

Strathcona County

Industrial Lands Strategy – Summary Report

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1 Introduction

Strathcona County is a specialized municipality within the Alberta Capital Region, and is composed of a large urban service area (Sherwood Park) surrounded by a significant rural area, which together account for a land mass of 800 square kilometres. Over the last five years, the County has seen population growth of 12%, making it the third largest municipality in Alberta. A founding member of Alberta's Industrial Heartland and home to a range of businesses in the Strathcona Industrial Association area, the County plays a key role in the petrochemical, chemical, and oil and gas sector – as both a centre of production and a centre for professional services. However, competitive pressures on the industrial business community – continually rising and increasingly from outside Alberta – suggest that the County prepare a strategy that will direct a diversified approach to land use planning that supports high levels of employment growth, fiscal sustainability and quality of life despite these increased pressures.

The purpose of the Industrial Land Strategy is to provide information to the community that will direct further development over the longer term (the 2044 time horizon of the Capital Region Board Growth Plan), as well as support the expansion of agricultural, light, medium and heavy industrial uses to maintain and expand the present tax base. This summary report has been prepared to highlight the key findings and recommendations of the study. Full details of the analysis can be found in the accompanying Industrial Land Strategy – Technical Report.

1.1 Industrial Land Strategy Concepts

In order to promote a common understanding of the industrial land strategy for Strathcona County, the following definitions have been developed to outline a number of more technical terms and concepts used to describe industrial land and development type, location, and characteristics.

- Industrial land absorption: refers to industrial lands removed from vacant land inventory to accommodate development; triggered at time of building permit issuance;
- Knowledge-based industries: industries that rely more heavily on human intellect and technology than raw materials in the delivery of products and services (e.g. research and development, professional services);
- Lower-order uses: land uses that, while achieving some goals and objectives of land development for developers, businesses and the municipality, may represent an underutilization or underachievement of development benefits or potential for a given site (e.g. outdoor storage, temporary facilities);



- Prestige Industrial: industrial development in which all activity occurs within an enclosed facility. Prestige industrial uses are often accommodated in business park-type settings and are built to a high standard of urban design with concern for the facility's relationship to adjacent buildings and the streetscape; and
- Shovel-ready: reflects zoned developable vacant industrial lands that have servicing and would be available for development by an end-user immediately or within the upcoming year. It excludes lands currently under construction and long-term land holdings of heavy industrial lands held by major oil companies.

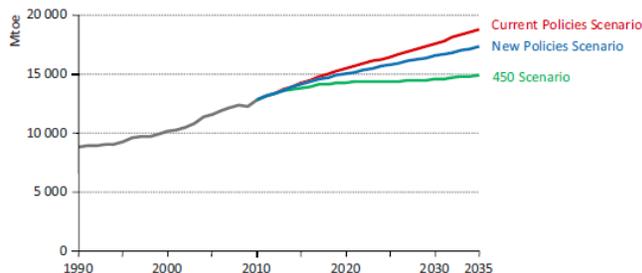
2 Competitiveness and Market Readiness

2.1 National and Provincial Context

As with the broader Capital Region, the economic prosperity of Strathcona County is centred on non-residential development that is derived, in part, from the energy industry. Therefore, setting the context of demand for industrial land in the County begins at the international level, in global energy trends. These trends are generally positive, with sustained demand and pricing that are anticipated to support increased production to 2035.

All of the scenarios in the IEA 2012 World Energy Outlook anticipate growth in global demand for energy to 2035

FIGURE 1: WORLD PRIMARY ENERGY DEMAND BY SCENARIO, 1990-2035



Source: World Energy Outlook 2012, International Energy Agency

Consistent with global energy trends, oil production in Canada is anticipated to increase 250% by 2035, with Alberta expected to continue leading national energy production. Light oil and other unconventional oil make up the majority of the projected increase in oil production, and the projected decline in conventional output of crude oil is anticipated to be overshadowed by the increase in oil sands production (which, in turn, will drive industrial demand). Estimates of investment in Alberta's oil sands are not only reliant on the price of oil, but also on constraints to capacity, including



transportation access, a tight labour market and competition for space, materials and business services. All of these factors are anticipated to remain challenges and could potentially lead to project delays. As such, these trends must be monitored in the context of longer term industrial land planning.

Significant investment is also expected in upstream industries to accompany this increased production – both in Alberta, and across the rest of Canada.¹ As with production, a number of barriers may stand in the way, including logistics capacity, availability of labour and inputs and environmental and social pressures. The IEA expects that the volatility of oil prices – and the fact that this is an entirely external factor for Alberta and Canada – will likely have the largest influence on the Provincial industry.

Overall, the Conference Board of Canada estimates that \$364 billion will be invested to support oil sands development between 2012 and 2035, generating 3.2 million person years of employment nationally.² Although more than one-third of the supply chain benefits are expected to spread to other provinces, the majority of benefits will be retained within Alberta. This has positive impacts on a full range of industries from industrial to knowledge-based sectors, which could shape industrial land demand in the Capital Region.

2.2 Regional Market Context

In 2011, population across the Capital Region³ reached 1,159,869, making it the sixth largest Census Metropolitan Area (CMA) in Canada. The area is expected to continue growing, with forecast annual rates of growth of 2.3% for employment and 1.5% for population, to 2041. Based on those growth trends, the Region's population is anticipated to reach 1.74 million people by 2041.⁴

The Capital Region Board's (CRB) 2010 Growing Forward report laid out a plan for regional growth management which stressed sustainability and transportation. Specifically, it identified a series of issues that would benefit from management at a regional level, including land use planning, highways and roads, inter-municipal transit, pipelines, waste management, and water and wastewater infrastructure. As such, any industrial lands strategy – that will generate implications in these areas – needs to consider the emerging regional structures guiding decision making.

