## CITY OF LEDUC & LEDUC COUNTY

JOINT SUSTAINABLE GROWTH STUDY 2008-2060







**OCTOBER 2008** 



CITY OF LEDUC & LEDUC COUNTY JOINT SUSTAINABLE GROWTH STUDY 2008-2060

PREPARED FOR: City of Leduc & Leduc County

PREPARED BY: Armin A. Preiksaitis & Associates Ltd.

Sturgess Architecture Associated Engineering



### contents

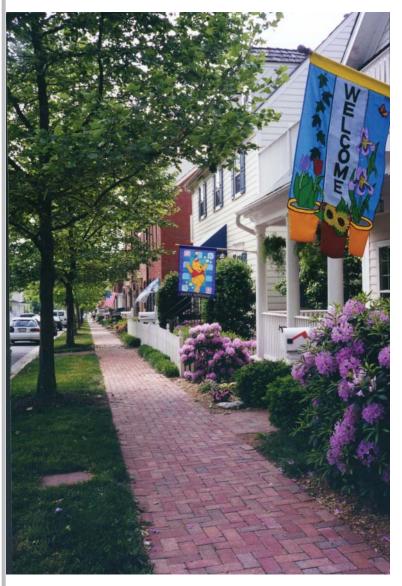
EXEC	CUTIVE SUMMARY	3
1.0	INTRODUCTION	15
1.1	PURPOSE AND SCOPE	16
1.2	GUIDING PRINCIPLES	18
2.0	GROWTH CONTEXT	23
2.1		24
2.2		27
2.3		29
2.4	CITY AND COUNTY PLANS AND POLICIES	30
3.0		35
3.1	SUSTAINABLE GROWTH STUDY METHODOLOGY	36
3.2	JOINT CITY AND COUNTY PLANNING PROCESS	40
4.0	POPULATION FORECASTS &	43
	LAND REQUIREMENTS	
4.1	CAPITAL REGION INTEGRATED GROWTH	44
	MANAGEMENT PLAN	
4.2	PAST POPULATION GROWTH	45
4.3	FUTURE GROWTH	45
4.4	LAND REQUIREMENTS	50
5.0	RECOMMENDED GROWTH STRATEGY	55
5.1	LAND USE	56
5.2	DEVELOPMENT CONSTRAINTS	56
5.3	POTENTIAL GROWTH AREAS	59
5.4 5.5	UTILITY SERVICING TRANSPORTATION	63 69
5.5	TRANSPORTATION	69
6.0	GROWTH STUDY REVIEW - FURTHER	77
	POLICY REVIEW	
6.1	INTERMUNICIPAL DEVELOPMENT PLAN	78
6.2	GROWTH STUDY REVIEW	78
6.3	RECOMMENDED FURTHER ACTION	79

This Growth Study is the start of a collaborative planning process to manage growth in the two municipalities, anticipate the impacts of growth, put the necessary plans in place, and avoid the need to play catch-up after major projects and initiatives have already proceeded.

FIGU	RES	
1.1	Joint Sustainable Growth Study Area Boundary	17
1.2	Regional Context	21
2.2	IDP Referral Area	30
3.1	Natural Features	41
4.1	Historical Population Growth 1976-2006	45
4.2	Scenario 1: Capital Region Integrated Growth Management Plan Forecast	46
4.3	Scenario 2: Strong Growth Forecast to 2060	49
5.1	Generalized Land Uses	57
5.2	Growth Strategy	61
5.3	Existing Water and Wastewater Infrastructure	65
5.4	Future Water and Wastewater Infrastructure	67
5.5	Medium-Term Transportation Infrastructure	71
5.6	Long-Term Transportation Infrastructure	73
5.7	Oil, Gas, and Power Infrastructure	75
TABL	ES	
2.1	City and County Recent Population Growth Rates	27
4.1	Population/ Employment Ratios	47
4.2	Forecast Methodology	49
4.3	Assumptions for Land Requirements 2008-2060	50
4.4	Estimated Densities of Existing and Approved Urban Communities in Alberta	51
4.5	Summary of Land Requirements to 2060	52



#### **BACKGROUND**



The Councils of the City of Leduc and Leduc County have agreed to the collaborative preparation of this Joint Sustainable Growth Study ('Growth Study') and a subsequent IntermunicipalDevelopment Plan (IDP). This is considered an important and unique intermunicipal initiative, in that both municipalities are committed to managing growth within this area of Alberta's Capital Region. The Leduc County - City of Leduc Steering Committee has been established with membership drawn from both Councils and municipal administrations to undertake this work. The Steering Committee has adopted a set of Guiding Principles that provides a framework for the preparation of both the Growth Study and the IDP.

The Guiding Principles are regional in scope and are based upon five Sustainability Pillars:

- 1. Smart Growth
- 2. Creating Vibrant Communities
- 3. Environmental Stewardship
- 4. Economic Development
- 5. Responsible Governance

... Leduc County & the
City of Leduc have engaged
in transparent sharing of
information, joint analysis,
open dialogue regarding
both divergent and mutual
interests, exploration of
options, negotiation, and
determination of preferred
strategies toward
the achievement of common
goals.

The Growth Study determines directions for future growth and associated infrastructure for the two municipalities. More specifically, the Study addresses:

- a comprehensive area of development influence
- local and regional economic trends
- population forecasts

- existing land inventories and future land requirements
- infrastructure considerations
- key stakeholders
- possible growth scenarios
- preferred growth strategies

The Growth Study has been formulated using a methodology unlike most of the growth studies that have been prepared over the past several decades in Alberta. Whereas traditional growth studies have been undertaken by single municipalities to plan for growth within their own boundaries, these two municipalities have engaged in transparent sharing of information, joint analysis, open dialogue regarding both divergent and mutual interests, exploration of options, negotiation, and determination of preferred strategies toward the achievement of common goals. Both Councils have taken responsibility for the Growth Study in approving it by resolution.

The population forecasting approach for the Growth Study is a method based upon projected employment. The Capital Region Integrated Growth Management Plan (CRIGMP) has forecast a significant amount of employment within the study area based on an analysis of several key growth drivers that are expected to have a strong impact here. An important principle in sustainable development is that employment and residential growth need to be both balanced and located close to each other. The Growth Study projects population growth in the Leduc area as a function of the anticipated amount of employment growth, while still taking into consideration historical growth trends and the Leduc area's past share of growth within the Capital Region. The methods driving the Growth Study therefore are rooted in strong technical analysis, whereby population growth is directly correlated to the key growth drivers and anticipated future employment, and that growth management trends, policies, practices, and development approvals will evolve to encourage and support a growing residential population and a thriving business community.

#### UNPRECEDENTED GROWTH IN THE LEDUC AREA

Economic development in the Capital Region has broken through new thresholds. Unprecedented levels of international investment have pushed the rates of development and population growth beyond projections that were forecast only a decade ago. At the nothern end of the powerful Edmonton-Calgary corridor, Alberta's Capital Region is a significant economic hub achieving one of the strongest GDP (Gross Domestic Product) and population increases in North America over the past few years (Capital Region Integrated Growth Management Plan, November 2007). The Capital Region has long been considered a major gateway to northern Alberta and



At the northern end of the powerful Edmonton-Calgary corridor, Alberta's Capital Region is a significant economic hub achieving one of the strongest GDP (Gross Domestic Product) and population increases in North America over the past few years (Capital Region Integrated Growth Management Plan, November 2007).





the Canadian North, where many industries such as oil and natural gas exploration, manufacturing, warehousing, distribution, air travel, and intermodal transshipment have thrived. In past decades, the market area for goods and services produced in the Capital Region has included most of Canada and the western and central United States. Now the range of nations with which the Capital Region trades is truly international in scope. Development of the CANAMEX Trade Corridor through Canada, the United States, and Mexico has extended the economic reach of the Capital Region south into Mexico. Even more significantly for long-term economic growth, the rail connections between the Capital Region and the expanding deep water port at Prince Rupert, British Columbia, promise to strengthen and secure lasting trade linkages between the Prairie Provinces and the Asia Pacific region, particularly with the booming economies of China and India. As a western Canadian nexus for all these trade routes, the Capital Region is guaranteed to play a critical role as a major crossroads in this emerging international trading system.

Growth in the Capital Region will increase demand for the various forms of existing and future transportation infrastructure in the Leduc area: highways, rail systems including future high-speed rail, air travel infrastructure, and regional public transit systems including light rail transit (LRT). Accompanying that new infrastructure will be the more intensive land use that will be necessary to achieve greater transportation and servicing efficiencies and sustainability. With more industrial development related to oil sands activity and its location on the QE II Highway corridor, the Leduc area is destined to become the major transportation crossroads within the national and international hub known as the Capital Region. The clearest harbinger of the increasing importance of the Leduc area is the expansion currently being planned for the Edmonton International Airport and Port Alberta. The growth in the Leduc area will be transformative.

On April 15, 2008, the Government of Alberta announced the Capital Region Board Regulation. That Regulation addresses the establishment and mandate of the Capital Region Board, including the preparation and implementation of a Capital Region Growth Plan. Leduc County and the City of Leduc will fully participate in the preparation of the Capital Region Growth Plan, which will consist of four elements:

- a comprehensive, integrated regional land use plan
- a regional intermunicipal transit network plan
- a plan to coordinate and enhance a geographic information system
- a plan to address social and market affordable housing requirements

Leduc County and the City of Leduc have been active participants in the Provincial and regional processes that have led to the creation of the Capital Region Board. Both municipalities are expected to fully and jointly maintain their robust participation in the Capital Region Board and in the preparation of the Capital Region Growth Plan.

#### STRONG FUTURE GROWTH PREDICTED FOR THE LEDUC AREA

In developing the future growth scenario for the City of Leduc and Leduc County, a number of growth scenarios were evaluated, including the Captial Region Integrated Growth Management Plan (see Section 4.3.1). In addition to future employment projections, current growth and economic activity were also considered in scenario development, including a 21% population increase in the City of Leduc's population in 2006 and 2007, as well as increasing rates of growth in land development, and increasing investment projected for public infrastructure. In consideration of the impact that the key growth drivers are anticipated to have on future growth in the Leduc

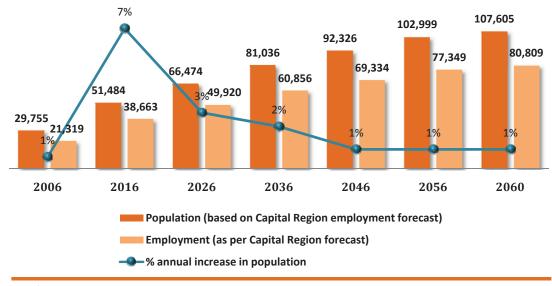


The City of Leduc's population increased 21% in 2006 and 2007. Leduc County and the City of Leduc are anticipated to have a combined population of over 107,000 within the next 50 years to 2060.



The combined impact of the key growth drivers in conjunction with the increasing trend toward community sustainability will result in stronger demand for housing located closer to employment.

area, and given more recent factors, the Strong Growth Scenario (see Section 4.3.2) was utilized in the Growth Study. Leduc County and the City of Leduc are anticipated to have a combined population of over 107,000 within the next 50 years to 2060.



▲ LEDUC COUNTY & THE CITY OF LEDUC STRONG GROWTH FORECAST 2008-2060

The critical factor determining the overall growth depicted in the Strong Growth Forecast is the growth spike projected for the decade 2006 to 2016, which forecasts annual growth rates similar to those rates experienced within the City of Leduc in the years 2006 and 2007. The Capital Region and the Leduc area in particular can expect dramatic growth spikes and economic volatility over the 50-year forecast period of this study. Although actual growth spikes may occur at different times than forecast here, it is essential for the City of Leduc and Leduc County to be prepared for future growth, and it will serve both municipalities well in achieving their joint vision of a sustainable future.

Based on the Strong Growth Scenario, Leduc County and the City of Leduc will require a total of 80 quarter sections to accommodate 50 year growth, 2008-2060: 39 quarter sections for residential growth and 41 for commercial/industrial growth.

	30 Year Total (quarter sections)	50 Year Total (quarter sections)	Total (quarter sections)
Residential	26	13	39
Commercial/Industrial	27	14	41
			80

LAND REQUIREMENTS FOR 50 YEARS GROWTH IN LEDUC COUNTY AND THE CITY OF LEDUC



#### **GROWTH STRATEGY**

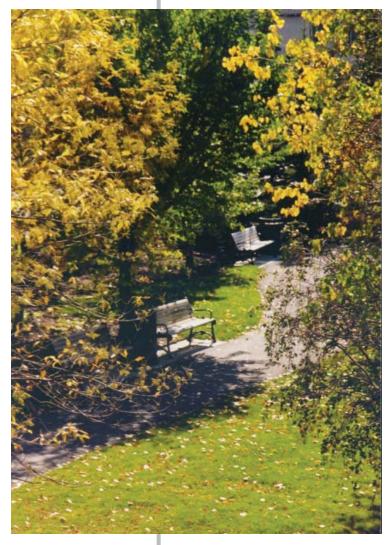
The determination of the preferred growth stategy, as illustrated in the Growth Strategy map within this Executive Summary and in Section 5.0, has been based upon evaluation of technical criteria and intermunicipal deliberation among Steering Committee members and administrative staff from both municipalities. The technical criteria used to evaluate growth options have been derived from traditional physical planning considerations as well as the Sustainability Pillars.

This growth strategy promotes the protection of natural areas and agriculture by directing growth away from the better agricultural lands and creeks that are located to the west of Edmonton International Airport. Environmental stewardship is supported by providing for passive recreational opportunities at the regional level and access to the natural areas between the City of Leduc and Saunders Lake. Access to existing and future infrastructure is taken

into account by directing growth toward major transportation corridors such as QE II Highway and Highways 2A, 19, and 39. Efficient utilization of infrastructure is promoted through placement of more intensive mixed-use areas where future LRT and high-speed rail alignments are anticipated. Compact and contiguous development patterns, rather than inefficient leapfrog or sprawling development along linear corridors, have been incorporated into the overall form of this growth scenario.

Incompatible land uses have been avoided, while complementary land uses have been placed close together. For example, industrial land uses have been concentrated to create business synergies and to mitigate potential impacts of industrial development on other land uses. Also, land uses such as commercial and residential development have been integrated in strategic locations to achieve a greater balance of employment with residential population, to make more efficient use of infrastructure, and to create more vibrant communities.

The development of significant residential areas close to employment will help the residential population to capitalize on local employment opportunities, which will enhance economic development and sustain local business viability in the Leduc area. Various transportation options

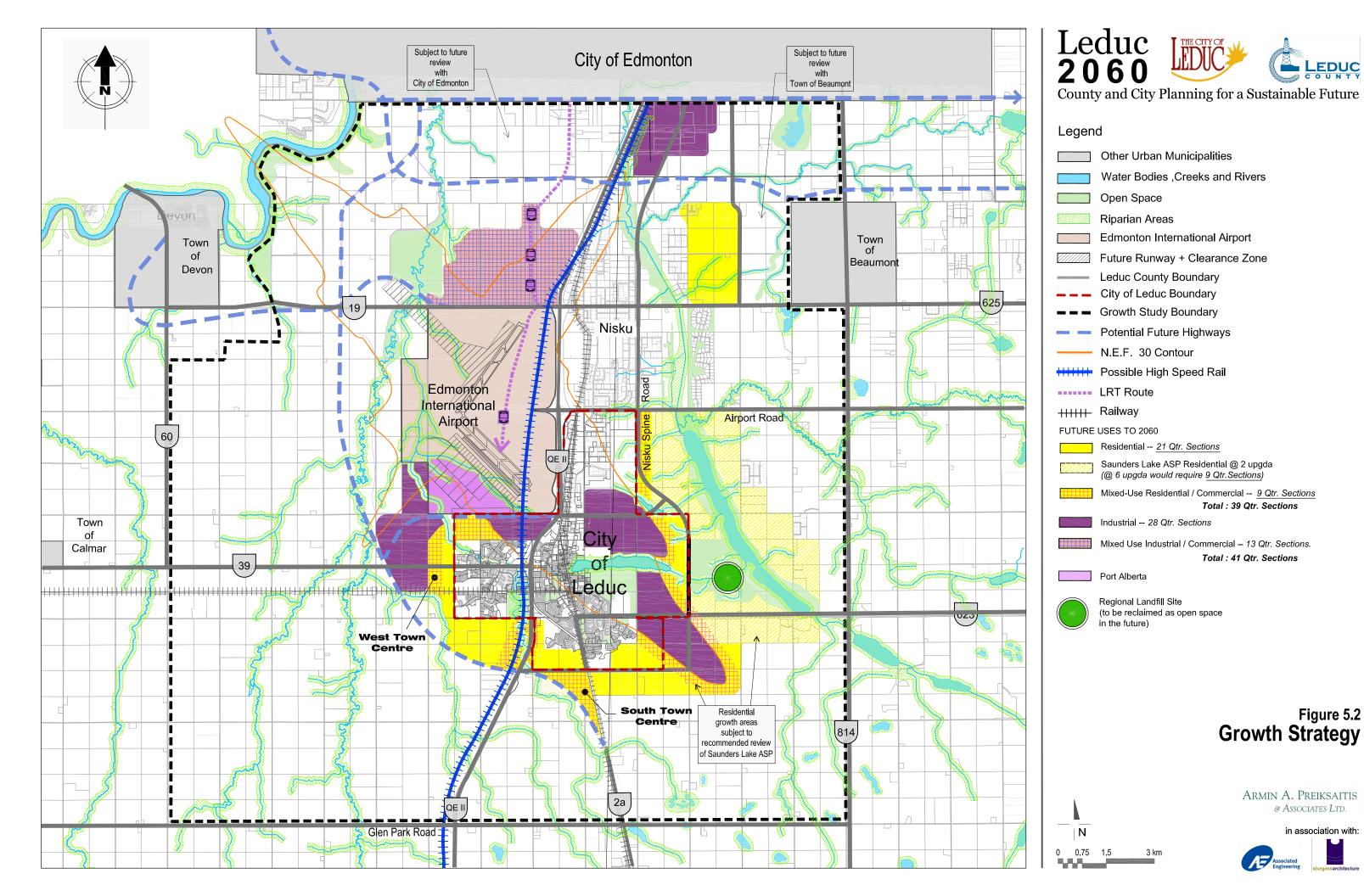


are anticipated and the intensive land uses and development patterns necessary to sustain access to such transportation options have been provided in strategic locations. This linkage of land use and infrastructure planning is intended to ensure integrated, cost-effective and energy efficient infrastructure.

