



Parkland County

Employment and Industrial Land Strategy

November 19, 2014



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1 Executive Summary

Parkland County retained the services of Millier Dickinson Blais (MDB), in association with Watson & Associates Economists Ltd. (Watson) to prepare an employment and industrial lands strategy for the County. Particular emphasis was placed on providing the background information needed by the County to prepare the new Municipal Development Plan and implement the business and industrial development initiatives outlined in the County's new economic development and tourism strategy.

The study provides a long term vision for likely levels and characteristics (by sector) of industrial and employment land demand in the County, including a long-term employment forecast and corresponding industrial land demand analysis that extends over a 30 year forecast period (i.e. to 2044). Unlike existing regional employment forecasts, the forecast completed as part of the employment and industrial land strategy uses a more market driven approach to create a made-in-Parkland employment forecast. This forecast contrasts with existing regional strategies, and offers a more robust assessment of the level of growth the County could potentially see over the longer term.

That forecast level of demand is assessed against the adequacy of available land supply in the County by sub area (e.g. Acheson, Fifth Meridian, and Entwistle), to determine the need to designate and district new employment and industrial lands to accommodate likely levels of growth over the longer-term. From this perspective, the strategy offers Parkland County it's most comprehensive look yet at current industrial and employment land supply and demand on a County-wide basis, and a strong base of data upon which to monitor industrial land demand over the longer term.

The study concludes with recommendations aimed at providing direction on improving investment readiness of the County and expanding industrial and employment land supply.

Competitiveness and Market Readiness

Like much of Alberta, Parkland County greatly benefits from the industrial and knowledge-based employment opportunities generated by the province's oil and gas extraction activities. Over the last decade this has led to expanded industrial, construction, and extraction activity in the province, and large-scale capital investment projects on the part of the Province and the private sector. Alberta is expected to continue attracting investment in the oil and gas sector over the short to medium term, suggesting continued opportunities for spin-off industrial development throughout the province, particularly in the Edmonton Capital Region, which has become a major service centre for the industry.

Over the last decade, the Capital Region has experienced notable levels of development, including an average of 625 acres (255 hectares) of industrial land absorption per year. There continues to be a diverse range of location options for potential investors across the Capital Region, with an estimated 20,000 net acres (8,094 net hectares) of vacant industrial land to accommodate growth. Both the City of



Edmonton and the surrounding counties maintain notable supplies of vacant industrial land. Strong levels of development have driven appreciation in industrial land prices as well, with the price of vacant industrial land across the Capital Region averaging \$497,000 per acre in 2013, compared to \$115,000 per acre in 2004. At present, prices for industrial land vary greatly by location and servicing, offering a diverse range of location options to potential investors. Overall, the Capital Region remains a dynamic and competitive market place.

Parkland County holds a significant place in that regional market. Though holding comparatively small shares of population and labour force across the Capital Region, the County is home to a notable proportion of employment, housed almost exclusively in the Acheson area. As a business location, Parkland County remains on the lower end of the scale among competitors in terms of property tax rates (roughly the lowest of all direct competitors) and serviced land cost, which has in part allowed the County to generate a comparatively high share of non-residential tax assessment. Despite a more limited long term supply of industrial lands than other areas, particularly Edmonton, Leduc County, Strathcona County, and the City of Leduc, the County remains a competitive location for longer term industrial development.

Like the rest of the Capital Region, Parkland County is home to a diverse industrial base. The County is expected to continue attracting activity in a wide range of industrial and knowledge-based sectors, largely based on the continued strength of goods-producing sectors in the regional economy. More specifically, the sectors most likely to drive demand across Parkland County, based on historic employment and business patterns, include:

- Advanced manufacturing
- Agriculture and agri-business
- Construction
- Mining, quarrying, and oil and gas (i.e. oil and gas servicing)
- Transportation and warehousing (including distribution)
- Professional, scientific, and technical services (e.g. engineering, management consulting)

Generally speaking, these sectors have the potential to generate demand with a range of characteristics in industrial and employment areas, from partially- or privately-serviced lots with space for outdoor storage or work, to prestige-type light and medium industrial developments with integrated office/industrial spaces or standalone office spaces.

Business and Industrial Employment Land Inventory

Parkland County is home to a total developed industrial land area of approximately 1,660 net acres (670 net hectares), with approximately 96% of development located in the Acheson area, 3% in the Fifth Meridian area, and 1% in the Entwistle area. Industrial and employment areas across the County range from general and prestige urban (though still rural) developments in the Acheson area to rural industrial and commercial business parks in Entwistle.



Overall, the County is home to an estimated supply of 1,628 gross acres (659 gross hectares) of vacant industrial land (i.e. lands designated and districted for industrial purposes in the Municipal Development Plan and Land Use Bylaw), with the majority of that supply residing in the Acheson area. On a net basis (i.e. removing considerations for environmental features, utilities, and internal roads), that supply is reduced to an estimated 995 net acres (403 net hectares) of vacant industrial and employment land, of which 467 net acres (189 net hectares) is considered shovel ready (or developable in the next six months). Again, the Acheson area accommodates the majority of total supply, and all shovel ready supply in Parkland County.

Employment Forecast and Land Needs Analysis

The favourable outlook for the energy sector is expected to drive continued investment and expanded production in the oil sands of Northern Alberta. As a major servicing centre for the industry, the Capital Region is expected to see direct positive effects on employment growth and industrial land demand. Further, the Capital Region's industrial and employment base is expected to continue diversifying, while population grows at a healthy rate. Parkland County remains in a competitive position to accommodate long-term employment growth based on industrial development opportunities in the County and across the Capital Region.

To 2044, Parkland County's total employment base is expected to grow by 18,600 jobs, or an average annual increase of 3.2%. This would increase total employment from an estimated 11,700 in 2014 to 30,300 by 2044. Employment growth over the 2014-2019 period is expected to average 850 jobs annually across the County, with employment growth rates moderately declining over each of the following five-year periods to 2044 as a result of the aging population and labour force. Broken down by major sectors influencing employment and industrial land demand, the following observations can be made:

- Industrial employment is expected to grow by 12,900 jobs, or two-thirds of total employment growth to 2044, particularly in wholesale trade/distribution, manufacturing, construction, and transportation sectors
- Commercial employment growth is expected to account for 19% (3,975 jobs) of total growth primarily in population-related sectors (e.g. retail, accommodations), though a moderate share is also expected in business and professional services employment (particularly engineering and environmental consulting)

Over the forecast period, Parkland County's industrial and employment lands are expected to accommodate 83% of total forecast employment growth, or 15,475 total jobs. Based on a review of market demand, an estimated 91% of that employment is expected to be accommodated in the Acheson area, with 6% and 1% accommodated in the Fifth Meridian and Entwistle areas respectively. An estimated 3% of total forecast employment will locate on industrial lands in the rural area.

Based on area-specific forecast employment densities, industrial land demand is expected to reach 2,270 net acres across the County to 2044, of which 85% is expected to be generated in the Acheson area.



Based on the existing supply of developable vacant industrial land, Parkland County, as a whole, has an insufficient supply of industrial lands to meet long-term needs to 2044. Based on the land needs analysis, a minimum of 1,089 net acres (441 net hectares), 186 net acres (75 net hectares) and 19 net acres (8 net hectares) of additional vacant industrial land is required within Acheson, Fifth Meridian, and Entwistle, respectively, to accommodate forecast employment growth to 2044. The land needs analysis also identifies that there is demand for rural industrial land within the County totalling 130 net acres (53 net hectares) over the forecast period. Considering longer term vacancy adjustments and allowances for internal infrastructure (but not necessarily environmental take-outs), the estimate of land need rises to a minimum requirement of 1,977 gross acres (800 gross hectares) in the Acheson area, 338 gross acres (137 net hectares) in the Fifth Meridian area, 34 gross acres (14 gross hectares) in the Entwistle area, and 236 gross acres (96 gross hectares) in the rural area.

The majority of additional demand is expected to be accommodated in reserve lands within the Acheson area. With a gross developable area of approximately 1,997 acres (808 gross hectares), Acheson will continue to play a key role in accommodating demand over the longer term. Outside of the Acheson area, the municipality has strategic opportunities to accommodate additional employment and industrial lands in a number of other areas (e.g. Fifth Meridian, Entwistle, TransAlta lands, strategic rural transportation corridors), based on new policy or process approaches that build relationships to explore opportunities, or improve alignment of available lands with likely types of demand.

Strategy and Recommendations

Parkland County remains a key destination for industrial and employment land investment in the Capital Region, based largely on cost competitiveness, availability of a diverse mix of industrial and employment land opportunities, and proximity to major infrastructure. These factors have greatly supported the recent rapid growth of the County in areas like Acheson, and have the potential to support continued employment growth in the future.

The employment and industrial land strategy is focused on supporting the continued potential of the County. In particular, the strategy is focused on determining the long-term demand for industrial and employment lands in Parkland County, and the ability of the County to accommodate likely levels of employment demand in the future (i.e. to 2044). With those broader goals in mind, the following recommendations provide actions that Parkland County can take to improve investment prospects over the short to long term:

1. Undertake regular and ongoing monitoring of industrial and employment land supply and demand indicators to assist with longer term land use planning activities
2. Improve alignment of land use regulations with emerging character and general purpose of industrial and employment areas



3. Provide stronger policy direction on the delineation of industrial and commercial policy areas in industrial and employment areas
4. Develop land use regulations restricting non-complimentary major or large-format standalone retail uses in industrial and employment areas
5. Provide stronger policy and regulatory direction on the objectives for encouraging ancillary and complementary non-industrial uses in industrial and employment areas
6. Plan for future industrial and employment growth in the Acheson area
7. Examine opportunities and plan for future industrial land development in the Fifth Meridian area
8. Plan for future industrial and employment land development in the Entwistle area
9. Work with rural landowners, particularly TransAlta, to establish and assess unserviced industrial and eco-industrial development opportunities

A detailed action plan for each of these recommendations can be found in Section Six of the full document.



2 Introduction

Parkland County's economic development strategy includes the promotion of business attraction and expansion, support for trade and tourism development, and the enhancement of local quality of life. In particular, the strategy recommended a focus on:

- Rural economic development
- Development of Acheson Industrial Area
- Partnerships with TransAlta including eco-industrial development

Outside of tourism, this strategic focus has driven much of Parkland County's employment and industrial development over the last several years and is anticipated to do so into the future. Indeed, Parkland County has seen notable success of late, including numerous large-scale land sales (e.g. Remington, Supreme Steel, Panattoni, and TransAmerica), building permit values of approximately \$100 million (almost exclusively in Acheson), and major developments in transportation and logistics. In order to continue pursuing ultimate goals of industrial and knowledge-based employment growth and expansion of the present tax base, the County has chosen to undertake an employment and industrial land strategy to provide the necessary background information to support longer term economic development and land use policy development.

2.1 Purpose

The general purpose of the employment and industrial land strategy is to inform and provide background information to the County in the preparation of its new Municipal Development Plan. It is also intended to be a tool for the implementation of Parkland's 2014-2018 Economic Development Strategy. In doing so, the employment and industrial strategy has several more specific objectives:

- Develop a comprehensive inventory of current employment and industrial lands across the County
- Analyze the present employment and industrial land inventory relative to market choice and desirability across the County and Capital Region
- Assess current market position and potential for the County's Planning and Development Department to guide longer-term development needs for light and medium industrial and employment land development
- Recommend specific land use, servicing, or development standards and policies to improve Parkland County's long term competitiveness within the Capital Region, and distribute investment across the County

In accomplishing those objectives, the strategy provides Parkland County with a number of other potential benefits based on its comprehensive nature and methodology:



- A County-wide assessment of industrial and employment land supply and demand more detailed than initiatives undertaken at the regional or local level in the past
- A made-in-Parkland approach to forecasting employment growth over the longer term that considers regional growth drivers and market conditions to come up with a detailed and data-supported forecast for likely levels of growth
- A strong baseline of data on County-level supply and demand that can be updated on an ongoing basis and used as a metric for economic development purposes

2.2 Employment and Industrial Land Concepts

In order to provide a common understanding of the opportunities and challenges for employment and industrial land in Parkland County, the following definitions have been developed to describe the technical industrial or employment land-related terms and concepts used in the report.

- **Knowledge-based industries:** industries that rely heavily on human intellect and technology rather than raw materials in the delivery of products and services (e.g. research and development, information technology, engineering services)
- **Lone eagles:** freelance professionals (or small business owners) with highly transferrable skills like writing, analysis, accounting, trades, or consulting
- **Light industrial:** lower-intensity industrial (or commercial office) uses and activities that generally occur within an enclosed building, creating limited nuisance outside of the building, and often constructed to a higher standard of design than other industrial uses¹
- **Medium industrial:** industrial activities and uses which may or may not include outdoor storage or work activities, with any nuisance factors generated by the use not extending beyond the boundaries of the parcel
- **Rural industrial:** lower-intensity industrial uses that can generally be accommodated in rural areas with private water and wastewater servicing, often at lower design standards than urban industrial developments on full municipal servicing²
- **Employment land:** lands (usually industrial or business-industrial) designated and zoned with the intent of accommodating industrial or commercial office uses
- **Shovel-ready:** zoned, developable vacant industrial lands that have servicing levels which would permit development by an end user immediately, or within the next six months

¹ Many enclosed industrial uses are also commonly referred to as prestige industrial uses.

² Rural industrial uses are also commonly referred to as dry industrial uses.



3 Competitiveness and Market Readiness

3.1 Provincial and Regional Context

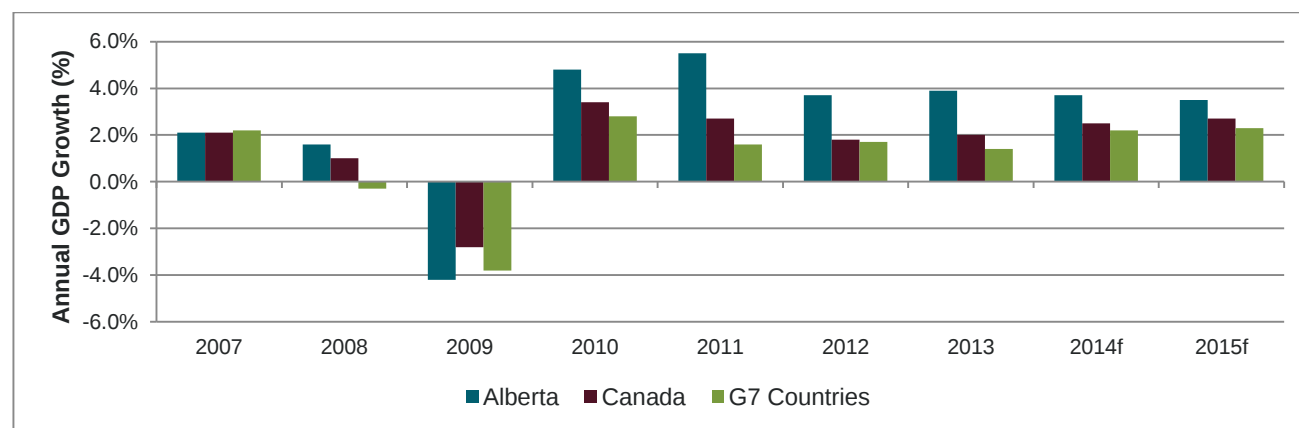
The Canadian economy has achieved modest growth over the last several years, slightly above that of all G7 countries. Average annual gross domestic product (GDP) growth was approximately 2.2% from 2011 to 2013. This more moderate level of growth follows a strong rebound in national growth levels from the recession of 2008-09, which saw GDP decline by 2.8% from 2008 to 2009. The national economy is expected to continue those modest growth trends, with GDP growing by 2.5% to the end of 2014, and 2.7% through 2015.

In contrast, Alberta's GDP growth has been slightly higher than Canada's over the last several years, particularly after the recession. While GDP contracted from 2008 to 2009 in Alberta, the rebound in growth to 2010 placed GDP above pre-recessionary levels. Since that time, Alberta has averaged consistently higher annual GDP growth than the rest of Canada. These trends are expected to continue to 2015, with GDP expected to grow 3.7% in 2014 and 3.5% in 2015. In large part, this strong recovery and consistent growth corresponds with higher oil prices, which have supported GDP growth and strong levels of capital investment in infrastructure and industry.

Chapter Objectives

- Set provincial and regional context for industrial and employment land development
- Identify industrial and employment land development opportunities by sector
- Evaluate impact of County policies and regulations on industrial development
- Identify strengths, weaknesses, opportunities, and threats to Parkland County

FIGURE 1: ANNUAL REAL GDP GROWTH, ALBERTA AND CANADA, 2007-2015



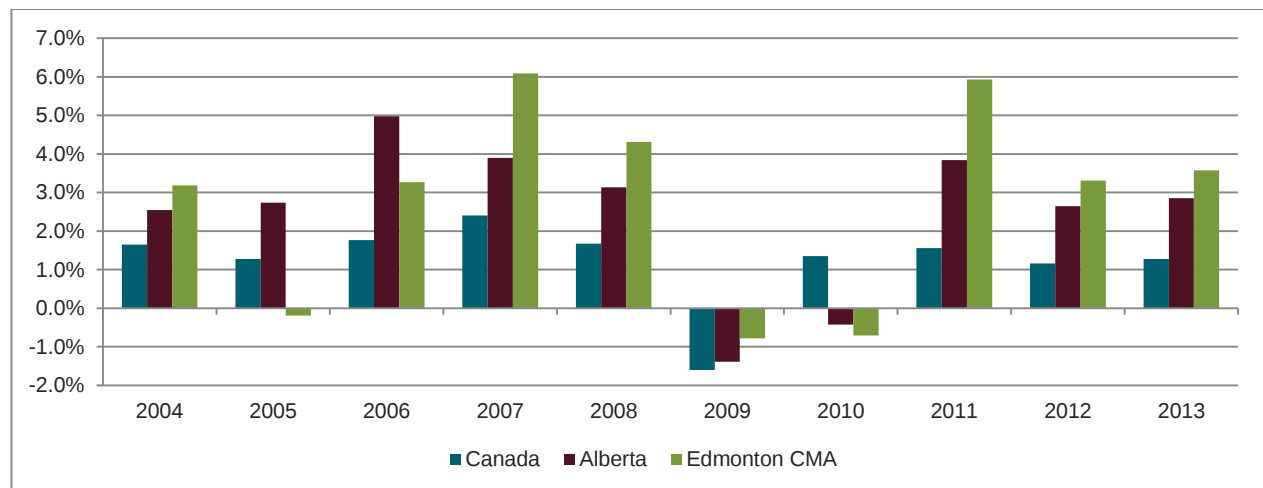
Source: Statistics Canada, CANSIM Table 379-0030, RBC Economic Provincial Outlook, 2014, International Monetary Fund, 2014

Figure 2 illustrates employment change over the last decade in Canada, Alberta, and the Edmonton CMA. Both Canada and Alberta experienced moderate employment growth from 2003 to 2007, with a notable decline in employment from 2008 to 2009. Both regions have experienced moderate employment growth since then, and maintain employment at levels well above their 2003 employment figures (and slightly above pre-recessionary levels).



The Edmonton CMA has shown a similar pattern in terms of employment growth as Alberta, though at slightly higher levels (despite a slight employment decline from 2004 to 2005). From 2005 to 2008, employment across the CMA grew from 562,500 to 642,900, based largely on strong population and industrial growth in the region. Like Alberta, the CMA experienced two consecutive years of employment declines in 2009 and 2010 (though a slightly lower decline from 2008 to 2009 and a higher decline from 2009 to 2010). Since that time though, the Edmonton CMA has posted consistently higher annual employment growth rates than both Alberta and Canada, averaging approximately 4.3% per year from 2010 to 2013. By the end of 2013, employment levels across the CMA remained well above the pre-recessionary peak in 2008.

FIGURE 2: ANNUAL EMPLOYMENT GROWTH, CANADA, ALBERTA, AND EDMONTON CMA, 2003-2013



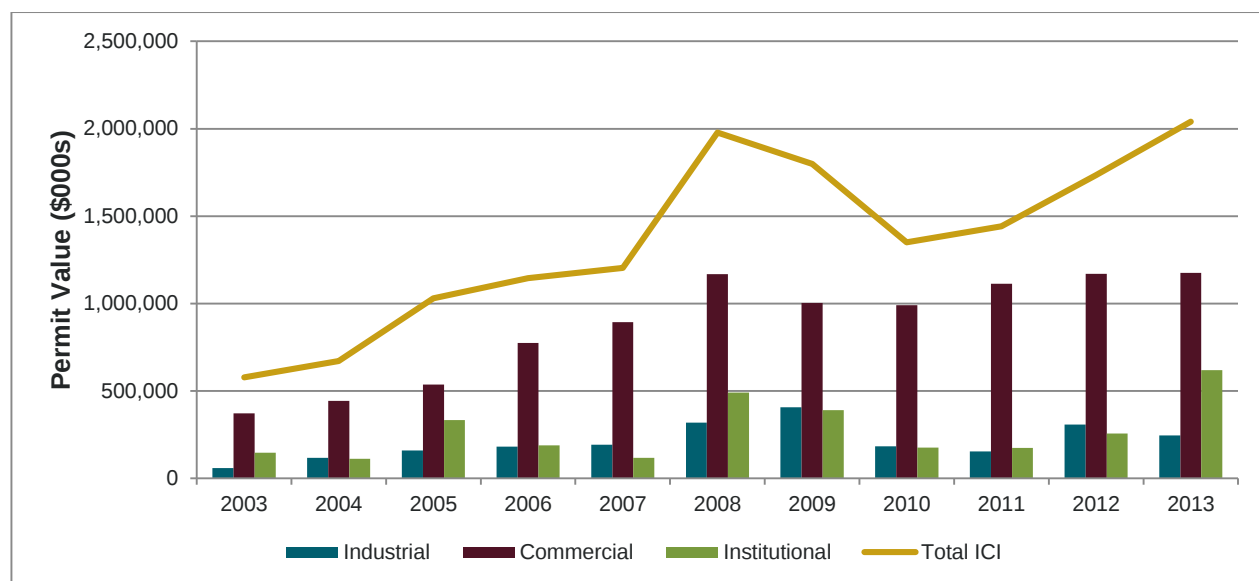
Source: Statistics Canada, Labour Force Survey, CANSIM Tables 282-0008 and 282-0112

Non-residential construction (i.e. industrial, commercial, and institutional, or ICI) construction value can also provide an indication of the strength of the regional economy relative to the broader economy. From 2003 to 2013, total non-residential construction value in the Edmonton economic region rose from \$578.2 million to \$2.0 billion, based largely on a strong commercial construction sector, which has posted permit values in the range of \$1.0 billion per year since 2008. As with employment and GDP, permit values declined slightly from 2008 to 2010, but recovered to pre-recessionary levels by the end of 2013.

Again, much of this growth is based on the strong performance of the commercial sector in the region over the last 10 years. Over that time commercial construction permit values have averaged \$876.4 million per year, and have grown 217%. Despite comparatively smaller permit values (the industrial sector averaged \$211.6 million over the 10 year period) the value of industrial permits has grown 315% since 2003.



FIGURE 3: ICI BUILDING PERMIT VALUES, EDMONTON ECONOMIC REGION³, 2003-2013



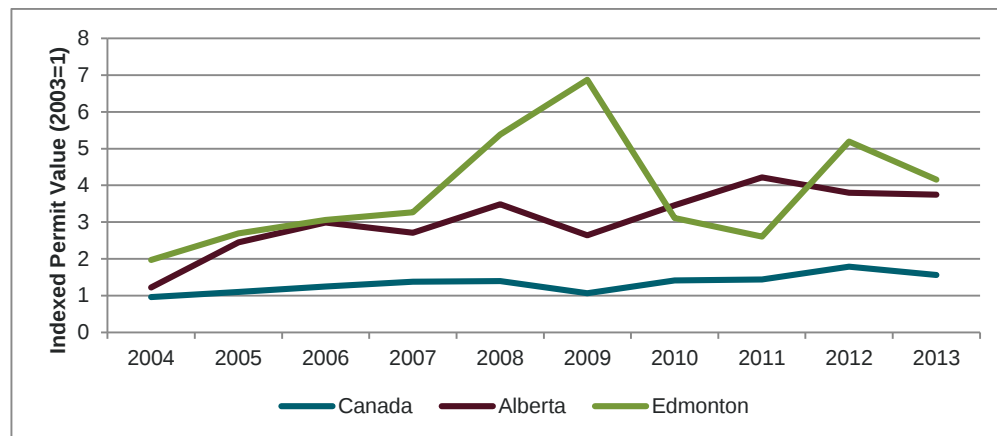
Source: Statistics Canada, CANSIM Table 026-0007

Comparing the value of the Edmonton economic region's industrial construction sector (by permit value) to the rest of Alberta and Canada illustrates the strength of the sector in the region. Figure 4 illustrates growth trends in industrial permit values in each of the jurisdictions, indexed to 2003 industrial permit values. As illustrated, industrial permits in Edmonton have grown by just over 300% since 2003, from \$59.2 million to \$245.8 million. Looking at the time series data, it would suggest that the effects of the recession of 2008/2009 were slightly lagging in the regional industrial sector, with industrial permit values actually reaching a peak in 2009 (as a flurry of projects planned or under construction in the lead-up to the recession were likely started or completed). Though the declines and increases in industrial permit value have been slightly more pronounced across the region (compared to Alberta and Canada), since that time, growth of the industrial sector remains well above growth rates at the national level.

³ The Edmonton Economic Region consists of the Cities of Edmonton, Fort Saskatchewan, Leduc, Spruce Grove, St. Albert, and Wetaskiwin; Brazeau, Leduc, Parkland, Strathcona, Sturgeon, and Wetaskiwin Counties; the Towns of Beaumont, Bon Accord, Calmar, Devon, Drayton Valley, Gibbons, Legal, Millet, Morinville, Redwater, and Stony Plain; and the Villages of Breton, Spring Lake, Thorsby, Wabamun, and Warburg; as well as a number of summer villages and First Nation reserves.



FIGURE 4: INDUSTRIAL PERMIT VALUES, CANADA, ALBERTA, AND EDMONTON ECONOMIC REGION, 2003-2013



Statistics Canada, CANSIM Tables 026-0004 and 026-0007

3.1.1 Energy Industry in Canada and Alberta

The energy industry has been a critical part of the province's economy since the first major oil field discovery in Turner Valley in 1914. Energy continues to generate a notable share of industry growth in Alberta today, with approximately 121,500 Albertans directly involved in mining and oil and gas extraction, and an estimated one in 16 jobs in Alberta directly related to energy⁴. Based on this, the energy industry plays a key role in industrial and employment land development in the province, generating or supporting demand in a range of industries and for a range of uses. This suggests that the prospects and outlook for the industry sector play a role in industrial land development in the province.

Over the past decade, increasing demand for oil has led to expanded industrial, construction, and extraction activity in the province, and large-scale capital investments in infrastructure and facilities on the part of the public and private sector. Alberta retains the third largest proven crude oil reserves in the world (after Saudi Arabia and Venezuela), with the majority of those reserves in the 140,000 sq. km. oil sands region in the Athabasca, Cold Lake, and Peace River areas.

The Athabasca Region has been the centre of oil sands production in Alberta of late. From 2001 to 2012, an estimated \$159.5 billion was invested in oil sands projects alone⁵. Much of that growth has been driven by the appreciation of oil prices over the last decade. The price of West Texas Intermediate (WTI) crude oil rose more than 600% from late 2001 (\$19 per barrel in December 2001) to July 2008 (\$133 per barrel),

⁴ Government of Alberta, Department of Energy. (2014).

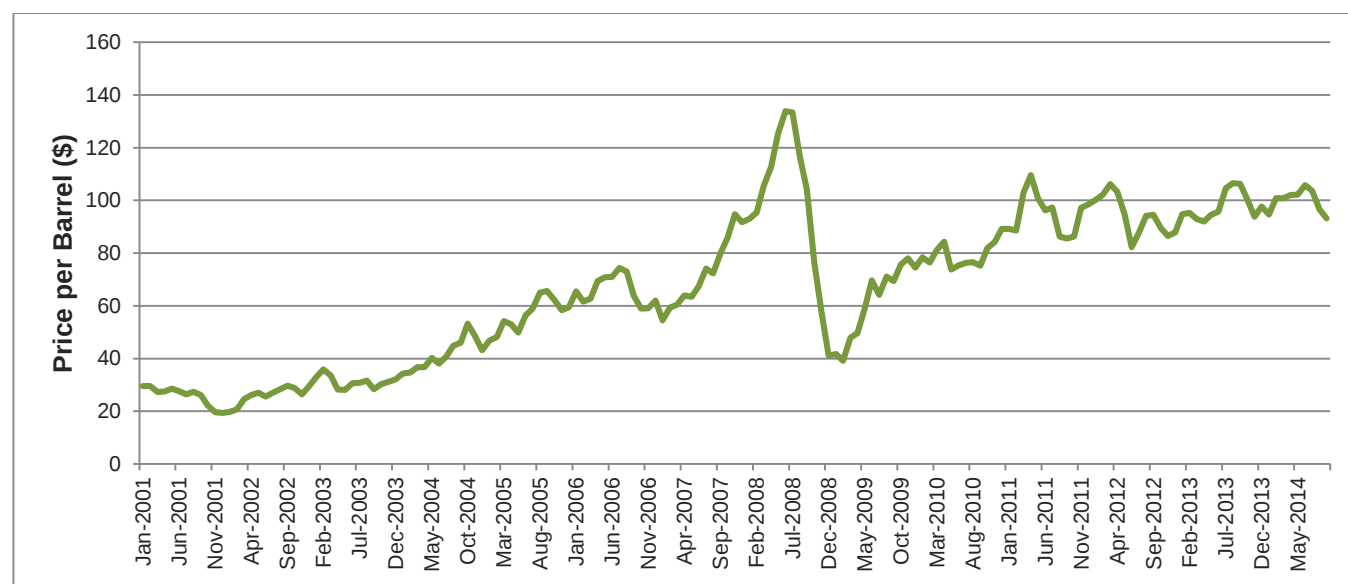
⁵ Government of Alberta, Department of Energy. (2013).



driving capital investment in Alberta with the rise⁶. Despite a sharp decline in crude oil prices during the 2008-2009 recession (with oil reaching a low of \$42 per barrel in January 2009), crude oil prices have rebounded significantly since then. However, it should be noted that since hitting a high of \$106 per barrel in mid-2014, oil prices have since declined to approximately \$93 per barrel at the end of September (and further into October).

It is uncertain how this recent turbulence might affect the industrial market. Predictions at the start of the year suggested that WTI prices were not expected to fall to a point that would impair or alter investment decisions on projects in Alberta⁷. In some cases, many of the projects already operating remain in operation, while there is speculation that some higher priced projects may be placed on hold. Over the longer term though, oil prices are expected to rise steadily to \$128 per barrel (in 2012 figures) in 2035, supporting the development of new types of oil resources and improving the recovery rates of existing fields⁸.

FIGURE 5: PRICE OF WEST TEXAS INTERMEDIATE, HISTORICAL



Source: EIA, Cushing OK WTI Spot Prices FOB

Growing demand in emerging economies is expected to support that steady upward trend, and thus the viability of comparatively more expensive oil sands production. By 2035 emerging economies are expected to account for more than 90% of net energy demand growth, with China continuing to lead growth in the shorter term, and India and

⁶ PriceWaterhouseCoopers. (2009). Alberta Industry Sector Performance and Prospects.

⁷ ATB Financial. (2014). Alberta Economic Outlook, Q2.

⁸ International Energy Agency. (2013). World Energy Outlook.



Southeast Asia (to a lesser extent) leading demand growth after 2025⁹. Oil sands production is expected to reach roughly 5.1 million barrels per day by 2035 based on increasing demand, pushing demand for industrial and construction development that supports these production activities¹⁰.

The economic impact of continued growth in oil demand on Alberta varies, but upward trends suggest positive impacts over the longer term. The Canadian Energy Research Institute (CERI) projected potential impacts on the province in 2011, under what it considered a realistic scenario for oil sands development over the longer term. To 2035, the CERI expects that new investments and production/operations in the oil sands are expected to generate approximately \$2.0 billion in cumulative total GDP, and a total of 10,041 thousand person years¹¹ of employment in the province (accounting for both new and preserved jobs¹². The report suggests notable impacts in the rest of Canada as well, with approximately 11,685 thousand person years of total employment expected to be generated from these projects¹³.

