

The Future of Land Use, Growth Management and Urban Form

Approaches for Canada's Capital Region

**A Discussion Paper for
Choosing our Future**





Choosing our Future Discussion Paper

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with contributions from:

City of Ottawa

City of Gatineau

National Capital Commission

Choosing our Future is an initiative led by the City of Ottawa, in partnership with the City of Gatineau and the National Capital Commission, to prepare Canada's Capital Region to meet the challenges of the 21st century. It will result in long-term strategic directions that integrate the concepts of sustainability, resiliency and liveability into all aspects of our communities.

Purpose

This series of Discussion Papers presents a range of ideas for how we can succeed in facing challenges such as demographic change; resource scarcity; globalization and economic uncertainty; rising energy and food prices; a changing climate; and sudden shocks such as extreme weather conditions and emergencies. The papers are intended to stimulate dialogue about the best ideas for the future of the region and provide the basis for our future plans.

Discussion Papers in this series include:

- The Future of Culture
- Greening the Economy
- The Future of Social Development
- The Future of Food and Farming
- The Future of Natural Systems
- The Future of Buildings and Energy Supply
- The Future of Water, Stormwater, and Wastewater Infrastructure
- The Future of Materials and Solid Waste Management
- The Future of Land Use, Growth Management and Urban Form
- The Future of Mobility

The ideas discussed in this series include many that were suggested by participants at public and stakeholder events during the process to date.

The papers, as well as other information about the initiative, can be found online at:

www.choosingourfuture.ca

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1 Introduction

1.1. The Future of Land Use, Growth Management and Urban Form

Canadian communities have evolved in an era of steady population growth and immigration, supported by cheap energy, a stable climate, and material abundance including an affordable and plentiful food supply. There are signs that these factors are shifting and the region needs to be prepared for a future where the population is older and more diverse; and resources like energy, water, food and materials are more scarce and expensive. How Canada's Capital Region accommodates a growing population is one of the key issues for regional sustainability. How can we create a liveable and resilient region that can thrive in an era of more expensive, less abundant fossil fuels? How can we adapt and continue to function in the face of stresses and change? And how do we ensure that urban form is affordable for future generations?

The shape, density and design of our communities will have a strong bearing on how dependent on energy we are, and will be a key determinant in the scale of greenhouse gas (GHG) emissions in the region. Community form will also influence the intensity of heat waves (through the heat-island effect¹), how much land is available to grow food, and our supply of water. As more land is consumed for urban uses, less land is available for farming and for ecosystem functions such as habitat, air and water filtration, and natural stormwater management. Growth patterns, land use, and urban form influence the diversity and affordability of housing in the region, and also the affordability of providing municipal infrastructure (roads, transit, water, wastewater) and services (such as libraries, fire, police, recreation, and social services).

¹ The heat-island effect refers to the tendency of urban areas to reach higher temperatures than the surrounding area because of waste heat generated within the city; the heat-retaining qualities of asphalt, concrete and other materials used in urban development; the lack of vegetation and evapotranspiration; and other physical characteristics of cities.

1.2. Summary

A range of high-level strategic directions for land use, growth management and urban form is explored in this paper. Each strategic approach is a response to the question: “What and how much should we do to achieve a more sustainable, liveable and resilient region?” Based on public and stakeholder feedback, this paper is designed to help forge a preferred path for the long-term plans developed through Choosing our Future. The strategies described here are not meant to be exclusive. Rather, they are framed as questions to stimulate discussion, responses and additional ideas. Those discussion areas include:

- **Focusing growth in connected, compact, complete communities** — How can we focus growth within existing urban boundaries, use infill, and leverage transit investments to intensify land use, improve liveability, and create a mix of uses to meet neighbourhood needs? This could reduce pressure for expansions onto undeveloped land in the rural area, allowing this to remain agricultural and rural in character. Part of the strategy would explore new ways to fund and price city services with financial disincentives for wasteful practices so as to encourage the kind of smart growth that is desired.
- **Enhancing the suburbs** — How can the suburbs be gently transformed into more convenient, pedestrian- and bike-friendly neighbourhoods with more connected street patterns? Could suburban town centres with intensification around rapid transit emerge as community nodes? How could we improve the connections for pedestrians and cyclists between homes and transit stations? Could obsolete commercial and retail sites be redeveloped to be greener at higher densities? Could low-profile infill development and “hidden density” such as secondary suites be used to boost the density of suburban areas?
- **Creating more sustainable greenfield development** — Even with a strong overall intensification agenda, there will still be demand for new housing to be built on undeveloped land. How can greenfield developments be encouraged to meet the highest standards of design and sustainability performance to reduce impacts on the environment, keep infrastructure lifecycle costs low, provide for the basic daily needs of residents, and create truly complete communities?
- **Redeveloping federal office complexes as mixed-use areas** — How do we harness major office districts owned by the federal government that are served by rapid transit to create innovative, new mixed-use areas and transit-oriented developments? Rather than continuing as large, single-use office complexes, could these areas be redeveloped with a broad mix of uses that serve the surrounding community?
- **Focusing rural growth in villages** — How can rural lifestyles remain an option while focusing on sensitively designed, appropriately-scaled new mixed-use development within village boundaries? What role can strong boundaries have in limiting the extension of development into rural and agricultural lands? What is the role of place-specific design guidelines and community plans in maintaining village vitality and rural identities?
- **Paying greater attention to design** — The identity and health of the region’s diverse communities is often attributed to the unique characteristics of the area. How can communities and neighbourhoods be designed in a way that is appropriate to the location

and context of each area? What new tools need to be developed to support and improve design excellence throughout the region?

