</li> </ul>
<b>Innovation Networks</b>		
<ul style="list-style-type: none"> <li>A network involving various partners contributing to creating new approaches</li> <li>The space where knowledge and business ecosystems overlap</li> <li>Includes entrepreneurs and established companies, universities and polytechnics, standalone research institutions, government bodies</li> </ul>	<ul style="list-style-type: none"> <li>Competitive companies lever on the generation of new knowledge and find ways to apply it to better meet customer needs</li> <li>Innovation can help to both sustain and disrupt markets - use of technology is a key enabler</li> <li>Areas with strong innovation networks create a draw for talent and support and grow talent – creating a</li> </ul>	<ul style="list-style-type: none"> <li>Mindset of participating in and contributing to an innovation ecosystem</li> <li>Collaboration, combining strengths and assets – this aligns with the Tri-Municipal regional approach</li> <li>Identify and lever natural synergies (e.g. NAIT campus in Spruce Grove, Parkland crane businesses, simulation development and training)</li> </ul>



- Moves beyond business clusters to creation of an ecosystem with all components required to innovate
  - Includes enabling factors including policy, financing, technology, physical infrastructure, other assets
  - Alberta is home to innovation networks, but are less developed, effective, and globally known than other jurisdictions
- virtuous cycle. In turn, companies operating from within these networks tend to lead the market in product development, change management, and growth
- Potential funding / matching for pilot projects, project or initiative-specific collaboration with schools, businesses, chambers
  - Creating attractive conditions for future growth clusters (e.g. food production, plastics manufacturing)
  - Share success stories with potential companies and venture capitalists, both of which seek out actual innovation in practice

#### In summary, regions with the right foundations for future growth:

- have a solid understanding of their current strengths and gaps generally and within their core sectors
- know which future trends are impacting businesses in these sectors
- collaborate with others to create a supportive ecosystem for current and future businesses and residents
- include future need requirements of business and residents in long term planning and operational considerations

## 4.6 Positioning through Differentiation

Creating and marketing advantages pertaining to needs of a particular sector or function is an effective way for the Region to differentiate itself from the competition. Through positioning its brand and identity around these relevant advantages, overall competitiveness is enhanced. The following table outlines positioning considerations for the Region along key business competitiveness categories, with discussion around factors to differentiate and sustain competitive advantages.

Table 4-4 Competitiveness Considerations to Differentiate and Sustain

Category	Existing Situation	Positioning Considerations:	
		Differentiate	Sustain
<b>Land and Buildings</b>	<ul style="list-style-type: none"> <li>• Region has traditionally traded on its affordable land base; however, this advantage will not endure.</li> <li>• Wide-range of commercial and industrial space available in terms of quality and cost</li> <li>• Larger parcel sizes advantageous</li> </ul>	<ul style="list-style-type: none"> <li>• Regional collaboration presents a harmonized urban / rural mix</li> <li>• Work with companies and developers to understand emerging trends</li> <li>• Land use controls which anticipate future needs (dimensions, intensity, form of use) for target industries) strengthens targeting</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on value, not price</li> <li>• Value offerings include flexible zoning, proactive planning around fringe / boundary areas; ease of use change</li> <li>• Plan for high quality buildings and flexible space</li> </ul>



Category	Existing Situation	Positioning Considerations:	
		Differentiate	Sustain
<b>Infrastructure and Services</b>	<ul style="list-style-type: none"> <li>• Region has well established road network and good access to Highway 16 and Anthony Henday Ring Road</li> <li>• Reasonable proximity to EIA and own small-scale airport with future potential</li> <li>• Proximity to rail line, but not optimal access</li> <li>• High speed internet trunk line in region, however unoptimized access</li> <li>• Regional water and wastewater rates above average for EMR</li> </ul>	<ul style="list-style-type: none"> <li>• Lever on benefits of urban / rural collaboration including utilities and transit</li> <li>• Development of further intermodal rail capacity key in accessing rail line asset</li> <li>• Increasing logistics services (freight consolidation, 3rd party logistics providers) and closer linkages with existing EIA-based firms</li> <li>• Utility delivering and costing cognizant of sector-specific needs</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure availability of competitively priced high-speed internet</li> <li>• Internet is a critical piece of infrastructure; while not typically within municipal wheelhouse, community can influence execution</li> <li>• Manufacturers, processors and ICT companies require stable and affordable power, water and wastewater services</li> <li>• Use of smart metering and flexible, conservation-focused rate programs</li> </ul>
<b>Workforce and Demographics</b>	<ul style="list-style-type: none"> <li>• Young, growing</li> <li>• Affordable housing and good quality of life</li> <li>• Mixed skill sets (professional / technical)</li> <li>• Commercial (office / retail) currently focused on local market</li> </ul>	<ul style="list-style-type: none"> <li>• Regional collaboration like urban / rural workplaces can optimize commute times and offer effective transit</li> <li>• Innovative ecosystems have strong tie to talent development. Targeted partnerships with primary and secondary schools, education institutions and employers beyond work experience programs</li> <li>• Technology focused skills development</li> <li>• Tourism / destination retail and hospitality</li> </ul>	<ul style="list-style-type: none"> <li>• Maximizing the resident workforce working/living in Region</li> <li>• Residential growth largely driven by housing – supportive development environment encouraging quality residential areas supported by interesting commercial and personal services</li> </ul>
<b>Business Environment</b>	<ul style="list-style-type: none"> <li>• Historically, focus in Region has been on removing barriers to development</li> <li>• Strong reputation for ease-of-doing business, responsive</li> </ul>	<ul style="list-style-type: none"> <li>• Strategizing businesses to be attracted and supported, their specific needs and ways to meet them</li> <li>• Planning and development approach based on future needs</li> <li>• Still involves traditional municipal levers, like zoning and bylaws</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous improvement on business-friendly approach. Ability to proactively understand and meet business needs helps perpetuate advantage</li> </ul>

Category	Existing Situation	Positioning Considerations:	
		Differentiate	Sustain
<b>Taxes and Incentives</b>	<ul style="list-style-type: none"> <li>Competitive tax rate and some incentive use in Region</li> <li>Low tax base alone insufficient to sustain business investment</li> </ul>	<ul style="list-style-type: none"> <li>A well-constructed incentive policy creates awareness of a location's openness to activity and a willingness to partner.</li> <li>Targeted skills development training programs (for example, available through Alberta Labour) can address a specific gap</li> <li>Effective tools available in MGA (Sections 364 and 364.2) to build effective but focussed incentive programs if desired</li> </ul>	<ul style="list-style-type: none"> <li>Fair taxes allows for resources to invest in necessary infrastructure. Businesses are willing to pay if they experience subsequent value.</li> <li>Incentive policy can lead to immediate benefits to community (e.g. infrastructure investment or training) which remains in the community (win/win)</li> </ul>
<b>Innovative Ecosystem</b>	<ul style="list-style-type: none"> <li>Vendors and suppliers in the Region informally collocating and working together</li> <li>Presence of NAIT campus</li> <li>Perception of Region outside the innovative hub (core), impacting talent attraction</li> <li>Lack of explicit incubation / entrepreneurship support</li> </ul>	<ul style="list-style-type: none"> <li>Formalizing strategic view of how to strengthen existing clusters and supply chains</li> <li>Identifying key missing links and targeted opportunities</li> <li>Sector-specific innovation clusters</li> </ul>	<ul style="list-style-type: none"> <li>Entrepreneurship support, technology and workforce development, school interfacing all leading to business startups and retention</li> <li>Focus on technology trends and future-focus sectors to ensure long term Regional prosperity</li> </ul>

#### 4.6.1 Role of Economic Development

##### Regional Collaboration

The key roles at the Regional level is setting the vision, coordinating individual municipal actions so they align with the Regional strategies and preparing and marketing effective messaging to appropriate targets. Communication priorities include the addressing of gaps in the Region (real or perceived) and emphasizing key aspects of the Region's value propositions for relevant sectors. Regional efforts require the assets to coordinate activities and effectively communicate to prospective audiences.

To this end, it may be desirable to develop a shared resource team from the Region to handle investment attraction, retention, and expansion inquiries. While it may or may not make sense to establish a new organization with this responsibility, it would be helpful to have one body with the acknowledged responsibility to coordinate all such activities, which could be comprised of member municipal economic development staff.

Regardless of structure, collaboration will require a framework guiding considerations such as protocols, contributions, activities among others. The existing cooperation framework utilized by Edmonton Global and EMR municipalities including Stony Plain and Spruce Grove may form a logical starting point for identifying an effective

collaboration framework internal to the Region. The Regional Economic Development Strategy can help define how such a framework should be defined.

Additionally, there is a need to establish a collaborative working relationship with other organizations who also hold mandates for investment attraction and retention in the EMR, notably Edmonton Global. Each of the member municipality of Edmonton Global supports the organization's efforts to attract new investment globally. The Region should work to ensure that Edmonton Global has a solid understanding of the Region's capabilities, readiness and targets for new investment opportunities. The Region should also actively participate when Edmonton Global reaches out to industries and target that match the Region's profile.

#### Individual Municipal- Level

Understanding and coordinating individual municipal approaches to competitiveness lies with the respective municipal Economic Development departments, as they have more familiarity with their respective policy and regulatory tools. These approaches can be supported and informed by the Regional collaborative strategy. The departments focus, strategy and practices should align with the principals outlined above - understanding emerging needs, spearheading regulatory and other changes to address gaps and identifying appropriate targets. It is up to individual municipalities to execute tasks within their boundaries. When coordinated under common strategy, these actions contribute towards a coherent picture of Regional competitiveness. It is critical for members to regard each other as partners, not competitors.

#### 4.6.2 Role of Other Departments

Actions by other departments, particularly Planning and Development, Engineering/Public Works and Finance can directly impact key elements of the Region's competitive environment. It is Economic Development's role to support these departments in understanding existing or potential future issues from a business standpoint and identifying innovative and mutually beneficial solutions. Other departments, like Community Services, Parks, Recreation and Culture also have roles to play. While their actions do not typically directly affect business operations, they help shape the living environment which is an important aspect of quality of life for residents, key to talent attraction and retention and creating a vibrant commercial base. Proactive communities collaborate internally to ensure that their individual focuses collectively create a positive living and working environment.

## 5. Appendix 1 - Economic Conditions and Outlook

### 5.1 Economic Outlook

#### 5.1.1 International

##### GDP

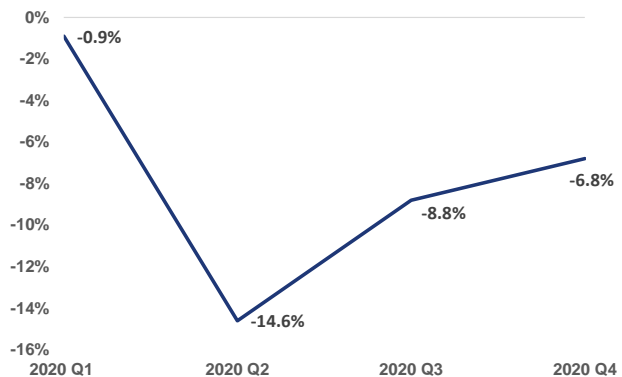
With the unprecedented shutdown of businesses and travel worldwide, the Covid-19 pandemic has massively disrupted the global economy. The World Bank forecasts this to be the deepest global recession since World War II, and almost three times as steep as the 2009 global recession.<sup>17</sup> The International Monetary Fund (IMF) projects global growth to contract 4.9% in 2020, with the pandemic having a greater negative impact on economic activity than previously anticipated.<sup>18</sup>

Contraction of GDP is forecasted to be deeper for advanced economies at 8 percent, while emerging markets and developing economies (EMDE) are expected to see a contraction of 3 percent. If the

pandemic slows, and shutdown measures are lifted in the

early second half of 2020, then a moderate recovery is expected in 2021, with global growth forecasted to reach 5.4 percent.<sup>19</sup> However, this baseline forecast may prove to be optimistic if the outbreak persists longer than expected, and restrictions are maintained or reintroduced throughout the rest of the year.

