WORKING TOGETHER

Report of the Capital Region Integrated Growth Management Plan Project Team



Acknowledgements

The Capital Region Integrated Growth Management Plan project has been an extremely complex one, made more demanding by the very tight timelines established by the Government of Alberta. While a project of this nature is never quite finished – additional work is always needed and additional people always need to be consulted – this report and its recommendations were completed within the deadline. This would not have been possible without the hard work and dedication of a long list of people inside and outside of government, many of whom still had full time jobs to attend to even while they assisted with this project. It is not possible to recognize everyone who contributed to the study and the recommendations, but there are some who deserve special mention. They are as follows:

Project Management Committee

- Chair of land use and core infrastructure: Brian Marcotte, Consultant
- Chair of social infrastructure: Susan Williams, Assistant Deputy Minister, Workforce Supports Division, Alberta Employment, Immigration and Industry
- Chair of Governance: Gordon Sloan, Partner, ADR Education
- Assistant Project Manager: Diane Simsovic, Senior Director, Advanced Industries Unit, on loan from Alberta Employment, Immigration and Industry
- Advisors (in alphabetical order):
 - o Margaret Bateman, Calder Bateman Communications
 - o Karen Bergman, Senior Manager, Strategic Policy, Treasury Board Secretariat
 - o Christine Couture, Executive Director of Labour Force Development, Alberta Employment, Immigration and Industry
 - o Bill Diepeveen, Manager, Municipal Dispute Resolution Services, Alberta Municipal Affairs and Housing
 - o Shelley Ewart-Johnson, Deputy Minister, Alberta Municipal Affairs and Housing
 - o Peggy Garritty, PG Communications
 - Gary Haynes, Director, Transportation and Logistics, Alberta Employment, Immigration and Industry
 - o Mildred Klassen, Senior Policy Analyst, Alberta Employment, Immigration and Industry
 - o Steve MacDonald, Assistant Deputy Minister, Strategic Policy Coordination, Executive Council
 - Mike Merritt, Assistant Deputy Minister, Local Government Services Division, Alberta Municipal Affairs and Housing
 - David McKay, Senior Policy Advisor, Multimodal Transportation, Alberta Infrastructure and Transportation
 - o Marcia Nelson, Deputy Chief, Policy Coordination, Executive Council
 - Brian Quickfall, Senior Strategic Advisor, Local Government Services Division, Alberta Municipal Affairs and Housing
 - Justin Riemer, Executive Director, Investment and Industry Development, Alberta Employment, Immigration and Industry
 - Rick Sloan, Assistant Deputy Minister, Immigration, Economic and Rural Development Division, Alberta Employment, Immigration and Industry

Consultants:

- ISL Engineering and Land Services, in conjunction with
 - o Applications Management Consulting Ltd.
 - o Lovatt Planning Consultants Ltd.
 - o EBA Engineering Consultants Ltd.
 - o SNC Lavalin
 - o LPS AVIA Consulting
 - o Hemisphere Engineering
- Nichols Applied Management
- Computronix (Canada) Ltd.
- City-Region Studies Center, Faculty of Extension, University of Alberta
- Intergovernmental Committee on Urban and Regional Research (ICURR)

I would also like to acknowledge the efforts of the Chief Administrative Officers of the 25 municipalities in the Capital Region who made time in their busy schedules to meet with the project committee and with various consultants engaged on the project, and to provide much-needed advice.

el.

C. D. (Doug) Radke December, 2007

Letter of transmittal

To: Hon. Premier Stelmach Hon. Minister Danyluk

I have the honour of presenting my report on the Capital Region Integrated Growth Management Plan which you commissioned with your press release dated June 12, 2007.

Throughout the development of this report, I have been struck by an overwhelming sense of déjà vu. Frankly, I was surprised at what little *real* progress has been made during the last seven years on creating the cooperative and collaborative regional approach to planning and development within the capital region envisioned by Mr. Hyndman in December 2000. In that final report, *An Agenda for Action*, Mr. Hyndman wrote in his executive summary:

After two years of examining trends, considering options, and most importantly, listening to citizens and municipal leaders, I have come to a single compelling conclusion: Strengthening the region is not a choice – it's a necessity. (page i)

I share that observation. He also wrote in Recommendation 2:

Establish a new partnership to strengthen and formalize decision making on a regional basis. A regional partnership agreement should:

- Specify how shared priorities and policies will be developed and implemented.
- Recognize the anchor role and predominance of the City of Edmonton.
- Provide representation for every municipality in the region.
- Include a voting formula that is predictable, known and understood, and that enables formal votes to be taken on motions where consensus is not possible. The formula should reflect population, diversity and geography.

Today, relationships between municipalities in the Capital Region are even more polarized than in Mr. Hyndman's day and little progress has been made on his recommendations. With Edmonton and others no longer participating in ACRA, there is no regional decision making body that makes decisions for the majority of the population in the region, and the result is a set of land use plans – sometimes conflicting -- that do not provide for important functions well into the future, and which have provoked two formal appeals of planning attempts before the Municipal Government Board. The bullets in Recommendation 2 are not currently under implementation as a package.

Mr. Hyndman wanted:

- Mandatory membership of all 21 (now 25) municipalities that participated in this review is important. All members should have a seat and voting rights.
- The decision making process must be finalized and must include a way to ensure that decisions can be made in situations where there is not unanimous agreement.
- Guidelines must be in place for determining when and how costs and revenues would be shared in the region.(page iv)

This has not yet been done in a way that is agreed upon by the member municipalities of the Capital Region, and from my observations of the discussion that has taken place during this current review, it would appear that the region is still a long ways from accomplishing on its own what Mr. Hyndman recommended seven years ago.

There are any number of reasons for this seven year delay, none of which really matter if what Mr. Hyndman saw to be required is ever going to happen. It would seem that municipalities in the region need a framework, a tool to get it done, one that does not rely on "consensus." What we have tried to provide in this report is that tool, that way to get it done. However, in the absence of a commitment by all parties to use those tools, additional provincial leadership will be required.

It is my hope that the Government of Alberta will put this framework in place as soon as possible, to provide industry with some certainty about how inter-municipal differences will be resolved and how the region will meet the challenges of growth, to allow the municipalities in the Capital Region an opportunity to improve relationships over time, and to develop collectively an integrated growth management plan for the entire region that will support the unprecedented economic opportunities now upon us.

I firmly believe that, if we get this right, the benefits will be clear to everyone in the Capital Region. Roads and highways will be built in the right place. Traffic gridlock can be avoided. The necessary infrastructure will be in place to support growth not only in the Industrial Heartland but all across the region. By working together, we can avoid problems that have plagued other high growth areas which have been forced to catch up after the fact because the necessary planning was not done in advance.

I thank you for the opportunity to be a small part of the attempt to make some progress in doing all of that.

adh

C. D. (Doug) Radke December 2007

Table of Contents

Executive su	mmary	1
Chapter 1:	Introduction	4
Starting with	h a clear mandate	4
Consulting	with municipalities and compiling essential information	4
Setting the	context for this report	5
Chapter 2:	Why is a regional approach important?	8
History sho	ws numerous approaches to regional cooperation	8
Why do we	need a regional approach now?	12
Chapter 3:	The framework for an integrated regional growth management plan _	15
Growth pro	jections	15
Land use _		20
Core infras	tructure	24
Social infra	structure	39
Areas of pr	ovincial responsibility	40
Areas of mu	inicipal responsibility	49
Chapter 4:	Issues to be addressed by the province	54
Chapter 5:	Establishing a regional approach	57
Recommen	led regional governance structure and approach	58
Chapter 6:	Sharing the costs and benefits of a regional approach	68
Cost estima	tes for addressing future infrastructure needs	68
Sharing cos	ts in the Capital Region	77
Funding the	e Regional Board's activities and mandate	82
Chapter 7:	Transition	83
Establishm	ent and legislation	83
	for land use decisions	83
Administra	tion of the Board	84
Cost allocat	ion	85
Chapter 8:	Concluding comments	

- Appendices: 1. Terms of reference
- Draft Board Charter
 Bibliography

Executive summary

In June 2007, Premier Stelmach initiated a comprehensive project to develop an integrated growth management plan for the Capital Region. A task team was appointed under the leadership of Doug Radke and since then, the team, along with a group of consultants, has been hard at work addressing growth projections, core and social infrastructure needs, alternative approaches to governance, and potential models for sharing in the costs of regional projects. Consultations were held with municipal officials and information and approaches were adjusted as a result of their advice.

This report provides the findings and recommendations from the project. The result is the most comprehensive database of information ever compiled about plans in the Capital Region in key areas that will be affected by growth. Several binders of detailed information have been provided to municipalities and the provincial government along with background papers and studies prepared as part of this project.

Throughout the project, some have continued to question the need for a regional approach. If anything, this project confirms the pressing need to put a regional approach in place. New growth is occurring at an unprecedented pace. In the next 35 years, the population in the region will nearly double. New industrial growth will be accompanied by economic activity throughout the region as well as a construction boom to build new industrial plants, housing, business and retail space to serve the expanding population. New businesses and services will be attracted to the region as a result of its tremendous growth.

These are positive opportunities for the Capital Region. But as we have seen from other rapidly growing communities, it is critically important to anticipate the impact and plan ahead. Not only that, but studies from other communities around the world clearly demonstrate the benefits of taking a regional approach.

It all begins with coherent and coordinated land use planning. Our project team found there is little or no coordinated land use planning for the region as a whole. There are several examples where municipalities are in serious conflict with each other and are appealing to outside agencies for a resolution. In some cases, existing plans for neighbouring municipalities don't match up and, in the absence of a regional approach, there is every reason to expect that this will lead to future conflict and poorer outcomes. Municipalities do not have a common information base for planning purposes, and some smaller municipalities do not have either up-to-date plans or the capacity to prepare such plans.

On the transportation side, the province has not unveiled its transportation plan for the region. This adds uncertainty about where transportation and utility corridors will be located at a critical time when industry needs greater certainty to guide their investment and location decisions. In other cases, although some issues have been resolved in the past few months, we learned about transportation plans not matching up across neighbouring municipalities.

As this report indicates, the costs of the core and social infrastructure needed to address and respond to the pressures of growth are substantial and certainly beyond the capacity of any single municipality. Nor is it the responsibility of the provincial government to cover all of the costs of responding to growth in the Capital Region. That means priorities have to be identified and funded appropriately. With regional planning in place, municipalities can set priorities for the region as a whole. The province can adjust its funding to support projects that are critical and support economic activity across the region. Economies of scale and new population growth can provide opportunities to expand public transportation in the region, including light rail transit beyond the City of Edmonton's boundaries. And industry can be called upon to participate in projects to address regional water supply, process water supply and regional waste disposal not to mention potential regional solutions to capture and reduce carbon dioxide emissions.

On the social infrastructure side, municipalities identified housing as a serious issue that cuts across all dimensions and has the potential to negatively affect growth in the Capital Region. Without the necessary supply of housing of all types and a regional plan for bringing new housing to the region, there is a possibility that the region will have serious difficulties in attracting the workforce it needs for the future. Along with housing, the project also identified increasing needs for health care services, social services, child care, policing and emergency services.

With that context in mind, this report provides:

- Background on the Capital Region, its history and the rationale for a regional approach.
- A comprehensive framework for a regional growth management plan identifying growth projections, current plans, projected needs and gaps in land use, core infrastructure (roads and highways, transit, pipelines, solid waste management, water and wastewater, process water, and rail, airports and power) and social infrastructure (housing, health care, policing, emergency services, social services, child care, kindergarten to grade 12 education, post-secondary education, and recreation).
- An identification of key issues to be addressed by the provincial government.
- A governance model that outlines the nature and make up of a new regional board, its functions and services, and how decisions should be made.
- Estimates of the costs and benefits of a regional approach and suggested models for sharing in the costs of regional projects.
- A transition plan for getting essential functions of the regional board up and running.

Some key points are important to reinforce at the outset:

- This report provides a conceptual framework within which more detailed plans can be developed. The next steps in developing a detailed integrated growth management plan should be the responsibility of a new board to be established in the Capital Region.
- The framework we have prepared is based on key assumptions about the scope of anticipated growth in the Capital Region. It is a high growth scenario that the project team believes is a reasonable and appropriate forecast for the region.
- The report takes the position that it is better to anticipate substantial growth in the region and build the necessary infrastructure once, rather than underestimate growth and be left with the problem of catching up on essential infrastructure needs.
- While there are disagreements on the extent of the provincial government's role in developing an
 integrated regional growth management plan, it's clear that the provincial government must
 make several important decisions in order for this framework and a regional governance
 approach to be successful. That will, of necessity, require changes in existing legislation and
 targeted support in the initial stages of the new board's mandate.
- There are ongoing debates about the need for, and scope of, a new approach to governance in the Capital Region. This report is unlikely to end all of those debates. But our starting point comes in the terms of reference for this project which state clearly that there will be a governance model and that "a board will be established to implement the plan."

Given the history of the region, we urge the provincial government to move quickly on implementing the essential aspects of this report. In a way, this entire report is a series of recommendations, with specific recommendations scattered throughout the report. On an overall basis, though, we recommend that the province:

- 1. Establish the first Board for the Capital Region effective January 2008.
- 2. Provide the necessary start-up funding and operational support for the first three years of the Board's operations. That should include support for a portion of the costs of developing an integrated regional plan for the Capital Region, which should be in place by January 2010.
- 3. Adopt and legislate the governance model recommended in this report including the specific roles and functions, authority of the Board, voting model, the cost sharing approach, and the dispute resolution process.
- 4. Implement the key steps outlined in the transition section of this report.
- 5. Address and resolve the provincial issues identified in this report including providing a tenyear provincial roads and highways plan, resolving the issue of responsibility for ambulance services, and addressing the critical issue of use of water for proposed upgraders in the Industrial Heartland.
- 6. Given the significant returns that could be received by the federal government as a result of economic activity in the region, the Province should engage in serious dialogue with the federal government to ensure that this fact is addressed in future federal infrastructure funding programs.

It is unreasonable to expect that any report – this one included – will put an end to the sometimes acrimonious debates that have characterized municipal relationships in the Capital Region not only in the last few years but throughout its history. Nonetheless, we are confident that the information provided in this report provides a comprehensive framework and the necessary tools for an integrated growth management plan for the region. We are confident that the governance model can work if municipalities set aside their preconceived ideas and give it a chance. We believe that appropriate models can be implemented for sharing costs of regional projects and initiatives without getting into messy and unnecessary battles about unconditional revenue sharing. And finally, we believe the citizens in the Capital Region are ready for a new approach that benefits not only their communities but the region as a whole.

With leadership from the province and cooperation from the municipalities, the title of this report – *Working Together* – can become a reality.

Chapter 1: Introduction

Starting with a clear mandate

To manage growth, I believe leadership by the Province and joint action by our municipalities is key to the efficient, cost-effective delivery of services. So today, I am releasing a road map towards that goal, and I'm confident it will lead to a long-term plan to support anticipated development in the Capital Region over the next 20 to 50 years.

Premier Ed Stelmach June 12, 2007

With those words, Premier Ed Stelmach launched a comprehensive process for developing an integrated growth management plan for the Capital Region. The objective was to support and guide the 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.

At the time the project was announced, approximately \$46 billion in major construction projects was planned, recently completed or underway in the region. Since then, the scope of potential projects has grown to almost \$88 billion, and the opportunity could be even greater if conditions are right. With this level of economic activity and an ambitious regional vision for growth, expected demand for infrastructure including roads, highways, transit, pipelines and transportation corridors will be in the billions. At the same time, a growing population and more people attracted to jobs in the region means there will be increasing pressure on essential services in the Capital Region including education, health care, social services, recreation and affordable housing. With major projects set to proceed, people in the Capital Region also want to know that the potential impact on water, air and land in the region is recognized and reflected in appropriate decisions not just for their community, but for the region as a whole.

These factors point to the pressing need for a regional plan to manage growth and to make sure the Capital Region is prepared to 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. As we've seen in other high growth regions, trying to catch up after growth has occurred is costly, both in financial terms and in the impacts on communities, on services, and citizens. The Capital Region has an opportunity to avoid those serious problems if a proactive and forward thinking plan is put in place, starting now.

Full details of the Terms of Reference for the project are included in Appendix 1.

Consulting with municipalities and compiling essential information

Following an initial meeting with the Mayors and Reeves in the Capital Region, an extensive process was launched under the direction of Doug Radke and a project implementation team. The first step was to put together comprehensive information about current plans, to identify gaps and issues, and to define the essential elements of an integrated growth management plan.

A team of consultants gathered input from municipalities to prepare regional growth projections and to compile current information about existing plans and future requirements for:

- Land use
- Core infrastructure including highways and roads, railways, airports, transit, power, pipelines, waste management, and water, wastewater and process water
- Social infrastructure including housing, health care, policing, emergency services, social services, child care, kindergarten to grade 12 education, post-secondary education, and recreation

The result is the most comprehensive compilation of information ever assembled about plans in the Capital Region in key areas that will be affected by growth. Areas where there is good cooperation today as well as gaps in existing plans were identified along with issues that should be resolved through an integrated plan. Municipal officials were provided with draft data and asked to identify errors and omissions in the base of information.

On the issue of governance, Gordon Sloan was hired by the provincial government to consult with municipalities in the region, review models for metropolitan governance and planning across Canada and around the world, and develop appropriate models for an effective governance structure for the Capital Region. His work was supported by a team of consultants and organizations. Again, municipalities were given the opportunity to review and discuss a range of options and to comment on proposals in advance of preparing this final report.

Throughout the process, three key meetings were held with Mayors and Reeves of municipalities in the region and a further five meetings involved their respective Chief Administrative Officers. Significant information was shared with all municipalities, including an expectation from the outset that municipalities would share their input and advice with each other, as well as with the project team.

Given the history in the Capital Region and strong differences of opinions, a lack of consensus on a number of aspects of this report was always a likely outcome of this process. Nonetheless, there is agreement on many of the details of future needs for core infrastructure and social infrastructure, and on the importance of key decisions and support from the provincial government. The balance of this report highlights areas where there are agreements and disagreements among municipalities along with a recommended approach for moving forward.

Setting the context for this report

Describing the Capital Region

For the purposes of this report, the Capital Region is defined as including the following 25 municipalities:

- Beaumont Bon Accord Bruderheim Calmar Devon Edmonton Fort Saskatchewan Gibbons Lamont
- Lamont County Leduc Leduc County Legal Morinville New Sarepta Parkland County Redwater St. Albert

Spruce Grove Stony Plain Strathcona County Sturgeon County Thorsby Wabamun Warburg Together, the Capital Region encompasses over 1.2 million hectares (close to 12,400 square kilometres) and is home to 1.05 million people. The 25 municipalities in the region include Edmonton – with over 70 percent of the population – combined with four smaller cities, five counties (one of which is a specialized municipality), eleven towns, and four villages. The geographical region also includes another twelve small urban municipalities (mostly summer villages), several hamlets, three First Nation reserves and a major military base. A significant portion of the Capital Region's heavy industrial and petrochemical facilities is located in the municipalities outside of Edmonton. In the recent past, much of the growth in the region has also occurred outside of the City of Edmonton.

The Capital Region also includes an area called the Industrial Heartland. The Industrial Heartland includes portions of four municipalities in the northeast part of the region: the City of Fort Saskatchewan, Lamont County, Strathcona County, and Sturgeon County. Plans for major industrial upgrader projects in the Industrial Heartland are a key driver behind the tremendous growth anticipated for the Capital Region.

In addition to the various municipalities and their elected Councils, the Capital Region also includes a regional airports authority, the Greater Edmonton Economic Development Team, a regional sewage commission, and five regional water service commissions. A number of sub-regional arrangements are in place covering solid waste management, recreation, the river valley, water systems, libraries, and emergency response services authorities outside of Edmonton. School authorities are not regional, although some consolidation did take place in the mid 1990s. The region includes ten post-secondary institutions serving not only students in the region but from across the province and around the world. Capital Health provides health services to most of the Capital Region. A number of other voluntary cooperative arrangements exist, including a regional chamber of commerce.¹

With that diversity, it is perhaps not surprising that there have been many different views on the challenges in the region and the best ways of addressing them.

Beginning with key assumptions and observations

With that context in mind, it is important to begin with some key observations about what this report achieves and does not achieve, how the various assumptions about future growth were determined, and the important next steps that should be taken once a new regional board is in place.

- This report and its accompanying documentation provide the most comprehensive database of information about the Capital Region that has been compiled to date. It should serve the Capital Region and the province for years to come.
- This report provides a conceptual framework within which more detailed plans can be developed. It provides direction and some degree of detail on a number of steps, decisions and actions that must occur before an integrated growth management plan can actually be implemented. The draft transportation plans show where road and highway improvements and interchanges are required based on the composite land use plan. Further detailed studies will be required to confirm alignments and right-of-way requirements for these improvements. In other areas, the framework provides basic information about where growth is most likely to occur, what plans have been developed to date, and where further work is required to address key gaps in existing plans.

¹ Information taken from LeSage and Stefanick – "A New Regionalist Metropolitan Action: The Case of the Alberta Capital Region Alliance" and other sources.

- The framework we have prepared is based on key assumptions about the scope of anticipated growth in the Capital Region. It is a high growth scenario that the project team believes is a reasonable and appropriate forecast for the region. Others may disagree; however, the key point is that the assumptions underlying the growth scenario for the region should be reviewed on an ongoing basis to ensure that they remain appropriate given changing conditions.
- The project committee has made no attempt to forecast the effect of various macro or micro economic factors on the completion of upgraders already announced. In the committee's opinion, any effect, adverse or beneficial, of a change in individual projects will affect only the timing of the overall development of the Industrial Heartland and therefore, will have little or no impact on the size of infrastructure required to support the developments over the longer term.
- The report also takes the position that it is better to anticipate substantial growth in the region and build the necessary infrastructure once, rather than underestimate growth and be left with the problem of catching up on essential infrastructure needs.
- While there are disagreements on the extent of the provincial government's role in developing an integrated regional growth management plan, it's clear that the provincial government must make several important decisions in order for this framework and a regional governance approach to be successful. That will, of necessity, require changes in existing legislation and targeted support in the initial stages of the new board's mandate.
- There are ongoing debates about the need for, and scope of, a new approach to governance in the Capital Region. This report is unlikely to end those debates. But our starting point comes in the terms of reference for this project which state clearly that there will be a governance model and that "a board will be established to implement the plan."
- The next steps in developing a detailed integrated growth management plan should be the responsibility of a new board to be established in the Capital Region. The board should also be responsible for monitoring and assessing the details of the plan and making adjustments on an ongoing basis. More details about the responsibilities of the board and transition requirements are outlined later in this report.
- When reference is made to views of the municipalities, it should be understood that the project team's understanding of individual municipal views is the result of a number of factors including opinions expressed by elected officials, the Chief Administrative Officers' technical advice, written submissions, and various responses to options put forward by the project team as the study progressed.
- This study is, of necessity, a snapshot in time. Every attempt has been made to include the most current information, but even while the various reports were being compiled, announcements were being made regarding infrastructure and other projects. There is a lot going on in this dynamic Capital Region.

As several municipalities have noted, the timelines for this project were tight. While the timelines did not prevent us from compiling the basic framework for an integrated growth management plan, they did inhibit greater consultation and did not allow time for the project team to initiate a formal mediation process that might have achieved some compromise or degree of consensus on how to move forward, particularly in the area of governance. We understand that some municipal officials were prepared to participate in facilitated discussions as part of this process but others were not. The unwillingness of some municipalities to compromise on any degree of significant change was a reality that additional time may not have resolved.

The timelines also prevented us from pursuing some topics in greater detail. That work will, of necessity, be left to the transition phase of this process or to the new board for the Capital Region.

Chapter 2: Why is a regional approach important?