The Shaping Alberta's Future report identifies challenges such as high costs to investors in terms of materials, labour and transportation costs; limited distribution channels for oil products; as well as an association with high environmental costs of oil sands extraction processes

¹ World Energy Outlook 2012, International Energy Agency, November 2012.

² Fuel for Thought: The Economic Benefits of Oil Sands Investment for Canada's Regions, The Conference Board of Canada, October 2012.

³ Defined as the Edmonton CMA, not the member municipalities of the Capital Region Board.

⁴ Working Together: Report of the Capital Region Integrated Growth Management Plan Project Team, November 2011.



The actions outlined in the Growing Forward report focus on infrastructure coordination and development at the regional level, as well as servicing requirements to meet anticipated demand. However, there are other considerations that may be applied to future land use planning for industrial lands in Strathcona County and the Capital Region, including providing space for entrepreneurial and knowledge-based businesses and improving access to communications systems. Overall, emerging global/provincial trends in energy and policy structure will play a key role in the County's industrial land use planning activities.

An assessment of the current and potential market capture can provide an understanding of the recent and expected performance of the County with regards to industrial development. The full assessment of current and projected market capture in Strathcona County can be found in section 2.2.4 of the Technical Report.

As a key area of the Edmonton Capital Region's economy, the prospects of the County are, in part, tied to those of the Edmonton CMA. The current strengths for the Edmonton CMA that will continue to have the highest likely impact on industrial land needs in the County in the future include construction, trade (primarily wholesale trade and distribution uses) and business, building and other support services. The strength of other non-industrial or population-related sectors in the Edmonton CMA, like education, accommodations and food services, other services and public administration, may also demand lands or facilities in industrial areas where permitted.

In terms of emerging strengths, the County may see increasing levels of growth in agriculture (primarily value-added), oil and gas, utilities, and transportation and warehousing. 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. For some sectors though, such as agriculture and related agri-industrial uses (e.g. machine shops, food processing), lingering challenges with labour force availability, capital costs and land availability may limit opportunities.

The manufacturing sector exhibits characteristics of a more mature sector, where external trends may limit development prospects across the Region, despite its comparative strength. Industrial demand then is likely to come from existing businesses looking to expand operations rather than from outside the Region.

The Economic Development and Tourism Strategic Plan for Strathcona County outlines specific opportunities for growth in professional, scientific and technical services, especially in engineering, design and management consulting. As such, more office-oriented demand is likely to continue. Though advanced technologies/manufacturing and transportation and distribution are targeted by other communities in the Capital Region, the skilled professional and technical workers in the community, and logistical advantages tied to the proximity to the High Load Corridor, make the County a likely area for investment in either sector. Overall, existing, emerging and underrepresented sector trends across the Capital Region suggest that the industrial land strategy consider the following target sectors for the County:

- Construction (non-residential, heavy, civil);



- Oil and gas (processing and servicing);
- Wholesale trade, transportation and warehousing;
- Advanced technologies/advanced manufacturing;
- Professional, scientific, technical services (engineering, design, management consulting, research and development, and architecture); and
- Agri-business and food processing.

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 Strathcona County. The challenge 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.

Based on land use policy review and feedback from consultations, three specific policy issues were examined in Strathcona County relative to comparators in the Capital Region, including the range of non-industrial uses listed on industrial lands, the range of industrial uses permitted in light and medium industrial areas and the range of industrial uses permitted in rural/agricultural areas. The full policy analysis exercise can be found in section 2.2.5 of the Technical Report, with key issues summarized below:

- The MDP and the LUB should articulate more specific direction on the accommodation of non-industrial uses in industrial areas and the intent of the community in that regard;
- While the Commercial Services (C5) zoning has not had a significantly detrimental effect on integrity of industrial areas to date, there are examples where it has created land use compatibility issues;
- Considering the industrial uses allowed in the industrial areas of some comparator communities, the County's slightly more restrictive approach in industrial areas (discretionary vs. permitted) could affect perceived shovel-readiness;
- With respect to light industrial, a lot of comparator communities have more opportunities to create more of a campus-like feel with their industrial zones; and
- Price, availability of land and availability of labour are the most significant challenges to agri-business development, but it is important to recognize that there are only limited policies to accommodate it despite overall MDP objectives.



2.3 SWOT Analysis

The SWOT considers broader macro-economic trends in Canada and Alberta's Capital Region, key themes from consultation with developers and brokers from across the Capital Region, comparative benchmarking of the County based on industrial development indicators and its policy environment, an assessment of current and potential market capture in the County, and an analysis to identify the development and servicing standards to support industrial development in a community. Some of the key findings from the SWOT analysis are highlighted below.