Figure 5-1 Real GDP Growth Projections for Canada,



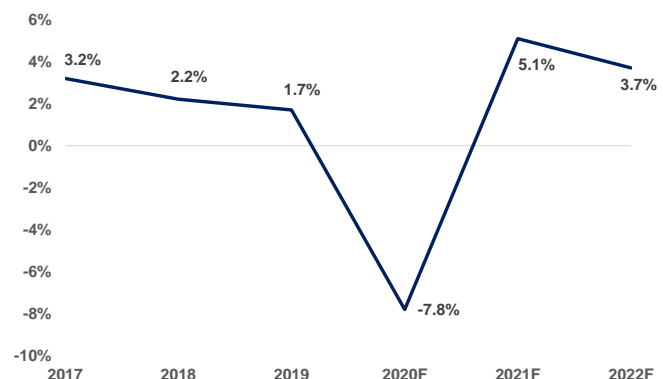
Source: Bank of Canada 2020

#### 5.1.2 National

##### GDP

Much like other advanced economies around the world, Canada has been hit hard by the pandemic. National GDP contracted by 14.6% in Q2 when containment measures were at their most restrictive, representing the worst of the impact to-date (see). The Bank of Canada projects a 7.8% contraction in GDP for the complete year (see Figure 5-2). However, Canada is expected to see economic growth again in 2021, with a projection of 5.1% in real GDP growth<sup>20</sup>.

Figure 5-2 Real GDP Growth and Projections for Canada,



Source: Statistics Canada 2020 (Table 36-10,0434-03), Bank of Canada

<sup>17</sup> World Bank. (2020). June 2020 Global Economic Prospects. Source: <https://www.worldbank.org/en/publication/global-economic-prospects>

<sup>18</sup> International Monetary Fund. (2020). World Economic Outlook Update, June 2020. Source:

<https://www.imf.org/en/Publications/WEQ/Issues/2020/06/24/WEQUpdateJune2020>

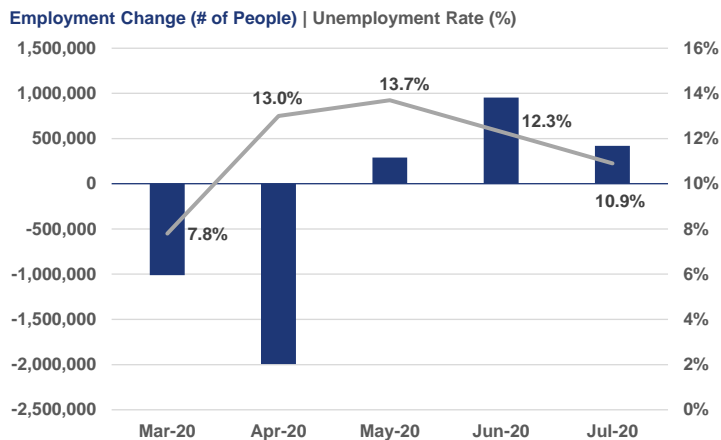
<sup>19</sup> International Monetary Fund. (2020). World Economic Outlook Update, June 2020. Source:

<https://www.imf.org/en/Publications/WEQ/Issues/2020/06/24/WEQUpdateJune2020>

<sup>20</sup> Bank of Canada. (2020). Monetary Policy Report July 2020. Source: <https://www.bankofcanada.ca/wp-content/uploads/2020/07/mpr-2020-07-15.pdf>

If this projection comes true, 2020 will be the deepest, but shortest recession in the country's history.<sup>21</sup>

Figure 5-3 National Labour Figures



Source: Statistics Canada Labour Force Survey 2020

### Employment

At its peak in April 2020, Canada lost almost 3 million jobs to the pandemic effect.<sup>22</sup> This loss of jobs has also impacted household consumption, which dropped by 11.3% in Q1 and 57.7% in Q2 of 2020. However, rising employment numbers nationally in May provided a glimmer of positive news, with the country regaining 1.24 million jobs in May and June.<sup>23</sup> This rise has also impacted consumer confidence, which improved in June linked to optimism of future employment prospects.<sup>24</sup> Nevertheless, Canada's road to employment recovery likely remains long, given the 1.76 million net jobs lost since February.

Unemployment spiked from 7.8% to 13.7% in May, and has subsequently decreased to 10.9% in July, much improved over the recent peak (see Figure 5-3).

### Exports

Canada's trade and investment are also expected to decline in 2020 due to Covid-19. Prompted by lowered worldwide demand, the value of Canada's international exports dropped by \$15 billion between the months of March and April 2020, and remained low in May.<sup>25</sup> The Conference Board of Canada projects that Canadian exports will contract by 14.3% in 2020.<sup>26</sup> The growing indebtedness and uncertainty surrounding the pandemic is also expected to impact investment by businesses, particularly in larger projects.<sup>27</sup> The Conference Board of Canada projects that private sector investment will contract by 11.3% in 2020.<sup>28</sup>

### Government Response

The Government of Canada has taken action to alleviate the impact of Covid-19 to individuals and businesses through numerous support programs. These include major financial aid programs such as the Canada Emergency Response Benefit (CERB), the Canada Emergency Wage Subsidy (CEWS), and the Canada Emergency Student Benefit (CESB). Other supports include deferrals on taxes and mortgages payments, GST credits, freezing student loans, increasing the childcare benefit, seniors assistance, commercial rent assistance, and interest-free

<sup>21</sup> Conference Board of Canada. (2020). Canadian Outlook Summary: Summer 2020. Source: <https://www.conferenceboard.ca/e-library/abstract.aspx?did=10737>

<sup>22</sup> Conference Board of Canada. (2020). Canadian Outlook Summary: Summer 2020. Source: <https://www.conferenceboard.ca/e-library/abstract.aspx?did=10737>

<sup>23</sup> Statistics Canada. (2020). Labour Force Characteristics, Monthly, Seasonally Adjusted, Last 5 Months. Table: 14-10-0287-01. Source: <https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1410028701>

<sup>24</sup> Conference Board of Canada. (2020). Consumer Confidence Halfway Through Its Full Recovery. Source: <https://www.conferenceboard.ca/focus-areas/canadian-economics/icc/2020/10741>

<sup>25</sup> Government of Canada. (2020). Trade Data Online. Source: <https://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/home>

<sup>26</sup> Conference Board of Canada. (2020). Canadian Outlook Summary: Summer 2020. Source: <https://www.conferenceboard.ca/e-library/abstract.aspx?did=10737>

<sup>27</sup> Bank of Canada. (2020). Monetary Policy Report July 2020. Source: <https://www.bankofcanada.ca/wp-content/uploads/2020/07/mpr-2020-07-15.pdf>

<sup>28</sup> Conference Board of Canada. (2020). Canadian Outlook Summary: Summer 2020. Source: <https://www.conferenceboard.ca/e-library/abstract.aspx?did=10737>

loans for business, to name a few.<sup>29</sup> Overall, the Covid-19 Economic Response Plan has represented \$256 billion spending by the federal government as of mid-June 2020, creating the largest deficit in Canada's history.<sup>30</sup>

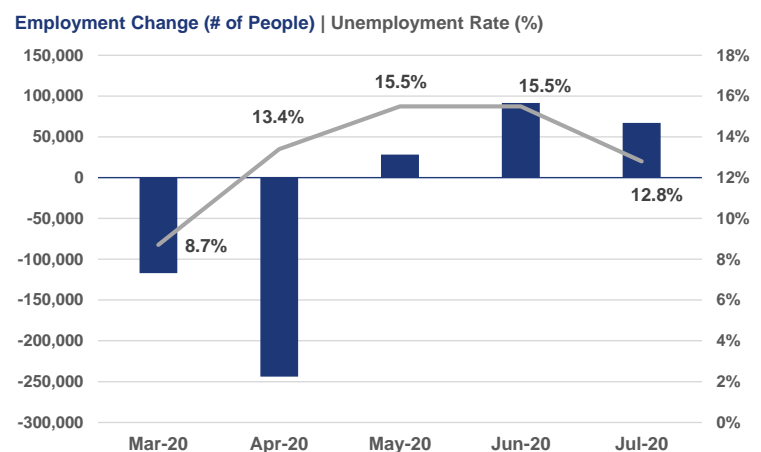
### 5.1.3 Provincial

Given Alberta's struggling economy before the pandemic hit, the province's recovery outlook is less certain. Low oil prices, lack of oil export capacity, and government-imposed oil production caps caused the provincial economy to slip into a mild recession in 2019.<sup>31</sup> Now, Alberta has been dealt a double blow – not only have the effects of the pandemic taken hold in the form of layoffs and lowered consumption, but the price of oil has hit historic lows due to an international oil price war and a worldwide economic slow-down.

Alberta is expected to experience the most severe contraction to economic growth of all provinces, with a drop of 6.8% in real GDP in 2020.<sup>32</sup> Alberta could see real GDP recover by 6.5% in 2021<sup>33</sup>, but the province's economy is not likely to return to pre-Covid levels for a few years.

Provincially almost 361,000 jobs were lost due to Covid-19 in March and April 2020, but, much like the rest of the country, the province experienced some job growth in May and June. This growth has been specific to certain sectors, including healthcare; information, culture, and recreation; and construction, while sectors such as oil and gas and manufacturing have continued posting job losses.<sup>34</sup> As of June 2020, Alberta's unemployment rate is the second highest in the country, after Newfoundland and Labrador, at 15.5 percent (see Figure 5-4).

Figure 5-4 Alberta Labour Figures



Source: Statistics Canada Labour Force Survey 2020

### Exports

The total value of provincial international exports has dropped in recent months, with tapered demand for oil and related energy products mostly to blame. In April, international export value contracted by 29 percent, while in May the value dropped further, by 19 percent.<sup>35</sup>

### Investment

<sup>29</sup> Government of Canada. (2020). Canada's Covid-19 Economic Response Plan. <https://www.canada.ca/en/department-finance/economic-response-plan.html>

<sup>30</sup> Office of the Parliamentary Budget Officer. (2020). The PBO's Covid-19 Analysis. Source: <https://www.pbo-dpb.gc.ca/en/covid-19?fbclid=IwAR1IWUdZaxUnP5HdBpvlZI13-t0sLpP9cNxSd5x8hhvo4h44OGkQRE-6B4Y>

<sup>31</sup> Conference Board of Canada. (2020). Provincial Outlook Summary: Winter 2020. Source: <https://www.conferenceboard.ca/e-library/abstract.aspx?did=10622>

<sup>32</sup> Conference Board of Canada. (2020). Provincial Outlook Economic Forecast: Alberta – June 2020. Source: <https://www.conferenceboard.ca/e-library/abstract.aspx?did=10722>

<sup>33</sup> Conference Board of Canada. (2020). Provincial Outlook Economic Forecast: Alberta – June 2020. Source: <https://www.conferenceboard.ca/e-library/abstract.aspx?did=10722>

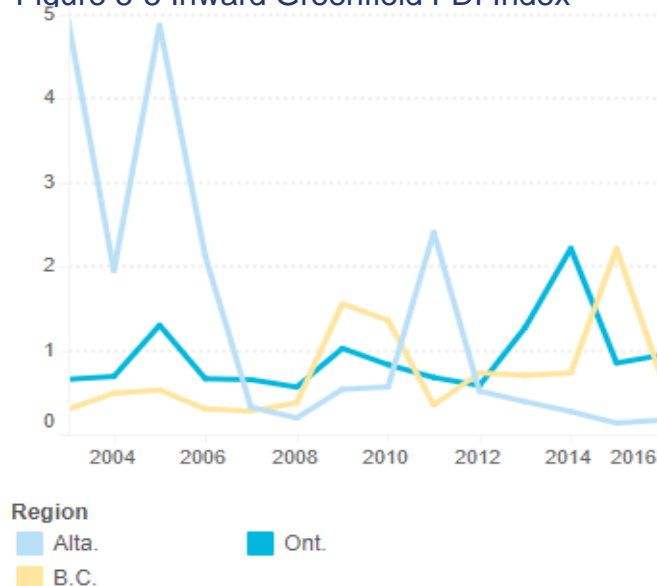
<sup>34</sup> Statistics Canada. (2020). Employment by Industry, Monthly, Seasonally Adjusted, Last 5 Months. Table 14-10-0355-01. Source: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410035501>

<sup>35</sup> Government of Canada. (2020). Trade Data Online. Source: <https://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/home>



Capital investments in Alberta have been low since the oil price decline of 2015. In 2017, FDI flows to the energy sector reduced by 12%, the largest amount in the past 17 years. Executive surveys indicated uncompetitive policies and regulatory uncertainty as prime factors affecting the province's perceived attractiveness for investment.<sup>36</sup> Uncertainty introduced by Covid-19 will likely exacerbate the issue in 2020; some rationalization within the oil patch through local mergers and acquisitions is already being observed.

