



Farmland at risk: Why land-use planning needs improvements for a healthy agricultural future in the Greater Golden Horseshoe

November 2015



environmental
defence

Acknowledgements



With funding from the Friends of the Greenbelt foundation, this report was prepared by Ray Tomalty of Smart Cities Research Services for the Ontario Federation of Agriculture and Environmental Defence. Permission is granted to the public to reproduce and disseminate this report, in part, or in whole, free of charge in any format or medium without requiring specific permission. Any errors or omissions in this report are the responsibility of the Ontario Federation of Agriculture and Environmental Defence.

The Ontario Federation of Agriculture (ofa.on.ca) is Canada's largest voluntary farm organization representing the interest of the province's farm families. As a farmer-led organization, the Federation understands farm issues and champions the interests of Ontario's farming community with governments and the public. The Federation is the voice of Ontario farmers for a sustainable farming and food sector.

Environmental Defence (environmentaldefence.ca) is Canada's most effective environmental action organization. ED challenges, and inspires change in government, business and people to ensure a greener, healthier and prosperous life for all.

The Ontario Federation of Agriculture and Environmental Defence would like to thank the many people who contributed to this report through their willingness to share their knowledge and insight into land-use issues affecting agriculture in the Greater Golden Horseshoe. A list of the people interviewed appears at the end of the report.

Copyright October 2015 by the Ontario Federation of Agriculture and Environmental Defence.

An electronic copy of this report may be found at environmentaldefence.ca/FarmlandAtRisk, or at ofa.on.ca.

Table of Contents

Executive Summary	4
Recommendations	7
Introduction	10
Agriculture and the land-use planning framework in the Greater Golden Horseshoe	12
The Importance of Agriculture in the Region	16
Challenges Faced by the Agricultural Industry in the Region	24
Opportunities for Greater Farmland Protection	41
Conclusion	58
Recommendations	59
People Interviewed for this Report	62
Endnotes	63

Executive Summary

The Greater Golden Horseshoe (GGH) is Canada’s most populated and fastest-growing region. The region’s population was 8.7 million in 2011, and the most ambitious projections say it will hit almost 13.5 million by 2041. Meanwhile, the number of jobs in the GGH is forecast to rise from 4.5 million to 6.3 million. Rapid growth will exacerbate existing challenges such as traffic congestion, pressure on infrastructure, loss of agricultural land and natural spaces, water quality challenges, and a changing climate. However, if carefully planned and smartly managed, growth can present an opportunity to build a more prosperous, healthy, and sustainable Ontario, with vibrant urban and rural communities that offer more (and better) options to live, work, and play.

Farmland makes up about half of the land area of the GGH and represents one of the most important economic sectors of the region, contributing \$11 billion and 38,000 jobs to Ontario’s economy. This economic activity generates \$1.7 billion in tax revenue for the three levels of government, about 38 per cent of all taxes received from agriculture in Ontario. Approximately one third of the province’s agri-food industry is based in the GGH and 42 per cent of Ontario’s best quality (Class 1) farmland is located in the region. A strong and stable agricultural industry is essential to Ontario’s long-term economic health.

Consumer trends are creating a significant demand for local food in the GGH. The unique combination of soils, climate, infrastructure, and access to a major market at their doorstep makes production for local markets in the GGH a natural fit. It is estimated that over 50 per cent of the province’s \$20 billion in imported food products could be produced in Ontario. Farms in the GGH have the capacity to respond to the growing interest in local food. Over 200 different foods are grown commercially in the region, including fruits and vegetables, grains, meat and dairy products, and non-food items, such as flowers. The Greenbelt has

two of the Province’s four “specialty crop areas,” the Niagara Tender Fruit and Holland Marsh, which have many fruit and vegetable operations that support local food supply chains.

The key to a robust agricultural industry is the same everywhere: the protection of the land base on which to farm and carry out farm-related activities. But farmland not only serves as the essential ingredient of the GGH’s bustling food industry, it provides a number of other precious ecosystem services that benefit all GGH residents, including storm-water storage and runoff control, protection against erosion on waterways, water filtration, carbon sequestration in soils and plants, pollination, and habitat for many animal and plant species. Beyond these essential ecological and economic functions, farmland in the GGH also provides aesthetic and cultural benefits, including opportunities for city-dwellers to reconnect with farmers and food production. It is estimated that the 3.8 million acres of farmland in the GGH supplies about \$1.6 billion in ecological services per year.

Farmland makes up about half of the land area of the GGH and represents one of the most important economic sectors of the region, contributing \$11 billion and 38,000 jobs to Ontario’s economy.

These are some of the many reasons why the Ontario government has taken important steps to preserve farmland and environmentally significant areas in the GGH. The Greenbelt Plan (2005) declared agriculture to be the predominant land use in the area covered by the plan and provided permanent protection to the agricultural land base. The plan has helped preserve agricultural land and operations

within its boundaries over the last 10 years.

Outside of the Greenbelt, the prospects for preserving farmland are less certain. The conversion of this farmland to urban uses is governed by the Growth Plan for the Greater Golden Horseshoe (Growth Plan), a weaker planning framework. The Growth Plan aims to shape growth in a less environmentally destructive way, but still leaves farmland vulnerable to urbanization. In other words, Ontarians can be reasonably assured of the permanence of agricultural land within the Greenbelt (assuming it is not weakened or farmland removed from it), but agricultural land in the GGH outside the Greenbelt can still be paved over for greenfield development, which could lead to more more sprawl subdivisions.

The copious attention given to the Greenbelt has given rise to the perception that protecting the Greenbelt lands is sufficient on its own to ensure that agriculture will thrive within the larger region.

It is important to keep in mind that about 75 per cent of the best farmland of the Toronto Metropolitan Region (a region slightly smaller than the GGH), and about 70 per cent of the region's greenlands lie outside the Greenbelt boundaries. These less protected lands are the ones at risk of being paved over to accommodate an additional 2.5 million people by 2031. How growth is accommodated in these areas will determine the future of agricultural lands and the agricultural economy in the GGH. This in turn will have an enormous impact on the ecological and economic well-being of the region and the province as a whole.

At present, there are several challenges facing agriculture in the GGH linked directly or

The land-use planning system in Ontario is geared towards the accommodation of urban (residential) development. Farmland is typically viewed as a background landscape upon which development is to be painted, or in other words, as tarmac-in-waiting.

Outside of the Greenbelt the prospects for preserving farmland are less certain.

indirectly to land-use planning. The GGH planning framework is undoubtedly a major step forward in the direction of managing growth and preserving farmland in the region. Despite the lofty objectives of the Growth Plan, there are signs that implementation of the framework is not going as effectively as desired. The growth management goals of the Growth Plan were weakened somewhat as the Plan was rolled out, allowing expensive low density growth to continue in many locations. The Province has allowed these changes in response to the demands of municipalities hungry for tax assessment and development charge revenues, even though these revenues are not adequate to cover more expensive servicing costs associated with greenfield or low density development. Speculators and developers also lobbying for expansions to settlement boundaries so as to incorporate their lands, creating an unhealthy cycle of municipalities requiring new sprawl developments to pay for the debts of existing ones. This has given rise to one of the most daunting challenges facing the GGH, namely leap-frog sprawl development over the Greenbelt into less-protected agricultural areas in the outer ring.

As urban development encroaches on agricultural land, people with no attachment to farming come into close contact with farm operations. This is the case when the urban envelope expands onto farmland without adequate buffers or when non-agricultural uses are permitted in rural areas, either because they were approved under the rules that predated the new planning framework or because the new framework permits, under certain limited circumstances, such development. These ongoing trends in the GGH are giving rise to conflict between the farmers and new arrivals in the countryside, with persistent challenges to normal farm practices that undermine the long-term viability of farming in affected areas.

While the GGH planning framework strains to control sprawl in the region, other policy tools are

showing themselves to be inadequate. Compared to other policy areas, such as natural heritage, the tools needed to protect agricultural land are far less developed. There is little understanding of the agricultural system among provincial agencies and municipal planners. Decisions are made routinely that inadvertently affect agricultural interests and there is little pressure at any level to assess the impact of planning, road design, and environmental regulations on farmers and their ability to persevere as stewards of their lands. Major new infrastructure projects—including new and extended highways, sewer pipes, industrial energy projects, and high-voltage hydro lines—are approved using an environmental assessment process that is insensitive to the agricultural system. These projects expropriate whole parcels of farmland, often split remaining farm parcels and serve as physical barriers between farmed lands. Despite its huge economic importance to the region and the province as a whole, policy- and decision-makers are often deaf to the needs and requests of farmers.

What is needed is a fresh perspective on farmland in the GGH, one that sees agriculture as a permanent feature of the regional landscape and farming as an essential component of our economy and cultural heritage.

The accumulated effects of these stresses have not only reduced the total area of land being farmed in the GGH but have also threatened it with something even more insidious—fragmentation. As urban land uses encroach upon and intrude into the countryside, essential linkages are lost as feeder businesses “see the writing on the wall” and move out of the area. Fragmentation weakens the synergy involved in having a concentration of viable farms and support services in a given area. Farmers have to travel further to get to essential services, such as abattoirs or to obtain farm technical services. The effort involved becomes too great and more farmers leave the area or retire early. As synergy is

lost, farming in the area tips into decline—buildings begin to decay, irrigation and drainage systems stop working, and farming may even be abandoned on some parcels. Within the GGH, signs of decline are visible in formerly vibrant agricultural areas in the white belt, and around other growing centres in the outer ring.

Ontario’s land-use planning system is geared towards the accommodation of urban (residential) development and other urban-related land uses within the framework of “good planning principles”. Within this framework, farmland is typically viewed as a background landscape upon which development is to be painted, or in other words, as tarmac-in-waiting. This perspective undermines confidence in the long-term feasibility of farming, and erodes farm-owners’ willingness to make the personal and financial commitments necessary to the continuation of this way of life. The resulting uncertainty in the farming community helps fuel the forces of urban development, the primary threat to farmland in the GGH.

A fresh perspective is needed on farmland in the GGH, one that sees agriculture as a permanent feature of the regional landscape and farming as an essential component of our economy and cultural heritage. This perspective is entirely compatible with smart growth planning principles that aim to contain and direct urban growth to settlement areas already or easily served by the necessary infrastructure. It is also consistent with principles of ecological planning that are increasingly coming to the forefront, as society realizes that we need to see ecological (including agricultural) systems holistically and protect and conserve them accordingly. The need for a new perspective is also being driven home by global climate change. Leadership is needed to accommodate population growth without contributing to this all-embracing problem or compromising our ability to adapt to the climate changes clearly upon us or those coming in the near future.

Recommendations

Positive Planning

1 The Province should adopt a “positive planning” approach to land-use planning in the Greater Golden Horseshoe that better integrates agricultural concerns into land-use decision-making, permanently protects areas of high agricultural potential, and supports agriculture as the preeminent land use.

Agricultural System

2 The Province should identify and map an agricultural system for the Greater Golden Horseshoe. As a prelude, the Growth Plan should be revised to describe an agricultural system in greater detail and assign clear responsibility for leading the effort to define and map the system across the region.

Better understanding of agricultural issues

4 The Province, municipalities and agricultural stakeholders should enhance agricultural understanding among officials by working through professional associations to offer continuing education on rural issues.

5 The Province should encourage and provide support to municipalities to appoint agricultural liaison officers, i.e. a senior official who would advise council on agricultural matters, help promote agricultural economic development, provide awareness training for municipal officials, help farmers and food industry entrepreneurs navigate approval processes, and provide feedback to regulatory authorities on ways to improve review and approval procedures.

6 The Province should revise the Growth Plan to require Agricultural Advisory Committees (AACs) in each region and provide more direction on their mandate and functioning on decisions related to agriculture and growth management. The Plan should be revised to require AACs throughout the region and provide more direction on their mandate and functioning.

Agricultural Impact Assessments

7 The Province should revise the Growth Plan to require that municipalities conduct Agricultural Impact Assessments under relevant circumstances, such as major planning strategies affecting agricultural areas and for all non-agricultural development proposals on or near agricultural land.

Conflict Prevention

8

The Province should develop new separation distance formulae for non-livestock agricultural uses that also need to be protected from neighbouring uses. The revised guidelines should direct municipalities to establish the minimum distance setbacks early in the land-use planning process, i.e. at the time of an Official Plan amendment for new or expanding settlement areas.

9

The 2014 Provincial Policy Statement allows limited non-residential, non-agricultural uses in prime agricultural areas under certain conditions. The Province should revise the Growth Plan to adopt language that further restricts or prohibits these uses in prime agricultural areas.

10

The Province should monitor municipal planning decisions that would relax restrictions on non-agricultural land uses in agricultural areas—such as re-designating agricultural land as rural land—and appeal to the Ontario Municipal Board if necessary.

11

The Province should prepare a guide on landscape design and buffering between agricultural and non-agricultural land uses. The Province should also adopt language in the Growth Plan to require that non-agriculture uses in proximity to an agricultural zone be buffered using principals found in the guide.

Environmental Assessment

12

The Province should adopt a policy-level directive requiring a comprehensive and integrated assessment of agricultural issues during environmental assessments and to prioritize minimizing impacts on the agricultural system. The Province should reinforce these goals in the four land-use plans that make up the planning framework in the Greater Golden Horseshoe.

Fiscal tools

13

The Province should revise the *Development Charges Act* to ensure development charges discourage sprawl by including all costs related to growth in their purview and allowing infrastructure standards to rise rather than be based on a backward looking 10-year average service level cap. Furthermore, the Province should revise the Act to encourage municipalities to base charges on the location in which the development occurs. Finally, the revised Act should provide a statutory exemption to farm buildings/structures from all development charges as they typically do not require public infrastructure servicing.

14

The Province should ensure the Municipal Property Assessment Corporation (MPAC) applies the same tax assessment rate for on-farm value-added operations as is applied to farms and farm outbuildings on agricultural lands.

15

The Province should play a leading role in setting up an Environmental and Ecological Goods and Services system to recognize the non-agricultural benefits provided by agricultural lands in the Greater Golden Horseshoe.

Growth management

16

The Province should revise the Growth Plan to include a moratorium on the growth of urban boundaries in the Greater Golden Horseshoe until at least 2031—even 2041.

17

The Province should revise the Growth Plan to include a vision statement that lays out the government's commitment to limiting growth within the current urban boundaries and the need to permanently protect agricultural and countryside lands inside and outside the Greenbelt.

18

The Province should establish permanent growth boundaries where mapping shows healthy agricultural systems are already in place or likely could be restored through permanent protection and other (e.g., economic development, infrastructure) policy supports.

19

The Province should revise the Greenbelt and Growth Plans to acknowledge the preeminent role of agriculture in the Greater Golden Horseshoe.

20

Within the permanent countryside, land uses in prime agricultural areas unrelated to their principle vocation should not be permitted, except in cases where such uses can be shown to be in the greater public interest (infrastructure, aggregates, etc.) through an environmental assessment.

21

The Province should increase intensification targets in the Growth Plan to 50 per cent, with 60 people and jobs per hectare on greenfield sites. The targets should continue to increase—based on market trends—during each future review of the Growth Plan.

22

The Province should ensure that infrastructure funding to municipalities—in particular funding flowing from the federal gas tax—should be conditional on municipalities meeting their growth management targets.

23

The Province should end exemptions for municipalities requesting to reduce their growth management targets.

24

The Province should reconsider allowing upper-tier municipalities to allocate growth targets to lower-tier municipalities.

25

The Province should reassess population and employment forecasts informing the Growth Plan, in light of more modest expectations for growth in the Greater Golden Horseshoe.

26

The Province should issue authoritative guidelines on the land budgeting methodology to be used for any future review of land supply needs in the region.

Introduction

The Greater Golden Horseshoe (GGH) is Canada's most populated and fastest-growing region. The high quality of life offered in the region attracts new residents from across Canada, while one in three new immigrants to the country chooses to settle here. The region's population stood at 8.7 million in 2011 and the most ambitious projections say it will hit almost 13.5 million by 2041.¹ Meanwhile, the number of jobs in the GGH is forecast to rise from 4.5 million to 6.3 million.² These trends will boost the regional population by almost 50 per cent and the number of jobs by 40 per cent. Rapid growth will exacerbate existing challenges such as traffic congestion, pressure on infrastructure, loss of agricultural land and natural spaces, water quality challenges, and a changing climate. However, if carefully planned and smartly managed, growth can present an opportunity to build a more prosperous, healthy and sustainable Ontario, with vibrant urban and rural communities that offer more options to live, work, and play.

The key to a robust agricultural industry is the protection of the land base to farm and carry out farm-related activities.

Farmland makes up about half of the land area of the GGH and represents one of the most important economic sectors of the region, contributing \$11 billion to Ontario's economy and 38,000 jobs.³ About one third of the province's agri-food industry is based in the GGH and a significant amount of Ontario's quality farmland is located in the Greater Golden Horseshoe. A strong and stable agricultural industry is essential to Ontario's long-term economic health.

The key to a robust agricultural industry is the same everywhere: the protection of the land base on which to farm and carry out farm-related activities. But farmland

not only serves as the essential ingredient of the GGH's bustling food industry, it also provides a number of other precious ecosystem services that benefit all residents of the GGH, including storm-water storage and runoff control, protection against erosion on waterways, water filtration, carbon sequestration in soils and plants, pollination, and habitat for many animal and plant species, some of which are under threat of extinction. Beyond these essential ecological and economic functions, farmland in the GGH also provides aesthetic and cultural benefits, including opportunities for city-dwellers to reconnect with farmers and food production through on-farm markets, pick-your-own excursions, and community shared agriculture. Conversion of farmland to urban uses permanently destroys these values. There are few cases of urbanized land being reconverted to agricultural production.

These are some of the reasons why the Ontario government has taken important steps to preserve farmland and environmentally significant areas in the GGH. The Greenbelt Plan (2005) declared agriculture to be the predominant land use in the area and provided permanent protection to the agricultural land base. The plan has undoubtedly helped preserve agricultural land and operations within its boundaries over the last 10 years.

Outside of the Greenbelt, however, the prospects for preserving farmland are less certain. The conversion of this farmland to urban uses is governed by the Growth Plan for the Greater Golden Horseshoe (Growth Plan), a weaker planning framework. The Growth Plan aims to shape growth in a less environmentally destructive way, but still leaves farmland vulnerable to urbanization. In other words, Ontarians can be reasonably assured of the permanence of agricultural land within the Greenbelt (assuming it is not weakened or farmland removed from it), but agricultural land in the GGH outside the Greenbelt can still be paved over for development.

There is no doubt that the Greenbelt Plan has helped preserve agricultural and environmentally

sensitive lands in an area under intense development pressures. The copious attention given to the Greenbelt has given rise to the perception, however, that protecting Greenbelt lands is enough on its own to ensure that agriculture will thrive within the larger region. Heavy emphasis has also been placed on the role of the Greenbelt in ensuring the availability of potable water and the delivery of necessary ecological goods and services to build resilient communities.

It is important to keep in mind, however, that about 75 per cent of the best farmland in the Toronto Metropolitan Region (a region slightly smaller than the GGH), and about 70 per cent of the region's natural heritage systems lie outside the Greenbelt boundaries. These less protected lands are the ones at risk of being paved over to accommodate an additional 2.5 million people by 2031. How growth is accommodated in these areas will determine the future of agricultural lands and the agricultural economy in the GGH. This in turn will have an enormous impact on the ecological and economic well-being of the region and the province as a whole.

Ontarians can be reasonably assured of the permanence of agricultural land within the greenbelt, but agricultural land in the GGH outside the Greenbelt can still be paved over for development.

The land-use planning system in Ontario is geared towards the accommodation of urban development and other urban-related land uses within the framework of "good planning principles." Within this framework, farmland is typically viewed as a background landscape upon which development is to be painted, or in other words, as tarmac-in-waiting. This perspective undermines confidence in the long-term feasibility of farming, and erodes farm-owners' willingness to make the personal and financial commitments necessary to the continuation of this way of life. The resulting uncertainty in the farming community helps fuel the forces of urban development, the primary threat to farmland in the GGH.

