



Inside and Out: Sustaining Ontario's Greenbelt

Ray Tomalty, Ph.D. and Bartek Komorowski, MUP
Smart Cities Research Services



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PREPARED BY:

Ray Tomalty, Ph.D. and Bartek Komorowski, MUP, Smart Cities Research Services, 438 Milton, Montreal, QC, H2X 1W3, tomalty@smartcities.ca

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Friends of the Greenbelt Foundation

68 Scollard Street, Suite 201

Toronto, Ontario

M5R 1G2

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Introduction

For decades, urbanization in the broad area known as the Greater Golden Horseshoe (GGH) has been consuming farmland and ecologically sensitive lands. Recognizing that ongoing urban expansion was threatening to consume the remaining supply of prime agricultural land and cause further environmental degradation, the provincial government issued a new Provincial Policy Statement (PPS) and passed two major pieces of legislation in 2005, the Places to Grow Act and the Greenbelt Act, intended to change the path of urban development in south-central Ontario. The Places to Grow Act provided the legislative basis for the Greater Golden Horseshoe Growth Plan, which sets far-reaching policies for urban growth management. The Greenbelt Act provides the legislative basis for the Greenbelt Plan, which permanently protects a large swath of land around Lake Ontario from urban development.

The Growth Plan and Greenbelt Plan are designed to function in tandem. The Growth Plan allots population and job growth projections to all of the upper-tier and single-tier municipalities in the GGH and provides directions on how the expected growth is to be managed. In particular, the Growth Plan requires that 40% of the combined population and job growth be absorbed within each municipality's existing built-up area boundary. The Growth Plan identifies certain growth centres locations within built-up areas where development is to be focused in order to

produce a minimum density of 200 people-plus-jobs per hectare. The remaining growth can be directed to areas beyond the existing urban boundary—i.e., greenfield areas—but must be managed to create an average density of at least 50 people or jobs per hectare. Thus, the Growth Plan limits the amount of land that can be designated for urban development. The Greenbelt Plan, for its part, defines where new urban development is prohibited. It establishes permanently protected areas, including areas of great agricultural and ecological value, around which major urbanization in the Greater Golden Horseshoe is to be organized.

This report focuses on threats to the long-term viability of the Greenbelt due to growth outside but adjacent to the Greenbelt. This comprises the areas in the so-called “whitebelt” (which lies between the urban growth boundaries and the greenbelt boundary) of the inner-ring municipalities, and areas close to the Greenbelt in the outer-ring municipalities.

The inner-ring municipalities are comprised of the City of Hamilton and the Regions of Halton, Peel, York, and Durham. The whitebelt provides a buffer area between already urbanized areas or areas designated in official plans for development and the Greenbelt, where urban development is prohibited. It is an area of rural and agricultural land with fewer land use restrictions than in the Greenbelt. As urban areas grow in population and employment, sections of the whitebelt will be designated for urbanization during periodic official plan reviews. The rules governing the expansion of urban areas into the whitebelt are laid down in the Growth Plan.

The outer ring of municipalities is comprised of two regions, seven counties, and six cities. Clockwise starting in the south, this includes the Niagara Region, Haldimand County, Brant County, City of Brantford, the Region of Waterloo, Wellington County, City of Guelph, Dufferin County, Simcoe County, City of Barrie, City of Orillia, City of Kawartha Lakes, Peterborough County, City of Peterborough, and Northumberland County. Because of the large number of jurisdictions in the outer ring, we have chosen to focus our attention in this report on the upper-tier jurisdictions to the north and west of the Greenbelt that are served by the 400 series Highway system. This is where the highest levels of population and employment growth are projected.

Many existing greenbelts around the world are threatened by pressures to relax development restrictions or alter boundaries to accommodate urban growth. The pressure is particularly acute when communities bordering the greenbelt run out of developable land while facing ongoing demand for new housing and employment spaces. In Canada, this type of situation has been witnessed in the Lower Mainland in British Columbia, where municipalities on the periphery of Metro Vancouver have successfully pressured the provincial government to release lands from the Agricultural Land Reserve (ALR). On a smaller scale, Ontario’s original Parkway Belt West Plan has seen its urban containment function become obsolete as extensive areas that were to perform this function were removed from the plan. In the international context, similar situations have been noted with the London Metropolitan Green Belt, the Copenhagen Finger Plan, and the Netherlands Green Heart, to name only a few examples (Carter-Whitney, 2010).

If the Growth Plan’s population and employment growth projections hold, and if municipalities in the inner-ring expand according to the plan’s prescriptions, the supply of land in the whitebelt should suffice to accommodate development for several generations. Thus, in principle, there should be no pressure for urban expansion into the Greenbelt in the foreseeable future.

While there may be no foreseeable pressure on the Greenbelt boundaries, how and where urbanization proceeds in the whitebelt is likely to have direct effects on agricultural

and ecological systems in the whitebelt. As many of these systems extend into the Greenbelt, urbanization in the whitebelt will have indirect effects on areas inside the Greenbelt. Negative effects could include increased pressures on Greenbelt groundwater supplies, additional demands for infrastructure expansions that would fragment the Greenbelt, and strains on Greenbelt recreational capacities.

In its current shape, the Greenbelt excludes some lands of evident ecological and agricultural importance and does not recognize certain natural heritage systems that extend from the whitebelt into the Greenbelt. Some commentators have suggested that valuable areas in the whitebelt should be better protected, either by expanding the Greenbelt to the encompass them or by other means, such as strict development controls.

As this report explains, meeting the general goals of the PPS and specific development targets set down in the Growth Plan poses several challenges for inner-ring municipalities. In this report, the key challenges and barriers to changing the patterns of urbanization in the inner ring and meeting the Growth Plan's targets are highlighted; the potential threats to the Greenbelt related to urbanization in the whitebelt are discussed; and the opportunities for strengthening the Greenbelt and protecting more land in the inner-ring are explored. A number of policy measures to address growth management challenges, to mitigate potential threats to the Greenbelt and to increase the protection of lands of great ecological and agricultural value in the inner ring are suggested.

The outer ring differs markedly from the inner ring and its future growth entails different threats and opportunities for the Greenbelt. Whereas the inner ring features a single, continuous urban area along Lake Ontario, the sparsely populated outer ring contains only a few larger urban population centres, separated by vast swaths of agricultural and rural land. The inner-ring conurbation can expand only further inland, towards the Greenbelt, consuming the large but finite band of unprotected rural and agricultural land known as the whitebelt. The many relatively small outer-ring communities, in contrast, can grow in any direction; there is no equivalent to the whitebelt. At face value, this suggests that greenfield growth in outer-ring areas will not necessarily creep towards the Greenbelt. It also suggests that there may be better opportunities for expanding the Greenbelt in the outer ring than the inner ring.

A main concern regarding growth in the outer ring is the potential for so-called leapfrog development—growth of communities in the outer-ring to accommodate people who might have otherwise settled in the inner-ring. Such leapfrogging is a concern because it entails the construction of additional roads and other infrastructure across the Greenbelt, increasing traffic and pollution within the Greenbelt and contributing to the further fragmentation of agricultural and environmentally sensitive lands.

Although leapfrog growth is of special interest, other forms of growth in the outer ring are also of concern. Scattered exurban growth in rural areas can undermine farming operations outside the Greenbelt; employment development along highway corridors far from settlement areas can encourage car dependency; and growth of any type can stress ecological systems by intensifying flows of water, wastewater, and stormwater. Low-density forms of growth can also impose very high infrastructure and servicing costs on municipalities, draining budgets that could instead be used for upgrading infrastructure and services in built up areas, thereby enabling intensification.

Five major issues are investigated in this report: (1) growth projections and conformity with the Growth Plan; (2) development pressures and their relationship to the Growth Plan and Greenbelt Plan; (3) impacts of growth in the inner and outer rings on rural and agricultural land in the Greenbelt; (4) the protection of natural heritage and valuable agricultural land outside the Greenbelt; and (5) the potential for expanding the Greenbelt.

This report combines research from primary and secondary sources. In terms of primary sources, a number of interviews were conducted with municipal planning officials, provincial planning officials, representatives of non-governmental organizations with an interest in protection of natural heritage and agricultural land, and representatives of the development industry. In terms of secondary sources, a wide variety of academic research papers, professional publication, municipal and provincial documents, and media reports were examined.

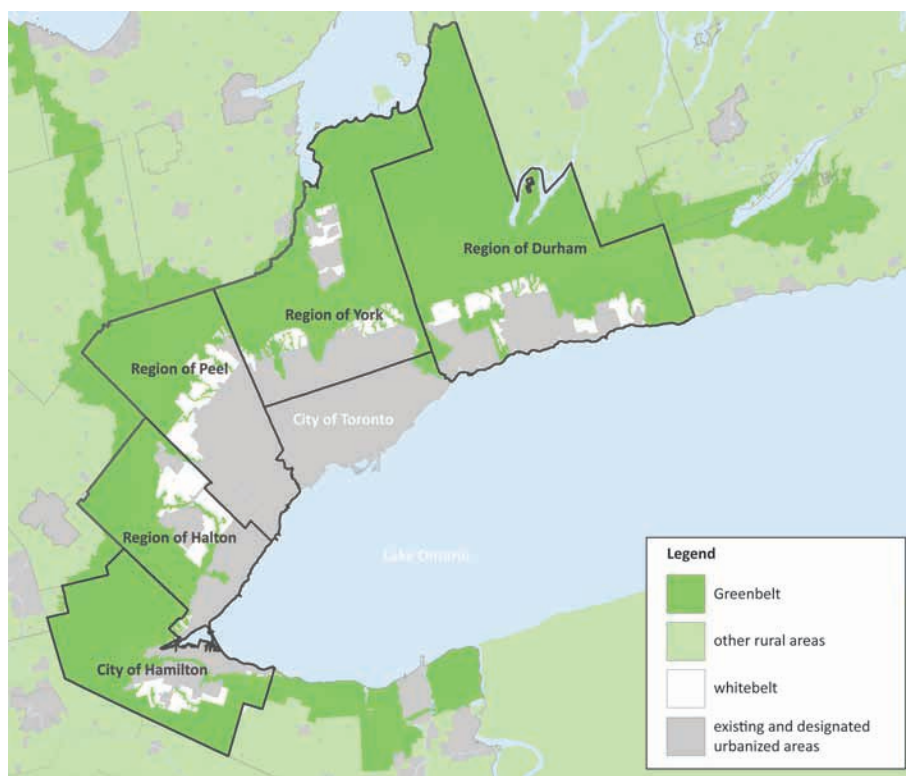
Overview of the Whitebelt or Inner Ring Municipalities

Figure 1 shows the single- and upper-tier inner-ring municipalities along with the boundaries of the urbanized areas, the whitebelt and the Greenbelt.¹ The Growth Plan has assigned population and employment growth projections to these five single- and upper-tier municipalities, along with their counterparts elsewhere in the GGH (see Table 1). The upper-tier municipalities are in turn responsible for distributing the projected growth among their lower-tier municipalities.