**Figure 5-5 Inward Greenfield FDI Index**



Source: Inward Greenfield Foreign Direct Investment (FDI) Performance Index, Conference Board of Canada, (2017)

the government is also launching a new agency called Invest Alberta Corporation, which would have a budget of \$18 million over the next three years to attract foreign investment.<sup>37</sup>

The province's Alberta's Recovery Plan, introduced in June 2020 has the following focus:

- protecting Albertans from the health and financial effects of Covid-19
- creating an environment that attracts investment and job creators
- building core infrastructure
- diversifying the economy.

The government has dedicated \$7 billion in deferrals and abatements to provide pandemic relief and has invested \$10 billion in infrastructure as part of these measures.<sup>38</sup> Recovery efforts come with a cost, piling on top of pre-

The Conference Board of Canada's study on inward FDI flows to Canada indicates that Alberta's dominant position during the 2000's has waned with the slowdown in energy investment post-2008. By 2013, the province ranked below Ontario and British Columbia, which reflected more stable values regarding inward FDI flows relative to overall economic strength. No data is available on current investment flows within the province, however following national trends it is presumably stagnant, given the economic uncertainty at play.

#### Government Response

The current provincial government has implemented a variety of policies and programs to stimulate investment, including cutting corporate taxes from 10% to 8% (making Alberta the least taxed province), introducing the innovation employment grant, and introducing the Red Tape Reduction Implementation Act, which aims to eliminate unnecessary rules and regulations and speed up regulatory approvals. The

<sup>36</sup> Fraser Institute. (2017). Annual Global Petroleum Survey. Source: <https://www.fraserinstitute.org/article/investors-steering-clear-of-canadas-energy-sector-in-alberta-and-beyond>

<sup>37</sup> CBC. (July 7 2020). Alberta Government Proposes New Agency to Woo Foreign Investment. Source: <https://www.cbc.ca/news/canada/edmonton/legislation-introduced-to-create-alberta-foreign-investment-attraction-agency-1.5640940>

<sup>38</sup> Government of Alberta. (2020). Alberta's Recovery Plan. Source: <https://www.alberta.ca/recovery-plan.aspx>



pandemic decreasing revenues - it is expected that Alberta's debt-to-GDP ratio will increase from 10% to 18% in 2020.<sup>39</sup>

#### 5.1.4 Edmonton Region

##### GDP

Out of the 13 largest metropolitan regions across the country, the Edmonton CMA is projected to experience the greatest real GDP contraction in 2020 at 5.6 percent.<sup>40</sup> This contraction may not last long however, as the region is projected to rebound by next year, growing by 6.2% in 2021 and 3.2% in 2022.<sup>41</sup> The Conference Board of Canada projects Edmonton to lead real GDP growth out of the major CMAs between 2021-2024 at 4.3 percent.<sup>42</sup>

##### Employment

The mandatory closure of non-essential businesses has resulted in many layoffs for the City and surrounding area. By the end of 2020, the Edmonton CMA is forecasted to lose 50,600 jobs, wiping out employment gains of the past two years. The unemployment rate for the region, which was already the highest of major CMAs in the country before the pandemic, is projected to reach 11.1% in 2020. However, a slight recovery is projected, with the unemployment rate falling to 9.2% in 2021. The Conference Board is forecasting employment in Edmonton to contract by 6.4% in 2020 but grow by 4.1% in 2021 and 2.2% in 2022.<sup>43</sup>

##### Investment

Although there will likely be a reduction in private investment over the next few years due to the uncertainty surrounding oil prices and the pandemic, there are still many major projects currently underway in the Edmonton region. In 2020, there were 70 projects under construction in the region with a cumulative value of more than \$22 billion. There are also 40 proposed projects with a total investment value exceeding \$11 billion. The two largest projects underway in the Region include the Telus 5G network and Inter Pipeline's Heartland Petrochemical Complex.<sup>44</sup> Proponents of the Heartland complex indicate a likely project cost overrun of \$500 million and a half-year delay attributable to pandemic-related effects<sup>45</sup>.

##### Housing

Housing demand in Edmonton has been hit both by the effects of the oil price shock and the pandemic. Unemployment and lost income, lowered migration, and uncertainty are all expected to play a role in subduing the housing market over the next two years. The Canadian Mortgage and Housing Corporation (CMHC) produced a dire outlook for impacts to Edmonton home prices, which have been trending downwards since mid-2017. The Corporation stated its expectation in July for Edmonton prices to be 11% to 29% lower in 2022 than in 2019.<sup>46</sup> To-date, the market has bucked these projections. Overall inventory in the Edmonton CMA as of July 2020 is

<sup>39</sup> Fraser Institute. (2020). Alberta's Debt-to-GDP Ratio Set to Climb. Source: <https://www.fraserinstitute.org/blogs/albertas-debt-to-gdp-ratio-set-to-climb-quickly>

<sup>40</sup> Conference Board of Canada. (2020). Major City Insights, Cross-City Comparison. Source: <https://www.conferenceboard.ca/focus-areas/canadian-economics/major-city-insights/appendix-a>

<sup>41</sup> Conference Board of Canada. (2020). Major City Insights Edmonton. Source: <https://www.conferenceboard.ca/focus-areas/canadian-economics/major-city-insights/edmonton>

<sup>42</sup> Conference Board of Canada. (2020). Major City Insights, Cross-City Comparison. Source: <https://www.conferenceboard.ca/focus-areas/canadian-economics/major-city-insights/appendix-a>

<sup>43</sup> Conference Board of Canada. (2020). Major City Insights Edmonton. Source: <https://www.conferenceboard.ca/focus-areas/canadian-economics/major-city-insights/edmonton>

<sup>44</sup> Edmonton Global. (July 13 2020). Data Trends with Tomas. Source: <https://edmontonglobal.ca/data-and-trends-with-tomas/>

<sup>45</sup> Global News Edmonton (May 7, 2020). Inter Pipeline Warns of Higher Costs, Delays for Alberta Petrochemical Project. <https://globalnews.ca/news/6919543/alberta-heartland-petrochemical-complex-delays-covid/>

<sup>46</sup> Canada Mortgage and Housing Corporation. (2020). Housing Market Outlook, Special Edition – Summer 2020 Canada's Major Markets. Source: <https://assets.cmhc-schl.gc.ca/sites/cmhc/data-research/publications-reports/housing-market-outlook/2020/housing-market-outlook-canada-summer-61500-2020-en.pdf?rev=ee98fa7e-3704-4e5f-9c43-95f04113558f>

down 15% from last year, but prices (all residential) are 0.7% higher than last year, and up by 2.7% over last June 2020.<sup>47</sup> This uplift could potentially be a short-term blip, driven by pent-up demand from the normally higher spring buying season. CMHC's forecast calls for continued depressed market conditions, with a tentative recovery in 2021. Market observers will be watching closely to see if the market continues to run contrary.

### Government Response

All local governments are feeling the pressure of reduced revenues. Those with sufficient resources are providing direct business supports, while others are acting as information conduits to other support sources, as well as offering in-kind support where possible. As an example, the City of Edmonton has put some measures in place to help businesses and individuals cope with the realities of the pandemic. The measures for businesses include a 2% property tax reduction, the introduction of an economic recovery grant, and a 50% reduction on business licence fees. For individuals, the City waived transit fares and parking fees from mid-March to mid-June and provided the option to defer property tax and utility payments.<sup>48</sup> As an example of Covid's impacts to local government, Edmonton expects to lose \$172 million by the end of the year due to revenue reductions and sees an forecasts and additional shortfall of between \$114-\$160 million in 2021.<sup>49</sup> The bulk of this loss comes from reduced transit fares, recreation centre fees, and parking revenues. To deal with the deficit caused by the pandemic, the City of Edmonton temporarily laid off 2,900 employees and decided to delay the implementation of major projects, including the new bus network and new waste separation strategy.

In July, both the federal and provincial governments announced relief funding to Alberta municipalities of approximately \$586 million total. It is still too early to know how much of this funding will be allocated to the Edmonton Region.<sup>50</sup>

Covid-related responses from the Tri-Municipal members to-date include tax payment and municipal utility deferrals and providing information directories of supports available to local businesses. Spruce Grove has temporarily relaxed sidewalk regulations to allow for greater seating and is permitting temporary business signage on city boulevards.

<sup>47</sup> Realtors Association of Edmonton. Monthly Market Statistics Update. July 2020. Source: [https://realtorsofedmonton.com/web/RAE\\_Public/Market\\_Stats/Monthly%20Market%20Statistics/RAE\\_Public/Market\\_Statistics/Monthly\\_Market\\_Stats.aspx#:~:text=All%20residential%20average%20prices%20are,3.06%25%20increase%20from%20June%202020.](https://realtorsofedmonton.com/web/RAE_Public/Market_Stats/Monthly%20Market%20Statistics/RAE_Public/Market_Statistics/Monthly_Market_Stats.aspx#:~:text=All%20residential%20average%20prices%20are,3.06%25%20increase%20from%20June%202020.)