What is needed is a fresh perspective on farmland in the GGH, one that sees agriculture as a permanent feature of the regional landscape and farming as an essential component of our economy and cultural heritage. This perspective is entirely compatible with smart growth planning principles that aim to contain and direct urban growth to settlement areas already or easily served by the necessary infrastructure. It is also consistent with principles of ecological planning that are increasingly coming to the forefront as we realize that we need to see ecological (including agricultural) systems holistically and protect and conserve them accordingly. The need for a new perspective is also being driven home by the growing concern about global climate change. We must find ways to accommodate population growth without contributing to this all-embracing problem or compromising our ability to adapt to the changes clearly upon us or that are coming in the not so distant future.

The coordinated review of the planning framework in the GGH provides an opportunity to take a more proactive and strategic approach to planning. This report outlines some of the key reasons why preserving agricultural land is so important before moving on to explore some of the challenges rendering that a difficult goal to achieve in the GGH. In the final section, opportunities for moving forward are identified and specific policy ideas are discussed, ending with recommendations on revising the Growth Plan. It is clear improvements to the Growth Plan are needed to ensure a robust agricultural sector and to build better cities.



Agriculture and the land-use planning framework in the Greater Golden Horseshoe

Ontario has a top-down, policy-led system of planning. Top-down means that the system is primarily constructed and directed by the Province and lower orders of government (municipalities of various types) must abide by provincial regulations, plans, and policies in their planning decisions. Policy-led means the system creates a prescriptive framework that provides positive direction to developers and others who play a role in community development—in other words governments do the planning, not the developers.

At the core of this framework is *The Planning Act*, which describes the tools and procedures

available to municipal governments in executing their planning duties, including Official Plans, zoning, subdivision of land, and so on. *The Planning Act* does not contain any specific policy prescriptions, but it provides the legislative authority for the government to adopt a policy statement to address matters of provincial interest. This includes the protection of farmland, the protection and wise management of natural resources and the environment, and the promotion of sustainable development. Among other matters, the Provincial Policy Statement (PPS) lays out the conditions under which agricultural land can be converted to urban use. Basically, it says prime agricultural land (except specialty crop areas) can be developed if the need for the land is clear and there are no alternative locations with lower-quality soil. It also requires that impacts from new non-agricultural uses on surrounding agricultural lands and operations are to be mitigated to the extent feasible. The extension of a growth boundary onto surrounding lands is only permitted during a comprehensive review of the municipality's Official Plan.

Because of the highly concentrated population and intense growth pressures in the GGH, the Province has put in place a series of plans to provide further guidance to municipalities in the region (see Figure 1, page 14). They provide direction in two key areas: how and where communities grow in the GGH, and what environmentally-significant and agricultural lands must be protected.

The 2006 Greater Golden Horseshoe Growth Plan (or simply Growth Plan) expresses the Province's long-term goal of reigning in sprawl by encouraging more compact, mixed-use development and the intensification of already urbanized areas, especially



Greenbelt Plan: provides a continuous and permanent land base necessary to support long-term agricultural production and economic activity.

Growth Plan: permits the conversion of agricultural lands to urban uses while trying to limit the amount of land involved.

around transit hubs. The plan projects population and job growth over a period of 25 to 35 years (2006-2031) and allocates a certain amount of that growth to each of the upper-tier and single-tier municipalities in the GGH. It also provides directions on how local authorities should manage the expected growth. In particular, the Growth Plan requires that 40 per cent of the population growth be absorbed within each municipality's existing built-up area. The remaining 60 per cent of growth can be directed to areas beyond the existing urban boundary—i.e. onto rural lands or “greenfields”—but must be managed to create an average density of at least 50 people or jobs per hectare. To obtain permission from the Province to expand onto surrounding greenfield lands, a municipality would have to show that it cannot accommodate its projected growth through intensification or in already designated greenfield areas. Thus, the Growth Plan permits the conversion of agricultural lands to urban uses while trying to limit the amount of land involved.

About one fifth of the land in the region is further subject to the Greenbelt Plan and its two sister plans, the Niagara Escarpment Plan (NEP) and the Oak Ridges Moraine Conservation Plan (ORMCP), with which it shares a conservation-oriented vision. The Greenbelt Plan (2005) establishes the region's Protected Countryside, which supports agriculture as its main land use, helps prevent the loss and fragmentation of agricultural land, and provides long-term protection for natural heritage and water resource systems. The Oak Ridges Moraine Conservation Plan (2002) protects approximately

470,000 acres, and helps to preserve important surface water, groundwater resources, natural features, and biodiversity.⁴ The Niagara Escarpment Plan (1985) protects approximately 480,000 acres of land and ensures a continuous natural environment along the Escarpment and only permits development compatible with the natural environment.⁵

In the Greenbelt Plan, the Protected Countryside has three main components: the agricultural system, the natural system, and settlement areas. The agricultural system is comprised of specialty crop areas, prime agricultural areas, and rural areas. While the Greenbelt Plan identifies the boundaries of the specialty crop areas, it relies on municipal Official Plans to delineate prime agricultural areas and rural areas. The two main agricultural areas (specialty crop and prime agriculture areas) have specific policies that govern land use. The intent of these policies is to provide a continuous and permanent land base necessary to support long-term agricultural production and economic activity. Specifically, towns, villages, and hamlets are not permitted to expand into these areas and agriculture is the long-term intended use.

The Growth Plan and Greenbelt Plan are designed to function in tandem. Together, these land-use plans are supposed to ensure urban growth happens in the right places and in the most efficient way, while protecting and enhancing the environmental and agricultural lands. Once the planning framework was in place, municipalities were required to revise their Official Plans in order to make them consistent with the policies found in the regional land-use plans.

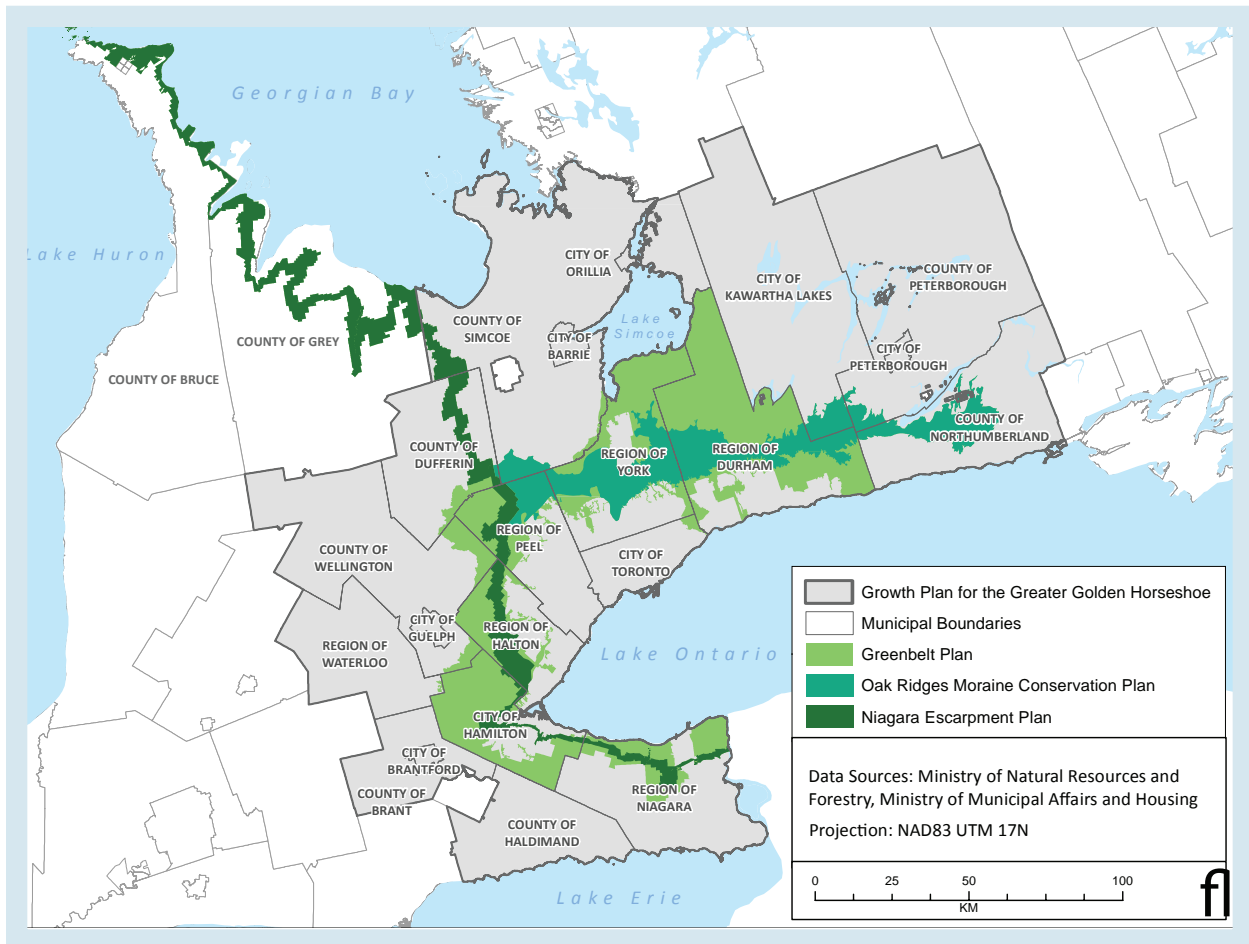
The Growth Plan and Greenbelt Plan are designed to function in tandem. Together, these land use plans are supposed to ensure urban growth happens in the right places and in the most efficient way, while protecting and enhancing the environmental and agricultural lands.

Municipalities in the GGH can be divided into two geographic categories (Figure 2, page 15). The inner ring is the heavily urbanized area adjacent to Lake Ontario, including the cities of Toronto and Hamilton and the regions of Peel, York, Durham, Niagara, and Halton. Further inland and on the other side of the Greenbelt, the outer ring is more diverse and includes mid-sized cities along with plenty of small towns and rural townships, like Peterborough, Kitchener, Waterloo, Guelph, and Barrie. The outer ring is comprised of Haldimand-Norfolk, Brant County, Dufferin County, Wellington County, Waterloo, Simcoe County, Northumberland County, Peterborough County, and Kawartha Lakes. The outer ring has most of the farmland in the GGH, but it is the inner ring that hosts almost the

The outer ring has most of the farmland in the GGH, but it is the inner ring that hosts almost the entire Greenbelt.

entire Greenbelt. There is a significant additional agricultural zone in the inner ring called the white belt, located between the built-up area skirting Lake Ontario and the Greenbelt. In an attempt to short-circuit leapfrog development over the Greenbelt into the outer ring, the Growth Plan says the inner ring will host about three-quarters of the population growth to 2031.

Figure 1: The Greater Golden Horseshoe and four land-use plans



Source: Ministry of Municipal Affairs and Housing, 2015. *Our Region, Our Community, Our Home: A Discussion Document for The 2015 Co-ordinated Review*. Toronto: Queen's Printer.

Figure 2: The Greater Golden Horseshoe, showing the inner & outer rings



Source: *Understanding the Fundamentals of the Growth Plan: Considerations for the 10-year Review*, by the Neptis Foundation (March 2015). This image has been modified from its original version to include Niagara Region in the inner ring.

The Importance of Agriculture in the Region

The GGH is home to the second largest agri-food cluster in North America, comprised of hundreds of food processing, warehousing, distribution, service and retail businesses.⁶ This reality is often overlooked as policy-makers tend to pay attention to more homogenous, identifiable sectors such as auto production. One result of this undervaluation is that the preservation of farmland is not seen as a regional priority—instead, it is a goal that is routinely trumped by urban development. This section spells out the economic importance of the agri-industry in the GGH, identifies the advantages enjoyed by farmers in the region that has given rise to such a

robust industry, and describes the important role played by farmland in the GGH in contributing to Ontario's productive capacity. This section also reviews the growing importance being accorded to the availability of local food and tries to quantify some of the important ecological services performed by farmland in the GGH.

Agriculture as an economic driver

The agri-food sector is one of the largest components of Ontario's economy. It currently generates \$34 billion a year in gross domestic product (GDP) and sustains 740,000 jobs—about one in every nine jobs across the province.⁷ The industry includes a wide spectrum of businesses—farms and food processing plants, distributors, retailers, and restaurants. Ontario is the largest food and beverage processing jurisdiction in Canada and is among the three largest in North America.⁸ The agri-food sector also includes companies making non-food products from agricultural sources, such as bioplastics and biodiesel. Over the past decade, even when other parts of Ontario's economy experienced a downturn, the province's agri-food sector experienced growth at an average rate of about one per cent annually.⁹ Premier Kathleen Wynne has challenged the industry to double its annual growth rate and create 120,000 jobs by the year 2020.¹⁰

The GGH has about 30 per cent of Ontario's farmland, but punches above this weight on key economic indicators of farm activity. As can be seen in Table 1 (page 18), agriculture in this region generated \$4.1 billion in farm gate receipts, 35 per cent of the provincial total.¹¹ Revenues were greater in the outer ring of the region, with \$2.4 billion compared to \$1.7 billion in sales for the inner ring.¹² This reflects the fact that substantially more farms are operating in the outer ring.



In terms of employment, there were about 38,000 people engaged in primary agriculture in the GGH, which accounts for 44 per cent of Ontario's employment in this sector. There were 21,000 jobs located directly on farms in the outer ring and another 17,000 in the inner ring.¹³ Food manufacturing firms in the GGH employed a further 67,000 workers, or an impressive 78 per cent of the provincial total.¹⁴ The lion's share of these jobs was in the inner ring, reflecting the concentration of food processing in the regional centre. Toronto alone had over 18,000 jobs in food manufacturing.¹⁵

Over the past decade, even when other parts of Ontario's economy experienced a downturn, Ontario's agri-food sector experienced growth at an average rate of about 1 per cent annually.

In 2011, the GGH had almost 50 per cent more workers on the average farm compared with the rest of the province. This suggests that the average GGH farm operation supports more families through employment than farms outside the region. The fact that farming in the GGH is more labour-intensive may reflect the larger proportion of horticultural activity in the region relative to the province as a whole.

A measure of farm productivity is average Gross Farm Revenue (GFR) or cash receipts per farm. For Ontario as a whole, the GFR was \$225,000 per farm.¹⁶ This was quite similar to the GFR for the average farm in the Greater Golden Horseshoe, with \$231,000 per farm.¹⁷ At \$205,000 per farm, the outer ring has just over 90 per cent of the average per farm revenue in Ontario.¹⁸ However, the average GFR for a farm in the inner ring increases to \$281,000, 25 per cent larger than the Ontario average.¹⁹ Much of the most productive land in the GGH is in the inner ring and farmers there are producing high value commodities such as fruits and vegetables for sale in local markets and export. In comparison, agriculture in the rest of the GGH places more emphasis on grain and oilseed production.

Because agricultural operations depend on a dense web of business relationships, farming activity tends to create a ripple of economic effects. In order to assess the real economic impact of farming in an area, we need to consider these multiplier effects, i.e., how a dollar of farm income circulates and re-circulates within the economy, multiplying the effects of the original expenditures on overall economic activity. The multiplier is higher in the GGH than anywhere else in Ontario because of the concentration of agri-business firms in the region. Based on this approach, the gross output of farms in the GGH is estimated to be in the order of \$11 billion. This economic activity generates \$1.7 billion in tax revenue for the three levels of government, about 38 per cent of all taxes received from agriculture in Ontario.

A large share of Ontario's productive capacity is in the GGH

Agricultural production in the GGH has a unique profile, featuring a diverse range of food products that distinguish the region from other agricultural areas in Ontario. This uniqueness arises from two sets of advantages enjoyed by farms in the GGH. The first set relates to the natural features of the region. The region has some of the country's most fertile soil—although the GGH comprises only 3.5 per cent of Ontario's land area, it contains 42 per cent of the province's best (Class 1) farmland. It is also favoured with a moderate climate, a relatively long growing season, plenty of sunny days, and copious water resources for irrigation. The GGH is privileged with unique physical landscape features, including the Niagara Escarpment, which creates a microclimate well suited to grapes and tender fruit crops, and the Oak Ridges Moraine, which acts as a natural reservoir and serves as the headwaters for many of the streams and rivers running through the region.

Although the GGH comprises only 3.5 per cent of Ontario's land area, it contains 42 per cent of the province's best farmland.

Table 1: Farm income and employment, 2011

	Value	Inner Ring	Outer Ring	GGH	Ontario less GGH	Ontario
Farm cash receipts	\$ million	1,716	2,425	4,141	7,750	11,891
Distribution	%	14.4	20.4	34.8	65.2	100
Farms	#	6,090	11,854	17,944	35,006	52,950
Distribution	%	11.5	22.4	33.9	66.1	100
Farm employment	#	17,020	20,940	37,960	47,985	85,945
Distribution	%	19.8	24.4	44.2	55.8	100
Per farm revenues	#	281,773	204,572	230,774	221,391	224,570
Ratio to Ontario	%	1.25	0.91	1.03	0.99	1
Food manufacturing employment	#	52,135	15,275	67,410	18,900	86,310
Distribution	%	60.4	17.7	78.1	21.9	100
Farm employment per farm	#	2.8	1.8	2.1	1.4	1.6

Source: Source: Agricultural Census, Statistics Canada

The second type of advantage favouring farming in the GGH is locational. The GGH is home to most Ontarians and is within a day's drive to a market of 140 million people, mostly in the United States. Farmers in the region also work in proximity to a rich network of essential inputs into food production, processing, and distribution services. This network includes a well-established food and beverage industry (among the top three economic clusters in North America); a concentration of food retail and food service businesses; access to abundant skilled labour; and multi-modal transportation systems (water, road and rail). The region is also favoured by the presence of advanced research and development facilities that help farmers and food processors innovate and adapt to change, including the Holland Marsh Muck Research Station, the Vineland Research and Innovation Centre, and numerous world class universities and colleges.

These advantages enable farmers in the GGH to

produce a vast range of foods, including many high-value crops.

Table 2 (on page 19) shows the area of land in different types of production within the GGH. The inner ring, which includes almost all of the Greenbelt, makes up one-quarter of the farmed land in the region. Most of the farmed land in this area is used for field crops, but specialty products also abound. This part of the GGH is known worldwide for its horticultural crops. Indeed, the inner ring accounts for 57 per cent of Ontario's acreage in fruit production, with much of this in Niagara's tender fruit and grape area. Similarly, floriculture (greenhouse flowers) in the Niagara region is robust, with the inner ring accounting for 55 per cent of Ontario's greenhouse flower production capacity. Another highly productive area within the Greenbelt is Holland Marsh, which specializes in vegetable production. Inner ring farmers account for 15 per cent of Ontario's vegetable acreage. Together, these

Table 2: Area of farmed land by type of product (acres), 2011

	Inner Ring	Outer Ring	GGH	Ontario
Total area	2,344,563	5,211,811	7,556,374	265,982,995
% of GGH	31	69	100	
% of Ontario	0/9	2	2.8	100%
Total farmed area	977,481	2,839,994	3,817,475	12,668,236
% of GGH	25.6	74.4	100	
% of Ontario	7.7	22.4	30.1	
Area in field crops	670,261	1,979,475	2,649,736	8,693,627
% of GGH	25.3	74.7	100	
% of Ontario	7.7	22.8	30.5	
Area in vegetable crops	18,880	32,165	51,045	129,595
% of GGH	37	63	100	
% of Ontario	14.6	24.8	39.4	
Area in fruit, berries, and nuts	29,915	7,534	37,449	52,740
% of GGH	79.9	20.1	100	
% of Ontario	56.7	14.3	71	
Area in nursery products*	12,097	7,111	19,208	25,270
% of GGH	63	37	100	
% of Ontario	47.9	28.1	76	
Area in sod production*	13,639	6,304	19,943	28,414
% of GGH	68.4	31.6	100	
% of Ontario	48	22.2	70.2	
Area in pasture	84,906	365,269	450,175	NA
% of GGH	18.9	81.1		
% of Ontario	NA	NA	NA	
Area in Christmas trees*	2,981	7,500	10,481	15,795
% of GGH	28.4	71.6		
% of Ontario	18.9	47.5	66.4	
greenhouse flowers	530.5	116.3	646.8	957.4
% of GGH	82	18		
% of Ontario	55.4	12.1	67.6	

Source: *Agricultural Census, Statistics Canada* (* = figures are for 2006)

two specialty crop areas comprise about 100,000 acres of extremely fertile land. Sod production in the area accounts for almost half of the land used for this purpose in the province. Only 19 per cent of the GGH's pasture land is in the inner ring.

