Smart Growth on the Metropolitan Fringe

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Abstract

EN Development patterns in the twentieth century saw urban growth expressed as sprawl. A strong interest in sustainable development has brought about alternative models of development, including Smart Growth. Advocates claim that Smart Growth enjoys widespread popularity in Canada, though studies to date have focused on the largest of Canada's cities. This study reports on whether Smart Growth principles are included in the planning documents of the fifteen fastest growing municipalities in Canada. These municipalities are located within or proximate to major metropolitan areas, and have grown quickly due to the attractiveness of urban living and the benefits of locating in the suburbs. Findings indicate a high level of support for Smart Growth from all the municipalities studied, but impact on development patterns is marginal in most cases. Canada's planning framework reflects the divison of power among multiple levels of government, entailing shared responsibilities for planning. Those provinces with stronger regional governance frameworks are closer to achieving the Smart Growth-related goals contained in planning documents.

Résumé

FR Les modèles de développement dans le vingtième siècle a vu la croissance urbaine a exprimé l'étalement. Un vif intérêt pour le développement durable a conduit à des modèles alternatifs de développement, y compris le Smart Growth. Les partisans prétendent que le Smart Growth bénéficie d'une grande popularité au Canada, bien que les études à ce jour ont porté sur la plus grande des villes du Canada. Cette étude rend compte de savoir si les principes du Smart Growth sont inclus dans les documents de planification des quinze municipalités à plus forte croissance au Canada. Ces municipalités sont situées à l'intérieur ou à proximité de grandes régions métropolitaines, et ont connu une croissance rapide en raison de l'attrait de la vie urbaine et les avantages de la localisation dans les banlieues. Les résultats indiquent un niveau élevé de soutien au Smart Growth de toutes les municipalités étudiées, mais impact sur les modes de développement est marginal dans la plupart des cas. Le cadre de planification du Canada reflète la divison du pouvoir entre les divers ordres de gouvernement, qui implique des responsabilités partagés pour la planification. Les provinces dont le renforcement des cadres de gouvernance régionales sont mieux en mesure d'atteindre les objectifs de Smart Growth contenues dans les documents de planification.

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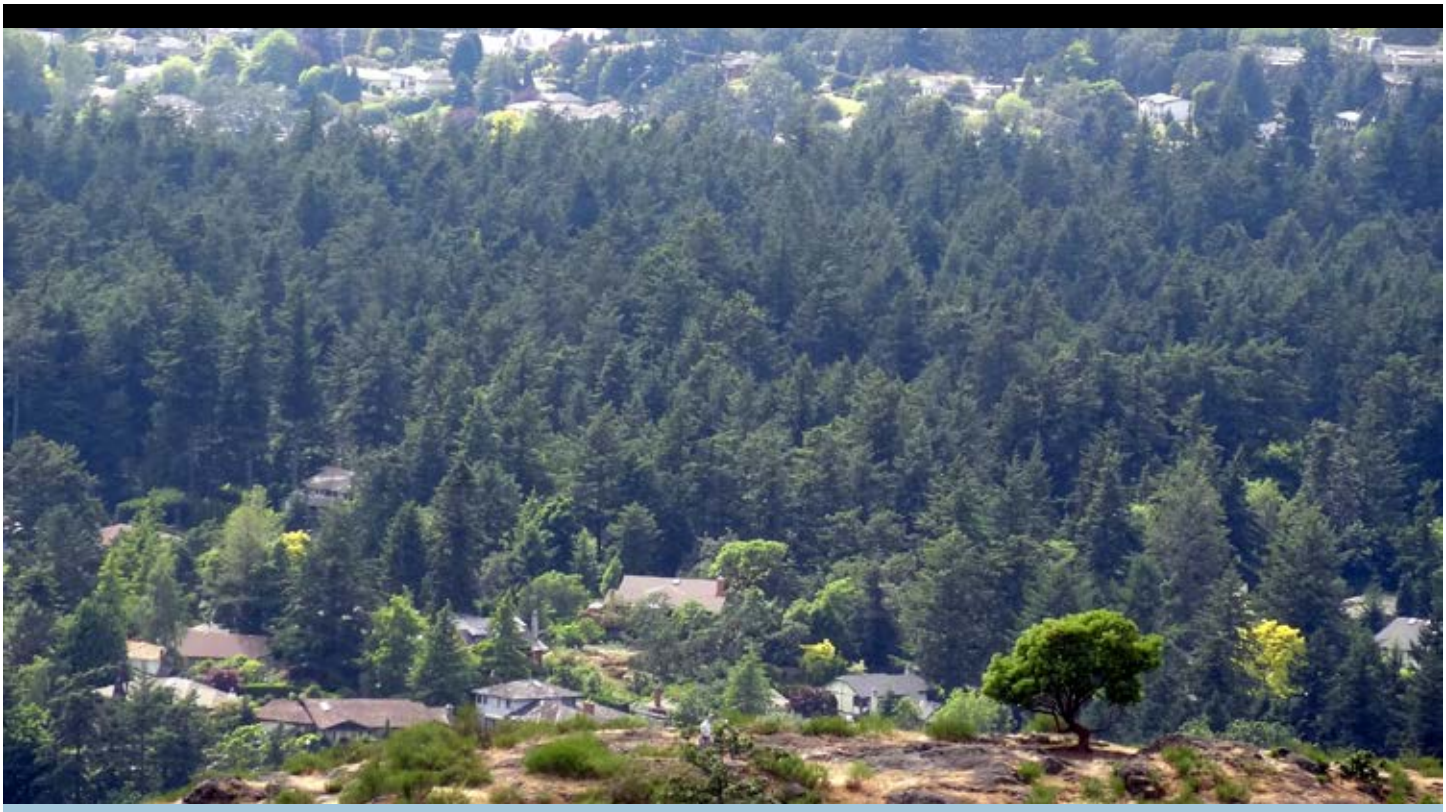


View from Mount Doug (c) the author

Introduction

The twentieth century saw massive changes in the organization of cities and in the way people lived. Following the Second World War, national employment and building programs created much of the modern highway infrastructure, as mortgages guaranteed by the Canada Mortgage and Housing Commission encouraged homeownership. Vast tracts of single-detached houses were built outside the city in order to satisfy the growing number of homeowners. The rise of the automobile made living outside the city in new suburbs a viable option for families, and decisions by planners and engineers entrenched a new auto-dependent lifestyle (Filion, 2010b). Development during this time period was low-density, had a clear separation of land uses, was dependent on access to a vehicle, and occurred largely at the fringe of cities. All of these characteristics, when found together, have come to be known as sprawl.

This sprawling pattern of development continues into the twenty-first century for a variety of reasons. Past scholarship has emphasized both consumer preferences driving growth in the suburbs (Neuman, 2005; Nilsson *et al.*, 2014), but also the affordability of suburban homeownership (Rérat, 2012; Thompson & Canadian Public Policy, 2013). Construction on greenfield land – found almost exclusively at the edge of municipalities – is also less expensive, making it an attractive option for profit-conscious developers (Fulford, 2005). For these reasons, growth in at the fringe continues to outpace growth in the city. In Canada, half of the urban population lives in a suburb or a suburban municipality, and the growth rate of these areas was 160% that of city centres in 2011 (Thompson & Canadian Public Policy, 2013). Changes to the current expression of growth will require strong leadership by fringe, city, and regional governments.

In 1987, the United Nations published Our Common Future, known today as The Brundtland Report, which urges cooperation among a variety of public and private actors to achieve sustainable development. This report was the crest of a wave of new ideas surrounding sustainability and the environment, and marked a change in the way local and regional planning was conceptualized. "Sustainable development" and "sustainability" quickly became buzzwords with little meaning, espousing an ideal future but without a clear roadmap to arrive there (Stevens & Mody, 2013). This is in part due to the very nature of sustainable development. Defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987, p. 43), a shift toward more sustainable development hinges on what people define as a need. Defining this need and promoting sustainability are wicked problems, in that "they do not lend themselves to societal consensus on problem definition, goal formulation, and how best to balance efficiency and equity concerns" (Stevens & Mody, 2013, p. 48).

Planning movements in the decades that have followed the Brundtland Report seek to balance the necessity of development with ecological values. A strong yearning for change exists today, just as it did when existing patterns of suburban development were established (Filion, 2010b). New patterns are conscious of environmental and fiscal sustainability, but also aim to encourage more sustainable behaviour. Canadian municipalities are increasingly adopting sustainability plans, though they have been weak at best in changing behaviours (Stevens & Mody, 2013). Greater success has been seen in the growth plans adopted at various levels of government across Canada, many of which directly address issues caused by auto-dependent sprawl (Filion, 2010b). Smart Growth is perhaps the most widely accepted alternative to conventional sprawling growth in Canada.

Smart Growth emerged from discourse surrounding sustainable development. It is a reaction to the dominant pattern of growth, aiming to focus growth in a way that minimizes its negative impacts while still allowing growth itself to occur (Filion, 2003). While there are both critics and proponents, in the current growth context of Canada it appears necessary to intervene in sprawling development patterns. Proponents of Smart Growth hope to change development patterns in such a way that cities are more compact and diverse in order to satisfy the requirements of sustainable development (Tomalty & Alexander, 2005). North American cities have been quick to turn to Smart Growth, but whether the rapidly expanding fringe is concerned with growth management is less clear.

"Recently, a broad consensus has emerged concerning the growth and development of Canadian cities: our cities, as they have grown over the last 60 years, are contributing significantly to global and regional environmental problems, government deficits, and social inequity. In order to be sustainable, cities should alter their development patterns so as to be more compact, diverse in local/district land uses, with well-defined urban boundaries and clear internal structures" (Tomalty & Alexander, 2005, p. 1)

Purpose

Proponents of Smart Growth claim that the theory enjoys widespread acceptance in Canada. While this may be the case in large cities, where urban sprawl related to population growth places mounting pressures on land use and infrastructural capacity, smaller jurisdictions may not yet have to cope with these issues. However, contemporary growth patterns show that the majority of population gain is in the fringes of metropolitan regions, making growth management a looming concern for municipalities within the orbit of large cities. This study profiles fifteen of the fastest growing municipalities in Canada, investigating whether the Smart Growth agenda is as universally accepted as some claim. The intent is not to critique the efforts of municipalities in the management of their area, but rather to show how growth management is being operationalized in a particular growth context.

Approach

Rapidly growing municipalities, as indicated by growth rates in the 2011 Census, were selected for study (Figure 1). The fifteen census subdivisions with the highest growth rates represent municipalities of various sizes in locations across the country (Figure 2, following page). Census subdivisions were chosen as the unit of analysis because they are governed by a single municipal body, allowing for analysis of municipal planning and policy.

While municipalities in Alberta dominate the list, six of the ten provinces are represented. Twelve of the municipalities are within the boundaries of a census metropolitan area (CMA), and three are outside but close to such an area. While it is acknowledged that choosing case studies based solely on absolute growth between census years does not yield a sample representative of the country, it is still a useful

Figure 1 - Table of selected high-growth municipalities

	CMA/CA	Population 2011	Growth (2006-2011)	CMA Growth (2006-2011)
Airdrie, AB	Calgary	42,564	47.1%	12.6%
Beaumont, AB	Edmonton	13,284	48.2%	12.1%
Blackfalds, AB	Near Red Deer	6,300	36.4%	8.9%
Chestermere, AB	Calgary	14,824	49.4%	12.6%
Leduc, AB	Edmonton	24,279	43.1%	12.1%
Okotoks, AB	Okotoks	24,511	42.9%	42.9%
Martensville, SK	Saskatoon	7,716	55.0%	11.4%
Warman, SK	Saskatoon	7,084	48.5%	11.4%
La Broquerie, MB	Near Steinbach	5,198	42.1%	22.2%
Milton, ON	Toronto	84,362	56.5%	9.2%
Whitchurch-Stouffville, ON	Toronto	37,628	54.3%	9.2%
Marieville, QC	Near Montréal	10,094	34.1%	5.2%
Ste-Brigette-de-Laval, QC	Québec	5,696	50.3%	6.5%
Ste-Marthe-sur-le-Lac, QC	Montréal	15,689	38.7%	5.2%
Paradise, NL	St. John's	17,695	40.6%	8.8%

sample to explore the issues of population growth and growth management in a rapid growth scenario.

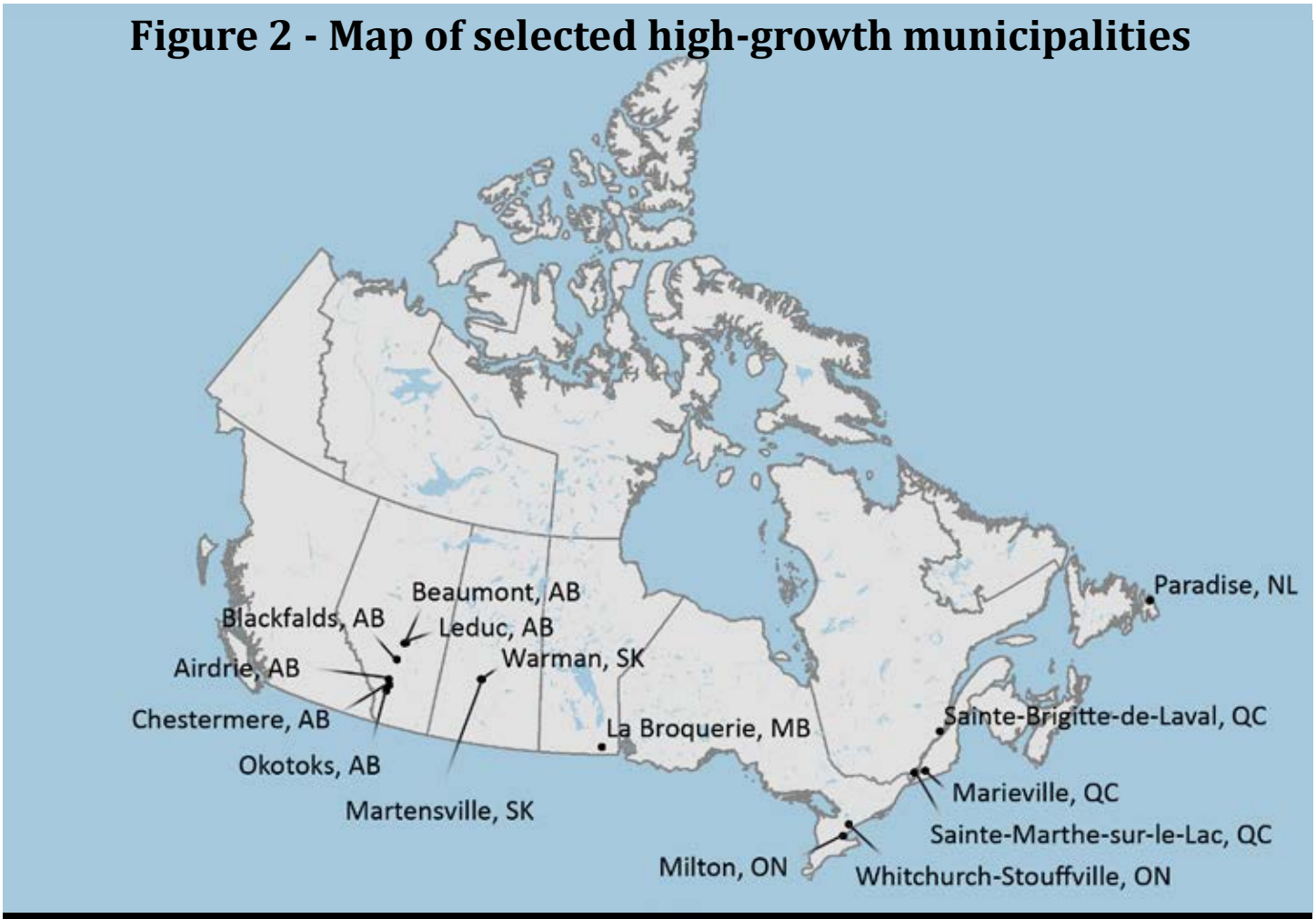
Analysis of the municipalities included absolute growth since 2001, content analysis of official community plans, and analysis of growth management policies where possible. Some aerial photography was also used to examine land-use patterns and urban form. Time constraints limited research to materials available online. As such, some documents could only be found in a draft form, while others were unavailable at the time of research.

Canadian Growth Context

Canada is the largest country by landmass in North America, and the second largest in the world. Despite the significant physical size of the country, Canada is sparsely populated compared to its peers. The last National Census in 2011 counted a total population of 33,476,688, making it the smallest G7 nation and third smallest G20 nation by population.

However, Canada posted the highest population growth rate among G7 nations in the last National Census, at 5.9% (Statistics Canada,

Figure 2 - Map of selected high-growth municipalities



"For the last 50 years, development patterns in Canada have emphasized building out onto greenfield lands at the urban edge at a rate that has outstripped the rate of population growth. This development pattern has resulted in the loss of farmland and natural areas, rising car dependency and traffic congestion" (Tomalty, 2003, p. 1).

2012). This is higher than the previous growth rate of 5.4% between 2001 and 2006, and higher than the 4.4% growth rate in the United States. Estimates by Statistics Canada forecast a population of over 40 million by 2026, and 50 million by 2054 (Green, 2012). Historically, the population of Canada has grown by approximately 3 million every ten years since 1941 (Figure #).

Canada can be geographically divided into four regions: Western, Central, Atlantic, and Northern. British Columbia, Alberta, Saskatchewan, and Manitoba make up Western Canada. Central Canada includes Ontario and Québec, the two most populous provinces and the historic heart of the nation. High growth in the West and a slow-down in Québec have changed national population dynamics, spreading population more evenly across the breadth of the country instead of being concentrated in Central Canada (Statistics Canada, 2012). Atlantic Canada includes New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland & Labrador, whose largely rural population is facing severe economic decline (Ibbitson, 2015). The Yukon, Northwest, and Nunavut Territories of Northern Canada account for only 0.3% of the national population.

Canadians are predominantly city dwellers, with most of the population located in large

Development in Victoria (c) the author

population centres close to the US-Canada border. The 33 census metropolitan areas (CMAs) account for 70% of the national population, with that proportion slowly increasing (Statistics Canada, 2012). Population growth – and therefore urban growth – is concentrated in the largest CMAs: Toronto, Montréal, Vancouver, Calgary, Edmonton, and Ottawa-Gatineau (Portnov, 2006; Statistics Canada, 2012). Urban growth is largely at the edge of these and other cities, attesting to the continuation of sprawling development (Press, 2012). Sprawl has characterized the development of North American towns and cities since the post-war period due to government investments in infrastructure, large tracts of available land, and the affordability of homes.

This growth at the edges is clear when looking at the census subdivisions (CSDs) with the highest growth rates as of 2011. Of the top fifteen, twelve are within a CMA – but not the core municipality – and the remaining three are in the "zone of influence" of a CMA or census agglomeration (CA). Conversely, the fifteen CSDs with the highest rate of population loss are in more remote or rural areas (Statistics Canada, 2012).

Growth Factors

When analyzing growth it is necessary to consider several structuring factors, including the economy, public policy, and demography. Economic trends emerging in the 1980s and 1990s saw a decline of secondary economic activities, including second and third transformation manufacturing (Portnov, 2006). Globalization of markets and production had large impacts on eastern and central Canada – the traditional manufacturing centre of the nation – while simultaneously opening new markets for the resource extraction industries of the west (Filion, 2010a). The resurgence of these peripheral resource centres spurred the decentralization of many services across the country, as well as a spread of cultural and educational facilities outside the traditional core (Portnov, 2006).

Geographic units of the Canadian census

A census subdivision (CSD) is a settlement of more than 5,000 people with a municipal government.

A census metropolitan area (CMA) is a grouping of several CSDs into an area of more than 100,000 people and an urban core population of at least 50,000. CMAs are determined based on the level of integration of orbiting municipalities with the core, predominantly by looking at commuter sheds.

A census agglomeration (CA) is a settlement or group of settlements with a core population of more than 10,000 characterized by high levels of integration, similar to CMAs. A CA is never included within a CMA, but may become one unto itself as it grows.

A population centre, formerly referred to as an urban area, is any area with a population of at least 1,000 and at least 400 persons per square kilometre. Areas that do not meet this requirement are rural areas.

Source: Statistics Canada, based on 2011 geographies

The volatility of the resource economy has since caused some of these centres to dwindle in importance, leaving many to rely on tourism as a means to sustain the local economy (Paul, 2015).

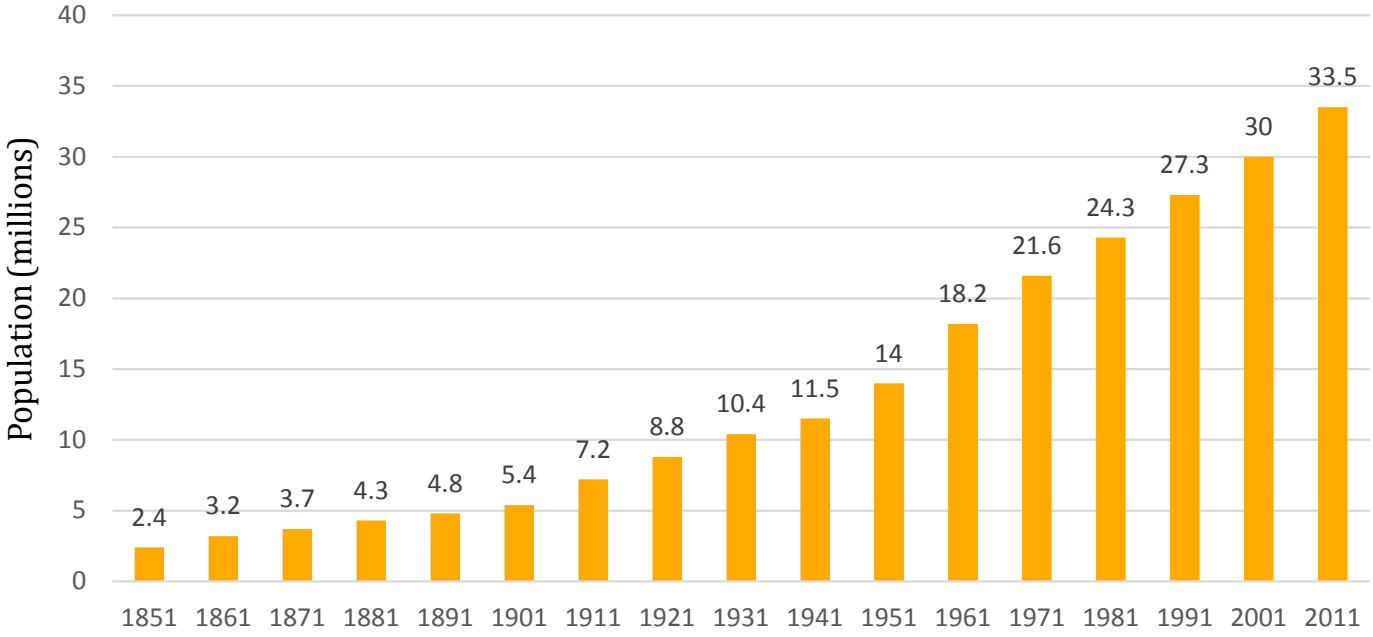
National and provincial policy also changed in this time period. After the Second World War, political ideologies shifted from interventionism to neoliberalism, which decreased regional economic development and redistribution programs (Filion, 2010a). Downloading responsibilities to municipalities made changing growth patterns both politically contentious and fiscally unfeasible (Filion, 2003). Municipalities are now increasingly left with the bill for maintenance of aging infrastructure (Thompson & Canadian Public Policy, 2013).

Neoliberalism also affected physical connections between Canadian towns and cities. Privatization of national transportation systems, such as the Canadian National Railway and Air Canada, caused a reduction in service to small population centres in the pursuit of increased profitability (Filion, 2010a). This strengthened the importance of larger population centres to the region.

Finally, the bulk of Canada's population growth does not come from natural replacement. Rather, the nation is characterized by low birth rates and high immigration rates (Statistics Canada, 2012). Natural increases in population account for only one third of population growth, making the rate of immigration to Canada one of the highest among industrialized nations (Green, 2012). This growth trend is challenging for Canadian provinces and municipalities. Immigration policy is largely set and controlled by the federal government, with some exceptions at the provincial level, so population growth is not a factor that municipalities can directly influence. Municipalities can only influence settlement patterns of these new Canadians through land-use planning activities and development policies. As stated earlier, the distribution of population growth and immigration is concentrated in certain centres. New immigrants favour Canada's large population centres, with

Figure 3 - Population of Canada since 1851

Source: Statistics Canada, 2012



"If the global population growth projections are right, we will need hundreds of new cities, or existing cities will need to get much larger, or both. The math can be intimidating. The art will be in how well we do our planning and designing for the people that are coming" (Toderian, 2015).

approximately 70% of immigrants settling in one of the six largest CMAs (Filion, 2010a).

These factors have led to a trend of agglomeration. The attractiveness of large population centres pulls in new residents, specialized services, advanced occupations, and infrastructural investment. This has been to the benefit of cities while hinterlands suffer (Filion, 2010a). In fact, the latter half of the 20th century was characterized by decline of rural areas and remote towns, half of which lost population in the 1996-2001 census period (Mitchell, 2009). Atlantic Canada is facing a rural crisis as the working population migrates to cities, leaving smaller towns with a retired population heavily dependent on social services. Some fear that a negative feedback loop of a departing tax base and slashed services will create a landscape of rural ghost-towns (Ibbitson, 2015). Planners and policy-makers in these municipalities are thus not concerned with growth management, but rather controlling or arresting rural decline.

Based on historic growth trends, it is likely that Canada's population will continue to expand in the larger population centres at the expense of smaller hinterland areas. Even amenity migrants leaving the city for a rural lifestyle favour areas within the influence of population centres, creating a new 'rural-recreational countryside' or 'urban field' (Halseth & Rosenberg, 1995; Mitchell, 2009). There are exceptions, of course: resource-based and leisure towns will

Figure 4 - Population count and growth rate by statistic area

	2006		2011		Growth (2001-2006)	Growth (2006-2011)
	Population	Share	Population	Share		
Canada	31,612,897	100%	33,476,688	100%	5.4%	5.9%
CMAs	21,534,063	68.1%	23,123,441	69.1%	6.9%	7.4%
CAs	4,136,342	13.1%	4,311,521	12.9%	4.0%	4.2%
Outside CMAs and CAs	5,942,492	18.8%	6,041,723	18.0%	1.0%	1.7%
Close to CMAs or CAs[1]	1,521,507	4.8%	1,586,681	4.7%	4.7%	4.3%
Remote from CMAs and CAs[2]	4,361,273	13.8%	4,393,039	13.1%	-0.1%	0.7%
Territories[3]	59,712	0.2%	62,009	0.2%	8.9%	3.8%

1 Refers to CSDs outside of CMAs or CAs classified as strong metropolitan influence zone
2 Refers to CSDs outside of CMAs or CAs classified as moderate, weak, or no metropolitan influence zone
3 Excludes CAs of Yellowknife and Whitehorse

Source: Statistics Canada, 2012

continue to occupy a niche in the urban system that cities cannot fill (Filion, 2010a).

Municipalities included in or in the orbit of large population centres will continue to benefit from the attracting factors of these cities. The last census shows that municipalities outside of but within the influence zone of a CMA or a CA averaged a growth rate of 4.3%, which, while lower than the national rate of 5.9%, is significantly higher than the rural growth rate of 0.7% (Figure 4).

With the high rate of metropolitan growth in Canada, it is necessary for municipalities within the orbit of large population centres to prepare for a growing population. Pressing concerns include the construction, maintenance, and improvement of physical infrastructure, expansion of services, and coordination within metropolitan regions (Filion, 2010a). Without careful planning, growth will continue to be expressed as sprawl, exacerbating existing issues related to decentralized development.

Intensification of existing urban areas is advocated as a means to improve transportation systems, environmental sustainability, and the efficiency of infrastructure. In Canada, intensification is often associated with the Smart Growth planning ideology. Smart Growth emerged as a sustainable development model initially to reconsider the amount of land required for automobile-focused development, but has since come to include concerns for efficient use of public money, job and housing accessibility, environmental sustainability, and strong communities (Smart Growth Network, 2006). The end goal is to mitigate sprawl through the development of compact urban areas.

Smart Growth offers several ways to manage growth and enjoys popularity in Canada, especially in larger cities where growth pressures are highest (Filion, 2003; Tomalty & Alexander, 2005). Many Canadian cities have been successful in coordinating intensification around transit nodes in order to lessen outward development pressure (Filion, Bunting, Pavlic, & Langlois, 2010; Filion & Kramer, 2012). However, significant barriers to change in the expression of growth exist. The auto-dependent transportation and land-use relationship is deeply entrenched in Canadian cities, and immense funds have already been sunk in creating and maintaining the existing built environment (Filion, 2010b).

