Attachment 1

BE READY, OR BE LEFT BEHIND

Report of the Advisory Panel on Metro Edmonton's Future

May 31, 2016

METRO MAYORS ALLIANCE

The City of Edmonton – Mayor Don Iveson

The City of Fort Saskatchewan – Mayor Gale Katchur

The City of Leduc - Mayor Greg Krischke

Leduc County - Mayor John Whaley

Parkland County - Mayor Rodney Shaigec

The City of Spruce Grove - Mayor Stuart Houston

The City of St. Albert - Mayor Nolan Crouse

Strathcona County - Mayor Roxanne Carr

Sturgeon County - Mayor Tom Flynn

PANELISTS

Don Lowry (Chair)

Carman McNary (Vice-Chair)

Dr. Stanford Blade

Phyllis Clark

Salima Ebrahim

Linda Hughes

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Liz O'Neill

Tim Reid

Andrew Ross

Dr. Brad Stelfox

Paul Whittaker

OUR MESSAGE TO THE MAYORS

The Advisory Panel on Metro Edmonton's Future is pleased to provide its report and recommendations to the Metro Mayors Alliance.

As you will read, we believe that a globally competitive Edmonton Metro Region can be achieved, but only if municipalities act together to build the regional systems that are needed to leverage our strengths.

In coming together as an Alliance and establishing our Panel, you distinguished yourselves as nine leaders who recognize the need to secure the Metro Region's competitiveness – and recognize the risks the region faces if we don't. Your municipalities represent 95 percent of the region's population (a population forecast to be up to 2.2 million by 2044), 96 percent of its assessment base and about 80 percent of its land base.

Having done much homework on this subject, we understand why you set out our task. The Metro Region's critical mass of human, physical and natural assets has the potential to deliver decades of prosperity with a high quality of life – if we get it right.

Getting it wrong – failing to compete – could jeopardize our social, economic and environmental sustainability and may lead to ongoing contentious annexations or forced amalgamations in the future.

Against this backdrop, greater regional collaboration isn't an option. It's an imperative.

Our Panel sees the opportunities, just as you do. And though it will require everyone to think about things differently, we believe the solutions we present are practical and achievable. Acting together on the core drivers of regional competitiveness can be done in ways that preserve local diversity and identities, respect accountability to voters and keep the lion's share of municipal services squarely under the control of local governments.

We have crafted this report with awareness of the changes that are taking place around us, including recent actions by the Capital Region Board and the introduction of amendments to the *Municipal Government Act*. These changes are timely, and they make our recommendations all the more relevant and important.

Our Panel envisions the Edmonton Metro Region taking its rightful place as the strong and confident heart of a more resilient and competitive Alberta. With this report, we call on municipalities in the Metro Region to take action.

EXECUTIVE SUMMARY

The Metro Mayors Alliance asked our Panel to consider whether a globally competitive Edmonton region is achievable and, if so, to provide advice about how to make it happen.

Over the course of several months we talked to experts, reviewed literature and listened to those with experience in municipal governance. We spoke with a wide cross-section of people in the private, public and non-profit sectors of our Metro Region communities. All of their views informed our analysis.

Our advice to the Mayors is this: a globally competitive Edmonton Metro Region is achievable, but it will require municipalities **planning, delivering and acting as one Metro Region in certain key areas.** Our emphasis on those words is deliberate.

Municipalities have become skilled at discussing issues and undertaking planning as a region. These have been the productive fruits of their participation in the Capital Region Board (CRB). But it has been challenging to translate those discussions and plans into collaborative actions with on-the-ground results.

Despite years of interaction around the CRB table, municipalities still deliver services and infrastructure individually and compete with each other for land, resources and investment. When making choices, the costs and benefits to their individual municipality take precedence over the benefits to the overall region.

Provincial policies and legislation have played a significant role in cultivating current practices. Municipalities are playing within the confines of a system that has evolved over decades – a system that drives competition among municipalities and doesn't provide adequate mechanisms for their collaboration.

This is understandable, but it's not sustainable.

Modelling commissioned by our Panel indicates that if municipalities continue to develop the Metro Region under a "business as usual" approach our region won't just fail to be globally competitive, it will fall backwards, with serious implications for taxpayers and for the quality of life we all take for granted.[1]

If municipalities don't change their current trajectory, the model shows as much as 87,700 additional hectares of agricultural land and 50,200 hectares of natural areas could be lost to uncoordinated development over the next 50 years. What's more, the settlement footprint across the region could double in size from 135,900 hectares to as much as 273,900 hectares. Taxpayers could be on the hook for an additional $8.2 billion to service that larger footprint with roads and other public infrastructure.

The good news is that there is a far better way forward – without amalgamation or the creation of a new layer of government.

The modelling commissioned by our Panel indicates that if municipalities plan, decide and act as one Metro Region through an integrated approach, the expansion of the overall settlement footprint could be cut by approximately half. This would save precious agricultural land and natural areas. Municipal servicing costs would be cut in half, reducing upward pressure on municipal tax rates and saving money for taxpayers. All of this would help make the Metro Region globally competitive and improve its quality of life.

[1] ALCES. (2016). Greater Capital Region Scenario Analysis. A copy of the modelling results is contained in Appendix 2.

So how should things change?

From a functional standpoint, there are many options for municipal collaboration. One of the most promising ways is for municipalities to take a regional systems approach.

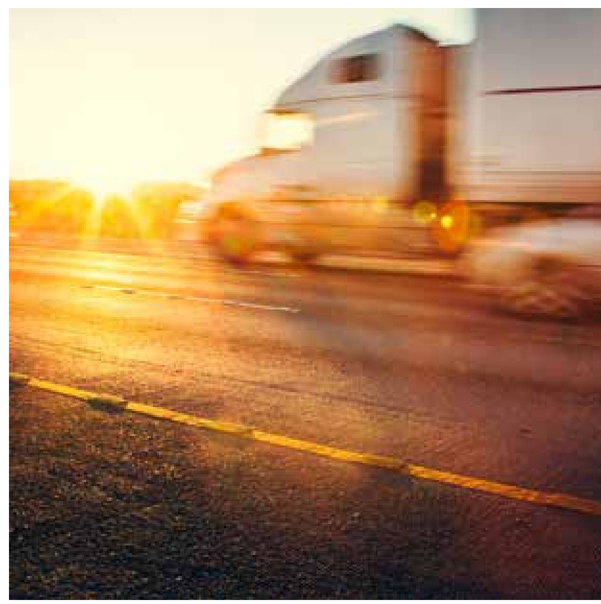
A regional systems approach doesn't mean delivering all aspects of a municipal service through a regional body. It means strategically bringing together elements of services that are regionally significant to create highly functioning systems across the region. Any aspect of a service that isn't regionally significant would continue to be locally planned and locally delivered by each municipality.

What are those regionally significant services that are important to our competitiveness?

Our Panel identified many recognized drivers of competitiveness in city-regions, but three stood out as "cornerstones" for the Edmonton Metro Region:

1. Economic development
2. Public transit
3. Land use and infrastructure development.

These three cornerstones are the primary factors considered by investors when deciding where to locate new industries and major facilities. Therefore, they are the areas of highest priority and greatest risk for the Metro Region. As inter-related areas, they should "snap together" to build a strong backbone that will enable the Metro Region to achieve its social, economic and environmental goals. And all three are areas where action is achievable, essential and urgent.



CHANGE TO COMPETE

A globally competitive Edmonton Metro Region can be achieved, but only if municipalities work together on regional issues that are crucial for building our competitiveness.

By looking beyond their respective municipal boundaries to the larger Metro Region, the Metro Mayors who established our Panel have already demonstrated their ability to do this. The nine municipalities they represent account for 95 percent of the region's population, 96 percent of its assessment base and about 80 percent of its land base, so they understand better than anyone what is at stake. They are already grappling with the challenges that have arisen from decades of inter-municipal competition. Those challenges are mounting and municipalities in the Metro Region today are coping, rather than competing.

There is a pressing need for municipalities to change direction. If they don't, the quality of life we currently enjoy in this region will steadily erode. We will continue to miss out on investments, jobs and opportunities that pass our region over in favour of others that are more competitive. And taxpayers will pay a lot more for a lot less.

Municipalities in the Metro Region are therefore faced with a choice: change how you work together and be ready for the future, or be left behind.

This change is possible, and it can be done without amalgamation or a new layer of government.

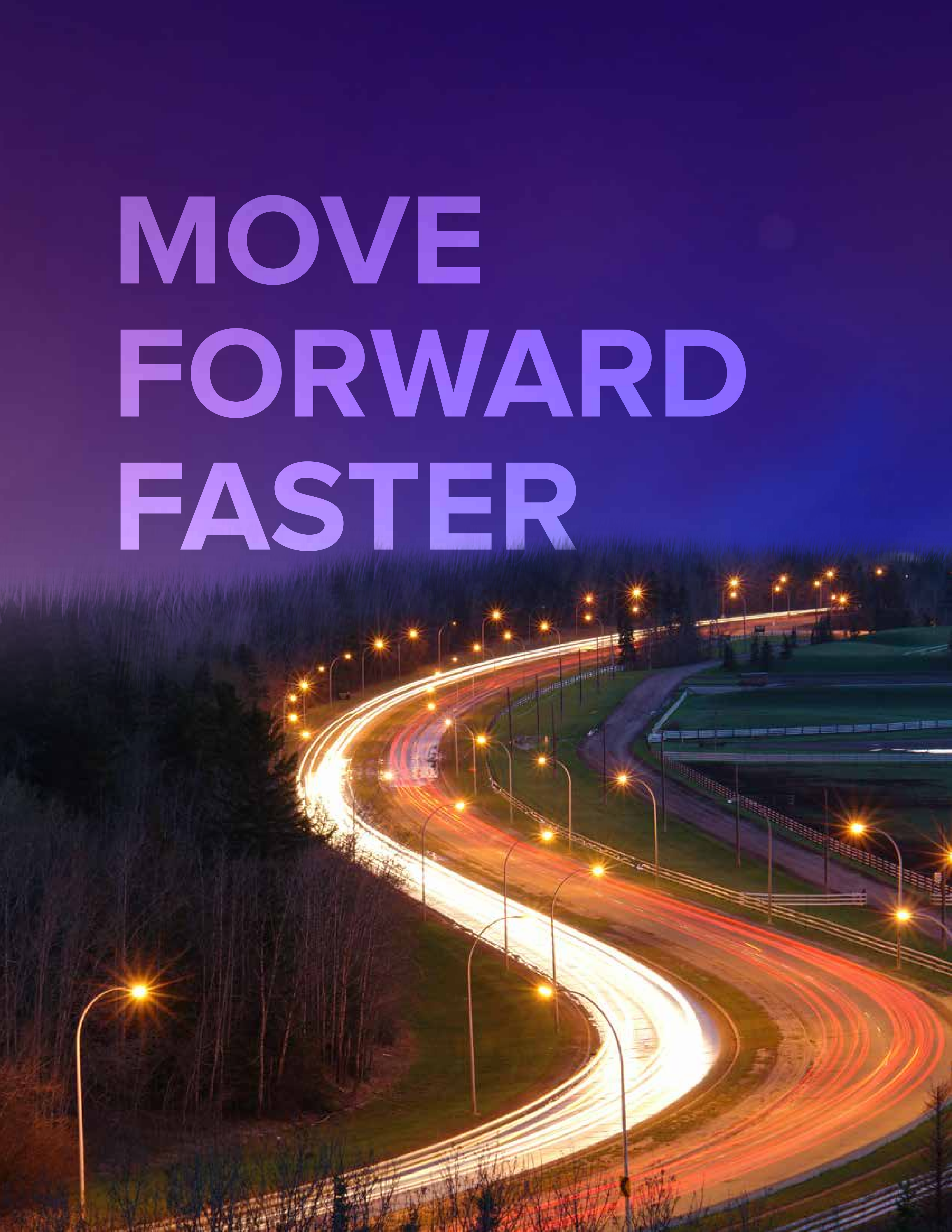
By acting as one Metro Region in regionally significant areas, municipalities can maintain their local identities while at the same time working to optimize the opportunities to build a globally competitive Metro Region. They share regional wins by working together.

In the following pages, we explain why and how this should be done.

Elements Of A Globally Competitive Metro Region

- Mechanisms that enable effective, efficient decision making
- Known in key markets as a premier location to work, learn, invest and live
- Home to a range of resilient economic clusters that support good-paying jobs
- Fiscally sound and sustainable
- Integrated transportation and public transit networks that enable efficient movement of people and goods
- Infrastructure to keep pace with the demands of the next 30 to 50 years
- Naturally healthy, with clean air, clean water, well-managed landscapes and healthy biodiversity
- Post-secondary institutions generating skilled graduates, research and innovation
- Safe communities with vibrant arts and culture
- Health, education, housing, recreation and other services that residents need and want

MOVE FORWARD FASTER



Many of the ingredients needed to build a resilient, globally competitive Metro Region are already present or obtainable, but they need to be assembled and leveraged more effectively. And this needs to happen with a greater sense of urgency.

City-regions are taking on greater significance in developed economies today. Experience is demonstrating that cities and regions have mutually beneficial relationships that can make them more competitive.

Regions are strengthened by the concentrations of people, businesses and services that their municipalities offer. For instance, a city is often where one finds a wide range of private and non-profit business and services, specialized health professionals, post-secondary institutions and cultural opportunities. A city typically has good connectivity, with built-out transit and transportation networks. People and businesses in a region need their city to be strong and vibrant for two critical reasons: to provide thrust for the overall region's economy and to offer greater amenities.

At the same time, cities are strengthened by the assets that are uniquely offered throughout their regions. Regions feature different landscapes and distinct communities, offering outdoor spaces for rural living and leisure. They also host diverse business and industrial sites, offer a wider workforce that can be drawn upon by economic clusters across the region and are responsible for a disproportionate share of the infrastructure that supports the larger economy. The city depends upon the diversity of the region.

Successful city-regions capitalize on these mutually beneficial relationships, leveraging their diverse assets by collaborating in strategic ways.

In the Edmonton Metro Region, the municipalities respect each other's economic and cultural diversity and recognize how each contributes to the overall potential of the region. However, they haven't always collaborated to leverage their key regional assets most efficiently and effectively. If they do so, they can build a Metro Region that is stronger and more competitive than the sum of its parts. If not, the full benefits of the Metro Region's potential will be lost to all.

We Need to Act Regionally

Defined by its demographics, diversity, natural resources and geographic location, our region is unique. There is no readily available "cookie cutter" model for regionalism that can be applied here. If it was easy, it would have been done by now, particularly considering how many times this issue has been studied and debated over the years.

On the positive side, municipalities in the Edmonton Metro Region have become skilled at planning together at a high level. Much of that has happened through the Capital Region Board (CRB).

Since 2008, the CRB has facilitated many conversations about regional cooperation and planning. But those conversations need to be translated into integrated decisions and action at a Metro Region level.

Provincially mandated structures haven't encouraged collaborative action to deliver services and infrastructure. In fact, some would argue that provincial structures have encouraged competition amongst municipalities as an operational philosophy.

That philosophy is increasingly problematic for the Metro Region. The world is more competitive than it has ever been. Jurisdictions are feverishly competing for investment and talent, and the Edmonton Metro Region isn't built to compete. Individual metro municipalities are doing a good job of managing their local services, but the overall Metro Region lacks the cohesive regional systems it needs to successfully attract jobs and investment now and in the future. For the Metro Region to be globally competitive, its municipalities need to act together to build regional systems in the areas that matter most.

At the same time, the provincial government has signalled a clear shift in direction in its recently introduced *Modernized Municipal Government Act.* This amending legislation places a clear emphasis on municipal collaboration as a path to better results. It makes sense for municipalities in the Metro Region to make a similar shift and realign themselves for greater collaboration. Doing so not only supports the new provincial direction, it helps build a more resilient and more competitive Alberta.

Build Regional Systems in Areas That Matter Most

Our Panel considered several options for how municipalities could collaborate to make the Metro Region globally competitive.

From a functional standpoint, options for working together exist on a spectrum. They range from purely voluntary cooperation at one end to formal amalgamation on the other. Neither end of the spectrum is ideal.

Voluntary cooperation between municipalities can effectively provide some discrete services, but it lacks the necessary rigour to be a foundation for building a great metropolitan area. Amalgamation can provide a metro-wide foundation, but it can create just as many challenges as it seeks to solve. It can weaken the link between elected representatives and their constituents, undermine regional diversity and often increases costs, further burdening taxpayers.

Evidence suggests that success can be found somewhere between these two ends of the spectrum using a regional systems approach. This widely accepted urban planning approach recognizes that developed areas and their surrounding environments are an interacting "system" that reacts dynamically to urban growth.

To be clear, a regional systems approach doesn't mean delivering all aspects of a municipal service through a regional body. It means strategically bringing together elements of services that are regionally significant so that crucial drivers of competitiveness are operating as highly functioning systems. Any aspect of a service that isn't regionally significant continues to be locally planned and locally delivered by each municipality.

Our Panel believes a regional systems approach offers the most promising direction. It would enable metro municipalities to maintain their local identities while they work together strategically in the areas that matter most for competitiveness.

What are the areas that matter most? There are a number of recognized drivers of competitiveness for city-regions. Of these, three in particular stand out as "cornerstones" for building a globally competitive Edmonton Metro Region:

1. **Economic development.** This has obvious linkages to a region's ability to attract jobs and opportunities. When done effectively, it draws new businesses and builds industrial clusters that contribute to a region's economic diversity and resilience. It also helps develop human capital, attracting and retaining the skilled talent needed to support a wide array of industries and, in turn, enhancing the region's high quality of life. Other jurisdictions have pursued regional collaboration on economic development to build their labour markets, expand their markets for goods and services and improve the exchange of knowledge and ideas in their economies. Experts have said that a collaborative, growth-oriented commercial environment is a primary enabler for a region's economic and social development. Regions have more to offer and are therefore more attractive than individual municipalities.
2. **Public transit.** Efficient inter-regional mass transit supports many social, economic and environmental goals. It enables people to move easily throughout a region – be it for work, school, leisure, medical appointments or other day-to-day needs. For those who are economically disadvantaged or have reduced mobility, transit can mean the difference between social engagement and social isolation. Well-planned inter-municipal transit helps to mitigate traffic congestion, lower greenhouse gas emissions and improve air quality. Regional collaboration on public transit helps improve connectivity between municipalities, expand transit ridership and realize economies of scale.

Key Drivers of Regional Competitiveness

- **Mobility** – The ability to efficiently move people and goods around a region.
- **Land use planning** – Growth-oriented planning that balances social, economic and environmental objectives.
- **Regional infrastructure** – Including roadways, bridges, pipelines and utility infrastructure that supports future growth and transportation connectivity.
- **Economic development** – The attraction of industries and opportunities that provide jobs and generate taxes, supported by a strong regional brand.
- **Human capital** – Skilled talent in a range of fields, including entrepreneurs, researchers and tradespeople.
- **Environment** – Clean air, water, land and other natural assets that support healthy ecosystems.
- **Social infrastructure** – Including assets that support the education, health and well-being of citizens and add to the region's cultural and recreational vibrancy.
- **Effective governance** – Sound governance structures that enable the region to plan, decide and act at a regional level.

3. **Land use planning and infrastructure development.** Effective land use planning supports competitiveness by providing clarity and certainty to residents, businesses and investors. It makes trade-offs to balance a region's social, economic and environmental goals, identifying what lands will be conserved, where people will live and where industrial clusters will be located. It also serves as a guide for the development of a region's major infrastructure, which is a crucial factor in attracting people and investment.

We identified these three cornerstones for a number of reasons:

- They are recognized as the most critical drivers in building globally competitive city-regions.
- They are the primary factors considered by investors when deciding where to locate new industries and major facilities.
- They can generate region-wide benefits in terms of service improvements, value, efficiency or cost-effectiveness which can and should be measured
- There has already been some regional progress in each of these areas, allowing for early action that will help create regional cohesion more quickly.
- They are areas in which action is practical, achievable and essential – and in which inaction will lead to the region falling behind.

The three cornerstones are highly inter-related. They "snap together" to build a strong foundation that will enable the Metro Region to achieve many other things, including social and environmental goals. Conversely, without these three, many goals will simply be out of reach, and the Metro Region will stagnate or even slide backward.

Examples of Regionally Significant Projects

- **Alberta's Industrial Heartland**
- **Aerotropolis**

Acting on Regionally Significant Matter

Taking a regional systems approach means acting as one Metro Region on **regionally significant** aspects of these three cornerstones.

What is regionally significant? Ultimately that question will be up to Metro Region municipalities, but these are some characteristics that can provide guidance. A project is regionally significant if:

- It's a project integral to the region's economic strategy
- It benefits the broader region in measurable ways
- Land use issues cross boundaries
- Supporting infrastructure needs to be aligned

In terms of the three cornerstones, examples of regional significance include:

- **Economic development.**
  - Integrated strategies and activities to attract investment to the region.
  - Development of strategies for the identification, creation and expansion of industrial clusters throughout a region.
  - Agreement on the identity or brand being used to market the entire economic region.
- **Public transit.**
  - Park-and-ride lots and transit centers that support the inter-municipal flow of passengers by inter-municipal buses, car pools or van pools.
  - Priority transit corridors that facilitate inter-modal transportation and transit across the Metro Region.
  - Regional initiatives that facilitate regional transit, such as information services, smart buses, smartcards or a regional control center.

- **Land use planning and infrastructure.**
    - Land uses that identify and deliver on the highest and best use of land as a precious regional resource.
    - Arteries that serve to carry relatively high numbers of people, goods and utilities from one municipality to another within a region, including utility corridors, expressways and freeways.
    - Projects that have the potential to attract investment and jobs to the region or mitigate the loss of investment and jobs from the region. For example, the development of airport lands or of major industrial or research parks.

The World Won't Wait for Us

There is an urgency to this work. Globalization has accelerated and economies today tend to respond rapidly. Jurisdictions everywhere are trying to identify their niches and capitalize on their unique competitive positions, while working aggressively to undermine competitors.

We have a limited window to get in the game and fashion an Edmonton Metro Region that is recognized as a globally competitive place to live, work, play, invest and do business. Unless action is taken soon, our region risks being relegated to the class of "flyovers" and "other places" that aren't notable or sought after, even though we have a wealth of assets, people and potential.

THE COST OF INACTION

From Coping to Competing

When one considers how the Metro Region is growing and evolving, one sees how crucial it is for municipalities to plan, decide and act together to build regional systems that support competitiveness.

The CRB forecasts that there will be up to 2.2 million people living in this region by 2044. If current patterns continue, more than 80 percent of population growth is expected to occur outside the established neighbourhoods in the City of Edmonton's core.[2]

This will exacerbate a trend that already exists. Only one in ten jobs in the Edmonton Metro Region is located in the downtown core. So, unlike other city-regions, we don't have vast numbers of people commuting from outlying areas into a single downtown. Instead they live, work and play all over the region. This makes our land use planning and transportation infrastructure more complicated, making alignment and integration all the more important.

Systems that are vital for growth – such as transportation connectivity, infrastructure and land use policies – also cross municipal boundaries. For the Metro Region to be globally competitive these systems need to be well-planned, integrated and efficient. In one survey, 82 percent of business executives in the region pointed to these as key factors in their business' ability to be successful.[3]

Land use planning has particular importance when it comes to supporting the Metro Region's future economy. Unsustainable development costs all governments, taxpayers and the environment.

Worldwide trends suggest a substantial economic opportunity for the Metro Region is in the agri-food industry. The estimated value of agriculture and food in the region is currently $4 billion. There is a potential to generate more value because the Metro Region is gifted with some of the best agricultural land in the world. However, due to the absence of a regional approach, these lands are being lost at a rapid rate.

The ability to attract and retain a skilled workforce is also key to global competitiveness. In an era when labour is mobile and jurisdictions furiously compete for talent, individuals have greater flexibility to choose where they live. People are increasingly drawn to places that offer appealing environments, including access to public transit, recreation and good infrastructure. Providing this kind of environment across the Metro Region will require municipalities to work in more collaborative and integrated ways.

With respect to the environment, the Metro Region has many natural assets but it's been experiencing ecosystem losses over time. Natural areas outside the river valley and ravines are at the highest risk. Between 2000 and 2007, almost a third of the City of Edmonton's Priority Natural Areas on lands above the river valley and ravine system were permanently lost to development.[4] Minimizing landscape disturbances from infrastructure and increasing densities can help mitigate ecosystem losses in the Metro Region. This requires careful and strategic planning of land uses and better coordination of infrastructure development.

All of the above suggests the Metro Region is currently coping, rather than competing. This might be "good enough" for some people, but it's not a recipe for long-term stability.

[2] City of Edmonton. (2009). *The Way We Move: Transportation Master Plan.*

[3] Sift Every Thing. (2014). *Choose to Lead: Building on the Competitive Advantages of the Capital Region.*

[4] City of Edmonton. (2011). *The Way We Green: The City of Edmonton's Environmental Strategic Plan.*

Coping may have been acceptable when the region's economy was flush from oil prices in the range of $80-$100 per barrel, and we had an ample flow of investment. It becomes much harder to attract new investment to the region at prices of $20-$40 per barrel.

A truly globally competitive Metro Region is one that is resilient. It's one where citizens have jobs and opportunities and benefit from efficient and reliable services despite upturns and downturns in the economy.

If municipalities work together to build regional systems in the three cornerstones – if they move from coping to competing – they can build this kind of Metro Region.

If they don't, there will be a price to pay. Our region's growth won't just stall; it will start declining, with serious implications for taxpayers and our quality of life.

The Models and Numbers Are Compelling

To explore, understand and quantify how taking a regional systems approach could enhance the Metro Region's competitiveness, our Panel commissioned modelling by land use consultants[5]. A copy of the modelling results is provided in Appendix 2.

Using data from the *Consolidated CRB-Accepted Population and Employment Projections, 2014-2044,* models were run of the Capital Region's development over the next 50 years using two scenarios. One scenario was a "business as usual" case wherein growth is accommodated through development densities that follow existing patterns. The other scenario was of "integrated growth" wherein municipalities take a regional systems approach on the three cornerstones, including regional planning of land use and collaborative action on regionally significant infrastructure.[6]

HOW SHOULD THE REGION GROW?

50 Year Comparison	Low Density (Business as Usual Approach)	Increased Density (Integrated Approach)
High Growth Scenario		
Agricultural lands lost	87,700 hectares	41,300 hectares
Natural areas lost	50,200 hectares	20,000 hectares
Settlement footprint growth	138,000 hectares	62,900 hectares
Total settlement footprint	273,900 hectares	198,800 hectares
Gross urban greenfield cost	$54.0 billion	$25.1 billion
Net urban greenfield cost	$15.3 billion	$7.1 billion
Low Growth Scenario		
Agricultural lands lost	58,400 hectares	29,800 hectares
Natural areas lost	33,200 hectares	14,200 hectares
Settlement footprint growth	91,700 hectares	44,800 hectares
Total settlement footprint	227,700 hectares	180,800 hectares
Gross urban greenfield cost	$37.3 billion	$18.0 billion
Net urban greenfield cost	$10.6 billion	$5.1 billion

100 ha = 1 km²

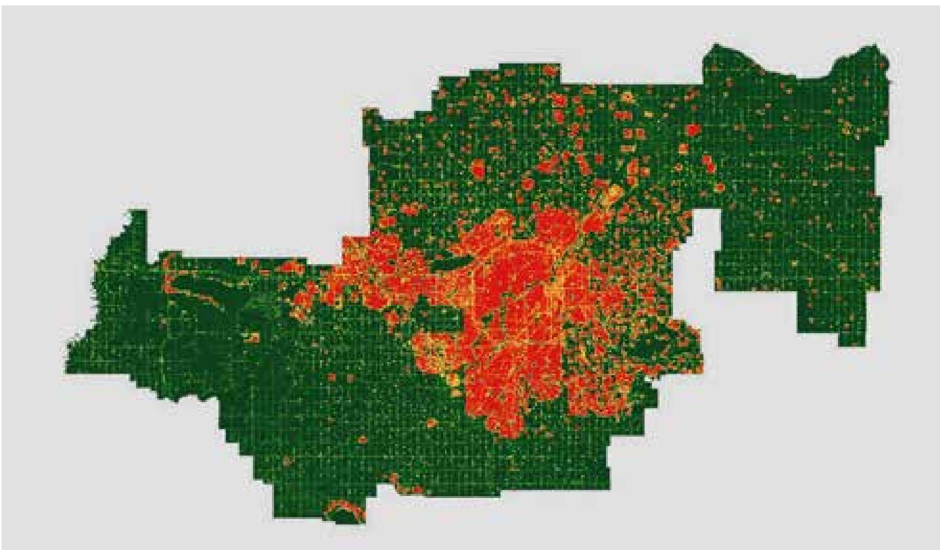
[5] The modelling was conducted by Alces, a recognized leader, both nationally and internationally, in the delivery of land use modelling tools.

[6] The intensification and greenfield density targets in the proposed CRB's *Growth Plan 2.0* were used as the basis.