The outer ring hosts the remaining three-quarters of farmed land in the GGH. This area is especially abundant in field crops, which account for 23 per cent of the land dedicated to this purpose in Ontario. A large quantity of land is used for pasture (livestock) in the outer ring, accounting for four-fifths of the land used for this purpose in the GGH. Although taking up a much smaller land area than field crops in the GGH, vegetable crops are also strong, with a quarter of the province's productive capacity. The outer ring also has significant portions of the land used in Ontario for nursery products (37 per cent), fruits (20 per cent), and sod production (32 per cent). Almost half of all land used for growing Christmas trees found in Ontario is located in the outer ring.

The combination of natural and locational advantages has made the GGH one of the most productive farming areas in the country.

The combination of natural and locational advantages has made the GGH one of the most productive farming areas in the country. However, sharing the region with a rapidly growing urban population is like wielding a double-edged sword. The food and farming cluster in the GGH is diverse and multi-faceted with tremendous potential to expand, but the well-being of the cluster is entirely dependent on the destiny of the prime agricultural land base. Soil analyses done for southern Ontario have shown that over 50 per cent of the land in the central zone (slightly larger than the GGH) qualifies as prime agricultural land, and over 20 per cent of this land qualifies as Class 1 soil. Urban development in the GGH threatens this precious resource. It is important to remember that prime agricultural lands (Classes 1, 2, and 3) and specialty croplands—are a very limited resource in Canada. Only five per cent of the Canadian land mass is made up of prime

land and only 0.5 per cent of it is Class 1. As farmers continually point out, land is a fixed, unmovable quantity and needs to be protected in the long-term for a stable farm economy to flourish.

Satisfying a growing interest in local food

The unique combination of soils, climate, infrastructure, and access to a major market at their doorstep makes production for local markets in the GGH a natural fit. Consumer trends are creating a significant demand for local food in the GGH. A survey conducted in 2007 for the Friends of the Greenbelt Foundation found strong support for local food among people in central Ontario: about 80 per cent prefer to buy locally grown produce, and more than 50 per cent say they do buy local at least once a week.²⁰ A whopping 91 per cent of those surveyed said they would buy more local food if retailers offered more.²¹

The local food movement is being bolstered by a number of factors, including the superior taste of fresh food, the more pleasant shopping experience, food safety concerns related to imported food products, as well as concern over climate change and the emissions linked to long-distance transport of imported food. People's food tastes are also changing, with more interest in heritage or heirloom food (both plants and animals) and specialty crops that can be grown locally. Access to fresh food is also increasingly seen as a key ingredient in a healthy diet. Provincial policy changes have also helped, such as the 2010 ban on junk food in schools, and the *Local Food Act*, requiring public institutions like hospitals to source a portion of their food locally.

There is a strong case to be made for a robust local food economy. Economic concerns about Ontario's reliance on imported food are growing.

Replacing the top 10 fruit and vegetable imports with local production would boost regional GDP by \$250 million and create 3,400 jobs.

Every year, Ontario imports \$9 billion more in food than it exports.²² Over 50 per cent of the \$20 billion in imported food products can be produced in Ontario.²³ By doing so, the agri-food trade deficit would disappear, with the export value equal to import value for products that cannot be grown in Ontario. Replacing the top 10 fruit and vegetable imports by just 10 per cent with local production would boost regional GDP by nearly \$250 million and would create 3,400 jobs.²⁴

Another advantage of prioritizing a local food economy is that it builds resilience into the region's food system. In the event of an emergency (weather, health, or political) urban areas that depend on imports are vulnerable to breaks in the food distribution chain. Even spikes in oil prices could cause disruption in the region's access to food imported from distant territories. According to estimates by retailers, there are only three days' worth of fresh food in Toronto at any time. The situation for smaller urban and more rural areas is likely even more precarious. Strengthening the connection between the GGH's cities and towns and their surrounding food-producing regions help reduce that vulnerability.

However promising, a local food system cannot thrive without a secure land base that gives producers confidence that their efforts, experimentation and investment will pay off.

Farms in the GGH have the capacity to respond to the growing interest in local food. With over 200 different foods grown commercially in the region and many fruit and vegetable operations that support local food supply chains, farms in the GGH have the capacity to respond to the growing interest in local food.

Many groups are working to strengthen the various components of a healthy local food system in the GGH, whether through local procurement agreements, improving retail access to local food,



local food branding efforts, food certification programs, consumer awareness and education, or developing regionally-appropriate food varieties. For example, EcoSource, is a non-profit based in Peel Region that has been a pioneer in local food education. The group engaged more than 11,700 students in local food events, while cafeteria staff was trained in cooking with local ingredients. Foodlink, in Waterloo, has developed a Buy Local! Buy Fresh! brand that it is beginning to license food retailers, and has brokered deals between local suppliers and commercial or institutional buyers in Waterloo Region. On other fronts, research organizations like Vineland Research and Innovation Centre are experimenting with new food varieties that suit local market preferences.

More and more residents of the GGH are shopping in farmers' markets, gathering their own produce at pick-your-own operations, and buying from farmers' stalls in the countryside. The Greenbelt Farmers' Market Network funds initiatives to help farmers meet consumer demand for a wide-range of local products and raise visibility and community support. In 2010, farmers' markets in the area attracted 5 million shoppers for a total of \$200 million in sales.²⁵

One undeveloped link in the local food chain was aggregators, companies that pick up food from small farms in the GGH and deliver to restaurants, retail stores, or processors. Now companies like 100km Foods, which gathers food from dozens of local farms and has sales of \$2.3 million annually, are filling that gap and further increasing the supply of local food in the region.

There is no question that production for the local market is a growing trend in the GGH and that there is enormous potential as consumer demand blossoms and the various pieces of a local food system are put in place. But however promising, a local food system cannot thrive without a secure land base that gives producers confidence that their efforts, experimentation, and investment will pay off in the long run.

Providing ecological services

Natural areas in the GGH are made up of a mix of crop lands, orchards, forests, and wetlands, all of which have considerable natural capital value (natural capital refers to the earth's natural ecosystems as stocks or assets that provide resources and a flow of services). Natural capital and ecosystem services are the foundation of life, including human life. However, as we do not pay directly for these services, they are often undervalued in our market economy. Calculating the dollar value of ecosystem services brings their importance to our attention and highlights that their loss would entail massive economic impacts, threatening health, food production, climate stability, and basic needs, such as clean air and water.

The total value of ecosystem services on farmland in the GGH is estimated to be in the order of \$1.6 billion per year, with about two-thirds of this value in the outer ring.

Different types of land cover generate different sets of ecosystem services. Farmland in the GGH can be divided into land used for animal and crop production on the one hand and natural heritage features, such as forests and wetlands, on the other. Forests and wetlands provide a wide range of ecosystem services, including storing carbon in soils and biomass, providing habitat for other species, improving air quality, cleaning surface water, controlling erosion, serving as habitat for crop pollinators, and creating cultural value and recreational opportunities, such as farm visits. Lands in agricultural production produce a smaller range of services than forests and wetlands because of the lower level of biomass involved. Key farmland services include pollinator habitat provided by natural cover on idle land and hedgerows, the storage of carbon in farmland soils, and the cultural value of agricultural lands.

Table 3: Value of ecosystem services provided by farmland in the Greater Golden Horseshoe, 2011

	\$/acre/yr	Inner Ring		Outer Ring		GGH	
		acres	\$/yr	acres	\$/yr	acres	\$/yr
Sub-total cropland	193	702,780	135,661,293	2,017,944	389,534,268	2,720,724	525,195,561
Sub-total orchards	200	29,915	5,980,454	7,534	1,506,159	37,449	7,486,612
Sub-total pasture	193	84,906	16,389,849	365,269	70,509,783	450,175	86,899,631
Sub-total idle	675	4,588	3,095,118	8,395	5,663,364	12,983	8,758,482
Sub-total woodlands	2191	116,966	256,268,997	337,069	738,508,068	454,035	994,777,066
Total			417,395,711		1,205,721,642		1,623,117,353

Source: Agricultural Census, Statistics Canada and David Suzuki Foundation, 2008.

Key farmland services include pollinator habitat provided by natural cover on idle land and hedgerows, the storage of carbon in farmland soils, and the cultural value of agricultural lands.

No one has conducted a comprehensive assessment of the economic value of farmland specific to the GGH, but a 2008 study conducted for the David Suzuki Foundation provides the basic information we needed to make a rough estimate.²⁶ The study calculates the economic value of a broad range of benefits provided by the natural capital present in the Greenbelt. By adapting the methods and values found in that study and matching the land classification used there to that used in the Agricultural Census, it's possible to scale up the analysis to the entire GGH.

The results of this approach are shown above in Table 3. The total value of ecosystem services on farmland in the GGH is estimated to be \$1.6 billion per year, with about two-thirds of this value in the outer ring. This value is likely to be conservative for two reasons. First, because the Agricultural Census does not differentiate between woodlands and wetlands. We have grouped them together here and used the lower woodland per acre value for the entire category. Second, we have not accounted for the much higher per-acre cultural value of farmland in near-urban areas, which flows from the fact that urbanites are much more likely to appreciate and visit these sites. At any rate, this exercise helps illustrate the enormous ecological value of an intact agricultural system and reinforces the case for the preservation of the agricultural land base.

Challenges Faced by the Agricultural Industry in the Region

This section describes some of the key challenges facing agriculture in the GGH, especially those linked directly or indirectly to land-use planning. The GGH planning framework reviewed in the last section is undoubtedly a major step forward in the direction of managing growth and preserving farmland in the GGH. Despite the lofty objectives, however, there are signs that implementation of the framework is not going as effectively as desired. The growth management goals of the Growth Plan were weakened somewhat as the Plan was rolled out, allowing low density growth to continue in many locations. The Province has allowed this loosening

of the planning framework in response to the demands of municipalities hungry for tax assessment and development charge revenues, along with speculators and developers lobbying for expansions to settlement boundaries so as to incorporate their lands. This has given rise to one of the most daunting challenges facing the GGH, namely leap-frog (sprawl) development over the Greenbelt and into agricultural areas in the less-protected outer ring.

As urban development encroaches on agricultural land, people with no attachment to farming come into close contact with farm operations. This is the case when the urban envelope expands onto farmland without adequate buffers or when non-agricultural uses are permitted in rural areas, either because they were approved under the rules that predated the new planning framework or because the new framework permits, under certain limited circumstances, such development. These ongoing trends in the GGH are giving rise to conflict between farmers and new arrivals in the countryside, impeding normal farm practices and undermining the long-term viability of farming in affected areas.

While the GGH planning framework strains to control sprawl in the region, other policy tools are

While the GGH planning framework strains to control sprawl in the region, other policy tools are showing themselves to be inadequate. Compared to other policy areas, such as natural heritage, the tools needed to protect agricultural land are far less developed.



showing themselves to be inadequate. Compared to other policy areas, such as natural heritage, the tools needed to protect agricultural land are far less developed. There is little understanding of the agricultural system among provincial agencies and municipal planners. Decisions are made routinely that inadvertently affect agricultural interests, and there is little pressure at any level to assess the impact of planning decisions, road design, and environmental regulations on farmers and their ability to persevere as stewards of their lands. Major new infrastructure projects, including new and extended highways, sewer pipes, industrial energy projects, and high-voltage hydro lines, are approved using an environmental assessment process that is not very sensitive to the agricultural system. These projects expropriate whole parcels of farmland, often split remaining farm parcels and serve as physical barriers between farmed lands. Despite its huge economic importance to the region and the province as a whole, policy- and decision-makers, are often deaf to the needs and requests of farmers.

As urban land uses encroach upon and intrude into the countryside, essential linkages for farming are lost as support businesses see the writing on the wall and move out of the area.

The accumulated effects of these stresses have reduced the total area of land being farmed in the GGH and threatened it with something even more insidious—fragmentation. As urban land uses encroach upon and intrude into the countryside, essential linkages are lost as feeder businesses “see the writing on the wall” and move out of the area. Fragmentation weakens the synergy involved in having a concentration of viable farms and support services in a given area. Farmers have to travel further to get to essential services such as abattoirs or to obtain farm technical services. The effort involved becomes too time-consuming and costly, and more farmers leave the area or retire early. As synergy is lost, farming in the area tips into decline—buildings begin to decay, irrigation and drainage systems stop

working, and farming may even be abandoned on some parcels. Within the GGH, signs of decline are visible in formerly vibrant agricultural areas in the white belt, and around other growing centres in the outer ring.

Difficulties implementing the Growth Plan

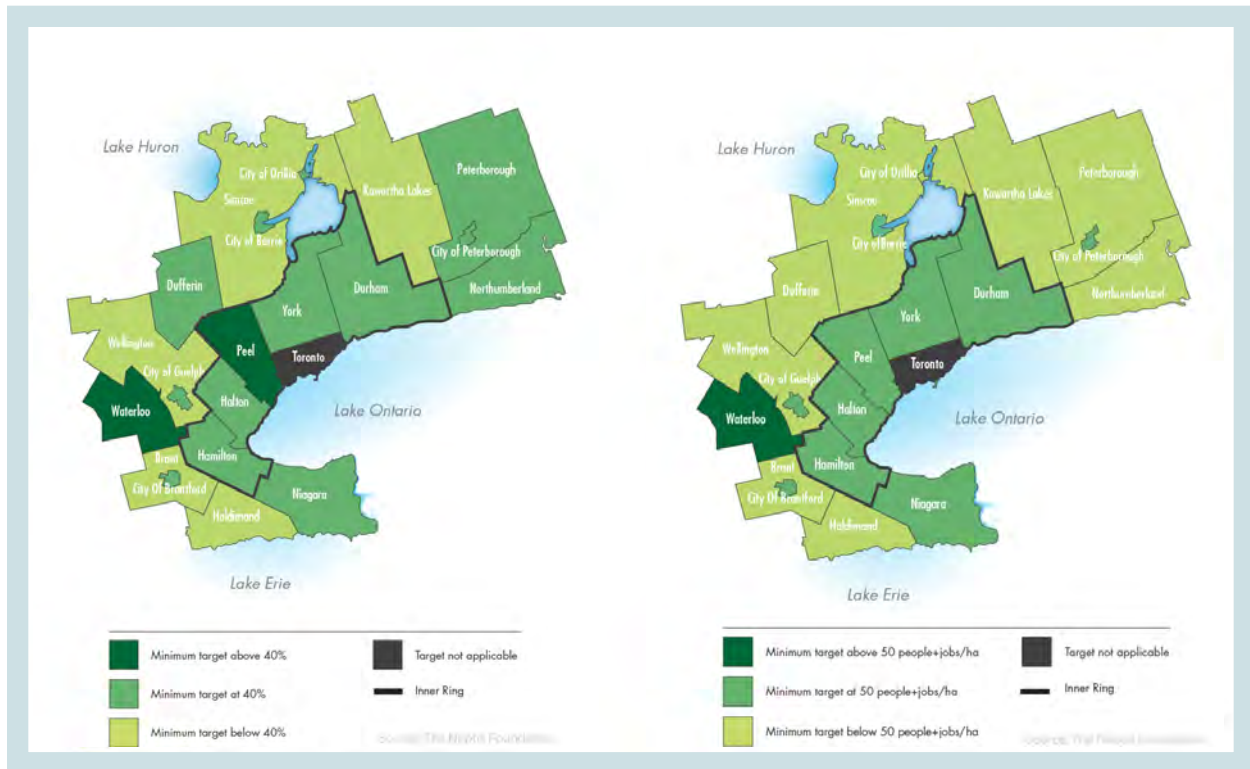
The planning framework in the GGH was designed to contain sprawl and preserve agricultural land. The Growth Plan provides the context for shaping the key force of change in the region, urban development. When the Growth Plan was created in 2006, it was widely recognized as a major breakthrough in regional planning in North America, even winning the prestigious Burnham award from the American Institute of Planners in 2007. In many people’s eyes, however, the Growth Plan is not living up to expectations. This section discusses three main reasons; flaws in the Plan itself, failures in implementation of the Plan, and amendments made to the Plan.

Flaws in the Plan

There are two key problems with the Growth Plan, both related to the Plan’s growth management targets. First, the Plan allows regional municipalities to allocate density and intensification quotas to its lower-tier (smaller) municipalities in any way it sees fit as long as the averages across the region abide by the Growth Plan targets. Second, the Plan allows for municipalities to apply for exemptions from the Plan’s growth management targets.

The problems created by these loopholes in the Plan are especially serious in the outer ring. As a report for the Neptis Foundation has shown, more than half the cities and upper-tier municipalities in the outer ring received permission from the Province to adopt targets below the Growth Plan objectives (Figure 3).²⁷ Some of these municipalities are rural areas that will see little growth, but others are expected to grow rapidly. Simcoe County, for example, is expected to increase its population by 64 per cent by 2031, adding 162,000 new residents. The County has adopted an intensification rate of 32

Figure 3: Intensification and greenfield density targets among upper-tier and single-tier municipalities in the Greater Golden Horseshoe.



Source: *Implementing the Growth Plan for the Greater Golden Horseshoe: Has the strategic regional vision been compromised?* (The Neptis Foundation, 2013). This image has been modified from its original version to include the Niagara Region in the inner ring.

per cent and a density target of 39 people plus jobs per hectare (16 per acre), both considerably below the Growth Plan target.²⁸ At the lower-tier level, we find many municipalities in Simcoe County with density targets of 32 people plus jobs per hectare (13 per acre)—more than one-third below the Growth Plan target—and with an intensification rate of only 20 per cent, half the provincial target. Such low targets are encouraging low-density car-dependent sprawl on vast areas of land in the outer ring in areas without access to regional transit services.

Implementation problems

Implementation failures have also undermined the intent of the Growth Plan, especially the way land budgets have been calculated. The Province required that municipalities bring their Official Plans into conformance with the Growth Plan within three

years⁵⁴. As part of this exercise, municipalities were to project the amount of land needed to accommodate the population and employment growth assigned. Unfortunately, there was no agreed upon methodology for guiding land projection efforts and many municipalities simply proceeded to hire economic consulting firms to make the necessary

Simcoe County has adopted an intensification rate of 32 per cent and a density target of 39 people and jobs per hectare. Both numbers are considerably below the Growth Plan targets, while many lower-tier municipalities knocked their targets down even further.

calculations. The consultants projected future land-use needs based on past trends, despite the fact that the Growth Plan was intended to disrupt previous growth trends. For example, many land budgets were based on the assumption that the demand for single-family housing would continue to be strong throughout the planning period. This expectation in turn inflated the amount of land needed to accommodate new growth as it was assumed that the land being set aside for higher density housing to meet the Growth Plan density requirements would remain unoccupied. This necessitated the projection of a larger land base in order to meet the projected demand for single-family housing.

Many land budgets continued to be based on past trends in housing demand, despite the intent of the Growth Plan to disrupt previous trends (and support higher density). This inflated the amount of land needed to accommodate new growth.

Region of Waterloo's Official Plan

The Region of Waterloo is widely recognized as one jurisdiction committed to implementing the letter and spirit of the Growth Plan (its Planning Director was one of the main drafters of the Growth Plan). In 2009, the Region adopted a new Official Plan to bring it into conformity with the Growth Plan. The land budgeting procedure used by regional planners assumed that demographic changes would slowly alter the desired mix of housing types so that the proportion of single-detached housing would decline over time. Its amendment proposed an extension of the urban boundary by only 200 acres. A model of smart growth planning, Waterloo's Official Plan prioritized intensification and mixed used neighbourhoods, which together can create vibrant, walkable, transit-friendly communities.

The plan was appealed to the Ontario Municipal Board (OMB) by dozens of (sprawl) developers who had speculated on lands not included in the boundary extension. They produced their own land budget based on past trends that concluded the region would

need 2,600 acres of mostly agricultural land to accommodate growth over the next 20 years—13 times the regional estimate. In 2013, just after ruling in a similar OMB case in Niagara that the market-driven approach to land budgeting was not legitimate under the Growth Plan, the board ruled that it preferred the developers' approach to land budgeting and directed the region to expand its growth boundary accordingly.

The Region believed the OMB seriously misinterpreted the Growth Plan and appealed the ruling. With the Province supporting the region, the developers decided to negotiate with municipal planners and eventually settled on a plan to expand the boundary by 635 acres to meet growth requirements to 2031 (the time horizon of the original Growth Plan) and another 495 acres to meet growth needs for the 10 years after that (the Province's amended time horizon). The developers agreed to submit to the Region's more restrictive land budgeting procedure in future rounds of Official Plan revisions.