Pursuing Smart Growth is especially difficult in the suburbs, where fragmented social values – such as a belief that action on unsustainable behaviours are necessary but an unwillingness to enact personal change – are exemplified by not-in-my-backyard mentalities. Intensification has been a successful strategy in larger cities, such as Vancouver and Toronto, since sustainable development came to the forefront of planning (Filion, 2010b; Filion & Kramer, 2012). Whether or not the Smart Growth approach to growth management and community planning has taken hold in municipalities on the metropolitan fringe is the subject of this study.

Growth Management

Growth over the last several decades in North America has taken the form of sprawl: low density development with a separation of land uses that can only be navigated by car. Sprawling suburban landscapes evolved out of a need to solve issues of overcrowding in the city, and have continued because of western preoccupations with home and vehicle ownership, the relative affordability of suburban construction, and a lack of suitable family dwellings in the city. New problems have now emerged. Unconstrained outward growth is unsustainable, and produces a landscape that is difficult to maintain, presents public health issues, and is ultimately inefficient (Christensen, 2014; Jenks, Burton, & Williams, 2005). The contemporary response to these problems is promotion of more dense development and growth management measures. Two planning movements in the late twentieth century have shown promise in addressing the concerns of sustainable development: the Compact City and Smart Growth.

The Compact City is a response to the United Nations Report Our Common Future (Brundtland, 1987), in which sustainability and sustainable development came to the front of planning concerns. The aims of this development model are to curtail sprawl through urban intensification, reduce private vehicle use through improved mass transportation, and increase quality of life through mixed-use zoning (Christensen, 2014; Williams, Burton, & Jenks, 2005). The thrust of most Compact City policies is to conserve open land and achieve a higher quality of life through the urban form. Compact City policies have been enacted throughout Western Europe, including

Calgary Suburban (c) Evan Leeson on Flickr, CC BY-NC-SA 2.0

"Although Smart Growth as a term is relatively new, the concept behind the rubric is not. In fact, the idea of managing urban growth to reduce environmental impacts, make cities more efficient to build and maintain and more socially inclusive is almost as old as urban planning itself" (Tomalty & Alexander, 2005, p. 1).

Britain, Ireland, Switzerland, Germany, and the Netherlands, as well as Australia.

The North American expression of the Compact City is Smart Growth. Both planning movements have their origins in land conservation, though the scope has since expanded to address other concerns, such as affordable housing, aging in place, urban revitalization, and social equity (Danielsen, Lang, & Fulton, 1999; Hillman, 2005; Kushner, 2002; Rérat, 2012; Williams *et al.*, 2005). Smart Growth proponents are notable in their focus on promoting the fiscal benefits to municipalities that intensification offers (Alexander & Tomalty, 2002). Of course, this has opened up both models to a wide range of critique, which will be discussed later in this section. By in large, the Compact City and Smart Growth have reframed many of the tenets of "good planning" (Tomalty & Alexander, 2005) This is clear when looking at the principles of Smart Growth (Figure 5).

Both development models state the need for a regional strategy for intensification to be successful. This typically includes defining zones of urban growth, establishing protected open and agricultural lands, and coordinating regional transportation networks (Daniels, 2001; Kushner, 2002; Nilsson *et al.*, 2014; Thomas &

Figure 5 - Smart Growth Principles

As Smart Growth has matured in North America, several organizations have been created to advocate the a more sustainable form of development. While there is no universally established set of principles, these ten principles demonstrate the core preoccupations of Smart Growth.

1. A range of affordable housing types and tenures
2. Development that creates vibrant, walkable communities
3. Urban design at a human scale
4. Intensification and renewal of existing communities
5. Green infrastructure to save money and protect the environment
6. Protected green spaces, agricultural land, and environmentally sensitive areas
7. Cooperation among actors within regions
8. Access to a variety of transportation options
9. Effective community involvement throughout development processes
10. A strong sense of community and neighbourhood identity

Source: Smart Growth BC, 2015; Smart Growth Network, 2006

"Ultimately, for Smart Growth to succeed, collaborative planning must work smoothly in a regional framework involving the state, counties, cities and villages" (Daniels, 2001, p. 276).

Cousins, 2005; Westerink *et al.*, 2013; Williams *et al.*, 2005). This regional approach is necessary to cope with the barriers to development that growth management strategies create. Without regional coordination, developers can choose to locate their projects in the municipality that provides the least resistance to growth. A "prisoner's dilemma" emerges, where regional growth strategies can only be successful if all jurisdictions in the region comply. If even one municipality in the region does not cooperate, it stands to attract high levels of growth and therefore detract from the growth management strategies of its neighbours. However, attracting conventional growth leaves municipalities on the hook for the costs of sprawl, negating any benefit of growth (Thompson & Canadian Public Policy, 2013).

Successful growth management strategies require that jurisdictions establish some sort of growth boundary, whether at a municipal or regional level. The boundary typically contains some greenfield land to satisfy long-term growth, but emphasis is placed on infill development, redevelopment, and building adaptation. This is reflected in the stated goals of many Smart Growth policies in promoting higher density development in already urbanised areas: increasing land-use efficiencies, lowering costs for the provision of infrastructure, protecting undeveloped land, and facilitating active transit as a viable travel mode (Daniels, 2001; Danielsen *et al.*, 1999). However, proponents are also quick to point out that intensification does not equate to neighbourhoods of high-rise buildings. Rather, mixed-use development at a higher density than currently exists is used to improve quality of life while retaining a scale appropriate to the neighbourhood, so that increased density has an observable benefit to residents (Danielsen *et al.*, 1999). Vancouver has realized this through the promotion of 'hidden,' 'gentle,' and 'invisible' density in residential neighbourhoods (Toderian, 2010). For both Smart Growth and Compact Cities, maintaining human scale and involving community concerns are important principles.

Benefits of Smart Growth

Compact Cities and Smart Growth have similar claims to a range of benefits, some more tangible than others. Because of this array of benefits, advocates for intensification claim that "Smart Growth, as compared to first generation growth management, enjoys widespread support by both public officials and the public" (Kushner, 2002, p. 48). This general support has been shown in Canada by Alexander & Tomalty (2002), Filion (2001), and Tomalty (2006). The claimed benefits of compact development are explored in the section, primarily through research and policy briefs on Smart Growth, though some material pertaining to the Compact City in Europe is included. Each benefit complements others in this list, and many feed into a virtuous cycle of increased activity and opportunity.

Land Conservation

Land use efficiency is one of the oft-cited benefits of compact development, and is in fact the original motivation behind the Smart Growth movement. This involves an interrelation between efficient use of the land being

developed – through a mixing of uses and increased density – and conserving the productive value of agricultural land and open space. Alexander & Tomalty note that Smart Growth policies place "less pressure to convert habitat and farmland to urban uses" (2002, p. 398). This conversion of rural to urban land is more than just inefficient use of a limited resource, but is damaging. According to Litman, "urban fringe development often has indirect impacts that disrupt farming activities, wildlife habitat, and groundwater quality on nearby properties" (2015b, p. 8). The Smart Growth Network agrees, claiming that growth management techniques allow rural municipalities "to grow while protecting the agriculture that means so much economically and culturally" (Smart Growth Network, 2006, p. 10). In an attack on conventional sprawling development, Litman argues that "Smart Growth helps preserve greenspace (farmland, wildlife habitat, wetlands, parks and other forms of environmentally beneficial land uses), which provides a variety of economic, social and environmental benefits" (2015a, p. 47). Conservation of open and productive green spaces can thus become an important argument when considering all three pillars of sustainability: environmental, economic, and social.

Cost Savings

One of the most attractive benefits of Smart Growth is the potential cost savings that can be reaped by municipalities, developers, and taxpayers (Curran & Leung, 2000). The Smart Growth Network claims that municipalities are increasing pressured to spend tax dollars wisely, and that "paying for new infrastructure for development on the fringes of a community – while neglecting buildings and infrastructure in which the community has already invested – is not fiscally prudent" (Smart Growth Network, 2006, p. 8). Proponents claims that Smart Growth offers considerable savings to municipalities in the construction, provision, and maintenance of infrastructure.

The key to these savings is the reduced coverage area of compact development. Sprawling, low density development incurs significant cost in infrastructure provision. Filion notes that "reduced infrastructure requirements would lower public sector urbanization expenses with advantageous fiscal and potential economic development consequences" (2003, p. 52). These 'advantageous fiscal consequences' are listed by Litman, and include "[reduction of] the length of roads and utility lines, and travel distances needed to provide public services such as garbage collection, policing, emergency response, and school transport, and so reduces the per capita costs of providing these services" (2015b, p. 11). Altering development to follow a more compact pattern will bring savings in the cost of building and maintaining physical infrastructure. In regard to infill development, Christensen (2014) claims that municipalities – and developers – are able to use existing infrastructure, eliminating the cost of new construction. Finally, Curran & Leung claim that "using green infrastructure to manage stormwater can reduce infrastructure costs for residents and developers, as well as help to enhance ecological systems in urban and near-urban areas" (2000, pp. 8-9).

"Many communities are questioning the fiscal wisdom of neglecting existing infrastructure while expanding new sewers, roads, and services into the fringe" (Smart Growth Network, 2006, p. 1).

"Communities around the nation are developing in ways that offer more choices, protect natural resources, honor shared culture and heritage, use resources wisely, and improve the economy" (Smart Growth Network, 2006, p. 22)

Proponents also point to direct benefits to consumers, beyond having their tax dollars used efficiently. Alexander & Tomalty claim that residents of more compact neighbourhoods have "reduced consumption of water and energy, which is typically higher in low-density districts due to higher heating and cooling costs for single-family homes and excess water use on lawns, gardens and cars" (2002, p. 398). In addition to energy consumption in the home, changes to travel patterns also incur cost savings. Both Danielsen *et al.* (1999) and Litman (2015a) claim that Smart Growth development has the ability to decrease household vehicle miles travelled. Litman (2015a) goes on to claim that the potential to eliminate one or more household vehicles further lowers expenses, offsetting the potentially higher housing costs of compact development.

Housing affordability is one last benefit of Smart Growth development. Affordability can be increased "by allowing smaller lots, making underutilized urban buildings and land available for redevelopment, allowing subdivision of existing parcels, allowing more diverse housing types (smaller lots, secondary suites, lofts, etc.), reducing parking requirements, reducing development costs, and providing financial discounts for infill development" according to Litman (2015a, p. 39). Diverse housing types are an important principle of Smart Growth. Alexander & Tomalty claim that this allows Smart Growth neighbourhoods to "accommodate a wider range of people in various stages of their life cycles" (2002, p. 398). Danielsen *et al.* goes into greater detail, noting that "higher density housing built according to Smart Growth guidelines can accommodate an empty-nester household that may want to downsize but remain in the same neighborhood – a housing option that is unavailable in most conventional suburban subdivisions" (1999, p. 524). The ability to house a variety of family types is increasingly important as demographic changes sweep the western world (Rérat, 2012).

Reduced Auto Dependence

Smart Growth is set up as the alternative to the automobile-focused growth of the 20th Century. Current patterns of outward growth favour the use of private vehicles to navigate the city and complete daily tasks, and makes walking or cycling difficult. Tomalty & Alexander note that "reducing car use and its impact on the environment, health, and quality of life is a cornerstone of the Smart Growth movement" (2005, p. 4) In critiquing the conventional growth model, Litman claims that "it [Smart Growth] reduces distances between common activities and supports alternative modes, while sprawl disperses destinations and is automobile dependent" (2015a, p. 5). Tomalty claims that this reduction in travel distances "[creates] more transportation choice through easier access to daily destinations like work, shopping and entertainment" (2003, p. 1).

Compact development is easier to service with public transit, and the increase in population density and neighbourhood amenities allows for more frequent service (Danielsen *et al.*,

1999; Hillman, 2005). Litman goes on to claim that "comprehensive smart growth policies create transit-oriented communities, neighborhoods where high quality walking, cycling, public transit and carsharing services allow households to minimize their vehicle ownership and use" (2015b, p. 3). The variety of options is important in providing not only transportation accessibility, but also equity. Neighbourhoods and municipalities built for vehicles can be difficult to navigate for those who cannot drive to age, ability, or socio-economic factors (Litman, 2015a, 2015b). Travel by private vehicle is still possible, but proponents argue that the overall vehicle miles travelled are reduced through increased transportation options and a decrease in the distance of trips (Filion, 2003; Jenks *et al.*, 2005; Litman, 2015a).

The reduction in auto dependence has benefits beyond accessibility. Litman claims that, because of the reduced number of passenger vehicles, "Smart Growth… reduces road space required per capita, and allows parking facilities to serve multiple destinations, which together reduce total road and parking land requirements" (2015b, p. 8). Christensen provides an environmental argument, claiming that Smart Growth is notable for "eliminating unnecessary vehicular movements and in doing so, reduces carbon emissions, creating a healthier society that is more active and more interactive with one another" (2014, p. 37).

Improved Quality of Life

Smart Growth could not enjoy widespread popularity if it did not provide tangible social and cultural benefits. Filion claims that "Smart Growth holds the potential of bringing about quality of life improvements in the form of shorter journeys and a broader range of life-style options" (2003, p. 52). Alexander & Tomalty agree, claiming that quality of life is improved "by providing services and amenities closer to home, making neighbourhoods more pedestrian-friendly and vibrant, and by increasing neighbourhood security through 24/7 street surveillance" (2002, p. 398). These are many of the social benefits raised by Jane Jacobs (1961) decades before Smart Growth emerged. The many benefits of urban living she wrote about in the 60s continue to appear in the rhetoric of Smart Growth, including publications by the Smart Growth Network (2006), Smart Growth BC (Curran & Leung, 2000) and the Canadian Mortgage and Housing Corporation (2009; Alexander & Tomalty, 2002; Tomalty & Alexander, 2005).

The local economy also stands to benefit from Smart Growth. Danielsen *et al.* claim that Smart Growth create "better access to retail services and employment" (1999, p. 518). Having both a more concentrated population and better transit access lead to "greater clientele and employee base for many businesses, resulting in more mixed land uses, which in turn are associated with a higher quality of life, access to services and transit feasibility," claim

"…while a detached single-family home is the most important attribute when choosing where to live, large houses and big yards are less important to GTA residents than walkable, mixed-use neighbourhoods, short commutes to work, and easy access to frequent rapid transit" (Thompson & Canadian Public Policy, 2013, p. 3).

Alexander & Tomalty (2002, p. 398). This virtuous cycle is supported by claims by Danielsen *et al.* (1999), Hillman (2005), and Williams *et al.* (2005). Alexander & Tomalty also claim that "a better mix of land uses may also mean a better balance between residents and jobs, with fewer people having to drive to work in far-flung locations" (2002, p. 398). Litman adds an environmental argument, claiming that "urban sprawl and excessive vehicle traffic can threaten the attributes that make a place special and attractive, and therefore increase land values and economic activity" (2015a, p. 47). Not only do proponents claim a more attractive and vibrant urban area, but better fringe spaces as well.

Critiques of Smart Growth

Smart Growth is the target of a wide range of critiques due to the number of claims that its proponents make. Two key groups of critics are libertarians – arguing for deregulation of land development – and those concerned with social equity. Kushner notes that, "both the libertarian and the social equity critics charge that restrictions on urban sprawl or development will adversely affect housing supply and affordability" (Kushner, 2002, p. 51). Finally, critics attack the looseness of Smart Growth as a model. Addison, Zhang, and Coomes find that, "as efforts to mitigate the negative consequences of sprawl have grown in recent decades, the interpretation of the term Smart Growth can be both vague and easily manipulated by different growth agendas and interests" (2013, p. 216). Four lines of critique – on housing supply, affordability, quality of life, and ambiguity – are given briefly in this section.

Housing Supply

As an alternative to conventional development patterns, critics claim that Smart Growth goes against what the market demands. Christensen points to critique that "there is resentment to the idea of compaction and increased population densities, by way of infill developments, that threaten a well-liked and established way of life" (2014, p. 39). This attitude is claimed to exist throughout the Anglo-American world, including the United States (Easterbrook, 1999), Ireland (Howley, 2009; Howley, Scott, & Redmond, 2009), the United Kingdom (Thomas & Cousins, 2005), and Canada (Tomalty & Alexander, 2005). Easterbrook claims that, "many of those actively complaining about traffic and growth really should be called sprawl preservationists because their goal is to pull up the ladders and bar new arrivals from their communities. They seek to keep housing lots large, boulevards uncluttered, and parking slots open" (1999, p. 542).

This attitude not only inhibits the acceptability of Smart Growth development, but undermines the benefits that compact municipalities accrue. According to Kushner, "developers are likely to simply leapfrog over Smart Growth sensitive towns or counties, generating both Dumb Growth sprawl further away and Dumb Growth traffic that will fill Smart Growth community streets" (2002, p. 53). Developers are also resistant due to "high land costs, difficulty of obtaining financing due to perceived risk, [and] higher construction costs" (Tomalty & Alexander, 2005, p. 2). Easterbrook (1999) argues that regulation unnecessarily forces growth and development outside of the municipality,

"...while many people like the idea of other people living in compact cities, given the option they would prefer to live in a lower density, "typical" suburban environment" (Christensen, 2013, p. 39).

"In a number of crucial areas of urban life, achieving the balance between 'town cramming' and vibrancy and sustainability will be the key to successful urban development in the future" (Williams et al., 2005, p. 71).

curtailing economic growth, reducing potential tax revenue to municipalities, and limiting investment. Therefore, municipalities should be accepting of whatever development the market demands.

Affordability

Smart Growth advocates claim that housing affordability can be increased through more dense development, but this density is not always achieved when growth restrictive policies are put in place. Addison, Zhang, & Coomes claim that "on the supply side, urban growth boundaries and state-wide growth management may reduce the amount of developable land. As a result, housing supply may be reduced accordingly, and this will generate a negative impact on housing affordability" (2013, p. 217). They go on to claim that "growth management practices generate desirable amenities which improve the quality of life, but for which home buyers incur the costs. This will likely have the strongest impact on LMI households, who have the least ability to pay" (Addison, Zhang, & Coomes, 2013, p. 403). These are common concerns, and have been substantiated to a degree. Alexander & Tomalty found that, when looking at more dense development in British Columbia, "[density] does not necessarily correlate with greater affordability of housing or more access to green space. In fact, if anything, we discovered a negative relationship between housing affordability and green space per capita and higher land-use densities" (2002, p. 403).

The array of amenities in the mixed-use neighbourhoods that Smart Growth advocates value raise further equity concerns. Gordon and Dunn (2015) describe how planners in Vancouver are restricting the number of mixed-use buildings in village centres, as they have found that these buildings actually take away from the vibrancy of an area by accommodating only select sectors. The businesses that choose to locate in mixed-use buildings and neighbourhoods are often of two types: service and knowledge sector (Gordon & Dunn, 2015; Moos, 2015). The lack of commercial variety has a marked consequence on neighbourhood affordability. The jobs created in these neighbourhood is foremost within the service and knowledge sectors, however the wages offered by service sector jobs are insufficient to afford rent in these neighbourhoods, which is the case in Toronto (Moos, 2015). The middle-class orientation of mixed-use neighbourhoods has also been shown in the United States, especially in New Urbanist developments (Kushner, 2002; Talen, 2010). Kushner elaborates: "Under gentrification, a consumer preference for urban living causes developers to increase rents, displacing the poor into a dwindling supply of decent housing… or the outright expulsion from the city or entry into homelessness" (2002, p. 67). This can lead to "a new form of segregation… when the poor are priced out of high-density areas," claim Danielsen *et al.* (1999, p. 519). According to many researchers and policy makers, growth management techniques cannot deliver equitable benefits without addressing the question of affordability (Alexander & Tomalty, 2002; Burton, 2000; Jenks *et al.*, 2005).

Quality of Life

Contrary to the claim that higher density and mixity in a neighbourhood increase quality of life for residents, critics claim that both factors can also detract from it. Christensen warns that, "while compactness and population intensification will reduce the number of vehicle trips per person, the overall concentration of vehicle traffic will increase leading to deterioration in local environmental conditions" (2014, p. 38). The claim that dense neighbourhoods experience greater volumes of traffic is also made by Danielsen *et al.* (1999) and Neuman (2005). Furthermore, Westerink *et al.* (2013) find that more dense neighbourhoods have a higher concentration of fine airborne particles, and that more people are exposed to particulates. One of the reasons planners have sought to separate land uses is to make transportation efficient and improve the air quality of the city.

A second danger of increasing density through intensification is the loss of urban green spaces. While larger parks are likely to be preserved through zoning, Thomas & Cousins (2005) claim that small garden spaces at the front and rear of lots are often the first pieces of land to be swallowed by infill. These urban green spaces are not only important for mitigating heat island effects and air quality, but for social reasons as well: "The significance of this 'greenery' is that for many of today's city dwellers, it is some of the only natural wildlife that they experience on a regular basis. As such it is a very valuable resource to the physical and mental well-being of many people" (Thomas & Cousins, 2005, p. 49).

Ambiguity of the Movement

Smart Growth emerged as a planning movement in response to a desire for more sustainable development, and has benefitted from input from a variety of actors throughout the world. However, this is also a danger. Filion notes that, "[critics] target the wide variations in the understanding of Smart growth, which stem from the fact that the concept is a compromise between environmental protection, quality of life, infrastructure expenses and urban development" (Filion, 2003, p. 52). This compromise has had a detrimental effect on the principles Smart Growth espouses. In studying the effect of Smart Growth policies in six Canadian cities, the Tomalty & Alexander find that, "while major progress has been made in terms of language and policy goals, performance is lagging behind considerably" (2005, p. 1). Kushner makes a similar observation in the United States, and believes that, "Smart Growth can have a measured impact on reducing the rate of urbanization of agricultural land and other greenfields and thus the pace of sprawl, but the flexibility of Smart Growth will not significantly alter the continued proliferation of Dumb Growth and the automobile-generating low density residences on the urban edge" (2002, p. 73).

Smart Growth Successes

The benefits of pursuing Smart Growth in new development are often hard to measure, as many of the goals of Smart Growth relate to qualitative improvements. Increases to community vibrancy and quality of life are hard to enumerate. However, studies into Smart Growth developments have revealed hard evidence of success in other areas.

Municipal Cost Savings

The cost savings of Smart Growth developments for municipalities are proven across North America. Alexander & Tomalty find that lower-density municipalities in British Columbia "[have] the most extensive sewerage and water facilities on a per capita basis" (2002, p.

"The Minneapolis–St. Paul Metropolitan Council found that by using Smart Growth techniques, 'the region overall could save $3 billion . . . , 94 percent [of which] would come from local communities saving money on roads and sewers'" (Smart Growth Network, 2006, p. 8).

401). The pair notes in a later study of infill across Canada that intensification projects pay for themselves within a few years, and then provide a net revenue stream to municipalities (Tomalty & Alexander, 2005). Thompson recounts that, "in Halifax, the City estimates a savings of $66 million over twenty years (2011-2031) if 25% of new development is accommodated through infill and intensification, versus the 16% rate currently (Thompson & Canadian Public Policy, 2013). Cost savings are largely accrued through efficiency in providing road and highway infrastructure, water and sewage systems, and emergency services. In addition to cost savings, Smart Growth developments provide a significantly higher tax base compared to typical suburban uses. In Sarasota County, Florida, mixed-use development was shown to generate five times more tax revenue than a suburban mall, and ten times more tax revenue than a residential subdivision (Litman, 2015b).

Housing Affordability

Smart Growth is able to make housing more affordable through promoting residential density and variety. Addison, Zhang, & Coome reviewed studies in the United States, and find that "high-density development and variety in housing consistently promote affordability for LMI [low- and middle-income] populations and, therefore, such strategies should be promoted" (2013, p. 220). The same was shown in British Columbia by Alexander & Tomalty (2002). The American Smart Growth Network notes that, "Following closely behind the revitalization of the neighbourhood [East Liberty in Pittsburgh, PA] were new and renovated homes and apartments affordable to the current residents, along with market-rate homes" (Smart Growth Network, 2006, p. 3). Litman adds quantitative data, and states that, "each 10% increase in their compact development index is associated with a 1.1% increase in housing costs relative to income but a 3.5% decrease in transport costs relative to income, so households save more than three dollars on transportation for each additional dollar spent on housing" (2015b, p. 17).

Quality of Life

Critics claim that Smart Growth increases traffic congestion by having more intensive land use in a smaller space. Advocates for Smart Growth do not deny that claim, but instead point to another measure of traffic congestion. Litman claims that, "denser development tends to increase congestion intensity, but by reducing travel distances, improving alternative modes, increasing connectivity and supporting demand management strategies, smart growth can reduce total per capita congestion costs" (2015b, p. 20). That is, the amount of traffic during periods of congestion is higher, but congestion lasts fewer hours. He supports this claim with data from various large American cities: low-intensity congestion in Houston, Texas; Miami, Florida; and Atlanta, Georgia, has a per capita congestion cost up to 30% higher than New York City, the city with the second highest level of congestion intensity (Litman, 2015b, p. 20).

Achieving Smart Growth in Canada

Smart Growth advocates emphasize a need for regional and intergovernmental cooperation in order to achieve success. In Canada, land-use planning is the responsibility of provincial governments. This responsibility is largely downloaded onto municipal governments through a Municipal Government Act or Planning Act, which is the enabling legislation that creates and defines municipalities. Municipal units commonly include cities, towns, and villages, each with a particular definition based on population size.

The ability of municipalities to address growth concerns is limited by provincial legislation. As creatures of the province, municipalities are constrained in their ability to exploit new revenue streams, which makes them financially dependent on the province (Thompson & Canadian Public Policy, 2013). While several cities in Canada enjoy greater powers due to city charters, these charters exist only in large cities and might not affect municipalities at the fringe of metropolitan areas. In order to access provincial funding, municipalities are required to produce a development plan or official community plan and to review the plan periodically. A comprehensive land-use bylaw covering the total are of the municipality is also required.

While the enabling legislation and requirements are different from province to province, there

Figure 6 - Planning terminology by province*

	Alberta	Saskatchewan	Manitoba
Provincial planning legislation	Municipal Government Act	Planning and Development Act	Planning Act
Regional plans	Intermunicipal Development Plan	District Development Plan	Joint Planning Scheme
Municipal plans	Municipal Development Plan	Basic Planning Statement Development Plan	Development Plan
District plans	Area Structure Plan Area Redevelopment Plan	Local Area Plan	Secondary Plan

"Good governance, i.e. the sphere of public debate, partnerships, interaction and dialogue between citizens, organisations and local governments, is a precondition for achieving sustainable development" (Nilsson et al., 2014, p. 15).

is a general framework that is common (Figure 6). Provinces may also create tiers of municipal governments, embedding land-use decisions in a regional context. In some cases, regional bodies are not a distinct level of government but a partnership among municipalities. In others, multiple layers of regional government exist. Provinces may also adopt land-use regulations at a supra-regional level, or establish planning guidelines for regional bodies to follow. Because of this, multiple layers of governments are involved in land use planning and growth management in Canada.

Achieving Intensification

There are many methods to achieve a more dense, compact urban form. These include techniques to manage the growth, natural lands and resources, infrastructure, character, and economy of communities. The techniques and strategies each municipality uses to manage growth in its territory are articulated in a variety of planning documents. It is of utmost importance that municipalities and higher levels of government work together to achieve goals related to growth management.

Ontario	Quebec	Newfoundland and Labrador
Planning Act	Loi sur d'amenagement et d'urbanisme (Land Use Planning and Developmnent Act)	Urban and Rural Planning Act
Upper Tier Plan Regional Official Plan Growth Plan	Schéma d'aménagement et de développement (Land Use and Development Plan) Plan métropolitaine d'aménagement et de développement (Metropolitan Land Use and Development Plan)	Regional Plan Joint Municipal Plan
Official Plan	Plan d'urbanisme (Planning Program)	Municipal Plan
Secondary Plan	Programme particulier d'urbanisme (Special Planning Program)	Development Scheme Comprehensive Area Plan

*includes only those provinces appearing in this report | Adapted from: Hodge & Gordon, 2008

"Municipal governments can lead the way in managing sprawl. Many policy changes are within their existing capacity. Provincial governments can amend legislation to provide additional capacity, and provincial and federal governments can align their policies to support municipal efforts" (Thompson & Canadian Public Policy, 2013, p. 24).

Urban Growth Limits

Locating new development in existing urban areas requires defining where the urban area ends. This can be done in several ways, such as urban growth boundaries, service limits, and green belts. All three serve a variety of purposes. The national planning body of the UK notes that these boundaries assist with five planning concerns (DCLG, 2012):

- Control of sprawl
- Prevention of town mergers
- Protection of countryside from encroachment
- Preservation of pastoral settings and historic character of towns
- Promotion of urban regeneration through infill development

Growth limits can be determined by designating a municipal boundary, maximum topographic elevation of permissible development, or existing infrastructural limits (Curran & Leung, 2000). In some cases, these growth limits are required by – or even determined by – higher levels of government (Daniels, 2001; DCLG, 2012). Municipalities will often designate a supply of greenfield land to satisfy future growth and prevent excessive increases in land value. Policy on the extent of lands outside the growth limit must be strict enough – and provide an area wide enough – to prevent or discourage leapfrog development and land speculation (Smart Growth BC, 2001). The designation of urban growth limits varies across Canada depending on provincial legislation and the established regional governance structure.