Strengths	Weaknesses
<ul style="list-style-type: none"> ■ Location and proximity to transportation corridors, particularly the Alberta High Load Corridor, provides an important competitive advantage for industrial development. ■ Rapid regional employment and business growth over the last decade, especially within the oil and gas industry (primarily services) and construction sector (primarily non-residential and heavy construction). ■ Recent local business growth trends in transportation and logistics, heavy and civil construction, waste management and remediation, research and development, engineering and specialized design and management/technical consulting. ■ A mix of both prestige industrial business parks (e.g. Sherwood Business Park) and general industrial development (e.g. Laurin Industrial Park). 	<ul style="list-style-type: none"> ■ Low unemployment resulting in a tight and costly labour environment. ■ The availability and cost of inputs, high purchase/lease rates and high cost business services. ■ Inconsistency in policy application and the implementation of the municipal development process. ■ Common medium (e.g. general industrial) and light industrial activities (e.g. prestige/specialty manufacturing) are discretionary, rather than permitted. ■ Limited land use regulations to accommodate agri-business development over the shorter term, despite broader policy directions to encourage this development. ■ Remaining industrial land opportunities provide more limited market choice than competitors in the Capital Region.
Opportunities	Threats
<ul style="list-style-type: none"> ■ Global energy demand is anticipated to continue into the future, paired with positive pricing conditions. ■ Proximity to existing and planned value-added petrochemical processing and strong transportation connections to oil sands developments. ■ Support for environmentally sensitive development. ■ Continued demand for industrial multi-tenant and integrated office/industrial facilities ■ Lower-order interim uses on industrial lands to provide short-term benefits, while adding land to the existing inventory. ■ Regional employment growth trends and concentration in construction, wholesale trade, transportation and warehousing, utilities, oil and gas, manufacturing and agri-business. 	<ul style="list-style-type: none"> ■ Relatively high cost of extraction in oil sands. ■ The real and perceived negative environmental impacts of the oil and gas industry. ■ The past and potential future volatility of the price of oil adds uncertainty to the future of industrial development, including construction and labour force attraction. ■ Projected energy independence in the United States. ■ Reliance on the investment decisions of international corporations, which are often not influenced by local considerations, in investment attraction and land development.



3 Strathcona County Industrial Areas Profile

3.1 Overview of Industrial Areas and Recent Development Trends

Strathcona County has a strong and diverse industrial base; key sectors include manufacturing, construction and transportation. The County's industrial lands accommodate approximately 13,400 jobs, representing 38% of the County's total employment base. A significant share of the County's industrial base is designated for Medium and Heavy Industrial. The County's industrial lands also accommodate office and "knowledge-based" sectors and, to a limited extent, retail and service trade.

The County's existing and planned industrial areas are delineated through four distinct Policy Areas in accordance with the County's Municipal Development Plan - Industrial Light/Medium Policy Area, Industrial Heavy Policy Area, Commercial Service Policy Area and Agri-Industrial Transition Policy Area. Strathcona County identifies four land use zoning designations which fall under the general category of industrial lands (as defined herein), including "Light Industrial," "Medium Industrial," "Heavy Industrial" and "Commercial Service." For the purposes of this study, lands designated as "Commercial Service" in accordance with the MDP and zoning by-law are included in the County's industrial base, because they permit some industrial uses and non-retail commercial uses including office and business services.

The County's industrial land base is delineated into two main geographic areas: Urban Service Area (Sherwood Park) and rural. The rural component is largely comprised of Alberta's Industrial Heartland located in the north part of the County. Strathcona County has a total of 2,681 net Ha (6,626 net acres) of developed industrial land. The majority of the County's developed industrial base is located within the Urban Service Area. Examples of prestige and general industrial development within the Urban Service Area are illustrated in Figures 2 and 4, respectively. Figure 3 illustrates the geographic distribution of the developed industrial lands within the Urban Service Area.