Amendments to the Growth Plan

The third main concern with the Growth Plan is the amendments that have been made to it by the Province since the original plan was created in 2006. These amendments have substantially undermined the intent of the Growth Plan.

The first amendment, adopted in 2012, applies to the Simcoe sub-area. The Places to Grow website states that Amendment 1 “provides more specific direction for municipalities in Simcoe County and the Cities of Barrie and Orillia to implement the Growth Plan.” However, many observers see this amendment more as an affront to the Plan’s principles of compact urban form, optimized infrastructure, conservation of natural and farmed land, and wise use of valuable natural resources.

The amendment was occasioned by the turmoil in the development community pursuant to the introduction of the Growth Plan. Land speculators and developers had been accumulating properties for decades in the area and were outraged by the restrictions on growth introduced by the Growth Plan. Departing from the pattern established in the original Growth Plan of allocating population and employment forecasts to the upper-tier municipalities and allowing them to distribute the numbers to their component lower-tier jurisdictions, Amendment 1 allocated the numbers for the Cities of Barrie and Orillia, the County of Simcoe, and each of the lower-tier municipalities. The totals, as the Province pointed out, remained the same for the original Growth Plan, but critics noted that growth was distributed to areas with large inventories of land purchased by major landbankers and developers who felt they had a right to develop these lands for low-density sprawl. Essentially, population and

The land budget calculations have also been dogged by the so-called “takeouts” issue. Density calculations are based on the number of people divided by the amount of land on which they are settled. The tricky part is deciding what to put in the land base—if you include all the land, then the density will appear low, but if you exclude areas that cannot be developed for one reason or another, then the density will look higher. The Growth Plan makes it clear that the density calculations are to exclude certain features on which development is not permitted (called “takeouts”) including provincially significant woodlands, wetlands, valley lands, habitat, and areas of natural and scientific interest. Unfortunately, because of the lack of provincial guidance, municipalities were able to add many takeouts to their calculations that were not permitted under the Growth Plan (i.e. cemeteries, flood plains, storm water management ponds, major roads and highways, and hydro corridors). All the inner ring regional municipalities did this and many outer ring ones did as well. The Region of Waterloo has been an exception to this rule. The confusion over takeouts has significantly inflated the amount of land that municipalities projected they would need to accommodate projected growth.

Many observers see the Simcoe amendment as an affront to the Growth Plan’s principles of compact urban form. One result was the addition of four major employment areas—about 10,000 acres of mostly prime agricultural land.

employment was transferred from more urban areas (like Barrie) that would have been able to accommodate growth in a more efficient manner and placed in greenfield locations. These are the very areas that received exemptions from the Growth Plan intensification and density targets (mentioned above), ensuring that the result would be sprawling, car-dependent development.

Secondly, the amendment used a sleight of hand to increase the amount of land that could be used to accommodate growth beyond the amount otherwise permitted under the Growth Plan. Recognizing that the municipalities in the area already had more land in their urban growth boundaries than needed to accommodate the projected growth, the amendment created a new distinction between “primary settlement areas” and “settlement areas.” The former corresponds to the amount of land needed using density and intensification numbers under the Growth Plan. Instead of requiring the municipalities to redesignate the remaining excess lands, the amendment accepted that these settlement areas could be used to accommodate growth, more or less as the municipalities involved saw fit. In other words, the amendment expanded the urban footprints in violation of the Growth Plan’s own land budgeting principles.

Finally, the amendment added four major employment areas—about 10,000 acres of mostly prime agricultural land—far in excess of that needed to accommodate the anticipated job growth in the area. Two of the employment areas (Bradford West Gwillimbury and Innisfil Heights) are along Highway 400 and are located far from urban areas in corridors poorly served by public transit. This will result in further congestion along the 400 and serve as an impetus for the Province to extend other highways across prime agricultural lands. These two employment areas do not share a border with the nearby communities of Barrie and Bradford, and will require long and expensive water and wastewater infrastructure extensions.

Ontario Ministry of Finance’s growth expectations are almost 50 per cent lower than those contained in the Growth Plan. Municipalities may be demanding more land for development than really needed.

Bradford West Gwillimbury

The Bradford West Gwillimbury “employment settlement area” is an area of about 865 acres, straddling highway 400 west of the town of Bradford. This new employment node is projected to accommodate manufacturing, warehousing, offices, and retail uses on prime agricultural land. The linear shape of the employment area along the highway will create a much longer agricultural/urban interface than locating employment areas within and contiguous to existing communities (such as the employment area approved in Bradford). This in turn will lead to an increase in agricultural/urban conflicts in terms of noise, odour, dust, machinery

on roads, etc. The zone will be encircled by prime agricultural land, multiplying the size of the impact zone. For example, all east/west movements to and from the employment area will need to cross agricultural lands. The designation of the area for employment will promote further speculation by non-agricultural interests in the adjacent areas, and create speculative pressures on those prime agricultural lands along the pipelines needed to service the employment node. This may fuel even further speculative pressure, more absentee ownership, less investment in agricultural infrastructure and a general waning of the agricultural economy and support businesses in south Simcoe County.

The outer ring has about 50 per cent of the approved greenfields and yet is forecast to accommodate about a third of the projected population, and only 25 per cent of the projected jobs to 2031.

All of this directly contravenes the principles of the Growth Plan. One of the main purposes of the Growth Plan was to stop designating new areas for urban development that would require huge capital investment of new water pipes, new sewage pipes, and new roads. The amendment opens the whole of Simcoe County to fragmented urban planning and encourages real estate speculators to leapfrog the Greenbelt to secure additional stretches of farmland in expectation that the region will continue to accommodate growth via car-dependent urban sprawl.

The second amendment, adopted in 2013, applies to all municipalities in the GGH. The amendment updates and extends the population and employment growth forecasts from 2031 to 2041. Municipalities are required to update their Official Plans to conform with Amendment 2 by 2018. The forecasts ensure a longer planning horizon and encourage longer-term thinking about

infrastructure needs. However, these forecasts are widely considered to be far too ambitious and are out of synch with those published by Statistics Canada and the Ontario Ministry of Finance (MOF). For the outer ring, MOF's growth expectations are almost 50 per cent lower than those contained in the Growth Plan. In Waterloo, for example, the Growth Plan projects a population growth of 742,000 by 2041,²⁹ while the MOF suggest that 650,000³⁰ is more reasonable, a difference in growth expectations of about 40 per cent. Nonetheless, municipalities are required to plan for these inflated population targets under the terms of the Growth Plan. This encourages them to demand more land for development than really needed to support a more realistic assessment of potential growth. On learning it did not have enough land to support anticipated growth to 2041, Brantford, for example, ramped up negotiations with surrounding Brant County to extend the city limits into a protected agricultural ribbon that encircles the city.

2041 population forecasts are widely considered to be far too ambitious. There is clearly more than enough land now designated for urban growth to 2041.

Table 4: Land budgets for inner-ring municipalities (in hectares)

Land Category	Designated Land as of 2006			Required New Lands (as of 2011)			White Belt Area	
	Residential	Employment	Total	Residential	Employment	Total	Available	Required
City of Hamilton	2,551	874	3,425	0	1,134	1,134	6,738	17%
Halton Region	3,360	2,530	5,890	1,680	1,100	2,780	14,300	19%
Peel Region	9,453	2,547	12,000	0	1,241	1,241	13,926	9%
York Region	7,274	2,646	9,920	1,603	861	2,464	10,400	24%
Durham Region	4,672	1,427	6,099	1,982	886	2,868	13,332	22%
Total	27,310	10,024	37,334	5,265	5,222	10,487	58,696	18%

Source: Ray Tomalty, 2011, *Inside & Out: Sustaining Ontario's Greenbelt*. Toronto: Greenbelt Foundation.

More vacant greenfield land than needed is available to accommodate population and employment projections for 2031 and the likely inflated 2041 projections.

Taken together, the watered down targets, implementation problems and wayward amendments to the Growth Plan have given rise to land budgets that far exceed what would be needed if the Growth Plan principles had been followed faithfully. In the inner ring, municipalities ended up obtaining approval for almost 10,500 ha (26,000 acres) of greenfield land (Table 4, on page 30).³¹ When added to the 37,300 ha (92,000 acres) of greenfield land already designated in 2006, a total of 47,800 ha (118,000 acres) of vacant greenfield land is available for new urban growth, enough for about 2.4 million people and jobs.³² Given that only 1.9 million people and jobs are projected (using the Growth Plan parameters) for greenfield lands in the inner ring by 2031, there is clearly more than enough land now designated for urban growth to 2031 and probably enough to accommodate the inflated 2041 projections. In the outer ring, land budgets showed an oversupply of land already designated prior to 2006 in virtually every region/county such that there were no urban expansions proposed (with the exception of Barrie and Waterloo). Moreover, several outer ring land budgets showed land supplies were sufficient to accommodate growth to 2041 and beyond.

The same report for the Neptis Foundation identifies a total of 107,000 ha (264,000 acres) of designated greenfields for the entire GGH, about 1.5 times the size of the City of Toronto.³³ Further, if rural settlements and residential and industrial lands outside of settlements are included, the total number is even larger. Of particular concern in the context of this report is the fact that the outer ring has about 50 per cent of the approved greenfields and yet is forecast to accommodate only about a third of the projected population and only 25 per cent of the projected jobs to 2031. Rather than changing land-use planning patterns to encourage compact walkable communities using existing infrastructure,

the lower density targets and vast amounts of land approved for development may encourage more expensive low density development.

Policy-makers and decision-makers do not fully understand agriculture and agriculture issues

Agriculture is in the shadow of urbanization in more ways than one. Not only is it directly threatened by the appetite for urban growth, agriculture is also overshadowed in the policy arena. Like the blank areas that are supposed to represent farmland on land-use maps, farmers feel that their interests are often overlooked or given low priority compared to other land-users in policy making and implementing processes. This is an issue that permeates all aspects of the planning and regulatory system.

As working landscapes, agricultural operations have the potential for many spill-over effects, such as impacts on water, air, natural heritage, infrastructure, and the quality of life of surrounding residents. Because of the many potential externalities involved, farming is a highly regulated form of economic activity. Farmers have legal obligations under the *Farming and Food Production Protection Act*, the *Environmental Protection Act*, the *Ontario Water Resources Act*, the *Pesticides Act*, and the *Health Protection and Promotion Act*. In addition, farmers must comply with laws on drainage, watercourses, well drilling, weed control, pesticide storage, and fuel storage, as well as municipal by-laws on setback distances, minimum distance separation, topsoil preservation, managing and protecting trees, and nutrient management, to name but a few. Farmers and farm organizations support most of these requirements in that they create a predictable regulatory environment while balancing the interests of farmers, the general public, and the environment. However, in many cases, regulatory requirements are developed by government agencies with what seems to be little regard for the business interests of farmers, a reflection of the generally low level of attention afforded agricultural issues in many policy circles.

A good example of how regulations can cause collateral damage to agricultural interests can be

Farmers can endlessly recite obstacles they face while carrying out their business in near-urban areas.

found in the Greenbelt Plan. The Greenbelt Plan requires a minimum 30-metre “vegetation protection zone” from key hydrologic features (KHF), which can include permanent and intermittent streams. The categorization of features is assessed differently at both provincial and municipal levels causing confusion for landowners. Where a vegetative protection zone overlaps with agricultural land it reduces the area dedicated to crops. On smaller farms, the designation of multiple KHFs can have very serious impacts on the viability of the operation.

Other examples of policies that inadvertently impact farmers can be found elsewhere in the policy sphere. For example, in near-urban areas, municipal bylaws that make perfect sense in the city—such as fencing requirements or prohibitions on discharging a fire-arm—are troublesome when applied in a rural context just beyond the urban fringe. Infrastructure designed without thought to the movement of large farm equipment in active agricultural areas may be

unable to accommodate modern farm equipment. Routinely hindering the viability of agriculture in the GGH are hard curbs on roads, bridges too narrow, or traffic circles too tight to allow wide and long farm vehicles to pass. Farmers can endlessly recite obstacles they face while carrying out their business in near-urban areas.

Another example of the agricultural blind spot can be readily seen in our system of impact assessment for new developments. At present, procedures to assess, avoid or mitigate the impacts of proposed development on agricultural land are weak compared to other potentially affected land uses. When residential development is proposed near industrial zones, environmentally significant features, or areas of archeological interest, protocols are in place to engage regional and provincial agencies to consider impacts on existing uses and mitigation measures that will protect future viability. For development that will affect agricultural operations, there is no such requirement in the provincial policy framework. As a result, Agricultural Impact Assessments (AIAs) are far from routinely conducted in the GGH. A review of Official Plans carried out by the Friends of the Greenbelt Foundation found that few required development applications in or near agricultural zones to assess potential impacts on the agricultural system.

Another symptom of the lack of appropriate attention given to agricultural lands can be found in the environmental assessment (EA) process. Major linear infrastructure, such as highways, transit, and water services, has the potential to seriously impact agricultural areas, both directly and indirectly. Highways in particular threaten agricultural lands; their wide rights-of-way remove large areas from the



Agriculture Impact Assessments (AIAs) are far from routinely conducted in the GGH. Environmental Assessments (EAs) conducted on major infrastructure projects in the region often only superficially assess impacts on agricultural lands.

A healthy farm community is based on a complex web of relationships including geography, local economy, and the presence of physical infrastructure.

agricultural base. Perhaps more importantly, a highway introduces a physical barrier, severing farm properties and restricting connections between neighbouring properties. Indirectly, highways spur [sprawl] development that threatens to encroach upon agricultural land throughout the corridor.

The Growth Plan calls for a variety of linear infrastructure to support planned growth in the region, most of which must pass through an EA process designed to reduce impacts on the environment, including ecological, social, and economic dimensions. Despite the potentially serious impacts, EAs conducted on major infrastructure projects in the region often only superficially assess impacts on agricultural lands. For example, EAs on new highways or highway extensions often do only a qualitative assessment of the potential loss of high-quality farmland and compare the number of farms likely to be affected by various route and technological alternatives. Little consideration is given to how each proposed route will affect individual farm viability or broader issues such as fragmentation of the agricultural land base, long-term impacts on farm infrastructure and supporting businesses, or how a new highway might induce more development that will encroach further on agricultural land. As a result, highways and other linear infrastructure projects often have a greater negative impact on the agricultural system than necessary. Witnessing the destructive outcomes of previous projects creates uncertainty among the local agricultural community.

Many of these oversights and lacunae in the policy arena reflect two underlying problems. First, decision-makers at all government levels do not appear to understand that a healthy farm community is based on a complex web of relationships. These include the geographical relationship among farmed parcels, the unique physical infrastructure

that support farms in an area, and the economic relationships that sustain farms, such as suppliers, processors, and distributors. Policy makers fail to appreciate that piecemeal decisions can reverberate through the web of relationships and have cumulative affects at a larger landscape scale. A healthy agricultural system can be tipped into an unhealthy state through “the death of a thousand cuts.” The second underlying problem is the lack of a clear statement in the GGH policy framework concerning the role of agriculture and its relationship to other land uses. Without a statement or vision, decision makers cannot properly balance agricultural interests with competing interests and prioritize agriculture where it has a predominate role in maintaining a healthy countryside.

Conflict between agricultural and non-agricultural land uses

Modern farming is a complex activity spread out over a wide physical area that entails multiple spill-over effects, such as impacts on water, air, natural heritage, infrastructure, and the quality of life of surrounding land-users. If non-agricultural development in or near agricultural areas is not carefully planned, serious conflicts inevitably arise. Urban development encroaching on agricultural land without adequate buffering and the creation of new lots for semi-rural residences in agricultural areas are two trends that can cause considerable conflict by bringing people who are not connected to agriculture into the impact area of an active farm, and vice versa.

Conflict may arise simply due to the fact that an actively farmed countryside often does not reflect the “family-farm” ideal held by exurban residents. For example, picturesque barns may be replaced with

Urban development encroaching on agricultural land without adequate buffering, and the creation of new lots for semi-rural residences in agricultural areas are two trends that can cause considerable conflict.

Upper Cold Creek Farm

Upper Cold Creek Farm (UCCF) is a 400-acre livestock farm in Vaughan in York Region that has been owned and operated by the same family since 1938. The farm is classed as prime agricultural land and is within the Greenbelt. The area to the north of the farm (Block 40/47) is now within the City's urban growth area due to a 2000 Official Plan amendment (OPA600) that re-designated almost 239.7 ha (600 acres) of farmland for residential use. Grandfathered under provisions of the Greenbelt Plan, the OPA evolved into OPA744, which was approved by Vaughan and York Region in 2014.

OPA600 was drafted with no input from the agricultural community or the owners of UCCF. No impact assessment was conducted and neither an agrologist nor a land-use planner specializing in agricultural planning issues provided an opinion on OPA 744. The planning reports prepared by both the City of Vaughan and Region of York did not address the incompatibility of UCCF with the proposed residential development. After the owners of UCCF spoke with staff and council, the draft OPA744 was amended to include a vague provision that future development should consider "compatibility" with adjacent rural lands.

Block 40/47 is destined to accommodate 5,000 new residents in almost 1,400 dwelling units, including 17 large-lot single-detached

homes directly abutting the farm. The owners of UCCF are concerned for the safety of their livestock and nearby residents. It is likely, that new residents will complain of the farm operation—interfering with their right to use their lands for their traditional purpose—and that minimum separation distance regulations will prevent them from building new livestock and other facilities in the boundary area near the new subdivision. This would eliminate 42 acres or almost 30 per cent of UCCF as a potential location for a new livestock building.

The family that owns UCCF has met with the developers numerous times but so far there has not been a willingness to compromise. They proposed that the developer use the storm water management pond that will be needed for the development to form the buffer between urban and rural uses, but that was rejected. As an alternative, the farmers suggested a 30-50 metre buffer area with a vegetated berm to provide a visual screen along with a sturdy fence. The developer's most recent offer is a buffer of 4.5 metres, a fence along the property line, and a requirement of a notice to home-buyers that they are buying into a subdivision that borders a working livestock farm. The farmers are appealing OPA 744 to require the region to better define "compatibility" and require an Agricultural Impact Assessment in the hope that this will force the developer to improve its offer.

industrial looking facilities that can be seen as a scar on the landscape by recently arrived residents. Often, new residents also complain about the externalities associated with normal farm operations, including noise, dust, smell, light, vibration, smoke, flies, and the presence of slow-moving agricultural machinery on local roads. Besides these aesthetic and physical annoyances, new residents may also be concerned about the environmental impacts of farm operations, especially run-off. Because of the odours and run-off associated with large numbers of animals, livestock

operations seem to generate the greatest volume of complaints, but these issues affect all types of farming in the GGH, especially in places closest to urban settlements.

Anticipating conflicts makes it difficult for farmers to plan to intensify or expand their operations.

Farmers near urban areas or non-agricultural land uses are also the victims of inappropriate behaviour, including trespassing, theft, vandalism, harassment of farm animals, and dumping of garbage on their lands. Encroaching development also brings night lights, noise, dust, heavier traffic on local roads, pets, and changes in water quality or quantity available to the farmer for irrigation. Urban

When land speculation is rampant in an agricultural area, the price of farmland is artificially inflated.

uses in proximity to an active farm can also trigger minimum separation distance regulations that may prevent farmers from expanding or upgrading their operations. Finally, urban land uses intruding into agricultural area tend to fragment the agricultural system and put the future of farming in the area into doubt. Anticipating conflict, these conditions make it difficult for farmers to plan to intensify or expand their operations, which may undermine their viability in the long-run.

Conflicts in the countryside and urban fringe are expected to become more common in the GGH as farming practices evolve, settlements expand into agricultural areas, and non-agricultural uses multiply in rural areas. This is putting an increasing strain on the relationship between neighbours, farm operators, and other key players in both the community and agricultural sectors.

There are formal mechanisms—including the Normal Farm Practices Protection Board and the Ontario Municipal Board—for resolving conflicts between agricultural and non-agricultural land uses in the GGH, but they are typically slow, expensive, and have uncertain outcomes. Rather than using formal processes, farmers often take corrective measures that add to their costs, such as installing sturdier fencing, planting a screen of trees, or removing land near the urban edge from production. The uncertainty and extra costs can also encourage farmers to decamp to areas where farming is less impacted by urban encroachment, i.e., where farming is accepted as a way of life and

where farmers do not have to defend normal farming practices.