Regional Plans

Proponents of Smart Growth are unanimous in their agreement that a regional approach needs to be taken for intensification to be successful. Without a concerted approach among various levels of government, municipalities have to compete with each other for development in what amounts to a 'race to the bottom.' Regional growth plans ensure that development is distributed through the region and sensitive to local growth management strategies (Nilsson *et al.*, 2014). The inclusion of transportation systems in the Smart Growth and Compact Cities discourses also requires a regional approach to transportation planning, with connections between municipalities as important as those within them.

Regional growth strategies typically look at a 20-year horizon, and set the context for the official community plans of municipalities within the region. In Canada, the Local Governments Acts of many of the provinces encourage or require that these plans be made (Smart Growth BC, 2001). Regional bodies can be established as an upper layer of government or as a partnership among municipalities. Some jurisdictions will have multiple layers of regional government, each with its own growth plan.

Municipal Plans

Communities envision the outcomes of municipal policy in municipal plans. This forward-thinking document is intended to guide the decisions of local government actors, and is therefore important in setting the tone for development (Porter, 2012). A comprehensive plan may include development goals that reflect a Smart Growth ideology.

District Plans

Many municipalities will require developers to submit a concept plan detailing proposed development, including the impact it will have on the surrounding area. The design and layout of new development is of increasing concern to municipalities, developers, and residents. Emphasis on human-scale development, an easily navigable grid pattern of streets, orientation toward active transportation, provision of green spaces, and other considerations can be important in creating a high quality of life and prevent a feeling of town cramming (Daniels, 2001). These concerns can be articulated in policy documents and guidelines so as to set design expectations, streamlining the development process.

Growth Management Resources

Managing Growth in America's Communities Douglas R. Porter divides his book on growth management in the United States into sections based on several techniques. He lists a total of 52 common methods to manage growth, ranging from federal and state-led programs to municipal zoning and bylaws. This book provides an overview of the field for those interested in implementing more strict growth management.

The Smart Growth Toolkit Smart Growth BC provides an introduction to sustainable development, Smart Growth, and citizen involvement strategies in this four part guide. The Toolkit is meant to be accessible to both public servants and citizen advocates.

Sources: Porter, 2008; Smart Growth BC, 2001

IMG_7453(c) wyliepoon on Flickr, 2012 CC BY-NC-ND 2.0

Smart Growth on Canada's Fringe

The high rate of immigration and population growth in Canada's cities is expected to continue, making growth management a pressing concern. Previous studies have demonstrated that Smart Growth has been adopted enthusiastically by cities across the country, though with varying levels of effects on actual growth and development (Alexander & Tomalty, 2002; Filion, 2010b; Stevens & Mody, 2013; Tomalty, 2003; Tomalty & Alexander, 2005). Prior to this study, the integration of Smart Growth principles into the plans of fringe municipalities in Canada was unknown.

This study reports on whether Smart Growth principles are included the growth planning documents of the fifteen fastest growing municipalities in Canada, as reported by Statistics Canada in the 2011 National Census. The fifteen municipalities are spread across the country in six of the ten provinces, and each is either within or near to a census metropolitan area or a census agglomeration. Western, Central, and Atlantic Canada are all represented in this study.

The analysis took into account Statistics Canada data and policy documents at various levels of government, as well as some aerial photography. Important statistical indicators include the gross unit density of the municipality, population growth trends, place of work, mode of commute, and composition of the housing stock, among others. Policy analysis included such documents as official community plans, strategic plans, sustainability plans, regional growth plans, design guidelines, and neighbourhood plans. Not all municipalities have the same types of plans, though official community plans are required by planning

legislation in each of the provinces. Aerial photography was used to examine the urban form growth has taken, whether an urban grid or a suburban loop and cul-de-sac pattern. The fifteen cases are presented by province in the following section.

Fifteen municipalities are profiled with particular attention to growth trends and growth management strategies at the local, metropolitan, and regional levels. The cases are presented by province, beginning with Alberta in the west (Figure 7). A summary of findings and exploration of possible improvements follow the case studies.

Airdrie, Alberta
Beaumont, Alberta
Blackfalds, Alberta
Chestermere, Alberta
Leduc, Alberta
Okotoks, Alberta
Martensville, Saskatchewan
Warman, Saskatchewan
La Broquerie, Manitoba
Milton, Ontario
Whitechurch-Stouffville, Ontario
Marieville, Québec
Sainte-Brigette-de-Laval, Québec
Sainte-Marthe-sur-le-Lac, Québec
Paradise, Newfoundland & Labrador

Figure 7 - Map of selected high-growth municipalities

Airdrie AB

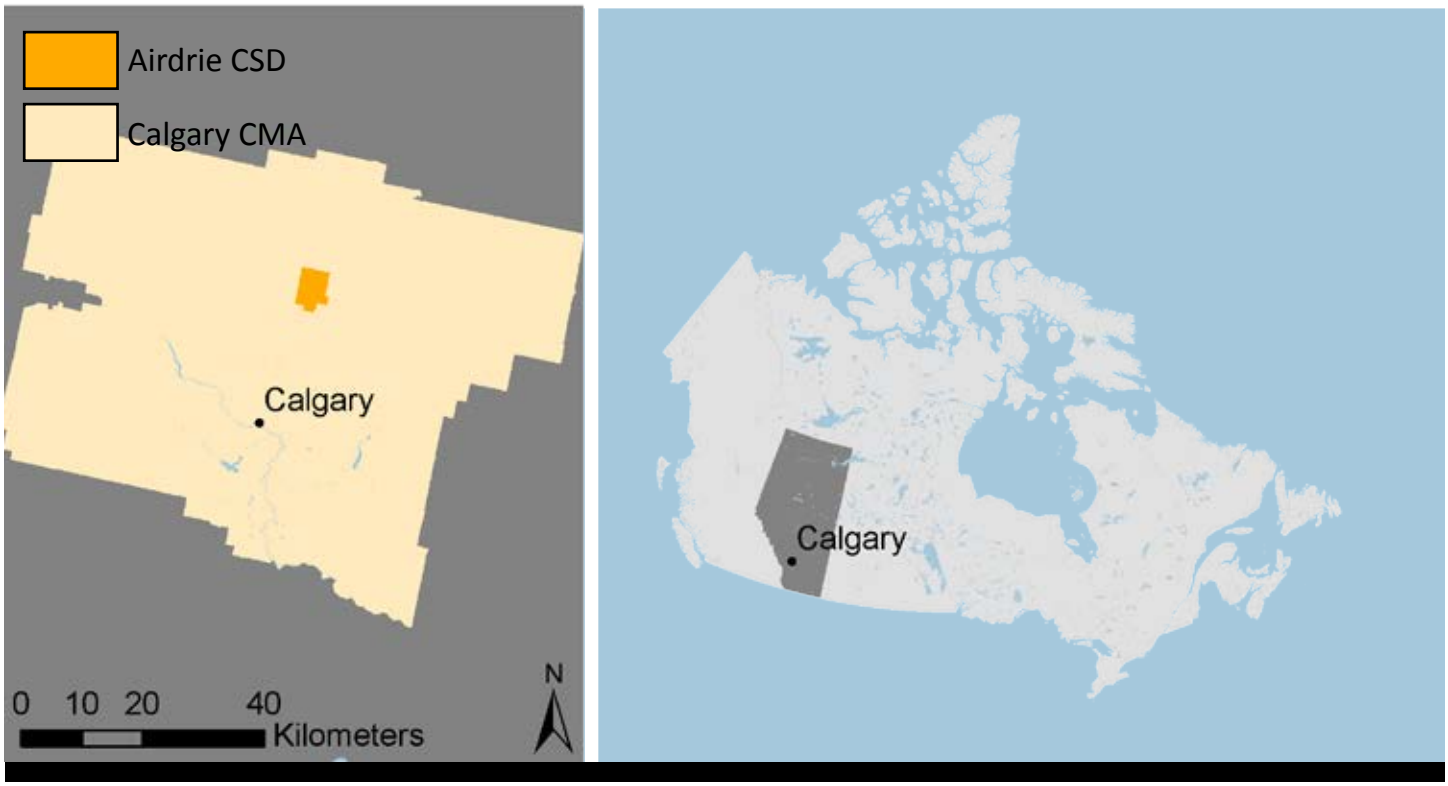
Airdrie is located astride a major transportation corridor linking Calgary to Edmonton. Incorporated in 1974 with a population around 1000, the city has grown to house an official population of 42,564 people. The municipal census in 2014 placed the population at 55,000, which the City estimates will rise to 90,000 by 2031. The municipal area covers 3310 hectares, with a residential gross unit density of 4.7 units per hectare according to the 2011 National Census.

The City of Airdrie is a voluntary member of the Calgary Regional Partnership, a group of municipalities that cooperate on planning objectives for the Calgary region. This is not analogous with the Calgary CMA. Airdrie's city centre is 27 kilometres from the core of Calgary, but the municipal boundaries of each city lie only a few kilometres apart. As such, Airdrie is a bedroom community of its larger neighbour.

Approximately 34% of the working population is employed in Airdrie, and 48% work within the region. However, the commuting flow goes both ways: 30% of the people working in Airdrie commute from Calgary.

Airdrie is largely auto-oriented, is experiencing rapid growth, and has 70% of its housing stock in single-detached homes. Residents are concerned with the lack of mechanisms to manage new growth, barriers to walking and transit use, encroachment on natural areas, and conservation of water resources (City of Airdrie, 2012b). The City responded to these concerns through the adoption of several policies and guidance documents, including an updated municipal development plan, a sustainability plan, updates to the land-use plan, and participation in inter-municipal planning efforts. All of these documents support Smart Growth principles.

Figure 8 - Airdrie context map



"Airdrie is a vibrant, caring community rich in urban amenities and opportunities for everyone. We value a healthy, sustainable environment connecting people and places." (City of Airdrie, vision statement)

Planning for Growth

Five documents were analyzed for this report, four of which are local planning documents while the fifth is a regional plan. These are the AirdrieONE Sustainability Plan, Land Use Bylaw Background Report, Mixed-use Centres Design Guidelines, the Municipal Development Plan, and the Calgary Metropolitan Plan.

Regional Planning

The City of Airdrie is involved in several ongoing inter-municipal planning activities, including membership in the Calgary Regional Partnership (CRP) and cooperation with Rocky View County, the rural region surrounding Airdrie.

The CRP is a group of thirteen member municipalities and counties that set planning expectations for the Calgary metropolitan region. Membership is voluntary, though regional planning is now required by the Alberta government. Airdrie is the second largest jurisdiction involved in the CRP, after Calgary. The current metropolitan plan identifies unsustainable contemporary growth patterns as a threat to natural resources, particularly watersheds. The plan articulates several policy expectations for member municipalities, including an intensification strategy, establishment of priority growth areas, watershed management, and commitment to regional transportation systems (CRP, 2014).

Airdrie (c) Calgary Regional Partnership 2012

Airdrie, AB

Local Planning

The City is committed to monitoring demographic trends and adjusting growth projections accordingly. Currently, the City is conducting all planning activities with an anticipated population horizon of 90,000 by 2031 and 110,000 as early as 2040 (City of Airdrie, 2014).

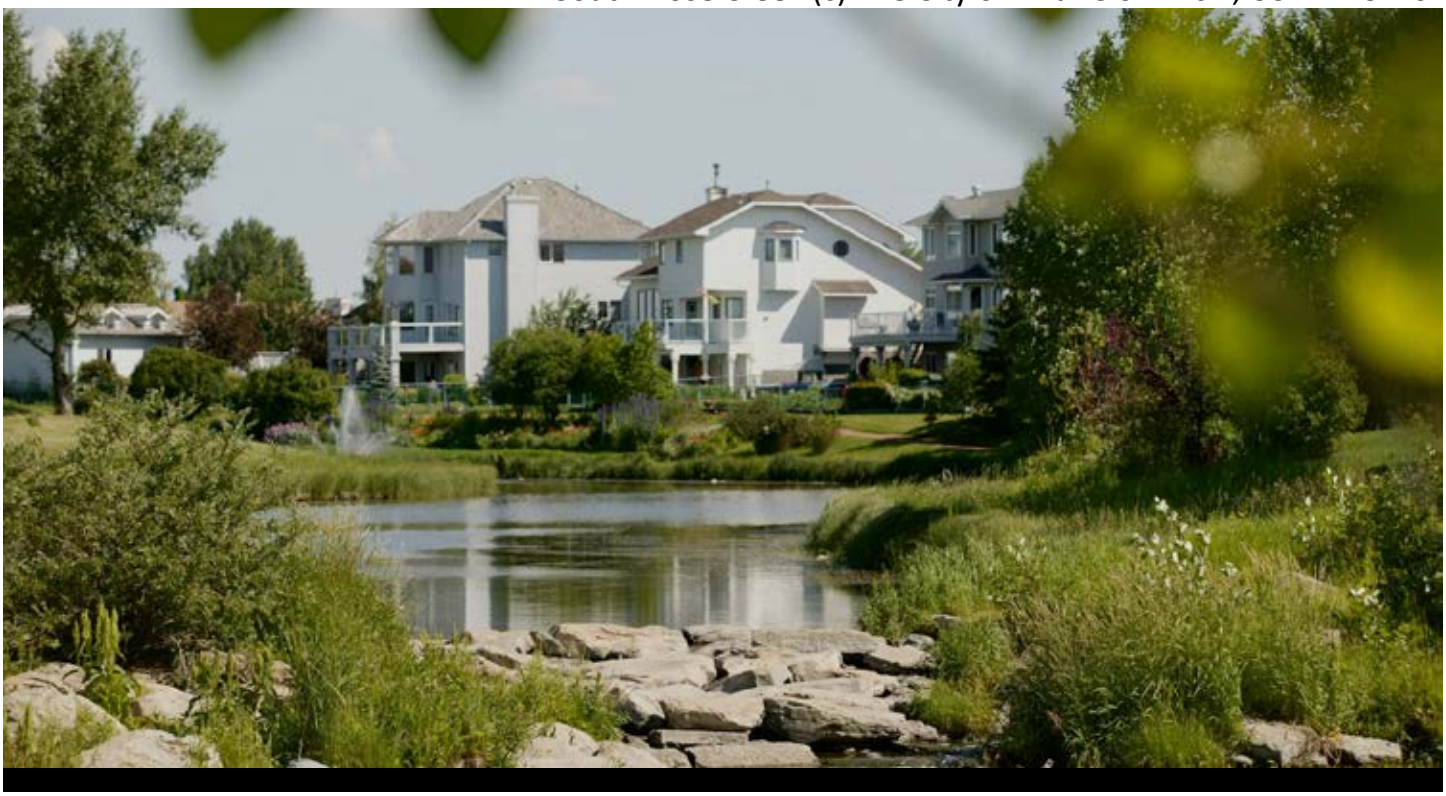
A new Municipal Development Plan (MDP) was adopted in 2014, and aligns with many of the policy commitments established in the Calgary Metropolitan Plan. A municipal Sustainability Plan preceded the MDP. Revision to the Land-use Bylaw started in 2010, with the first draft published in 2013. Both plans explicitly reference Smart Growth. A background report to the draft Land-use Bylaw establishes six Smart Growth principles (City of Airdrie, 2012a):

- Preserve open space, natural resources and environment
- Create a range of housing opportunities
- Promote alternative transportation
- Promote economic development
- Promote livable communities
- Enhance quality of life

Under the current MDP and incoming land-use bylaw, new residential developments will require a Community Area Structure Plan. This will ensure that the City meets a target of 8 residential units per hectare of development and include a mix of housing types, including live-work units, secondary suites, above-shop units, townhouses, apartments, and single-detached homes. The City outlines a variety of land-use districts, introducing Mixed-Use Districts in the updated OCP and land-use bylaw.

District designation allows the City to dictate design expectations for certain neighbourhoods, and to encourage good design through development incentives in others. A Transect Overlay Code – modelled after the SmartCode of Duany Plater-Zyberk & Company – applies to all Mixed-Use Districts. This code pays special attention to human scale, walking environment,

South Nose Creek (c) The City of Airdrie on Flickr, CC BY-NC 2.0



and neighbourhood character (City of Airdrie, 2013).

New development is focused around existing commercial centres, and away from environmentally sensitive areas in the case of greenfield development. Context-sensitive infill and redevelopment is expected to fulfil some growth requirements, though the City does not expect to meet the CRP target of accommodating 25% of population growth through intensification. To accommodate growth, the City annexed 12,600 acres of rural land in 2012. Future growth areas are included in the current MDP, with appropriate neighbourhood designations and planning controls established.

Growth Management

Before 2012, Airdrie had a municipal boundary enclosing an 8,179 hectare area. Due to the high growth rate of the city and projected development needs, the City successfully annexed a significant portion of land surrounding the existing urban area, bringing the total potential urban area to 20,819 hectares. Land use categories and district designations are assigned to these future growth areas, enclosed by the anticipated urban growth boundary. Approximately 2530 hectares of the annexed land is designated rural/agricultural and is located outside of the anticipated urban growth boundary. The City states that no new annexation is to occur within the 90,000 population horizon. Land beyond the municipal boundary belongs to and is managed by either the City of Calgary to the south, or to Rocky View County.

Summary

The City of Airdrie is committed to using Smart Growth principles to guide further growth of the urban area. It aims to be a leader in sustainability among Canadian municipalities. To this end, it has adopted a sustainability plan to add context to the provincially-required community plan. A variety of policies and guides support Airdrie's Smart Growth approach to growth. However, the City does not plan to meet the development and density requirements established in the metropolitan plan. This is troubling, as the development occurring during this high-growth period will set the tone for future growth of the city.

Documents

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City of Airdrie. (2012a). Airdrie Land Use Bylaw Review Phase 1: Background Report. Airdrie: Department of Planning & Development.

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City of Airdrie. (2013). Airdrie Land Use Bylaw (Consultation Draft). Airdrie: Department of Planning & Development.

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CRP. (2014). Calgary Regional Plan. Calgary: Calgary Regional Partnership.

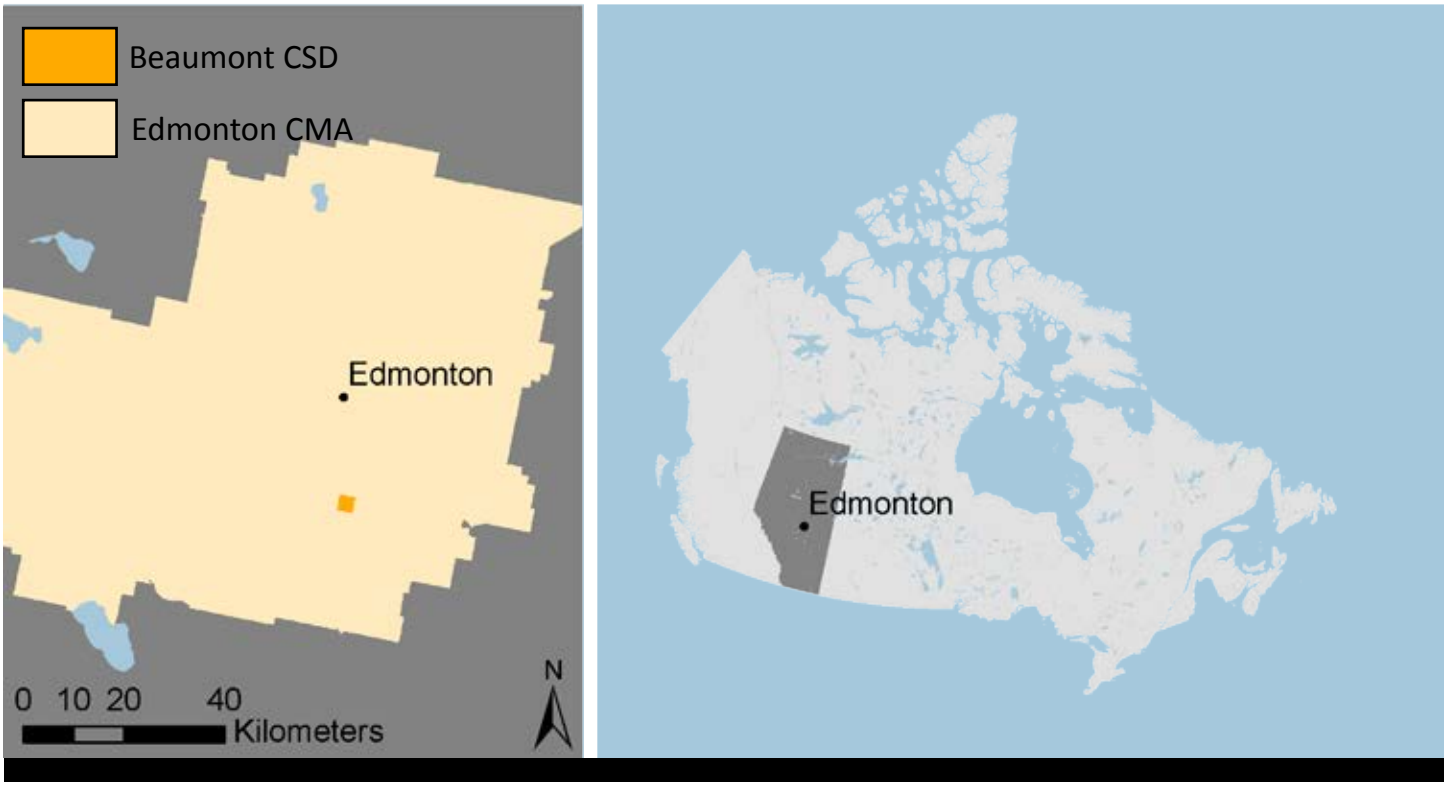
Beaumont AB

Beaumont is a town in Leduc county and part of the Alberta Capital Region. The Edmonton city core is only 23 kilometres north of the town, which is also well connected to both the city and regional transportation systems: Edmonton International Airport and the Queen Elizabeth Highway to Calgary are within a few minutes' drive. Because of this ease of access and rural setting, the town is a bedroom community of Edmonton, with approximately half of the workforce employed in the city.

Growth in Beaumont is rapid, with an annual growth rate averaging 5.2% since 1991. The town was listed as one of the fastest growing municipalities in Canada in both 2006 and 2011. The official population of the town is 13,284, though the municipal census enumerated 15,828 people in 2014. The population increase has consistently outpaced projections, leading to significant growth management challenges.

Other concerns in the town include a lack of pedestrian infrastructure, poor transit connections to Edmonton, a need for diverse housing stock and rental units, and a perceived lack of commitment to growth plans. Residents generally support the idea that Beaumont needs to move away from a conventional subdivision growth pattern to better reflect a French village character, particularly in the downtown area (Town of Beaumont, 2014c). According to statistics from 2011, 86% of dwellings in the town are single-detached. The gross density is 4.3 residential units per hectare. The Town claims that the unit density rose from 17.7 units per hectare in 2010 to 20.1 units per hectare in 2013, with a regional goal of 25 units per hectare in residential areas (Town of Beaumont,

Figure 9 - Beaumont context map



"A vibrant community that builds on the abundance of personal and collective potential; that is enhanced by its French heritage; and that welcomes a wide diversity of citizens who make Beaumont their choice to live, work, play and invest." (Town of Beaumont, vision statement)

2014a). The report does not state whether this a gross or net density measurement.

Planning for Growth

Population growth in Beaumont is consistently high, outpacing municipal projections. Land annexation in 1999 was planned to accommodate necessary growth for 30 to 40 years, but the Town of Beaumont is requesting annexation of an additional 1,344 hectares from Leduc County. As the town is currently 1050 hectares, this represents an expansion of almost 130%, which the Town believes will satisfy growth for up to 50 years. The Capital Region Board projections anticipate growth to 21,577 by 2044, an increase of 162% from the 2011 population.

Growth in Beaumont is guided by policy documents at the local and regional level. The documents included in this analysis are the Growing Forward Capital Region Growth Plan and an addendum, the Municipal Development Plan, the municipal Strategic Plan, a report card on the Strategic Plan goals and objectives, the Beaumont Growth Study, French Village Design Guidelines, and the Central Area Redevelopment Plan.

Regional Planning

In 2008, the Alberta government established the Capital Region Board (CRB), an organization of 25 member municipalities and counties. Membership on the board is mandatory

Beaumont (c) Communities in Bloom 2014

for all jurisdictions within the boundaries of the Capital Region. The CRB boundaries correspond with the Edmonton CMA statistical area defined by Statistics Canada.

The CRB published its first regional growth plan, entitled Growing Forward, in 2009. It includes sections on land use, public transit, GIS, and housing. The land use section lists six principles that echo Smart Growth, while the housing section explicitly refers to Smart Growth. The CRB concludes the plan with recommendations to its member municipalities as well as the provincial government. It is the responsibility of these bodies to align their planning activities with the goals and principles of the CRB (CRB, 2009b).

The Town of Beaumont has not updated their Municipal Development Plan since the publication of the CRB growth plan, so alignment has not yet occurred. This is due to the pending land annexation request. Currently the lands contained in the annexation request are subject to a planning agreement between the Town and Leduc County, referred to as the intermunicipal fringe area.

Local Planning

The Town of Beaumont has a Municipal Development Plan (MDP) and Strategic Plan to inform development decisions. The MDP was last amended in 2009, though a Central Area Redevelopment Plan (CARP) particular to the downtown was published in 2014. The CARP stresses a high-quality, dense urban form reminiscent of a French village (Town of Beaumont, 2014c).

The Strategic Plan identifies six key focus areas for the municipal government. Priorities of the Smart Growth focus area include an increase in non-residential growth and aligning planning activities to Smart Growth principles. Several measures of success are included in the plan. A report card looking at a period from 2010 to 2013 evaluates the Town's achievements based on these measures (Town of Beaumont, 2014a). Several measures are of note:

- Commercial storefronts increased from 109 to 134
- No new non-residential lands were developed
- No new development occurred in the area included in the CARP

Place Chaleureuse (c) ICM Realty Group

- Unit density rose from 17.7 units/ha to 20.1 units/ha
- Single-family home construction dominated new housing starts, with 782 new units built compared to 183 semi-detached or townhouse units

Policy initiatives to improve the mixity of development downtown, the variety of housing types available, and density of residential areas are either recently adopted or in the planning process. These include new policies related to density bonuses within the CARP, allowance of residential units above street-level commercial uses, live-work units in single-family neighbourhoods, and tax holidays for redevelopment in the CARP (Town of Beaumont, 2014c).

Growth Management

An annexation agreement with Leduc County in 1999 stated that the Town of Beaumont would not request further annexations before reaching a population of 25,000. However, the Town recently initiated a request for 1,344 hectares of land outside the current municipal boundaries. The Town believes this is a necessary move due to the high rate of growth in Beaumont, unanticipated at the time of the agreement (ISL Engineering and Land Services, 2014). Total build-out of the existing land area is expected to occur within 11 years under the medium growth scenario. Development staging in 4-year intervals for the proposed annexation were prepared as part of the request, and if managed properly will not see build-out until 2063.

Summary

The Town of Beaumont has high aspirations for the continued growth and development of the town. Annexation of a significant portion of land will continue to drive growth outward. The Town does wish to direct some growth to the struggling downtown core, and to this end has adopted a master plan for the area. Updates to the Municipal Growth Plan are likely to continue to incorporate Smart Growth principles, since both the regional plan and the municipal strategic plan reference Smart Growth directly. At present, it is unclear if the Smart Growth objectives set in the Strategic Plan have had impacts on growth and development patterns.

Documents

Capital Region Board. (2009). Growing Forward: The Capital Region Growth Plan. Edmonton: CRB.

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Town of Beaumont. (2014b). 2014-2019 Strategic Plan. Beaumont: Town of Beaumont.

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Blackfalds AB

Alberta's two largest cities, Calgary and Edmonton, sit on either end of a major transportation corridor vital to the province's oil and gas industry. Blackfalds in located along this highway, 130 kilometres from Edmonton and 150 kilometres from Calgary. Red Deer – a city of nearly 100,000 – is 12 kilometres south. Blackfalds has grown at a high rate due to the desirability of locating commerce and industry in Red Deer, making it a bedroom community of the larger city. Only 10% of the workforce is employed in Blackfalds: 56% work within the census division, which includes Red Deer and Lacombe County, and 22% have no fixed work address. The population is young, with growth fuelled by in-migration of families. Blackfalds is seen attractive due to the small-town atmosphere and easy access to the jobs and services of Red Deer.

The suburban character of Blackfalds is evident in its dwelling statistics. Single-detached dwellings accounted for 73% of the 2011 housing stock, while row houses and semi-detached dwellings accounted for 12% and 5.8%, respectively. The gross density of the town is 1.5 units per hectare. While land use ratios are not available, the Town states that 82% of their tax revenue comes from residential property assessment (Town of Blackfalds, 2014).