This question is at the heart of many of the debates about regional planning and cooperation across the Capital Region. The debates are not new, and strong opinions have been voiced on all sides. Through its consultations, the project team heard continuing questions by some municipalities about the need for any formal regional approach. Some suggested that cooperation in the region is working just fine. In their view, municipalities with common issues and interests can and do work together and solve problems without the need to involve all municipalities in a regional approach. On the other hand, there are equally strong views that the lack of a regional approach to plan for future economic growth is a serious impediment to the future of the Capital Region. Some suggest that, without a regional approach, there is a serious risk that the region will not keep pace with the necessary infrastructure and will lose out on the full potential for economic development in the region. Furthermore, a regional approach is vitally important to maintain a positive quality of life for citizens across the region and avoid the negative impacts of haphazard and unplanned growth.

Many people have suggested that there is much to be gained from more cooperation across the region, particularly when it comes to anticipating and planning for growth and its impact across the entire region. Examples from around the world demonstrate that regional approaches can work, and work well, even when there are significant numbers of municipalities involved and large discrepancies in their size. Nonetheless, there are ongoing questions and so it is important to outline the case for taking a regional approach, starting with the history of how regional cooperation has been addressed in the past.

History shows numerous approaches to regional cooperation

Over the years, a number of different approaches have been used to expand cooperation and address planning issues across the region.²

When Edmonton became a city in 1892, it was not the only urban community in the region. It absorbed some of its neighbours, starting with the City of Strathcona in 1912, but by no means all.

Alberta's first urban planning legislation was the Town Planning Act, introduced in 1913, and its first rural planning legislation was the Preservation of Natural Beauty Act, passed in 1928. However, Edmonton did not formally establish a planning department until 1949.

The Edmonton District Planning Commission was established in 1950 after the adoption of the Town and Rural Planning Act. Participation was not mandatory and various urban and rural municipalities joined or left the district planning commission.

In 1956, Dr. G. F. McNally was charged with examining municipal and school financing and administration in the Edmonton and Calgary areas. He concluded that the piecemeal pattern of development around both cities was inappropriate and recommended significant annexations. In Edmonton's case, he recommended annexing Beverly and Jasper Place (which occurred) and Sherwood Park and the industrial area of Strathcona (which did not occur).

Dr. McNally also recommended mandatory regional planning. The legislation was amended and the Edmonton Regional Planning Commission was established in 1963. However, the Commission's preliminary regional plan was not completed until 1972 and its official regional plan was never approved.

² For more detailed information, see LeSage and Stefanick, "A New Regionalist Metropolitan Action: The Case of the Alberta Capital Region Alliance." June 2004

In 1979, the City of Edmonton pursued annexation of substantial areas around the existing boundaries of the city. In June 1981, after a protracted and acrimonious debate, the city's boundaries were significantly expanded but that expansion did not include any of the suburbs surrounding the city or the major industrial developments located east and north of the city.

In 1981, in an attempt to facilitate better planning in the region, the province split the Edmonton Regional Planning Commission into two: the Yellowhead Regional Planning Commission addressed regional planning matters to the west of the Capital Region and the Edmonton Metropolitan Regional Planning Commission addressed planning issues within the Edmonton area. Edmonton council members held nine of the 27 positions on the Edmonton Metropolitan Regional Planning Commission. Rural municipalities had serious concerns with the approach, as did the City of Edmonton. The City's concerns stemmed from the fact that it had 75 percent of the region's population at the time and legislation required that any regional plans or amendments had to be approved by two-thirds of the Commission's board.

The Edmonton Metropolitan Regional Planning Commission then prepared a regional plan which was adopted in 1983.

Various reports suggest that concerns with regional planning commissions were not unique to the Capital Region. Despite their representation on planning commissions, criticism was strongest from the rural municipalities. They lobbied for one-municipality, one-vote provisions or the elimination of regional planning commissions. As a result of this and other factors, the *Municipal Government Act* was amended in 1995 and these amendments did away with the planning commissions and all mandatory regional planning.

In anticipation of this change in legislation, the members of the Edmonton Metropolitan Region Planning Commission adopted a business plan providing a framework for part of the Edmonton Metropolitan Regional Planning Commission to survive as a new voluntary inter-municipal agency called the Capital Region Forum.

Heralded as establishing a "new era of inter-municipal cooperation", the Capital Region Forum was to be dedicated primarily to resolving regional issues, improving harmony and cooperation, promoting communication among municipalities, and advancing the region. A Regional Accord was included in the Forum's 1995 business plan. The Accord included coordination of land use planning on a regional basis along with a special committee to ensure the provisions of the Accord were implemented and refined over time. The Accord also envisioned regional services to be provided to municipalities in the region along with municipal planning and development. Even though it was more than ten years ago, many of the initial priorities involved the same issues as we see today: facilitating cooperation on environmental matters concerning the North Saskatchewan River, grappling with "fringe" area issues, identifying regional information and electronic communications needs, and developing a transportation inventory. The Forum also sought to establish a formal process to manage relations among the members.³ (This certainly is a reminder of the old adage that the more things change, the more they stay the same.)

Consensus was the preferred approach to decision making, although the Forum's articles allowed for majority vote decisions. Edmonton retained its nine votes, St. Albert and Strathcona County had two votes each, and the remainder of the municipalities had one vote each. This voting structure ultimately was the beginning of the end for the Forum. Six of the smaller municipalities (including three of the region's four rural municipalities) decided against joining the Forum. By 1997, the Forum began to lose members and there was growing discontent.

³ ibid p. 11

A restructuring in 1997 established the Alberta Capital Region Alliance (ACRA) to replace the Forum. While the concept of a "forum" was retained, the focus shifted primarily to enhancing regional communications and providing a unified regional voice to the province. Direct planning services were dropped, research was pulled back, and plans for joint purchasing and equipment pooling were dropped. The Regional Accord that began with such optimism was silently put aside.

Key features of ACRA included:

- A new governance structure with one-municipality, one-vote provisions
- Membership on the ACRA Board comprising mayors and reeves of member municipalities and selected others with non-voting status
- Significant governance roles for regional Chief Administrative Officers as non-voting members of the ACRA Board and membership on the Management Committee

In the late 1990s, ACRA became much more interested in addressing prosperity and partnership matters, particularly in terms of transportation planning. Membership began to grow, but not all of the region's municipalities were members. Rural municipalities did not participate and problems were noted with the absence of any development control and the lack of an economic development plan for the region.

In December 1998, the Minister of Municipal Affairs, Honourable Iris Evans, announced the creation of the Alberta Capital Region Governance Review. The Minister was adamant that "the status quo will not do."

Mr. Lou Hyndman, former Cabinet Minister and Chancellor of the University of Alberta, was appointed to head the review. His mandate was to "recommend approaches to the governance of the capital region which will address the broad range of challenges and opportunities the region will face over the next 30 years or more."⁴ Reminiscent of past concerns, controversy centred primarily on representation and voting for a proposed Edmonton Capital Regional Council. In anger, the City of Edmonton temporarily withdrew from the review.

The Hyndman report proposed a two-track approach to strengthening the region: a partnership track and a shared service track. He left the task of creating a voting formula with the region's municipalities but proposed that participation would be mandatory. His report also did not identify specific provincial actions to support a regional body.

In the end, little of significance materialized from the partnership recommendations of the Hyndman report, although the province officially accepted all but two of the report's recommendations (including creating a formal regional partnership agreement). The Minister of Municipal Affairs encouraged the municipalities to develop an action plan and timetable, with ACRA taking the lead. A response to the Minister was prepared, but little action was taken on the partnership track recommendations.

In 1999, ACRA began work on a new agenda and several strategic initiatives, with competitiveness of the region at the top of their priorities. This followed through on a decision made in their 1997 business plan to revise ACRA's mission statement to include "developing initiatives benefiting economic competitiveness of the Edmonton metropolitan region" as a central purpose. Several key initiatives were taken to promote and expand economic development in the region.

⁴ Alberta Capital Region Governance Review, 2000, p. 7.

A key success involved joining together as members of ACRA to support a regional ring road (Anthony Henday Drive) as their unanimous choice for provincial transportation funding. ACRA followed this up with a multi-year strategic transportation plan, a coordinated regional municipal transit review and a regional roads inventory. Economic development initiatives were continued. For 2003-05, a regional GIS project was included as one of their priorities. Other priorities for ACRA included initiatives to improve communications, lobby the provincial government, improve municipal services and develop regional leadership (including a regional studies centre located at the University of Alberta).

Several of these initiatives have had limited success. The regional transit study has not resulted in the development of a regional transit network. The influence of the ten-year strategic transportation plan is difficult to assess because the province has not published its ten-year highway plan. The regional GIS project has not moved forward to completion. The key problem is that ACRA has no authority to implement its recommendations.

While ACRA has had some successes around specific initiatives and projects, the history of ACRA was certainly not without its disputes and challenges. At the heart of many of these disputes was the continuing disagreement over representation and voting. In March 2004, the City of Edmonton considered four options ranging from going it alone to adopting a formal regional policy in which the City acted as a good neighbour and regional leader. Opinions of city council members on the best option were divided with the majority agreeing with a more "utilitarian" approach – basically, if it's in our interests to participate, we will.

Since 2004, the divide between municipalities that participate in and support ACRA and those that do not, particularly the City of Edmonton, has widened. Discussions and debates have become even more acrimonious. Those who support ACRA point to the successes of a consensus approach. Detractors, on the other hand, see ACRA as ineffective at best and an impediment at worst.

In 2006, Edmonton City Council voted to end its membership in ACRA, calling on the province to step in and resolve the issues once and for all. Since that time, four other municipalities (Calmar, Legal, Stony Plain and Wabamun) have voted to withdraw from ACRA. The remaining members continue to support ACRA and its approach.

In an attempt to address Edmonton's concerns about decision making, ACRA adopted a double majority voting model in January 2007. With the requirement to achieve a majority vote by incorporation type, this model does not reduce the rural/urban tensions that have characterized the history of the region and it did not result in municipalities re-joining ACRA.

Over the past few years, a number of studies have been undertaken and reports prepared on the Capital Region. In November 2006, Dr. Michael Percy prepared a report on *Sustaining Municipal Government Relationships in Alberta* for the Minister's Council on Municipal Sustainability's Relationships Working Group.⁵ In February 2007, a report done by Hemson Consulting Ltd. for the City of Edmonton looked at ways of creating a stronger Edmonton region.⁶ Public opinion research conducted for the City of Edmonton in January 2007 showed strong support for more regional cooperation and decision-making, particularly in face of anticipated economic growth in the region.⁷ While it is not specific to the Capital Region, the March 2007 report from the Minister's Council on Municipal Sustainability recommended that:

⁵ M.B. Percy Consulting Ltd. Sustaining Municipal Government Relationships in Alberta. November 2006.

⁶ Hemson Consulting Ltd. Creating a Stronger Edmonton Region. February 2007.

⁷ Longwoods International. *Managing Growth in the Edmonton Region: Public Opinion Research*. January 23, 2007.

"In metropolitan or high growth areas involving a larger number of municipalities and more complex inter-municipal relationships, more formalized regional agencies should be established. These agencies would have a mandate to develop growth management plans for the region, address cost and revenue sharing issues where appropriate, and coordinate planning, land use and service delivery. In these areas, Municipal Development Plans (MDPs) must be required to conform to these regional plans. Each regional agency must also have the authority to make decisions in the absence of consensus, but the decision process must incorporate some form of 'double majority' (e.g. decisions require the support of a majority of the region's municipalities that collectively represent a majority of the region's population) in order to properly balance the interests of communities large and small."

The report went on to recommend that municipalities should be given time to work out the necessary arrangements to meet their needs, but that, in the absence of agreement, provincial direction should be provided.

That history brings us to the situation today and it reminds us that the issues we're hearing about now and will hear about when this report is released have a long-standing history that calls out for resolution.

Why do we need a regional approach now?

In spite of the checkered history of regional approaches in the Capital Region, there are compelling reasons for implementing a regional planning approach to meet the tremendous challenges that will be caused by growth in the region.

The following are some of the key reasons that have been identified through the current project and in other studies and reports on the Capital Region.

• Meeting the anticipated demands for core and social infrastructure to accommodate growth in the region extends beyond the boundaries of any one municipality.

Chapter 6 of this report outlines the anticipated investments in core and social infrastructure that will be needed to keep up with the expected growth in the Capital Region. Total investment required by the province, municipalities and the private sector in core infrastructure could total \$19.6 billion in the next ten years and an additional \$21.3 billion in the next 25 years after that. The required capital investment in social infrastructure over the next ten years could be in the range of \$5 billion while operating costs by 2016 could be \$1.1 billion greater than in 2007.

These costs are well beyond the scope of any single municipality in the region to accommodate. A large share of the costs will also be the responsibility of the provincial (and perhaps federal) government and it is essential for longer term plans to be in place. Furthermore, the costs apply to many of the municipalities in the region, and not necessarily to those which will be the largest beneficiaries of future increases in property tax revenues as a result of developments in the Industrial Heartland. Unless a model is put in place to share costs for projects that benefit and affect the region as a whole, there is every reason to believe that some of these essential projects will not proceed.

 Planning to date, particularly around anticipated land uses at the fringe of municipalities, has been uncoordinated.

The compilation of detailed plans prepared as part of this project reveals a lack of overall planning for the region and numerous gaps and issues to be addressed, particularly along the borders of various municipalities. There are several areas where conflicts have already arisen over incompatible plans for land use. Furthermore, in the absence of an overall land use and transportation plan for the region, there is every reason to expect conflicts to continue and incompatible land uses to be approved by adjoining municipalities. A continued lack of overall planning is certainly not in the best interests of the region as a whole.

• The current period of rapid growth is putting significant pressure on municipal governments to manage dealings with their neighbours and to do so on a timely basis.

The Capital Region is in a period of rapid economic growth that is expected to accelerate over the next ten years. However, the interaction of financial pressures, managing growth, and constrained land use options for many municipalities is putting increasing pressure on municipalities to negotiate agreements with their neighbours. As noted above, the results have not always been positive and certainly not quick. Aside from the lengthy, expensive and sometimes acrimonious process of taking disputes to the Municipal Government Board, there are no alternative approaches for resolving issues on a regional basis.

• There are common interests that apply to the region as a whole and where a regional approach will benefit all municipalities.

In a number of areas such as the environment, boundaries between municipalities in the Capital Region are largely irrelevant. The Province is taking the lead on addressing the cumulative impact of the Industrial Heartland on all aspects of the environment throughout the Capital Region, not just the counties in the area. There are very real opportunities for municipalities to work together to address issues related to water supply and quality in the North Saskatchewan River, preserving the River Valley as a world-class recreation, tourism and environmental resource, and expanding efforts to divert more solid waste from landfills. Economic development and tourism marketing are also areas where the entire region can benefit from cooperative efforts.

Experiences from cities in Canada, the United States and other parts of the world show that
regional approaches can work. They also show the downside of allowing the centre of a region to
hollow out while development proceeds around the central city.

Research suggests that there are synergies between the central city and its surrounding communities, demonstrating that suburbs also benefit from investment in healthy urban cores and pointing to the inter-connectedness of the economic wealth of an entire region.⁸

Studies done as part of this project also point to numerous examples where effective regional models have been put in place. Successful approaches include Portland, Glasgow, Pittsburgh and Melbourne. Aside from the current preferences of some municipalities, there is no reason why similar models could not work in the Capital Region. It's also important to avoid the situation where development proceeds all around the City of Edmonton and its services and population are "hollowed out." This leads to stagnancy and a lack of resources in the City to address growing issues and demands.

⁸ "Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Patterns", Brookings Institution Center on Urban and Metropolitan Policy, March 2004.

• Competition in a global economy occurs not just between neighbours but with other regions of the world.

Several studies have pointed to the fact that potential investors evaluate the capacity of a region to offer an integrated package of amenities, quality of life and regional services. Research⁹ indicates that regional planning which allows for the development of a cohesive vision for the region leads to increased competitiveness in the global economy.

 Decisions about where to locate new industrial developments or business opportunities are based, in part, on where the least cost environment can be found, but that is affected by factors that extend beyond the boundaries of a single municipality.

Competitiveness involves a complex interplay of land costs, proximity to transportation, availability of infrastructure, and ability to attract and retain the necessary workforce. The Capital Region is fortunate to have all of these attributes available. But the individual municipalities that make up the region must recognize their interdependence and address challenges on a regional basis if they are to remain competitive.

Research also provides evidence that regional planning can lead to improvements in overall productivity and economic performance. These benefits are captured when a region is able to plan for compact, mixed use development that fosters dense labour markets, vibrant urban centres, efficient transportation systems, and a high "quality of place." Productivity also increases with a county's employment density.¹⁰

In spite of several attempts, the approach provided by the Alberta Capital Region Alliance (ACRA) is not sufficient to address current and anticipated issues in the region.

While ACRA represents an admirable attempt at voluntary regional cooperation, it does not provide a robust framework that permits regional planning to proceed when consensus among municipalities fails. This inability to move forward in the face of a lack of consensus has led to an inability to make decisions on key issues. In order for regional planning and decision making to be effective, there must be certainty that once decisions are made on regional issues, they cannot be overturned by individual municipalities. For that reason, any model that does not bind its members to the decisions made will not be effective. Furthermore, ACRA has lost the support of the largest municipality in the Capital Region – the City of Edmonton. As several municipal representatives have pointed out, it does not make sense for decisions about future developments in the region to proceed without the active involvement and participation of Edmonton. It's clearly time for a new approach.

These reasons clearly point to the value and benefits of taking a regional approach to key issues which affect the region as a whole. Implementing a regional model does not in any way detract from the roles and responsibilities of individual municipalities or their accountability to their electorate. If anything, it adds a further dimension to their work – one that will bring long-term benefits to citizens all across the Capital region.

⁹ ICURR, November 2007.

¹⁰ Brookings Institution, March 2004

Chapter 3: The framework for an integrated regional growth management plan

A primary task for this project was to prepare the framework for an integrated regional growth management plan for the Capital Region. As noted earlier, extensive work was done by consultants working directly with municipalities and provincial government departments to compile all available plans and information, develop growth projections and projections of the core and social infrastructure necessary to meet anticipated needs, and to identify gaps in key areas. The results are included in several binders of detailed information on land use, core infrastructure and social infrastructure.¹¹

The following sections provide highlights of the findings from that process. Taken together, this information provides the framework for an integrated regional growth management plan. More detailed work will be necessary to follow up on this framework and prepare the specific plans that are needed to guide future decisions by municipalities in the region and the provincial government.

Growth projections

The starting point is to outline key assumptions about anticipated future growth in the Capital Region, where that growth is most likely to occur, and the impact on population growth in the various municipalities. These growth projections underlie the assessment of current gaps and issues to be addressed and are essential to anticipate and plan for future land use, core infrastructure and social infrastructure needs.

Economic growth assumptions

Alberta's Capital Region is a significant economic region within Canada and it is the northern hub of the powerful Edmonton – Calgary corridor. Over the past few years, this corridor has achieved one of the strongest GDP (Gross Domestic Product) and population increases in North America. The region has enormous economic potential and is attracting investment from every corner of the globe. A special TD Economics report recognized this fact over four years ago. One of the report's key recommendations to take advantage of this economic opportunity was to, "Continue to improve cooperation with other municipalities in the region, recognizing the handsome economic returns to effective region-wide coordination and planning."¹²

The Capital Region is increasingly becoming recognized as a North American hub for the energy industry which will drive the region's growth for decades to come. However, the region has a diverse array of economic opportunities in other areas including transportation and logistics, advanced manufacturing, agri-food, forest products, and health care-related products.

There is no certainty about where and when growth will occur or how much of the anticipated growth in the Capital Region will actually take place. A number of factors affect decisions made by developers, industry and governments and those decisions can affect the timing of new projects as well as whether or not they proceed as planned. In spite of that uncertainty, it is critical for municipalities in the region to anticipate the most likely growth scenarios and plan accordingly.

¹¹ Information contained in the binders has been made available to all 25 municipalities in the Capital Region. The information is also available at http://www.alberta.ca/home/crigmp.cfm.

¹² The Calgary-Edmonton Corridor, TD Economics, April 22, 2003.

For the purposes of this report, we have deliberately chosen a "high growth" scenario. The scenario is, in our view, a reasonable assumption about the level of growth that is likely to occur over the next 10 and 35 years (to 2041). It also is a prudent approach for determining the scope of infrastructure that will be required. As noted earlier, this report takes the view that it is better to anticipate substantial growth in the region and build the necessary infrastructure to accommodate that growth, rather than underestimate and be faced with the serious challenge of catching up when growth occurs.

Some may see this high growth scenario as overly optimistic. The scenario takes into account the possibility of new investments in upgrading and value-added processing throughout the Capital Region beyond what has been already announced. Energy-related investments in Alberta's Industrial Heartland and in the region in general are expected to continue to 2030 and beyond as output from the oil sands expands to meet growing demands not only in the United States but also from the rapidly growing economies in China, India and other energy-consuming nations. With a declining supply of conventional oil and continuing political instability in other parts of the world where conventional oil supplies exist, the forecast in this report anticipates continuing strong demand for Alberta's heavy oil and for upgrading of heavy oil to meet market demands.

Specifically, we anticipate growth in the Capital Region to be driven by a number of key developments.

• The Industrial Heartland

Eight multi-billion dollar oil sands upgrader projects are 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, including construction, turnarounds, operations, and direct and induced jobs associated with these projects is expected to range between 30,000 and 40,000 person years per year throughout the forecast period.

In addition to the Industrial Heartland, the City of Edmonton has indicated that industrial and commercial development is planned for north of the Manning Freeway. Two major industrial projects as well as light and medium industrial development are included in the population and employment forecasts.

Port Alberta

The Edmonton International Airport is located in Leduc County and is the second largest airport in Canada in terms of land area. Although the Airport falls under the jurisdiction of Transport Canada, the Edmonton Regional Airports Authority has prepared an Area Structure Plan to provide clear direction for the development of the Airport lands.

The Area Structure Plan designates over 700 hectares of land on the airport property for the development of Port Alberta commercial facilities. Port Alberta is defined as a multi-modal transportation hub that integrates air and surface transportation in one location, includes the development of a new runway, and provides a large supply of land for industrial and limited commercial uses to host manufacturing, production, supply, distribution and storage of goods. Ultimately the port 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.

Based on projections provided by the Edmonton Regional Airports Authority, by 2036, total aviation activity at the International Airport will grow to levels that currently exist at the Vancouver International Airport. By 2016, total employment at the Edmonton International Airport and Port Alberta will reach approximately 12,000. By the end of 2041, that number is expected to increase to 33,000 jobs.

Nisku Industrial Park

The Nisku Industrial Park is located in Leduc County, to the east of the Edmonton International Airport. 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 Leduc/Nisku area, providing substantial growth opportunities. Work currently is underway by Leduc County to prepare an Area Structure Plan that would address its potential lack of industrial land to satisfy market demand, the anticipated expansion of the Edmonton International Airport, and the prospect of significant road network changes within the County.

• 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 principal road and rail connections, and in the Vancouver and Prince Rupert corridors, and the ensuing port expansions, 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.

Anticipated economic growth throughout the region

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.¹³

Employment growth projections

Economic growth is expected to translate into continuing strong employment growth for the forecast period. Employment growth will be strongest in the manufacturing and primary industry sector along with wholesale trade, commercial and non-commercial services, and construction.

Over the forecast period to 2041:

- Employment will continue to grow by 2.3 percent annually to 2016 for a total of 135,000 additional jobs.
- From 2016 to 2041, employment growth could slow to 1.0 to 1.2 percent per year, but will still result in an additional 200,000 jobs.
- Total employment over the entire region is expected to grow to 863,000 jobs.