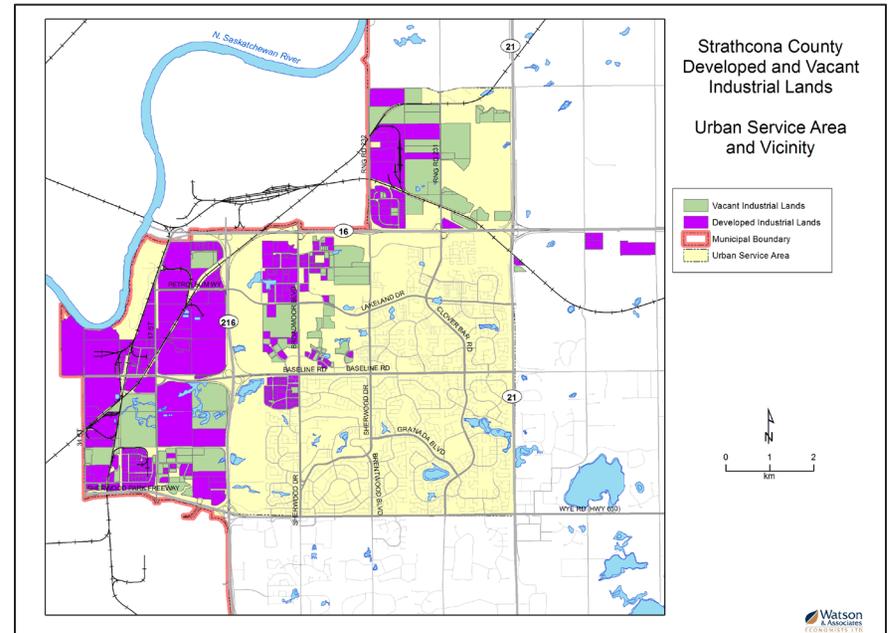
FIGURE 2: PRESTIGE INDUSTRIAL DEVELOPMENT IN SHERWOOD PARK



FIGURE 4: GENERAL INDUSTRIAL DEVELOPMENT IN SHERWOOD PARK



FIGURE 3: SHERWOOD PARK AND VICINITY DEVELOPED AND VACANT INDUSTRIAL LANDS



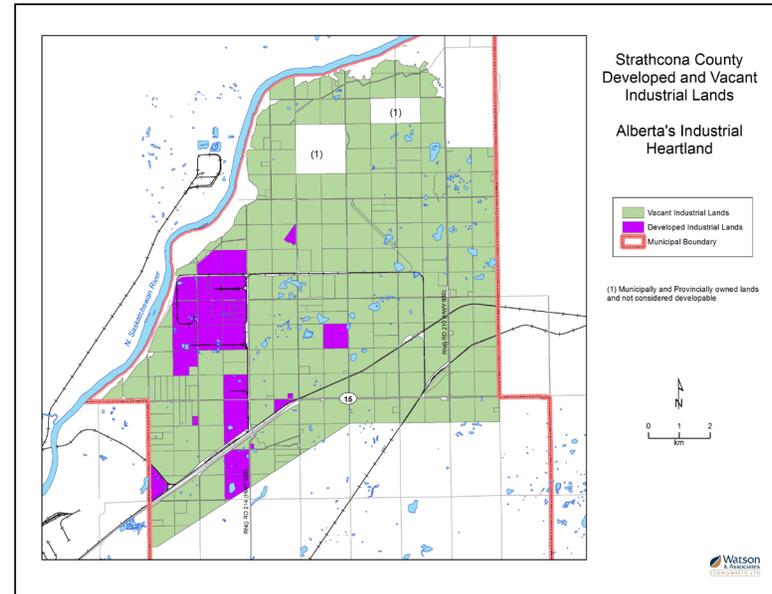
The majority of developed industrial lands in the rural area of Strathcona County are located within Alberta's Industrial Heartland. Alberta's Industrial Heartland is Canada's largest hydrocarbon processing region and includes extensive petrochemical processing facilities, including upgraders and refineries, as illustrated in Figure 5. Figure 6 illustrates the geographic distribution of the developed industrial lands within Strathcona's share of Alberta's Industrial Heartland.



FIGURE 5: ALBERTA'S INDUSTRIAL HEARTLAND WITHIN STRATHCONA COUNTY



FIGURE 6: ALBERTA'S INDUSTRIAL HEARTLAND DEVELOPED AND VACANT INDUSTRIAL LANDS



The County has experienced relatively strong development on industrial lands over the past decade. As shown in Figure 7, the County has averaged 411,000 sq.ft. of building activity on industrial lands annually over the 2002-2011 period.

Over the past decade, 35% of development activity on industrial lands has been accommodated on Heavy Industrial (IH) zoned lands, followed by 21% on Medium Industrial (IM) lands and 19% on Commercial Service (C5) lands. Development activity on Development Control (DC) lands and Local Industrial (IL) has accounted for 12% and 2% of the total, respectively. Approximately 60% of development on industrial lands has been in the non-industrial sector (e.g. office development, other commercial and institutional) and 40% in the industrial sector. Though industrial development is the primary use accommodated on industrial lands, the above analysis suggests that the County's industrial lands are accommodating a significant amount of commercial development.



FIGURE 7: ANNUAL INDUSTRIAL DEVELOPMENT ACTIVITY, 2002-2011

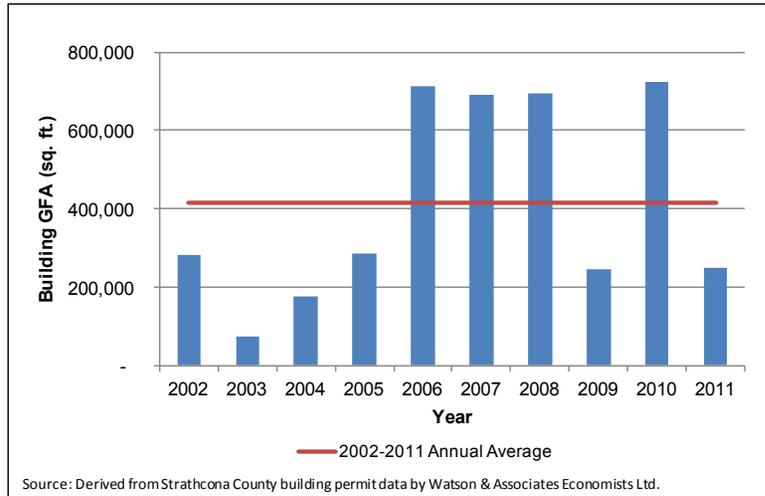
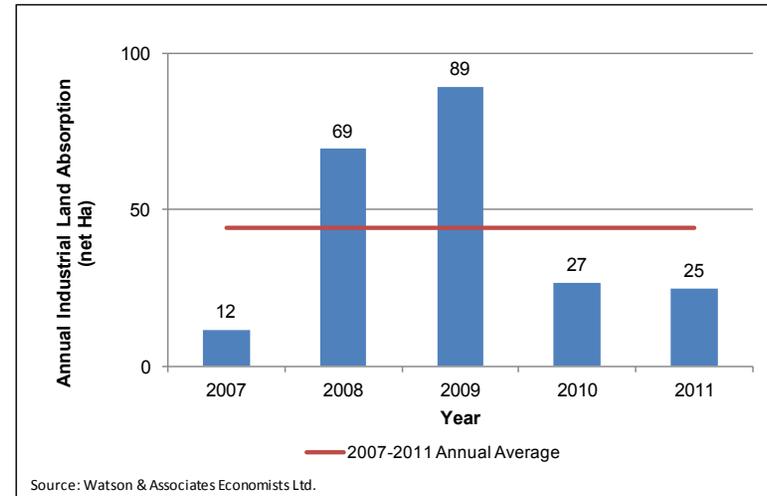


FIGURE 8: STRATHCONA COUNTY INDUSTRIAL LANDS ANNUAL ABSORPTION, 2007-2011



Over the 2007-2011 period, industrial land absorption averaged 44 net Ha (110 net acres) annually for Strathcona County, as shown in Figure 8. Over the period, 78% of industrial lands absorbed were zoned Heavy Industrial (IH). In comparison, Medium Industrial (IM) zoned land accounted for 12%, Commercial Service (C5) 6%, Development Control (DC) 4% and Light Industrial (ILT) less than 1%.