Planning for Growth

Blackfalds had a population of 6,300 as of the 2011 National Census, an increase of 36.4% since 2006. The previous five-year growth rate was 48.2%. A municipal census in 2014 enumerated 7,858 residents, representing an 8% annual growth rate. Population growth in Blackfalds has outpaced both the county

Figure 10 - Blackfalds context map

"Blackfalds is an active family community full of pride, commitment and opportunities reflecting an economically sustainable, self-sufficient, and safe living environment, with a balanced range of municipal services provided through innovation and proactive community partnerships" (Town of Blackfalds, vision statement)

and the province since 1996, when the town's growth accelerated.

Planning activities by the Town assume a population of 30,000 by 2036. This is based on a moderate growth projection to 30,564 residents in the next thirty years, or 38,040 residents if the high growth pattern continues. To satisfy the land needs of the growing population, the Town annexed 783 developable hectares (983 gross hectares) from Lacombe County in 2009. An increase to the maximum allowable residential unit density will ensure these lands accommodate a population of 31,800, slightly above the thirty-year growth horizon (Stantec Consulting Ltd., 2008).

Policy documents affecting Blackfalds include a joint Rural Fringe Area Structure Plan with Lacombe County, an Intermunicipal Development Plan, a Municipal Development Plan, a municipal Sustainability Plan, and a master plan for the lands to be annexed.

Regional Planning

The Town of Blackfalds has had a planning relationship with Lacombe County since 1988, with the most recent Intermunicipal Development Plan adopted in 2013. This plan identifies a long-term residential growth area adjacent to existing Blackfalds neighbourhoods, and a joint economic area for industrial growth outside the town boundary (Town of Blackfalds & Lacombe County, 2013). The County also has a Rural Fringe Area Structure Plan to prevent leapfrog development, so that roads and services can be constructed in a cost efficient, contiguous manner (Armin A. Preiksaitis & Associates Ltd., 2008).

Blackfalds (c) Town of Blackfalds

No regional body exists to provide a larger land-use framework, and Blackfalds is outside the Red Deer census agglomeration. The provincial government has established the spatial boundaries of a potential Red Deer Planning Region, though an advisory council has not been appointed.

Local Planning

Population growth in Blackfalds has exceeded that of the surrounding county, straining the ability of the Town to provide municipal infrastructure and services. Economic sustainability is thus one of the key concerns of the municipality. The Town published a Municipal Sustainability Plan in 2014 based on five pillars of community sustainability – governance, social, economic, environmental, and cultural – with measures and outcomes for each goal (Town of Blackfalds, 2014). The municipal development plan is currently under review, so it can be expected than these goals will reappear in planning and development policy.

The first important goal of the Town is to decrease the ratio of residential to non-residential uses. In 2014, Town tax income came from an 82:18 split, whereas the new target ratio is 70:30. The Town expects increases to the non-residential tax base through growth in clean industry, reduced barriers to home-based businesses, and revitalization of the downtown retail sector.

The Town also aims to increase the efficiency of infrastructure and services, which would occur through infill of vacant lands and controlled outward growth. Many other planning directions are advocated in the Sustainability Plan. Infill is promoted in the downtown core, including residential additions to existing commercial buildings. The Town suggests that new residential developments be required to include innovate housing forms that reduce environmental footprints and ensure target unit densities of 10-17 units per hectare are reached. Furthermore, the Town is considering placing the cost of providing services on the

Blackfalds (c) Google Maps 2015

developer, as well as requiring that developers "oversize" these services so that future growth can be accommodated.

Growth Management

In 2009 the Town expanded its municipal boundaries through annexation of land from Lacombe County. These lands are included in an Intermunicipal Development Plan, and the adjacent land remaining in Lacombe County's territory is subject to the Rural Fringe Area Structure Plan. The municipalities are committed to working together in fostering economic growth of the region.

At the time of annexation, the maximum unity density in Blackfalds was 12.5 units per hectare. Under this density assumption, short term growth up to 11,600 residents could be accommodated within the previous town limits, with the annexed land allowing population growth to 31,800. Since then, the maximum has increased, setting an expected density of 10-17 units per hectare (Town of Blackfalds, 2009). This will allow for potentially larger growth in both population and industrial activity.

Summary

With convenient access to Red Deer and a small town setting, Blackfalds has grown considerably thanks to in-migration of young families. Population growth has accelerated since 1996, which has allowed the Town to continually monitor and adjust its growth strategies over the last two decades. High growth is expected to continue until 2036 before slowing. The municipality acknowledges that increasing industrial and commercial activities in the town is crucial to long-term growth. To this end it has developed several economic development plans, both in-house and in cooperation with Lacombe County. No regional body exists to coordinate growth planning, but the groundwork has been laid by the province should such a body become necessary.

Documents

Armin A. Preiksaitis & Associates Ltd. (2008). Lacombe / Blackfalds Rural Fringe Area Structure Plan: Lacombe County.

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Chestermere AB

Formerly a "summer village" of lakefront cabins, Chestermere was incorporated as a town in 1993 with a population of just over 1,000. Since then, the high growth rate of the Calgary region has brought the population up to 14,824 officially, and 17,203 according to the 2014 municipal census. Passing the 10,000 threshold allowed the municipality to apply for city status, which it was granted in January 2015. It was the fastest growing municipality in Alberta between 2006 and 2011.

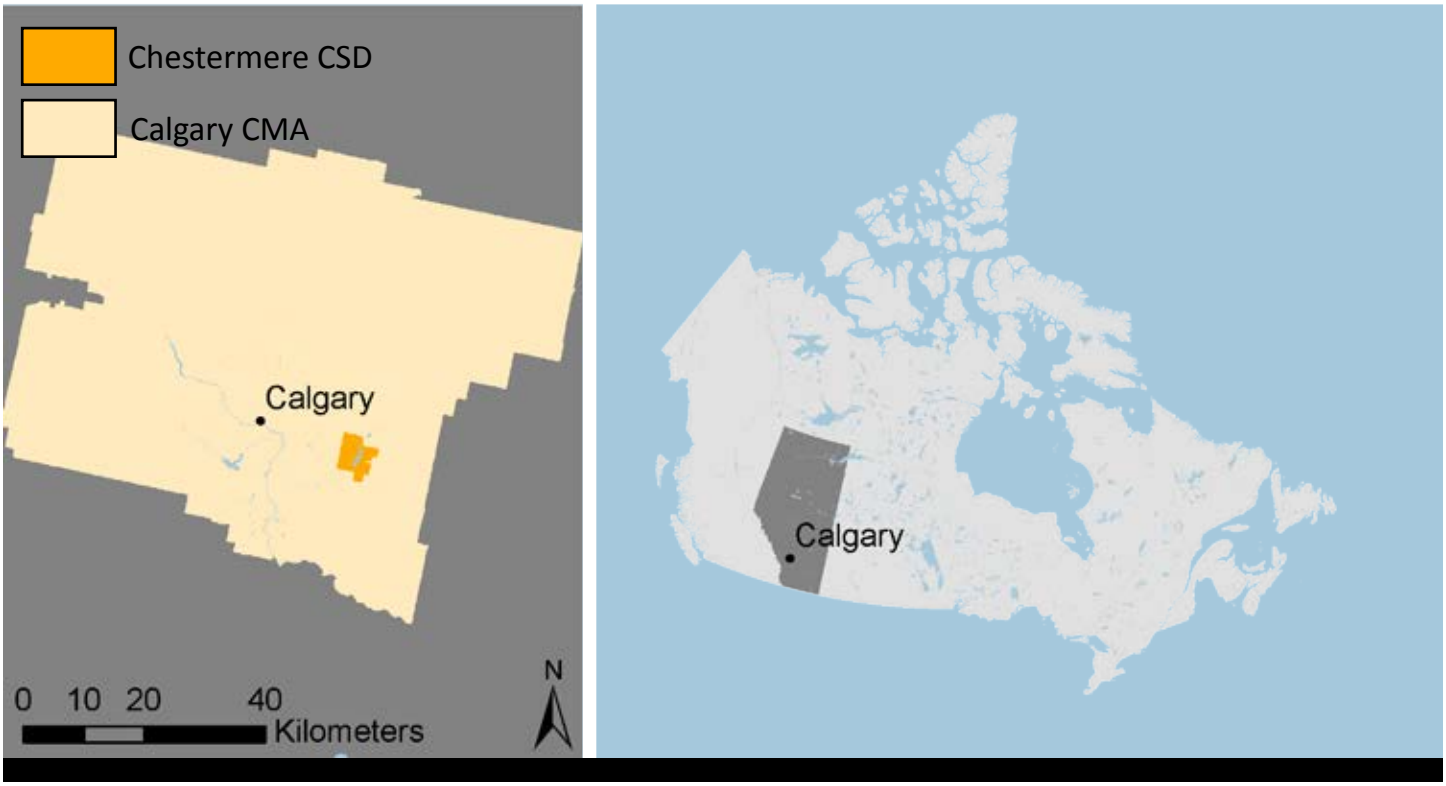
The city is within the Calgary metropolitan statistical area, and a member of the Calgary Regional Partnership (CRP). It is located 17 kilometres from the urban core of Calgary, and has thus become a popular location for families to raise their children; half of the city households include children who live at home.

Chestermere maintains a small-town character through limiting the height and density of new developments. It is typical of suburban municipalities in the region, having a very high proportion of single-detached dwellings. In 2011, 84% of the housing stock was in single-detached dwellings, though one goal of the current Municipal Development Plan (MDP) is to see that proportion shrink to 60% (City of Chestermere, 2009). According to the 2011 community profile, Chestermere has a gross density of 1.5 units per hectare. It is worth noting, however, that the gross area includes Chestermere Lake and recently annexed agricultural land.

Planning for Growth

Three tiers of plans affect growth management in Chestermere: local, intermunicipal,

Figure 11 - Chestermere context map



"A distinctive recreational lake community promoting a safe, family-oriented, sustainable environment" (City of Chestermere, vision statement)

and metropolitan. These policy documents include the Calgary Metropolitan Plan, two Intermunicipal Development Plans with Rocky View County, a Municipal Development Plan, a Strategic Plan, a Transportation Plan, and a municipal growth study.

The large volume of plans affecting Chestermere may be explained by the intense growth the municipality has experienced in the past two decades. The City of Chestermere has worked within a high-growth scenario since incorporation of the town in 1993 – the five-year growth rate from 1991 to 1996 was 106%, 95.8% from 1996 to 2001, and 148% from 2001 and 2006. Growth has since slowed to a rate of 49.4% from 2006 to 2011.

Annexation of 555 hectares from Rocky View County in 1995 was planned to accommodate population growth to 9,000 in 2025 (City of Chestermere & Brown and Associates Planning Group, 2007). However, that population horizon was reached by 2006, prompting the City to request additional lands for annexation. In 2009, the City acquired 2556 hectares in order to satisfy long-term growth of the municipality for the next thirty years. These lands are predominantly agricultural, but include some existing acreage subdivisions. Plans for the development of these new lands are supported by inter-municipal planning arrangements as well as municipal development and area structure plans.

Current concerns among residents include maintaining autonomy from Calgary, retaining a small-town, family-friendly atmosphere, increasing the amount of commercial activity in the city, prioritizing sustainability and

Chestermere (c) CRP 2012

environmental conservation measures, and development that reflects the status-quo (City of Chestermere, 2009). Addressing these concerns will require regional cooperation, as Chestermere is potential in danger of being surrounded by the City of Calgary. Recent land transfers from Rocky View County to the City of Calgary have made the municipal boundaries of the two cities contiguous.

Regional Planning

The City of Chestermere is involved in several cooperative planning programs with both adjacent municipalities and others in the region. An Intermunicipal Development Plan between the City and Rocky View County applies to lands at the borders of these two municipalities, and identifies potential land for annexation in the long term. The City of Chestermere will preserve the rural character of this area, and in return the County will guard against leap-frog development (Rocky View County & City of Chestermere, 2014).

Membership in the Calgary Regional Partnership places additional policy requirements on the City, though total alignment between these policies has not occurred. For example, the CRP sets a minimum density of 10 UPA (units per acre), but Area Structure Plans for new development in Chestermere target the existing norm in the city: 5-7 UPA. The City is committed to other growth management strategies included in the metropolitan plan, such as walkable mixed-use village centres, contiguous growth, and establishment of growth areas (City of Chestermere, 2009; CRP, 2014).

Local Planning

A new Strategic Plan for the City of Chestermere prioritizes cooperation with regional partners, increasing the non-residential tax base, and maintaining recreational activities in the city (City of Chestermere, 2014). The existing Municipal Development Plan reflects these aims, and adds protection of the existing residential density. Townhouses and low-rise apartments of no more than 3-storeys are permitted in village and town centres, which are the only mixed-use areas in the land-use bylaw. Outside of these areas, residential form is to reflect a rural lifestyle. Infill of existing urban areas is only possible through an Area Structure Plan, which must be produced in consultation with area land owners. That being said, the City recognizes that having flexible land-use designations within the mixed-use zones will allow for future infill and intensification of nodes.

Frosty Trees

The Municipal Development Plan places high priority on mobility within Chestermere. A network of pedestrian and cycling paths connects residential areas, parks, and employment areas. This network is to be maintained and expanded on in future growth areas. The City hopes that this network will help attract employers to the City, which currently relies heavily on its residential tax base. In 2008 there were less than 900 jobs in the City (or 0.07 jobs per resident), and only 13% of the population worked in Chestermere as of 2011 (City of Chestermere & Bunt and Associates

Engineering (Alberta) Ltd., 2010). Increasing the number of available jobs is important in achieving the self-sufficiency the City desires.

Growth Management

Build-out to the former City limits is expected to occur within 5 to 10 years and provide homes for 20,000 people. The newly annexed lands will house up to 80,000 people, with build-out expected after 40 years. The City requires all new growth to be accompanied by an Area Structure Plan, which allows the City some control over the form that development takes. Agreements with the surrounding County ensure that growth will not leap-frog over the municipal boundary, but remain contiguous and incremental.

Summary

The City of Chestermere directs growth in a manner that respects current lifestyles, development patterns, and architectural forms. These preferences do not fully align with the goals and objectives of the Calgary Regional Partnership, despite the City of Chestermere's active involvement in inter-municipal planning activities. While the City is pursuing several Smart Growth goals related to protection of the environment, provision of active transportation infrastructure, and development of town centres, it is doing so at a much smaller scale than in larger cities in the region such as Airdrie or Okotoks. The "made in Chestermere" approach to growth management is sensitive to the needs and concerns of current residents, but does not vary significantly from the existing suburban form growth has taken in the past.

Documents

City of Chestermere, & Bunt and Associates Engineering (Alberta) Ltd. (2010). Transportation Master Plan Update (2009) Final Report. Chestermere: City of Chestermere.

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Rocky View County. (2004). Calgary-Chestermere Corridor Area Structure Plan. (Bylaw No. C-5980-2004). MD of Rocky View.

Rocky View County, & City of Chestermere. (2014). Intermunicipal Development Plan. (Draft). MD of Rocky View and City of Chestermere.

Leduc AB

As part of the rapidly growing Alberta Capital Region, Leduc is the ninth fastest growing municipality in Canada. This growth is largely motivated by the employment and GDP gains of the region, which are among the highest in North America. Leduc is located adjacent to the Edmonton International Airport, which is undergoing considerable expansion as part of the Port Alberta project, and the Nisqu industrial park. Proximity to these major employment areas mean that Leduc is not a bedroom community. Rather, 70% of the working population is employed within Leduc or the adjacent employment centres, while only 23% commute to Edmonton. Workplace proximity is an enduring priority of the City.

Planning for Growth

Leduc experienced low growth from 1995 to 2005, when annual population growth was less than one percent. This changed in the last decade, with annual growth climbing to almost 8% as of 2011. The City of Leduc expects this high growth rate to continue until at least 2016, at which point they forecast a controlled descent to a more moderate growth rate of 3-5% per year through 2035. This is a higher growth forecast than the Capital Region Board has projected: 1-3% over the same period.

Planning activities by the City of Leduc are often done in collaboration with Leduc County, and a metropolitan plan is also in force. The policy documents affecting Leduc include the Capital Region Growth Plan and an addendum, three Intermunicipal Plans and studies, a Municipal Development Plan, and an Area Structure Plan for recently annexed lands.

Figure 12 - Leduc context map

"In 2035, Leduc will be a vibrant community where growth is balanced and sustainable" (City of Leduc, vision statement)

The City and Leduc County share many priorities, such as the continued economic development of the area, explaining the number of intermunicipal planning activities. Population projections for both the city and county are based on employment growth projections, demonstrating a commitment to remaining regional employment centres. To facilitate its own growth, the City of Leduc annexed 526 hectares of land from Leduc County in 2014. The City has planned for these lands to satisfy employment and population growth over the next 30 years. The City estimates a population horizon of between 47,000 and 54,000 by 2045.

Regional Planning

The City of Leduc participated in the creation of the Capital Region Growth Plan, and is committed to meeting many of the planning goals it contains. The City also works closely with Leduc County, which surrounds it. This has included an intermunicipal development plan and a joint growth study, which establish the growth priorities of the area. Being located adjacent to the Edmonton International Airport, the City has also liaised with the Edmonton Airport Authority to minimize impacts of airport expansion, assure local employment growth, and share on infrastructural costs.

Planning activities with Leduc County are extensive, and represent an unusual relationship between municipalities. The joint growth study is unique in Canada, and establishes Smart Growth as a guiding principle. The two municipalities have committed to focusing development in priority growth areas, away from creeks and high-quality agricultural land. Compact, contiguous development is emphasized, with

the County protecting against development leapfrogging across open land. New residential development is to meet regional density targets – 25-30 units per hectare – and maintain proximity to employment centres. Mixed-use town centres will be higher density nodes to facilitate transit infrastructure, provide local services, and increase housing mix.

Based on the close working experience between the City of Leduc and Leduc County, the municipalities have expressed a long-term desire to explore alternative forms of government, such as amalgamation or Special Municipality status.

Local Planning

The recent Municipal Development Plan is aligned with the goals and targets of the region, with an emphasis on maintaining existing local employment levels. All developed land within Leduc is subject to Area Structure Plans, which are also required for any new development in the municipality. A Downtown Master Plan promotes intensification and revitalization of this area, emphasizing a mix of uses and variety of residential unit types.

New development in Leduc requires an ASP, and is subject to the density targets established by the Capital Region Board. The target of 25-30 units per hectare are to be met using a variety of low, medium, and high density housing types, of which none may dominate the neighbourhood. That is to say, no more than 50% of housing units in a single ASP may be of the same type. This is to allow for older populations to age in place, young families to find housing that meets their needs, and a variety of income groups to live and work in Leduc.

Contrary to some other Albertan municipalities, the City of Leduc recognizes that infill and intensification of existing urban areas is necessary, and the densification should not only occur in new subdivisions. The City places high value on access to local employment, reducing car dependence, and building capacity for

Leduc residential neighbourhood (c) City of Leduc

transit. Without adequate density, these goals are not possible.

Growth Management

The City collects off-site development fees as part of the policies articulated in the Municipal Development Plan. Developers are required to pay for the total cost of development, including the provision of water, sewage, storm water management, roads, paths, and franchise utilities. By passing on these costs to developers, compact and dense development becomes cost effective. All subdivision that creates more than three land parcels requires an area structure plan as well, which allows the City some control over the form growth takes.

Recent annexation by the City is expected to satisfy growth for the next 30 years, based on growth projections and density targets. With density of 25-30 units per hectare, the City estimates the new lands will allow the city to house 54,000 people at build-out, more than double the current population.

Summary

The City of Leduc is committed to retaining an employment base for its residents throughout its development. This has led the City to work with Leduc County frequently on growth management, as the two share many priorities. Access to employment remains a constant concern, making land use and transportation planning an important aspect of both municipalities' long-term planning activities.

Because of the close link between employment growth and population growth in Leduc, growth estimates by the City appear much more conservative than in other Albertan metropolitan municipalities. Whether recent high-growth trends in Leduc are a temporary spike related to employment and GDP gains by the Edmonton region or a lasting phenomenon remains to be seen.

Documents

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Okotoks AB

The town of Okotoks is a steadily growing municipality south of Calgary. It is both a regional centre for Foothills County and a bedroom community of Calgary. The distance between Okotoks and the city centre is approximately 40 kilometres, with the overwhelming majority of commuters travelling to work by car. Employment in the Calgary region is 45%, while 35% of the workforce remains in Okotoks. Statistics Canada identifies Okotoks as a census agglomeration, meaning the surrounding areas exhibit a high degree of integration through commuting flows. For this reason, Okotoks is not included in the Calgary census metropolitan area.

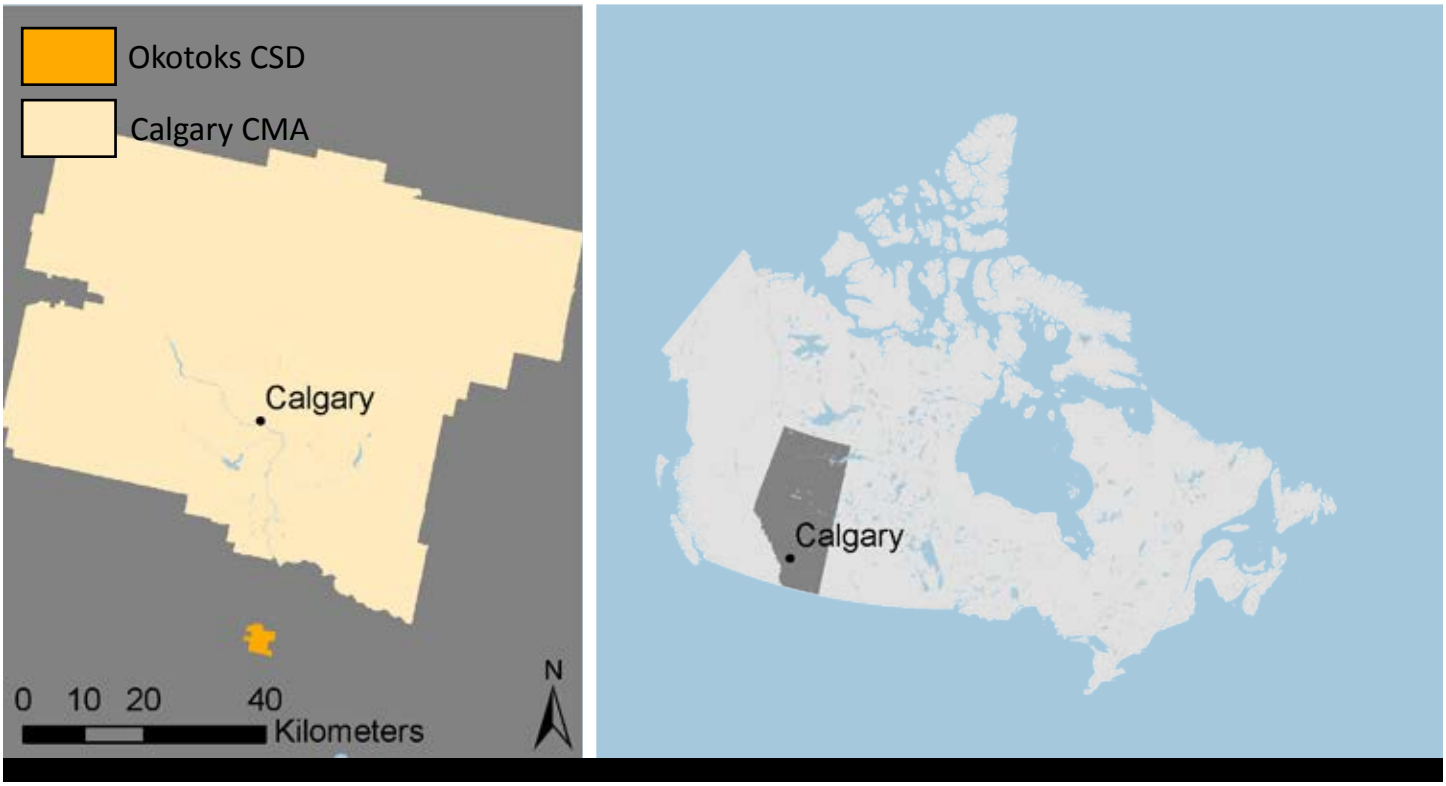
The town is predominantly residential, with the bulk of those units comprised of single-detached dwellings. Data from Statistics Canada in 2012 and a growth study completed by the Town of Okotoks in 2014 reveal that 77% of homes in Okotoks are single-detached, accounting for 623 hectares. The municipal area covers 1924 hectares. Okotoks has a gross unit density of 4.52 units per hectare according to the 2011 National Census.

Planning for Growth

Growth management is subject to several layers of planning policy in Okotoks and the region. These policy documents include the Calgary Metropolitan Plan, an Intermunicipal Development Plan with Foothills County, a Municipal Development Plan, and a growth study.

Okotoks has made sustainability and sustainable development a priority. In 1998, the Town made a decision to cap population at 25,000. At the time, 8,528 people lived in Okotoks. The number 25,000 was chosen based on the

Figure 13 - Okotoks context map



"In the year 2010, the City of Okotoks, in the pristine Sheep River valley, will be an environmentally sensitive and responsible community of people who enjoy a quality of life and a shared vision of prosperity and harmony" (City of Okotoks, MDP).

capacity of the Sheep River basin to supply water to the town. The cap was established in a Municipal Development Plan in 1998, which was raised to 30,000 by later amendments and finally lifted in 2012 due to increased development pressures in the Calgary metropolitan region (Town of Okotoks, 1998). The town population was 24,511 according to the 2011 Census, and stands at 27,311 according to the 2014 municipal census.

High growth has characterized Okotoks for several decades: the town has been among the top 20 fastest growing municipalities in Canada since 1991. Recent five-year growth rates were 42.9% in 2011, 46.7% in 2006, and 36.8% in 2001. Based on a growth study by the Town using population projections by the Calgary Regional Partnership, Okotoks stands to grow to a population of 82,152 by 2073. As the largest town in Alberta, Okotoks is expected to have a 4.4% share of the Calgary metropolitan region's population growth (Town of Okotoks, 2014).

One major obstacle to growth is the existing infrastructure in Okotoks. Due to the Town planning infrastructure to reach a build-out target of 25,000, intensification of existing built-up areas is only planned to account for 10% of the town's population growth (Town of Okotoks, 2014). However, the Calgary Metropolitan Plan sets a target of 25% of new development occurring through intensification (CRP, 2014).

Okotoks (c) CRP 2012

Regional Planning

The Town of Okotoks engages in two forms of regional planning. Since 1998 it has had an Intermunicipal Development Plan (IDP) with the Municipal District of Foothills, which concerns lands on either side of the municipal boundary. When drafted, the IDP set a population cap of 25,000 within Okotoks' urban boundary with no identified growth areas (Town of Okotoks & Municipal District of Foothills, 1998). However, the Plan did anticipate annexation of some or all of the IDP area if growth trends continued. The Town has since tendered a request for phased annexation of some of the IDP lands: 543 hectares for a growth period until 2043, and 399 hectares for growth to 2073 (Town of Okotoks, 2014). The Town supports an updated IDP upon transfer of the lands.

At the regional level, the Town of Okotoks participates as a member municipality of the Calgary Regional Partnership (CRP). This organization conducts concerted planning activities across the Calgary region. Regional infrastructure, transportation, population and employment growth, and environmental protection are some of the issues considered in the Calgary Metropolitan Plan (CRP, 2014). The metropolitan plan establishes priority growth areas, sets targets for intensification, and assigns the expected share of population growth each municipality will receive up to 2073. At the core of the plan is ensuring a sustainable balance between the protection of and access to water by the regional population, which is expected to grow to three-million over the 60-year planning period.

Local Planning

Sustainability has been at the core of the town's vision since 1998, which is reflected in the Municipal Development Plan. The current MDP was adopted in 1998, and was last amended in 2012. The MDP identifies several policies and targets related to different aspects of sustainability. For example, it is council policy to refuse development that does not conform to sustainable design principles. A non-exhaustive list of these principles included in the MDP are "emphasis on high quality architecture, nodal

A view of Okotoks (c) B Crawford, CC BY-NC 3.0

rather than strip commercial development, attractive and limited signage, creation of pedestrian linkages, mixed land uses in new neighbourhoods, broader range of housing mix, [and] quality landscaping" (Town of Okotoks, 1998, p. 17).

The Town also wishes to increase the number of non-residential uses present in Okotoks. The aim is not only to increase the quality of life and local employment opportunities of residents, but also increase the available tax base. The MDP sets an expectation that 22% of municipal tax revenue will come from non-residential uses at build-out of the current urban boundary.

Growth Management

The Town explicitly states in the MDP that it aims to manage growth, not attract it. Planning prior to 2012 considered build-out to the urban boundary accommodating no more than 25,000 residents. The Town has since shifted from a finite to a continued growth model, based on growth trends and the projections made by the CRP. A municipal growth study published in 2014 states that further growth would have to be accompanied by the construction of a water reservoir, which would receive treated water from the City of Calgary. To support its continued growth and maintain a strong stance on sustainable development, Okotoks is currently drafting a Sustainable Community Plan. It can be expected that this new plan will include Smart Growth policies that make a strong link between the environment and urban development based on both the history of Okotoks' leadership and the trajectory of the CRP.