¹³ Estimate taken from ISL profiles of major projects planned or anticipated by the 25 municipalities included in the study.

Table 1: Capital Region Employment Growth Forecast

	1996	2006	2016	2041	
Employment	434,020	529,620	663,524	862,608	
A	From	1996	From 2006		
Average Annual Growth	2.0)%	2.3%	1.4%	

Source: ISL Engineering and Land Services

Population growth projections

The Capital Region has seen significant population growth, especially in the past five years. Since 2001, the Edmonton Census Metropolitan Area (CMA) has grown by 10.4 percent. Much of that increase results from the substantial number of people moving to the Capital Region. Between 2001 and 2006, net migration to the Capital Region averaged over 10,000 people per year.

Looking ahead to 2041, total population growth is expected to average 1.54 percent per year. That adds up to a 23 percent increase in population to 2016 and a 35 percent increase between 2016 and 2041. With that rate of growth, by 2041, the Capital Region will be home to 1.74 million people, up from 1.05 million people in 2006.¹⁴

Table 2: Capital Region Population Growth Projections

	1996	2006	2016	2041	
Population (million)	0.86	1.05	1.30	1.74	
	From	1996	From 2006		
Average Annual Change	1.9	9%	2.1%	1.5%	

Source: ISL Engineering and Land Services

In addition to forecasting the population growth for the region, it is also important to anticipate where the additional people coming to the Capital Region are most likely to live. Historically, the municipalities outside of Edmonton have grown at a faster pace than the City itself. That trend is expected to continue over the forecast period. While Edmonton's share of the Capital Region's total population was 73 percent in 1976, this percentage declined to 71 percent by 2006 and is expected to drop even further to 67 percent by 2041.

¹⁴ The combined forecasts from municipalities in the Capital Region are higher than those used in this report. Their forecasts would add another 200,000 people, bringing the total to two million people by 2041.

The following table provides projected population changes for each of the 25 municipalities in the Capital Region.

Engineering and Land Services Capital Region Integrated Growth Management Plan Comparison of Municipal Projections and Regional Forecast Growth - November 2007							
Municipality	Regional Forecast 2006 ¹	Regional Forecast 2016 ¹	Municipal Population Projection to 2016	Projection Difference 2016	Regional Forecast 2041'	Municipal Population Projection to 2041	Projection Difference 2041
City of Edmonton	740,041	880,144	900,112	19,968	1,158,872	1,158,872	0
City of Fort Saskatchewan	15,089	30,657	35,000	4,343	40,392	40,000	-392
City of St. Albert	57,787	79,085	79,085	0	110,901	110,901	0
City of Leduc	17,021	22,062	23,469	1,407	33,077	34,728	1,651
City of Spruce Grove	19,496	24,489	26,292	1,803	35,492	43,135	7,643
Subtotal	849,434	1,036,437	1,063,958	27,521	1,378,734	1,387,636	8,902
Strathcona County	82,705	108,482	108,482	0	153,264	166,930	13,666
Lamont County	3,935	4,130	6,500	2,370	4,582	25,000	20,418
Sturgeon County	18,664	22,055	22,000	-55	30,126	30,000	-126
Leduc County	12,734	15,530	16,750	1,220	21,852	45,650	23,798
Parkland County	29,740	35,663	37,000	1,337	49,476	73,000	23,524
Subtotal	147,778	185,860	190,732	4,872	259,300	340,580	81,280
Town of Lamont ³	1,675	1,935	7,500	5,565	2,446	22,063	19,617
Town of Bruderheim	1,215	2,778	2,778	0	3,835	3,835	0
Town of Morinville	6,775	10,138	10,138	0	14,373	14,373	0
Town of Gibbons	2,642	5,115	5,948	833	7,003	7,003	0
Town of Redwater	2,192	3,281	9,051	5,770	4,450	26,750	22,300
Town of Bon Accord ³	1,535	2,191	3,500	1,309	3,023	8,413	5,390
Town of Legal	1,193	1,718	1,718	0	2,276	2,276	0
Town of Beaumont	8,961	13,257	14,000	743	20,687	22,000	1,313
Town of Devon	6,256	7,858	9,775	1,917	11,389	26,060	14,671
Town of Calmar	1,959	2,461	10,000	7,539	3,566	25,000	21,434
Town of Stony Plain ⁴	12,518	15,529	15,484	-45	22,507	32,421	9,914
Subtotal	46,921	66,261	89,892	23,631	95,555	190,194	94,639
Village of Thorsby	945	1,153	3,000	1,847	1,622	5,000	3,378
Village of Warburg	621	735	1,000	265	1,004	2,000	996
Village of New Sarepta	410	486	1,200	714	664	2,400	1,736
Village of Wabamun	601	691	750	59	917	2,000	1,083
Subtotal	2,577	3,065	5,950	2,885	4,207	11,400	7,193
Total	1,046,710	1,291,623	1,350,532	58,909	1,737,796	1,929,810	192,014

Table 3: **Capital Region Integrated Growth Management Plan**

These columns reference the Regional Forecast (population projections) described in the "Capital Region Infrastructure Revie®opulation and Employment Forecasts prepared by Applications Management Consulting Ltd. (Appendix A to this report).

² Parkland County's Regional Forecast population figures in this report include those of the former Village of Entwistle presented in Appendix A. The Village of Entwistle dissolved into a hamlet under the jurisdiction of Parkland County effective December 31, 2000.

⁴ The pown of Lamont and the Town of Bon Accord did not provide a population projection for 2041. The Project Team conducte**gm** with rate trend analysis, based on each municipalities 2016 population projection, to generate the 2041 population projection for 2041. The Project Team conducte**gm** with rate trend analysis, based on each municipalities 2016 population projection, to generate the 2041 population projection for 2041. The Project Team conducte**gm** with rate trend analysis, based on each municipalities 2016 population projection, to generate the 2041 population projection for the Town of Stony Plain is based upon an annual growth rate of 3%. Note: The population fridan Reservations are not included in this report.

In addition to these population projections, detailed maps were prepared describing regional population and employment growth. The maps show that population growth is directly tied to transportation corridors and is centred around employment areas. Specifically, the projections show that:

- The existing population is clustered around urban centres with the greatest population increases along the urban fringe. Employment is heavily concentrated in Edmonton's mature areas and in developments along transportation corridors in Fort Saskatchewan, the Queen Elizabeth II Highway in Leduc County, and the Yellowhead Highway in Spruce Grove and Stony Plain.
- In 2016, population growth is expected to be most pronounced around Edmonton's fringe, with new growth areas located in the eastern portion of Parkland County, the southern portion of Sturgeon County, the central portion of Strathcona County, and the central portion of Leduc Country.
- By 2041, population growth is expected to intensify around the City of Edmonton's urban fringe and growth areas are further defined on lands adjacent to the Yellowhead Highway in Parkland County, lands adjacent to Anthony Henday Drive and along Edmonton's southern boundary, and new growth areas east and west of the Queen Elizabeth Highway in Leduc County, Strathcona County's central area, and the Fort Road corridor in Edmonton and Fort Saskatchewan. Employment growth is expected to intensify along transportation corridors, especially along the Queen Elizabeth II Highway and Fort Road.

Municipal views

Overall, the combined population projections for the individual municipalities are nearly 12 percent higher than the projection developed for this report; however, the municipalities generally agree that the overall forecast of population growth for the region as a whole is reasonable. A number of municipalities disagree with the specific forecasts for their municipalities and believe their growth will, in fact, be greater than what is projected in this report. Analysis of these discrepancies suggests that they are not large enough to cause changes to the projected infrastructure needs; however, the timing of planned infrastructure may need to be advanced. This is an area that should be monitored and adjusted on an ongoing basis as new information becomes available.

Land use

Based on consultations with individual municipalities and a compilation of all available information, consultants developed a detailed profile of each of the 25 municipalities including population and employment data, land use plans and future land use considerations, a summary of statutory planning documents, Municipal Development Plan policies affecting growth, and additional pertinent information.

Current land use plans

Under the *Municipal Government Act*, each municipality is responsible for planning and developing their lands in an orderly and economic manner. A hierarchy of plans is approved as municipal bylaws including Inter-municipal Development Plans (IDPs), Municipal Development Plans (MDPs) and Area Structure Plans (ASPs).

Our review indicates that all municipalities place a high priority on land use planning. At the time of preparing this report:

- Five municipalities were preparing new Municipal Development Plans
- Some municipalities are aware of land use conflicts along their common boundaries and some were initiating inter-municipal studies to determine or resolve land use conflicts
- Only three Inter-municipal Development Plans exist Sturgeon County and the City of St. Albert, Leduc County and the Town of Beaumont, and Leduc County and the City of Leduc
- Many municipalities are looking to annex land to provide an adequate supply of residential and industrial lands; some are concerned about the time and effort required to annex lands
- Some municipalities are concerned that they do not have the staff or resources to adequately support their anticipated growth rates or prepare long-range planning documents

The project team consolidated 25 future land use plans to create a composite image of current and planned municipal land use for the Capital Region. This consolidated image highlights the key planning issues for the region and the need for an integrated land use plan to be prepared.

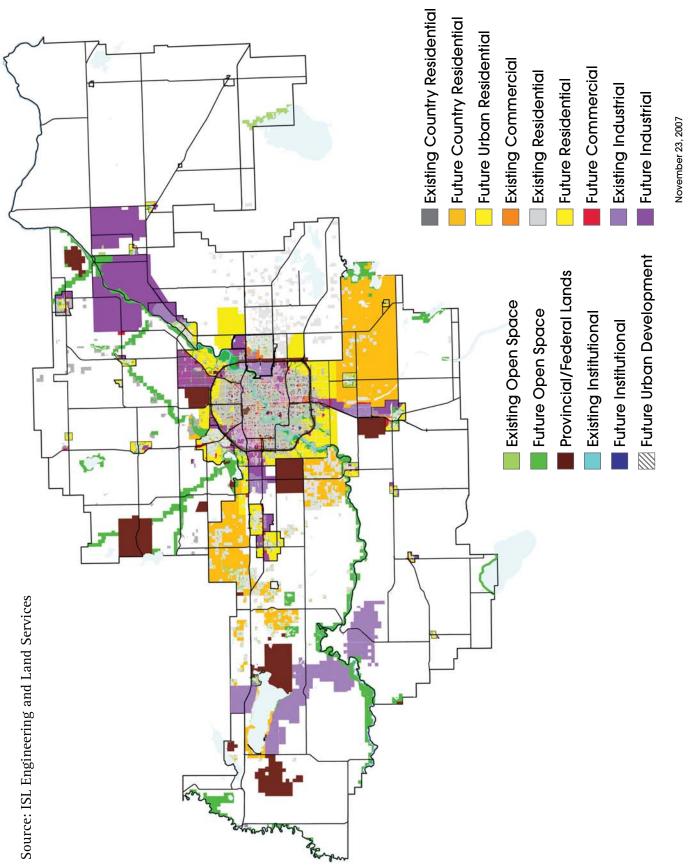


Figure 1: Current and Planned Municipal Land Use

Identifying gaps and issues

The compilation of the various land use plans uncovered numerous gaps and issues. The gaps fall into four main categories: legislative gaps, operational gaps, structural gaps, and technical gaps.

Overall, it is important to note that there is no regional land use plan for the Capital Region – only a composite of plans from individual municipalities. This is certainly the most serious gap and one that could have a negative impact on future investment in the region as well as on plans for meeting the essential core and social infrastructure needs resulting from growth in the region.

Legislative gaps and issues

- Because there are no detailed legislated requirements for Inter-municipal Development Plans and Municipal Development Plans, the content and level of plans varies widely among municipalities and only three Inter-municipal Development Plans are in place.
- A number of municipalities do not have a Municipal Development Plan and some plans are out of date.
- A range of inter-municipal planning issues in various parts of the region are not being addressed.

Operational gaps and issues

- A number of gaps and potential land use conflicts were identified around the fringe areas of
 municipalities in the Capital Region. Development setbacks (e.g. buffers between heavy industry
 and incompatible uses, safety setbacks between railways and residential lands) vary from
 municipality to municipality and cause land use conflicts. The designation of large areas of
 country residential development near urban centres is also an issue because it constrains urban
 growth and increases pressure for services from the urban centres. It also potentially increases the
 overall costs of providing roads and services in the region.
- Several municipalities in the Capital Region have experienced conflicts over land use plans. For example, a dispute between the City of Edmonton and Strathcona County is currently before the Municipal Government Board.
- Many urban municipalities in the Capital Region will need to consider annexation before 2041; however, the current Municipal Government Act does not contain criteria for determining the need for annexation. This results in the potential for land use conflicts when future annexation bids are proposed.
- Some urban municipalities in the region are constrained in where future growth can occur because they are largely surrounded by physical features and adjacent developments. They may need to consider accommodating more growth within their existing boundaries through infill and redevelopment as opposed to outward expansion.

Structural gaps and issues

- Growth in the Capital Region will also affect nearby municipalities (in addition to the 25 municipalities included in this project) and a number of potential issues have been identified.
- Predicting the pace and location of development is a challenge. Although municipalities have plans for growth, private sector developers and market demand have a direct impact on where and when development occurs and new industrial areas proceed.
- There currently is no effective forum for regional decision making and planning.

• Legislation to protect existing highways does not extend to future Transportation and Utility Corridors and regional roads. Without a commitment from individual municipalities, land for potential regional roads and Transportation and Utility Corridors cannot be protected.

Technical gaps and issues

 A common database of information and consistent standards are not in place. Twelve of the municipalities use a GIS approach and the remaining 13 rely on the Alberta Capital Region Alliance (ACRA) for mapping. The lack of a consistent approach is a serious barrier to future land use planning for the region.

Municipal views

Municipalities reviewed the land use inventory and gaps identified by the consultants. Some municipalities identified areas where they do not agree with the specific gaps noted in the detailed reports. Those specific issues should be the subject of future discussion as one of the essential next steps to develop a detailed land use plan for the region. In spite of disagreement by some municipalities, overall, many municipalities recognize the importance and value of an integrated land use plan for the Capital Region.

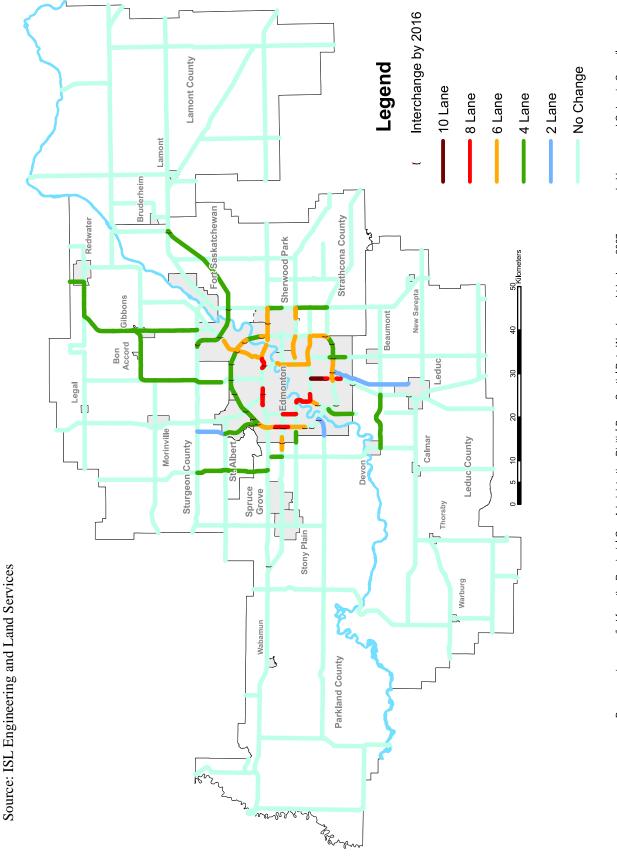
Core infrastructure

For the purposes of this framework, core infrastructure includes: highways and roads, transit, pipelines, solid waste management, water and wastewater, process water, and rail, airports and power. Detailed information about municipal, provincial and private sector plans in each of these key areas has been compiled and provided to municipalities.

Highways and roads

As part of this project, a draft ten-year highways and roads plan has been developed based on input from municipalities, Alberta Infrastructure and Transportation, and traffic modelling analysis based on anticipated growth patterns. The plan includes provincial highways, major roads connecting regional centres, and over-dimensional load corridors and reflects the population and growth projections used as the basis for this overall framework. This type of ten-year plan is essential to ensure that the necessary roads and highways are in place to support residential, industrial and commercial development in the Capital Region.

There is general agreement on this draft ten-year plan. Some minor adjustments may still be required, particularly in the Industrial Heartland area where further review will be necessary. Long-term highway needs should be reassessed once agreement is reached on land use plans.



Base mapping compiled from the Provincial Geo Administrative Digitial Base, Spatial Data Warehouse Ltd., June 2007, as amended by approved Orders in Council. Other digital data provided by Alberta Infrastructure and Transportation, the City of Edmonton's Transportation Department, GeoEdmonton, and Alberta Municipal Affairs and Housing, July & August 2007. .

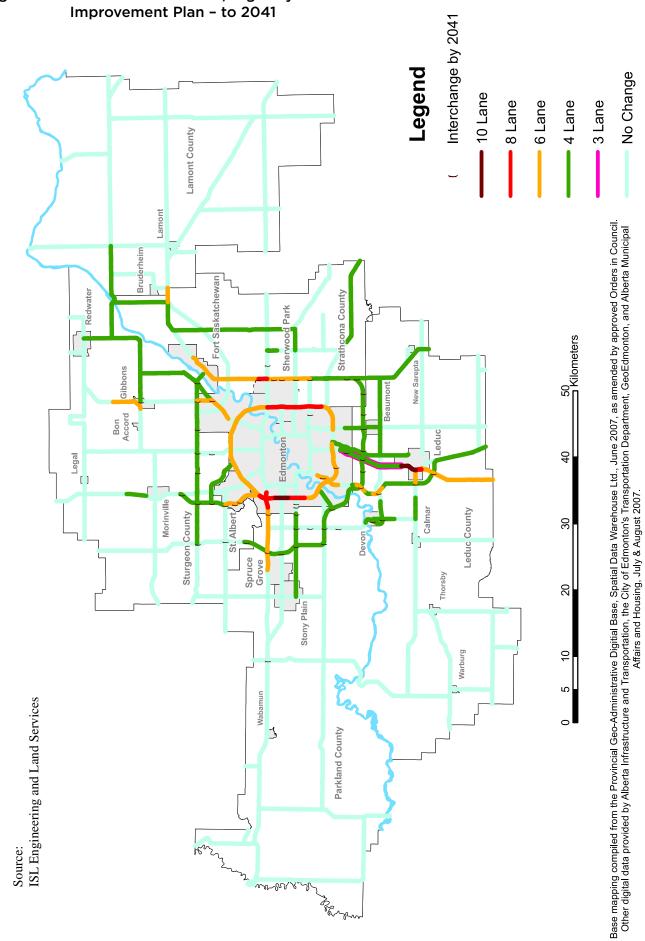


Figure 3: Next 35 Years Roads/Highways Improvement Plan - to 2041

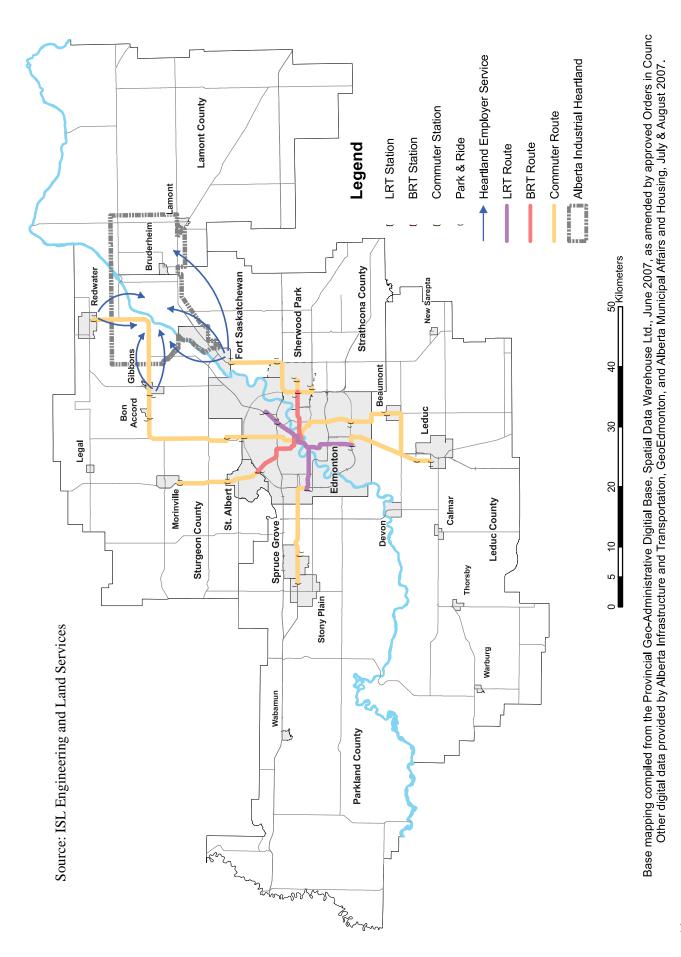
- The biggest gap to date has been the lack of published provincial ten-year and longer capital plans for the region.
- While there is a positive relationship between the province and municipalities in planning for highway infrastructure projects, ongoing discussion and coordination will continue to be essential in order to anticipate and respond appropriately to growth pressures.
- Additional regional transportation model runs are required to resolve outstanding capacity issues, supplemented by functional planning studies.
- Additional consideration needs to be given for strategic (e.g. economic and goods movement) and safety-driven improvements.
- Specifically, the ten-year plan identifies the need to:
 - Plan for railway grade separations based on CNR and CPR expansion plans. Rail traffic is expected to increase significantly in the Capital Region. Appropriate plans are required to ensure the orderly movement of traffic and adequate emergency service response.
 - Plan for industrial growth nodes in Nisku and at the Edmonton International Airport. A number of improvements have been identified to meet the growing traffic needs along the Queen Elizabeth II Highway corridor and the immediate area. A major planning study for the QE II Highway between Edmonton and Leduc is currently underway and will provide further data and recommendations on the preferred highway upgrades in the area.
 - Finalize the scope of improvements, their relative priority and the timing for highway and road plans for the Industrial Heartland.
 - Finalize plans and timing for the regional ring road. Significant planning work is required including determining the alignment, anticipating the impact of new developments, and identifying potential linkages to developments in the Industrial Heartland, particularly the Fort Saskatchewan bypass, within the next ten years.

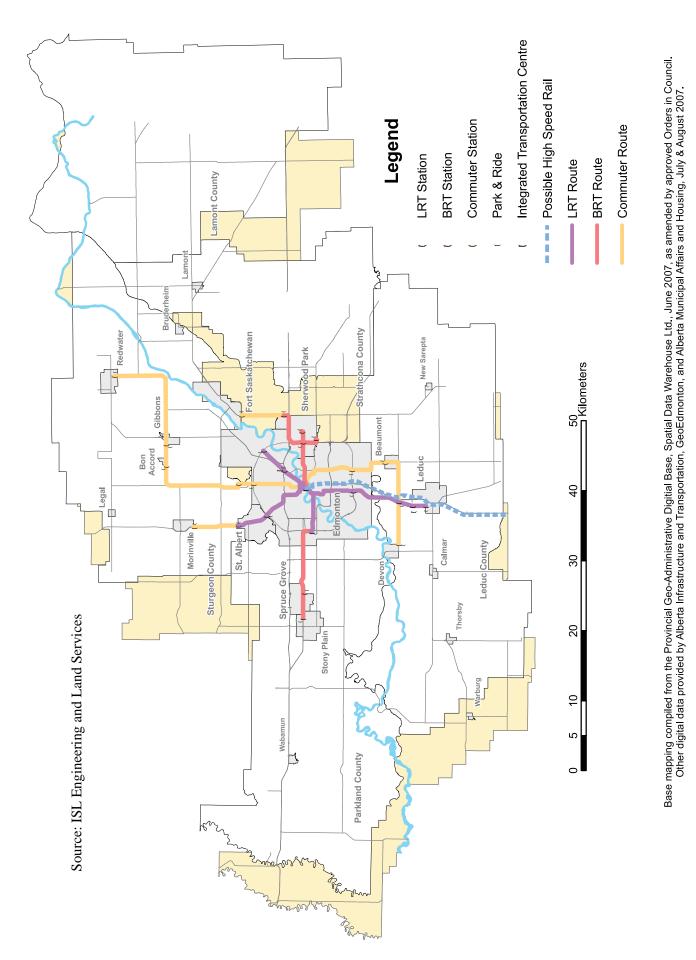
Inter-municipal Transit

The study of transit plans and needs in the Capital Region includes regional bus services, Light Rail Transit (LRT), taxi, specialized transportation services for people who are mobility challenged, and connections to trans-regional transportation services.