The economic development potential of this Growth Strategy cannot be overstated. The creation of vibrant residential communities in the City of Leduc and Leduc County, including truly urban places in the proposed "Town Centres" to the south and west of the City of Leduc as discussed in Section 5.0, will in turn attract a more complete range of businesses and residents alike. Complete communities offering the full array of amenities, employment opportunities, and housing choices are the essence of sustainability.







# Miles De la Constantina del Constantina de la Co

#### RECOMMENDATIONS

The following summarizes the principal recommendations of the Growth Study, which are described in more detail in Section 6.3:

#### **REGIONAL**

- Capital Region Board (CRB) and Capital Region Growth Plan. The City
  of Leduc and Leduc County are strongly encouraged to maintain their
  robust participation in the CRB and in the preparation of the Capital
  Region Growth Plan.
- 2. Sustainability Planning. The City of Leduc and Leduc County would benefit from further collaboration with their municipal neighbours and other stakeholders in the preparation of a multi-jurisdictional sustainability plan.
- 3. Regional Public Transit Planning. Leduc County and the City of Leduc are encouraged to fully and jointly participate in the preparation of the LRT Corridor Study for the area south of the City of Edmonton and in other initiatives addressing the future provision of public transit within the Capital Region.

#### **INTERMUNICIPAL**

- 4. Communications Strategy. Both Councils are strongly encouraged to adopt a joint communications strategy to promote the progressive initiatives being undertaken by the City of Leduc and Leduc County.
- 5. Integration of Land Use and Infrastructure. Further intermunicipal cooperation and integration of land use planning with engineering, servicing, transportation, and utilities studies should help both municipalities achieve greater efficiencies and provide better services to their residents and businesses.
- 6. Transportation Master Planning. The County and the City have both been updating their Transportation Master Plans. These long-range transportation plans would benefit significantly from enhanced information sharing and joint intermunicipal planning in collaboration with Alberta Transportation.

The development of significant residential areas close to employment will help the residential population to capitalize on local employment opportunities, which will enhance economic development and sustain local business viability in the Leduc area.



- 7. Joint Utilities Master Planning. As with Transportation Master Plans, both municipalities prepare and update master plans for utility infrastructure such as water and sanitary sewer services. Joint intermunicipal planning and collaboration in the provision and operation of municipal utility systems would help both the City and the County to achieve greater efficiencies and provide better services to their residents and businesses.
- 8. Fiscal Sustainability and Jointly Managing the Costs of Growth. The City of Leduc and Leduc County each use fiscal and growth management tools such as off-site development levies to ensure that the costs of growth are fairly allocated amongst benefitting developers, landowners, residents, businesses, service providers, and the municipalities themselves. The County and City are urged to investigate opportunities for cooperation in the establishment of joint cost recovery mechanisms to ensure that future development will "pay its own way" and achieve fiscal as well as environmental sustainability.
- 9. Collaboration with Edmonton International Airport. The plans for the expansion of facilities and capacity at Edmonton International Airport, including the development of a new runway and the proposed Master Plan for Port Alberta, will have siginificant impacts on long-range planning for the City of Leduc and Leduc County. Both municipalities are strongly encouraged to work with the Edmonton International Airport to coordinate planning at all levels in order to maximize the potential that future development will bring to the County, the City, and the Airport.
- 10. Greenways, Riparian Areas, Trails, Multiways, Parks, and Recreation Plans. It is recommended that planning for natural areas, regional pathways, and open space systems become a high priority in the IDP.
- 11. Joint Review of Saunders Lake ASP. It is recommended that the County and City undertake a joint intermunicipal review of the policies of the Saunders Lake ASP, particularly as they address sustainability, residential densities, clustering of residential development, and long-term potential for redevelopment or infill development.

The growing awareness of the detrimental impacts that commuter times are having on the natural and social environments has sparked a growing trend toward increasingly sustainable development . . .

#### **MUNICIPAL**

- 12. Municipal Development Plans. Amendments may be considered for the Municipal Development Plans of both municipalities in order to reflect the outcomes of the Growth Study, the subsequent IDP, the expected Capital Region Growth Plan, and any sustainability initiatives that either municipality may contemplate undertaking.
- 13. Land Use Bylaws. Certain policy directions resulting from the Growth Study, the IDP, the Capital Region Growth Plan, sustainability initiatives, or Municipal Development Plan amendments may create the need to review relevant sections in either municipality's Land Use Bylaw.
- 14. County Reviews with City of Edmonton and Town of Beaumont. It is strongly recommended that Leduc County consider joint intermunicipal reviews of the plans and joint policies that it has already approved with both the City of Edmonton and the Town of Beaumont.



# INTRODUCTION {section one}

#### 1.1 PURPOSE AND SCOPE

Leduc County and the City of Leduc have agreed to collaboratively prepare and approve a Growth Study and a subsequent Intermunicipal Development Plan (IDP). Both municipalities consider this an important initiative in Alberta, where the two municipalities are committed to managing growth within this area of Alberta's Capital Region. This innovative Growth Study will form the basis for a comprehensive long-range IDP that will incorporate sustainability principles.

The purpose of the Growth Study is to determine directions for future growth and associated infrastructure upgrading and extensions for the City of Leduc and Leduc County. The report provides population forecasts and land requirements for residential, industrial, commercial, and institutional land uses for the next fifty (50) years. The Growth Study identifies growth areas according to existing and projected capital investments in infrastructure, employment, and other related factors. In addition to supporting a new IDP, the findings and recommendations of this report are expected to support future collaborative growth management planning initiatives of the City and the County.

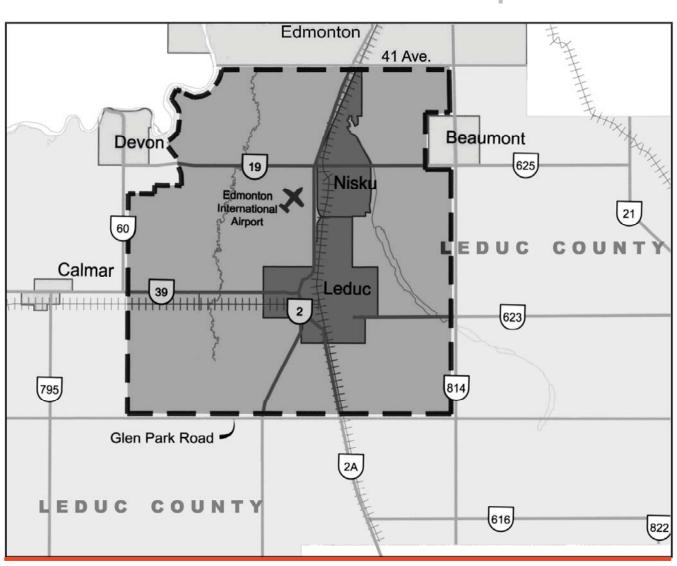
The Growth Study addresses:

- a comprehensive area of development influence
- local and regional economic trends
- population forecasts
- existing land inventories and future land requirements
- infrastructure considerations
- key stakeholders
- possible growth scenarios
- preferred growth strategies

The Leduc County – City of Leduc Steering Committee has agreed that the Growth Study should address future growth and development within the study area shown on Figure 1.1. The study area was originally proposed in order to capture projected growth trends while acknowledging other policy planning exercises that Leduc County is preparing, such as a new IDP with the Town of Devon. Given that this report is intended to consider growth to the year 2060, the study area is necessarily broader than the area within which growth and development may occur during the anticipated IDP time frame. Certain growth areas identified in the Growth Strategy in Section 5.0 will likely become incorporated within other plans that Leduc County intends to prepare with other municipalities in the Capital Region.

The long-term scope of the growth study defers more detailed staging of development and infrastructure to the subsequent IDP. With the Growth Study and the subsequent IDP, the City of Leduc and Leduc County intend to create a new vision of intermunicipal sustainability that will be attained through ongoing collaboration and commitment to action.





▲ FIGURE 1.1 JOINT SUSTAINABLE GROWTH STUDY AREA BOUNDARY

#### 1.2 GUIDING PRINCIPLES

These Guiding Principles provide a framework for the Leduc County – City of Leduc Steering Committee in the preparation of both the Growth Study and the Intermunicipal Development Plan (IDP). The Steering Committee has committed to review these Guiding Principles at the completion of the Growth Study to ensure that they will be appropriate in the formulation of the IDP. The Guiding Principles are regional in scope and are based upon five Sustainability Pillars:

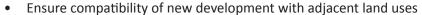
- 1. Smart Growth
- 2. Creating Vibrant Communities
- 3. Environmental Stewardship
- 4. Economic Development
- 5. Responsible Governance

#### 1.2.1 SMART GROWTH

Growth and development in Leduc County and the City of Leduc will be sustained by the following Smart Growth Principles:

- Create diverse communities
- Support responsible development and preservation of agricultural land
- Create a range of housing choices and forms
- Mix land uses
- Foster distinctive, attractive communities with a strong sense of place
- Create walkable communities with meaningful open space
- Preserve open space, agricultural land, natural beauty and critical environmental areas
- Provide a variety of transportation options





- Utilize green infrastructure and buildings
- Capitalize on local employment opportunities
- Ensure integrated, cost-effective and energy efficient infrastructure
- Establish triple bottom line accountability

#### 1.2.2 CREATING VIBRANT COMMUNITIES

Vibrant communities will be created and sustained by:

- Safe and healthy neighbourhoods
- Responsive community services
- Functional community, recreational, health, and educational facilities
- Viable social infrastructure and institutions
- Compatible integration of home, community, work, commerce, and recreation

#### 1.2.3 ENVIRONMENTAL STEWARDSHIP

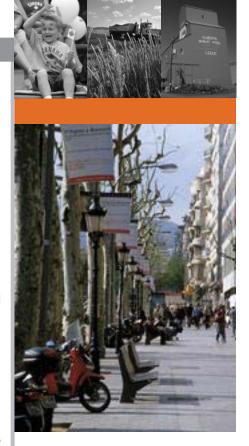
Leduc County and the City of Leduc will protect, sustain, and enhance the natural environment by:

- Respecting the primacy of natural systems
- Cooperating in the protection of environmentally sensitive areas, water bodies, wetlands, water courses, and parkland landscapes
- Cooperatively integrating existing and future development with natural areas and greenways to support stormwater management, wildlife corridors, and passive recreation
- Protecting and supporting agriculture
- Jointly planning, developing, and maintaining natural habitat and recreational areas
- Implementing innovations in sustainable development

#### 1.2.4 ECONOMIC DEVELOPMENT

The City of Leduc and Leduc County will attract investment and create employment opportunities through:

- Economic diversification
- Supporting and optimizing the major infrastructure that drives the regional economy
- Edmonton International Airport
- Highways
- Railways
- Energy transmission
- Communications
- Innovation
- Employment, training, and employee support systems



An important principle in sustainable development is that employment and residential growth need to be both balanced and located close to each other.

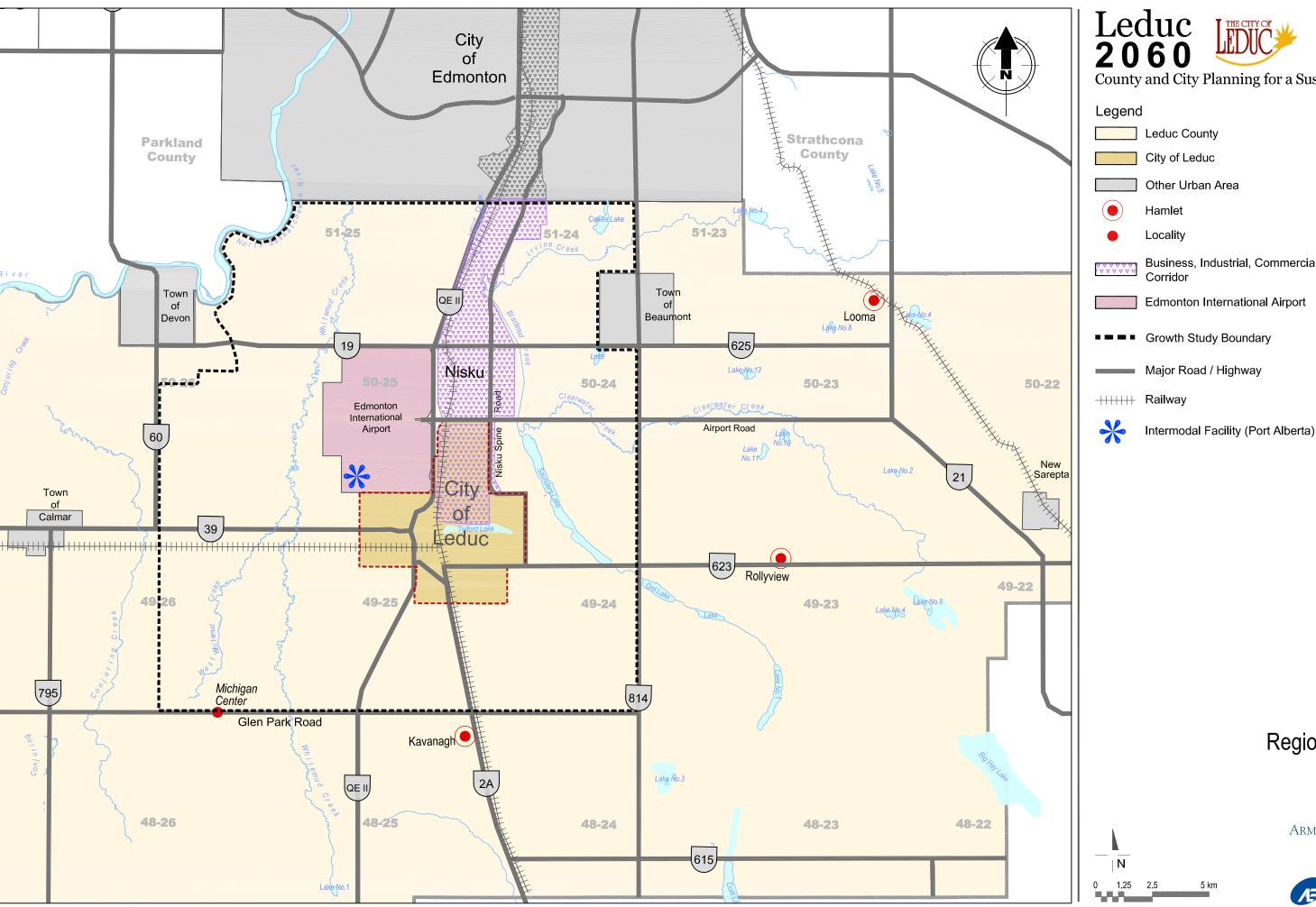
By anticipating future land use planning for the County and City in a coordinated and collaborative manner, the two municipalities will aim to optimize their economic growth potential in the region and provide for more efficient, costeffective delivery of services and infrastructure.

#### 1.2.5 RESPONSIBLE GOVERNANCE

Leduc County and the City of Leduc are committed to:

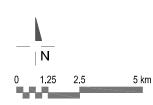
- Intergovernmental cooperation, collaboration, communication, and coordination
- Honest communication among the municipal, regional, and provincial stakeholders
- Pursuing mutual interests and attaining common goals, while acknowledging distinctive attributes and resolving important differences
- Open and transparent planning and decision-making
- Meaningful citizen engagement
- Timely and cost-effective planning and decision-making processes
- Sound fiscal management
- Appropriate and effective sharing of services and costs





Leduc **2060** LEDUC County and City Planning for a Sustainable Future Legend Leduc County City of Leduc Other Urban Area Hamlet Locality Business, Industrial, Commercial, Employment Edmonton International Airport ■ ■ Growth Study Boundary Major Road / Highway

Figure 1.2 Regional Context











## **GROWTH CONTEXT**

{section two}

#### 2.1 REGIONAL GROWTH

Leduc County and the City of Leduc are located south of the City of Edmonton, adjacent to the Edmonton International Airport, as identified in Figure 1.2. Both communities are located within the Alberta Capital Region, which includes the City of Edmonton and 24 surrounding municipalities. The multi-jurisdictional nature of the Capital Region has played an important role in the history of development within this part of Alberta.

Economic development in the Capital Region has broken through new thresholds. Unprecedented levels of international investment have pushed the rates of development and population growth beyond projections that were forecast only a decade ago. The Capital Region has long been considered a major gateway to northern Alberta and the Canadian North, where many industries such as oil and natural gas exploration,

manufacturing, warehousing, distribution, air travel, and intermodal transshipment have thrived. In past decades, the market area for goods and services produced in the Capital Region has included most of Canada and the western and central United States. Now the range of nations with which the Capital Region trades is truly international in scope. Development of the CANAMEX Trade Corridor through Canada, the United States, and Mexico has extended the economic reach of the Capital Region south into Mexico. Even



more significantly for long-term economic growth, the rail connections between the Capital Region and the expanding deep water port at Prince Rupert, British Columbia, promise to strengthen and secure lasting trade linkages between the Prairie Provinces and the Asia Pacific region, particularly with the booming economies of China and India. As a western Canadian nexus for all these trade routes, the Capital Region is expected to play a critical role as a major crossroads in this emerging international trading system.

The global trends affecting North America and western Canada, such as changes in demographic profiles and population distribution, increased immigration, and demand for greater variety in the types and affordability of housing, will be more noticeable in the Capital Region than elsewhere in Canada. New growth is already occurring at a previously unforeseen pace in the Capital Region. In the next 35 years, the population in the region is expected to nearly double (Capital Region Integrated Growth Management Plan [CRIGMP], November 2007). New industrial growth will be accompanied by economic activity throughout the region, with a construction boom to build new housing, business and retail space, industrial plants, and infrastructure to serve the expanding population. New businesses

A STATE OF THE STA

and services will be attracted to the region as a result of its tremendous growth. Rather than gradual growth that may be easier to manage, the Capital Region is predicted to experience dramatic spikes in growth that will transform the region into a major metropolitan area.

All of this regional growth will increase demand for the various forms of existing and future transportation infrastructure in the Leduc area: highways, rail systems including future high-speed rail, air travel infrastructure, and regional public transit systems including light rail transit (LRT). Accompanying that new infrastructure will be the more intensive land use that will be necessary to achieve greater transportation and servicing efficiencies and sustainability. With more industrial development related to oil sands activity and its location on the QE II Highway corridor, the Leduc area is destined to become the major transportation crossroads within the national and international hub known as the Capital Region. The clearest harbinger of the increasing importance of the Leduc area is the expansion currently being planned for the Edmonton International Airport and Port Alberta. The growth in the Leduc area will be transformative.