The five single- and upper tier municipalities have updated their Official Plans, in which they are required by the province to show where growth is to occur between now and 2031. They are allowed to designate parts of the whitebelt for urban growth up to 2031, provided that they are able to justify the need for the expansion to provincial planners. To do so, they must show that the lands already designated for greenfield development are insufficient to accommodate the projected growth. As at least 40% of the combined population growth must be accommodated within the built-up area, i.e., a maximum of 60% of the projected population

¹ Provincial policy documents do not use the term *whitebelt*. Officially, all areas outside the Greenbelt and *settlement areas* are labeled *agricultural and rural areas*. The whitebelt refers only to rural and agricultural areas between the Greenbelt and the settlement areas adjacent to Lake Ontario.

growth can be directed to greenfield areas. The total designated greenfield area—i.e., existing designated greenfield areas plus new greenfield areas taken out of the whitebelt—must be sized to produce a density of 50 people-plus-jobs per hectare.



Source: adapted Greenbelt Plan (2005), Schedule 1

Note: This map is for illustrative purposes only. The areas depicted are approximate.

Figure 1. Greenbelt Map

Table 1. Growth Projections in the Inner Ring

Jurisdiction	2001 Population	2031 Population	2001 Employment	2031 Employment
City of Hamilton	510,000	660,000	210,000	300,000
Region of Halton	390,000	780,000	190,000	390,000
Region of Peel	1,030,000	1,640,000	530,000	870,000
Region of York	760,000	1,500,000	390,000	780,000
Region of Durham	530,000	960,000	190,000	350,000
Total	5,810,000	8,620,000	2,950,000	4,330,000

Source: Growth Plan for the Greater Golden Horseshoe (2006), Schedule 3

Table 2 lays out the key figures related to the land budgeting in the single- and upper-tier municipalities in the inner ring. The figures are based on the municipalities' proposed Official Plan updates that are to bring them into conformity with the Growth Plan. The first two columns show the amount of land that is already designated for urban expansion and available for development, i.e., prior to the present land budgeting exercise. It shows that over 27,000 ha of residential land have been designated along with more than 10,000 ha of employment land, for a total land bank of over 37,000 ha. In their new draft official plans, the five inner-ring municipalities have put forward a request for over 5,000 ha of residential land and an equivalent amount of employment land for a total of almost 10,500 ha of newly designated land to accommodate greenfield development to 2031. The final column shows the proportion these requests make up of the existing whitebelt, with a range between 11% and 22.8% and a total of 17.2% of the existing whitebelt. This leaves 82.8% of the whitebelt intact.

Table 2. Land Budgets in the Inner Ring²

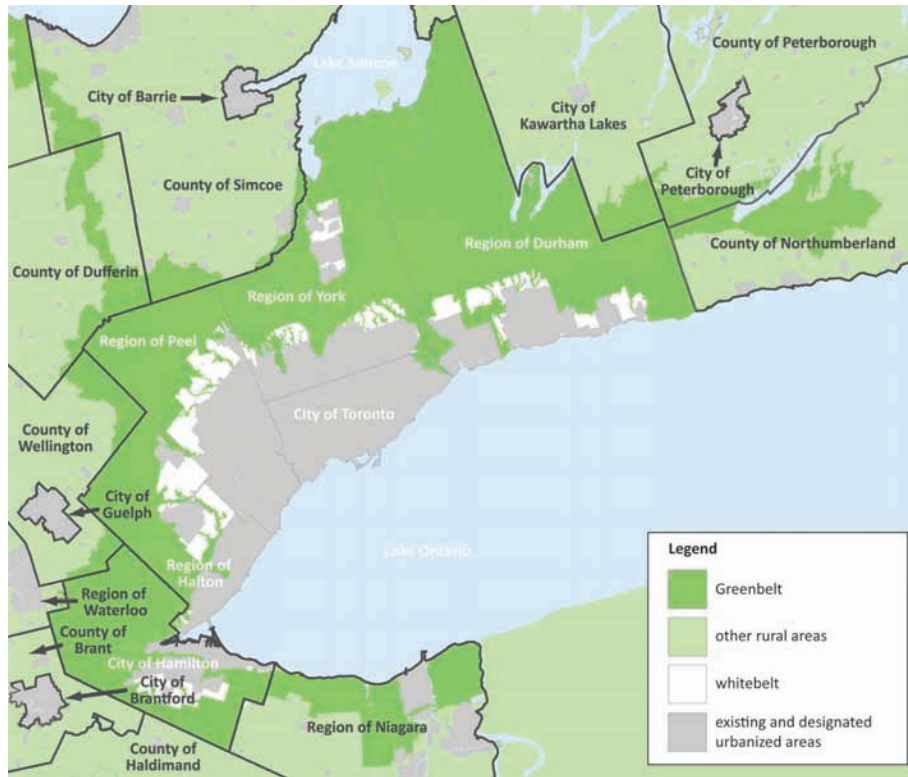
Jurisdiction	Designated Residential (ha)	Designated Employment (ha)	Designated Total (ha)	Required Residential (ha)	Required Employment (ha)	Required Total (ha)	Whitebelt Area (ha)	Whitebelt Area Required
City of Hamilton	2,551	874	3,425	0	830	830	6,738	12%
Region of Halton	3,360	2,530	5,890	1,680	1,100	2,780	14,300	19.5%
Region of Peel	9,453	2,547	12,000	0	1,539	1,539	13,926	11%
Region of York	7,274	2,646	9,920	1,507.3	864.6	2,372	10,400	22.8%
Region of Durham	4,672	1,427	6,099	1,982	886	2,868	13,332	21.5%
Total	27,310	10,024	37,334	5,196	4,919	10,115	58,696	17.2%

² Sources: City of Hamilton, Final Hamilton Employment Land Budget Report, September 2009; Region of Halton, Working Paper #3, April 2009; Region of Peel, Regional Official Plan Amendment No.24; Region of York, Staff Report, March 2010; Region of Durham, Growing Durham, November 2008

Overview of the Outer Ring Municipalities

Figure 2 shows the single- and upper-tier municipalities that make up the outer ring of the GGH. The sole single-tier municipality is the City of Kawartha Lakes. Two of the upper-tier municipalities, the Region of Niagara and the Region of Waterloo, incorporate both rural and large urban areas; they have planning authority over all areas within their territories. Counties are also upper-tier municipalities but tend to have weaker planning authorities as they cover only rural areas and smaller communities. Larger cities that are geographically located within counties are governed by separate single-tier councils with their own planning authorities. This includes the City of Brantford (separated from Brant County), the City of Guelph (separated from Wellington County), the Cities of Orillia and Barrie (separated from Simcoe County), and the City of Peterborough (separated from Peterborough County). Two county governments—Dufferin and Northumberland—have no autonomous planning authority; planning at the county scale is coordinated by the province.

Schedule 3 of the Growth Plan provides 2011, 2021, and 2031 population and employment growth projections for most single- and upper tier-municipalities (see Table 3). For separated cities and surrounding counties, the Growth Plan provides a single projection for 2021 and 2031—i.e., there is one total population projection and one total employment projection for the county and the separated city.



Source: adapted from Greenbelt Plan (2005), Schedule 1

Figure 2. Greenbelt Map

Table 3. Growth Projections in the Outer Ring

Jurisdiction	2001 Population	2031 Population	2001 Employment	2031 Employment
Region of Niagara	427,000	511,000	186,000	218,000
County of Haldimand	46,000	56,000	17,000	20,000
County of Brant ¹	129,000	173,000	54,000	71,000
Region of Waterloo	456,000	729,000	236,000	366,000
County of Wellington ²	195,000	321,000	99,000	158,000
County of Dufferin	53,000	80,000	19,000	27,000
County of Simcoe ³	392,000	667,000	154,000	254,000
City of Kawartha Lakes	72,000	100,000	20,000	27,000
County of Peterborough ⁴	130,000	144,000	53,000	60,000
County of Northumberland	80,000	96,000	29,000	33,000
Total	1,980,000	2,880,000	870,000	1,240,000

Source: Growth Plan for the Greater Golden Horseshoe (2006), Schedule 3

¹includes the City of Brantford

³includes the City of Barrie and the City of Orillia

²includes the City of Guelph

⁴includes the City of Peterborough

Growth-Related Issues in the Inner Ring

4.1. Growth Plan Implementation

4.1.1. Growth projections

Barring Durham Region, the regional planners interviewed for this study did not report major issues with the population and employment growth projections in Schedule 3 of the Growth Plan. Planners at Halton and Peel regions suggested that the populations projections could be slightly too low as they underestimate immigration rates. Most planners interviewed indicated that if the population projections are revised in the next decade, they would likely be revised upwards. If this were the case, the regions would be allowed to expand their designated greenfield growth areas further into the whitebelt, but would also have to plan for more development in existing urbanized areas to meet the Growth Plan's intensification requirement. It is worth noting that the Ministry of Finance is using different, more recent population projections than those used by the Ministry of Energy and Infrastructure in the Growth Plan. The Ministry of Finance's projections are slightly higher than those in the Growth Plan, also suggesting that the numbers are likely to be revised upwards when the current review of the population and employment forecast is completed.

Where employment is concerned, some of the regional planners mentioned that the projections could be overestimating the increase in the number of jobs. This is purportedly due to lower-than-expected employment growth in the GGH as a result of the recent recession. On the other hand, some municipalities believe that the employment growth projections are insufficient. Durham Region's planning department would like to see the employment growth projection revised upwards to provide one job for every two people in its jurisdiction.

4.1.2. Meeting intensification targets

The province has developed a system for measuring intensification rates in the GGH (MPIR, 2008). The method relies on a definition of the built boundary as of 2006, based on the province's property assessment database and the parcel database. Intensification rates are expressed as the amount of current growth within the built boundary as a percentage of the total growth in that jurisdiction. Table 4 shows current intensification rates in the five inner ring single- and upper-tier municipalities, as estimated by planning staff using the province's definition of the 2006 built boundary. The highest rate of intensification is found in Peel Region, where much growth has occurred in already developed areas of Mississauga and Brampton. The lowest rate of intensification is found in Halton where greenfield growth still predominates.

Table 4. Current Intensification Rates in the Inner Ring

Jurisdiction	Rate
City of Hamilton	~30%
Region of Halton	~16%
Region of Peel	~50%
Region of York	~20%
Region of Durham	~30%

Sources: planners from each municipality, personal communication

Despite the gap between current and targeted intensification rates in the inner ring, provincial officials at the MEI and the MMAH seem confident that municipalities will be able to meet the intensification target. Likewise, planning officials at the City of Hamilton and the regional municipalities all said that the intensification target is achievable on their territory. This confidence seems to be buoyed by observations related to current trends in the market, e.g., the aging of the population and the increasing demand for smaller units in proximity to services. Concerns over lengthening commuting times, congestion, and the price of motor fuel may also be increasing the demand for employment and residential uses closer to city centres. Finally, a trend towards increasing rates of intensification appears to be supported by a Neptis Foundation study on intensification in the inner-ring municipalities Burchfield (2010). The study found that intensification rates were increasing over time (see Table 5), from an average of 29% in the 1991-2001 period (using a 1990 built boundary) to 59% in the 2001-2006 period (using a 2001 built boundary).³

³ This Neptis Foundation study uses a different method for identifying the built boundary, based on satellite imagery (Burchfield, 2010). This method results in a looser definition of the built boundary and higher estimated rates of intensification. Thus, the figures in Table 5 cannot be compared directly to those found in Table 4.