Forecasts of both population and employment growth indicate the need to consider and plan for multiple commuting solutions, in addition to roads and highways. There are a number of transit services throughout the region and efforts have been made by municipalities to connect these services and facilities. However, these efforts have been hampered by the lack of a common planning framework to service municipalities and accommodate future growth.

As part of this framework, a concept has been developed for a potential inter-municipal transit network to serve the region's population to 2041. Municipalities generally agree that a ten-year regional transit plan is required; however, they disagree on how such a plan should be implemented. Further work is required to develop a detailed transit plan and integrate that plan with land use plans and plans for highways and roads.





- The primary gap is the absence of an integrated regional transit plan.
- By and large, there is little coordination between land use planning and transportation infrastructure planning and development in the Capital Region. There are no planning policies in the region that specifically guide the development of transit-oriented developments.
- Transit needs have not been incorporated into regional highway plans. As the region grows, it
 will be essential to consider how the regional road and highway network can be adapted to
 accommodate a region that will have to rely more and more on effective transit service to move
 its citizens.

Pipelines

For the most part, people in the Capital Region are unaware of the vast network of pipelines that weave throughout the region. Pipelines are the dominant transportation method for getting Alberta's oil and gas products and by-products to markets across North America.

Future investment and development in the Alberta energy sector will place significant demands on the pipeline infrastructure. Research done for this project indicates that, by 2009, the demand for capacity will exceed what is available from the current pipeline system. In energy hubs, including the Capital Region, future pipelines will compete with industrial, residential, agricultural and other surface developments for space. At the same time, projected population growth and anticipated developments in the region can constrict space for future pipeline access to industrial plants and pipeline terminals.

Given these challenges, municipalities in the Capital Region agree on the need for the Province to establish pipeline routing policy and to protect pipeline corridors.

Crown Reservations Operating Pipeline Protected Areas Legend amont Count tchewan Sherwood Pa Strathcona County 50 Kilometers Sask ns Gibb Beaumont 4 1-1-1 à Leduc 8 Edmonton 20 1 \mathbf{P} Morinville Albe Sturgeon County Coun St. 9 Ċ Spruce Stony Plain Source: ISL Engineering and Land Services mun Waba Parkland County 10 Enzy. source on the 75 North Contraction

Figure 6: Current Pipeline Infrastructure in the Capital Region



- Uncontrolled, uncoordinated development of pipeline routes results in land fragmentation and bottlenecks can restrict further development, especially in congested areas of Edmonton, Fort Saskatchewan and the Industrial Heartland.
- Currently, there is no entity mandated to study the pipeline needs of the Capital Region and to work with stakeholders to develop long-term plans.
- Designated utility corridors in the Capital Region would facilitate planning and location of future pipelines in dense urban areas and minimize further land fragmentation.
- The provincial government will need to establish pipeline policy and corridors for the region.

Waste management

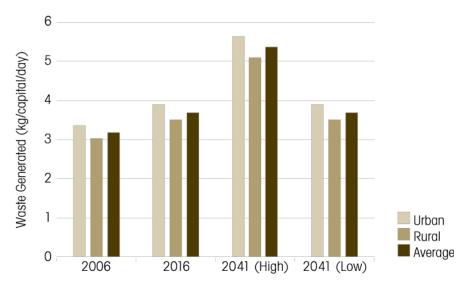
If municipalities in the region choose to simply dispose of their waste, there is more than enough landfill capacity to accommodate anticipated demand for the foreseeable future. However, there is an increasing expectation that waste should be diverted from landfills as much as possible and, in this case, it is less certain that there is sufficient regional infrastructure to meet this objective.

Many municipalities and community members in the Capital Region are already actively involved in limiting waste and in embracing new approaches to divert solid waste from landfills. Recycling has become a common practice for many citizens in the region and many municipalities have programs in place to encourage recycling. The City of Edmonton's integrated waste management system is recognized as one of the best in the world. However, most municipalities in the region do not have waste diversion infrastructure in place.

Looking to the future, two factors will drive the volume of waste generated in the region: population growth and economic growth. The following tables indicate that waste management will become an increasing challenge as the region looks ahead to 2041. Even using lower forecasts, the estimated amount of waste generated in the Capital Region will grow from over 1.26 million tonnes in 2006 to almost 2.43 million tonnes by 2041. Of that total, the amount of waste disposal to landfills is expected to increase only slightly while the amount of waste diverted to other options will increase substantially. The Beaver Regional Landfill near Ryley and the proposed Waste Management of Canada site at Thorhild can supply enough capacity to meet the region's needs but the diversion capacity is more limited and must respond to growing needs.

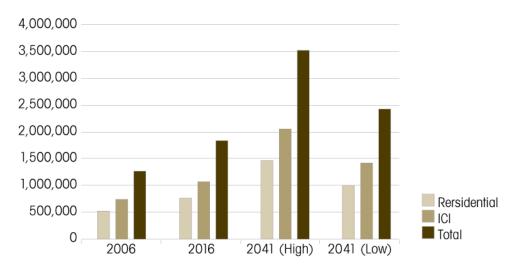
It's also important to note that the provincial government has set a voluntary target of a maximum of 500 kg of waste per capita per year being disposed of in landfills by 2010. To put that in perspective, the current amount of waste disposed in landfills in the region is 1146 kg per capita per year (or 3.14 kg per capita per day) and the amount is growing at a rate of 1.5 percent per year.

Figure 7: Volume of Waste Generated in the Capital Region



Source: ISL Engineering and Land Services

Figure 8: Waste Generation Rates, Capital Region



Source: ISL Engineering and Land Services

- Population and economic growth in the region will increase the challenge of limiting waste and diverting more from landfills.
- There is a large gap between waste diversion infrastructure and the targets for reducing waste going to landfill. This includes the need for a regional approach for transferring and hauling waste and for encouraging the necessary investment to support waste diversion.
- Regional cooperation may be required in order to meet the provincial government's target for the Capital Region.

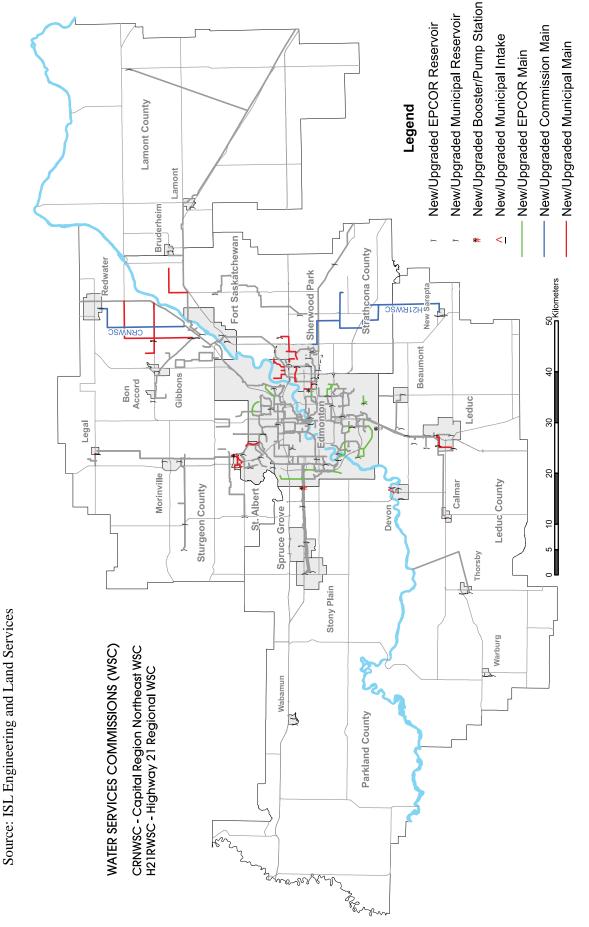
Water and wastewater

The North Saskatchewan River is the primary source of water in the Capital Region – 22 municipalities rely on the river for their water supply while three municipalities have groundwater aquifers. EPCOR supplies potable water to 20 of the 25 municipalities in the region, using two water treatment plants – E.L. Smith and Rossdale. Of these 20 municipalities, the City of Edmonton, Strathcona County, St. Albert, Morinville and parts of Sturgeon County are all supplied directly. The remaining municipalities are supplied by five regional Water Service Commissions. There are a total of seven water treatment plants in the Capital Region.

With respect to wastewater, 15 communities are serviced by mechanical wastewater treatment plants while the remaining communities are serviced by lagoons. The Town of Devon and the City of Edmonton have their own wastewater treatment plants and the Alberta Capital Region Wastewater Commission (ACRWC) operates a plant on behalf of its 13 member municipalities.

The City of Edmonton's Gold Bar Wastewater Treatment Plant treats wastewater for over 95 percent of Edmonton plus the ACRWC south communities. The ACRWC Wastewater Treatment Plant treats wastewater from northeast Edmonton and municipalities located northeast and northwest of Edmonton. The Gold Bar Wastewater plant has limited room for expansion. The ACRWC plant has adequate space on its site to expand the plant capacity by more than tenfold.

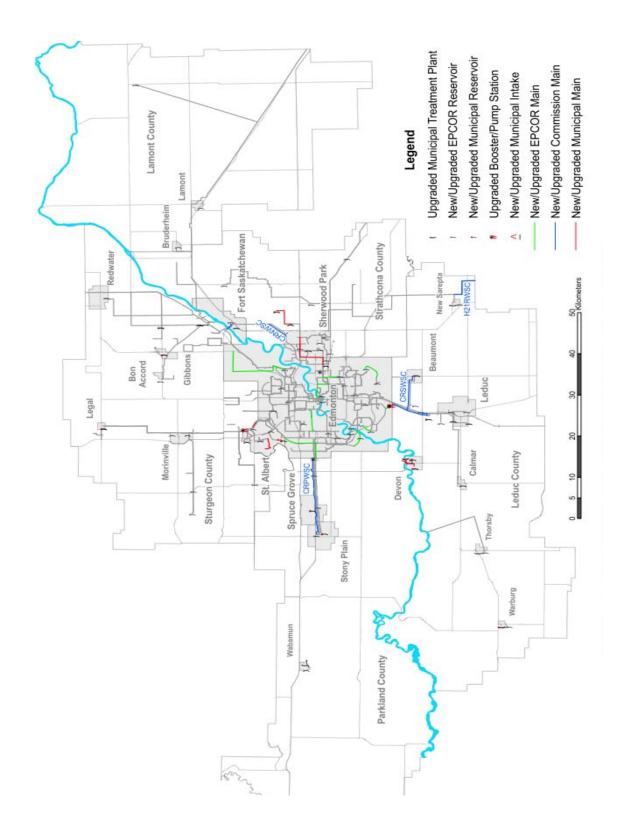
There is general agreement that the water and wastewater system, including the regional commissions, are working well at this time. This should be monitored over time to ensure that the necessary capacity is in place to meet the demands caused by growth in the region.



Base mapping compiled from the Provincial Geo-Administrative Digitial Base. Spatial Data Warehouse Ltd., June 2007, as amended by approved Orders in Council. Other digital data provided by Alberta Infrastructure and Transportation, GeoEdmonton, Alberta Environment, EPCOR Water, the City of St. Albert, UMA Engineering Ltd., the Town of Devon, Sturgeon County, the Department of National Defense, Associated Engineering, Strathcona County, and Alberta Municipal Affairs and Housing, July & Augusta 2007.

35

Figure 9: Water Network Projections to 2016





Base mapping compiled from the Provincial Geo-Administrative Digitial Base, Spatial Data Warehouse Ltd., June 2007, as amended by approved Orders in Council. Other digital data provided by Alberta Infrastructure and Transportation, GeoEdmonton, Alberta Environment, Stewart, Weir & Co. Ltd., the City of Edmonton's Asset Management and Public Works Department, the City of St. Albert, the Town of Devon, Sturgeon County, Strathcona County, and Alberta Municipal Affairs and Housing, July & August 2007.

- The system is working well, however, it should be noted that regional water and wastewater commissions do not service all regional users. This may result in a potential difference in health and safety standards, cost and the level of service for all users.
- Regional commissions have no mandate for expansion to other municipalities.
- In terms of wastewater, only a few minor gaps were noted.

Process water

The impending growth of heavy industry in the Industrial Heartland has raised concerns about the potential water requirements for the area. Eight upgraders are currently planned for the region and additional upgrading and refining capacity is anticipated. When completed, these upgraders could require in total in the order of 200 to 240 megalitres per day (ML per day). To put this in context, the entire Capital Region currently uses about 350 ML per day. The primary source of water in the region is the North Saskatchewan River.

Several studies have been undertaken to determine how the needs for water can be met in the Industrial Heartland and the potential impact on the watershed in the region.

- A study was undertaken for Sturgeon and Strathcona Counties by Morrison Hershfield on the feasibility of using process water (water that has been used and treated for re-use in industrial facilities).
- Alberta Environment commenced a watershed study of the North Saskatchewan River in April 2007 to protect the aquatic environment, set objectives for water quantity and quality, and assure that the development in the Industrial Heartland is within the capacity of the North Saskatchewan River's ecosystem. Results of this study indicate that there is sufficient water in the North Saskatchewan River to accommodate the projected growth, but water quality is a concern.
- In the fall of 2007, the Minister of Environment created an advisory committee called the "Water Committee for the Industrial Heartland and the Capital Region." It includes representatives from Alberta Environment, municipalities, the Alberta Capital Region Wastewater Commission, industry and utility companies. The Committee's objective is to develop an "integrated dynamic regional framework" and to address issues of providing process water to the Industrial Heartland while ensuring sustainability of the North Saskatchewan River watershed.

A number of options are being considered but, at the time of this report, the Water Committee's report and the Minister of Environment's response have not been concluded. Both are expected before the end of 2007. (Further discussion about this issue is included in Chapter 4.)

Gaps and issues

Industrial development in the Industrial Heartland may be delayed until this issue is resolved.

Other infrastructure issues - rail, airports and power

The regional planning project also looked at the potential impact of growth in the Capital Region on railways, airports and power. Again, detailed information on each of these areas has been provided to municipalities.

Railways

- The Capital Region has the distinct advantage of direct rail access to both the Port of Vancouver and the Port of Prince Rupert.
- Most railway expansion plans are related to the Industrial Heartland.
- The expansion of the Port of Prince Rupert will push more container traffic to and through the Capital Region.
- Industrial growth at the Edmonton International Airport may require a new rail line.
- As noted in the highways and roads section, the impact of increased rail traffic will drive the need for new grade separations with major roads and highways.

Airports

- There are 14 certified airports and registered aerodromes in the Capital Region.
- Edmonton passenger volume climbed by 15.5 percent in 2006 and previous forecasts by the Edmonton Regional Airports Authority for 2015 have already been reached.
- Five airports in the region have significant infrastructure and can be expanded to meet air traffic beyond 2041.
- Plans have been developed for significant expansion at the Edmonton International Airport including plans for Port Alberta. One issue identified as part of the study is the need for public transportation to the International Airport.

Power

- Demand for electricity is expected to increase substantially as a result of growth in the region. At the same time, the Capital Region has an excess of generation capacity and that is expected to continue until 2041. However, electricity supply and demand is balanced on a provincial basis and power generated in the region is transmitted throughout Alberta.
- The Alberta Electric System Operator is responsible for planning transmission systems and coordinating the supply and generation of electricity.
- While there are a number of issues related to timing and load requirements for large projects, capacity in the region, and location of future transmission lines, those issues are the responsibility of the Alberta Electric System Operator.

- Some new infrastructure will be needed to meet projected growth; however, investment is driven by the private sector.
- Transportation and utility corridors should be designated to assist in future planning for pipelines and power transmission lines.

Municipal views

Individual municipalities reviewed the detailed plans for core infrastructure and identified areas where corrections, additions and adjustments were required. Overall, many, but not all, of the municipalities in the region agree that some regional planning is important to address the impacts of growth and to take steps now to put the necessary infrastructure in place. In some cases, municipalities prefer to develop sub-regional plans – working with several other municipalities on issues where they share a direct interest rather than engaging the Capital Region as a whole. This is apparent for counties in the Industrial Heartland. In other cases, municipalities agree on the need for a regional plan for key areas of core infrastructure (e.g. highways and roads or transit) but they disagree on how such plans should be developed and implemented.

Based on input and advice from municipalities, the following areas are the key priorities for regional planning:

- Developing a land use plan
- Developing and refining a detailed ten-year transportation plan for highways and roads
- Developing a regional transit plan
- Designating transportation, pipeline and utility corridors

Social infrastructure

Planning for future land use and core infrastructure needs such as roads and highways, transit and pipelines is important for the Capital Region. But there is more to the Capital Region than roads and concrete. Growth in the region will also bring added pressure on social services and programs to support a growing and diverse population. As the Capital Region grows and changes in the years to come, important steps need to be taken to maintain and enhance the quality of life the region offers to current and future residents.

This regional planning project included a comprehensive review of current and anticipated demands in housing, health care, policing, emergency services, social services, child care, kindergarten to grade 12 and post-secondary education, and recreation.¹⁵ Primary responsibility for many of these services lies with the provincial government including housing, health care, social services, child care, kindergarten to grade 12 and post-secondary education. Areas in which municipalities have a greater responsibility include urban policing, emergency services, and recreation.

Projecting future social infrastructure needs is more complicated than projecting future core infrastructure needs because social infrastructure needs are related not only to population size but also to its composition. The Capital Region's future social infrastructure requirements will be influenced by demographic changes, including the aging of the region's population, income levels, the number of people moving to the region without established social supports, the needs and circumstances of immigrants moving to the region, the incidence and nature of addictions and mental illness in the region's population, changes in the recreational preferences of residents, and other factors. The estimates of future social infrastructure needs prepared as part of this project are based primarily on population projections and, where applicable, service delivery standards. The development of more detailed plans in the future will need to take other factors into consideration.

¹⁵ The original terms of reference included 24 municipalities. A subsequent decision was made to include the Town of Lamont. The social infrastructure component does not include the Town of Lamont so all of the information in this section applies to 24 municipalities in the Capital Region. Also, while 35 year projections are included for core infrastructure, social infrastructure requirements were projected for only the next ten years, reflecting the fact that investment decisions for these elements can be made more quickly as conditions in the region evolve.

Some key facts help shape a picture of future needs for social infrastructure in the Capital Region.

- Almost one-fifth of the households in the region are low income and approximately 2,600 people are homeless.
- Aboriginal people make up almost 4.5 percent of the population in the region and that proportion is expected to increase. Current social issues already facing First Nations, Metis and Inuit will require increased support through enhanced social infrastructure.
- Young individuals and families are expected to account for a large share of the region's population growth, with many of these households lacking established local support networks, at least initially.
- Almost 22 percent of the region's population was born in other countries and growth in the number of new Canadians is expected to continue as the region attracts its workforce from around the world. Many of these people will require support in acquiring English language skills and in integrating into communities and the workforce.
- Similar to the rest of Alberta and Canada, the population in the region is aging and this will influence the social supports required in the future.
- Development of the Industrial Heartland is a key workforce challenge. Anticipated projects in the Industrial Heartland will require more workers than the Capital Region will be able to supply. As a result, the region will likely see an influx of a mobile construction workforce of 8,000 to 9,000 people over the next six to ten years. These mobile workers will potentially have an impact on housing, policing and health care, as well as other social services.

Against this backdrop, the following sections provide highlights of plans and identified gaps and issues for social infrastructure in the Capital Region.

Areas of provincial responsibility

Housing

Of all the aspects of the region's social infrastructure reviewed as part of this project, housing is by far the most pressing need. The availability and affordability of housing is a key issue that has the potential to constrain growth in the Capital Region and to affect the quality of life for current and future residents. The impact of a shortage of affordable housing is being felt by a broad cross-section of society, ranging from those who are on waiting lists for social housing to those seeking affordable rental housing or people trying to enter the private ownership market.

The analysis of affordable housing carried out as part of this project takes a broad approach, expanding beyond an examination of 'traditional' social housing to also include the segment of the private housing market that is critical to households in core housing need (defined for the purposes of this project as having low income – less than \$25,000 per year – and spending more than 30 percent of gross income on housing). Categories of social housing that were analyzed include emergency shelters, transitional housing, supportive housing and independent social/subsidized rental housing. The segment of private market housing of concern includes affordable housing options for those who no longer require social housing, lower income people in the region, and many of those coming to the Capital Region seeking employment.

The following key points highlight the seriousness of the issue.

- Housing prices have doubled and rental rates have increased by 50 percent in the past five years. Affordability has become an issue not only for people who need social supports but also for a broader cross section of people in the region, including many who are employed. Estimates are that 15 percent of households in the Capital Region are in core housing need.
- The average sale price for a single-detached home in August 2007 reached just over \$400,000. The majority of houses in the region are no longer affordable for households with average incomes (who are not already homeowners). The market is not expected to self-correct the large affordability gap, given the projections for continuing strong population growth. This could deter individuals and families from moving to the region for employment opportunities, adding to the region's current workforce challenges.
- The rental vacancy rate of 0.7 percent is at a historic low which, in turn, drives up rental rates. This places an additional strain on low or fixed income households. This situation may ease somewhat as the vacancy rate appears to be rising and pressures on rental rates are currently diminishing.
- New rental projects are not financially attractive for developers and many existing rental complexes are being converted to condominiums.
- For social (non-market) housing, demand exceeds the supply for all types.

Looking at the full continuum of housing needs, the study also identified the fact that the majority of social housing units are provided in the City of Edmonton. The small amount of social housing available in the rest of the region consists primarily of subsidized seniors lodging.

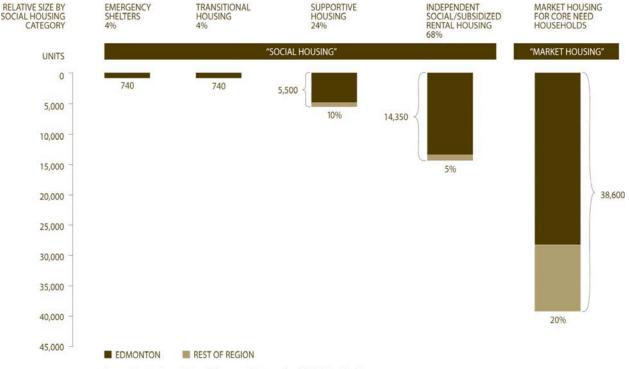


Figure 11: Supply of Housing for Households in Core Need

Source: Housing Branch, City of Edmonton (Estimates) and Nichols Applied Management

- Projected demand for housing to meet the growth in core need in the Capital Region is estimated at 16,000 units by 2016. Of this demand, 5,700 units of social housing will be required while 10,300 households will need to find housing in the private market. Current plans identify 4,000 affordable housing units planned for development by 2016, resulting in a gap of 12,000 units. (This estimated gap does not include the existing shortfall in social housing in the region.)
- A lack of affordable housing could deter future growth in the region.
- Roles and responsibilities for municipal, provincial and federal governments and the private sector (not-for-profit and for-profit housing sectors) regarding social and affordable market housing need to be clarified. There are also differing opinions among municipalities in the Capital Region about whether or not affordable housing is partly a municipal responsibility.
- The concentration of social housing and related social services and supports in the City of Edmonton means that the City is shouldering a larger burden and a higher proportion of the costs of social housing compared to other municipalities in the region.
- Coordination throughout the region as well as pooling of resources would help address anticipated demand and deliver housing supports that are suited to each community's needs.
- Common definitions of social and affordable housing are not in place, and this adds to the difficulty of determining roles and responsibilities and developing the necessary plans.