The County has a total of 10,512 gross Ha (25,975 gross acres) of vacant industrial land

3.2 Vacant Industrial Land Supply Inventory

A major factor in the future competitiveness of Strathcona’s economic base is the supply and quality of its vacant industrial lands. Vacant designated industrial lands were identified as those which fall under the designation of “Industrial” and “Commercial Service” in accordance with the Municipal Development Plan and zoning by-law as described in Section 3.1. The inventory includes AD (Agricultural-Future Development) class lands within the urban area which reflects lands which are designated for future industrial development under the MDP but are currently not zoned. Further, agricultural lands (zoned AG) in the rural area falling under the industrial designation in accordance with the MDP have also been identified. Figure 3 and Figure 6 illustrate the geographic location of the County’s remaining industrial land supply which is identified as vacant as of 2012.



Gross and Net Land Supply

Figure 9 summarizes the total gross and net vacant employment lands supply for Strathcona County (as of 2012) by geographic area. As illustrated, the County has a total of 10,512 gross Ha (25,975 gross acres) of vacant industrial land, which reflects major environmental takeouts identified in the Municipal Development Plan and Area Structure Plans.

The supply of vacant industrial lands has also been adjusted to exclude hydrological features and major utilities corridors (i.e. major oil/gas pipelines and major hydro corridors). Larger vacant parcels (i.e. typically 10 Ha (25 acres) or greater) were subject to an additional downward adjustment with a net to gross adjustment of 65% to account for internal infrastructure. In accordance with the aforementioned adjustments, the County's net vacant industrial land supply is estimated at 6,272 net Ha (15,498 net acres). Of this, 552 net Ha (1,364 net acres) are located within the Urban Service Area. The remaining 5,720 net Ha (14,134 net acres) are located within the rural area. Adjusted for land vacancy, the County's net vacant industrial land supply is 4,456 net Ha (11,011 net acres). Within the Urban Service Area, the net vacant industrial land supply totals 451 net Ha (1,114 net acres). The net vacant industrial land supply within the rural area totals 4,005 net Ha (9,896 net acres), the majority of which is located within Alberta's Industrial Heartland.

The County has a total of 4,456 net Ha (11,011 net acres) of vacant industrial land

FIGURE 9: STRATHCONA COUNTY SUPPLY OF NET DEVELOPABLE INDUSTRIAL LANDS SUPPLY (HA)

Area	Total Gross Vacant (A) ¹	Hydrological Features (B) ²	Major Utilities Corridors (C) ³	Adjustment for Roads and Other Internal Infrastructure (D) ⁴	Net Vacant Industrial Land Supply (E = A-B-C-D)	Long-term Land Vacancy Adjustment (F) ⁵	Net Vacant Industrial Land Supply Adjusted for Long-Term Vacancy (G = E - F)
Urban							
Urban Service Area (excluding SIA Lands)	617	4	19	166	429	64	364
Urban Service Area-SIA Lands	233	21	25	64	123	37	86
Urban subtotal	850	25	43	229	552	101	451
Rural							
Alberta's Industrial Heartland	9,659	141	722	3,079	5,717	1,715	4,002
Other Rural	3	0	0	0	3	0	3
Rural subtotal	9,662	141	722	3,079	5,720	1,715	4,005
County Total	10,512	166	766	3,308	6,272	1,817	4,456

Source: Watson & Associates Economists Ltd.

1. Reflects adjustments for municipal reserve lands, public utility lands and environmental reserves as identified in the Municipal Development Plan and Area Structure Plans.

2. Includes lakes (perennial and intermittent) and lagoons.

3. Includes major oil pipelines, natural gas pipelines and hydro corridors.

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

5. Long-term industrial land vacancy adjustment - 15% of net developable vacant lands in the Urban Service Area (excluding SIA lands) and 30% of net developable vacant lands within Urban Service Area SIA Lands designation and Alberta's Industrial Heartland. Accounts for industrial land sites, which may not develop over the long-term due to underutilization of industrial sites and sites inactive/land banking.



Provisions for Market Choice

Strathcona needs to provide a balanced inventory of “shovel ready” and zoned developable vacant industrial lands that is sufficient to meet market demand in the short to medium term. Currently, the County has limited prestige designated lands comprised of Commercial Service (C5) or Light Industrial (ILT) zoned lands within the Urban Service Area. This is particularly relevant since demand for prestige industrial lands has been relatively strong in recent years.

The County currently has a limited number of larger vacant industrial lands parcels (i.e. 5-10 net Ha) in the Medium Industrial (IM) designation available for development. In order for the County to be competitive and potentially attract larger scale industrial employers, such as large-scale manufacturers and logistics and distributions, the County needs to provide a greater number of sites in this zone class.

Overall, the County’s supply of shovel-ready lands within the Urban Service Area is somewhat limited. The County needs to ensure that for sufficient market choice, additional shovel-ready lands need to be made available to accommodate short-term demand.

There is also a strong indication that the market choice for heavy industrial lands within Alberta’s Industrial Heartland is limited, due to the high degree of land banking and the large site requirements of prospective companies wishing to establish operations in the area.

In order to allow for proper market functioning, it is our opinion that the County should ensure that a minimum five-year supply of industrial lands (by various sizes, zoning and locations) is available at all times throughout the forecast period. Over the 2012 to 2044 planning period, it is recommended that the County monitor its current industrial lands inventory, at minimum, every five years to determine if additional industrial lands are required to accommodate forecast demand.



4 Employment Forecast and Industrial Land Needs Analysis

4.1 Employment Forecast

Future demand for industrial lands within Strathcona County is ultimately driven by forecast employment growth within the County. Building on the macro and micro economic analyses, identified major growth drivers and the regional employment structure analysis provided in the Technical Report, a long-term employment forecast for the County was prepared for the 2012-2044 period.