Table 5. Historical Intensification Rates in the Inner Ring

Jurisdiction	1991-2001	2001-2006
City of Hamilton	24%	44%
Region of Halton	23%	58%
Region of Peel	30%	65%
Region of York	32%	64%
Region of Durham	31%	22%
Average	29%	59%

Source: Burchfield (2010)

Redevelopment of a Brownfield Site into Pedestrian-oriented Retail, Live-work, and Townhouses – Lakeshore Road, Port Credit Village, Mississauga, ON



Copyright Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Infrastructure

However, most interviewees also acknowledged that achieving the provincial intensification target in the inner ring will involve some challenges. The main challenge will be in developing housing in the built-up areas; employment intensification is seen as less of a challenge. There is still strong demand for ground-related housing, driving the development of single- and semi-detached homes in greenfield sites. Demand for alternative forms of housing is thought to be more limited. Demand aside, there are many more barriers to the provision of housing in built-up areas than in greenfield sites. According to development industry representatives, these include:

- **provision of infrastructure:** existing infrastructure does not always have excess capacity to support additional buildings and increased population and job densities.
- **NIMBYism:** local resistance to intensification projects slows down approvals and often results in reductions in density.
- **slower approval process:** in many suburban municipalities, approvals staff are specialized for handling low-density subdivisions; they do not yet have expertise for handling design-intensive condominium site plans.
- **parkland dedication policies:** little land is available on intensification sites so developers have to pay cash in lieu of land, based on the higher property values found in already urbanized areas.
- **tax assessment policies:** when a parcel is rezoned for higher density development, the tax assessment category changes and the developer is liable for higher property taxes while waiting for planning approval.

Academic commentators (e.g., Blais, 2003) have pointed to these additional factors:

- **parking standards:** municipal standards often require large areas of surface parking, which reduces overall densities and reinforces car dependency. Moreover, the requirements are often the same across a municipality and do not reflect site-specific conditions such as transit availability, or the users of a facility, such as students, who usually use transit.
- **transit investment:** in many areas of the region, improvements to the existing transit system are necessary before more intensification can take place because the existing routes are at capacity or otherwise insufficient. Developers are reluctant to proceed with investments in denser development based solely on the promise of future transit.
- **municipal finances:** development charges do not accurately reflect the actual costs incurred by different types of development in different locations across a municipality. In general, they tend to favour low-density development on the urban fringe over infill-development in urban centres.

There is also a risk that municipalities will find it increasingly difficult to sustain their intensification rates over time, as the larger, more easily developed sites are filled up and only smaller, more complex sites remain.

York Region Transit VIVA Bus at Toronto Transit Commission Finch Subway Station



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Ontario Growth Secretariat, Ministry of Infrastructure

4.1.3. Meeting density targets

One of the challenges for meeting the Growth Plan's greenfield density target of 50 people-plus-jobs per hectare will be compensating for a large number of yet-to-be built developments that were planned and approved before the Growth Plan came into force. Most of the inner-ring regions have a considerable backlog of planned developments predating the Growth Plan, with densities that are not sufficiently high to compensate for planned land-extensive employment uses and bring the combined people-plus-jobs density above 50 per hectare. Newly planned residential developments will have to have densities significantly higher than 50 people per hectare to compensate for approved residential and employment planned developments, unless these approved developments are revised to increase their densities. According to provincial officials, municipal councils could in theory reopen such plans to update the densities—a move that many developers would favour. They are unwilling, however, to do so because of concern over possible NIMBY responses from local residents.

Many regions perceive the continued demand for land extensive employment uses as a barrier to meeting the greenfield density target. Most would like to have the uses excluded from the density calculation. The province insists that inner-ring municipalities must offset low-density employment uses with higher density residential or employment uses elsewhere to obtain an upper-tier-wide average of 50 people-plus-jobs per hectare—they cannot be excluded from the calculation. Some commentators have observed that municipalities could do more to improve the density of these employment uses.

4.1.4. Expansion of settlement areas into the whitebelt

All of the inner-ring upper-tier municipalities are proposing to expand their settlement areas into the whitebelt to accommodate their growth forecasts to 2031. This will consume between 11% and 22.8% of each municipality's whitebelt (see Table 2). Overall, of the nearly 59,000 ha of whitebelt, only 10,115 ha or 17.2% are proposed to be designated for greenfield development to 2031 in the current round of draft Official Plan amendments. As the Ministry of Municipal Affairs and Housing is asking most regions to further limit their proposed expansions, it is likely that an even smaller portion of the whitebelt will ultimately be designated for greenfield development.

The development parameters in the Growth Plan effectively place an upper limit on how much new land can be designated for greenfield development. Most upper-tier municipalities have come up with official plans that propose the largest possible expansion given their projected population and employment numbers by assuming the lowest possible intensification and density targets still consistent with the Growth Plan.⁴ Therefore, most if not all of the upper-tier municipalities in the inner ring are likely to call for further expansions into the whitebelt during future official plan updates, particularly if the population and employment projections for the inner-ring are revised upwards. There is also a risk that expansions could also occur if inner-ring municipalities fail to meet the intensification target or if planned low-density developments build out too quickly and create pressures for new greenfield designations. Nevertheless, the area of the whitebelt is so large that it is unlikely to be fully developed for several generations, if ever. As the whitebelt can theoretically continue to absorb development across the inner-ring of the GGH, it is unlikely that there would be pressure to push the Greenbelt's inner boundary further away from Lake Ontario to accommodate development. However, the more whitebelt is absorbed, the fewer opportunities there will be for expanding the Greenbelt into the whitebelt or implementing other land use and development controls to protect valuable agricultural land and ecologically sensitive areas of the whitebelt.

Interestingly, there are a few lower-tier municipalities where there are political movements to limit expansion into the whitebelt. Examples include the Town of Markham and the City of Vaughan, both in York Region, as well as the City of Ajax in Durham Region.

Compact, Pedestrian-oriented,
Suburban Homes – Cornell, Markham, ON



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Ontario Growth Secretariat, Ministry of Infrastructure

⁴ An exception is Peel Region's intention to exceed the intensification requirement. Nonetheless, the region's greenfield density targets are not ambitious and the rate of expansion into the whitebelt is to be the maximum allowed by the Growth Plan.

The principal motive for limiting urban expansion is to protect prime agricultural lands in the whitebelt. Municipalities wishing to protect their prime agricultural lands could request that they be put under Greenbelt protection, using the protocol provided by the Ministry of Municipal Affairs and Housing.

4.2. Perceived Boundary Problems

A number of planners and members of the development industry believe that there are problems with the Greenbelt boundary that should be addressed when the Greenbelt comes up for review in 2015. The observed problems with the Greenbelt boundary as currently defined include:

- Greenbelt overlapping with previously designated urban areas (e.g., on the periphery of Brampton)
- Greenbelt boundary bisecting existing infrastructure (e.g., a natural heritage feature defined through a road to the Hamilton International Airport)
- exclusion of underground aquifers that are key to supporting surface natural heritage features included in the Greenbelt. (Ontario Nature, 2009; Nico, 2010)

4.3. Greenbelt Boundaries and Development

Despite the fact that the amount of land available in the whitebelt for further urban expansions is so vast, planners indicated that landowners with holdings just inside the Greenbelt have been exerting pressures to move Greenbelt boundary. Planners interviewed did not believe that landowners and developers would succeed in having the boundary moved without support from the relevant municipalities. Municipalities are generally unlikely to support developers' requests, given overwhelming public support for the Greenbelt (see Section 5.5).

Some municipalities are nonetheless expected to request some boundary changes to accommodate development. These are cases where the existing boundaries prevent optimal use of infrastructure. For example, Halton Region's planning department supports an adjustment of the urban boundary around Acton, a settlement within the Greenbelt. Without increasing Acton's population significantly, the Region cannot cost-effectively increase municipal services. Another example is the Centennial Parkway area in the City of Hamilton. The City is planning to service a community on one side of the parkway and would like to allow some development on the other side of the Parkway to optimize the infrastructure investment. The City would like to have the Greenbelt boundary running along the parkway moved to open up land for development on the other side of the parkway.

Our interviews suggested that some planners and developers are under the impression that it would be possible to take land out of the Greenbelt at one location provided that the same amount is added at another location. Provincial officials maintain that no substitutions will be allowed. The Greenbelt Plan states that the total area of the Greenbelt cannot be reduced, however, it does not explicitly prohibit or enable substitutions. The protocol for applying for Greenbelt expansion, however, explicitly states that municipalities cannot propose any substitutions as part of an application for expansion.

4.4. Protection of Agricultural Land in the Whitebelt

There are popular movements in several lower-tier municipalities to protect prime agricultural land in the whitebelt, including in Markham, Vaughn, and Ajax. If these movements succeed, the municipalities in question could either request that these lands be added to the Greenbelt, using the protocol provided by the Ministry of Municipal Affairs and Housing, or could choose to set up their own protection policies. The latter option is attractive to local officials as it would give the municipality more flexibility in defining and changing boundaries as well as designating land uses.

Some of the interviewed planners noted that they were concerned that certain types of value-added agricultural activities, such as packaging, sorting, and processing produce, were being restricted inside and outside the Greenbelt. Both the Greenbelt Plan and the PPS (which applies to lands outside the Greenbelt) state the “secondary agricultural uses” are allowed and even encouraged on agricultural lands without defining what they are. Several municipalities want the province to make it clear which value-added uses are considered secondary agricultural uses. As the PPS is up for review sooner than the Greenbelt Plan, a new definition of secondary uses would apply to land outside the Greenbelt first. Some municipalities therefore wish to keep land out of the Greenbelt for the time being.

The development industry is likely to oppose these so-called ‘foodbelt’ movements that impose development restrictions on whitebelt lands or any other proposal to expand the Greenbelt into the whitebelt. These are seen as a threat to the supply of developable land in the inner-ring and a source of uncertainty regarding which lands will be developable in the future.

4.5. Political Support

The Niagara Escarpment Plan and the Oak Ridges Moraine Conservation Plan, which have now been integrated in the Greenbelt Plan, have enjoyed strong public support. One of the interviewed planners cited the success of the Niagara Escarpment Plan (NEP) as a precedent that bodes well for the survival of the Greenbelt. Despite initial pessimism about the NEP, established in 1985, it has survived several changes of government uncompromised.