- **Expanding communication, education and promotion** — Current trends towards intensifying development have left many planners, developers and communities searching for design solutions that improve the quality of life in and around more compact neighbourhoods. How can successful and not-so-successful plans and projects to increase density in the city be held up to objective scrutiny as part of a continuous improvement effort?



2 Background

2.1. Land Use, Growth Management and Urban Form Defined

Growth management is the management of the form, density and layout of neighbourhoods and communities as the population and economy of a region grows. Growth management is used by governments to ensure that cost-effective services are available to meet a growing population's demands and to ensure that municipal infrastructure can be provided in an affordable and technically feasible way. It is also used to manage impacts on the agricultural land and the natural environment and to shape developments that are less reliant on the automobile and supportive of transit. Growth management can involve regulating the type, timing, location, amount, and density of land uses. This is generally achieved through Official Plans in Ontario and Urban Plans (les Plans d'Urbanisme) in Quebec and a host of supporting policies, regulations and guidelines.

At the neighbourhood level, land use and urban form have a large influence on travel distances to daily destinations, the availability and frequency of transit and therefore on the choices people make about how to travel. Walking and cycling contribute to the good health of residents and limit the amount of emissions produced in the region from transportation.

Perhaps more than all this, land use and urban form patterns that encourage compact, and more complete communities create places that people want to live and work in. Neighbourhood shops within walking distance that impart a unique sense of place; a diversity of housing that appeals to a variety of ages and lifestyles; streets that are comfortable to cycle on - all of these increase neighbourhood liveability. They benefit the environment, and they also benefit our quality of life. Quality of life and the liveability of our communities benefit not only residents, but also influence the region's ability to attract tourists and highly mobile talent that will, in part, drive future economic success.

2.2. Context

Governance and policy

Each municipality in the region has different mandates, reflecting differences in legislation between Ontario and Quebec and the authority allocated to the municipal level by the province. Municipal authority to act in land use matters is supported by a variety of policies. In Ontario, for example, such legislation includes the *Planning Act* and the Provincial Policy Statement, *Ontario Heritage Act*, *Environmental Assessment Act*, and the *Ontario Water Resources Act*.

Municipalities in Quebec must apply the *Act Respecting the Preservation of Agricultural Land and Agricultural Activities (Loi sur la protection du territoire et des activités agricoles)*, established in 1978 to protect farmland. Rural land use in Quebec outside the City of Gatineau is governed by the upper tier *MRC des Collines de l'Outaouais* and various lower tier municipalities including villages and townships. Municipalities in Quebec must also respect the *Act Respecting Land Use Planning and Development (Loi sur l'aménagement et l'urbanisme)* dating from 1979 (under review at present), the *Environment Quality Act (Loi sur la qualité de l'environnement)*, *Cultural Property Act (Loi sur les biens culturels)* (under review) *Municipal Powers Act (Loi sur les compétences municipales)*, and a set of bylaws that establish a common framework of reference for municipal activities.

The cities of Ottawa and Gatineau establish land use and development policy and approve new development on publicly and privately owned lands within their boundaries. They do this through municipal plans—Ottawa's Official Plan,¹ Gatineau's Urban Development Plan (*Plan d'urbanisme*)² and Land Use Plan (*Schéma d'aménagement*)³—and through zoning bylaws. The National Capital Commission owns a large area of land within the region and it leads land use and development changes on these lands, as well as influencing development on other federal lands and some private lands through plans like the Plan for Canada's Capital and the Greenbelt Master Plan.

Development history

During the latter part of the 20th century, market demand for single-detached houses on large lots increased pressure on land supplies in the region. At this time of significant growth, a “garden city” approach to community planning was popular; many neighbourhoods turned inward and were built around a core containing a school, parks, community centre or library, and a small commercial plaza. During the 20 years from 1970 to 1990, land prices and housing costs increased to the extent that large single-detached houses were not an affordable option for many residents. The 1990s saw the rise of street-oriented townhouses to fill this market need. By the end of the 1990s, the Province of Ontario had created strong policies to better manage urban growth and to protect environmental and agricultural lands.

Quick Facts

Canada's Capital Region is approximately 4,700 square kilometres in size, about the size of Prince Edward Island.

Based on present modelling, the current population is approximately 1.2 million and is anticipated to grow to almost 1.8 million by 2060, an increase of 50% over 50 years.