<sup>48</sup> City of Edmonton. (2020). Wednesday April 29 2020 – City of Edmonton Budget Update. Source: <https://www.youtube.com/watch?v=ymULwVHlaqY>

<sup>49</sup> Edmonton Journal. (July 17 2020). 'Good First Step': Mayor Iveson Pleased with Financial Aid Plan, About \$586 Million to Hit Alberta Cities. Source: <https://edmontonjournal.com/news/local-news/prime-minister-justin-trudeau-announces-emergency-funding-for-municipalities-to-help-recover-from-covid-19>

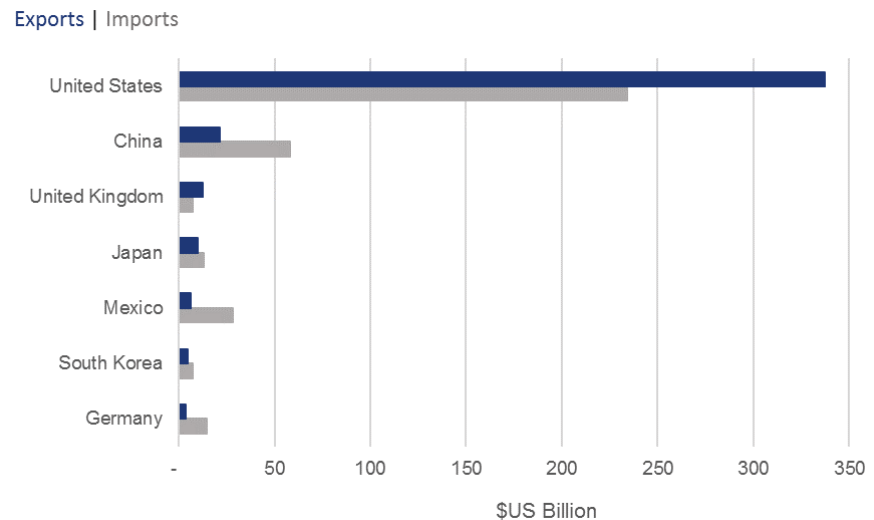
<sup>50</sup> Edmonton Journal. (July 17 2020). 'Good First Step': Mayor Iveson Pleased with Financial Aid Plan, About \$586 Million to Hit Alberta Cities. Source: <https://edmontonjournal.com/news/local-news/prime-minister-justin-trudeau-announces-emergency-funding-for-municipalities-to-help-recover-from-covid-19>

## 5.2 Trade Environment

### 5.2.1 Overview

At present, Canada has 14 free trade agreements with 51 countries in force. Canada's trade with these countries accounted for 78% of imports and 89% of exports in 2018.<sup>51</sup> Principal trade agreements include the Canada-US Free Trade Partnership (CUSFTA), Trans-Pacific Partnership (TPP), the Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union and the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP) for the Asia-Pacific region.<sup>52</sup>

Figure 5-6 Breakdown of Exports by Top Exporting Country



Source: UN Comtrade (2018)

The replacement of the North American Free Trade Agreement (NAFTA) by the US-Mexico-Canada Agreement (CUSMA) shelve the prospect that the US, Canada's largest trading partner, abandoning a preferential North American trade regime that existed since NAFTA came into force in 1994. CUSMA entered into force on 1 July 2020 and will not change Canada's trade regime substantively apart from two exceptions: <sup>53</sup>

- more restrictive rules of origin for automotive goods
- elimination of investor state dispute settlement options

Other top destinations for Canadian exports include the Netherlands, India and Hong Kong. Other top countries supply imports include Italy, France and Brazil.

Table 5-1 Top Imported and Exported Goods

Top Export Goods	Value (US\$)	Top Import Goods	Value (US\$)
Oil & Mineral Fuels	99	Motor Vehicles & Parts	75
Motor Vehicles & Parts	61	Industrial Machinery	69
Industrial Machinery	35	Electrical Machinery	45
Precious Stones & Metals	18	Oil & Mineral Fuels	37
Wood	14	Plastics	17

<sup>51</sup> Statistics Canada: <https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2019048-eng.html>

<sup>52</sup> Government of Canada: <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/index.aspx?lang=eng>

<sup>53</sup> Global Affairs Canada: <https://www.international.gc.ca/trade-commerce/assets/pdfs/agreements-accords/cusma-aceum/CUSMA-impact-repercussion-en.pdf>

Plastics	14	Precision Instruments	13
Electrical Machinery	13	Pharmaceuticals	13
Aircraft	11	Iron & Steel Articles	11
Aluminum	10	Furniture	9

Source: UN Comtrade (2018)

### 5.2.2 Manufacturing

General manufacturing is driven by exports and is the largest business sector in Canada. It contributes to about a third of Canadian economic activity and about a quarter of Canadian employment. Free Trade Agreements (FTAs) have served the manufacturing industry well with agreements like NAFTA and CUSMA encouraging global economic integration, increased opportunities for selling manufacturing components, sub-components and finished goods to consumers and other businesses around the world.<sup>54</sup>

### 5.2.3 Value-Added Agriculture

#### Cannabis and Hemp

In 2017, Canada exported 10,500 metric tons (MT) of hempseed valued at nearly \$50 million USD. 70% of Canada's export volume went to the United States, followed by the EU and South Korea.<sup>55</sup>

In Canada, international trade of cannabis is governed by the Cannabis Act and its regulations.<sup>56</sup> Under the Act, licenses and permits authorizing the importation and exportation of cannabis may be issued only in respect of cannabis for medical or scientific purpose.<sup>57</sup>

The onset of mutual recognition agreements (MRAs) between Canada and Europe will accelerate the import and export of cannabis products between Canada and European countries. MRAs are specialised trade agreements that allow trading countries to be certain that the pharmaceuticals they purchase from abroad are equivalent to what is produced at home. This includes not only ingredients but processing procedures, production plant hygiene, testing and more.<sup>58</sup>

#### Advanced Primary Production

Canada's national, provincial, and rural economies depend on trade. Across Canada, 9 out of every 10 farms are dependent on export markets.<sup>59</sup> Under NAFTA, an institutional cornerstone to agri-food trade in North America, tariffs on all covered goods traded between Canada and Mexico were eliminated in 2008. Over the nearly three decades of NAFTA and the CUSFTA, Canada's agri-food exports have grown by more than five-fold, from under \$10 billion in 1988 to \$56 billion in 2016.<sup>60</sup>

USMCA was well received by Canadian canola producers as it maintains a strong North American market for canola.<sup>61</sup> Under the agreement, canola seed, oil and meal will remain free of tariffs, with some additional benefits

<sup>54</sup> Scaled Trade: Gearing Up Canadian Exports: <https://cme-mec.ca/wp-content/uploads/2018/11/Trade-Report-FINAL-002.pdf>

<sup>55</sup> USDA Foreign Agricultural Service:

[https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Industrial%20Hemp%20Production%20Trade%20and%20Regulation\\_Ottawa\\_Canada\\_12-14-](https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Industrial%20Hemp%20Production%20Trade%20and%20Regulation_Ottawa_Canada_12-14-2018.pdf)

[https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Industrial%20Hemp%20Production%20Trade%20and%20Regulation\\_Ottawa\\_Canada\\_12-14-2018.pdf](https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Industrial%20Hemp%20Production%20Trade%20and%20Regulation_Ottawa_Canada_12-14-2018.pdf)

<sup>56</sup> Mondaq: <https://www.mondaq.com/canada/cannabis-hemp/884226/global-cannabis-trade-a-primer-on-canadian-importexport-requirements-for-cannabis>

<sup>57</sup> Mondaq: <https://www.mondaq.com/canada/cannabis-hemp/884226/global-cannabis-trade-a-primer-on-canadian-importexport-requirements-for-cannabis>

<sup>58</sup> Cannabis Industry Journal: <https://cannabisindustryjournal.com/tag/pharmaceutical/>

<sup>59</sup> Canadian Agri-Food Trade Alliance: <http://cafta.org/trade-agreements/>

<sup>60</sup> Canadian Agri-Food Trade Alliance: <http://cafta.org/trade-agreements/>

<sup>61</sup> Canada Canola Growers Association: <https://www.ccga.ca/about/press-releases/Pages/New-Trilateral-Agreement.aspx>

resulting for further processed products. A new section of USMCA addresses biotechnology and new plant breeding techniques which is of interest to Canadian farmers and the canola sector. The agreement states that innovation is a critical tool for economic and environmentally sustainable production for farmers.<sup>62</sup>

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) secures access to the Asian region which has a combined GDP of \$13.5 trillion. A sample of the opportunities include:

- for canola, better trade security, more value for their products and increased exports
- Canadian beef producers expect to double or triple annual exports to Japan
- Canadian barley producers could export an additional 400,000 to 500,000 tonnes of barley in various valued added forms
- small quota increases into US sugar market for Canada's sugar and sugar-containing products sector<sup>63</sup>

#### 5.2.4 Energy Services

Energy services relate to oil and gas field services as well as pipelines and electrical generation activities. The most relevant trade agreements are CUSMA and CETA. It is closely tied to manufacturing, particularly including fabrication and machining of tools, equipment and facility components.

USMCA maintains obligations and provisions on trade in energy products and services, including in the areas of national treatment and market access, rules of origin, customs and trade facilitation, and cross-border trade in services and investment, and locks in Mexico's services and investment-related commitments in the energy sector. Other outstanding energy services related issues addressed by USMCA includes: <sup>64</sup>

- resolution of an issue regarding use of diluent in pipelines when moving crude oil, costing Canadian producers upwards of \$60 million per year in duties and other fees
- includes an enforceable side letter between Canada and the United States on energy regulatory measures and regulatory transparency, including the establishment of transparency requirements for the authorization process in the energy sector

Under CETA, Canadian oil and gas products enjoy duty-free, quota-free market access to the EU. Canadian service providers in the oil and gas sector benefit from various provisions in CETA, including those related to temporary entry and trade in services. Canada has a preferential trade advantage with the EU which many other competitors do not have.<sup>65</sup>

#### 5.2.5 Transportation, Warehousing and Logistics

Additions contained within the USMCA agreement impact Canada's transport, warehousing, and logistics sector, particularly relating to customs and trade facilitation. These changes should translate into faster shipping times and reduced administrative burden on transportation and logistics companies. However, the ability of logistics services companies and transport modes, especially trucking, to capitalize on some of the efficiencies in the

<sup>62</sup> Canadian Agri-Food Trade Alliance <https://www.ccqa.ca/about/press-releases/Pages/New-Trilateral-Agreement.aspx>

<sup>63</sup> Canadian Agri-Food Trade Alliance: <http://cafta.org/trade-agreements/cptpp/>

<sup>64</sup> Government of Canada: <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/ceta-aecq/business-entreprise/secteurs-secteurs/OGE-EPPG.aspx?lang=eng>

<sup>65</sup> ibid

agreement depend on improvements to relevant infrastructure, such as faster crossing capability along the Canada-US border.<sup>66</sup>

#### 5.2.6 ICT Services

A number of changes due to CETA are expected to affect the ICT sector including improving the foundation for **competitive shared environment for ICT development and use**. Canada and the EU are currently implementing a combination of policies, including a strong and flexible series of intellectual property (IP) rights, laws and a regime of interoperable data-protection to allow functional exchange of data and information between the regions' information systems. These policies aim to encourage and foster digital, scientific and technological innovation while also protecting privacy with an intention of improving safe exchange of information and knowledge between the two regions.<sup>67</sup>

<sup>66</sup> Norton Rose Fullbright: <https://www.nortonrosefulbright.com/en/knowledge/publications/5d79a0ad/usmca---impact-on-transport>

<sup>67</sup> EUCCAN: <https://euccan.com/eu-ict-industry/>

## 6. Appendix 2 – Modelling Inputs

Table 6-1 Modelling Inputs – International Competitiveness

General Notes: Geography considered at the Census Metropolitan Area (Canada) / Metropolitan Statistical Area (US)