The long-term employment growth prospects and potential industrial land demand for the Capital Region are favourable and Strathcona County is well positioned to capitalize on the anticipated long-term regional employment growth potential. Strathcona County's total employment is expected to increase from 36,200 in 2012 to 70,200 by 2044. Over the 32-year forecast period, the County is forecast to add approximately 34,000 jobs to its existing base, which represents an average annual increase of 1.6%.

Over the forecast period, the industrial sector represents the second largest employment growth sector in Strathcona, comprising approximately 33% of total employment growth. Significant employment opportunities will exist in sectors related to manufacturing, construction and logistics/distribution. A large share of this industrial employment growth will be direct and indirect employment from the energy sector. It is anticipated that this will continue to drive demand for Light and Medium Industrial lands. Opportunities for industrial employment growth also exist in the petrochemical and energy related sectors which would likely be accommodated on heavy industrial zoned lands. Future demand for population-related/commercial employment growth in Strathcona County is anticipated to be strong, accounting for 43% of employment growth. Though a large portion of this employment growth is directly related to population-related employment uses such as retail and accommodation/food services, the County is expected to experience a significant increase in "knowledge-based" employment.



4.2 Industrial Land Needs, 2012-2044

Based on the industrial lands supply summarized in Section 3 and forecast demand on industrial lands summarized below, total industrial land needs within Strathcona County to the 2044 planning horizon were 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.); and
- The amount of long-term net developable vacant industrial lands within Strathcona County.

The percentage breakdown by major sector (ICI) employment on industrial lands used for the forecast period (2012 to 2044) was based on a review of recent development trends in Strathcona County and a review of permissible uses on industrial zoned lands. Based on this allocation, over the 2012-2044 period, Strathcona's industrial lands are anticipated to accommodate 46% of the County's total employment growth. Over the 2012-2022, 2012-2032, and 2012-2044 periods, employment growth on industrial lands is expected to total 5,835, 10,760 and 15,805, respectively.

Strathcona County has a diversified industrial base which consists of urban serviced light, medium and prestige industrial lands, heavy industrial lands and light/medium industrial lands in the rural area. Each of these has varying land demand prospects and corresponding land need requirements. As such, it is necessary to disaggregate the employment forecast on industrial lands by these three distinct industrial land classes to determine the forecast land need for each.

Based on the ICI employment allocation share by industrial land class, the forecast employment growth by industrial land class over the forecast period was determined, as shown in Figure 10. Over the 2012-2022, 2012-2032 and 2012-2044 periods, employment growth on Urban Service Area light/medium and prestige industrial lands is expected to total 5,010, 9,215 and 13,550, respectively. In comparison, employment growth on heavy industrial lands is anticipated to total 605 over the 2012-2022 period, 1,135 over the 2012-2032 period, and 1,660 over the 2012-2044 period. Employment growth on light/medium industrial lands within the rural area is forecast to total 215, 410 and 600 over the 2012-2022, 2012-2032 and 2012-2044 periods, respectively.



FIGURE 10: FORECAST EMPLOYMENT GROWTH ACCOMODATED BY INDUSTRIAL LAND CLASS, 2012-2044

Industrial Class	Forecast Period		
	2012-2022	2012-2032	2012-2044
Urban Service Area - Light/Medium/Prestige Industrial	5,010	9,215	13,550
Heavy Industrial	605	1,135	1,660
Rural - Light/Medium Industrial	215	410	600

Source: Watson & Associates Economists Ltd.

Based on the forecast employment growth on industrial land and assuming employment densities comparable to current market trends, Strathcona County is forecast to absorb a combined annual average of 54 net Ha per year (133 net acres per year) of industrial land from 2012 to 2044. This is compared to an average of 44 net Ha (110 net acres) annually over the 2007-2011 period, as identified in Section 3.2. Over the 2012-2044 planning horizon, the Urban Service Area light/medium/prestige industrial land demand is forecast to total 542 net Ha (1,339 net acres), as illustrated in Figure 11. This is compared to 1,107 net Ha (2,735 net acres) for heavy industrial land and 60 net Ha (148 net acres) for rural light/medium industrial land over the same period.

In accordance with the existing supply of vacant industrial lands (identified in Section 3) versus long-term demand, Strathcona has an insufficient supply of light/medium/prestige industrial lands within the Urban Service Area to meet long-term needs to 2044, as illustrated in Figure 11. In terms of heavy industrial lands and rural light/medium industrial lands, the County has sufficient supply to meet forecast demand through the forecast period; however, land banking of heavy industrial lands reduces market choice and raises challenges to meeting longer term need for heavy industrial lands within Alberta's Industrial Heartland, as previously discussed.

Based on the land needs analysis, a minimum of 178 net Ha (440 net acres) of additional vacant light/medium/prestige industrial land is required within the Urban Service Area to accommodate forecast employment growth to 2044. 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 322 gross Ha (796 gross acres) by 2044. It is also important to note that this does not take into account non-developable environmental features.



FIGURE 11: STRATHCONA COUNTY, INDUSTRIAL LAND NEED (DEMAND VS. SUPPLY) 2012-2044

	Urban Service Area (Light/Medium/Prestige Industrial)			Heavy Industrial Lands			Rural Light/Medium Industrial		
	2012-2022	2012-2032	2012-2044	2012-2022	2012-2032	2012-2044	2012-2022	2012-2032	2012-2044
Net Industrial Land Demand	200	369	542	403	757	1,107	22	41	60
Net Industrial Land Supply (reflecting vacancy adjustment)	364	364	364	2,845	2,845	2,845	1,246	1,246	1,246
Net Industrial Land Surplus/ (Shortfall)	164	(4)	(178)	2,442	2,088	1,738	1,225	1,205	1,186
Net Land Need with Vacancy Adjustment¹	-	5	209	-	-	-	-	-	-
Gross Land Need²	-	7	322	-	-	-	-	-	-

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.