Summary

Okotoks is a visionary town that seeks to lead by example. To this end it has incorporated a variety of sustainability goals, targets, and policies in its planning documents since 1998, when it was a small town of just over 8,500. Now at over 27,000, it has surpassed the population cap established in 1998 and is looking to manage further growth in a sustainable manner. Directives from the Calgary Regional Partnership conflict with the Town's targets, and it is unclear how the Town will align its planning documents in a manner that respect both the Calgary Municipal Plan and the priorities of the Town. Okotoks has had to cede its growth cap, and is expected to accommodate a significantly larger population than it intended to. A new Sustainable Community Plan, currently being prepared, will guide growth in Okotoks for the next sixty years.

Documents

CRP. (2014). Calgary Metropolitan Plan. Calgary: Calgary Regional Partnership.

Town of Okotoks. (1998). Municipal Development Plan. (Bylaw No. 50-98). Okotoks: Planning and Development.

Town of Okotoks. (2014). Growth Study and Financial Assessment. Okotoks: Planning and Development.

Town of Okotoks, & Municipal District of Foothills. (1998). Okotoks/Foothills Inter-municipal Development Plan. (Bylaw No. 51-98). Okotoks: Planning and Development.

Martensville SK

Martensville is one of the most recent municipalities to be given city status in Saskatchewan, and has been impacted by the high population growth rate of the Saskatoon region. It is typical of Canadian prairie communities in the metropolitan fringe; located astride a highway, the population is predominantly young families who work in Saskatoon but raise their children in the countryside. The city centre of Saskatoon is only 17 kilometres south. The nearest city, Warman, is 6 kilometres to the east. Seventy percent of the workforce commutes within the Saskatoon region, and local employment is 11%. Commuters travel almost exclusively by car, as there are no transit connections to surrounding cities.

The urban form of Martensville reflects small town prairie values and aesthetics. Over 80% of homes are single-detached, though the subdivision pattern is more typical of urban cores than the suburbs. Blocks are neatly arranged with a supporting laneway system. Gross unit density is 3.5 units per hectare. The black and laneway road system allows for logical extension of growth, which has worked to the benefit of Martensville in recent years. It was the fastest growing municipality in Saskatchewan over the 2006-2011 census period, and the second fastest in Canada. It registered a five-year population growth rate of 55% in 2011, and has nearly doubled its 2001 population to 7,716. This growth trend is expected to continue, as the CMAs in all three Prairie Provinces have displayed strong growth in recent years.

Figure 14 - Martensville context map

Planning for Growth

The City of Martensville is involved in the Saskatoon North Partnership for Growth (P4G), a regional cooperative of municipal governments. The P4G formed in 2014, and started planning activities in 2015. A regional master plan is expected in 2016 to address a doubling of the regional population to 500,000 in twenty years, and a population of one-million within sixty years (P4G, 2015b).

A new Official Community Plan is being written. The OCP prepared in 2008 identified a population horizon in excess 10,000 by 2028 (City of Martensville, 2008). A future growth area to the east of the city is identified in the OCP, and a development proposal for this area was completed in 2009. According to the City, the development plan for this area will be incorporated in the new Growth Master Plan. The City expects these new lands to house 15,000 new residents at a density of 10-12 units per gross hectare (AECOM, 2009). The P4G has not published population projections for each member municipality, so comment on the capacity of these new lands to accommodate growth is not possible.

Prior growth projections by the City were very conservative, perhaps due to the negative five-year growth rates of the province since 2001. Regardless, the City does include some Smart Growth principles in the current OCP, including creation of a strong town centre, increasing the number of local jobs, improving pedestrian connections within the city, and optimizing the use of existing infrastructure (City of Martensville, 2008). The City has a clear vision for Martensville, but will have to translate that vision from prairie town to prairie city.

Documents

AECOM. (2009). East Master Plan. Martensville: City of Martensville.

City of Martensville. (2008). Official Community Plan. (Bylaw No. 17-2008). Martensville: Planning and Regulations.

P4G. (2015). Annual Report. Saskatoon: Saskatoon North Partnership for Growth.

Martensville (c) City of Martensville 2015

Warman SK

The newest city in Saskatchewan, Warman is embedded in an agricultural landscape at the fringe of Saskatoon. The metropolitan core is approximately 21 kilometres south of Warman, and its nearest neighbour, Martensville, is six kilometres to the west. The prairie town atmosphere and distance to Saskatoon have made Warman an attractive place for young families to settle, driving the impressive growth of the city. In 2001, Warman was a town of 3,481 people. By 2011 the population had growth to 7,084 – an annual increase averaging 6% - allowing the municipality to apply for city status. Population growth was accompanied by both commercial and industrial growth. The City expects continued growth based on demographic trends and quality of life measures.

Warman's urban form is similar to other prairie towns and cities, strongly influenced by the historic block and laneway structure. A railway bisects the city, and a second forms its eastern boundary. The gross density is 2.9 units per hectare. These units are predominantly single-detached homes, which account for 78.7% of the housing stocks. Other dwelling types have made gains since 2006: semi-detached dwellings increased to 6.9% from 5.2%, and apartment dwellings from 3.3% to 7.7%.

Planning for Growth

The high level of population growth is predominantly among under-40 age cohorts. Families with children dominate the demographic profile, and the City claims 26% of its population is under the age of 15. The City therefore makes growth projections based on high rates of in-migration and natural increase. The City operates on a medium growth scenario, with

Figure 15 - Warman context map

"[To] Establish a development strategy which will serve as a framework for the community indicating areas where future development will occur to provide for the orderly and cost-effective development of the community within the financial capabilities of the City of Warman" (City of Warman, OCP).

a population horizon of 44,000 by 2034. This is based on an 8% annual growth rate (City of Warman, 2014). While higher than the historic average, the City notes that Saskatchewan is still experiencing a boom despite an economic recession in many other parts of Canada and the globe.

To satisfy population growth to 44,000, the City has requested land annexation from the Rural Municipality of Corman Park. Approximately 850 hectares will be required to accommodate the new population, including new infrastructure and employment areas. City estimates are based on 750 residents per 40 acre (16 hectare) development module, approximately 15 units per hectare. In 2020 the projection will be reassessed when updates to the OCP are made. Land-use and planning policies are contained in a draft form in the City's Official Community Plan and Land-use Bylaw. A metropolitan plan for Saskatoon is to be published in 2015.

Regional Planning

The City of Warman is one of the municipal partners in the Saskatoon North Partnership for Growth (P4G) regional planning effort. This group has established a vision based on the principles of partnership, efficiency, flexibility & resilience, sustainability, equity & inclusiveness, and opportunity (P4G, 2015b).

Warman (c) City of Warman 2015

There are obvious parallels to several Smart Growth principles, though the ideology is not mentioned explicitly. A regional growth plan is expected in 2016 (P4G, 2015a).

Growth studies within Warman and neighbouring municipalities have prompted a cooperative effort to study two highway corridors, No. 11 and No. 12, leading to Saskatoon. This partnership with the Saskatchewan Ministry of Highways, City of Martensville, and RM of Corman Park aims to address existing safety and capacity concerns while planning for future urban growth (Province of Saskatchewan, 2013). Capacity is an important concern as both highways are used daily by the large number of commuters from fringe communities, and will intersect with a new perimeter highway bypassing downtown Saskatoon. The City hopes to coordinate future growth with the City of Martensville and the RM of Corman Park. Public transit and a potential LRT to Saskatoon are two goals that will require regional cooperation (City of Warman, 2014).

Local Planning

The City is currently updating both its Official Community Plan and Land-use Bylaw. Both documents are available in draft form and were thus included in this analysis. The draft OCP sets forth many goals and objectives, including cost-effective development, economic diversity, a variety of housing types and densities, built environment that encourages active transportation, and Healthy By Design principles (City of Warman, 2014).

Two land-use codes allow for continued growth and development. Urban Holdings are potential infill sites, while Future Growth Areas are much larger and will see the bulk of new development. Future Growth Areas are identified outside of the municipal borders in order to accommodate long-term growth despite being outside of the jurisdiction of the municipality.

The existing land-use pattern facilitates both outward growth and intensification. The

Warman Municipal Office (c) Canadian2006, CC BY-SA 3.0

City notes that the street grid that can easily be extended, and the existing lane system can accommodate some garden and garage suites (City of Warman, 2014). While single-family residences on large lots dominate the residential landscape, the City expresses a need for higher density rental units to house both retiring baby boomers and young adults leaving their parents' homes. Intensification of the downtown and introduction of various housing types to new developments is planned to help satisfy these consumers.

Growth Management

The City has adopted tiered growth phasing in the draft OCP. Development modules of 40 acres (approx. 16ha) are assigned to each tier. The first tier consists of land currently in the city and an additional 600 acres (243 hectares), which the City projects will accommodate growth over ten years. The second tier, from 2025-2034, will require acquisition of 1300 acres (526 hectares) for development. Tier three, beyond 2034, will see the population approach the 44,000 horizon with build-out of the acquired lands.

All new developments will require a concept plan, and the City reserves the right to request a Comprehensive Development Report. These documents must be received prior to any subdivision in order to ensure orderly, sequential growth and adequate provision of services. The City requires that the proponent of new development bear the full cost of providing services and enter into a servicing agreement with the City. Off-site development charges allow the City to upgrade existing infrastructure as needed and provide community services such as parks and schools. The City wishes new developments to be based on New Urbanist planning principles.

Summary

The high population growth rate in Warman over the last 40 years has seen it transform from a village to Saskatchewan's newest city. High growth projections are based on the continued growth of the Saskatoon region – expected to double by 2035 – and the high quality of life Warman offers. Proximity to the jobs and services of Saskatoon will continue to attract new families looking for their first home, and the prairie town atmosphere will be a welcome compromise for retirees looking for rest, relaxation, and access to healthcare. With growth expected to continue, the City is looking at ways to diversify the local economy and provide attainable housing to a variety of consumers. The City has seen some success in attracting more multi-unit housing developments, and hopes to implement public transit in the future.

Documents

City of Warman. (2014). Official Community Plan. (Draft). Warman: Planning & Development.

City of Warman. (2015). Zoning Bylaw No. 2015-xx. (Draft). Warman: Planning & Development.

P4G. (2015a). Annual Report. Saskatoon: Saskatoon North Partnership for Growth.

P4G. (2015b). Regional Vision. Saskatoon: Saskatoon North Partnership for Growth.

La Broquerie MB

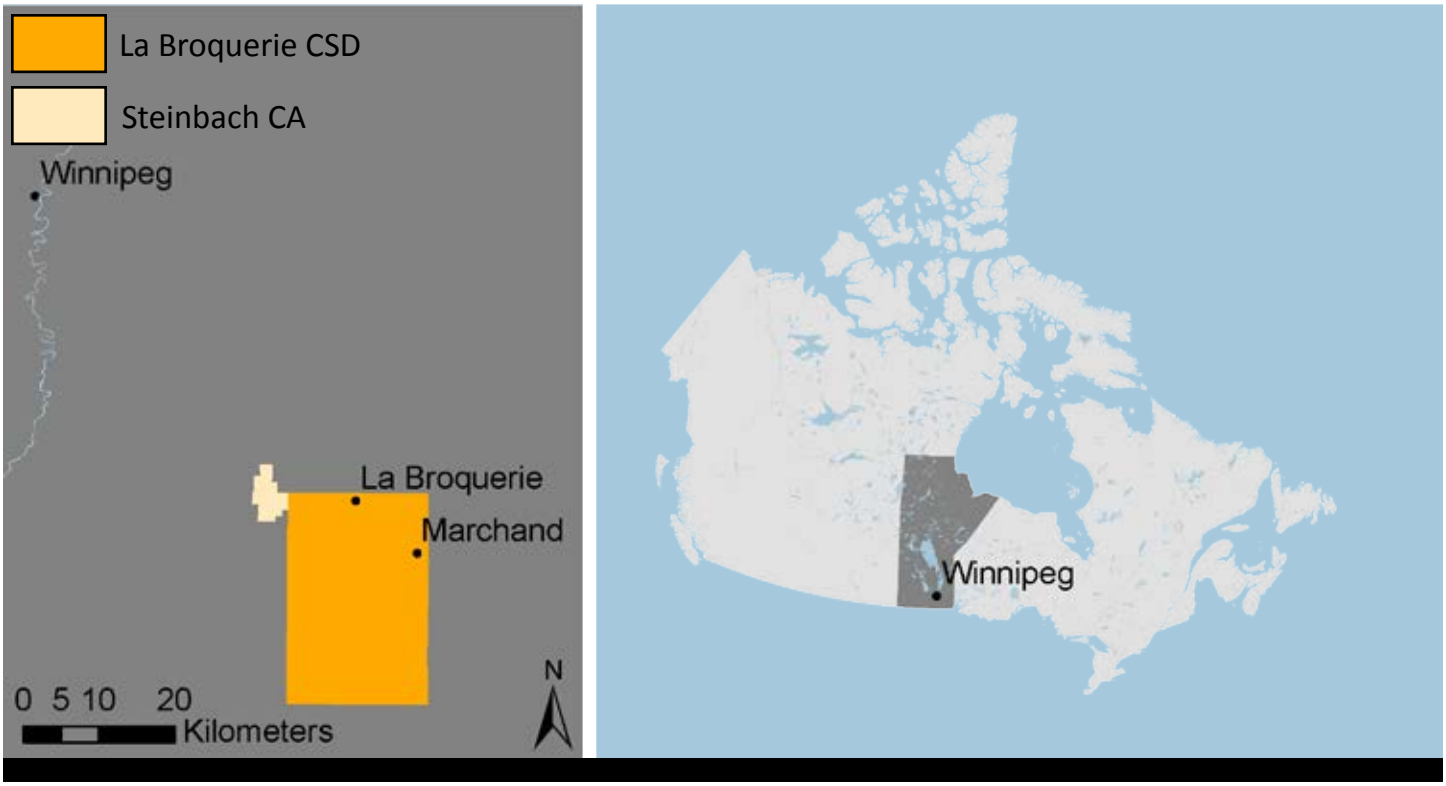
The smallest of Canada's rapidly growing municipalities, La Broquerie is a rural municipality covering 578km^2 in southern Manitoba. A municipal council governs the whole of the area, which includes two unincorporated communities: the Local Urban District of La Broquerie, and the Community of Marchand. A large number of rural residential and agricultural areas comprise the remaining territory. The LUD of La Broquerie is the most dense of these areas, at 135 people per square kilometre. With sufficient density, the LUD of La Broquerie could eventually incorporate as a town or village under The Municipal Act of Manitoba. It requires a density of 400 people per square kilometre to incorporate as an urban municipality.

The nearest city centre, Steinbach, is 13 kilometres to the west of the LUD of La Broquerie. Winnipeg is 60 kilometres north. Steinbach's core population grew significantly between the 2006 to 2011 census years, earning the city a new statistical label as a census agglomeration. This new status made it the third fastest growing CA in the country, with a growth rate of 22.2%. The RM of La Broquerie grew by 42.1% in this same period. Comparatively, Winnipeg grew by only 4.8%. Growth in the municipality has not concentrated in existing urban areas. The LUD and RM of La Broquerie had near identical growth rates between 2006 and 2001: 42.5% and 42.1% respectively.

Planning for Growth

Because it is a rural municipality covering a large land area, the RM does not need to concern itself with annexation proposals or build-out of its territory. Rather, conserving land and using infrastructure efficiently is the primary

Figure 16 - La Broquerie context map



"Here, in the heart of beautiful Southeastern Manitoba, we've built a fully bilingual community that we believe captures the essence of healthy country living – a community that is safe, cooperative and friendly, a community that is respectful of its heritage while embracing opportunities for progress, a community that is small enough to care, but is also big enough to prosper" (RM of La Broquerie, website).

concern of the municipality. A new Development Plan seeks to focus development on the already urbanised areas and make the LUD of La Broquerie and the Community of Marchand more prominent. To this end, it has established these two communities as principle centres, while the rest of the territory is covered by rural residential areas, agricultural areas, and a transitional policy area (RM of La Broquerie, 2011). The Development Plan is the only planning document analyzed in this study.

Infrastructure provision is the backbone of all land-use policies in the RM. Most properties are not connected to a municipal water or sewage service due to the low development density. The municipality acknowledges that, as the community grows, providing piped infrastructure will be necessary to ensure efficient use of land.

The principle centres and transitional policy areas are the only areas that have currently have some level of piped infrastructure. The municipality plans to focus growth in these areas to make efficient use of land and services. The principal centres will be characterized by higher levels of community services, municipal

North View of Town (c) Rural Municipality of La Broquerie

infrastructure, land-use diversity, and commerce. In effect, they will be the urban centres of the rural municipality. Smaller lots and multi-unit developments are permitted in the principle centres to capitalize on existing infrastructure and to ensure that service expansion is cost-effective. In lower density areas, infill is encouraged so that service expansion can occur. Residents and council hope to see the LUD of La Broquerie and the Community of Marchand develop into complete communities.

The Development Plan sets a goal to convert onsite water management to municipally serviced water and sewage in Marchand. This transition will occur through intensification and infill development guided by an updated land-use bylaw, development standards, and a secondary plan. The secondary plan will act much like a community plan.

Rural residential areas are outside of the principal centres, but not permitted on prime agricultural land. The municipality describes rural residences as having limited servicing and large lots, with long driveways off the main grid of roads. The municipal council may require a concept plan for any new rural residences, so that future growth can be accommodated. Infill between existing residences is encouraged, as it will allow for potential subdivision and expansion of services in the future. In addition, rural residential development is not permitted in areas that hamper the orderly expansion of the two principle centres.

Finally, a transitional policy area on the northwest corner of the municipality is subject to planning arrangements with the City of Steinbach. This area is contiguous with Steinbach's municipal border, and so certain land uses are forbidden to allow for expansion of the city. Rural residences are not permitted, and any residential development is encouraged to make servicing arrangements with the City of Steinbach (RM of La Broquerie, 2011). One of the goals of the OCP is to cooperate with the City in the creation of a regional planning district for

Community of Marchand (c) Google Maps 2015

the purposes of sharing the costs and benefits of growth, resolve issues related to water and sewer management, and create a sustainable growth strategy.

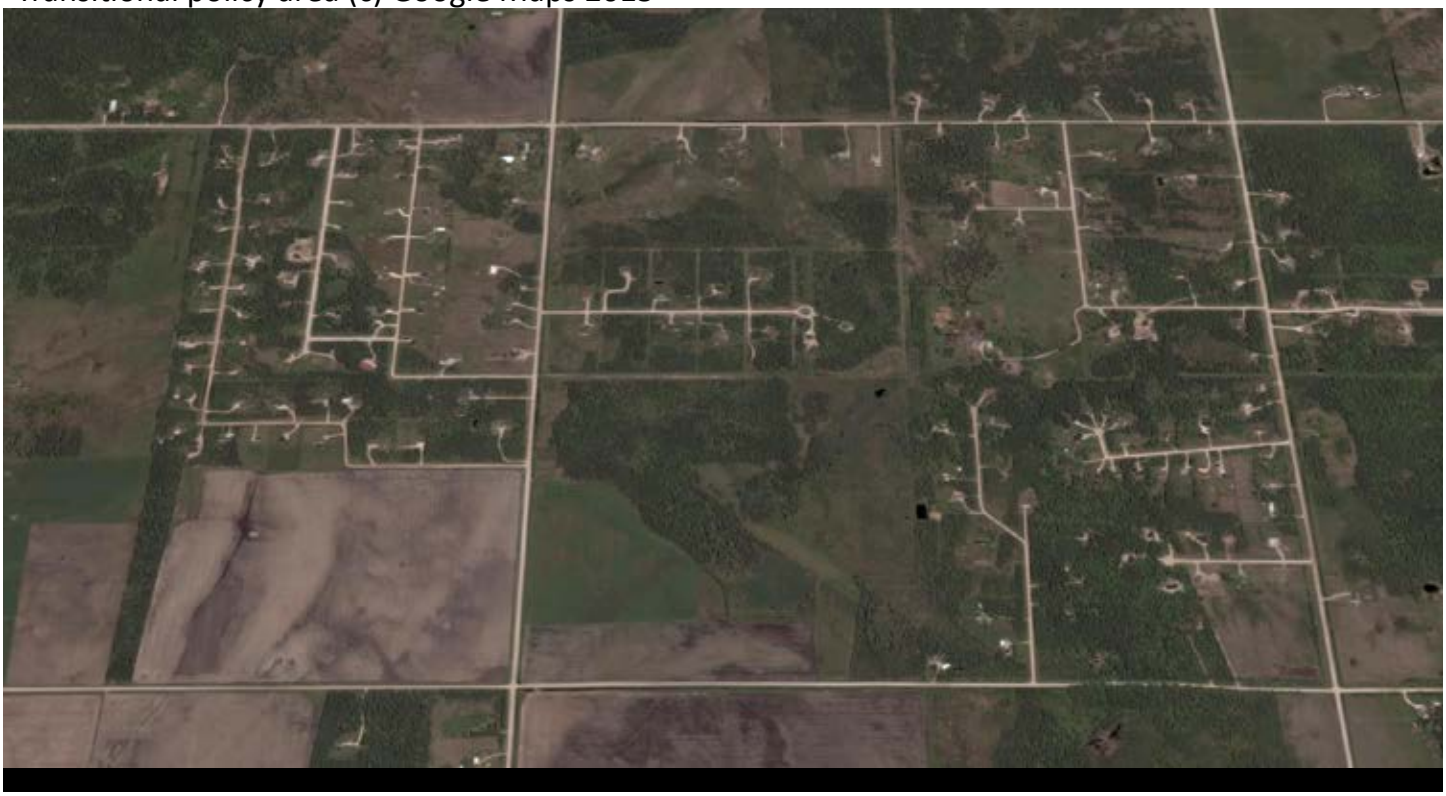
Summary

As a rural municipality, La Broquerie is proud of the lifestyle it offers and the closeness of its communities. However, as growth continues to impact land use there is a noticeable shift away from the rural residences toward a more compact village. Growth policies in the two principle centres will focus development in these areas and allow the municipality to offer more services, increase the range of housing options, and locate community resources efficiently. La Broquerie is forward-thinking in evaluating the long-term sustainability and cost-effectiveness of continued patters of rural residential development. Partnership with neighbouring municipalities may see the creation of a regional planning district.

Documents

R.M. of La Broquerie. (2011). Development Plan. (Bylaw No. 20-2011). La Broquerie: Rural Municipality of La Broquerie.

Transitional policy area (c) Google Maps 2015



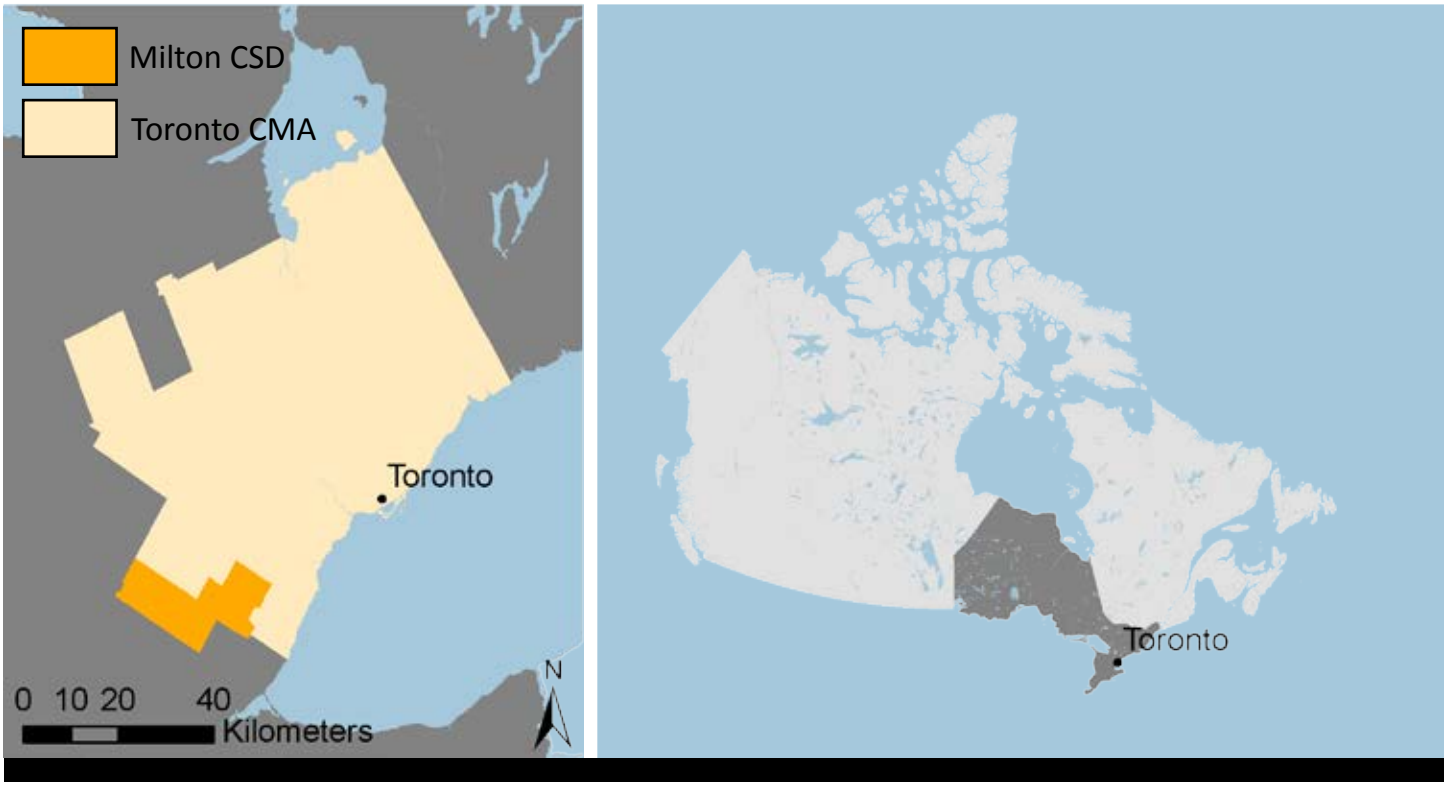
Milton ON

Southern Ontario is the most populous region in Canada, and one of the fastest growing poplation centres in North America. Milton is a poster-child of this growth, and was among the fastest growing municipalities in the country in both 2011 and 2006. The town is well located in the region: downtown Toronto, Hamilton, and Kitchener-Waterloo are all within 50 kilometres to the east, south, and west, respectively. Milton is part of the Regional Municipality of Halton, an upper-tier municipality according to the Ontario Planning Act. Both are nested further within several supra-regional bodies, such as the Greater Toronto Area (GTA) and the Greater Golden Horseshoe Region.

Milton is contiguous with the City of Mississauga, and shares some aspects of the larger city's urban form. The share of single-detached dwellings in Milton is 63.4%, with row houses (18.6%), semi-detached homes (10.4%), and apartments (7.4%) comprising the remainder. These shares are virtually unchanged from the 2006 statistics, despite construction of close to 10,000 units between censuses. Gross density in Milton is 0.77 units per hectare, though the municipal area contains a large conservation area. The Town of Milton has a gross density target of 20 units per hectare in residential subdivisions (Town of Milton, 2010b).

The population of Milton is both growing and diversifying at a rapid rate. The 2001 Census recorded a visible minority population of only 3.1%, which increased to 30% in 2011. This is a common trend throughout the GTA, as it is a magnet for immigration. International immigration accounted for 16% of Milton's growth during this period, and 29.6% of the current population was not born in Canada.

Figure 17 - Milton context map



"The Town of Milton offers many amenities and opportunities for residents that help make Milton, Ontario a safe, healthy and livable community. As Canada's fastest-growing community, Milton is a blend of urban and rural, modern and historic, all set in the backdrop of the Niagara Escarpment." (Town of Milton, website).

Planning for Growth

The current Official Plan was adopted in 1997, when Milton had a population of 32,100. Despite servicing constraints and a low growth rate, the Town projected a population horizon of 85,000 in 2011 (Town of Milton, 2008). Milton experienced a negative growth rate between 1996 and 2001, shrinking by 2%, but the town came to national attention in the following census year when it registered a five-year growth rate of 71.2% in 2006, the second highest in the country. Its five-year growth rate in 2011 was also high at 56.5%, making it the fastest growing municipality in the country.

The actual population in 2011 was only slightly below the 1997 projection, with 84,362 residents enumerated in the Census. The current population is an estimated 102,000, which is anticipated to grow to 228,000 by 2031 (Town of Milton, 2015). Revisions to the Official Plan in 2010 have not yet been approved by the Regional Municipality.