Category	Current Supply (2007)	Planned Increase Supply (2008-16)	Forecasted Demand (2008-16)	Unplanned Units (Gap) (2008-16)
Social Housing	21,400	4,000	27,100	1,700
Market Housing	38,600	-	48,900	10,300
Total	60,000	4,000	76,000	12,000

Table 4: Summary of Core Housing Need Infrastructure Gap in 2016

Note: Numbers have been rounded. Source: Nichols Applied Management

Health care

Health care is one area in which regional coordination and delivery of services is already in place. Capital Health provides services to the entire Capital Region, except for Lamont County, Lamont and Bruderheim which are served by the East Central Health Region. The delivery of health care services in the Capital Region provides a positive model for regional delivery. Municipalities in the Capital Region have opportunities to work with Capital Health and are engaged in cooperative efforts to promote health and prevent illness and injury in areas such as emergency services, traffic safety, disaster response and population health. Community members also have an opportunity to provide input to Capital Health through Community Health Councils throughout the Capital Region. In addition to serving the residents of the Capital Region, Capital Health also delivers specialized health services to people from across the province and from other parts of Canada. More than one in five patients served by Capital Health is from outside the region.

A review of several benchmarks regarding access to and satisfaction with health care services in the region indicates that there are stressors on the public health system, particularly in relation to emergency department wait times and workforce issues. However, on many indicators the system is faring well in comparison to other health regions in the province.

A number of factors are expected to put added pressure on the health care system in the next ten years.

- The shortage of health care workers is a critical issue. Current estimates are that Capital Health will face a shortage of approximately 5,000 health care providers by 2016. Both Capital Health and the provincial government have developed workforce plans to address these issues but the current shortages are expected to continue to have an impact on the delivery of health services in the region.
- The aging of the region's population will have a significant impact on the delivery of health services including an increased need to serve residents with age-related illnesses (e.g. heart disease and some cancers) and those who need home care and long-term care.
- Population growth in the region, including the likelihood of a large, mobile workforce and increased industrial activity, is expected to place increased pressure on certain health services including emergency department services, primary health care, public and environmental health programs, and mental health services.

The following table highlights the estimated number of additional acute and long-term care beds required in the region.

Time Period	Planned Acute Care Beds	Additional Acute Care Beds Required (Range +/-10%)
2008-2011	452	230-280
2011-2016	140	80-100
Total	592	310-380

Table 5: Estimates for Additional Acute Care Beds

Source: Nichols Applied Management

Time Period	Planned Long Term Care Beds	Additional Long Term Care Beds Required (Range +/-10%)
2008-2011	108	570 - 720
2011-2016		990 - 1,210
Total	108	1,560 - 1,930

Table 6: Estimates for Additional Long Term Care Beds

Source: Nichols Applied Management

Gaps and issues

- Recruitment and retention of health care providers is the most serious issue facing the health system in the region.
- There are plans in place for significant expansion of health-related infrastructure to address both existing backlogs and future demand. However, the population projections developed for this project are higher than those previously used for planning purposes. Serving a potentially larger population will require significant additional capital and operating funding. The gap between population projections used in this report and projections used by Alberta Health and Wellness should be addressed. The gap ranges from a three percent lower projection by Alberta Health and Wellness in 2008 to an eight percent gap in 2016.
- Mobile workers required to meet the workforce demands in the Industrial Heartland will also put
 added pressure on the health care system. However, new hospital facilities are under construction
 in Fort Saskatchewan and Strathcona County and many proponents of heavy industrial projects
 in the Industrial Heartland are planning to have onsite medical services to address some of the
 impacts on the health system from the large onsite workforce.
- Innovation in service delivery, new models of care, and a continuing focus on health promotion and disease prevention are important and could partially mitigate the need for more beds in the region.

Social services

Social services in the Capital Region include a broad range of services delivered by municipal, provincial and federal governments, community organizations, faith communities, and others. This study gathered and reviewed information about: Family and Community Support Services (FCSS), services provided by Child and Family Services Authorities (including Parent Link Centres), emergency shelters for women and youth, services for immigrants and temporary foreign workers, and addictions services.

Social services and supports in the region include:

- FCSS programs and services. All but one of the municipalities in the region have FCSS programs. Municipalities pay at least 20 percent of the costs of these programs, with some covering a significantly larger share of the costs of their FCSS services. Some municipalities in the region collaborate to jointly provide FCSS services to their residents.
- Nine Parent Link Centres.
- Three women's emergency shelters (one with two houses) and two transitional residences.
- Five agencies all in Edmonton that provide immigrant settlement services.
- Alberta Alcohol and Drug Abuse Commission (AADAC) offices and treatment centres in Edmonton, Leduc, Sherwood Park, St. Albert and Stony Plain. AADAC works with community coalitions to address local drug issues. Some of these coalitions involve more than one municipality.

Demand for social services is expected to increase over the next ten years and will put added pressure on existing social agencies in the Capital Region.

- Provincial support for social services, including FCSS, is not keeping pace with demand. Municipalities are closest to social issues but often do not have the mandate or the resources to address them.
- Responding to alcohol and drug abuse problems in the Capital Region requires attention to other social issues including the shortage of affordable housing, the availability of mental health services, and social isolation.
- The Capital Region lacks a regional public transportation system and has a shortage of specialized transportation services for seniors and people with disabilities. This contributes to the challenges many residents face in accessing needed social services and supports.
- The social services sector is facing acute staffing issues. Increases in demands for services are coming at a time when social service agencies are experiencing serious staffing shortages and rising costs. Many workers in the social services field are moving to less stressful and higher paying jobs in other sectors of the economy.
- The number of Temporary Foreign Workers in the region is expected to increase. These workers are currently ineligible for settlement services and English as a second language training.
- Alberta has a high rate of family violence and there is a shortage of shelter spaces for women and children trying to escape from abusive situations in the Capital Region. The shortage of women's emergency shelter beds in the region is expected to increase from 50 to 92 by 2016.
- The City of Edmonton is expected to continue to have a larger share of the region's population
 needing social supports and services, including low income households, people with mental and
 physical disabilities, those with severe substance abuse problems, and people who are homeless.
 The City also has the largest proportion of Aboriginal people and recent immigrants, some of
 whom may also require different types of social supports and services.

Child care

Responsibility for child care is shared between the provincial government and the private sector; however, municipalities in the Capital Region provide support through regulatory changes (zoning and building codes), financial support, municipally-run programs, and other actions to attract licensed child care providers to their communities. Municipalities also provide other support such as assisting community child care groups, running babysitting training, and providing informal child care registries.

Licensed child care programs in the Capital Region include day care centres, family day home providers, drop-in centres, nursery schools, and out-of-school care. The availability and affordability of quality child care is an issue that affects not only individual children and families but also the ability of the region to attract and retain the workforce it needs to support future economic growth.

The provincial government provided \$134 million in 2006-07 to assist child care providers invest in staff and spaces. Some of this funding is being used to provide additional increases in child care subsidies for low and middle income families.

- By 2016, to maintain current service levels, an estimated 5,800 additional child care spaces would be needed for children under the age of six and approximately 200 additional spaces needed for children aged seven to 12. However, the actual demand for licensed child care in the region is expected to be even higher than this because of unmet demand at the current service levels.
- Staff shortages are a serious issue and are expected to continue as child care workers leave for higher paying jobs in other sectors.
- Costs for child care are rising and can be expected to increase pressure for higher subsidies.
- There currently is no provincial subsidy for out-of-school care for children aged seven to 12. There is increasing concern about the number of children in this age group without adequate supervision after school.
- Additional staff training may be required in the future to care for children from different cultural backgrounds and at-risk children.
- Demand for child care outside of regular working hours is expected to increase.

Table 7:Summary of Future Requirements for Child Care Provision in the
Capital Region

	GAP	Percent Increase from 2006 Levels			
Estimated Number of Licensed Spaces to be added between 2007 and 2016					
Licensed Spaces for Childre	Licensed Spaces for Children under the Age of 7				
City of Edmonton	3,700	19%			
Other Municipalities in the Capital Region	2,100	37%			
Total Capital Region	5,800	23%			
Licensed Spaces for Children between the Ages of 7 and 12					
City of Edmonton	100	8%			
Other Municipalities in the Capital Region	100	27%			
Total Capital Region	200	12%			
Total Licensed Spaces for Child	Iren under the Age	of 13			
City of Edmonton	3,800	18%			
Other Municipalities in the Capital Region	2,200	36%			
Total Capital Region	6,000	22%			
Estimated Number of Additional Child Care Staff - Total Capital Region					
Number of Additional Child Care Workers 2007-2016	950	22%			

Source: Nichols Applied Management

Kindergarten to Grade 12 Education

Schools are an integral part of a community's social infrastructure. Education enhances the quality of life of individuals and communities and helps to build the workforce that the region will need in the future.

Alberta is recognized as having one of the best kindergarten to grade 12 education systems in the world. Within the Capital Region, education is delivered by 12 school boards as well as a number of charter and independent schools. One of the hallmarks of the region's education system is the wide array of choice that is provided within the public system.

By 2016, enrolment in elementary and junior high schools in the Capital Region is forecast to increase by 11,900 students, with the largest increases projected in the inner city of Edmonton (where substantial expansion of condominiums and redevelopment is expected), southwest Edmonton, and in quadrants outside of Edmonton. While the region's overall high school aged population is projected to increase only modestly by 2016, projections indicate that there could be a substantial increase of almost 900 high school students in the eastern part of the region.

Gaps and issues

- Plans have been announced for 10 new schools in the Capital Region from 2007 2017. These approved projects will add 6,840 spaces at the elementary and junior high school level and 1,225 spaces at the high school level. All of the currently approved projects except one are located within the City of Edmonton. Based on the analysis done for the project, up to ten additional new schools could be needed in the Capital Region by 2016 to accommodate projected enrolment growth outside of Edmonton nine at the elementary/junior high level and one high school.
- Over 660 teachers and 380 additional non-teaching staff will be needed in the region by 2016. Some school jurisdictions are already experiencing difficulty in recruiting and retaining staff for certain positions including Instructional and Special Needs Teaching Assistants, administrative and custodial staff, and bus drivers.
- Balancing the growing demand for new schools in areas with high population growth with the desires of mature neighbourhoods to retain their schools is a major challenge for school jurisdictions in the region.
- High school completion rates continue to be a concern. High school completion rates for school jurisdictions in the region range from a low of just over 56 percent to a high of 82 percent. Continued investment is needed in programs and supports for students at risk of not completing school.

Post-secondary education

The Capital Region is home to several well-established post-secondary institutions including the University of Alberta, Grant MacEwan College, Norquest College, Concordia University College, Taylor University College, King's University College, and the Northern Alberta Institute of Technology (NAIT). These institutions provide close to 60,000 full-load equivalent enrolments (equivalent to over 90,000 students) in the Capital Region. Just over 70 percent of students enrolled in publicly-funded post-secondary institutions in Capital Region come from the region while the remaining 30 percent come from other parts of Alberta, across Canada and around the world.

Demand for access to post-secondary education and training programs is expected to increase to 2016 as a result of the region's growing population, pressures from economic growth, and demands for a highly skilled workforce. Current provincial plans include a commitment for \$800 million in infrastructure funding which will add enough capacity to accommodate an additional 5,480 full-load equivalents by 2011.

- The analysis done for this project indicates that a total of 73,141 full load equivalent spaces will be required at publicly-funded post-secondary institutions in the Capital Region in 2016. This is 1,092 higher than current projections from Alberta Advanced Education and Technology.
- The provincial government's plan to add capacity for an additional 5,480 full-load equivalents only partially covers the infrastructure required to meet the enrolment demand estimated in this report. Over the 2008 to 2016 period, annual enrolment demand is expected to increase by approximately 12,485 full-load equivalents. Therefore, infrastructure capacity for a further 7,005 full-load equivalents could be required.
- Given the projected demands, accessibility is a continuing concern. According to Alberta Advanced Education and Technology, over 5,300 qualified Alberta applicants were turned away from publicly-funded post-secondary institutions in the province in 2005-06. That translates into an estimated 2,100 to 2,600 qualified applicants turned away in the Capital Region. This issue will need to be addressed at the provincial level.
- Demands for access to post-secondary education are highest in health sciences and apprenticeship
 programs to meet critical shortages in the workforce. Population growth is also expected to result
 in higher demand for post-secondary programs and services including workforce training,
 language training, foreign qualifications assessment, and student financial assistance.
- With the exception of apprenticeship training, Alberta has among the lowest post-secondary participation rates in the country. If this issue is not addressed, it will put added pressure on recruiting highly skilled people from outside the province.

Areas of municipal responsibility

Policing

Policing plays a critical role in maintaining safe and secure communities. In addition to law enforcement, police services are involved in crime prevention, public education, assisting in locating missing persons, dealing with lost property, traffic control, victim assistance and accident investigation. Specialized police services are also involved in serious crime, drug enforcement, intelligence gathering, organized crime, and forensic work.

In the Capital Region, policing services are provided through the Edmonton Police Services and the RCMP. Under Alberta legislation, all urban municipalities with populations over 5,000 are required to provide or contract for their own police services. The City of Edmonton is the only municipality in the Capital Region that has its own police service. The other municipalities are served by the RCMP, nine through contracts between the municipality and the RCMP and 14 through the Provincial Police Service Agreement (where the provincial government negotiates an overall agreement with the federal government and services are provided by the RCMP).

Anticipated growth in the region will result in the need for additional Edmonton Police Services and RCMP officers. Overall, the analysis projects a need for over 400 new officers in the Capital Region, including both Edmonton Police Services and the RCMP. Approximately 45 new officers will be required annually from 2008 to 2016. This could also result in the need to build or expand police stations across the Capital Region.

The Public Security Peace Officer Program has also emerged as a viable complementary program for police services. This could have an impact on forecasts for the number of police officers required for the Capital Region, but further analysis will be needed to determine the anticipated impact.

Year	Population	Police Officers	Increase over 2006	Officers per 100,000 Population
2006	718,788	1,356		189
2011	812,112	1,535	179	189
2016	880,144	1,663	307	189

Table 8: Projection of Police Officers Required in the City of Edmonton

Sources: Population projections from Applications Management Consulting Ltd.; 2006 data from Statistics Canada.

Table 9:Projection of Police Officers Required in the Capital Region Outside of
the City of Edmonton

Year	Population	Police Officers	Increase over 2006	Officers per 100,000 Population
2006	306,158	303		99
2011	373,559	370	67	99
2016	406,124	402	99	99

Sources: Population projections from Applications Management Consulting Ltd.; 2006 data from Statistics Canada.

- There is good cooperation at the operational level among police services in the region, but there is no regional strategic plan for policing. Regional planning and coordination would improve the efficiency and effectiveness of service delivery across the region.
- Demands for police services are expected to increase in response to demographic, societal and economic changes including increased levels of drug trafficking, gang activity, and youth crime.
- All police services face a serious challenge in attracting and retaining staff. This will make it more difficult to meet increasing demands for police services in the future. A regional approach could help in addressing staffing needs across the region.
- Municipalities indicate there are inequities in the financing of police services, with larger urban municipalities absorbing a larger burden of policing costs than rural and smaller urban municipalities.
- The Provincial Police Service Agreement with the RCMP expires in 2012 and will have to be renegotiated before then.

Emergency services

Emergency services include both fire and ambulance services provided by all municipalities in the Capital Region. Delivery methods vary across the Capital Region in terms of the level of integration of fire and ambulance services, the level of coordination with other municipalities, and the reliance on part-time volunteer services rather than full-time career staff. Emergency services are the responsibility of municipalities and are funded by rate payers and users of the services (in the case of ambulance services). Alberta Health and Wellness provides \$19 million to support ground ambulance services in the Capital Region. In addition to fire suppression, fire departments often coordinate disaster planning for a municipality or an industrial area.

A total of 62 fire stations (including those jointly occupied by ambulance services) are located throughout the Capital Region. This includes 38 stations outside of Edmonton and 24 fire stations within the City of Edmonton. There also is a fire service located at the Edmonton International Airport. Other fire services in the region include a number of industrial fire stations attached to major industrial developments.

Ambulance services for the region are provided by 67 ambulances operating out of 34 ambulance stations.

- In terms of fire services, the analysis carried out for this project identifies the need for an additional seven to 12 fire stations beyond what is currently planned. In total, it is estimated that ten to 15 new fire stations will be required in the Capital Region by 2016.
- While there is cooperation among municipalities on disaster planning, a regional disaster plan is not in place and should be developed, particularly in view of substantial industrial developments planned for the region.
- Municipalities are facing challenges in retaining trained staff, especially part-time volunteer fire
 officers. As a result, some may need to consider moving to full-time, career fire services.
- Increasing fire hazards associated with current building codes were identified by fire departments in the region.
- The most pressing issue in regard to ambulance services in the region is the need to sort out provincial plans and future responsibilities for ambulance services. (Further discussion of this issue is provided in Chapter 4.) Other issues related to ambulance services in the region include patient transfer times at emergency departments, the need for continued attention to emergency department protocols and routing of ambulances to hospitals without backlogs, and the impact of an aging population on demands for ambulance services.
- The analysis in this report points to the need for 17 additional ambulances and five to six more ambulance stations than are currently planned by municipalities. That would bring the total number of ambulance stations required to eight or nine by 2016.
- As industrial development intensifies, the need for emergency services at industrial sites will increase. There is an opportunity in the Industrial Heartland to coordinate private and publicly-funded services to maximize their delivery in a cost effective way.

Recreation

Recreation includes all those activities an individual chooses to participate in during their leisure time. It includes physical (indoor and outdoor), sports, artistic, cultural, social and intellectual activities. Recreation enhances the quality of life in communities, enables active living and social interaction, and helps create vibrant, healthy people and neighbourhoods.

Municipalities are the primary providers of public recreation facilities and programs, although community and not-for-profit organizations, provincial and federal governments, and the private sector also play important roles. Municipalities in the Capital Region place a high priority on recreation facilities and programs. There are several examples where municipalities in the Capital Region have joined together to plan and meet recreation needs (e.g. River Valley Alliance, TransAlta Tri-Leisure Centre).

Demand for recreation facilities is expected to increase by 2016. Changing recreational preferences (for example, for more outdoor activities and less formal recreation activities) may require retrofitting some of the current recreational facilities in the region.

- The provincial government's Major Community Facilities Program is set to end in 2008-09. Municipalities face serious challenges in balancing the increasing demand for additional recreation facilities and programs with limited capital and operating funding. If this program is not extended or replaced, municipalities will face an even more difficult challenge in the future.
- There are opportunities for greater cooperation across the region to meet recreation needs, particularly in terms of capital planning and financing the construction and operation of recreational facilities and programs.
- Some municipalities suggested that further work should be done to examine the current utilization of existing facilities to determine the extent of new recreation facilities required in the region.
- In terms of indoor recreation facilities, current plans are in place for the construction or upgrade of nine new indoor arenas. Analysis done for this project indicates that one to four indoor swimming pools and nine to 12 ice sheets may be required in addition to current plans.
- Lack of transportation is identified as the greatest challenge to participation in recreation and cultural activities in the region. Expanded public transportation could help improve access to and utilization of existing facilities across the region.
- An additional 22 branch library facilities will be required by 2016. These facilities will likely be located in leased space.
- Municipalities identified the need for more parkland and outdoor recreation facilities in the Capital Region. Protecting the North Saskatchewan River is a priority of municipalities and several also consider the implementation of the planned expansion of the trail system in the river valley to be a priority. Other recreation needs included expanding recreation opportunities for young people (especially in smaller municipalities) and for an aging population.

Municipal views

In the area of social infrastructure, many municipalities pointed to the significant role of the provincial government in ensuring that key social service needs are met. This is particularly important in areas such as housing, health care, social services, child care, kindergarten to grade 12 and post-secondary education. In areas of municipal responsibility, there is some support for greater cooperation at the strategic planning level in the area of policing and disaster planning. Municipalities have differing views on the future responsibility for ambulance services but all agree on the need for this issue to be resolved so that appropriate planning cooperative approaches to meet growing recreation demands.

Given the analysis of social infrastructure needs in this project, the highest priority for future work lies in the areas of:

- Housing
- Ambulance services in terms of sorting out future roles and responsibilities
- Recreation
- Regional strategic planning for police services

Chapter 4: Issues to be addressed by the province

As part of the extensive work done on compiling information and current plans and identifying specific gaps and issues, a number of areas were identified that go beyond the responsibility of the municipalities in the Capital Region. They include a number of areas where the provincial government has primary responsibility and must make and communicate decisions in order for the municipalities to plan effectively.

Most of these issues have been discussed with affected departments during the course of this study, and we expect responses to be available shortly.

The following highlights those key areas and the current status.

• A commitment to share long-range road and highway plans

While extensive work has been undertaken by the provincial government to prepare longer-term transportation plans in consultation with municipalities, these plans have not been made public. Even though there may need to be an appropriate disclaimer explaining that funds cannot be committed beyond a single fiscal year, the publication of a ten-year plan by the provincial government is essential to allow the municipalities in the Capital Region to develop their own complementary long-term plans. In addition to transportation plans, some municipalities suggested that all provincial capital plans should be shared with municipalities in the region so that future plans for schools, health facilities, and other capital projects can be included in municipal plans.

Housing

The social infrastructure component of this framework identified the lack of social housing and affordable market housing as the most serious challenge facing the Capital Region. The lack of affordable market housing exacerbates the problem of attracting the necessary workforce, particularly to jobs in the services sectors (including health care and social services). At the same time, many municipalities noted that the provision of affordable housing was not their responsibility. This is an area where municipalities expect the provincial government to provide the necessary leadership, support and incentives so that the full range of affordable and social housing needs can be met. In October 2007, the provincial government announced plans to develop a new ten-year plan to end homelessness. Support for a number of social housing projects was also announced in the fall of 2007.

Workforce challenges

Although workforce challenges affect all aspects of the economy, including municipalities, public sector agencies and the private sector, the provincial government has a critical role to play. This study indicates that the supply of labour currently available in the Capital Region will not be sufficient to meet anticipated demands in the Industrial Heartland, if major projects proceed as planned. We also heard about serious labour shortages in health care and other areas such as social services, where wages and working conditions make it difficult to attract and retain the necessary workforce. These are areas where the province should play a leadership role through its overall workforce strategy.

Environmental issues

Environmental issues affect all municipalities in the Capital Region. Decisions about next steps, particularly in the Industrial Heartland, are the responsibility of the provincial government but will have a direct impact on citizens throughout the region and on future industrial developments.

The Industrial Heartland is one of the first areas where the government's new cumulative effects management approach is being implemented. A series of comprehensive, science-based targets, outcomes and actions have been set to protect the air, land and water of the Capital Region. This includes:

- Setting a cumulative airshed target for all large industrial facilities in the Industrial Heartland
- Using science-based thresholds, baseline data and limits on 100 different parameters to ensure water quantity and quality outcomes are achieved
- Protecting the regional wetlands and groundwater, ensuring that land is reclaimed, and mitigating any potential harmful changes to wildlife or habitat by implementing minimum setbacks from the North Saskatchewan River¹⁶

For regional planning to proceed, policies and regulations relative to the use of process water for new industrial projects must be known and communicated by January 2008. The specific issue of the use of process water by the proposed industrial projects could derail planned investments in the Industrial Heartland if it is not resolved quickly. We expect a plan to be announced by Alberta Environment in December.