The majority of the jobs expected to be created are direct (3,975 thousand person years) or indirect (3,098 thousand person years), suggesting that Alberta will be a primary beneficiary of development. Direct employment includes those employed directly as a result of the development of the project, such as in construction, administration, maintenance, and operations. A notable portion of that employment can be expected within areas close to the mines, particularly in the Wood Buffalo area. Indirect employment encompasses jobs within primary suppliers to the oil sands value chain (e.g. construction, manufacturing, transportation). These impacts are likely to be spread throughout the province, particularly to major industrial and oil and gas servicing centres in the province, such as Parkland County and the Capital Region, and likely in industrial and employment areas of those communities.

Similarly, the Conference Board of Canada predicts notable impacts across Canada and Alberta. Of the 3.21 million total person years of employment (or 3,200 thousand person years) projected to 2035 across Canada, Alberta is expected to capture approximately 74% of that employment impact (or 2.38 million person years)¹⁴. This includes approximately 844 thousand person years of direct employment, 1,012 thousand person years of supply chain (i.e. indirect) employment, and 519 thousand person years of income effect employment (i.e. induced) in Alberta to 2035¹⁵. As with the CERI report, almost all of the direct employment impact is expected to reside in

⁹ Ibid.

¹⁰ International Energy Agency. (2011). International Energy Outlook.

¹¹ Defined as thousands of jobs created and preserved every year. For example, a new oil sands project employing 60 people in a year equates to 0.06 thousand person years of employment during that year (or 60 person years of employment). During the next year of operation, if employment stayed constant, the same operation would now account for 120 person years of employment (or 0.12 thousand person years). For the purposes of the CERI report, the number 10,000 jobs and 10 thousand person years would both denote that 10,000 people were employed for a year.

¹² Canadian Energy Research Institute. (2011). Economic Impacts of New Oil Sands Projects in Alberta (2010-2035).

¹³ Ibid.

¹⁴ The Conference Board of Canada. (2012). Fuel for Thought: The Economic Benefits of Oil Sands Investment for Canada's Regions.

¹⁵ The Conference Board of Canada. (2012). Fuel for Thought: The Economic Benefits of Oil Sands Investment for Canada's Regions.



Alberta (approximately 96%), with the majority of supply chain effects (70%) residing there as well¹⁶. These supply chain effects are expected in industries where oil in gas in general, and oil and gas in particular, are a major source of revenues, such as oilfield services, engineering services, oil and gas equipment manufacturing, equipment rental and leasing, metal tanks, and pumps and compressors¹⁷. Further, these supplier industries generally locate in business and industrial areas that offer lands appropriate for both knowledge-based (e.g. engineering) and industrial (e.g. manufacturing, storage) activities.

Overall, the continued development of the energy industry in the Athabasca Region has the potential to generate notable employment impacts in industries directly and indirectly related to the oil sands, all over Canada. Estimates range widely based on methods used to quantify the scope of investment, but stable upswings in oil prices appear likely to support projects in Alberta. As a result, the energy industry should continue to support demand for industrial and employment lands to house both industrial and knowledge-based employment directly and indirectly connected to the oil sands.

3.1.2 Capital Region Trends and Growth Policies

The Capital Region has an estimated population of approximately 1.23 million in 2014, with population expected to grow to between 1.9 million and 2.2 million by 2044¹⁸. This represents average annual population growth rates of between 1.5% and 1.9% over the thirty year period. Similarly, the Capital Region's current employment of approximately 630,700 in 2014 is expected to climb to between 898,000 and 998,500 to 2044, at average annual growth rates of between 1.2% and 1.5% to 2044¹⁹. This anticipated level of growth presents both opportunities and challenges, suggesting the need for coordinated planning and growth policies across the Region.

However, one of the most notable challenges itself seems to be the general acceptance of these levels of growth. In many cases, it has been suggested that these forecasts understate the potential growth of the Capital Region. More specifically, some of the expected employment growth trends outlined by the most recent Capital Region forecasts for Parkland County seem inconsistent with historical growth trends and future growth potential. As a result, this study provides a market-driven employment forecast consistent with the growth prospects of the County.

The Capital Region Growth Plan (CRGP) was developed in 2009 and approved by the province in 2010, to guide and manage growth in the Capital Region in four key areas: land use, inter-municipal transit, housing, and geographic information systems. The four plans of the CRGP were drafted with the following goals in mind:

- Protect the environment and resources

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Stokes Economic Consulting, Strategic Projections Inc. (2013). Capital Region Population and Employment Projections.

¹⁹ Ibid.



- Minimize the regional footprint
- Strengthen communities
- Increase transportation choices
- Ensure efficient provision of services
- Support regional economic development

The Capital Region Land Use Plan was drafted to lay out a strategy to manage growth to minimize the Region's footprint, based on transit-oriented development and densification of existing developed areas. The plan was intended as a framework to guide planning and development decisions in the Region, and provides for an integrated approach to planning for future growth by identifying intended overall growth patterns, key infrastructure investments, and services and land uses to maximize benefits.

The Capital Region Board (CRB) has several roles and responsibilities under the Land Use Plan to achieve these objectives:

- Review, require amendments, and approve the Municipal Development Plans of municipalities
- Review and approve any subsequent new statutory plans, amendments to MDPs, or other statutory plans
- Establish procedures for the ongoing administration of the Land Use Plan, including criteria for the evaluation of applications by CRB for consistency with the Plan, monitoring indicators, annual reports, context statements, and amendment procedures

Local municipalities are required to share the vision for the region in their growth management plans, and implement the policies of the land use plan through their statutory documents. Further, as MDPs, Inter-municipal Development Plans (IDPs), or other statutory documents are created or amended (e.g. ACPs, ASPs) at the local level, municipalities are required to notify and submit the plans to the CRB for information and evaluation. As a result, most growth management and planning decisions, particularly those within Priority Growth Area A in the Land Use Plan (which includes the Acheson area) are subject to review by the CRB.

The CRB initiated a five year review for the Growth Plan (and its associated component plans) in 2013, with the goal of providing an updated plan for 2015. In planning for the update, CRB administration consulted with regional CAOs to better understand the successes and shortcomings of the current CRGP. The following four issues and gaps emerged through the process, and will shape the development of the updated plans:

- Strategic focus, including direction on better alignment with global trends and provincial priorities, consensus and understanding on regional economic sustainability, greater flexibility and opportunities for trade-offs in terms of economic prosperity, better understanding of regional equity and equality, balancing the role and importance of Edmonton and all other communities in



sustainability and economic prosperity, and a longer term focus on infrastructure planning.

- Building the foundation, including direction on the province's role in regional planning, a shared regional vision for the region, inclusivity of all land uses in the region, examining growth plan boundaries against the shared vision, and improving clarity on interpretation.
- Managing growth, including direction on linking demand for core infrastructure and social infrastructure with regional growth, tying land use decisions to infrastructure decisions that are meaningful at a regional level, and guiding sustainable, efficient, compact, fiscally sustainable, and environmental friendly development through planning policies.
- Measures of success, including the need for improved measureable goals and relevant indicators, a more relevant Regional Evaluation Framework, improved reporting and assessment, more opportunities for collaboration, and better relationships with the Region.

A broader issue identified with the plan was its accessibility. With the number of documents that compose the plan, and the complexity of each of those documents, improvements to the integration of the plans with one another and the clarity of their policies will be pursued in the update.

Overall, the updated CRGP will continue to influence the development environment in Parkland County. Longer term planning decisions on employment and industrial lands, such as designation of new lands for employment and industrial purposes, are presently subject to more regional priorities for investment and development, and will likely continue to be regulated by regional plans in terms of permitted uses, infrastructure provision, and amount of designated lands.

3.1.3 Capital Region Industrial Market

The following provides a summary of the Edmonton Capital Region's industrial base, recent development trends and opportunities to accommodate future long-term growth.

Developed Industrial Lands Base

The Capital Region has a large and diverse existing industrial base, totalling approximately 20,000 acres (8,094 Ha) of developed industrial land and 110 million sq.ft. of industrial GFA.²⁰ The City of Edmonton has the largest developed industrial lands base in the surrounding market area (i.e. Capital Region), accounting for approximately 60% of the total. The majority of Edmonton's industrial land base is situated in the City's Northwest and South/Southeast Districts. Other large developed industrial areas are located in Parkland County (Acheson), Sherwood Park (urban Strathcona County), Alberta's Industrial Heartland, and the Nisku/Leduc area.

²⁰Capital Region developed lands industrial land inventory estimate by Watson & Associates Economists Ltd. Industrial GFA derived from Colliers International, Edmonton Industrial Market Report, Q2 2014.



Industrial Development Trends

The industrial market in the Capital Region is robust and expanding with strong development activity across a broad range of sectors. Over the past decade, industrial land absorption in the Capital Region has averaged approximately 625 acres (255 Ha) annually. Approximately half of this has been accommodated within the City of Edmonton.

A significant share of industrial development activity and corresponding land absorption within the Capital Region over the past decade has been in the west and south parts of the Capital Region, within the City of Edmonton's Northwest and South/Southeast Districts, the Nisku/Leduc area, and Acheson (Parkland County).

The Capital Region has maintained a strong industrial base that has grown and evolved in connection with major transportation networks throughout the area. Location factors play a key role in the distribution of the dominant business clusters visible across the Capital Region today, such as manufacturing, transportation/logistics, wholesale trade, construction, and petrochemical processing.

For industrial land development, highway access is considered highly important. Historically, areas with good highway access have seen strong development pressure. The completion of the northwest leg of Anthony Henday Drive, developing the highway into a complete ring road, has provided greater access and industrial development opportunities in the northwest part of the Region, including Acheson (Parkland County). Acheson, along with Northwest Edmonton and St. Albert were previously underserved by major highway connections. With stronger regional road connections, industrial and commercial development activity in the northwest part of the Region, most notably in Acheson and Northwest Edmonton, has accelerated in the past five years.

Given the Region's strong base in the logistics/distribution sector, intermodal facilities also play an important role in industrial development patterns. The CN Intermodal facility in Northwest Edmonton has also been a major catalyst for industrial development in that part of the City and surrounding area (e.g. the Acheson Industrial Area in Parkland County).

Proximity and access to a major airport is also advantageous for an increasing number of industrial sectors. Sectors such as research and development and advanced manufacturing rely increasingly on air transport in their supply chains and just-in-time delivery. Other sectors directly tied to airport activities and operations include air freight distribution/logistics. Edmonton International Airport, which is situated on Highway 2 next to the City of Leduc and the Nisku Area, has served as a catalyst for light industrial and office development in South Edmonton and the airport is considered a key driver of future industrial land development in the south part of the Region. Further, the proposed CP intermodal facility in South Edmonton is expected to expand the multi-modal structure of the area, creating further development opportunities for logistics and distribution in South Edmonton and Leduc County.

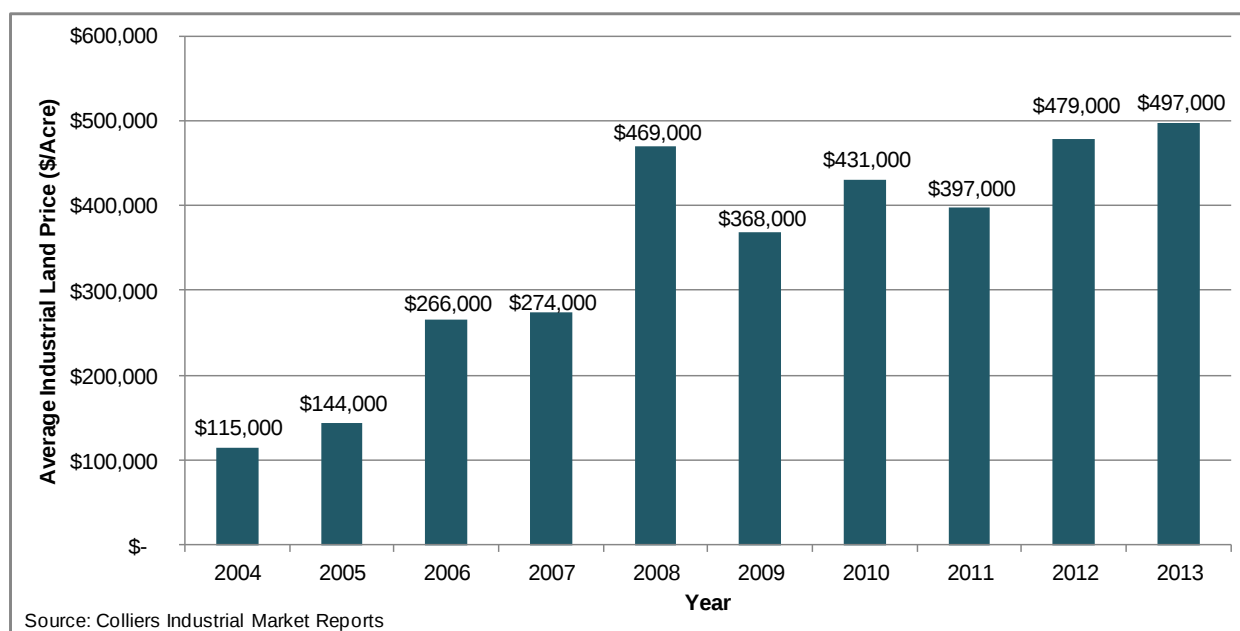


For both international and locally based industries, Parkland County has a strong appeal given its proximity to major regional infrastructure, including the Yellowhead Highway (Trans-Canada) and the CN intermodal facility in Northwest Edmonton. However, other areas of the Region, including South Edmonton and the Highway QE2 Corridor offer a competitive market for industrial development. The completion of the northeast part of Anthony Henday Drive will also expand the market potential for industrial development in Northeast Edmonton, including the Edmonton Energy and Technology Park.

Trends in Lands Prices

Strong development activity has driven the appreciation in industrial land prices in the Capital Region. Over the past decade, vacant industrial land prices have more than quadrupled, with land prices in the Capital Region averaging \$497,000 per acre in 2013 compared to \$115,000 per acre in 2004, as shown in Figure 6. Prices for industrial land in the Capital Region vary widely depending on location and servicing, ranging from a low of \$35,000 per acre for unserviced heavy industrial land in Alberta's Industrial Heartland, to a high of close to \$1,000,000 per acre in prestige business parks in South Edmonton.

FIGURE 6: AVERAGE INDUSTRIAL LAND PRICE, CAPITAL REGION, (\$/ACRE), 2004-2013



Opportunities to Accommodate Industrial Growth

The employment base of the Capital Region is expected to increase from 643,100 in 2014 to 997,700 in 2044, or an increase of 55%.²¹ The analysis presented herein

²¹ Capital Region Employment Projections Update– High Case Scenario, March 2014.

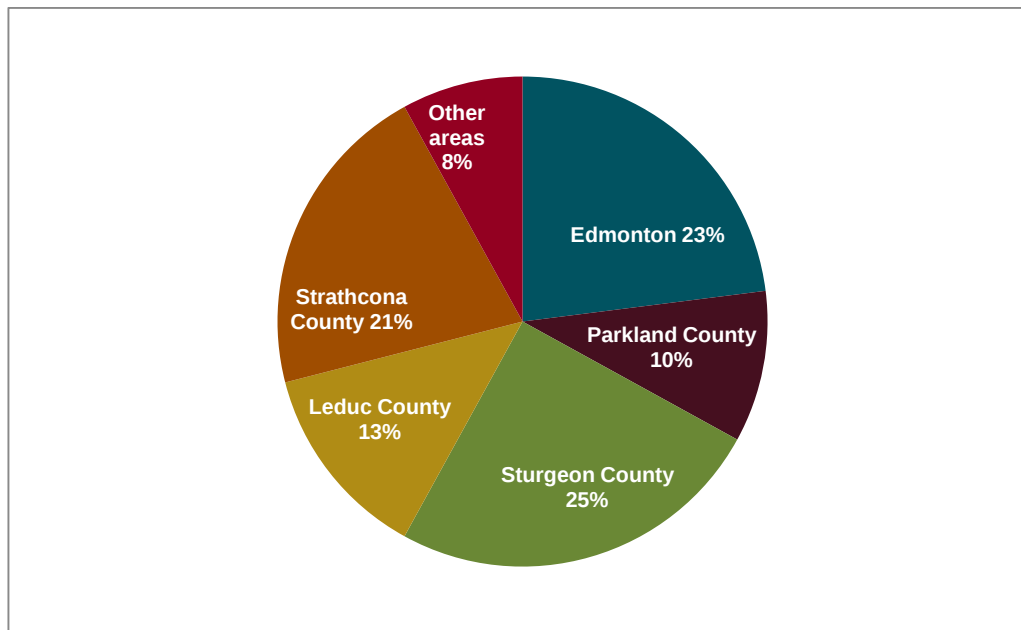


suggests that the Edmonton Capital Region economy is well positioned to continue to generate a high proportionate share of goods-producing sector jobs, which will drive the demand for industrial land in the Region.

The Capital Region has significant vacant industrial land supply opportunities, totalling approximately 20,000 net acres (8,094 net Ha), to accommodate future employment growth.²² The City of Edmonton offers the largest and most diverse range of industrial land opportunities, accounting for approximately 54% of the Capital Region's industrial land supply, and can accommodate a wide range of sectors. A large share of Edmonton's vacant industrial land supply is within the Edmonton Energy and Technology Park. When exclusively considering districted vacant lands, Edmonton continues to hold a notable share of land across the Region.

Other municipalities in the surrounding market area with a moderately large supply vacant of industrial lands include Parkland County, Sturgeon County, Leduc County, and Strathcona County. In comparison, vacant industrial land opportunities within other municipalities are more limited in terms of their range of market choice and quantum of available land.

FIGURE 7: DISTRICTED VACANT INDUSTRIAL LAND SUPPLY OPPORTUNITIES WITHIN CAPITAL REGION



Source: Watson & Associates, Millier Dickinson Blais, 2014

Over the next 30+ years, there is expected to be a strong demand for light industrial development within the west part of the Capital Region. With the vast majority of the vacant industrial land supply within Edmonton's Northwest Industrial District expected

²² Excludes lands associated within Alberta's Industrial Heartland.



to be absorbed during this period, and with limited current expansion opportunities within the Edmonton City-limits, Parkland County is increasingly becoming an attractive location to accommodate industrial development.

3.1.4 Regional Benchmarking

In an effort to provide a clearer picture of the regional competitiveness of Parkland County, a benchmarking exercise of Parkland County's performance on demographic and economic indicators that influence industrial and employment land development was completed. A number of communities across the Capital Region were chosen as comparators, with particular emphasis on communities that directly compete with Parkland for light and medium industrial development, or communities that compete with Parkland County for more niche industrial opportunities (e.g. Drayton Valley). In order to provide some consistency in the benchmarking exercise, data sources that offer insight into each of the comparator communities using the same data were used where possible (e.g. the most recent population and employment projections completed by the Capital Region Board²³).

Overall, the most recent assessments provided by the Capital Region Board suggest Parkland County is home to approximately 3% of the total population across the comparator community group, but remains larger than most of the other more rural counties (with the exception of Strathcona County, a specialized municipality). In terms of growth, Parkland's population increase of 4.6% between 2006 and 2011 placed it well behind the average growth of 13.4% across the comparator group, but again, in front of most other rural counties. Interestingly, if population growth figures for both Spruce Grove and Stony Plain were incorporated into Parkland County's figures, the combined population growth (17.4%) would be among the highest of the comparator group, behind only the City of Leduc from 2006 to 2011. Despite moderate population growth forecasts for the County, both Stony Plain and Spruce Grove are expected to continue growing rapidly in the future, which will likely benefit Parkland County in terms of available labour force.

Based on most recent estimates by the CRB, Parkland County is estimated to hold approximately 1% of total employment across the comparator group in 2014, leading only Sturgeon County, Stony Plain, and Devon. Further, employment in the County is expected to grow only moderately, at projected high and low rates below the average growth rates expected among the comparator group. To 2044, employment is expected to reach between 9,500 and 11,000. Stony Plain is expected to lead employment growth, followed by Leduc, Spruce Grove, and Devon. Based on these projections, Parkland is expected to accommodate approximately 0.7% of the growth projected among the comparator group.

However, these employment projections are based in part of data from the 2006 census, while also providing little regard for the market forces that might drive

²³ Stokes Economic Consulting, Strategic Projections Inc. (2013). Capital Region Population and Employment Projections.



employment growth and industrial development across the Capital Region in the future. For example, these most recent projections suggest that employment in Parkland County could reach a high of 11,000 to 2044. However, the base estimate of employment in Parkland County for 2014 already exceeds that 2044 level.

As a result, Chapter Five of this study provides an alternative, market-driven, employment forecast for Parkland County to 2044 based on overall employment growth trends in the Capital Region, macroeconomic conditions and trends, and infrastructure and employment land availability. Using this methodology provides a more comprehensive and nuanced approach to employment projections, which can more effectively guide future industrial and employment land needs.

FIGURE 8: GROWTH TRENDS OF COMPARATOR COMMUNITIES

Characteristic		Parkland County	City of Edmonton	Leduc County	Strathcona County	Sturgeon County	Town of Devon	City of Leduc	City of Spruce Grove	City of St. Albert	Town of Stony Plain	Town of Drayton Valley
Population (2011)		30,568	812,201	13,541	92,490	19,578	6,510	24,279	26,171	61,466	15,051	7,049
Population Growth (2006-2011)		4.6	11.2	3.1	12.1	5.5	4.0	43.1	33.9	6.4	21.7	2.3
Population (2014)		31,800	861,900	14,100	96,800	20,600	7,000	26,300	28,400	64,300	16,700	-
Projected Population (2044)	High	50,000	1,443,900	23,200	160,000	39,200	13,900	62,600	67,000	120,000	40,000	-
	Low	42,700	1,336,800	19,300	138,000	31,000	11,800	45,700	49,700	91,600	32,200	-
Average Annual Change (%)	High	1.5	1.7	1.6	1.6	2.1	2.3	2.8	2.8	2.0	2.9	-
	Low	1.0	1.5	1.1	1.2	1.4	1.8	1.9	1.9	1.2	2.2	-
Employment (2014)		8,100	486,500	18,100	37,400	5,900	1,800	12,800	11,200	19,800	5,800	-
Projected Employment (2044)	High	11,000	749,400	25,300	54,800	10,000	3,300	26,000	22,800	33,600	12,700	-
	Low	9,500	699,100	21,600	47,600	7,900	2,800	19,400	17,200	25,900	10,300	-
Average Annual Change (%)	High	1.0	1.4	1.1	1.2	1.7	1.9	2.2	2.2	1.7	2.5	-
	Low	0.5	1.2	0.6	0.8	1.0	1.4	1.4	1.4	0.9	1.9	-

Source: Statistics Canada, 2011, and Stokes Economic Consulting, Strategic Projections Inc., 2013

Outside of Stony Plain, Parkland County's non-residential tax rate (i.e. general municipal) is the lowest of all municipalities surveyed. Though much lower than most urban municipalities, the rate is also lower than adjacent rural counties that compete for similar non-residential investment as Parkland County (e.g. Strathcona County, Sturgeon County).

Generally speaking, most types of non-residential development provide a higher rate of return on investment and servicing costs than residential developments, in terms of the tax revenues they create. At a basic level, the share of total tax assessment attributed to non-residential types of development can be an indicator of the fiscal strength of a municipality. Parkland County has the third highest non-residential tax assessment share of all municipalities surveyed, largely based on the strong industrial sector in the County. Parkland County is behind only Leduc County and the Town of Drayton Valley, and only falls behind Strathcona County in terms of non-residential share when machinery and equipment assessment is added.



FIGURE 9: FISCAL CHARACTERISTICS OF COMPARATOR COMMUNITIES

Characteristic	Parkland County	City of Edmonton	Leduc County	Sturgeon County	Strathcona County	Town of Devon	City of Leduc	City of Spruce Grove	City of St. Albert	Town of Stony Plain	Town of Drayton Valley
Non-residential Tax Rate (mill rate)	6.9357	14.7009	7.1100	9.7187	8.3983	8.5485	8.3350	8.5408	10.4983	5.5480	11.8884
Non-residential Assessment (Millions)	2,908.4	37,958.8	4,174.0	1,082.9	4,334.5	99.2	1,271.7	669.6	1,267.6	310.8	442.0
Assessment Share - Residential	62.6%	73.0%	34.2%	62.6%	52.4%	87.5%	71.4%	84.1%	87.5%	86.1%	60.5%
Assessment Share - Non-Residential	34.1%	26.3%	62.4%	20.7%	15.1%	12.4%	28.5%	15.8%	12.3%	13.8%	37.0%
Assessment Share - Machinery and Equipment	2.8%	0.7%	2.0%	15.2%	32.4%	0.0%	0.1%	0.0%	0.1%	0.0%	2.4%

Source: Municipal websites, Alberta Municipal Affairs, 2014

A comparison of vacant serviced (i.e. short-term), zoned/districted (i.e. medium term), and designated (i.e. long term) industrial land supply was completed through consultation with municipal economic development and land use planning staff in the Capital Region. A strong supply of vacant industrial and employment lands in a municipality can be a sign of competitiveness for that municipality, and perhaps add certainty to the community's ability to accommodate new investment or provide a range of employment and industrial land products over the longer term.

Overall, the City of Edmonton has the largest short term land supply, as noted by serviced vacant and zoned industrial land. This is followed by Sturgeon County and Leduc County, which hold less than half and less than one-quarter (respectively) of the short term supply in the City of Edmonton. Though Parkland County has a more limited supply of short term of vacant industrial lands, it still holds a larger inventory than Strathcona County, and all of the remaining urban communities.

The largest inventory of zoned vacant industrial land is held by Sturgeon County, followed by Edmonton (where all zoned land is considered shovel-ready), and Strathcona County. Other than Parkland County, with a supply of 955 acres of zoned vacant land, no other municipality's inventory of zoned vacant land is approaching 1,000 acres.

The largest supply of designated vacant industrial lands is held by Edmonton, with Leduc County and Strathcona County holding notable shares as well. This represents a medium- to longer-term supply, which may still require additional planning (i.e. zoning or districting) and development approvals or infrastructure investment before it is considered investment-ready. Outside of those three communities, the City of Leduc holds the next highest inventory of designated vacant industrial land supply. Though Parkland County's supply is larger than many of the smaller urban areas or other rural counties, the estimated 995 acres of designated land (all of which is zoned) seems inadequate to accommodate supply over the longer term, given recent development trends.



From a competitiveness perspective, land prices may provide a key advantage for a municipality. In particular, low land prices may be an advantage for land extensive uses like transportation, warehousing, large scale manufacturing or any other uses where the cost of acquiring land for development might influence location decisions. In slower markets though, low land prices may be indicative of low demand, particularly if paired with a large supply of available and shovel ready lands.

With the exception of Sturgeon County, Spruce Grove/Stony Plain, and smaller communities (Devon, Drayton Valley), the price of serviced industrial land in Parkland is well below other competitors in the Capital Region. In particular, the cost of serviced land in Acheson is below Edmonton, Leduc (city and county), Strathcona County, and St. Albert, likely as a result of lower design standards (e.g. rural, where others are more urban) and lower comparative absorption rates (against areas like Leduc-Nisku). With land supply still generally adequate over the medium term, Parkland should continue to benefit from competitive land prices.

FIGURE 10: INDUSTRIAL LAND COMPARISON, ACRES

Characteristic	Parkland County	City of Edmonton	Leduc County	Sturgeon County	Strathcona County	Town of Devon	City of Leduc	City of Spruce Grove	City of St. Albert	Town of Stony Plain	Town of Drayton Valley
Vacant Serviced Industrial (ac)	467	2,217	615	1,030	320	14	126	211	55	133	71
Districted (LUB) Vacant Industrial (ac)	995	2,217	1,295	2,429	1,988	0	200	211	96	133	91
Designated (MDP) Vacant Industrial (ac)	995	12,706	3,694	2,429	2,637	26	2,100	599	754	400	99
Serviced Land Cost (per acre)	\$425,000	\$700,000	\$525,000	\$100,000-200,000	\$500,000-800,000	\$275,000	\$525,000	\$350,000	\$600,000-700,000	\$350,000	\$250,000-310,000

Source: Individual municipal staff, Watson & Associates

3.2 Regional Sector Opportunity and Gap Analysis

In light of the comparative benchmarking exercise presented above, the next step is to assess the current and potential market capture for the County. This section will provide an understanding of the recent and expected performance of the County with regards to industrial development. The market capture analysis focuses on recent employment and business growth trends at the local and regional level. The resulting discussion provides the County with an indication – by North American Industry Classification System (NAICS) sector – of the recent and projected trends in industrial market capture, which will guide elements of the industrial and employment land strategy.

3.2.1 Employment Based Market Capture

Figure 11 illustrates the composition and change in employment (i.e. employed resident labour force) across all of Alberta and the Edmonton CMA over the last decade. This data is drawn from the 2013 Statistics Canada Labour Force Survey



which reports on Canada's CMAs. The Edmonton CMA includes the majority of municipalities in the Capital Region, including Parkland County, so this data should be considered an appropriate proxy to determine the region's employment trends. In 2013, the largest major sectors by employment in the Edmonton CMA were:

- Trade (wholesale and retail)
- Health care and social assistance
- Construction

In addition to construction, other industrial sectors like manufacturing and transportation and warehousing accounted for large shares of total employment across the CMA. Alberta follows a similar pattern, with trade, health care, and construction holding the majority of employment in the province. Outside of the Edmonton CMA, Alberta has large concentrations of employment in the oil and gas sector along with the professional, scientific, and technical services sector. Aggregated further, the share of employment in goods producing and service producing sectors has stayed relatively stable across the Edmonton CMA over the last decade. In 2013 total employment in the goods producing sector accounted for 25% of employment while the service sector accounting for the remaining 75%. In the same year, Alberta held a higher share of employment in goods producing sectors (approximately 28%) when compared to the Edmonton CMA. This trend is consistent over last decade.

FIGURE 11: EMPLOYMENT (000S) CHANGE BY MAJOR SECTOR

Industry (NAICS)	Edmonton CMA			Alberta		
	2002	2013	Change (%)	2002	2013	Change (%)
Total (all industries)	527.1	718	36.2%	1676.5	2211	31.9%
Agriculture	2.8	5	78.6%	62.1	63.3	1.9%
Forestry, fishing, mining, quarrying, oil and gas	11.6	28.8	148.3%	96.8	173.7	79.4%
Utilities	4.7	6.2	31.9%	16.7	18.7	12.0%
Construction	46.8	80.9	72.9%	140.3	231.3	64.9%
Manufacturing	56.7	57.1	0.7%	150.3	138.4	-7.9%
Goods-producing (sub-total)	122.7	177.9	45.0%	466.3	625.3	34.1%
Trade	80.6	119.3	48.0%	247.3	328	32.6%
Transportation and warehousing	27.5	38.5	40.0%	98.8	117.4	18.8%
Finance, insurance, real estate and leasing	31.8	38.5	21.1%	84.5	110.2	30.4%
Professional, scientific and technical services	37.2	48.9	31.5%	121.6	177.6	46.1%
Business, building and other support services	18.3	24.4	33.3%	55	74.1	34.7%
Educational services	41.4	44.6	7.7%	110.7	128.8	16.4%
Health care and social assistance	55.2	81.3	47.3%	156.2	235.3	50.6%
Information, culture and recreation	21.8	22.8	4.6%	69.6	77.3	11.1%
Accommodation and food services	36.9	45	22.0%	119.3	135.7	13.7%
Other services	24.8	38.6	55.6%	81.4	111.6	37.1%



Public administration	28.9	38.2	32.2%	65.8	89.5	36.0%
Services-producing (sub-total)	404.4	540	33.5%	1210.2	1585.7	31.0%

Source: Statistics Canada, Labour Force Survey, CANSIM Tables 282-0008 and 282-0112

When this table is considered in its entirety, overall employment in both jurisdictions has risen rapidly. Employment across the Edmonton CMA has increased at a faster rate than across the province (36.2% growth from 2002 to 2013 in the CMA against 31.9% growth across the province). By major industry group, the leading sources of growth have been:

- Forestry, fishing, mining, quarrying, oil and gas
- Construction
- Agriculture

With the exception of agriculture, much of that rapid growth can be connected, in part, to the oil and gas industry. As a result of that activity, the CMA has become a major professional and technical service centre for the province's oil and gas industry – home to a network of firms from large multinationals to entrepreneurs and small independent businesses (i.e. lone eagles). Furthermore, growth in each of these three sectors across the Edmonton CMA exceeded growth at the provincial level. The growth in agriculture is particularly noteworthy given its contrast to the nominal employment growth experienced at the provincial level.