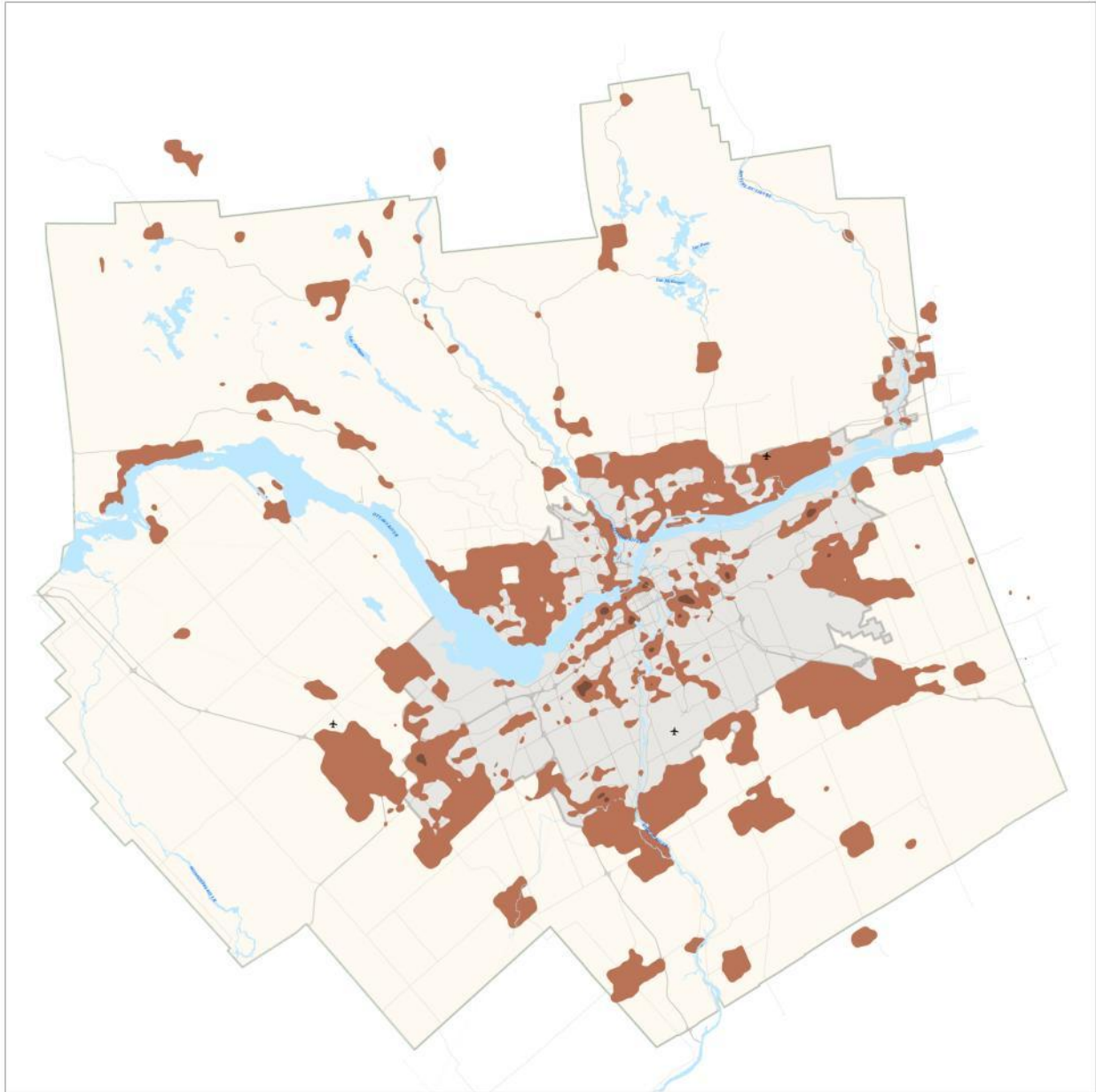
Growth and development in Ottawa and Gatineau through the 1980s and 1990s has been marked by the following characteristics:

- Periodic expansion of the urban area into farmland and other rural land in response to property owners' applications.
- Suburbs were conceived as distinct areas for housing not business, with mixed-use development proposed primarily for the downtown and new suburban centres as well as some rapid-transit stations.
- Overall, development was low density and dispersed, resulting in a car-oriented land use pattern with little attention given to walkability. Shopping areas, park space, and community services were planned in a hierarchy that reflected the size of population they were intended to serve. The development of "big box" retail stores upset this order by serving a larger market from new arterial road locations, pulling business away from smaller stores and neighbourhood plazas.
- In the rural area, major woods and wetlands were studied and additional measures to protect them were established in plans and policies.
- Rural development represented about 10% of growth in Ottawa and occurred in both villages and country lot subdivisions. About 40% of this rural growth occurred in villages.
- In Gatineau, although little development occurred in rural or agricultural areas, greenfield development has been happening increasingly far from the core.

Since the 1980s and 1990s, suburban densities in the region have increased and mixed use, compact development and other ideas championed by new urbanism, Smart Growth, and environmental concerns have been widely adopted but only partially implemented.