Support for the Greenbelt Plan across inner-ring communities also appears to be strong. A poll commissioned by the Friends of the Greenbelt Foundation found that, while awareness of the Greenbelt Plan was limited, once the Greenbelt and its goals were explained to respondents, the vast majority expressed support for the plan. This was echoed by the majority of interviewees, who largely agreed that the Greenbelt has overwhelming public support and is unlikely to be compromised in any significant way, even after a change of provincial government. A number of interviewees suggested that, if anything, they expected that Greenbelt would expand in the future—into parts of the current whitebelt as well into rural and agricultural areas in the outer-ring of the GGH.

It appears that some councillors in the inner-ring municipalities do not support the Growth Plan and the Greenbelt Plan as strongly as the general public. There is evidence of municipal pushback, especially to the Growth Plan. This is reflected in the proposed OP amendments that the municipalities have submitted to the province. Many of the initial proposals were based on very loose interpretations of the Growth Plan and several have sought outright relaxations of certain

Growth Plan requirements, particularly with respect to employment density in greenfield areas. By and large, it seems municipal councils, while not overtly opposed to growth management, are subtly trying to resist some of the growth management objectives set by the province.

A number of urban observers have suggested that there is a tendency for municipal councils in the GTA to be pro-development (e.g., Sewell, 2009). This may shed light on why some inner-ring councils have resisted the province's attempt to strengthen the system of growth management and land protection in the GGH. The Markham "foodbelt" initiative may reflect this reality: opinion polls show overwhelming public support for the protection of agricultural areas within Markham and yet the town council is split down the middle on this issue.

The dominance of pro-development politicians on some municipal councils has been at least partially attributed to the municipal election campaign financing regulations in Ontario (e.g., Campaign Lake Simcoe, 2010). Compared to the rules governing the financing of provincial and federal parliamentary candidates' campaigns, the rules for municipal council candidates are relatively lax. Council candidates can receive large donations from corporations and unions. There are well-documented examples of municipal council and mayoral campaigns in the GTA that have been heavily financed by members of the development industry (MacDermid, 2006). This funding bias gives pro-development candidates an important campaigning advantage over other candidates and colours the political inclinations of many municipal councils.

4.6. Monitoring

Both the provincial government and municipalities have a role in monitoring the implementation of the Growth Plan as well as development activity in and near the Greenbelt. In terms of the Growth Plan, the crucial parameters are of course the intensification rates and densities of greenfield development. As mentioned above, the province has developed a procedure for tracking intensification rates based on the delineation of built boundaries. However, the province has not yet started tracking actual intensification rates. The available estimates of current intensification rates come from planning staff within the single- and upper-tier planning departments. The Growth Plan contains a provincial undertaking to track intensification rates on a yearly basis and this work should begin immediately in order to ensure a consistent approach across municipal jurisdictions, not only at the upper-tier level, but also at the lower-tier scale.

The need for a consistent monitoring framework is even more pronounced with respect to density measures. The methodology for calculating greenfield densities is provided by the Growth Plan, which also stipulates that the province should track these densities on a five-year basis, whenever new census data become available. The province has not yet begun tracking this metric.

Growth-Related Issues in the Outer Ring

5.1. Growth Plan Implementation

5.1.1. Growth projections

In general, the interviewed county and regional planners said that the growth projections in Schedule 3 of the Growth Plan are reasonable and consistent with recent growth trends. Some planners suggested that the numbers for their regions are likely to be revised slightly upwards during a review that was ongoing at the time of writing. A few cited the recently updated Ministry of Finance growth projections, which for most parts of the GGH are slightly higher than those found in the Growth Plan.

Wellington County is the only municipality in our subset of outer ring study municipalities that has deemed Growth Plan projections to be excessive. According to planners, the combined Wellington County and City of Guelph population projection would exceed the Speed River's capacity to absorb wastewater given present sewage treatment technology. While updating their Official Plans, the County and the City requested that the province decrease the combined 2031 growth projection for the combined County-City area. Rather than decreasing

the overall projections, the province instead designated a portion of the projected population and employment growth as “unallocated”—i.e., to be addressed in the future. If there is a major change in environmental technology before 2031, which would increase the regions sewage treatment capacity, then some or all of the unallocated projections will become allocated. A similar situation has arisen in Dufferin County, where assimilative capacity limitations and lack of infrastructure have resulted in unallocated growth projections.

Another area where growth projections are causing some difficulty is Simcoe County. For 2021 and 2031, the Growth Plan provides one population and one employment growth projection for Simcoe County and the independently administered cities of Barrie and Orillia combined. Thus, the projected growth will have to be allocated among the three jurisdictions. The City of Barrie has asked the province for a large share of the projected growth. Legislation allowing it to annex land from Simcoe County in order to accommodate this growth has been passed. Despite the apparent limitations in the Lake Simcoe watershed’s carrying capacity, some politicians and planning officials in the County fear that too little growth will be allotted to the County. At the time of writing, the County and the two separated Cities were awaiting a provincial decision regarding the growth projections.

5.1.2. Meeting intensification targets

Of the five study areas, only the two most populous upper-tier municipalities in the outer ring, the Niagara and Waterloo Regions, intend to meet and, in the latter case, exceed the Growth Plan’s intensification target. Planners from the three primarily rural and agricultural counties all cited the need for a lower target. They claimed that the 40% percent target, while appropriate for larger urban settlements, is ill-suited for small, rural towns. They claimed that intensification at the rate stipulated in the Growth Plan would entail a significant departure from existing densities and a substantial transformation of the built form, threatening to change the historic character of these towns. Some planners also argued that the infrastructure in many small towns would not have the capacity to absorb the required amount of intensification and that local governments would not be able to afford the necessary infrastructure upgrades. This concern might not be well grounded, given that the provincial and federal governments provide subsidies for infrastructure upgrades in built up areas; it is unlikely that any municipality would be forced to carry the costs on its own. Development charges can also be used to make up any predicted shortfall.

Due to a combination of the abovementioned factors, the three counties claim they cannot meet the province’s 40% intensification target for future development.⁵ The Growth Plan stipulates that the province may “review and permit an alternative minimum intensification target for an upper- or single-tier municipality located within the outer ring to ensure the intensification target is appropriate given the size, location and capacity of built-up areas”.⁶ Not surprisingly, these three counties have applied for alternative targets under this provision of the Growth Plan. The requested targets, some already approved by the province, range from 15% to 30% intensification.

5 It should be noted that the separately administered cities within the outer-ring counties (i.e., Brantford in Brant County, Guelph in Wellington County, Barrie and Orillia in Simcoe County, and Peterborough in Peterborough County) have set intensification targets independent of those set by the surrounding county. In all cases, these cities are to meet or exceed the province’s 40% intensification target.

6 Inner ring municipalities cannot apply for alternative targets.

Table 6. Intensification Rates (2006 built boundaries)

Jurisdiction	2001-2006*	Current Rate^	Proposed Rate^
Niagara	48%	~40%	40
Waterloo	38%	~40%	40
Simcoe	34%	unknown	25-30
Wellington	20%	10-12%	20
Brant	22%	~15%	15

^Source: planners from each municipality, personal communications

*Source: Burchfield (2010)

As shown in Table 6, the proposed targets are in the range of current or recent intensification trends.⁷ If the province wishes to ratchet up these targets when the Growth Plan comes up for review, it will need to provide some support to these largely rural counties. Of particular importance is the need to build institutional capacity. Rural areas may have limited planning capacity to accommodate intensification due to small staff sizes and a lack of suitable experience. Provincial programs can assist local leaders by providing resources to assist with the design of intensification projects and ensure that they integrate properly with the existing built form. Provincial assistance may also be required in terms of funding the infrastructure needed to support intensification initiatives in rural areas.

Pedestrian Amenities on a Downtown Street – 2nd Avenue, Owen Sound, ON



Copyright Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Infrastructure

⁷ The current and proposed rates of intensification are calculated using the province's definition of the 2006 built boundary. The 2001-2006 intensification rates, drawn from the Neptis report by Marcy Burchfield, were calculated using a method somewhat different than the one used by the province to identify built boundaries. Thus, these rates are not directly comparable.

5.1.3. Meeting density targets

The situation with respect to the Growth Plan's density target mirrors that of the intensification target: the two regional municipalities in the outer ring intend to achieve this target whereas the counties profiled in this report have requested permission to pursue alternative targets.

The two outer-ring regional municipalities face the same challenges as their inner-ring counterparts in meeting the density target. They have grandfathered greenfield developments—i.e., approved but not yet built—with densities lower than those required by the Growth Plan, which bring down the regional average greenfield density. Moreover, they tend to attract land extensive employment uses, such as warehousing and manufacturing, which depress the regional average greenfield density.

Where the outer-ring counties are concerned, the planners interviewed believe that the 50 people plus jobs per hectare target is not appropriate for areas outside the larger, separately administrated cities and perhaps a few larger settlements with an urban character. Achieving this target, they argue, would entail a major departure from existing densities of smaller settlements and would result in greenfield development that contrasts sharply with existing areas in terms of built form, potentially compromising their historical character. This may be a disingenuous argument, at least in some cases, given that some small towns with a historic character have approved sprawling subdivision and commercial development that has little relation to historic built form.

Another reason given by planners for pursuing a lower greenfield density target is the lack of public transit service. Outer-ring municipal planners see the 50 people plus jobs per hectare as a target designed to make public transit viable in new greenfield developments. This rationale for higher density development is seen as not applicable in rural areas where conventional forms of public transit are currently not practical. This is, of course, a chicken and egg situation: low-density development undermines transit provision and the lack of transit is used to undermine densification initiatives. Non-conventional forms of transit that are suitable for rural areas could help to break this vicious cycle.

Citing a combination of the above-mentioned constraints, outer-ring municipalities have asked for alternative greenfield density targets, which are currently pending approval from the province. The requested targets are generally in the 30 to 40 people plus jobs per hectare range.⁸

5.1.4. Land budgets

From the perspective of long-term pressure on the Greenbelt, land budgets are an issue of lesser concern in the outer ring than in the inner ring. Apart from intensification, the only vector of growth in inner-ring regions is into the whitebelt and towards the Greenbelt. Although the whitebelt is large enough to accommodate several generations worth of growth, there is a realistic prospect that it will eventually be filled up and that urbanization will come up against the Greenbelt's inner boundaries. In contrast, the urbanized portions of the outer-ring territories are relatively small and the relative amount of rural and agricultural land is

8 As with the intensification targets, the Growth Plan stipulates that the Minister of Public Infrastructure Renewal may permit an alternative density target for an upper- or single-tier municipality that is located in the outer ring, provided that it does not have a designated urban growth centre. Alternative targets will be granted to ensure the density target is appropriate given the characteristics of the municipality and adjacent communities.

very large. Urbanized areas in the outer ring are not forced to grow towards the Greenbelt—they can grow in a variety of directions. That does not mean that land budgeting is not a concern to these regions; land budgeting is still important from the perspective of achieving intensification and density levels that will help rationalize infrastructure investment and protect farmland and ecological services.