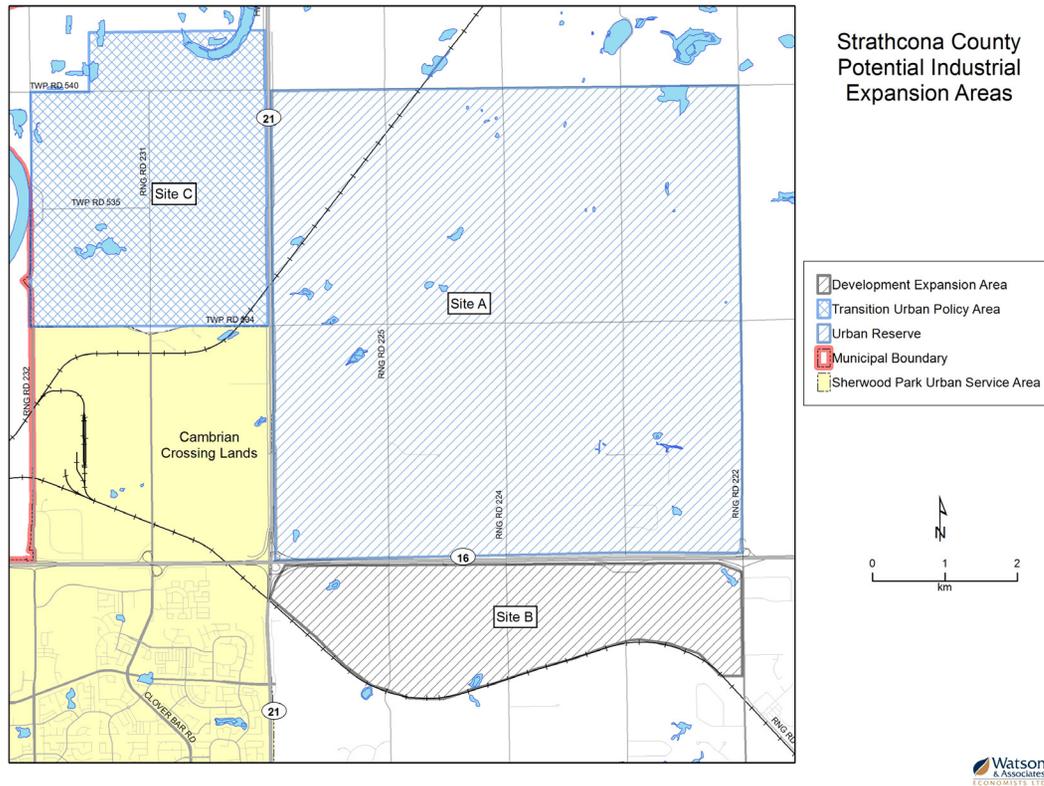
A minimum requirement of 322 gross Ha (796 gross acres) of additional vacant light/medium/prestige industrial land is required within the Urban Service Area by 2044

4.3 Location Options for Future Industrial Development

As identified in Section 4.2, the County has a need to expand its urban industrial land base over the forecast period to accommodate forecast employment growth on industrial lands. Based on identified physical opportunities, constraints and established planning and economic criteria determined by the project team and County staff, three potential location options for future industrial land development have been selected. This includes the Bremner Urban Reserve Area (North East Growth Area), the Development Expansion Area and the Transition Urban Reserve Policy Area, which are illustrated in Figure 12.



FIGURE 12: STRATHCONA COUNTY POTENTIAL INDUSTRIAL EXPANSION AREAS



For future designated industrial lands within Strathcona County to be successful, they require certain characteristics and attributes depending on their employment nature (prestige vs. general employment) and target sectors, as discussed in Section 2. Building on the analysis of industrial/business parks within the surrounding markets and identified “best practices” identified in Section 2, the potential future industrial expansion areas were evaluated based on a number of factors, including:

- Physical characteristics, which include continuity and delineation of land base, physical and environmental constraints;



- Access/circulation, which includes an assessment of the accessibility of each site via road infrastructure and rail, and the visibility of the area to major transportation routes;
- Servicing, including potential for extension of servicing to the area; and
- Policy/Regulatory Factors and Land Use Compatibility, the degree to which proposed industrial land development on subject lands is consistent with County and regional policy and planning direction and the degree to which industrial development would be compatible with land uses within the surrounding area.

A site matrix was developed to provide an evaluation and ranking of potential industrial expansion sites based on the identified criteria, which is presented in the Technical Report. Based on this high level evaluation, the Bremner Urban Area (Site A) and Transition Urban Policy Area (Site C) scored highly and are equally good candidates to accommodate future industrial growth. The Development Expansion Area (Site B) rated lower due to challenges of incorporating lands into the Urban Service Area and providing full municipal servicing.

Given the merits of Sites A and C, the County may consider designating industrial lands within both areas within the forecast period. This report will help guide the County in its future growth management strategy work on the Bremner Urban Reserve Area and the evaluation of the Area Concept Plan/Area Structure Plan for the West of Highway 21 Lands within the Transition Urban Policy Area being prepared by the developer.

It is expected that a more detailed determination of land use designations and total land supply potential will be identified through the forthcoming Growth Management Strategy for the Bremner Urban Reserve Area and the Area Structure Plan and Area Concept Plan for the West of Highway 21 Lands.

While the Development Expansion Area holds high potential for accommodating industrial development based on its locational and geographic attributes, constraints with municipal servicing prevent it from being utilized for Urban Service Area expansion at this time. Though the DEA could be developed for industrial purposes using on-site servicing, the needs assessment contained herein has determined that forecast rural industrial growth can be sufficiently accommodated within Alberta's Industrial Heartland.