Economic development in the Capital Region has broken through new thresholds. Unprecedented levels of international investment have pushed the rates of development and population growth beyond projections that were forecast only a decade ago.

The following have been identified as key growth drivers in the Capital Region (CRIGMP, November, 2007):

- Gateway to the North and the Asia Pacific Corridor
- Edmonton International Airport
- Port Alberta
- Greater Nisku/Leduc Industrial Area
- Industrial Heartland
- Anticipated economic growth throughout the region

#### GATEWAY TO THE NORTH AND THE ASIA PACIFIC CORRIDOR

As a central hub, supplier, and staging area for many communities and industries operating in northern Canada, the Capital Region is expected to see continued economic activity to support growth in the north. Infrastructure improvements to key road and rail connections to the Vancouver and Prince Rupert corridors, and the anticipated expansion of those ports, are expected to increase export

capacity and provide a more efficient and reliable transportation system that will result in increased trade between the Capital Region and the Asia Pacific region. As the area within the Capital Region that is projected to be the best endowed with the strategic combinations and capacities of highways, rail systems including future high-speed rail, air travel infrastructure, and regional public transit systems including light rail transit (LRT), the Leduc area is well placed to capitalize on its location within the region by becoming the hub that serves the Asia Pacific Corridor.



New growth is already occurring at a previously unforeseen pace in the Capital Region. In the next 35 years, the population in the region is expected to nearly double (Capital Region Integrated Growth Management Plan [CRIGMP], November 2007).

#### **EDMONTON INTERNATIONAL AIRPORT**

Edmonton International Airport is located in the centre of the study area. In terms of land area, it is already the second largest airport in Canada and is now the country's fastest growing airport. Plans for the expansion of facilities and capacity at Edmonton International Airport, including the development of a new runway, are expected to result in capital investment in the range of \$2 billion. Based on projections provided by the Edmonton Regional Airports Authority, by 2036 the total aviation activity at the International Airport will grow to levels that currently exist at Vancouver International Airport. By 2016, total employment at Edmonton International Airport and Port Alberta is projected to reach approximately 12,000. By the end of 2041, that number is expected to increase to 33,000 jobs (CRIGMP, November, 2007).

#### **PORT ALBERTA**

Edmonton International Airport falls under the jurisdiction of Transport Canada and is managed by the Edmonton Regional Airports Authority. Given the planned expansion of capacity at the airport, including the new runway, significant areas of land controlled by the Authority have increased their potential for development of airport-related businesses and industries. Consequently, the Edmonton Regional Airports Authority has prepared a land use concept to provide clear direction for development of the airport lands. The concept plan designates over 700 acres of land on the airport property for the development of the proposed "Port Alberta" industrial and commercial facilities. Port Alberta is being planned to serve as a multi-modal transportation hub that will integrate air and surface transportation, including rail connections, in one location. This strategically located development will take advantage of links with international airline service, the QE II Highway and the CANAMEX Trade Corridor, major rail freight services, and connections to the Asia Pacific region through the new deep water port at Prince Rupert, British Comubia. The major land uses planned for this large area include industrial and limited commercial uses to host manufacturing, production, supply, distribution, and storage of goods. Ultimately Port Alberta could integrate multi-modal and other logistics facilities from across the Capital Region, notably Alberta's Industrial Heartland and the warehousing and distribution centres in northwest Edmonton.

#### GREATER NISKU/LEDUC INDUSTRIAL AREA

The Greater Nisku/Leduc Industrial Area, located to the east of Edmonton International Airport, straddles the boundary between the City of Leduc and Leduc County. This industrial and business area is currently the largest in western Canada and the second largest of its kind in North America. The area includes a mix of light, medium and heavy industrial uses and accommodates a workforce of 15,000 to 17,000 people. Much of the future industrial equipment and service supply for the oil sands projects could come from the Greater Nisku/Leduc Industrial Area, providing substantial growth opportunities. As addressed in Section 2.4, Leduc County is currently preparing the Highway 19 Area Structure Plan for approximately 9,000 acres (3,640 hectares) to address the potential need to satisfy market demand for more industrial land, the anticipated expansion of Edmonton International Airport, and the prospect of significant road network changes within the County.

#### INDUSTRIAL HEARTLAND

Eight multi-billion dollar oil sands upgrader projects are tentatively scheduled to be constructed in the Industrial Heartland over the next 15 years. While specific projects have not been identified for the rest of the forecast period, the region should expect to see continued development and investment in heavy industry projects beyond the first 15 years of the forecast period. Total employment within the Industrial Heartland is expected to range between 30,000 and 40,000 jobs throughout the period up to 2041.



While it is more difficult to quantify economic growth throughout the region, forecasts point to continued strong growth in many parts of the Capital Region. The value of major industrial and commercial projects planned for the Capital Region outside of the Industrial Heartland and Port Alberta is estimated at \$5 billion. Across the entire Capital Region, investment in core infrastructure required by the province, municipalities, and the private sector could total \$19.6 billion by the year 2018 and an additional \$21.3 billion by the year 2043 (CRIGMP, November, 2007).

#### 2.2 RECENT LOCAL GROWTH TRENDS

Although the outlook of the growth study is long term, it is helpful to take into account more recent trends in population growth and development activity within the City of Leduc and Leduc County. Within both municipalities, population growth has been strong over the past two decades. From 1991 to 2006, the annual rate of population growth has steadily increased.

Year	<b>Population</b>	<b>Annual Growth Rates</b>	<b>Growth by 5-Year Period</b>
1991	25,473	} 0.94% per annum	} 4.7%
1996	26,666	y 0.94% per annum	; 4.770
2001	27,560	} 0.72% per annum	} 3.4%
2001	27,300	1 1 COO/ nor annum	1 0 00/
2006	29,755	} 1.60% per annum	} 8.0%

▲ TABLE 2.1 CITY AND COUNTY RECENT POPULATION GROWTH RATES





The Greater Nisku/Leduc industrial and business area is currently the largest in western Canada and the second largest of its kind in North America.

By 2016, total employment at Edmonton International Airport and Port Alberta is projected to reach approximately 12,000. By the end of 2041, that number is expected to increase to 33,000 jobs (CRIGMP, November, 2007). The City of Leduc population has risen by approximately 21% since 2006. Along with this population growth, both municipalities have recently experienced increasing rates of growth in land development. Another indicator of recent growth in the Leduc area can be found in the amount of investment that has been projected for public infrastructure. A full one third of all the capital infrastructure recently budgeted within the Capital Region has been earmarked for the Leduc area.

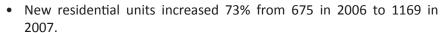
#### LEDUC COUNTY

- From January to December 2007 a total of 130 building permits were issued; down 30 permits or 23% from 2006. 36% or 47 of these building permits were for residential construction.
- Housing starts increased from 75 in 2001 to 161 in 2006, which represents a 115% increase over the five-year period.
- Major non-residential projects include a \$11.2 million Highway 60 resurfacing (completed); a \$15 million Nisku Business Park (under construction); an \$18 million North Terminal Redevelopment (proposed); a \$200 million Edmonton Regional Airport Authority Five Year Capital Program (proposed).
- The value of 2007 building permits totalled \$120 million.
   This represents an increase of over \$43 million from the \$77 million building permit value reached in 2006.

#### CITY OF LEDUC

- The June 2008 census for the City of Leduc reported a population of 20,529, which represents a 21% total increase (10.5% annual increase) over the 2006 population of 16,967 reported in the 2007 Capital Region Integrated Growth Management Plan (CRIGMP).
- From January to December 2007 a total of 1,261 building permits were issued; up 409 permits or 48% from 2006. 93% or 1,169 of these permits were for residential construction.
- The total value of 2007 building permits amounted to \$329 million. As with commercial construction, this represents a doubling of the total building permit value by over \$164 million from the \$165 million building permit value reached in 2006.





- Housing starts increased from 306 in 2001 to 630 housing starts in 2006, which represents a 92% increase over that five-year period.
- Major projects include a \$12 million Assisted Living Development (2007/08) and a \$43.5 million recreation facility.
- 42 commercial building permits were issued for both new commercial construction (13 permits) and additions/renovations (29 permits) in 2007, which is the highest number of commercial building permits issued in the last 12 years. Building permit value for commercial construction more than doubled from \$11 million in 2006 to \$22 million in 2007.
- In both census years 2003 and 2008, 60% of all working residents of the City of Leduc were employed locally within the City of Leduc, in Nisku, or at the Edmonton International Airport.



The Growth Study builds upon the intermunicipal cooperation that has been established in the 1998 IDP and is intended to support a new IDP to be approved by both municipalities.

The June 2008 census for the City of Leduc reported a population of 20,529, which represents a 21% total increase (10.5% annual increase) over the

2006 population of 16,967...

#### 2.3 REGIONAL PLANNING

On April 15, 2008, the Government of Alberta announced the Capital Region Board Regulation. That Regulation addresses the establishment and mandate of the Capital Region Board, including the preparation and implementation of a Capital Region Growth Plan. Leduc County and the City of Leduc will fully participate in the preparation of the Capital Region Growth Plan, which will consist of four elements:

- a comprehensive, integrated regional land use plan
- a regional intermunicipal transit network plan
- a plan to coordinate and enhance a geographic information system
- a plan to address social and market affordable housing requirements

Leduc County has prepared Intermunicipal Development Plans (IDPs) with other neighbouring urban municipalities in addition to the City of Leduc -Leduc County IDP. The County has approved IDPs with the City of Edmonton and the Town of Beaumont, while it has recently updated an IDP with the Town of Devon. Through these IDPs and other intermunicipal and regional initiatives, both the City of Leduc and Leduc County have established effective working relations with the other municipalities in the Capital Region. Leduc County and the City of Leduc expect that this Growth Study and subsequent IDP will support the objectives of the Capital Region Board and the Capital Region Growth Plan.

Eight multi-billion dollar oil sands upgrader projects are tentatively scheduled to be constructed in the Industrial Heartland over the next 15 years.

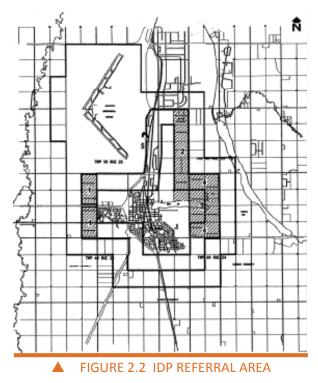
#### 2.4 CITY AND COUNTY PLANS AND POLICIES

#### MUNICIPAL DEVELOPMENT PLANS

As required by the Alberta Municipal Government Act, Municipal Development Plans (MDPs) have been approved by both Leduc County (most recently amended in 2004) and the City of Leduc (adopted in 2005). These two MDPs each contain policies that promote intermunicipal coordination of planning and growth management.

Section 13 of the Leduc County MDP is "intended to maintain consultative processes in order to prevent jurisdictional land use conflicts and to facilitate coordinated planning with adjacent municipalities." More specifically, Section 13.1 sets forth the County's intermunicipal Planning Objectives:

- 13.1.1 To achieve harmonious and compatible land use patterns with adjacent municipalities.
- 13.1.2 To establish joint planning and referral mechanisms for the resolution of interjurisdictional issues and conflicts through cooperative efforts.



Section 7 of the City of Leduc MDP states, "Cooperation between the City and the surrounding Leduc County is especially important for creating an orderly and economically efficient urban area."

The Growth Study supports the objectives of both MDPs and is consistent with the spirit and intent of the intermunicipal planning policies of both the City of Leduc and Leduc County.

#### INTERMUNICIPAL DEVELOPMENT PLAN

In 1998, the City and County mutually agreed to an Annexation Agreement and Intermunicipal Development Plan (IDP). While the Annexation Agreement specifies the details of the City's 1999 land annexation, the IDP outlines the basic planning principles and processes that apply to a transitional



area surrounding the City, which is identified as the "referral area". In accordance with the approved IDP, both municipalities maintain the ability to review and comment on all proposed developments in the referral area. In addition, the IDP provides for the City of Leduc to be notified of any changes to a Memorandum of Understanding that has been approved by the County and the Edmonton Airport Authority. The Growth Study builds upon the intermunicipal cooperation that has been established in the 1998 IDP and is intended to support a new IDP to be approved by both municipalities.

#### **COUNTY LOCAL PLANS**

Leduc County has approved five Area Structure Plans (ASPs) within the overall study area. A number of these ASPs, such as the Nisku ASP approved in 1981,

are considered built out and are not included within the potential growth areas identified in Section 5.0. Other ASPs approved by Leduc County are located within the overall study boundaries shown in Figure 1.1, but are situated beyond the potential growth areas identified in Section 5.0. Of the ASPs that Leduc County has approved within the overall study area, portions of the North Major ASP and the Saunders Lake ASP are located within the potential growth areas identified in Section 5.0.

#### **NORTH MAJOR ASP**

The North Major ASP provides for residential, business industrial, business park, and commercial land uses between the southern corporate limits of the City of Edmonton (41st Avenue)

and Township Road 510. This ASP also proposes a residential policy area to the west of the Town of Beaumont. The portions of the North Major ASP affected by the potential growth areas identified in Section 5.0 are located to the northeast of Edmonton International Airport. Those areas are considered as having long-term potential for residential, industrial, and mixed-use industrial and commercial development beyond the 50-year horizon of the Growth Study (i.e., after 2060).

Considerable portions of the North Major ASP fall outside the potential growth areas of the Growth Study, but may be subject to development influences in relation to other municipalities such as the City of Edmonton and the Town of Beaumont. One of the recommendations of the Growth Study identified in Section 6.3 is that the County consider joint intermunicipal review of the plans and policies that Leduc County has already approved with both the City of Edmonton and the Town of Beaumont.





#### SAUNDERS LAKE ASP

The Saunders Lake ASP provides for a range of residential land uses between the City of Leduc and the shores of Saunders Lake to the east of the City. Much of the Saunders Lake ASP is included within the potential growth areas identified in Section 5.0 of the Growth Study.

The residential densities proposed in the Saunders Lake ASP are significantly lower than the overall 6 dwelling units per gross developable acre (upgda) assumed for future development in the Growth Study. The environmental and recreational value of the lands between the City of Leduc and Saunders Lake may support protection of significant areas for open space. Although considerably higher residential densities may not be appropriate within this area, it may sustain higher densities than are currently contemplated by the ASP. One of the recommendations of the Growth Study is that the County and City should undertake a joint intermunicipal review of the policies of the Saunders Lake ASP, particularly as they address sustainability, residential densities, clustering of residential development, and long-term potential for redevelopment or infill development.

Leduc County is also in the process of preparing three proposed ASPs: the East Vistas ASP, the QE II Business Park Local ASP, (both within the North Major ASP), and the Highway 19 ASP. The Highway 19 ASP is contiguous to the other growth areas identified in Section 5.0. Although the proposed East Vistas ASP and the QE II Business Park Local ASP are not contiguous to those growth areas, development within these two local plans would have regional implications affecting not only growth within an Intermunicipal Development Plan for the City of Leduc and Leduc County, but also for other municipalities in the area such as the City of Edmonton and the Town of Beaumont.

#### PROPOSED HIGHWAY 19 ASP

The proposed Highway 19 ASP would provide for a range of residential, industrial, business park, and recreational land uses on approximately 9,000 acres (3,640 hectares) to the north and northwest of Edmonton International Airport (on both sides of Highway 19 within the County's jurisdiction). The northern boundary of the proposed Highway 19 ASP would be Township Road 510. The draft policies of the proposed Highway 19 ASP have been taken into account in the Growth Study. The potential growth areas identified in Section 5.0 include portions of the proposed Highway 19 ASP within the 50-year horizon, for mixed industrial and commercial land uses. More specific land requirements for those uses are projected in Section 4.4.2 and Table 4.5. The northern and eastern portions of the proposed Highway 19 ASP have not been included within growth strategy areas identified for development within the 2060 time horizon. Those longer term growth areas are proposed for a variety of industrial, mixed industrial and commercial, recreational, and residential land uses.

#### PROPOSED EAST VISTAS ASP

The proposed East Vistas ASP would provide for comprehensively planned low-density, medium-density, and townhouse residential development with supporting local commercial development and a comprehensive open space system. Approximately 562 gross acres would be proposed for development of more than 3,300 dwelling units, which could house nearly 12,000 people. An overall residential density of 5.9 dwelling units per acre is proposed within the East Vistas ASP, which is consistent with the 6 dwelling units per gross developable acre assumed by the Growth Study.

#### PROPOSED QE II BUSINESS PARK LOCAL ASPS

The proposed QE II Business Park Local ASP would provide for industrial land uses south of the approved WAM Industrial Park Local ASP. Both of these Local ASPs are located immediately south of the City of Edmonton and northeast of Edmonton International Airport, on the east side of the QE II Highway. Future industrial land uses on the 6 quarter-sections covered by these two Local ASPs have been taken into account in the Growth Study.

#### CITY LOCAL PLANS

The City of Leduc has approved twelve Area Structure Plans (ASPs) within the current City boundaries. About half of those ASPs still have some short-term to medium-term development potential before they attain full build-out. As stated in the 2007 Annual Report of the City of Leduc Planning & Development Services Department, there are approximately 450 hectares (1,112 acres or about 7 quarter-sections) of land available for residential development within the present City boundaries.

At the current rate of housing starts experienced in 2007, this residential land supply could reasonably be expected to achieve full build-out within the next five to ten years (between 2012 and 2017).

Notwithstanding the relatively short time horizon anticipated for build-out of the existing ASPs within the City of Leduc, the undeveloped portions of these ASPs have been included in the 50-year potential growth areas identified in Section 5.0.

#### **COUNTY PLANNING AND INFRASTRUCTURE STUDIES**

Leduc County has been undertaking a number of infrastructure projects, both independently and in collaboration with other municipalities and provincial agencies. The following represent the major projects that have some bearing on the Growth Study.

41<sup>st</sup> AVENUE SW CONCEPTUAL PLANNING STUDY The City of Edmonton Transportation Department, in conjunction with Leduc County, is undertaking a concept planning study that will identify long-term plans for 41<sup>st</sup> Avenue SW between 50<sup>th</sup> Street (Highway 814) and 184<sup>th</sup> Street (Range Road 254). 41<sup>st</sup> Avenue SW is the boundary between the City of Edmonton and Leduc County. The concept plan will provide a plan for the short and long-term configuration of 41<sup>st</sup> Avenue SW and the intersecting roadways, including tie-ins to a proposed interchange at the Queen Elizabeth II Highway.