Downtown, Small-scale, Pedestrian-oriented Commercial Street – Paul Street,
St. Catharines, ON



Copyright Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Infrastructure

Infill Building Stepping Back from a Downtown Pedestrian-oriented Street – King Street, Kitchener, ON



Copyright Queen's Printer for Ontario, photo source: Ontario Growth Secretariat,
Ministry of Infrastructure

5.1.5. Conflicting provincial priorities

In the outer ring, we have noted cases where different provincial policies appear to be at odds. In particular, some elements of the province's Simcoe Area: A Strategic Vision for Growth are in conflict with the Growth Plan and the Lake Simcoe Protection Plan. In terms of conflicts with the Growth Plan, the Simcoe strategy essentially proposes the creation of employment areas along Highway 400 in locations that are not adjacent to existing communities—one near Bradford West Gwillimbury and the other south of the City of Barrie. Creating employment areas away from residential uses and other services run counter to the Growth Plan's emphasis on creating complete communities.

In terms of conflict with the Lake Simcoe Protection Plan, environmental groups claim

that the amount of development proposed in the provincial Simcoe strategy would exceed the carrying capacity of the already highly stressed Lake Simcoe watershed. There is particular concern about the size and location of some of the areas the province proposes to develop. This includes the large strategic employment area proposed near Bradford West Gwillimbury as well as the proposed expansions in Bradford and Alliston. Critics contend that no environmental assessments have been conducted to show that local sub-watersheds and the Lake Simcoe watershed as a whole can accommodate the added phosphorous loading that these developments would entail, and that the loading will exceed the amounts permitted by the Lake Simcoe Protection Plan (Campaign Lake Simcoe, 2009). Although the Lake Simcoe Protection Plan requires that Certificate of Approvals (COAs) for phosphorous loading be obtained for new developments, environmentalists claim that the permitted amount of phosphorous loading in COAs have been habitually adjusted to fit development proposals, rather than development proposals being modified to fit permitted amounts of phosphorous loading.

5.2. Development and the Greenbelt

5.2.1. Leapfrog development

A main concern regarding growth in the outer ring is the potential for leapfrog development—growth of communities in the outer-ring to accommodate people who might have otherwise settled in the inner-ring. This is especially of concern if that growth is composed of bedroom communities, i.e., people who commute across the Greenbelt to employment centres in the inner-ring.

Such leapfrogging is a concern because it entails the construction of additional roads and other infrastructure across the Greenbelt, increasing traffic and pollution within the Greenbelt and contributing to the further fragmentation of agricultural and environmentally sensitive lands. Leapfrog development also runs counter to provincial policies with respect to the creation of compact, transit-supportive communities and contributes to greenhouse gas emissions. Furthermore, leapfrog development may create pressure for expensive expansions of Great Lake-based trunk water and wastewater infrastructure to service outer ring communities.

Views on leapfrog development expressed by planners and provincial officials contrast with those of members of the development industry, particularly where Simcoe County is concerned. The development industry's perspective is that the Greenbelt has significantly changed the path of development in the GGH. Development interest in areas outside the Greenbelt has purportedly increased, especially in areas close to the outer boundaries of the Greenbelt and offering good transportation links to the inner ring, which facilitate commuting. For example, the current development pressure in southern Simcoe County is concentrated around Highway 400 and in the catchment area of the GO commuter train service station at Innisfil.

In contrast, the outer-ring planners interviewed for this report, especially those in the higher growth upper-tier municipalities (Waterloo Region, Wellington County, and Simcoe County), expressed doubts that the development pressures currently being felt in their regions are a result of the Greenbelt and Growth Plans. They pointed out that bedroom communities for people working in the GTA have been developing in the outer ring for many years. Provincial officials interviewed for this report expressed similar views.

There is as yet no empirical evidence on this important question, but on balance, it seems unlikely that development pressures outside the Greenbelt are increasing due to development leapfrogging from the inner ring municipalities. The amount of developable land outside the Greenbelt within inner-ring communities is sufficient to accommodate expected growth for many generations. Within the Greenbelt itself, most urban areas have generous whitebelts around them, as Greenbelt boundaries were intentionally drawn to avoid areas where urban growth was expected in the coming decades. The only exceptions are Newmarket and Aurora, which were already urbanized to their municipal boundaries or already constrained by the Oak Ridges Moraine Plan. As for rural settlements within the Greenbelt, development was already largely being constrained by the lack of sewer and water servicing and by existing policies in municipal plans or the Oak Ridges Moraine Plan.

The Niagara Region presents a slightly different story. The urbanized areas in the northern part of the region that border on Lake Ontario, namely the City of St. Catharines and the Town of Niagara-on-the-Lake, are bounded by the Greenbelt; there is no whitebelt that would allow for contiguous greenfield expansion in the future. The absence of greenfield expansion opportunities in the northern part of the region may redirect urban growth to southern and central Niagara municipalities. However, directing growth to the central southern portions of the region is a long-established policy, adopted well before the Growth Plan and Greenbelt Plan came into effect. Furthermore, the projected growth rate for the Niagara region is relatively low (85,000 people and 32,000 jobs between 2001 and 2031) so whatever effect the Greenbelt has in terms of displacing growth in the region, it will be small.

While the Greenbelt has not been a major factor responsible for displacing growth from inner-ring to outer-ring communities, market forces may work to drive leapfrog development in the future. In particular, international experience with land containment policies, such as urban growth boundaries and greenbelts, shows that they can eventually lead to land value increases within growth boundaries unless densities rise and measures are taken to improve the supply of affordable housing (Dawkins and Nelson, 2002). Residents that cannot afford a suitable home in the inner-ring may be drawn to less expensive options in the outer ring and the resulting development pressures could work to undermine good planning in those locations. This points to the importance of coordinating growth management policies between the inner and outer rings in order to encourage compact development in communities along the Lake Ontario lakeshore, while preventing sprawl on the other side of the Greenbelt. Clearly, the Growth Plan is a good step in this direction and its vigorous enforcement is crucial to shaping market forces in the region and preventing leapfrog development (Fung and Conway, 2007). The international experience also suggests the need for policies and programs to improve the affordability of the housing stock in the inner ring.

5.2.2. Impacts of development on the Greenbelt

Most outer-ring planners interviewed for this report do not believe that the growth of settlements outside the Greenbelt will encroach on the Greenbelt. There do not appear to be any urban areas or settlements poised to expand into the Greenbelt. There could, however, be other, indirect impacts on the Greenbelt from development outside the Greenbelt. Impacts on the Greenbelt could flow from increased commuter traffic or the construction of new

transportation infrastructure and utilities crossing the Greenbelt. Leapfrog development could also be detrimental to natural systems outside the Greenbelt, especially on watersheds with limited absorptive capacities such as those centered on Lake Simcoe.

Indirect impacts of development in the outer ring could also include those related to the expansion of existing, and creation of new, aggregate extraction sites in the Greenbelt. Growth in the outer ring will create demand for aggregates, and that may drive aggregate extraction operations within the Greenbelt.

There is also a risk that development outside the Greenbelt will have indirect ecological impacts on the Greenbelt by affecting ecological systems that extend into the Greenbelt. The Paris-Galt Moraine is an example of such a system. Development on the portion of the moraine that lies outside the Greenbelt would impact the entire moraine and could cascade across the larger hydrological system to which it belongs. Finally, development on the Greenbelt's outer boundary also limits the potential for Greenbelt expansion by converting rural land to urban uses.

5.3. Land Protection and Greenbelt Expansion

There are valuable agricultural lands and natural heritage systems outside the Greenbelt that merit the kind of permanent protection that inclusion in the Greenbelt would afford. Several upper-tier municipalities have used their regional or county official plans to protect areas deemed valuable from an agricultural or ecological perspective. It does not appear that these outer-ring municipalities are interested in applying for Greenbelt expansions on their territories.

Planners interviewed for this report mentioned that the protection of agricultural lands through regional or county official plans is preferable to expanding the Greenbelt. They point out that the Provincial Policy Statement (PPS) already provides the same protection to prime agricultural lands outside the Greenbelt. Moreover, municipalities are concerned that under the current definition of "secondary agricultural uses" in both the Greenbelt Plan and the PPS, certain value added uses that they consider desirable are being restricted. As the PPS will be reviewed before the Greenbelt Plan, some municipalities would prefer to keep the lands out of the Greenbelt until this issue is resolved.

Some planners suggested that keeping land out of the Greenbelt affords the municipality more flexibility in how the land will be used. Municipalities can designate their own protected agricultural zones and the permitted land uses. Should a municipality wish to someday develop an area that is under its own protection regime, or simply to change the permitted land uses, it could do so with few barriers. In contrast, boundary and land use changes in the Greenbelt would be virtually impossible. Thus, the Greenbelt's comparative inflexibility might discourage some municipalities from requesting Greenbelt expansions into rural and agricultural areas.

The Greenbelt Plan policies with respect to aggregate resources, which closely follow policies set in PPS, could indirectly act as a barrier to expansion at least in one upper-tier municipality. The municipality in question, Waterloo Region, has proposed a ban on aggregate resource development in the Environmentally Sensitive Areas (ESAs) that it identified in its recently proposed Regional Official Plan amendment. As the amendment is currently under review by the province, it is unclear whether Waterloo Region will in effect be allowed to impose restrictions on aggregate resources that are stricter than those laid out in the PPS. If the province accepts this

aspect of the amendment, it would create a strong disincentive for the Region to add its ESAs to the Greenbelt. The Greenbelt Plan essentially allows aggregate resources to be developed anywhere (under strict conditions) except where certain natural heritage systems are at stake, including ‘significant’ wetlands, ‘significant’ habitats for endangered or threatened species, and ‘significant’ woodlands (Greenbelt Plan Policy 4.3.2). Waterloo Region’s plan, in contrast, calls for a blanket prohibition on aggregate resource development across an entire ESA, regardless of the specific biophysical characteristics of a particular site inside the ESA. If the ESAs were to be incorporated into the Greenbelt, the more permissive Greenbelt Plan policies would prevail, potentially creating new opportunities for aggregate resource development—an undesirable scenario from Waterloo Region’s perspective.

It is clear from these observations that expansion of the Greenbelt is unlikely to be driven from “below”, by municipalities. Moreover, letting municipalities establish their own land protection policies through official plans has a significant disadvantage vis-à-vis the Greenbelt: it is less likely that the protection will be permanent. Official plans are revised and amended frequently, providing ample scope for changes to land protection policies initiated by municipal politicians. Greenbelt protection, in comparison, would give municipal councils little or no scope for altering the boundaries of protected areas—i.e., the protection would essentially be permanent. This suggests that provincial action is needed to expand the Greenbelt or otherwise permanently protect valuable agricultural lands and natural heritage systems outside the Greenbelt.