2.3. Challenges and Trends

Looking forward, Canada's Capital Region will need to deal with a number of growing challenges in order to maintain the high quality of life that residents currently enjoy and to advance regional sustainability and resilience. Continuing on the development path of the late twentieth century (Map 1) would require over 22,000 hectares (200 square kilometres) of new urban land outside the existing urban boundaries of Ottawa and Gatineau by 2060. This would add significantly to the costs of new infrastructure such as roads, sewers, water, and electricity and the costs of providing community services such as fire, recreation, police, libraries and day-cares. It would also impact rural communities, agricultural land and natural features such as forests in the rural area.



Map 1: The historical residential growth trend, if continued, would result in large residential communities outside the existing urban boundary. This potential growth pattern represents growth in rural villages as well as in potential expansion areas in the City of Gatineau, and the City of Ottawa.

Intensifying urban areas

Most of the urbanized area of 2060 already exists and much of what has been built may be largely unaffordable to many residents given the higher energy prices expected in 2060. Within this timeframe, many buildings will likely need to be replaced. While replacing a whole city is not realistic, it is possible to proactively look for opportunities to make existing development more compact, more suited to walking, cycling, and transit, and with a greater mix of uses.

Demographic change

Within 30 years, one out of every four Canadians will be a senior citizen.⁴ Based on present modelling, the population of Ottawa and Gatineau is projected to grow from 1.2 million to 1.8 million by 2060—a 50% increase over 50 years. The increased demand for living space will make our urban areas denser, which creates both challenges and opportunities. While higher density can support more walking, cycling and transit for an older and larger population, a liveable community also requires attention to design, creation of quality public spaces, and places for all people to live, work, and spend their leisure time.

Enhancing the Suburbs

People live in suburban areas in part because they value peace and quiet and a green setting that overall creates an appearance of low density. Increasingly, however, suburban residents are concerned about lengthy commuting times and the need to drive for shopping, recreation and other services. How can the suburbs become more walkable and convenient for their residents, offering better access to urban amenities while maintaining their valued qualities?

Municipal Costs

Municipal governments have struggled to budget for the ongoing lifecycle costs of roads, infrastructure and services required by low-density suburbs, with charges attached to the new development covering only part of the cost. The net cost of providing municipal services is greater outside the Greenbelt than it is inside the Greenbelt, once the cost of service provision is compared with the potential revenues from the property tax. Considering only net expenditures, the cost of providing municipal services is about 7% higher per capita outside the Greenbelt and 15% higher in rural areas compared with the city-wide average.⁵ New development through intensification also carries public costs and challenges, however. Given the age of water and wastewater infrastructure in central areas and the change in land use and infrastructure technology over time, it can be challenging to determine the effects of proposed new development on these systems and the need for any upgrades to the local service.

Re-balancing Property Taxes The cities of Ottawa and Gatineau need to find a different way to fund infrastructure and price city services. The current property tax model penalizes centrally-located development with higher taxes applied to higher value properties, and rewards suburban development with lower taxes.⁶ This further skews affordability towards greenfield development at the urban periphery rather than encouraging developers to build and residents to locate in the urban core.

Resilience

Resilience describes the degree to which a community can bounce back from major disruptions. Resilience is a crosscutting theme that affects every aspect of community development. Current trends and the challenges ahead described above are likely to be further exacerbated by the effects of a changing climate, rising energy prices and potential resource scarcity. As we move forward, there is a need to design processes, human services and environments that can adapt to and recover from major, unforeseen events.

2.4. Goals

Recognizing the need to address these issues and challenges, and to envision a better future, Choosing our Future, through community outreach, has developed a set of high-level aspirational goals to define success over the long term. This discussion paper and the strategic directions identified respond to three primary goals and several related goals:

Primary Goals

All residents enjoy a high quality of life and contribute to community well-being

Our communities are healthy, safe, secure, accessible, and inclusive places, where all residents have the opportunities required to enjoy a high quality of life and be involved in community life.

Walking, cycling, and transit are residents' first choices for transportation

Through careful land use planning, the need to travel long distances has been greatly reduced because jobs and most of our daily needs are provided in complete, liveable communities. Transportation networks are well-connected between and within communities, minimizing environmental impacts, moving residents and goods safely, efficiently, and affordably, and encouraging social interaction. Residents choose walking, cycling and transit and mobility is enhanced by electronic communications, good planning and urban design.

Housing options are green, healthy and meet the needs of the whole community

A variety of housing options provide affordable, attractive and accessible choices for all residents. This range of housing choices exists within every community and allows people of various abilities and incomes to live in a community throughout various life stages. Housing is energy efficient, healthy and attractive, and uses sustainable building materials and practices.

Related Goals

Economic prosperity supports residents, community well-being, and ecological health

Wealth is generated with a fraction of today's material and energy throughput and with respect for the limits of planetary ecosystems and resources. The region's economy supports regional self-reliance, good jobs for residents, and contributes to a high quality of life for all residents. Residents and businesses also support responsibly produced goods and services from around the world.

Ecosystems are healthy, protected and support biodiversity

The region continues to fulfill its traditional ecological functions, supporting connected habitats, regulating water and nutrient cycles, and providing food and shelter to all species living in the region. Residents value biodiversity and ecosystem health and understand the interconnectedness between humans, other species, and the ecosystems in which we all live.