Ambulance policy

Future roles and responsibilities in relation to ambulance services are unclear. The provincial government had decided to transfer responsibility for ground ambulance services to health regions, but those plans were withdrawn. Several pilot projects were undertaken but, at the time of this report, there is no certainty around the future direction for ground ambulance services. Many municipalities in the region stated that ambulance services are the "first step" in health care and should be the responsibility of health regions while others, particularly those with integrated fire and ambulance services, prefer to retain those services but with adequate funding from the province. Whatever the resolution, the province needs to make a decision so that appropriate planning for future emergency services can proceed in the region.

Designation and enforcement of utility corridors

A map in the previous section showed the growing clutter of pipelines throughout the Capital Region and identified the challenge of setting aside surface land for future pipelines. Continuing growth in the region means an expansion of pipeline capacity and electricity transmission lines will be required. As the region faces competing demands for land, it will be critical for the provincial government to identify and protect land for these utility corridors before the land is used for other purposes such as country residential developments. Currently, there is no provincial entity in place with responsibility to enforce transportation and utility corridors.

¹⁶ For further impact on the cumulative effects project in the Industrial Heartland go to the Alberta Environment website at http://environment.gov.ab.ca/cem/industrial_heartland.html.

Meeting anticipated demand for social, health, education and child care services

This study outlined the projected impact of future growth on anticipated demand for social, health, education and child care services. This includes a substantial increase in demand for social services and child care spaces, an expansion of health care services as well as changing services to meet the needs of an aging population, an increase in schools over the number included in current plans, and an increase in access to post-secondary education to meet labour force demands. All of these areas are the responsibility of the provincial government and must be addressed in their future plans.

Policing

As noted in the previous chapter, the current provincial agreement with the RCMP expires in 2012. The nature and scope of a new agreement will have an impact on municipalities within the Capital Region that currently rely on RCMP services. In addition, municipalities raised concerns about inequities among the different funding mechanisms for policing services. This issue should be addressed by the provincial government.

In addition to these specific issues, the provincial government's role in funding infrastructure and services as well as in implementing the necessary legislation to establish a regional framework for the Capital Region is addressed in subsequent chapters of this report.

Chapter 5: Establishing a regional approach

History tells us that compiling information, comparing plans and talking about regional cooperation are one thing – actually implementing a regional approach is another story entirely.

Governance and voting have been the lightning rod for acrimonious debates and public battles. At the time of preparing this report, relationships between municipalities in the Capital Region have grown even more competitive.

Discussions throughout the process have demonstrated that, when it comes to issues related to governance, municipalities in the Capital Region line up along three somewhat incompatible dimensions.

The Alberta Capital Region Alliance Model

Six municipalities, including all five counties, proposed a regional governance model that would be structured along the lines of the existing Alberta Capital Region Alliance (ACRA). While membership in this new board would be mandatory (unlike the existing voluntary membership), the proposal insists that the Board should not have any ability to bind member municipalities to decisions. The mandate for the Board would be restricted to planning for transit and transportation only. Any jurisdiction over land use planning is rejected; a regional growth plan would be created, but would not be binding. Recognizing that the previous ACRA consensus model did not work, they recommend a voting structure currently used by ACRA, which unfortunately tends to encourage faction building by only passing a vote if a two-thirds majority involving municipalities of every incorporation type agree.¹⁷ Given the non-binding nature of the proposed board's decisions, it is unclear why a voting structure would even be required, as the board would have little or no power to influence events in the region.

This model seeks to preserve a status quo which is not sustainable. It ignores the fact that, with some exceptions, little progress has been made in the development of an integrated regional approach since the release of the Hyndman report in 2000. That report put the onus on the municipalities in the region to collaboratively come up with solutions to the issues identified in the report. Nothing substantial has happened to support Mr. Hyndman's optimistic view that this can be done cooperatively, and relationships seem to have actually worsened since the report was released. The withdrawal last year of Edmonton and some other municipalities has demonstrated that ACRA no longer reflects the needs of the majority of citizens in the region.

The composite land use plan compiled by the consultants in this project clearly demonstrates the failure to develop a truly regional vision. The composite features a number of uncoordinated and conflicting land use plans which have provoked at least two formal appeals to the Municipal Government Board.

¹⁷ The current ACRA model involves a complex two-step voting procedure. The first step is to get a two-thirds majority of ACRA members in support of a resolution. The second step is to get the support of at least the following: Edmonton or all four other member cities, plus two of the four ACRA counties (counting Strathcona as a county), plus seven of the 14 towns and villages in ACRA. This model was developed when ACRA still had 23 members (including Edmonton) and after Edmonton had served notice it would be withdrawing from ACRA.

Top down planning

A second governance model is one proposed by the City of Edmonton which would have the Province do the detailed planning for all the major facets of land use control and other matters affecting the region. The Province would simply hand the completed plan over to a board to "implement", leaving member municipalities with little or no influence over what is contained in the plan. This proposal suggests a straight "double majority" form of voting to make decisions, although it is again unclear why a voting structure would be required when all meaningful decision making would be the responsibility of the Province.

This approach goes too far in removing the ability of member municipalities to influence and affect their own destiny. While the preservation of complete local authority and autonomy at all costs is inappropriate for the good of the entire region, local circumstances deserve recognition in the decision-making process. The transfer of most planning and decision-making responsibility to the Province, including decisions that will affect the City of Edmonton, implies that the City does not believe that working with its regional partners, in the absence of provincial direction, will lead to effective decisions. It also assumes that the Province is better equipped to make local decisions than locally elected officials, which seems unsupportable in the light of the philosophy of the Municipal Government Act.

Coordinated development

A number of municipalities have indicated some degree of support for a board that would both develop and implement a detailed regional plan. While the extent of the binding powers to be granted to such a board and the functions to be performed by such a board are a matter of varying opinion, the direction appears to be towards a coordinated approach that makes timely decisions and integrates all aspects of the required planning and development of the region. Responses favour a board that would make land use planning and core and social infrastructure decisions for the greater good of the region.

Looking at the three approaches, only the coordinated development approach will meet the current and future needs of the Capital Region. Neither the ACRA model nor top-down provincial planning will end – in the short term or the long term – the acrimony that surrounds the relationships within the region, nor will either approach properly serve and support the residents of the region.

For these reasons, this report recommends the following approach as a workable model that has, over time, the promise of both improving the relationships between municipalities in the region and delivering coordinated and integrated planning for the entire region.

Recommended regional governance structure and approach

Nature and make-up of the Board

The terms of reference for this project, established by Premier Stelmach in June 2007, specifically state that a board will be established to implement the plan and that the board is to consist of municipally-elected representatives of the municipalities in the Capital Region. Consistent with the terms of reference, the governance model recommended in this report does not establish a new order of government. Instead, it ensures balance between the principles of one municipality/one vote and representation by population, and it provides a mechanism for timely, effective decision making.

Nature of the Board

The regional governance model set out in this framework takes the organizational structure of a "Board." The Board should be a corporate body involving the 25 municipalities named in the Capital Region Integrated Growth Management Plan project that has been defined by the Province. The

Board should be supported by specific enabling legislation or amendments required to give it legal effect.

One of the first steps the Board should take is to formally adopt a charter outlining the basic principles and values that underlie all of its actions and the approach it takes to fulfill its mandate. As part of the work on this project, a proposed charter was developed with input from representatives of a number of municipalities in the region. The charter proposes principles that addressed recognition of municipalities, the role of the province, social and economic sustainability, environmental sustainability, cooperation and collaboration, sharing at a regional level, and planning and implementation. The charter was developed as a starting point for the Board's consideration. We strongly recommend that the Board adopt a charter as one of its first orders of business.¹⁸

Mandatory Effect

Participation by all twenty-five municipalities should be required by the Province. Any future changes in the membership of the Board should be the responsibility of the Province.

Nature of Municipal Representation on the Board

Each of the 25 member municipalities in the region should be entitled to one representative on the Board. The representative from a municipality must be either the Chief Elected Officer of the municipality or, if not the Chief Elected Officer, another elected Council Member appointed by the Council of the municipality. The Council of each municipality should also appoint an elected representative as an alternate to the primary representative. In the event it is a hardship for a member town or village to provide a representative or alternate, the Board should provide for an alternative method of representation for that town or village.

Municipal Right to Participate in Board Decisions

All representatives on the Board should have equal status to speak to any issue. A Board representative should be empowered to cast the vote for his or her municipality on any proposal coming before the Board. Proposals should be circulated 30 days prior to a vote being taken so Board representatives will be in a position to vote on behalf of their municipalities.

Provincial Role on the Board

The nature of provincial representation on the Board should be decided by the Province in discussion with the Board and could be varied from time to time by agreement. Any representative(s) of the Province should be appointed by the Premier and should sit on the Board in an <u>ex officio</u> capacity. The provincial representative(s) should not have the power to vote on issues but should participate in discussions.

Board Leadership

The Board should be chaired for a three-year term by one of the municipal representatives chosen by election by the Board members. The Chair should be permitted to vote on all decisions of the Board and should hold the Chair position for the duration of his or her municipal term. A representative should be able to serve as Chair for only two consecutive terms.

Staffing

The Board should be supported by a staff including a Chief Administrative Officer, professional staff, clerical personnel, financial personnel and such other human resources as needed to carry out its mandate. All staff will be responsible to and report to the Chief Administrative Officer as outlined in a Human Resources Plan. One of the key roles staff should play involves facilitating consensus and decision making among Board members. Given the history of the region and the difficulty in

¹⁸ A draft of a proposed charter for consideration by the new Board is included in Appendix 2.

reaching agreement on key issues, it is highly recommended that the Board hire a facilitator as part of its staffing plan.

Public Reporting

The Board should report to the public regularly and this requirement should be set out in legislation.

Authority of the Board

Authority with Respect to Municipal Members

The Province should establish the authority of the Board in legislation. That should include the legislated authority to make binding decisions concerning the matters included in its mandate. Subject to provincial powers, the Board's authority should extend to planning, coordinating, or implementing the functions and providing the services indicated in its mandate.

Authority of the Province over Board Policy

The provincial representative(s) on the Board should provide information and data from provincial government departments and arrange liaison with departments as needed. The provincial representative(s) should also represent the point of view and interests of the Board to government departments and from the Province to the Board as needed.

The provincial representative(s), <u>ex officio</u> on the Board, should have the responsibility and authority to advise the Board when:

- the Board is dealing with matters outside its mandate,
- the Board is acting beyond its jurisdiction,
- timeliness of completion of tasks critical to the Board's mandate is at issue, or
- the Board is acting in a way that is inconsistent with its charter.

The Province should have the authority to make decisions binding on the Board concerning compliance with the Board's mandate, jurisdiction, terms of reference and timeliness.

Functions and services

Regional Nature of Board's Mandate

Under this regional governance model, all functions and services over which the Board has a mandate should be regarded as regional in scope. All municipalities should be required to participate in the functions and services, and the decisions of the Board should have effect over all its members.

There has been considerable discussion about how regional issues should be defined and determined, as opposed to issues that apply only to individual or smaller groups of municipalities. Under this governance model, all functions and services over which the Board has a mandate should be regarded as regional in scope.

Other regional issues could include:

 Issues which involve one or more municipalities in the Capital Region and which have a significant impact, adverse or beneficial, on some municipalities beyond their borders. For example, extension of LRT services beyond Edmonton's borders or alignment of transportation, pipeline and utility corridors throughout the region would be defined as regional issues.

- Issues which require a common approach to planning or delivery of services that will result in benefits to the entire region. Examples include developing and implementing common approaches to mapping and planning key cultural and recreational facilities.
- Issues which transcend municipal boundaries or where a regional approach is expected. Examples include tourism marketing or attraction of international investment.

Where an issue involves only two municipalities and there is no impact beyond the borders of those two municipalities, the matter would be considered sub-regional and dealt with on a sub-regional basis. Municipalities can continue to pursue matters of sub-regional interest beyond the mandate of the Board on their own, by establishing inter-municipal agreements.

As the regional Board proceeds, it may refine and address future questions about what is and what is not considered regional. If the Board acts outside of its mandate, the Province can and should step in to make corrections.

Board Mandate

Consistent with the definition of regional issues, considerable discussion has gone into determining an appropriate range of functions and services that should properly and effectively be included in the mandate for the regional board. On the one hand, it is important for the regional board to be responsible for functions that are critically important for the region as a whole, particularly those areas where careful planning is necessary to anticipate and prepare for growth in the region. On the other hand, as a new organization, taking on too many functions at once may overburden the Board in its crucial start-up phase.

The following charts outline the specific roles proposed for the Board as the first priority for action and those that should be included as a second priority over the longer term. The Board's mandate over functions and services should be defined in its legislation.

Function	Strategic Planning	Detailed Planning	Recommending Plans (Non binding decisions)	Plan Decision Making (Binding Decisions)	Direct Delivery	Monitoring and reporting	Enforcement
Land Use Planning (Regional) • Vision • TUCs • Regional Road Planning • Buffer Areas • Density • Density • Population and employment forecasts	~	~		~	✓ (Creation of Regional Plan)	~	External
Information Services - GIS - Streamlining existing data sources - Common mapping	~	~		~	~	~	Internal
Public Transit (Inter - municipal)	~	~		✓	~	~	Internal
Housing Social Market Affordable	~		~			\checkmark	

PRIORITY 1 IMPLEMENTATION

PRIORITY 2 IMPLEMENTATION

Function	Strategic Planning	Detailed Planning	Recommending Plans (Non binding decisions)	Plan Decision Making (Binding Decisions)	Direct Delivery	Monitoring and reporting	Enforcement
Policing	~		~			~	
Portable Water*	~		~			~	
Wastewater**	~		~			~	
Solid Waste Management*	~		~			~	
Emergency Services (Fire and Ambulance)**	~		1			~	
Social Services (FCSS)	1		~			~	
Recreation*	~		\checkmark			~	
Economic Development*	~		~			~	

*Potential for direct delivery (must apply for additional authority

**Provincial Policy currently under review

For the purposes of this project, the following definitions describe the intent of each of the types of functions proposed for the Board:

- Strategic planning Includes the long-range consideration of pending issues and requirements, resulting in a directional plan for further developing in greater detail on a shorter time frame.
- Detailed planning Involves planning to be done for implementation on a more immediate basis.
- Recommending plans Means recommendations would be made by a regional board to member municipalities or to other entities responsible for a particular function (e.g. provincial government). Implementation is at the discretion of the member municipalities or other responsible entities.
- Plan decision making Means regional plans would be binding on member municipalities and, where applicable, member municipalities would be required to bring local plans into conformity with regional plans.
- Direct delivery Means the regional board would take full responsibility for the delivery of the
 regional service, either by delivering it directly (e.g. by owning the equipment to do so) or by
 direction (coordinating) the delivery of services by member municipalities or the private sector.
- Monitoring and reporting Involves reporting to member municipalities, the Province, and to the public relative to the performance of board functions, the extent of cooperation and compliance by local councils, and the efficiency of the regional board.
- Enforcement Involves ensuring compliance of member municipalities with binding decisions made by the regional board, either by using powers provided directly to the regional board (internal) for that purpose or by obtaining enforcement from external sources (e.g. Minister of Municipal Affairs and Housing, appeal bodies, courts, etc.)

Within that context, the Board should undertake, as a priority, the following functions and services which should be more fully defined in its enabling legislation:

Regional Land Use Planning

Detailed planning and development of a comprehensive, integrated regional plan, including preparing a regional land use map, identifying corridors for transportation and utilities and intermunicipal transit; decision making including adopting the regional growth management plan for the Province's ratification; enforcement including reviewing Municipal Development Plans and seeking provincial enforcement if member municipalities do not comply with the regional growth management plan.

Transit

Detailed planning of a regional inter-municipal transit network including specialized transit services for persons with disabilities, decision making to approve the network and determine implementation options, direct delivery of agreed regional transit services, review of municipal transit plans to ensure they are complementary with the regional plan.

Information Services

Detailed planning of protocols and methods to collect, store and access data, decision making necessary to approve protocols and methods, direct development of the information desired, and assurance of common mapping in support of land use, infrastructure and other planning.

Housing

Strategic planning, preparing recommendations, monitoring and reporting on social and market affordable housing requirements, addressing the general location of social housing in the region, pooling provincial and federal funding sources for social housing, and developing options to increase affordable market housing.

The Board should also have the mandate to strategically plan for and monitor related functions and services such as policing, emergency services, social services, recreation, economic development, solid waste management, waste water and potable water. It should be required to seek approval of the Province before proceeding with detailed planning or direct delivery with respect to any of these functions and services.

Additional Mandates

The Board should apply to the Province if its members want to expand its mandate to include additional functions or services. The Province should also be prepared to add or delete functions or services from the mandate of the Board.

Methods of Delivery of Functions and Services

The mandated functions and services of the Board may be pursued by committees, commissions or specific issue-focused organizations set up and governed under the auspices of the Board to deal with each function or service. Work may also be partially or entirely contracted out to member municipalities, not-for-profit groups, companies, or consortiums.

Decision making

Objectives

The Board's objective is to generate decisions which:

- are obtained in a timely way
- serve the best interests of the region
- maximize the mutual gain of the participants
- meet the stated objectives of the participants

Decisions Based on Consensus at First Instance

The Board should seek to generate decisions which enjoy the consensus (general agreement) of all participants. Consensus should be sought through discussion and negotiation among Board members assisted by staff acting as facilitators for those discussions and negotiations.

As noted under the discussion of staffing requirements, facilitation will be a critically important function of the Chief Administrative Officer and staff working for the Board. The Chief Administrative Officer should hire a facilitator as part of the staff complement to ensure that this essential function is fulfilled. The key point is that municipalities in the region will need support to ensure that consensus can be achieved wherever possible and in a timely way.

Obligation to Describe Objectives and Build Consensus

In seeking a consensus decision, the following obligations should fall on those assenting to and dissenting from a proposal:

- those in *disagreement* with the proposal should be obliged to explain the basis of their disagreement and the objectives that they seek to advance in any version of the proposal that they would accept.
- those in *agreement* with the proposal should have a corresponding obligation to explain their agreement and the objectives that they seek to advance.
- a positive obligation should fall on all parties to accommodate the objectives of those with whom they disagree by attempting to find mutually acceptable alterations to the proposal in order that it can be agreed to by all.

In the event the Chair determines that consensus cannot be reached by the end of the meeting next following the meeting in which a proposal arose, a decision about the proposal should be obtained through a vote.

Decisions Based on Voting at Second Instance

Voting is perhaps the most contentious issue in the proposed governance model. The project team considered a range of options for voting models including:

- Voting by population range Municipalities would be allocated a certain number of votes based on their population and a proposal would require the majority of votes
- Double majority based on incorporation type Municipalities would be categorized by type (e.g. cities, towns, counties, etc.). A proposal would have to be passed by at least 17 municipalities (two thirds of the total) which include at least 50 percent of each incorporation type grouping.

- Double majority with override Each municipality would have one vote but for a proposal to pass, it would require the support of at least 15 municipalities with 75 percent of the population. However, regardless of population, any 21 municipalities could vote to pass a motion.
- Double majority with a super-majority Each municipality would have one vote. For a motion to pass, it must have the support of 17 municipalities with at least 75 percent of the population of the member municipalities.

Following extensive evaluation of each of these options as well as other possible modifications, a double majority voting model with a super-majority is recommended. As part of the voting process, attendance of Board members at decision making should be mandatory. Abstentions by those entitled to vote should not be permitted. In the case of the absence or non-participation of a member municipality, its vote should be registered as agreement with the proposal.

The super majority model:

- Requires two thirds of municipalities in the Capital Region to agree before a motion is passed
- Respects the principle of one municipality/one vote but balances this with the principle of representation by population
- Recognizes that Edmonton is the predominant player in the region when it comes to many services, especially social services, and deserves to have a substantial voice in the determination of what happens in the region
- Recognizes that Edmonton has the majority of the population in the region
- Ensures that Edmonton must seek out a large majority (16) of its neighbours in order to achieve its objectives and secure a positive vote
- Does not allow a group of municipalities with a smaller population base to block votes and prevent progress
- Is easier to understand than many of the more complex approaches reviewed in this project.

As the largest municipality in the Capital Region, the City of Edmonton has pushed for a regional approach, an objective with which we agree. This voting model requires the City to act responsibly and cooperatively with its neighbours in order to achieve that objective. It presumes that Edmonton would not be willing to jeopardize its opportunity for a truly regional partnership because, if this model is not successful, the alternative is long and protracted debates on options that include annexation or amalgamation. We choose to take a more positive outlook. We believe that, if municipalities give this voting model a decent chance, it will be in the best interests of all municipalities and particularly, the citizens and taxpayers in the Capital Region.

Table 10: Population of Capital Region Member Municipalities

Municipality	2006 Population	% of Regional Population
Beaumont	8,961	0.86%
Bon Accord	1,535	0.15%
Bruderheim	1,215	0.12%
Calmar	1,959	0.19%
Devon	6,256	0.60%
Edmonton	740,041	70.70%
Fort Saskatchewan	15,089	1.44%
Gibbons	2,642	0.25%
Lamont	1,675	0.16%
Lamont County	3,935	0.37%
Leduc	17,021	1.63%
Leduc County	12,734	1.22%
Legal	1,193	0.11%
Morinville	6,775	0.65%
New Sarepta	410	0.04%
Parkland County	29,740	2.84%
Redwater	2,192	0.21%
St. Albert	57,787	5.52%
Spruce Grove	19,496	1.86%
Stony Plain	12,518	1.19%
Strathcona County	82,705	7.90%
Sturgeon County	18,664	1.78%
Thorsby	945	0.09%
Wabumun	601	0.06%
Warburg	621	0.06%
Total	1,046,710	

Final Decisions

Decisions made either by agreement based on the consensus model outlined or by a vote should be considered final and not subject to the dispute resolution provisions outlined below.

Dispute Resolution

Disputes Entitled to Dispute Resolution

The following matters could be the subject of a request for dispute resolution by a member municipality:

- an allegation of a breach of process or improper administration
- a complaint about unfairness or breach of natural justice
- a complaint about discriminatory treatment of a member municipality by the Board

Dispute Resolution Process

In the event of a request for dispute resolution, the Chair should proceed with the request:

- first, by discussion among the members or Board representatives as the case may be, with a view to finding a mutually agreeable settlement of the subject matter of the request
- second, if the matter is not resolved by discussion, by reference to mediation, either privately or through the services of the Dispute Resolution service of Alberta Municipal Affairs and Housing
- third, if the matter is not resolved by mediation, by binding fast track arbitration through a mutually acceptable arbitrator

Appeals

An appeal from the outcome of any of the dispute resolution processes mentioned above should be permitted only as specifically provided for in legislation or at common law. Otherwise, the outcome of dispute resolution will be final.

Dispute Resolution of Other Issues

Disputes arising between member municipalities that are not the subject of the Board's mandate or are not listed above, should be pursued by those municipalities according to legislation or their rights at law.

Chapter 6: Sharing the costs and benefits of a regional approach

The framework for a regional plan identifies key areas where additional infrastructure will be required, from expansion of existing roads and highways to new transit plans, additional ambulance and emergency services, and recreational facilities. The costs associated with those infrastructure and service needs are significant and provide a sound case both for the need for an integrated plan for the Capital Region and for new approaches to sharing in and paying for the costs associated with those projects and services.