... there are approximately
450 hectares (1,112 acres or
about 7 quarter-sections) of
land available for residential
development within the present
City of Leduc boundaries. At
the current rate of housing
starts experienced in 2007, this
residential land supply could
reasonably be expected to
achieve full build-out within the
next five to ten years (between
2012 and 2017).



#### TOWNSHIP ROAD 510 FUNCTIONAL PLANNING STUDY

The Township Road 510 Functional Planning Study was initiated to clearly outline long-term requirements for the ultimate design of the roadway from the proposed Nisku Spine Road (9<sup>th</sup> Street) to Highway 814 (50<sup>th</sup> Street). The functional plan will recommend improvements to the existing roadway structure, design standards, horizontal and vertical alignment, right-of-way requirements, intersection requirements, and access control.

#### GREATER NISKU OFFSITE LEVY

In April 2008, Leduc County approved a new Offsite Levy Bylaw for roadway, sewer, and water infrastructure improvements within the Greater Nisku/Leduc Industrial Area. The County consulted with the public, affected landowners, and developers within the Greater Nisku Offsite Levy area in the formulation of the Offsite Levy Bylaw policy and procedures for the cost of the levies. Given the large benefitting area of this Offsite Levy Bylaw, which extends as far south as Saunders Lake, significant infrastructure improvements can be anticipated as new commercial and industrial development proceeds. That new infrastructure can in turn be expected to attract

further development within the benefitting area.

### CITY PLANNING AND INFRASTRUCTURE STUDIES

The City of Leduc has recently undertaken or approved the following projects and agreements, which have been reviewed in the preparation of the Growth Study:

- Parks, Recreation and Culture Master Plan
- Emergency Services Master Plan (March 2008)
- Transportation Study update
- Arterial Road Agreement
- School Reserve Agreement
- Cost Sharing Agreement
- Corporate Business Plan
- Corporate Strategic Plan
- Off-Site Levy Bylaw
- Social Needs Assessment 2006





## **METHODOLOGY**

{section three}

#### 3.1 SUSTAINABLE GROWTH STUDY METHODOLOGY

The Growth Study has been formulated using a methodology unlike most of the growth studies that have been prepared over the past several decades in Alberta. Traditional growth studies have been undert by single municipalities to plan for growth within their

in Alberta. Traditional growth studies have been undertaken by single municipalities to plan for growth within their own boundaries. Quite often, the primary purpose of such growth studies is to support annexation applications. Although many growth studies involve consultation with other adjacent affected municipalities and stakeholders, few include true intermunicipal collaboration. In this Growth Study, Leduc County and the City of Leduc have engaged in a unique planning process characterized by the transparent sharing of information, joint analysis, open dialogue regarding both divergent and mutual interests, exploration of options, negotiation, and determination of preferred strategies toward the achievement of common goals. Moreover, both Councils have taken responsibility for the Growth Study in approving it by resolution.

Growth Study
determines directions for fu

determines directions for future growth and associated infrastructure, including:

- •a comprehensive area of development influence
- local and regional economic trends
- population forecasts
- existing land inventories and future land requirements
- infrastructure considerations
- key stakeholders
- possible growth scenarios
- preferred growth strategies

One example of how this intermunicipal collaboration has affected the preparation and outcomes of the Growth Study has been the approach to municipal boundaries. In fact, for the purposes of projecting employment and population growth, determining land requirements, and allocating future growth areas in the Growth Strategy, the Growth Study has been undertaken as if the boundaries between the City of Leduc and Leduc County do not exist. This approach has helped both municipalities to appreciate their mutual issues and interests on a more regional, if not global scale. The Growth Study

therefore projects growth in the Leduc area irrespective of jurisdiction, based upon sound planning practice, sustainable development, and the principles of Smart (Interm Growth.

Plan) is

The Leduc County—City of Leduc Steering Committee has determined this study area in order to capture projected growth trends while acknowledging other policy planning exercises that Leduc County is preparing, such as a new IDP with the Town of Devon. Given that this report is intended to consider growth to the year 2060, the study area is necessarily broader than the area within which growth and development may occur during the anticipated IDP time frame. Certain growth areas identified in the Growth Strategy in Section 5.0 will likely become incorporated within other IDPs that Leduc County intends to prepare with other municipalities in the Capital Region.

The Growth Study will provide the technical basis for formulation of an Intermunicipal Development Plan (IDP). The resulting intermunicipal agreement on the technical and base line information for joint planning is intended to more effectively support the joint development of the IDP planning policies.

(Intermunicipal Development Plan) is a land use planning tool prepared jointly by two or more municipalities. This statutory plan requires adoption by the Councils of the municipalities involved. An IDP provides for a cooperative and coordinated policy approach to land use planning strategies, subdivision and development in fringe areas deemed common to the municipalities. The plan must also include a dispute resolution process in case differing opinions arise in the course of implementation of the plan.

36

Within this context of intermunicipal collaboration, the Growth Study is still a technical document. Based upon regional economic trends, the Growth Study is intended to establish:

- population forecasts for the area
- land needed for future residential and employment growth
- general recommendations for future growth areas
- recommendations for sustainable and efficient land development and infrastructure

### 3.1.1 EMPLOYMENT BASED FORECASTING

There are a number of methods that may be used to generate population forecasts. It has been determined that the most appropriate population forecasting approach for the Growth Study is a method based upon projected employment. As noted in Section 2.1, the Capital Region Integrated Growth

Management Plan (CRIGMP) has forecast a significant amount of employment within the study area. An important principle in sustainable development is that employment and residential growth need to be both balanced and located close to each other. Significant employment growth in the Edmonton International Airport and Leduc areas without a balanced amount of residential growth close to that employment would create a number of issues that would militate against sustainability at the regional level. One of the most problematic effects of such an imbalance between employment and residential growth would be a severe strain on regional transportation infrastructure. The fewer people living close to employment opportunities in the study area, the more employees will have to commute from other parts of the Capital Region. At the local level, providing opportunities for people to live close to where they work helps to sustain local business viability.

The Growth Study does not simply extrapolate historical population growth trends into the future. Neither does it assume a steady allocation of a proportion of the Capital Region's growth to the Leduc area over the forecast period. Rather, Section 4.0 of the Growth Study projects population growth in the Leduc area as a function of the anticipated amount of employment growth, while still taking into consideration historical growth trends and the Leduc area's past share of growth within the Capital Region. The methods



An important principle in sustainable development is that employment and residential growth need to be both balanced and located close to each other.



driving the Growth Study therefore are rooted in strong technical analysis, whereby population growth is directly correlated to the key growth drivers and anticipated future employment, and that growth management trends, policies, practices, and development approvals will evolve to encourage and support a growing residential population and a thriving business community.

An important advantage of this methodology is that it allows for adaptability in the face of the dramatic growth spikes and economic volatility discussed in Section 2.1, which are expected to transform the Capital Region into a major metropolitan area. With such conditions affecting forecasts for the Capital Region and the Leduc area, straight-line trends and constant regional shares of growth cannot be relied upon in anticipating the array of scenarios that may affect this region. Linking population growth to employment concentration is the most adaptable and sustainable approach for Leduc County and the City of Leduc to take as they jointly prepare for the future.

### 3.1.2 EVALUATION CRITERIA

As described in more detail within Section 5.0 of the Growth Study, the determination of the preferred growth stategy has been based upon evaluation of technical criteria and intermunicipal deliberation among Steering Committee members and administrative staff from both municipalities. The technical criteria used to evaluate growth options have been derived from traditional physical planning



considerations as well as the Sustainability Pillars and Smart Growth Principles listed under Section 1.2. More specifically, the evaluation criteria include:

### PHYSICAL PLANNING CONSIDERATIONS

- Protecting natural areas and agriculture
- Providing access to open space and recreational opportunities
- Facilitating access to existing and future infrastructure
- Linking land use intensity and density with efficient utilization of infrastructure
- Placing intensive development and land uses where future infrastructure is anticipated or desired (e.g., light rail transit or high speed rail)
- Achieving compact and contiguous development patterns rather than inefficient leapfrog or sprawling development along linear corridors
- Concentrating land uses such as industrial development to create synergies and to mitigate development impacts
- Mixing land uses such as commercial and residential development to achieve a greater balance of employment with residential population, to make more efficient use of infrastructure, and to create more vibrant communities
- Avoiding incompatible land uses while taking advantage of complementary land uses

### SUSTAINABILITY PILLARS

- Smart Growth
- Creating Vibrant Communities
- Environmental Stewardship
- Economic Development
- Responsible Governance

### **SMART GROWTH PRINCIPLES**

The Smart Growth Principles that have provided the most useful evaluation criteria for the Growth Study include:

- Support Responsible Development / Preservation of Agricultural Land
- Mix Land Uses
- Preserve Open Space, Agricultural Land, Natural Beauty and Critical Environmental Areas
- Provide a Variety of Transportation Options
- Ensure Compatibility of New Development with Adjacent Land Uses
- Capitalize on Local Employment Opportunities
- Ensure Integrated, Cost-Effective and Energy Efficient Infrastructure

Underpinning all of these criteria are the existing natural systems within the Growth Study area. Those natural systems are shown in Figure 3.1.



Significant employment growth in the Edmonton International Airport and Leduc areas without a balanced amount of residential growth close to that employment would create a number of issues that would militate against sustainability at the regional level.

### 3.2 JOINT CITY AND COUNTY PLANNING PROCESS

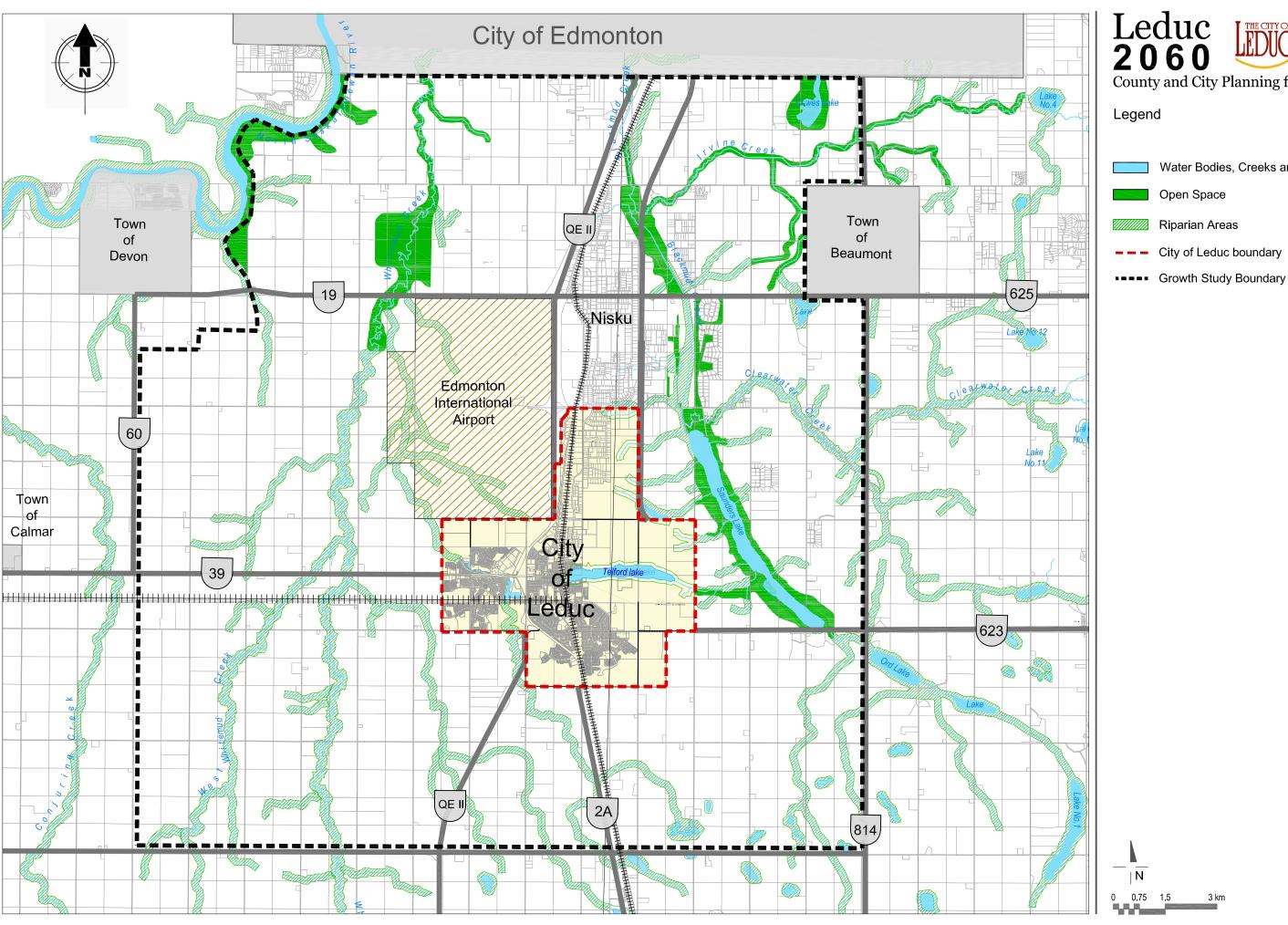
Leduc County and the City of Leduc have placed a high priority on intermunicipal collaboration, consultation with key stakeholders, and the involvement of the general public during preparation of the Growth Study and the subsequent Intermunicipal Development Plan (IDP). Work on these strategic projects has been overseen by the Leduc County – City of Leduc Steering Committee, made up of elected officials and administrative representatives from both municipalities. The Steering Committee members, who were appointed by both Councils in Fall 2007, adopted Terms of Reference for these projects in April 2008. The Terms of Reference establish that the Steering Committee be responsible for providing policy direction and recommending approval of the Growth Study and IDP to their respective Councils. The Leduc County – City of Leduc Steering Committee also determined the boundary of this study area.

The communications strategy for the Growth Study addresses stakeholder relations, public consultation, Council meetings, and media relations. Key stakeholders involved in the Growth Study have included:

- Residents
- Provincial staff
- Staff from other municipalities
- Staff from public utilities, public agencies, or public authorities
- Affected developers
- Affected landowners
- Affected business, commercial, or industrial interests
- Technical experts

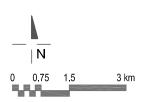
These key stakeholders and the general public have been advised of the work the two municipalities have undertaken on the Growth Study through an Open House as well as one-on-one discussions. Information on the growth plans, technical perspectives, and long range policies of the key stakeholders has been incorporated into the Growth Study. Subsequent stakeholder and public consultation has been authorized by the Steering Committee during formulation of the IDP.





Leduc **2060** LEDUC County and City Planning for a Sustainable Future Legend Water Bodies, Creeks and Rivers Open Space Riparian Areas

### **Figure 3.1**Natural Features







# POPULATION FORECASTS & LAND REQUIREMENTS

{section four}

### 4.1 CAPITAL REGION INTEGRATED GROWTH MANAGEMENT PLAN

In June 2007, Premier Stelmach initiated a comprehensive project to develop an integrated growth management plan for the Capital Region. The project was given a short timeline, with the Capital Region Integrated Growth Management Plan produced by November 2007. The report's objective is to support and guide municipalities in the Capital Region in developing a long-term, integrated management plan to support the tremendous economic growth in the region, with particular attention to the economic, social and environmental impacts on all residents in the region. With almost \$88 billion in major construction projects planned, recently completed or underway in the region, and a growing population, there is increasing pressure for a regional plan to manage growth and to make sure the Capital Region is prepared to anticipate and plan for the impacts of growth.

The methodology utilized in developing the regional population forecast is based on projected economic development from several key growth drivers: Port Alberta (impacted by increased activity at the Port of Prince Rupert); the role of the region as the gateway to the north and the Asia Pacific Corridor; the Greater Nisku/Leduc Industrial Area; the Industrial Heartland; and the anticipated economic growth throughout the region. A total population increase for the Capital Region was estimated based on the projected economic development within the area to 2041. This total population was then allocated among the 25 communities within the Capital Region by assigning growth based on:

- a review of municipal forecasts
- the impact of known or expected regional economic development and its impact on the expected desirability of the municipality as a residential location
- historical population growth
- known availability and sequencing of servicing
- proposed and approved land use plans

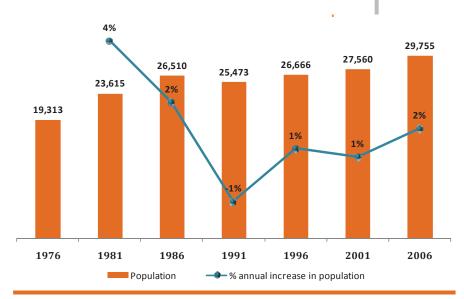
In general, the majority of communities within the Capital Region felt that the population forecasts assigned to them in the Capital Region Integrated Growth Management Plan were too low. The Capital Region forecast found that overall, the communities outside the City of Edmonton are expected to grow at a faster rate than the City. The following are highlights of the Capital Region forecast:

- The majority of the municipalities within the Capital Region (17 of 25) are expecting their population growth to be greater than the regional forecast projections.
- In 2016, the total municipal population projection for the Capital Region is almost 59,000 people or 4.6% higher than the regional forecast. In 2041, this disparity increases to 192,014 people or 11% higher than the regional forecast.
- Over the entire forecast period (to 2041), total population growth in the Capital Region is projected to average 1.5% per year. Over the first 10 years of the forecast (to 2016) total population growth is projected to average 1.9% per year.
- Historically, municipalities in the Capital Region outside the City of Edmonton have grown at a faster pace than Edmonton. It has been forecast that over the next 35 years, to 2041, the City of Edmonton will grow at an average annual rate of 1.3%. The other municipalities in the Capital Region, collectively, are projected to grow at an average annual rate of 1.8%.



### 4.2 PAST POPULATION GROWTH

Figure 4.1 illustrates the population changes for Leduc County and the City of Leduc since 1976. The City and the County experienced strong growth between 1976 and 1981, with annual growth above 4%. Between 1981 and 1986, growth slowed to just over 2%, and then declined slightly by 1991. Since 1991 growth has steadily increased to a 2% annual growth rate by 2006.