Milton (c) Microsoft Corporation 2015

Regional Planning

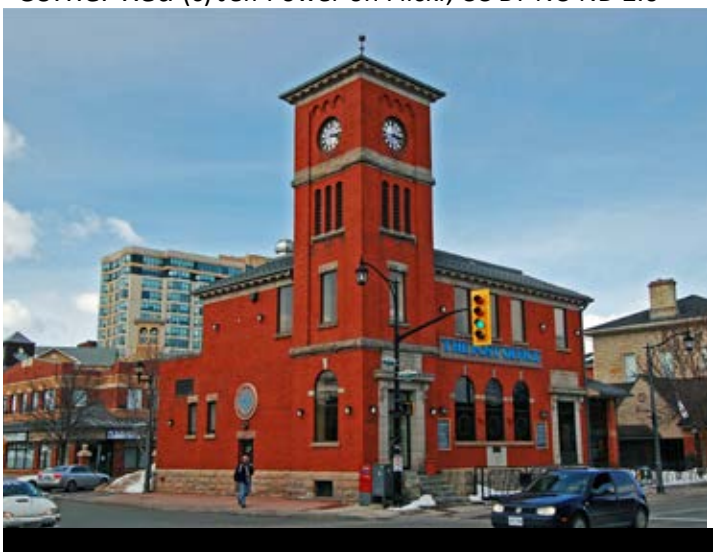
The Town of Milton is subject to several layers of plans and policies. These include:

- Growth Plan for the Greater Golden Horseshoe Region (Province of Ontario)
- Greenbelt Plan, Niagara Escarpment Plan, and Parkway Belt West Plan (Province of Ontario)
- Sustainable Halton Plan (RM of Halton)

The Growth Plan is currently being reviewed, as are the plans concerning the Greenbelt and Niagara Escarpment. The Sustainable Halton Plan was appealed to the Ontario Municipal Board and has not come into full effect. The Town of Milton has made several amendments to its own Official Plan, as required by the Ontario Planning Act, to bring it in line with the various plans. Revision of the Growth Plan will trigger cascading reviews of the Sustainable Halton Plan and the Town's Official Plan upon its adoption.

The Growth Plan emphasizes complete, compact, and vibrant communities throughout the Greater Golden Horseshoe Region (Ontario, 2006). Optimization of existing infrastructure and support of regional transit is advocated through infill and intensification. The Plan establishes various targets that the Town is expected to achieve by certain dates. By 2015, the Town will to accommodate 40% of residential development in built-up areas. By 2031, combined population and employment density in Milton's urban growth centre (UGC) is to be 200 per gross hectare. Currently, Milton has 7,300 residents and jobs within the UGC boundary, which will need to increase to 27,360 (Town of Milton, 2010a).

Corner Red



Local Planning

Five municipal documents are analyzed in this study. These are the Official Plan currently in force, the new draft Official Plan, the Destiny Milton 2 strategic plan, and two reports on intensification and economic development.

The Town of Milton's Official Plan was adopted in 1997, and has been amended several times to align with revisions to upper-tier plans. The most recently approved amendments were made in 2004. In 2010, Town Council adopted a series of amendments to bring the Official Plan in line with the most recent ROP, though these amendments have not been approved by the RM of Halton. The amendments primarily concern the territory designated as an urban growth centre, significantly increasing population and job density targets (Town of Milton, 2010b). A Major Transit Station Area is introduced surrounding the terminus of the Milton GO Train line, which connects the town to Toronto.

One major change in the Official Plan is the emphasis on higher density development. The previous plan, from 1997, set housing share targets: 60% single- and semi-detached housing, 15% townhouses, and 25% apartments. In 2011, the actual shares were 63.4% single-detached houses, 10.4% semi-detached, 18.6%

townhouses, and only 7.4% apartments. These shares will move closer to the original targets as the urban centre is intensified: the Town wants to see at least 50% of annual residential development come in the form of apartments and townhouses according to their intensification strategy (Town of Milton, 2010a). Infill forms a large component of future growth plans at both the local and regional levels, and the Town has engaged with residents to determine how this intensification will take place.

Finally, economic development plays a significant role in the Town's planning activities. It is actively pursuing new employers as part of its goal to develop several employment areas. It appears to have been successful, as local employment has remained at the same level as in 1996, with approximately one third of the workforce employed in Milton. Forty-six percent of the workforce commutes outside of the Halton region to surrounding municipalities, such as Mississauga and Toronto.

Growth Management

Protected green spaces are established in plans at all levels of government. The Greenway, Niagara Escarpment, and Parkway Belt West Plans prepared by the province contribute to the greenbelt surrounding the Greater Toronto Area. The Sustainable Halton Plan protects certain ecologically significant features and reserves prime agricultural land. The Town of Milton's Official Plan places green buffers at its edges to prevent encroachment on surrounding municipalities where contiguous urban areas do not exist.

Summary

Milton has been growing at a rapid pace for the past decade, but growth planning in the late nineties by the Town and Regional Municipality have ensured that the incoming population had places to settle. The percentage of workers employed locally remained unchanged during this growth period, a feat of the Town's economic development plan. Although the Town was unable to meet density or housing share targets, it is ambitiously pursuing the high standards recently set by the province for intensification. A unique measure taking into account the density of both residents and jobs will help ensure that local employment and community vibrancy remain defining characteristics of Milton.

Documents

Ontario. (2006). Growth Plan for the Greater Golden Horseshoe. Toronto: Ministry of Infrastructure.

RM of Halton. (2009). Halton Region Official Plan. (Bylaw No. 233-95). Oakville: Regional Municipality of Halton.

Town of Milton. (2006). Destiny Milton 2: Shaping Our Future. Milton: Town of Milton.

Town of Milton. (2010a). Intensification Strategy Final Report. Milton: Planning and Development.

Town of Milton. (2010b). Official Plan Review - Conformity Exercise. (Official Plan Amendment No. 31). Milton: Planning and Developmeny.

Town of Milton. (2015). Milton Fast Facts. Milton: Economic Development.

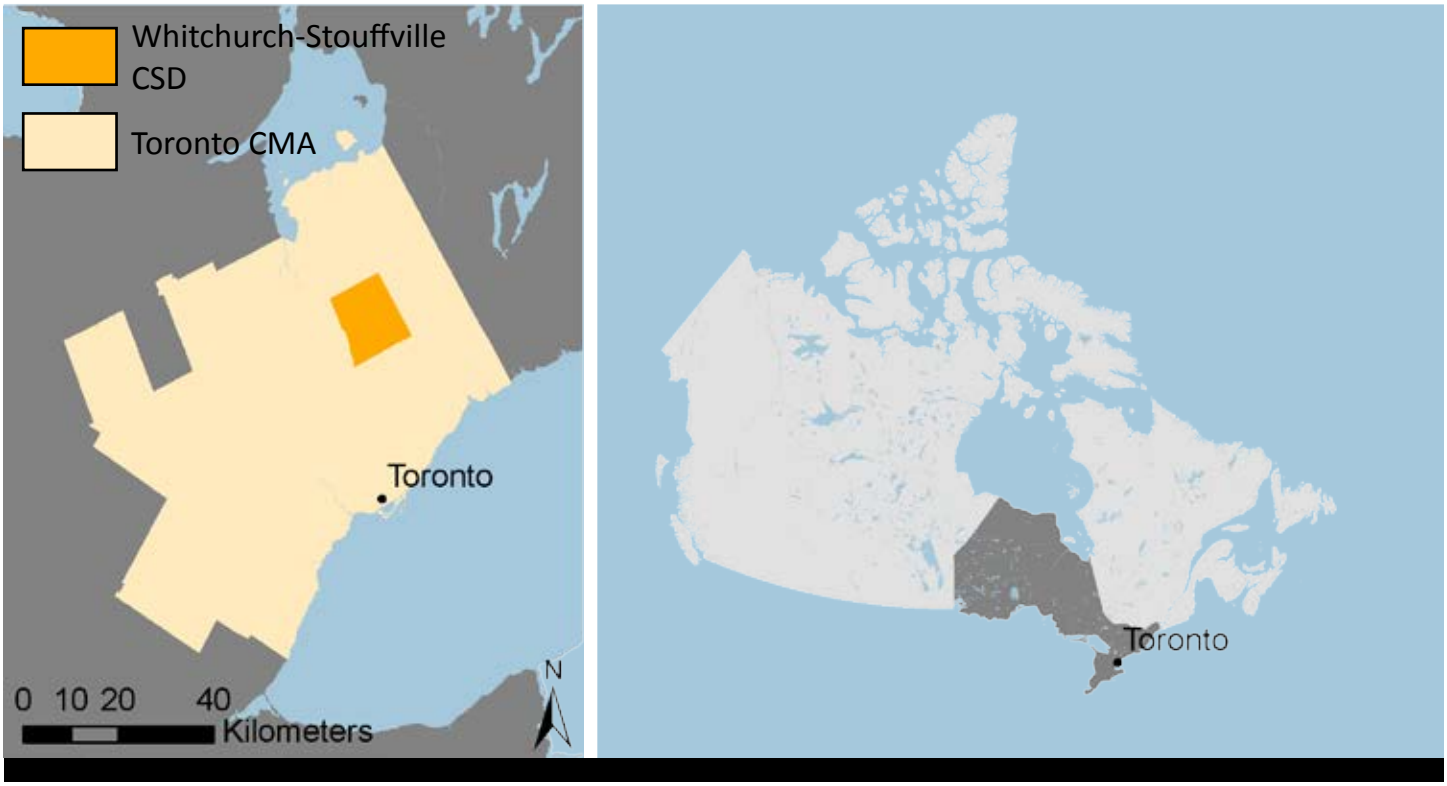
Whitchurch-Stouffville ON

Whitchurch-Stouffville is a large, predominantly rural municipality in the York region of Greater Toronto. The municipality covers over 200km2, which contains the Community of Stouffville and sixteen smaller communities. Agriculture is the dominant land use, though it is fragmented by rural estates, golf courses, plant nurseries, cemeteries, gravel pits, and other peri-urban uses. The provincially protected Oak Ridges Moraine Conservation Area also crosses through the town.

The gross density of the municipality is quite low due to the prevalence of agricultural uses as well as the conservation area, standing at 0.66 units per hectare as of 2011. Single-detached dwellings have a 78.7% share of the total housing stock, which is a decrease in percentage from the 2001 shares. Evidently, the municipality has seen some success in attracting a greater variety of dwelling types during this high growth period.

Stouffville is the urban centre of the municipality, and is located 50 kilometres northeast of Toronto and 30 kilometres northwest of Oshawa. Two GO Transit stations – the regional rail system for Greater Toronto – are within Whitchurch-Stouffville, connecting it to several employment centres before terminating in downtown Toronto. Despite this transit connection, only 4% of the workforce commutes by public transit; 84.3% drive, with a further 7.6% riding as a passenger. Residents' place of work is fairly diverse, with 30% working within the town, 29% in the York region, and 27% outside of the region.

Figure 18 - Whitchurch-Stouffville context map



"The Town of Whitchurch-Stouffville is a rural community that will preserve and enhance its quiet, calm, attractive environment for residents, visitors and future generations" (Town of Whitchurch-Stouffville, vision).

Planning for Growth

Rapid growth was unexpected in Whitchurch-Stouffville. In the year 2000, the municipality projected population growth to 38,100 by 2021 (Town of Whitchurch-Stouffville, 2000). At this time, the population of the town was 22,008, with a previous five-year growth rate of 11.0%. This rate actually decreased between 2001 and 2006, falling slightly to 10.8%, which was still above the provincial average. In the period between 2006 and 2011 the growth rate spiked to 54.3%, the third highest in the country. This brought Whitchurch-Stouffville's population to 37,628, close to the 2021 projection.

The municipality has made several amendments to the Official Plan, most recently in 2011. Revisions were made to align the Official Plan with the Regional Municipality of York's Official Plan as well as the Growth Plan for the Greater Golden Horseshoe Region. The revised plan sets a population horizon of 60,600 in 2031. The RM of York adds an employment projection of 23,000 jobs in the town by the same year.

Community of Stouffville (c) Microsoft Corporation 2015

Whitchurch-Stouffville, ON

Regional Planning

The Town of Whitchurch-Stouffville is subject to several layers of plans and policies. These include:

- Growth Plan for the Greater Golden Horseshoe Region (Province of Ontario)
- Greenbelt, Oak Ridges Moraine Conservation, and Parkway Belt West Plans (Province of Ontario)
- York Region Official Plan (RM of York)

The Growth Plan is currently being reviewed, and will trigger a cascade of revisions to the plans it supersedes. Nearly all revisions to the York Region Official Plan were appealed to the Ontario Municipal Board, notably the sections pertaining to sustainable development, protection of employment lands, and identification of regional growth centres.

Both plans emphasize complete, compact, and vibrant communities. Infill targets are aligned among all levels of plans at 40% of total residential development, with most development focused on urban centres and regional corridors. The RM of York identified the Community of Stouffville as one such urban centre. The province and the RM set both the municipal and urban boundaries of Whitchurch-Stouffville.

Local Planning

The municipality's Official Plan can be divided into two parts, one which deals with the entirety of its territory, and another that contains plans specific to individual communities. These secondary plans are prepared for the four areas that the municipality wishes to direct the majority of its growth: Stouffville, Ballantrae-Musselman Lake, Vandorf-Preston Lake, and the Gormley Industrial Area. The Community of Stouffville is the most important of these four areas: as it is the designated urban centre it will accommodate up to 97% of the total growth to 2031 (Town of Whitchurch-Stouffville, 2000).

Within Stouffville, the municipality is working to achieve the infill targets set by the province. The Official Plan identifies residential intensification areas, as well as a community core area

Memorial Park Skatepark (c) Town of Whitchurch-Stouffville on Facebook

adjacent to the GO Train station. These medium density areas have a target of 30 units per net hectare at a minimum, with a maximum density of 65 units per net hectare.

Despite the unanticipated pace of growth, the municipality seems to have achieved some success in increasing residential density through a variety of housing types. The shares of housing types in 2001 were: 82.9% single-detached, 0.8% semi-detached, 2.7% townhouses, and 12.9% apartments. In 2011, the shares were: 78.7% single-detached, 5.2% semi-detached, 7.5% townhouses, and 8.5% apartments. Though the share of apartments decreased, semi-detached and townhouses increased significantly during these high growth years. The municipality hopes that further growth will be more dense, and intensification will raise the densities of existing built areas. To this end the municipality has set an objective in its Official Plan of having 1,400 housing units delivered through intensification by 2031, and up to 3,500 units in new greenfield developments.

Further goals in the secondary plan for Stouffville echo Smart Growth principles: maintenance of the town's heritage and character, protection of the natural environment, a robust local economy, a built environment that promotes healthy living, and efficient use of public funds. Each goal is expressed through a principle, with several associated objectives.

Summary

Whitchurch-Stouffville is a rapidly growing municipality in the Greater Toronto Region, which is one of the fastest growing regions in North America. The municipality is predominantly rural, making preservation of that rural character important. At the same time, big city ideas are being implemented in the Community of Stouffville, including more dense development and intensification of existing built areas. High density targets around regional infrastructure nodes are intended to create communities that have a variety of housing, employment, transportation, and recreation options. Success has already been seen in the greater mix of dwelling types since 2001, with a marked increase in the proportion of semi-detached and rowhouse units. Though high growth was unanticipated by the municipality and the RM of York, revisions to planning documents at all levels of government have taken place in order to effectively manage heightened growth.

Documents

Ontario. (2006). Growth Plan for the Greater Golden Horseshoe. Toronto: Ministry of Infrastructure.

RM of York. (2013). York Region Official Plan Package. Newmarket: Regional Municipality of York.

Town of Whitchurch-Stouffville. (2000). Official Plan of the Town of Whitchurch-Stouffville Planning Area. Whitchurch-Stouffville: Planning and Development.

Marieville QC

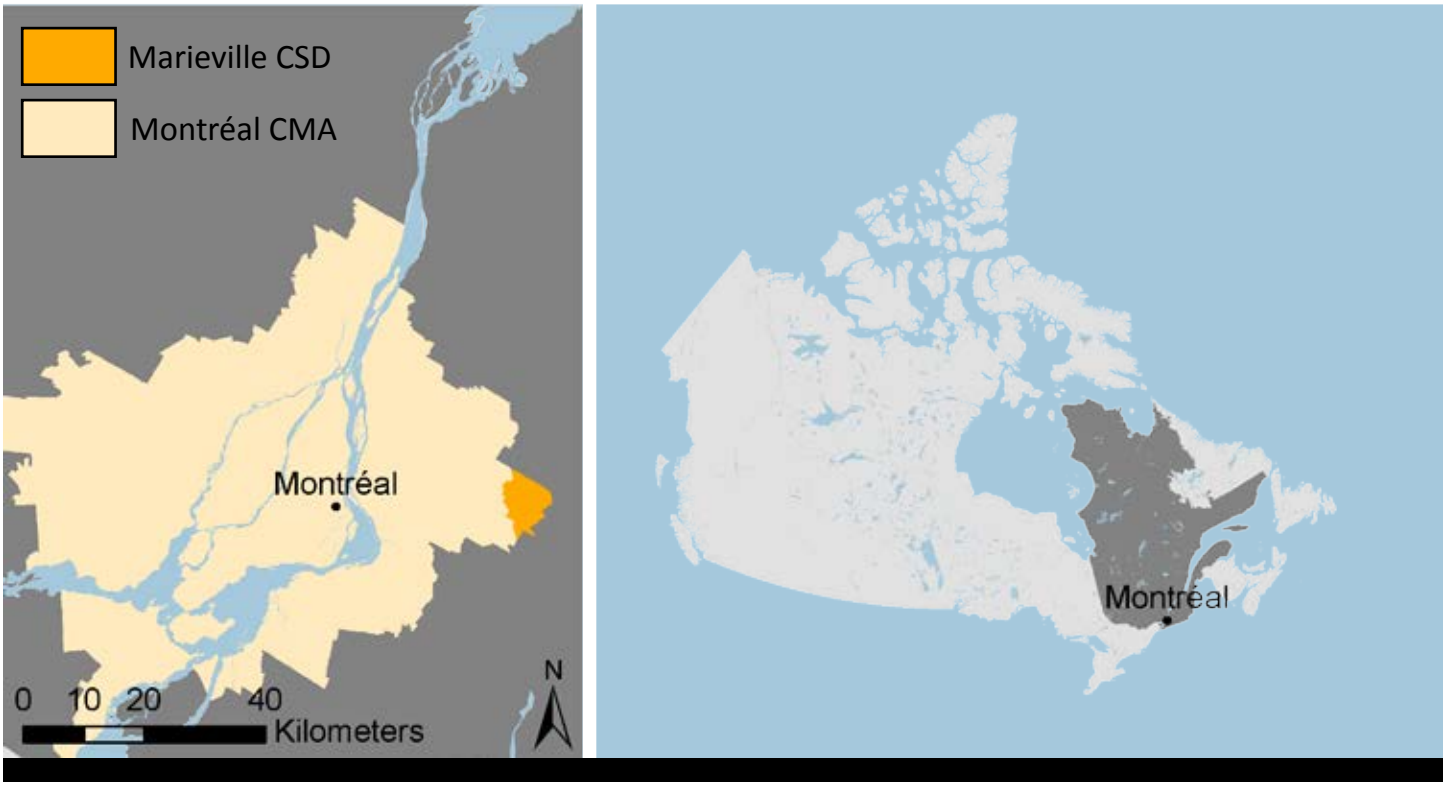
The town of Marieville is embedded in a thriving agricultural area 34 kilometres east of Montréal. Its location close to the metropolis, as well as the surrounding cities of Saint-Hyacinthe, Saint-Jean-sur-Richelieu, Chambly, and Granby, affords it great access to regional, national, and international transportation networks. Combined with the exceptionally high soil quality and favourable climate, the area surrounding Marieville is one of the premier agricultural areas in Québec. These factors allow for a diversity of employment options: 35% of the workforce is employed in the town, 10% within the county, and 46% in cities outside the county, including Montréal.

The urban form of Marieville is sparse compared to Montréal, but higher than other municipalities in the same county. Gross density according to Statistics Canada in 2011 is 0.7 units per hectare, though this can be adjusted to 9.5 units per hectare when only looking at dwellings in the urban area. Residential uses account for half of the municipal urban land use, at 58.7%, but there are also significant shares of manufacturing (15.9%), service (8.6%), park (7.2%) and commercial (5.7%) uses. Marieville is the seat of the county government, and carries the bulk of the regional commerce, community institutions, and manufacturing jobs. Agriculture and manufacturing are the two most important contributors to the county economy (MRC de Rouville, 2014b).

Planning for Growth

Planning for the eight municipalities within the county is partly handled by the regional government, the Rouville Regional County Municipality (MRC de Rouville). Municipal zoning and

Figure 19 - Marieville context map



"A vibrant and sustainable urban milieu that satisfies the county population in terms of services, facilities, and infrastructure" (MRC de Rouville, vision statement, translated from French by the author).

planning policies must conform to the Regional Development Plan (Schéma d'aménagement et de développement, SAD). This document is currently being reviewed due to some of the county territory falling into the Montréal metropolitan boundary, and thus subject to the recent Montréal Metropolitan Development Plan (Plan métropolitaine d'aménagement et de développement, PMAD). The current draft takes into account the recent demographic trends in the area.

High growth is a new phenomenon in Marieville. The 2011 Census showed a growth rebound from the previous two censuses: -5.2% in 2001 and 4.0% in 2006. While the provincial average maintained a stable rate of approximately 5%, Marieville experienced a 34.1% growth rate between 2006 and 2011. Recent growth has seen a surge in the number of seniors, but also relatively large gains in the 0-4 age cohort.

The town accounted for half of the total county growth, and holds one third of the county population: 10,094 residents of a 35,690 total. This share is expected to remain constant through the planning horizon of fifteen years. The MRC projects household growth to 18,451 by 2031. Based on projected population shares, Marieville will receive 1950 households, bringing its total to 6150. Expansion of the urban area will be required to house the new population and provide jobs and infrastructure. In total, 38.78 hectares of residential land and 10 hectares of commercial and industrial land will be added. This estimate accounts for infill equivalent to 25 hectares currently within the town (MRC de Rouville, 2014b).

Marieville (c) Google Maps 2015

Marieville, QC

At the same time, the MRC is taking strides in protecting existing agricultural activities as well as allowing growth in this sector. An Agricultural Zone Development Plan (PDZA) is in place to balance urban and agricultural growth needs (MRC de Rouville, 2014a). The agricultural zone of Marieville accounts for 92.6% of its area. Agricultural zones account for 96.3% of the land area of the MRC, making the PDZA an important planning document.

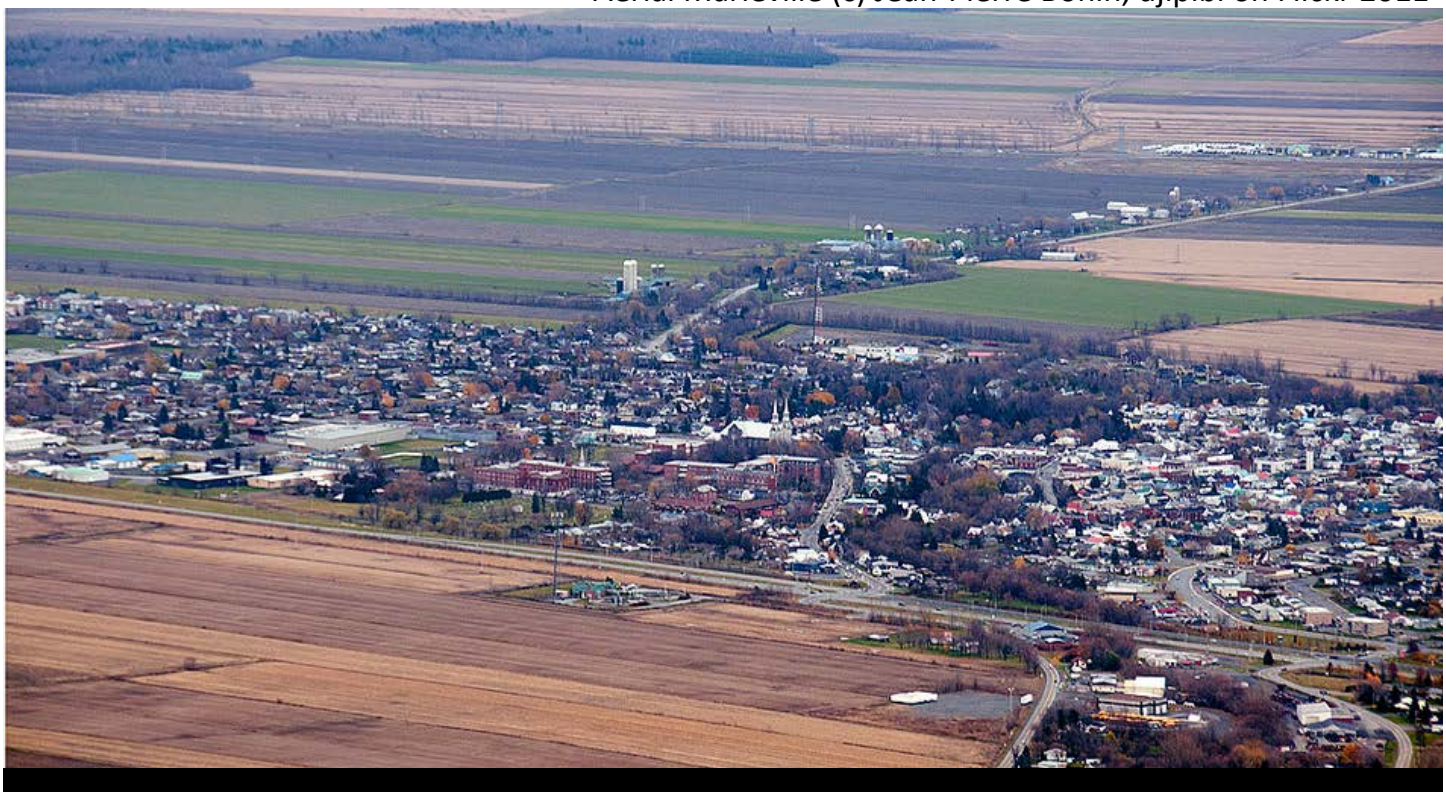
Regional Planning

Due to its size, Marieville is identified as the main centre of the county. Currently it contains over 25% of the population, commerce, institutions, and manufacturing centres of the region, despite being one of eight towns. The MRC has directed that future major institutions and commercial activities be centralized in Marieville as part of the updated Development Plan.

The Plan aims to focus future growth in existing urban areas, which continues the recent growth trend. The share of homes within urban areas increased from 67% in 2006 to 72% in 2011, despite urban growth of only 1.7%. Infill and intensification is the development norm in the county and Marieville. It is also worth noting that Marieville has the highest density among towns in the county, at 16.15 units per net hectare, or 20.19 units per gross hectare. The MRC has decided to align density targets in Marieville with those in the PMAD, although the town is not contained within that jurisdictional boundary. The target minimum urban density for Marieville is 22 units per gross hectare by 2027. The density targets for 2014 and 2022 under the PMAD have already been surpassed.

As with many smaller municipalities, the MRC hopes to attract more commercial activities to Marieville. It notes that high population growth has not brought a corresponding increase to the variety of shops and services in the county. Surrounding cities remain important supra-regional centres for shopping (MRC de Rouville, 2013).

Aerial Marieville (c) Jean-Pierre Bonin, djipibi on Flickr 2011



At the same time, the MRC is taking strides in protecting existing agricultural activities as well as allowing growth in this sector. An Agricultural Zone Development Plan (PDZA) is in place to balance urban and agricultural growth needs (MRC de Rouville, 2014a). The agricultural zone of Marieville accounts for 92.6% of its area, and 96.3% of the land area of the MRC. Agriculture is a major contributor to the regional economy, and includes cash crops, livestock rearing, artisanal farming, agrotourism, and food processing. According to area farmers, many of the new residents hoping for an idyllic rural lifestyle do not understand what this actually entails: early morning noise, potentially unpleasant smells, and sharing the road with farm equipment. Preventing clashes between agricultural and urban uses is thus important to the continued growth of Marieville.

Summary

Marieville continues to be a hub of activity for the MRC de Rouville, a predominantly agricultural county. Future growth will be focused in this town and expressed as dense development and infill where possible. The Town and the MRC have high aims for urban density, aligning their density targets with those of the Montréal Metropolitan Region. Success has already been seen in recent growth trends, where the majority of growth have been focused on the existing urban area. This is attributed to the strength of the policies contained in the PDZA and the will of the two jurisdictions. By directing growth away from agricultural land, the MRC hopes to contribute to the continued success and growth of the agricultural sector.

Documents

MRC de Rouville. (2013). Plan stratégique en développement économique 2013-18. Marieville: Municipalité régionale de comté de Rouville.

MRC de Rouville. (2014a). Plan de développement de la zone agricole de la MRC de Rouville (PDZA). Marieville: Municipalité régionale de comté de Rouville.

MRC de Rouville. (2014b). Projet de Schéma d'aménagement et de développement révisé édicté par le règlement numéro 282-14. (Draft). Marieville: Municipalité régionale de comté de Rouville.