Energy is used efficiently and supplied from green, renewable sources

Energy is used efficiently and responsibly in the region and comes from a diverse portfolio of resources that are renewable, low-impact, and contribute to local economic development. The region also manages demand for energy through community planning, transportation initiatives, and building design.

The local food system is sustainable and provides residents with healthy and affordable food

The region's farmers, working on a well-protected, highly productive land base, produce a great variety of foods using diverse, sustainable practices. While residents consume food from outside the region as well as modest amounts from urban areas, the region's farms and the local food system provide residents and businesses with a high-quality, healthy, and affordable supply of food.

Other goals can be found on the project website: www.choosingourfuture.ca.

2.5. Current Plans and Programs

The City of Ottawa, the City of Gatineau and the *MRC des Collines de l'Outaouais* each have community plans that guide land use and development over the short and medium terms.

City of Ottawa

Many of Ottawa's Official Plan policies balance intensification and redevelopment inside the Greenbelt with new development outside the Greenbelt.

Current policies in Ottawa include:

- The need for more urban land will be considered by Council every five years, in view of Provincial policy requirements, the supply and demand for residential and employment land, and the amount of intensification that has occurred.
- Major intensification is supported in specific areas, including main streets and transit stations, but not within established neighbourhoods. About 10% of total growth is targeted for the rural area and divided evenly between villages and country lots outside villages.

Specific strategies to support these directions include:

- A comprehensive look at a broad range of strategies to support intensification such as zoning and improved street design in key areas.
- Minimum density targets are set for mixed-use centres such as Tunney's and Billings Bridge on major rapid transit stations; in the town centres of Orleans, Kanata, and Barrhaven; and along arterials or main streets such as Carling Avenue and Montreal Road.
- Design guidelines are used extensively to help with challenges posed by infill housing, development near rapid-transit stations, high-rise housing, and other types of development. Design quality is achieved through review and approval by the Design Review Board and site plan approval, where these apply.
- Municipal fees are waived for social housing, and surplus municipal land is considered for affordable housing before other uses.
- Community Improvement Plans enable the City to offer financial incentives to property owners to redevelop specified areas (e.g. brownfield redevelopment areas).
- Increased height or density bonuses can be allowed for community benefits (e.g. affordable housing, green space, environmental performance, cultural facilities).
- Characterization of groundwater supplies in the rural area is ongoing, to better protect the quality and quantity of water accessed by private wells.

City of Gatineau

Similar to Ottawa, the City of Gatineau balances intensification within existing urban areas with new development on undeveloped sites. The *Plan d'urbanisme* (Urban Plan) specifies the creation of complete urban villages with a range of housing types and local services, intensification of areas around public transit, and the reinforcement of industrial and service commercial areas as centres of employment. Gatineau recently adopted a detailed development program for its downtown. The objective is to attract 4,000 new dwelling units or 10,000 new residents within the next 15 years.

National Capital Commission

The NCC has a number of plans in place to guide capital planning and decision making, two of which are currently being updated. Plan Horizon 2067 for Canada's Capital (in progress) is the revision of the 1999 Plan for Canada's Capital. The revised plan will set forth a vision for the Capital and outline the principles and goals that provide guidance to all NCC Plans. The plan will provide guidance specifically for NCC controlled lands within the Capital Region.

The NCC is also revising the 1996 Greenbelt Master Plan. The Greenbelt is a 20,000 hectare band of farmland, wetlands, forest, and federal facilities owned by the National Capital Commission within the City of Ottawa. Public consultation on the plan, which considers different ways to strengthen the agricultural and natural environment functions of the land, will inform development of the draft plan by the end of 2011. The proposed strategies include modest increases to the areas identified for agriculture and strengthening the linkages between natural areas within the Greenbelt and adjacent natural areas.⁷

These initiatives and plans indicate that the region is moving in the right direction as far as land use planning goes. There are also opportunities to do more to address the challenges ahead.



3 New Directions

3.1. Strengthening Land Use, Growth Management and Urban Form

In order to achieve our goals and create a region that is sustainable and resilient to change in the 21st century, it will be necessary to go beyond the current plans and programs outlined in the previous section. Some of the following strategies are based on the use of stronger tools to implement many of the policies now in place; others introduce new concepts.

Focusing growth in connected, compact, complete communities

How can the lifestyle qualities that are desired in the suburbs be coupled with the convenience of a more urban environment? Creating highly liveable complete communities where people are able to meet their needs within their neighbourhood is a good start. Complete communities are structured around high-density, mixed-use nodes around the expanding network of rapid transit stations and along high streets on key arterial corridors. A variety of shops and services within the neighbourhood allow residents to get their groceries, visit the dentist or even go to work without depending on their car. Frequent, reliable transit supports this land use pattern by connecting where people are with where they want to go. Well-marked routes over many kilometers connect cyclists to transit hubs where bicycles can be stored or loaded onto transit to continue the journey. Pedestrian connections lead into and throughout mixed-use development around the transit hub. These hubs contain the density, both in employment and population, necessary to support a high level of transit service throughout the day.