▲ FIGURE 4.1 LEDUC COUNTY & CITY OF LEDUC HISTORICAL POPULATION 1976-2006

### 4.3 FUTURE GROWTH

The Capital Region Integrated Growth Management Plan, November 2007, indicates that over the next 35 years employment is expected to grow by nearly 50% in the City of Leduc, and by over 280% in Leduc County. It is important for the City of Leduc and Leduc County to anticipate the impact that this growth will bring and to plan ahead. Leduc County and the City of Leduc are undertaking the growth study and IDP planning process — a new approach that will benefit not only their communities but the region in general. By anticipating future land use planning for the County and City in a coordinated and collaborative manner, the two municipalities will aim to optimize their economic growth potential in the region and provide for more efficient, cost-effective delivery of services and infrastructure. The Growth Study is the start of a collaborative planning process to manage growth in the two municipalities, anticipate the impacts of growth, put the necessary plans in place, and avoid the need to play catch-up after major projects and

With almost \$88 billion in major construction projects planned, recently completed or underway in the region, and a growing population, there is increasing pressure for a regional plan to manage growth and to make sure the Capital Region is prepared to anticipate and plan for the impacts of growth.

initiatives have already proceeded. Trying to catch up after growth has occurred is costly, both in financial terms and in the impacts on communities, services, and citizens. Leduc County and the City of Leduc are being proactive in collaborating with each other, other key stakeholders, and their municipal neighbours in this forward-thinking planning process.

The City of Leduc and Leduc County are strategically located within the Capital Region in relation to the key growth drivers listed in Section 4.1. The two communities are situated strategically relative to two of the primary growth drivers in the region, Port Alberta and the Greater Nisku/Leduc Industrial Area. The combined impact of the key growth drivers in conjunction with the increasing trend toward community sustainability will result in stronger demand for housing located closer to employment. This will have a significant impact on the demand for growth in both Leduc County and the City of Leduc in the coming years.

### 4.3.1 SCENARIO 1: CAPITAL REGION INTEGRATED GROWTH MANAGEMENT PLAN FORECAST

Figure 4.2 shows the combined population forecast for Leduc County and the City of Leduc as identified in the Capital Region Integrated Growth Management Plan, November 2007. The Capital Region's population forecast for Leduc County and the City of Leduc expects the population to increase slightly to 3% annual growth between 2011 to 2016 before declining to 2% by 2021 and then to 1% by 2031. In contrast, employment is expected to increase steadily over the forecast period, going from approximately 20,000 jobs in 2006 to over 65,000 jobs by 2041, a 212% increase over the forecast period or over 6% annually. The Capital Region's forecast would result in roughly 10,000 more jobs than people living in Leduc County and the City of Leduc by the end of the forecast period, which

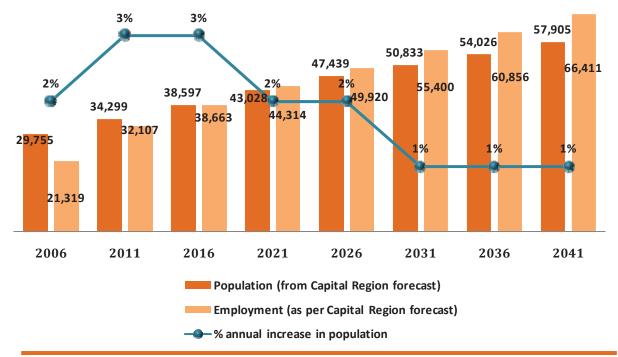


FIGURE 4.2 LEDUC COUNTY & CITY OF LEDUC SCENARIO 1 : CAPITAL REGION INTEGRATED GROWTH MANAGEMENT PLAN FORECAST 2006-2041

<sup>\*</sup> For the purposes of the Growth Study, the total Leduc County population is assumed equivalent to the Leduc County population residing within the study area. The discrepancy is considered negligible given the aggregate statistics used in this study.

is counter-intuitive to the growing sustainability trend of people living closer to their location of employment. The Capital Region's forecast would result in decreasing sustainability in these two communities, reversing the current Leduc County and City of Leduc population/job balance from 1.39 (for every local job there are 1.39 residents) down to 0.87 (for every local job there are 0.87 residents).

### 4.3.2 SCENARIO 2: STRONG GROWTH FORECAST

In reviewing the population growth forecasts for communities within the Capital Region as identified in the Capital Region Integrated Growth Management Plan, November 2007, it was noted that both Leduc County and the City of Leduc anticipated that their population growth rates would be higher than what was reported. Given the strong growth drivers within and adjacent to the boundaries of the City of Leduc and Leduc County, combined with the growing awareness of the global trends towards increasingly sustainable development and the resulting closer geographical integration of housing and work, the Growth Study recommends an alternative methodology for forecasting population growth for Leduc County and the City of Leduc.

### SUSTAINABLE POPULATION/JOB BALANCE

As an alternative methodology, the population forecasts in this scenario are based on a population/job ratio of 1.7 and the employment forecasts developed in the Capital Region Integrated Growth Management Plan, November 2007. A population/job ratio of 1.7 is typical of many cities in Canada, including the Cities of Calgary and Edmonton. In most metropolitan areas, the population/job ratio increases (or the number of local jobs per resident decreases) the further away people live from the central city. For example, in 2006 the City of Vancouver had a population/job ratio of 1.5, while the Greater Vancouver Region as a whole had a population/job ratio of 2.2. Nevertheless, this phenomenon is changing as more jobs are moving to suburban locations. The growing awareness of the detrimental impacts that commuter times are having on the natural and social environments has sparked a growing trend toward increasingly sustainable development based on principles similar to the Guiding Principles developed by the City of Leduc and Leduc County for future development (see Section 1.2).

As identified in Table 4.1, the City of Leduc and Leduc County currently have a combined population/job ratio of 1.39 (for every local job there are



The Capital Region Integrated Growth Management Plan, November 2007, indicates that over the next 35 years employment is expected to grow by nearly 50% in the City of Leduc, and by over 280% in Leduc County.

The City of Leduc and Leduc County are strategically located within the Capital Region . . . . relative to two of the primary growth drivers . . . Port Alberta and the Greater Nisku/Leduc Industrial Area.

MUNICIPALITIES	2006 POPULATION	2006 EMPLOYMENT	POP/JOB RATIO
City of Leduc & Leduc County	29,755	21,319	1.39
Spruce Grove, Stony Plain, & Parkland County	61,754	11,539	5.35
Ft. Saskatchewan & Strathcona	97,794	34,732	2.82
City of Edmonton	740,041	418,864	1.76
Capital Region	1,046,710	528,255	1.98

1.39 residents). Compared with other sub-areas of the Capital Region and other outlying areas of metropolitan regions in general, this is a relatively low ratio. The trend toward more sustainable development is resulting in people tending to live closer to their location of employment. Given the recent population growth experienced within the City of Leduc, it is highly likely and desirable that Leduc County and the City of Leduc will start to experience greater residential growth rates that will move their population/job ratio closer to 1.7.

### LEAKAGE FACTOR

In acknowledgement of the current population trend within Leduc County and the City of Leduc to work within these two communities but to live elsewhere, the Scenario 2: Strong Growth Forecast incorporates a leakage factor of 30%, resulting in over 41,000 people working in but living outside the communities of Leduc County and the City of Leduc by 2060. Although the leakage factor remains consistent at 30% over the forecast period, it is anticipated that in actuality this trend to work in but to live outside the communities of the City of Leduc and Leduc County will decrease over the forecast period as the trend toward sustainability and people wanting to live closer to where they work gains prominence.

### **EMPLOYMENT MULTIPLIER FACTOR**

In addition to the employment generated from the key growth drivers, it is also standard practice to assume a certain amount of employment as a percentage of the population. Over and above the jobs identified in the Capital Region employment forecast, the residential population creates a variety of jobs in the community (i.e., drycleaners, convenience stores, flower shops, etc). Typically this is calculated at 10% of the total population. Scenario 2: Strong Growth Forecast assumes an employment multiplier factor of 10%, resulting in an increase of 9,616 jobs and 11,443 people by the end of the forecast period in 2060.

### EMPLOYMENT GENERATED POPULATION FORECAST

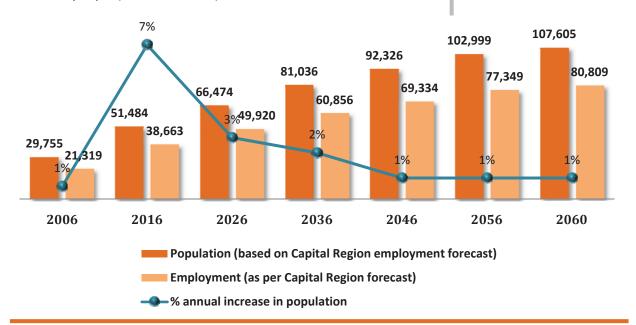
Table 4.2 and Figure 4.3 identify the recommended population forecast, Scenario 2: Strong Growth Forecast for Leduc County and the City of Leduc out to 2060 calculated using the following methodology:

- 1. Combined employment growth for Leduc County and the City of Leduc, as per the Capital Region Infrastructure Review November 2007, is 80,809 jobs by 2060. Beyond 2041, an annual employment growth of 1.1% was utilized (by 2041, the Capital Region estimates the City of Leduc to have an annual employment growth of 0.9%, and Leduc County to have an annual employment growth of 1.9%).
- 2. In the City of Calgary and the City of Edmonton, the population/job ratio for 2006 is 1.7 and 1.76 respectively (i.e., for every local job there are 1.7 or 1.76 residents). Using the Capital Region's employment forecast as a basis for estimating population growth, and using the population/job ratio of 1.7, Leduc County and the City of Leduc could have a combined population of 137,376 by 2060 (80,809 jobs x 1.7).
- 3. Using a leakage factor of 30%, roughly 41,000 people are estimated to work in but live outside Leduc County and the City of Leduc (137,375 x 30% = 41,212) by 2060. This would reduce the 2060 population calculated above to 96,163 (137,376 less 41,000).
- 4. When undertaking population forecasts, it is standard to factor in a 10% multiplier effect. Basically, over and above the jobs identified, the residential population creates a variety of jobs in



the community (i.e., drycleaners, convenience stores, flower shops, etc). Typically this is calculated at 10% of the total population. Based on a total population of 96,163, this would result in an additional 9,616 jobs and 11,443 people (96,163 x 10% = 9,616 jobs x 1.7 pop/job ratio = 16,347 people x 70% = 11,443 people).

5. Total 2060 population then, would be 11,443 + 96,163 = 107,607. Subtracting the current population of approximately 29,755, the total increase over the forecast period 2006-2060, would be an estimated 77,852 people (107,607-29,755).



▲ FIGURE 4.3 LEDUC COUNTY & CITY OF LEDUC SCENARIO 2: STRONG GROWTH FORECAST TO 2060

	-						
	2006	2016	2026	2036	2046	2056	2060
Population (Capital Region employment x 1.7)		65,727	84,864	103,455	117,868	131,494	137,376
less leakage 30%		46,009	59,405	72,419	82,507	92,046	96,163
plus 10% multiplier effect:		5,475	7,069	8,618	9,818	10,953	11,443
increased employment as a result of population (population x 10%)		4,601	5,940	7,242	8,251	9,205	9,616
increased population from new employment (new employment x 1.7)		7,822	10,099	12,311	14,026	15,648	16,348
less leakage on multiplier population (30%)		5,475	7,069	8,618	9,818	10,953	11,443
Total Population	29,755	51,484	66,474	81,036	92,326	102,999	107,607
cumulative increased population		21,729	36,719	51,281	62,571	73,244	77,852
Summary							
Population (based on Capital Region employment forecast)	29,755	51,484	66,474	81,036	92,326	102,999	107,607
Employment (as per Capital Region forecast)	21,319	38,663	49,920	60,856	69,334	77,349	80,809
% annual increase in population	1%	7%	3%	2%	1%	1%	1%

TABLE 4.2 LEDUC COUNTY & CITY OF LEDUC FORECAST METHODOLOGY

The critical factor determining the overall long-term growth depicted in Figure 4.3 is the growth spike projected for the decade 2006 to 2016, which forecasts annual growth rates similar to those rates experienced within the City of Leduc in the years 2006 and 2007 (see Section 2.2). As discussed in Sections 2.1 and 3.1, the Capital Region and the Leduc area in particular can expect dramatic growth spikes and economic volatility over the 50-year forecast period of this study. In reality, future growth surges may have different characteristics than portrayed in Figure 4.3. Although actual growth spikes may occur at different times than forecast here, it is essential for the City of Leduc and Leduc County to be prepared to adapt to whatever conditions may occur. Section 6.2 includes specific recommendations addressing measures that may be taken to enhance adaptability in the face of future uncertainty. Broad interpretation of this "Strong Growth Forecast" will serve both municipalities well in achieving their joint vision of a sustainable future.

### 4.4 LAND REQUIREMENTS

### 4.4.1 ASSUMPTIONS

In order to identify the amount of land required to accommodate forecasted future growth, certain assumptions have been made about the form and type of future development. These assumptions are identified in Table 4.3. In general, these assumptions are based on direction from the Leduc County – City of Leduc Steering Committee, current MDP policies, typical standards of service provision in other urban centres, and judgements about Leduc County and the City of Leduc's ability to attract non-residential land uses within a competitive regional market.

Type of Land Use	Assumptions
Residential	Average household size of 2.5 persons  Average density of 6 dwelling units per gross developable acre. Similar to development trends across the country, it is anticipated that future residential development in Leduc County and the City of Leduc will reflect a more intensive/efficient use of land.  Note that this standard includes local parks, schools, roads, convenience retail and other land uses normally found within a residential neighbourhood.
Industrial / Commercial	Provides for 70 acres of industrial and commercial land for each 1,000 persons of new growth. Similar to development trends across the country, it is anticipated that future industrial and commercial development in Leduc County and the City of Leduc will reflect a more intensive/efficient use of land.
Other Land Uses	This study adds 20% of the calculated residential, industrial and commercial lands to accommodate a broad range of other land uses including institutional, regional parks, vacancy and land held off the market and unavailable for development at any particular time.

### ▲ TABLE 4.3 LEDUC COUNTY & CITY OF LEDUC ASSUMPTIONS FOR LAND REQUIREMENTS 2008-2060

### **RESIDENTIAL ASSUMPTIONS**

Specifically, the residential density assumption of 6 upgda was a decision made by the Leduc County – City of Leduc Steering Committee based on an analysis of existing and approved developments within Alberta, as identified in Table 4.4. That analysis supports the general consensus of the Steering

Committee that, in keeping with the global trend toward sustainability, future development should be more compact and efficient than currently exists in the Leduc area. This residential density can be achieved through a variety of means, such as infill, redevelopment, and clustering, and through a variety of housing types, such as duplexes, fourplexes, townhouses, and apartment buildings (both low-rise and high-rise). Higher residential densities do not necessarily imply higher densities throughout a community. Strategically located residential and mixed-use development at higher densities can maximize infrastructure efficiencies and sustainability while at the same time leaving room for more traditional lower densities elsewhere in the community.

### INDUSTRIAL/COMMERCIAL ASSUMPTIONS

The industrial/commercial assumption of 70 acres per 1,000 persons of new growth reflects a fairly aggressive consumption of land, but is appropriate given the considerable growth potential over the forecast period of Port Alberta and the Greater Nisku/Leduc Industrial Area. In addition, the types

Area Structure Plan	Gross Developable Area (acres)	# Dwelling Units	Gross  Dwelling  Units/Acre	
City of Leduc				
Bridgeport	450	1,939	4.3	
Suntree	147	838	5.7	
Southfork	487	2,397	4.9	
Leduc County				
Saunders Lake	1,357	2,998	2.2	
City of Edmonton				
Windermere	4,026	21,213	5.3	
Heritage Valley (low density)	3,848	19,502	5.1	
Heritage Valley (high density)	3,848	24,574	6.4	
Strathcona				
Emerald Hills	175	1,262	7.2	
City of St. Albert				
Riel South (Beaverbrook)	113	703	6.2	
City of Calgary				
Mahogany*	1,300	9,100	7.0	

<sup>\*</sup>from Mahogany Community Plan, not ASP. Estimated number of dwelling units based on minimum required residential density of 7.0 units per acre as outlined in Mahogany Community Plan.



In keeping with the global trend toward sustainability, future development should be more compact and efficient than currently exists in the Leduc area.

The methods driving the Growth Study... are rooted in strong technical analysis, whereby population growth is directly correlated to the key growth drivers and anticipated future employment, and that growth management trends, policies, practices, and development approvals will evolve to encourage and support a growing residential population and a thriving business community.

<sup>▲</sup> TABLE 4.4 LEDUC COUNTY & CITY OF LEDUC ESTIMATED DENSITIES OF EXISTING AND APPROVED URBAN COMMUNITIES IN ALBERTA

of industrial, warehouse, and distribution businesses that are expected to drive future growth in the Leduc area are generally more land extensive than other commercial or industrial uses.

### 4.4.2 TOTAL LAND REQUIREMENTS

Table 4.5 Summary of Land Requirements to 2060 identifies the amount of land that would be required within Leduc County and the City of Leduc based on population growth in Scenario 2: Strong Growth Scenario. Applying this study's factors and assumptions to Scenario 2, the total amount of land required to accommodate the projected 50 year population growth in Leduc County and the City of Leduc would be 80 quarter-sections of land. This total land requirement is equivalent to approximately 164 acres per 1,000 persons population growth. This land forecast assumes that future growth will provide higher density development and more efficient land use patterns, in keeping with the growing trend toward increasingly sustainable development. Section 5.0 includes a proposed geographic distribution of the major land uses addressed in Table 4.5.