Sainte-Brigitte-de-Laval QC

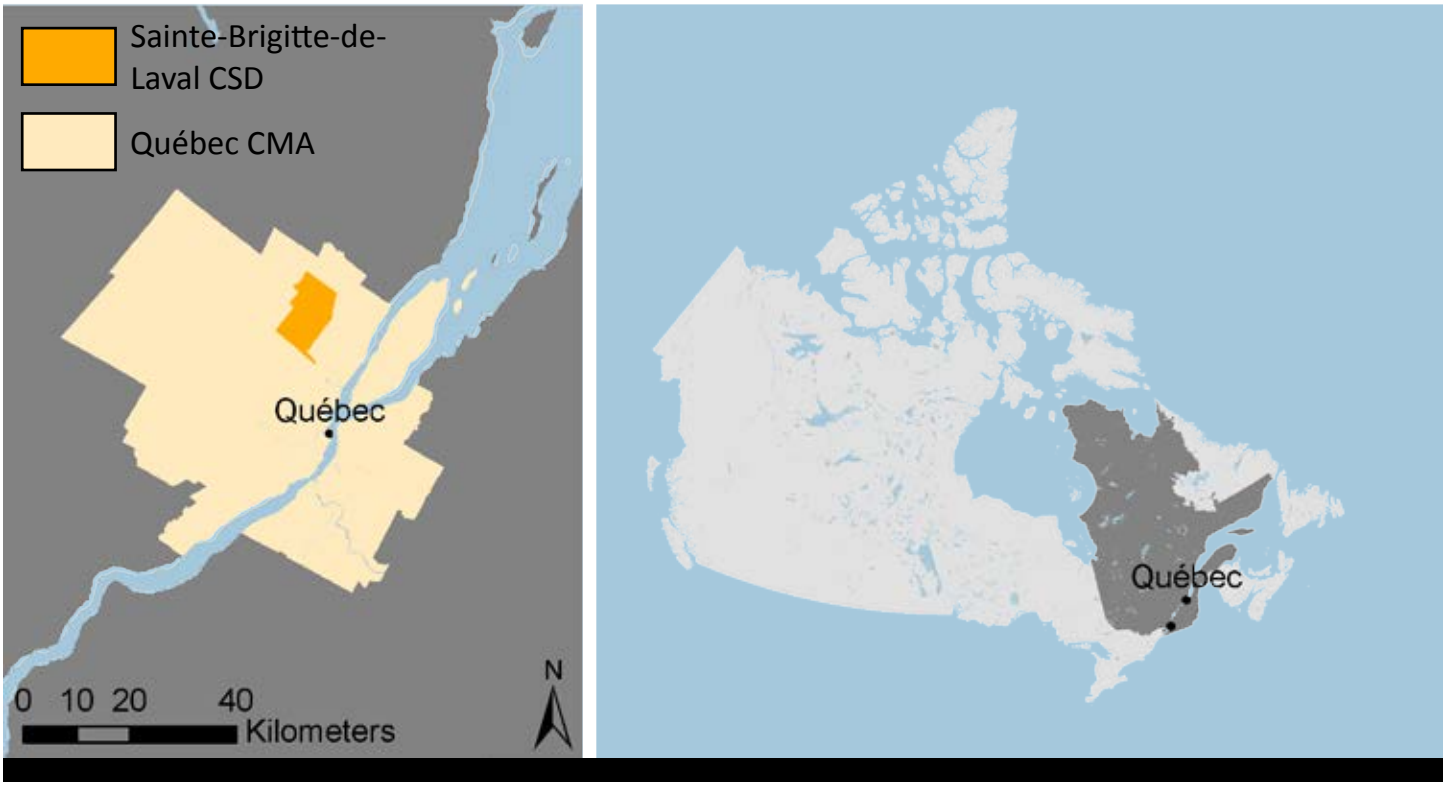
The city of Sainte-Brigitte-de-Laval is a picturesque bedroom community located north of Québec City along the Montmorency River. Québec City is 30 kilometres south, making the commute approximately half an hour by car. Seventy-three percent of the workforce makes this commute daily, while only 11.5% are employed within the city. As such, Sainte-Brigitte-de-Laval is predominantly residential and recreational.

Single-detached dwellings dominate the housing stock at 79.6%, though semi-detached dwellings have an 11.6% share, higher than the Québec average. All dwellings are largely concentrated in the city's urban area. The municipality manages 111km2, of which only 880 hectares are part of the urban area. The remaining territory is part of a "touristic and recreational zone" or "recreo-forest zone," both of which have strict growth controls. In these zones some cottages are permitted, but the majority of construction is in the three village centres that make up Sainte-Brigitte-de-Laval (Sainte-Brigitte-de-Laval, 2004). These three centres are connected by an arterial road that continues to Québec City.

Planning for Growth

The last long-range planning documents were prepared in 2004, with the most recent amendments made in 2010. Rapid growth is a new phenomenon in Sainte-Brigitte-de-Laval. A 5.3% five-year growth rate in 2001 climbed to 50.3% in 2011, making the city the fourth fastest growing municipality in Canada and the fastest in Québec. The municipal plan (Plan d'urbanisme, PU) set a population horizon of 5,000 residents by 2011. Actual growth was

Figure 20 - Sainte-Brigitte-de-Laval context map



"Sainte-Brigitte-de-Laval offers a bewitching backdrop to all those who wish to combine the proximity of the city with pure mountain air. Breathtaking landscapes, several rivers, and mountains on the horizon all combine to make Sainte-Brigitte-de-Laval a paradise for nature lovers and outdoor enthusiasts" (Ville de Sainte-Brigitte-de-Laval, website, translated from French by the author)

slightly beyond that figure, with 5,696 residents enumerated in the 2011 Census.

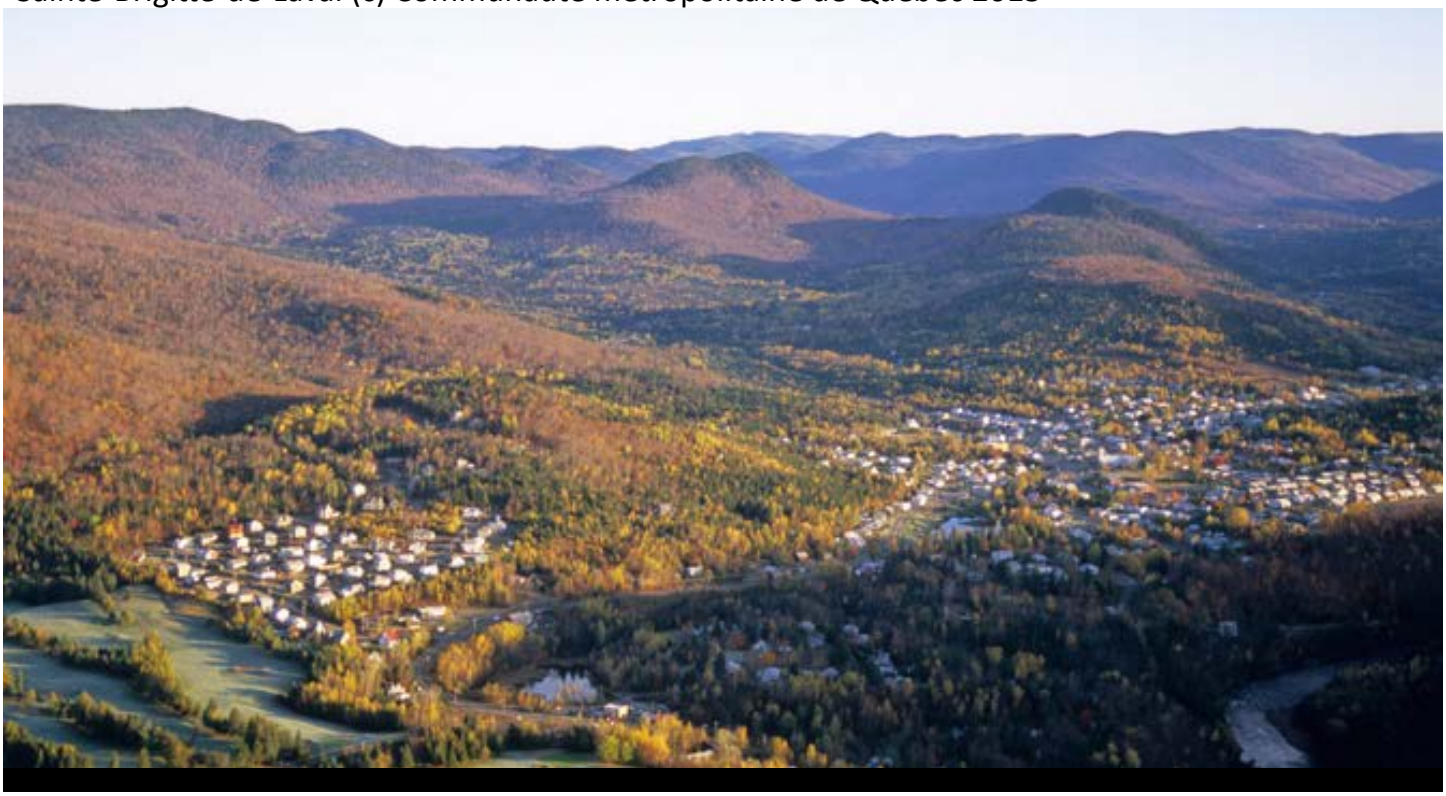
Regional Planning

The City's municipal plan aligns with several layers of regional planning documents. As part of the Regional Municipal County of La Jacques-Cartier (MRC de La Jacques-Cartier), the City is subject to the regional development plan (Schéma d'aménagement et de développement, SAD). This document establishes the municipal and urban limits of the City's territory, in cooperation with the Province (MRC de la Jacques-Cartier, 2004). Regional planning is also nested within the Québec Metropolitan Development Plan (Plan métropolitain d'aménagement et de développement, PMAD). The SAD was prepared in 2004, and the PMAD in 2013. It can be assumed that both the municipal and regional planning documents will be revised to align with the new metropolitan plan.

Local Planning

The PU divides the City territory into three broad zones: touristic and recreational, recreo-forest,

Sainte-Brigitte-de-Laval (c) Communauté métropolitaine de Québec 2013



Sainte-Brigette-de-Laval, QC

and urban. The touristic and recreational zone accounts for 42% of the total territory, predominantly along the Montmorency River and other water bodies. Cottages are allowed in this zone, and new cottages are subject to restrictions on size, architecture, and unit density. The recreo-forest zone is 50% of the total territory. Though some residences are present, very little growth is allowed in this zone. The City does not permit the construction of new streets or roads, so any new development must occur on existing roads. Furthermore, watersheds and steep slopes are protected from development, severely limiting the amount of buildable land in these zones.

The urban zone accounts for only 8% of the total territory. In 2004 this amounted to 880 hectares, of which 580 hectares had some development and 300 hectares were in an urban reserve. Since then, 88 hectares have been added to the urban reserve to accommodate future growth. Growth in the urban zone is phased, with infill prioritised, followed by development of four priority growth areas. The urban reserve lands are to be developed when no less than 75% of the priority growth areas have been developed (Sainte-Brigitte-de-Laval, 2004).

This phasing has been adhered to, as the 2013 PMAD shows the same priority growth areas and urban reserves as the 2004 municipal plan. Infill and densification of the urban zone is apparent when looking at the share of dwelling types in Sainte-Brigitte-de-Laval, which the City had aimed to diversify. In 2006, single-detached homes accounted for 88.3% of the housing stock, which declined to 80% in 2011. The share of semi-detached dwellings rose dramatically, from 2% to 11.6% in the same period. An aging population, telecommuting, and desire for intergenerational housing are some of the demographic trends that contribute to this increase according to the PU (Sainte-Brigitte-de-Laval, 2004). In total, 705 new dwellings were built.

Several new residential developments are currently planned or in progress, all of which conform to the phasing established in 2004. Most of these developments include a mixture of dwelling types, including semi-detached and condominium units. Unit density is capped at 15 units per gross hectare.

Summary

Sainte-Brigitte-de-Laval is both a bedroom community of Québec City and a destination for outdoor recreation, leading to protection of many of its natural features. The City has strict controls on outward growth, with an urban boundary established at the regional and metropolitan level. Within this urban zone, the City seeks to accommodate growth through infill along existing roads. Outward growth is located in several priority growth areas, and an urban reserve ensures viability of long-term growth. The City has been successful in encouraging a variety of housing types be constructed, with the share of semi-detached dwellings increasing dramatically. As the city continues to develop, updating the municipal plan within the context of the metropolitan plan will contribute to the continued success of growth management.

Documents

CMQ. (2013). Le Plan métropolitain d'aménagement et de développement du territoire de la Communauté métropolitane de Québec. Québec: Communauté métropolitaine de Québec.

Jacques-Cartier, M. d. l. (2004). Schéma d'aménagement révisé. Shannon: Municipalité régionale de comté de La Jacques-Cartier.

Sainte-Brigitte-de-Laval, M. d. (2004). Le Plan d'urbanisme. (Bylaw No. 454-04). Sainte-Brigitte-de-Laval: Urbansime.

Cottages in the recreo-forest zone (c) Google Maps 2015

Sainte-Marthe-sur-le-Lac QC

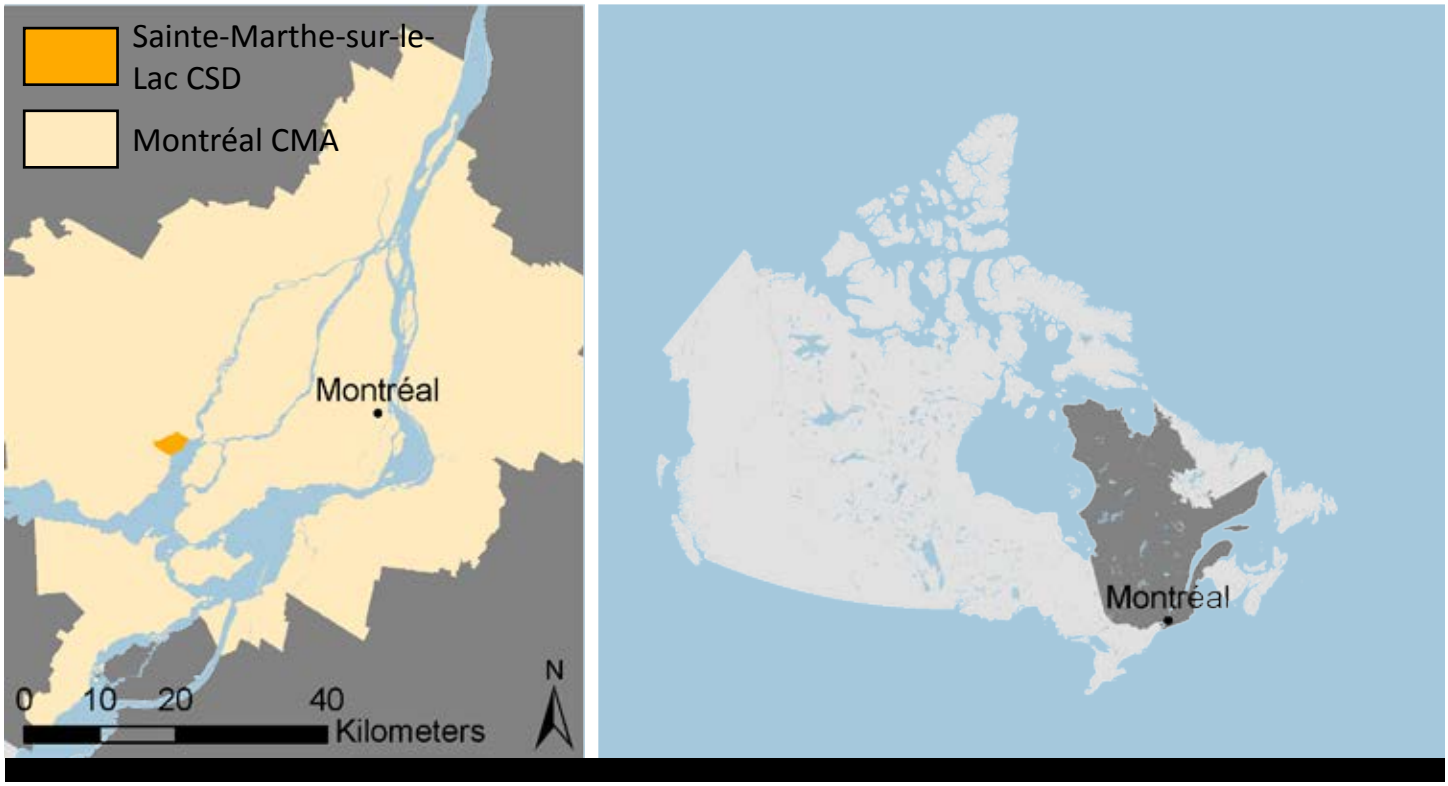
The city of Sainte-Marthe-sur-le-Lac is part of the Deux-Montagnes administrative region (MRC de Deux-Montagnes) on Montréal's north shore. It was formerly a seasonal vacation village, but has become one of the many off-island suburbs in the metropolitan region. It is connected to the city of Montréal by the Deux-Montagnes train line, which makes commuting time to the metropolitan core approximately one hour by transit or private vehicle. Major employment centres in Laval on the north side of the Island of Montréal, such as Anjou and Ville Saint-Laurent, are closer but not as accessible by public transit. The commuting mode share reflects this: 81% of people drive to work, while only 11% take public transit.

Sainte-Marthe-sur-le-Lac is a true bedroom community. Only 5% of the workforce is employed within the city, with the majority working outside of the Deux-Montagnes region. People aged 30-49 make up 34% of the population, and children aged 0-14 are 20.4% of the population. Senior cohorts are only 9.4% of the population. The family-oriented suburban profile is further when looking at the local housing stock, where 75.4% of dwellings are single-detached. Apartments make up the second highest dwelling share at 15.8%. The gross unit density of Sainte-Marthe-sur-le-Lac is 6.62 units per hectare.

Planning for Growth

High growth rates over the last decade have rapidly changed Sainte-Marthe-sur-le-Lac: the five-year growth rate was 29.4% in 2006 and 38.7% in 2011. The city is operating on a very conservative population horizon of approximately 20,000 people by 2031 despite recent

Figure 21 - Sainte-Marthe-sur-le-Lac context map



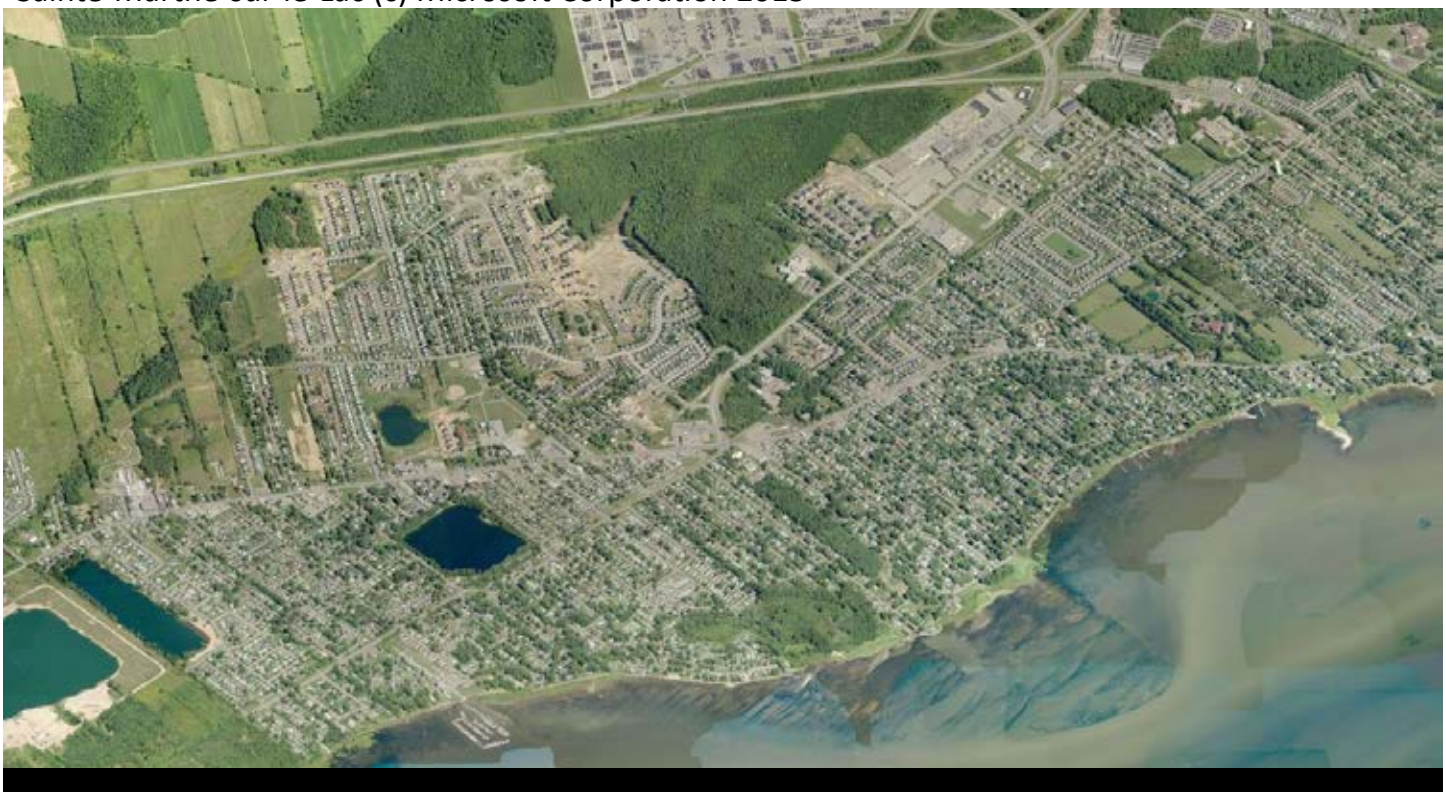
"Without a shadow of a doubt, Sainte-Marthe-sur-le-Lac is a city of the future!" (Ville de Sainte-Marthe-sur-le-Lac, website, translated from French by the author)

growth rates (Ville de Sainte-Marthe-sur-le-Lac, 2012). This is based on a regional projection of 10,486 new households in the Deux-Montagnes region, of which Sainte-Marthe-sur-le-Lac would maintain its 13% share. The Regional Municipal County of Deux-Montagnes (MRC de Deux-Montagnes) makes projections based on households rather than individuals, making the City's portion of regional growth 1,363 households(MRC de Deux-Montagnes, 2015). The average household size in 2011 was 2.9 persons, so it can be assumed that these 1,363 households correspond with an additional 3,952 individuals.

The City estimates 70 residential building permits to be issued each year over the planning horizon. This figure is far below the current average of over 250 permits issued annually since 2003. The City expects development to slow down as vacant land is used up, and as the newly serviced neighbourhood to the south reaches build-out.

Municipal and urban boundaries are set by the MRC de Deux-Montagnes, the regional authority. Sainte-Marthe-sur-le-Lac falls largely within the regionally established urban zone, with the exception of a small corner devoted to agriculture. The city is bordered to the north by agricultural reserve, to the east and west by other municipalities, and to the south by Lac des Deux Montagnes. Almost all new development is expected to occur through infill and redevelopment. Undeveloped land within the urban boundary is predominantly reserved for environmental conservation.

Sainte-Marthe-sur-le-Lac (c) Microsoft Corporation 2015



Regional Planning

Sainte-Marthe-sur-le-Lac is one of seven municipalities within the MRC de Deux-Montagnes administrative region. The MRC sets planning expectations through a regional land use and development plan (Schéma d'aménagement et de développement, SAD), which is currently under review. This plan is being aligned with the metropolitan development plan established by the Montréal Metropolitan Region in 2012 (Plan métropolitain d'aménagement et de développement, PMAD). Once adopted by the MRC, the City of Sainte-Marthe-sur-le-Lac will have to amend its own municipal documents to align with the regional and metropolitan plans.

Montréal's PMAD names Smart Growth, New Urbanism, and Transit-Oriented Development as inspirations (CMM, 2012). The plan sets density targets for the entire metropolitan region based on existing urban form, transportation infrastructure, and capacity to support new TODs. Despite being adjacent to a commuter rail line, Sainte-Marthe-sur-le-Lac is not included among potential TODs. As such, the target unit density per gross hectare rises incrementally to 23 by 2027, as opposed to a minimum density of 40 units per gross hectares of designated TODs on the commuter train lines.

Local Planning

The City's municipal plan (Plan d'urbanisme) was adopted in 2012. Priorities of this plan include economic development of the downtown core, diversification of housing options, protection of ecologically significant areas, and improvements to local mobility (Ville de Sainte-Marthe-sur-le-Lac, 2012).

To improve the economic vitality of the city, businesses and services will be concentrated in the downtown core. This pole will be complemented by a mixed-use corridor on Oka Street, the major arterial road bisecting the city. The target residential unit density for these mixed-use areas is 25 units per gross hectare,

Sainte-Marthe-sur-le-Lac en Images (c) Christian Lavigne

acknowledging the importance of density to successful mixed-use neighbourhoods.

The City will achieve diverse housing options through densification of select sectors and re-development of former summer cottages. The later occurred to a large extent when municipal services were extended south of Oka Street toward the lake. The City also aims to include standards for intergenerational housing and secondary suites within planning regulations. Low density residential neighbourhoods have no established minimum unit density, but cannot be built at over 25 units per gross hectare. Medium density neighbourhoods have a 25 unit per gross hectare minimum density target (Ville de Sainte-Marthe-sur-le-Lac, 2012). These targets should allow Sainte-Marthe-sur-le-Lac to maintain a unit density higher than the metropolitan target of 23 units per gross hectare.

Summary

Sainte-Marthe-sur-le-Lac has transformed from quiet cottage country to a rapidly growing bedroom community. Growth in the number of families has driven a surge in residential construction, though build-out appears imminent. The City and the MRC have projected lower growth over the coming twenty years, reflecting the importance of retaining agricultural activities and ecologically significant features. Great emphasis is placed on densification of select nodes and corridors to sustain future growth. Though not required by the metropolitan development plan, transit-oriented development around the commuter rail station is hoped to help achieve many of the City's planning goals.

Documents

CMM. (2012). Plan métropolitaine d'aménagement et de développement. Montreal: Communauté métropolitaine de Montréal.

MRC de Deux-Montagnes. (2015). La MRC Deux-Montagnes - Schéma d'aménagement et de développement. Retrieved May 20, 2015, from http://www.mrc2m.qc.ca/fr/services/shema-damenagement-du-territoire/

Ville de Sainte-Marthe-sur-le-Lac. (2012). Plan d'urbanisme. (Bylaw No. 1000). Sainte-Marthe-sur-le-Lac: Service de l'urbanisme.

Paradise NL

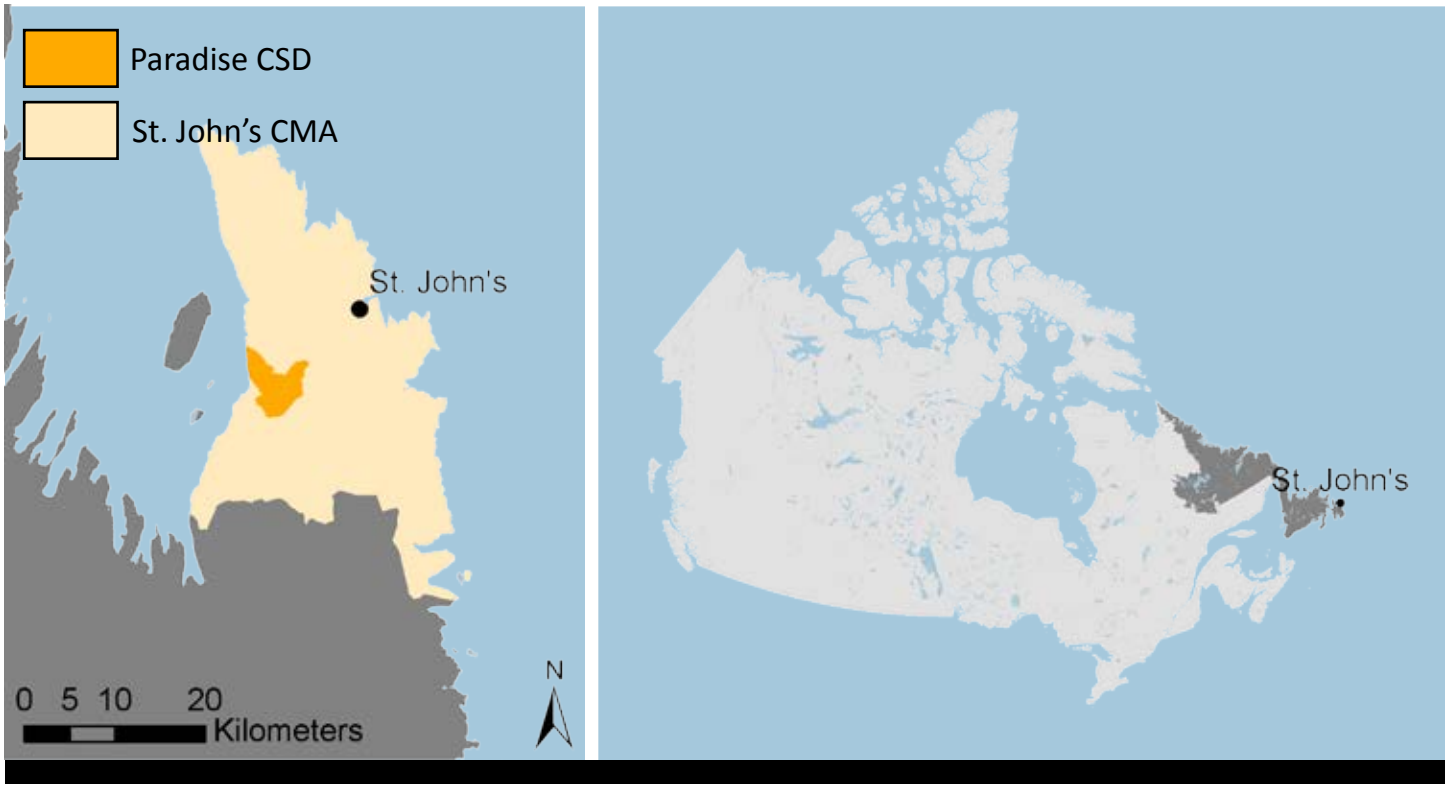
Though Newfoundland and Labrador is known for its low growth rate, the town of Paradise is the fastest growing municipality in Atlantic Canada. The population grew by 40.6% between 2006 and 2011, and 31.1% between 2001 and 2006. Conversely, the province had five year growth rates of 1.8% in 2011 and -1.5% in 2006. The 2011 Census population is 17,645 residents, but municipal estimates in 2015 place the population at 19,500.