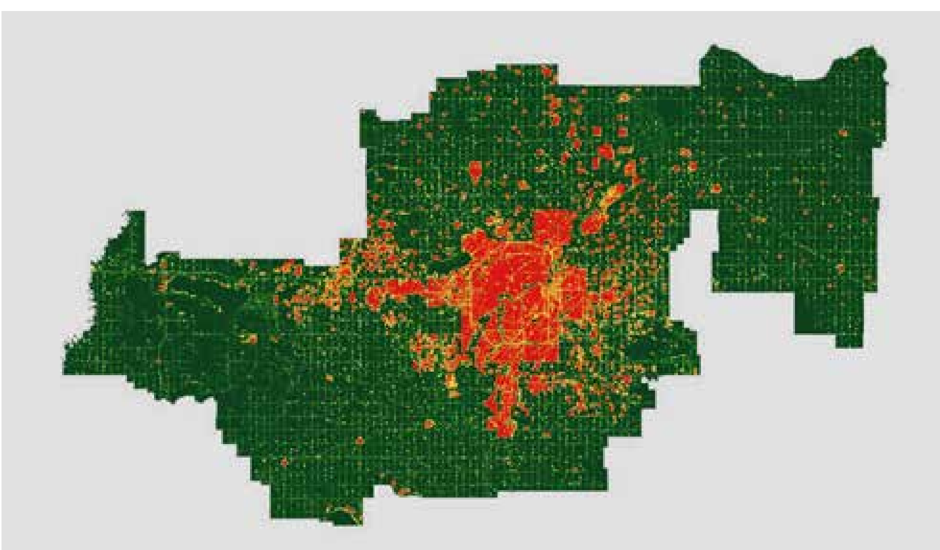
These two scenarios were modelled using projections for high growth and for low growth, yielding four sets of results.

While they are only estimates from modelling, the results are striking.

In a future with high growth, the region's development under a "business as usual" approach could result in the overall settlement footprint doubling in size from what it is today. Thousands of hectares of agricultural lands and natural areas could be lost as a result of



Low Density - High Growth



Increased Density - High Growth

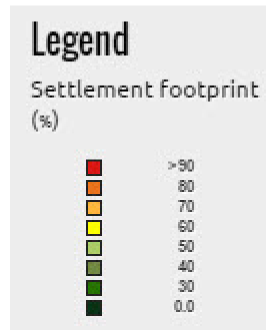
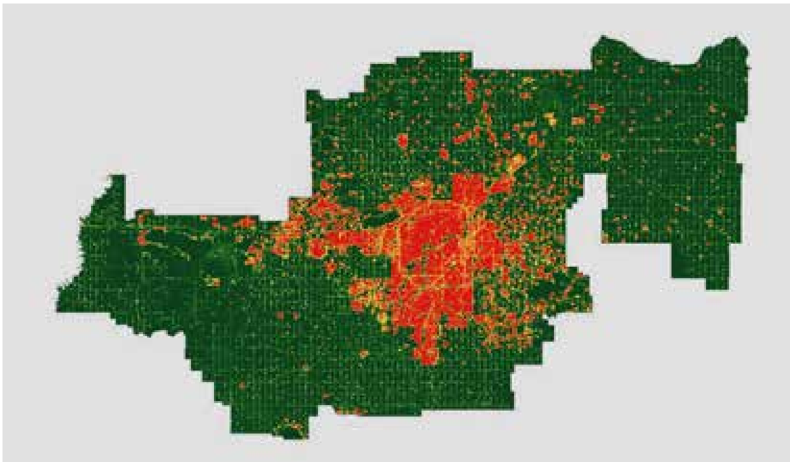


Figure 1.
Total settlement footprint in year 2064 under simulated Low Density (top) and Increased Density (bottom) scenarios with high growth. The difference in size is 75,100 hectares.



Low Density - Low Growth

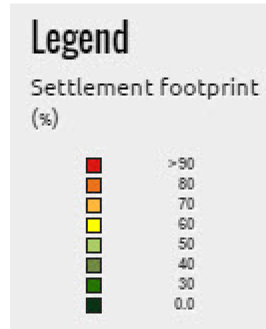
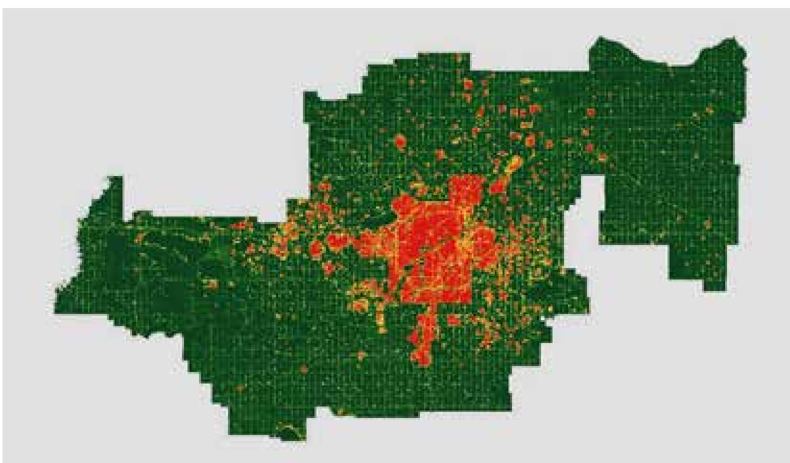


Figure 2.
Total settlement footprint in year 2064 under simulated Low Density (top) and Increased Density (bottom) scenarios with low growth. The difference in size is 46,900 hectares.



Increased Density - Low Growth

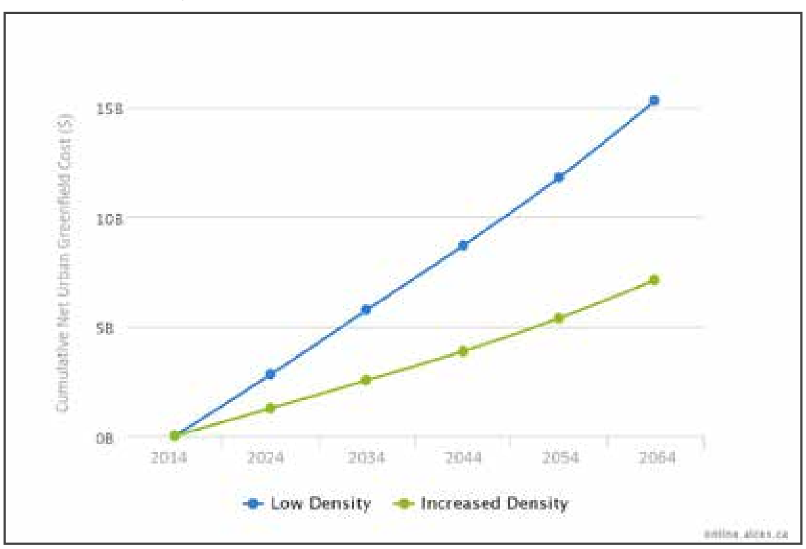
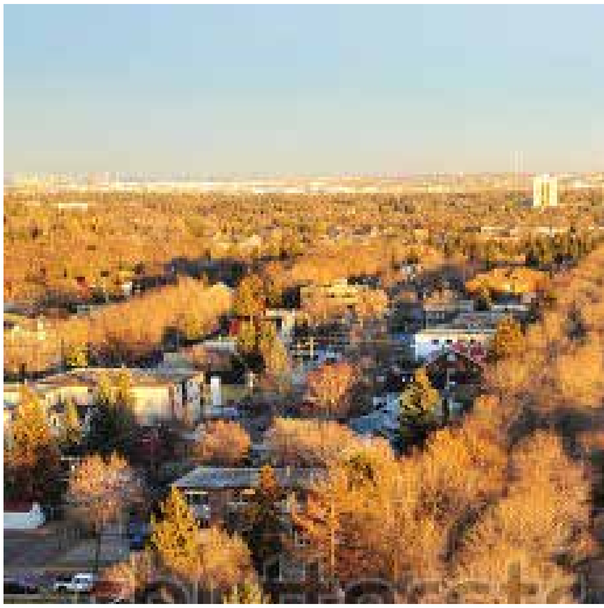


Figure 2a. Simulated cumulative net urban greenfield costs during Low Density and Increased Density scenarios with high population growth.

poorly coordinated expansion. More sprawl would mean longer commute times, more traffic on roads and higher emissions of greenhouse gases and air pollutants. Municipalities would face substantial costs to service the larger footprint (e.g. roads, infrastructure etc.), which could translate into notably higher taxes for Metro Region citizens and businesses. The overall picture isn't one of competitiveness, but of a reduced quality of life.

By comparison, the region's development under an "integrated growth" approach generates dramatically better results. In acting collaboratively on land use and development, municipalities save land and money. Expansion of the region's overall settlement footprint could be reduced by approximately half, as could losses of agricultural lands and natural areas. Such savings would preserve more farmland to support the region's agri-food industry and more natural lands to support the region's ecosystems. A smaller settlement area means municipalities could spend approximately half as much money on servicing costs, reducing pressure on municipal taxes for Metro Region citizens and businesses. The overall result is a region that is better positioned for global competiveness, and has the capacity to better assure a good quality of life.



In a future with low growth, the magnitudes of the numbers are smaller but the overall pattern remains the same. Under an "integrated growth" approach the expansion of the settlement footprint, the loss of agricultural lands and natural areas and the associated costs to taxpayers could all be cut in half when compared to the "business as usual" approach.

Ultimately, the numbers generated by the modelling aren't important so much as the story they tell. By planning, deciding and acting as one Metro Region in areas where it counts the most, municipalities could build a more efficiently functioning region that better conserves land, provides better value for taxpayers and is better positioned to compete for investment, talent and jobs.

A METRO REGION MINDSET

As we noted earlier, many policies around municipal governance and funding have fostered competitive and territorial thinking amongst municipalities. Municipalities often must make choices through the narrow lens of their assessment base (i.e. how much in taxes they will raise from citizens and businesses). In order to fund services and infrastructure, each municipality seeks to expand its local assessment. This leads to municipalities competing with each other for resources, investment and especially land.

This inter-municipal competition is understandable, but it's not sustainable. In order to act differently, municipalities must start thinking differently.

The Government of Alberta has introduced amendments to the *Municipal Government Act* that emphasize a shift from inter-municipal competition to greater collaboration. Metro municipalities can make this shift by changing the architecture of their relationships in the three cornerstones of competitiveness we have identified.

Changing the architecture will help drive a new mindset, and in turn, lead to choices that help build the regional systems the Metro Region needs to be globally competitive.

So what kind of new mindset is needed? One that embraces three central concepts.

The first is taking a regional systems approach on regional issues.

When it comes to the three cornerstones, municipalities need to shift from asking what's best for their individual budgets to what's best for the Metro Region as a whole. This means recognizing that building a globally competitive Metro Region benefits everyone because it attracts investments that would otherwise not come here. And it means being willing to give up some singular direct control so that the entire Metro Region can gain a lot.

Taking a regional systems approach also requires municipalities to understand how local choices and decisions can affect regional success. As discussed earlier, there are certain aspects of the three cornerstones that are crucial to building regional systems in order to drive competitiveness. Ideally, municipalities will manage local matters in ways that support and complement these regional systems while responding to their local needs and priorities.

The second concept is regional leadership.

Achieving a globally competitive Metro Region will take bold and determined actions. It will require doing what's right, even in the face of opposition or apathy. By regional leadership we don't mean a regional government or amalgamation. Rather, we mean leaders who recognize they have responsibilities to the broader Metro Region because the region's success affects the success of their municipality.

Mayors in the Metro Region have already demonstrated regional leadership by initiating the work of this Panel. Going forward, that same spirit of regional leadership needs to infuse and drive municipal decisions and actions.

The third concept that needs to be part of the new regional mindset is the philosophy of "shared investment, shared benefit." While this may be the most difficult shift in thinking, it may also prove the most critical.

Given the intricate ties that bind city-regions together, municipalities can't truly succeed when their neighbours are struggling. The critical infrastructure that underlies our regional economy doesn't reside within a single municipality. A manufacturer in Edmonton, for instance, relies on the infrastructure in the surrounding municipalities at least twice: first to receive the materials it requires, and then once again to get the finished product to market. Likewise, many of the services funded and delivered by the City of Edmonton (e.g. transit, an integrated road system etc.) support economic growth beyond the city's boundaries.

No municipality can attribute its success solely to its own actions, and as a result, it should share a portion of the benefits it enjoys with the greater region that made it possible. On the other side of the ledger, municipalities need to invest jointly to foster the conditions that make success possible.

Enid Slack, one of Canada's foremost experts in municipal finance, has identified four basic principles that need to underlie any successful "shared investment, shared benefit" arrangement:

- **Equity:** Costs and benefits should be shared fairly across the community taking into account the ability to pay and the benefits received.
- **Efficiency:** Resources should be optimized to ensure maximum value in services.
- **Cost-Effectiveness:** A service should be provided at the least cost.
- **Accountability:** Consumers and taxpayers should know who can be held accountable for service provision and the taxes they pay for these services.

The idea of sharing investment or costs with other municipalities in order to realize greater shared benefits or revenues in your own community may seem counterintuitive. However, evidence suggests that models that encourage greater inter-municipal cooperation decrease the potential for outmigration (i.e. when high taxes in one municipality drive people to neighbouring municipalities with lower taxes), and reduce the need to annex land simply for the sake of increasing revenue.

In terms of expenditures, there are three reasons that inter-municipal cooperation makes sense. First, municipal boundaries don't always coincide with boundaries that achieve efficient service delivery and effective infrastructure. Second, economies of scale can be realized by acting inter-municipally. Third, it helps get the job done by bringing together the necessary resources (e.g. financial, institutional, intellectual etc.) to address challenges that are regional in nature.

Investing together to benefit together isn't just a theoretical concept; it has been functionally employed in a number of jurisdictions. Often cited is the example of Minneapolis-St. Paul, where each municipality contributes 40 percent of its annual growth in commercial-industrial tax revenues to a pool of investment dollars that is distributed to participating municipalities based on local capacity.

Other places use different approaches that make sense for their local circumstances and needs. No single model can or should be "copied and pasted" for our Metro Region. However, given the evidence, our Panel strongly believes that municipalities in the Metro Region should adopt its own "shared investment, shared benefit" model, one that reflects the particular circumstances and interdependence of this region.

MAKING IT HAPPEN

Recommendation 1: Affirm the Metro Mayors Alliance by developing and signing a Memorandum of Understanding that spells out a commitment to plan, decide and act as one Edmonton Metro Region.

As a first step, municipalities should publicly affirm their Alliance as an Edmonton Metro Region by committing to a shared vision and principles embodied in a Memorandum of Understanding (MOU).

Our Panel has worked with legal advisors to develop a draft non-binding MOU for the Mayors to consider and present to their respective Councils. The MOU declares the municipalities' intent to plan, decide and act as a Metro Region on regionally significant issues in each of the three cornerstones of competitiveness. Under the MOU, municipalities commit to fulfill this intent. A copy of the MOU is provided in Appendix 1.

Committing to the MOU will demonstrate leadership from the Mayors and their Councils, and signal how they intend to lead as a Metro Region for the overall benefit of the region and its taxpayers. It will send a clear signal to other levels of government about how they intend to lead as a Metro Region that represents 95 percent of the population and 96 percent of the assessment base.

Recommendation 2: Formalize the commitment to plan, decide and act as an Edmonton Metro Region through a legally binding Master Agreement.

In order to successfully deliver and act as one Metro Region to build regional systems, municipalities will require a formal inter-municipal agreement. They will need to move forward in a way that is meaningful, rigorous and ensures a long-term commitment on the part of all Alliance members. This Master Agreement would set the stage for delivering and acting as one Metro Region.

The Master Agreement would:

- Formalize the recognition of the Edmonton Metro Region
- Reaffirm the commitment of municipalities to deliver and act as one Metro Region in the three cornerstone areas – economic development, public transit and land use and infrastructure – on regionally significant issues
- Identify the outcomes that are expected to be achieved
- Outline details about the organizational structures that will be established and used by municipalities to deliver and act as one Metro Region
- Outline the entitlements that municipalities each have in delivering and acting as one Metro Region (e.g. financial benefits, participant rights, decision-making rights etc.)
- Outline the obligations that municipalities each have in delivering and acting as one Metro Region (e.g. honouring regional decisions, financial obligations, shareholder obligations etc.)
- Specify decision-making and dispute resolution processes

- State the parties' agreement to share investments/expenditures and benefits/revenues across the Metro Region equitably, and identify the principles that will inform and underscore the development of mechanisms to do this
- Set criteria and provide for the admission of additional municipalities to the Master Agreement (and hence, to the Metro Region)
- Provide for the expansion by participating municipalities into other key drivers of competitiveness in the future, if agreed to by signatories of the agreement
- Set conditions and provide for the exit of a municipality from the Master Agreement (and hence, from the Metro Region) and outline the consequences of exiting
- Set timelines for results

Importantly, the Master Agreement needs to reflect the inherent rights and obligations of municipal Councils under the current *Municipal Government Act*. It must also reflect the need for accountability to voters through municipal Councils.

Recommendation 3: Consistent with the signed Master Agreement, establish the structures needed to create the three key cornerstones of a globally competitive Edmonton Metro Region.

ECONOMIC DEVELOPMENT

Current State

In the course of our work, our Panel learned that the Metro Region has considerable catch-up work to do when it comes to economic development. Municipalities are each undertaking their own competing economic development activities. Each one markets its own brand. Municipalities are effectively bumping into each other in their efforts to bring business and industry to the same region. Prospective investors face a labyrinth of processes and players. Not only is this confusing, it's counter-productive.

There has been good progress on integrating regional tourism opportunities, however, the lack of regional collaboration on economic development has caused the Metro Region to miss out on investments and opportunities. We have been "passed over" on multiple occasions in favour of other places that have strong regional brands and have integrated their efforts to "hunt as a pack."

Our Panel notes that the CRB has done work to improve cooperation in economic development, particularly in planning and research. The CRB has developed and approved an *Edmonton Metropolitan Region Economic Development Framework* and an *Edmonton Metropolitan Region Economic Development Strategy 2015-2018*.

On March 10, 2016, the CRB passed a motion "That the Capital Region Board incubate a formal regional economic development model, which would be independent of the CRB, for further development and that administration seek Provincial support for the next steps, and administration to report on progress in June."

Our Panel finds the spirit of cooperation encouraging, but we believe work on this cornerstone of competitiveness should move forward faster.

Recommendation 3a: Establish and mandate a new entity responsible for regional economic development in the Edmonton Metro Region.

In today's hyper-competitive world of investment attraction, time means cost – and both time and cost matter to businesses. Our Metro Region needs to take action on this front by creating a single entity that would develop and execute a Metro Region economic development strategy. The content of that strategy should reflect and leverage the inherent strengths and assets of the Metro Region.

Our Panel has considered the various options that exist for structuring regional organizations (e.g. regional services commission, non-profit corporation etc.) and Appendix 5 contains a comparison of these options and their characteristics. In establishing the regional economic development entity (and other regional entities that our Panel recommends later in this report), municipalities will undoubtedly wish to use the structural option they think will be most appropriate. However, in the spirit of contributing advice based on what we have learned, we have suggested structural options for each of our recommendations.

In this case, we believe the regional economic development entity might best take the form of a non-profit (i.e. "Part 9") corporation. This would give it status as a separate legal entity that has a range of authorities (e.g. such as borrowing, owning property etc.).

To establish the entity, each municipality should put forward its most readily available regional economic development assets. This includes tangibles such as research, strategies and other information. Each municipality should also contribute financial resources and skilled talent to the entity. This will enable it to hit the ground running and achieve results quickly.

Suggested Hallmarks of a Metro Region Economic Development Strategy

- Building on the strength of our Industrial Heartland to attract value-added energy- and petrochemical-related industrial projects
- Looking at the health sector as a growth industry, building on successes in health innovation and existing assets in nanotechnology
- Positioning ourselves as a global producer of agriculture and food, as we are among a small handful of jurisdictions that has the land base and high-quality soil capable of fulfilling this role
- Making use of our "hub" position and sweet spot in supply chains to expand our transportation and logistics industry
- Pursuing environmental technologies in oil and gas that support a transition to a lower-carbon economy
- Leveraging our post-secondary institutions to reinforce and build our position as a centre of young, skilled entrepreneurs and of new ideas and discoveries
- Capitalizing on our existing, strong manufacturing industry to produce technological innovations

Desired Outcomes

- **A regional economic development strategy maximizes the Metro Region's assets and advantages and sustains its high quality of life**. The good work that has been done by municipalities and the CRB is used as a basis for the regional strategy. Key economic opportunities are identified across the region and collaborative strategies are developed to achieve them.
- **Significant investment and jobs are attracted to the Metro Region in the decades ahead.** This includes the identification, development and expansion of a range of economic clusters, including manufacturing, value-added oil and gas, agri-foods and knowledge-based industries.
- **A strong, overarching regional image and brand make the Metro Region competitive in key markets and support our economic goals.** The region competes and succeeds in key markets through its integrated marketing approach. Individual municipalities respect and support the regional brand and marketing strategy.
- **Metro municipalities support the role, responsibilities and activities of the regional economic development entity.** Metro municipalities participate in the development of a regional economic strategy and support the entity that delivers the regional brand and marketing. Municipalities continue to address their own local development initiatives, without competing with regional priorities.

PUBLIC TRANSIT

Current State

Public transit is a crucial cornerstone for developing a globally competitive region. However, citizens in the Metro Region currently experience a patchwork of multiple public transit networks operated by each municipality. This results in regional inefficiencies and higher costs as the region develops. It also inhibits those citizens who would choose public transit, thereby failing to maximize the environmental and other benefits that inter-municipal transit can realize. Between 2010 and 2014, the number of vehicles in the City of Edmonton alone increased by over 14 percent.

The lack of a regionally planned transit system also has costs to the overall economy, notably through traffic congestion. According to the Organization for Economic Cooperation and Development, developed countries lose three percent of their GDP each year due to traffic congestion. In Alberta, this translates to an estimated $7 billion of economic activity lost each year.[7]

The City of Edmonton and the City of St. Albert have taken some important early steps to cooperate on public transit. A vision published jointly by Edmonton Transit System and St. Albert Transit, *Moving Integrated Transit Forward*, notes that:

- Population growth in the Metro Region is dramatic, and the window of opportunity to proactively put in place an integrated regional transit system is closing. The region risks being put in a position of constantly reacting to transit demands on a fractured basis, rather than effectively leveraging transit to encourage growth.
- People in the Metro Region are living farther away from where they work, and an effective transit "backbone" at the regional level is needed.
- Since its founding in 2008, the CRB has commissioned seven studies regarding improved regional transit. The CRB's Inter-Municipal Transit Governance Study Report indicates there is a business case for regional transit.

To this end, Edmonton Transit and St. Albert Transit have sought agreement from their Councils to explore ways to integrate their transit operations in order to better serve citizens. In March 2016, St. Albert City Council and the City of Edmonton's Transportation Committee agreed to move forward on developing a separate regional commuter bus service. This is encouraging, but our Panel believes that efforts should be made across the most populous areas of Metro Region.

Recommendation 3b: Establish and mandate an entity responsible for planning, decision-making and delivering core public transit across the Edmonton Metro Region.

Importantly, the feasibility of a Metro Region transit system depends on the participation of the metro municipalities with the three highest populations: Edmonton, St. Albert and Strathcona County, which together provide more than 95 percent of the transit service within the region. Other municipalities could participate later, but a regional transit system is only possible when these three municipalities commit to moving forward together.

[7] Alberta Economic Development Authority, Transportation Committee. (2013). *Congestion Management: Vital Component of Today's Infrastructure Planning.*

The regional transit entity's focus should be on commuter corridors that enable the smooth flow of people between municipalities and enhance mobility throughout the Metro Region. Local bus routes should be left to individual municipalities.

In this case, the regional transit entity might best take the form of a regional services commission. That structure has been used in the past for inter-municipal activities such as water treatment. A regional services commission is a separate legal entity and has the authority to borrow and own land. Its directors are appointed by its member municipalities to ensure that the commission's work is informed by municipalities' views and priorities. It also works only for the benefit of member municipalities, as its service area is limited to the geographic boundaries of its members.

Desired Outcomes

- **Citizens and businesses in the Metro Region have better regional transit service.** Regional transit is delivered efficiently and seamlessly, enabling people to move around the region quickly and easily. People can move between municipalities without encountering unnecessary barriers such as misaligned routes. The time required to traverse the region by transit is markedly reduced.
- **The regional transit network leverages social and environmental benefits, as well as economic expansion.** The strategic development of a transit network can help enhance a region's overall air-road-rail connectivity which is sought after by many industries. Rail links between airports and downtown cores, for example, help make a region attractive to skilled talent and business investors.
- **Taxpayers realize significant procurement savings through an inter-municipal transit system.** By leveraging their collective purchasing power through a single entity, the participating municipalities are able to save money on vehicle purchases, service, repairs and administrative costs.

LAND USE AND INFRASTRUCTURE

Current State

Land is a scarce and valuable regional resource, and effective mechanisms to make decisions on the best uses for land are vital for the Metro Region's resilience and long-term competitiveness.

Aligning linear infrastructure such as major roads, interchanges and bridges with future land uses is a key driver of regional competiveness. As such, decisions and actions concerning regional land use and infrastructure should be made at a regional systems level.

Over the years, the CRB has done substantial work in both land use and infrastructure, crafting a number of broad regional plans outlining where and how development should take place, including what lands should be set aside for certain purposes, and how the road and transit networks should evolve to support those purposes. However, our Panel was told consistently that:

- Further sprawl continues to be accommodated, putting all municipalities on track for increased servicing and infrastructure costs, and all taxpayers on track for much higher property taxes in the future.
- Prime agricultural lands remain at risk of conversion into residential, commercial or industrial developments, undermining the long-term prospects of the Metro Region's food and agriculture industry This land use challenge is both complex and sensitive. It encompasses issues of densification, recognition of the rights of property owners and the implications for rural municipalities of preserving these lands.
- Annexation is the primary tool available to and used by Metro Region municipalities to expand their assessment base and control land uses. These competitive annexation processes are expensive, create regional antagonism and leave important regional land use issues either unresolved or exacerbated.
- There is currently no regional body that can effectively negotiate the necessary trade-offs among Metro Region municipalities or resolve regional land use conflicts and compliance issues. The need for such a mechanism in the Edmonton Metro Region is significant, given its growing population, its concentration of development and the diverse demands for regional land now and in the future. An entity with the capacity to affect and negotiate land uses at the Metro Region level is key to avoiding future contentious annexations.
- The Municipal Development Plans (MDPs) and other statutory plans of the Metro Region municipalities align with the current CRB *Growth Plan*, but compliance within those statutory plans is inconsistent across the region.
- Municipalities compete with each other for infrastructure funding from the provincial and federal governments. They do not take a consistent and deliberative approach to identifying those regional projects that would most benefit the region as a whole.

Recommendation 3c: Establish a structure with the capacity and authority to facilitate and act upon regional land use planning and regional infrastructure development in the Edmonton Metro Region.

Municipalities have already demonstrated an ability to work together on land use planning. They must now build on this, and consistently act on those plans as one Metro Region, including the development of major regional infrastructure.

Our Panel has identified two options for making this happen. One is the use of an Inter-Municipal Development Plan (IDP), which is a tool available under the *Municipal Government Act*. The other option is for municipalities to serve as a provincial Growth Management Board for the Edmonton Metro Region.

In operational terms, the differences between an IDP and a Growth Management Board are not significant. Both provide the means for driving alignment on regionally significant land uses and infrastructure.

The key difference is in how the two options can come about. The Growth Management Board approach would require action by the provincial government, since it has the necessary authority to establish such a board The IDP approach could be pursued by metro municipalities on their own.

Each option is described in more detail below.

Option #1:

In order to plan, decide and act as one on regionally significant land use and aligned infrastructure, our Panel recommends an Edmonton Metro Region Inter-Municipal Development Plan be entered into by Edmonton Metro Region municipalities. This IDP would:

- **Include all of the land in the Edmonton Metro Region municipalities**
- **Direct cooperation on land use through procedures as allowed in the *Municipal Government Act***
- **Create and delegate powers to an Edmonton Metro Region Joint Committee on Infrastructure**
- **Establish an Edmonton Metro Region Infrastructure Development Fund managed by the Joint Committee on Infrastructure**

Inter-Municipal Development Plans are used by neighbouring municipalities to coordinate their land use planning in fringe areas where their municipal boundaries meet. Unlike traditional IDPs, the Edmonton Metro Region IDP could encompass the entire Metro Region and would accommodate the specific actions and purposes outlined in the recommendation above. This innovative use of the IDP process would require approval by each participating municipality in a bylaw.

The Edmonton Metro Region IDP would enable an effective regional system for land use and infrastructure planning. It would be a product of collaboration not a provincially mandated structure and it could:

- Establish policies for cooperation on land uses such as regionally significant residential, industrial, commercial and agricultural uses. Given the time, investment and expertise that have gone into the *Capital Region Growth Plan* and other CRB-led plans, the CRB's land use planning work should serve as the basis for the Metro Region IDP. This approach would avoid duplication and build further on the good work and collaboration across the Capital Region to date.
- Drive alignment on regionally significant land uses through Municipal Development Plans and Area Structure Plans as provided for under the *Municipal Government Act*.
- Provide the means to plan, decide and act on land use and infrastructure matters of significance to the entire Metro Region (e.g. support to economic clusters, new residential areas of regional significance, major industrial developments, aligning development with major infrastructure projects).
- Enable Metro Region municipalities to continue to manage their own municipal planning matters such as local roads, zonings and permitting.
- Create a platform that doesn't currently exist to negotiate the necessary trade-offs for shared regional benefit on land use decisions. The IDP would contain procedures and mechanisms by which the participating municipalities would facilitate collaborative investment/benefit sharing. These mechanisms would look at both the costs to municipalities (direct and indirect) of land use decisions and the regional benefits (revenues and other benefits), as well as how they would be shared.
- Allow the Metro Region municipalities to leverage their combined weight to achieve regional infrastructure goals through a highly integrated mechanism. This collaboration would enable the metro municipalities to more effectively advocate for provincial and federal funds at a time when government are embarking on significant multi-year initiatives to invest in infrastructure.
- Provide for the creation of a Joint Committee on Infrastructure to identify and support regionally significant infrastructure projects. Participating municipalities would need to either pass an enabling bylaw to authorize the Joint Committee's establishment and delegate powers to that Joint Committee, or include those provisions in the bylaw approving the IDP. This committee would determine which priorities are of regional significance and support regional goals across the "triple bottom line." Additionally, it would seek funding from the provincial and federal governments, other public authorities and the private sector. It could also undertake contracting and risk management for metro regional infrastructure developments.