5.3.1. Agricultural lands

With the exception of the Niagara Region, most outer-ring upper-tier municipalities have relatively small areas within the Greenbelt, while all of them, including Niagara, have significant amounts of agricultural land outside the Greenbelt. Some upper-tier municipalities have adopted a variety of policies to protect these lands. The strongest policies appear to be in the Waterloo Region and neighbouring Wellington County. Both have explicitly designated agricultural areas in their official plans, which allow a wide range of primary and secondary agricultural activities but exclude all other forms of development. The Niagara Region also has policies to protect agricultural land outside the Greenbelt. Rather than protecting specific swaths of agricultural land, the region has blanket restrictions on hamlet expansion and land divisions that apply to all agricultural areas, while allowing some value added uses, such as sorting and packaging facilities. Simcoe and Brant counties do not have explicit policies for protecting agricultural land. On the whole, as mentioned above, there is little interest among municipalities in the outer ring to push for inclusion of their valuable agricultural lands in an expanded Greenbelt. Provincial action is needed to address this patchwork situation.

5.3.2. Natural heritage

Some interviewees in outer-ring municipalities noted that there are highly valuable natural systems, especially water resources, which are partially or entirely outside the Greenbelt. Landlocked areas of the outer ring, such as the Waterloo Region and the counties of Brant and Wellington, depend on groundwater for their municipal water supplies. For them, protecting the aquifers that provide

their water is a greater priority than protecting surface streams and rivers. As reflected in the choice of Greenbelt boundaries, the Greenbelt Plan focuses on protecting surface watercourses; groundwater sources are largely ignored. For example, the current Greenbelt boundary bisects the Paris-Galt Moraine, an aquifer that Wellington County and the City of Guelph depend on for their water supply. Planners argued that the Paris-Galt Moraine and other key aquifers throughout the outer ring deserve similar protection to that which has been afforded to the Oak Ridges Moraine. While there have been discussions between planners in some municipalities and staff with the provincial government, there has not yet been any formal requests to grow the Greenbelt.

5.4. Political support

There is evidence of municipal opposition to the growth management regime imposed by the Growth Plan, particularly among the primarily rural counties. As noted in the context of inner-ring municipalities, the dominance of pro-development politicians in municipal governments is believed to result, at least in part, from the municipal election finance system in Ontario. According to York University researcher Robert MacDermid (2009), the same dynamics appear to be at work in the outer-ring municipalities.

Municipal councils dominated by pro-development politicians may resist provincial efforts to limit sprawl, protect valuable agricultural land, and preserve ecologically sensitive areas if they depart significantly from existing municipal practices. For example, environmental groups have argued that pro-development municipal politicians are pushing through development proposals likely to aggravate ecological conditions in the already stressed Lake Simcoe watershed (Campaign Lake Simcoe, 2010).

Another theme raised by some interviewees relates to the costs and benefits of growth. Municipal councillors often support development because they focus on its potential benefits, such as increased tax revenues and construction jobs. However, this perspective ignores the long-term servicing burden that accompanies most types of residential growth, especially low-density greenfield growth or scattered rural growth.⁹ Interviewees pointed out that municipal councils are increasingly aware of this issue in outer ring municipalities, especially in the more urbanized areas, but more detailed information on the fiscal repercussions of different types of growth (infill versus rural estate or greenfield) is needed.

From a political perspective, the Greenbelt appears to be far less contentious in the outer ring than in the inner ring. In contrast to the inner ring, where the upper-tier municipalities saw significant portions of their land base put under Greenbelt protection, outer-ring municipalities (with the exception of the Niagara Region) saw only small portions of their territories directly included in the Greenbelt. Therefore, the Greenbelt Plan did not constrain development and land uses nearly as much as in the outer ring – and did not raise the ire of pro-development politicians, developers, and farmers – as it did in the inner ring.

9 In 2004, a study done for the Halifax Regional Municipality showed that municipal service costs declined significantly, on a per household basis, from low density suburban to high-density urban development.

6

Policy Measures

The pattern of future urbanization in the Greater Golden Horseshoe as a whole is expected to depend crucially on the successful implementation and the continuing enforcement of the Growth Plan. A recent report by the Neptis Foundation (Taylor and Burchfield, 2010), which compared Greater Toronto to Calgary and Vancouver, concluded that a strong planning policy framework is essential to driving intensification, increasing the density of development, and ultimately containing urban growth. The study found that Vancouver's staggering intensification rate between 1991 and 2001 (80% Vancouver versus 44% Toronto) and its much slower expansion rate (2.3 ha per 100 new residents Vancouver versus 4.4 ha per 100 new residents Toronto) cannot merely be explained by strong geographic constraints. Rather, Vancouver's success has much to do with long-established, strong planning policies. This section lays out some policy recommendations for buttressing the Growth Plan and the Greenbelt Plan in order to protect the Greenbelt in the long term.

6.1. Growth Plan Implementation

Urban growth in the inner-ring should not encroach on the Greenbelt in the foreseeable future, provided that municipalities succeed in meeting the intensification and greenfield density targets of the Growth Plan. The greater their success in containing outward urban expansion, the more opportunities there will be for protecting valuable agricultural lands and natural systems in the whitebelt, either through expansion of the Greenbelt or through other land use and development controls.

With the exception of the northern portion of Niagara Region, urban growth in the outer ring is not constrained by the Greenbelt. Nevertheless, this does not mean that meeting intensification and greenfield density targets and slowing the rate of urban expansion is any less important in the outer ring than it is in the inner-ring. As highlighted earlier in this report, there are valuable agricultural lands and sensitive natural heritage systems in the outer ring outside the Greenbelt. Better growth management in the outer ring will increase opportunities for protecting these valuable lands while achieving other important provincial objectives, such as encouraging the creation of more complete communities and shifting travel demand away from cars.

Most policy measures to help implement the Growth Plan in the inner-ring also apply to the more urbanized parts of the outer ring. However, some do not apply as well to the rural context in the outer ring. The primarily rural counties have different constraints and preoccupations that need to be addressed with distinct policies. We make note of rural-specific measures in the following sub-sections. Both urban- and rural-appropriate policies proposed to facilitate the implementation of the Growth Plan are summarized in Table 7.

6.1.1. Facilitating intensification

The province could facilitate intensification by taking the following direct measures:

- **create an infrastructure upgrade fund:** help municipalities finance infrastructure upgrades required for intensification, including public transit improvements
- **invest more in public transit** (and keep previous commitments to fund transit)
- **clarify the long-term net cost advantage** of intensification versus greenfield development for municipal planners, councillors and residents
- **strengthen support for initiatives that enhance urban livability** (social, cultural, ecological), thereby helping to stimulate demand for higher density urban housing
- **permit land value taxation:** encourage property owners to intensify by allowing municipalities to put more weight in their property tax assessments on the value of the land rather than the building value.

Municipalities, for their part, could consider the following:

- **use tax increment financing:** use the increase in property tax revenues (i.e., the tax increment) induced by an infrastructure project in an infill area to pay for the project

- **expedite approvals for intensification projects:** streamline approvals process and develop human resources specialized in handling intensification project site plans
- **reduce cost burden on intensification projects:** allow green roofs and other green infrastructure to qualify as substitutes for parkland dedication requirements; reduce development charges and other municipal fees on infill projects
- **reduce parking requirements:** subject intensification projects (especially near transit facilities, where shared car facilities are provided) to lower parking requirements
- **zoning for as-of-right development:** allow development as-of-right in designated intensification areas and near public transit infrastructure thereby limiting the scope of NIMBY responses
- **allow for small-scale intensification:** modify zoning by-laws to allow secondary dwelling units, on single-family properties and for small-scale multi-unit residential buildings that fit neighbourhood character.

In more rural municipalities in the outer ring, intensification issues are somewhat different than in their more urban counterparts. Here, municipal planners are concerned with the preservation of the historic character and with infrastructure funding limitations that constrain intensification. Provincial initiatives could assist with both of these concerns.

In terms of preserving historic and small town character, many small towns may not have the urban design and architectural expertise needed to ensure that infill development can be properly integrated into the existing built form. Provincial policies that would help preserve historic character while facilitating intensification include:

- **provide urban design resources for small towns,** such as design guidelines or a team of expert consultants, to which town council and residents can turn for advice on how to integrate new buildings while maintaining and even enhancing the historic character of the town
- **provide grants for the architectural design of new buildings** to help create buildings that fit with their historic surroundings, helping to reduce opposition to new construction
- **provide grants to assist with the adaptive reuse** of existing historic buildings, such as disused school buildings and mills
- **fund a redevelopment readiness certification program for dissemination to rural municipalities,** consisting of community visioning, training for public officials, streamlining of development regulations, and marketing that sends a message to potential investors that the town is open for investment in infill projects (ICMA, 2010).

In terms of funding infrastructure to support intensification in smaller towns, the provincial government could:

- **provide funds for main streets revitalization through** the Ontario Small Town and Rural (OSTAR) Development Infrastructure Initiative (run by OMAFRA); grants for infrastructure improvement provided by the fund could be tied to conditions regarding the revitalization and infilling of downtown or main street areas and could allow some money to be used for urban design and walkability measures which would also help strengthen the local sense of place (ICMA, 2010).
- **make provincial funding for the expansion of sewer and water infrastructure into greenfield area conditional** on the adoption of municipal policies and programs to encourage infill development.
- **require that a certain percentage of provincial infrastructure subsidies** be used to enable infilling of the built-up area.
- **allow lower-than-target rates of intensification** in exchange for reduced growth allocations in cases where the cost of infrastructure expansions is expected to exceed the benefits.

6.1.2. Increasing the density of greenfield development

To meet the 50 people plus jobs per hectare target, urban municipalities in both inner and outer rings may need to exploit the lapsing provisions in the Planning Act to add more density to previously planned developments that have not yet been built. Lapsing provisions enable municipalities to review and request changes to approved plans for developments that have not been built out after a certain period of time. These provisions give municipalities the chance to update development plans to conform to changes in the policy and regulatory context. Municipalities can also engage in outreach campaigns to encourage developers to resubmit new plans to obtain density increases. As an added incentive, approval fees could be waived for resubmitted plans.

As for new as yet unplanned developments, the more urban municipalities will need to ensure that they use planning and engineering standards that allow for compact development. This is especially important for ground-related residential development. Planning standards can be revised to allow for smaller lots, smaller setbacks, and less area dedicated for off-street parking. Engineering standards can be revised to minimize street widths and rights-of-way for underground infrastructure, helping to create an even more compact urban form. Greenfield development should be structured around transit facilities, with the highest densities closest to transit stations. This will require increased investment in transit infrastructure in major urban areas in both inner and outer rings.

A report by the Neptis Foundation on shaping greenfield development in the GGH (Taylor and Van Nostrand, 2008) suggests that higher densities can be achieved through smaller and more strategic allocations for public facilities in greenfield developments. Smaller allocation would allow more land to be freed up for development and facilitate the attainment of higher densities. Three measures are recommended: (1) creating dual use park and schoolyard facilities (already

common); (2) locating playing fields in floodplains; and (3) integrating parks into natural heritage systems. Scenario testing suggests that a 20% decrease in per capita public facility allocations could result in a 12 to 15% increase in combined population and employment density.