5 Strategy and Recommendations

The primary objective of this exercise is to determine the long-term demand for industrial lands in Strathcona. This is to ensure the County guides its industrial land development and planning in a manner that sees it continuing to develop as a competitive, well-balanced and sustainable community. The following strategic recommendations cover short- to longer-term actions that Strathcona County can take to improve the investment-readiness of the County's existing and future industrial land inventory. The following recommendations outline the issues and opportunities for Strathcona County to consider. For a full description of the recommendations and potential actions, see the Technical Report.

- 1. Develop policy directions to regulate non-industrial uses on industrial lands:** Strathcona County's industrial land policies generally align with those of competing jurisdictions in the Capital Region with regards to restricting conflicting non-industrial uses from developing in industrial areas. However, the MDP and LUB have limited overarching direction compared to others on the intent of the municipality for non-industrial uses on industrial lands, including uses which may be preferable in industrial areas (such as professional offices). Though just policy statements, they can be used to offer further direction and certainty to potential investors in how policies will be implemented, and to development officers with stronger direction on the interpretation of the LUB on discretionary uses in industrial districts. The revision of policy provides the Municipality with a more robust policy-based protection of the integrity of industrial areas for industrial and other compatible (e.g. professional office) uses.
- 2. Introduce agri-industrial and limited-scale industrial uses in agricultural areas:** Though the County has MDP and LUB policies that support agri-industrial development in agricultural areas of the County, the lack of zoned land to support industrial uses in agricultural and rural areas limits the potential for short-term development. The demand forecast suggests limited employment growth in the rural areas (outside the Heartland Area) and thus, likely little prospect for larger-scale agri-industrial development in agricultural areas. Nevertheless, the continued growth of agriculture across the Capital Region, the remaining agricultural uses in the area and the potential demand for agriculture-related or small industrial service uses that may not be appropriate for the urban area (e.g. machine shops, contractor yards) generated by new industrial uses in the Heartland and urban area, could support some growth. This suggests that the County needs to take this into account in industrial planning, perhaps through the introduction of some limited and smaller-scale industrial uses in agricultural areas.
- 3. Differentiate light and medium policy areas further in policy documents:** The combination of light and medium industrial definitions into a Light/Medium Industrial policy area in the MDP is a fairly common approach across the Capital Region. There are, however, slight differences in the delineation of these uses by definition and spatial



arrangement in the policy documents of other Capital Region municipalities – perhaps to offer a clearer definition of the municipality’s intent for that type of development. Further, within Strathcona County, there are some inconsistencies in the definition and delineation of light industrial that should be examined as the Municipality works to update its MDP to offer stronger direction to the development community.

4. **Introduce general industrial uses in medium industrial areas:** The majority of other surveyed communities in the Capital Region list general industrial uses as a permitted use in medium industrial areas (except Leduc County). Though the use is listed as discretionary in the County’s IM district, each application is subject to additional examination by the Municipality in the development process, which may be interpreted by potential investors as an additional step or slower process. The Municipality should consider making general industrial uses a permitted use in IM lands, while ensuring that compatibility issues with adjacent land uses can be mitigated through policy controls.
5. **Introduce more regular industrial land planning policies and monitoring procedures:** Planning for industrial land and development over the longer term requires a more ongoing approach to monitoring conditions in the Municipality’s industrial areas, as well as revising any projections of industrial land demand based on changing market conditions. This study represents a first step, but the Municipality must engage more fully in the initiative if it is to encourage longer-term sustainability in its industrial economy.
6. **Investigate potential redesignation and zoning of lands in the Agri-industrial Transition Policy Area:** The rural areas outside of the AIH area are forecast to accommodate only limited employment growth over the longer term, given current market conditions; however, the Agri-industrial Transition Policy area encompasses some 1,308 Ha (3,233 acres) of vacant land designated for agri-industrial uses. Further, the assets of the area – proximity to the Heartland, dual rail access, or highway access – make some areas marketable for other industrial uses, as well as the potential expansion of heavy industrial opportunities. The introduction of new industrial opportunities in that area may improve the County’s prospects for absorbing some lower-order uses that are choosing other jurisdictions, because the County lacks appropriate land in the rural area (e.g. modular construction, outdoor activity, transportation and logistics) or additional heavy industrial investment. Overall, it is important to ensure that any proposed development still functions as a transition from the heavy industrial uses in the Heartland, particularly west of Bruderheim. Figure 65 in the Technical Report illustrates these suggested changes.
7. **Address market choice challenges in Alberta’s Industrial Heartland:** Alberta’s Industrial Heartland represents the primary opportunity for accommodating additional heavy industrial development in the County; however, the Complementary ASP for the area was developed in 2001, when market conditions and considerations were quite



different for the area. Though the land base is technically large enough to accommodate investment to 2044 (with a surplus), market choice and land availability may be too limited to actually support heavy industrial growth. Simply designating more land for industrial development may not resolve the problem, as existing uses and private market sales may continue to limit short-term opportunity, or may result in continued acquisition and banking of land. The County should support updates to the existing plans, as well as investigate alternative means of achieving market choice objectives.

8. **Plan for future industrial growth:** The industrial land demand forecast identifies a need for an additional minimum 178 gross hectares (440 acres) of industrial land in the urban service area by 2044, with industrial land supply in the urban area reaching a shortfall by 2032. Considering an adjustment for vacancy, this need could be higher. As a result, the County needs to plan for additional industrial lands over the next 30 years. Based on physical characteristics, access/circulation, servicing potential and policies/regulation, sites in the Bremner Urban Reserve Area and the Transition Urban Reserve Policy Area were identified as appropriate for the longer-term accommodation of industrial lands. The County should continue to consider new industrial areas where appropriate, as part of the longer-term planning for these lands.