				30 Year		40 Year		50 Year
	2006-2016	2016-2026	2026-2036	Total	2036-2046	Total	2046-2060	Total
Total Population	51,484	66,474	81,036	81,036	92,326	92,326	107,607	107,607
Population Growth	21,729	14,990	14,562	51,281	11,290	62,571	15,281	77,852
Cumulative Total	21,729	36,719	51,281	51,281	62,571	62,571	77,852	77,852
New Household / Units (at 2.5 ppu) <sup>1</sup>	8,692	5,996	5,825	20,512	4,516	25,028	6,112	31,141
Land Requirements								
Residential Acres (at 6 upgda) <sup>2</sup>	1,449	999	971	3,419	753	4,171	1,019	5,190
Cumulative Total (acres)	1,449	2,448	3,419	3,419	4,171	4,171	5,190	5,190
Commercial/Industrial Acres (70 ac/1000) <sup>3</sup>	1,521	1,049	1,019	3,590	790	4,380	1,070	5,450
Cumulative Total (acres)	1,521	2,570	3,590	3,590	4,380	4,380	5,450	5,450
Cumulative rotal (acres)	1,321	2,370	3,390	3,330	4,360	4,360	3,430	3,430
Subtotal	2,970	2,049	1,990	7,008	1,543	8,551	2,088	10,640
Cumulative Total (acres)	2,970	5,018	7,008	7,008	8,551	8,551	10,640	10,640
0.1		440	200	4.402	200	4 740	440	2.420
Other Land Uses (at 20%) <sup>4</sup>	594	410	398	1,402	309	1,710	418	2,128
Cumulative Total (Acres)	594	1,004	1,402	1,402	1,710	1,710	2,128	2,128
Total Land Requirement (Cumulative)	3,564	6,022	8,410	8,410	10,262	10,262	12,768	12,768
Acres per 1,000 population growth	164	164	164	164	164	164	164	164
Cumulative Acres Required								
Residential	1,746	2,950	4,120	4,120	5,027	5,027	6,254	6,254
Commercial/Industrial	1,818	3,072	4,291	4,291	5,235	5,235	6,514	6,514
<b>Cumulative Quarter Sections Required</b>								
Residential	11	18	26	26	31	31	39	39
Commercial/Industrial	11	19	27	27	33	33	41	41

<sup>&</sup>lt;sup>1</sup> Average persons per unit

▲ TABLE 4.5 LEDUC COUNTY & CITY OF LEDUC ESTIMATED SUMMARY OF LAND REQUIREMENTS TO 2060

<sup>&</sup>lt;sup>2</sup> As determined by the Leduc County & City of Leduc Joint Growth Study & Intermunicipal Development Plan Steering Committee

 $<sup>^{</sup>m 3}$  Growth Forecast and Land Requirements Discussion Paper, Armin A. Preiksaitis & Associates 2008

<sup>&</sup>lt;sup>4</sup> Other Land Uses are split equally between residential and commercial/industrial areas Amounts in this table are rounded up or down to the nearest whole number

## Married Marrie

### 4.4.3 RESIDENTIAL LAND REQUIREMENTS

By the end of the 30 year period in 2036, Leduc County and the City of Leduc will require 26 quarter-sections of residential land. By the end of the 40 year period in 2046, the City of Leduc and Leduc County will require an additional 5 quarter-sections of residential land, and by the end of the 50 year period in 2060, they will require a further 8 quarter-sections of residential land. Overall, in the fifty-year period out to 2060, Leduc County and the City of Leduc will require a total of 39 quarter-sections of land to accommodate residential growth.

### 4.4.4 COMMERCIAL / INDUSTRIAL LAND REQUIREMENTS

By the end of the 30 year period in 2036, the City of Leduc and Leduc County will require 27 quarter-sections of commercial/industrial land. By the end of the 40 year period in 2046, Leduc County and the City of Leduc will require an additional 6 quarter-sections of commercial/industrial land, and by the end of the 50 year period in 2060, they will require a further 8 quarter-sections of commercial/industrial land. Overall, in the fifty-year period out to 2060, the City of Leduc and Leduc County will require 41 quarter-sections of land to accommodate commercial/industrial growth.

This land forecast assumes that future growth will provide higher density development and more efficient land use patterns, in keeping with the growing trend toward increasingly sustainable development.







# RECOMMENDED GROWTH STRATEGY

{section five}

### 5.1 LAND USE

An analysis of approved land use policy and vacant land was undertaken to determine potential locations for future growth in Leduc County and the City of Leduc. Figure 5.1 identifies generalized existing land use policy for Leduc County and the City of Leduc based on approved Area Structure Plans and the City of Leduc's Municipal Development Plan.

### 5.2 DEVELOPMENT CONSTRAINTS

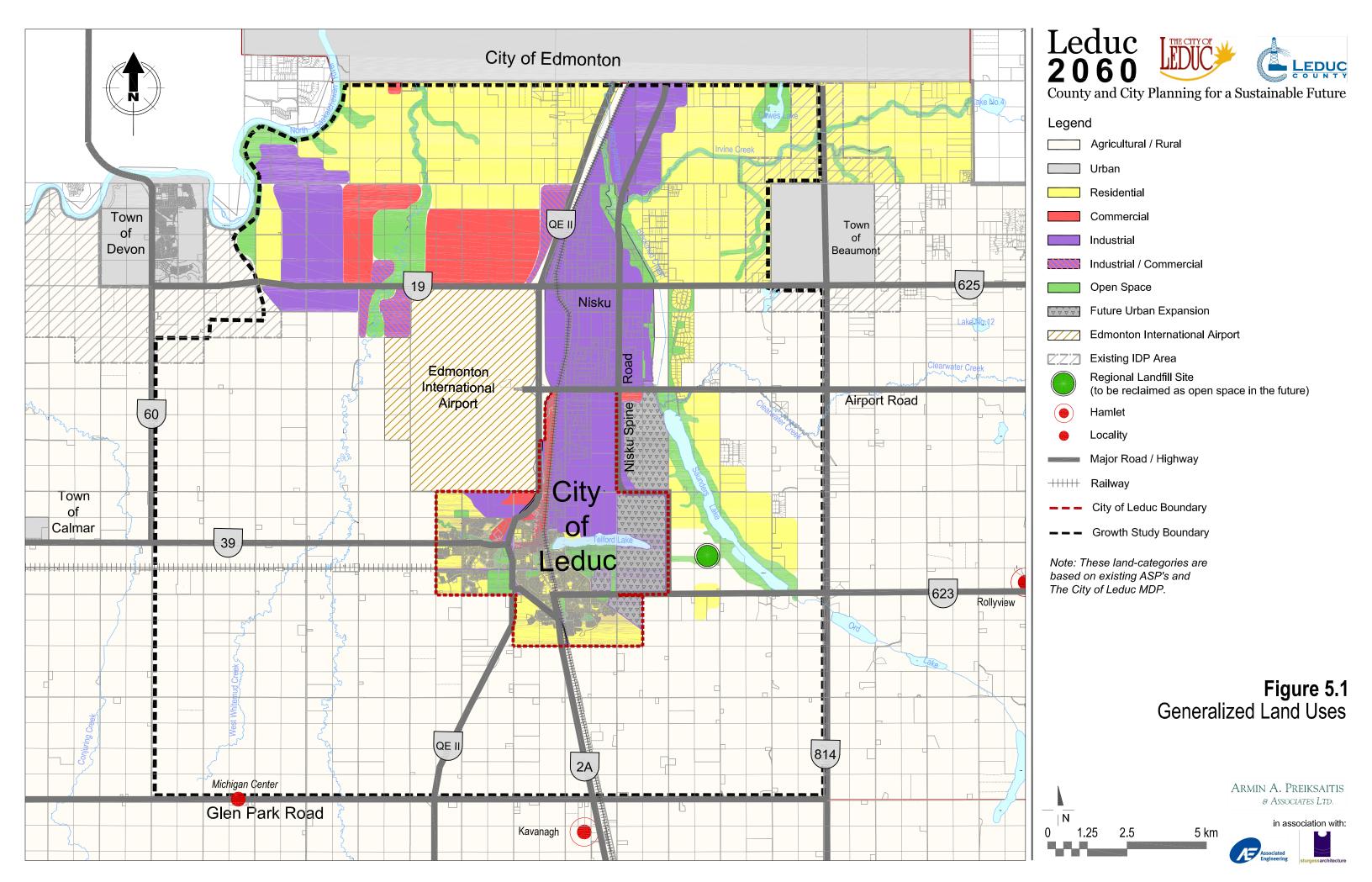
A wide range of factors may constrain development potential, including environmental conditions, legislative requirements, infrastructure, existing land uses, and development patterns. The Growth Study takes into account environmental conditions such as the lakes and creeks in the study area. In addition to those water courses and water bodies, Figure 3.1 shows conceptual riparian areas surrounding creeks and lakes. Those riparian areas are not intended to illustrate any existing or proposed legislative requirements for the protection of land. Rather, they are meant to illustrate opportunities for the creation of open space and for the protection of water quality. Since such natural areas can and should be integrated with future development, they have been taken into account in projecting future land uses in Figure 5.2.

Other development constraints include the restrictions imposed by the Airport Vicinity Protection Area (AVPA) Regulation and associated Noise Exposure Forecast (NEF) contours promulgated under the Alberta Municipal Government Act. Those restrictions address the types of land uses that can and cannot be developed within certain areas. For example, new residential uses cannot be developed within the NEF 30 contour. The AVPA also stipulates certain restrictions on building heights, materials, and orientation of structures that may interfere with airport operations.

Good quality agricultural land is also considered a development constraint for the purposes of the Growth Study. Although development on good agricultural land cannot be completely avoided, the growth projected in Figure 5.2 has generally been directed away from the better agricultural land to the west of the Edmonton International Airport.

Major infrastructure such as highways, railways, electric power facilities, oil and gas facilities, and landfills may also constrain development due to the negative impacts they can cause (e.g., noise or odour). In some cases, development setbacks to mitigate such impacts are required by provincial legislation (e.g., around landfill sites) or by municipal bylaws. These constraints have been taken into account in the growth study.

It is neither practical nor desirable to show on one map all of the development constraints that this study has taken into consideration. Nonetheless, Figure 3.1 and all of the Figures in Section 5.0 can be examined and compared to gain a better understanding of the development constraints and opportunities that will affect growth in the Leduc area.





### 5.3 POTENTIAL GROWTH AREAS

Figure 5.2 shows the recommended strategy for the Growth Study area to accommodate the anticipated strong growth over the next 50 years. As noted in Section 2.1, the Capital Region Integrated Growth Management Plan (CRIGMP) has forecast a significant amount of employment within the Growth Study area. This strong growth scenario has been derived using an employment based population forecast method, which is described in Section 3.1. Thus residential population in the Leduc area is expected to grow as a function of the anticipated amount of employment growth. The methods driving the Growth Study therefore are rooted in a strong technical analysis, whereby population growth is directly correlated to the key growth drivers and anticipated future employment, and that growth management trends, policies, practices, and development approvals will evolve to encourage and support a growing residential population and a thriving business community.

### PHYSICAL PLANNING, SUSTAINABILITY, AND SMART GROWTH PRINCIPLES

The determination of the preferred growth strategy has been based upon evaluation of technical criteria and intermunicipal deliberation among Steering Committee members and administrative staff from both municipalities. The technical criteria used to evaluate growth options have been derived from traditional physical planning considerations as well as the Sustainability Pillars and Smart Growth Principles listed under Section 1.2.

This Growth Strategy promotes the protection of natural areas and agriculture by directing growth away from the better agricultural lands and creeks that are located to the west of Edmonton International Airport. Environmental stewardship is supported by providing for passive recreational opportunities at the regional level and access to the natural areas between the City of Leduc and Saunders Lake. Access to existing and future infrastructure is taken into account by directing growth toward major transportation corridors such as QE II Highway and Highways 2A, 19, and 39. Efficient utilization of infrastructure is promoted through placement of more intensive mixed-use areas where future LRT and high-speed rail alignments are anticipated. Compact and contiguous development patterns, rather than inefficient leapfrog or sprawling development along linear corridors, have been incorporated into the overall form of this growth scenario.

Incompatible land uses have been avoided, while complementary land uses have been placed close together. For example, industrial land uses have been concentrated to create business synergies and to mitigate potential impacts of industrial development on other land uses. Also, land uses such as commercial and residential development have been mixed in strategic locations to achieve a greater balance of employment with residential population, to make more efficient use of infrastructure, and to create more vibrant communities.

The total amount of land required to accommodate the projected 50 year population growth in Leduc County and the City of Leduc would be 80 quarter-sections of land.

The development of significant residential areas close to employment will help the residential population to capitalize on local employment opportunities, which will enhance economic development and sustain local business viability in the Leduc area. Various transportation options are anticipated and the intensive land uses and development patterns necessary to sustain access to such transportation options have been provided in strategic locations. This linkage of land use and infrastructure planning is intended to ensure integrated, cost-effective and energy efficient infrastructure.

The economic development potential of this Growth Strategy cannot be overstated. The creation of vibrant residential communities in the City of Leduc and Leduc County, including truly urban places in the proposed "Town Centres" discussed below, will in turn attract a more complete range of businesses and residents alike. Complete communities offering the full array of amenities, employment opportunities, and housing choices are the essence of sustainability.

### **INDUSTRIAL**

50-year growth within Leduc County and the City of Leduc will require approximately 41 quarter-sections for industrial/commercial development. Given the strong economic growth potential of Port Alberta in the future, much of the recommended industrial and commercial growth areas are situated close to or adjacent to the Airport and Port Alberta lands. As noted in Figure 5.2, the recommended industrial and commercial growth areas are located both north and south of the Edmonton International Airport. Similarly, recommended industrial growth areas are located to the south of the Greater Nisku/Leduc Industrial Area, providing for an extension of this industrial area into the City of Leduc and beyond. This particular industrial and commercial growth area also falls within the Noise Exposure Forecast contour (NEF 30), where the Alberta Edmonton International Airport Vicinity Protection Area Regulation (AVPA) prohibits residential development.

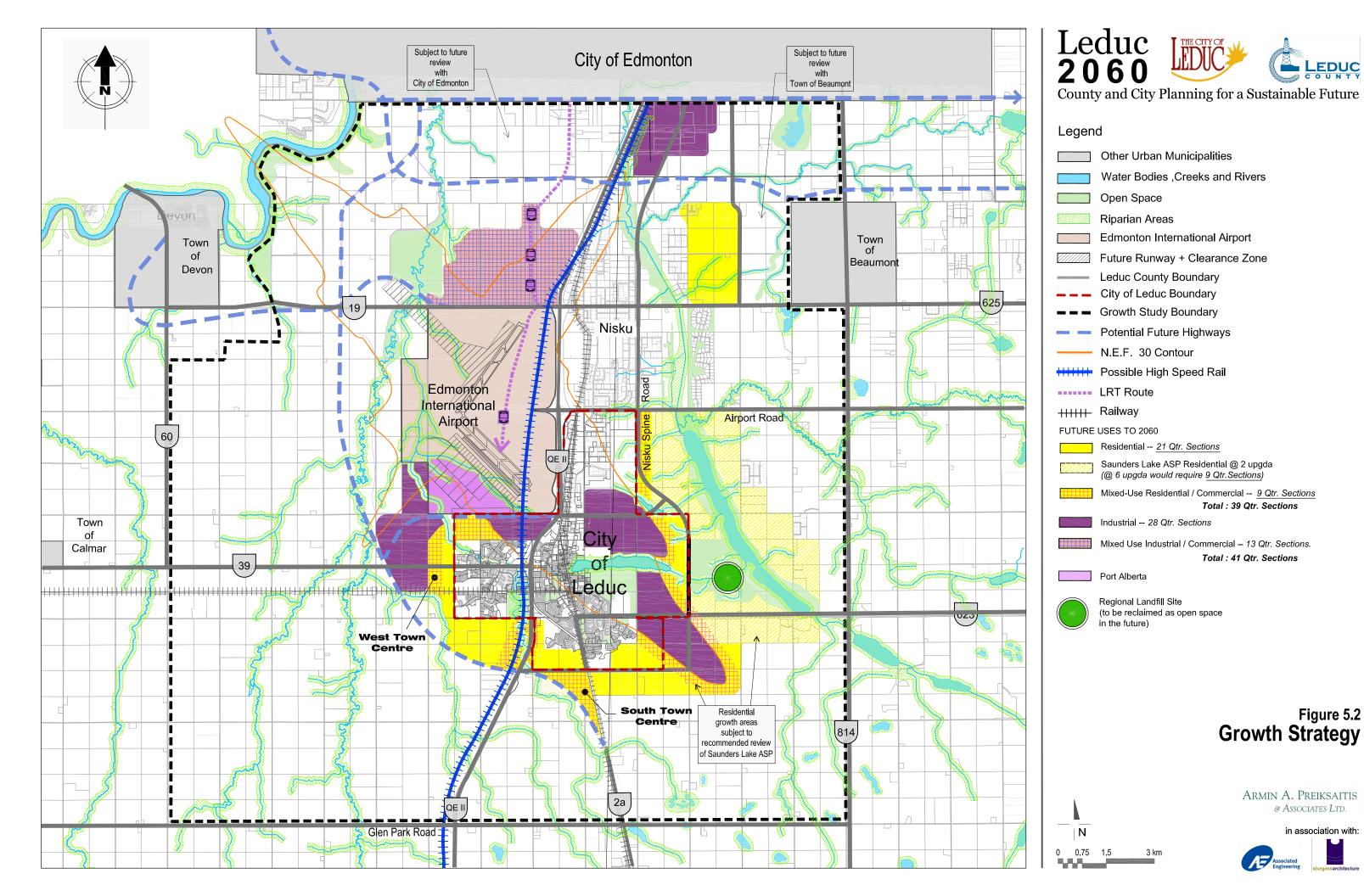
### **RESIDENTIAL**

Lands to accommodate the increased demand for residential development, which will be a result of the anticipated strong growth in employment, are located mainly to the west of Saunders Lake and to the south of the City of Leduc. Some residential growth is also projected northeast of the Airport within the proposed East Vistas ASP. At an overall density of 6 dwelling units per gross developable acre, 50-year residential growth in Leduc County and the City of Leduc will require a total of 39 quarter-sections of land.

### MIXED LAND USE

Two types of mixed land use are contemplated in this growth scenario. Higher density residential, commercial, and retail uses have been integrated at strategic "Town Centre" locations where future LRT or high-speed rail services are anticipated. Two major Town Centres are located immediately to the south and to the west of the City of Leduc, where future rapid transit (Bus Rapid Transit [BRT] or Light Rail Transit [LRT]) service may be expected. Other mixed residential and commercial land use areas, such as the lands between Nisku and Saunders Lake, are intended to serve as buffers between industrial development and residential communities.

The second type of mixed-use area blends light industrial and commercial (retail or office) employment uses in business park settings. Those mixed industrial and commercial land use areas would be located to the north of Edmonton International Airport.





### 5.4 UTILITY SERVICING

The existing potable water service, sanitary sewer service, and storm water management facilities in the study area have sufficient capacity to accommodate all infill development within the study area and any new development of the undeveloped lands within the City boundaries (Figure 5.3). Servicing of new development areas located south of the existing City boundaries will require the development of new facilities and infrastructure (Figure 5.4). To ensure maximum benefit of all new servicing facilities, a contingency for oversizing should be planned during the preliminary stages of new development. This will allow for growth into the areas identified for development beyond 2060 without incurring additional costs.