The more urban municipalities could also undertake efforts to increase the land efficiency of employment uses. Uses such as logistics, warehousing, manufacturing and so on could be made more land efficient, for instance by using multi-level buildings. Another strategy is to locate these types of uses near transit nodes and corridors and to limit the amount of surface parking provided. The development of free standing office buildings with large surface parking areas could also be restricted through appropriate zoning measures.

For smaller, rural settlements in the outer ring, as with intensification, a key concern is maintaining the established character of the settlement. In order to develop denser new communities with a mix of uses without creating jarring contrasts with the existing built form, it is suggested that small towns use form-based zoning rather than land use based zoning. Form-based codes can help a smaller community support mixed uses, diverse housing options, and open space while controlling design details such as streetscapes and façades—essential to maintaining the established character of the town (ICMA, 2010). To help design form-based zoning by-laws and urban design schemes for greenfield areas, smaller communities should have access to the necessary urban planning and architectural expertise. Again, the province has a key role to play here; it can develop guides and instructional materials available to help municipalities establish appropriate form-based zoning. The province could also assemble a team of expert consultants that could advise smaller towns of matters related to form-based zoning and urban design.

One of the key arguments in support of densification in larger urban areas is the boost it gives to transit ridership. In rural areas, most towns do not have the density required to support transit or adequate transit services, two factors that coexist in a self-reinforcing cycle. As densities are gradually increased in rural towns through implementation of the Growth Plan, the argument for transit provision will become more persuasive. The province should work together with local authorities in rural areas to provide reliable, flexible and inexpensive transport alternatives to local populations.

Transit options for rural communities differ somewhat from those typically associated with urban areas. While fixed-route bus systems may not currently be feasible in many rural towns, other innovative transit modes (such as subsidized fixed route taxis, or corporate vanpooling) offer practical alternatives. Better coordination of existing “social transportation” services, mostly provided by volunteer agencies or public institutions, could improve the efficiency of such informal systems (Transport Canada, 2009). As intensification of existing areas and new development at higher densities proceeds, the transition can be made to low-cost fixed-route services (such as rush hour only service using mini-buses) and eventually to a wider array of services.

6.1.3. Creating complete communities

Meeting the provincial intensification and density targets will only be possible if municipalities plan and developers build communities that attract residents and businesses. This links to another key goal of the Growth Plan: the creation of complete communities. Although this goal

does not have a strict quantitative definition it is no less important than the quantitative goals found in the Growth Plan. Also, it is applicable to the urban and the rural context alike.

Provincial policies that would facilitate the creation of complete communities include:

- **Provincial facilities:** locate provincial-funded facilities and services (e.g., health, recreational and cultural services) in designated growth centres and other areas targeted for intensification
- **design workshops:** develop intensive design workshops that will give municipal planners the opportunity to experiment with innovative zoning and design techniques that encourage a diversity of land uses, housing types, and transportation alternatives.

Municipal policies also have a role to play in the creation of complete communities:

- **conditional zoning:** use conditional zoning provisions of the Planning Act to grant developers bonus densities and other allowances on certain conditions, such as providing a diversity of services, green infrastructure, etc.
- **Mixed use:** move away from single-use zoning and adopt zoning approaches that are flexible enough to accommodate a wide range of compatible land uses.

6.1.4. Conflicting provincial priorities

The creation of employment areas near transportation corridors should only be allowed where it contributes to the creation of complete communities and does not sacrifice good farmland or the maintenance of ecological services. Creating employment uses in areas that are not contiguous with existing communities, that are not served by public transit and to which people cannot realistically commute by any means other than the private automobile should explicitly be prohibited in the Growth Plan. The province should revise its Simcoe Strategy accordingly, either removing the strategic employment zones outside Barrie and Bradford-East Gwillimbury designated in the original plan, or adding language to the plan that will ensure that these areas are developed in a way that contributes to the creation of complete communities.

In principle, all stakeholders seem to agree that development and economic priorities should not trump environmental considerations. Thus, it is recommended that conformity with applicable environmental policies be enforced and given higher priority during Official Plan approvals.

Table 7. Summary of Policies for Meeting Growth Plan Targets

Barrier	Provincial Policies	Municipal Policies
INTENSIFICATION		
cost of infrastructure upgrades	<ul style="list-style-type: none"> • set up a provincial infrastructure fund, provide municipalities with cheaper financing where this facilitates intensification and density • reform development charges legislation, allow municipalities to charge for transit service up front • modify the existing rural community infrastructure fund to make grants conditional on downtown revitalization and infilling; enable funds to be used for urban design and walkability improvements • in rural areas, make provincial funding for the expansion of sewer and water infrastructure into greenfield area conditional on the adoption of municipal policies and programs to encourage infill development • require that a certain percentage of provincial infrastructure subsidies be used to enable infilling of the built-up area 	<ul style="list-style-type: none"> • use Tax Increment Financing to fund infrastructure projects in infill areas
NIMBYism		<ul style="list-style-type: none"> • allow development as-of-right in designated intensification areas and near public transit infrastructure
slow approvals		<ul style="list-style-type: none"> • train and hire more staff to handle condominium site plans

cost burdens		<ul style="list-style-type: none"> allow green roofs to be used in lieu of parkland dedication requirements reduce development charges in infill areas reduce parking requirements on intensification sites
zoning restrictions on small-scale intensification		<ul style="list-style-type: none"> allow creation of secondary dwellings or "granny flats" on existing single-family properties
preservation of historical town character	<ul style="list-style-type: none"> provide urban design resources to small settlements provide architectural resources to builders to help integrate new buildings in the existing fabric provide grants to assist with the adaptive reuse of existing historic buildings, such as disused school buildings and mills fund a redevelopment readiness certification program for dissemination to rural municipalities 	
GREENFIELD DENSITY		
large supply of developments planned before Growth Plan		<ul style="list-style-type: none"> use lapsing provisions to increase density of planned developments
conventional planning standards		<ul style="list-style-type: none"> update planning standards to allow smaller lots, smaller setbacks, fewer off-street parking spaces, fewer public land takings
conventional engineering standards		<ul style="list-style-type: none"> reduce the width of public ROWs by making streets narrower and placing utilities under the sidewalks or roads

smaller and more strategic public facility allocations		<ul style="list-style-type: none"> • reduce per capita standards for public facility allocation in new developments • create dual use park and schoolyard facilities • locate playing fields on flood plains • integrate parks into natural heritage systems
preservation of rural or small town character	<ul style="list-style-type: none"> • enable form-based zoning • provide urban design resources to help integrate new denser forms of development with existing forms 	<ul style="list-style-type: none"> • use form-based zoning to encourage higher density and mixed uses while controlling the visual character of new developments
lack of public transit in rural areas	<ul style="list-style-type: none"> • provide funding for innovative rural transit programs 	<ul style="list-style-type: none"> • implement demand-responsive services and other innovative transit modes
COMPLETE COMMUNITIES		
poor control over mix of land uses	<ul style="list-style-type: none"> • locate provincial facilities and services in designated growth centres and other areas targeted for intensification 	<ul style="list-style-type: none"> • use conditional zoning to ensure adequate services to create a complete community
restrictions on mixed use zoning		<ul style="list-style-type: none"> • ensure a mix of land uses and housing types • allow small scale employment uses in residential areas
lack of experience with mixed-use urban development	<ul style="list-style-type: none"> • launch design workshops to familiarize planners with innovative design and zoning techniques 	<ul style="list-style-type: none"> • participate in workshops
contradictory Growth Plan policies	<ul style="list-style-type: none"> • resolve potential conflict between complete communities and strategic employment areas policies; allow development of employment areas only if they are contiguous with existing communities 	

6.2. Leapfrog Development and the Greenbelt

The interviewed outer-ring planners did not view leapfrog development as a pressing growth management issue, but this does not mean there are no reasons for concern. Experience with other greenbelts abroad suggests that leapfrog development is very likely to occur when land markets in the area within the greenbelt tighten (Carter-Whitney, 2010). This is expected to increase the pressure for development to leapfrog to the outer ring, bringing with it the negative impacts described above. For these reasons, it is recommended that policies for mitigating leapfrog development be adopted as soon as possible.

The strategy to contain leapfrog development should be twofold. On the one hand, the factors attracting residents from the inner to the outer ring need to be addressed. Primarily, this means grappling with housing affordability in the inner ring. At the same time, the strategy should seek to avoid facilitating leapfrog development by allowing too much development in parts of the outer-ring that are not self-sufficient in terms of employment or by expanding transportation infrastructure crossing the Greenbelt.

In terms of housing affordability, policy measures that facilitate the implementation of the Growth Plan should also help improve affordability. The Growth Plan's emphasis on intensification and higher density greenfield development should translate to an increased mix of housing options in all of the suburban areas of the inner-ring. Other policy options for increasing the supply of affordable housing in the inner ring include: measures to facilitate site planning and speed up approvals; new planning and engineering standards that allow for more land efficient forms of housing; pre-zoning or as-of-right zoning measures to reduce NIMBY interference with higher density residential projects; and measures to allow more small-scale intensification, such as the creation of secondary dwelling units on single-family properties. These and other measures are discussed at greater length in Section 6.1 of the chapter on inner-ring development.

In terms of population growth and employment self-sufficiency in the outer ring, when the Growth Plan comes up for review, it may be necessary to shift population growth projections from areas where population growth is outpacing employment growth to areas where employment growth is faster. This would help limit the creation of bedroom communities far from employment centres and would help limit long distance commuting, including commuting across the Greenbelt.

In terms of limiting the expansion of transportation infrastructure, it is recommended that the development of infrastructure that would facilitate commuting across the Greenbelt be avoided. This means the province should carefully consider the likely stimulus to leapfrog development before building new highways or expanding the capacity of existing highways that cross the Greenbelt.

Discouraging commuting across the Greenbelt also means that the potential land use and environmental impacts of commuter rail and other commuter transit services crossing the Greenbelt should be carefully studied before the province commits to such investments. The province's priority should be on the expansion and improvement of transit service within the inner and outer rings, where transit investments should be used as a means of structuring urban development in accordance with the Growth Plan.

6.3. Greenbelt Boundaries

Perceived inaccuracies in the Greenbelt boundary, should only be corrected if they create planning problems. The province could set up a process for municipalities to report such errors and apply for boundary changes to resolve the conflict as part of the 2015 review.

Similarly, the policy of no land swaps should be inserted into the Greenbelt Plan following the 2015 review.

The signage that has been put in place to draw attention to the Greenbelt boundary and the educational activities undertaken as a result of the work of the Greenbelt Foundation is undoubtedly raising awareness of the existence and importance of the Greenbelt as a component of the regional sense of place. This work should continue and efforts redoubled to ensure that the Greenbelt in its entirety becomes an essential element of the public's mental map of the region.