Land banking and speculation on farmland undermines growth management

Land banking refers to the practice of purchasing raw (usually agricultural) land with the intent to hold it until it is profitable to sell. Typically, speculators buy up land they believe to be in the path of growth in rapidly developing municipalities. The investment strategy is to identify parcels that are not designated for residential development, influence the land-use planning process to encourage the expansion of urban settlement boundaries and the positioning of infrastructure (roads, water, sewer) and then resell the land to developers at a profit.

When land banking (speculation) is rampant in an agricultural area, the price of farmland is artificially inflated, sometimes exponentially. High land prices can make it prohibitively expensive for farmers to expand their operations by purchasing adjacent properties, another factor that can impact farm viability. New farmers cannot enter the field due to exorbitant land prices, which cuts off the supply of new farmers into the agricultural community. Farm parcels subject to speculation are often rented on short-term leases to farmers who plant cash crops such as corn and soybeans, and understandably are reluctant to invest in maintaining or upgrading their operations. As a result, agricultural areas subjected to speculation often take on a dilapidated air. As farming becomes more expensive, expansion becomes more difficult, and nearby farms begin to deteriorate, a vicious cycle sets in where farmers simply give up and give in to developer offers to buy.

On a broader scale, speculation drives sprawl and undermines the intensification objectives of the

On a broader scale, speculation drives sprawl and undermines the intensification objectives of the Growth Plan.

Growth Plan. Land speculators usually quietly buy up land parcels until they have a dominant position in a given market. Because of their deep pockets, speculators often achieve considerable influence with local councils (e.g., by contributing to election campaigns, buying land from councillors at inflated prices, assuming influential positions in the local homebuilders' association, and sitting on development liaison committees), influence they can use to bend councils in favour of expanding growth boundaries and rezoning lands for urban developments. Meanwhile, infill parcels within the already built-up area of the city (which land banking companies are not interested in, as they are less profitable) are ignored as population growth is driven to the urban fringe on greenfield land opened up by speculators.

Land banking has been dampened in the Greenbelt due to the long-term protection afforded to agricultural land, but it is common in the outer ring and the white belt—the latter is thought to be almost entirely owned by or optioned to developers and land bankers. The truth is that no one knows how much land banking is going on in the GGH as governments do not keep records based on this

type of ownership pattern. Individual concerned citizens have managed to gather some statistics on land banking in specific areas by using publically accessible corporate data and land title searches at their own expense. Such efforts have revealed that one land banking company, Walton International Group, owns about 9,700 acres of land in the outer ring, mostly in areas close to the Greenbelt boundary. The greatest concentrations are in Brant and Simcoe Counties, where the company controls six per cent and three per cent respectively of the agricultural land base.

The fiscal system burdens farming

Another burden faced by farmers in the GGH is felt through the fiscal system, when municipalities raise revenues to pay for urban growth. Not only does urban sprawl consume agricultural land, farmers are forced to underwrite it through the municipal finance system. Sprawling development is profitable for developers but expensive for municipalities, which subsidize sprawl through taxation and development charges. Sprawling greenfield development requires

Brant County and Brantford

Brantford is a small city just outside the Greenbelt on the western side of the GGH, entirely encapsulated by rural Brant County. A "green ribbon" of protected agricultural lands set up by the provincial government in the 1980s buffers the countryside from the city. The north-eastern edge of this ribbon is less than two kilometres from the western border of the Ontario Greenbelt.

Walton International Group, a large Canadian multi-national that refers to itself as a land banker, owns 4,302 acres of farmland in Brant County, just outside the protected green ribbon to the north and east of Brantford. The company has been lobbying the city to extend its boundaries and bring municipal services

(sewer and water) closer to its properties. The city and county are now in formal annexation negotiations about a large piece of land in the green ribbon on the north side of the city, between the current city limits and one of Walton's large land holdings.

Farmland prices in Brant County have skyrocketed recently, with some farmers being offered as much as \$27,000 per acre in an area where land sold for \$5,000 less than 10 years ago. As a result of all of the land buying, Brant County is losing a number of successful heritage farms and vast tracts of food land to speculators. Walton claims it has historically paid returns of over 20 per cent to its thousands of small-time investors. The company is on record as stating that it has achieved these profits without having ever put a shovel in the ground.

new infrastructure and thus new capital spending. Development charges cover some of the costs involved, but some infrastructure is exempt from development charges and discounts are routinely applied to lighten the load on developers. The unpaid amount is shifted to the wider taxpayer. This means that the general public is subsidizing growth on the fringe through excessive property taxes.

The approach to development charges used in most GGH jurisdictions means that an average charge is applied per residential unit or square metre of commercial space, regardless of its location, the municipal services it needs, or the density of the development. Because new development on the urban fringe requires expensive infrastructure upgrades and extensions, an average cost system cross-subsidizes sprawl instead of more efficient patterns of development, such as infill development which uses infrastructure already in place. In effect, those who pay development charges but do not require new municipal infrastructure to support their development proposals are subsidizing urban sprawl through an unbalanced development charges system. Some municipalities have exempted farm buildings from development charges. However, in municipalities that have not provided such an exemption, farmers find that they are hit with a hefty development charge when they build new farm buildings on their farms, even if those structures require no municipal infrastructure to support them.

Development applications appear attractive from a short-term fiscal point of view because they promise to increase the tax base, but in the long-term, low density residential development is a tax drain on municipalities.

When a new development is approved on the fringes, municipalities get additional property tax revenues, but they also pick up new costs, including liabilities for future services to the public and infrastructure maintenance and replacement costs that continue indefinitely and rise over time.

Development applications appear attractive from a short-term fiscal point of view because they promise to increase the tax base, but in the long-term, low density residential development is a tax drain on municipalities.

Rural lands uses tend to use fewer services than their urban counterparts.

A study done by the Ontario Federation of Agriculture (OFA) demonstrated this dynamic using a typical rural municipality in the province as a case study (Bayham, located in Elgin County).³⁴ The study showed that when all expenses and revenues were included an analysis of the fiscal impacts of different types of land use showed residential development failed to pay its own way. The municipality spent \$1.08 to service the residential category for every dollar of revenue associated with that category. In contrast, the municipality spent only \$0.50 servicing the farm/forest category for every dollar of revenue associated with that land use category. In other words, the municipality collected approximately twice as much revenue associated with the farm/forest category than it spent on servicing those lands, reflecting the fact that rural land uses tend to use fewer services than their urban counterparts. Farm/forest land uses, effectively 'subsidized' residential uses. The Bayham case study results are consistent with the findings of similar U.S. case studies conducted by the American Farmland Trust and other authors.

While some have claimed that farm/forest uses are subsidized by a tax rate that is equal to 25 per cent of the residential rate, this study demonstrates that when all factors are taken into account, the farm/forest category has more than paid its way. The strain placed on municipal finances represented by sprawl increases the temptation to approve new development in order to obtain short-term revenue relief. This cycle has been called a giant "Ponzi scheme" by its critics, as municipal liabilities continue to mount as more inefficient development patterns are approved in an attempt to defray the costs of previous decisions.

As urban development approaches farm areas, the price of farmland increases. The increasing value of agricultural land in some parts of the GGH reflects in part the speculative value of these lands for urban development. For property tax purposes in Ontario, the assessment of land is based on its current value and is not supposed to consider the sales of lands and buildings to persons whose principal occupation is other than farming. However, farmers successful in purchasing a farm property have had to outbid non-farmer purchasers. Therefore, speculation raises the prices paid by farmers and inadvertently affects the assessed value of farmlands. As a result, farmers tend to be hit with higher tax bills just as urban encroachment is making farming difficult for other reasons discussed above. The combination of higher operating costs and tempting offers from developers tips the balance for many farmers in favour of selling their land for urban development.

Impacts on farming in the GGH

The farm sector in the GGH is strong, but the issues described above are making farming in the GGH somewhat precarious. Table 5 (on page 39) reveals a snapshot of a rural landscape in transition in the GGH for the years 2001 to 2011. The rows in the table are arranged with the crops using the most land at the top and crops using less land at the bottom. In the outer ring, pasture-land (used for livestock) and fruit crops have lost 23 per cent of their land area over the decade.³⁵ Vegetable crops are also declining (by 5 per cent), as is Christmas tree farming (by 26 per cent).³⁶ Field crops (mostly grains and oilseeds), comprising by far the largest share of all farm area, increased by nine per cent in cultivated area in the outer ring.³⁷ Nursery products are booming (15 per cent), as is sod production (59 per cent).³⁸ In the inner ring, the pattern of loss is more serious, except for fruit, which lost only 13 per cent of its productive land.³⁹ Unlike the outer ring, field crops declined in the inner ring (by 6 per cent).⁴⁰ Meanwhile, sod production was on a considerable upswing (79 per cent), while nursery products were stable (1.2 per cent).⁴¹

The picture that emerges from this overview is of a stressed region that has suffered considerable losses in its agricultural base. In particular, livestock

operations seem to be greatly impacted, with major declines throughout the region, especially in the inner ring. Because of the externalities associated with livestock farmers, this type of farming is the most vulnerable to neighbours' complaints. Its dramatic decline is a signal that conflicts in the countryside throughout the GGH are increasing. Fruit production is also declining substantially in the outer ring, perhaps reflecting the closure of fruit processing facilities. Vegetable crops are on a gentler decline, with a more noticeable drop in the inner ring. Field crops across the GGH are stable but this hides the fact they shifted noticeably from the inner ring to the outer ring.

When we look at the overall changes in the amount of land farmed in the GGH (Table 6), we see that the area farmed is steadily decreasing in the region, going from about 4.1 million acres in 2001 to 3.8 million in 2011, a drop of six per cent in just 10 years.⁴² This is about the same rate of loss experienced by the farming sector across the province. Although the GGH planning framework was introduced to stem farmland loss, the process seems to have accelerated after 2006. The GGH's stock of farmland dropped 4.5 per cent or by 180,000 acres in the five-year period after the introduction of the Greenbelt and Growth Plan—an area larger than the City of Toronto.⁴³

When we look at the distribution of the lost farmland between the inner and outer rings, the picture is more disturbing. Due primarily to the intense growth pressures in the white belt, the farmed area in the inner ring has declined at a faster rate than the outer ring (or the provincial average). Over the decade from 2001 to 2011, farmed land in the inner ring dropped almost 10 per cent compared to a 4.6 per cent rate of loss in the outer ring over the same period.⁴⁴ In terms of absolute numbers, however, the loss of active agricultural land has been greater in the outer ring, where 138,000 acres went out of production, compared to 104,000 acres in the inner ring.⁴⁵ These losses were concentrated in the 2006-2011 period, when the outer ring lost almost 50 per cent more land than the inner ring over the same period.⁴⁶ This occurred despite the fact that the outer ring was slated to accommodate only 25 per cent of the overall population and employment growth of the GGH. This reflects the very low densities at which growth is occurring in some outer ring municipalities.

Table 5: Farmed area by type of crop, change from 2001-2011

	Inner Ring		Outer Ring		GGH		Ontario	
	acres change	% change	acres change	% change	acres change	% change	acres change	% change
Total farmed area	-103,657	-9.6	-138,016	-4.6	-241,673	-6	-839,121	-6.2
field crops	-40,246	-5.7	156,152	8.6	2,559	0.1	-53,141	-0.6
pasture	-45,678	-35	-106,117	-22.5	-151,795	-25.2	NA	NA
vegetable crops	-2,166	-10.3	-1,721	-5.1	-3,887	-7.1	-40,552	-23.8
fruit, berries, and nuts	-4,394	-12.8	-2,197	-22.6	-6,591	-15	-12,336	-19
sod production	7,724	79	2,878	59.2	10,602	72.4	-260	-0.9
nursery products	142	1.2	998	15.1	1,140	6.1	-218	-0.9
Christmas tree production*	-1,216	-29	-2,627	-25.9	-3,843	-26.8	-5,971	-27.4

Source: Agricultural Census, Statistics Canada. (* = change is 2001-2006)

This 10-year snapshot of farmland loss in the GGH is part of a longer term decline. From 1976 to 2011, the GGH lost 19 per cent or over 840,000 acres of its agricultural lands, which is roughly equivalent to an area the size of Peel Region, Halton Region and the City of Hamilton combined.⁴⁷ Looking forward, 264,000 acres of greenfield space is currently approved for urbanization, representing another seven per cent of the GGH's remaining agricultural lands that will disappear by the year 2031.⁴⁸ This does not take into account farmland that will be lost to exurbanites living on hobby farms, highways, golf courses, aggregate mines, airports, and other non-farm uses. Further losses will occur if we are to allow 60 per cent of the expected growth in 2031-41 to be accommodated on additional greenfield space, pursuant to the Growth Plan.

Farmland loss in the GGH is very well documented, but it is just one dimension of the oft-noted cycle of decline that affects the agricultural sector in areas stressed by urbanization from an inadequate planning framework. When urban uses intrude onto farmland, a large shadow is projected over the remaining agricultural operations in the area. Conflicts between agricultural and non-

The area farmed in the GGH is steadily decreasing, going from about 4.1 million acres in 2001 to 3.8 million in 2011, a drop of six per cent in just 10 years. Farmland loss declined at a faster rate in the white belt, but total loss of active farmland was greatest in the outer ring.

agricultural land users increase, disrupting farming practices and causing uncertainty that undermines the profitability of farmers and supporting businesses. When entrepreneurs lose confidence in farming as a viable enterprise in an area, they pull up stakes and move to areas with longer-term promise. In this way, some agricultural areas in the GGH have lost essential agricultural support businesses and services, such as farm machinery dealerships, repair shops, food processing facilities, abattoirs, and food grading stations. Farm operators highly dependent on these services—fruit or livestock farmers for

Table 6: Area farmed in the GGH (2001, 2006, 2011)

		Inner Ring			Outer Ring			GGH			Ontario		
	Units	2001	2006	2011	2001	2006	2011	2001	2006	2011	2001	2006	2011
Area farmed	acres (1,000)	1,081	1,043	977	2,978	2,954	2,840	4,059	3,997	3,817	13,507	13,310	12,668
Change by 2006	acres (1,000)	-38,239			-23,816			-62,055			-197		
Change by 2006	%	-3.5			-0.8			-1.5			-1.5		
Change by 2011	acres (1,000)	-103,657 -65,418			-138,016 -114,200			-241,673 -179,618			-839 -642		
Change by 2011	%	-9.6 -6.3			-4.6 -3.9			-6 -4.5			-6.2 -4.8		

Source: *Agricultural Census, Statistics Canada.* (* = change is 2001-2006)

example—leave the area because their ability to compete and long-term viability are compromised.

Infrastructure (e.g. water, sewer, and roads) to support the new urban uses is often overbuilt on the assumption that further chunks of farmland will eventually be urbanized. This triggers a spiral of speculation as developers looking to capitalize on new infrastructure bid for farms in the area. Unable to compete with speculators, farmers cannot afford land to grow their operations. As more farmers and farm support businesses and services sell to speculators, the agricultural system fragments and farm investment declines. More and more lands are owned by absentee owners and farm conditions visibly deteriorate, creating a sense of resignation in the remaining shreds of the farm community. Meanwhile, municipalities hungry for new tax payers to help pay for the infrastructure rationalize a new expansion of the urban envelope, which leads to another turn of the cycle.

This vicious circle thrives in a context of planning regulations that provide only temporary protection of agricultural lands while allowing continued expansion of the urban footprint. This planning approach conveys the essential message to the range of stakeholder parties involved that agricultural land is simply an urban reserve, a message that serves as a self-fulfilling prophesy.

A unique combination of natural and locational advantages has created winning conditions for farmers in the GGH and helped make them among the most productive on the continent. However, these advantages will not guarantee a healthy farming sector in the GGH that can compete with farm products produced elsewhere in North America and the world. The numbers presented above indicate that the sector is under stress as its land base is chipped away and some farm activities—such as livestock operations—are driven away. The next section will discuss how to address this situation.

Looking forward, 264,000 acres of greenfield land are currently approved for urbanization, representing another seven per cent of the GGH's remaining agricultural lands that will disappear by the year 2031.

Opportunities for Greater Farmland Protection

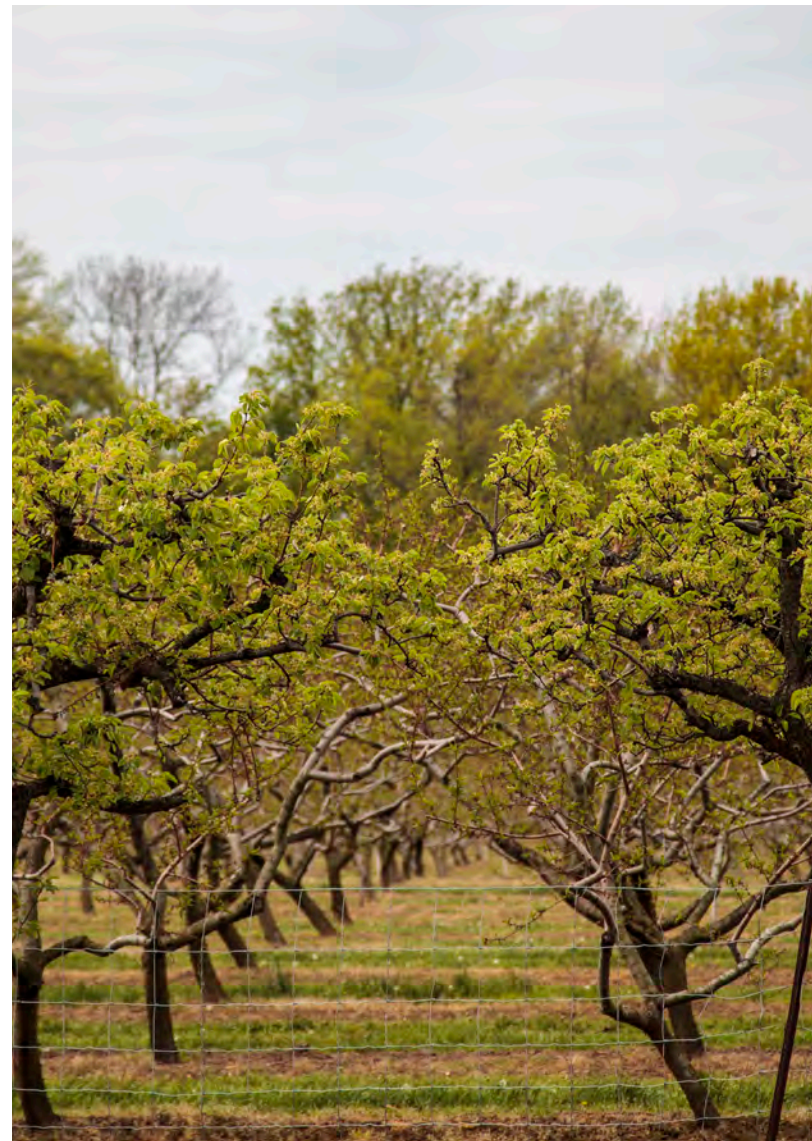
The vicious circle of decline affecting the farm industry in rapidly growing urban regions is a well-known and much discussed phenomenon. Less often noted is the potentially virtuous circle of revitalization, whereby the various positive elements come together to create a vibrant farming sector throughout the region. In this scenario, protecting an integrated system of agriculture lands and supporting businesses is given high priority, speculation is rendered pointless, urban intrusions are kept to a minimum, profitability in the industry is healthy, farmers and support businesses see a long term future in their chosen profession, investment in the sector is high, and no one is tempted to sell off or out for extra revenue.

Planning is central to both stories—to both decline and to success. Our present system can be described as a “negative planning” regime whereby we plan for growth and infrastructure in the foreground and agriculture is what is left over in the background once the dust settles. Other provinces like British Columbia and Quebec, and states like Oregon, have more progressive agricultural-centered planning systems dedicated to maintaining a healthy farmland base and building healthy farm economies into the indefinite future. These systems all provide the perception and reality of permanency that short-circuits the never-ending cycle of farmland conversion to urban uses.