Paradise is part of the St. John's urban region, and a popular bedroom community due to its proximity to the city: St. John's is only 16 kilometres to the northeast. In many ways Paradise is typical of Canadian commuter suburbs. It is predominantly residential, low density, and has a young population. Only 13.4% of the workforce is employed in Paradise, while 76.6% commute within the metropolitan region. Recent developments have pushed the share of duplex apartments to 17.6% of housing units, with single-detached houses accounting for 76.7%. The gross density of the town is 2.36 units per hectare. Paradise is also known for having the youngest average age in the province, which at 35.4 is nearly a decade below the provincial average of 44.

Planning for Growth

A high rate of population growth is not new to the Town of Paradise. Although growth in the province is low, and was negative in the 2006 and 2001 Census years, Paradise has enjoyed a growth rate of 20.8% in 2001 and 31.1% in 2006. The most recent growth rate, in 2011, was 40.6%. Newfoundland and Labrador had a growth rate of 1.8% in this period, and the St. John's CMA a rate of 8.8%.

Figure 22 - Paradise context map



"There is a safe, nurturing environment waiting for you in Paradise. One of the big advantages is that we offer the best of urban and community living. Residents have easy access to work, shopping, recreational and cultural attractions, hospitals and educational institutions" (Town of Paradise, website)

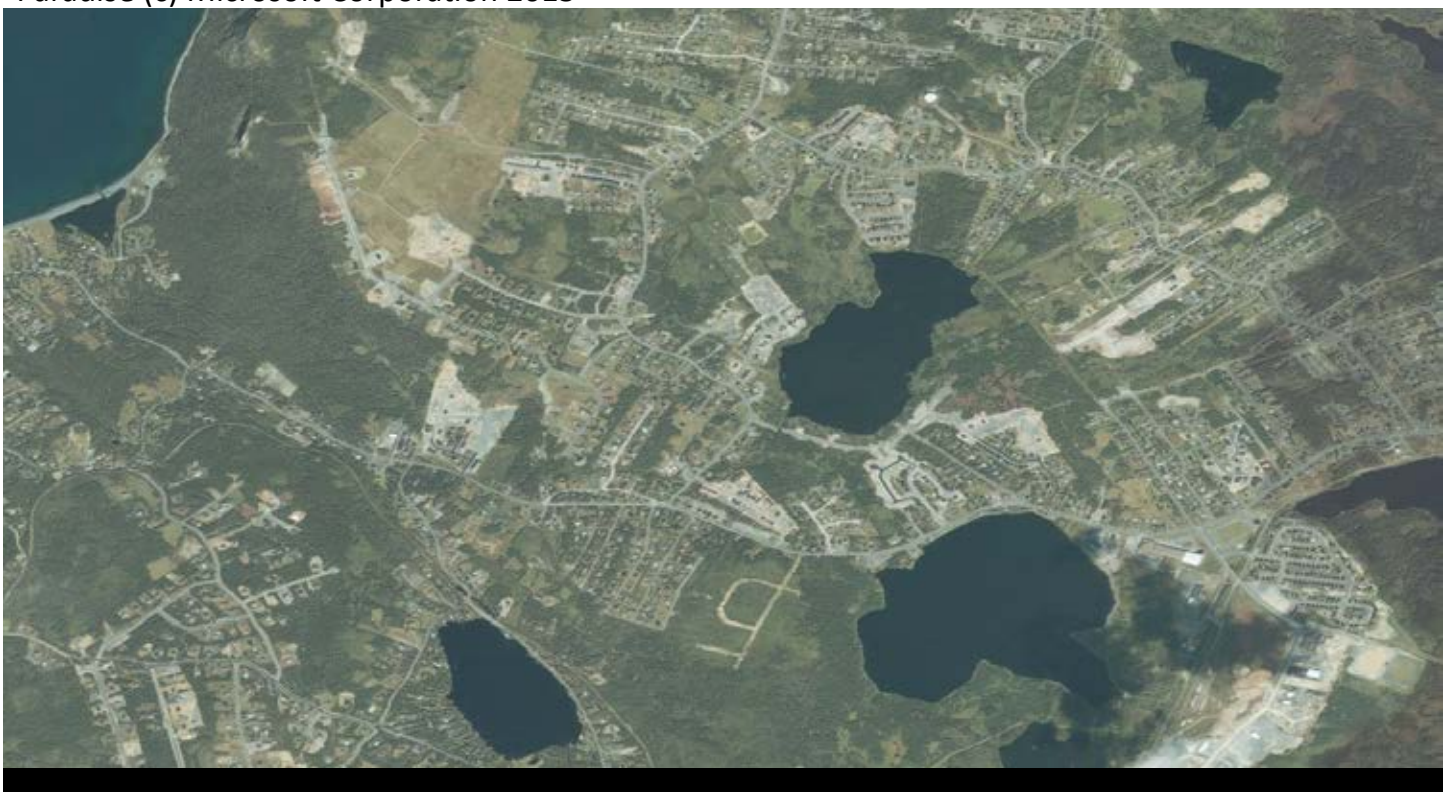
The current Municipal Plan was adopted in 2004, with a ten-year outlook. The Town projected a linear annual growth rate of 3%, which would see the population increase from 9,600 to 14,098 by 2014 (Town of Paradise, 2004). However, population growth spiked soon after the plan was adopted: the 14,098 population horizon was reached sometime between 2006 and 2011. The actual population in 2011 was not projected to be reached until 2022.

The high level of growth in Paradise may have been aided by the amount of buildable land in the municipality resulting from several amalgamations in 1992. Two towns – including Paradise – and four urban areas were combined to form the current municipality. As such, the Town has no plans to acquire additional land to support growth, but is rather seeking to control and guide growth in designated areas (Town of Paradise, 2004, 2013).

Regional Planning

There is no regional level of government in Newfoundland and Labrador. Instead, regional plans are drafted in collaboration among municipalities, and adopted by the provincial Department of Municipal and Intergovernmental Affairs. Paradise is included in the St. John's Urban Region, which has had a regional plan since 1976. The regional plan is currently being

Paradise (c) Microsoft Corporation 2015



revised by the fifteen member municipalities to respond to population growth, demand for development, economic opportunities, regional transportation and services, environmental protection, and community vitality (City of St. John's, 2015). The new plan is being referred to as the Northeast Avalon Regional Plan.

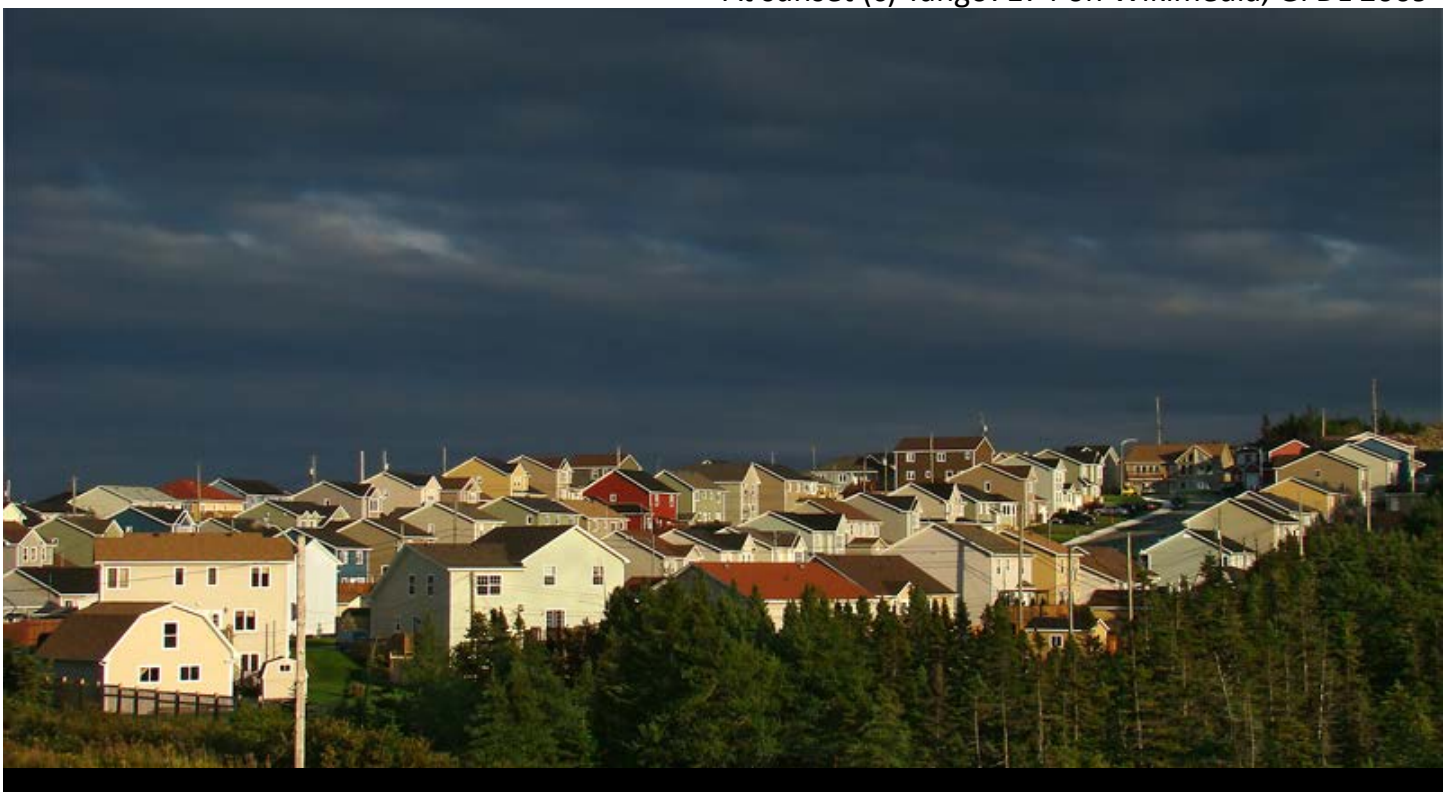
Local Planning

Amalgamation of several jurisdictions in 1992 created what is now the town of Paradise. Each of the previous jurisdictions had allowed development on its territory, with the result of disjoined patches of development across the whole of the new town with varying levels of municipal services. The planning vision established in the current Municipal Plan seeks to reverse this development trend, favouring consolidation of existing urban areas and more efficient service provision. To achieve these two goals, consolidation and efficiency, the Town prioritizes infill on existing roads and in areas where municipal services are available. Growth is only permitted adjacent to serviced areas and must be harmonious with the neighbourhood built form. The Town requires an Area Plan for all new subdivisions.

In an attempt to improve access to affordable housing, the Town is currently in the process of identifying areas for more dense development and amending planning regulations to allow more diverse housing types. As the Town is involved in reviewing the regional plan, it is not likely that these amendments to the Municipal Plan will be made until after the review is completed. In the meantime, a Strategic Plan establishes several goals and objectives to guide decisions until 2017.

One of these goals, which is also present in the Municipal Plan, is to create a town centre. Increasing the share of non-residential uses in the town will bring a new tax base, and allow the municipality to improve its level of service (Town of Paradise, 2013). Retail, office, civic, and community uses will be concentrated in

At sunset (c) Tango7174 on Wikimedia, GFDL 2009



this centre, which is largely undeveloped at this time. A greenfield area with access to several transportation corridors and pedestrian trails was chosen for the town centre, though a concept plan has not yet been completed.

Improving the economic vitality and diversity of the town is another goal. In addition to commercial growth in the established business park and new town centre, industrial growth is important to the Town. In response to regional growth and the strategic location of Paradise, a Future Industrial Zone was introduced in 2006 to accommodate industrial growth. As with residential developments, new industrial development requires an Area Plan before a development permit is issued.

Summary

The town of Paradise is the fastest growing municipality in Atlantic Canada, and due to its history faces challenges in the organization of its territory. Though the Town was unable to anticipate the spike in population growth after 2006, strict controls on residential growth adopted in 2004 have allowed Paradise to grow in an orderly, contiguous manner. The Town aspires to have a vibrant town centre and a greater employment base to reduce its dependence on St. John's. To this end it has recently adopted a strategic plan to guide decision making until new regional and municipal plans are drafted.

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Summary

Regardless of the size of the municipality or the tier of government, Smart Growth principles have been embraced by the planning profession in Canada. While several principles are simply indicative of what has been considered "good planning" for decades, many of the plans surveyed explicitly referred to Smart Growth as a planning model. Smart Growth principles included in upper tier plans – both regional and metropolitan – ensure that these concerns trickle down to even the smallest municipalities. While each of the ten principles identified do not appear in all the municipalities surveyed, five were prominent. These were:

- A range of affordable housing choices
- Development that creates vibrant, walkable communities
- Intensification and renewal of existing urban areas
- Conservation of green spaces, agricultural land, and ecologically significant areas
- Cooperation among actors within regions

Each of these principles will be discussed briefly in this section. Each of the principles on their own is not necessarily unique to Smart Growth, but when assembled together support the goals and aspirations of the Smart Growth model.

Housing choice

All of the municipalities indicate a desire to increase the share of multi-unit dwellings available in new developments. Affordable housing is sometimes mentioned, though the general belief is that affordability concerns can be satisfied through providing units of appropriate sizes to a variety of family types. In most cases, higher density housing options are located only in the designated core or urban centre areas, while surrounding residential subdivisions retain a primarily single-detached form. Semi-detached and townhouse units are also allowed in these areas, though they must fit with the design and massing of the neighbourhood.

Achieving a mix of housing options is done through the municipal plan. Two different approaches are seen in municipal policy, though both can be used concurrently. The first is to establish quotas of the different housing types: single-detached, semi-detached, townhouse, and apartment. The City of Leduc, AB, requires that no one housing type comprise more than fifty percent of the residential units in a new subdivision (City of Leduc, 2012). Other municipalities set internal targets: in Milton, ON, housing type targets are based on the projected population at build-out of the total urban area (Town of Milton, 2010b).

"Healthy communities are the key to a successful future. They are the communities that will thrive by attracting investment and provide a high quality of life. To build competitive and healthy communities, we have to integrate physical development with environmental, social and economic perspectives in decision-making" (RM of La Broquerie, 2011, p. 6).

"By increasing housing density in serviced areas, infill development contributes to more efficient use of land and municipal services" (Town of Paradise, 2004, p. 22)

The second, and more common, means of achieving greater housing variety is through increased minimum density requirements. In all cases where a metropolitan plan is in effect, minimum density targets are set at a regional level. Where regional targets are absent, municipal targets are often high enough to force development that includes secondary suites, duplex apartments, or above-shop suites. While some targets are specific to new subdivisions, others apply designated growth areas to promote intensification.

Vibrant Communities

Many of the municipal vision statements use the word "vibrant" to describe the ideal future, but vibrancy in the metropolitan fringe takes a different form than vibrancy in the metropolitan core. In these fringe municipalities, vibrancy appears to be more-or-less equivalent to variety in land use, particularly commercial activities. Every single municipality studied identified a desire to reinvigorate the town centre, creating a mixed-use urban core that could support the day-to-day shopping and service needs of residents.

While increasing quality of life for residents is one motivation, almost all the municipalities approached commercial and industrial activity through a focus on their total tax base. As the Town of Okotoks states in their Municipal Development Plan, commercial and industrial developments are net taxpayers: they do not require the same level of service as residential developments, and therefore subsidize the continued viability of long-term servicing requirements (Town of Okotoks, 1998). Municipalities thus strive to achieve fiscal sustainability through promoting community vibrancy.

Many of the municipalities studied have employment or commercial power centres at the edge of or beyond the urban boundary. In the case of such small municipalities, re-orienting activity from the edges back to the urban core will prove a difficult challenge. Whether the intensification and economic development strategies found in the various policy documents have an effect on existing and future activity nodes remains to be seen.

Intensification of Existing Urban Areas

The notion of fiscal sustainability also appears in infrastructural concerns. Proponents of Smart Growth have shown that low density development is more expensive to service per capita than higher density development. Municipalities have accepted this and are now seeking to intensify land use in existing urban areas. In the larger municipalities, this may take the form of increased density requirements or amended zoning codes in the urban centre, so as to create a more dense, mixed-use core. Smaller municipalities are looking to focus new growth on existing service lines, filling in the gaps between homes and businesses to use existing infrastructure more efficiently.

Infill targets are common in areas with a regional growth plan. These range from an infill target of 25% of new residential development in the Calgary Region to 40% in the Greater Golden Horseshoe Region (CRP, 2014; Ontario, 2006). However, whether or not these targets will be effective in smaller municipalities

"Achieving Smart Growth on the local level requires a collective vision, a shared decision-making framework, procedures for dealing with conflict, skilled leadership, strategic planning, and a substantial commitment of time, energy, and skills from volunteers. Organization and collaboration are the keys to sustaining your efforts to promote and implement viable alternatives to uncoordinated growth" (Smart Growth BC, 2001, p. II-3).

included in the metropolitan region is unclear. For example, the City of Chestermere, AB, has set a goal to maintain the low-density character of its development, and has an infill target significantly lower than the Calgary Regional Plan (City of Chestermere, 2009). There are two potential explanations for this. The first is that infill targets are difficult to meet in municipalities where a large supply of greenfield land is held as a priority growth area, as is the case when recent land annexations have occurred. The second is that fringe municipalities wish to retain the low densities that make them attractive to new residents, and forcing infill to raise density would decrease their ability to compete with neighbouring municipalities.

Nevertheless, intensification appears to be an increasingly important development strategy for jurisdictions of all sizes, from rural municipalities of only 5,000 residents to the cities containing 50,000. Whether or not intensification will actually occur as a result of new policies and targets depends on the willingness of municipalities to adopt and enforce regional policies as part of their municipal plans and land-use bylaws.

Conservation of Green and Rural Spaces

Many actors work to protect zones outside of the urban area. Municipalities have the power to designate conservation zones, which may include watersheds, wooded areas, steep slopes, or agricultural uses. Regional bodies – whether a tier of government or a partnership – may establish larger conservation areas that cross municipal boundaries. Comprehensive planning of ecologically significant areas and regional watersheds is common at this level. Provincial governments have the authority to establish provincial parks and other conservation areas, as does the federal government. There were no cases of federally protected conservation areas within the boundaries of municipalities in this study.

Conserving undeveloped land is especially important in the metropolitan fringe, where greenfield land is abundant and municipal boundaries increase incrementally with growth. Ontario has established conservation areas and a greenbelt within the Greater Golden Horseshoe Region to control physical growth of municipalities (Ontario, 2006). In Québec, urban growth can be controlled through an agricultural development plan (Plan de développement de la zone agricole, PDZA), which is adopted by the regional municipality. In all the provinces studied, conservation of green and rural spaces was most common at the regional level, due to the boundary-crossing nature of ecological systems.

Regional Cooperation

All of the municipalities studied conduct planning activities within an inter-jurisdictional

framework. Only two are not part of an organized region: Blackfalds, Alberta; and La Broquerie, Manitoba. The organization of regions differs from province to province depending on the enabling legislation. Ontario and Québec have regional municipalities that operate as an upper tier of government and include the land area of local municipalities, whereas the rural municipalities of Alberta and Saskatchewan include only the area outside of local municipalities. In the three Prairie provinces, inter-municipal plans between municipalities and rural municipalities or counties are common.

Metropolitan plans are present in all of the census metropolitan areas surveyed (Calgary, Edmonton, Montréal, Saskatoon, St. John's, Toronto, and Québec City) at various levels of completion. The organization and structure of metropolitan planning bodies differs among the provinces studied. The cases include co-operative planning among local jurisdictions (Alberta, Saskatchewan), separate levels of upper-tier municipalities (Ontario, Québec), regional planning by the province (Ontario), and cooperative planning among local and provincial governments (Newfoundland & Labrador).

Only Blackfalds, Alberta, and La Broquerie, Manitoba, are not included in a metropolitan area or regional municipality. However, both municipalities conduct inter-municipal planning activities with their neighbours and state an intention to work toward greater regional cooperation. Marieville, Québec is not part of Greater Montréal or the Montréal CMA, but it is contained in the Rouville Regional County Municipality. Two of the other local municipalities in the RMC are part of Greater Montréal, and as such Marieville has chosen to align its own municipal plan with the metropolitan plan (MRC de Rouville, 2014b).

In all of the provinces studied, regional plans contain targets that municipal plans must align with. For example, Greater Montréal sets minimum density requirements for zones based on transportation access and existing urban scale, with the requirements for each zone rising gradually through the thirty-year scope of the plan (CMM, 2012). In all jurisdictions, changes to the metropolitan plan trigger a cascade of revisions to the various plans it supersedes, including the regional plan and municipal plan. This ensures that all municipalities are working toward the same planning vision.

Room for Improvement

The fifteen municipalities have high hopes for their communities, but the on-the-ground reality of the built environment often does not match with the narrative created in their Official Community Plans. Aerial photography of each municipality reveals a sparse, sprawling pattern in Western Canada and Ontario. Opportunities for residential and commercial infill are abundant, but densification would be at odds with the values of those who chose the suburban lifestyle and drove the high levels of population growth. Municipalities that do

"However, without properly managing growth, communities will continue to experience the negative aspects associated with rapid growth, such as increased traffic congestion, deteriorating air and water quality, and the disappearance of agricultural lands and natural resources" (Ontario, 2006, p. 6).

choose to rein in sprawling development in favour of Smart Growth may face a dramatic downturn in the number of new residents, thwarting any growth aspirations. Municipal and private actors thus walk a thin tight-rope while balancing the values of sustainable development with those of the general population.

To achieve this, greater regional leadership is required. While nearly all of the municipalities studied participated in regional planning activities, the structure of the upper tiers of government differed (Figure 23). In Alberta and Saskatchewan, regional governments were composed of representatives from each municipality, with decisions made cooperatively among municipalities. The plans produced by these bodies had vibrant narratives and clear goals, but were short on implementation. Accountability also appears to be an issue in these member-based regional bodies, as many of the Albertan municipalities chose not to align their municipal plans with the regional plan.

Municipalities in Central Canada fared better, where regional bodies were a separate tier of government. Regional Municipalities in Ontario and Regional County Municipalities in Québec coordinate the planning activities of several local municipalities. In addition, metropolitan bodies look after the planning and development of Toronto, Montréal, and Québec City. Municipal and regional plans are expected to align with metropolitan plans, so changes at the metropolitan or regional tier trigger a cascade of revisions by lower tiers of government. All four of the municipalities contained in a Central Canadian metropolitan region have aligned their growth plans with upper tiers of government, and Marieville ascribed to the expectations of the Montréal Metropolitan Plan despite being outside of the planning area. While the growth contexts of Western and Central Canada are quite different, adopting a government and planning structure more similar to Ontario and Québec may help fringe municipalities in Alberta and Saskatchewan achieve regional Smart Growth goals.

A stronger upper tier of planning regulations is also necessary to check the impact of residents' opinions and values toward growth. There is a degree of NIMBYism in many of the municipalities studied, where current residents would be happy to benefit from the increased transit, potential tax breaks, neighbourhood amenities,

Figure 23 - Regional Structure

	Regional Body or Bodies		Type	Cases
AB	Calgary Regional Partnership		Partnership	Airdrie, Chestermere, Okotoks
AB	Capital Region Board		Partnership	Beaumont, Leduc
SK	Saskatoon North Partnership 4 Growth		Partnership	Martensville, Warman
ON	Greater Golden Horseshoe	Regional Municipalities	Upper-tier	Milton, Whitchurch-Stouffville
QC	Communauté Métropolitaine de Montréal	Regional County Municipalities	Upper-tier	Sainte-Marthe-sur-le-Lac
QC	Communauté Métropolitaine de Québec	Regional County Municipalities	Upper-tier	Sainte-Brigette-de-Laval
NL	Northeast Avalon Region		Partnership	Paradise

"The province is also the only level of government that can diffuse the competition among municipalities to attract development interest and new residents by not making new growth pay its own way" (Alexander and Tomalty, 2002, p. 407).

and strong local economy that more dense development would bring, but do not want to see intensification of their own neighbourhoods. Rather, there is a desire for a mid-rise urban core, low-rise inner ring suburbs, and a more dense outer ring of new development. The vocal minority is in many municipalities composed of "CAVE people" – citizens against virtually everything. Without the weight of upper-tier governments behind them, local municipalities cave to the status quo. This is evident when looking at the objectives and vision statements contained in municipal plans versus aerial photography of urban form. A report publuished by the CMHC in 2005 raised similar concerns in regard to findings Canadian metropolitan areas:

> "These results reflect not only a historical lack of political will at all levels of government, but also other constraints such as the many regulations that have been put in place over the decades that militate against innovation in planning and development, the lack of widespread interest in the development community in non-conventional development designs, the financial impacts of municipal taxation and development charges policies, and consumer preference for lower density urban landscapes" (Tomalty & Alexander, 2005, p. 7).

It is difficult to say how heavy-handed a municipality should be in achieving Smart Growth goals, but greater leadership will be necessary to change the course of growth in fringe municipalities.

The articulation of goals and targets can also be improved. Target residential units per hectare, proportion of new dwellings through infill, and ratio of tax revenue from residential versus non-residential properties are all common across Canada. However, these targets miss some of the key Smart Growth principles: mixed-use development and vibrant communities. Increasing the density of a residential neighbourhood may increase housing affordability, servicing costs, or transit provision, but without added amenities it remains a residential neighbourhood.

One innovative solution is in Ontario, where the Growth Plan for the Greater Golden Horseshoe sets density targets based on the number of residents and jobs combined. This allows for designation of a hierarchy of urban centres based on regional and local importance, with corresponding density targets for each. While it is possible for a target to be met wholly by residents or jobs, additional policies can be put in place to establish minimum proportions.

In Conclusion

Smart Growth appears to enjoy the same high level of acceptance in Canada as it does throughout the western world. Municipalities on the metropolitan fringe are increasingly aware of the environmental and fiscal costs of low density development, and using Smart Growth principles to manage future growth. Every single case identified a need to diversify the housing stock, increase the share of non-residential uses, and utilize infrastructure to

ensure both contiguous growth and intensification of urban areas. These municipalities aim to become complete communities with shops and services located in an urban core, strengthening the local economy and improving quality of life for current and future residents.

What remains to be seen in these high-growth municipalities is whether the Smart Growth principles that appear in their municipal plans will have a lasting impact on urban growth and development. The status quo of disperse suburban growth cannot be reined in with principles alone, but must be accompanied by municipal and provincial will.

"The subtle shift in mindset that has taken place in recent years is that today, there is less concern about attracting growth and more concern about managing growth toward a positive and proactive vision we have for the community" (Town of Okotoks, 1998, p. 1).

West Kelowna (c) the author

Glossary

ASP Area Structure Plan

CA Census agglomeration

CMHC Canadian Mortgage and Housing Corporation

CMA Census metropolitan area

CMM Communauté métropolitaine de Montréal (Greater Montréal)

CMQ Communauté métropolitaine de Québec (Greater Québec City)

CRB Alberta Capital Region Board

CRP Calgary Regional Partnership

CSD Census subdivision

GTA Greater Toronto Area

IDP Intermunicipal Development Plan

LUD Local Urban District

MDP Municipal Development Plan

MP Municipal Plan

MRC Municipalité régionale de compté (Regional County Municipality)

OCP Official Community Plan

P4G Saskatoon North Partnership for Growth

PDZA Le Plan de développement de la zone agricole (Agricultural Development Plan)

PMAD Plan métropolitaine d'aménagement et de développement (Metropolitan Development Plan)

PU Plan d'urbanisme (Municipal Plan)

RM Regional Municipality *or* Rural Municipality

SAD Schéma d'aménagement et de développement (Regional Development Plan)

TOD Transit-oriented design

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