Of all industrial sectors in goods and services-producing sectors, the manufacturing sector was the only sector to post employment decline between 2002 and 2013. At the provincial level, the manufacturing sector declined by 7.9% and in the CMA had nominal growth of 0.7% over this time period. With that said, since the Global Recession, employment in the manufacturing sector has rebounded. Between 2009 and 2013, employment growth at the CMA level employment has been positive (31.2%), which has outpaced the recovery at the provincial level (11.2%).

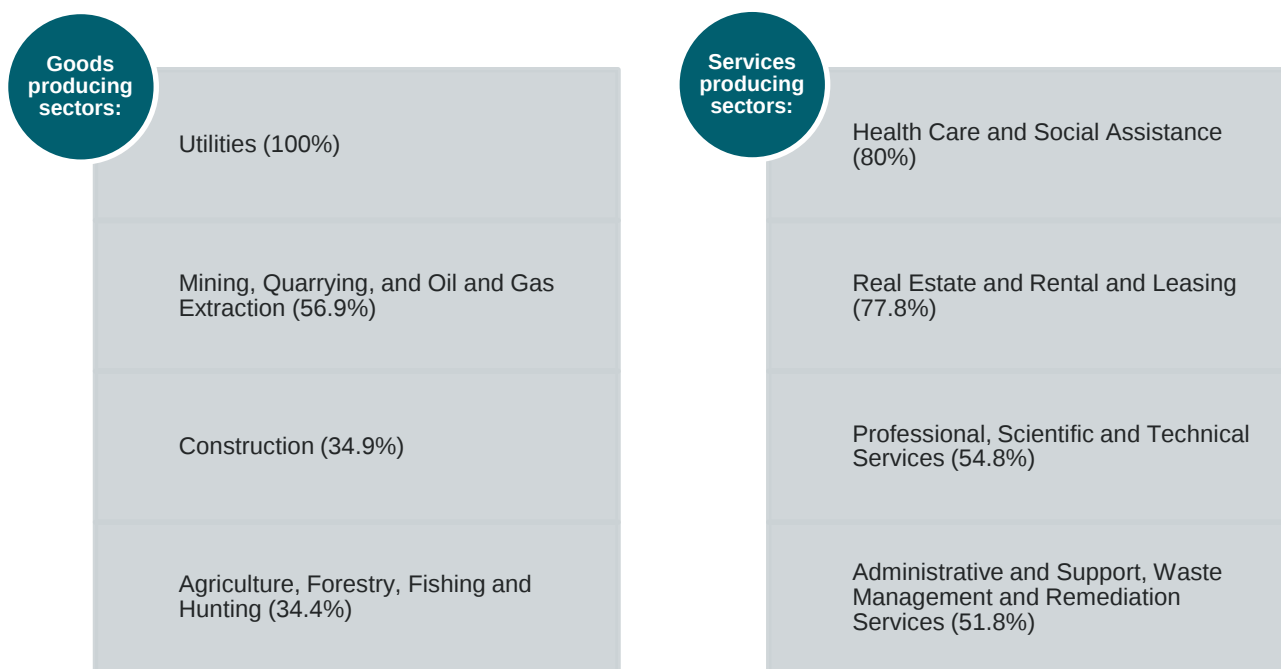
Aggregated to a higher level, the goods producing sector across the CMA grew by 45% since 2002; notably higher than the growth of 34.1% at the provincial level over the same time period. Performance over the last five years (through the most recent recession and recovery) has favoured the CMA over the province as well. Between 2009 and 2013, employment in the CMA's goods-producing sector grew by 33.2%, while employment in goods-producing sectors at the provincial level grew by 16.4%. Growth of employment in the CMA's services-producing sectors has also eclipsed both five- and ten-year growth rates at the provincial level. In the services-producing sectors, however, the CMA's growth rate has been only slightly ahead of the province with a difference of 2.5% over the last decade and 0.5% over the last five years.



3.2.2 Market Capture by Business Category

Canadian Business Patterns data can provide a further indication of the current market capture across Parkland County, as well as the trends in market capture by business sector. From December 2008 to December 2013, the total number of businesses (employer businesses and the self-employed) in the County grew by 35.9%, with employer businesses growing by 25.7% (in Figure 12), employer businesses fall under the “Subtotal” heading and self-employed businesses fall under the “Ind” heading). Overall, the County has experienced rapid business growth over these five years. Some of this growth, however, may be attributed to the post-recession recovery beginning in 2009/2010 and continuing into 2013.

The sectors that exhibited the highest total business growth were found in both the goods producing and services producing sectors. The sectors with the greatest relative growth include:



Some of this growth can also be attributed to the population growth across the Capital Region during this period. However, the majority of this growth can be attributed to the capital investment related to the oil and gas sector’s post-recession recovery and expansion.

For employer businesses – which typically have a higher impact on land development than the self-employed – the servicing-producing sectors (45.6%) led the growth of goods-producing sectors (43.0%) from 2008 to 2013. The growth in goods-producing sectors was led primarily by Agriculture, Forestry, Fishing and Hunting (43.2%),



Mining, Quarrying, and Oil and Gas Extraction (33.3%) and Utilities which grew by 50%, but added just two employer businesses during this period. The service-producing areas of the economy, which gained the largest share of employer establishments included Finance and Insurance (100%), Health Care and Social Assistance (48.2%), and Real Estate and Rental and Leasing (45.5%).

FIGURE 12: BUSINESS PATTERNS FOR SELECT INDUSTRIAL AND KNOWLEDGE-BASED SECTORS, PARKLAND COUNTY, DECEMBER 2008 AND DECEMBER 2013

Industry (NAICS)	2008			2013			% Change	
	Total	Ind	Subtotal	Total	Ind	Subtotal	Total	Subtotal
Total	1,738	986	752	2,412	1,467	945	38.8%	25.7%
11 Agriculture, Forestry, Fishing and Hunting	212	168	44	285	222	63	34.4%	43.2%
21 Mining, Quarrying, and Oil and Gas Extraction	65	26	39	102	50	52	56.9%	33.3%
22 Utilities	5	1	4	10	4	6	100.0%	50.0%
23 Construction	466	216	250	629	328	301	35.0%	20.4%
31-33 Manufacturing	96	39	57	114	51	63	18.8%	10.5%
41 Wholesale Trade	101	54	47	99	51	48	-2.0%	2.1%
48-49 Transportation and Warehousing	214	118	96	259	141	118	21.0%	22.9%
51 Information and Cultural Industries	15	9	6	17	12	5	13.3%	-16.7%
52 Finance and Insurance	67	56	11	97	75	22	44.8%	100.0%
53 Real Estate and Rental and Leasing	144	111	33	256	208	48	77.8%	45.5%
54 Professional, Scientific and Technical Services	268	152	116	415	256	159	54.9%	37.1%
56 Administrative and Support, Waste Management and Remediation Services	85	36	49	129	69	60	51.8%	22.4%

Source: Statistics Canada, Canadian Business Patterns Database, December 2013 and December 2008.

At the subsector level though, there are a number of larger or notable goods-producing and knowledge-based service-producing industries that experienced growth in employer businesses over the five year period, which may translate to industrial or employment land demand, as illustrated in the figure below.



FIGURE 13: PARKLAND COUNTY'S INDUSTRIES BY GROWTH AND POTENTIAL EMPLOYMENT LAND DEMAND

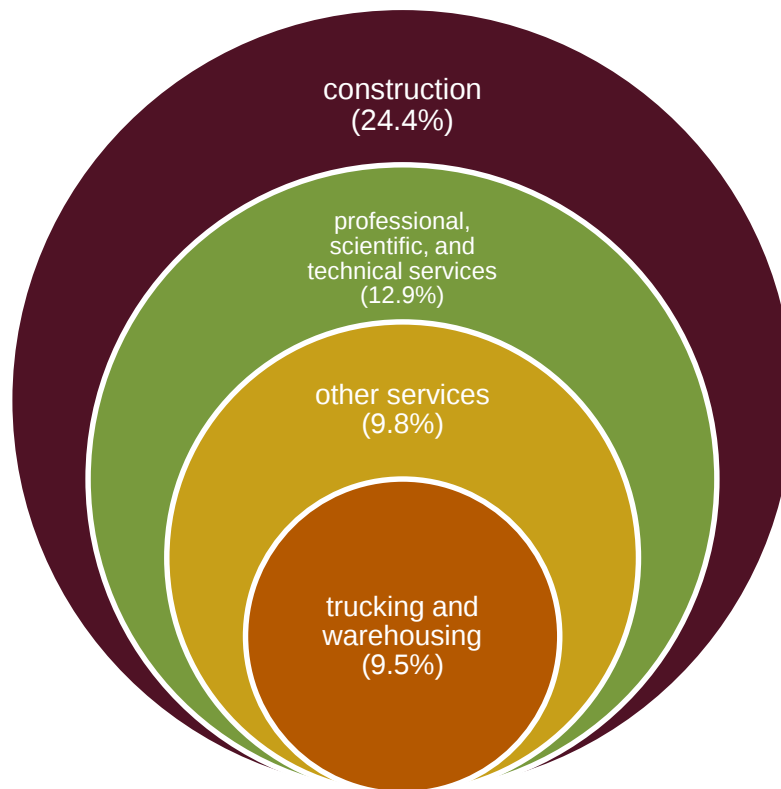
Industry (NAICS)	2008		2013		% Change (Subtotal)
	Total	Subtotal	Total	Subtotal	
541215 - Bookkeeping, payroll and related services	7	3	25	9	200.0%
213119 - Other support activities for mining	2	2	10	6	200.0%
541990 - All other professional, scientific and technical services	16	3	24	8	166.7%
333130 - Mining and oil and gas field machinery manufacturing	2	2	8	5	150.0%
541690 - Other scientific and technical consulting services	39	17	86	42	147.1%
484222 - Dry bulk materials trucking, local	11	4	18	9	125.0%
484221 - Bulk liquids trucking, local	14	7	24	12	71.4%
484239 - Other specialized freight (except used goods) trucking, long distance	15	7	17	12	71.4%
417110 - Farm, lawn and garden machinery and equipment merchant wholesalers	6	3	6	5	66.7%
237120 - Oil and gas pipeline and related structures construction	16	9	24	15	66.7%
541212 - Offices of accountants	15	8	24	13	62.5%
532410 - Construction, transportation, mining, and forestry machinery and equipment rental and leasing	30	9	38	14	55.6%
237110 - Water and sewer line and related structures construction	6	4	10	6	50.0%
484121 - General freight trucking, long distance, truck-load	27	10	35	14	40.0%
561110 - Office administrative services	20	11	27	14	27.3%
236220 - Commercial and institutional building construction	20	11	34	14	27.3%
484110 - General freight trucking, local	61	25	64	29	16.0%
541514 - Computer systems design and related services (except video game design and development)	34	15	40	17	13.3%
213118 - Services to oil and gas extraction	42	25	61	28	12.0%
551113 - Holding companies	71	9	83	10	11.1%
541611 - Administrative management and general management consulting services	38	11	44	12	9.1%

Source: Statistics Canada, Canadian Business Patterns Database, December 2013 and December 2008.

While some of these sectors account for a comparatively small share of total employer businesses in the County, their growth provides an indication of the type of investment the County has attracted over the last five years.

The current business patterns data also outlines a profile for the County's business community by share of total businesses accommodated in each sector. By characterizing the current business base, the likely areas of growth by subsector can be determined if broader sector growth trends are identified.

In December 2013, the goods-producing sector accounted for 39.2% of employer businesses in the County. This figure depicts the proportion of businesses within Parkland County by major sector.



By major sector, the construction (24.4%) and professional, scientific, and technical services (12.9%) sectors dominated the local business base, with other services (9.8%) and transportation and warehousing (9.5%) accounting for the next highest industries in terms of share of total employer businesses.

At the subsector level, the County's construction sector shows concentrations of employer businesses in: residential construction; commercial and institutional building construction; oil and gas pipeline and related structures construction; poured concrete foundation and structure contractors; electrical contractors and other wiring installation contractors; plumbing, heating and air-conditioning contractors; site preparation contractors; and other specialty trade contractors. While the construction sector may not necessarily drive industrial absorption as a result of employment densities, the sector may produce demand for large industrial sites that can accommodate equipment or modular construction activity. Further, given the County's access to skilled labour and proximity to major civil and industrial projects around the Capital Region and to the north, any administrative functions in the sector could demand dedicated office spaces or integrated office-industrial facilities in Parkland County's industrial areas.

The base of professional, scientific, and technical services firms is centred on: computer systems design and related services; accountants; engineering services;



administrative management and general management consulting services; bookkeeping, payroll and related services; and management consulting services. Given the relative proximity to the Capital and cost of real estate, many of these operations are likely located in Parkland County as a cost saving measure, but provide the majority of their services to industrial and commercial clients in the Capital Region, as well as industrial clients in the Wood Buffalo area.

In other industrial and knowledge-based sectors of the economy with implications on industrial development, the County shows local concentrations of activity in mining and oil and gas field machinery manufacturing; other support activities for mining; farm, lawn and garden machinery and equipment merchant wholesalers; specialized freight trucking (e.g. bulk liquids and dry materials), and general freight trucking.

3.2.3 Market Capture Outlook and Opportunities

In addition to looking at current market capture, background work for an industrial land strategy must also examine the opportunities associated with the expected trends in employment and industrial sectors. This discussion focuses on only those areas in which Parkland County is best positioned, given its assets in conjunction with those trends affecting the Capital Region. These opportunities are outlined because of their direct bearing on those industrial products and land developments which may be considered by the County. By looking at industry employment growth and relative industry concentration, conclusions can be made about sectors that have driven – and continue to drive – growth across the Capital Region. Further, the findings will offer some insight into the likely forms of employment growth and development that the County's industrial lands will accommodate given these regional trends.

Figure 14 illustrates the relative concentration and historic annual growth rates of employed labour force across the Edmonton CMA in select industrial sectors, and knowledge-based sectors that may locate on industrial lands (e.g. professional, scientific, and technical services). By employment growth and relative concentration, the Capital Region's existing strengths are in the construction and trade sectors; both of which show above average relative concentration and have consistently grown over the last decade. The growth of regional employment in each sector was above the growth of the sector at the provincial level as well.

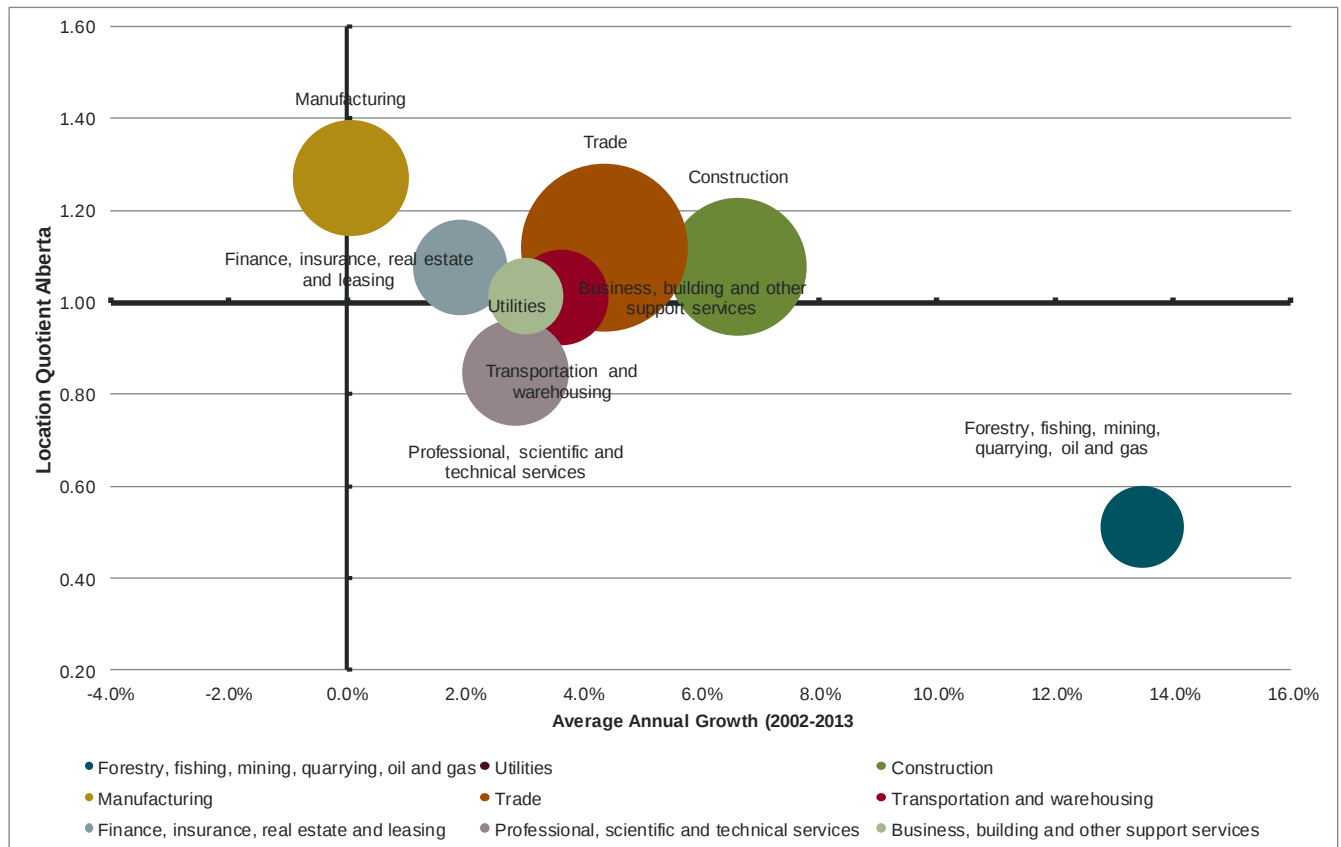
The forestry, fishing, mining, oil and gas sector; and professional, scientific, and technical services sectors show increasing growth at the regional level, but have a comparatively low concentration of employment when compared to the rest of Alberta. Given their increasing strength across the Capital Region and historical growth rates, these two sectors may represent a likely source of demand for industrial lands across the Edmonton CMA, as well as a 'gap' area of opportunity given their relative concentration.

The manufacturing sector is the third largest sector across the Capital Region with respect to employment. It is a mature industry with a high relative concentration of employment when compared to the province, but has struggled to post positive growth



between 2002 and 2013. Over this period, it has only grown by an average of 0.1% each year. The Capital Region's manufacturing sector was impacted greatly by the 2008/2009 recession, but has since rebounded to pre-recession levels of employment. Manufacturing remains a more mature sector across the Capital Region, with more targeted and technology-based opportunities for growth and industrial development. On a more local level, the comparative growth of manufacturing in Parkland County contrasts these trends and potential. Despite challenges at the regional level, a diverse range of manufacturing uses remain likely prospects for development across Parkland County.

FIGURE 14: CONCENTRATION AND CHANGE IN SELECT NAICS-BASED INDUSTRIAL AND KNOWLEDGE-BASED SECTOR EMPLOYMENT, EDMONTON CMA, 2002-2013



Source: Statistics Canada, Labour Force Survey, CANSIM Tables 282-0008 and 282-0112

Pin pointing regional drivers

Though relative concentration of employment and regional growth trends can shed some light on likely sources of employment growth, it is also useful to examine whether or not the Capital Region is experiencing an increase or decrease in its competitive share of employment relative to Alberta's entire economy. By performing a shift share

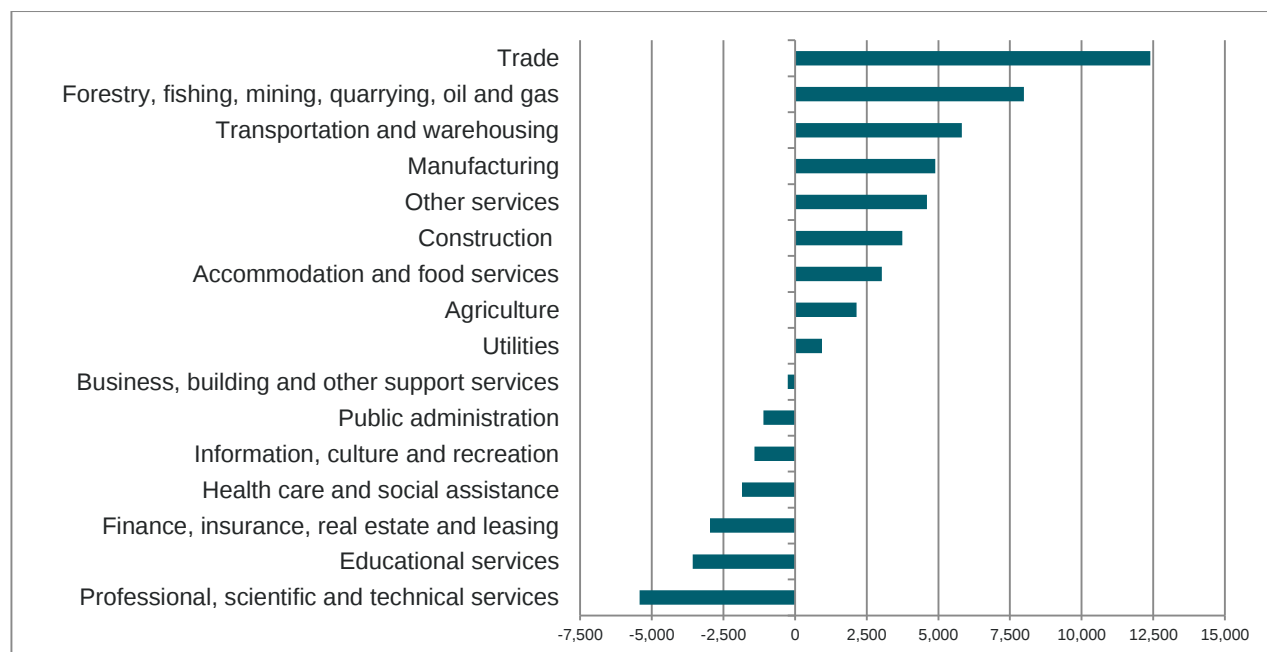


analysis, it is possible to isolate the employment generated because of broad trends affecting the provincial economy (e.g. an increase in global oil prices) opposed to employment growth driven by regional factors like the cost of land or new technological advancements. In other words, this analysis identifies the leading and lagging sectors in the Regional economy when provincial influences are removed.

The results of this analysis are shown in Figure 15. Across the Capital Region, there a number of NAICS-based sectors experiencing a declining competitive employment share when compared to the province. The most underperforming sectors include professional, scientific and technical services; educational services; finance, insurance and real estate; and health care and social assistance. This contrasts the positive growth trends of the professional, scientific and technical services sector described above. This suggests the Edmonton CMA may be losing its competitive positioning relative to the rapidly growing provincial professional, scientific and technical services sector in other areas of the province.

With respect to those industries that have relevance to industrial lands, the forestry, fishing, mining, oil and gas (primarily oil and gas); transportation and warehousing; manufacturing; construction; agriculture; and utilities sectors exhibited increasing competitive shares of employment from 2002 to 2013. Notably, the Region's manufacturing sector has exhibited positive signs of its competitiveness, which supports the notion of niche opportunities deserving of business attraction, retention, and expansion activities.

FIGURE 15: REGIONAL COMPETITIVE SHARE OF EMPLOYMENT BY NAICS SECTOR, EDMONTON CMA, 2002-2013



Source: Statistics Canada, Labour Force Survey, CANSIM Tables 282-0008 and 282-0112



When considering the competitive positioning of the sectors across the CMA relative to the province, as well as growth trends and relative employment concentration, several conclusions can be made about where growth is likely to occur across the Region. Current strengths in the Edmonton CMA have driven, and will continue to drive, employment growth over the short term. As such, the industrial and knowledge-based current strengths may translate into continued demand for both industrial and office facilities on light and medium industrial and employment lands. The current strengths for the Edmonton CMA that will have the highest likely impact on industrial land needs include construction and trade (primarily wholesale trade and distribution uses).

The strength of other non-industrial or population-related sectors in the Edmonton CMA like education, accommodations and food services, business, building and other support services, and public administration may also – as a function of their continued growth – demand lands or facilities in industrial areas where permitted. This may result in positive trends, such as the expansion of services in those areas, or negative trends, such as the absorption of industrial and employment lands by non-industrial or incompatible uses. This issue is explored further in the policy review section.

In terms of emerging strengths, or where the County may see increasing levels of growth based on regional trends in employment, the following sectors show positive growth prospects across the region and may generate industrial demand:

- Agriculture
- Forestry, fishing, mining, and oil and gas (primarily oil and gas)
- Transportation and warehousing
- Manufacturing

Growth in these four sectors has the potential to translate into a range of development requirements, from large-scale, land-extensive development down to smaller-scale, office-oriented development. Growth may be irregular, with several large greenfield developments moving forward at once, or long periods of inactivity and expansions on existing sites. Although, given the pace of recent developments in the Acheson Industrial Area, periods of inactivity are unlikely to occur without a major macro-economic collapse similar to the 2008 / 2009 global recession.

In the case of agriculture, growth trends suggest that if challenges with labour force availability and land availability are resolved, the County may have opportunities to support the growth of agriculture-related industrial development (e.g. machine shops, food processing). This is particularly relevant for rural areas of the County.

The manufacturing sector exhibits characteristics of a more mature sector, but its recent performance at the local level suggests the possibility of modest development prospects in the near term. This outlook is supported by the manufacturing sector's comparative size and regional employment competitiveness. As a result, the sector should be a target for niche business attraction, retention and expansion activities in the County. Accordingly, industrial demand also likely to come from existing businesses looking to expand operations or relocate facilities within the Capital Region rather than from businesses looking to relocate to the Capital Region. Just as it is



important to maintain an inventory of land to attract investment, it will be necessary for the County to maintain an inventory of land to accommodate any expansion of the manufacturing sector (or existing and emerging sectors as well for that matter), as a means of retaining existing businesses.

3.2.4 Regional Gap Analysis

From a more qualitative perspective, potential market capture may also be assessed based on the regional “gaps” in sector targeting. By targeting these niche and gap areas, the municipality may be able to attract investment based on limited regional competition. The Capital Region Board, in the *Economic Road Map for Alberta’s Capital Region*, outlined the regional competitive environment for economic development based on the sector-focus of member municipalities. There are a number of common sectors targeted throughout the Region with relevance for an industrial land strategy²⁴:

- Green industry including environmental building practice, eco-industrial development and green/environmental products, services and technologies (e.g. waste management, water, renewable energy) (7)
- Energy, including upgrading and processing, and oil and gas servicing (7)
- Professional, scientific, and technical services including information technology, research and knowledge-based industries (6)
- Advanced technologies/advanced manufacturing (3)
- Logistics including transportation, warehousing and distribution (3)

Further to that list, the *Economic Road Map* suggests that seven municipalities across the Capital Region have a focus on attracting light industry in their economic development strategies, or industries that focus on the utilization of already processed inputs to produce relatively higher value output goods. This could potentially include development in any of the sectors mentioned above.

While Parkland County has the potential to attract new businesses in each of these sectors, given Parkland County’s existing strengths and likely growth sectors, the most notable sectors from the above list include:

1. Logistics including transportation, warehousing and distribution (3)
2. Advanced technologies/advanced manufacturing (3)
3. Energy, including upgrading and processing, and oil and gas servicing (7)

On the one hand, logistics and manufacturing represent the largest relative gap with respect to the number of communities targeting these sectors for growth (each of these sectors only have three communities actively targeting them for growth). On the other hand, service oriented operations supporting the oil and gas sector is a relatively

²⁴ The number in brackets indicates the number of communities currently targeting that sector.



saturated area with seven communities across the Capital Region targeting these activities. Accordingly, Parkland County is well positioned to continue to attract and retain logistics oriented operators. Moreover, consultation with local and external stakeholders has reinforced this direction for the County, outlining a number of advantages for the community.

Parkland County's competitive strengths are its cost of real estate and access to transportation corridors. While manufacturing firms are attracted to both of these features, they are often more concerned with access to a skilled workforce, quality of life/ place considerations, and access to appropriately sized parcels of land or buildings to accommodate their needs. In this vein, the perceived lack of services to support the Acheson Industrial Business Park along with the lack of industrial lands that can accommodate small to medium size facilities and yards (16,000 to 25,000 square feet), could make the attraction of small to medium sized advanced manufacturing operations difficult. For these reasons, it will be a challenge for Parkland County to positively differentiate itself from the Capital Regions other communities actively targeting the manufacturing sector. Over the long term, as Acheson reaches build out, the Meridian Business Park will become more attractive to investors. This park could be positioned or marketed as a niche oriented professional and scientific / advanced manufacturing cluster, given its proximity to Edmonton and location along major transportation routes. At a smaller scale, Entwistle may be able to leverage manufacturing trends to support growth in niche areas of the sector, particularly related to resource extraction activities.

3.3 Regional Industrial Areas and Characteristics

Given Parkland's location within the Capital Region, the County is well positioned to capitalize on this area's anticipated long-term employment growth potential. Parkland, however, is located in a competitive environment, with favourable opportunities for industrial development within the neighbouring municipalities of Edmonton and Leduc County. Parkland also competes with industrial land opportunities within the broader Capital Region market. These municipalities offer attributes that appeal to prospective international and local firms. The degree to which Parkland can capitalize on this potential will depend significantly on the competitiveness of its industrial land base.

The following provides an overview of the key characteristics of industrial and business parks, as well as an overview of the existing industrial areas within the Capital Region with which Parkland competes. Commentary is also provided regarding planned industrial areas which are expected to be developed over the medium and longer term which are expected to exhibit competition for Parkland in the future.

3.3.1 General Industrial/Business Park Characteristics

Industrial/business parks require good access to regional transportation networks, on-site infrastructure including roadways and utilities, a critical mass or complementary



industries, and available zoned and serviced land. Industrial/business parks are typically located on flat to slightly rolling topography in areas with minimal environmental issues. Roadways within industrial parks tend to be laid out in a grid system to optimize circulation and parcel configuration. Parcels are typically square or rectangular in shape to optimize site design. Many of these attributes help to optimize the end-users' development speed-to-market, while minimizing development costs and project risk.

The specific attributes that are required for an industrial/business park to be successful are largely based on the intended function and designations, which are broadly defined here as general industrial and business park. General industrial lands typically accommodate light/advanced manufacturing, logistics, distribution and transportation sectors. Generally, industrial parks with these land use designations have the following physical requirements:

- Proximity to controlled access highways (e.g. Highway 16) is critical for the success of general industrial parks that have a significant degree of manufacturing, warehousing, distribution and logistics. These parks do not necessarily have to be adjacent to a controlled access highway but must be in proximity and easily accessible via major arterials that pass through limited residential or mixed-use commercial area(s).
- Size is vital to ensure a wide selection/flexibility of land options and parks must include a sufficient supply of large parcels. As a minimum, 200 acres (80 Ha) is a suitable size for a park, in order to reach the critical mass needed to provide reasonable presence, choice and economies of scale. Newer parks focused on warehousing and transportation tend to be larger, in excess of 500 gross acres (202 gross Ha).
- Location must provide efficient and effective vehicular access and circulation, particularly for heavy truck traffic, with a minimum of two access points to enter/exit the industrial park.
- Buffering is important for general industrial parks in order to minimize noise and air pollution to neighbouring residential and other non-residential areas.
- Parcel size and configuration needs to be conducive for a wide range of land uses, especially for land extensive uses such as wholesale trade and transportation.
- Land prices must be competitive, given the relatively land-extensive nature associated with many uses in General Industrial parks.

3.3.2 Existing Industrial Areas

Key industrial areas with which Parkland competes directly for business attraction and retention include Northwest Edmonton, Aurum Industrial Park and the Nisku Business Park. Parkland also competes with municipalities of Spruce Grove and St. Albert for industrial development given their geographic proximity.

Overview



The following explores key industrial development potential within these competing areas.