Examples such as this tell us we can do better in Ontario and in particular the GGH, where agriculture is at once the most promising and the most threatened of anywhere in the province. In spite of the plans and policies in place in the GGH, farmland continues to be lost to other uses at an unsustainable rate. It’s time to explore opportunities and new policy approaches to enhance our ability to protect the agricultural land base. The opportunities and suggestions noted in this section are meant to

help us transition to a “positive planning” system that better integrates agricultural concerns into land-use decision-making, permanently protects areas of high agricultural potential, and supports agriculture as the preeminent land use.

But protecting the land base is not enough, Ontario must also support farming as an economic activity. When these two goals are not pursued in tandem, it’s possible to still end up with dilapidated rural landscapes that are lacking vitality. Land-use plans and policies need to work in tandem with



complementary tools and resources that protect farm operations and revitalize them where they are under pressure. The OFA and Environmental Defence cannot do justice to this dimension of the solution in a report on land-use planning, but our recommendations below suggest how land-use and other policies can work together.

Define and map agricultural system

Earlier, this report discussed the generally low level of understanding of agricultural issues within the three levels of government in the GGH. This is in contrast to the relatively sophisticated understanding of natural heritage features that has been developed in the region with effective tools for identification and mapping of natural features and strong policies for protecting them. The notion of a natural heritage system has been a key factor in catalyzing

Other provinces like B.C. and Quebec, and states like Oregon, have more progressive agricultural-centred planning systems dedicated to maintaining a healthy farmland base and building healthy farm economies.

Describing an agricultural system throughout the Growth Plan area would entail identifying key features and mapping components in order to recognize the system's strengths and weaknesses.

progress on this front in the last 20 years. The idea of applying the systems concept to agricultural land and supporting agricultural infrastructure is now springing forward in terms of protecting and promoting agriculture too. The Greenbelt Plan refers to the broad concept of an agricultural system but some stakeholders are asking for a more refined working concept and more detailed policies to create a GGH agricultural system. Moving forward, this nascent concept needs to be fully spelled out in the revised plans.

While this may appear to be a daunting undertaking, there are some significant building blocks already in place. Municipalities are required to identify prime agricultural areas, so they have already mapped the agricultural land base. The limitation of this approach is that this mapping is sometimes based on data from decades past and there has been no standardized guidance from the Province. The result is a somewhat outdated view of the agricultural land base marked by inconsistencies

The B.C. Agricultural Land Reserve

In Greater Vancouver, an agricultural preserve works in tandem with urban containment boundaries that can only be changed with the approval of a provincially-appointed commission. The Agricultural Land Reserve (ALR) is a special land-use zone in which agriculture is recognized as the priority use, farming is encouraged, and non-farm uses

are restricted. The Commission that governs the ALR is an independent Crown agency with the mission to protect agricultural land and encourage and enable farm business. The boundary created by the ALR has obliged local governments to seek out more innovative approaches to growth through densification and the creation of compact communities. As a result, Metro Vancouver has an intensification rate approaching 75 per cent of new growth and near urban agriculture has been protected.

in how agricultural land is classified and mapped and a confusing array of different nomenclatures in the Official Plans of adjacent municipalities. Moreover, this mapping may be somewhat one-dimensional, relying only on a single variable, i.e., soil types.

A more complex method was used to assess farmland for protection in the area that was to become the Greenbelt. Land Evaluation and Area Review (LEAR) is a multi-dimensional tool developed by the Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA) in the 1990s that can be used to assess the health of the agricultural sector in a given area by mapping data on parcel sizes, farmland fragmentation, intrusion of non-farm uses, climatic factors, infrastructure, and economic performance. The weakness of this tool is that it does not include data on the agri-businesses that supply farms with inputs and services or handle the processing, distribution, and marketing of farm products. Fortunately, another initiative—the Agri-Food

Asset Mapping Project—can help fill this need. This massive undertaking by the Golden Horseshoe Food and Farming Alliance (in partnership with OMAFRA and area municipalities) maps the entire value chain in the different sectors of the farm economy using a geocoding method. After having completed the mapping for the Golden Horseshoe municipalities, the project is now expanding to the entire GGH.

Combining the various building blocks and augmenting them with more data on infrastructure would provide a relatively complete overview of the agricultural system in the GGH. To ensure consistency and comprehensiveness, this initiative would have to be led by the Province, but it should work in partnership with municipalities, farm organizations, and other stakeholders with local knowledge, reliable data, and the ability to ground-truth outputs. The partners should work together to identify sub-areas for analysis and metrics, gather data, and standardize outputs.

Key Components of an Agricultural System

The agricultural system includes all the components related to a healthy farming system in a given area. The system can be divided into the productive land base, inputs into the system and outputs from the system:

- The land base is at the core of the system, with information on the location of prime agricultural areas and specialty crop areas based on criteria such as soil, climate, productivity, and type of operation. The land base can also be categorized by average lot sizes, the degree of fragmentation, and intrusion of non-farm uses.
- Inputs may include the range of wholesale or retail companies that provide goods or services to farms. This includes local businesses that facilitate farming in a given area, like nurseries, local co-ops, veterinarians, and farm equipment repair shops; strategic businesses that service whole regions, such as seed, fertilizer, and crop protection distributors, along with farm equipment dealers; and infrastructure inputs include water supplies for irrigation, the availability of three-phase electrical supply, natural gas access, broadband internet, among others.
- On the output side, an agricultural system includes first-level processing and packaging facilities such as canneries, grading stations, packing facilities, and abattoirs. Distribution and marketing opportunities include farmers' markets, community shared agriculture systems, food hubs, and wholesalers.

The Agri-Food Asset Mapping Project is mapping the entire value chain for different farm economies, in the GGH. It will provide a basis with which to link land-use policy, infrastructure investment, and economic development plans and programs in rural areas.

The results would be extremely useful from a policy and planning point of view as it would provide a basis with which to link land-use policy, infrastructure investment, and economic development plans and programs in rural areas. An agricultural systems approach would allow gaps in the system to be recognized and point to components to be added or strengthened in order to preserve or revitalize the farming sector in a given subarea, e.g. land or transportation corridors to physically connect separated farming clusters, input or output services such as processing plants, or infrastructure such as tile drainage. It would also serve to assess the overall strengths or weaknesses of sub-areas from an agricultural perspective and inform policy decisions on which areas are to be protected in the long-term versus those that should be targeted to accommodate growth. Finally, an agricultural system map could improve the analysis of alternatives during environmental assessments of infrastructure projects.

Currently, the Growth Plan contains an unfulfilled policy commitment to identify and protect prime agricultural areas through sub-area assessments. To identify and map an agricultural system for the GGH, the Ontario government should revise the Growth Plan to describe an agricultural system in greater detail and assign clear responsibility for leading the effort to define and map the system across the GGH, including the Greenbelt Plan area.

Promote a better understanding of agriculture issues

The issues raised earlier in this report suggest that agricultural issues are often ignored or downplayed in decision making by governmental authorities in the GGH. Appreciation of agriculture among the public is growing. People are increasingly concerned about the providence of their food supplies, the health of the regional agricultural economy, and connecting with agriculture through farm visits, community shared agriculture, and so on. When farmers present their concerns to public officials, however, they often find that their interests and perspectives are misunderstood, downplayed compared to other stakeholders, or completely sidelined.⁴⁹ Policies are adopted or applied in such a way that makes sense in an urban milieu, but are annoying, costly or destructive in a rural context. Approvals for building permits and other applications are often fraught with misunderstandings, a lack of flexibility to account for rural distinctiveness, and unnecessary delays.

One reason for the poor communication between the farm community, planners and other officials is the predominate focus on urban issues at technical and university programs. This results in a lack of sensitivity to the distinctive nature of rural and agricultural needs. One way to enhance agricultural understanding among officials would be to work through professional associations to offer continuing education on rural issues. Any number of agencies, such as OMAFRA, the OFA, or the Friends of the Greenbelt Foundation, could help develop agricultural training for land-use planners, traffic engineers, environmental planners, and so on.

A good example of what is possible on this front is a recent initiative by the Friends of the Greenbelt Foundation. The Foundation is developing and delivering training for planners to increase their understanding of agricultural trends and issues. The content focuses specifically on near urban areas and planners' capacity to develop and interpret planning policies and regulations that are supportive of the agricultural system. Accreditation is provided by the Ontario Professional Planners' Institute.

Agricultural Liaison Officer in Halton

Halton instituted the position of Agricultural Liaison Officer (ALO) in 2013. The ALO reports to the planning director and plays an important role in promoting agricultural interests and the agricultural industry in the regional municipality. Candidates for this position require a degree in agriculture and a background in agricultural policy.

The duties of the ALO include:

- Developing an economic development and investment strategy for agriculture in Halton
- Looking for ways to strengthen the value chain in the agricultural industry in Halton, e.g. by linking farmers with local distributors and retailers
- Marketing local agricultural products to Halton communities
- Implementing farm succession planning, including attracting new farmers to Halton
- Promoting environmental stewardship by providing support in the preparation

of environmental farm plans and environmental impact assessments for agricultural buildings

- Developing and implementing education programs to promote public awareness and support for the agricultural industry
- Developing plans and programs to promote and support agriculture innovation
- Providing expert testimony before the Ontario Municipal Board and other judicial tribunals
- Providing staff support to the Halton Agricultural Advisory Committee

Halton's ALO is also beginning to play a role in the land-use planning process by reviewing and commenting on major land-use planning documents. For example, the ALO may review the Official Plan to ensure it reflects provisions of OMAFRA's guidelines concerning permitted uses in prime agricultural areas in a way that dovetails with opportunities and constraints in the local farming industry. Halton's ALO is a model that other municipalities and regions should look to emulate.

Another way to move forward would be to encourage municipalities to appoint agricultural liaison officers, i.e. a senior official who would advise council on agricultural matters, help promote agricultural economic development, provide awareness training for municipal officials, help farmers and food industry entrepreneurs navigate approval processes, and provide feedback to regulatory authorities on ways to improve review and approval procedures. Important for our present purposes is their potential role in advising council on planning and regulatory matters related to agriculture—reviewing drafts, Official Plans, and

zoning bylaws, for example—and in promoting good farming practices that can reduce conflict with non-farm land users. At present, there is only one fully dedicated agricultural liaison officer in the GGH—in Halton. Other municipalities have economic development officers who dedicate part of their time to farm issues, but do not necessarily have a background in agricultural issues.

Municipal agricultural advisory committees (AAC) have also been suggested as a vehicle for sensitizing local officials to the realities of farming in the GGH. These committees—typically made up of farmers, local farm organization representatives, and

One way to enhance agricultural understanding among officials would be to work through professional associations to offer continuing education on rural issues. Another way to move forward would be to encourage municipalities to appoint agricultural liaison officers.

municipal officials—provide advice to municipal staff and council on agricultural land use and farm-related issues. For example, they may review development proposals, and draft municipal bylaws and planning documents to ensure they do not sideswipe agricultural interests in the municipality. They could also review standards used for roads, bridges, and roundabouts in rural areas to ensure they can be negotiated by large farm machinery.

The Growth Plan encourages municipalities to establish and work with Agricultural Advisory Committees (AACs) and consult with them on decision-making related to agriculture and growth management. Inner ring municipalities already have such committees in place, although there are questions about their effectiveness in influencing key municipal decisions and the narrow scope of issues that is placed before them. There seems to be a general consensus that the influence of these committees needs to be reinforced, e.g. through better provincial direction on their mandate, scope, and operating procedures, through training of

When a development with the potential to impact the agricultural resource is proposed within or in close proximity to an agricultural area, good planning practice suggests that an Agriculture Impact Assessment be required by the relevant planning agency.

their members, and information sharing among committees across municipalities. AACs currently have less of a presence in the outer ring, where they are also needed. Revising the wording of the Growth Plan to require AACs throughout the region and provide more direction on their mandate and functioning would be helpful.

Require Agricultural Impact Assessments

As discussed earlier, development applications are sometimes approved and major planning initiatives are sometimes undertaken without adequate attention given to the implication of such decisions for agricultural activities in the affected area. The provincial planning framework—including the Provincial Policy Statement (PPS), the Niagara Escarpment Plan, the Oak Ridges Moraine Conservation Plan, the Greenbelt Plan, and the Growth Plan for the Greater Golden Horseshoe—does not require a systematic assessment of agricultural impacts and in the absence of provincial direction, municipalities in the GGH present a patchwork of policies on this score. To address this situation, Agricultural Impact Assessments (AIAs) could be required in relevant circumstances.

An AIA is a study conducted by a municipality for the purpose of identifying and assessing the impact of converting agricultural land to other uses on remaining agricultural operations in the vicinity. When a development with the potential to impact the agricultural resource—whether that be a residential subdivision, expansion of an aggregate operation, or the extension of linear infrastructure—is proposed within or in close proximity to an agricultural area, good planning practice suggests that an AIA be required by the relevant planning agency. This would ensure that the well being of the agricultural base be considered in any land-use decisions that might affect it. The requirement for AIAs could be expressed in guidelines on permitted uses in prime agricultural areas, currently being drafted by OMAFRA. Alternatively, the Growth Plan could be amended to require that an AIA be conducted for major planning strategies affecting agricultural areas and for all non-agricultural development proposals on or near agricultural land.

Agricultural Impact Assessments (AIA) in Halton

The Region of Halton Official Plan requires an Agricultural Impact Assessment (AIA) be conducted as part of the development application process in relevant circumstances and provides guidelines for proponents to use in preparing the assessment. The need for an AIA is triggered by non-agricultural development within an agricultural zone or within one kilometre of such a zone. In addition to development proposals, an AIA may be required as part of any secondary plan process that, if approved, would permit development within an urban area on lands in close proximity to an agricultural area.

Among the components of an AIA required by Halton's Official Plan are:

- An evaluation of constraints on agricultural production arising as a result of existing and proposed non-agricultural uses in the area, including minimum distance separation, nutrient management, traffic impacts, etc
- A description of the long-term agricultural potential of the site, including an overall description of the broad rural area containing the site, fragmentation and tenure (absentee, non-farm) characteristics, non-agricultural land uses, the general agricultural (soil and macroclimatic) capability, and the availability of agricultural support services to the site
- A description of the future effects of the proposal on existing and potential farming operations, including OMAFRA's minimum distance criteria for the separation of livestock operations from sensitive land uses, nutrient management issues, the compatibility of the proposal with agricultural operations, potential impacts on wells or impacts due to noise and increased traffic
- Consideration of the proposal's impact on the existing agricultural character of the general area including implications for land use, tenure, or fragmentation patterns
- Consideration of the potential cumulative impacts of this proposed development in the context of other decisions in the area
- A description of any measures that could be taken to mitigate the impacts of the proposal on agriculture and the degree to which the impacts would be reduced
- An alternative location analysis to demonstrate that the proposed development location has the least impact on agriculture and to demonstrate the need, within an appropriate planning horizon, for additional land to be designated to accommodate the proposed use

Prevent conflicts between agricultural and non-agricultural land uses

Across the GGH, the nature of the rural countryside is changing through the encroachment of settlement areas, the influx of non-farm rural residents, and the expansion of farming into larger, more intensified operations. These changes are generating more opportunities for conflict between farmers and non-farmers, both in the open countryside and at the urban-rural fringe. This is bringing the farm economy to a crossroads; its viability to continue production is dependent on approaches to resolve disputes concerning normal farming practices.

The Farming and Food Production Protection Act (1998) protects farmers employing normal farm practices from nuisance court actions over agricultural odours, noises, dust, light, vibration, smoke, or flies. The Act established the Normal Farm Practices Protection Board to hear and rule on complaints against farmers. In addition, the Board hears and rules on applications from farmers for exemptions from unduly restrictive municipal by-laws. The Ontario Municipal Board (OMB) is also called upon to adjudicate conflicts between farm and non-farm interests in matters related to land-use development and the compatibility of adjacent

activities. While these mechanisms are useful in addressing certain types of conflicts, they are slow-moving, expensive to use, and have uncertain outcomes for farmers, all of which contributes to the instability of farming, within or near urban boundaries.

A more sustainable approach to this matter is to work towards a policy framework that prevents conflict from arising in the first place. In the case of livestock farming, existing minimum distance standards (MDS) take this approach—regulations set out formulae to prevent encroachment on livestock farms by neighbouring uses, providing sufficient separation between the two. These guidelines are now being updated by OMAFRA to incorporate new farming practices and technologies. This is an opportunity to develop new separation distance formulae for non-livestock agricultural uses, such as grain dryers and greenhouses, which also need to be protected from neighbouring uses. The revised guidelines should direct municipalities to establish the MDS setbacks early in the land-use planning process—i.e. at the time of an Official Plan amendment for new or expanding settlement areas.

Another way to prevent conflict from arising is to restrict non-agricultural uses on prime agricultural lands. The only permitted uses on prime agricultural lands should be agricultural uses, agriculture-related uses, on-farm diversified uses compatible with the surrounding agricultural operations, and home-based businesses located within the existing dwelling. Other acceptable uses include secondary activities related to farm operations (e.g. grain drying) as well as commercial and industrial activities that could provide supplemental income to farm businesses to keep those farms financially viable. Other types of industrial and commercial development are best located within existing industrial and commercial areas inside urban settlements. Recreational uses such as public parks,

Another way to prevent conflict from arising is to restrict non-agricultural uses on prime agricultural lands.



golf courses and amusement parks should not be permitted in prime agricultural areas.

The 2014 PPS allows limited non-residential, non-agricultural uses in prime agricultural areas under certain conditions. OMAFRA's draft guidelines on interpreting this and other provisions of the PPS related to permitted uses in prime agricultural areas makes clear that the full range of commercial, industrial, institutional, and recreation uses are on the table. Given the degree of intrusion of urban uses in agricultural areas evident in many parts of the GGH and the pressure for ever more encroachments on agricultural land, the Growth Plan should adopt language that further restricts or prohibits these uses. Furthermore, any municipal planning decision that is designed to relax restrictions on non-agricultural land uses in agricultural areas—such as re-designating agricultural as rural land—should be carefully monitored by the Province and appealed to the OMB if necessary.

A third approach to conflict prevention is through landscape design. While routine Agricultural Impact Assessments (AIAs) would help flag potential conflicts during the project design stage, stronger policy direction is needed to encourage proponents of new or expanding non-agricultural uses to adopt mitigation measures that will meet the needs of the farming community. The main idea here is to require a buffering land use between the non-agricultural and agricultural land uses in order to physically remove the two uses from each other's impact zones.

The 2014 PPS requires that in prime agricultural areas, impacts from new non-agricultural uses on surrounding agricultural operations and lands are to be mitigated to the extent feasible (Policy 2.4.1), but no further details are provided, making it easy to ignore. OMAFRA's draft Guidelines on Permitted Uses in Ontario's Prime Agricultural Areas suggests placing intervening land uses between agricultural and residential areas in order to mitigate impacts on agricultural operations, e.g. a storm-water management, pond, or green space. Compared to the attention given to avoiding impacts on natural heritage areas—including natural heritage manuals and well-trained people working in Conservation Authorities to monitor threats to natural heritage features—these guidelines are minimal.

Other provinces have been more proactive on

Stronger policy direction is needed to encourage proponents of new or expanding non-agricultural uses to adopt mitigation measures that will meet the needs of those who arrived first in the area, i.e. farmers.

this front. In British Columbia, for example, the Ministry of Agriculture has published a detailed 80-page guide for planning on both sides of the urban-rural line entitled *Guide to Edge Planning: Promoting Compatibility Along Agricultural—Urban Edges*. The guide proposes a 300-metre buffer zone on the urban side of the boundary that is subject to special planning and design attention. Suggested solutions described in the manual include:

- Requiring a vegetated buffer along the boundary with setbacks of 15 metres (the guide provides detailed guidelines on the design of vegetated buffers and the types of vegetation to include)
- Offering the developer higher density on the rest of the parcel in return for a larger vegetated buffer along the boundary.
- Placing the legally required park dedication along the boundary
- Designing roads to move traffic and pedestrians away from the boundary
- Avoiding road stubs or cul-de-sacs pointing into the agricultural area
- Avoiding oversizing infrastructure in expectation of further development in the agricultural area
- Locating large institutional groups of people—playgrounds, schools, churches, health care facilities, seniors' centres, etc.—far from the boundary
- Using longer, narrower residential lots along the boundary

A guide similar to the one being used in British Columbia would be welcomed in Ontario. In order

to provide a policy basis that would give the guide some teeth, the Growth Plan could adopt language requiring that non-agricultural uses in proximity to an agricultural zone be buffered using principles found in the guide.