Indicator	Edmonton	Calgary	Vancouver	Winnipeg	Houston	Denver	Boise
<b>Households, Occupation/Industry Employment (%)</b>	Source(s): StatsCan Census; Esri BAO Community profile; The World University Rankings						
2018 Total Population (Esri)	1,443,534	1,529,575	2,621,830	832,369	7,050,107	2,928,292	616,561
2018 Household Population (Esri)	547,405	567,622	1,023,582	329,467	2,438,834	1,146,523	283,550
2018 Median Age (Esri)	36.5	36.9	40.3	38.2	34.4	37	35.6
2023 Total Population (Esri)	1,600,700	1,706,698	2,822,591	878,793	7,792,464	3,175,434	867,359
2018-2023 Population: Annual Growth Rate (Esri)	2.09%	2.22%	1.49%	1.09%	2.02%	1.63%	2.18%
2023 Household Population (Esri)	605,769	630,874	1,104,542	349,162	2,689,409	1,240,468	315,663
2018 Population: No Diploma (%) (2016 CA)	9.74%	8.13%	8.01%	10.10%	16.7%	8.9%	3.2%
2018 Population: High School Diploma (%) (2016 CA)	24.80%	22.27%	24.36%	26.69%	23.3%	20.5%	20.2%
2018 Population: Technical Certification (%) (2016 CA)	10.87%	7.44%	6.74%	7.25%	6.9%	8.0%	6.0%
2018 Population: University Degree (%) (2016 CA)	19.96%	26.63%	24.58%	22.52%	20.9%	27.2%	21.7%
2018 Population: Post Graduate (%) (2016 CA)	8.91%	11.67%	12.89%	9.05%	11.8%	15.9%	10.6%
Flagship University Ranking (Global)	132	199	37	401	86	301	600+
2018 Occupation: Management/Business/Financial/Admin (Esri)(18%)	26.44%	28.87%	27.25%	24.19%	27.8%	31.4%	15.5%
2018 Occupation: Sales and Service (Esri) (%)	17.68%	19.95%	22.24%	23.22%	27.7%	27.6%	10.0%
2018 Occupation: Trades, Transport/Equipment Operators (Esri) (%)	19.87%	13.60%	12.13%	14.39%	16.3%	13.6%	5.4%
2018 Occupation: Manufacturing/Production (Esri) (%)	2.16%	1.96%	4.14%	3.92%	6.0%	3.7%	4.8%
2018 Industry: Agriculture/Mining (Esri) (%)	4.47%	7.36%	1.44%	1.95%	2.5%	1.1%	2.5%
2018 Industry: Construction (Esri) (%)	9.96%	8.29%	6.83%	5.92%	9.9%	8.2%	9.2%
2018 Industry: Manufacturing (Esri) (%)	6.55%	5.73%	6.51%	8.82%	9.6%	6.3%	9.8%
2018 Industry: Wholesale Trade (Esri) (%)	4.90%	4.39%	4.84%	3.85%	3.5%	2.8%	3.0%
2018 Industry: Retail Trade (Esri) (%)	10.59%	10.41%	10.71%	11.10%	10.3%	10.1%	10.4%
2018 Industry: Transportation/Utilities (Esri) (%)	6.00%	6.77%	6.13%	6.66%	6.1%	5.1%	4.3%
2018 Industry: Information (Esri) (%)	1.88%	2.31%	3.76%	2.17%	1.2%	3.0%	1.4%
2018 Industry: Finance/Insurance/Real Estate (Esri) (%)	5.73%	6.13%	7.72%	6.45%	5.9%	8.0%	6.7%
2018 Industry: Services (Esri) (%)	41.72%	44.09%	46.96%	44.47%	48.2%	51.1%	46.5%
2018 Industry: Public Administration (Esri) (%)	8.23%	4.49%	5.10%	8.59%	2.8%	4.3%	6.3%
2018 Unemployment Rate	6.10%	7.7%	2.50%	5.30%	5.5%	3.3%	10.4%
2018 Owner Occupied Housing Units (Esri) (%)	69.55%	72.7%	63.56%	67.19%	55.4%	59.7%	66.7%
2018 Renter Occupied Housing Units (Esri) (%)	30.28%	27.3%	36.42%	32.77%	36.6%	35.7%	26.5%



Indicator	Edmonton	Calgary	Vancouver	Winnipeg	Houston	Denver	Boise
2023 Owner Occupied Housing Units (Esri) (%)	69.76%	72.6%	63.56%	67.30%	57.4%	61.4%	67.0%
2023 Renter Occupied Housing Units (Esri) (%)	30.07%	27.4%	36.43%	32.67%	35.1%	34.4%	26.7%
2018 Average Household Income (Esri)	\$118,180	\$139,543	\$106,833	\$ 95,750	\$84,124	\$93,475	\$82,312
2018 Per Capita Income (Esri)	\$ 44,815	\$ 51,794	\$41,708	\$ 37,900	\$43,082	\$50,777	\$30,015
2018-2023 Average Household Income: Annual Growth Rate (Esri)	2.3%	1.7%	2.0%	1.8%	2.5%	1.9%	1.6%
2018-2023 Per Capita Income: Annual Growth Rate (Esri)	2.3%	1.6%	2.0%	1.9%	2.0%	1.7%	1.6%
2023 Average Household Income (Esri)	\$ 135,563	\$ 154,537	\$ 120,017	\$106,672	\$97,461	\$104,766	\$90,621
2023 Per Capita Income (Esri)	\$ 51,303	\$ 57,124	\$46,965	\$ 42,383	\$48,376	\$56,161	\$33,016
2018 Housing Units	547405	567622	1023582	329,467	2,649,356	1,201,658	192,628
2023 Housing Units	605769	630874	1104542	349,162	2,907,291	1,294,507	213,107
2018-2023 Housing Unit Growth (%) (Esri)	9.6%	10.0%	7.3%	5.6%	8.9%	7.2%	2.0%
<b>Unemployment Rates</b> Source(s): Bureau of Labour Statistics; Esri BAO							
2013	4.0%	4.2%	3.8%	5.6%	6.0%	6.6%	5.8%
2018	6.1%	7.7%	2.5%	5.3%	4.3%	3.0%	2.7%
2013-2018 unemployment rate change	2.1%	3.5%	-1.3%	-0.3%	-1.7%	-3.6%	-3.1%
<b>Labour Force</b> Source(s): Bureau of Labour Statistics; Esri BAO							
2013	785,752	796,951	1,341,008	425,082	3,182,553	1,463,915	311,318
2018	864,838	876,204	1,490,212	444,613	3,407,706	1,639,069	364,103
2013-2018\ labour force change	10.07%	9.94%	11.13%	4.59%	7.07%	11.96%	16.96%
<b>Miscellaneous</b> Source(s): MIT Living Wage & Living Wage Canada; Cities Ranked and Rated; Google Research; Google Maps; StatsCan; Airport Websites; OpenRailwayMap.org; US Bureau Statistics NRCAN Energy Factbook 2018/19; EIA - U.S. Total Energy Production 2018							
(Minimum Living Hourly Wage - 1 Adult)	\$16.31	\$18.15	\$20.91	\$ 14.54	\$ 15.60	\$ 18.03	\$11.16
Annual Precipitation mm	476.9	412.6	1474.9	504	1219.2	406.4	330
Annual Snowfall cm	123.5	126.7	43.6	114.8	0	152.4	46
Days Precipitation	125.8	113.6	169.1	123.5	107	88	87
Avg January Low	-16	-15.1	2.7	-23.6	5.28	-8.78	-4
Average July High	22.8	22.9	22	26.1	34.61	30.78	33
Average Commute Time (Driving Car)	24.2	24.1	27.3	22.6	28.4	26	n/a
Km Light Rail	24.3	59.9	79.6	0	36.9	76	32.2
Km to Major Airport	28.9	15.6	14.5	8	17.5	51.3	6.2
Time to Major Airport	29	17	30	15	18	37	10
Annual Passenger Volume (air)	7,449,265	15,565,055	23,410,812	4,146,275	55,327,328	64,494,613	3,500,000
Annual Cargo Volume (air) tonnes	27,113.00	85,907.00	280,845.30	61,550.20	494,058	29,778	40,746
Seaport/Riverport (Y/N)	N	N	Y	N	Y	N	N

Indicator	Edmonton	Calgary	Vancouver	Winnipeg	Houston	Denver	Boise
Class 1 Railroads	2	2	3	2	2	2	2
Interstate Highways	2	2	2	2	4	3	2
City Region share of Provincial / State Population (~2019/20)	35%	38%	56%	65%	24%	51%	35%
City Region Per Capita Share of State/Province Total Energy Production (Trillion BTUs)	4,394	4,656	1,720	189	4,965	1,862	62
<b>Crime Rates</b> Source(s): FBI; StatsCan; McLean's							
2016 Violent Crime Rate per 100,000	1128	764	958	1291	578.2	389	298
2016 Property Crime Rate per 100,000	4962	4093	5092	4599	2923.8	2954	2325
<b>Labour Force Cost (Median Hourly Wage) - by Occupation</b> Source(s): Canada Jobbank; BLS							
Manufacturing Managers/Industrial Production Managers	\$45.14	n/a	\$38.00	\$ 40.87	\$ 73.96	\$ 61.22	\$44.48
Managers in health care/Medical and Health Services Managers	\$53.47	\$51.00	\$40.87	\$ 45.00	\$ 67.17	\$ 70.71	\$44.40
Computer and info systems managers	\$57.69	\$54.30	\$43.27	\$ 46.01	\$ 92.90	\$ 95.30	\$51.86
Architecture and science managers/Architecture and engineering managers	n/a	\$57.69	\$43.68	n/a	\$106.50	\$ 96.25	\$38.81
Managers in transportation/Transportation, storage, and dist. Managers	n/a	\$33.65	n/a	\$ 39.42	\$ 61.83	\$ 68.46	\$40.67
Mechanical Engineers	n/a	n/a	\$42.31	\$ 32.03	\$ 61.20	\$ 55.67	\$40.14
Electrical Engineers	n/a	\$48.35	\$36.06	\$ 46.88	\$ 62.78	\$ 57.95	\$44.84
Industrial Engineers	\$40.00	\$44.73	\$33.96	\$ 36.06	\$ 63.97	\$ 59.23	\$44.47
Software Engineers/Developers	n/a	\$50.48	\$38.46	\$ 41.35	\$ 65.73	\$ 65.94	\$44.81
Chemical Engineers	n/a	\$51.28	\$40.87	n/a	\$ 70.34	\$ 59.06	n/a
Computer Engineers	n/a	n/a	\$47.69	\$ 37.60	\$ 69.32	n/a	\$47.30
Civil Engineers	\$40.00	\$46.15	\$38.51	\$ 38.46	\$ 66.57	\$ 51.14	\$37.83
Financial Analysts	n/a	\$38.00	\$36.06	\$ 31.25	\$ 50.30	\$ 53.30	\$35.18
Accountants	\$37.98	\$38.46	\$28.85	\$ 29.33	\$ 49.14	\$ 44.63	\$28.19
Technical Sales Representatives	\$28.85	\$33.17	\$23.08	\$ 24.64	\$ 53.27	\$ 63.45	\$31.28
Farm Labourers	n/a	n/a	\$15.00	\$ 15.00	\$ 12.88	\$ 16.91	\$11.33
Labourers in Food Processing	\$19.00	\$19.00	\$14.00	\$ 15.00	\$ 15.80	\$ 15.04	n/a
Medical Lab Technologists	\$39.08	\$41.00	\$33.33	\$ 33.78	\$ 38.39	\$ 41.78	n/a
Computer Programmers	\$37.19	\$35.90	\$36.06	\$ 33.65	\$ 50.28	\$ 60.57	\$32.56
Biologists	\$40.00	\$38.46	\$36.00	\$ 33.85	\$ 52.61	\$ 47.55	\$36.31
Chemists	\$43.21	\$44.71	\$30.29	\$ 31.05	\$ 48.14	\$ 48.87	n/a
Electronic Assemblers and Fabricators	n/a	\$22.00	\$18.75	\$ 15.00	\$ 16.35	\$ 19.90	\$14.30
Other Assemblers	n/a	\$30.00	\$28.50	\$ 21.53	\$ 24.97	\$ 23.84	\$13.67
CNC & Machine Operators	\$27.88	\$26.00	\$22.52	\$ 21.00	\$ 25.66	\$ 21.98	\$15.26
Heavy Truck Drivers	\$26.15	\$24.04	\$23.08	\$ 19.00	\$ 24.43	\$ 29.84	\$22.26