- Enable investments in projects of regional significance by creating an Edmonton Metro Region Development Fund, a shared pool of capital investment dollars from which regional infrastructure development priorities would be financed. This Fund would include grants and investment dollars from other orders of government and partners. Municipalities would each maintain their current capital programs for local infrastructure projects that fall outside the criteria for regional scope.

Option #2:

Work with the Government of Alberta to obtain provincial recognition and authority to serve as the Metro Region's Growth Management Board.

Given the pressing need for regional action in the Edmonton Metro Region, an alternative to the IDP that could be created quickly through provincial regulation is a Growth Management Board. Under the current *Municipal Government Act*, a Growth Management Board is responsible for integrated and strategic land use and infrastructure planning within a defined area.

The recently tabled *Modernized Municipal Government Act* proposes expanding the scope of Growth Management Boards to include specifying regional services and funding of those services. If passed into law, these changes would enable Growth Management Boards to be more effective in promoting integrated land use and infrastructure planning.

A Growth Management Board would provide an effective forum to negotiate the necessary trade-offs for shared regional benefit on land use decisions, as well as mechanisms to facilitate collaborative investment/benefit sharing. The Joint Committee on Infrastructure and the Edmonton Metro Region Infrastructure Development Fund could also be responsibilities of an Edmonton Metro Region Growth Management Board.

Desired Outcomes

- The Edmonton Metro Region facilitates growth and regional competitiveness collaboratively. A platform is in place to find the compromises and to negotiate the necessary trade-offs needed to ensure collaborative approaches to land use planning and aligned infrastructure development.
- The economic development goals of the Metro Region are supported by regional land use and infrastructure planning. The Metro Region has the capacity to implement decisions with a focus on economic resilience and affordability for taxpayers. The municipalities of the Edmonton Metro Region plan, act and advocate together to "win" as one rather than compete individually.
- The Metro Region is better served with a collaborative voice on significant regional infrastructure priorities. A strong, collaborative voice representing over one million people presents a united case to other orders of government on the infrastructure funding priorities for the Edmonton Metro Region.
- Investment dollars for regional infrastructure are pooled and leveraged for optimal regional benefit. Municipalities act with a "shared investment, shared benefit" philosophy to make capital investments in regionally significant infrastructure that supports the Metro Region becoming globally competitive. The pooling of investment dollars enables greater "bang for the buck," providing benefits to Metro Region taxpayers.

ALIGNING WITH OTHER GOVERNMENTS

The Edmonton Metro Region has special significance in Alberta. It's a major economic and creative hub for the province. It's Alberta's capital city and a prime connector to and from Canada's north. As a globally competitive region it can play a strong role in helping advance a more resilient, more diverse and more competitive Alberta. Enhancing municipal-provincial alignment will enable the Metro Region to fully assume this role with confidence, generating substantial benefits for Metro Region residents and for all Albertans.

Building a globally competitive Metro Region will require provincial cooperation and support. It will involve municipalities and the province thinking and acting in parallel on economic, social and environmental policies. For example, while it should be firmly rooted in the needs and priorities of the Metro Region, the development of a inter-municipal public transit system should have a line of sight to broader provincial directions on urban transportation, mobility and intermodal policies. The Metro Region's economic strategy should also align with the provincial government's economic diversification and value added strategies.

The Government of Alberta has set new directions to modernize the Municipal Government Act that it would enable greater municipal collaboration in areas that will drive efficiencies, effectiveness and economic competitiveness. This makes especially good sense in an era of limited public resources.

The path our Panel recommends is consistent with this philosophy. We believe there is an opportunity for the Metro Region to be a model of successful inter-municipal collaboration in the province. To that end, we believe the province should develop flexible funding models that incent regional collaboration – and disincent inter-municipal competition where it leads to higher costs or inefficiencies.

We also believe the Metro Region municipalities should move quickly to work with the Government of Alberta to ensure maximum alignment to create new regional systems.

In some cases, this will mean the Metro Region obtaining approval from the provincial government to establish certain mechanisms. For example, the regional transit entity would need provincial approval to be established as a regional services commission. Provincial approvals or decisions might also be necessary in the establishment of an appropriate mechanism for inter-municipal sharing of investments and benefits.

It will also be valuable to ensure municipal-federal alignment, particularly as it concerns capital investment. The federal government has signalled an intent to invest heavily in municipal infrastructure. This creates opportunities for the Metro Region to build the regionally significant projects needed to lift up the whole region and help make it globally competitive.


KEEP THE COURAGE AND KEEP GOING

The capacity for leadership, commitment and action are foundational elements of a resilient, globally competitive Metro Region. By signalling their willingness to think beyond their municipal boundaries and consider Metro Region issues and opportunities, the Mayors have demonstrated far-sighted leadership.

So what are the next steps?

1. **Accept the Panel's Report and Commit to a Shared Vision and Principles.** The first step would be for the Mayors to accept this report and commit to seek approval from their respective Councils of the shared vision and principles contained in this report. Since nothing else can happen until those who desire change commit to it, this needs to happen right away.
2. **Present the Panel Report and the Draft MOU to Councils.** The Mayors should present the Panel's report and proposed MOU to their respective Councils, a copy of which is included in Appendix 1.
3. **Engage with the Provincial Government.** The municipalities need to initiate a two-track engagement process with the Government of Alberta both with key Ministers and at administrative levels. Specific areas of focus would be establishing the transit entity as a regional services commission and establishing the Metro Region Alliance as a Growth Management Board (provided that option were chosen and agreed to by the province).
4. **Finalize and Sign the MOU.** While acknowledging the need for review, discussion and debate of the MOU by municipalities and their Councils, we believe the non-binding MOU could be signed by the fall of 2016.
5. **Initiate a Two-Stream Process to develop the Master Agreement.** The Mayors would need to move on two fronts simultaneously:

- **A Master Agreement Steering Committee.** Given the critical and complicated nature of the process, the Mayors and their Councils should establish a Steering Committee to negotiate terms of the Master Agreement and identify a leader for this initiative who has the skill set to negotiate among the various interests and issues and is given the responsibility and mandate to do so.
- **Focused Task Forces.** To aid and accelerate its work, the Steering Committee should create a set of task forces. The membership would include Chief Administrative Officers (CAOs), who have the ability to drive change, and experts, who have the knowledge and experience to inform the process. These task forces would tackle the key issues that will shape the Master Agreement including:
    - determining the principles that would inform the IDP, if the municipalities opt for that approach to land use and infrastructure
    - developing governance and operating models for regional economic development, the regional transit entity and either the IDP or the Growth Management Board
    - devising a Metro Region shared investment/shared benefit model
    - negotiating with the Province on elements that require legislative or other support
    - devising stakeholder engagement and communications plans

6. **Negotiate and Sign the Master Agreement.** Once negotiations are complete, municipalities should endorse and sign the Master Agreement. Our Panel recommends a target date for completion of the Master Agreement by the end of March 2017.
7. **Metro Region Action on Economic Development and Public Transit.** When the Master Agreement is signed, municipalities should act quickly to establish the regional economic development agency. Working with the provincial government, the municipalities can similarly move forward to create a public transit entity.
8. **Integrate Land Use and Infrastructure at the Metro Region Level.** Our Panel's recommendations provide two options for integrating regionally significant land use and infrastructure throughout the Edmonton Metro Region. In operational terms, the differences between an IDP and a Growth Management Board are not significant. The key difference is in how the two options can come about. The Growth Management Board approach would require action by the provincial government, while the municipalities could pursue the IDP approach on their own.
    - **Option #1: The Edmonton Metro Region Inter-Municipal Development Plan**
      Although the principles contained in the Master Agreement would broadly shape a Metro Region IDP, its key elements would be statutorily dependent on public input. Appreciating that public consultations require time, our Panel believes the process should begin as soon as practical after the Master Agreement is signed. Once consultations are complete, the Councils, as required under the *Municipal Government Act*, would need to pass bylaws to adopt the new plan.

OR

    - **Option #2: The Edmonton Metro Region Growth Board**
      The Edmonton Metro Region Growth Board would need to be created by provincial regulation once the new *Municipal Government Act* legislative changes are passed.
9. **Create the Joint Committee on Infrastructure and the Edmonton Metro Region Infrastructure Development Fund.** The Joint Committee on Infrastructure would be created by each municipality by passing an enabling bylaw. The committee would be responsible for the newly created Edmonton Metro Region Infrastructure Development Fund.
10. **Identify Edmonton Metro Region Infrastructure Priorities.** The Metro Mayors Alliance should develop and secure Council agreement on a "short list" of the three to five most pressing projects of regional significance. Ideally, this should be ready to inform the 2017-2018 provincial and federal budget cycles. This list would eventually become the responsibility of the Joint Committee on Infrastructure.

Many will ask whether the targeted timelines outlined here are realistic. Our Panel would say they are clearly ambitious.

Our Panel's recommendations focus on organizational models that have been successfully executed elsewhere and which don't require significant new legislative or regulatory frameworks. However, they will require rigorous implementation planning, and the scope of that work shouldn't be underestimated or unappreciated.

Our Panel recognizes that the support of municipal Councils in the Metro Region is required in order to proceed with some or all of our recommendations. This process will ensure a healthy and necessary democratic debate on building a competitive Edmonton Metro Region. After the review by Councils, control over how the process moves forward, and at what pace, would rest with the Metro Mayors Alliance.

We believe there is a clear imperative to remain resolutely ambitious on timelines in order to achieve change and results over the next two years.

Too often in our region's history we have taken the easy route – the status quo. As our report has frankly stated, the world isn't waiting on us. Instead, it's becoming more and more competitive at an increasingly rapid rate. If we don't act quickly to meet the competition, we risk wasting our region's tremendous potential.

Timeline Proposed By Panel

2016	Present Report and MOU to Councils	Finalize and Sign MOU (Fall 2016)	Establish Master Agreement Steering Committee and Task Forces		
2017	Finalize and Sign Master Agreement (March 2017)	Creation of Growth Management Board (Option 1)	Inter-Municipal Development Plan Begins Process (Option 2)	Complete legal framework to establish Economic Development Corporation	Complete legal framework to establish Transit Commission
2018	Create Joint Committee on Infrastructure and Infrastructure Development Fund	Develop Infrastructure List	Adopt Inter-Municipal Development Plan (Option 2)		

ADAPTABLE FOR THE FUTURE

By acting on our recommendations, municipalities can build a globally competitive, economically resilient Metro Region that is adaptable for the future.

- The Metro Region can compete globally. A refrain we consistently heard was that the Metro Region can be much more than the sum of its parts. We agree. Our recommended approach gives municipalities the ability to build a globally competitive, future-ready and economically resilient Metro Region.
- The Metro Region Alliance can evolve. Our Panel was established by nine Mayors who recognized the need for municipalities to think, plan and act differently in the future. We would hope and expect that these nine municipalities are founders of the Edmonton Metro Region. However, the approach we advocate can accommodate additional municipalities now and in the future. There may be certain municipalities whose participation makes immediate sense; for others, the value proposition may evolve over time. As we said earlier, there is great power in coming together in this deliberate and willing way.
- The Metro Region can be adaptive. Our Panel has emphasized the need for municipalities to deliver and act as one Metro Region on the three cornerstones of competitiveness. Once that is done, municipalities can and should feel free to deliver and act as a single Metro Region in other areas. Literature suggests it makes good sense for a "metro tier" to deliver services that have regional benefits. Our view is that municipalities should deliver and act as a Metro Region in areas where doing so will lead to better functioning systems, greater efficiencies and advantages for taxpayers. There will be many areas where the necessary economies of scale will simply not be present, and municipalities should handle these areas locally.
- The Metro Region can maintain its diversity. One advantage of our recommended approach is that municipalities can retain their unique identities while delivering and acting as one Metro Region. Literature indicates that diversity is a strength of competitive and successful city-regions. If our recommended approach is implemented well, the days of antagonistic annexations or amalgamation can be a thing of the past.

APPENDICES

Appendix 1
Proposed Memorandum of Understanding

This Memorandum of Understanding is made effective this ___ day of ___________, 2016.

Between:

The City of Edmonton

And

Strathcona County

And

The City of Leduc

And

Leduc County

And

The City of Fort Saskatchewan

And

The City of St. Albert

And

The City of Spruce Grove

And

Parkland County

And

Sturgeon County

(collectively the "Municipalities")

PREAMBLE

The Municipalities wish to realize a globally competitive, future-ready Edmonton Metro Region that attracts people from across the country and around the world to live, work, invest and raise a family.

The Municipalities realize that such a region, one that is more resilient to up-turns and downturns in the economy and capable of welcoming one million new residents by 2044, is not possible if they continue working independently of one another on issues of regional significance.

The Municipalities agree that they must plan, decide and deliver key regional-level systems that enable the future competitiveness of the Edmonton Metro Region.

For these reasons, the Municipalities through their respective Mayors established the Advisory Panel on Metro Edmonton's Future ("the Advisory Panel") to provide advice and to recommend options on how best to leverage the combined assets and attributes of the region.

The Advisory Panel's report identifies the following competitive cornerstones to building a globally competitive Edmonton Metro Region:

(a) economic development

(b) public transit

(c) land use and infrastructure

(hereinafter referred to as "Cornerstones of Competitiveness" or "cornerstones:).

Because the Municipalities' ability to cooperate on these cornerstones will determine the Edmonton Metro Region's future competitive capacity and success, the Advisory Panel recommended that action be taken so the Municipalities can plan, decide and act in aligned and integrated ways on the Cornerstones of Competitiveness.

The Advisory Panel also recommended that Municipalities enter into clear agreements providing for a "shared investment/shared benefit" model related to regional economic development and land use and infrastructure development.

The Municipalities wish to explore ways they can establish, align and integrate these Cornerstones of Competitiveness, including a means for sharing investments and benefits, and therefore wish to facilitate further discussions in regard to these matters.

THEREFORE the Municipalities record their mutual understanding and intent, as follows:

UNDERSTANDINGS

1.0 Definitions

1.1 In this Memorandum of Understanding, the following words and terms will have the following meanings:

a. "Advisory Panel" has the meaning given that term in the preamble hereto.

b. "Council" means the respective Municipal Council of each of the Municipalities.

c. "Edmonton Metro Region" means the region comprising the Municipalities, collectively.

d. "Memorandum of Understanding" or "MOU" will mean this Memorandum of Understanding.

e. "Municipalities" means the City of Edmonton, Strathcona County, the City of Leduc, Leduc County, the City of Fort Saskatchewan, the City of St. Albert, the City of Spruce Grove, Parkland County, and Sturgeon County, collectively and a "Municipality" means any of them.

2.0 Purpose and Intent of MOU

2.1 This MOU provides the framework to negotiate and develop the tools to implement the cooperation, coordination and potential combination of the Cornerstones of Competitiveness, and the shared investment/shared benefit approach for regionally significant economic development and land use and infrastructure within the Edmonton Metro Region.

2.2 This is not a legally binding agreement, and does not create binding obligations upon or between the Municipalities. It does, however, reflect the shared intention of the Municipalities who commit to work to achieve the outcomes included herein as a start to better overall cooperation, coordination and potential collaborative delivery models across areas necessary to improve regional competitiveness. This MOU is therefore intended to guide participating Municipalities, their Councils, their management and their staff in addressing issues that impact regional competitiveness in these areas.

2.3 Any Municipality may withdraw from this MOU, or any process contemplated within it, at any time, on appropriate and reasonable notice to the other Municipalities.

3.0 Actions Related to the Cornerstones of Competitiveness

3.1 The Municipalities will establish a steering committee to discuss and negotiate the terms of cooperation, coordination and potential collaborative models for the Cornerstones of Competitiveness and the shared investment/shared benefit approach. The Municipalities will determine the committee type, its membership and the number of members.

3.2 To aid and accelerate the work of the steering committee, the Municipalities will establish a set of task forces. Led by the committee, these task forces will study and advise on issues related to the Cornerstones of Competitiveness and the shared investment/shared benefit approach. The Municipalities will determine the number of task forces and their respective mandates as well as their membership.

3.3 The Municipalities will continue to meet in this context until they make their final recommendations to their Councils, adopt a different governance structure, or for so long as the Municipalities find it useful to continue meeting.

3.4 To ensure adaptability to the circumstances in each municipality, the Municipalities may:

a. Proceed with Cornerstones of Competitiveness with the participation of less than all of the Municipalities, or with the inclusion of municipalities not currently included in the Edmonton Metro Region;

b. Proceed with the process with respect to an amended list of Cornerstones of Competitiveness which may expand upon, limit or otherwise alter the list of Cornerstones of Competitiveness.

However to the extent it is not inconsistent with its other obligations, each Party shall endeavour to keep the others informed of such determinations.

3.5 There is urgency to this work, and the Municipalities will work towards a deadline of **XXXX, 2016,** to put into action appropriate structures and processes for the Cornerstones of Competitiveness, and the investments/benefits structures required to sustain them.

4.0 Future Amendments or Agreements

4.1 The discussions contemplated in this MOU are intended to lead to formal agreements between the Municipalities, including appropriate investments/benefits agreements, public transit agreements, economic development agreements or land use and infrastructure commitments.

4.2 The Municipalities may also mutually agree to amend this MOU, in writing, at any time.

EXECUTED on behalf of each Municipality by its duly authorized representative.

The City of Edmonton	**Strathcona County**	**The City of Leduc**
Per:__________________	Per:________________	Per:_______________
Leduc County	**The City of Fort Saskatchewan**	**The City of St. Albert**
Per:__________________	Per:_________________	Per:________________
The City of Spruce Grove	**Parkland County**	**Sturgeon County**
Per:_________________	Per_________________	Per:________________

Appendix 2
Greater Capital Region Scenario Analysis

Introduction

This report provides a summary of settlement land-use scenarios that have been simulated for the Edmonton Metro Region in order to identify a range of potential impacts on landscape composition and greenfield costs at various growth and density patterns.

This simulation technology used data available in the Capital Region Board's (CRB) recently updated Growth Plan and other available sources as noted. The results illustrate a "scale of magnitude" of the impact of various growth patterns.

In order to achieve a more accurate and detailed result, future analyses should use actual data sets available from municipalities and/or the CRB and apply them in these same models.

The Alces models used in this report have been peer reviewed and used for planning purposes across Alberta, Canada and internationally.

CONTEXT

This report recognizes that residential complexes (cities, towns, acreages, farm houses) and their embedded and surrounding watersheds (ecosystems) are an interacting "system" that respond dynamically to urban growth patterns. These responses are numerous and diverse and include such dynamics as transportation metrics, storm water movement, water quality, infrastructure costs, food security, and a broad suite of social performance metrics.

Data tells us that the constituent municipalities of the greater capital region and the Edmonton Metro Region interact within a dynamically shifting bio-physical-anthropogenic system. As such, it is critical for the Edmonton Metro municipalities to carefully consider the consequences of urban form in a "systems" context.

KEY FINDINGS

Planning objectives of Edmonton Metro Region municipalities recognize the importance of natural capital to the long-term prosperity of the greater Metro Region.

Urban densification strategies generate a broad and significant suite of socio-economic and fiscal benefits to both current and future generations.

The analyses presented here compare population densification patterns in two different scenarios:

- A **Low Density** scenario in which regional land use and infrastructure occurs without a regionally integrated approach to planning and development, resulting in low-density development that characterizes what has occurred in past decades.
- An **Increased Density** scenario in which there is a mechanism to apply an integrated approach to growth that implements intensification and minimum density standards to reduce the footprint that is required to accommodate future population growth.

The outcomes of the simulations point to clear benefits of an integrated approach including conservation of natural land and farmland and reduced development costs.

HOW SHOULD THE REGION GROW?		
50 Year Comparison	Low Density (Business as Usual Approach)	Increased Density (Integrated Approach)
High Growth Scenario		
Agricultural lands lost	87,700 hectares	41,300 hectares
Natural areas lost	50,200 hectares	20,000 hectares
Settlement footprint growth	138,000 hectares	62,900 hectares
Total settlement footprint	273,900 hectares	198,800 hectares
Gross urban greenfield cost	$54.0 billion	$25.1 billion
Net urban greenfield cost	$15.3 billion	$7.1 billion
Low Growth Scenario		
Agricultural lands lost	58,400 hectares	29,800 hectares
Natural areas lost	33,200 hectares	14,200 hectares
Settlement footprint growth	91,700 hectares	44,800 hectares
Total settlement footprint	227,700 hectares	180,800 hectares
Gross urban greenfield cost	$37.3 billion	$18.0 billion
Net urban greenfield cost	$10.6 billion	$5.1 billion

100 ha = 1 km²

LOW DENSITY SCENARIO

In a future with high growth, the region's development under a "low density" approach could result in:

- The overall settlement footprint doubling in area from what it is today. Expansion of low-density sprawl would likely mean longer commute times, more traffic, and increased emissions.
- Thousands of hectares of agricultural lands and natural areas could be lost as a result of poorly coordinated expansion.
- Municipalities would face substantial costs to service the larger footprint (e.g. roads, infrastructure etc.), which could translate into notably higher taxes for Metro Region citizens and businesses.

INCREASED DENSITY SCENARIO

By comparison, the region's development under an integrated approach to achieve increased density generates dramatically better results:

- In acting collaboratively on land use and development, municipalities save substantial land and money.
- Expansion of the region's overall settlement footprint would be reduced by approximately half, as could losses of agricultural lands and natural areas.
- Such savings would preserve more farmland to support the region's agri-food industry and more natural lands to support the region's ecosystems.
- A smaller settlement area means municipalities could spend approximately half as much money on creating new residential areas, reducing pressure on municipal taxes for Metro Region citizens and businesses.

Methods

CURRENT LANDSCAPE COMPOSITION

A spatial data layer describing the area and location of anthropogenic footprint, natural land, and farmland was derived from the City of Edmonton Landuse Map and numerous additional inventories provided by organizations such as AltaLIS, Open Street Map, Agriculture and Agri-food Canada Landcover, the Alberta Biodiversity Monitoring Institute, CanVec, and ESRI.

SCENARIOS

Four scenarios were simulated

1. Low Density development with high population growth –Implements the Capital Region Board high population growth trajectory, and accommodates the growing population using low density development that follows existing patterns.
2. Increased Density with high population growth –Implements the Capital Region Board high population growth trajectory, and accommodates the growing population using intensification and minimum greenfield density targets identified in the Growth Plan 2.0[1].
3. Low Density development with low population growth –Implements the Capital Region Board low population growth trajectory, and accommodates the growing population using low density development that follows existing patterns.
4. Increased Density with low population growth –Implements the Capital Region Board low population growth trajectory, and accommodates the growing population using intensification and minimum greenfield density targets identified in the Growth Plan 2.0.

POPULATION GROWTH

Low and high population growth trajectories by municipality over the next 50 years were as per the Consolidated CRB-Accepted Population and Employment Projections, 2014-2044 downloaded from the Capital Region Board website. Populations for member municipalities were available for years 2014 and 2044 under low and high growth. Population growth between 2014 and 2044 was assumed linear, based on the linear shape of population projections presented in the December 2009 Capital Region Growth Plan Addendum. The final 20 years of the 50 year population growth trajectories were based on a linear extrapolation of the 2014-2044 projection. i.e., population growth from 2045-2064 was assumed to be 2/3 of that projected for 2014-2044. Based on these assumptions, population grew from 1.25 million in 2014 to 2.89 million in 2064 under the high growth scenario, and to 2.42 million in 2064 under the low growth scenario. Population projections by member municipality are provided in the appendix.

Within the City of Edmonton, population growth was distributed at a finer spatial scale based on the recent distribution of new dwellings across wards, and the development status of neighbourhoods within each ward. The recent distribution of new dwellings across wards was calculated as the change in the number dwelling units for each ward between the 2012 and 2014 Edmonton censuses. Wards 6, 7, 8, 10, and 11 were excluded from the calculation because they are built out (i.e., no developing or planned neighbourhoods). The assumption that net new structures is a surrogate for new dwellings was tested through comparison with the spatial distribution of residential low density lot registrations (City of Edmonton 2014). Residential low density lot registrations were available by city subsector (North, Northeast, Northwest, West, Southeast, and Southwest). When wards and subsectors were organized into common spatial units, agreement between the distribution of net new structures and low density lot registrations was high[2].

[1] Growth Plan 2.0 refers to the growth plan described in Draft #1 of the Edmonton Metropolitan Region Growth Plan: Toward a Complete Region.

[2] The southeast subsector aligns with ward 9 and accounts for 24% of net new structures and 27% of lot registrations. The southwest subsector aligns with ward 9 and accounts for 31% of net new structures and 30% of lot registrations. The north, northwest, and west subsectors align with wards 1, 2, and 5 and account for 32% of net new structures and 34% of lot registrations. The northeast subsector aligns with ward 4 and accounts for 14% of net new structures and 10% of lot registrations.

Within each ward, development was sequenced across neighbourhoods based on their development status (City of Edmonton 2014). Developing neighbourhoods were developed first, and were sequenced based on the proportion of low density residential lots that have been registered. Planned neighbourhoods were developed after developing neighbourhoods were built out. Planned neighbourhoods were sequenced according to their planning status; neighbourhoods with a Neighbourhood Area Structure Plan (NASP) were developed prior to those with an Area Structure Plan (ASP). Mature, established, institutional, recreational, industrial, and transportation (e.g., Anthony Henday) neighbourhoods were not available for greenfield residential development.

As per the pattern anticipated by the City of Edmonton Growth Study, the city was simulated to expand into the proposed annexation areas south of Edmonton's municipal boundary upon exhaustion of residential land supply in wards south of the North Saskatchewan River. Development of the annexation areas proceeded outwards from the municipal boundary to the south. For the Low Density development with high population growth scenario, greenfield development exceeded the availability of land within the annexation areas towards the end of the simulation; greenfield demand was met by developing within 1 km of the municipal boundary.

Within other cities and towns, population growth occurred within municipal boundaries until available land was exhausted, at which time it expanded outwards from the municipal boundary. Within rural municipalities, population growth occurred within zoned country residential areas[3]. If zoned country residential areas were not available, country residential occurred elsewhere.

SETTLEMENT ASSUMPTIONS

The simulations tracked three types of footprint associated with human settlement: urban residential, country residential, and industrial. Urban residential footprint was simulated as gross footprint, such that it accounts for other urban land uses such as commercial and institutional.

Urban and country residential

Each municipality's development footprint was simulated to expand in accordance with its population projection. Scenarios explored the implications of two forms of development with differing relationships between population growth and development footprint.

In the Low Density scenario, settlement expansion favoured low density and dispersed development as has occurred in recent decades. All population growth in the Low Density scenario was accommodated by greenfield development with the exception of City of Edmonton for which intensification was simulated at the current level of infill (14% [5]). The dwelling unit densities of new developments in the Low Density scenario followed existing patterns as per "Existing PGA Residential Density" identified in table 2 of Appendix B of the October Addendum to the 2009 Growth Plan. These densities were 17.5 dwelling units per net residential hectare (du/nrha) for communities within PGA's Ce (Beaumont) and A (Spruce Grove and Stony Plain), 22.3 du/nrha for communities within PGA E (Leduc), and 25.6 du/nrha for communities within PGA's B (Edmonton and St. Albert) and G (Fort Saskatchewan). Those municipalities occurring outside of PGA's had dwelling unit density was set at 21.7 du/nrha which is the average existing net residential density of PGAs excluding downtown Edmonton according to the October Addendum to the 2009 Growth Plan. Dwelling units per net residential hectare (du/nrha) were multiplied by 0.544

[3] Spatial polygons identifying the location of annexation areas were digitized from a map download from the City of Edmonton's website: http://www.edmonton.ca/city_government/documents/City_of_Edmonton_Annexation_Area_April_15_2015.pdf

[4] Zoned country residential areas were digitized at the resolution of quarter sections from Draft Schedule 1: Edmonton Metropolitan Regional Structure to 2044 as presented in Draft #1 of the Edmonton Metropolitan Region Growth Plan: Toward a Complete Region.

[5] Nichols Applied Management. 2014. City of Edmonton Growth Study.

to convert to dwelling units per gross residential hectare (du/grha) based on the City of Edmonton Growth Study which reports that 43% of gross area is net residential and that 79% of gross area is developable, implying that net residential accounts for 54.4% of gross developable area. Dwelling units per gross residential hectare (du/grha) was then converted to population density (people per gross residential ha) by assuming 2.5 people per household, which is the average number of people per household in the Edmonton Census Metropolitan Area according to the 2011 Statistics Canada Census [6]. Existing dwelling unit density for rural municipalities followed the pattern of existing traditional country residential subdivisions (35 lots per quarter section as stated in the October Addendum to the 2009 Growth Plan [7]). An exception was Sherwood Park, whose dwelling unit density was simulated at the average existing net residential density of urban areas outside of downtown Edmonton (21.7 du/nrha).