Aurum Energy Park

The Aurum Energy Park is a recently developed industrial park of 700 acres (283 Ha) situated in the City of Edmonton's northeast. The Park has direct access to the Yellowhead Trans-Canada Highway (Highway 16) and the park will have direct access to Anthony Henday Drive upon the completion of the northeast extension in November 2016. A major catalyst to this park is the planned conversion and expansion of Aurum Road to a major six-lane highway which will provide a barrier-free transportation corridor to Fort McMurray. The highway is projected to be completed in 2020. Other transportation improvement plans that will benefit the park include expansion of rail connectivity with the Canadian Pacific Railway and the National Railway which run through the park and will allow for bulk transportation to major markets.

Over 20 firms involved in heavy construction, warehousing and shipping materials to the oil sands and other resource projects have announced plans or have developed facilities in the park.

Edmonton Northwest District

The Northwest Industrial District (Northwest District) is located in Northwest Edmonton, extending east-west along the Yellowhead Trans-Canada Highway (Highway 16) and north-south along the Anthony Henday Drive corridor. The District encompasses 6,700 net acres (2,711 net Ha) of developed industrial land, the largest concentration in the Capital Region.

Northwest Edmonton has the largest amount of developed industrial space within the City of Edmonton and is largely oriented to logistics, transportation, warehousing and light manufacturing. The majority of the City's transportation and logistics land uses are located in Northwest Edmonton, within proximity of the CN Intermodal facility and major highways, such as the Yellowhead Trans-Canada Highway which serves as a major connection to the Canadian west coast. The recent construction of Anthony Henday Drive further strengthens the highway connections to this area and the area's competitive advantage in the transportation and logistics sectors.

The District's newer areas are located west of 170th Street and north of the Yellowhead Trans-Canada Highway. Northwest Edmonton has approximately 1,300 net acres (526 net Ha) of vacant industrial land and is expected to continue to experience strong employment growth in the industrial sector. Established large-scale industrial parks in Northwest Edmonton which can accommodate short- to medium-term industrial growth include the Northport Business Park, Horizon Business Park, IG Northwest Business Park, Golden West Business Park and Rampart Industrial Park. These areas are prestige and considered highly marketable.

Over the longer term, the Winterburn Industrial Area (located immediately east of the Acheson Industrial Area) is expected to accommodate a significant share of industrial



development within Northwest Edmonton. The Winterburn Industrial Area was recently subject to a new ASP which designates the area's remaining vacant industrial lands to accommodate a wider range of uses, including light industrial, medium industrial and business industrial development. This will raise Winterburn's competitiveness in the light industrial and prestige industrial development markets.

Nisku Business Park

The Nisku Business Park is located on the east side of the QE II Highway, just east of the Edmonton International Airport in Leduc County. The Nisku Business Park, which dates back to the early 1980s, covers an area of over 4,000 net acres (1,619 net Ha). The park, along with the neighbouring Leduc Industrial Park (located within the City of Leduc), forms the largest energy cluster in North America. The Nisku Business Park has a mix of light and medium industrial development of general industrial character, with a high concentration of businesses serving the energy sector. Major industrial sectors include warehousing, manufacturing and construction, largely related to the energy sector. Recent development activity has been largely in warehousing, manufacturing, office and multi-tenant industrial condos. The nature of development in Nisku is evolving, with an increasing share of development in Nisku related to commercial development. The Nisku Business Park has an estimated 250 net acres (101 net Ha) of vacant industrial land and is approaching built out.

Spruce Grove

The City of Spruce Grove is situated west of Edmonton along the Yellowhead Trans-Canada Highway.

Industrial development activity has gained momentum in Spruce Grove over the past few years with the opening of two new industrial areas – Spruce Grove Industrial Park and Campsite Business Park, located south of Highway 16A. The parks are prestige employment areas and have a light industrial presence comprised of wholesale trade, business services and other commercial services. Both parks offer further potential to accommodate further industrial development.

St. Albert

The City of St. Albert has two designated industrial areas – Riel Business Park and Campbell Business Park. The two parks, which accommodate light industrial uses in an urban setting, are approaching build out. Riel Business Park has a general industrial character, while Campbell Business Park offers a prestige industrial character. The City has limited existing vacant industrial land opportunities but over the longer term this is expected to change as discussed in Section 3.3.2.

Comparison of Physical and Economic Attributes



Key industrial areas within the surrounding market area were assessed and compared to the Acheson Industrial Area in Parkland County based on a number of general physical and land use characteristics. Figure 16 summarizes key physical and economic characteristics of the select industrial areas, which are discussed below.

Industrial Park Size and Vacancy

- The parks surveyed range in size from 35 net acres (14 net Ha) to 7,995 net acres (3,235 net Ha); the largest include the Northwest Industrial District in Edmonton, Nisku Business Park and the Acheson Industrial Area. In comparison, the Campsite Business Park and Spruce Grove Industrial Park are the smallest of the surveyed industrial areas.
- The Acheson Industrial Area and Northwest Edmonton offer significant opportunities to accommodate future industrial development. In comparison, the Nisku Business Park and Aurum Energy Park are approaching build out. The Campsite Business Park and Spruce Grove Industrial Park are largely unbuilt but, given their size, have limited supply of vacant industrial land.

Land Absorption

- Annual land absorption has been strongest in Northwest Edmonton (148 acres), the Aurum Energy Park (125 acres) and the Acheson Industrial Area (90 acres).
- In comparison, Nisku Business Park has averaged 20 acres (8 Ha) of land absorption per year, while land absorption in Spruce Grove Industrial Park and Campsite Business Park has averaged 10 (4 Ha) acres and 2 (0.8 Ha) acres annually, respectively.

Parcel Size

- Parcel size is a function of the nature of the industries which operate within a park. Parks oriented towards heavy industry, warehousing and distribution require larger parcels. Conversely, business parks with a large office or business services component often require smaller parcels of 2 acres (0.8 Ha) or less.
- Common parcel size in each park ranges from a high of 5-50 acres (2-20 Ha) in the Aurum Industrial Area and 2-20 acres (1-8 Ha) in the Acheson Industrial Area and Northwest Edmonton, to a low of 1-4 acres (0.4-2 Ha) in the Campsite Business Park.
- The larger industrial areas, including Acheson Industrial Area, Northwest Edmonton, Nisku Business Park and Aurum Industrial Park, offer the widest range in parcel sizes, catering to a broad range of uses.

Land Uses/Occupant Mix

- The surveyed industrial areas present a wide range of industrial land uses.
- Northwest Edmonton, Acheson Industrial Area and Aurum Energy Park are largely oriented to light industrial uses with some medium industrial uses while Nisku



Business Park is oriented more towards medium industrial uses. In comparison, Campsite Business Park and Spruce Grove Industrial Park are highly oriented towards prestige employment uses

Industrial Land Prices

- Serviced industrial land prices vary by industrial area with the highest land values in Northwest Edmonton (\$625,000 per acre) followed by \$425,000 per acre in the Acheson Industrial Area and Aurum Energy Park and \$400,000 in Nisku Business Park.
- The lowest industrial land prices within the surveyed industrial areas are in Spruce Grove Industrial Park and Campsite Business Park, averaging \$300,000 and \$330,000 per acre, respectively.
- From a competitiveness perspective, land prices can provide a key advantage, especially for land intensive uses such as transportation, wholesale trade/logistics, warehousing and large scale manufacturing.

FIGURE 16: GENERAL PHYSICAL CHARACTERISTICS OF EXISTING COMPARATOR BUSINESS AND INDUSTRIAL PARKS

Industrial/Business Park	Total Size (Net Acres)	Developed (Net Acres)	Vacant (Net Acres)	% Vacant	Recent Land Absorption per Year (acres)	Typical Parcel Size	Servicing	Occupant Mix	Average Land Price (\$ per acre)
Acheson Industrial Area (Parkland County)	2,558	1,570	988	39%	90	2 - 20 acres	Partly municipally serviced	Manufacturing, construction, wholesale trade, warehousing, transportation and logistics	\$ 425,000
Aurum Energy Park (City of Edmonton)	720	630	90	13%	125	5 - 50 acres	Full municipal water/sewer	Transportation, logistics, warehousing	\$ 425,000
Campsite Business Park (City of Spruce Grove)	35	5	30	86%	2	1 - 4 acres	Full municipal water/sewer	Business Services, Professional, technical and scientific services, Construction	\$ 330,000
Nisku Business Park (Leduc County)	4,270	4,020	250	6%	20	2 - 25 acres	Full municipal water/sewer	Energy sector, transportation, manufacturing, construction	\$ 400,000
Northwest Edmonton (City of Edmonton)	7,995	6,700	1,295	16%	148	2 - 20 acres	Full municipal water/sewer	Distribution/ wholesale trade, transportation, manufacturing	\$ 645,000
Spruce Grove Industrial Park (City of Spruce Grove)	85	25	60	71%	10	2 - 11 acres	Full municipal water/sewer	Manufacturing, business/ commercial services, logistics	\$ 300,000

Source: Watson & Associates Economists Ltd.



3.3.3 Planned Industrial Areas

Over the medium and longer term, a number of new industrial areas are anticipated to become available in the Capital Region. This includes the Edmonton Energy and Technology Park within the City of Edmonton, various industrial/business park developments within Leduc County and potential industrial land expansions in St. Albert. Over the longer term, these future planned developments will pose significant competition for Parkland County. The following provides commentary on these new development areas.

Edmonton Energy and Technology Park

The Edmonton Energy and Technology Park, located in Northeast Edmonton, represents the last remaining large greenfield area within the City that is available for industrial development. The park, which is now under development, has a net developable area of approximately 8,000 net acres (3237 net Ha) and is being marketed as an eco-industrial hub, which will take advantage of its proximity to Alberta's Industrial Heartland. The market potential of the park will be greatly strengthened when the northeast part of Anthony Henday Drive is completed in 2016. The park is intended to accommodate a range of industrial uses including energy-related value added industries, manufacturing, logistics and research and development activities.

Leduc County

Approximately 1,500 net acres (607 net Ha) are expected to become available for development in three industrial parks in Leduc County over the next few years: Border Business Park (WAM Development), QE II Business Park (Hopewell Development) and Discovery Business Park (Remington Group). These three parks will be highly marketable for distribution/logistics, manufacturing, office and other commercial uses. Further industrial development opportunities will also likely transpire along the Highway 19 corridor in proximity to the airport, over the longer term. This includes the South of Devon area which is currently subject of an industrial area structure plan.

St. Albert – Industrial Land Expansion

The City of St. Albert is currently assessing potential industrial land expansion areas which would see their industrial land supply opportunities expand considerably in the future. This includes approximately 240 gross acres (97 gross Ha) of land identified for short-term development located along the Anthony Henday Drive corridor and a further 600-700 gross acres (243-283 Ha) for longer term development along Ray Gibbon Drive. These lands offer the potential to accommodate a broad range of general and prestige industrial uses including distribution/wholesale trade, transportation, and commercial services.



3.4 Evaluation of Land Use Policy and Regulations

The County's industrial land policies, land use regulations and other guiding documents play a key role in determining the potential and desire for industrial land development in Parkland County. The challenge for the County lies in ensuring that land use regulations strike a balance between supporting the attraction and retention/expansion of businesses while offering a competitive product in the regional marketplace and ensuring that industrial development is not a detriment to other land uses in close proximity and broader quality of life.

Given the changing nature of industrial development, there are also evolving requirements for businesses. Many more knowledge-based industrial activities require different types of industrial land that can accommodate more integrated office/industrial type uses, often at a higher standard of urban design. Municipalities have rushed to meet this need by designating business parks to accommodate these new integrated activities. It is often the case that these types of land are under pressure from non-industrial development (e.g. commercial and retail) that also values these higher standards of land use regulations, urban design and infrastructure.

The following review is intended to outline the policies, regulations and guiding principles that must be considered in the development of this strategy.

3.4.1 Parkland County Municipal Development Plan

Approved in 2007, with amendments in force up to and including 2010, Parkland County's Municipal Development Plan (MDP) sets out the guidelines for orderly growth and development of the County. The MDP provides the projected framework within which growth and development may take place. Section One of the MDP sets out the guiding principles for the Plan, including the following goal for economic development:

Emphasize Economic Development – The County supports new industrial and commercial development that is compatible with its other goals.

Such development is supported by this Municipal Development Plan and should be encouraged and accommodated in appropriate locations to create jobs, attract investment and expand and diversify the tax base.

The MDP's Land Use Concept contains policies with a bearing on industrial and commercial uses.

These uses “continue to be directed to existing planned business parks including Acheson, the Fifth Meridian and the Entwistle Business Parks. An existing highway commercial node located at the intersection of Highways 16 and 44 is recognized. Municipal Development Plan policies allow for highway commercial development at strategic locations.”



The MDP also supports the application of new best practice initiatives to better manage its resources and to achieve sustainability. Relevant examples include:

- Encouraging eco-industrial parks that promote synergistic relationships between industries such as making use of waste products of neighbouring industries.
- Encouraging Brownfield development which involves redeveloping, expanding, or reusing a property which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. The decommissioning of the Wabamun power plant site provides an opportunity for Brownfield development in Parkland County.

Section Five of the MDP establishes policies for lands designated industrial and commercial (i.e. Industrial/Commercial or Highway Commercial) in the Plan. This section contains five objectives to guide the future development in existing and new industrial and business parks. These include:

- Direct intense industrial and commercial developments to existing serviced industrial/business parks
- Encourage new industrial and commercial subdivision and development
- Assume a proactive approach to considering the implications of aggregate resource and hydrocarbon resource extraction proposals on the environment and adjacent land uses
- Encourage eco-industrial parks and green initiatives in considering industrial development
- Promote positive aesthetics by applying a high standard of design guidelines to new industrial and commercial developments located along Highways 16, 16A, 60, 44 and 779

Section Five also contains policies to direct the future development of commercial and industrial lands. With respect to commercial development, relevant policies include:

- (5.1) Commercial development will be directed to locate in appropriate existing industrial commercial parks
- (5.3) Highway commercial development shall be encouraged to locate and/or expand within the commercial nodes designated on Map 2 where safe access and egress is feasible without disrupting the function of the highway by locating on service roads
- (5.4) The County shall require that a high standard of design and landscaping be applied to highway commercial uses located along Highways 16, 16A, 44, 60 and 779

With respect to industrial development, relevant policies include:

- (5.5) New industrial development shall be encouraged to locate in the Acheson Business Industrial Park, the Fifth Meridian Business Park and the Entwistle Business Park
- (5.7) The County shall investigate the feasibility of extending piped water and sewer services to the Fifth Meridian Business Park and the Entwistle Business



Park, and recovering the cost of extending services through an off-site levy or other cost recovery methods

- (5.8) Eco-industrial parks shall be encouraged within the Acheson Industrial, Fifth Meridian and Entwistle Business Parks
- (5.11) The County shall develop and implement a marketing strategy to attract new industrial businesses to existing industrial Area Structure Plan areas as a means of better balancing business assessment with residential assessment
- (5.12) Pursuant to Policy 5.11 and in cooperation with Trans Alta, the marketing strategy shall consider an approach for attracting heavy and medium industrial development to Trans Alta's reclaimed lands located north and south of Wabamun Lake. In particular, the strategy will consider attracting such industry to the Whitewood mine located along the north side of Highway 16. The reclaimed mine site provides an opportunity for a new Brownfield, eco-industrial type of heavy industrial park

Section Two of the MDP outlines the policies to direct future development of agricultural lands. This section has limited implications for the future industrial land requirements for the County. This section does, however, "encourage the growth and expansion of value added agricultural or industrial agricultural uses such as food processing facilities". Relating to this objective, the MDP notes:

- (2.13) Value added agricultural industrial uses can take place on or off the farm. Those on-farm value added industrial uses that exceed the Land Use Bylaw provisions for a Level 3 home business will be required to locate in designated industrial parks

Note that the MDP defines the Value-added Agricultural Industry as a project that can clearly demonstrate it adds value to a primary agriculture product and includes agricultural product manufacturing, food-processing activities, and nonfood- processing activities. Activities related to an agricultural value-added enterprise can take place on or off the farm. Examples include, but are not limited to, separating, grading, cleaning, and packaging produce, making jam from berries, converting milk into cheese to sell in roadside stores or adding a canning or pickling operation to a farm business, and activities such as producing fibreboard from hemp or straw. Agritourism, organic farming, storage, distribution, and transportation are not considered to be agricultural value-added activities.

3.4.2 Area Structure Plans

Area Structure Plans (ASPs) in the County provide a more detailed framework for development which includes proposed land uses, density of population and sequence of development, general location of roadways, public utilities in the area, and any other additional requirements that Council has directed. There are a number of ASPs that direct development in the industrial areas of the County, with a select number of plans



summarized briefly below. Emphasis has been placed on the ASPs in areas that have vacant industrial land opportunities.

Acheson Industrial Area Structure Plan (1997)

The purpose of the Acheson Area Structure Plan is to facilitate and direct the long term industrial/commercial development of lands within the boundaries of the ASP while recognizing the integrity of other land uses within the area. This plan has a time horizon of approximately 20 years. The Acheson Area Structure Plan area encompasses approximately 4,145 hectares (10,240 acres, or approximately 16 square miles) of land in Parkland County.

It should be noted that this ASP is still in effect, but is currently under review with a newly drafted ASP completed in 2014 and awaiting approval by the Capital Region Board. The newly drafted ASP is reviewed in the next section.

The ASP area is located on the eastern edge of the County. The ASP area is defined by Provincial Highway 16 to the north, Hillview Road and the City of Edmonton boundary to the east, Provincial Highway 628 and the Stony Plain Indian Reserve #135 to the south, and the City of Spruce Grove to the west.

With respect to current land uses, the majority of land in the ASP area is currently used for agricultural purposes, especially south of Highway 16A. As of 1997, industrial uses occupied only 10 percent of the total area. These industrial lands are primarily bordered by the CNR line to the north, Highway 60 to the east and Highway 16A to the south. Despite this exposure to major highways, there is only one official access point to the park, at the eastern limits, onto Highway 60. There are a variety of businesses represented in the industrial area, including contractor shops, lumber yards, farm implement dealers and other.

Oil and gas extraction activities in the ASP present challenges with respect to compatible uses and buffer requirements. The existing Chevron Gas Plant is considered a “level 1” facility which requires a separation distance of 100 meters from residential and other development. Other development constraints resulting from oil and gas activities include the existing infrastructure of flow lines and pipelines which would complicate and increase the costs of municipal infrastructure, and the service roads and traffic which are needed for the operations and maintenance of wells and batteries.

The entire ASP is designated for industrial/commercial use under Parkland County’s Municipal Plan adopted in 1979. With respect to these uses, the ASP is districted ICC-Industrial/Commercial Core.

The ASP contains several objectives to guide the future development of these lands. These objectives are noted because of their potential influence on the location and use of future industrial lands in the ASP.

- To accommodate a variety of business/commercial/industrial opportunities including major distribution and shipping warehousing, resource industry supply and service, light manufacturing and assembly, transportation and related uses



- To accommodate existing non-industrial/commercial land uses within the ASP and to create greater certainty as to the intended long-term use of lands for all users.
- To avoid further dispersed, scattered industrial development
- To balance the designation of land for industrial/commercial purposes with a realistic exception of the timing of such development
- To develop servicing infrastructure in an orderly, efficient and cost-effective manner to facilitate industrial/ commercial and other development
- To achieve “critical mass” or economies of scale of development so as to minimize infrastructure costs

In terms of the land use concept plan, the ASP area is designated as predominately an industrial/commercial area. The main concentration of this land use type will be in the northern half of the plan area, with development stages in sequence with the implementation of water and sewer servicing. In this vein, no development on individual parcels of land with independent servicing systems will be permitted to maximize future servicing systems.

Existing residential uses within the ASP may continue as non-conforming uses, but no-districting, subdivision or development will be permitted of these uses. This is to protect the existing and potential industrial/ commercial land base.

Acheson Industrial Area Structure Plan (Draft – January 2014)

The Acheson Area Structure Plan will guide the future long term industrial/ commercial development of the Acheson area for the next twenty to thirty years. The Acheson Area Structure Plan area encompasses approximately 5,019 hectares (12,402 acres, or approximately 19 square miles) of land in Parkland County.

It should be noted that this is still a draft document, pending approval from the Capital Region Board. This ASP provides an update to the previous ASP in a number of areas. There are two overarching changes worth noting from the perspective of this industrial lands strategy. First, the new ASP includes a greater geographic area with the addition of 3 square miles or 874 hectares. The new land has primarily extended the southern boundary of the ASP. The second major change relates to the specific districting of lands. The previous ASP districted industrial and commercial lands as “ICC-Industrial/Commercial Core” whereas this ASP considers these lands as BI (Business Industrial), MI (Medium Industrial District). This change affects permitted uses as outlined in the County’s Land Use By-law.

The ASP area is located on the eastern edge of the County. The ASP area is defined by Provincial Highway 16 to the north, Hillview Road and the City of Edmonton boundary to the east, Provincial Highway 628 and the Stony Plain Indian Reserve #135 to the south, and the City of Spruce Grove to the west.

With respect to current land uses, the majority of land in the ASP area is currently used for agricultural purposes, approximately 2,464 hectares (6,086 acres) is districted BI (Business Industrial), MI (Medium Industrial District), or IRD (Industrial Reserve



District) in the Land Use Bylaw. A small portion, 12.46 hectares (30.79 acres) is districted RIC (Rural Industrial / Commercial District).

Acheson is serviced by provincial highways 16, 16A, 60 and 628. A series of local arterial and collector roads, coupled with a developing internal road network provides good access for industrial, commercial and residential users. Acheson is also located approximately 8 kilometres west of Canadian National Rail's Edmonton Intermodal Yard. The CNR's main line transects Acheson with several spurs providing rail access to Acheson. Acheson is located 32 kilometres from Edmonton International Airport.

In terms of future development, industries related to transportation distribution, logistics, oil sands development, oil and mining, warehousing, and manufacturing are suited for Acheson due to their requirements for transportation networks, access to provincial and national markets, and typically large land requirements.

With respect to guiding development objectives for industrial and commercial areas, those relevant are highlighted below.

- (6.1.1.1.) To support the economical and orderly expansion of the Acheson area for industrial and commercial development
- (6.1.1.2.) To ensure that all future industrial and commercial development in Acheson is fully serviced
- (6.1.1.6.) To promote Acheson in the Edmonton Capital Region by supplying a variety of parcel lot sizes

Relating to industrial and commercial areas, those policies with implications for future land-uses include:

- (6.1.2.2.) Industrial land uses in Acheson will be light to medium in nature. Heavy industry will not be permitted
- (6.1.2.10.) Parkland County encourages the clustering of similar and compatible businesses and sectors that support the sharing of information, products and linkages to resource and transportation networks
- (6.1.2.11.) Parkland County encourages infill development on existing vacant or underutilized lots
- (6.1.2.12.) Parkland County encourages the completion of a fiscal analysis as part of the development process to ensure the economic potential of a particular site is maximized. This should address how site Floor Area Ratio (FAR) can be optimized
- (6.1.2.14.) Developments which do not provide a net benefit to the County will be discouraged
- (6.1.2.24.) All developments shall be serviced by water, sewer and all necessary shallow utilities. The County will not support subdivision, redistricting or development which does not provide full municipal site servicing
- (6.1.2.25.) The County encourages land subdivision that establishes a variety of parcel sizes to facilitate developer flexibility and to anticipate business needs. Land subdivision shall not result in lots that are not serviceable or accessible

Entwistle Area Structure Plan (2013)



The purpose of the Entwistle Area Structure Plan (ASP) is to provide Parkland County and its ratepayers with a document that outlines direction for balanced and sustainable development of the Hamlet and its surroundings.

The lands contained within the Entwistle Area Structure Plan can be defined as those Sections in Township 53, Range 7, West of the 5th Meridian: a) All those lands in Section 21 north of the Yellowhead Highway 16; b) The North East Quarter of Section 18 east of the Pembina River; and c) All those lands in Section 17 east of the Pembina River.

Existing land uses within the Plan Area can be grouped into four broad categories, residential, industrial, commercial, and agricultural/resource extraction. Within the Hamlet boundary the land uses can also be grouped into four broad categories, including residential, industrial, commercial, and urban reserve/direct control.

This review is concerned with the Entwistle Industrial Business Park which consists of approximately 150 acres of land within the Entwistle area.

Although the Entwistle Industrial Business Park is located in close proximity to other serviced business industrial operations, municipal servicing and development for this quarter section must be phased as there is a gravel extraction operation presently covering a large portion of the quarter section. Due to the distance from existing municipal servicing, un-serviced industrial development will be temporarily permitted.

The most significant development objectives in this plan include:

- (9.2.1) Support the development of a fully serviced commercial/industrial park within the Plan Area
- (9.2.2) Allow un-serviced medium industrial development on a temporary basis until these lands can be accessed by municipal water and sewer

The most significant development principles in this plan include:

- Upon full build out of the Entwistle Industrial Business Park, all developments shall be connected to the Hamlet's municipal servicing system
- Initial development in the industrial business park that "leapfrogs" and is not within 200 metres of a municipal connection may be allowed to be developed temporarily to an un-serviced standard
- Costs associated with the construction, operation and on-going maintenance for any on-site private water or sewage system shall be borne by the landowner or developer
- Should a developer install municipal servicing and infrastructure upgrades which benefit other parcels of land, they shall be compensated through an endeavour to recover agreement
- Developers who propose to tie into the municipal servicing may be required to supply detailed studies including but not limited to, water and sewer servicing studies and domestic groundwater studies at the discretion of Parkland County, to ensure that the carrying capacity of the land or infrastructure is capable of supporting the proposed development



Fifth Meridian Area Structure Plan (2013)

The Fifth Meridian Area Structure Plan (ASP) will guide the future development of the area until 2020. The ASP consists of approximately 1,455 ha of land. The area is bounded by Highway 16 to the north, the Town of Stony Plain to the south, Rosenthal Road to the west and Boundary Road and the City of Spruce Grove to the east.

The Fifth Meridian Business/Industrial Park consists of 247.5 gross ha or 17% of the total ASP. From the perspective of future industrial and business development, this plan has several objectives. These include to:

- Encourage economic development and business investment to strengthen and broaden the County's economic base
- Accommodate a range of industrial and commercial land uses in a manner compatible with surrounding land uses

From a land use perspective, the Fifth Meridian Business/Industrial Park allows for Business/Industrial uses. Examples of such uses that should be encouraged include Agri-based commercial uses on larger lots, non-noxious value-added agricultural food processor uses, manufacturing, warehousing distribution, and commercial related tourist facilities, including truck stops and recreational vehicle parks. Certain limitations on types of uses allowed may need to be implemented based upon available servicing capabilities and fire protection that can be afforded. In this vein, the area is generally unserved, which may limit development intensity.

The future development concept of this area directs development to the following locations:

- Areas along the service road parallel to Highway 16 on either side of service highway 779
- Along the west side of service highway 779

3.4.3 Parkland County Land Use Bylaw

Approved in 2009, the Land Use Bylaw for Parkland County establishes the regulations governing the use of land and buildings in the County. Section Seven of the LUB establishes policies for industrial districts of the County, with the intended purpose of each industrial district outlined below.

- Business Industrial (BI) District: to accommodate a range of lower intensity industrial and commercial uses which may have outdoor storage or work activities, but do not create any nuisance outside a building that would affect compatibility with non-industrial uses, in fully serviced business and industrial parks. Developments in the BI district, particularly along high-visibility highways and County roads, are subject to a high landscaping standard.
- Medium Industrial (MI) District: to provide for a broad range of compatible industrial uses on fully serviced parcels, including uses that require outdoor storage or work



activities. Nuisance factors of intended uses do not extend beyond the boundaries of the parcel.

- Heavy Industrial (HI) District: to provide for large scale industrial uses that, due to their large land requirements and potential negative impacts on adjacent land uses (e.g. noise, odour, risk of toxic emissions, fire or explosion hazard), are incompatible with non-industrial uses, but may be compatible with extensive agricultural operations.
- Rural Industrial/Commercial (RIC) District: to accommodate lower intensity industrial and commercial development requiring minimal servicing outside of business and industrial parks.
- Industrial Reserve (IRD) District: to accommodate existing low intensity development with minimal servicing requirements, and to reserve land for future expansion of industrial and commercial land uses to prevent premature and scattered development patterns.

In addition to the above mentioned districts, Section Seven of the LUB includes regulations for Resource Extraction (RE) districts. These districts allow for uses associated with the large scale exploration, extraction, processing, and reclamation of coal resources in the Wabamun Lake area and areas falling within mine permit areas designated by Alberta Energy and Utility Board (EUB), as well as agricultural production and related farming activities. Though not a key component of the County's light and medium industrial land inventory, these districts could potentially accommodate a limited number of industrial activities compatible with resource extraction, such as industrial storage and warehousing or mine-related general manufacturing or processing.

Direct Control (DC) districts permit the County to regulate and control the use, development, and subdivision of land or buildings in specific areas of the County. County Council considers the application and designation of DC districts in Parkland County where:

- Development regulations and control by means other than the districts provided for in the LUB may be inadequate or appropriate in having regard for existing or future developments and to the interests of the applicant, public, and County
- An approved statutory plan for the area could be more effectively implemented
- A proposed development is of unique for or nature not contemplated or reasonably regulated by another land use district provided for in the LUB

Section Nine of the LUB outlines the DC districts in Parkland County, including the Acheson Industrial Area Direct Control District (DC Area 1). The DC district applies to lands within the Acheson area to the north and south of Highway 16A, west of Range Road 261 (i.e. Cholla and Northlands landfills), and outlines the regulations for expansion of existing uses, and introduction of new uses (indoor and outdoor recreation) on reclaimed lands. Further, the LUB contains DC districts for the Highvale End, Whitewood (DC Area 3), and Keephills (DC Area 4) areas. Both Highvale End and Keephills DC districts provide regulations outlining the County's interactions with existing TransAlta activities in those areas, while the Whitewood DC outlines the



guidelines and conditions to permit different types of development in the Whitewood area.

Section 10 of the LUB outlines several overlays in Parkland County, including the Acheson Industrial Commercial Area Overlay. The overlay outlines a number of regulations to ensure that industrial and commercial development in the Acheson Industrial Area has minimal impact on the Osborne Acres residential subdivision.

3.4.4 Evaluation of Land Use Policy and Regulations

The following evaluation of land use policies and regulations builds on the inventory of land use policies above, and examines Parkland County's policies and regulations within the context of existing and perceived employment and business trends, and common investment readiness and competitiveness factors in industrial and employment land development. The evaluation is focused on both the Municipal Development Plan and the Land Use Bylaw, within the context of several key themes that can affect a community's ability to accommodate and compete for industrial and employment land investment:

- Division of industrial and commercial development designations in planning policy documents
- Alignment of policies and regulations with likely forms of growth on industrial and employment lands
- Permission of a wide range of industrial and employment uses in industrial and employment areas
- Permission of non-industrial or non-basic²⁵ uses on industrial and employment lands

Industrial and Commercial Land Designations

Industrial and commercial uses are often considered separately within the context of planning policies in statutory planning documents across Canada. Doing so allows for a very clear definition of the municipality's longer term intent for employment and industrial lands, perhaps limiting the potential for competition among industrial and commercial users and developers. This type of competition is particularly possible in emerging prestige-type business park areas with high levels of accessibility and urban design – lands are often highly desirable for a broad range of enclosed commercial, industrial, and institutional development.

Parkland County presently has just one Municipal Development Plan designation for commercial and industrial lands in the County, with additional Highway Commercial Clusters identified at strategic intersections with Highway 16. Leduc County is the only

²⁵ Economic development theory often categorizes employment as either basic or non-basic, based on its relationship with the local economy. Basic employment primarily includes uses serving non-local markets and/or non-retail markets, and often falls into sectors like manufacturing, transportation, professional services, or information technology. Non-basic employment is largely population-related, or focused on serving the needs of the local population in areas like retail, personal services, health care, or public administration.



other County in the Capital Region that combines industrial and commercial development under one designation in their Municipal Development Plan (though Lamont does not have specific commercial or industrial designations outside of the Heartland Area). Both Sturgeon County and Strathcona County provide separate designations for industrial and commercial lands in their MDPs.