Indicator	Edmonton	Calgary	Vancouver	Winnipeg	Houston	Denver	Boise
Material Handlers	\$19.35	\$19.00	\$16.83	\$ 18.00	\$ 16.20	\$ 17.02	\$36.82
<b>Labour Force Numbers by Position</b> Source(s): Canada Jobbank; BLS							
Manufacturing Managers/Industrial Production Managers	1,850	2,430	6,340	2,220	3,170	580	250
Managers in health care/Medical and Health Services Managers	1,520	1,310	2,790	720	5,070	2,310	1,010
Computer and info systems managers	2,070	3,110	5,930	820	5,790	4,290	950
Architecture and science managers/Architecture and engineering managers	640	770	820	n/a	4,520	1,960	8,190
Managers in transportation/Transportation, storage, and dist. Managers	1,130	1,740	3,340	750	2,470	720	320
Mechanical Engineers	1,890	3,510	2,960	410	8,470	3,470	600
Electrical Engineers	1,780	3,080	3,410	450	4,250	2,190	790
Industrial Engineers	390	970	870	n/a	5,270	1,670	490
Software Engineers/Developers	1,400	3,190	8,510	540	12,680	15,460	3,140
Chemical Engineers	660	1,590	730	n/a	4,110	320	n/a
Computer Engineers	630	1,210	1,280	n/a	820	n/a	110
Civil Engineers	3,910	5,170	5,860	460	10,690	5,790	1,230
Financial Analysts	1,110	3,330	3,270	720	8,040	2,740	620
Accountants	8,430	17,210	23,150	2,980	37,990	22,910	2,360
Technical Sales Representatives	6,590	8,310	14,060	2,450	6,780	3,990	460
Farm Labourers	1,580	1,730	2,770	4,020	910	960	1,290
Labourers in Food Processing	930	1,570	3,840	820	1,920	1,430	n/a
Medical Lab Technologists	1,030	1,000	1,500	470	3,230	1,670	n/a
Computer Programmers	3,950	7,060	15,560	1,780	4,980	2,000	330
Biologists	780	770	1,910	330	440	210	110
Chemists	1,020	710	930	n/a	2,760	990	60
Electronic Assemblers and Fabricators	220	430	1,840	n/a	4,780	1,290	620
Other Assemblers	310	150	980	n/a	3,550	550	4,440
CNC & Machine Operators	290	150	260	350	4,150	460	290
Heavy Truck Drivers	14,420	13,060	24,260	7,400	39,170	12,950	4,560
Material Handlers	8,430	7,950	17,420	2,830	42,810	21,610	n/a
<b>Occupation Employment as Share of Labour Force</b> Source(s): Conway Inc.							
Manufacturing Managers/Industrial Production Managers	0.21%	0.28%	0.43%	0.50%	0.09%	0.04%	0.07%
Managers in health care/Medical and Health Services Managers	0.18%	0.15%	0.19%	0.16%	0.15%	0.14%	0.28%
Computer and info systems managers	0.24%	0.35%	0.40%	0.18%	0.17%	0.26%	0.26%
Architecture and science managers/Architecture and engineering managers	0.07%	0.09%	0.06%	n/a	0.13%	0.12%	2.25%

Indicator	Edmonton	Calgary	Vancouver	Winnipeg	Houston	Denver	Boise
Managers in transportation/Transportation, storage, and dist. Managers	0.13%	0.20%	0.22%	0.17%	0.07%	0.04%	0.09%
Mechanical Engineers	0.22%	0.40%	0.20%	0.09%	0.25%	0.21%	0.16%
Electrical Engineers	0.21%	0.35%	0.23%	0.10%	0.12%	0.13%	0.22%
Industrial Engineers	0.05%	0.11%	0.06%	n/a	0.15%	0.10%	0.13%
Software Engineers/Developers	0.16%	0.36%	0.57%	0.12%	0.37%	0.94%	0.86%
Chemical Engineers	0.08%	0.18%	0.05%	n/a	0.12%	n/a	n/a
Computer Engineers	0.07%	0.14%	0.09%	n/a	0.02%	0.35%	0.03%
Civil Engineers	0.45%	0.59%	0.39%	0.10%	0.31%	0.35%	0.34%
Financial Analysts	0.13%	0.38%	0.22%	0.16%	0.24%	0.17%	0.17%
Accountants	0.97%	1.96%	1.55%	0.67%	1.11%	1.40%	0.65%
Technical Sales Representatives	0.76%	0.95%	0.94%	0.55%	0.20%	0.24%	0.13%
Farm Labourers	0.18%	0.20%	0.19%	0.90%	0.03%	0.06%	0.35%
Labourers in Food Processing	0.11%	0.18%	0.26%	0.18%	0.06%	0.09%	n/a
Medical Lab Technologists	0.12%	0.11%	0.10%	0.11%	0.09%	0.10%	n/a
Computer Programmers	0.46%	0.81%	1.04%	0.40%	0.15%	0.12%	0.09%
Biologists	0.09%	0.09%	0.13%	0.07%	0.01%	0.01%	0.03%
Chemists	0.12%	0.08%	0.06%	n/a	0.08%	0.06%	0.02%
Electronic Assemblers and Fabricators	0.03%	0.05%	0.12%	n/a	0.14%	0.08%	0.17%
Other Assemblers	0.04%	0.02%	0.07%	n/a	0.10%	0.03%	1.22%
CNC & Machine Operators	0.03%	0.02%	0.02%	0.08%	0.12%	0.03%	0.08%
Heavy Truck Drivers	1.67%	1.49%	1.63%	1.66%	1.15%	0.79%	1.25%
Material Handlers	0.97%	0.91%	1.17%	0.64%	1.26%	1.32%	n/a
<b>Location Quotient</b> Source(s): Conway Inc.							
Agriculture, Forestry, Fishing, and Hunting	0.76	0.54	0.82	0.83	0.08	0.17	1.69
Mining, Quarrying, Oil and Gas Extraction	5.50	10.37	0.71	1.47	5.87	0.77	0.40
Utilities	2.63	2.50	1.31	2.88	1.67	0.63	1.24
Construction	1.74	1.45	1.19	1.03	1.19	1.01	0.92
Manufacturing	0.69	0.60	0.69	0.93	0.77	0.69	1.20
Wholesale Trade	1.11	1.00	1.10	0.88	1.30	0.86	1.07
Retail Trade	0.90	0.88	0.91	0.94	1.03	0.97	0.72
Transportation and Warehousing	1.19	1.40	1.38	1.33	0.85	1.16	1.00
Information and Cultural Industries	0.87	1.06	1.73	1.00	0.78	1.93	0.78
Finance and Insurance	0.83	0.88	1.11	1.07	0.78	1.25	0.94
Real Estate and Rental/Leasing	1.16	1.26	1.58	0.95	1.68	1.91	0.95
Professional, Scientific and Technical Services	1.07	1.65	1.38	0.73	1.28	1.17	1.02

Indicator	Edmonton	Calgary	Vancouver	Winnipeg	Houston	Denver	Boise
Management of Companies and Enterprises	0.06	0.12	0.10	0.15	0.13	0.06	1.00
Administrative and Support, Waste Management and Remediation Services	0.49	0.60	0.68	0.60	0.41	0.48	0.97
Educational Services	2.82	2.32	2.67	2.95	2.60	2.20	0.90
Health Care and Social Assistance	0.74	0.66	0.71	0.90	0.97	0.81	1.02
Arts, Entertainment and Recreation	0.85	1.14	1.28	1.14	0.80	1.50	0.75
Accommodation and Food Services	0.55	0.57	0.75	0.72	0.88	0.95	0.84
Other Services (except Public Administration)	1.42	1.24	1.38	1.25	1.40	1.51	0.89
Public Administration	1.42	0.77	0.88	1.48	0.55	1.03	1.31
<b>Tax (2018)</b> Source(s): Tax Foundation; Altus Group Property Tax Rate Benchmark							
Federal Corporate Income Tax - Highest Bracket	15.00%	15.00%	15.00%	15.00%	21.00%	21.00%	21.00%
State/Provincial Corporate Income Tax -Highest Bracket (starting P55, second column)	12.00%	12.00%	12.00%	12.00%	0.00%	4.63%	7.60%
National Employment/Unemployment Rates	2.27%	2.27%	2.27%	2.27%	6.46%	8.15%	2.7%
Sales Tax (Federal, State/Provincial, and Local combined)	5.00%	5.00%	12.00%	13.00%	8.17%	7.52%	6.00%
Median Property Tax	2.08%	1.77%	1.24%	2.44%	2.26%	0.70%	0.61%
<b>Access to Markets</b> Source(s): Esri BAO							
Population within 4 Hours (2018)	3,861,012	3,933,431	3,289,273	1,284,288	21,272,481	5,795,705	1,527,192
Households within 4 Hours (2018)	1,453,022	1,481,742	1,285,577	500,777	7,627,740	2,259,530	559,971
Avg Household Income within 4 Hours (2018)	\$ 124,634	\$ 123,023	\$ 104,949	\$ 92,995	\$107,991	\$118,104	\$56,286
Annual Growth in # Households (2018-2023)	1.86%	1.87%	1.46%	1.10%	1.64%	1.43%	1.55%
<b>Real Estate Availability (2018)</b> Source(s): Cushman & Wakefield; CBRE; Colliers; Numbeo							
Inventory Industrial Buildings (sf)	126,511,710	125,300,085	209,500,867	78,256,812	434,914,575	246,884,157	1,000,748
Vacancy Rate	5.40%	7.50%	2.10%	2.30%	6.20%	4.70%	0.88%
Weighted Average Net Rent	\$9.24	\$9.07	\$11.62	\$ 8.96	\$ 8.11	\$ 8.59	\$8.59
Inventory Commercial Office Buildings (sf)	28,885,622	72,422,928	58,610,654	13,684,959	185,418,562	117,461,432	6,433,522
Vacancy Rate	14.50%	22.00%	4.00%	8.90%	27.90%	15.20%	9.33%
Average Asking Rent (Class A)	\$33.75	\$37.47	\$39.75	\$ 17.10	\$ 36.48	\$ 31.89	\$18.14
Quality of Life Index	160.88	176.72	172.43	142.14	160.53	167.05	n/a
<b>Housing (2016)</b> Source(s): StatsCan - 2016 Census							
Median Value of Dwellings (ownership), \$CAN	\$399,932.00	\$450,338.00	\$800,220.00	\$ 299,614.00	\$ 296,504.88	\$ 647,304.35	\$505,267.00
Housing price/Average Income	2.95	2.91	6.67	2.81	3.04	6.18	5.58
Housing Quality (% Total occupied dwellings requiring major repairs)	5%	4%	6%	8%	n/a	n/a	n/a
Housing Affordability (% households (all types) spending >30% pre-tax income on shelter)	22%	19%	32%	21%	n/a	n/a	n/a