In the Increased Density scenario, dwelling unit density was increased through intensification of existing neighbourhoods and implementation of minimum density targets for greenfield developments, as proposed in Growth Plan 2.0 [8]. Intensification within existing urban footprint accommodated 25% of population growth within Edmonton; 17.5% of population growth within St. Albert and Sherwood Park; 15% within Fort Saskatchewan, Leduc and Stony Plain; 10% within Beaumont and Spruce Grove; 7.5% within Calmar, Devon, Lamont and Morinville; and 5% within other towns, villages, and hamlets. Dwelling unit densities for urban municipalities were 50 du/nrha for cities and towns within the metropolitan area[9] , 25 du/nrha for towns outside of the metropolitan area, and 20 ud/nrha for villages. In rural municipalities, 50% of population growth was accommodated by urban residential development located at existing villages and hamlets as per Growth Plan 2.0, at a density of 20 du/nrha. The remaining residential development rural municipalities occurred as traditional country residential at a density of 0.8 du/grha[10]. In both urban and rural municipalities, sensitive environmental areas (municipal and provincial)[11] were protected from development in the Increase Density scenario as per Growth Plan 2.0.

Industrial

Industrial areas[12] in the City of Edmonton and the surrounding area expanded at 1372 net ha/decade based on the area of land absorption in industrial areas over the past decade (City of Edmonton 2015). Continued expansion at 1372 net ha/decade throughout the 50-year simulation was judged appropriate given the assumed linear population growth pattern. Net industrial area was converted to gross industrial area by assuming that net industrial footprint accounts for 61% of gross industrial footprint; the remaining 39% is assumed to be non-developable land and non-industrial developable such as parks, stormwater management facilities and roads (Nichols Applied Management 2014). Expansion of industrial areas in Edmonton was distributed based on the following pattern of expansion occurring over the past 10 years: 66% in the north, and 34% in the south. In

[6] http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil122f-eng.htm

[7] 35 lots per quarter section was implemented as 0.54 du/grha based on 129 lots per quarter section being equivalent to 2 du/grha.

[8] Intensification targets and minimum greenfield densities were as per table 2 in the briefing note "Growth Plan2.0: Growth Management Scenarios" which was part of the agenda package for the April 13 2016 Growth Plan Update Task Force meeting.

[9] Municipalities located within the metropolitan area, as defined by the Growth Plan 2.0, are Beaumont, Edmonton, Fort Saskatchewan, Leduc, Spruce Grove, St. Albert, Stony Plain, and Sherwood Park.

[10] A density of 0.8 du/grha is identified as the target for country residential areas in the briefing note "Growth Plan2.0: Growth Management Scenarios" which was part of the agenda package for the April 13 2016 Growth Plan Update Task Force meeting.

[11] Sensitive environmental areas were digitized at the resolution of quarter sections from Draft Schedule 6: Natural Living Systems to 2044 as presented in Draft #1 of the Edmonton Metropolitan Region Growth Plan: Toward a Complete Region.

[12] The location of industrial areas were digitized from Draft Schedule 3: Major Employment Areas as presented in Draft #1 of the Edmonton Metropolitan Region Growth Plan: Toward a Complete Region.

the north, the Northeast and Northwest industrial areas were first developed, followed by the planned Edmonton Energy and Technology Park as well as continued development in the Acheson Industrial Area immediately to the west of Edmonton's municipal boundary. In the south, the South and Southeast industrial areas were first developed; thereafter, industrial development was assumed to occur within industrial areas to the south of Edmonton including Nisku, Sherwood Park, Leduc, and the proposed Aerotropolis.

In addition to the City of Edmonton, three other areas were simulated to receive continue expansion in industrial development. The Alberta Industrial Heartland, Sturgeon Industrial Park, and Tri-Muni Industrial areas expanded in proportion to simulated employment growth in Fort Saskatchewan, Sturgeon County, and Spruce Grove/Stony Plain, respectively [13]. Under the low growth scenario, this implied that industrial area expansion relative to today was 6.8%/decade (497 ha/decade) in Alberta Industrial Heartland, 6.8%/decade (47 ha/decade) in Sturgeon Industrial Park, and 15%/decade (82 ha/decade) in Tri-Muni Industrial Area. Under the high growth scenario, industrial area expansion relative to today was 21.4%/decade (691 ha/decade) in Alberta Industrial Heartland, 20.2%/decade (66 ha/decade) in Sturgeon Industrial Park, and 19.2%/decade (115 ha/decade) in Tri-Muni Industrial Area.

INDICATORS

Landscape Composition

Three variables related to landscape composition were tracked. Settlement footprint was calculated as the sum of urban, rural, and industrial settlement footprint and roads. Farmland area included all cropland and pasture. Natural land included forest, wetland, and other natural cover types (e.g., grassland, shrubland) but excluded water.

Urban Greenfield Cost

The cost of creating new urban residential areas was calculated based on the average cost per gross developable area (GDA) of new neighbourhoods assessed by the City of Edmonton [14]. Costs included capital, operation and maintenance/service delivery, and renewal expenditures during the first 30 years of a neighbourhood. In addition to gross cost, net cost was calculated as the difference between expenditures and expected revenues from municipal tax, commercial tax, and user fees. The average expenditure across 15 neighbourhoods[15] was $1.26 million per gross developable ha. The average net expenditure was $0.36 million per gross developable ha. There was not a strong relationship between city expenditures and population density for the 15 neighbourhoods. As a result, the same city expenditure coefficient was assumed for all greenfield urban areas, regardless of density [16].

[13] Employment projections were as per Consolidated CRB-Accepted Population and Employment Projections, 2014-2044 downloaded from the Capital Region Board website

[14] Costs and Revenues for New Areas. Report provided by the City of Edmonton.

[15] The City of Edmonton reports costs and revenues for 17 neighbourhoods. Two neighbourhoods were excluded: neighbourhood B because it is atypical in that it is predominantly (i.e., >50%) commercial; and neighbourhood C because it's population density is higher than what will be assumed for greenfield developments in the simulations.

[16] Across the 15 neighbourhoods, population density ranges from 30 to 66 people/GDA ha with an overall average of 51 people/GDA ha. In comparison, the population density for greenfield urban residential areas simulated in the low density scenario ranges from 24 to 35 people/GDA ha across all urban areas in the greater capital region, with an area weighted average of 32 people per GDA ha. In the higher density scenario, population density of simulated greenfield urban residential areas ranges from 27 to 68 people per GDA ha with an overall average of 63 people per GDA ha.

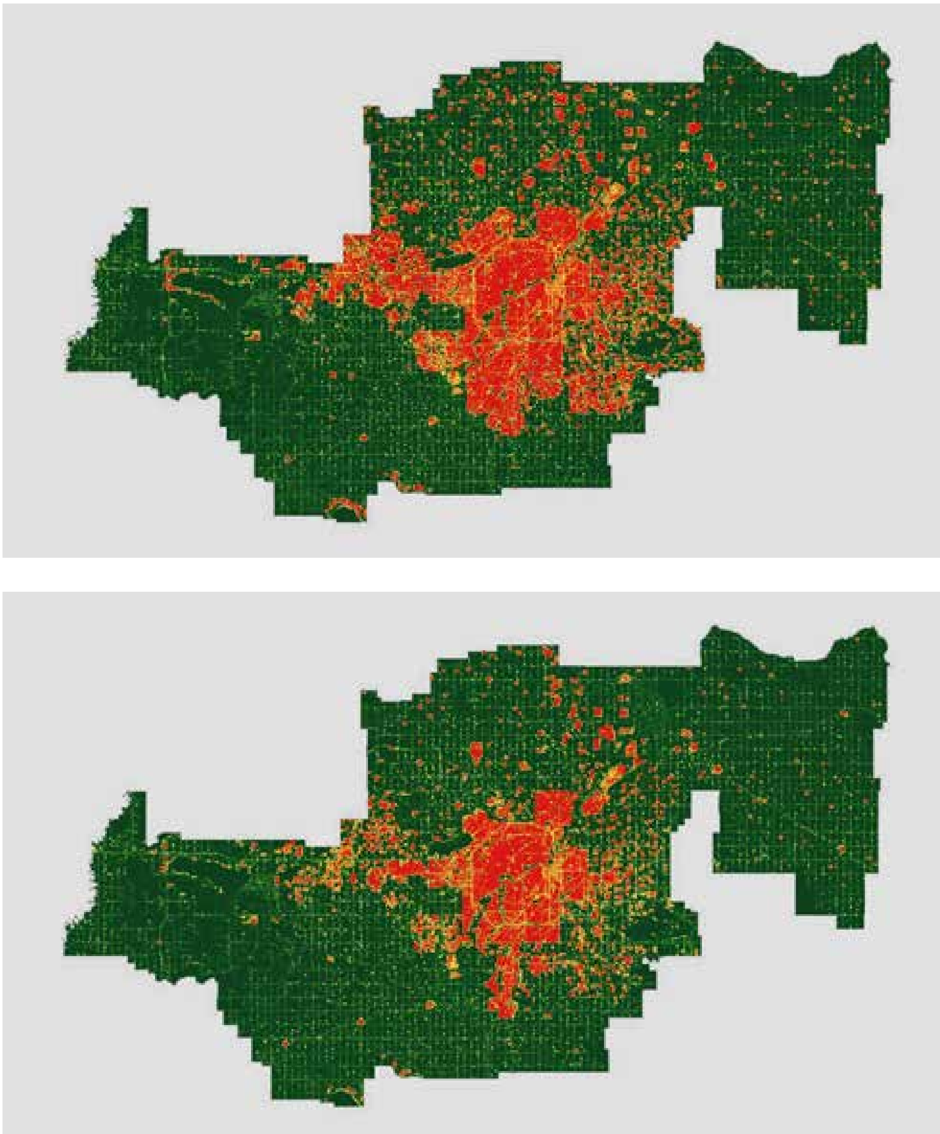
Results

High Growth Scenarios

During the 50-year high population growth simulation, total settlement footprint doubled from 1359 km2 to 2739 km2 when Low Density development was applied. Rural residential footprint accounted for the largest portion of the settlement footprint growth (795 km2), followed by urban residential (428 km2) and industrial (156 km2). Settlement footprint growth was reduced by over 50% in the Increased Density scenario, reaching a total extent of 1988 km2 as compared to 2739 km2 during the Low Density scenario.

Reduced settlement footprint expansion during the Increased Density scenario resulted in the conservation of farmland and natural land. Whereas the Low Density scenario resulted in the loss of 502 km2 of natural land cover and 877 km2 of farmland under high population growth, these losses were reduced to 200 km2 of natural land cover and 413 km2 of farmland during the Increased Density scenario. This represents conservation of 302 km2 of natural land cover and 464 km2 of farmland relative to the Low Density scenario.

The lower settlement footprint expansion during the Increased Density scenario also resulted in lower urban greenfield costs relative to the Low Density scenario. Under high population growth, the cumulative gross urban greenfield cost during the Increased Density scenario was $25 billion compared to $54 billion during the Low Density scenario, for a savings of $29 billion. Cumulative net urban greenfield cost during the Increased Density scenario was $7 billion compared to $15 billion during the Low Density scenario, for a savings of $8 billion.



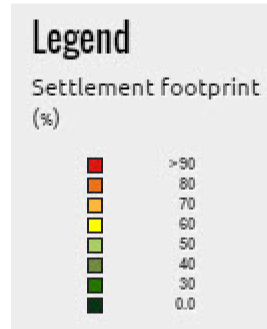


Figure 1. Total settlement footprint in year 2064 under simulated Low Density (top) and Increased Density (bottom) scenarios with high population growth.

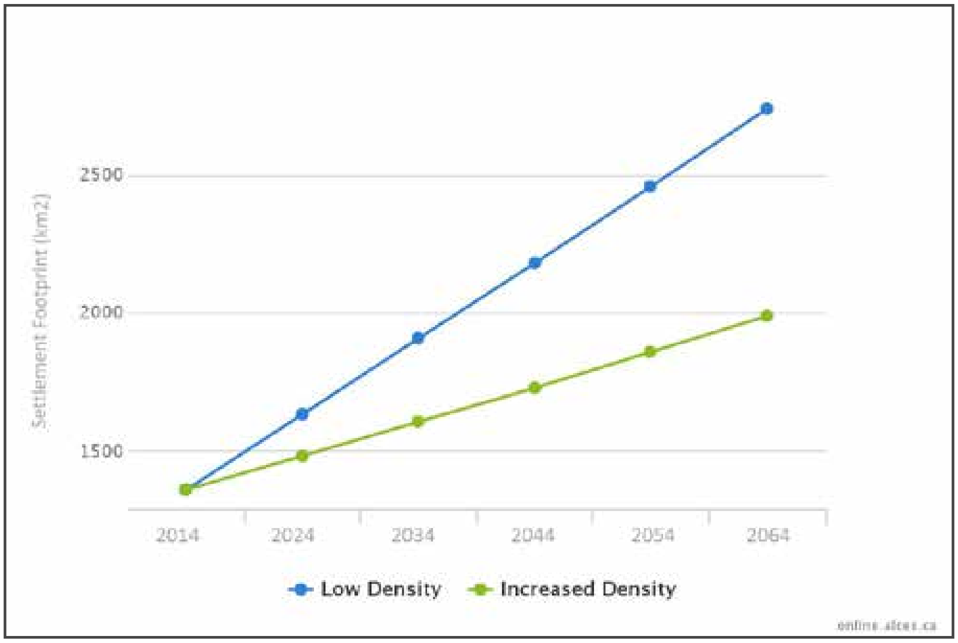
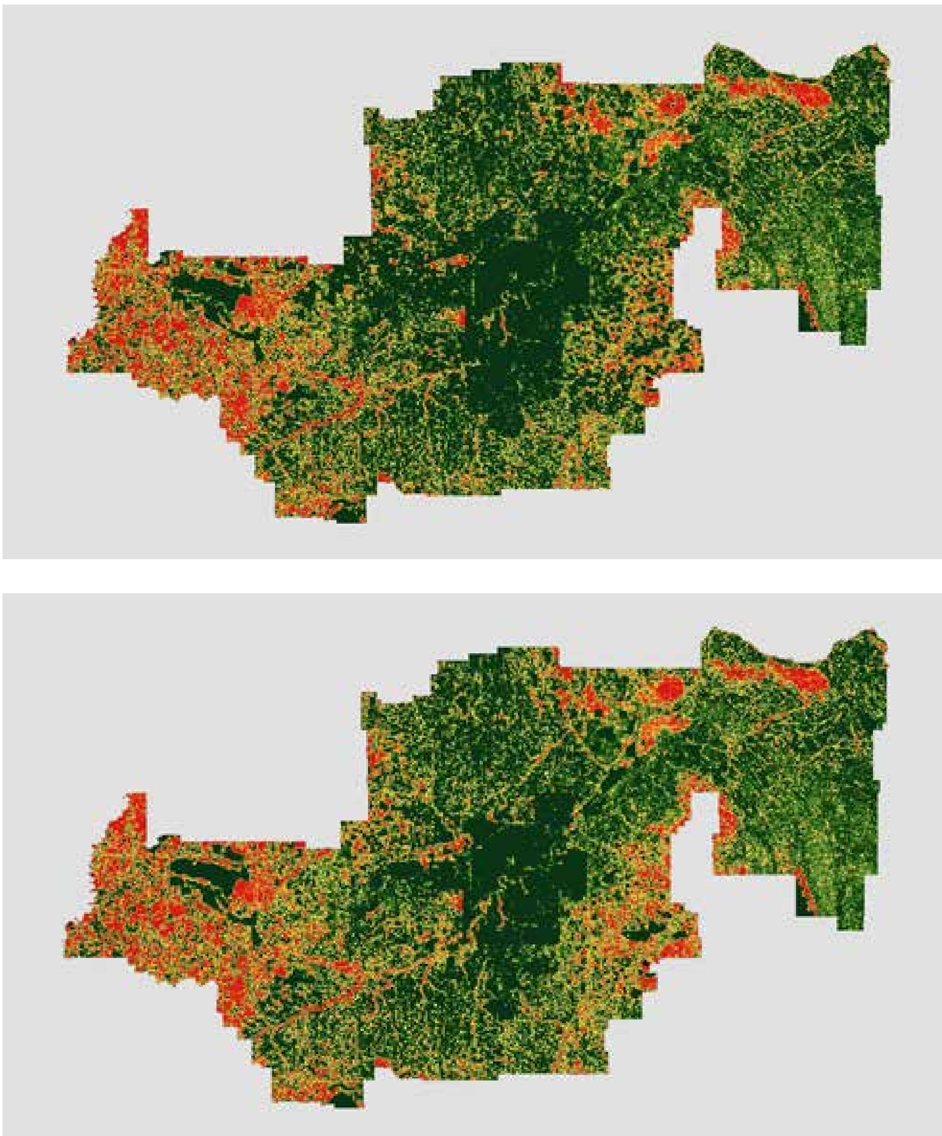


Figure 2. Simulated total settlement footprint growth during Low Density and Increased Density scenarios with high population growth.



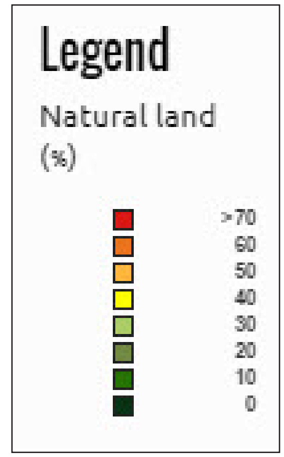


Figure 3. Natural land in year 2064 under simulated Low Density (top) and Increased Density (bottom) scenarios with high population growth.

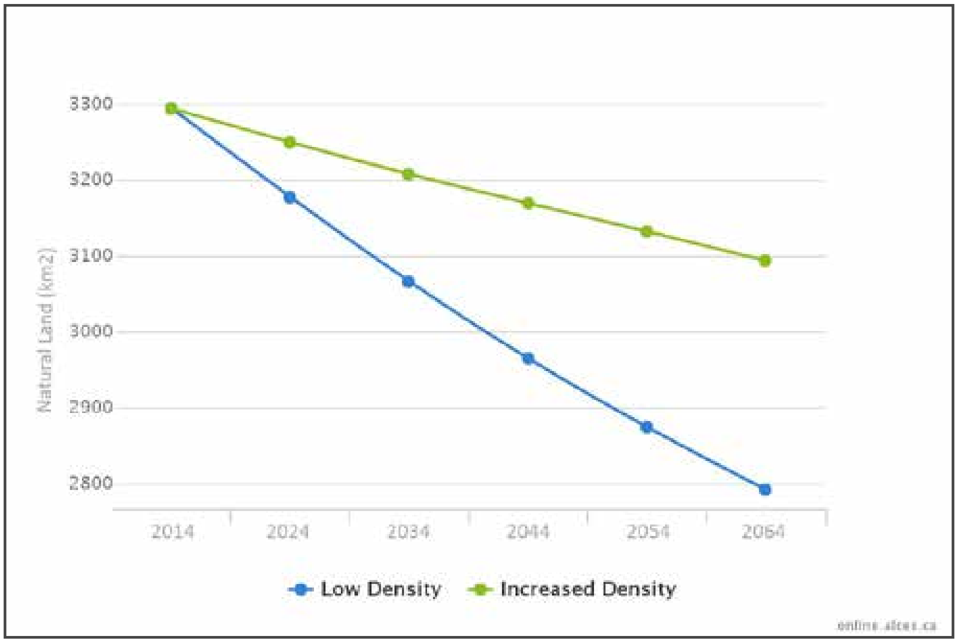


Figure 4. Simulated decline in natural land during Low Density and Increased Density scenarios with high population growth.

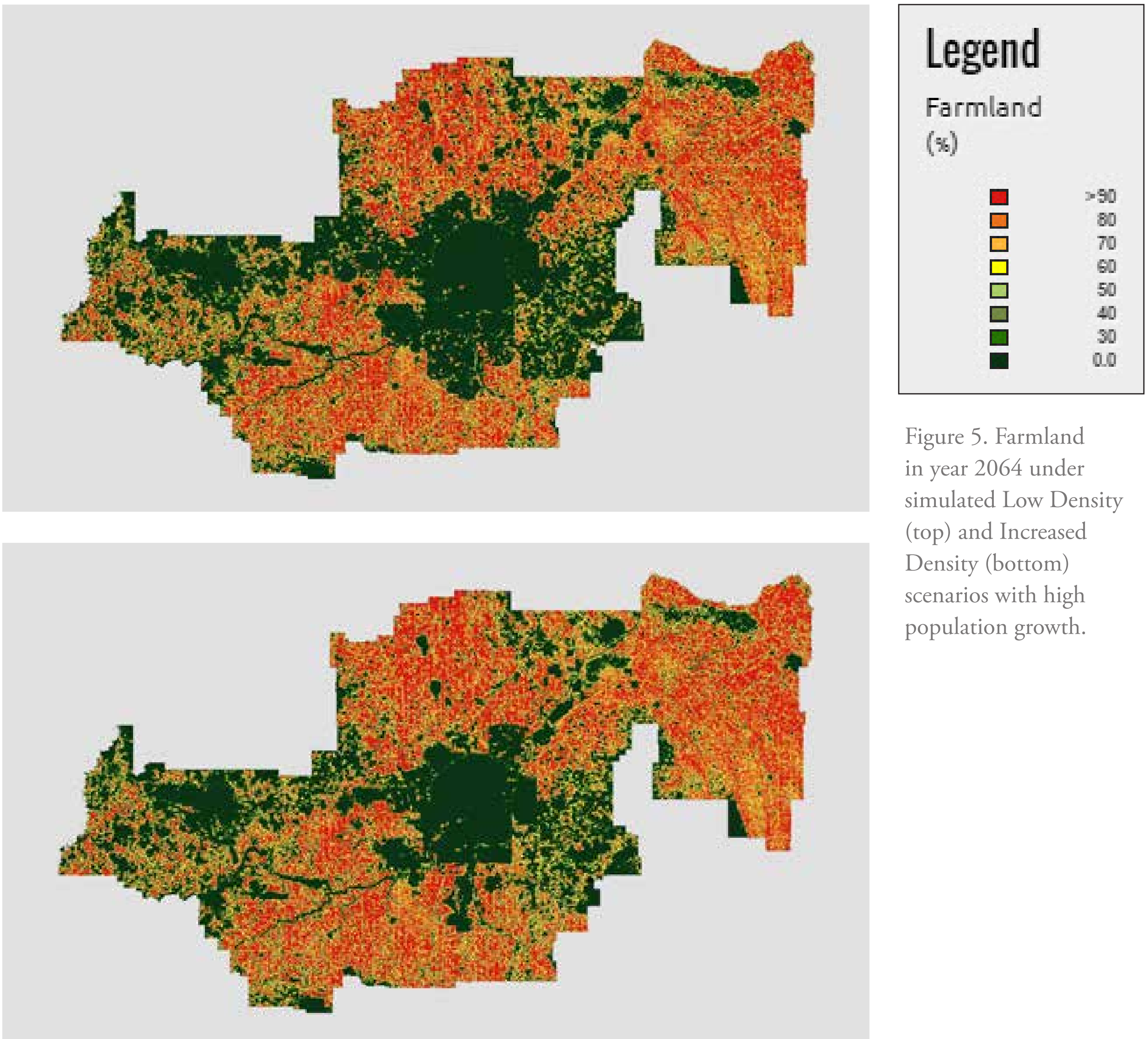


Figure 5. Farmland in year 2064 under simulated Low Density (top) and Increased Density (bottom) scenarios with high population growth.

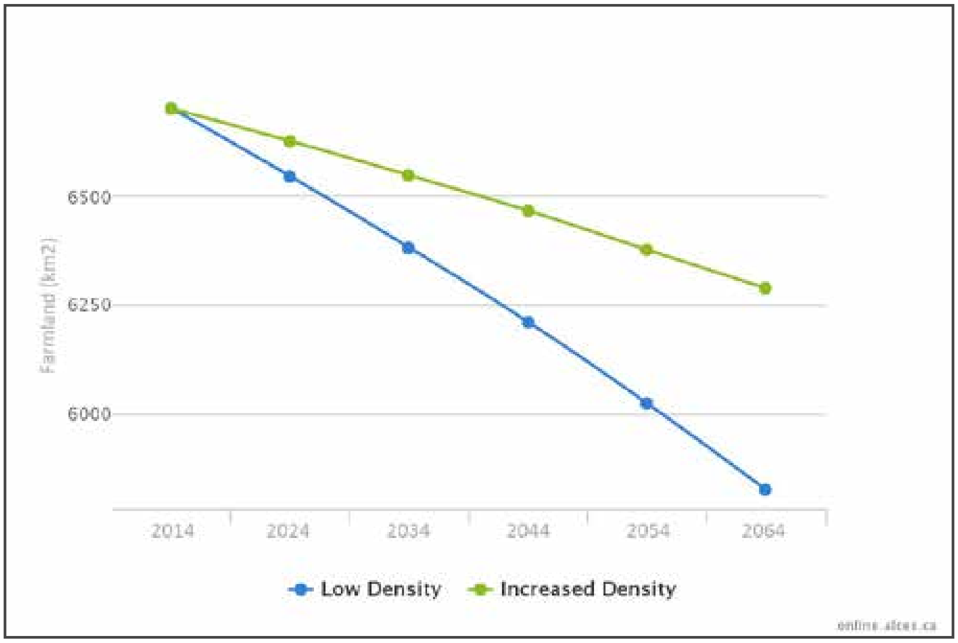
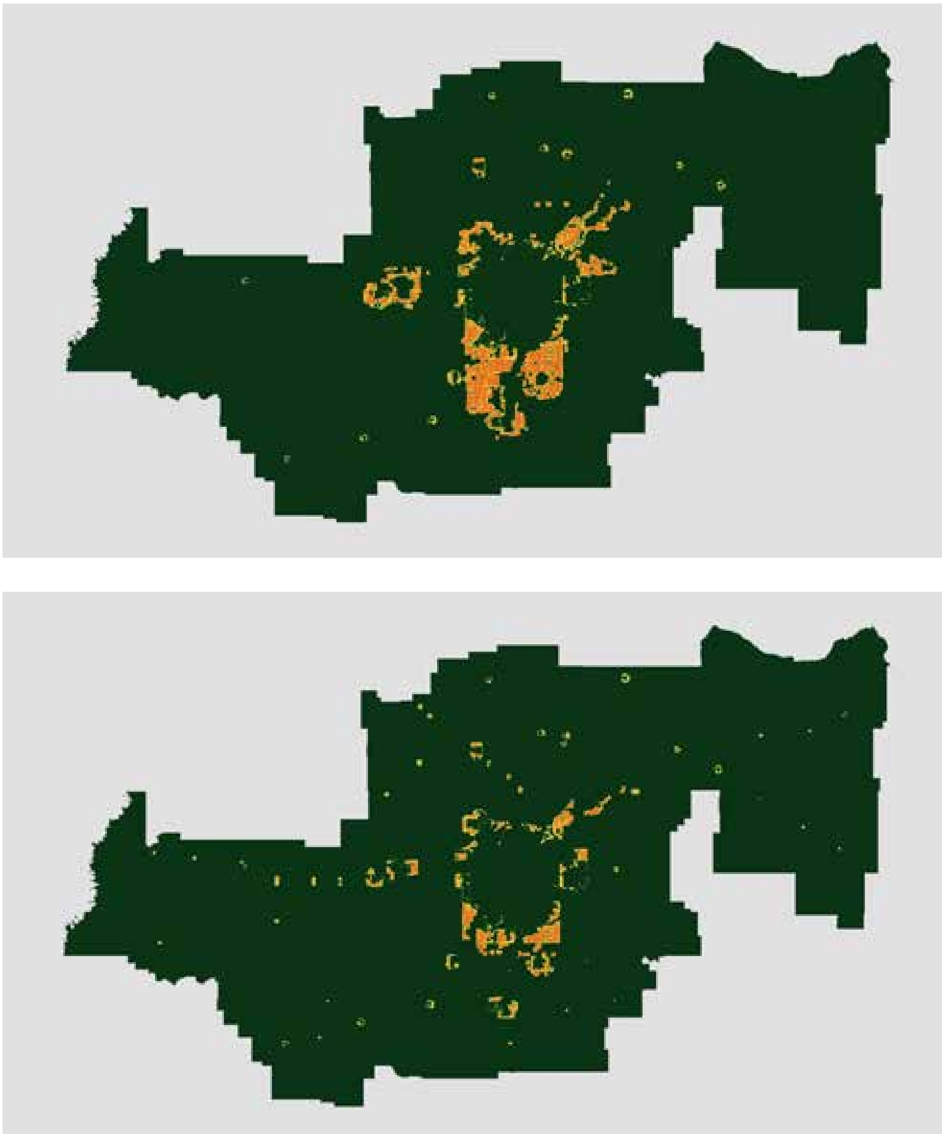


Figure 6. Simulated decline in farmland during Low Density and Increased Density scenarios with high population growth.