Though secondary plans, area structure plans, and land use bylaws present more defined land use concepts for employment and industrial areas – often separating potentially conflicting industrial and commercial (particularly retail) users in the concept – the combination of industrial and commercial areas as aggregated designations in statutory planning documents often leaves the municipality's intended vision for employment lands and areas open to interpretation and uncertainty in the development process. For that reason, most urban or near urban communities will present separate designations for commercial and industrial development, often with their own separate hierarchies for each use (e.g. light/medium industrial, heavy industrial). While not a key issue preventing investment, the aggregation of industrial and commercial uses into one MDP designation in Parkland County could produce uncertainty among both the private and public sectors when considering the land use concepts for industrial and employment lands and areas over the longer term.

Alignment of Policies and Regulations with Growth Prospects

The potential market capture section outlined existing and emerging opportunities in a number of sectors, including:

- Advanced manufacturing
- Agriculture and agri-business
- Construction
- Mining, quarrying, and oil and gas
- Transportation and warehousing (including distribution)
- Professional services (e.g. engineering, management consulting)

Generally speaking, these sectors have the potential to generate demand with a range of characteristics in industrial and employment areas, from partially- or privately-serviced lots with space for outdoor storage or work, to prestige-type light and medium industrial developments with integrated office/industrial spaces or standalone office spaces. The figure below outlines typical sector-based uses and characteristics for each sector that should be considered in policy decisions, as well as the alignment of land use policies and regulations in Parkland County with these uses and characteristics.



FIGURE 17: ALIGNMENT OF LAND USE POLICIES AND REGULATIONS WITH SECTOR-BASED DEVELOPMENT AND LAND USE CHARACTERISTICS

Sector	Potential Sector-based Uses	Development Characteristics	Land Use Regulation Alignment
Advanced manufacturing	■ Machinery manufacturing ■ Fabricated metal manufacturing and machining ■ Transportation equipment manufacturing ■ Electronics and electrical component manufacturing ■ Structural metals manufacturing	■ Prestige or general in nature ■ 2-10 acre (1-4 ha) parcel sizes ■ Potential for high-quality urban design ■ Outdoor storage or work areas may be required ■ Access to limited access highways required	■ Can generally be accommodated in MI and HI districts (permitted) and BI, RIC, and RE districts (discretionary) ■ Heavy industrial manufacturing can be accommodated in HI district ■ Outdoor storage and warehousing can generally be accommodated in MI, HI, and RIC (permitted) and BI and RE districts (though subject to higher design standards in BI)
Agriculture and agri-business	■ Food processing ■ Beverage manufacturing ■ Bioproducts/fibre manufacturing ■ Biofuels/chemical manufacturing ■ Agricultural support services	■ Likely general industrial in nature, though prestige uses possible ■ Outdoor storage likely (e.g. feedstocks, bulk agricultural materials) ■ High to low levels of urban design ■ 2-10 acre (1-4 ha) parcel sizes	■ Can generally be accommodated in MI and HI districts (permitted) and BI, RIC, and RE districts (discretionary) ■ Abattoir uses can be accommodated in rural areas (RIC) on a discretionary basis ■ Outdoor storage and warehousing can generally be accommodated in MI, HI, and RIC (permitted) ■ Agricultural support services can be accommodated in BI, MI, and RIC districts ■ Bulk agricultural chemical uses limited to MI (discretionary)
Construction	■ Construction trades/contractor office/shop ■ Construction equipment storage ■ Construction equipment rental ■ Modular construction yard	■ General industrial in nature ■ Outdoor storage and work areas likely required ■ Low levels of urban design ■ Relatively low site coverage ■ Standalone or multi-tenant ■ 2-10 acre (1-4 ha) parcel sizes	■ Can generally be accommodated in MI and HI districts (permitted) and RIC, and RE districts (discretionary) ■ Outdoor storage of equipment can generally be accommodated in MI, HI, and RIC (permitted) ■ Could be accommodated in BI if more prestige in nature, with higher standard of design



Sector	Potential Sector-based Uses	Development Characteristics	Land Use Regulation Alignment
Mining, quarrying, and oil and gas	- Heavy equipment repair and maintenance - Contract services (e.g. drilling, excavation) - Machinery and equipment storage - Site remediation contractors	- General industrial in nature - Outdoor storage and work areas required - Low levels of urban design - Relatively low site coverage 2-10 acre (1-4 ha) parcel sizes	- Can generally be accommodated in MI and HI districts (permitted) and RIC, and RE districts (discretionary) - Could be accommodated in BI if more prestige in nature, with higher standard of design and no outside storage - Outdoor storage uses can generally be accommodated in MI, HI, and RIC (permitted)
Transportation and warehousing	- Warehouses and storage - Wholesale distribution - Freight brokers/arrangement - Logistics facilities/trans-loading - Integrated office uses	- Outdoor storage for equipment likely required - Loading/unloading areas - General or prestige in nature - High to low levels of urban design - Land extensive, large building foot prints - Access to limited access highways required 5-75 acre (2-30 ha) parcel sizes	- Can generally be accommodated in MI and HI districts (permitted) and BI, RIC, and RE districts (discretionary), particularly if enclosed (e.g. warehousing and distribution) - Outdoor storage of trailers, trucks, equipment or products can be accommodated in most industrial districts
Professional services	- Engineering and design - Management consulting - Computer systems design	- Standalone or multi-tenant offices - Integrated office and warehouse/manufacturing, storage - Prestige in nature - High levels of urban design - High level of site coverage - Proximity to complementary uses, urban areas 1-5 acre (0.5-2 ha) parcel size	- Can generally be accommodated in BI and MI districts (permitted), and RIC (discretionary) district - Outdoor storage of equipment or vehicles can be accommodated in most industrial districts, including BI (though discretionary)



Overall, the industrial land use districts in the LUB are supportive of existing and potential forms of industrial and knowledge-based growth in the Capital Region and Parkland County. Common developments in each of the sectors – particularly those that are relevant to the development context of Parkland County – are generally listed as either a permitted or discretionary use in BI, MI, HI, or RIC districts. Further, regulations are generally flexible enough for some forms of investment to be potentially accommodated in any industrial district, particularly more prestige-type or enclosed industrial developments in advanced manufacturing, agri-business, transportation and warehousing, or professional services.

Range of Industrial and Employment Uses Allowed in Business and Industrial Areas

In order to remain competitive, industrial and employment areas must be able to accommodate a wide range of potential uses that generate industrial and knowledge-based employment. The figure below assesses the range of industrial²⁶ and commercial office uses in each of the current²⁷ industrial business and employment districts of the LUB. Though not assessed as part of this study, it should be noted that both the local commercial (LC) district (permitted) and the highway commercial (HC) district (discretionary) have the potential to accommodate professional office uses as well.

²⁶ Given the rural nature of industrial and employment areas in Parkland County, several non-industrial or agricultural uses that may be appropriate in industrial areas, such as auctioneering services or livestock auctions, have been included in the assessment. However, it should be noted that this does not suggest these uses will be appropriate on industrial and employment lands in all areas of the County.

²⁷ Given that it is primarily intended to reserve lands for future industrial and employment land development rather than accommodate investment presently, the Industrial Reserve (IRD) district was excluded from the assessment.



FIGURE 18: PERMITTED AND DISCRETIONARY INDUSTRIAL AND EMPLOYMENT USES, BY DISTRICT

District	Permitted Uses	Discretionary Uses
Business Industrial (BI)	- Agricultural support services - Automotive, equipment, and vehicle services - Professional, business, financial, and office support services - Recycling depot – minor	- Auctioneering services - General industrial manufacturing/processing - Industrial storage and warehousing - Natural resource extraction/processing - Recycling depot – major
Medium Industrial (MI)	- Agricultural support services - Auctioneering services - Automotive, equipment, and vehicle services - General industrial manufacturing/processing - Industrial storage and warehousing - Professional, business, financial, and office support services - Recycling depot – minor	- Bulk agricultural chemical distribution - Bulk fuel depot - Concrete/asphalt plant - Natural resource extraction/processing - Recycling depot - major
Heavy Industrial (HI)	- Auctioneering services - Automotive, equipment, and vehicle services - Bulk fuel depot - General industrial manufacturing/processing - Industrial storage and warehousing - Industrial, heavy - Livestock auction mart - Recycling depot - minor	- Concrete/asphalt plant - Natural resource extraction/processing - Recycling depot – major - Waste management facility, major
Rural Industrial and Commercial (RIC)	- Agricultural support services - Auctioneering services - Industrial storage and warehousing - Livestock auction mart	- Abattoir - Automotive, equipment, and vehicle services - Bulk fuel depot - General industrial manufacturing/processing - Natural resource extraction/processing - Professional, business, financial, and office support services - Work camp
Resource Extraction (RE)	- Auctioneering services - Natural resource extraction/processing	- Bulk fuel depot - General industrial manufacturing/processing - Industrial warehousing and storage - Work camp



The LUB allows for a wide range of industrial or business/employment developments in industrial and business districts. Industrial development of both a light and medium nature is generally encompassed in the general industrial manufacturing/processing use in the LUB. That use is listed as permitted in the MI and HI districts and discretionary in the BI and RIC districts (likely as a means ensuring industrial development is consistent with the intent of the LUB for the district). Associated uses like industrial storage and warehousing can generally be accommodated in most districts as well, though the use is listed as discretionary in the BI district. Professional office development is also generally permitted, with BI and MI districts listing them as permitted uses, while similar office uses are listed as discretionary in rural areas. Overall, the current districts in the LUB appear to accommodate a full range of industrial and employment land development, from general industrial uses to more prestige industrial and standalone office uses.

LUB districts also generally accommodate a range of related industrial service-type investments, and sector-specific industrial support services. For example, the BI, MI, and RIC districts accommodate agricultural support services, aimed at serving the agricultural community throughout Parkland County and the rest of the Capital Region. Livestock auctions and abattoirs are also listed as permitted and discretionary uses in the LUB, accommodating primary uses in the agri-food value chain. Further, each industrial district accommodates automotive, equipment, and vehicle services (e.g. fleet services, key lock retail sales) on a permitted (BI, MI, HI) or discretionary (RIC) basis, while medium, heavy, and rural industrial areas also accommodate bulk fuel depots.

Overall, the uses listed as permitted and discretionary in the industrial and employment districts of the LUB appear general enough to accommodate a wide range of industrial and employment land investment. Any barriers to industrial or employment land development are likely less related to the existing regulations in place than they are to the market choice available in industrial and employment areas (e.g. size of parcels, availability of servicing).

Non-Industrial Uses on Industrial Lands

Factors like rapid population growth and the increased prominence of services-producing sectors of the economy can create highly competitive industrial and employment land markets. Lands that have been planned and designated for industrial and knowledge-based employment (i.e. basic forms of employment) are often highly desirable and marketable based on infrastructure, visibility, or cost (particularly relative to commercial land and space in some markets). As such, they can attract interest from non-industrial users, such as commercial retail or community/institutional uses. This has several potential negative impacts on municipality's industrial and employment land inventory:

- Erosion of a finite supply of industrial and employment lands meant to accommodate high-value and export-oriented industrial and knowledge-based development



- Fragmentation of the existing industrial and employment land supply
- Introduction of unintended land use conflicts or compatibility issues in employment and industrial areas (e.g. traffic congestion, parking, off-site nuisance factors)

However, some non-industrial and non-basic uses may also play a role in improving the competitiveness or investment readiness of an employment area. These uses contribute to the development of a more complete employment area – one that accommodates a wide range of employment uses, but also select services that support employees and businesses in the employment or industrial area. For example, the development of limited to full service restaurants or accommodations in employment areas serves both the daytime working population of the area, but also business travellers or temporary workers visiting businesses in the area.

As a result, municipalities must find a balance between conserving industrial and employment lands for industrial and knowledge-based employment uses and allowing non-industrial or non-basic uses that serve those users, and accomplish the municipality's goals for economic development.

The figure below examines the provisions for non-industrial and non-basic uses in the business and industrial districts in the County, with the intent of examining the potential for existing regulations to allow for non-industrial development that may create unintended compatibility issues. Emphasis has been placed on identifying uses that could consume notable portions of land through development (based on parking requirements, for example), generate considerable traffic, or be incompatible with adjacent industrial uses.



FIGURE 19: PERMITTED AND DISCRETIONARY NON-INDUSTRIAL AND NON-BASIC LAND USES, BY SELECT INDUSTRIAL DISTRICTS

District	Permitted Non-Industrial and Non-Basic Uses	Discretionary Non-Industrial and Non-Basic Uses
Business Industrial (BI)	- Accommodation and convention services - Animal health care services - Convenience retail services - Drive through business - Funeral home - General commercial retail services - Government services - Indoor eating establishment - Indoor participant recreation services - Kennel - Personal and health care services - Small animal breeding and boarding	- Community recreation services - Day care services - Horticultural use - Liquor sales/distribution services - Recreational vehicle storage - Spectator sports establishment
Medium Industrial (MI)	- Animal health care services - Convenience retail services - General commercial retail services - Kennel - Service station - Small animal breeding and or boarding	- Community recreation services - Government services - Indoor eating establishment - Recreational vehicle storage
Heavy Industrial (HI)	- Animal health care services - Indoor participant recreation services	
Rural Industrial and Commercial (RIC)	- Animal health care services - Recreational vehicle storage	- Government services - Horticultural use - Indoor eating establishment - Kennel

Overall, the County lists a number of non-industrial and institutional uses as permitted or discretionary in its key industrial and business districts. The Business Industrial (BI) district lists the widest range of potential non-industrial and non-employment land uses, based on its purpose to accommodate a wide range of both industrial and commercial employment. This includes a number of commercial and services uses associated with serving the population (e.g. commercial retail, government services, personal services, restaurants, liquor sales/distribution, and recreation centres), or subsets of the population (e.g. travelling public, sport event spectators). While some of these uses may be limited in size, each has the potential to draw clientele from outside of the employment area.

The Medium Industrial (MI) district has a slightly more restrictive stance on non-industrial, non-employment uses than the BI district. Uses like government services and restaurants are listed as discretionary in the district (where they are listed as



permitted in BI), while a number of commercial services and community uses (e.g. accommodations, personal services, are indoor and outdoor recreation) are not permitted at all. Like the BI district, MI districts in Parkland County list general commercial retail and convenience retail as a permitted use.

The Heavy Industrial (HI) and Rural Industrial and Commercial (RIC) have the least number of non-industrial and non-basic uses as permitted or discretionary uses, likely based on compatibility issues for the former and population density or servicing characteristics in the latter. The uses most likely to generate conflicts or compatibility issues are discretionary in the RIC district, particularly the government services and indoor eating establishment uses. That said, uses like recreational vehicle storage (permitted in RIC district) could be land extensive, and absorb land that could be conserved for industrial and commercial employment uses.

One of the more notable potential issues of those listed above is the lack of direction on size or scale of non-industrial and non-basic uses permitted on industrial and employment lands. For example, the LUB presently defines uses like general commercial retail services and indoor eating establishments broadly, potentially allowing developments from standalone retail stores or restaurants up to large-format retail and commercial clusters or power centres (particularly in employment or industrial areas near Edmonton, Stony Plain, and Spruce Grove).

Though these uses play a key role in economic development in Parkland County – particularly by enhancing quality of life and the services available to local residents and employees – they may consume a notable portion of industrial lands that could accommodate uses with higher employment densities or higher positive fiscal impacts on the municipality (i.e. net positive tax revenues when servicing costs are considered). For that reason, non-industrial or non-basic uses are often restricted in size when permitted within key industrial and employment areas, often as an accessory to a primary industrial or basic use (e.g. retail sale of goods manufactured on site), or as a unit in multi-unit developments. By restricting the size and scale of some non-residential or non-basic uses, the municipality may reduce the potential competition for industrial and employment lands, as well as reduce the potential for compatibility issues (e.g. traffic congestion, as large-format retail uses have the potential to draw on a regional clientele). At present, policies in Parkland County do not differentiate the types of non-industrial and non-basic uses that are most beneficial or appropriate for employment areas.



3.5 SWOT Analysis

A SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis can provide a municipality with a sense of its ability and capacity to support employment and industrial land investment. The SWOT considers broader trends in Canada and Alberta's Capital Region, comparative benchmarking of the County's competitiveness based on industrial indicators, an assessment of current market capture in the County, and the insight and perceptions of select local developers and real estate stakeholders in the County. For the purposes of the employment and industrial land strategy, a SWOT is characterized in the following terms:

- **Strengths (positive, internal):** Positive attributes or assets currently present in Parkland County, particularly in comparison to the Capital Region or Alberta
- **Weaknesses (negative, internal):** Local characteristics that limit the current or future growth opportunities for the County
- **Opportunities (positive, internal and external):** Areas where the County can remedy its weaknesses or further leverage its strengths (e.g. marketing, targeted investment attraction)
- **Threats (negative, internal and external):** Trends that threaten the County's existing and future attractiveness to industrial development

The SWOT that follows provides Parkland County with insight into the challenges and opportunities it faces in efforts to generate, sustain, and accommodate industrial development over the longer term.

Strengths

- Lower comparative non-residential tax rates than other areas of the Capital Region, paired a strong fiscal position related to non-residential tax assessment base
- Affordable industrial lands when compared to urban communities in the Capital Region, and the highest perceived value for investment in the area (given servicing available)
- Stable business growth trends, particularly in oil and gas; construction; and professional, scientific, and technical services sectors, with niche and subsector growth trends in manufacturing (e.g. oil and gas machinery), wholesale trade (e.g. machinery and equipment), and transportation and warehousing (e.g. general and specialized trucking) sectors
- Land use policies and regulations that are generally aligned with existing and emerging economic development opportunities and sector-based demand characteristics, and allow for a fairly wide range of industrial and business investments
- Comparatively more diverse mix of industrial land supply and more flexible light and medium industrial zoning regulations (e.g. lower building coverages, allowance of outdoor storage, and rural industrial design standards) than other areas of the Capital Region



- Competitive location in the Capital Region with regards to supplying Wood Buffalo, as well as close proximity to major interprovincial and international infrastructure (e.g. Edmonton International Airport, Yellowhead Highway, QEII Highway, rail intermodal facilities) and key transportation routes (e.g. high load corridor)
- Presence of Acheson Business Association, which represents a notable partner in terms of industry attraction and advocacy for issues that affect industry at the provincial and federal level (e.g. transportation)
- Presence of major national (e.g. Manitoulin) and multi-national (e.g. IBM) companies in Acheson, signalling competitiveness of the County

Weaknesses

- Potential for industrial and employment land absorption by uses generally not accommodated in industrial/employment areas (e.g. general retail), or with the potential to produce unintended land use conflicts (e.g. traffic, off-site nuisances)
- Lack of unserviced, rural industrial areas in the County appropriate for lower-density industrial and employment uses (e.g. laydown yards, modular construction, outdoor work)
- Limited presence of population-oriented retail, food service, or accommodations uses in Acheson and other proposed employment and industrial areas that would support daytime working or travelling population
- Perception that lack of public transit in Acheson is a competitive disadvantage in comparison to areas of Edmonton when considering industries that employ lower skilled workers, though employment densities remain too low to support large-scale implementation of transit options and costs to retrofit employment areas for transit may be prohibitive given current rural configuration (e.g. lack of sidewalks, stopping areas)
- Limited ability to provide servicing to major employment and industrial areas outside of Acheson at present, limiting the marketability of other major employment areas (e.g. Entwistle, Fifth Meridian) for many potential industrial uses
- Perceived lack of a comprehensive servicing strategy and associated mechanisms for funding infrastructure investment or recovering costs for infrastructure investment, resulting in uncertainty around development prospects and limiting prospects for servicing extension outside of Acheson
- Existing configuration of highway and rail infrastructure in Acheson area perceived as a bottleneck, and limiting factor for investment and marketability of lands, particularly for uses that require a high degree of access
- Existing land use policy combines industrial and commercial policy areas; though a somewhat minor issue, it may add to uncertainty on the part of the private sector or regional partners on the intent of the municipality to accommodate industrial or commercial employment in an area
- Strong perception among the development community that Parkland County administration is unpredictable in its decision making and approval requirements, impacting interest in investment



Opportunities

- Comparatively strong levels of GDP growth, employment growth, and industrial growth tied to oil and gas development, with continued activity expected over the short to medium term driving additional industrial and knowledge-based investment
- Strong services-producing employment and labour force growth rates at the regional level, offering opportunities to increase local economic diversity into more knowledge-based areas of employment
- Emerging strengths in oil and gas, transportation and warehousing, and manufacturing sectors at the regional level, offering opportunities for local industrial development
- Development of value-added and agriculture-related industrial opportunities leveraging the strong regional agriculture sector, if challenges with skills availability and rural land development can be overcome
- Increased development as a western Canadian hub for distribution uses, as those uses are pushed out of Edmonton based on cost and design pressures
- Longer term opportunities for charter movement of goods and workers from the new airport, should a viable business and service niche emerge
- Bulk movement of raw materials via rail, particularly agricultural feedstocks and biomass, may offer opportunities for agriculture-related or value added activity in Acheson
- Resource-based employment opportunities (oil and gas servicing, forestry-related) in western parts of the County, similar to types of development areas like Drayton Valley have attracted
- Eco-industrial types of development based on waste and co-product streams of power generation, should business cases for location be established
- Dry industrial or lower density industrial uses in the rural area, particularly in areas owned or reclaimed by TransAlta and along major highway corridors
- Increased self-sufficiency and a more complete and diversified business park environment in Acheson

Threats

- Uncertainty surrounding longer term industrial and employment land development prospects within and outside of regional priority growth areas in Parkland County, based on regional planning initiatives
- Cost pressures in oil sands extraction activity, and associated influence on light and medium industrial development tied to extraction activities
- More general cost impacts associated with Alberta (e.g. labour), and the continued effects on all types of investment
- Continued competition for investment in oil and gas and other industrial sectors with non-traditional competitors (e.g. Gulf coast States)
- Fragmentation of industry-led groups and County-led groups on priorities for industrial development and investment attraction in the County



- Limited shares of employment and population growth for Parkland County in existing Capital Region estimates, and the associated influence on regional understanding and support for longer term industrial and employment land needs



4 Business and Industrial Employment Land Inventory

This section provides an overview of Parkland County's existing industrial structure and recent development trends. A detailed assessment of the County's vacant industrial land inventory is also provided.

4.1 Overview of Industrial Areas

Parkland County has a strong and diverse industrial base. Key sectors include distribution/wholesale trade, manufacturing, construction, and transportation. Parkland's industrial lands form an integral part of its economic development potential and accommodate a significant share of the County's businesses and employment.

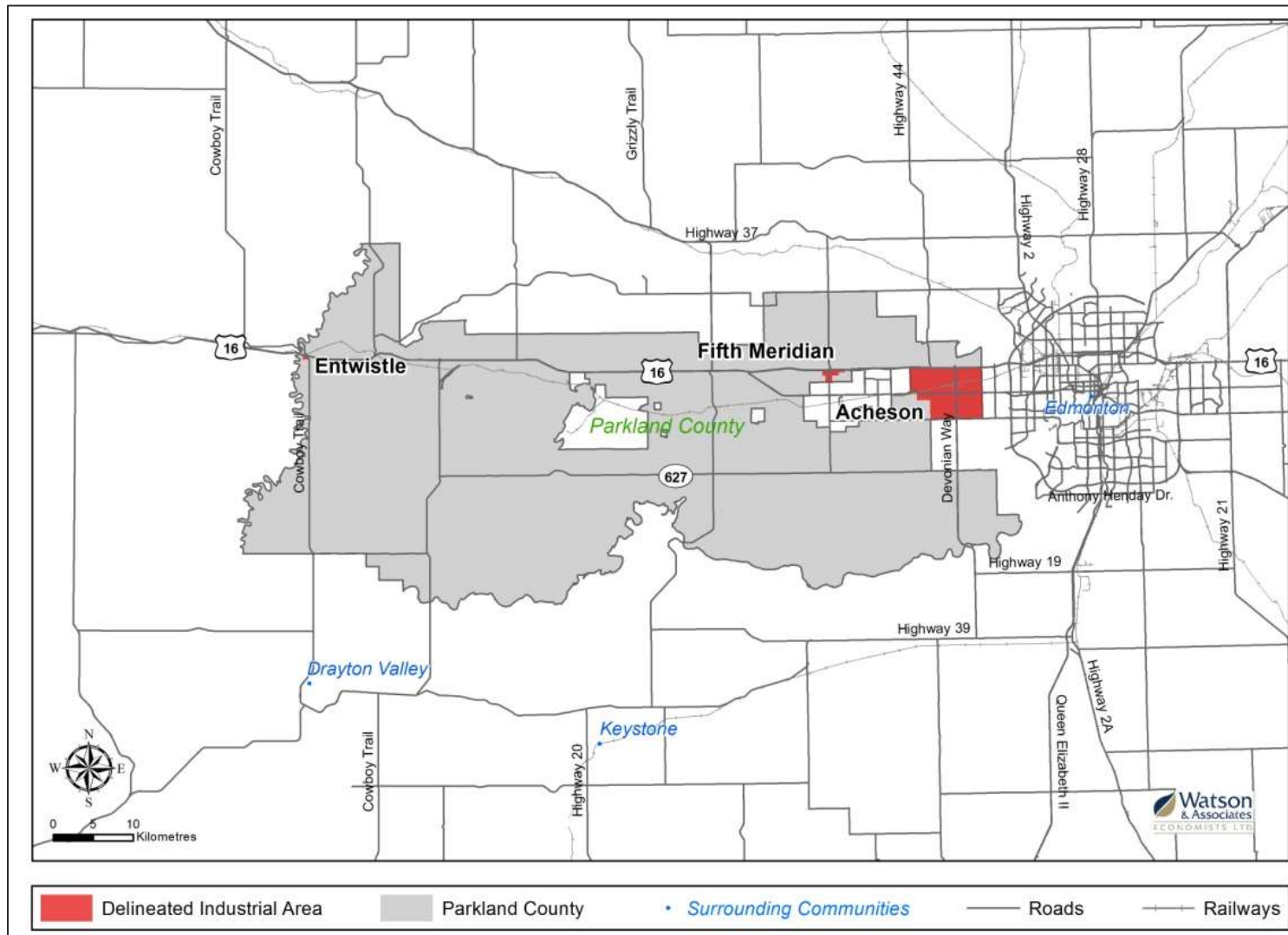
As discussed in Section Three, the County's industrial lands are largely reflected under two land districts – Medium Industrial District and Business Industrial District. Parkland County's districted industrial land base comprises a total developed land area of approximately 1,660 net acres (670 net Ha) located in three designated industrial areas – Acheson Industrial Area, Meridian Business Park and Entwistle Industrial Area, as illustrated in Figure 20. Of the developed industrial lands, 96% (1,570 net acres) is located in the Acheson Industrial Area, 3% (44 net acres) in the Meridian Business Park and 1% (18 net acres) in Entwistle.

Chapter Objectives

- Provide overview of industrial and employment areas
- Identify recent industrial development trends
- Establish a County-wide vacant industrial and employment land inventory



FIGURE 20: PARKLAND COUNTY INDUSTRIAL AREAS





The following provides a profile of the County's main industrial areas including the Acheson Industrial Area, Entwistle, and Fifth Meridian.

Acheson Industrial Area

The Acheson Industrial Area is a large and diverse urban-type (though rural) industrial area which contains the majority of Parkland County's industrial base. Located on the eastern edge of the County immediately west of the City of Edmonton, the area contains 1,570 acres (635 Ha) of developed industrial land and approximately 2.6 million sq.ft. of industrial space.²⁸

Acheson is home to approximately 200 businesses comprised of a wide range of light and medium industrial uses including manufacturing, wholesale trade/distribution, construction, transportation, and logistics. The area also accommodates a limited share of commercial uses largely related to heavy equipment services, and professional, scientific and technical services. Acheson is home to approximately 7,300 jobs,²⁹ representing approximately 62% of the County's employment base. Based on the identified employment on industrial lands and the developed land area, the average employment density (on designated industrial lands) within Acheson is approximately five jobs per net acre (12 jobs per net Ha).

Acheson has experienced strong industrial development activity over the past five years. It has been attractive for development due to a large land supply and market choice, competitive land prices, and access to the CN intermodal terminal and highways (Yellowhead Highway, Highway 16A and Anthony Henday Drive). The industrial area is also located on Highway 60, part of the Alberta High Load Corridor, which allows for the movement of goods and workforce servicing oil and gas operations in Northern Alberta, providing an important competitive advantage for industrial development.

The Acheson Industrial Area has a large number of private developers with active developments in the area. This includes Parkland Estates (Transamerica Group), the NorthView Business Park (Panattoni), Route 60 Industrial Park (Remington Group) and Fath Business Park (Fath Group).

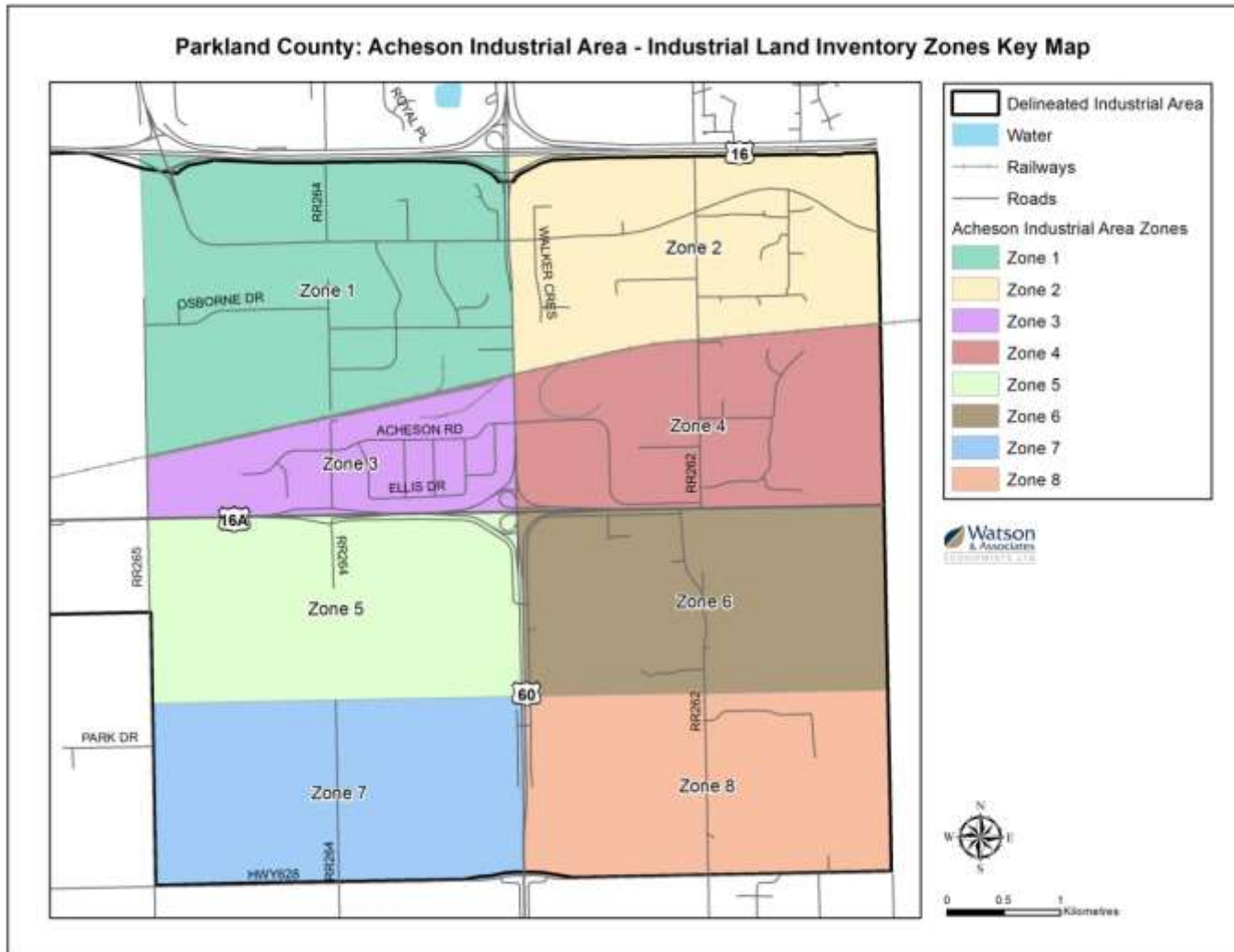
The Acheson Industrial Area is subdivided into eight zones as illustrated in Figure 21.