### 5.4.1 WATER

Water for the City of Leduc and Leduc County is supplied by EPCOR through the Capital Region Southwest Water Services Commission (CRSWSC). Although no immediate improvements are required to water facilities in either municipality, long term growth will require:

- upgrades to the CRSWSC boundary pump station
- twinning of the transmission line from the pump station to the airport reservoir
- upgrades to the airport reservoir



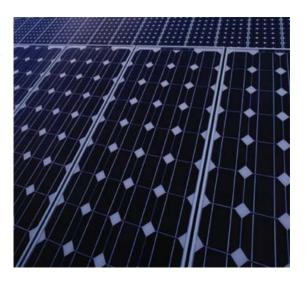
Along with these upgrades, additional storage capacity within the City of Leduc will be required to accommodate growth in the area. The existing municipal water system within the study boundaries (Figure 5.3) will need to be supplemented with the development of additional new reservoirs and water transmission lines (Figure 5.4).

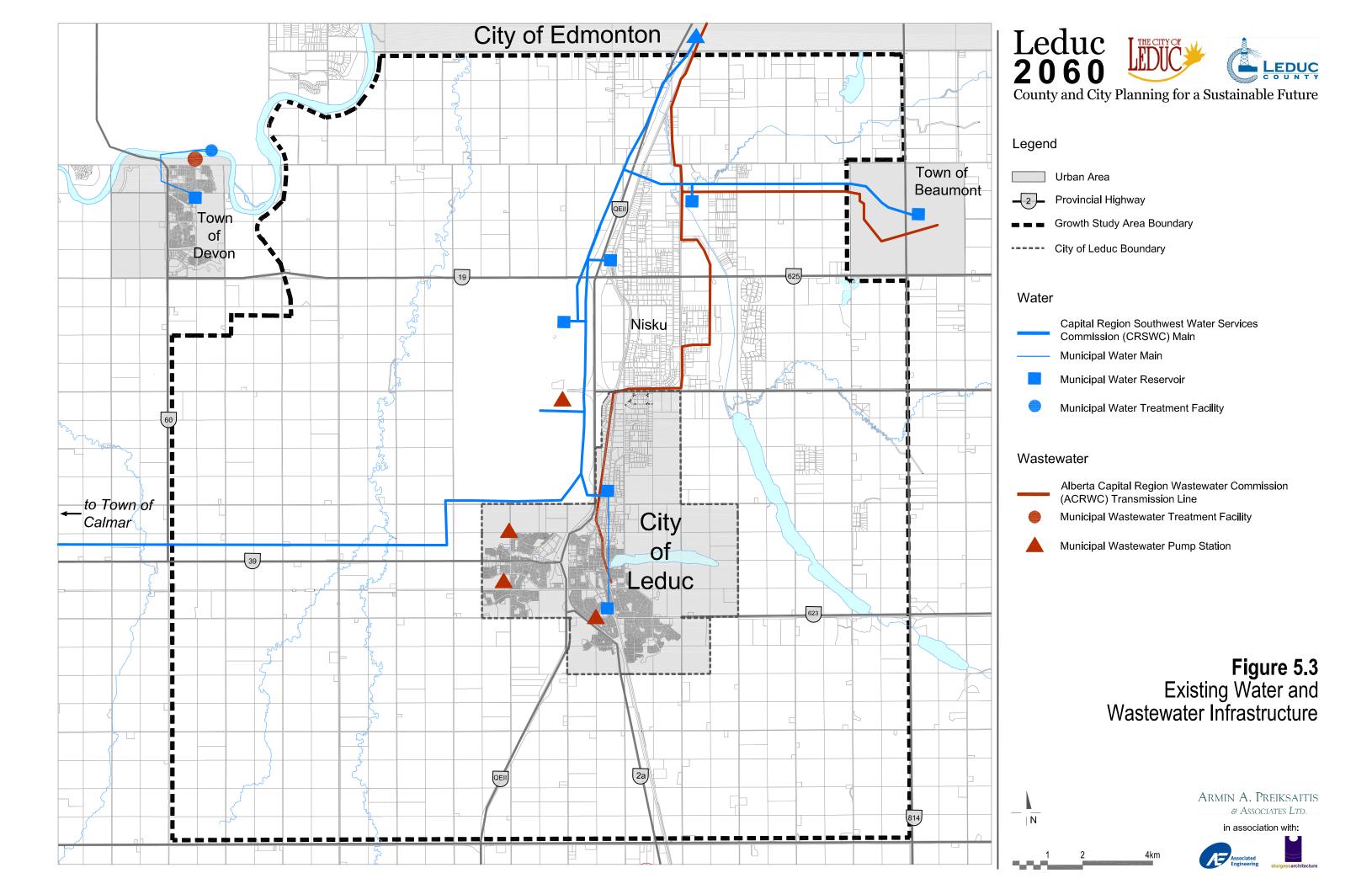
### 5.4.2 WASTEWATER

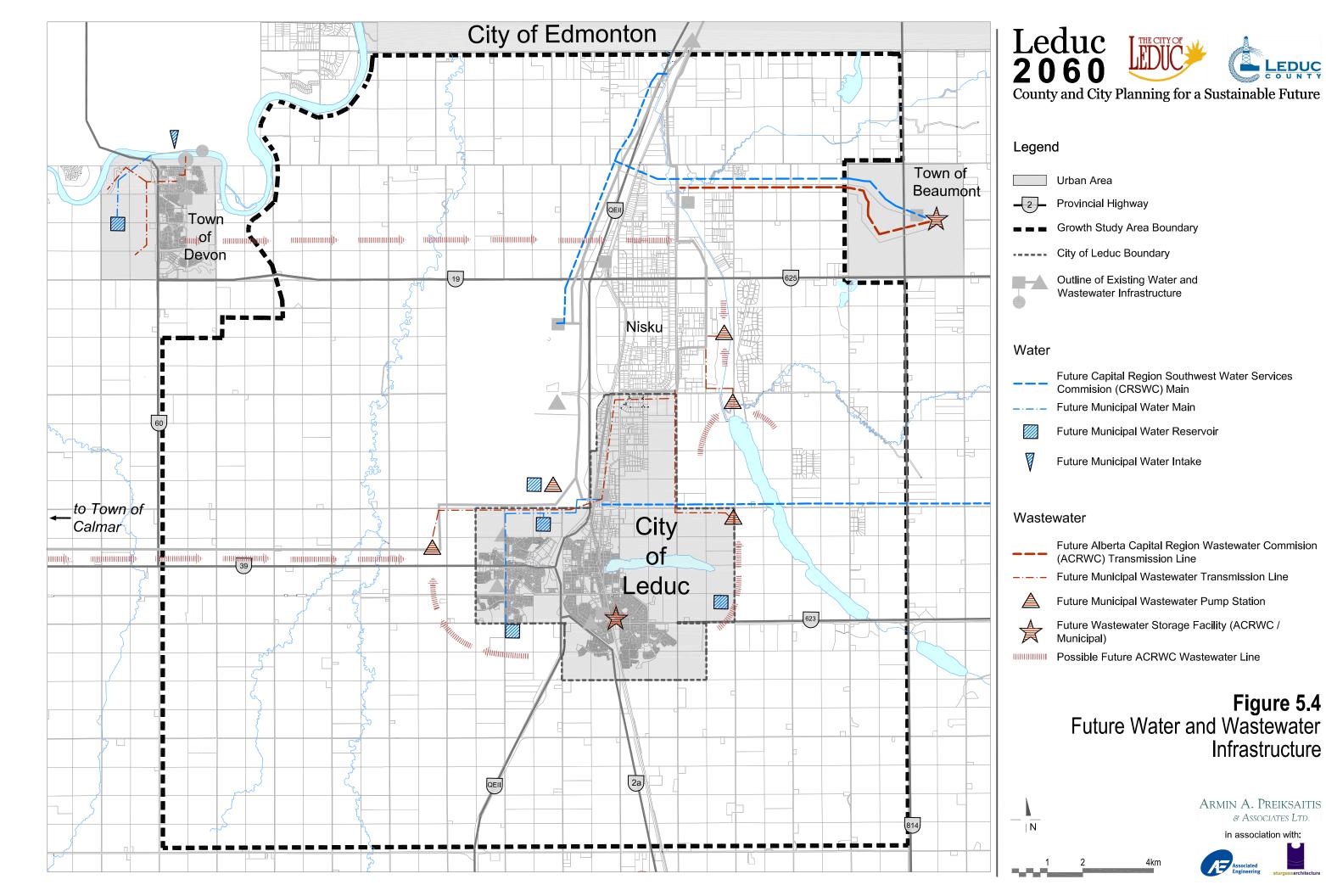
All wastewater service within the study boundaries is provided by the Alberta Capital Region Wastewater Commission (ACRWC). There are no existing ACRWC storage facilities or pump stations within the study area. To accommodate the increased demand associated with projected growth and development, new pump stations, storage sites, and municipal transmission lines will need to be developed. One of the proposed pump stations located west of the City of Leduc may be used in connection with a future ACRWC transmission line, which would provide wastewater service to the Town of Calmar (Figure 5.4).

### 5.4.3 STORMWATER

In order to improve water quality and to control runoff from future development, stormwater management facilities (wetlands or wet ponds) should be incorporated in the initial planning stages for new growth areas. These are typically constructed by developers when local areas are developed. In order to minimize the number of small stormwater management facilities, it is recommended that larger development areas be examined at the preliminary planning stages.







### 5.5 TRANSPORTATION

The City of Leduc, Leduc County, and the other neighbouring municipalities are presently serviced by a number of highways under the jurisdiction of Alberta Transportation. These include the QE II Highway, Highway 2A, Highway 19, Highway 39, and Highway 625. The capacity of these roadways is considered adequate for the existing needs of the region, but further growth will necessitate upgrades and additional facilities.

Alberta Transportation is examining preliminary options for two major elements in the regional highway network: a future highway west of the Edmonton International Airport and the Edmonton Regional Ring Road, which will be located between the City of Edmonton and the Edmonton International Airport. The Edmonton Regional Ring Road may also include a future utility corridor to accommodate major linear infrastructure of regional significance. It is important to note that the source for the projected alignment of the Edmonton Regional Ring Road shown in Figure 5.6 is the November 2007 Capital Region Integrated Growth Management Plan (CRIGMP), rather than Alberta Transportation.

Additional plans are being developed for improvements to other portions of the existing highway network within the study area. For example, Alberta Transportation expects to initiate a study in consultation with the Town of





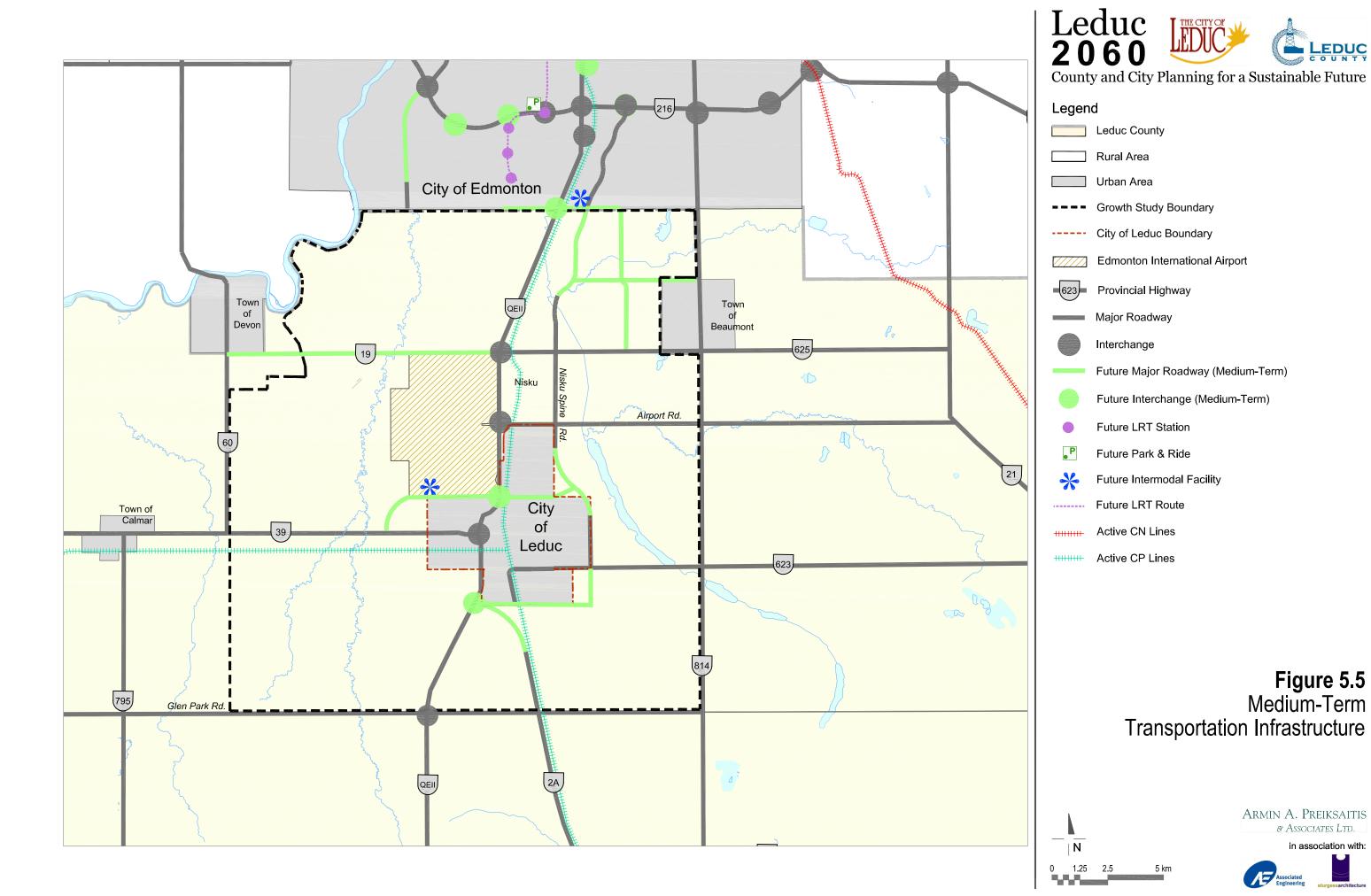


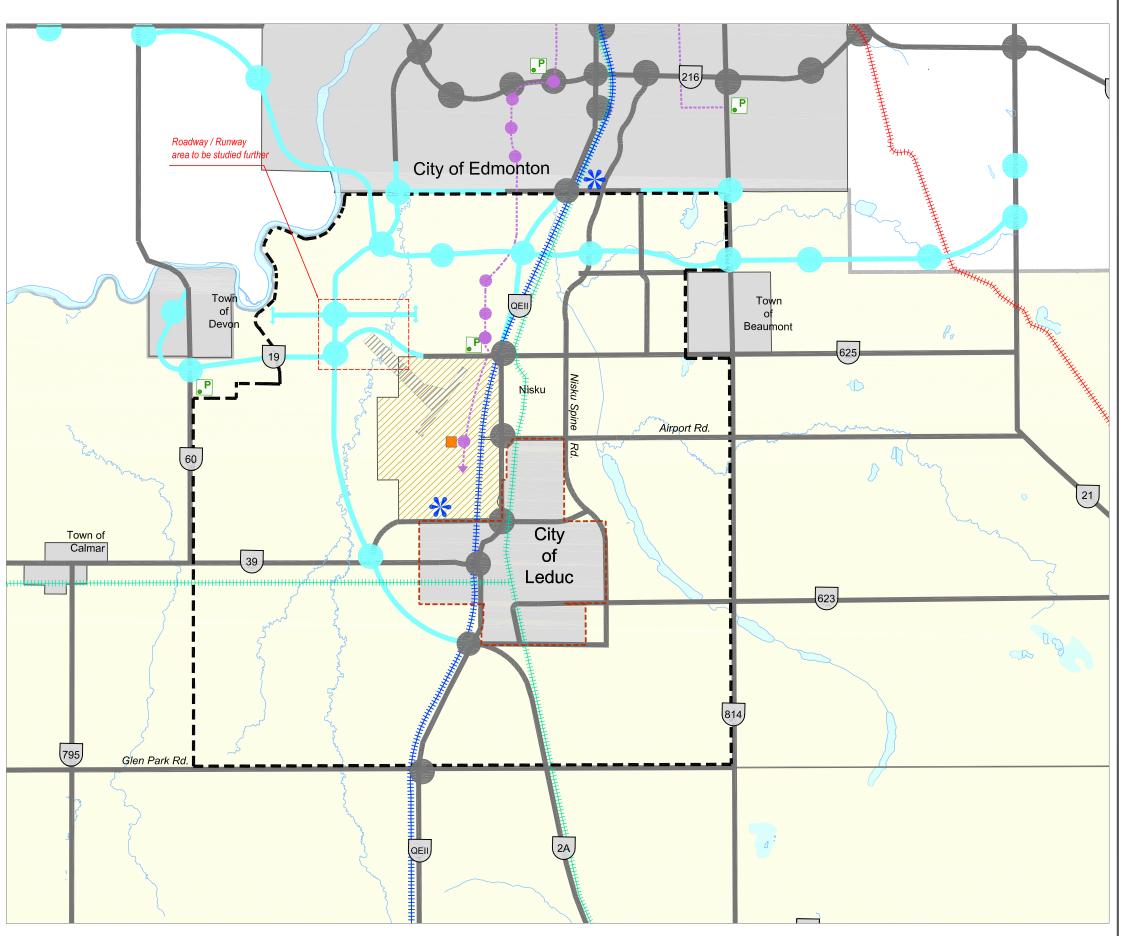
Beaumont for a north-south bypass around the east side of Beaumont. Likely to be developed as a major roadway in the long term, that bypass would link 17th Street with Highway 814 to the south, ultimately connecting to the QE II Highway.