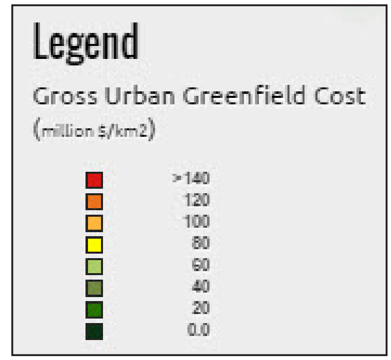


Figure 7. Cumulative gross urban greenfield cost under simulated Low Density (top) and Increased Density (bottom) scenarios with high population growth.

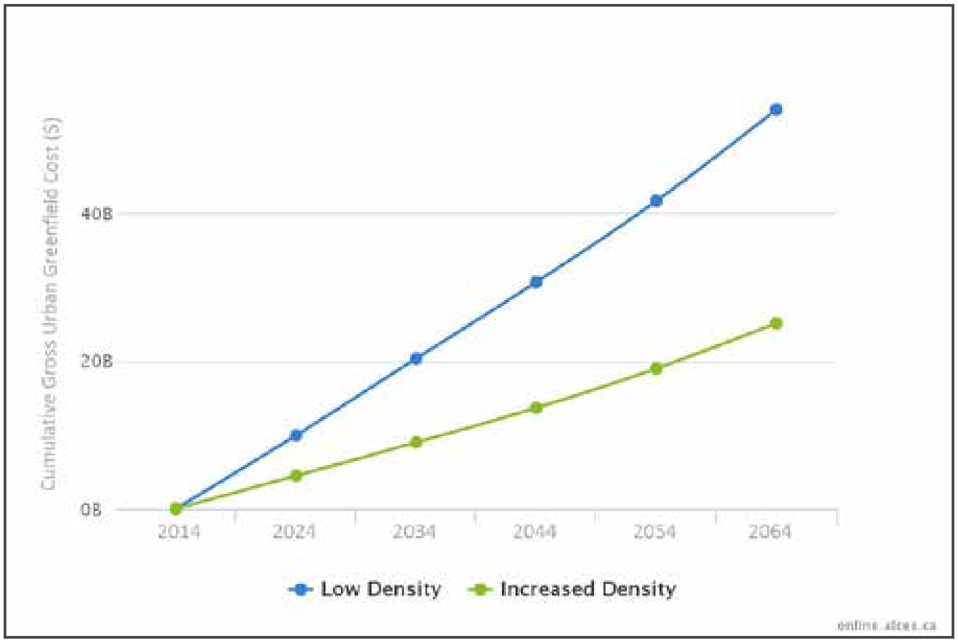
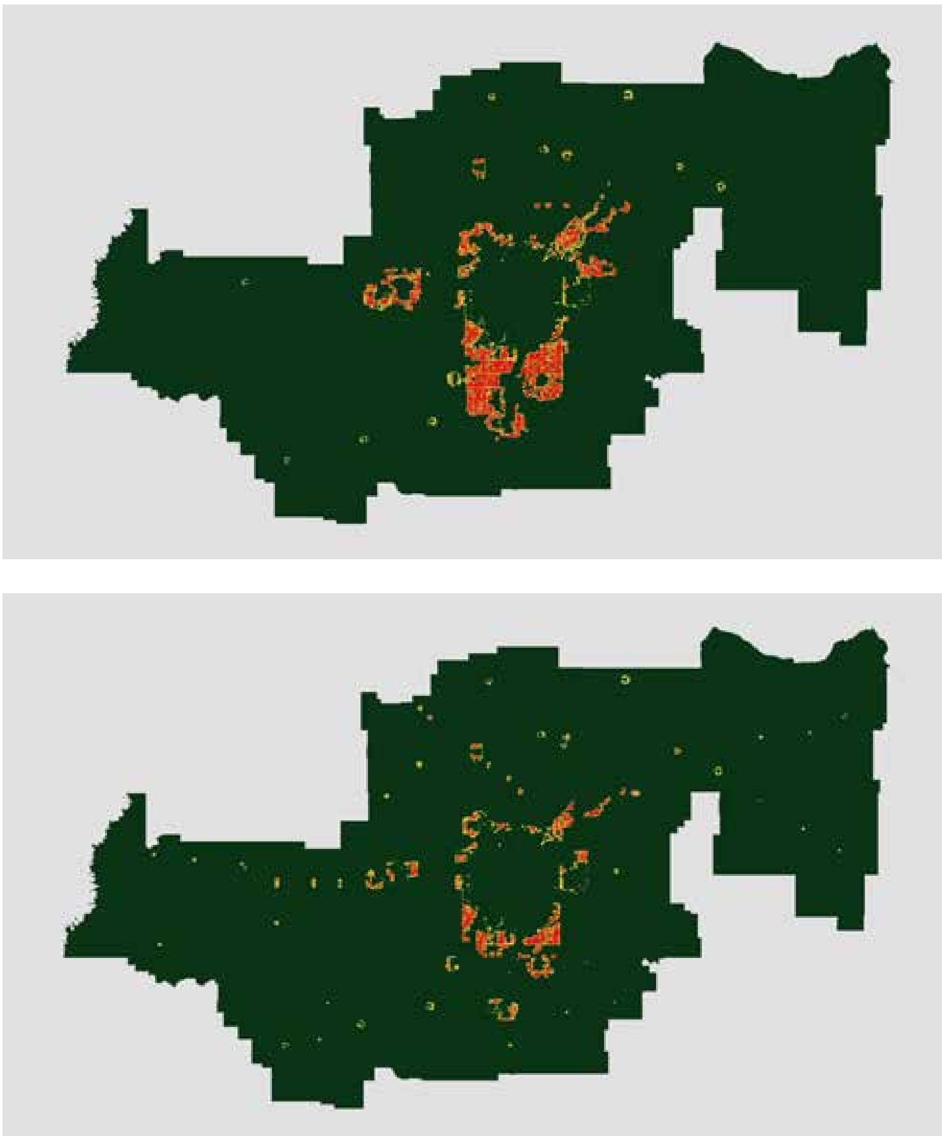


Figure 8. Simulated cumulative gross urban greenfield costs during Low Density and Increased Density scenarios with high population growth.



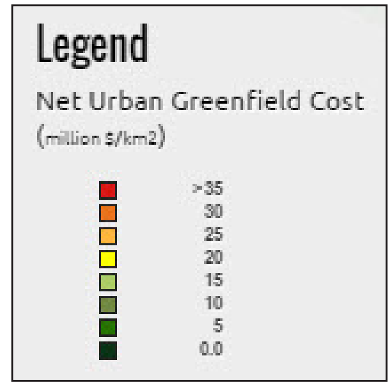


Figure 9. Cumulative net urban greenfield cost under simulated Low Density (top) and Increased Density (bottom) scenarios with high population growth.

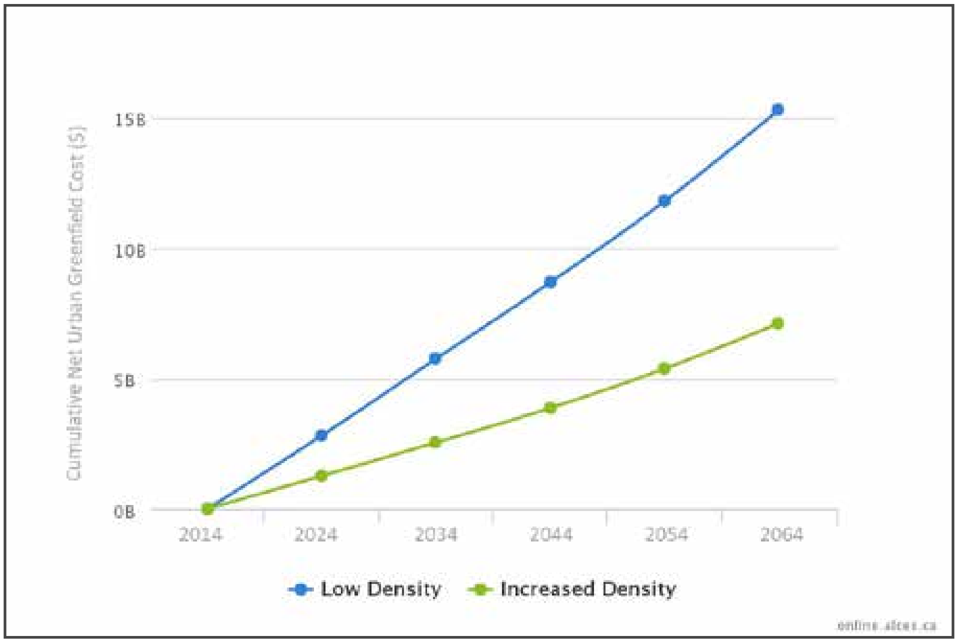
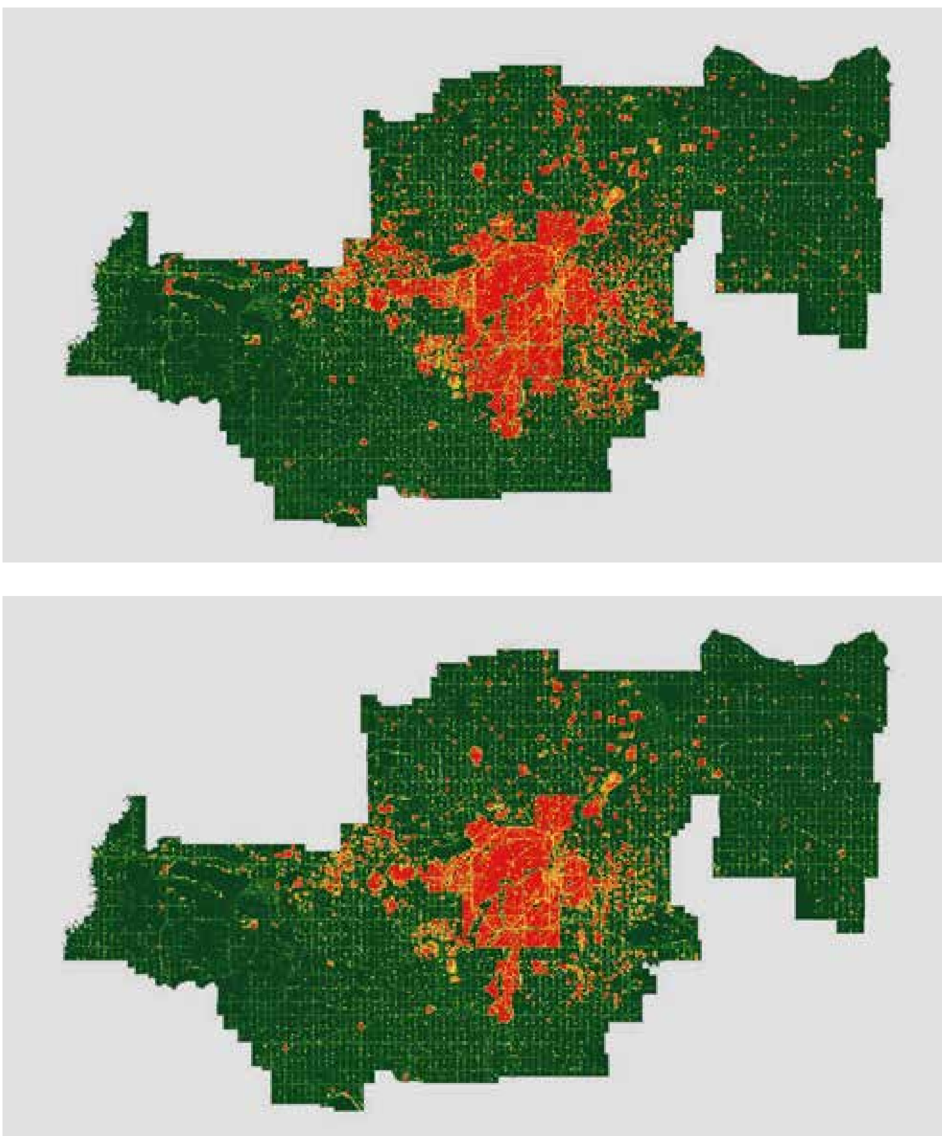


Figure 10. Simulated cumulative net urban greenfield costs during Low Density and Increased Density scenarios with high population growth.

Low Growth Scenarios

Under low population growth, the expansion of settlement footprint was reduced by 1/3rd compared to high population growth. As a result, loss of farmland and natural land was also reduced. By the end of the 50-year simulation of the Low Density scenario with low population growth, total settlement footprint had expanded by 917 km2, resulting in a loss of 332 km2 of natural land and 584 km2 of farmland. The relative effect of the Increased Density scenario was the same under low population growth as it was under high population growth (~50% reduction in settlement expansion), although the absolute effect was smaller due to the overall reduction in settlement expansion with lower population growth. The same pattern was evident for urban greenfield costs. Costs were reduced by 1/3rd under low population growth compared to high population growth, but the relative effect of the Increased Density scenario was the same (~50% reduction in cost relative to Low Density).



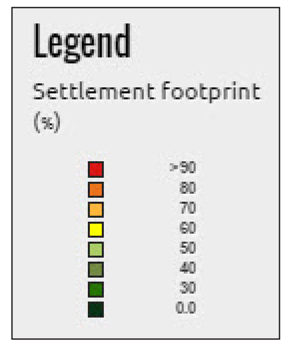


Figure 11. Total settlement footprint in year 2064 under simulated Low Density (top) and Increased Density (bottom) scenarios with low population growth.

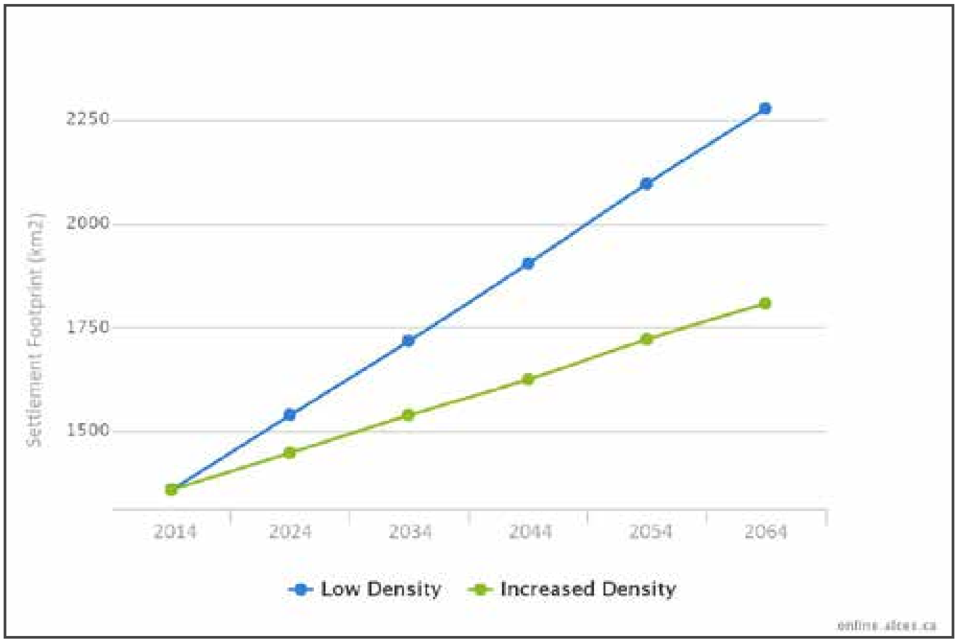
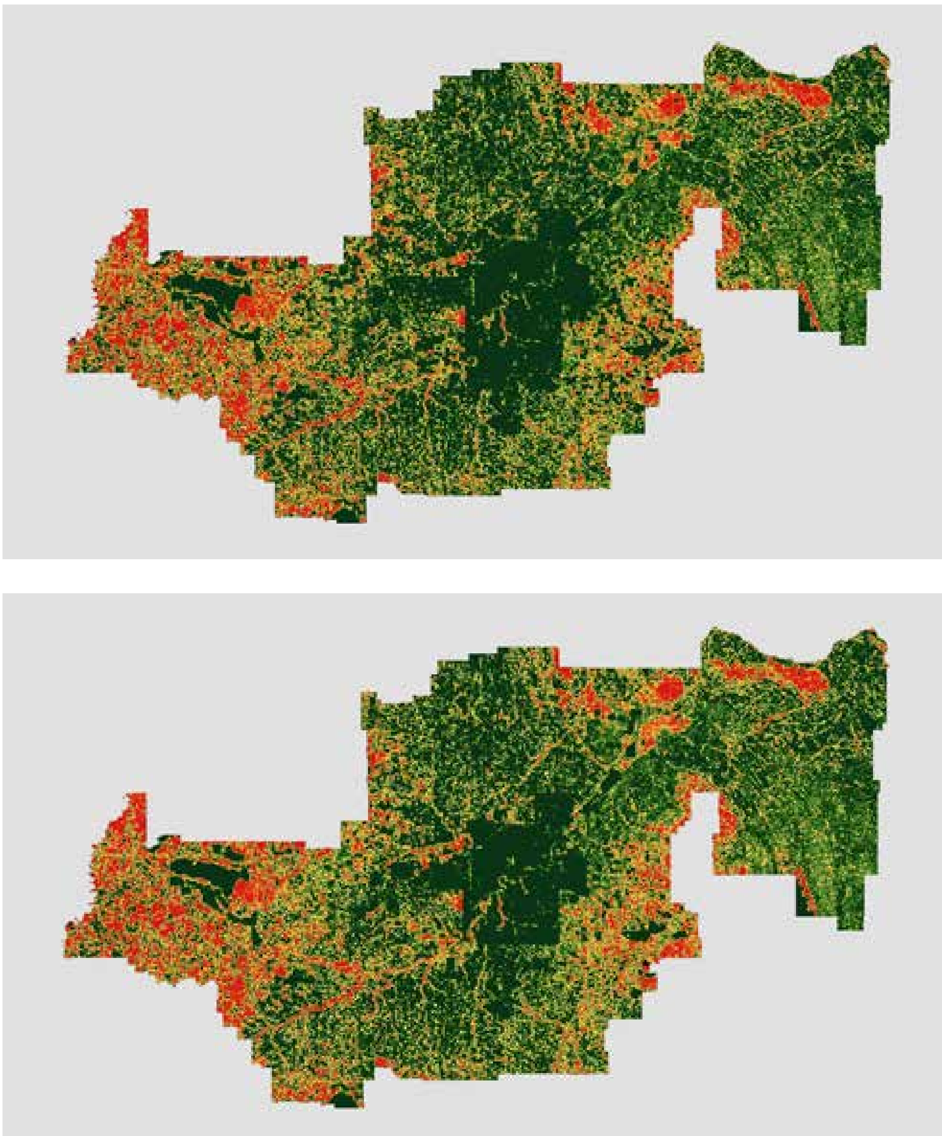


Figure 12. Simulated total settlement footprint growth during Low Density and Increased Density scenarios with low population growth.



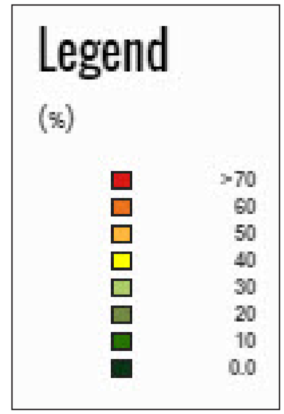


Figure 13. Natural land in year 2064 under simulated Low Density (top) and Increased Density (bottom) scenarios with low population growth.

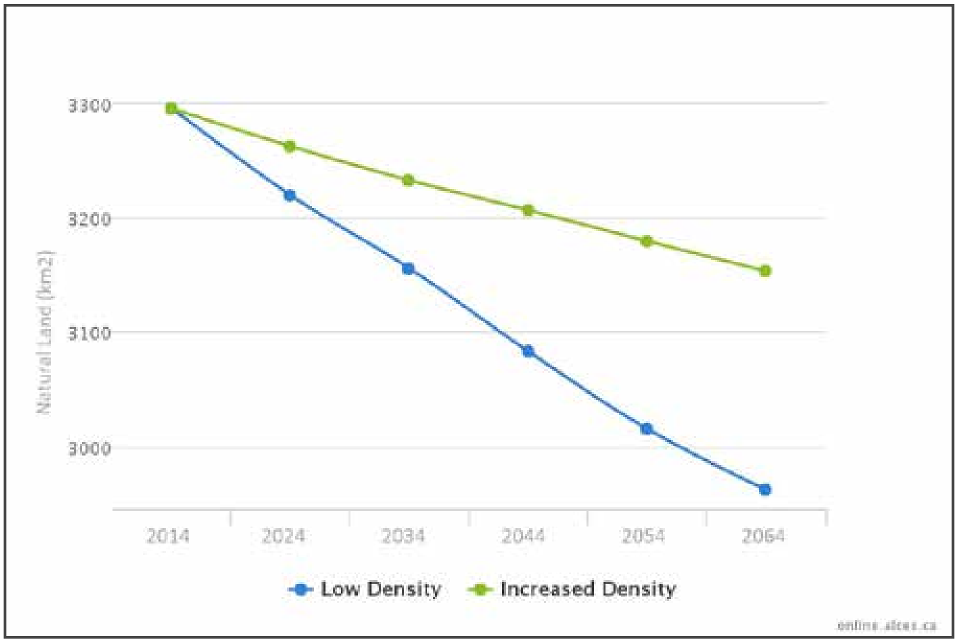
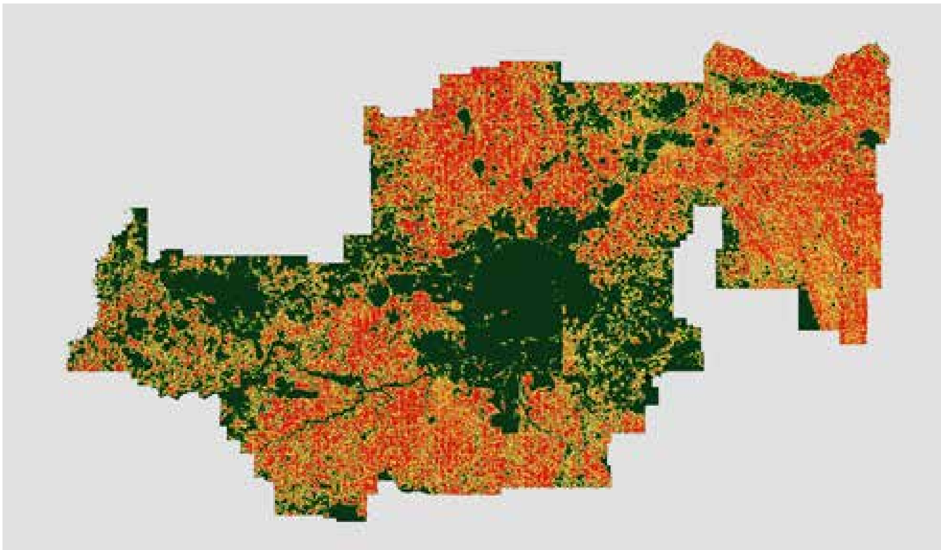
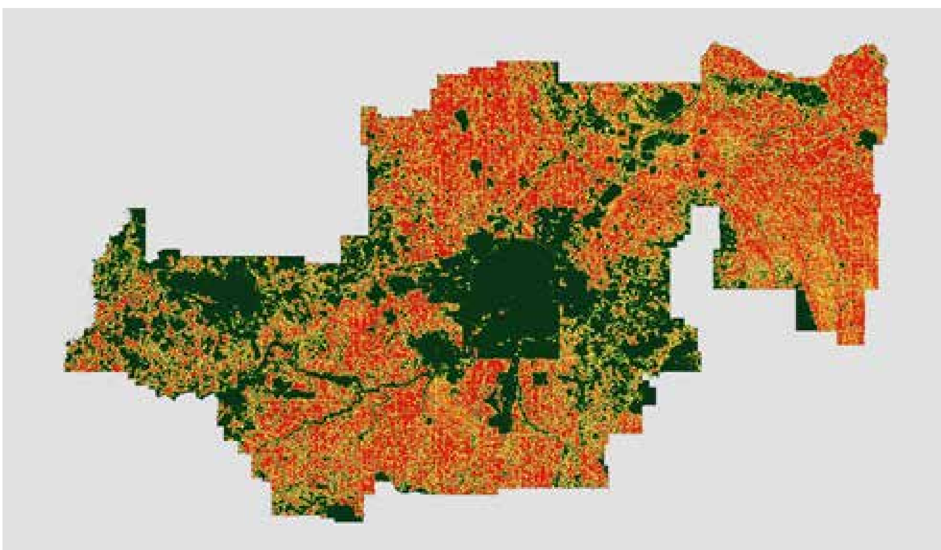


Figure 14. Simulated decline in natural land during Low Density and Increased Density scenarios with low population growth.





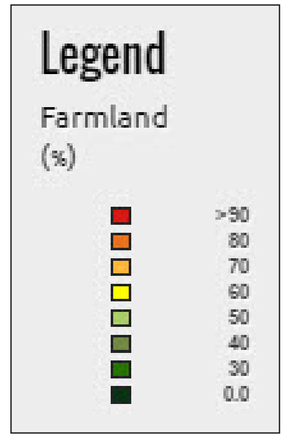


Figure 15. Farmland in year 2064 under simulated Low Density (top) and Increased Density (bottom) scenarios with low population growth.

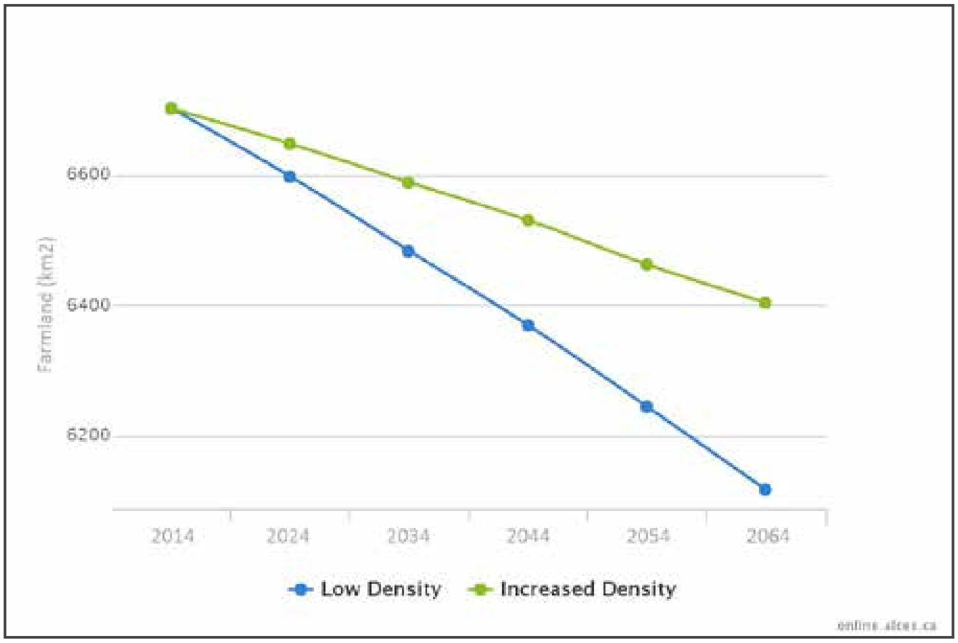
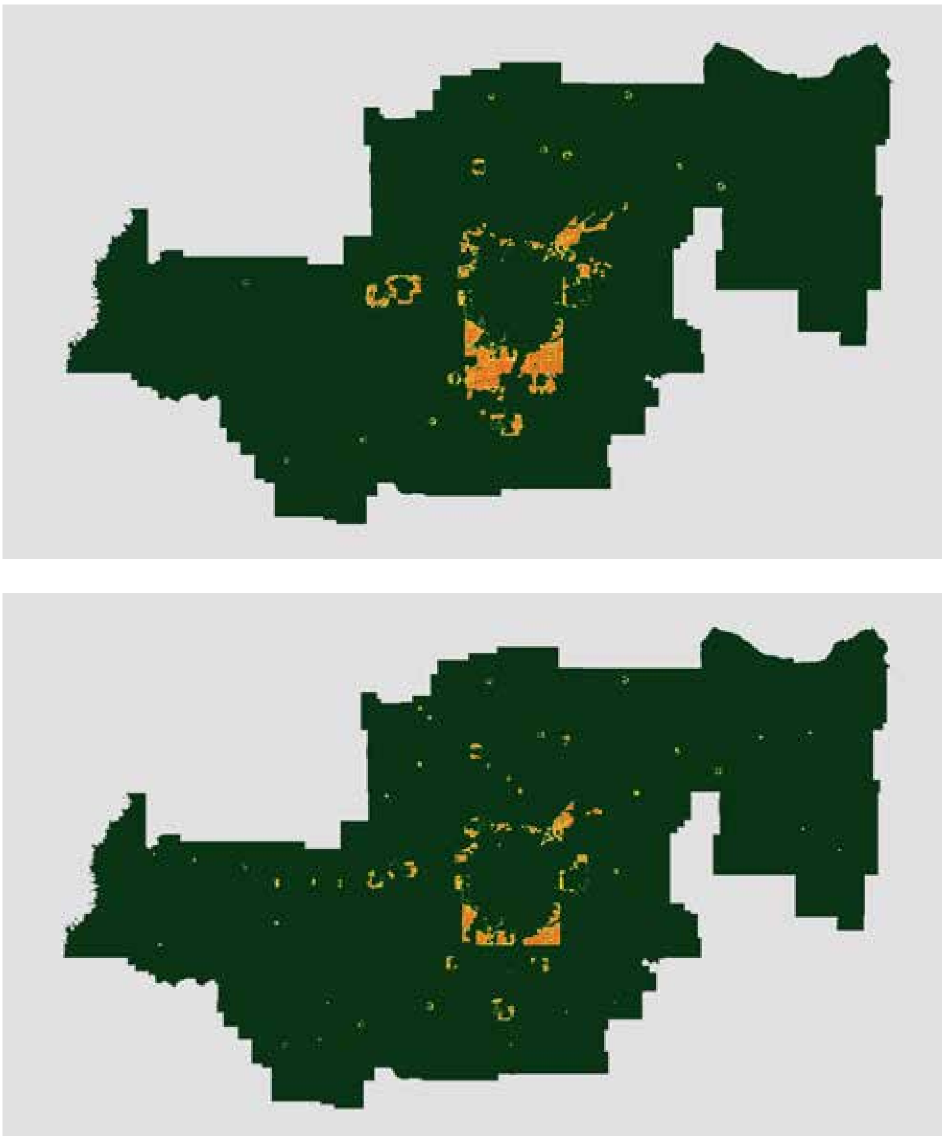


Figure 16. Simulated decline in farmland during Low Density and Increased Density scenarios with low population growth.