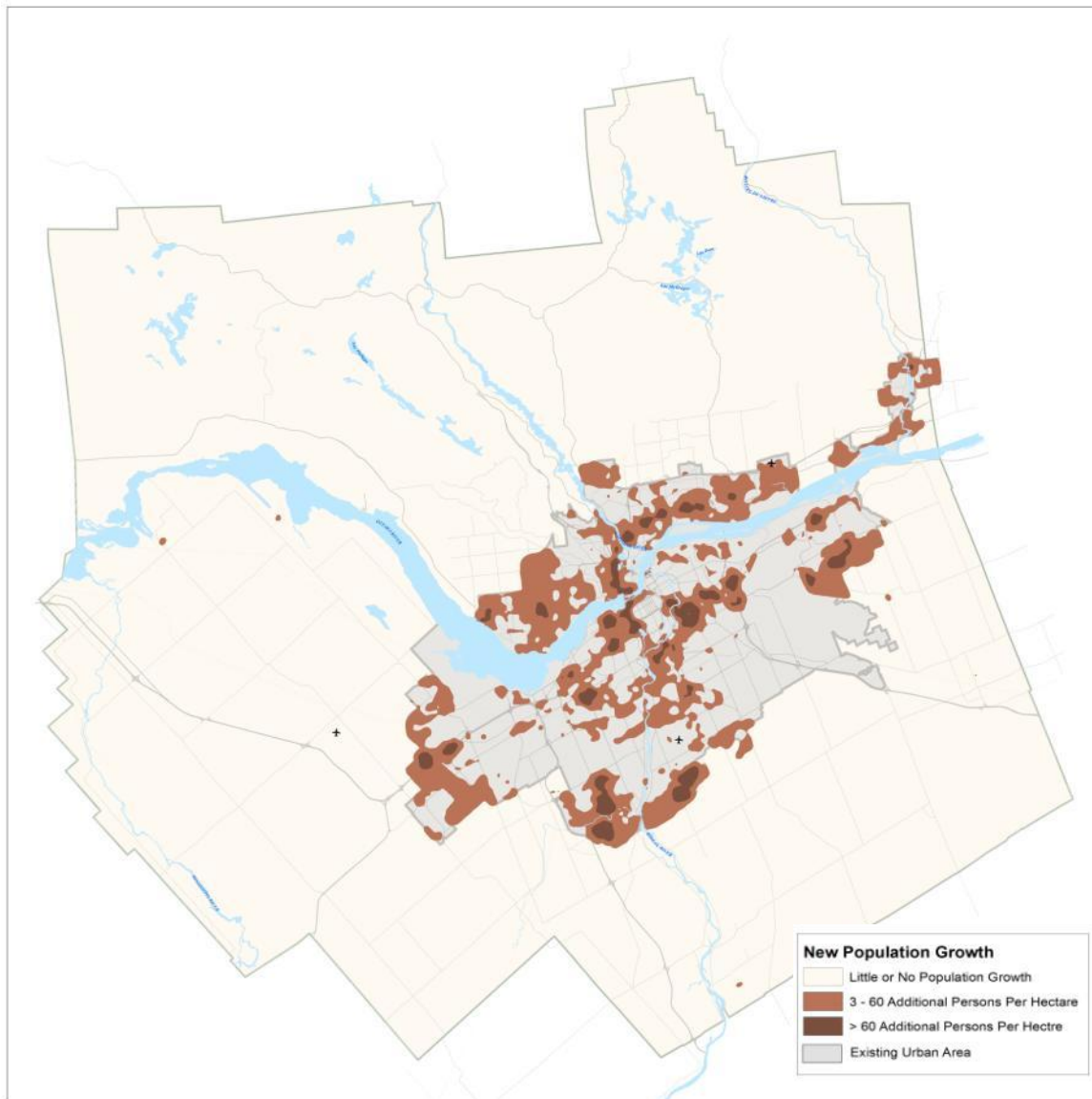


Figure 1: Mixed-use, high density residential and retail. Source: HB Lanarc

The provision of a variety of green spaces can help to maintain a connection to nature, even in the middle of the city. Pocket-size parks can be provided along boulevards and street right-of-

ways. Vacant lots can be converted into community gardens. And access to the region's rivers and waterways can be encouraged through appropriately designed and oriented developments.

Community design plans in Ottawa and similar plans in Gatineau are good vehicles for planning at this scale. Implementation strategies could include financial incentives allowed in identified community improvement project areas. Public-private partnerships could also be used to leverage the use of municipally owned land, transit stations, and other municipal infrastructure to achieve higher densities and mixed-use development.



Map 2: Creating dense, walkable, and complete cores around rapid transit stations would translate into a growth pattern of unique districts connected by a regional transit system. This pattern would be extended into new greenfields opened for development where required, given the desirability of creating a compact urban form and reducing consumption of new land. The urban boundary of Ottawa shown here was in effect in 2010.

Enhancing the suburbs

As previously mentioned, much of the region of 2060 already exists. One of our biggest challenges is how to retrofit and enhance established suburban areas so they become more liveable and more affordable. Key to this will be to improving street and block patterns – the longest lasting feature of our land use decisions – to increase linkages and shorten distances between destinations.