²⁸ Industrial GFA data derived from Colliers International, Edmonton Industrial Market Report, Q2 2014.

²⁹ Employment data derived from Acheson Industrial Park Business Questionnaire/Census Report, Economic Development & Tourism, Parkland County, 2014. Excludes seasonal employment and employees with no fixed place of work.



FIGURE 21: ACHESON INDUSTRIAL ZONES





The following provides additional commentary on the industrial lands within the Acheson Industrial Area by key industrial zone.

Zone 1

Located southwest of Highway 16 and Highway 60, Zone 1 represents a diverse range of industrial uses including wholesale trade/distribution, manufacturing, and utilities. Lands on the north side of Township Road 531A, including those located in the Kawin Business Park, have a general industrial character while lands to the south, including the Fath Business Park and Northview Business Park are relatively prestige in character, with underground utilities and street lighting. A significant share of recent larger-scale development activity within Acheson has been accommodated within the Northview Business Park. This includes Powell Canada, Wajax, Navistar, PTI, Altalink, and Suncor. The zone has some vacant districted lands remaining in the Fath Business Park and the Northridge Industrial Park (a planned development) as well as a further 190 acres (77 Ha) situated west of the Northview business park, which may have servicing challenges.

FIGURE 22: ACHESON INDUSTRIAL ZONE 1



Zone 2

Zone 2 is situated to the southeast of Highway 16 and Highway 60 and accommodates a broad range of sectors including transportation, manufacturing, distribution, construction, and commercial services. The northern edge of the area has a moderately prestige character, while lands to the south are more general industrial in character. Known as Parkland Estates, the area has been in development since the early 2000s by TransAmerica Group. Recent developments include Manitoulin Transport, Graham Group, and Strongco. Zone 2 has some vacant districted lands remaining, largely located along Highway 16.



FIGURE 23: ACHESON INDUSTRIAL ZONE 2



Zone 3

Zone 3, located to the northwest of Highway 16A and Highway 60, includes the oldest industrial area within Acheson, dating back to the 1970s. The oldest areas within the zone, which includes Ellis Industrial Park and Sherwin Industrial Park, have a general industrial character with significant open storage. The West Acheson Industrial Area, on the western edge of the zone is a recent industrial development and is moderately more prestige in character. The zone accommodates largely small- to medium-sized businesses in the construction, transportation and manufacturing (e.g. steel fabrication, wood products) sectors. With the exception of the West Acheson Industrial Area, the zone is largely built out.

FIGURE 24: ACHESON INDUSTRIAL ZONE 3



Zone 4

Located to the northeast of Highway 16A and Highway 60, Zone 4 is largely undeveloped. The developed portion, located immediately east of Highway 60, is comprised of heavy industrial uses. The area holds some opportunities to accommodate longer-term industrial growth.



Zone 5

Zone 5, located southwest of Highway 16A and Highway 60, has been one of the most active areas of development in Acheson in the last few years. Major sectors include manufacturing and transportation. The zone offers significant development opportunities, including shovel-ready lands³⁰ within the Highway 60 Industrial Park.

FIGURE 25: ACHESON INDUSTRIAL ZONE 5



Zones 6, 7 and 8

Zones 6, 7 and 8 are currently undeveloped and contain significant opportunities to accommodate longer-term growth within Acheson.

Entwistle

The Entwistle Industrial Area is a small industrial area located on the south side of the Trans-Canada Highway within the hamlet of Entwistle. The Hamlet is fully serviced with water and sewer, though the industrial lands are privately serviced. With a developed land area of 18 net acres (7 net Ha), Entwistle has a general industrial character, accommodating small industrial businesses including warehousing, automotive services, and construction firms. The area has not seen any recent development activity but does have 7 net acres (2.8 net Ha) of vacant districted industrial land subdivided for smaller-scale development.

³⁰ "Shovel-ready" lands are defined as those that are serviced and zoned and generally considered potentially developable within the next 6 months.



FIGURE 26: ENTWISTLE INDUSTRIAL AREA



Fifth Meridian

Fifth Meridian is a privately serviced industrial area located along Highway 779, on the south side of the Trans-Canada Highway just north of the Town of Stony Plain. The area has a developed industrial land base of 42 acres (17 Ha) and it is home to a limited number of businesses including Parkland County's administration building and agriculture-based businesses, warehousing, and manufacturing. The Meridian Business Park is privately serviced and no further development is permitted in the area without municipal servicing being extended to serve the area. The area has no districted vacant industrial land but does have vacant non-districted land totalling 387 gross acres (157 gross Ha) to accommodate growth over the longer term.

FIGURE 27: MERIDIAN BUSINESS PARK





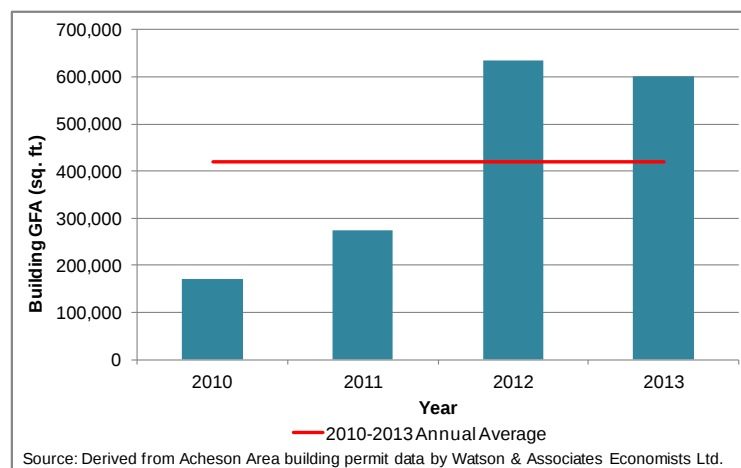
4.2 Recent Acheson Development Activity and Trends

Nearly all industrial development activity within the County in the past decade has been accommodated within the Acheson Industrial Area. The following provides a summary of recent development activity and trends within the Acheson Industrial Area.

4.2.1 Development Activity, 2010-2013

Over the 2010-2013 period, the Acheson Industrial Area has seen an average of 420,000 sq.ft. of gross floor area (GFA) in development activity annually, as illustrated in Figure 28. Of this, 93% has been in the industrial sector, 6% in the commercial sector and 1% in the institutional sector. Large businesses which have moved to Acheson since 2010 include Powell Canada, Manitoulin Transport, CIVEO (PTI), and Graham Group.

FIGURE 28: PARKLAND COUNTY DEVELOPMENT ACTIVITY ON INDUSTRIAL LANDS, 2002-2011



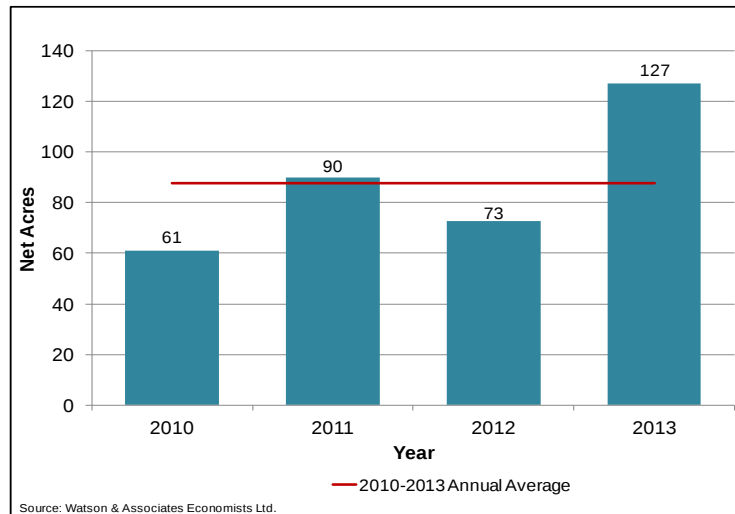
4.2.2 Industrial Land Absorption, 2010-2013

Based on the building permit data, industrial land absorption averaged 88 acres (36 net Ha) annually for Acheson from 2010-2013, as shown in Figure 29.³¹

³¹ Lands considered absorbed at time of building permit issuance.



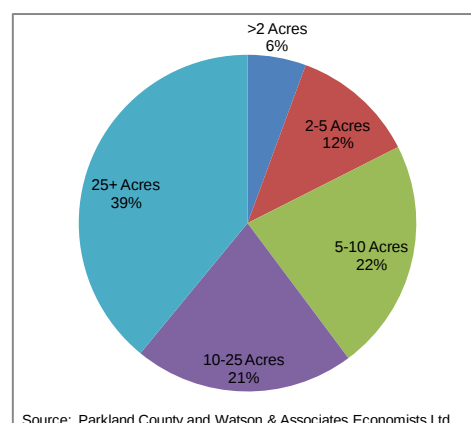
FIGURE 29: PARKLAND COUNTY INDUSTRIAL LANDS ANNUAL ABSORPTION, 2010-2013



4.2.3 Land Absorption by Parcel Size

Industrial land absorption over the 2010-2013 period was comprised of parcels in a broad range of sizes. A very small proportion (6%) of the industrial land absorbed over the period consisted of parcels less than two net acres (0.8 net Ha) in size, as summarized in Figure 30. Meanwhile, parcels 2-5 net acres in size (0.8-2 Ha) accounted for 12% of the total. Larger parcels of 10-25 net acres (4-10 net Ha) accounted for 21% of absorbed lands over the 2010-2013 period, while parcels over 25 net acres (10 net Ha) accounted for the largest proportion, 39%, of absorbed parcels.

FIGURE 30: PARKLAND COUNTY INDUSTRIAL LANDS ABSORBED BY PARCEL SIZE, 2010-2013

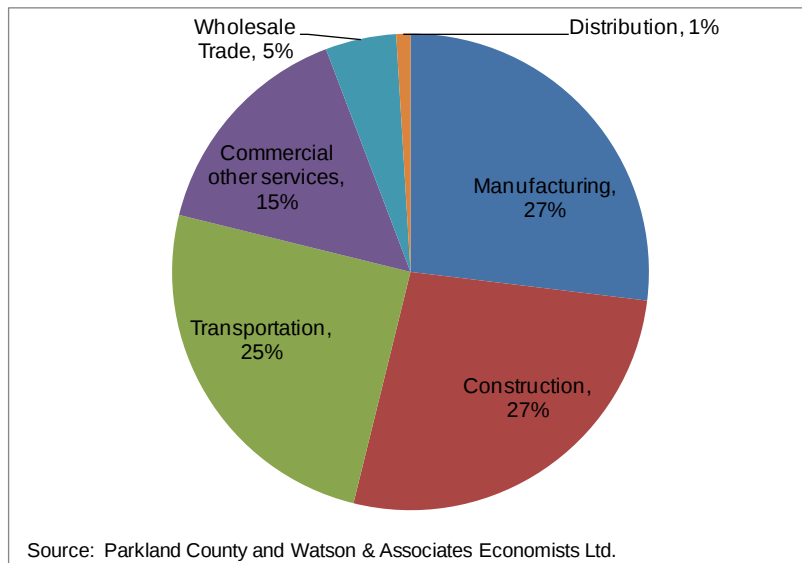




4.2.4 Land Absorption by Sector

Figure 31 illustrates the industrial lands absorbed over the 2010-2013 period by employment sector. As shown, the Acheson Industrial Area has seen significant development in transportation, construction, and manufacturing.

FIGURE 31: PARKLAND COUNTY INDUSTRIAL LANDS ABSORBED BY EMPLOYMENT SECTOR, 2010-2013



4.2.5 Recent Employment Density Trends

Employment density (on designated industrial lands) for recent development in Acheson is estimated to average seven jobs per net acre (17 jobs per net Ha), as shown in Figure 32. The average employment density varies widely by sector with the highest density in manufacturing and the lowest in the primary (energy) sector. Average employment density on recently developed industrial lands is moderately higher than the existing employment density of five jobs per net acre (12 jobs per net Ha), which is attributed to the more urban type development, which tends to have higher utilization of land and correspondingly higher employment densities than older developments within the area.



FIGURE 32: PARKLAND COUNTY EMPLOYMENT DENSITY ON RECENTLY DEVELOPED INDUSTRIAL LANDS

Sector	Jobs per net Acre
Construction	6
Distribution/Wholesale Trade	6
Manufacturing	8
Primary - Energy Sector	3
Transportation	6
Other Services	4
County-wide	7

Source: Watson & Associates Economists Ltd.

4.3 Vacant Districted Industrial Land Supply Inventory

A major factor in the future competitiveness of Parkland's economic base is the supply and quality of its vacant industrial lands. This section provides a comprehensive assessment of the County's vacant districted industrial land supply.

4.3.1 Vacant Industrial Lands Analysis

Parkland's vacant employment land inventory was developed from the County's parcel fabric mapping layer using GIS-based mapping software with various mapping overlays, including Municipal Development Plan designations, zoning maps and orthophotos. Vacant designated industrial lands were identified as those which fall under the designation of "Industrial" in accordance with the Municipal Development Plan and zoning by-law as described in Section Three. This includes lands districted "Business Industrial District" and "Medium Industrial District." Further, Area Structure Plans (ASPs) were reviewed in combination with windshield surveys of industrial areas to develop the inventory.

Industrial Reserve District lands, which reflect lands which are designated for future industrial development under the MDP but are currently not zoned, are not included in the supply inventory but are considered as possible lands to accommodate future industrial growth in Section Five.

Figures 33 and 34 illustrate the geographic location of the County's remaining districted industrial land supply which is identified as vacant as of mid-2014.



FIGURE 33: ACHESON DISTRICTED INDUSTRIAL LAND INVENTORY

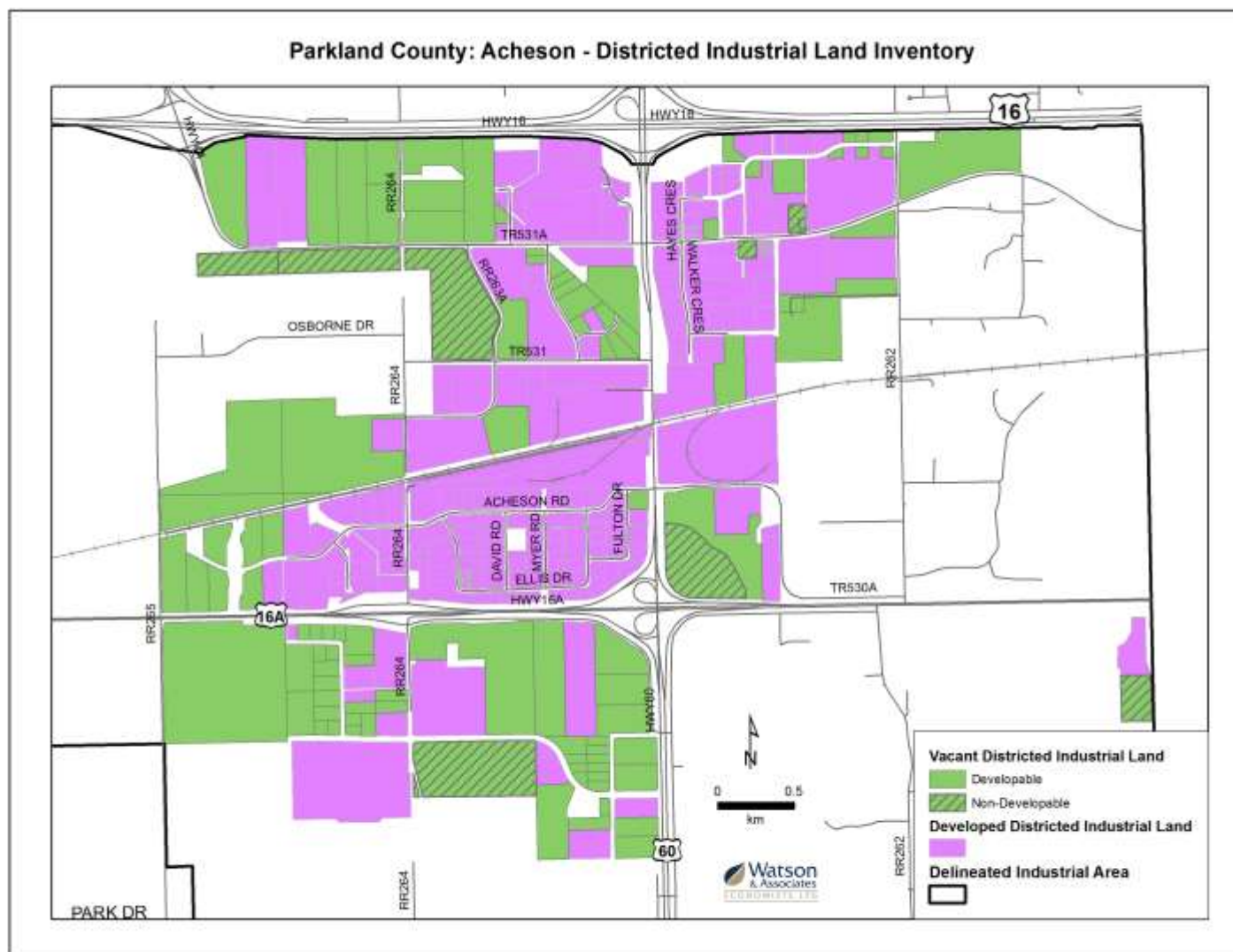




FIGURE 34: ENTWISTLE AND FIFTH MERIDIAN DISTRICTED INDUSTRIAL LAND INVENTORY

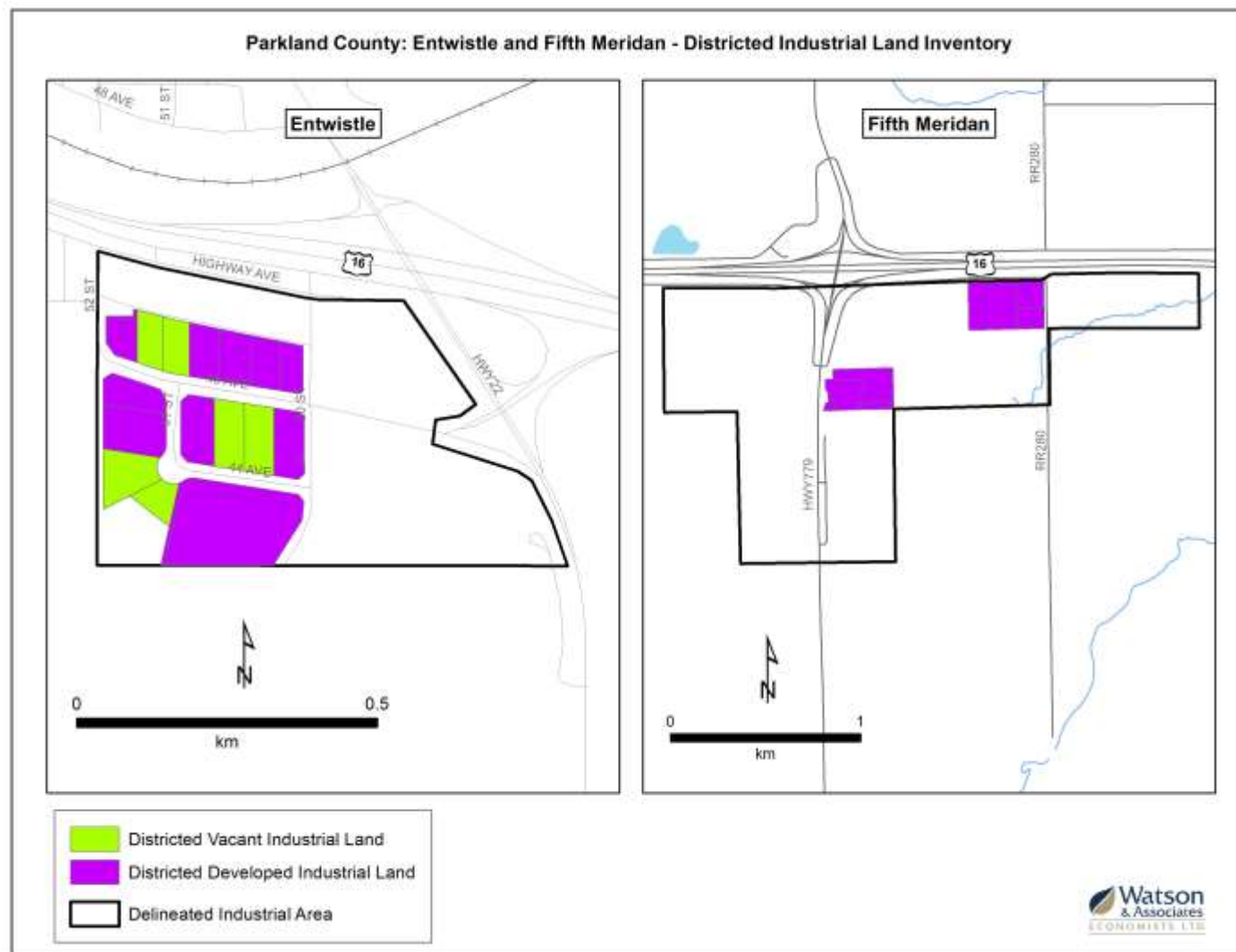




Figure 35 summarizes the total gross and net vacant industrial land supply for Parkland County (as of 2014) by geographic area. As illustrated, the County has a total of 1,628 gross acres (659 gross Ha) of vacant districted industrial land. The following highlights the steps taken to identify the net vacant industrial land supply and net developable vacant industrial land supply.

FIGURE 35: PARKLAND COUNTY NET DISTRICTED DEVELOPABLE INDUSTRIAL LANDS SUPPLY (ACRES)

Area	Total Gross Vacant (A)	Environmental Lands (B)	Municipal Reserve Lands (C)	Major Utilities ¹ (D)	Adjustment for Roads and Other Internal Infrastructure (E) ²	Net Vacant Industrial Land Supply (F = A-B-C-D-E)	Long-term Land Vacancy Adjustment (G) ³	Net Developable Vacant Industrial Land Supply Adjusted for Long-Term Vacancy
Acheson	1,621	49	85	116	382	988	148	840
Entwistle	7	0	0	0	0	7	1	6
Fifth Meridian	0	0	0	0	0	0	0	0
County Total	1,628	49	85	116	382	995	149	846

Source: Watson & Associates Economists Ltd.

1. Includes major oil pipelines, natural gas pipelines, oil wells and utilities infrastructure

2. A downward adjustment of 25-35% to larger unsubdivided parcels (after environmental takeouts) has been applied to account for internal infrastructure and municipal reserve requirements.

3. Long-term industrial land vacancy adjustment - 15% of net developable vacant lands accounts for industrial land sites, which may not develop over the long-term due to underutilization of industrial sites and sites inactive/land banking.

Non-Developable Lands/Features

The supply of vacant industrial lands has also been adjusted to exclude non-developable features from the inventory. A total of 134 acres (54 Ha) of environmental lands and municipal reserve lands were removed from the vacant industrial land supply. Further, major utility corridors, consisting of major oil/gas pipelines, oil wells and telecommunications infrastructure, were also considered, reducing the total inventory by an additional 116 acres (47 Ha).

In determining the industrial land inventory, larger subdivided parcels were also subject to an additional downward adjustment to reflect internal infrastructure (i.e. roads, stormwater ponds, easements, etc.) with a net to gross adjustment of 65 to 75%. In accordance with the aforementioned adjustments for internal infrastructure, the inventory was reduced by 382 acres (155 Ha).

In accordance with the aforementioned adjustments, the County's net vacant industrial land supply is estimated at 995 net acres (403 net Ha), as summarized in Figure 35. Of this total, 988 net acres (400 net Ha), representing 99% of the County's total net vacant industrial land supply, is located within Acheson. The remaining 7 net acres (3 net Ha) is located within the Entwistle Industrial Area.

Adjustment for Long-Term Vacancy

Long-term land vacancy is a common characteristic which is experienced in industrial parks throughout Parkland County, the Capital Region and elsewhere in Canada. This reflects industrial sites which are unlikely to develop to their full capacity due to underutilization of future development and parcel inactivity/land banking, which may tie



up potentially vacant and developable lands. Over the next decade, it is foreseeable that the County's industrial areas, as they mature, will also begin to exhibit these characteristics. For the purpose of this analysis, an estimate of 15% long-term land vacancy has been applied to the net vacant industrial land inventory. Adjusted for land vacancy, the County's net vacant industrial land supply is 846 net acres (342 net Ha), as summarized in Figure 35.

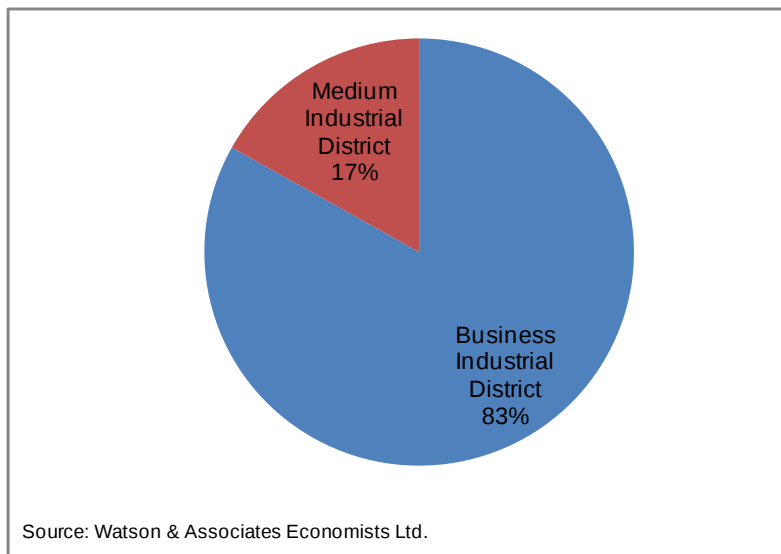
4.3.2 Vacant Industrial Land Characteristics

The following provides further details on the County's districted industrial lands. This includes commentary on the supply opportunities within the Acheson Industrial Area with respect to location, shovel-ready lands, lands that are zoned/serviced and currently have no development permits and lands that are currently for sale.

Land Supply by Land Use District

The County's vacant industrial land inventory by district is illustrated in Figure 36. As shown, 83% of the County's vacant industrial lands are designated Business Industrial District. The remaining 17% of industrial lands are designated Medium Industrial District.

FIGURE 36: PARKLAND COUNTY VACANT INDUSTRIAL LANDS BY DISTRICT



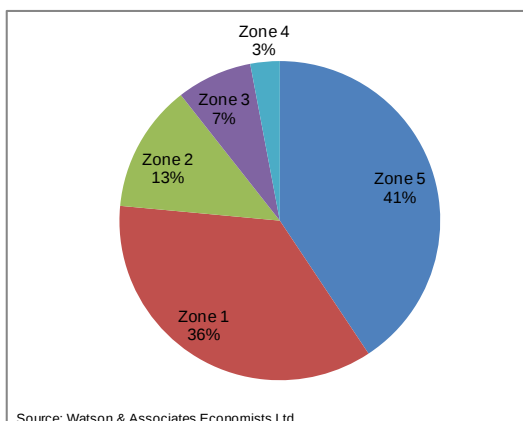
Vacant Industrial Land Supply within the Acheson Industrial Area

As previously discussed, the Acheson Industrial Area is divided into a series of industrial zones. Figure 37 summarizes the districted net vacant industrial land supply within Acheson by industrial zone. As shown, Zone 1 and Zone 5 have the highest vacant industrial land supply, comprising 77% of the total industrial land supply. Zones



2, 3 and 4 contain the remaining vacant industrial land with 13%, 7% and 3%, respectively.

FIGURE 37: ACHESON COUNTY DISTRICTED NET VACANT INDUSTRIAL LAND SUPPLY BY INDUSTRIAL ZONE



Market choice of shovel-ready³² industrial lands and potential for future expansion are key factors in the site selection process. Acheson has approximately 467 net acres (189 net Ha) of shovel-ready industrial lands. Figure 38 summarizes the share of shovel ready industrial land, by parcel size. As shown, 27% of the vacant industrial land sites are less than 2 net acres (0.8 Ha) in size. In comparison, sites measuring 2-5 net acres (0.8-2 Ha) and 5-10 net acres (2-4 Ha) represent 41% and 14% of sites, respectively. With respect to larger industrial site, 17% of parcels measure 10-25 net acres (4-10 Ha) in size while the County has only one shovel-ready parcel larger than 25 net acres (10 net Ha) (1% of sites).

FIGURE 38: ACHESON SHOVEL-READY INDUSTRIAL LANDS BY SIZE

Parcel Size	Acheson	
	Parcels (#)	Share of Parcels (%)
Less than 2 Acres	22	27%
2 - 5 Acres	33	41%
5 - 10 Acres	11	14%
10 - 25 Acres	14	17%
25 Acres and greater	1	1%
Total	81	100%

Source: Watson & Associates Economists Ltd.

³² "Shovel ready" lands are defined as those that are serviced and zoned and generally considered potentially developable in short-term (i.e. next six months).



The supply of zoned and serviced lands without development permits within Acheson totals 661 net acres (267 net Ha). Based on a review of vacant industrial lands currently for sale, it was identified that within Acheson there are 300 net acres (121 net Ha) of zoned and serviced land available for sale. This suggests that there is a relatively healthy market choice of lands available in Acheson to accommodate new prospective development.

Market Choice Requirements

From a market choice perspective, one of the most important industrial site selection criteria (that is largely controllable by the County on a high level) relates to ensuring that an ample supply of suitable vacant serviced (and serviceable) industrial land is available for purchase and absorption. Though the County appears to have a sufficient supply of shovel ready lands relative to recent absorption trends, including an ample supply of small- and medium-sized parcels, market choice of larger vacant industrial land parcels (i.e. 10 Ha and greater) is limited. In order for the County to continue to be competitive and potentially attract larger-scale industrial employers, such as large-scale manufacturers, logistics uses, and distribution centres, there is a need to provide a greater number of larger serviced industrial sites.

In order to allow for proper market functioning, the County should work with the private sector to ensure that a minimum five-year supply of industrial lands (by various sizes, zoning and location) is available at all times throughout the forecast period. Over the 2014-2034 planning period, it is recommended that the County monitor its current industrial land inventory at minimum every five years to determine if additional industrial lands are required to accommodate forecast demand.

4.4 Observations

The analysis provided in this section identifies a number of key observations with respect to the current industrial lands in Parkland County:

- Parkland County has a large and diverse industrial base
- The County has experienced strong development activity on industrial lands over the past five years which has resulted in high land absorption
- As of 2014 the County's total gross supply of vacant districted industrial lands totals approximately 1,600 gross acres (647 gross Ha)
- The amount of net vacant districted industrial lands, which will be potentially available to accommodate long-term demand is approximately 846 net acres (342 net Ha)
- Nearly all of Parkland's vacant districted industrial land is located within the Acheson Industrial Area
- Strong development growth in the past five years has greatly diminished the supply of industrial parcels within Acheson



- The County's vacant industrial land supply opportunities are insufficient to accommodate potential larger-scale users
- From a market choice perspective, one of the most important industrial site selection criteria which is largely controllable by the County relates to ensuring that an ample supply of suitable vacant serviced (and serviceable) industrial land is available for purchase and absorption
- It is further recommended that the County monitor shovel-ready and long-term industrial land inventory, at minimum every five years, to determine if additional industrial lands are required to accommodate forecast demand



5 Employment Forecast and Land Needs Analysis

Building on the macro economic analysis and identified regional growth drivers provided in Section Three, this section presents an employment forecast for Parkland County for the 2014-2044 period. Based on the forecast employment growth, long-term industrial land demand is also identified. Assessing the long-term industrial land demand against the vacant industrial land inventory identified in Section Four, long-term industrial land need is identified for Parkland herein.

5.1 Employment Forecast

Based on the identified economic growth drivers discussed in Section Three, the long-term employment growth prospects and potential industrial land demand for the Capital Region are favourable.

The favourable outlook for the energy sector is expected to drive continued investment and expanded production in the oil sands of Northern Alberta, which is anticipated to have a direct positive effect on employment growth and industrial land demand in the Edmonton Capital Region. The Capital Region's role as a servicing centre for the energy sector will continue to grow. Further, employment growth is expected across a wide range of sectors as the economic base continues to diversify and the population base expands at a healthy rate. As such, Parkland County is well positioned to capitalize on the anticipated long-term regional employment growth potential. The long-term employment forecast summarized herein assumes a significantly higher rate of employment growth over the forecast period than the Capital Region Board's employment forecast for Parkland County.³³

5.1.1 Approach to Forecast Employment Growth

In generating a long-term employment forecast for the County, a comprehensive review of current and evolving economic trends, as well as future development opportunities/constraints, was undertaken. The employment growth analysis presented herein is based on the findings detailed in Section Three and the key economic drivers that are anticipated to drive future employment growth in Parkland County.