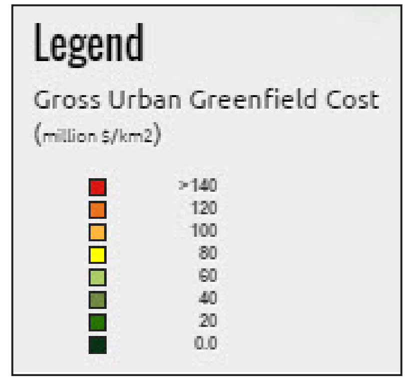


Figure 17. Cumulative gross urban greenfield cost under simulated Low Density (top) and Increased Density (bottom) scenarios with low population growth.

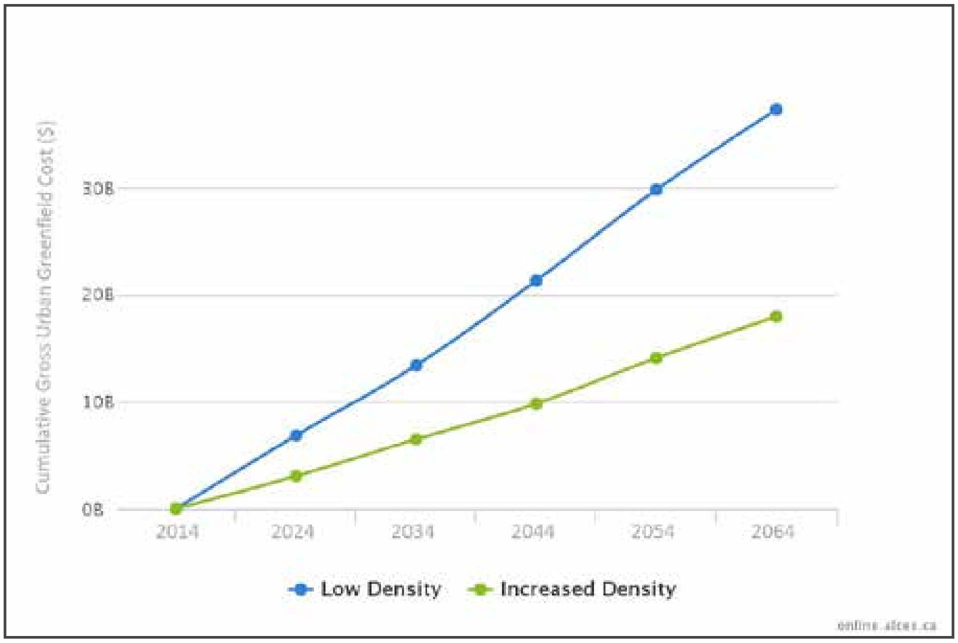
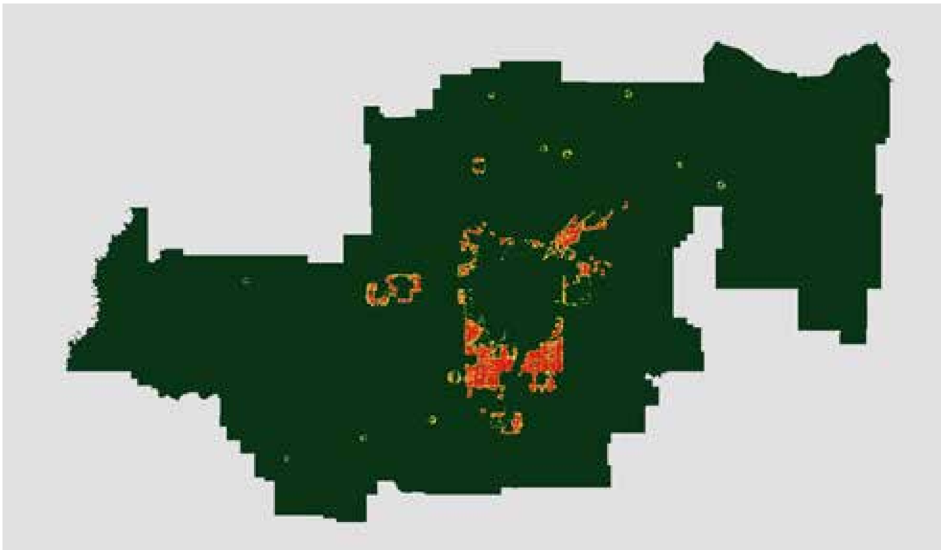
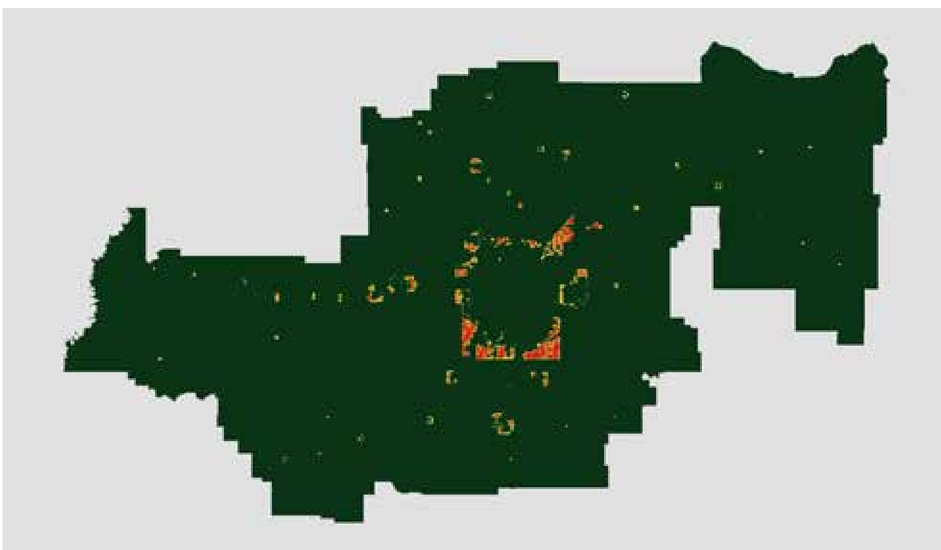


Figure 18. Simulated cumulative gross urban greenfield costs during Low Density and Increased Density scenarios low population growth.





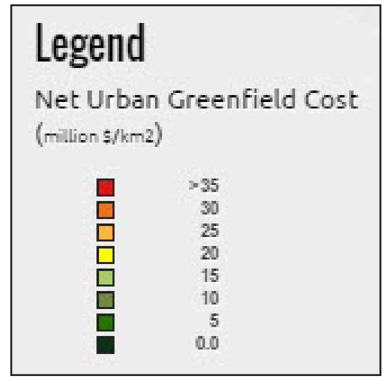


Figure 19. Cumulative net urban greenfield cost under simulated Low Density (top) and Increased Density (bottom) scenarios with low population growth.

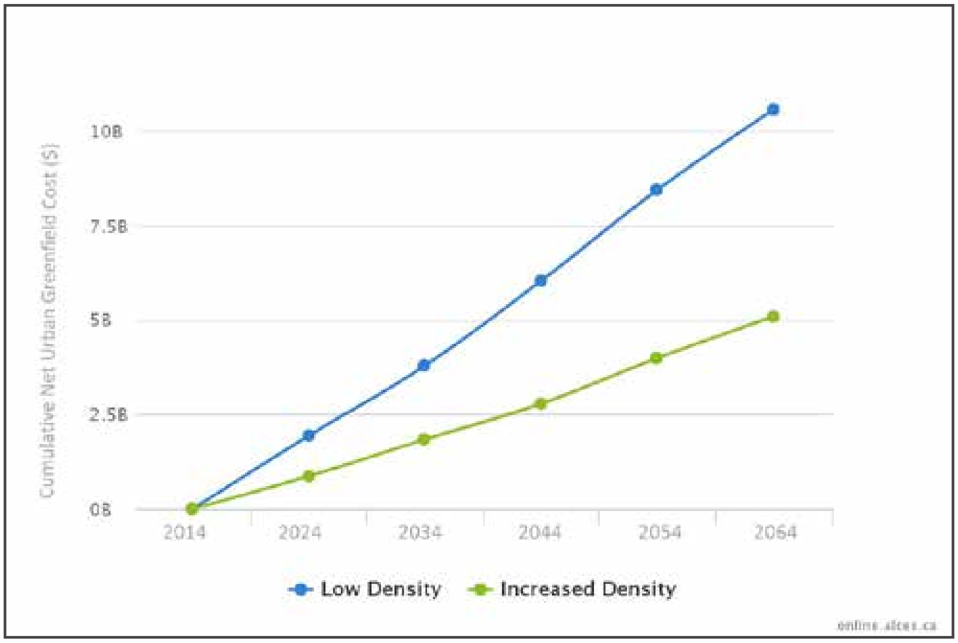


Figure 20. Simulated cumulative net urban greenfield costs during Low Density and Increased Density scenarios with low population growth.

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Appendix – Population Projections

As described in the report, low and high population growth trajectories by municipality over the next 50 years were as per the Consolidated CRB-Accepted Population and Employment Projections, 2014-2044 downloaded from the Capital Region Board website. Population growth between 2014 and 2044 and after 2044 was assumed linear.

Low Growth Population Projection

Member Municipality	2014	2024	2034	2044	2054	2064
Beaumont	15800	22800	29800	36800	43800	50800
Bon Accord	1600	1967	2333	2700	3067	3433
Bruderheim	1300	1667	2033	2400	2767	3133
Calmar	2100	2567	3033	3500	3967	4433
Devon	6700	8200	9700	11200	12700	14200
Edmonton	877900	1039167	1200433	1361700	1522967	1684233
Fort Saskatchewan	22800	29733	36667	43600	50533	57467
Gibbons	3200	3933	4667	5400	6133	6867
Lamont	1900	2300	2700	3100	3500	3900
Lamont County	4200	5200	6200	7200	8200	9200
Leduc	28600	35600	42600	49600	56600	63600
Leduc County	14100	15833	17567	19300	21033	22767
Legal	1400	1667	1933	2200	2467	2733
Morinville	9400	11333	13267	15200	17133	19067
Parkland County	31800	35433	39067	42700	46333	49967
Redwater	2200	2500	2800	3100	3400	3700
Spruce Grove	29500	36867	44233	51600	58967	66333
St. Albert	63300	72233	81167	90100	99033	107967
Stony Plain	16700	21867	27033	32200	37367	42533
Sherwood Park	69696	79584	89472	99360	109248	119136
Strathcona County	27104	30949	34795	38640	42485	46331
Sturgeon County	20600	24067	27533	31000	34467	37933
Thorsby	1000	1233	1467	1700	1933	2167
Wabamun	700	833	967	1100	1233	1367
Warburg	900	1033	1167	1300	1433	1567

[17] The population projection for Sherwood Park was created by assuming that 72% of Strathcona County's population resides in Sherwood Park based on Strathcona County's 2015 census (http://www.strathcona.ca/departments/legislative-legal-services/census/).

High Growth Population Projection

Member Municipality	2014	2024	2034	2044	2054	2064
Beaumont	15800	30467	45133	59800	74467	89133
Bon Accord	1600	2167	2733	3300	3867	4433
Bruderheim	1300	1867	2433	3000	3567	4133
Calmar	2100	2800	3500	4200	4900	5600
Devon	6700	8867	11033	13200	15367	17533
Edmonton	877900	1075533	1273167	1470800	1668433	1866067
Fort Saskatchewan	22800	36367	49933	63500	77067	90633
Gibbons	3200	4267	5333	6400	7467	8533
Lamont	1900	2533	3167	3800	4433	5067
Lamont County	4200	5633	7067	8500	9933	11367
Leduc	28600	41733	54867	68000	81133	94267
Leduc County	14100	17133	20167	23200	26233	29267
Legal	1400	1833	2267	2700	3133	3567
Morinville	9400	12233	15067	17900	20733	23567
Parkland County	31800	37867	43933	50000	56067	62133
Redwater	2200	3067	3933	4800	5667	6533
Spruce Grove	29500	42867	56233	69600	82967	96333
St. Albert	63300	81533	99767	118000	136233	154467
Stony Plain	16700	24467	32233	40000	47767	55533
Sherwood Park	69696	84864	100032	115200	130368	145536
Strathcona County	27104	33003	38901	44800	50699	56597
Sturgeon County	20600	26800	33000	39200	45400	51600
Thorsby	1000	1400	1800	2200	2600	3000
Wabamun	700	933	1167	1400	1633	1867
Warburg	900	1133	1367	1600	1833	2067

Appendix 3 – The Panel and Its Process

BACKGROUND

With an eye to the region's collective future, a group of nine Edmonton-area Mayors formed a positive alliance and spearheaded an initiative to look at new ways of planning, deciding and acting as one Metro Region.

The Metro Mayors Alliance is made up of Mayor Don Iveson (City of Edmonton), Mayor Gale Katchur (City of Fort Saskatchewan), Mayor Greg Krischke (City of Leduc), Mayor John Whaley (Leduc County), Mayor Rodney Shaigec (Parkland County, Mayor Stuart Houston (City of Spruce Grove), Mayor Nolan Crouse (City of St. Albert), Mayor Roxanne Carr (Strathcona County) and Mayor Tom Flynn (Sturgeon County). The municipalities they represent account for 95 percent of the region's population (over one million people), 96 percent of its assessment base and about 80 percent of its land base.

In September 2015, the Alliance appointed an independent Panel to provide frank advice on maximizing the Metro Region's potential. Composed of 12 members with various backgrounds (business/industry, finance, academia, arts and culture, social and not-for-profit agencies, public policy and agriculture), the Advisory Panel on Metro Edmonton's Future was asked to examine and make recommendations on three key questions:

- Is a globally competitive Edmonton Metro Region achievable? What does success look like?
- What is required to get there? What are the key success factors?
- What needs to be different to achieve these results?

During the course of its work, the Panel was supported by three resources: a Working Group to offer guidance and expertise on municipal governance issues; a Research Group to provide research assistance, including summarizing the wealth of academic articles and policy papers relevant to the Panel's work; and a Secretariat to provide administrative coordination and facilitation support.

THE PROCESS

To ensure it heard from a representative selection of regional voices, the Panel reached out to a wide range of stakeholders, including community advocates, business leaders and local First Nations. It consulted with experts, regional leaders, academics, representatives from municipal and provincial governments and other knowledgeable voices.

The Panel also benefitted from the ideas raised during a series of roundtable discussions on economic development, infrastructure, land use and community and social issues. Each roundtable discussed:

- What's working now?
- What's not working now?
- What needs to change in order to plan, decide and act as an Edmonton Metro Region in order to become globally competitive – socially, environmentally and economically – for the future?
- What mechanisms would you recommend to achieve this?

These focussed questions led to a number of invaluable insights and suggestions.

In developing its recommendations and writing its report, the Panel met its mandated requirements to:

- Identify barriers to maximizing regional assets and recommend potential solutions to overcome those barriers.
- Clearly enumerate and define shared benefits for the Metro Region.
- Make recommendations on what change is required to achieve a competitive Edmonton Metro Region within the context of triple bottom line (economic, social and environmental) outcomes.

Be Ready, Or Be Left Behind is the culmination of the Panel's distillation and consideration of all these inputs.

EXPERTS, REGIONAL LEADERS AND KNOWLEDGEABLE VOICES

Municipal Issues Experts

- Enid Slack, Director, Institute on Municipal Finance and Governance and Adjunct Professor, Munk School of Global Affairs, University of Toronto
- Wendell Cox, Chair, Housing Affordability and Municipal Policy, Frontier Centre for Public Policy
- Robert O'Neill, Executive Director, International City/County Management Association

Regional Leaders and Knowledgeable Voices

- Jerry Bouma, Principal, Toma and Bouma Management Consultants
- Mike Chow, Director, Aboriginal Relations, City of Edmonton
- Rick Sloan, Senior Policy Advisor, Office of the General Manager, Sustainable Development, City of Edmonton
- Ian Morrison, Senior Principal, Stantec
- Brad Pickering, Deputy Minister, Alberta Municipal Affairs
- Joseph Doucet, Dean, Alberta School of Business, University of Alberta
- Deb Teed, Executive Director, Family and Community Support Services
- Carl Amrhein, Deputy Minister, Alberta Health
- Doug Bertsch, Vice President, Regulatory and Stakeholder Relations, Northwest Upgrading
- Jeremy Heigh, Principal, Sift Ever Thing
- Brad Ferguson, President and CEO, Edmonton Economic Development Corporation
- Malcolm Bruce, CEO, Capital Region Board
- William Barclay, Counsel, Reynolds Mirth Richards & Farmer LLP

Roundtable Participants

- Todd Banks, Executive Director, Public Relations, Sherwood Park Chamber of Commerce
- Warren Singh, Vice President, Policy and Outreach, Edmonton Chamber of Commerce
- Barbara McKenzie, Executive Director, Leduc Nisku Economic Development Association
- Neil Shelly, Executive Director, Alberta's Industrial Heartland
- Glen Vanstone, Vice President, Startup Edmonton
- Maggie Davison, Vice President, Tourism, Edmonton Economic Development Corporation
- Line Porfon, Vice President, Government Relations, Merit Contactors
- Richard Horncastle, Director, Leduc Chamber of Commerce
- Chris Lumb, CEO, TEC Edmonton
- Laurie Scott, Chair, Urban Development Institute (Edmonton Region)
- Gary Redmond, Executive Director, Strathcona Industrial Association
- Jillene Lakevold, Director, Corporate Strategy and Relations, Canadian Manufacturers & Exporters Alberta
- Anne Smith, President and CEO, United Way Capital Region
- Bruce Armson, CEO, Unlimited Potential
- Martin Garber-Conrad, CEO, Edmonton Community Foundation
- Ian Mathieson, Director, Operations, Boyle Street Mission
- Erick Ambtma, CEO, Edmonton Mennonite Centre
- Merle White, Executive Director, Native Friendship Centre
- Russ Dahms, Executive Director, Edmonton Chamber of Voluntary Organizations
- Lindsay Daniller, Director, Community Initiatives and Development, REACH Edmonton
- Ione Challborn, Executive Director, Canadian Mental Health Association

Panel Members

Don Lowry (Chair)
After 16 years as President & CEO of EPCOR Utilities, Don Lowry stepped down in 2013 to focus on corporate board and advisory work and to devout more time to local community boards and associations. During Don's time with EPCOR, he led the growth of the Edmonton-based utility into a North American power and water company. In 2009, Don initiated the spin-off of EPCOR's power generation business into one of Canada's largest investor-owned generation companies, Capital Power Corporation.

Carman McNary (Vice-Chair)
Carman McNary is the Managing Partner of the Edmonton office of Dentons Canada LLP, and has practiced law in Edmonton since 1982. His practice focuses on strategic level planning for tax, tax litigation and corporate transactions and structures, working with boards and executive teams to develop structures and transactional solutions to complex cross-border investment growth. Carman has served in the community in many previous roles, notably as Chair of the Edmonton Chamber of Commerce, Governor of the Canadian Tax Institute and Member of the Capital Region Economic Roadmap Task Force. Carman also served as an officer in the Canadian Armed Forces, Naval Reserve, from 1975-2008, retiring at the rank of Captain (Navy).

Dr. Stanford Blade
Dr. Stanford Blade was born in Alberta and raised on a dairy and grain farm. He received his Bachelor of Science from the University of Alberta, Masters of Science from the University of Saskatchewan and Doctorate from McGill University. Stanford is currently the Dean of the Faculty of Agricultural, Life and Environmental Sciences at the University of Alberta. The Faculty is focused on teaching, research and community service in its departments and schools. Stanford was also the founding CEO of the Alberta Innovates Bio Solutions Corporation, a provincial government agency that leads and coordinates science and innovation to grow prosperity in Alberta's agriculture, food and forestry sectors.

Phyllis Clark
After completing her Doctoral Candidacy in Economics at the University of Michigan, Phyllis Clark served as Assistant Deputy Minister of Ontario's Management Board Secretariat and, between 1991 and 1992, was the province's Chief Economist and Assistant Deputy Minister of Finance. She then transferred her skills to higher education and joined York University as Vice President of Finance and Administration. In 2002, Phyllis returned to Alberta for her current role as Vice President, Finance and Administration, and Chief Financial Officer at the University of Alberta.

Salima Ebrahim
Salima Ebrahim is the Executive Director of the Banff Forum, a national public policy organization whose mission is to reinvigorate public debate in Canada and to find ways to strengthen our country through engaging young leaders from diverse backgrounds and industry sectors. Prior to working with the Banff Forum, Salima was a management consultant with the world's largest professional services firm (Deloitte), where she led teams focusing on developing strategies for governments in the Middle East and North America. She also worked with the City of Calgary and the Government of Canada and was a fellow with the United Nations Office of the High Commissioner for Human Rights.

Linda Hughes
Linda Hughes has been a leading figure in Canadian media for over 20 years and continues to be one of Canada's most influential communicators and advocates for education. She served as the 19th Chancellor of the University of Alberta and Chair of the Senate. Prior to that, she had an extensive career in journalism. In 1992, she was named Publisher and President of the Edmonton Journal – the first woman in Canada to hold the position of publisher of a major newspaper. Deeply committed to her community, Linda is a founding member of the NorQuest College Foundation and former Chair of the Board of the United Way of the Alberta Capital Region.

Reg Milley
Reg Milley recently retired from Edmonton Airports where he was President and CEO since 2005. Throughout his time with Edmonton Airports, Reg had a positive impact, not just on the airport, but in the community and region as well. Thanks to his vision and leadership, the Edmonton area has a world-class airport with 15 more non-stop destinations, 50 percent more terminal space and double the number of shops and services. Prior to joining Edmonton Airports, Reg was President of Halifax International Airport, a position he had held since 2001. Before that, he was a Vice President and Lead Officer with Husky Energy Inc. headquartered in Calgary.

Liz O'Neill
For over 30 years, Liz O'Neill has devoted her life to serving children and youth. She began her career at the Department of Secretary of State in youth policy and programming and then became the Field Director of Youth Services for the Ontario Youth Secretariat. Liz is currently the executive director of Boys and Girls Clubs Big Brothers Big Sisters Society of Edmonton & Area. She started in 1979, serving 50 children; today, this organization, after several mergers, has more than 3,000 volunteers and serves more than 5,000 children. As a driving force in Edmonton's charitable sector, Liz has demonstrated savvy business acumen, sound values and inspirational leadership.

Tim Reid
Tim Reid is currently President and CEO of Northlands. Leading one of Edmonton's oldest institutions through a period of evolution is no easy task, but he injects an entrepreneurial spirit back into an organization that was created by visionaries nearly 137 years ago. Joining the team in September 2014, he came to Northlands with unparalleled experience in revolutionizing entertainment and recreation facilities across Canada. Throughout his time at Northlands, Tim has been instrumental in pushing the organization into a new era where positive staff culture, long-term planning and people are paramount to its success.

Andrew Ross
Andrew Ross currently serves as Executive Vice President, Northern Operations, for Clark Builders, where he leads a team of more than 600. During his time with the company, Andrew has fuelled impressive growth, and is accountable for more than $500M in revenue. His commitment to people, quality, innovation, and enduring relationships ensures operational excellence and sustainability for the future. Andrew is a proud Albertan driven to achieve long term success for the community He commits his time, energy and skills to several non-profit boards and committees.

Dr. Brad Stelfox
Dr. Brad Stelfox established the ALCES Group in 1995. The ALCES Group is a collection of landscape planners and resource analysts whose mission is to be a world leader in the delivery of land-use cumulative effects simulation modeling tools, strategic land-use planning advice and the provision of practical strategies to assist governments, businesses and society make balanced, informed decisions. During the past decade, the ALCES Group has completed approximately 40 large land use cumulative effects projects in Canada, Paraguay, United States, India and Australia. Brad is also an adjunct professor at the Department of Biological Sciences, University of Alberta and Department of Environmental Design, University of Calgary.

Paul Whittaker
Paul Whittaker was appointed President and CEO of the Alberta Forest Products Association in 2014 and assumed the additional duties of Chair of the Alberta Softwood Lumber Trade Council in 2015. Previously, Paul was with the Government of Alberta for 31 years serving in a range of senior posts, including in Alberta Health, Alberta Federal and Intergovernmental Affairs, Deputy Minister of Alberta Municipal Affairs, President of the Alberta Social Housing Corporation, as well as working on Aboriginal and constitutional issues.

Working Group Members

- John McGowan, President and CEO, McGowan & Associates
- Dr. Robert Murray, Vice President, Research, Frontier Centre for Public Policy, Adjunct Professor, University of Alberta
- Simon O'Byrne, Vice President, Sector Leader – Community Development Canada, Stantec
- James Simpson, President, James V. Simpson & Associates Inc.

BE READY, OR BE LEFT BEHIND

Report of the Advisory Panel
on Metro Edmonton's Future

May 31, 2016

APPENDICES 4 - 5

Appendix 4 – Annotated Bibliography

Is a globally competitive Edmonton Metro Region achievable? What does success look like? What are the factors required to get us there? What needs to be done differently in the region to achieve results? In setting out to answer these questions, the Panel considered a wide range of government reports and academic articles on inter-municipal cooperation.

Alberta Capital Region Steering Committee. "Capitalize: The Economic Roadmap for Alberta's Capital Region." 2011.

This report provided the Capital Region Board with a vision for Alberta's Capital Region, arguing that a coherent and focused collaborative approach was needed for the region to emerge as a significant city-region on the world stage. The report's recommendations include strengthening regional management, improving the arena of education and training, participating in the economic and social development of the circumpolar north, attracting businesses and developing transportation links to, from and within the region.

Alberta Capital Region Steering Committee. "Volume 1: Edmonton Metropolitan Region Economic Development Framework." June 4, 2015.

The Edmonton Metropolitan Region Economic Development Framework represents a long-term agreement to be signed by different parties in the Alberta Capital Region. The vision is "To be a business location of choice for global investment, by collaboratively building on regional assets." Making the distinction between local, sub-regional and regional levels, the authors argue the top three priority areas are regional: marketing, talent and industry.

Alberta Capital Region Steering Committee. "Volume 2: Edmonton Metropolitan Region: Economic Development Strategy 2015-2018." May 21, 2015.

This document for the Capital Region Board contains a strategy reflecting the insights of regional economic development professionals on how to prepare Alberta's Capital Region to succeed in a globally competitive metropolitan environment. At the core of this strategy is a commitment to collaboration. Priorities for the coming five years include unified marketing, attracting talent and growing and diversifying industry. This is a sister document to "The Economic Development Framework," which outlines a framework for collaboration, the organization and the funding model for the initiative.

Alberta Municipal Affairs. "Collaborative Governance Initiative." http://www.municipalaffairs.alberta.ca/mdrs_collaboration.

The provincial government's Collaborative Governance Initiative (CGI) offers Municipal Dispute Resolution Services that can help municipalities assess whether collaborative governance is an appropriate fit, help convene the process, and ensure that prerequisites are in place. It provides a few samples under "Protocols, Agreements & Successes" of successes involving the CGI, including the Common Bonds Agreement between Strathcona County and the City of Fort Saskatchewan.

Aquatera Utilities Inc. https://aquatera.ca/.

Aquatera is a full-service utility company formed by the City of Grande Prairie, County of Grande Prairie and Town of Sexsmith. This for-profit corporation has a vision of being "the most innovative municipal company in Canada by 2020." Aquatera serves as an example of two or more municipalities forming a for-profit corporation with the minister's approval and transferring assets to that corporation to help it achieve its objectives.

BCTransit. "Victoria Regional Transit Commission." http://bctransit.com/*/about/funding-and-governance/victoria-regional-transit-commission.

AND

BCTransit. "Victoria Regional Transit System: SD62." School District 62 – Transportation Public Meeting: Sooke. January 21, 2016.

BCTransit is a provincial authority responsible for the planning, funding and operation of all transit in the province outside of Metro Vancouver. The Victoria Regional Transit Commission makes decisions regarding transit services and funding in the Victoria region, more specifically. It consists of seven elected local government officials appointed by the Lieutenant Governor in Council, and two Commission members are appointed as directors of BCTransit.

Bish, Robert. "Amalgamations: Discredited Nineteenth-Century Ideals Alive in the Twenty-First." C.D. Howe Institute, 2001.