While the costs are substantial, it is also important to recognize that major developments in the Capital Region will generate substantial revenues for municipalities, for the province and for the federal government.

As we look ahead to developing and implementing an integrated regional growth plan for the Capital Region, two aspects of costs must be addressed:

- Developing effective and appropriate mechanisms for sharing in the costs of future infrastructure needs in the region.
- Supporting the ongoing functions of the Capital Region Board both in its initial start-up phase and over the longer term.

To set the context for addressing those two key issues, this section begins with our forecast of the costs of the necessary infrastructure developments required to meet the anticipated pressures of growth in the region.

Cost estimates for addressing future infrastructure needs

Chapter 3 of this report identified specific gaps between current and projected infrastructure needs in core and social infrastructure. Detailed work was done as part of the project to assess and identify future core and social infrastructure needs based on the growth projections identified earlier in this report.

The result is a composite view of the estimated order of magnitude of investment needed to meet anticipated infrastructure needs. More detailed information on the breakdown of each of the key categories is included in the binders of information provided to municipalities. It is also available at http://www.alberta.ca/home/crigmp.cfm.

Infrastructure Element	(\$ x million - 2007 dollars)			
	2007 - 2016	2017 - 2041		
1. Highways/Roads Municipal Provincial	\$1,532 \$3,972	\$876 \$6,291		
Total Highway/Roads	\$5,504	\$7,167		
2. Railways	\$240	n/a		
3. Airports	\$1,550	n/a		
4. Transit	\$5,000	\$3,700		
5. Water	\$393	\$332		
6. Wastewater	\$453	\$653		
7. Process Water	n/a	n/a		
8. Power	\$1,165	n/a		
9. Pipelines	\$5,300	\$9,500		
10. Waste Management	\$22	n/a		
Total	\$19,627	\$21,352		

Table 11a: Estimated Investment Needs for Core Infrastructure, 2007 - 2016

Table 11b:Assumed Allocation of Core Infrastructure Investment
Responsibility in the Capital Region, 2007 - 2041

Assumed Allocation	(\$ x million - 2007 dollars)		
(refer to Table 11a)	2007 – 2016	2017 - 2041	
Provincial – Item 1.b	\$3,972	\$6,291	
Municipal - Items 1.a, 4, 5, 6, 10	\$7,400	\$5,561	
Industry – Items 2, 3, 7, 8, 9	\$8,255	\$9,500	

Table 12:Estimated Investment Needs for Social Infrastructure, 2007 - 2016Capital Cost Component

Infrastructure Element	Cost Range (\$ x million – 2007 dollars)
Housing	\$901
Health Care	\$1,750 - \$1,930
Police	\$220 - \$225
Emergency Services a. Fire b. Ambulance Service	\$38 - \$75 \$16 - \$18
Public Education a. Elementary/Jr. High b. High School	\$448 \$62
Post Secondary Education	\$1,098
Recreation	\$540 - \$600
Total	\$5,073 - \$5,357

Infrastructure Element	Estimated Operating Cost Increase (\$ x million - 2007 dollars)		
	2011	2016	
Housing	\$51	\$114	
Health	\$ 395	\$595	
Police	\$27	\$45	
Emergency Services a. Fire b. Ambulance Service	\$10 - \$15 \$9.5	\$20 - \$30 \$19	
Social Services	\$5.4	\$8.2	
Child Care	\$3.6	\$7.4	
Public Education (K-12)	\$34	\$104	
Post Secondary	\$115	\$150	
Recreation	\$32.4 - \$36.4	\$48.1 - \$53.1	
Total	\$683 - \$692	\$1,111 - \$1,126	

Table 13:Estimated Operating Cost Increases for Social Infrastructure in the
Capital Region (increase over 2007 actual costs)

Social infrastructure costs are primarily a provincial responsibility, but there are a number of services where costs may be shared in some proportion among the provincial and federal governments and municipalities. These services include housing, police, emergency services and recreation. The estimated breakdown between provincial responsibilities and shared responsibilities is as follows:

	(\$ x million – 2007 dollars)
Province:	\$3,388 - \$3,568
Shared:	\$1,709 - \$1,813

Estimated revenue

As growth proceeds in the Capital Region, it will generate substantial revenues for municipalities as well as for the provincial and federal governments. Based on the best available information, the project team developed forecasts of anticipated revenues over the next 35 years.

As outlined earlier in this report, a set of assumptions on the short- and long-term economic development potential for the capital region was used to generate employment and population projections for 2008-2041, which in turn were used to inform the development of core and social infrastructure requirements for the region.

These economic growth assumptions include:

- Development of Port Alberta at the Edmonton International Airport.
- Economic activity associated with servicing the oil sands industry and with new trade opportunities arising from the development of the Port of Prince Rupert.
- An estimated almost \$88 billion in new capital investment to develop upgraders and other oil sands-related industrial projects.

While it was reasonable to estimate employment arising from all expected economic growth, it was not feasible to try to estimate associated capital investment, except for the Industrial Heartland.

Provincial and federal revenues

The assumptions about growth in the Capital Region have been used to develop an understanding of the level of revenues the provincial and federal governments could be expected to realize as a result of this unprecedented economic growth. The expected economic activity in the Industrial Heartland, with its identifiable potential investment levels, was used as a benchmark to determine whether there would be adequate returns to the Province to justify developing core and social infrastructure to the level suggested in this report.

Using only the expected capital investments of almost \$88 billion for the Industrial Heartland (plus the Petro-Canada refinery conversion in Strathcona County) and its associated construction, operations and maintenance employment, provincial and federal revenue projections were developed using the 2003 Alberta Input-Output Model. The model calculates the full impact of each dollar invested in the Alberta economy by calculating direct, indirect and induced activity. Since there is no model for oil sands upgraders, it was assumed that the pattern of spending would be similar to the development of petroleum or coal products manufacturing facilities. Royalty rates were held at zero, since this activity is not expected to affect royalties. The model is conservative, in that it automatically estimates that some of this capital spending will occur outside Alberta, but that spending generated by employment activity will largely remain in province.

For this report, a conservative assumption was made that projected investments would be completed by 2022 (15 years) and that there would be no new capital investment after that date, but that operations and regular maintenance/overhaul would continue through to the end of the study period in 2041. Table 14 illustrates the investment and employment assumptions that were used for these projections. Table 15 demonstrates the expected economic impact of these assumptions on the Alberta economy.

All revenues were projected using constant 2006 dollars and assuming current federal and provincial taxation rates for corporate, personal and other taxes.

As illustrated in Table 16, total expected provincial revenues generated only from the economic impact of the projected investments in the Industrial Heartland from 2006 – 2041 could reach \$25.4 billion, with \$15 billion collected by 2022. Federal tax revenues will be even greater, reaching \$36.8 billion by 2041.

Table 14:	Cumulative industry spending assumptions based on announced
	upgrader projects for the Alberta Industrial Heartland 2006-2041

	Labour Costs (\$000)	Other Associated Costs (\$000)	Cumulative Total 2006 - 2041 (\$000)
Capital Costs for known projects	\$17,470,000	\$70,190,000	\$87,660,000
Turnaround & Maintenance	\$9,505,800	\$26,013,149	\$35,519,000
Operating Expenses	\$8,359,360	\$176,888,816	\$185,248,000
Total	\$35,335,160	\$ 273,091,966	\$308,427,000

Source: AIH Key Metrics, IO Calculations, October 2007; yearly construction, operations and maintenance workforce calculations developed by Alberta Employment, Immigration, Industry

Table 15:	Cumulative Revenue Impacts on Alberta Economy from Expected
	Projects in the Alberta Industrial Heartland, 2006 - 2041

A. Economic Impacts	GDP (\$000)			Labour Income (\$000)		
	2016	2022	2041	2016	2022	2041
Direct impacts from upgrader projects	17,769,440	23,584,800	35,335,160	17,769,440	23,584,800	35,335,160
Direct impacts to first-level suppliers	21,845,809	29,149,809	41,354,586	18,603,129	24,086,110	31,738,771
Indirect impacts (secondary suppliers)	44,250,568	79,112,285	178,466,157	21,456,420	32,230,461	57,607,562
Induced impacts	29,960,150	41,395,452	64,595,226	16,988,564	23,472,824	36,627,997
Total	113,825,967	173,242,346	319,751,129	74,817,553	103,374,195	161,309,490

Source: Known Project Impact Calculations: 2006-2016; 2006-2022; 2016-2041; October 2007

Provincial and Federal Tax Impacts					
(000)	2016 2022		2041		
	Provincial Tax I	mpacts			
a. Direct Corporate Taxes	\$1,887,048	\$3,093,121	\$6,310,233		
b. Provincial personal taxes	\$4,519,255	\$6,330,699	\$10,013,868		
c. Provincial indirect taxes	\$3,963,770	\$5,597,382	\$9,079,881		
Total Provincial tax impacts	\$10,370,073	\$15,021,202	\$25,403,982		
Federal Tax Impacts					
a. Direct corporate taxes	\$3,566,521	\$5,845,999	\$11,926,339		
b. Direct personal taxes	\$7,913,363	\$11,117,901	\$17,684,670		
c. Transfers to Social Insurance Plansv	\$89,086	\$124,607	\$197,365		
e. Indirect Taxes*	\$3,225,009	\$4,478,018	\$7,046,709		
Total Federal tax impacts	\$14,793,979	\$21,566,525	\$36,855,083		
Total revenue impact from known Alberta Industrial Heartland Projects	\$25,164,052	\$36,587,727	\$62,259,065		

Table 16:Provincial and Federal Tax Impacts from Expected Projects in the
Alberta Industrial Heartland, 2006 - 2041

*Indirect taxes include licenses, fees, gaming, alcohol, tobacco, gasoline and other taxes on goods and services

Source: Known Project Impact Calculations: 2006-2016; 2006-2022; 2016-2041; October 2007 *Indirect taxes include licenses, fees, gaming, alcohol, tobacco, gasoline and other taxes on goods and services

Municipal revenue

The single biggest driver of anticipated growth in the Capital Region over the next few decades is the heavy industrial development proposed for the Industrial Heartland. Other significant industrial and commercial projects are also planned for the Capital Region but the value of those projects is estimated at under \$5 billion in total.¹⁹ Because the value of these additional projects is modest compared to developments in the Industrial Heartland, they will have only a limited impact on estimates of municipal revenue for the Capital Region as a whole.

As a result of this concentration of major projects in the Industrial Heartland, the analysis looked primarily at the impact on property tax revenues from upgrader projects located in eastern Sturgeon County and northern Strathcona County. Because of the location of the upgraders, only these two counties will receive any direct property tax revenue as a result of the proposed upgraders.

There has been considerable interest in estimating the potential impact of the upgrader projects on revenues of the other municipalities in the Capital Region. However, once we move away from direct property taxes attributable to the major projects, there is no model currently available which would allow for a sound correlation between population and employment growth on the one hand and growth in municipal property taxation and other revenue for individual municipalities on the other hand.

It is also important to note that property tax revenues associated with an upgrader will not flow to the municipality where it is located until the plant is operational. Revenue sources aside from property taxes are expected to be modest and will, at best, cover the direct infrastructure and services for upgraders which do not require major front-end investments. If major municipal investments such as additional water facilities are required, the municipalities involved would have to borrow against future property tax or utility revenues to ensure their timely construction.

The experience of many municipal jurisdictions with large scale industrial development, including the Regional Municipality of Wood Buffalo, is that much of the municipal services and infrastructure required for the workforce and their families must be in place before the municipality receives any significant financial benefits from the project. This often creates major financial issues and can result in long-term financial hardships even after an industrial facility is in operation. This is especially true if workers live in one jurisdiction while the industrial facility is in another.

With that context in mind, four scenarios for estimating annual property tax revenues were prepared.²⁰ The scenarios take into account a range of assumptions about when the various projects could proceed. By 2022, the estimated capital spending on upgrader conversions, expansions and new projects varies from \$36 billion in scenario 1 to almost \$88 billion in scenario 4. This translates into potential annual upgrader-related property tax revenue of anywhere from \$129 million to \$318 million by 2023.

¹⁹ ISL Engineering and Land Services, Interim Report on Land Use, Appendix A, pages 42-105.

²⁰ Further information on the details of these scenarios and the methodology is provided in *Capital Region New Upgrader-Related Property Tax Revenue Estimates*, Alberta Municipal Affairs and Housing, available at http://www.alberta.ca/home/crigmp.cfm.

Table 17: Estimated New Upgrader Annual Property Tax Revenue (millions)

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Strathcona County – 10 years (2017)	\$78.69	\$69.63	\$158.42	\$126.43
Sturgeon County – 10 years (2017)	\$49.93	\$94.61	\$94.61	\$99.12
Strathcona County – 35 years (2042)	\$78.69	\$78.69	\$158.42	\$218.84
Sturgeon County – 35 years (2042)	\$49.93	\$94.61	\$94.61	\$99.12

Source: Alberta Municipal Affairs and Housing, November 2007

The figures identified in scenario 4 represent an upper-end forecast of municipal property tax revenues and could be considered optimistic. However, this scenario should be used for long-term planning purposes because it reflects the same assumptions as were used to develop the Capital Region population projections in this study as well as the associated core and social infrastructure requirements.

To put the property tax numbers in perspective, in 2006, the twenty-five municipalities in the Capital Region levied property taxes of approximately \$1.2 billion on a total taxable assessment of \$102 billion. Two thirds of that amount (almost \$800 million) was allocated to municipal purposes and the balance was used for education and other requisitions. Under scenario 4, the projected increase in upgrader-related property taxes is estimated to be \$318 million by the year 2023. The increase of \$318 million is equivalent to 40 percent of the nearly \$800 million in property tax revenues collected for municipal purposes in the entire Capital Region in 2006.

As noted earlier, these forecasts apply only to the direct property taxes generated by the upgraders in Strathcona and Sturgeon Counties. They do not take into account the potential spin off companies and related industries that could be located either in those two counties or in other municipalities within the Capital Region, nor do they attempt to estimate potential residential property taxes.

Sharing costs in the Capital Region

From the previous sections, it is clear that:

- There will be substantial costs involved in providing the necessary infrastructure to meet the anticipated needs resulting from growth in the Capital Region.
- While it is difficult to estimate all of the potential benefits in terms of additional revenues to municipal, provincial and federal governments, looking only at the impact of developments in the Industrial Heartland confirms that there will be significant increases in revenues to all three levels of government.
- The costs of future infrastructure needs apply across much of the Capital Region, and some are concentrated in the City of Edmonton. At the same time, the increased municipal revenues coming from projects in the Industrial Heartland, which are partly reliant on population and infrastructure available in the region, will flow primarily to two counties in the region.

This assessment of costs and revenues reinforces the need for an integrated plan to manage and accommodate growth in the region and to address the critical issue of how costs for capital and operating projects can be shared across the Capital Region. Examples of projects that could be undertaken on a cooperative basis include GIS support, expansion of LRT or BRT (bus rapid transit) beyond the boundaries of a single municipality (such as to the International Airport), projects that support the diversion of waste products from landfills, or other similar projects of regional benefit and within the mandate of the Capital Region Board.

Through discussions with various municipal representatives, there appears to be willingness to share in the costs of projects which benefit or support the region as a whole. On the other hand, there is strong disagreement, deep suspicion and even resentment about any funding models that would involve unconditional sharing of revenues between and among municipalities. Because the critical issue on a go-forward basis involves the necessary planning and development of infrastructure to meet future needs, the focus should be on how costs can be shared. Municipalities would keep their own revenues but follow an equitable model for sharing in the costs of projects within the mandate of the Capital Region Board. This approach avoids acrimonious debates over revenue sharing and still ensures that the necessary funding is there to support projects of a regional nature.

The approach we have used, then, is to address how costs for essential regional projects can be shared among the municipalities in the region and with other partners such as the provincial and federal governments.

Sources of funding can vary by project or by purpose and include one or more sources or a combination of potential revenue sources. Within the current environment, the following might be seen as potential sources of funding for regional projects:

- Funding by the provincial government, either as unconditional or conditional grants, paid to the board or to a "regional growth fund" that can be accessed by the board. Most of this would likely have to be "new money" (funds that are in addition to existing and ongoing funding) given the nature of the Municipal Sustainability Initiative and other existing funding programs. Some funding could be provided by the provincial government as a result of a review of current policies or renewal of expiring programs. For example, the Major Community Facilities Program, which is expected to expire in 2008, could be re-established with available grant funding payable only to the regional board.
- Funding by the federal government, most likely on a project by project basis or within a program cost shared with the Province.

- Funding by partnerships with the private sector (a financing option).
- Loans available from the Alberta Capital Finance Authority. These loans could be used to address the need for infrastructure spending before new developments produce significant municipal tax or utility revenues.
- Funding resulting from cost recovery, cost sharing or user fees. Cost sharing for clearly defined
 regional projects with benefits that can easily be tracked should be encouraged. However, cost
 sharing is not workable for all projects²¹ or for all purposes and other sources of funding for
 projects will need to be explored where benefits can be seen but tracking is difficult,
 unreasonably complex, or impossible.

These would likely be from requisitions developed and executed by the Province based on a request from the regional board.²² The funds received from such a requisition could be paid directly to the board to administer or be deposited into a "regional growth fund" for access by the board in support of projects of regional benefit. Requisitions could also be raised to support the administrative and operational requirements of the board, although the Province may not need to be involved as "banker" for this purpose.

Some municipalities have suggested that establishing a regional board with the power to requisition its member municipalities creates the spectre of another level of government. This is not what this report recommends. First of all, this report does not propose that the regional board would have the power to requisition. If a requisition is required to support regional projects, it would be done by the provincial government at the request of the regional board. Second, all members of the regional board would be elected representatives of the municipalities with the powers to make decisions on behalf of their councils, not independently from them. The board would be provincially constituted and have powers determined in legislation. A recent task force report on governance identified 248 provincially constituted boards, commissions and agencies of the province, and no one has suggested that there are 248 levels of government as a result.

The power to requisition, in and of itself, does not create another level of government. In fact, there are several bodies, provincial and municipal, which have the power (or have had the power in the past) to requisition funds without being considered another level of government. Examples include requisitions for libraries or seniors housing. In the past, hospitals have exercised the power to requisition and few considered the act of requisitioning to be tantamount to the creation of another level of government.

In terms of developing an appropriate cost sharing model for the region, a number of factors need to be considered.

Large scale industrial development can create daunting challenges. Substantial investments in new infrastructure are likely to be required, while the increased population arising from an influx of new workers places significant additional demands on infrastructure and services ranging from roads to housing to schools to policing. These challenges can be exacerbated within a region when most of the workforce resides in a different municipality (or municipalities) than the one in which the industrial facilities are located.

However, not all of the challenges facing fast-growing communities are the responsibility of municipal governments. Schools, for example, are a provincial responsibility, and there is no suggestion that schools should be funded regionally rather than provincially. Inter-municipal cost

²¹ "Project" is broadly defined to include social programs with regional benefits.

²² Requests could be project specific or an annual request based on the approved regional plan. Deposits could be made in a regional growth fund, or directly to the board.

sharing should be limited to areas of municipal responsibility and the municipal component of shared provincial-municipal responsibilities.

A number of approaches have been developed in other jurisdictions in order to equitably share the financial burdens of services and infrastructure that benefit a region rather than one specific municipality. Some of these approaches are based on broad concepts such as per capita allocations, while others use very specific and precise measures of the costs and benefits of a particular facility or service.

Within Alberta, the property assessment base is often used as a means of equitably allocating costs between municipalities. The use of this approach recognizes that the municipal assessment base is, in general terms, a reflection of the municipality's revenue generation capability. Thus, allocating costs on the basis of assessment in effect bases allocation on "ability to pay."

Within the overall property tax base, commercial and industrial properties generally provide the highest net returns to municipalities. In contrast, growth in residential property assessment is often accompanied by costs for municipal services that outstrip the additional tax revenue. Thus, in general, municipalities enjoy a greater "ability to pay" as the non-residential portion of their overall assessment increases.

In light of the above considerations, it is recommended that regional costs be shared within the Capital Region on the following basis:

- Where other funding is available (e.g. provincial or federal grants), funds from these sources would normally be used first. Provincial funding for projects in the province's capital plan will remain in place. The Minister of Municipal Affairs and Housing should be responsible for bringing forward requests from the Board to modify or add to the province's capital plan.
- Where at least some of the costs can reasonably be recovered through user fees, this approach should also be utilized.
- Where benefits and beneficiaries can be reasonably attributed to each municipality, then costs not covered through other funding or user fees would normally be recovered on this basis.

For projects where the benefits and beneficiaries can not be reasonably allocated among member municipalities, then any remaining costs should be allocated among municipalities within the Capital Region according to one of the following formulas, depending upon the type of service or project planned for the region:

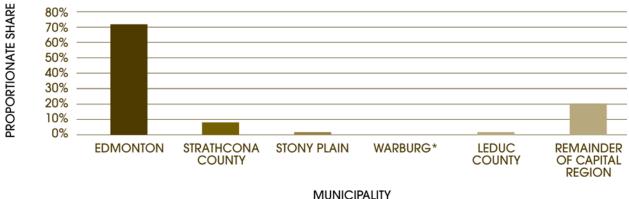
- Per capita
- Each municipality's proportion of the total property assessment base for the region
- Each municipality's proportion of the non-residential property assessment base for the region

The following three examples show how each of the approaches could work. It should be noted that the examples provide a snapshot in time based on current population and assessment. The proportions will change over time as population changes and residential and non-residential assessment bases evolve.

Example 1

For the provision of services to people (e.g. an inter-municipal specialized transit service for seniors and people with disabilities), a per capita allocation would likely be the most appropriate mechanism for covering infrastructure and operating costs not covered by grants or user fees. An example of how a per capita allocation of costs might work, based on 2006 populations, is illustrated below.²³

Figure 14: Example of cost sharing based on 2006 population PROPORTIONATE SHARE BASED ON POPULATION



Note: Warburg represents approximately 0.06% of the total population of the Capital Region.

Example 2

10% 0%

Where a project is for the infrastructure required to support the regional road system, the costs not covered by grants could be allocated based on each municipality's proportionate share of the Capital Region's total property tax assessment base. An example of how this allocation of costs might work based on 2008 equalized assessments is illustrated below.²⁴

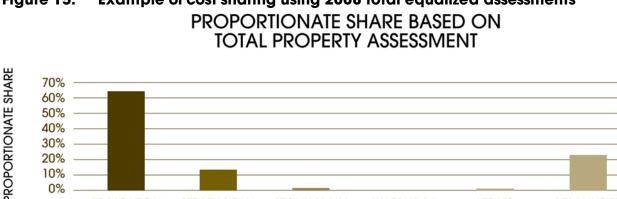


Figure 15: Example of cost sharing using 2008 total equalized assessments

Note: Warburg represents less than 0.05% of the total property assessment base.

STRATHCONA

COUNTY

EDMONTON

STONY PLAIN

MUNICIPALITY

WARBURG*

LEDUC

COUNTY

REMAINDER

OF CAPITAL

REGION

²³ Population projections used for this calculation are found in "Capital Region Infrastructure Review: Population and Employment Forecasts" of the ISL report Capital Region Integrated Growth Management Plan: Interim Report on Land Use.

²⁴ For the purpose of this type of allocation, all property that is taxable for municipal purposes (including machinery and equipment) has been included in this calculation by Alberta Municipal Affairs and Housing.