The employment forecast provided is partly based on the activity rate method, which is defined as the number of local jobs in the County divided by the resident population. While it is beyond the scope of this study to provide a comprehensive analysis of future population growth for Parkland County, understanding the long-term population

Chapter Objectives

- Present a long term employment forecast for Parkland County to 2044
- Identify County-wide industrial and employment land needs to 2044 by sub-area
- Identify potential locations to accommodate future industrial land demand

³³ Compared to the High Scenario identified in Capital Region Employment Projections Update, March 2014.



potential for the County is important to this study. Population growth impacts the need for non-residential lands in different ways. Population-related development (i.e. retail commercial, personal service uses and institutional) is automatically attracted to locations convenient to local residents. Generally, as the population grows, the demand for population-related development also increases to service the needs of the local community (subject to available services within the surrounding market area). For the purposes of this exercise, it was assumed that the County's population will grow from 32,200 in 2014 to 50,000 in 2044, in accordance with the Capital Region Board Projections High Scenario.³⁴

Industrial and office commercial development (i.e. export-based industries), on the other hand, are not directly linked to local population growth and tend to be more influenced by broader market conditions (i.e. regional economic competitiveness, transportation access and distance to employment markets), as well as local site characteristics such as servicing, highway access and exposure, site size/configuration, physical conditions and site location. As a result, industrial employment is not necessarily anticipated to increase in direct proportion to population growth. For these reasons, the industrial employment forecast has been developed based on a review of the following:

- Historical Census employment growth for Parkland County and the Edmonton CMA
- Historical non-residential building permit activity by employment sector for Parkland County
- Business patterns for Parkland County
- Opportunities to accommodate industrial growth within the County
- Discussions with the local development community
- Labour force and demographic trends

5.1.2 Employment Forecast, 2014-2044

Figure 39 summarizes the County-wide employment forecast by sector in five-year increments to the year 2044. As shown, Parkland's total employment is forecast to increase significantly over the forecast period, growing from 11,700 in 2014 to 19,400 in 2024, 25,500 in 2034 and 30,300 by 2044. Over the forecast period, the County's employment base is expected to increase by 18,600 which represents an average annual increase of 3.2%. During the forecast period, the County's employment activity rate is forecast to increase from an estimated 36% in 2012 to 61% in 2044.

³⁴ Capital Region Employment Projections Update, March 2014.



FIGURE 39: PARKLAND COUNTY, EMPLOYMENT FORECAST, 2014 TO 2044

Period	Population	Total Activity Rate	Employment					Total
			Primary ¹	Work at Home	Industrial	Commercial	Institutional	
2001	27,252	0.21	758	1,614	1,936	1,027	345	5,680
2006	29,220	0.24	858	1,727	2,446	1,363	542	6,935
2011	30,568	0.30	825	2,005	4,005	1,575	820	9,230
2014	32,200	0.36	835	2,155	5,830	2,005	850	11,675
2019	35,200	0.45	880	2,375	8,905	2,815	985	15,960
2024	38,000	0.51	910	2,525	11,400	3,420	1,140	19,395
2029	41,000	0.55	945	2,705	13,530	4,100	1,310	22,590
2034	44,300	0.58	975	2,880	15,505	4,650	1,460	25,475
2039	47,400	0.59	995	3,080	17,065	5,120	1,610	27,870
2044	50,000	0.61	1,000	3,250	18,700	5,550	1,800	30,300

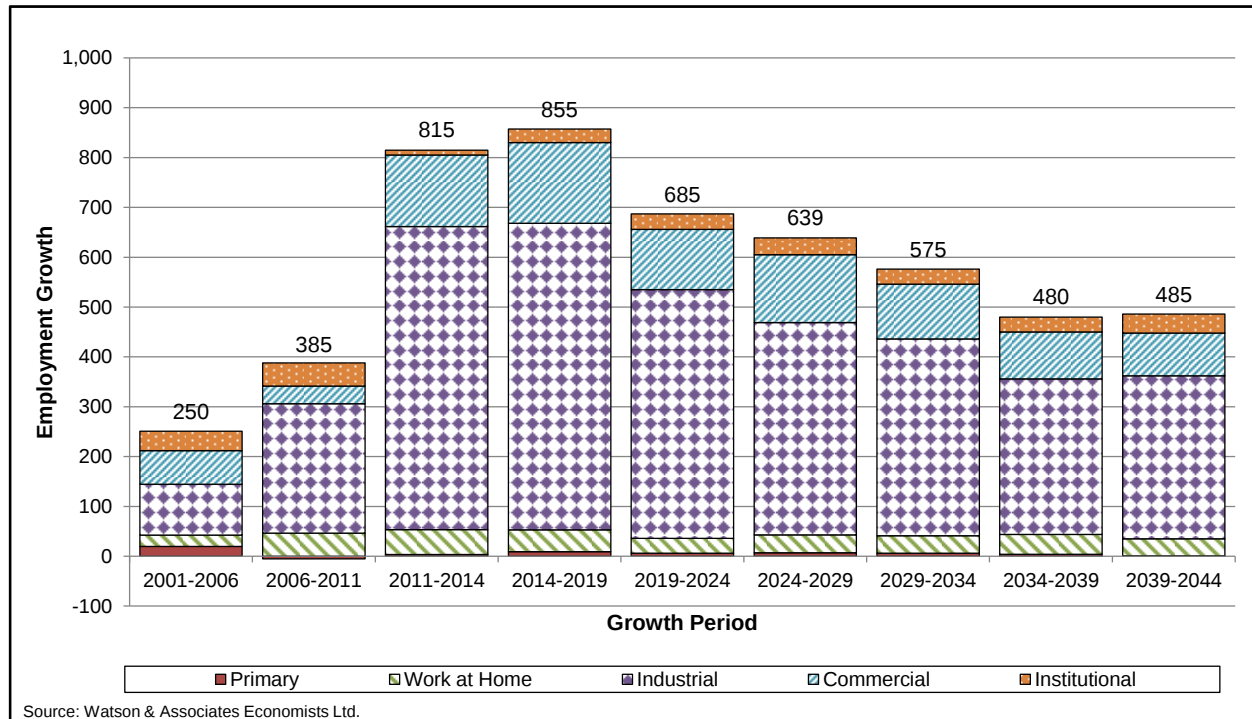
Source: Watson & Associates Economists Ltd.

1. Reflects employment in agriculture, forestry, fishing and hunting and employment in mining and oil and gas extraction.

Figure 40 summarizes the average annual employment forecast by major sector over the forecast period in comparison to historical trends (2001-2014). As illustrated, employment growth over the 2014-2019 period is expected to average 850 annually, which is marginally higher than the average over the 2011-2014 period. Over the 2019-2024 period, employment growth is forecast to average 680 annually, moderately lower than over the 2014-2019 period. Average annual employment growth will gradually decline over the 2024-2034 period largely as a result of the aging of the population and labour force. Post-2034, the rate of annual employment growth is expected to stabilize to approximately 480 jobs per year.



FIGURE 40: PARKLAND COUNTY AVERAGE ANNUAL EMPLOYMENT GROWTH, 2001-2044



With respect to employment growth by major employment sector, the following observations have been made:

- Over the forecast period, the industrial employment base is forecast to increase by 12,900 jobs, accounting for more than two-thirds of total employment growth. Significant employment opportunities will exist in sectors related to wholesale trade/distribution, manufacturing, construction, and transportation
- Future demand for population-related/commercial employment growth in Parkland is anticipated to be moderately strong, accounting for 19% of employment growth. Though a share of this employment growth is directly related to population-related employment uses such as retail and accommodation/food services, the County is also expected to experience moderate growth in business services and professional and technical services, particularly engineering and environmental services
- The County is anticipated to experience a moderate employment increase in the institutional sector, which will be largely driven by population growth. Institutional employment growth is forecast to account for 5% of total employment growth
- Primary industries (i.e. agriculture and other resource-based employment) are anticipated to experience minimal employment growth over the 2014-2044 forecast period. The increase in employment is anticipated to come from energy-related resource employment



- Over the forecast period, increased opportunities will exist for “work at home” employment through improved telecommunication technology, increased opportunities related to telecommuting and potential work schedule flexibility, most notably in knowledge-based employment sectors. Also, as the County’s population and labour force continues to age, it is likely that an increased number of working and semi-retired residents will be seeking lifestyles which will allow them to work from home on a full-time or part-time basis

5.2 Industrial Land Needs, 2014-2044

This section summarizes total industrial land needs within Parkland County to the 2044 planning horizon, based on the industrial land supply summarized in Section Four and forecast demand on industrial lands summarized below.

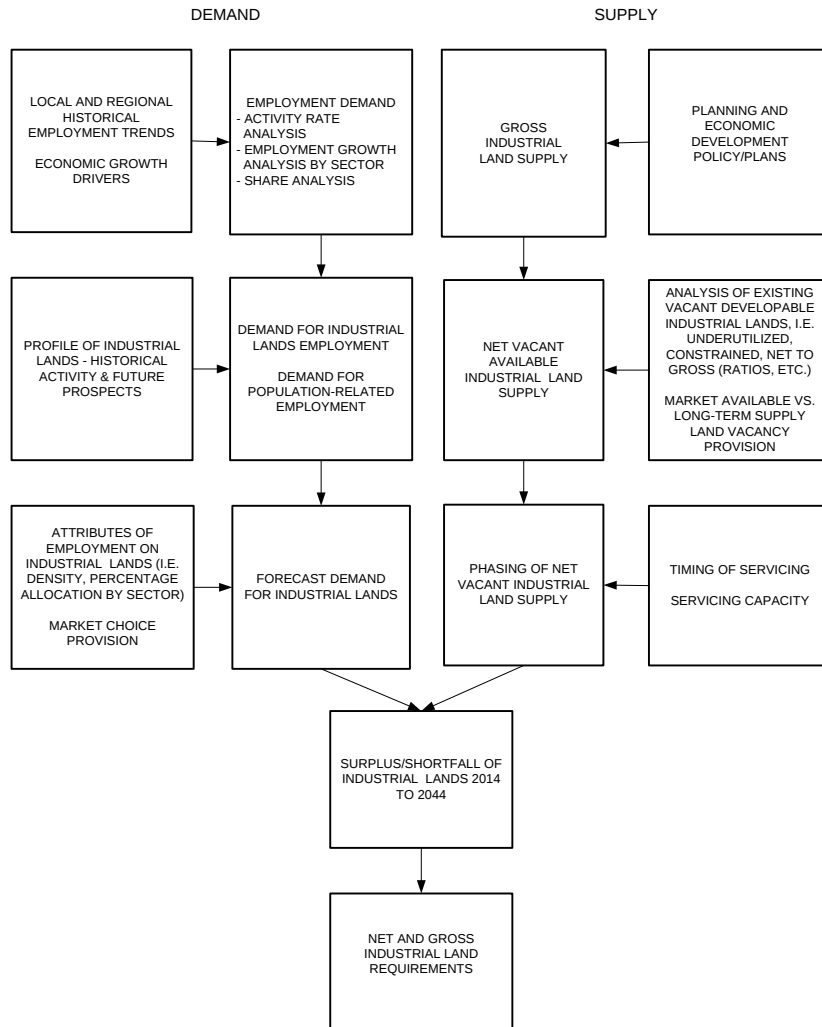
Building on the long-term employment forecast presented in Section 5.1, anticipated industrial land need requirements are then identified based on consideration of the following:

- Estimating the share of employment growth on industrial lands by ICI (industrial, commercial and institutional)
- Estimating the share of employment growth on industrial lands by geographic area
- Existing and forecast density assumptions (i.e. employees per net hectare/acre) for employment on industrial lands
- Historical and forecast absorption on industrial lands by employment type (i.e. general vs. prestige and sector (i.e. manufacturing, warehousing and distribution, office commercial, etc.))
- The amount of long-term net developable vacant industrial lands within Parkland County

Figure 41 graphically illustrates this approach.



FIGURE 41: SCHEMATIC OF APPROACH TO INDUSTRIAL LAND NEEDS ANALYSIS



In generating industrial land area requirements for Parkland County, the following steps have been undertaken:

1. Remove “Work at Home” Employment

As a first step, all estimated “Work at Home” employees have been excluded from the industrial land needs analysis, as these employees do not require land in the County’s industrial areas.

2. Determine the Amount of Industrial, Commercial and Institutional (ICI) Employment to be Located on Industrial Lands

As previously identified, current definitions of industrial lands have broadened to include a number of commercial uses (and, to a lesser extent, institutional uses) in



addition to traditional industrial development. For example, a number of commercial and institutional uses (as defined by Statistics Canada) are permitted on lands zoned industrial lands. Figure 42 represents the percentage breakdown by major sector (ICI) on industrial lands used for the forecast period (2014 to 2044). The allocation by ICI is based on a high-level review of recent development trends in Parkland County, a review of permissible uses on industrial zoned lands and anticipated opportunities to accommodate non-residential growth on non-industrial lands (e.g. commercial lands) in the County. Key observations include:

- 100% of forecast industrial employment growth is anticipated to be accommodated on industrial lands
- The majority (95%) of primary employment growth related to the energy sector is expected to be accommodated on industrial lands
- A significant share (65%) of commercial employment growth is forecast to be accommodated on industrial lands and largely represents employment within business services and services oriented to the energy sector. The remaining 35% represents employment in retail, food and accommodation, and other population-related services and is expected to be accommodated largely on commercial designated lands throughout the County
- 15% of institutional employment growth is expected to occur on urban industrial lands, with the balance accommodated on other designated lands throughout the County

FIGURE 42: PARKLAND COUNTY, PROPORTION OF FORECAST EMPLOYMENT GROWTH ON INDUSTRIAL LANDS

Employment Sector	Percentage of Total Employment on Industrial Lands
Primary	95%
Industrial	100%
Commercial	65%
Institutional	15%

Source: Watson & Associates Economists Ltd.

3. Determine the Amount of Employment on Industrial Lands Allocated by Geographic Area

As previously identified, Parkland County has a diversified industrial base which is concentrated in the Acheson Area. However, there are also opportunities to accommodate industrial growth in other areas of the County including within Fifth Meridian, Entwistle and on rural industrial lands. These areas have varying land demand prospects and corresponding land need requirements. As such, it is necessary to complete a separate land needs assessment for each identified geographic area.



5.2.1 Forecast Employment on Industrial Lands

Figure 43 summarizes forecast employment on industrial lands over the forecast period, based on the assumed allocation of growth on industrial lands assigned by ICI. As illustrated, over the forecast period, Parkland's industrial lands are anticipated to accommodate 83% of the County's total employment growth. Over the 2014-2024, 2014-2034, and 2014-2044 periods, employment growth on industrial lands is expected to total 6,605, 11,620 and 15,475, respectively.

FIGURE 43: PARKLAND COUNTY, SUMMARY OF EMPLOYMENT GROWTH ON INDUSTRIAL LANDS, 2014-2044

Sector	Employment Growth by Sector			Employment Growth on Industrial Lands			Percent of Total Employment Growth on Industrial Lands
	2014-2024	2014-2034	2014-2044	2014-2024	2014-2034	2014-2044	
Primary	75	140	165	70	135	155	95%
Work @ Home	365	725	1,095	0	0	0	0%
Industrial	5,570	9,675	12,870	5,570	9,675	12,870	100%
Commercial	1,415	2,645	3,545	920	1,720	2,305	65%
Institutional	290	610	950	45	90	145	15%
Total	7,715	13,795	18,625	6,605	11,620	15,475	83%

Source: Watson & Associates Economists Ltd.

5.2.2 Forecast Employment Density on Industrial Lands

Existing employment density on industrial lands in Parkland County was explored in Section Four and showed that employment density on recently developed industrial lands in Acheson averaged 6.5 jobs per net acre (16 jobs per net Ha).

It is anticipated that future industrial development patterns will include a broad range of industrial uses, including logistics/distribution, manufacturing and construction, many with relatively low employment densities. However, over time, densities are anticipated to increase marginally as the area becomes increasingly attractive for more prestige and urban type employment uses and coverages increase as land prices continue to increase, encouraging greater utilization of lands.

Given these factors, it is foreseeable that future densities on employment land in Parkland will gradually increase relative to existing conditions and recent development. An industrial density of 6.5 jobs per net acre (16 jobs per net Ha) is forecast over the 2014-2024 period, comparable to recent trends. Over the longer term as the range of sectors, uses and built form continues to evolve, the average employment density is expected to continue to increase. For the 2024-2034 period, an industrial density of eight jobs per net acre (19 jobs per net Ha) is forecast and for the 2034-2044 period, 8.5 jobs per net acre (21 jobs per net Ha).

Industrial land employment density is anticipated to be moderately lower within industrial areas outside of Acheson. Within Fifth Meridian, employment density is expected to average five jobs per net acre (12 jobs per net Ha) while industrial



development in Entwistle and on rural industrial lands is expected to average three jobs per net acre (seven jobs per net Ha).

The forecast density identified herein has been used in generating future land demand on industrial lands over the forecast period. It should be noted that the recommended average density on industrial lands has been informed by recent and anticipated market trends and it is foreseeable that future density levels achieved on industrial lands could differ, depending on the regional and local industrial market conditions. Accordingly, it is recommended that the County monitor future density trends on industrial lands on a five-year basis.

5.2.3 Forecast Employment Growth by Geographic Area

Based on a review of market demand, it is anticipated that 91% of forecast employment growth on industrial lands over the 2014-2044 period, representing approximately 14,100 jobs, is anticipated to be accommodated within the Acheson area. Approximately 6% (900 jobs) and under 1% (75 jobs) of forecast employment growth on industrial lands is anticipated to be accommodated within Fifth Meridian and Entwistle, respectively. The remaining 3% of employment growth on industrial lands (400 jobs) is expected to be accommodated on industrial lands in the rural area.

5.2.4 Industrial Land Demand

Figure 44 summarizes forecast demand for industrial lands from 2014-2044 in five year increments in accordance with the assumptions outlined previously. Key observations include:

- Parkland County is forecast to absorb a combined annual average of 76 net acres per year (31 net Ha per year) of industrial land from 2014 to 2044. Absorption is expected to peak between 2014-2024, averaging 105 net acres (42 net Ha) per year and decline thereafter
- Over the 2014-2044 planning horizon, industrial demand is forecast to total 1,929 net acres (781 net Ha) within Acheson. Over the 2014-2024 period, annual absorption within Acheson is forecast to average net 91 acres (37 Ha) per year, slightly above recent absorption trends. Over the balance of the forecast period, annual land absorption is expected to decline
- Forecast industrial land demand within Fifth Meridian and Entwistle is expected to total 186 net acres (75 net Ha) and 25 net acres (10 net Ha) over the forecast period, respectively. Rural industrial lands within the rest of the County are anticipated to absorb 130 net acres (53 net Ha) of land over the forecast period



FIGURE 44: PARKLAND COUNTY FORECAST INDUSTRIAL LAND DEMAND, 2014-2044

Growth Period	Total Employment on Industrial Lands	Employment Density (Jobs Per Net Acre)	Total Industrial Land Demand (Acres)	Annual Industrial Land Absorption (Acres)
Acheson				
2014-2024	6,275	6.5	965	97
2014-2034	10,805	7.0	1,544	77
2014-2044	14,080	7.3	1,929	64
Fifth Meridian				
2014-2024	165	5.0	33	3
2014-2034	465	5.0	93	5
2014-2044	930	5.0	186	6
Entwistle				
2014-2024	35	3.0	12	1
2014-2034	60	3.0	20	1
2014-2044	75	3.0	25	1
Rural Area				
2014-2024	130	3.0	43	4
2014-2034	290	3.0	97	5
2014-2044	390	3.0	130	4
County Total				
2014-2024	6,605	6.3	1,053	105
2014-2034	11,620	6.6	1,753	88
2014-2044	15,475	6.8	2,270	76

Source: Watson & Associates Economists Ltd.

5.2.5 Identified Net Developable Industrial Land Supply

Parkland's net vacant districted industrial land supply, adjusted for long-term vacancy, is 846 net acres (342 net Ha), as summarized in Section Four. This includes 840 net acres (340 net Ha) within Acheson and six net acres (two net Ha) within Entwistle. Fifth Meridian currently has no vacant districted industrial lands. The County also has no current opportunities to accommodate industrial growth on rural lands.

5.2.6 Industrial Land Requirements, 2014-2044

Figure 45 summarizes forecast industrial land need for Parkland County over the forecast period. In accordance with the existing supply of vacant industrial lands versus long-term demand, Parkland has an insufficient supply of industrial lands to meet long-term needs to 2044.



Based on the land needs analysis, a minimum of 1,089 net acres (441 net Ha), 186 net acres (75 net Ha) and 19 net acres (8 net Ha) of additional vacant districted industrial land is required within Acheson, Fifth Meridian and Entwistle, respectively, to accommodate forecast employment growth to 2044. The land needs analysis also identifies that there is demand for rural industrial land within the County totalling 130 net acres (53 net Ha) over the forecast period.

The identified net land need does not reflect site-specific takeouts, including open space, arterial roads/rail, stormwater ponds and easements, which require a “gross up” to determine gross land need. Further, it does not reflect future land vacancy, as previously discussed. Assuming a vacancy adjustment of 15% and a 65% net to gross ratio, this translates into a minimum requirement of 1,977 gross acres (800 gross Ha) of additional districted land within the Acheson, 338 gross acres (137 net Ha) within Fifth Meridian and 34 gross acres (14 gross Ha) within Entwistle to 2044. A further 236 gross acres (96 net Ha) is required to meet rural industrial land needs to 2044. It is important to note that this does not take into account non-developable environmental features.

FIGURE 45: PARKLAND COUNTY, INDUSTRIAL LAND NEEDS (ACRES), 2014-2044

	Acheson			Fifth Meridian			Entwistle			Rural		
	2014-2024	2014-2034	2014-2044	2014-2024	2014-2034	2014-2044	2014-2024	2014-2034	2014-2044	2014-2024	2014-2034	2014-2044
Net Industrial Land Demand	965	1,544	1,929	33	93	186	12	20	25	43	97	130
Net Industrial Land Supply (reflecting vacancy adjustment)	840	840	840	0	0	0	6	6	6	0	0	0
Net Industrial Land Surplus/ (Shortfall)	(125)	(704)	(1,089)	(33)	(93)	(186)	(6)	(14)	(19)	(43)	(97)	(130)
Net Land Need with Vacancy Adjustment¹	148	830	1,285	39	110	219	7	17	22	51	114	153
Gross Land Need²	228	1,277	1,977	60	169	338	10	25	34	79	175	236

Source: Watson & Associates Economists Ltd.

1. A 15% land vacancy adjustment has been assumed to account for vacant parcels of land which will not develop over the long-term in proposed industrial expansion areas.

2. Assumes 65% net to gross ratio. Excludes land requirements associated with non-developable environmental features.

5.3 Location Options for Future Development

The County has a need to expand its industrial land base to accommodate forecast employment growth on industrial lands, as identified in Section 5.2. This includes identifying opportunities for future industrial land expansion to accommodate growth within the Acheson, Fifth Meridian, and Entwistle areas, and to identify opportunities to accommodate industrial growth in the rural area.

The location of future industrial lands expansion areas should give consideration to a number of factors, including (but not limited to) the following:

- Good access to regional transportation networks (e.g. Highway 16, Highway 16A, Highway 60, Highway 43, Highway 44)
- Physical connectivity of proposed area to existing industrial lands to create a contiguous industrial area



- A critical mass – minimum of 250 acres (100 acres) – of available lands, where possible
- Flat to slightly rolling topography in areas with minimal environmental issues
- Potential for efficient and effective vehicular access and circulation, particularly for heavy truck traffic
- Buffering in order to minimize noise and air pollution to neighbouring residential and other non-residential areas

Opportunities to accommodate future industrial growth are discussed below.

5.3.1 Acheson-based Industrial Expansion Opportunities

Developable Lands within the Acheson Industrial Area

As discussed above, there is a need to designate an additional 1,980 gross acres (800 gross ha) of land within Acheson to accommodate growth to 2044. The Acheson Industrial Area has a significant amount of undeveloped non-districted land, totalling approximately 6,884 gross acres (2,785 gross Ha), that is currently designated Industrial Reserve District, Agriculture General District and Agriculture Restricted District, which could potentially accommodate future industrial development, as summarized in Figure 46. However, the area has a number of constraints which significantly reduce the total developable land area, as shown in Figure 47. Reflecting these constraints, the net developable land area is reduced to approximately 1,997 gross acres (808 gross Ha) as illustrated in Figure 46. Comparing this to the gross land need of 1,977 acres (800 Ha) identified in Section 5.2, the analysis suggests that there is sufficient developable non-districted lands within Acheson to meet long term industrial land needs to 2044.

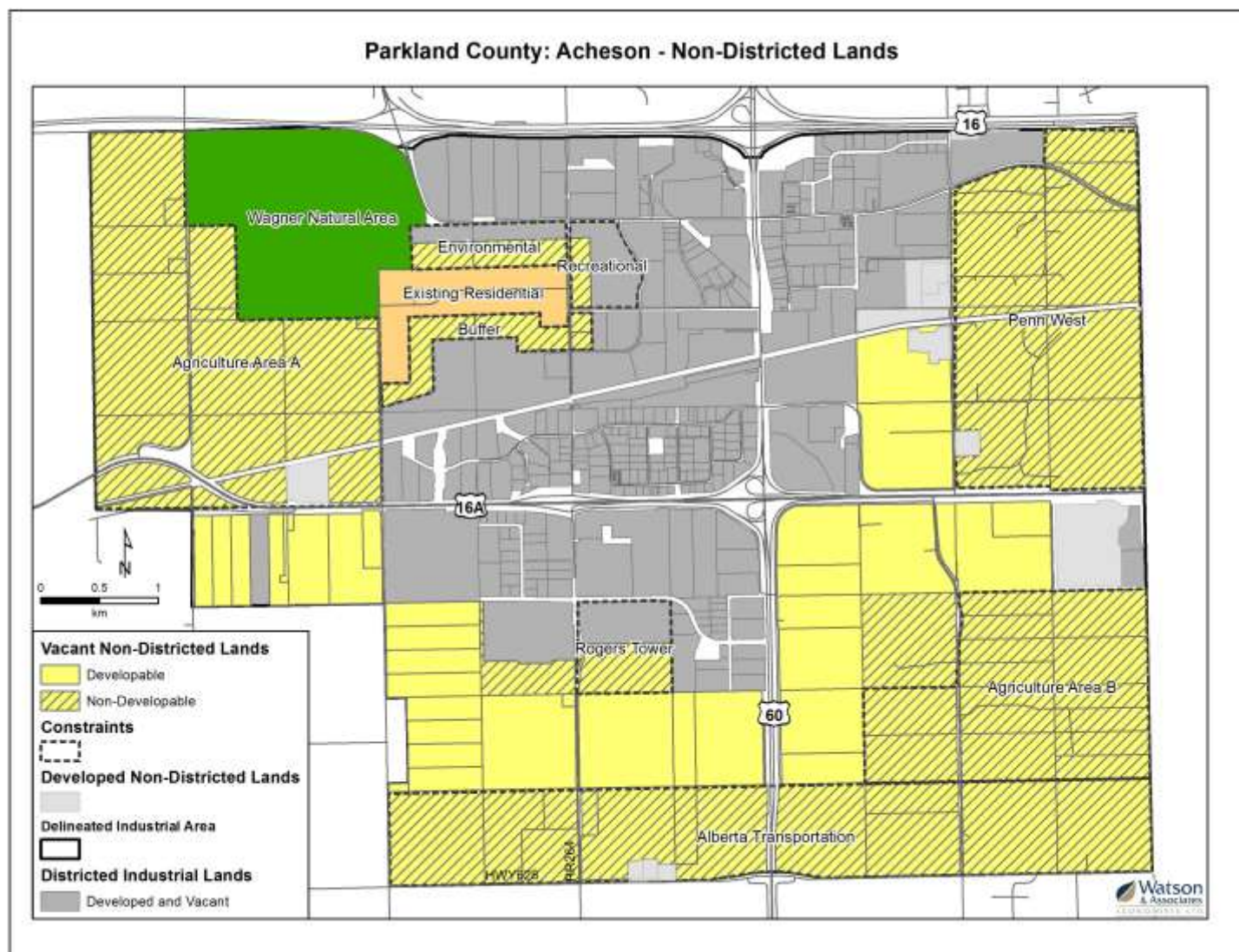
FIGURE 46: ACHESON, POTENTIALLY DEVELOPABLE NON-DISTRICED LANDS (ACRES)

	Total Gross Vacant (A)	Potential Constraints (B)	Gross Vacant Adjusted for Constraints (C = A-B)
Industrial Reserve District	2,441	1,365	1,075
Agriculture General District	918	642	276
Agriculture Restricted District	3,525	2,879	646
Total	6,884	4,886	1,997

Source: Watson & Associates Economists Ltd.



FIGURE 47: ACHESON INDUSTRIAL AREA POTENTIALLY DEVELOPABLE LANDS





While there appears to be sufficient gross developable land area within Acheson to meet future industrial land needs to 2044, there are still potential challenges to developing some of the lands identified. The following provides some high level observations on the development and market potential of the identified developable lands by industrial zone.

Evaluation of Developable Lands

Figure 48 provides an assessment of the developable lands by industrial zone within the Acheson Industrial Area and the recommended phasing/timing of development. Key observations are summarized below.

- Zone 7, with 601 gross acres (243 gross Ha) of developable land, has the highest development potential of the lands identified. Given that the County does not have sufficient designated lands to accommodate growth for the next 10 years, it is highly recommended that the County designate these lands for industrial uses and work with the private sector to ensure that these lands become developable in the short to medium term (i.e. 1-10 years), with lands abutting Highway 60 having highest development priority followed by lands further west
- Developable lands in Zone 8 should be designated and developed over the medium term (i.e. 5-10 years). This may be done in tandem with the development of lands in Zone 6 abutting Highway 60, which are highly marketable, but remaining operating wells on these lands make the timing of development less certain
- Developable lands in Zone 5 should be phased to develop in the long term (10-20 year period). The lands offer moderate development potential, which should increase as the surrounding area builds out. However, major roadway improvements are needed, including enhancing access to Highway 16A
- The timing of development of developable lands in Zone 4 and those along Highway 16A in Zone 6 is constrained given the operating wells in these areas. It is assumed that over the longer term (i.e. 20+ years), these lands will become available for development to meet the County's industrial land needs

FIGURE 48: ACHESON INDUSTRIAL AREA POTENTIALLY DEVELOPABLE LANDS ASSESSMENT

Industrial Zone	Gross Land Area (Acres)	Strengths	Weaknesses	Phasing/Timing of Development
Zone 4	243	■ Good access to Highway 60 ■ Frontage on Highway 16A	■ Operating oil wells, uncertainty on availability of lands for industrial development	Longer Term
Zone 5	436	■ Large contiguous land parcels ■ Some parcels have frontage on Highway 16	■ Access to Highway 16 ■ Road access	Long Term (10-20 years)



Zone 6	577	Proximity and visibility to Highways 16A and 60	Operating oil wells, uncertainty on availability of lands for industrial development	Longer Term
Zone 7	601	- Large contiguous land parcels - Extension of existing industrial area (Highway 60 Industrial Park) - Frontage/access to Highway 60		Short to Medium Term (1-10 years)
Zone 8	140	- Excellent access/frontage to Highway 60 - Large contiguous land area		Medium Term (5-10 years) or longer

By 2044, the developed area of Acheson will be approximately 5,000 net acres (2,000 net Ha) and approaching buildout of the identified developable land area. Opportunities to expand the delineated boundary of the Acheson Industrial Area are limited. The park borders the City of Edmonton to the east and south, City of Spruce Grove to the west and the area to the north is largely residential. However, over the longer term, constrained lands such as the Penn West lands may become available for industrial development which may expand the buildout potential of Acheson. Despite this possibility, it is imperative that the County explore opportunities to accommodate future industrial development in areas outside of Acheson, as outlined below.