This source makes a case against amalgamation and large, central bureaucracies. It argues that smaller governments are more responsive to their citizens than large bureaucracies. The benefits of amalgamating, on the other hand, are rarely realized. Not only is money not necessarily saved by centralizing authority, according to the article, approximately 80 percent of local government activities don't benefit from economies of scale. The activities that do possess economies of scale are those needed infrequently by municipalities, such as homicide investigation or traffic light maintenance or a few very large capital facilities, such as landfills. "In summary, there is overwhelming evidence that *the least expensive local governments* are found in polycentric systems of small and medium-sized municipalities that also cooperate in providing those services that offer true economies of scale (p. 20)." This source also compares different approaches used throughout Canada, including the model used in British Columbia.

Bish, Robert L. "Amalgamation: Is it the Solution?" Prepared for The Coming Revolution in Local Government conference. Halifax: Atlantic Institute for Market Studies, 1996.

This paper discusses the merits and disadvantages of both single-tier municipal reforms and two-tier municipal reforms, and it discusses an alternative way of thinking that isn't a "tier" model. The arguments essentially come down to a "debate over multi-organizational versus centralized control." According to the author, "The observation that a multiplicity of individuals and organizations can function together for mutual benefit without central direction is one of the most important insights in the history of human thought." After exploring regional collaboration at the inter-municipal level, the author argues in favour of deeper mechanisms of collaboration.

Bouma, Jerry. "Capital Region Board Growth Plan Update: Agriculture Working Paper." January 10, 2016.

This report for the Capital Region Board asserts that the province has failed to provide specific guidelines regarding the use of agricultural lands in the region and so the onus to establish policies is now on the municipalities. The report's purpose is to provide background information and policy recommendations for the CRB to use when updating the *Capital Region Growth Plan*. The report notes that municipalities in the region currently have differing approaches to agricultural land use planning, which the author argues "leads to differing rates of land conversion, fragmentation and impacts to the agricultural industry at large."

Bruce, Brittany M. "Collaboration and Regional Economic Development: A Comparison of North Country, New York and Four Counties, Ontario." Master's thesis. Waterloo, ON: University of Waterloo, 2014.

This is a Master's thesis that studies collaborations related to agriculture and economic development in North County, NY and Four Counties, ON. It explores key factors for success or failure, barriers to cooperation and implementation challenges. The author finds that regional collaboration is not a universal solution to economic challenges for all jurisdictions and may be more successful at an intra-county scale. Furthermore, it finds that a vast geography, lack of an urban centre and insufficient resources facilitate collaboration. She notes that stakeholders are increasingly encouraging collaboration because they are "beginning to understand the limits of what they can achieve as individual organizations" and "provincial, state and federal levels of government increasingly want to interact with only one entity at a regional level to increase efficiency."

Capital Region Board. "Capital Region Land Use Plan." March 12, 2009.

The primary purpose of this CRB plan is to "manage sustainable growth that protects the region's environment and resources, minimizes the regional development footprint, strengthens communities, increases transportation choice and supports economic development." According to the CRB, the document aims to accomplish these objectives through an integrated and strategic approach to planning which coordinates planning and development decisions in the region and identifies a regional development pattern to complement existing infrastructure, services and land uses.

Capital Region Board. "Growing Forward Fact Sheet: Land Supply and Regional Development Footprint." N.d.

This brief document provides the status of the Alberta Capital Region's current land supply. Making the distinction between "absorbed land supply" and "unabsorbed land supply, this document asserts that "the Capital Region has a sufficient supply of lands to accommodate future residential, commercial and industrial growth over the next 35 years and beyond." The bottom of the first page notes that one of the core principles of the Capital Region Growth Plan is to minimize the "regional development footprint" and that applying density targets will do this.

Capital Region Board. "Growing Forward Fact Sheet: Priority Growth Areas." N.d.

This fact sheet explains that there are seven "Priority Growth Areas" (PGAs) in the Alberta Capital Region. These are the areas where the Capital Region Growth Plan intends for most new growth to occur. It's important to note that the CRB has signalled its intention to replace PGAs with three new policy tiers in its updated Growth Plan.

"Capital Region Intermunicipal Transit Network Plan." Growing Forward, Appendix 3. March 2009.

Based on the land use scenarios considered during the development of the Capital Region Growth Plan, the plan is intended to provide guidance to the Capital Region for regionally integrated and coordinated transit service planning and delivery. Its recommendation include moving forward with "quick wins" (i.e. transit initiatives and projects that are regionally beneficial and which can be implemented relatively quickly), establishing a new urban transit section within Alberta Transportation and developing a mechanism to enable municipalities to share the costs associated with the delivery of inter-municipal transit services.

City of Edmonton. “The Way We Grow: Municipal Development Plan.” Bylaw 15100.

This source is the City of Edmonton’s Municipal Development Plan to accommodate growth and aid in the evolution of a sustainable, healthy and compact city. Arguing that the city “recognizes the merits of managing growth and is committed to the success of the Capital Region Growth Plan,” this plan focuses on land use planning in particular.

City of Edmonton. “The Way We Move: Transportation Master Plan.” September 2009.

Acknowledging that land use and transportation are inextricably linked, this plan is based on seven transportation strategic goals, including transportation and land use integration, well-maintained infrastructure and economic vitality. Each of these goals embodies the four guiding principles: integration, sustainability, livability and innovation. The purpose of the plan is to guide policies and direction on how best to manage Edmonton’s transportation system to contribute to a city that is “safe, vibrant, economically robust, culturally active and environmentally sustainable.”

City of Edmonton. “The Way We Prosper: The City of Edmonton’s Economic Development Plan.” March 2013.

This source provides a vision of the City of Edmonton’s future to help set direction and encourage different parties to align their priorities. It notes that “aligning the economic development focus of 20 municipalities in the region is also seen as difficult.” The report also identifies “key constraints” Edmonton faces when competing with neighbouring municipalities for new business investment. It also has a section In “The Drive for Talent,” it notes a global trend to adopt strategies aimed at retaining and attracting talented labour.

City Regions Task and Finish Group. “City Regions Final Report.” Welsh Government, July 2012.

This report identifies potential city regions in Wales and explores how adopting a “city region approach” might benefit the economy. It argues that city regions in Wales “should be free to explore best-fit governance arrangements based on global good practice, recognizing that different levels of governance are required for different policies. The focus must be on what a change in governance is intended to achieve, not the process itself.” This source also touches on economic development, concluding that “a city region approach in Wales could deliver three main economic benefits: larger and more efficient labour markets, larger potential markets for goods and services, and a greater exchange of knowledge, ideas and innovation.”

Clark, Greg, and Tim Moonen. “The 10 Traits of Globally Fluent Metro Areas: International Edition.” Brookings Institution, 2013.

The aim of this report is to provide insights for cities that are “forging their own new approaches toward the opportunities and challenges in a globalizing economy.” It summarizes ten traits that define “globally fluent” metropolitan areas and that have proven to be strong determinants of an area’s ability to succeed in global markets, including “open and opportunity-rich” and “international connectivity.”

Cox, Wendell. "Reassessing Local Government Amalgamation." Frontier Centre for Public Policy. February 2004.

Provideing evidence from the United States that larger, amalgamated municipalities spend more per capita to operate than do smaller municipalities, this source demonstrates some of the pitfalls of amalgamation. Still, Cox says that a few functions of municipal government are better administered at a metropolitan level, such as highways and public transit.

Dawes, Sharon S., and Lise Préfontaine. "Understanding New Models of Collaboration for Delivering Government Services." ***Communications of the ACM 46*****, no. 1 (January 2003).**

Featuring a number of cases studies, this short article demonstrates that fundamental elements of collaboration transcend cultural and national boundaries. It finds that collaboration rests on an understood (but often tacit) working philosophy, that collaboration efforts offer continuous opportunities for feedback, collaborators face issues regarding data ownership rights, multi-organization collaborations need an institutional framework, and technology choices have important effects on participants and the results.

Dawson Regional Planning Commission. http://dawson.planyukon.ca/

AND

Yukon Land Use Planning Council. "About Us." http://www.planyukon.ca/index.php/about-us-2.

In December 2014, the Government of Yukon, Tr'ondëk Hwëch'in and Vuntut Gwitchin Government made public a joint decision to suspend the Dawson Regional Land Use Planning process due to a matter before the courts that directly relates to the process. The Yukon Land Use Planning Council is currently active, however, and has three members who serve three-year terms. Its mandate is to make land use planning recommendations to the government and to First Nations.

Dell and Intel. "Preparing Local Economies for the Future." ***Harvard Business Review*****, January 12, 2016.**

This article argues that the formula city planners need to follow to attract industries to their region is changing. Technology has made information ubiquitous and so virtual infrastructure is more important for many companies than the physical infrastructure that cities traditionally use to attract them. Experts at the 2015 Strategic Innovation Summit identified three major enablers for cities/communities to focus on: 1) attract and nurture human capital, 2) foster collaborative, growth-oriented commercial environments and 3) build an enabling foundation of technology, telecom and physical infrastructure.

Edmonton Economic Development. "Navigating Your Economic Future in Edmonton." January 2015.

The purpose of this workbook is to guide businesses in planning for economic possibilities likely to occur in Alberta's future, considering the possibility of four different scenarios, including "Oil Kings No More."

Federation of Canadian Municipalities. "Cities and Communities: Partners in Canada's Future." 2015.

This report contains proposals for the federal government to partner with municipalities to strengthen Canada's future. The Federation of Canadian Municipalities is a valuable agency for collaboration among municipalities and other levels of government that would be a valuable resource to a regional body, especially its Municipal Infrastructure Forum. The report proposes a number of solutions for infrastructure and public transit.

Found, Adam, Benjamin Dachis and Peter Tomlinson. "The 2014 C.D. Howe Institute Business Tax Burden Ranking." C.D. Howe Institute E-Brief, October 29, 2014.

This report contains the results of measuring the tax burdens of the largest cities in each province, arguing that prevailing tax-burden estimates are incomplete because they are missing business property taxes and land transfer taxes. It ranks the tax regimes of Calgary and Saskatoon as the least burdensome in Canada. The report recommends that municipalities "should reduce investor uncertainty by announcing a time-path of tax rates for future years."

Garcea, Joseph, and Edward C. LeSage Jr., eds. *Municipal Reform in Canada: Reconfiguration, Re-Empowerment, and Rebalancing*. Canada: Oxford University Press, 2005.

This book contains analyses of municipal reform initiatives, whether implemented or not, in each of Canada's provinces and in the territories. This source provides a means to compare different municipal reforms efforts tried in Canada. A section "Products of the Municipal Reform Initiatives: The Outputs" in the final chapter provides a comparative overview of four types of reform: structural, functional, financial and jurisdictional.

Gibson, Ryan. "A Primer on Collaborative Multi-Level Governance." Canadian Regional Development, May 2011.

This source discusses various definitions for the concepts of "governance," "multi-level" and "collaborative." Drawing on other authors' work, it says the region is a manageable scale for designing regional development policies and programs. Furthermore, new regionalism represents a movement by the nation states to shift towards pluralistic governance to better respond and coordinate policies and programs at the regional level.

Golden, Anne. "The Case for Regionalism Revisited." Speech for Toronto Region Economic Summit, March 29, 2012.

This source is a copy of a speech given by Anne Golden, who was asked in 1995 to chair a task force on the future of the Greater Toronto Area. The task force had highlighted some priorities for change, and 17 years later, Golden says that many of the issues flagged have not been addressed: the neglect of municipal physical infrastructure, a failure to integrate land use and transportation planning and a governance structure that impedes regional collaboration.

Golden, Anne, and Sophie Knowles, ed. "Governance Gridlock: Solving the Problem for 21st Century City-Regions." Toronto: Ryerson University, 2013.

This report is for a symposium in Toronto premised on the idea that city-regions are the drivers of economic prosperity in today's global economy. It argues that city-regions need sound governance, sufficient fiscal resources and effective leadership in order to succeed. While focused on Ontario, experts provided think pieces that would have relevance to other regions as well. The summary by Harry Moroz notes that most ideas for city-regions presented fall under three categories: governance reforms or new institutions, increased civic or public engagement and solutions focused on a particular issue. He notes a concern that the creation of municipal power centers might make provincial governments feel threatened.

Gormanns, Nina, and Cam Nguyen. "Canada's Municipal Spending Watch 2015." Canadian Federation of Independent Business, November 2015.

This report argues that the increased spending in Canada's municipal sector has far outpaced the reasonable benchmark of inflation and population growth. Furthermore, the CFIB claims that if Edmonton had held to the benchmark with its spending, each household could have saved $8,500 over the course of the decade. According to the report, Edmonton's operating spending increased by 74 percent between 2003 and 2013 compared to a population increase of 23 percent.

"Greater ABC Region Inter-municipal Consortium." In *Inclusion, collaboration and urban governance: Brazilian and Canadian Experiences*, organized by Hugh Kellas. Vancouver: The University of British Columbia, 2010.

This case study outlines the development of the Greater ABC Consortium, established in 1990, which articulates policies for the Greater ABC Region (part of Metropolitan Sao Paulo). This study argues, among other things, that a key weakness of the consortium's structure was its "lack of mechanisms, such as solid and trustworthy institutions, that ensure continuity of actions agreed upon." In 2009, a new public consortia law was in the works.

Halifax Regional Municipality. "The Greater Halifax Partnership – Economic Development Arm of HRM." May 2010.

The Greater Halifax Partnership was created in 1996 and intended to be the catalyst for economic growth in Greater Halifax. It's a unique model that has been copied elsewhere in North America, including Edmonton, which focuses on bringing together both the private and public sectors. This source is a valuable example of a collaborative model used elsewhere in Canada and can be used as an important example of other Canadian jurisdictions that have found novel ways at coming together to collaborate.

Heigh, Jeremy. "Choose to Lead: Building on the Competitive Advantages of the Capital Region." Sift Every Thing, November 13, 2014.

This report discusses the Alberta Capital Region's competitive advantages, based on interviews with the region's 24 Mayors and with 83 business executives. It finds that the "region's strongest advantages build on the pure volume of its ability to pull in inputs and push out products." It claims that while the energy sector drives the economy, it's not the biggest sector in the region. "Successfully navigating this region," this report argues, "will require deliberate leadership … decision makers must choose to pull in a common direction and focus on opportunities that build this region's advantages."

Hethcock, Bill. "Here's the main reason Toyota is moving from California to Texas." *Dallas Business Journal*, December 11, 2015.

This short article claims that housing costs are the main reason Toyota is re-locating its company to Texas. Its employees want affordable housing and to live the American dream. This source pinpoints an important consideration for regional planners to keep in mind: affordable housing attracts human capital and encourages economic development.

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

This report was commissioned by the Government of Alberta to provide recommendations for the Alberta Capital Region on governance and collaboration. It argues that strengthening the region is a necessity and that "partnerships are the best option." Section IV "Moving forward on two tracks" is of particular relevance; Hyndman makes recommendations based on two tracks: 1) a partnership track and 2) a shared services track.

ISL Engineering and Land Services. "Capital Region Integrated Growth Management Plan: Final Report on Core Infrastructure." November 30, 2007.

This report was written to develop the *Capital Region Integrated Growth Management Plan*. It discusses the core infrastructure components of Alberta's Capital Region and the infrastructure that will be required to accommodate projected growth in the region, including highways/roads, railways, airports, transit, water, wastewater, process water, power, pipelines and waste management. Population growth will exacerbate any existing inefficiencies or infrastructure deficits, so it's important to address the region's infrastructure needs.

Kelcey, Brian. "Mergers of RMs Ignorant." *Winnipeg Free Press*, July 10, 2013, http://www.winnipegfreepress.com/opinion/analysis/mergers-of-rms-ignorant-214868671.html.

This short article opposes forced amalgamation of rural municipalities. One of the reasons citied by the author is the tendency for staff salaries to go up and management pay to rise after mergers. Furthermore, larger municipalities can take on debt more easily and do so for precarious infrastructure projects. He claims that the "poster child" for successful amalgamation is Killarney-Turtle Mountain, but notes that this amalgamation was voluntary and followed 40 years of local leaders sharing for selected services.

Kelling, Jan, ed. "Urban-rural relationships in metropolitan areas of influence." Hamburg: Metrex, n.d.

This report discusses different approaches to "urban-rural partnerships" in Germany, recognizing the importance of cooperative relations between metropolitan areas and their surrounding rural areas. Its examples of cooperation are often focused on specific issues, for example, "food" or "tourism." The Rhein-Main regional park is a product of collaboration, and this source records some significant challenges that had to be overcome.

Kushner, Joseph, and David Siegel. "Citizen satisfaction with municipal amalgamations." *Canadian Public Administration* 48, no. 1 (Spring 2005): 73-95.

This article reviews three amalgamations in Ontario (Central-Elgin, Chatham-Kent and Kingston) to see if the goals of "efficient service delivery" and the provision of "high-quality services at the lowest possible cost" were met. This study is valuable as it not only focuses on the level of expenditures after amalgamation but considers changes in the quality and quantity of services delivered. The quality of services is mostly measured by carrying out surveys on citizen satisfaction after amalgamation, and it finds that residents didn't see a significant change in the quality of services.

Kushner, Joseph, and David Siegel. "Effect of Municipal Amalgamations in Ontario on Political Representation and Accessibility." *Canadian Journal of Political Science* 36, no. 5 (Dec. 2003): 1035-1051.

This article examines whether amalgamations in three Ontario municipalities met the objectives of reducing expenditures by taking advantage of economies of scale provided by larger units of government, as well as maintaining accessible representation and preserving community identity while reducing the number of politicians. It concludes that the "immediate aim of reducing the number of councillors was accomplished, but if the underlying objective was to reduce expenditures, the government failed to meet that goal." While most people felt that the accessibility of councillors to their constituents wasn't affected, a "sizeable minority" thought accessibility had diminished.

LeSage, Edward C., Jr., Melville L. McMillan and Neil Hepburn. "Municipal shared service collaboration in the Alberta Capital Region: The case of recreation." *Canadian Public Administration 51*, no. 3 (September 2008): 455-473.

This article is an empirical examination of shared service arrangements (SSAs) for recreational and cultural services among municipalities within the Edmonton metropolitan region, carried out in order to identify factors that promote or discourage municipal participation in inter-municipal agreements. Population is a dominant factor – smaller municipalities with a single facility are more inclined towards SSAs than a large municipality that already has multiple facilities. Results for other potential factors were inconclusive.

Macomber, John D. "The 4 Types of Cities and How to Prepare Them for the Future." *Harvard Business Review*, January 18, 2016.

This article argues that what works for one city will not necessarily work for another. It makes distinctions between legacy vs. new cities and developed vs. emerging economies, discussing what planners should keep in mind depending on which segment their city fits into. While intervention in developed, legacy cities often requires dismantling something that already exists, a newer city needs to build its brand and important infrastructure in order to attract more participants to its economy.

Mallett, Ted, Simon Gaudreault, and Andrea Bourgeois. "Entrepreneurial Communities: Canada's top places to start and grow businesses in 2015." Canadian Federation of Independent Business, October 2015.

This source argues that "entrepreneurship is an inseparable aspect of growth and development of communities." It then ranks cities using different entrepreneurship indicators. The grouping of municipalities surrounding Calgary topped the rankings in Canada, with the Edmonton periphery ranking third overall in 2015 and second overall in 2014. The report states that the outer rings of major cities are "usually better incubators of new businesses because of lower relative costs but still reasonably good access to large markets."

Martin, John, Gary Paget and Brian Walisser. "Rural Municipal Development and Reform in Canada: Policy Learning through Local-Provincial Collaboration." *Commonwealth Journal of Local Governance* no. 10 (December 2011-June 2012).

This article focuses on the role of provincial governments – which are responsible for framing the powers of local governments – with regards to municipal collaboration. It argues that provinces are moving away from "directive intervention" toward a strategy of "facilitative intervention," which seeks "to build capacity in a manner that is less state-centred, more bottom-up, and better adapted to variable local circumstances."

McCulloch, Sandra. "B.C. Transit reports more riders in Greater Victoria, lower costs." *Times Colonist*, July 16, 2014. http://www.timescolonist.com/news/local/b-c-transit-reports-more-riders-in-greater-victoria-lower-costs-1.1208300.

This newspaper article reports that transit ridership has increased in Greater Victoria and that operating costs were below budget, thanks to efforts made by B.C. Transit in partnership with the city to increase efficiency. B.C. Transit is often cited as a successful example of transit collaboration.

Meloche, Jean-Philippe, and François Vaillancourt. "Public Finance in Montréal: In Search of Equity and Efficiency." IMFG Papers on Municipal Finance and Governance. No. 15. 2013.

This paper is about metropolitan governance challenges facing Montreal. After amalgamation in 2001-02, some suburban municipalities de-merged in 2006, and this paper is a discussion about dealing with decentralization. It notes challenges with regional government and discusses the proper way to manage fiscal relations between collaborating jurisdictions, including the concept of equity in public finance. This source is valuable for learning about the experience of another Canadian jurisdiction interested in improving its inter-municipal governance arrangements.

"Metro Vancouver: Collaboration for a Sustainable Metropolitan Region." In *Inclusion, collaboration and urban governance: Brazilian and Canadian Experiences*, organized by Hugh Kellas, 89-98. Canada: University of British Columbia, 2010.

This case study examines Metro Vancouver's collaborative governance model, and its application in regional development planning. Metro Vancouver is a consortium of 22 municipalities, one First Nations government and one unincorporated area. It's focused on integrating land use and transportation strategies, with a goal of environmental protection as a guide. In discussing outcomes, the report claims that Metro Vancouver has helped guide development and provide cost-effective services, but it also lists some of the challenges associated with the model.

Miljan, Lydia, and Zachary Spicer. "Municipal Amalgamation in Ontario." Fraser Institute, May 2015.

This report examines three relatively small municipalities in Ontario to see whether intended benefits of municipal restructuring were realized. Its findings suggest that amalgamation did not result in cost savings or lower property taxes, and the speed with which restructuring was implemented was likely a significant factor in this outcome. The authors also found that "when rural areas were amalgamated with urban areas, residents began to demand more urban services, which further stretched municipal budgets in the years following the initial consolidation."

"Montreal: Amalgamation to Consortiation." In *Inclusion, collaboration and urban governance: Brazilian and Canadian Experiences,* organized by Hugh Kellas. 121-127. Canada: University of British Columbia, 2010.

This case study examines the collaborative governance structures established in Quebec when it amalgamated 28 municipalities surrounding Montreal and then partially dismantled the amalgamation as a result of public concern. As the report argues, "The creation of the Metropolitan Montreal Community as a broader region-wide governance structure … seems to have created tangible societal benefits for the region." On the other hand, "there remains a significant amount of discontent … about the new governance and taxation structures."

Morris, Marleen. "Multi-Sectoral Collaboration and Economic Development: Lessons from England's Regional Development Agencies."

This source argues for the necessity of collaboration in the area of economic development. It studies England's regional development agencies with the intent of applying the lessons learned to the British Columbia context. The author argues that collaborative environments require leaders who are inspiring and lead by example, that "information and evidence" are necessary for good discussion and cooperation, and that monitoring and progress reports "bring coherence to … strategies, programs and projects."

MXD Development Strategists and Stantec. "Alberta Aerotropolis." Prepared for the Leduc Partnership (City of Leduc, Leduc County & EIA). N.d.

This document provides current statistics on, and projections for, the Leduc Region. It lists examples of regional collaboration and partnerships in which the Leduc Region has participated, such as a recreation and library cost share agreement, fire and emergency services cost-share and mutual aid agreements, the Leduc transit service, the Shared Services, Goods and Equipment Agreement, community support services, and airport tax revenue sharing.

Neilson, M., V. Dowdell and J. Kolkman. "Tracking the Trends 2013: 12th Edition." Edmonton, Canada: Edmonton Social Planning Council, 2013.

This publication discusses many aspects of the well-being of Edmonton and the surrounding area, including demographics, education and employment, cost of living and housing trends, wages and income and poverty and government income supports. The authors argue that decision-makers must understand social trends to be effective in the long term, and this source shows trends in the context of other trends. The report emphasizes the population growth Metro Edmonton is experiencing. This source highlights the interdependent nature of the region and the need to collaborate. It's a valuable source of data for regional planners interested in the triple bottom line (economy, environment, social).

O'Brien, Allan. "Municipal Consolidation in Canada and Its Alternatives." Toronto: ICURR Publications, May 1993.

This source provides descriptions and assessments of various cooperation or consolidation models used throughout Canada, noting a need for effective regional planning especially in the face of federal and provincial deficits. In the author's view, though there are often protests during a transition, consolidation or restructuring has lasting benefits. While he notes that there are alternatives to consolidation, he is concerned about a decline in accountability. The author posits that the process by which consolidation occurs can be an important factor in its ultimate success or failure.

Office of the Auditor-General. "Auckland Council: Transition and emerging challenges." New Zealand Parliamentary Paper, December 2012.

This report contains reflections from the Auditor General of New Zealand two years after Auckland's local authorities and Regional Council amalgamated into the single Auckland Council. She points out that this complex entity affects the daily lives of more than a third of New Zealanders, and that its large size presents challenges. She reports that there are inherent tensions in the Council's governance arrangements and is "not confident that the Council will be able to build the more future-oriented and trust-based culture it seeks by using more formal processes and mechanisms." Part 4 of the report explains more about the Auckland Council's two-tier governance structure designed to deal with decision-making: the governing body makes decisions at a strategic and regional level, while local boards have more engagement with the community.

Ontario Ministry of Northern Development and Mines. "Ontario Establishes Ring of Fire Infrastructure Development Corporation." News release. August 28, 2014. https://news.ontario.ca/mndmf/en/2014/08/ontario-establishes-rof-infrastructure-development-corporation.html;

AND

Ontario Ministry of Northern Development and Mines. "Transportation Infrastructure: What is the ROF (Ring of Fire) Infrastructure Development Corporation (ROFIDC)?" http://www.mndm.gov.on.ca/en/ring-fire-secretariat/transportation-infrastructure.

The ROF Infrastructure Development Corporation is a not-for-profit corporation headquartered in Thunder Bay. Created by the Government of Ontario in 2014, its purpose is to "encourage and assist exploration for and development of mineral deposits in the Ring of Fire by financing, building, operating and maintaining strategic transportation infrastructure, including industrial and community access roads." This partnership will include First Nations, industry, communities and the federal government. The interim board of the ROF Infrastructure Development Corporation has four directors from the Ontario Public Service, who will put the structures in place to bring other partners on board.

Organisation for Economic Co-operation and Development. *OECD Territorial Reviews: Competitive Cities in the Global Economy*. OECD Publishing, November 2006.

Summaries here: http://www.oecd.org/gov/regional-policyecdterritorialreviewscompetitivecitiesintheglobaleconomy.htm

This book studies the growth and competitiveness of regional economies and identifies some of the major dilemmas policymakers face. There are currently 34 countries that are members of the OECD, including Canada, and this report considers 78 of the largest metro-regions found in the OECD's member countries. According to the executive summary, there are a number of economic advantages to large agglomerations, but metro-regions are not always synonymous with success. The report argues that the Greater Vancouver Regional District has achieved striking successes as a voluntary organization in providing some metropolitan-wide services.

Parr, John, Joan Riehm and Christiana McFarland. "Guide to Successful Local Government Collaboration in America's Regions." A Report from National League of Cities' CityFutures Program, October 2006.

This guide informs policymakers of 17 different options for intergovernmental or regional cooperation, along with exploring their associated advantages and disadvantages. It provides its options in the form of a spectrum of "easier" to "harder" options, with "informal cooperation" considered the easiest approach and a "merger/consolidation" option considered the hardest.

Plunkett, Thomas J. "Metropolitan Government in Canada." *University of Toronto Law Journal* 14, no. 1 (1961): 29-51.

This article describes growth patterns in metropolitan areas, stating that the automobile has made it possible to live on the periphery of a large city (which is often seen as a more desirable place to live than in the heart of a city) and to travel back and forth for work. Though the modern metropolitan area is an interdependent economy with area-wide problems, maintaining the same units of local government is typically staunchly defended. But the author concludes that the "development of metropolitan government in [Toronto and Winnipeg] has been a major advance toward meeting the needs of metropolitan areas." While this source is decades old, it's widely considered to be core reading for anyone studying topics related to local government.

Portland Metro Region. "Regional Framework Plan." http://www.oregonmetro.gov/regional-framework-plan;

AND

Portland Metro Region. "2040 Growth Concept." http://www.oregonmetro.gov/2040-growth-concept.

The Portland Metro's Regional Framework Plan was adopted in 1997 and has been amended several times since. It guides policies with regard to several matters, including mass transit systems and land use planning. The *2040 Growth Concept* is a long-range plan adopted by the Portland Metro Council. Its policies are designed to encourage compact development that uses land and money efficiently, a healthy economy, and more. The plan identifies ten distinct urban design components, such as the "central city," "town centers," "main streets" or "regional centers."

Powers, Pike. “Building the Austin Technology Cluster: The Role of Government & Community Collaboration in *the Human Capital*.” Federal Reserve Bank of Kansas City. Proceedings – Rural and Agricultural Conferences. 2004.

Austin, Texas, is a city well recognized as being a center for technology innovation. This source discusses the keys to the city’s success, including nurturing a climate for entrepreneurship, having space and facilities for start-ups, property tax abatement and special agreements such as to not annex. In addition to being a great place to do business, the region is recognized for having affordable, diverse neighborhoods.

Radke, C. D. “Working Together: Report of the Capital Region Integrated Growth Management Plan Project Team.” December 2007.