How can we enhance the suburbs to give families the attractive neighbourhoods and other qualities they are seeking and address their concerns about community times and the need to drive for shopping, recreation and other services? How can we gently transform the suburbs to be more convenient, more pedestrian and bike-friendly places? How could we improve the connections for pedestrians and cyclists between homes and transit stations? In many locations, new measures to add additional units to existing dwellings could be used to create what might be called “invisible” or “gentle” density: provisions for additional units such as small apartments above detached garages on a single property, garden suites and other means of promoting secondary suites within existing buildings. New housing forms that complement their suburban surroundings could also be designed to accommodate several smaller units.

The suburbs could become more urban around rapid transit stations by developing high-density mixed-use cores. This increase in density would help provide the population needed to create vibrant community cores in Kanata, Orleans, and Barrhaven as well as new urban areas in suburbs inside the Greenbelt. On the 50-year horizon, land-extensive office and shopping areas may become obsolete and as land values rise, opportunities may also arise to rebuild these areas as unique places to live, work and shop.

Creating more sustainable greenfield development

Even with a strong intensification and suburban retrofit agenda, there will still be demand for new greenfield development. How can developers be encouraged to meet the highest standards of design, performance, and environmental integrity? Can higher standards be achieved for these new developments to compensate for the inherent environmental and social impacts associated with the land consumption and long commutes associated with most greenfield development?

The question of how development charges can more accurately reflect the true cost of providing municipal services to suburban land remains central to fostering smart growth. Generally, choices that work against sustainability should pay significantly more than choices that have lower energy and environmental impacts; however, finding mechanisms to ensure this from a municipal perspective remain a challenge. Market forces can be very efficient if the market is structured to produce efficient results. New third party standards such as LEED-ND (Neighbourhood Development) are a tool that can help create an objective guide for sustainability performance.



Figure 2: Greenfield development must include high quality pedestrian facilities and green space. Source: HB Lanarc

The opportunity exists to make a transition from developing subdivisions to developing complete communities with all the rich variety of design, activity, and network of relationships that the word “community” entails.

Exploring mixed-use redevelopment of federal office nodes on rapid transit

Much of the recent growth in employment of all kinds has occurred in areas that are not well-served by transit. With 138,000 employees, the federal government is the region’s primary employer and real estate holder, a situation that presents a great opportunity for the federal government to show leadership in sustainable development. How can these assets be harnessed to enable and promote major office uses as the anchors to mixed-use development centred around current and future rapid transit stations?

Currently, the location and land-extensive nature of major office complexes such as Tunney’s Pasture and Confederation Heights lend themselves to redevelopment, presenting significant opportunities to reconfigure road patterns, open spaces and pedestrian routes to better connect these sites with the surrounding communities. New restaurants, shopping and services within the office areas could be introduced to serve the larger community, while new housing would help maintain activity there long after office hours. Similarly, opportunities to use district energy with renewable energy sources could be explored, especially in areas where district energy systems now operate. The redevelopment of these areas could act as catalyst projects that lead change by example.

Focus rural growth in villages

While the majority of growth in the region occurs in the urban core and through the redevelopment of suburbs, rural lifestyles should remain a viable option.



Figure 3: Rural Village design guidelines assist with keeping the “feel” of the place. Source: HB Lanarc

The growth of many villages is guided by village plans and heritage and design guidelines to keep new development in character with existing patterns and architectural styles. In our region, rural growth continues to be focused within existing village boundaries, forming a distinct edge between developed and non-developed areas. Rural country lot subdivisions can undermine the character of the rural landscape and can be incompatible with agriculture and resource use. These land-intensive forms of development are costly to service, have a disproportionate impact on the environment, and produce greater reliance on the private vehicle. In 2009, the City of Ottawa initiated a moratorium on new country lot subdivisions so that new forms of rural settlement could be considered over the next five years.

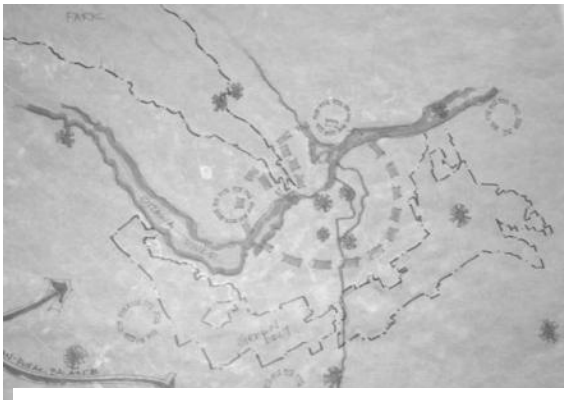
If Ottawa chooses to maintain a fixed development boundary for villages and the urban area or constrain additions to the land supply could it could require stronger regulatory mechanisms than currently exist. One possibility is for the Province of Ontario to introduce an Agricultural Land Reserve similar to those in Quebec and British Columbia. This would mean that any expansion into agricultural land would require approval from the Province. Another option is to consider working with the provincial government to develop fixed settlement areas through the Places to Grow initiative, similar to plans for the Niagara and Toronto regions. Such a plan would identify

urban and village boundaries, land reserved for agriculture and mineral resource extraction, and the woodlands, wetlands, and other features that form the natural heritage system. The province would be responsible for any amendments and municipal plans would need to conform to the provincial plan.