Table 6-2     Modelling Inputs – Regional Competitiveness

Category	Indicator	Parkland County	Spruce Grove	Stony Plain	Edmonton	Leduc	Leduc County	St. Albert	Sturgeon County	Strathcona County	Beaumont	Red Deer	Red Deer County	Rocky View County	Airdrie
Business Environment    Source(s): Alberta Regional Dashboard Municipality websites															
	Property Tax Rate (Mills) - 2019	8.19%	8.90%	7.66%	17.80%	8.52%	6.96%	11.00%	10.30%	9.20%	9.28%	13.90%	12.20%	7.62%	9.57%
	Local tax incentives available	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y
	Incubator/Accelerator Present	N	N	N	Y	Y	Y	Y	N	N	N	N	N	N	N
	Research Institution Present (sector specific)	N	Y	N	Y	Y	N	N	N	N	N	Y	N	N	N
Infrastructure & Utilities    Source(s): Google Maps 2019 & 2020; ATCO/Direct Energy/AltaGas; AESO; Municipal Fees and Utility Bylaws; Telus															
	Km to international airport	71.6	56	55	30	7	9.1	55	81	59	15.5	133	133	24.9	24
	Time to international airport	49	42	38	35	8	9	45	56	40	13	81	82	23	20
	Time to regional airport (minutes)	26	56	55	30	30	33	47	35	14	15.5	18	28	29	25
	Km to regional airport	38.2	42	38	31.65	37.2	43	57.16	45.4	17.5	13	16.16	33.25	38.7	22.4
	Km to Trans Canadian	13	21	4.5	6	38.3	48.6	6.4	36.3	30.9	29	6	10.55	30.3	23
	Time to Trans Canadian (minutes)	10	16	5	8	39	34	11	33	23	22	8	10.5	33	16
	2 lane or 4 lane (nearest highway)	4	4	4	4	4	4	4	4	4	2	4	4	4	4
	Distance to Intermodal/Transload (Class 1) (km)	12	34	46.2	16.8	24.7	27.1	10.6	43.8	37.6	24.7	155	145	46.5	34
	Gas Rate (\$/GJ) - Light Industrial / Commercial (medium demand facility)	\$4.02	\$4.02	\$4.02	\$4.02	\$4.47	\$4.47	\$4.02	\$4.02	\$4.02	\$4.47	\$4.02	\$4.02	\$3.99	\$3.99
	Delivered Cost Electricity (\$/MWh) (Industrial - Medium/Large Commercial Blended)	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100.00	\$ 100	\$ 100	\$ 100	\$ 100
	Blended Water/Wastewater Rate (Fixed and Variable) - 150m3/mo.	\$ 780	\$ 938	\$ 1,021	\$ 497	\$ 863	\$ 1,200	\$ 1,490	\$ 974	\$ 700	\$ 585	\$ 815	\$ 906	\$ 1,151	\$ 578
	High speed internet (unmanaged account) 1 GB speed up/down - monthly cost	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350
Labour    Source(s): Canada Job Bank; StatsCan - 2016 Census; Esri BAO															
Labour Force Cost (Median Hourly Wage) - by occupation (Wage per occupation)															
Value-added Agriculture	Crop farmer	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	n/a	n/a	n/a	n/a
	Farm Labourers	20	20	20	20	20	20	20	20	20	20	21	21	n/a	n/a
	Labourers in Food Processing	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Mining, Oil and Gas	Mechanical Engineers	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Industrial Engineers	23.46	23.46	23.46	23.46	23.46	23.46	23.46	23.46	23.46	23.46	n/a	n/a	28	28
	Oil and gas drilling engineer	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	n/a	n/a	31.25	31.25

Category	Indicator	Parkland County	Spruce Grove	Stony Plain	Edmonton	Leduc	Leduc County	St. Albert	Sturgeon County	Strathcona County	Beaumont	Red Deer	Red Deer County	Rocky View County	Airdrie
Manufacturing	Manufacturing Manager	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	n/a	n/a	26.44	26.44
	Materials handlers	15	15	15	15	15	15	15	15	15	15	n/a	n/a	15	15
	CNC Machining Tool Operator	15	15	15	15	15	15	15	15	15	15	n/a	n/a	15	15
	Manufacturing Engineer	23.46	23.46	23.46	23.46	23.46	23.46	23.46	23.46	23.46	23.46	n/a	n/a	28	28
	Metalworking Machine operator	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	18	18
Transportation & Warehousing	Heavy Truck Drivers	19	19	19	19	19	19	19	19	19	19	19.23	19.23	17.75	17.75
	Managers in transportation/Transportation, storage, and dist. Managers	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	21.6	21.6	27.88	27.88
	Warehouse Manager	21.15	21.15	21.15	21.15	21.15	21.15	21.15	21.15	21.15	21.15	NA	NA	21.15	21.15
ICT	Software Engineers/Developers	19	19	19	19	19	19	19	19	19	19	19.23	19.23	17.75	17.75
	Computer Engineers	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	32.05	32.05
	Financial Analysts	30.77	30.77	30.77	30.77	30.77	30.77	30.77	30.77	30.77	30.77	n/a	n/a	27.88	27.88
	Accountants	21.63	21.63	21.63	21.63	21.63	21.63	21.63	21.63	21.63	21.63	30.29	30.29	22.05	22.05
Commercial	Technical Sales Representatives	16	16	16	16	16	16	16	16	16	16	16.96	16.96	16.96	16.96
	Motor Parts Dealer	17	17	17	17	17	17	17	17	17	17	17	17	17.48	17.48
	Clothing Retail	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Education attainment levels															
	2016 Census: No certificate, diploma, or degree	19%	10%	13%	15%	18%	20%	12%	16%	13%	5%	18%	18%	13%	13%
	2016 Census: High School Diploma or equivalency certificate	29%	30%	29%	27%	18%	29%	28%	31%	28%	27%	31%	29%	27%	30%
	2016 Census: Technical Certification (%)	16%	14%	16%	9%	14%	16%	10%	17%	12%	15%	11%	14%	8%	11%
	2016 Census: Postsecondary certificate, diploma, or degree	53%	60%	59%	57%	49%	51%	60%	53%	59%	68%	51%	51%	61%	57%
	2016 Census: University certificate or diploma or degree at bachelor level or above	13%	17%	14%	27%	13%	13%	25%	13%	21%	21%	16%	11%	29%	18%
	2016 Totals	25,995	18,505	8,850	749,395	23,220	11,180	52,205	15,380	78,470	9,770	79,820	15,120	31,680	45,865
Local Labour Supply															
	2014 Total Population (Esri)	32,998	32411	17,060	931,234	29,084	14,233	67,494	20,983	100,759	16515	101,085	19,853	39,420	57014
	2019 Total Population (Esri)	34,724	40484	18,519	1,035,298	34,100	14,821	70,213	21,882	104,433	20,339	106,556	21,376	42,484	75395



Category	Indicator	Parkland County	Spruce Grove	Stony Plain	Edmonton	Leduc	Leduc County	St. Albert	Sturgeon County	Strathcona County	Beaumont	Red Deer	Red Deer County	Rocky View County	Airdrie
	2019 Total Population Age 15-24 (Esri)	3,851	4565	2,090	125,943	3,484	1,589	8,240	2,730	12,291	2,252	13,321	2,376	5,664	6502
	2019 Total Population Age 25-34 (Esri)	3,399	6957	2,663	182,295	6,014	1,648	8,422	2,604	12,701	3,160	17,404	2,493	3,503	11026
	2019 Total Population Age 35-44 (Esri)	4,766	6873	2,663	134,820	5,875	2,039	10,233	2,989	14,916	3,905	16,411	2,796	5,372	10312
	2019 Total Population Age 45-54 (Esri)	5,409	4673	2,683	124,679	3,790	2,106	9,638	3,148	14,628	2,349	12,795	3,116	6,937	7174
	2019 Total Population Age 55-64 (Esri)	6,035	4118	2,345	105,141	3,583	2,488	9,917	3,318	14,628	2,158	13,623	3,752	7,388	5123
	2019 Median Age (Esri)	43.8	34.9	38.6	36.4	35.7	42.6	41	39.7	40.5	34	36.6	0.433	44.4	34.3
	2024 Total Population (Esri)	38,598	46729	19,933	1,145,497	38,214	16,323	75,824	23,897	112,683	23,360	113,531	23,667	46,580	89619
	2019-2024 Population: Annual Growth Rate (Esri)	2.14%	2.91%	1.48%	2.04%	2.30%	1.95%	0.02%	1.78%	1.53%	2.81%	1.28%	2.06%	1.86%	3.52%
Market capture indicators	Population within 4 hour drivetime (2019)	3,849,343	3,896,897	3,879,528	3,878,024	3,889,146	3,890,367	3,859,925	3,785,310	2,165,958	3,936,995	3,944,380	3,968,997	3,930,346	3,974,857
	Households within 4 hr drivetime (2019)	1,438,473	1,456,226	1,449,303	1,450,128	1,453,657	1,453,973	1,442,377	1,415,311	821,485	1,471,465	1,473,031	1,482,650	1,464,800	1,483,370
	Average Household Income within 4hr (2019)	126,106	125,930	125,844	126,114	125,989	125,972	126,005	125,792	117,040	125,516	124,011	124,791	124,857	124,390
Commuting	Population within 20min drive time (2019)	119,052	222,050	89,416	815,611	163,959	349,374	561,741	128,539	597,882	333,045	134,507	158,715	593,495	277,228
	Population within 1 hour drive time (2019)	1,503,439	1,499,583	1,496,067	1,506,984	1,546,174	1,546,206	1,498,823	1,496,439	1,534,339	1,530,462	278,113	292,582	1,680,778	1,693,567
	2019 Unemployment Rate (%) (Esri)	7.5%	6.6%	7.3%	7.1%	7.4%	6.3%	5.9%	6.3%	5.8%	6.3%	5.4%	4.8%	7.3%	7.7%
Employment by Occupation (Cluster)															
	2019 Occupation: Management Occupations (Esri) (%)	0.1415	0.1115	0.1022	9.25%	10.48%	19.43%	13.50%	15.73%	13.65%	0.1242	8.47%	19.43%	19.11%	0.11%
	2019 Occupation: Business, Finance, and Administration (Esri) (%)	0.1599	0.1575	0.1441	15.37%	15.97%	14.20%	16.89%	14.62%	17.21%	0.1671	12.19%	12.61%	18.21%	0.17%
	2019 Occupation: Natural and Applied Science (Esri) (%)	0.0556	0.0445	0.0442	7.36%	4.62%	4.99%	6.44%	4.60%	7.22%	0.0687	4.73%	3.39%	9.01%	0.08%
	2019 Occupation: Health (Esri) (%)	0.0568	0.0635	0.0552	8.34%	4.77%	5.01%	8.00%	5.59%	7.64%	0.0637	8.40%	5.95%	6.51%	0.07%
	2019 Occupation: Education, Law and Social, Community and Government Services (Esri) (%)	0.0765	0.1077	0.093	12.01%	9.28%	7.99%	14.54%	15.06%	11.82%	0.123	11.49%	8.32%	8.73%	0.11%
	2019 Occupation: Art, Culture, Recreation and Sport (Esri) (%)	0.0164	0.0171	0.0161	2.32%	1.28%	1.68%	2.88%	1.29%	2.19%	0.0178	1.92%	1.69%	2.40%	0.02%
	2019 Occupation: Sales and Service (Esri) (%)	0.1584	0.2055	0.223	22.44%	23.57%	13.98%	18.90%	14.51%	17.66%	0.1792	25.00%	15.61%	15.37%	0.21%
	2019 Occupation: Trades, Transport/Equipment Operators (Esri) (%)	0.2561	0.2335	0.2552	17.18%	23.66%	22.86%	14.84%	21.25%	16.88%	0.2014	17.07%	19.62%	13.46%	0.19%
	2019 Occupation: Natural Resources, Agriculture and Related Production (Esri) (%)	0.0394	0.021	0.0214	1.15%	3.02%	6.59%	1.81%	3.75%	2.00%	0.0232	3.91%	8.87%	4.01%	0.02%
	2019 Occupation: Manufacturing and Utilities (Esri) (%)	0.0231	0.0254	0.0281	2.53%	2.30%	2.53%	1.51%	2.72%	2.64%	0.0204	4.98%	3.23%	1.57%	0.02%
Land & Buildings Source(s): Municipal Survey / Realtor Reports / Interviews; Municipal Rates Bylaws															
Industrial	Total Industrial Zoned Land, acres	4000	960	466	26100	1760	3900	440	28270	18400	667	2380	2000	3700	2930