Strengthen agriculture-related provisions in Environmental Assessments

The environmental assessment (EA) process is a large-scale undertaking that heavily influences decision-making on major infrastructure projects, including the choice of technology, the placement of the infrastructure, and mitigation procedures. The EA process for major infrastructure in the GGH—especially highways—should be modified to more systematically incorporate consideration of agricultural issues. In particular, agriculture should not be considered under the other headings—like economy, resources, or community—but should form an issue category on its own, a change that would reflect the economic, social, and environmental importance of working landscapes and the interconnections among these various dimensions in particular places. This would bring agricultural issues up to the same level of prominence enjoyed by natural heritage, which typically has a category heading of its own with sub-categories to ensure all aspects of the topic are explored.

The content of an Environmental Assessment should be revised in order to capture the full range of issues important to the long-term viability of farm operations in and near an infrastructure corridor.

Furthermore, the content of the assessment should be revised in order to capture the full range of issues important to the long-term viability of farm operations in and near an infrastructure corridor. EAs should go far beyond the need to minimize the loss

of prime agricultural land based on soil classification and consider the broader impacts of a project on the agricultural system as a whole, including effects on agriculture-supportive businesses, fragmentation of the land base, and loss of accessibility to land, support services and markets. Beyond this, EAs should also explore the indirect impacts of highway projects via the possible inducement of urban development in the vicinity, and put more weight on the role of alternative technologies less likely to trigger growth pressures in rural areas, i.e., transit and local road improvements. If a highway through a rural area cannot be avoided, EAs should be more attentive to the potential for design measures to mitigate impacts on the surrounding agricultural system. For example, underpasses and overpasses can be built to provide connections across the highway, facilitating the movement of farm machinery along the corridor.

Current fiscal arrangements encourage sprawl, exacerbating challenges for municipalities. New fiscal tools are needed to reinforce compact development goals in the GGH.

Recent EAs (such as the one being conducted for the GTA-West highway project) have shown improvement on many of these issues, but progress is being made on a case-by-case basis. What would be more helpful would be a policy-level directive from the Ontario government that would change the way agricultural interests are treated in all EAs. The directive would emphasize the need to undertake a comprehensive and integrated assessment of agricultural issues and highlight the priority that should be given to planning infrastructure in order to avoid or minimize impacts on the agricultural system. The language governing infrastructure planning in the four land-use plans in the GGH could be reinforced to this effect.

Revise development charges and tax policies to discourage sprawl and encourage farm investment

Land-use plans and policies are essential to help protect and support agricultural lands and operations, but they need to work in tandem with complementary tools and resources, such as fiscal instruments. Currently, fiscal arrangements encourage sprawl; undercharging developers for municipal costs caused by new greenfield developments, artificially distorting the market in favour of sprawling development, and exacerbating the fiscal challenges faced by municipalities in the GGH.

Fiscal tools can be used to reinforce the compact development goals expressed in the GGH planning framework. Local governments have a

number of these tools at their disposal, including development cost charges and property taxes. The Province is presently reviewing its development charges system (Bill 73). Changes to the Act should ensure development charges discourage sprawl by including all costs related to growth in their purview and allowing infrastructure standards to rise rather than be based on a backward looking 10-year average service level cap. Furthermore, the revised Act should encourage municipalities to base charges on the location in which the development occurs. For example, the City of Kitchener's suburban residential development charges are 74 per cent higher than those for central neighbourhoods.⁵⁰ For non-residential buildings, suburban charges are 157 per cent higher.⁵¹ Similarly, Ottawa has higher charges for development beyond its greenbelt.⁵² Hamilton provides a 90 per cent exemption from development charges in the downtown area.⁵³

Edge Planning in Waterloo Region

Waterloo Region is taking a very broad approach to edge planning—an approach that not only eliminates conflict between urban and rural land uses, but reinforces the region's commitment to permanent rural landscapes outside its urban boundary. The Region uses major landscape features to define its urban boundary, composed of environmentally sensitive landscapes (wetland clusters, woodlots, etc.), protected countryside, and recharge areas (moraine). Urban expansion into areas with these designations is prohibited in the region's Official Plan. Together, these wide swaths of land add up to about 70,000 acres of permanently open space. About 75 per cent of the urban boundary is buffered in this way with the remaining boundary being the direction the Region intends to grow in.

The Region is also using community design and infrastructure planning to reinforce its

permanent urban edge. Subdivisions abutting the urban boundary are not permitted to contain road stubs that dead end towards the buffer area—short-circuiting a common practice that presupposes further additions to the urban area. The Region also requires that infrastructure servicing the edge areas be sized to accommodate only the land within the current boundary, making it very difficult for future councils to allow urban growth to penetrate the boundary.

The public has enthusiastically adopted the Region's approach, indicating that an attractive, highly visible landscape ribbon is a more meaningful boundary than a line on a map. Even developers have accepted the approach. The creation of a permanent edge to the city has invigorated the farm economy outside the buffer area. Speculation and creeping divestment in farm operations are being reversed as farmers realize they can count on being viable into the indefinite future.

Hamilton provides a 90 per cent exemption from development charges in its downtown area. An exemption on farm buildings makes sense as they typically do not require public infrastructure servicing.

Finally, the revised Act should provide a statutory exemption to farm buildings/structures from all development charges as they typically do not require public infrastructure servicing.

Farming in the GGH could also be promoted by providing relief from municipal taxation and zoning restrictions for on-farm, value-added enterprises. Diversification through value-added operations is crucial for the economic viability of small and medium sized farms by allowing farmers to make local food 'market ready'. However, land-use planning policies tend to operate against value-added on-farm operations by unreasonably restricting the types of activities permitted (e.g. processing facilities). Furthermore, value-added activities may incur negative tax consequences. The parts of the farm properties that house the buildings in which the value-added activities take place are sometimes classified by Municipal Property Assessment Corporation (MPAC) as industrial or commercial, attracting higher municipal tax rates, thereby marginalizing or negating the net benefit accrued by engaging in the value-added activities. Providing the same tax assessment rate for on-farm value-added operations as is applied to farms and farm outbuildings on agricultural lands, as in Oregon, would increase the viability of farming in Ontario.

The Province could also play a leading role in setting up an Environmental and Ecological Goods and Services system to recognize the non-agricultural benefits provided by agricultural lands, e.g. groundwater recharge, carbon sequestration, and wildlife habitat. Such systems reward farmers for maintaining their land in long-term agricultural production, thereby benefitting society at large. This approach is being piloted in Manitoba, Prince Edward Island, and here in Ontario, in Norfolk County. A

similar program would acknowledge the importance of agricultural operations in stewarding the land and help alleviate the higher financial costs of farming in the GGH.

Reinforce the Growth Plan's growth management provisions

The movement to preserve agricultural land is the flip side of the smart growth movement. Containment of growth into a smaller footprint leaves a greater part of the surrounding countryside (including farmland) undisturbed. Compact urban areas are best served by transit rather than car-based infrastructure. Cars need spacious highways, multi-lane arterials, parking lots, driveways and garages, while public transit needs density and what transportation planners call concentrated nodes of activities, i.e. popular destinations. Transit depends on walking and people's willingness to walk depends on having walkable neighbourhoods, at both origins and destinations. Compact growth, encouraging walkable urban design and transit, and limiting car use are all allies of a healthy agricultural system. This is the combination that is at the heart of the Growth Plan's vision. It is a vision that emerged gradually in the Toronto region over a period of about 20 years and achieved a remarkable incarnation in the form of the Growth Plan about 10 years ago. This review of the planning framework in the GGH provides an opportunity to move forward with the realization of the smart growth vision that inspired that plan.

Doing so is a matter of attempting to correct some of the flaws of the Plan and its implementation but it's also a matter of adapting the Plan to new realities in the region. Beyond correcting and adapting, there is also a need for a critical shift in perspective, one that will complete the vision of a two-sided coin, with countryside on one face and city on the other. This refers to the need to adopt a proactive approach to planning that raises the profile of agriculture and sees its preservation and flourishing as a key component of a healthy countryside and city region.

In terms of new realities, recent research by the Neptis Foundation showed land consumption is slowing more than anticipated compared to the 1991-2001 decade, the time frame used to calibrate

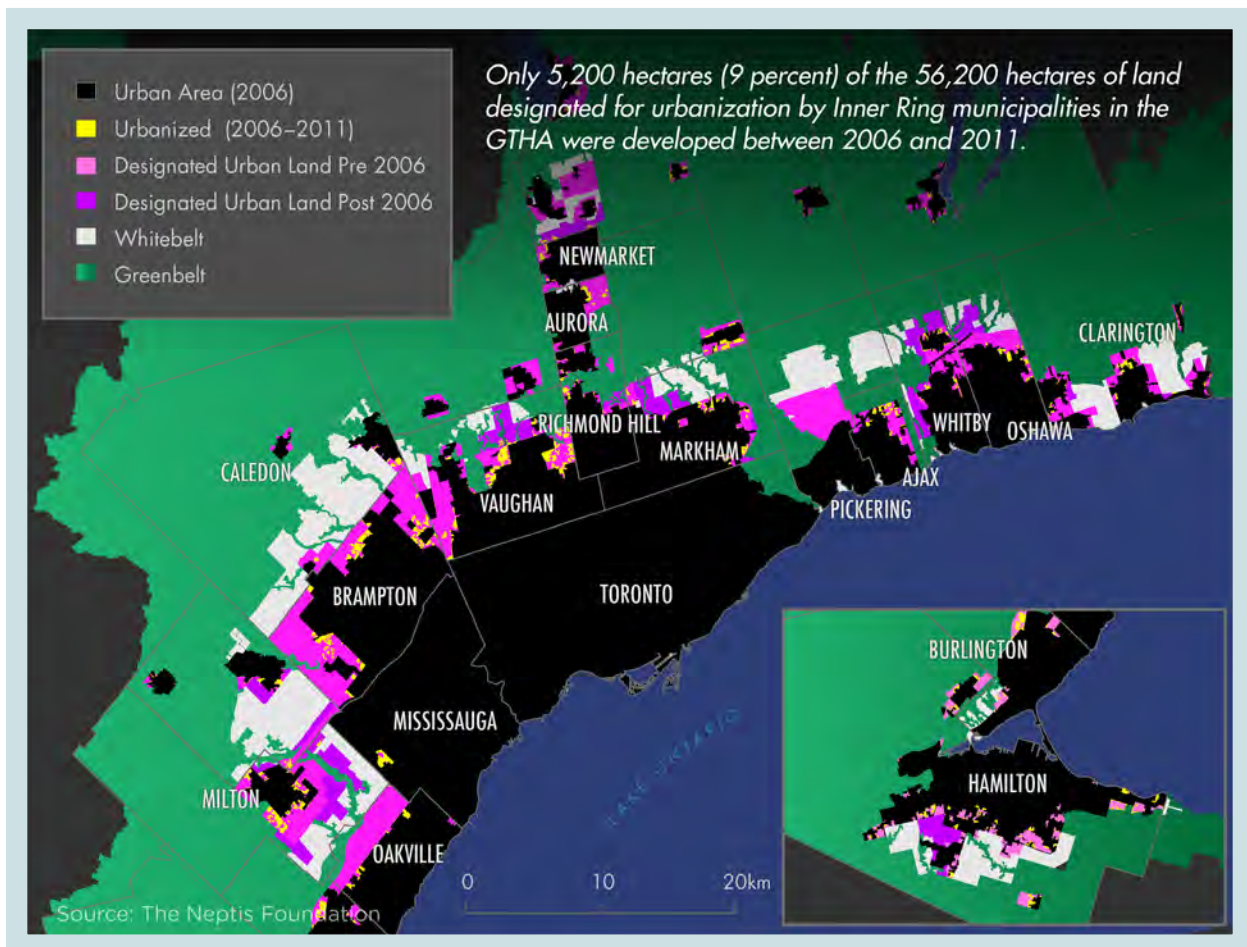
municipal land budgeting in the round of Official Plan revisions to achieve conformance with the Growth Plan.⁵⁴ Since the Growth Plan was adopted, only nine per cent of the approved greenfield land in the inner ring was developed between 2006 and 2011, or roughly half the rate that would be expected given that the period comprised 20 per cent of the Growth Plan's 25-year time frame (Figure 4). The Province's performance report on the Growth Plan suggests that the same rate of absorption applies to the outer ring.

The deceleration in land consumption reflects three other new realities—a changing housing mix, smaller lot sizes, and high intensification rates. As the Province's performance report card for the Growth Plan indicates, single-detached housing dropped dramatically from 2006 to 2013 and the share of

There is a need for a critical shift in perspective on planning, one that raises the profile of agriculture as a key component of a healthy countryside and city region.

apartments rose accordingly.⁵⁵ These trends date back to the period prior to the Growth Plan—single houses peaked in 2002 and apartments have been rising since 1998 (Figure 5).⁵⁶ These trends, which are linked to the cost of housing in the region and shifts in location preferences, apply equally to the inner and outer rings.

Figure 4: Lands developed versus lands designated in the White Belt, 2006-2011



Source: The Neptis Foundation, 2015. *Understanding the Fundamentals of the Growth Plan*. Toronto: Neptis.

There has also been a long-term decline in the size of housing lots in the GGH. As can be seen from Figure 6 (on the next page), lots for single houses on lands currently being developed are smaller in both the inner (26 per cent smaller) and outer (40 per cent) rings.⁵⁷ This is a trend that has been continuing for at least the last 20 years. This trend needs to be considered when the Growth Plan is reviewed to ensure we aren't budgeting more land than is necessary for the projected growth.

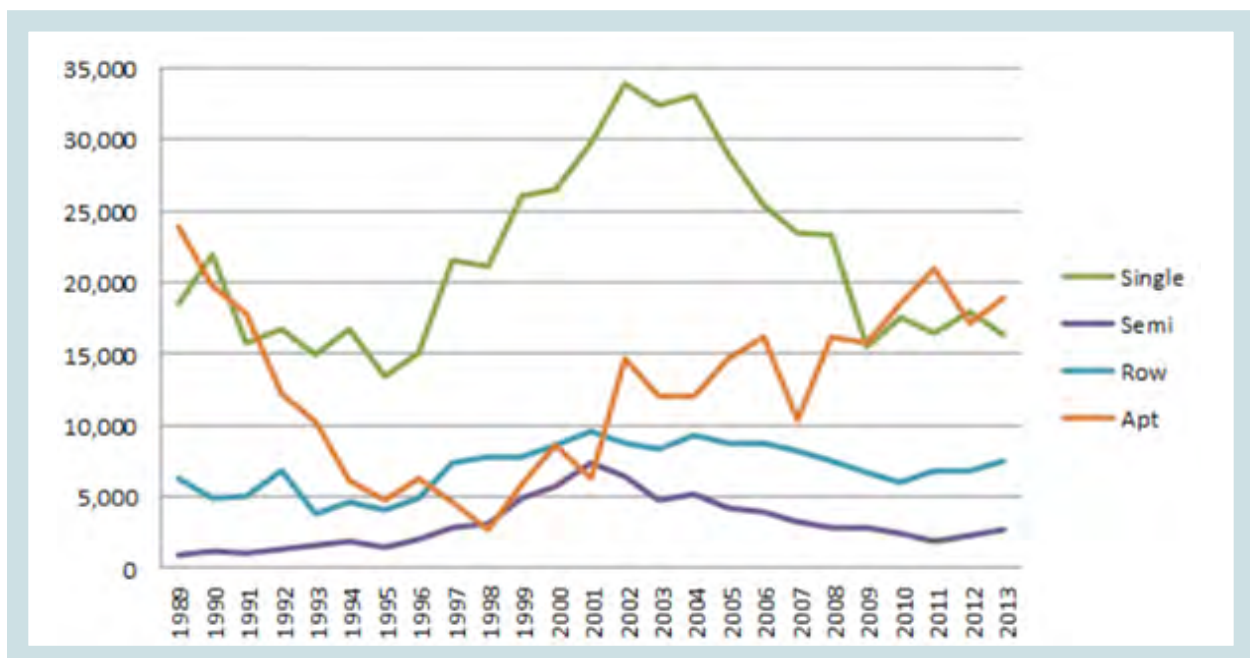
In terms of intensification rates, the Province's Growth Plan performance report shows that many municipalities are achieving or exceeding their required intensification targets ahead of the 2015 target date. Between 2007 and 2010, upper- and single-tier municipalities across the region achieved an average annual intensification rate of 60 per cent. The intensification rate for the region, excluding Toronto, was 44 per cent (Figure 7, on the next page).⁵⁸

This report has already noted that the vast amounts of designated greenfield land in the GGH are in excess of what is needed to meet the 2031 Growth Plan population and job growth targets, and are probably sufficient in most cases to meet

the inflated 2041 targets. With consumption rates much slower than anticipated, the housing mix is shifting decisively towards higher density forms, and intensification is happening to a greater extent and more rapidly than anticipated. Under these circumstances, it seems almost a foregone conclusion that no new greenfield land will be needed to accommodate population and employment growth to 2041. There is no justification, therefore, for increasing urban growth boundaries for the foreseeable future and some outer ring—e.g. in Simcoe—municipalities may in fact need to see their stock of designated greenfield lands reduced to short-circuit leapfrog development.

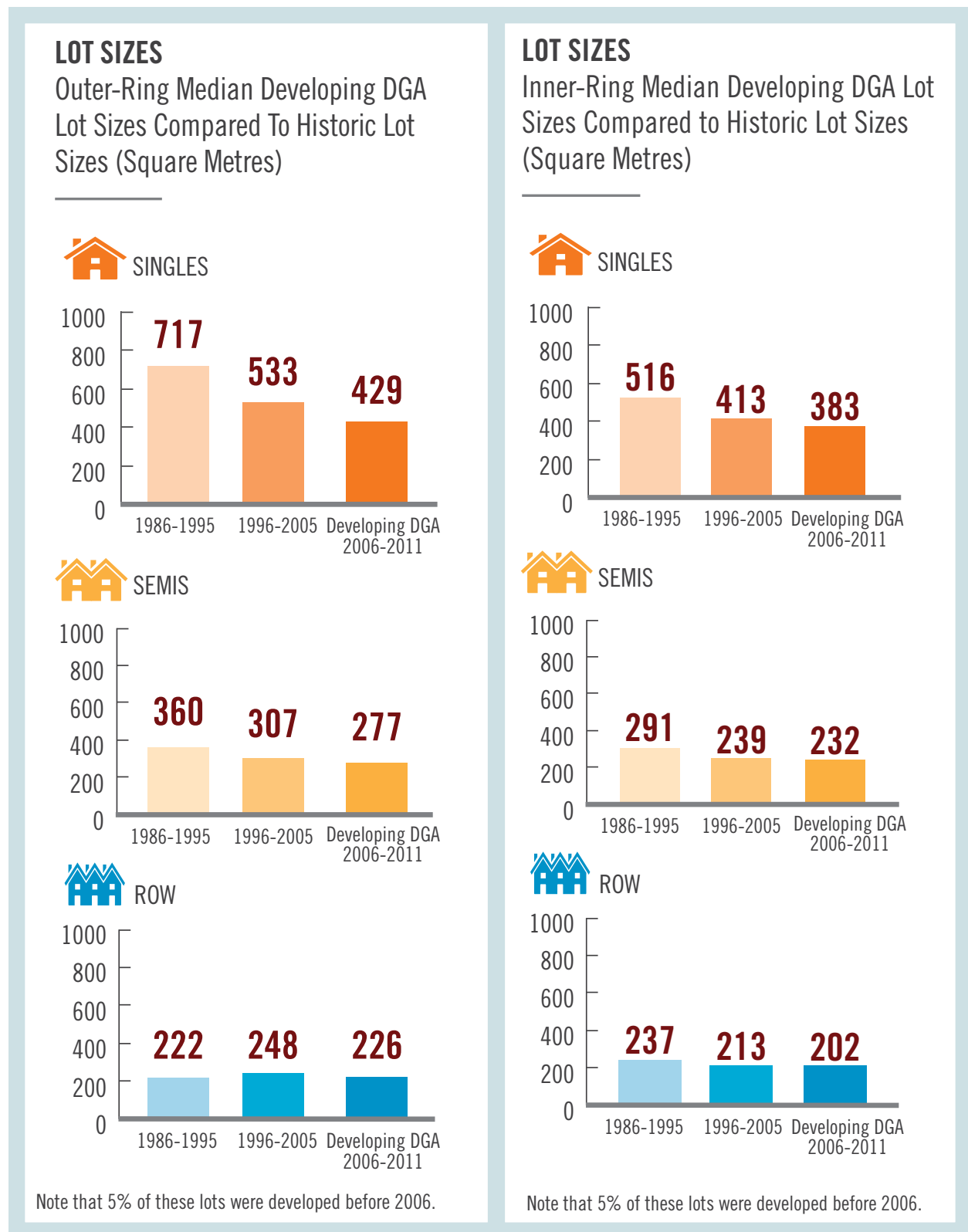
The shift in demand to smaller lot sizes, a more diverse housing mix, and higher intensification rates must be considered when the Growth Plan is reviewed to avoid larger land budgets than needed.