Paying greater attention to community design

Regardless of the form that growth takes in the region, an increased emphasis and policy direction on high-quality design is needed, one that is appropriate to the location and context of the region's many distinct areas. There are different "places" within the region—the urban core, older urban neighbourhoods, new suburbs, arterial commercial streets, and the farms, rural acreages and villages of rural areas—each presenting opportunities to explore the creation of design standards uniquely tailored to their needs. So do will better ensure our design and engineering standards can create special neighbourhoods and a strong, distinct community and regional identity.

A stronger emphasis on good urban design could ensure that higher-density developments are liveable and feel human-scaled. For example, improving the quality of the designing of our public streets, plazas, and park spaces could better accommodate more intense uses. Elements for consideration would include street-level detailing, tall building overlook and shadowing issues, view corridors and skylines. The use of a design review panel and effective design guidelines could help promote high standards in each and every development project.



*Figure 4: Choosing our Future Visioning Charrette.
Source: City of Ottawa*

In Ottawa, community design plans provide an overall design framework for villages and urban neighbourhoods experiencing change, but such plans have not been prepared for all of these communities. Ottawa also has design guidelines for specific uses, such as infill housing and large retail stores, and for different types of areas such as mainstreets.

The 2008 Visioning Charrette⁸ sponsored by the Choosing our Future initiative produced a valuable document that explores long-term sustainability strategies for the region as a whole as well as strategies for a cross-section of neighbourhood

types ranging from inner city to rural villages. It clarified issues for long-term integrated planning, especially around how to enhance resiliency. The charrette also attempted to redesign existing neighbourhoods and villages to incorporate additional sustainability features. Looking at a community contained wholly within the Greenbelt, for example, the participants saw a need to create heritage places for "tomorrow," in addition to preserving those now in place. They also proposed such features as green schoolyards that also served as multi-functional spaces for the use of the whole neighbourhood, and re-energizing roads by introducing planted areas or even building sites within the centres of broad rights-of-way.

The charrette is a valuable resource document that will be useful as staff and the community continue to explore implementation issues on both the regional and neighbourhood scales.

Expanding communication, education, and promotion

Intensification works best when it is well-designed. Communities, planners, builders and developers, corporate clients, engineers, architects and others involved in intensification projects are building a shared understanding of design through such means as consultations on design plans for sites or districts; public talks sponsored by universities, professional associations and other parties; and design awards and promotions by the municipalities and development industry. Opportunities to further this learning for all parties could be fostered, building on past experience to create a more liveable future.

3.2. Conclusion

To meet the challenges of sustainability in the region, Ottawa, Gatineau, and the NCC will need strong land use policies and practices to manage growth. Accommodating most future growth within the current urban area would increase efficiencies (materials, costs, energy) and decrease environmental impacts. Where new greenfields for housing are required, higher standards for design and more compact, complete and convenient neighbourhoods would be required. Compact, people-oriented development reduces the pressure to expand into rural areas and creates vibrant places where residents can work and live. A more compact form would make the provision of municipal infrastructure and transit more efficient, and higher density around rapid-transit stations will support transit ridership and improve the financial return on transit investment.

Sustainability must be considered at the level of the neighbourhood. Community design plans are in place in many communities which can help to define a path forward for areas that are experiencing growth and change. Ottawa's budding Neighbourhood Sustainability Program, for example, is also well suited for this task. The program will help with the understanding of sustainability and the alignment of the Choosing our Future vision with community interests.

Sustainability at the neighbourhood level involves neighbourhood planning and design, with attention to energy efficiency and conservation, liveability, and quality of life. It involves zoning that supports mixed-use development, creating complete communities or neighbourhoods and creating opportunities for sharing spaces, services, and resources. It also involves attention to the details of architecture and the public realm that make great spaces for people to enjoy.

Redevelopment and sensitive new development can help to provide residents with housing affordability and choice in the neighbourhood they want to live. Expanding the range of spaces (in size, price, configuration, and use) available across the region for residents, businesses, and other organizations to occupy increases future resiliency to meet our social and economic needs while protecting the land we live on.

Endnotes

- ¹ City of Ottawa, 2003. Official Plan http://www.ottawa.ca/city_hall/ottawa2020/official_plan/vol_1/pdfs_en.html
- ² City of Gatineau, 2005. Plan d'urbanisme
- ³ City of Gatineau, 2005. Schéma d'aménagement
- ⁴ Public Health Agency of Canada. 2010. The Chief Public Health Officer's Report on The State of Public Health in Canada 2010
- ⁵ Hemson Consulting Ltd. Comparative Municipal Fiscal Impact Analysis. City of Ottawa. January 2009.
- ⁶ P. Blais, 2010. Perverse Cities: Hidden Subsidies, Wonky Policy and Urban Sprawl. UBC Press
- ⁷ NCC, 1996. Greenbelt Master Plan
- ⁸ City of Ottawa, City of Gatineau, NCC, 2008. Visioning Charrette