6.4. Land Protection and Greenbelt Expansion

6.4.1. Protecting agricultural land

It is recommended that the province pursue policies that will make protection of valuable agricultural land in the outer ring mandatory and permanent. This could be done either by expanding the Greenbelt to encompass prime agricultural areas in the outer ring or adopting policies to facilitate municipal adoption of an alternative protection regime.

The main advantage of expanded Greenbelt protection is that it would provide the most reliable and permanent protection, less likely to be eroded by unsympathetic municipal councils and developer interests. However, the province should consider that municipalities in both the inner and outer rings are reluctant to have additional lands placed under Greenbelt protection because they are anticipating that the meaning of 'secondary uses' is more likely to be clarified in the PPS, which governs land outside the Greenbelt, before it is clarified in the Greenbelt Plan. To minimize opposition to expansion, the definition of secondary agricultural uses in the Greenbelt Plan should be modified in consultation with municipalities, farmers, and other stakeholders at the earliest opportunity. The definition of secondary agricultural uses should be broadened in order to accommodate a wider range of agriculture-related, value added uses.

The problem with expanding the Greenbelt to protect other valuable agricultural lands, aside from likely municipal opposition, is that not all prime agricultural areas in the outer ring are adjacent to the current Greenbelt. Expanding Greenbelt protection to such areas could entail adding non-contiguous Greenbelt exclaves to the otherwise unitary Greenbelt. An alternative agricultural land protection regime might therefore be preferable in this case. In consultation with the affected upper- and lower-tier municipalities, the province could introduce new legislation to create a few "foodbelts" across the outer ring, which would impose land use and development controls similar to those provided by the Greenbelt Act. The foodbelts could encompass large agricultural areas in the outer ring. The areas designated should be large enough to avoid fragmentation or, in other words, large enough to maintain self-sustaining agricultural communities.

6.4.2. Protecting natural systems

The province should consider putting ecologically sensitive areas outside the Greenbelt under Greenbelt protection or another protection regime. In particular, the province should recognize and protect key aquifers and areas containing groundwater resources, in addition to the existing protection of surface watercourses. It is recommended that the province proceed to identify ecologically sensitive areas with the input of the upper- and lower-tier municipalities in the outer ring. Protection policies for especially ecologically sensitive areas in the outer ring could be modeled on the well-received Oak Ridges Moraine Conservation Plan and enabled by legislation similar to the Oak Ridges Moraine Conservation Act of 2001. The province could also modify the PPS to strengthen protection for natural heritage systems lying outside the Greenbelt, especially those that are not near the current Greenbelt boundaries and therefore unlikely to be covered by a future Greenbelt expansion.

6.4.3. Aggregate extractions in the Greenbelt

The province should consider imposing stricter limitations on the development of aggregate resources within the Greenbelt, especially in areas deemed to be environmentally sensitive. It may be necessary to broaden the array of natural heritage features and hydrological features that merit protection from aggregate operations. It is suggested that the province consult with municipalities as to which additional types of natural heritage systems should be protected in this context. Otherwise, if municipalities such as Waterloo Region succeed in imposing their own limitations on aggregate operations in areas outside the Greenbelt they deem to be environmentally sensitive, they may be unwilling to apply for Greenbelt expansions.

6.5. Political Support

The province should amend the Ontario Municipal Elections Act to reduce the role of special interests in municipal election campaigns. A few recommended changes, originally proposed by the NGO Campaign Lake Simcoe (2010), include:

1. ban corporate and union contributions
2. limit the total value of an individual's contributions
3. allow only those who are qualified electors in a municipality to make contributions to candidates for municipal office in that jurisdiction.

The province could also revise the rules respecting volunteer labour in municipal election campaigns. As it stands, employers can pay employees who volunteer to work on a municipal election campaign and these wages are not considered an election contribution. An amendment to the Ontario Municipal Election Act could be introduced requiring that wages paid by employers to campaign volunteers be considered financial contributions to the candidate's campaign.

Finally, more municipalities in both the inner and outer rings should consider modeling themselves after Markham, Vaughan and Toronto by providing a rebate to municipal campaign donors. Donations in these three municipalities are partially rebated by the municipality (e.g.,

75% of the first \$300 in Markham). This measure is thought to encourage individual donations to election campaigns and reduce candidate's reliance on a few large corporate donors.

The province should also consider making fiscal impact assessment of proposed major development mandatory. These cost-benefit analyses should be undertaken by developers during the planning approval process and made available to the public.

6.6. Monitoring

For the last several years, the Growth Secretariat has been preoccupied with ensuring municipal compliance with the Growth Plan, and unable to give much consideration to monitoring issues. As the current round of official plan amendments come to an end, the province should turn its attention to meeting the monitoring requirements set out in the Growth Plan, i.e., annual intensification rates and five-year average densities in each GGH municipality.

In addition to these basic parameters, it is recommended that the province develop an inventory of potential intensification sites—i.e., greenfield, brownfield, and greyfield sites within built-up areas that have development potential.

Where greenfield density is concerned, aside from merely measuring the combined population and employment density of greenfield areas, the province should be closely monitoring the uptake of greenfield land over time. This will allow provincial planners to identify areas where greenfield land is being absorbed at a greater rate than expected and to help municipalities make adjustments to meet the land budgeting targets. Monitoring of the balance of housing types under construction would also help ensure that the conditions are promising for achieving density targets.

Although the monitoring of these simple metrics will help guide the Growth Plan implementation process and shape negotiations between provincial and municipal planners, it will not ensure that the communities being built meet the more qualitative goals of the Growth Plan, i.e., for complete communities that support alternatives to automobile travel. To monitor progress towards these more qualitative goals, more complex metrics may be needed, such as measures of land use mixing, neighbourhood quality, and walkability.

Conclusions

The projected population and employment growth in the inner-ring does not pose a clear threat to the Greenbelt for the foreseeable future. The City of Hamilton and the four upper-tier municipalities that make up the inner-ring are expected to expand their urban boundaries between 11% and 22.8% of the available whitebelt in each single- or upper-tier municipality, or 17.2% of the 58,696 ha total whitebelt area. The remaining whitebelt is large enough to accommodate further changes in urban boundaries for several generations of official plans. In effect, the whitebelt will continue to buffer the Greenbelt from northward urban expansions.

This conclusion depends on a number of assumptions, none of which are guaranteed. The extensive lands in the whitebelt could be reduced should prime agricultural lands and environmentally sensitive areas currently in the whitebelt be brought under Greenbelt protection or some other form of development restriction. This scenario would undoubtedly entail greater conflict between advocates of greenland preservation and development interests in the region. There is also a risk that urban development will encroach further and more quickly into the whitebelt than what has been proposed in the recent upper-tier Official Plan amendments. This would be likely to occur if the Growth Plan's population and employment projections for 2031 were exceeded, and it seems many planners expect this to occur. Further encroachment

could also occur under certain other circumstances, such a failure to meet intensification and greenfield density targets, which would result in the premature exhaustion of designated greenfield areas and the need to designate new greenfield areas in the whitebelt. Another risk is that development of planned lower-density greenfield areas outpaces the development of higher-density greenfield areas and intensification areas. This too could create pressure to designate more land in the whitebelt for greenfield development.

To minimize encroachment of development into the whitebelt in the foreseeable future, the province and municipalities in the inner-ring will need to enact policy measures that address the persisting barriers to intensification and higher-density greenfield development. At the same time, planning authorities will need to ensure that they are creating complete communities with a diversity of housing types and land uses; point-towers in a sea of low-density, single-family homes may appear consistent with the quantitative goals of the Growth Plan but will ultimately undermine it if residents seek more livable environments on the other side of the Greenbelt.

It would also be useful to recognize that the foreseeable future is not tremendously distant in planning terms and shifting the nature of built form is slow. Even if several generations of whitebelt capacity remain today, it is not too early to begin thinking about what needs to be put in place in the foreseeable coming years to accommodate or end growth in population and other pressures on the Greenbelt's inner boundary.

In terms of the outer-ring municipalities, this report raises two key concerns. One issue is the growing risk of leapfrog development, which may entail the construction of additional infrastructure across the Greenbelt and all the environmental concerns that raises (e.g., fragmentation of farmland, commuter traffic, air pollution). Leapfrogging will also increase development activity in areas outside the Greenbelt, where local watersheds have limited absorptive capacity or are already under stress, particularly in the Lake Simcoe area but also in Wellington County.

The degree of leapfrog development will depend on inner-ring communities' success in implementing the Growth Plan, which should lead to a diversification of their housing markets. More affordable housing options in the inner ring may stave off the pressure for building bedroom communities for inner-ring workers in the outer ring. At the same time, avoiding the expansion of highways and commuter transit services that cross the Greenbelt and facilitate daily commutes between the inner and outer rings can also help stop development from leapfrogging over the Greenbelt.

The second key issue concerning the outer-ring municipalities is the protection of agricultural land and natural systems that are currently partially or entirely outside the Greenbelt. As it stands, the Greenbelt covers only a tiny portion of the outer ring and offers little protection to productive agricultural lands and natural heritage systems. Most agricultural areas in the outer ring and some very sensitive natural systems, such as the Lake Simcoe watershed and the Paris-Galt Moraine, are not included in the current Greenbelt boundary. To ensure adequate protection of both, a combination of Greenbelt expansions and stronger conservation policies will be required. Both the PPS and the Greenbelt Plan should be modified to further strengthen protection of agricultural lands and natural heritage systems. The modifications should include tighter restrictions on aggregate extractions inside and outside the Greenbelt. At the same time, the definition of secondary agricultural uses in the PPS and the Greenbelt Plan should be

modified to allow a broader range of value-added activities that will help make farming more economically viable. By modifying both policies, the province would enhance protection of agriculture and natural heritage both inside and outside the Greenbelt and would remove some of the main disincentives to Greenbelt expansion.

Another area worthy of attention is the longer-term (for most places) question of capacity. As noted above, biophysical constraints have already been identified in Wellington and Simcoe. They apply overall, however, and will be increasingly stretched over time. More specific understanding of local and regional constraints would also be increasingly valuable. Our current ability to understand and document the relevant constraints is primitive. Early initiatives to develop that ability would be wise. A better appreciation of biophysical constraints should provide an important element of the long-term planning framework, including an appreciation of the ultimate population and employment load that the region can sustainably withstand.

Further research should be undertaken to gain a more detailed understanding of how growth patterns in the GGH are changing:

- a thorough documentation of Growth Plan conformity work undertaken by all of the upper- and single-tier municipalities in the GGH, including an account of overall land budgets for greenfield development distinguishing employment uses from other uses; a mapping of budgeted lands, also distinguishing employment from other uses, should be included
- an analysis of existing designated employment lands in GGH, including a spatial assessment of their proximity to 400 series highways (existing and planned) and other major transportation infrastructure (airports, ports, railways, intermodal transfer facilities)
- a comparative analysis of alternative intensification and greenfield density targets in the outer ring, once these have all been approved by the province; this should include an analysis of the opportunities for and costs of intensification in outer ring settlements within provincially-defined built boundaries.

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