5.3.2 Expansion Opportunities Outside of Acheson

There are additional industrial and employment land development opportunities outside of Acheson that should play into the accommodation of industrial employment – both serviced and unserved. Further, these lands might assist Parkland County with accessing opportunities or addressing challenges in current market supply (e.g. lack of unserved industrial land), as well as achieving economic development objectives (e.g. distributing employment growth throughout the County, encouraging eco-industrial development principles). Industrial and employment land development opportunities outside of Acheson are identified below.

Fifth Meridian

Based on a review of development opportunities in the County, Fifth Meridian Business Park represents an excellent opportunity to accommodate future industrial and employment land growth in the County over the longer term. As identified in Figure 45, the County is forecast to need approximately 338 gross acres (137 gross Ha) of additional industrial land is required in the Fifth Meridian area to meet the long term needs to 2044.



The Fifth Meridian area offers strong locational attributes, given its location along a major highway (Highway 16) and proximity to urban areas. The park offers expansion potential of approximately 390 gross acres, is of sufficient critical mass to support a range of opportunities, and would be more than sufficient to meet the County's 30 year land needs.

The ASP notes that much of the area designated for business/industrial uses requires full servicing to permit development. It is acknowledged that there are constraints to development of the area, which have contributed to a perception that the area is generally uneconomical to service. Servicing lands in the area is considered to have only a limited return on investment by the private sector, and previously completed servicing strategies have placed the costs for full municipal servicing in the area above other water and sewer systems (e.g. trickle fill), based on the need for a reservoir and low pressure sanitary systems.

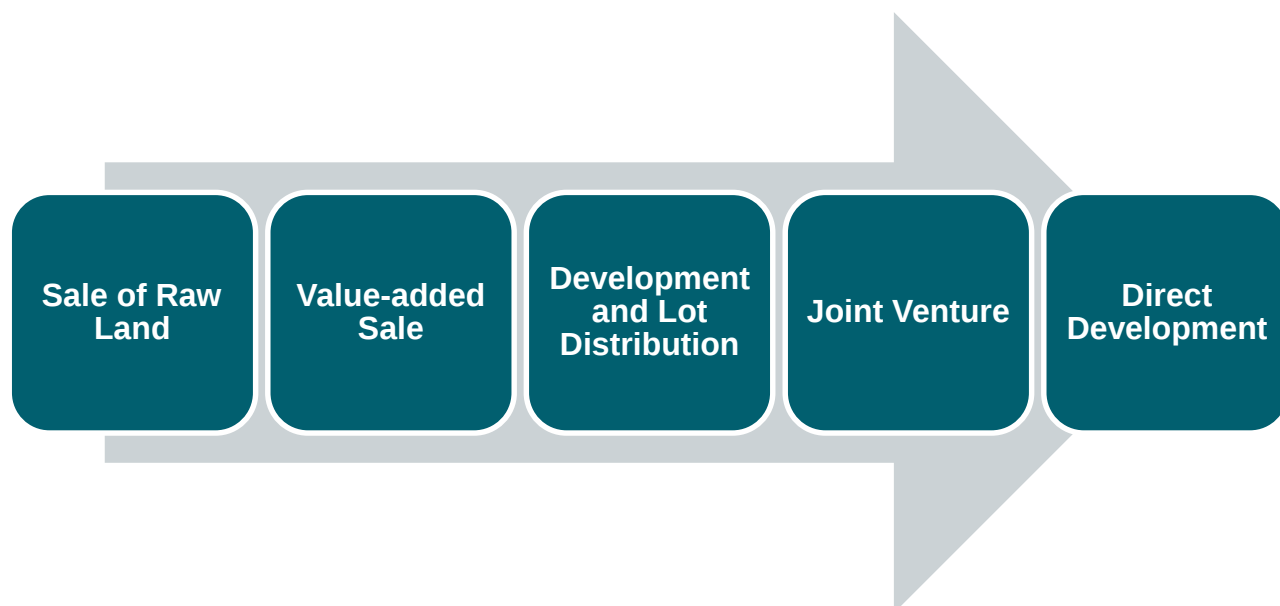
Perhaps more pressing than the costs for water and wastewater servicing in the area are the costs required for upgrading the existing transportation network in the area. The Highway 16 and 779 interchange is presently constructed to more of a rural standard, with frontage roads (Township Road 531A and Range Road 11) connecting to Highway 779 just south of the on/off ramps to Highway 16. The section of Highway 16 from Highway 779 to Kapasiwin Road (Range Road 35) is expected to be reconfigured to a freeway standard roadway (though no specific timetables for conversion exist), with part of that plan requiring construction of Township Road 531 and realignment of existing frontage roads to accommodate a full, freeway standard interchange at Highways 16 and 779. Though much of this cost will be borne by the provincial government, the resulting investment on the part of the private sector to plan for internal roads and land subdivision in alignment with the anticipated plans, particularly given uncertain timelines for the project, acts as a barrier to investment as well.

Finally, land in the area is presently owned by a range of different land owners. Though not as notable a barrier as infrastructure costs, this could complicate larger scale assembly of parcels and coordinated development of the entire area.

To stimulate industrial activity within this area, alternative development strategies may need to be pursued. This could include various development scenarios ranging from a more direct approach with respect to land acquisition, servicing and industrial development, to public-private partnerships involving joint-venture cost-sharing agreements. Generally speaking, public involvement in industrial land development often occurs over a continuum, after purchase of the land. The following figure outlines this continuum of options, from least amount of effort/resources on the part of the municipality to highest amount of effort/resources (moving left to right).



FIGURE 49: CONTINUUM OF LAND DEVELOPMENT OPTIONS



Each of these approaches offer a potential list of risks and rewards, and are often applied in very specific circumstances, as outlined in the figure below.

FIGURE 50: CHARACTERISTICS, RISKS, AND REWARDS OF DEVELOPMENT OPTIONS

Development Option	Characteristics, Risks, and Rewards
Sale of Raw Land	After purchase of lands, unserviced and undeveloped lands are strategically sold at market rates by the municipality. This approach may be particularly useful if the original vision for land development during municipal purchase of lands cannot be realized in an appropriate timeline. The risk of this approach is the lowest of all options, but the potential benefits of sale are limited exclusively to any appreciation in land costs since purchase.
Value-added Sale	The municipality undertakes required planning approvals to facilitate development (i.e. ASP, Outline Plans, or Zoning) of lands, with lands sold to strategic partners for development. This can be a useful approach when the municipality is not in a position to develop the lands, but has a vision for the development of those lands. Risks are relatively limited, and the municipality benefits from establishing the land use planning policies and regulations that govern development of the land (as well as any appreciation of land cost).
Development and Lot Distribution	The municipality provides raw land to partners for development, with each partner receiving subdivided lots in proportion to their contribution to market and sell. This option offers municipalities the outside expertise needed to achieve a specific type of development over a certain period of time. Risk is shared over the duration of the



Development Option	Characteristics, Risks, and Rewards
	project, but the partnership is comparatively short term in this case. Though the municipality receives fully serviced lots that achieve the municipality's vision, rewards are limited to the sale of the parcels the City receives back through the distribution of lots based on contributions.
Joint Venture	The municipality pools resources with partners in a separate corporation, which develops, markets, and sells shovel-ready land. This is most appropriate where the timeline for development can be extended over a long period, and where risk analysis notes that expertise is best provided through a long term agreement. While the municipality achieves a longer term vision, it is critical that the relationship be well-defined at the outset to manage risks and rewards.
Direct Development	The municipality participates fully in the planning, servicing, marketing, and sale of lands to users most aligned with the municipality's vision for development. Construction is tailored to demand or specific market gaps, and phased to avoid surplus supply entering the market before demand exists. This model offers the highest financial and economic development rewards for the municipality, but exposes the municipality to the highest levels of risk as well.

Depending on the financial commitment required in each option, the County may need to consider the use of alternative financing tools and strategies to support this activity. This could include revision to the off-site levy bylaw, or exploration of additional levies and other strategies to fund development or build reserves. Most municipalities that have undertaken direct development activities have required strategies like this in the short term, with some shifting the financing of direct development activities to revenues acquired through previous development and sale activities over time. However, in the shorter term, it should be noted that any direct development activities undertaken will likely require new or redeployed sources of revenue for the County.

Entwistle

The Entwistle Industrial Area offers only limited opportunity to accommodate development over the short term (as outlined in the land inventory section), but remains the main business park in the Entwistle/Evansburg area. Though anticipated to accommodate a limited share industrial of development in Parkland, there are continued opportunities to explore and support industrial development in the area. The industrial land needs analysis contained herein identifies that an additional 34 gross acres (14 gross Ha) of districted industrial land are needed in Entwistle to meet longer term demand.

Though expected to remain unserviced for the foreseeable future, the park may represent unique opportunities to accommodate dry industrial uses focused on serving the surrounding agricultural and resource extraction uses, particularly as new lands



become available to the south of existing business and industrial lands. Potential uses could include metal fabrication or machine shops, as well as machinery and equipment repair. Further, the servicing constraints in the area may also allow for temporary (i.e. until such time that industrial lands are serviced) use of industrial lands by unserviced uses, such as industrial storage yards, should appropriate design standards be met.

To accommodate future demand, the County should expand the developable industrial land area by districting Urban Reserve lands to the east for industrial purposes. The County should also explore the potential to expand the delineated industrial area boundary further south (as present activities permit) and designate a portion of the Agricultural Restricted (AGR) district lands for medium industrial purposes, as per the directions of the Entwistle ASP.

Rural Parkland County

Several factors suggest that certain areas of rural Parkland County may be appropriate as future industrial land options over the short to long term. Primarily, the employment forecast and associated land demand assessment suggested that there is a potential need for approximately 236 gross acres (96 gross ha) of industrial land outside of key employment and industrial areas to 2044. The present supply of industrial land in the rural area is limited, suggesting that the County needs to make the development of strategies to accommodate this investment a high priority in its industrial land strategy.

Further to projected demand, the County continues to experience competition for serviced industrial lands from uses with low building coverages, low employment densities, and outdoor storage requirements. In part, this is a reflection of the movement of these uses out of west Edmonton (as City policies increasingly restrict development), and the lack of unserviced and dry industrial lands available to accommodate these uses in the Capital Region (which do not typically require serviced industrial lands). While these uses provide the County with tangible benefits in terms of increased tax assessment, their absorption of serviced industrial lands in areas like Acheson reduces the potential for the County to attract higher density industrial uses that offer higher tax benefits (as a result of more densely developed lands) and potentially higher levels of employment impact.

In addition to lower density uses, the continued and expected levels of Provincial investment along the Highway 16 corridor, particularly upgrades to interchanges at major highway intersections (e.g. Highway 43, Highway 44), might offer opportunities to support higher density employment and industrial land development over the longer term as well. As lands more suitable for higher density industrial uses in existing employment and industrial areas get absorbed across the County, lands at these key intersections should continue to be studied to assess their potential for higher density serviced or unserviced industrial development.

As such, some rural areas of Parkland County may play a role as future industrial areas, accommodating both low and high density employment uses. In part, this depends on the County and its landowners developing an understanding of the highest priority or most appropriate areas for this activity, combined with policy and regulatory



approaches that allow for development in the rural areas while protecting adjacent land uses.

Given that transportation access plays a key role as a location factor for many of the uses most likely to locate in Parkland County, as well as lower density storage-type uses, corridors and intersections of major transportation routes (e.g. Highways 16, 16A, 43, 44, and 627) are likely the highest priority areas to explore dry and unserved industrial opportunities (in the short term) and serviced industrial development in the longer term (particularly for those areas closest to Acheson, Spruce Grove, and Stoney Plain). Actually accommodating development in these areas though will require policy and regulatory changes, as the majority of lands in the rural area are currently districted Agriculture General (AGG), or in some cases, Highway Commercial (HC).

TransAlta Lands

TransAlta retains ownership on a notable portion of lands in Parkland County, including lands currently being mined, lands intended to be mined over the short to long term, lands adjacent to mining operations, and lands in the reclamation process. Given extensive land holdings, TransAlta remains a key potential partner in accommodating (and perhaps expanding) industrial land demand in the rural area. Like Entwistle, there are unique opportunities to be explored in these areas, ranging from more limited scale and difficulty (which could be implemented over the short term) to large-scale and ambitious plans (which might be viewed as longer term projects). Shorter term opportunities might include temporary or permanent low density industrial storage or outdoor work uses (e.g. laydown yards), on lands intended to be mined, adjacent to lands intended to be mined, or lands being reclaimed (particularly for lands with development or servicing constraints). In areas currently zoned Resource Extraction (RE) district, these uses could be accommodated with little additional planning consideration, if there is interest on the part of TransAlta and the County. Given access requirements, lands along (or in close proximity to) Highways 16 and 627 should be a priority.

On the larger-scale, there may also be opportunities to explore eco-industrial development in areas currently owned by TransAlta as a means of accommodating rural industrial development, particularly those uses that may benefit from waste and co-products of energy generation activities. This represents a longer term plan, given the relative difficulty associated with master planning an eco-industrial development and the associated exploratory and planning activities that would need to be undertaken by all parties to assess market demand. Nevertheless, Parkland County should begin to explore opportunities of this nature.

Parkland Airport

The Parkland Airport is located on the east side of Range Road 270 (Sandhills Road), approximately two kilometres north of Highway 627. Over the last year, the airport has undergone a number of improvements, including the addition of new refuelling facilities, stormwater management facilities, fire suppression facilities, a taxiway and apron, as well as an extension and upgrade of the runway facilities. At present, the



airport remains primarily focused on serving general aviation interests, particularly the Edmonton Flying Club.

As business markets become more global in nature, the role of airports in driving economic development is increasingly being explored. Once reaching a sufficient size and volume of commercial traffic, airports have particularly been found to drive development of a number of air-related business and employment sectors on or immediately adjacent to airport lands:

- Services directly supporting the operation of the airport (e.g. aircraft maintenance services)
- Services for airline employees and passengers (e.g. accommodations, food services, automobile rentals)
- Air-related freight services (e.g. shipping, freight forwarding)

A range of other businesses may be attracted to areas in close proximity to the airport, based on the prestige of locating close to an airport and access to passenger and freight air services. More specifically, this might include businesses in professional services, transportation, warehousing, and technology-based manufacturing (particularly of products with a high value-to-weight ratio). Some larger airports have started to leverage these trends through the concept of an aerotropolis development, where the airport acts as a node for master planned developments of industrial, commercial, residential, and institutional uses. Both the City of Leduc and County of Leduc continue to pursue plans for an aerotropolis-like development surrounding Edmonton International Airport.

The Parkland Airport Development Corporation continues to pursue the expansion of the airport through the acquisition and development of lands in the area. However, the lack of commercial aircraft and passenger movement suggests that the employment and industrial land impacts of the airport are limited over the short to medium term. It should be noted that if activity grows at Parkland Airport over the longer term, there may be opportunities to encourage the development of industrial, commercial, or residential lands in close proximity to the airport. Given present levels of activity and proximity to Edmonton International Airport though, other areas of the County represent higher priority areas of focus for future industrial and employment land planning over the term of this strategy.



6 Strategy and Recommendations

Parkland County remains a key destination for industrial and employment land investment in the Capital Region, based largely on cost competitiveness, availability of a diverse mix of industrial and employment land opportunities, and proximity to major infrastructure. These factors have greatly supported the recent rapid growth of the County in areas like Acheson, and have the potential to support continued employment growth in the future.

The employment and industrial land strategy is focused on supporting the continued potential of the County. In particular, the strategy is focused on determining the long-term demand for industrial and employment lands in Parkland County, and the ability of the County to accommodate likely levels of employment demand in the future (i.e. to 2044). In doing so, the strategy offers the background information required to shape land use and economic development policies that encourage employment and non-residential tax assessment growth, primarily through the designation, zoning, and servicing of a competitive inventory of industrial and employment lands.

The lands analysis identified that Parkland County does not have the necessary districted inventory to accommodate demand over longer term (i.e. to 2044). Beyond the next 10 years, Parkland County is expected to experience a notable deficit in employment and industrial land supply, reaching an estimated total deficit of 2,585 gross acres (1,046 gross hectares) by 2044, with the majority of land need in the Acheson area (1,977 gross acres or 800 gross hectares). This suggests that the municipality needs to start considering expansion of industrial and employment land supply – as well as the policy approaches to support, encourage, and enable land and industrial development – in the near term, to ensure lands are market ready within the next 10-15 years.

With those broader goals in mind – improving investment readiness and enhancing employment land supply – several objectives guide Parkland County's employment and industrial land strategy:

- Alignment of policies with existing and emerging areas of economic and industrial growth or demand and emerging characteristics of industrial and employment areas
- Monitoring of industrial and employment land supply on a regular and ongoing basis
- Minimization of land use conflicts or industrial and employment land supply fragmentation
- Improved consistency and certainty in approvals and longer term planning for industrial and employment lands
- Recommended strategies to accelerate and encourage industrial and employment land development

Chapter Objectives

- Provide strategies and recommendations to improve the longer term supply and investment readiness of industrial and employment lands in Parkland County



The following recommendations build on those guiding strategic objectives, and outline the actions that Parkland County can take to improve investment prospects, over the short to long term. Each strategic recommendation outlines the current issues and opportunities associated with it, as well as policy or process based actions for Parkland County to consider in its longer term employment and industrial land use and economic development planning activities.

Recommendation 1: Undertake regular and ongoing monitoring of industrial and employment land supply and demand indicators to assist with longer term land use planning activities	
Opportunities and Challenges	Effectively accommodating industrial and employment land development over the longer term requires the implementation of programs and mechanisms to accurately receive, catalogue, and assess industrial development information, as well as assess the available supply of <u>employment and industrial lands</u>. The data collected and presented in this study offers Parkland County with a base to work from, but the County will need to continue to develop and adapt the data to inform its longer term land use policy and regulation development objectives.
Potential Actions	■ Building on baseline data in the employment and industrial land strategy, develop a system for tracking and monitoring industrial and employment land supply and demand data, to assist with longer term planning activity and development inquiry response. Data should be tracked on an ongoing basis, and should include site-specific indicators and municipality-wide indicators, such as: ● Number of industrial or commercial office development inquiries and characteristics of inquiry (e.g. sector, parcel size) ● Proposed building sizes on industrial lands (GFA) ● Constructed building size on industrial lands (GFA) ● Industrial land absorption ● Industrial land availability (i.e. amount on the market) ● Business openings/closings ● Employment on industrial lands ● Industrial and employment land inventory (by MDP designation, zoning classification, and servicing status) ■ Track alignment of employment and population growth in Parkland County with the forecasts in this strategy and at the regional (i.e. CRB) level ■ Undertake a comprehensive industrial land inventory exercise at a minimum of every five years, to determine when industrial and employment lands are required to accommodate demand and assess market choice



Recommendation 2: Improve alignment of land use regulations with emerging character and general purpose of industrial and employment areas	
Opportunities and Challenges	Though design standards in Acheson have risen in the last several years, particularly in BI districts, several uses listed as permitted or discretionary in industrial districts of the LUB are not necessarily consistent with the emerging character of industrial and employment areas in Parkland County, or the intended character of new employment and industrial areas (e.g. Meridian Business Park). Though listed as discretionary (and as such, subject to additional review) and not likely to develop in most employment or industrial areas in the County, the removal of some heavier industrial uses no longer consistent with the County's employment and industrial areas ensures that the character of the area will be maintained in the future. Further, though the General Industrial Manufacturing/Processing use is quite flexible in the types of industrial uses it could accommodate, its general nature requires that it be listed as a discretionary use in the BI district, to ensure that development is consistent with the purpose of the zone (e.g. contained activities). As such, some types of prestige or light industrial developments that are consistent with the purpose of the zone would be subject to more review than a "permitted" use. As a result, there may be opportunities to identify new industrial and employment land type uses in the LUB that are prestige or light in nature, and could be listed as a permitted use in the BI district.
Potential Actions	■ Consider the removal of heavier industrial uses in MI districts, such as Concrete/Asphalt plants or bulk agricultural chemical distribution uses ■ Consider the development of one or more new industrial uses related to prestige industrial activities (i.e. fully enclosed, no nuisance factors outside the building) that more closely align with the purpose outlined for the BI district, and which may be listed as a permitted use in BI district of the LUB

Recommendation 3: Provide stronger policy direction on the delineation of industrial and commercial policy areas in industrial and employment areas	
Opportunities and Challenges	Though not necessarily a critical barrier to investment, the combination of industrial and commercial uses into a single policy designation can create uncertainty into the longer term objectives for an employment or industrial area. This could be on the part of the private sector or the public sector, particularly as land use policies move through the <u>Regional Evaluation Framework of the Capital Region</u>. By separating industrial and commercial policy areas in the MDP, ASPs, and other plans (at a minimum in policy area mapping, but also with respect to goals, objectives, and policies), the municipality provides more detailed information on its longer term objectives around industrial and employment area configuration. In particular delineation of industrial and commercial policy areas may assist with reducing potential land use conflicts or absorption of lands intended to be industrial through LUB amendments.
Potential Actions	■ Modify existing Industrial/Commercial policy area in MDP (and any applicable ASPs) to separate industrial and commercial policy area designations, based on land use principles of conserving industrial land for industrial development, and creating complete business parks with industrial and commercial uses



Recommendation 4: Develop land use regulations restricting non-complementary major or large-format standalone retail uses in industrial and employment areas	
Opportunities and Challenges	The BI and MI districts accommodate a range of non-industrial or non-basic uses. Some of these uses could potentially create negative impacts on the surrounding industrial or employment uses, or impact the future prospects of the area for industrial development. For example, the General Commercial Retail Services use may include commercial retail developments in a range of configurations, from small scale retail stores to large format, standalone retail (i.e. big box) stores. Though large format retail uses generate employment, they may also absorb large shares of land through their configuration or requirements (e.g. parking), draw considerable traffic from outside of the immediate area (creating congestion in the industrial area), or affect the character of an industrial or employment area. As such, approaches should be developed to discourage major retail development in industrial areas.
Potential Actions	■ Limit potential for land use conflicts between general retail (particularly large-format, standalone retail) and industrial, professional office, and locally-focused commercial uses, through one of several options: ● Removal of General Commercial Retail Services as a permitted or discretionary use in BI or MI districts to minimize potential land absorption or traffic conflicts; or ● Change of General Commercial Retail Services from a permitted to a discretionary use in BI and MI districts, with criteria and direction limiting size, scale, or scope to more locally-oriented retail services as a condition of approval in LUB.



Recommendation 5: Provide stronger policy and regulatory direction on the objectives for encouraging ancillary and complementary non-industrial uses in industrial and employment areas	
Opportunities and Challenges	Notwithstanding the need to restrict or regulate retail uses that are incompatible with industrial development, the competitiveness of industrial and employment areas is increasingly being considered within the context of a more complete employment or industrial area – one that provides a range of services focused on the working or travelling population in the employment area (e.g. restaurants, accommodations, or small-scale retail). As such, land use policies and regulations must strike a balance between maintaining industrial and employment lands for key industrial and employment-generating uses, while also allowing the development of the industrial or employment area as a viable and competitive place to work.
Potential Actions	■ Introduce more defined policy direction in the MDP to outline the goals and objectives for creation of complete industrial and employment areas (e.g. non-industrial, non-office uses should be of limited scale, or focused on serving businesses and employees in the industrial or employment area) that manage non-industrial uses and potential conflicts and create a viable mix of commercial and industrial land use designations and districts through the ASP process ■ Consider the introduction of more defined criteria or descriptions of appropriate scale and scope of complementary non-industrial uses (e.g. indoor eating establishments, daycares, personal and health care services) in MI and BI districts, or the introduction of smaller-scale service-oriented businesses at strategic and accessible locations in existing MI districts



Recommendation 6: Plan for future industrial and employment growth in the Acheson area

Opportunities and Challenges	The land demand analysis notes a requirement for a minimum of 1,089 net acres (441 net ha) of land in the Acheson area to accommodate anticipated employment growth to 2044. Taking into account internal infrastructure and long term vacancy considerations though, this land need increases to a demand for 1,977 gross acres (800 gross ha) over the longer term. With a present supply of just 840 net acres, the area is expected to be in a shortfall before 2024, suggesting the need to begin longer term planning in the near term, including the involvement and support by the County for districting and developing additional employment and industrial lands. <u>In addition to a lack of longer term supply</u>, Acheson continues to struggle with demand from lower density and low intensity industrial uses. While somewhat supporting the County's objectives for economic development, these uses often offer comparatively lower levels of tax assessment impact and employment than other types of industrial development forms. While lands get absorbed, they remain somewhat underutilized based on the Acheson area's potential to support a range of higher density, employment generating uses. Further, the requirements for outside storage may not necessarily be consistent with the emerging prestige character of many of Acheson's newer BI districted employment areas. In addition to the provision of new industrial and employment lands in Acheson to accommodate growth, the County should consider the development of regulations that discourage the development of rural uses that do not offer the best utilization of land (and thus highest tax assessment) and highest potential for job creation.
Potential Actions	■ Engage with developers and landowners in the Acheson area to coordinate and plan for industrial uses within the 1,997 gross acres (808 gross ha) of developable lands in the Acheson area through planning approvals and servicing, prioritized as follows (as outlined in Section 5.3.1): ● Short- to medium-term, one to 10 years: 601 gross acres (243 gross ha) in Zone 7 ● Medium-term, five to 10 years: 140 gross acres (57 gross ha) in Zone 8 ● Long-term, 10 to 20 years: 436 gross acres (176 gross ha) in Zone 5 ● Long term, 20+ years: 820 gross acres (332 gross ha) in Zones 4 and 6 ■ Develop regulations to limit the size of outdoor storage uses to 25% or less of the building footprint on BI districted lands in Acheson, to discourage the absorption of lands by lower density uses ■ Continue to monitor and assess opportunities for the introduction of industrial uses on lands currently considered constrained, with longer term objectives of encouraging reclamation and industrial development



Recommendation 7: Examine opportunities and plan for future industrial land development in the Fifth Meridian area

Opportunities and Challenges	The land demand analysis identified a potential demand of approximately 338 gross acres (137 gross ha) of additional industrial and employment land in the Fifth Meridian area to 2044. With an estimated 390 gross acres (158 gross ha) of industrial land available, the area has the critical mass needed to support a range of industrial development needs over the longer term. The competitiveness of the area is enhanced by its proximity to major highways and urban areas, offering it the potential to support a wide range of both knowledge-based and industrial opportunities <u>in a more prestige setting than much of Acheson</u>. However, there are continued challenges to the development of the area. Servicing of the area is largely perceived as offering a limited return on investment, while the area's diverse ownership interests make larger-scale development initiatives more complicated. Further, there are uncertain timelines for investment and redevelopment of major transportation infrastructure in the area. Given its favourable market potential though, the Fifth Meridian area might offer opportunities for public intervention in the employment and industrial land development market to overcome these challenges, <u>while not necessarily competing directly with the private sector</u> (if lands offered specifically target gap areas of the market). Public involvement in employment land development can occur over a continuum after purchase of the land, ranging from limited risk/involvement to direct involvement (as outlined in Section Five). In each of the scenarios outlined, the County would maintain some interest in the development of the land, ensuring it occurs in alignment with municipal objectives. Public involvement in development might have several benefits: ■ The County could be a patient investor (recovering costs over a longer term than the private sector) ■ The County could address current market gaps across Parkland County (e.g. the need for more prestige industrial and employment uses characteristic of gateway employment areas) to improve market choice The employment and industrial land strategy for Parkland County in the Fifth Meridian area should include efforts to work with present landowners on addressing supply objectives, and consideration for public intervention in the employment land market to address market gaps.
Potential Actions	■ Engage with developers and landowners in the Meridian area over the medium (i.e. five to 10 years) to long term to evaluate land use planning and servicing opportunities, focused on improving the investment readiness of the approximately 390 gross acres of developable employment and industrial land in the area ■ Evaluate opportunities to purchase and undertake public development of an industrial or business park in the Fifth Meridian area of a minimum of 250 acres (100 ha) in size, with the County's involvement occupying one or more of the public intervention strategies outlined in Section Five, supported by a sustainable source of funding ■ Should the municipality engage in land development, expand the use of fiscal impact assessments in the development process to ensure that developers and users closely align with municipal objectives and offer the strongest potential to recover municipal costs of development



Recommendation 8: Plan for future industrial and employment land development in the Entwistle area	
Opportunities and Challenges	The land demand analysis noted that the Entwistle area has the potential to accommodate an estimated 75 new jobs on employment and industrial lands to 2044, with an associated demand of roughly 25 gross acres (10 ha). Given the present supply of six net acres is expected to be absorbed over the next 10 years, there is an anticipated shortfall of 19 net acres (eight net ha) of land, or 34 gross acres (14 gross ha), in the Entwistle area by 2044. Most of that demand can be accommodated through industrial lands designated in the current ASP, particularly with the expansion of industrial areas to the east of the existing area (presently urban reserve), and the expansion of industrial uses south along the Highway 22 corridor outside of the hamlet boundary (in areas presently used for gravel extraction). In addition to moving forwards with planning approvals and servicing strategies under approved phasing of the area, the County should continue to promote the area as a medium industrial hub for western Parkland County, and industrial and resource-based operations in adjacent areas.
Potential Actions	■ Work with land owners to change UR district lands to the east of existing BI and MI districts to the MI and HC districts, as per the directions in the Entwistle ASP ■ Work with existing land owners over the medium to longer term to change districting in the quarter section of lands immediately south of the hamlet boundary from the AGR district to MI, HC, and PC districts, as per the directions and phasing strategies in the Entwistle ASP ■ Continue to engage with developers and potential industrial users – particularly small manufacturing users focused on agriculture and resource extraction and dry industrial storage users – on industrial land opportunities in the Entwistle area, with a short term focus on temporarily unserved industrial development



Recommendation 9: Work with rural landowners, particularly TransAlta, to establish and assess unserved industrial and eco-industrial development opportunities

Opportunities and Challenges	Overall, the industrial land demand analysis determined potential demand for up to 236 gross acres (96 gross hectares) of industrial land outside of established employment areas. In part, this is driven by lower density industrial uses that are increasingly being pushed out of urban areas, as well as rural and agriculture-related businesses that require close proximity to their customers/suppliers in the rural areas. However, there may be longer term opportunities to accommodate higher density development as employment lands in Acheson, Fifth Meridian, and Entwistle are absorbed. At present, there are limited marketable opportunities to accommodate industrial demand in the rural area. In part, this is based on a lack of appropriately districted land, but also perhaps some unrealized potential opportunities. TransAlta remains a major land holder in the County, through lands acquired for mining purposes (or adjacent to those lands) and lands moving through the reclamation process. Though much of the area is intended to be mined over the longer term, there may be opportunities to introduce temporary or permanent industrial developments on some of these lands not required for agricultural purposes, either before they are mined or following their reclamation. The presence of the Keephills and Sundance plants in those areas may offer some select opportunities to introduce eco-industrial developments as well, particularly those that may benefit from or use waste heat or other co-products generated in the process (e.g. flyash) in their processes. Outside of TransAlta's lands, there are strategically located lands in areas outside of existing industrial and employment areas that may be appropriate for lower-intensity industrial or agriculture-related and resource extraction-related industrial uses as well. As a result, the engagement of rural landowners in discussions regarding longer term industrial land planning should be a priority, as well as monitoring the long term plans of Alberta Transportation.
Potential Actions	■ Work with land management officials at TransAlta to assess longer term interest in eco-industrial development in close proximity to Sundance and Keephills facilities, including the development of business cases for specific industrial business lines that can use waste and co-products (e.g. greenhouses), and integrate findings into economic development marketing efforts ■ Engage land management officials at TransAlta to identify strategic lands for dry industrial development within their RE district land holdings, including industrial storage (e.g. laydown yards) and outdoor work uses, to encourage the development of temporary or permanent dry rural industrial land supply along major transportation routes (e.g. highways 16 and 627) ■ Work with landowners at strategic sites outside of existing industrial and employment areas (e.g. Highway 16 and Highway 44, Highway 16/16A corridors) to assess interest in dry industrial development, and facilitate the amendment of the LUB to create RIC districted lands in those areas ■ Continue to monitor long-term capital plans of Alberta Transportation for Highway 16, to assess the feasibility of industrial and employment land development at major highway interchanges, after they are redeveloped or constructed