Future roadways designed to accommodate inter-regional travel should be protected as limited access facilities. This will ensure that the roadways function at the level designed. In most cases, rights-of-way to accommodate up to 8 lanes of traffic on the future roadways will need to be protected. Roadway planning within all new developments and communities will need to ensure that adequate traffic flow, emergency access, and pedestrian accommodation can be provided between new and existing development areas, given the limited available access to the adjacent highway network. It is important to note that the alignments and interchange locations shown in Figures 5.5 and 5.6 will be subject to functional transportation studies to be conducted under the auspices of Alberta Transportation. For example, the QE II Highway Phase 2 study is expected to resolve issues such as interchange locations and designs along the QE II Highway at Highway 19 and 65th Avenue within the City of Leduc.

The existing Multiway trail system in the City of Leduc provides a transportation network for non-motorized transportation. This environmentally friendly option should be expanded into all new development areas. Future trail expansion will need to be planned in conjunction with the development of the road and greenway network. This will ensure efficiencies in labour, materials, energy, and costs. Moreover, it will enhance the safety, security, and use of the trail network.

Future expansion of the Edmonton LRT system to the airport, and possibly to the City of Leduc, will present opportunities for an expanded regional public transit system. There is a demonstrable need for alternatives to commuter travel by private automobile, particularly between the City of Leduc, Leduc County, and employment centres such as the Greater Nisku/Leduc Industrial Area, Port Alberta, the Edmonton International Airport, and the City of Edmonton. To maximize the benefits of a public transit system, transit centres and transit destinations should be considered in the planning of new developments. This is especially important with the development of mixed used residential/commercial centres.











County and City Planning for a Sustainable Future

### Legend

Leduc County

Rural Area

Urban Area

Growth Study Boundary

---- City of Leduc Boundary

Edmonton International Airport

////// Proposed Runway

Provincial Highway

Major Roadway

Interchange

Future Major Roadway (Long-Term)

Future Interchange (Long-Term)

Future LRT Station

Future Park & Ride

Future Intermodal Facility

Future Integrated Transportation Centre (Airport)

Possible High Speed Rail

Future LRT Route

Active CN Lines

Active CP Lines

denotes a location where trans-regional transportation services meet and exchange passengers with regional

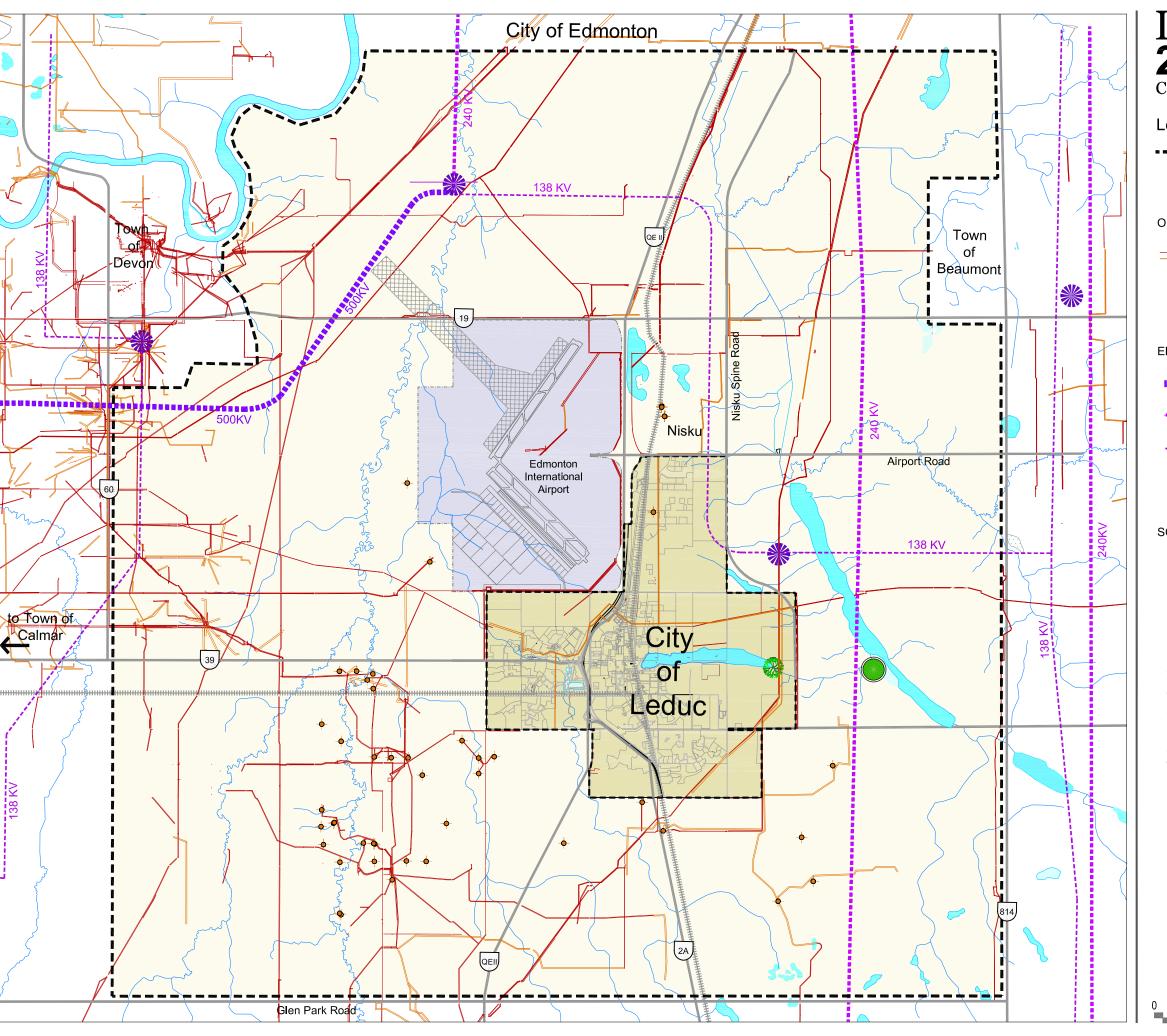
Figure 5.6
Long-Term
Transportation Infrastructure











## Leduc **2060**





County and City Planning for a Sustainable Future

### egend

Growth Study Area Boundary

### OIL AND GAS INFRASTRUCTURE

Oil or Gas Pipeline

Wells

### **ELECTRICAL POWER (SCHEMATIC)**

Schematic route of 500 KV Line Corridor

Schematic route of 240 KV Line Corridor

----- Schematic route of 138 KV Line Corridor



Schematic location of Power System Substation

### SOLID WASTE

Leaf and Yard Waste Facility

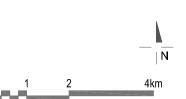


Regional Landfill Site (to be reclaimed as open space in the future)

### NOTE:

- 1. "Wells" denotes the following: Pumping, Flowing or Suspended Oil wells, Flowing or Suspended Gas wells, Gas Test wells, Water Injection Zones, Drains, Standing wells and Training wells
- The Power Line Routes displayed on this map are schematic in nature only, and do not denote exact locations of existing Electrical Power facilities.

## Figure 5.7 Existing Oil, Gas, Power and Solid Waste Infrastructure



ARMIN A. PREIKSAITIS

& Associates Ltd.







### GROWTH STUDY REVIEW-FURTHER POLICY REVIEW

{section six}

### 6.1 INTERMUNICIPAL DEVELOPMENT PLAN

In accordance with the requirements of the Alberta Municipal Government Act (MGA), the City of Leduc and Leduc County intend to adopt a new Intermunicipal Development Plan (IDP). Although the MGA does not require the preparation of a growth study prior to the adoption of an IDP, these two municipalities have determined that the Growth Study will form the basis for the joint preparation, policy formulation, negotiation, and adoption of an IDP.

In particular, it is anticipated the IDP will be prepared in accordance with the Guiding Principles and Sustainability Pillars described in Section 1.2 of the Growth Study. The Leduc County – City of Leduc Steering Committee intends to go beyond the minimum requirements of the MGA by producing an IDP that will address a wide range of intermunicipal matters. Based on the recognition that sustainable development requires planning that reaches across municipal boundaries, Leduc County and the City of Leduc see this new IDP as an important stage in their ongoing progress toward sustainability. Work on the new IDP has been scheduled to commence immediately upon approval by both Councils of the Growth Study. As set forth in the Terms of Reference for the Leduc County – City of Leduc Steering Committee, it is expected that both Councils will be able to consider approval of the new IDP in early 2009.

### 6.2 GROWTH STUDY REVIEW

The Alberta Municipal Government Act requires that an IDP "must include a procedure to be used, by one or more municipalities, to amend or repeal the plan." It is anticipated that the IDP to be prepared by Leduc County and the City of Leduc will include not only provisions for IDP amendments but also policies and procedures that maintain the IDP as a "living document". One of those IDP provisions should be to conduct reviews, when appropriate, of the Growth Study.

One important challenge in long-range planning is that plans and planning studies must not be neglected or allowed to "stay on the shelf". New approaches that have emerged from the field of sustainability planning have led to the proposition of serious methods to deal with this challenge. Such methods include the development of indicators for measuring the achievement of objectives, ongoing monitoring, periodic policy review, and the use of "triggers" (conditions or events) that would warrant the review of a policy, plan, or study. This latter method often forms the basis of an emerging field known as scenario planning. Although the Growth Study is not a statutory municipal policy planning document, it would be useful for both municipalities to review its findings, particularly if conditions change or if unforeseen events occur.

Even though the IDP will likely include provisions for the review of the Growth Study, certain conditions or events may trigger the need for separate review of this document. Such conditions or events would include:

- significantly new or unexpected development in the Capital Region or the Leduc area, either through private investment or public expenditure on infrastructure (e.g., major transportation infrastructure)
- unforeseen economic shocks or volatility, in the form of either extreme growth or recession (regional, national, or global)

- dramatic changes in energy production or consumption, including the development and use of alternative energy sources
- technological advances that may affect land development, employment, industry, communications, housing, or transportation
- changes in transportation behaviour as a result of any of the above
- major changes in Provincial legislation governing municipalities or land use planning
- major reorganization of local government at the Provincial or regional level, including major adjustments to municipal territories

Sections 3.1.1 and 4.3.2 refer to the need for both municipalities to be adaptable in the face of unforeseen situations. As recent events have shown, future uncertainty should be taken into account in the preparation and implementation of plans. Thus the list above does not address specific targets or measurable conditions. What this list does is suggest that certain events or conditions must be seen not as insurmountable challenges but rather as opportunities to reflect on previous plans, take stock of current affairs, and invent new ways of creating communities that do not necessarily rely on old practices.

### 6.3 RECOMMENDED FURTHER ACTION

The possible benefits of recommending certain actions have come to light through the preparation of the Growth Study. Some of these recommendations are addressed in the body of this document, while the benefits of other recommendations have become apparent upon completion of this study. Many of these recommended actons may be addressed in the anticipated IDP, whereas others may require action independent of the IDP preparation, approval, and implementation. These recommendations are grouped according to categories of regional concern, intermunicipal concern between Leduc County and the City of Leduc, and individual municipal concern.

### **REGIONAL**

### 1. Capital Region Board (CRB) and Capital Region Growth Plan

Leduc County and the City of Leduc have been active participants in the Provincial and regional processes that have led to the creation of the Capital Region Board (CRB). Both municipalities are also expected to fully and jointly participate in the preparation of the Capital Region Growth Plan. Full participation in the CRB will give both municipalities greater access to information, expertise, resources, and a higher profile in the region (see Recommendation 4 below). The City of Leduc and Leduc County are strongly encouraged to maintain their robust participation in the CRB and in the preparation of the Capital Region Growth Plan.



This innovative Growth
Study will form the basis for
a comprehensive long-range
Intermunicipal Development Plan
that will incorporate sustainability
principles.

### 2. Sustainability Planning

Both municipalities have become involved in sustainability initiatives, including their support for sustainability approaches taken in this study. It is quite possible that the proposed IDP will take on the form and role of an intermunicipal sustainability plan. Leduc County and the City of Leduc are urged to engage in further discussions with surrounding municipalities and agencies such as



Alberta Transportation and the Edmonton International Airport Authority on the potential for collaboration on multijurisdictional sustainability projects, including sustainability planning. As relatively new policy and implementation tools for municipalities to set longtermvisionsandtoestablish multi-stakeholder commitments to actions in the short, medium, and long terms, sustainability plans are most effective when they transcend municipal

boundaries. The City of Leduc and Leduc County would benefit from further collaboration with their municipal neighbours and other stakeholders in the preparation of a multi-jurisdictional sustainability plan.

### 3. Regional Public Transit Planning

A number of public transit initiatives are underway in the Capital Region, including an LRT Corridor Study for the area south of the City of Edmonton. Leduc County and the City of Leduc are strongly encouraged to fully and jointly participate in the preparation of that LRT Corridor Study and other initiatives addressing the future provision of public transit within the Capital Region. Those public transit plans and studies should consider the integration of land use and transportation as well as specific infrastructure planning related to future LRT service.

### **INTERMUNICIPAL**

### 4. Communications Strategy

One of the key findings of the Growth Study is that Leduc County and the City of Leduc have recently undertaken a number of progressive land use policy, growth management, economic development, and community engagement initiatives. It is important for these two municipalities to acknowledge, publicize, and celebrate these accomplishments. Full participation in the Capital Region Board will achieve significant strategic benefits, one of which would be to attain



a higher profile in the region (see Recommendation 1). Both Councils are strongly encouraged to adopt a joint communications strategy to promote the progressive initiatives being undertaken by the City of Leduc and Leduc County.

### 5. Integration of Land Use and Infrastructure

Both municipalities have regularly engaged in very thorough reviews of engineering standards and levels of utility and transportation services within their jurisdictions. Leduc County and the City of Leduc have already engaged in several joint studies and planning exercises, including the Growth Study. This joint planning can be strengthened by initiatives that integrate land use planning and infrastructure planning. Further intermunicipal cooperation and integration of land use planning with engineering, servicing, transportation, and utilities studies should help both municipalities achieve greater efficiencies and provide better services to their residents and businesses.

### 6. Transportation Master Planning

The County and the City have both been updating their Transportation Master Plans. These long-range transportation plans would benefit significantly from enhanced information sharing and joint intermunicipal planning in collaboration with Alberta Transportation.

### 7. Joint Utilities Master Planning

As with Transportation Master Plans, both municipalities prepare and update master plans for utility infrastructure such as water and sanitary sewer services. Joint intermunicipal planning and collaboration in the provision and operation of municipal utility systems would help both the City and the County to achieve greater efficiencies and provide better services to their residents and businesses.



### 8. Fiscal Sustainability and Jointly Managing the Costs of Growth

The City of Leduc and Leduc County each use fiscal and growth management tools such as off-site development levies to ensure that the costs of growth are fairly allocated amongst benefitting developers, landowners, residents, businesses, service providers, and the municipalities themselves. The County and City are urged to investigate opportunities for cooperation in the establishment of joint cost recovery mechanisms to ensure that future development will "pay its own way" and achieve fiscal as well as environmental sustainability.

### 9. Collaboration with Edmonton International Airport

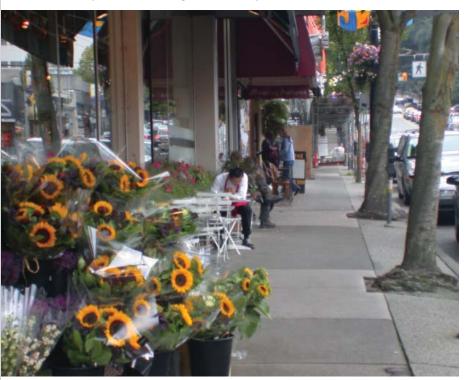
The plans for the expansion of facilities and capacity at Edmonton International Airport, including the development of a new runway and the proposed master plan for Port Alberta, will have significant impacts on long-range planning for the City of Leduc and Leduc County. Both municipalities are strongly encouraged to work with the Edmonton International Airport to coordinate planning at all levels in order to maximize the potential that future development will bring to the County, the City, and the Airport.

### 10. Greenways, Riparian Areas, Trails, Multiways, Parks, and Recreation Plans

Particular sections of the Growth Study refer to natural areas, regional pathways, and open space systems. The IDP will most certainly address these important environmental and recreational amenities. It is recommended that planning for these elements of the shared natural resources of both municipalities become a high priority in the IDP.

### 11. Joint Review of Saunders Lake ASP

Section 2.4 notes that the residential densities proposed in the Saunders Lake ASP are significantly lower than the overall 6 dwelling units per gross developable acre (upgda) assumed for future development in the growth study. The environmental and recreational value of the lands



between the City of Leduc and Saunders Lake may support protection of significant areas for open space. Although considerably higher residential densities may not be appropriate within this area, it may sustain higher densities than are currently contemplated by the Saunders Lake ASP. Although the IDP process will likely address the Saunders Lake ASP, more detailed intermunicipal review of this ASP may not be possible during preparation of the IDP. Thus it is recommended that the County and City undertake a joint intermunicipal review of the policies of the Saunders Lake ASP, particularly as they address sustainability, residential densities, clustering of residential development, and long-term potential for redevelopment or infill development.

**MUNICIPAL** 

### 12. Municipal Development Plans

In order to achieve policy alignment with initiatives from both the Capital Region Board and the proposed IDP, both municipalities may determine that the review of their current Municipal Development Plans would be appropriate. It is acknowledged that a new City of Leduc MDP was adopted in 2005 and the Leduc County MDP was most recently amended in 2004. Accordingly, comprehensive MDP reviews may not be appropriate at this time. Nonetheless, amendments may be considered for both MDPs to reflect the outcomes of the Growth Study, the subsequent IDP, the expected Capital Region Growth Plan, and any sustainability initiatives that either municipality may contemplate undertaking.

### 13.Land Use Bylaws

Upon completion of the IDP and other policy planning or growth management projects that either municipality may be considering, the City of Leduc or Leduc County may determine that amendments to their respective Land Use Bylaws may be appropriate. As with the two MDPs, it is acknowledged that a new Leduc County Land Use Bylaw has just been adopted and the City of Leduc Land Use Bylaw has recently been amended. Nevertheless, certain policy directions resulting from the growth study, the IDP, the Capital Region Growth Plan, sustainability initiatives, or MDP amendments may create the need to review relevant sections in either Land Use Bylaw.

### 14. County Reviews with City of Edmonton and Town of Beaumont

Another observation presented in Section 2.4 is that considerable portions of the North Major ASP fall outside the potential growth areas of the Growth Study, but may be subject to development influences in relation to other municipalities such as the City of Edmonton and the Town of Beaumont. It is strongly recommended that Leduc County consider joint intermunicipal reviews of the plans and policies that it has already approved with both the City of Edmonton and the Town of Beaumont.