Category	Indicator	Parkland County	Spruce Grove	Stony Plain	Edmonton	Leduc	Leduc County	St. Albert	Sturgeon County	Strathcona County	Beaumont	Red Deer	Red Deer County	Rocky View County	Airdrie
	Available Industrial Zoned Land, acres	1600	800	122	16850	560	880	85	22550	11235	655	100	300	1900	2120
	Serviced Industrial Land Sale price/acre (~2019)	\$ 450,000	\$ 400,000	\$360,000	\$630,000	\$450,000	\$425,000	\$650,000	\$200,000	\$700,000	\$725,000	\$300,000	\$350,000	\$550,000	\$425,000
	Light Industrial / Warehouse Lease Rate, (/ft2) (~2019)	\$ 13.00	\$ 13.50	\$ 14.00	\$9.50	\$11.00	\$ 12.50	\$8.25	\$9.00	\$ 12.50	\$ 15.00	\$ 10.00	\$ 10.75	\$ 10.00	\$9.00
Commercial (General)	Total Commercial Zoned Land, acres	250	400	294	n/a	340	545	115	2000	n/a	475	1060	3150	3700	400
	Available Commercial Zoned Land, acres	n/a	340	93	1730	20	65	n/a	550	130	385	85	410	1900	150
Office	Total Office Inventory, (/ft2)	n/a	n/a	30000	26210000	1480000	n/a	n/a	n/a	1405000	n/a	1250000	530000	637000	735000
	Available Office Space, (/ft2)	n/a	44000	7000	4875000	370000	n/a	n/a	n/a	360600	20000	271000	110000	114000	8900
	Office Vacancy Rate, (%)	n/a	5%	5%	18.6%	25.0%	n/a	n/a	n/a	25.0%		21.7%	20.8%	18.0%	1.2%
	Office Net Lease Rate, (/ft2) (~2019)	n/a	\$ 27.50	\$ 29.00	\$ 17.85	\$13.00	n/a	\$ 20.25	\$ 13.00	\$ 16.50	\$ 23.00	\$ 14.50	\$ 14.50	\$ 13.00	\$ 18.50
Retail	Total Retail Inventory, (/ft2)	n/a	n/a	99800	35150250	1460000	n/a	n/a	n/a	4087000		6536000	1585000	1300000	2555000
	Available Retail Space, (/ft2)	n/a	43000	69200	1900000	140000	n/a	65970	n/a	226035	\$25,000.00	728250	175000	36000	124100
	Retail Vacancy Rate, (%)	n/a	5%	23%	5.4%	9.6%	n/a	n/a	n/a	5.5%		11.0%	11.0%	2.7%	4.8%
	Retail Net Lease Rate, (/ft2) (~2019)	n/a	\$ 20.11	\$ 25.00	\$ 23.00	\$25.00	n/a	\$ 30.50	n/a	\$ 18.00	\$ 23.00	\$ 20.75	\$ 20.75	\$ 30.00	\$ 22.50
Planning and Development	Complete Development Permit Approval Timeline (max working days)	60	40	60	60	10	20	20	40	30	28	60	25	60	40
	Development and Building Permit Fees (100,000ft2 / \$22M building - proxy project)	\$ 165,980	\$ 186,130	\$ 55,990	\$ 223,600	\$143,160	\$ 266,000	\$ 249,200	\$ 190,000	\$ 235,190	\$ 121,383	\$ 192,450	\$ 97,000	\$ 241,000	\$ 192,445
<b>Living Environment</b> Source(s): Esri BAO; StatsCan - 2016 Census; CMHC Housing Statistics; Canadian Community Crime Tracker															
	2019 Owned Dwellings (Esri)	10,641	11,489	5,449	253,890	9,510	4,572	21,652	5,997	33,557	5,508	27,983	6,540	12,883	21,155
	2019 Rented Dwellings (Esri)	955	3,535	1,795	140,454	3,314	627	4,224	981	4,307	973	14,806	847	1,220	4,756
	2024 Owned Dwellings (Esri)	11,653	13,169	5,877	282,116	10,675	5,014	23,363	6,511	35892.0	6,246	29,797	7,209	14,194	24,784
	2024 Rented Dwellings (Esri)	1,142	4,176	1,951	153,024	3,672	669	4,670	1,078	5,031	973	15,849	930	1,366	6,009
	House Values (Median Value of Dwellings (ownership))	\$501,284	\$375,502	\$358,826	\$390,262	\$358,837	\$501,401	\$421,396	\$551,892	\$450,119	\$448,713	\$348,457	\$500,035	\$897,619	\$400,319
	Average rent 2 bedroom (October 2019)	\$1,193	\$1,209	\$1,046	\$1,263	\$1,163	\$1,193	\$1,320	\$1,193	\$1,385	\$1,193	\$1,030	\$1,275	\$1,312	\$1,338
	Vacancy Rate (All Apt. Types) (Oct. 2019)	7.40%	4.10%	2.80%	5.10%	1.40%	7.40%	1.10%	7.40%	8.80%	7.40%	8.80%	19.00%	6.30%	7.00%
	Average Rent 2 bedroom (Oct. 2019)	\$1,193	\$1,209	\$1,046	\$1,263	\$1,163	\$1,193	\$1,320	\$1,193	\$1,385	\$1,193	\$1,030	\$1,275	\$1,312	\$1,338
	Rental Condominium Apartments and Private Apartments in the RMS Vacancy Rate	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4	4.9	4.9	4	4.9
	Rental Condominium Apartments Vacancy Rate	3	3	3	3	3	3	3	3	3	1	3	3	1	3
	Housing Quality (% Total occupied dwellings requiring major repairs)	7%	3%	4%	6%	4%	6%	4%	6%	4%	2%	4%	7%	4%	2%
	Crime Rate per 100,000 population (2017)	7451.25	8447.90	8462.48	9904.40	9136.09	14373.00	4783.84	5196.15	4873.38	3526.55	14030.60	10647.34	5623.80	4470.54

Category	Indicator	Parkland County	Spruce Grove	Stony Plain	Edmonton	Leduc	Leduc County	St. Albert	Sturgeon County	Strathcona County	Beaumont	Red Deer	Red Deer County	Rocky View County	Airdrie
	Median Household Income (Median total income of households in 2015 (\$))	\$115,005	\$107,878	\$94,248	\$87,225	\$101,910	\$103,646	\$119,905	\$121,984	\$126,399	\$134,443	\$85,794	\$95,475	\$152,866	\$109,992
<b>Employment by Industry</b> Source(s): StatsCan 2016															
	<b>Employment by Industry (Detailed NAIC Codes)</b>														
	115 Support activities for agriculture and forestry	35	20	15	210	10	35	15	15	25	0	30	80	100	50
	1150 Support activities for farms (1151 and 1152)	20	15	15	115	0	30	10	10	15	0	15	65	90	30
	1153 Support activities for forestry	10	10	0	90	10	10	10	10	10	0	15	10	10	15
	213 Support activities for mining and oil and gas extraction	510	410	245	7,860	1,020	530	365	250	1,340	500	3,115	630	685	1,025
	2131 Support activities for mining and oil and gas extraction	505	410	240	7,865	1,020	530	365	250	1,340	500	3,115	630	680	1,025
	311 Food manufacturing	40	75	25	3,800	40	15	200	25	295	10	1,505	50	80	200
	3111 Animal food manufacturing	15	10	0	200	0	10	40	10	20	0	35	10	0	20
	312 Beverage and tobacco product manufacturing	15	10	15	600	10	0	45	0	40	0	50	0	25	40
	3131 Fibre, yarn and thread mills	0	0	0	15	0	0	0	0	0	0	0	0	0	0
	321 Wood product manufacturing	95	130	25	1,085	45	15	90	25	75	20	65	10	30	80
	3252 Resin, synthetic rubber, and artificial and synthetic fibres and filaments manufacturing	10	0	0	55	20	0	0	0	40	0	20	0	0	0
	3254 Pharmaceutical and medicine manufacturing	10	0	0	200	0	0	10	0	45	0	0	0	10	0
	3261 Plastic product manufacturing	30	30	20	1,910	50	30	135	35	155	15	140	10	15	120
	3262 Rubber product manufacturing	0	0	0	210	10	0	20	15	15	0	20	0	0	0
	331 Primary metal manufacturing	20	50	20	1,270	70	35	35	35	195	10	105	35	25	55
	333 Machinery manufacturing	115	105	25	3,970	290	140	145	55	475	145	360	55	135	300
	3331 Agricultural, construction and mining machinery manufacturing	80	45	10	2,040	165	95	25	25	220	85	210	25	50	60
	3332 Industrial machinery manufacturing	0	10	0	205	0	10	15	0	15	0	30	10	0	0
	3335 Metalworking machinery manufacturing	0	10	0	275	20	10	20	0	20	0	10	0	0	0
	441 Motor vehicle and parts dealers	300	470	195	8,410	495	135	650	255	1,080	140	1,205	200	295	790
	443 Electronics and appliance stores	55	50	20	2,210	65	15	115	35	150	15	290	20	50	125
	444 Building material and garden equipment and supplies dealers	175	215	45	3,465	200	60	315	105	410	60	570	80	125	420
	445 Food and beverage stores	385	535	275	12,970	425	95	885	200	1,170	145	1,460	145	380	910
	448 Clothing and clothing accessories stores	145	185	100	7,960	175	35	380	75	580	70	740	85	165	425
	454 Non-store retailers	40	105	30	1,305	55	35	120	40	170	35	295	65	80	150
	4541 Electronic shopping and mail-order houses	10	20	0	215	10	15	15	0	30	15	35	0	25	30
	484 Truck transportation	590	475	355	8,400	335	150	425	270	980	175	750	295	425	535
	4842 Specialized freight trucking	305	230	120	2,890	145	90	175	140	515	85	335	115	170	170

Category	Indicator	Parkland County	Spruce Grove	Stony Plain	Edmonton	Leduc	Leduc County	St. Albert	Sturgeon County	Strathcona County	Beaumont	Red Deer	Red Deer County	Rocky View County	Airdrie
	4882 Support activities for rail transportation	25	15	0	350	20	0	55	15	60	0	25	0	0	15
	4884 Support activities for road transportation	25	40	10	520	35	10	45	10	90	0	65	10	20	50
	493 Warehousing and storage	25	65	40	2,200	95	45	140	30	95	35	100	10	70	170
	4931 Warehousing and storage	25	65	45	2,200	95	45	135	30	95	40	100	10	70	165
	5112 Software publishers	10	0	0	330	0	0	20	0	45	0	0	0	0	15
	518 Data processing, hosting, and related services	0	10	10	230	0	0	25	0	20	10	30	10	10	10
	5413 Architectural, engineering and related services	325	330	80	11,940	290	140	790	175	1,335	180	935	140	685	685
	5415 Computer systems design and related services	145	95	50	6,420	70	35	480	80	485	55	215	25	315	405
	5419 Other professional, scientific and technical services	115	120	35	1,980	30	35	150	50	295	60	160	55	215	200
	5415 Computer systems design and related services and software publishers	330	295	160	5,090	240	135	315	170	610	120	435	125	240	340
	72 Accommodation and food services	695	1,260	590	39,970	1,390	235	1,950	340	2,595	585	4,940	440	905	1,755
	721 Accommodation services	130	170	115	5,450	260	35	115	45	255	45	745	135	100	245
	722 Food services and drinking places	560	1,090	475	34,520	1,130	205	1,840	300	2,340	545	4,195	300	805	1,510



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