Example 3

Finally, the regional board may decide to undertake a special infrastructure project that would not normally be a regional service but which has strategic importance in either attracting or supporting significant commercial or industrial investment within the Capital Region. An example of this might be building an overpass over a rail line to reduce congestion in the flow of people and goods to a key upgrader construction site. In this instance, the project costs not covered by grants could be allocated to each municipality within the region based on each municipality's proportionate share of the Capital Region's total non-residential assessment base. An example of how this allocation model might work based on 2008 equalized assessments is illustrated below.²⁵

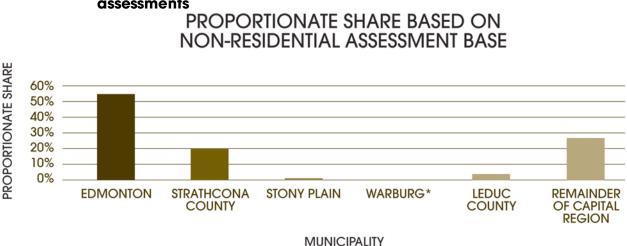


Figure 16: Example of cost sharing using 2008 non-residential equalized assessments

Note: Warburg represents less than 0.05% of the total non-residential assessment base

These approaches to allocating costs for different types of projects indicate that there are workable cost allocation models that can be applied to projects of regional benefit within the capital region. However, the time available for the current project has not allowed for the kind of analysis that would yield precise results, nor has it allowed for a discussion of the various formulae with the 25 municipalities of the capital region.

The manner in which costs can be shared among municipalities is only one side of the equation. The other side of the equation involves determining which of the actual costs of future projects should be shared. These costs cannot be determined except in the context of an integrated regional plan, starting with a regional land use plan.

As a result, a funding model cannot be finally decided until a great deal of additional analysis of the various formulae has been undertaken.

²⁵ For the purpose of this type of allocation, all non-residential property that is taxable for municipal purposes (including machinery and equipment) has been included in this calculation by Alberta Municipal Affairs and Housing.

Based on this reality, it is recommended that:

- A cost allocation model that would allow the implementation of the detailed regional plan should be developed on a track parallel to the development of that plan.
- The cost allocation model should be applied where other sources of funding cannot be found, where these other sources cannot cover all of the costs of a regional project or service, or where the nature of the regional project or service does not lend itself to easy calculation of costs attributable to each municipality.
- The cost allocation model should either cap or exempt smaller municipalities from paying shares of the costs that are beyond their means.
- Other than start-up or interim funding for the regional board, the Province should advance no new funds to the municipalities in the capital region until such time as it has approved an integrated regional plan.²⁶

Funding the Regional Board's activities and mandate

The proposed Regional Board will have an important role to play in addressing many of the gaps and issues identified in this framework as well as taking immediate steps to develop and implement a detailed, integrated regional plan. This work will involve the necessary administrative and operational support including accommodations, staff salaries, office equipment and supplies, travel expenses, research and communications costs.

Several views have been expressed about how the operations of the regional board should be funded. Some municipalities suggested that all the costs should be borne by the Province on an ongoing basis. On the other hand, it has been suggested that the municipalities should fund it themselves, using a cost allocation model that would address the size of the various municipalities and the limited capacity of smaller villages and towns to contribute.

In the initial start-up phase (for the first three years), we recommend that the Province should take a lead role in supporting the establishment and operations of the regional board, including providing financial support for the development of a regional growth management plan. In reality, it is hard to imagine that the Province would "come to the table" to discuss what portion of the costs of implementing a regional plan it might be prepared to assume until it has seen a satisfactory Capital Region growth plan. As a result, it would be helpful for the Province to provide interim funding of the administrative and operational requirements of the board sufficient to allow the development of a detailed, integrated regional plan.

On an ongoing basis, it makes sense that the municipalities themselves should assume all or most of the costs of the regional board's operations. It will be up to the Board and the member municipalities to determine an appropriate approach to sharing ongoing costs. Any ongoing provincial funding that may be provided to the Board should be determined based on current provincial functions that the Board may acquire in the future.

²⁶ This is not intended to affect long-term agreements where money is attached (e.g. Municipal Sustainability Initiative grants, fuel tax agreement with the City of Edmonton, Alberta Municipal Infrastructure Program grants which expire in 2010, etc.).

Chapter 7: Transition

A number of important steps have to be taken to implement the recommendations outlined in this report, to get a new Board for the Capital Region up and running, and to put the necessary foundation in place.

Establishment and legislation

The Capital Region Board can be established by regulation as a corporation with special regulatory powers regarding land use planning. Section 603 of the *Municipal Government Act* allows the Lieutenant Governor in Council to make a regulation for a matter that is otherwise insufficiently provided for in the Act.

The section 603 regulation should provide the necessary authority for the board to be established and staffed quickly and to have regulatory powers immediately upon formation. Some of the provisions of the regulation should be similar to those for Regional Services Commissions. However, the Board's operational roles and responsibilities should initially focus on planning activities including:

- Carrying out the mandated planning activities to successfully prepare an integrated regional plan, including strategic planning for social housing and detailed planning for land use, road networks, inter-municipal public transit, and utility corridors.
- Initiating the ongoing review and evaluation of new municipal statutory plans and statutory plan amendments according to an established set of evaluation criteria to ensure compliance with key Capital Region planning objectives. The scope of this review should be limited to new Municipal Development Plans (MDPs), Inter-municipal Development Plans (IDPs), and Area Structure Plans (ASPs), and new amendments to those plans. New MDPs, IDPs, and ASPs, or new amendments to these plans that do not meet the evaluation criteria authorized by the regulation, will not come into effect.

Since a section 603 regulation must be confirmed within two years after coming into force, it should be followed up with appropriate amendments to the *Municipal Government Act* during the next session of the Legislature.

Framework for land use decisions

Municipalities in the Capital Region will make thousands of land use decisions between now and the time the regional plan is prepared and adopted. These decisions range from minor additions to existing developments to approvals for major residential, commercial and industrial developments. Some of these projects, such as those pertaining to the Industrial Heartland area or Port Alberta, will be particularly important for the continued economic success of the Capital Region. However, there are other proposals which, if approved, could seriously limit the effectiveness of the integrated regional plan that is to be prepared.

Therefore, it is critical that, during this interim period, proposals that have any significant potential to compromise key planning objectives for the region are identified, analyzed and, on rare occasions, postponed until the plan is completed. The majority of proposed developments, especially those that are vital to the economic future of the region, will not be impeded by this process while the integrated regional plan is in preparation. The intention is certainly not to create a bottleneck to potential developments or to interfere with decisions that have already been made and approved.

Until an integrated regional plan is in effect, municipalities in the region should be required to refer the adoption of any proposed municipal development plan, inter-municipal development plan, or area structure plan that could significantly affect the future regional plan to the Capital Region Board for ratification. This requirement should also extend to referring the adoption of any significant amendments to municipal development plans, inter-municipal development plans or area structure plans to the Board.

The province should provide a set of criteria for municipalities to utilize in determining whether new statutory plans or new plan amendments are regionally significant in nature and therefore require review and ratification by the Board. The evaluation criteria should address matters such as the expected amount of infrastructure investment required and the expected impact on natural features. Municipalities should be expected to apply these criteria themselves in the first instance, so as to limit referrals that need to be considered by the Board.

The significant plans and amendments referred to the Board should be further assessed using criteria developed by the province from key planning objectives. Examples of these objectives include the protection of regional utility corridors, efficient use of infrastructure capacity, an effective and efficient regional road and transit system, and promotion of regional economic objectives. The Board should ratify the plans and amendments which do not conflict with attaining these key objectives. Plans and amendments that have significant potential to negatively affect key planning objectives should not be ratified and therefore, should not come into effect.

In terms of timelines and next steps, it is recommended that the Board:

- Use a regional evaluation framework to review proposed amendments to Municipal Development Plans, Inter-Municipal Development Plans, and Area Structure Plans starting within the first three months of incorporation. The Province should provide a framework for the Board's consideration.
- Initiate preparation of an integrated regional plan within four months of incorporation.
- Approve a ten-year inter-municipal transit plan within 12 months of incorporation.
- Make recommendations to the Province on the following:
 - A ten-year regional road/highway plan approved by the Board within 12 months of incorporation
 - Possible transportation and utility corridors identified by the Board within 18 months of incorporation

Administration of the Board

As noted in the previous chapter on funding issues, during the transition phase, the administrative costs for the Board should be the responsibility of the provincial government. Specifically, the province should be responsible for:

- Providing annual grants to support the operation of the Board for the first three years, beginning in 2008, including some financial support to assist in the development of an integrated regional plan.
- Appointing the first Chair of the Board for organizing purposes. The Chair should be in place for at least six months.
- Assisting the Board in accessing and recruiting the necessary staff, support and expertise and developing a transitional human resources plan. That would include providing support for a facilitator as part of the staffing requirements for the Board.

- Facilitating access to loans from the Alberta Capital Finance Authority to the Board if required to support initial projects agreed to by the Board.
- Providing an initial charter for the Board to consider and amend as appropriate.

Cost allocation

As noted in the previous chapter, further review and analysis of potential cost allocation models are necessary in order to develop the best approaches for different types of regional projects and initiatives. This further work should be undertaken by the Province in consultation with the Board and completed by November 2008.

To achieve this, it is recommended that:

- An approach to measuring the costs of various projects with regional benefits should be completed by May 2008.
- Consultations with member municipalities should take place in May and June, 2008.
- A proposal on what costs should be included in the model should be complete by September 2008.
- Further consultations about the cost allocation model should take place with member municipalities in October 2008.
- The Province should make a final determination on the cost allocation model in November 2008.

Chapter 8: Concluding comments

Decisions about the next steps regarding this report are the responsibility of the provincial government and will certainly require the cooperation of member municipalities in the Capital Region if they are to be successful.

Given the history of the region, we urge the provincial government to move quickly on implementing the essential aspects of this report. In a way, this entire report is a series of recommendations, with specific recommendations scattered throughout the report. On an overall basis, though, we recommend that the province:

- 1. Establish the first Board for the Capital Region effective January 2008.
- 2. Provide the necessary start-up funding and operational support for the first three years of the Board's operations. That should include support for a portion of the costs of developing an integrated regional plan for the Capital Region, which should be in place by January 2010.
- 3. Adopt and legislate the governance model recommended in this report including the specific roles and functions, authority of the Board, voting model, the cost sharing approach, and the dispute resolution process.
- 4. Implement the key steps outlined in the transition section of this report.
- 5. Address and resolve the provincial issues identified in this report including providing a tenyear provincial roads and highways plan, resolving the issue of responsibility for ambulance services, and addressing the critical issue of use of water for proposed upgraders in the Industrial Heartland.
- 6. Given the significant returns that could be received by the federal government as a result of economic activity in the region, the Province should engage in serious dialogue with the federal government to ensure that this fact is addressed in future federal infrastructure funding programs.

Perhaps the most significant question at the end of this process is: what will change and what will not?

The optimistic view is that, if the recommendations and approach outlined in this report are adopted, some of the acrimonious debates from the past can be set aside in favour of a cooperative approach to issues that affect the region as a whole. Realistically, that is not likely to happen overnight. However, as the work of the new Board proceeds, some clear benefits certainly are achievable.

- Better coordination of land use and infrastructure planning will minimize future conflict and avoid costly duplication, while enhancing the region's ability to address regional infrastructure and service needs.
- Member municipalities in the Capital Region will have an effective vehicle for identifying regional initiatives and making decisions.
- Future demands for key services such as emergency services, policing, social services and child care can be identified and addressed.
- Smaller municipalities will benefit from the added expertise a regional board can provide while the larger municipalities will have a vehicle for addressing issues and resolving disputes.
- Member municipalities will have a more powerful voice in bringing issues forward to the provincial and federal governments.

• Citizens throughout the Capital Region will benefit from a regional approach in key areas such as land use planning, planning for roads and transit, economic development, recreation facilities and environmental issues.

At the same time, it is important to recognize that most of the business of municipal government within the region will continue without any notable changes:

- Citizens of the region will continue to be served by their existing municipal governments
- Citizens of the region will continue to elect their own municipal councils
- The region's residents will continue to pay municipal property taxes and fees determined, established and collected by their own local governments
- The kinds of services and the levels of services provided within each community will continue to be determined by locally elected councils
- Local bylaws and licensing requirements will remain in effect citizens will continue to go to their respective municipal offices for their development permits, dog licenses, payment of various fees and charges, etc.
- Individual municipalities will continue to establish and administer municipal statutory plans and municipal land use bylaws, and will review and approve development applications, with the only change being a requirement to conform to regional planning objectives

The establishment of a new regional board will result in some cost-sharing, but no revenue sharing. As well, establishment of this board will not involve the transfer of any provincial government financial responsibilities to the region.

Decisions on regional projects and services will be made collectively by the region's mayors and reeves, individuals who have been elected by citizens within each of the region's municipalities. This process will ensure that individual community identities can be maintained and community futures enhanced within the context of a dynamic region.

On balance, then, it is time for municipalities in the Capital Region to move on with a new approach. With leadership from the province and cooperation from the municipalities, the title of this report – *Working Together* – can become a reality.

Appendix 1 - Terms of Reference

Title:	Capital Region Integrated Growth Management Plan
Purpose:	Development of a long term integrated growth management plan is needed to support anticipated economic growth over the next 20-50 years in the Capital Region, with particular attention to the economic, social and environmental impacts on all residents of the region.
Rationale:	The inventory of Major Alberta Projects database for 2007 indicates that there is approximately \$46 billion in construction projects planned, recently completed or underway in the Capital Region.
	Demands for public sector infrastructure projects will be in the billions.
	Meeting the infrastructure requirements associated with this growth will require a concerted and coordinated effort from municipal, provincial and federal governments as well as industry to minimize the impacts on taxpayers. All partners recognize the need for, and desire more formal coordination.
	Provincial leadership is essential to ensuring the highest quality of life for all residents of the 24 ²⁷ municipalities and all Albertans through the capture of value added activity.
Scope:	This initiative will develop i) a regional growth management plan and ii) create a management structure to implement it.
	 The planning for core infrastructure and services will focus on economic development, utilities (water/wastewater, waste management, electricity, pipelines, environmental management) and transport (railways, highway/roads, airports, public transit).
	 The social infrastructure and services to be reviewed include elements in the areas of workforce, housing, education, health care, emergency services, policing and social services.
	 The plan will integrate both core and social infrastructure and services planning needs.
	The ultimate goal is strong communities and efficiency for the taxpayer, resulting from optimal economic and community growth and sustainable environmental management. This plan will not result in amalgamation, but rather the efficient delivery of public services.
	The plan will be developed based on the principles of:
	 Ensuring community identities are supported.
	 All residents in the Capital Region benefit from the anticipated economic growth.

²⁷ A 25th municipality – the Town of Lamont – was subsequently added to the list of member municipalities.

Execution plan:

- Commence in June 2007 and will be completed by January 2008.
- Implementation of the plan will commence in Spring 2008.
- Announce the initiative based on an approved communication plan.
- Engage municipal leaders at a meeting to discuss the planned approach.
- The province will appoint an implementation committee consisting of provincial deputy ministers and municipal representatives.
- Engage industry and the federal government partners.

The project will result in two deliverables which will be developed concurrently:

1. Regional Growth Management Plan

The plan will integrate the following elements:

a. Growth Scenario and Plans Inventory

- Develop a realistic and comprehensive scenario(s) of significant industrial projects and economic growth most likely to be pursued over the next 20-50 years.
- Complete an inventory of existing industry, provincial, federal, and municipal government initiatives/plans/assessments for infrastructure and service expansion.
- b. Core and Social Infrastructure Planning
 - Assess current core and social infrastructure and service plans against likely growth scenario and identify gaps.
 - Create a plan to address gaps (who, what, where and when).
 - Develop preliminary cost estimates.
 - Develop an implementation plan.
- c. Land Use Planning
 - Assess current land use plans against likely growth scenarios, core and social infrastructure and service needs and environmental impacts.
 - Develop an integrated land use plan.
 - Develop an implementation plan,

- 2. Regional Growth Management Structure Development
 - Create a governance model for implementation of the regional growth management plan.
 - A new order of government will not be created. A board will be established to implement the plan consisting of municipally-elected representatives of the existing 24 (expanded to 25) municipalities in the Capital Region.
 - The board must be empowered to make timely decisions. The voting model will balance the principle of representation by population, blended with the principle of one council one vote, as recommended by the Minister's Council on Sustainability.
 - Identify timelines, roles, responsibilities, and funding for the plan.
 - Draft legislation if required.

Appendix 2 - Proposed Charter

This charter sets out the key principles and values guiding the governance of the Capital Regional Board in its implementation and stewardship of the Capital Region Integrated Growth Management Plan.

Governing Principles

The following are the principles that guide the parties in their application of this Charter:

- Accountability Each municipality is responsible for its development and is accountable to its electorate.
- Autonomy The Board will respect the self-determination of municipalities and their control over local land use planning within the context of the regional plan.
- Collaboration The Board will expect all municipal members to work together to support the planning efforts of the Board.
- Equity In its work, the Board will treat member municipalities in a way that is both equitable and consistent with their differences.
- Flexibility The Board will encourage municipalities to identify options that work best for themselves while also fitting in with the needs of the region.
- Mutuality It is recognized that working together in the region is often the key to achieving the economic objectives of any of the member municipalities.
- Sustainability The Board will seek decisions which encourage sustainable communities.
- Timeliness The Board will execute its mandate in a timely way and make decisions that respect the need to come to terms even when there is disagreement among its members.
- Transparency Decision-making processes will be open and transparent to all participants.

Recognition of municipalities

- 1. We recognize that each of the municipalities in the region is unique, having its own special character, vision and values and that uniformity in municipalities in the region is not desired.
- 2. We recognize and value the diverse history, culture, values, societal interests and character of all the municipalities in the region.
- 3. We acknowledge that the City of Edmonton, as a large city of national status, the seat of government, and a centre of business, is distinct from the other municipalities in the region. We also acknowledge that the City of Edmonton, among all the municipalities of the region, has a disproportionate share of social demands.
- 4. We acknowledge that, subject to provincial legislation, each municipality is legally autonomous and accountable to its electorate for the decisions of its leadership.
- 5. We acknowledge the need to recognize the distinctiveness of rural communities; their social structure, ethnic roots and history. As well, we recognize the commercial and societal attributes of urban communities, their complexities and population bases.
- 6. We recognize that, for some municipalities, large proportions of residents commute to work from nearby municipalities.

The role of the Province

- 7. The "board" acknowledges that the Province will assume a leadership role in assuring that there is integrated regional land-use and core and social infrastructure planning and implementation.
- 8. We acknowledge that the Province wants municipalities in the region to manage some of their services and functions in a way that integrates those activities and encourages the municipalities to work together with the Province providing encouragement and leadership where needed.
- 9. We recognize that integrated planning and implementation of issues and matters that are regional in scope is in the best interest of all the municipalities of the region, their residents, and ultimately, all Albertans.
- 10. It is also in the provincial interest to support economic diversity in the region, including the preservation of a vigourous agricultural base, sustainable communities and a dynamic industrial and business base.

Social and economic sustainability

- 11. We recognize the desire of all communities for continuous and long-term economic sustainability and viability.
- 12. We will implement the Capital Region Integrated Growth Management Plan in a way that promotes a dynamic and competitive economy, stimulates sound economic activity and encourages a diversified, value-added economy.
- 13. We recognize that economic stability is sustained by a healthy population. We will strive to constantly improve the quality of life enjoyed by residents of the region.

Environmental sustainability

- 14. We acknowledge the need to preserve green space, protect sensitive air, land and aquatic ecosystems, and designate sufficient land area to support biodiversity.
- 15. We acknowledge that the region needs consultation and liaison with the Province on environmental issues, such as air and water quality, that have regional impact in order to develop guidelines and consider cumulative environmental impacts of development and growth.
- 16. The "board" believes that water quality and quantity is an important issue. We will strive to encourage water conservation and protect major waterways and instream flows from degradation.

Cooperation and collaboration

- 17. We acknowledge and support processes and mechanisms through which municipalities can partner with each other in addressing common problems and mandates.
- 18. The "board" recognizes the opportunities for advancement of the regional common good that are presented by instances of synergy, integrated planning, mutual gain, innovation and information sharing among municipalities.
- 19. We believe that regional decisions can best be made through processes that emphasize the importance of discussion and accommodate differing interests.

Sharing at a regional level

- 20. We recognize that some issues ("regional" in scope) are important to every municipality in the region and transcend the interests of individual municipalities.
- 21. The "board" recognizes that some issues ("sub-regional" in scope) are important only to some of the municipalities.
- 22. We acknowledge that when it comes to the delivery of services, generally, when a municipality gains benefit from a service, it is expected to contribute to the cost, and when a municipality contributes, it is expected to derive benefit.
- 23. We recognize that the cumulative cost of growth needs to be approached across the region by all municipal members of the region, the Province, the private sector and, where applicable, the federal government.
- 24. The "board" recognizes that all municipalities expect to benefit in a variety of ways as a result of their regional investment.

Planning and implementation

- 25. The "board" believes that in order to provide an increasing seamlessness among the region's municipalities, municipal development plans and other planning mechanisms must be consistent with the Capital Region Integrated Growth Management Plan.
- 26. The "board" supports the idea that planning at a regional scale should assure adequate inventories of land in the region for a variety of uses identified in the Capital Region Integrated Growth Management Plan and protect land from incompatible uses.
- 27. We believe that a key principle in implementation of the Capital Region Integrated Growth Management Plan will be the constant improvement of the quality of life of residents of the region.
- 28. The Capital Region Board will strive to be flexible and adaptive in its decision making with a view to accommodating changing economic, environmental and growth conditions.

Bibliography

ADR Education. "Capital Region Growth Management Plan – Governance Component", powerpoint presentation to the Implementation Committee of the Capital Region Integrated Growth Management Plan project. October 2007.

City-Region Studies Centre, Faculty of Extension, University of Alberta. "Regional Governance Models: An exploration of structures and critical practices"; Prepared for this report. October 2007.

Computronix (Canada) Ltd. "Regional Voting Schemes – Review and Recommendations"; prepared for this report. October 2007.

Cooperative Municipal Partnership. "Growing Together Through Collaboration, Autonomy & Accountability – Review of the Minister's Council on Municipal Sustainability Report and Opportunities for Moving Forward"; July 2007.

Hemson Consulting Ltd. "Creating a Stronger Edmonton Region", February 2007.

Hyndman, Lou. "Alberta Capital Region Governance Review. Final Report – An Agenda for Action", December, 2000.

Intergovernmental Committee on Urban and Regional Research (ICURR). "Metropolitan Governance and Fiscal Cooperation Programs"; prepared for this report. September 2007.

Intergovernmental Committee on Urban and Regional Research (ICURR). "Cost Sharing in Canada and in the United States – Selected Examples and Observations", prepared for this report. October 2007.

Intergovernmental Committee on Urban and Regional Research (ICURR). "Regional Planning and Regionalization of Services", prepared for this report. November 2007.

ISL Engineering. "Report on Land Use", prepared for this report. November 2007.

ISL Engineering. "Report on Core Infrastructure", prepared for this report. November 2007.

LeSage, Edward and Stefanick, Lorna. "New Regionalist Metropolitan Action: The Case of the Alberta Capital Region Alliance", presented at the Canadian Political Science Association meetings, Winnipeg, June, 2004.

Longwoods International. "Managing Growth in the Edmonton Region: Public Opinion Research", January 23, 2007.

M.B. Percy Consulting Group. "Sustaining Municipal Government Relationships in Alberta; Phase One and Two Report – The Research and Analysis of Best Practices and Current Relationship and Recommendations for Change", prepared for the Minister's Council on Sustainability, Relationships Working Group, November 2006.

Muro, Mark and Puentes, Robert. "Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns", Brookings Institution Center on Urban and Metropolitan Policy – Discussion Paper, March 2004.

Nichols Applied Management. "Growth Pressures and Social Infrastructure in the Capital Region – Issues, Gaps and Conclusions", prepared for this report. November 2007.

TD Economics. "The Calgary-Edmonton Corridor", April 22, 2003.