Figure 5: Annual housing completions in the GGH, 1989-2013



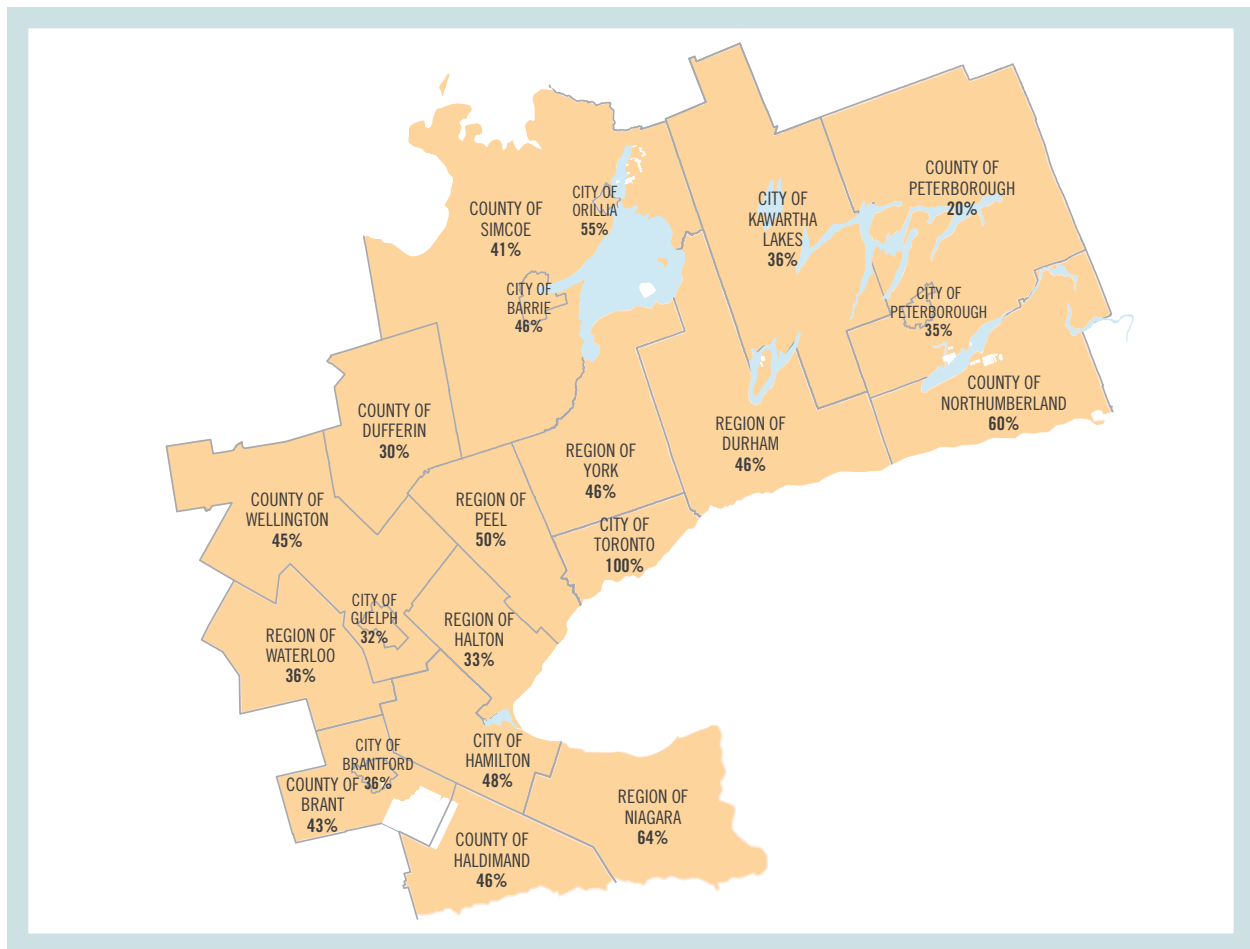
Source: Canada Mortgage and Housing Corporation

Figure 6: Trends in lot sizes, outer and inner ring municipalities



Source: Ministry of Municipal Affairs and Housing, 2015. Performance indicators for the Growth Plan for the Greater Golden Horseshoe, 2006. Toronto: Queen's Printer.

Figure 7: Average annual intensification rates, 2007-2010



Source: Ministry of Municipal Affairs and Housing, 2015. Performance Indicators for the Growth Plan for the Greater Golden Horseshoe, 2006. Toronto: Queen's Printer.

The implications of this conclusion are profound as it implies that for the first time the Province is in a strong, empirically defensible position to impose a moratorium on the growth of urban boundaries in the GGH, and to step back and do the planning necessary to identify where rural lands will remain strictly protected.

To express this shift in perspective, the Growth Plan should adopt a vision statement that lays out the Province's commitment to limiting growth within the current urban boundaries throughout the GGH and the need to permanently protect countryside both within the Greenbelt and outside it. The Greenbelt Plan lays out the basis for a long-term vision for agriculture within its boundaries by stating that agriculture is the predominant land use. Outside

of the Greenbelt, however, there is no unequivocal, authoritative statement on the long-term destiny of agricultural lands. The pre-eminent role of agriculture should be acknowledged in the preserved countryside throughout the GGH. If the Growth Plan contained such a vision, it would help clarify and validate the role of agriculture outside the Greenbelt, provide guidance in situations where agricultural uses are in conflict with other land uses, assist with the interpretation and evaluation of policy, and help resolve inconsistencies in policies emanating from various government agencies.

To consolidate this vision, permanent growth boundaries should be established where mapping shows healthy agricultural systems are already in place or likely could be restored through

For the first time, the Province is in a strong, empirically defensible position to impose a moratorium on the growth of urban boundaries in the GGH, and to step back and do the planning necessary to identify where rural lands will remain strictly protected.

permanent protection and other (e.g. economic development, infrastructure) policy supports. Within the permanent countryside boundaries, land uses in prime agricultural areas unrelated to their principle vocation should not be permitted, except in cases where such uses can be shown to be in the greater public interest (infrastructure, aggregates, etc.) through an environmental assessment.

For the white belt, there is no longer any justification for the assumption (promoted by the development industry) that it should act as an urban reserve, an assumption that has seriously destabilized the agricultural system throughout the area. At the current rate of land consumption, it would take about 12 generations to completely fill the white belt. As the Growth Plan is retuned and planning signals are gradually lined up to fully complement market forces, this number could be multiplied further. The white belt has some of the best agricultural land in Ontario and the government should study how much of it realistically will be needed to accommodate future generations, placing the rest under permanent protection.

The revised Growth Plan should also acknowledge that the original growth management targets are being superseded by market trends as developers try to reduce costs by building homes on smaller lots, shifting to more affordable housing types, and better exploiting available land

For the white belt, there is no longer any justification for the assumption that it should act as an urban reserve—an assumption that has seriously destabilized the agricultural system throughout the area.

within the built-up area. To provide further policy direction, the revised Growth Plan should ratchet up the growth management targets to 50 per cent intensification and 60 people plus jobs per ha on greenfield sites, targets that are being achieved and surpassed in other regions in Canada (e.g. in Metro Vancouver). The targets should continue to increase, based on market trends, during each future review of the Growth Plan. To reinforce the targets, this report proposes that infrastructure funding to municipalities—in particular funding flowing from the federal gas tax—be conditional on municipal achievement of the revised Growth Plan's growth management goals.

The practice of exempting some outer ring municipalities from the growth management targets should be eliminated.

The practice of exempting some outer ring municipalities from the growth management targets—tantamount to issuing a license for urban sprawl in areas that are almost completely car-dependent—should be eliminated. Moreover, the practice of allowing upper-tier municipalities to distribute the targets to lower-tier municipalities should be reconsidered. In addition, the population and employment forecasts that are at the heart of the Growth Plan need to be reassessed in light of more modest expectation for growth in the GGH. Finally, the Province should issue authoritative guidelines on the land budgeting methodology to be used for any future review of land supply needs in the region. These measures will extend the time frame for the absorption of currently designated land into the distant future, perhaps generations from now.

Conclusion



The review of the Greenbelt and the Growth Plan provides an opportunity to improve the effectiveness of the plans. The environment and our economy in the GGH are extricably linked and both will benefit if we plan our land use with the objective of supporting prosperous agricultural systems. The successful implementation of the Growth Plan is key to building the cities people want to live in, connected, walkable, vibrant communities with the amenities people need like transit but the implementation will also benefit our finite resources, like agricultural land and clean water. By incorporating the recommendations below the Growth Plan will better support a thriving agriculture community in the GGH.

Recommendations

Positive Planning

1 The Province should adopt a “positive planning” approach to land-use planning in the Greater Golden Horseshoe that better integrates agricultural concerns into land-use decision-making, permanently protects areas of high agricultural potential, and supports agriculture as the preeminent land use.

Agricultural System

2 The Province should identify and map an agricultural system for the Greater Golden Horseshoe. As a prelude, the Growth Plan should be revised to describe an agricultural system in greater detail and assign clear responsibility for leading the effort to define and map the system across the region.

Better understanding of agricultural issues

4 The Province, municipalities and agricultural stakeholders should enhance agricultural understanding among officials by working through professional associations to offer continuing education on rural issues.

5 The Province should encourage and provide support to municipalities to appoint agricultural liaison officers, i.e. a senior official who would advise council on agricultural matters, help promote agricultural economic development, provide awareness training for municipal officials, help farmers and food industry entrepreneurs navigate approval processes, and provide feedback to regulatory authorities on ways to improve review and approval procedures.

6 The Province should revise the Growth Plan to require Agricultural Advisory Committees (AACs) in each region and provide more direction on their mandate and functioning on decisions related to agriculture and growth management. The Plan should be revised to require AACs throughout the region and provide more direction on their mandate and functioning.

Agricultural Impact Assessments

7 The Province should revise the Growth Plan to require that municipalities conduct Agricultural Impact Assessments under relevant circumstances, such as major planning strategies affecting agricultural areas and for all non-agricultural development proposals on or near agricultural land.

Conflict Prevention

8

The Province should develop new separation distance formulae for non-livestock agricultural uses that also need to be protected from neighbouring uses. The revised guidelines should direct municipalities to establish the minimum distance setbacks early in the land-use planning process, i.e. at the time of an Official Plan amendment for new or expanding settlement areas.

9

The 2014 Provincial Policy Statement allows limited non-residential, non-agricultural uses in prime agricultural areas under certain conditions. The Province should revise the Growth Plan to adopt language that further restricts or prohibits these uses in prime agricultural areas.

10

The Province should monitor municipal planning decisions that would relax restrictions on non-agricultural land uses in agricultural areas—such as re-designating agricultural land as rural land—and appeal to the Ontario Municipal Board if necessary.

11

The Province should prepare a guide on landscape design and buffering between agricultural and non-agricultural land uses. The Province should also adopt language in the Growth Plan to require that non-agriculture uses in proximity to an agricultural zone be buffered using principals found in the guide.

Environmental Assessment

12

The Province should adopt a policy-level directive requiring a comprehensive and integrated assessment of agricultural issues during environmental assessments and to prioritize minimizing impacts on the agricultural system. The Province should reinforce these goals in the four land use plans that make up the planning framework in the Greater Golden Horseshoe.

Fiscal tools

13

The Province should revise the *Development Charges Act* to ensure development charges discourage sprawl by including all costs related to growth in their purview and allowing infrastructure standards to rise rather than be based on a backward looking 10-year average service level cap. Furthermore, the Province should revise the Act to encourage municipalities to base charges on the location in which the development occurs. Finally, the revised Act should provide a statutory exemption to farm buildings/structures from all development charges as they typically do not require public infrastructure servicing.

14

The Province should ensure the Municipal Property Assessment Corporation (MPAC) applies the same tax assessment rate for on-farm value-added operations as is applied to farms and farm outbuildings on agricultural lands.

15

The Province should play a leading role in setting up an Environmental and Ecological Goods and Services system to recognize the non-agricultural benefits provided by agricultural lands in the Greater Golden Horseshoe.

Growth management

- 16 The Province should revise the Growth Plan to include a moratorium on the growth of urban boundaries in the Greater Golden Horseshoe until at least 2031—even 2041.
- 17 The Province should revise the Growth Plan to include a vision statement that lays out the government's commitment to limiting growth within the current urban boundaries and the need to permanently protect agricultural and countryside lands inside and outside the Greenbelt.
- 18 The Province should establish permanent growth boundaries where mapping shows healthy agricultural systems are already in place or likely could be restored through permanent protection and other (e.g., economic development, infrastructure) policy supports.
- 19 The Province should revise the Greenbelt and Growth Plans to acknowledge the preeminent role of agriculture in the Greater Golden Horseshoe.
- 20 Within the permanent countryside, land uses in prime agricultural areas unrelated to their principle vocation should not be permitted, except in cases where such uses can be shown to be in the greater public interest (infrastructure, aggregates, etc.) through an environmental assessment.
- 21 The Province should increase intensification targets in the Growth Plan to 50 per cent, with 60 people and jobs per hectare on greenfield sites. The targets should continue to increase—based on market trends—during each future review of the Growth Plan.
- 22 The Province should ensure that infrastructure funding to municipalities—in particular funding flowing from the federal gas tax—should be conditional on municipalities meeting their growth management targets.
- 23 The Province should end exemptions for municipalities requesting to reduce their growth management targets.
- 24 The Province should reconsider allowing upper-tier municipalities to allocate growth targets to lower-tier municipalities.
- 25 The Province should reassess population and employment forecasts informing the Growth Plan, in light of more modest expectations for growth in the Greater Golden Horseshoe.
- 26 The Province should issue authoritative guidelines on the land budgeting methodology to be used for any future review of land supply needs in the region.

People Interviewed for this Report



Phone interviews conducted during August and September 2015

Wayne Caldwell, Professor, University of Guelph

Anna Demarchi Myers, Agricultural Liaison Officer, Halton Region

Michele Doncaster, Environmental and Land-Use Policy, Ontario Ministry of Agriculture, Food and Rural Affairs

Kevin Eby, Planning Commissioner, Waterloo Region

David Donnelly, Donnelly Law

Victor Doyle, Planning Innovation Section, Ministry of Municipal Affairs and Housing

Ella Haley, farmer in Brant County

Peter Jeffery, Senior Policy Researcher, Ontario Federation of Agriculture

Kathy Macpherson, Vice President, Research and Policy, Greenbelt Foundation

Shelley Petrie, Program Director, Greenbelt Foundation

Linda Pim, Environmental and Land-Use Policy, Ontario Ministry of Agriculture, Food and Rural Affairs

Susan Lloyd Swail, Greenbelt Program Manager, Environmental Defence

David Toyne, farmer in Vaughan

Margaret Walton, Senior Planner, Planscape

Endnotes

- 1 Ministry of Infrastructure (Office Consolidation 2013). Growth Plan for the Greater Golden Horseshoe, 2006. Retrieved from <https://www.placestogrow.ca/content/ggh/2013-06-10-Growth-Plan-for-the-GGH-EN.pdf>
- 2 Ibid.
- 3 Statistics Canada. 2011 Census of Agriculture. Last Updated 2011.
- 4 Ministry of Municipal Affairs and Housing (2002). Oak Ridges Moraine Conservation Plan. Toronto: Queen's Printer
- 5 Ministry of Natural Resources and Forestry (Office Consolidation 2014). Niagara Escarpment Plan. Retrieved from <https://www.ontario.ca/document/niagara-escarpment-plan>
- 6 Walton, Margaret (2012). Food and Farming: An Action Plan 2021. Retrieved from https://www1.toronto.ca/static_files/economic_development_and_culture/docs/Sectors_Reports/foodfarming_actionplan.pdf
- 7 Ontario Ministry of Agriculture and Rural Affairs (2014-2015 Edition). Ontario's Local Food Report. Retrieved from http://www.omafra.gov.on.ca/english/about/local_food_rpt.htm
- 8 Ibid.
- 9 Ibid.
- 10 Province of Ontario (2013). Agri-Food Growth Challenge. Retrieved from <http://www.omafra.gov.on.ca/english/stats/economy/growthtargets/scorecard14.pdf>
- 11 Statistics Canada (2011), Agricultural Census. Last updated 2011.
- 12-19 Ibid.
- 20 Environics (2007). Awareness Measurement. Friends of the Greenbelt Foundation, June 2007.
- 21 Ibid.
- 22 Econometric Research Limited, Harry Cummings and Associates & MacRae, Rod (2015). Dollars and Sense: Opportunities to Strengthen Southern Ontario's Food System. Friends of the Greenbelt Foundation, February 2015.
- 23-24 Ibid.
- 25 Informa (2010). 2010 Research Report. Greenbelt Farmers' Market Network, April 2010.
- v David Suzuki Foundation, 2008. Ontario's Wealth, Canada's Future: Appreciating the Value of the Greenbelt's Eco-Services. Toronto: DSF.
- 27 Neptis Foundation, 2013. Implementing the Growth Plan for the Greater Golden Horseshoe: Has the strategic regional vision been compromised. Toronto; Neptis.
- 28 Ibid.
- 29 Ministry of Infrastructure (Office Consolidation 2013). Growth Plan for the Greater Golden Horseshoe, 2006. Retrieved from <https://www.placestogrow.ca/content/ggh/2013-06-10-Growth-Plan-for-the-GGH-EN.pdf>
- 30 Ministry of Finance (2014). Ontario Population Projections. Retrieved from <http://www.fin.gov.on.ca>
- 31 Komorowski, Barteck & Tomalty, Ray (2011). Inside and Out: Sustaining Ontario's Greenbelt. Friends of the Greenbelt Foundation, June 2011.
- 32 Ibid,
- 33 Neptis Foundation (2013). Implementing the Growth Plan for the Greater Golden Horseshoe: Has the strategic regional vision been compromised. Toronto; Neptis.
- 34 LeFort, Ben (2014). Cost of Community Services: Case Study of Municipality of Bayham, Ontario, Canada. Ontario Federation of Agriculture, September 2014.
- 35 Statistics Canada (2011), Agricultural Census. Last updated 2011.
- 36-47 Ibid.
- 48 Neptis Foundation (2013). Implementing the Growth Plan for the Greater Golden Horseshoe: Has the strategic regional vision been compromised. Toronto; Neptis.
- 49 Caldwell, Wayne & Procter, Kate (2013). Farming in Ontario's Greenbelt: Possibility Grows Here. Friends of the Greenbelt Foundation, June 2013.
- 50 See City of Kitchener Development Charges <http://www.kitchener.ca/en/businessinkitchener/DevelopmentChargesStudy.asp>
- 51 Ibid.
- 52 See City of Ottawa Development Charges <http://www.ottawa.ca/e/city-hall/planning-and-development/how-develop-property/development-charges>
- 53 See City of Hamilton Development Charges <http://www.hamilton.ca/budget-finance/development-charges/development-charges-overview>
- 54 Neptis Foundation, 2015. Understanding the Fundamentals of the Growth Plan. Toronto: Neptis
- 55 Ministry of Municipal Affairs and Housing, 2015. Performance Indicators for the Growth Plan for the Greater Golden Horseshoe, 2006. Toronto: Queen's Printer
- 56 Canada Mortgage and Housing Corporation (2015). Canadian Housing Statistics. Retrieved from <http://www.03.cmhc-schl.gc.ca>
- 57 Ministry of Municipal Affairs and Housing, 2015. Performance Indicators for the Growth Plan for the Greater Golden Horseshoe, 2006. Toronto: Queen's Printer
- 58 Ibid.