Commissioned by the Government of Alberta, this report was written by the project team for the Capital Region Integrated Growth Management Plan. It expresses surprise “at what little real progress has been made” since Hyndman’s report in 2000 and recommended the quick establishment of the first Board for the Capital Region. “Compiling information, comparing plans and talking about regional cooperation are one thing,” the report argues, “actually implementing a regional approach is another story entirely.”

Reputation Institute. “2015 City RepTrak: The World’s Most Reputable Cities.” 2015.

This report scores cities around the world on their reputation, a measurement of emotional attitudes that stem from rational dimensions. Sydney was labelled the most reputable city in 2015; Vancouver was the highest ranked Canadian city on the list, while Edmonton wasn’t measured. This source argues that while the overall reputation of a city is an emotional perception, reputation has a strong impact on the behaviour of stakeholders, who improve a city’s economy. This source would be valuable for city planners who want to improve the reputation of their region.

Rosenfeld, Raymond A., and Laura A. Reese. “The Anatomy of an Amalgamation: The Case of Ottawa.” *State & Local Government Review* 35, no. 1 (Winter 2003): 57-69.

This article focuses on the experience of the former city of Gloucester during the metropolitan consolidation of the Ottawa-Carleton Region of Ontario, examining “implementation issues associated with consolidation.” The piece identifies four problematic aspects of implementation: 1) the transition board was appointed by the province rather than elected at the local level, 2) different administrative cultures were present among the cities (Ottawa preferred to control growth while Gloucester had a “business friendly” stance), 3) the amalgamation was large in scale and 4) the amalgamation was mandated by the province.

Sancton, Andrew. “Municipal amalgamations: a made-in-Canada solution to an undefined problem.” *Canadian Issues* (Feb 2003): 33-36.

This source provides valuable historical context on municipal amalgamation, especially from the United States. The author claims, in 2003, that amalgamations are higher on the policy agenda in Canada than elsewhere in the world and that amalgamation doesn’t convert into “real influence on the national stage.” One of the great unresolved issues with amalgamation, according to the author, is how to fairly represent rural residents. Representation by population would mean rural areas have virtually no representation, while giving them more representation than their population implies compromises a fundamental principle of democratic governance.

Sancton, Andrew, Rebecca James and Rick Ramsay. “Amalgamation vs. Inter-Municipal Cooperation: Financing Local and Infrastructure Services.” Toronto: ICURR Press, July 2000.

Focussing on Canadian examples, this study examines four cases of amalgamation and four cases of municipal cooperation. Chapter 3 contains interesting historical information on the Edmonton Metropolitan Region. In the authors’ view, Edmonton is already remarkably consolidated by North American standards. This source is hesitant about further municipal consolidation being undertaken in the region, because “such a course of action has rarely lived up to expectations.” It points out that “amalgamation and inter-municipal agreements co-exist in the real world; they are not mutually exclusive alternatives.”

Slack, Enid. “Innovative Governance Approaches in Metropolitan Areas of Developing Countries.” UN Habitat Global Expert Group Meeting, June 2014.

This paper is about identifying a range of governance mechanisms that can support efficient and equitable services in the metropolitan areas of developing countries. Rapid urbanization throughout the world has created economic opportunities as well as serious challenges. It points out that special-purpose bodies have the disadvantage of not being required to make trade-offs when it’s responsible for only a single service. This paper also emphasizes that different contexts must be taken into consideration when choosing or reviewing governance models.

Slack, Enid. “Inter-Municipal Cooperation: Sharing of Expenditures and Revenues.” Toronto: ICURR Publications, April 1997.

This report reviews Canadian and American examples of inter-municipal cooperation including expenditure sharing and tax sharing. The author concludes that “inter-municipal cooperation is probably more successful at meeting the criteria of efficiency and effectiveness than is amalgamation. Annexation and amalgamation, do, however, result in a fairer distribution of the tax burden among constituent municipalities.” She also suggests that “in terms of accountability, annexation and amalgamation are likely to be more accountable because those making the expenditure and tax decisions are elected by local taxpayers” as opposed to cases in which tax decisions and expenditure decisions are made by separate parties.

Slack, Enid, and André Côté. “Comparative urban governance.” UK Government’s Foresight Future of Cities Project, July 2014.

This paper describes and compares different models of urban governance around the world, including the one-tier fragmented government model or voluntary cooperation and special districts model. It claims that, internationally, “no one model of governance stands above the rest” but that “some form of region-wide authority is essential for cities.” According to the source, Canada’s model of local government involves “weak mayoral leadership” that “can result in an incoherent governing agenda.”

Slack, Enid, and Richard Bird. "Does Municipal Amalgamation Strengthen the Financial Viability of Local Government? A Canadian Example." ***Public Finance and Management*** **13, no. 2 (2013): 99-123.**

This article argues that while amalgamation of Toronto resulted in increased expenditures for fire, garbage, parks and recreation (but not for libraries) and reduced access and participation by residents in local decision-making, it did increase the financial abilities of smaller municipalities by increasing their access to the tax base of the amalgamated city and equalized local services in the sense that residents throughout the whole city received a similar level of services. Part of the reason amalgamation doesn't save costs is because "salaries and benefits tend to equalize up to the level of the former municipality with the highest expenditures." Tackling the issue of amalgamation in Toronto, the authors argue that the process has resulted in a city still too small to address regional issues, but too big to be responsive to local residents.

Slack, Enid, and Richard Bird. "Merging Municipalities: Is Bigger Better?" Institute on Municipal Finance & Governance Papers on Municipal Finance and Governance, No. 14. 2013.

This paper reviews ways in which the governance of metropolitan areas may be restructured, including a case study of the amalgamation in Toronto. The concluding section "Is Bigger Better?" sums up the authors' views: it's possible that merging municipalities would enable some smaller municipalities to reap some economies of scale, but it's unlikely. Inter-municipal cooperation allows local governments to retain autonomy while still permitting them to be more responsive to residents' needs, but it can also be hard to implement a regional vision. The authors suggest that the "two-tier approach" may be the best.

Southeastern Wisconsin Regional Planning Commission. http://www.sewrpc.org/SEWRPC.htm.

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) was created in 1960 and is the metropolitan planning organization for seven counties. Its purpose is to provide the "planning services necessary to solve problems which transcend the corporate boundaries and fiscal capabilities of the local units of government." This Commission is an international example of a collaborative inter-municipal initiative.

Spicer, Zachary. "Cooperation and Capacity: Inter-Municipal Agreement in Canada." IMFG papers on Municipal Finance and Governance no. 19 (2015).

This paper examines inter-local agreements in six Canadian metropolitan areas, including Edmonton. In the author's view, provincial governments have not actively encouraged municipalities to pursue voluntary inter-local cooperation, but there is evidence this attitude is changing as "enthusiasm for amalgamation appears to be waning." The Edmonton CMA is the largest area geographically of the cities included in the study, and it has a higher number of governing units than Calgary. The author finds that the bulk of inter-municipal agreements are in the Toronto and Edmonton CMAs.

Spicer, Zachary. "Post-Amalgamation Politics: How Does Consolidation Impact Community Decision-Making?" ***Canadian Journal of Urban Research*** **21, no. 3 (2012): 90-111.**

This paper uses Hamilton as a case study in post-amalgamation governance. It analyzes votes for the first three city councils following amalgamation and finds that councillors from amalgamated communities primarily vote together, with little cohesion with councillors from the central city. In other words, "two distinct voting blocs" emerged, though these blocs appear to be losing strength over time. This source examines the effects amalgamation has on communities that come together. Amalgamation doesn't necessarily solve regional problems, as voting trends on new councils can "be detrimental to future urban initiatives, such as transportation planning in the city or urban renewal projects."

St. Albert Transit System and Edmonton Transit System. "Moving Integrated Transit Forward." StAT/ETS Regional Transit Concept Attachment 1, April 2015.

Struggling to keep up with increasing demand for public transit, St. Albert City Council passed a motion to enter into talks with Edmonton about transit integration. The report outlines the case for collaboration between Edmonton Transit Services and St. Albert Transit, the experience of other jurisdictions and the potential outcomes of greater integration (e.g. more convenient service across municipal boundaries, superior access to a wider range of jobs to a wider range of people and greater linkage between regional transportation and regional land use planning).

Stantec. "Musquodoboit Harbour Cooperative Transportation Study." March 31, 2011.

This study explores the potential provision of transit services in the Musquodoboit Harbour area of Nova Scotia through a cooperative organization. Section 3.0 "Framework for Rural Cooperative Transit" discusses basic components of a rural transit cooperative, some of which would be applicable to any transit service, ranging from the requirement to incorporate the cooperative to vehicle selection to available funding sources.

Stokes Economic Consulting and Strategic Projections. "Capital Region Population and Employment Projections." September 12, 2013.

Commissioned by the Capital Region Board in 2012, this report contains population and employment projections for the region up to year 2047. Its base case sees the region's population growing at a rate averaging 24,400 per year.

"Toronto as a Global City: Scorecard on Prosperity – 2015." Toronto Region Board of Trade, 2015.

With a focus on trade, this document measures and assesses the economy and labour attractiveness of the Toronto Census Metropolitan Area compared to 23 other metropolitan areas around the globe. Toronto is Canada's largest urban region and planners elsewhere in Canada that want to see their regional economies be globally competitive might learn from its experiences.

United Way. "Creating Pathways Out of Poverty." 2013.

This report discusses the state of Alberta's Capital Region in terms of poverty and other social issues. In a section on regional alignment and collaboration, the report argues that "addressing poverty is not something that one organization or order of government can take on alone – it takes a truly collaborative effort; with government, the not-for-profit sector, corporate partners and community members aligned together."

Urban Development Institute. "Market Watch September 2015." 2015.

This brief report provides statistics on employment, weekly earnings, migration, housing sales and more for the Edmonton Census Metropolitan Area.

Urban Systems. "Inter-municipal Transit Governance Study and Implementation Plan." Interim Report to the Transit Committee, November 27, 2012.

This report for the CRB's Transit Committee argues that the Inter-municipal Transit Network Plan outlined in the Capital Region Board's *Growth Plan* "is vital in terms of enhancing the prospects for economic, social and environmental success" in the region. The report recognizes "that the limitations and constraints to implementing the strategy are intrinsically connected to the governance model that exists today."

Vojnovic, Igor. Municipal Consolidation in the 1990s: *An Analysis of Five Canadian Municipalities.* Toronto: ICURR Publications, August 1997.

This study, which details the first phase of a consolidation research project, includes discussions on economies of scale, equity considerations, political accountability, citizen access, regional planning and economic development. The author notes that "a generic answer to whether municipal consolidation is the most effective reform option cannot be expected" given municipalities' unique contexts.

Vojnovic, Igor. "The Transitional Impacts of Municipal Consolidations." *Journal of Urban Affairs* 22, no. 4 (2000): 385-417.

This article examines the transition and short-term effects of municipal consolidation on five amalgamated municipalities in Canada, finding that the success of consolidation is dependent on distinct history as well as the spatial and economic circumstances of the region considering reform.

Webster, Douglas, and Larissa Muller. "Urban Competitiveness Assessment in Developing Country Urban Regions: The Road Forward." Paper prepared for Urban Group, INFUD, July 17, 2000.

This paper is about the different approaches and techniques used for assessing the competitiveness of urban regions, particularly in developing countries. Urban competitiveness "refers to the ability of an urban region to produce and market a set of products (goods and services) that represent good value (not necessarily lowest price) in relation to comparable products of other urban regions." The more competitive an urban region, the better the quality of life and standard of living for its people. One indicator of competitiveness the authors mention is the degree of inter-jurisdictional cooperation, arguing "intra-urban region competition is not only costly for urban residents, but a detriment to the urban area's overall competitiveness."

Wheeler, Stephen M. "The New Regionalism: Key Characteristics of an Emerging Movement." *APA Journal* 68, no. 3 (2002).

This article details developments within the academic field of urban studies or urban planning. It states that since the early 1990s there has been a dramatic resurgence of interest in regional planning. The "New Urbanism," it argues, is about smart growth, liveable communities, sustainable development and improved equity within metropolitan areas. The article encourages urban planners to coordinate and think holistically. "Regional agencies," as the author argues, "must integrate land use, air quality, and transportation planning, through coordinated action between agencies if not a single regional plan by one agency." It also notes "urbanists in particular" have "recognized that many regional problems can only be solved by coordinating planning and urban design at regional, municipal, neighbourhood and site scales."

Work Foundation. *Collaboration Case Studies*. N.d.

This document contains brief case studies of inter-municipal cooperation initiatives in the United Kingdom. The studies mention challenges that were faced, outcomes and lessons that planners elsewhere can learn from. For example, in the Glasgow Edinburgh Collaboration case study, it states that challenges can arise "if there are concerns about the benefits of collaboration being greater for one party than another." The Association of Greater Manchester Authorities (AGMA) is considered a success that has inspired other public and private sector bodies to collaborate on a wide range of issues.

Working Group of Government Departments, Core Cities, and Regional Development Agencies. "Cities, Regions and Competitiveness." Second Report. UK: Office of the Deputy Prime Minister, June 2003.

This report is about strengthening the United Kingdom's capacity for growth through stronger regional cities. It argues that the following are significant factors in success: 1) strength of "innovation" in all areas of the economy, 2) level and relevance of workforce skills, 3) efficiency of transport connections to key markets and 4) capacity to design and deliver long-term development strategies. This source discusses the "city-region" relationship –(i.e. how cities boost regions and how cities in turn rely on the region), and is a valuable indicator that throughout the world, governments are interested in the potential of city regions.

York Region Transit. "About Us." http://www.yrt.ca/en/aboutus/history.asp.

In 2001, five municipal transit systems amalgamated to form the York Region Transit (YRT). Since then it has experienced an average growth of 10 percent per year, making the average weekday ridership approximately 80,000 passenger trips. Launched in 2005, Viva is a bus rapid transit service. YRT/Viva contracts out its services to private contractors to employ bus operators and maintain the fleet, rather than the transit agency being responsible for its operators and fleet, making it a unique service delivery model in Canada.

Appendix 5 – Research Review – Models of Collaboration

A. “Shared Investment/Shared Benefit” Models

In recent decades, a confluence of factors has come together to put pressure on municipal finances. As a result, municipalities have had to look at ways to increase efficiency and cut costs, including partnering with the private sector, amalgamating with neighbouring municipalities or cooperating with other municipalities in the delivery of services. Adopting a “shared investment, shared benefit” approach is one form of inter-municipal cooperation that has been successfully implemented in jurisdictions in Canada and the United States. “Shared investment, shared benefit” models can take a number of forms, including the following:

MINNEAPOLIS-ST. PAUL

The Minnesota Fiscal Disparities Program is a system that provides for the partial sharing of the commercial-industrial property tax base among all jurisdictions within a metropolitan area. Used in the Twin Cities, the model requires each municipality to contribute 40 percent of its annual growth in commercial-industrial tax revenues to a regional pool. Studies have demonstrated that the program has reduced tax disparities between high and low-income areas, allowing for reinvestment in the central cities and in fiscally challenged neighbouring communities. Furthermore, it has also promoted more integrated regional economic development by reducing the incentive for municipalities to capture revenue-generating land uses from neighbours.

TOWN OF WHITECOURT AND WOODLANDS COUNTY

As so many of their residents work in one and live in the other, the Town of Whitecourt and Woodlands County, in 2010, signed a tax revenue sharing agreement, stating their desire to “develop and maintain safe and viable communities” that are “efficient and economical.” Under the agreement, the town and county pay to each other 30 percent of the municipal taxes they collect on new non-residential developments with a construction value of $50 million or greater.

REGIONAL DISTRICTS IN BRITISH COLUMBIA

In 1965, the Government of British Columbia introduced a new form of local government known as the regional district system. The purpose of the new system was to provide a means for the municipalities and rural areas to work together at a regional level. There are 29 regional districts in the province. Under the model, regional districts, whose governing boards are made up of municipal councilors, can take on any function that their municipalities can perform on their own. Regional districts have three basic roles: 1) provide region-wide services (e.g. regional parks and 911 service, 2) provide inter-municipal or sub-regional services where residents of a municipality and residents in areas outside the municipality benefit from the service (e.g. recreation facilities) and 3) act as the general local government for the electoral areas and provide local services such fire protection and waterworks.

The revenue used to finance regional district operations and services is generated through property taxes, fees and other charges. Each year, the regional district board sets its budget, through a Five-Year Financial Plan, which determines the amount of revenue that will be needed. The amount to be collected through taxation is then apportioned among the regional district participants, which includes member municipalities, electoral areas and service areas.

REGIONAL COUNTY MUNICIPALITIES IN QUEBEC

Quebec has 87 county-like political entities known as municipalités régionales de comté, or regional county municipalities. Municipalities in the province are charged for services by the regional county municipality in which they are located. Municipalities pay for these services through their contribution to their regional county municipality. For most services, these contributions are not based on a municipality's usage of regional services, but on its capacity to generate revenues, which is measured by the standardized property value (i.e. the potential to generate revenues from their tax base). This model acts like a form of fiscal balancing within the region as the municipalities with higher standardized property values pay a greater share of the costs than what they are in fact "consuming." Local municipalities have the choice of opting out of certain services if they wish to do so.

METROLINX'S TRANSIT PROCUREMENT INITIATIVE (ONTARIO)

Metrolinx's Transit Procurement Initiative (TPI) is one of the largest joint transit procurement programs in North America. Since its creation in 2006, the program has helped its 33 registered member transit agencies – small, medium and large transit systems from across the province – save money by leveraging their collective purchasing power. In addition to actual buses, TPI's purchases also include service and repair. The program is estimated to have saved Ontario taxpayers roughly $14.39 million to date in purchasing and administrative costs.

B. Examples of Inter-Municipal Cooperation in Other Jurisdictions

Economic Development

THE GREATER TORONTO MARKETING ALLIANCE (GTMA)

The GTMA is a public-private partnership that brings together the 29 municipalities and regions in the Greater Toronto Area (GTA), the provincial and federal governments, several not-for-profit organizations and a cross section of private sector corporations. Working to "expand the economy of the GTA by raising the profile of the region internationally to attract new investment and employment," the GTMA is a key point of contact for businesses wanting to explore opportunities in the region. Its current Board of Directors includes four regional Mayors, regional economic development directors and the CFO for Metrolinx, the provincial agency responsible for coordinating and integrating transportation in the Greater Toronto and Hamilton Area. The Alliance has played a role in attracting a number of businesses to the region, including India-based Polaris Software Lab Ltd., interactive entertainment giant Ubisoft and Arkadiu, the New York-based developer, publisher and distributor of casual, social and mobile electronic games.

METRO DENVER ECONOMIC DEVELOPMENT CORPORATION

The Metro Denver Economic Development Corporation's mission is "to enhance the regional economy through the retention and expansion of primary jobs and capital investment." As an affiliate of the Denver Metro Chamber of Commerce founded in 2003, it brings together cities and economic development agencies from nine counties in the Metro Denver and Northern Colorado area. Rather than compete with each other, the cities and counties work together to compete against other major cities around the globe. In Forbes' 2015 list of the Best Places for Business and Careers, Denver ranked No. 1 and Fort Collins ranked No. 10.

Transit

YORK REGION TRANSIT

In 2001, the regional municipality created York Region Transit (YRT) by bringing together five separate municipal transit systems operating in the region. Four years later, YRT launched Viva, its bus rapid transit service. The regional transit system now services all nine York Region municipalities, with more than 120 routes as well as connecting services in the City of Toronto and the Region of Peel. The York Region Rapid Transit Corporation is a subsidiary of the Regional Municipality of York. Its Board of Directors comprises the Chairman and CEO and the mayors or councillors of the region's towns and cities. Since the establishment of YRT, ridership on the conventional transit system has grown by an average of 10 percent per year, resulting in an average of 80,000 passenger trips per weekday.

VICTORIA REGIONAL TRANSIT COMMISSION

The Crown Corporation B.C. Transit has been responsible for transit services in the province for several decades. In the 1990s, regional transit commissions were created through the British Columbia Transit Act to make decisions regarding transit services and funding in Victoria and Vancouver. The Victoria Regional Transit Commission is made up of seven elected local government officials appointed by the Lieutenant Governor in Council. Two commission members are appointed as directors of B.C. Transit. It's funded by the province, local government, fuel taxes and passenger fares. Compared to similar sized systems across Canada, Victoria Regional Transit has 35.1 percent more passengers per capita and a 13.3 percent lower operating cost per passenger.

GRAND RIVER TRANSIT (WATERLOO REGION)

Grand River Transit (GRT) was created in 2000 through the merger of the former Cambridge and Kitchener transit systems. GRT is run by the Regional Municipality of Waterloo and now provides services throughout the three cities of Cambridge, Kitchener and Waterloo. Annual ridership increased by 110 percent between the end of 1999 — when the GRT was established — and 2011, a year that saw a ridership of 19.7 million. By the end of 2014, its ridership reached more than 21.6 million.

BOW VALLEY REGIONAL TRANSIT SERVICES COMMISSION

The Bow Valley Regional Transit Services Commission is a government agency that was established in 2011, and it assumed responsibility for Roam, Banff's local transit service. Its mission is to create and enhance a regional transit system in the Bow Valley. It currently serves Banff, Canmore and Improvement District #9. Its Board of Directors comprises six elected officials from the region. Transit ridership has been greatly increasing with the introduction and expansion of regional services. In 2015, Roam's regional service saw a 10 percent usage increase from 2014.

Land-use planning

YUKON LAND USE PLANNING COUNCIL

Following the failure of the Yukon Land Use Planning Agreement, the Yukon Territorial Government, the federal government and the Council for Yukon First Nations, by signing the Umbrella Final Agreement, established the Yukon Land Use Planning Council (YLUPC) in 1993. The agreement acknowledged Aboriginal rights and interests and allowed for individual First Nation land claim agreement negotiations. The YLUPC consists of three members, with one member nominated by each of the three parties that signed the agreement, and each member serve a three-year term. Under the oversight of the YLUPC, the North Yukon Regional Land Use Plan was the first regional plan approved in the Yukon.

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

The Southeastern Wisconsin Regional Planning Commission oversees land use and transportation planning in seven counties in the southeastern part of the state. Created in 1960 through legislation, it helps plan for public works such as highways, transit, sewerage, water supply and parks. The commission consists of 21 members, three members from each of the seven counties. The county appoints one member and the Governor appoints another two members. It's funded by a regional tax levy apportioned to each of the seven counties and receives supplements from the state and federal government.

Other examples of collaboration

GREATER MANCHESTER COMBINED AUTHORITY (UNITED KINGDOM)

The Greater Manchester Combined Authority was formally established in 2011 to provide a formal administrative authority for Greater Manchester, replacing a range of single-purpose joint boards. It has strategic authority over public transport and skills and planning, among other areas. It consists of eleven indirectly elected members. Effective in 2017, the region's voters will fully elect a Mayor to govern alongside ten council members.

PARTNERSHIP FOR URBAN SOUTH HAMPSHIRE (UNITED KINGDOM)

The Partnership for Urban South Hampshire recognizes the benefits of working together to support sustainable growth in the region, and it facilitates the strategic planning necessary to support growth. Along with Solent EU Collaboration Group, members have worked collaboratively to develop 18 European Union-funded projects with a total value of over £20 million.

PIMA ASSOCIATION OF GOVERNMENTS

The Pima Association of Governments' mission is "to address regional issues through cooperative efforts and pooled resources, and to provide accurate, relevant data that leads to effective regional planning decisions." PAG was established in 1970 as a council of governments. In1973, it was designated to address transportation planning at a regional level.

ALAMO AREA COUNCIL OF GOVERNMENTS (TEXAS)

The Alamo Area Council of Governments (AACOG) was established in 1967 as a voluntary association of local governments and organizations that provides general assistance to member governments in their planning functions and the administration of a wide range of services, including regional transit, veterans services and 911call centres.

C. Municipal Entity Option

	REGIONAL SERVICES COMMISSION	SOCIETY	PART 9 COMPANY	BOARD, COMMITTEE, AUTHORITY FORMED BY AGREEMENT BETWEEN PARTICIPATING MUNICIPALITIES	FOR PROFIT CORPORATION	PUBLIC/ PRIVATE PARTNERSHIPS
OBJECTS OR SERVICES PROVIDED	• Services authorized in the Regulation establishing the Commission (e.g. solid waste, water, sanitary sewage, assessment services, emergency services, etc.)	• Any benevolent, philanthropic, charitable, provident, scientific, artistic, literary, social, educational, agricultural, sporting, or other purpose that does not involve trade or business	• a) Can include art, science, religion, charity or any other useful object and it is the intention of the company to apply profits or any other income in promoting its objects • Payment of dividends to members of the Company is prohibited • b) Formed solely for the purpose of promoting recreation amongst its members and it is the intention of the Company to apply profits or any other income in promoting its objects • Payment of dividends to members of the Company is prohibited	• Any municipal purpose or service which a Municipal Authority is authorized to provide	• Established to make profit for its shareholders • Any other purposes or limitations on purposes or services may be specified in constituting documents (generally Articles, Bylaws and, if applicable, the Unanimous Shareholders Agreement (USA) • Municipally controlled Corporations must be incorporated for Municipal purposes as set out in s. 3 of the *Municipal Government Act* (Reg. 284/03)	• Public/Private partnerships take many different forms • Usually the Private entity seeks profit, while the Public entity seeks the construction of a capital project with the use of private funds
APPOINTMENT OF DIRECTORS	• Initial Directors and Chairman appointed by Minister • Subsequent Directors and Chairman appointed by Bylaw approved by Minister • A Director who represents a Municipality must be a member of Council	• Provided for in the bylaws of the Society • Usually elected by the members of the Society	• Directors appointed in accordance with the Articles of Association or by Agreement	• Directors are appointed according to the Agreement establishing the Authority, Board or Committee	• Directors are appointed according to the constituting documents • Generally parties “vote their shares” (i.e. if one party controls a majority of shares, that party can control who is appointed as Director, subject to any provisions to contrary in the USA)	• As P3s are not a legal entity, Directors are not appointed • Rather, the parties are separate legal entities with a common purpose, which is governed by the agreement(s) between the parties

POWERS	• Is a separate legal entity that has the powers set out in the Act and the Regulations establishing the Commission • Has natural person powers, can own land and has the power to expropriate • Must hold meetings in public • Service area is limited to geographic boundaries of members • Not designed to make profit	• Is a separate legal entity that has the powers set out in the Act • Can hold land and borrow funds as set out in the Bylaws of the Society • Not designed to make profit	• Is a separate legal entity and has the powers set out in the Act • Can hold lands in its own name and borrow funds • Not designed to make profit	• Not a separate legal entity and therefore cannot hold land or borrow funds in its own name. • Not designed to make profit	• A separate legal entity with the powers contained in the BCA including "natural person" power • Subject to restrictions in BCA and USA • Does not have the statutory or legislative powers of a municipality but can make profit	• Each party retains its separate powers but enters into agreements in order to achieve common goals
BORROWING	• Can borrow with the approval of the Directors of the Commission, subject to the restrictions set out in the Act and the Debt Limit Regulation	• For the purpose of carrying out its objects, a Society can borrow, raise or secure the payment of money in any manner the Society thinks fit, subject to the requirements set out in the Society's bylaws	• Can borrow for the purpose of carrying out its objects but is not eligible for direct loans from Alberta Capital Finance Authority (ACFA)	• As it cannot borrow, it must obtain money from the members of the Authority	• Enjoys full borrowing powers unless restricted by constituting documents, or "liquidity and solvency" test contained in BCA • Is not eligible for direct loans from ACFA	• Typically the private entity will borrow funds to fund project, and recoup those funds over the life of the project, often through an operating or maintenance agreement • The financial institution providing the funds will typically require security over agreements
CONTROL	• Directors manage and control the Commission, subject to the restrictions in the Act and Bylaws • Directors are appointed by the Municipal Authorities • Possible to provide for unequal representation on the Board	• Directors usually control Society, subject to the provisions contained in the Bylaws and the Act • Membership is generally open and members elect the Directors	• Members elect and appoint Directors who usually control the Company subject to the provisions contained in the Bylaws and the Act	• Can be controlled in the manner set out in the Agreement under which the Authority, Board or Committee is established	• Shareholdings are usually proportionate to contribution • Shareholders control the election of Directors, who control the hiring of management • Directors and management have effective day-to-day control of the corporation	• Each entity is subject to its own control mechanism • The relationship is governed by legal obligation in agreements

AUTHORIZING LEGISLATION	• *Municipal Government Act*, R.S.A. 2000, c. M-26	• *Societies Act*, R.S.A 2000, c. S-14	• *Companies Act*, R.S.A 2000, C. C-21	• *Municipal Government Act*, R.S.A. 2000, c. M-26	• *(Alberta) Business Corporations Act*, R.S.A. 2000, c. B-9	• Each entity subject to own governing legislation
HOW ESTABLISHED	• Regulation made by the Lieutenant Governor in Council (Cabinet) on the recommendation of the Minister of Municipal Affairs	• Application for Incorporation, proposed bylaws with proposed name filed with the Registrar under the Business Corporations Act (BCA)	• Filing of Memorandum and Articles of Association along with proposed name with Registrar under BCA	• By Agreement between participating Municipal Authorities setting out powers, duties and functions of the Authority, Board or Committee	• By filing Articles of Incorporation and other constituting documents with Registrar under BCA • Municipalities require Ministerial approval (M.O.) to acquire shares (MGA: ss. 73, 250)	• By agreements between the parties