Agriculture Trends and Updates: Understanding the Greenbelt's Unique Advantages

JRG Consulting Group

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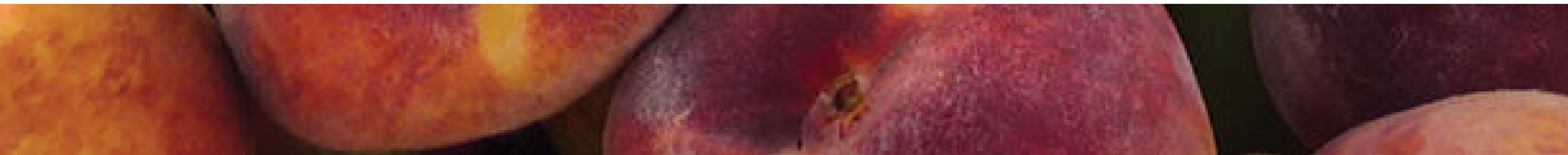

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The Friends of the Greenbelt Foundation is committed to promoting awareness and education about Ontario's Greenbelt. To this end we occasionally publish research and general interest papers that explore our three program areas: viable agriculture and viticulture; vibrant rural communities; and, a restored and protected natural environment.

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Foreword

> 53% of Ontario's fruit acreage is in the Greenbelt, more than 80% of Ontario's acreage in peaches, plums and prunes, apricots, and grapes.

Agriculture is an integral part of the Greenbelt, fostering rural prosperity and sustaining a significant agri-food sector in the Greater Golden Horseshoe (GGH). Home to 750,000 acres of some of the most productive agricultural land in Canada, the Greenbelt ensures this farmland is permanently protected.

The natural advantages of unique soils, as in the Holland and Bradford marshes, and favourable climate, such as in the Niagara Tender Fruit Region, translate to a significant volume of produce grown in the Greenbelt relative to its farm area. Nearly 53% of Ontario's fruit acreage is in the Greenbelt, including more than 80% of Ontario's acreage in peaches, plums and prunes, apricots, and grapes. While just 6.1% of Ontario's farmland, the Greenbelt accounts for 11% of Ontario's acreage in vegetables.

Farming in the Greenbelt also benefits from its proximity to Canada's largest markets in the GGH region. This proximity supports direct sales to consumers, as well as significant nursery product and Christmas tree markets. In addition, 60% of Ontario's food processing capacity is located in the

> **“Farms in the Greenbelt have slightly higher revenues per farm than in the rest of Ontario, with 60% higher revenues per acre.**

immediate vicinity of the Greenbelt, providing another large market for Greenbelt farmers.

Proximity to urban centres can, however, be a disadvantage to certain types of farm operations – in particular animal agriculture where peri-urban areas are less likely to have the supporting infrastructure. It can be more challenging to meet rules around minimum distance separation, and farmers are more likely to face odour complaints from neighbours. Urbanization, particularly development approved prior to the enactment of the Greenbelt Plan, has also contributed to a slightly higher decline in farmed acreage in the Greenbelt than in the rest of the province.

Farms in the Greenbelt have slightly higher revenues per farm than in the rest of Ontario, with 60% higher revenues per acre reflecting the higher proportion of horticulture operations, as well as smaller average farm sizes. These operations make a significant economic contribution to their rural communities, providing jobs, both on and off farm, as well as supporting overall community vitality.

Long term agricultural viability in the Greenbelt requires continued support for rural economies with local jobs, a diverse municipal tax base, and the availability of infrastructure and rural services. The secure land base, protected by the Greenbelt, means farmers and associated agri-services can continue to invest in their businesses. Sustaining the sector for decades to come requires deliberate and determined efforts to ensure:

- fair prices are paid by buyers of farm products;
- only compatible uses are permitted close to farms and farmers have the ability to use normal farm practices;
- the maintenance and improvement of soil health;
- openness of farmers to new crops, technologies, and ways of connecting with customers;
- availability of input suppliers, agri-services, and other agricultural infrastructure;
- a more coherent and simplified regulatory environment; and,
- urban boundaries are not extended into the agriculture system.

Achieving this will continue to require collaborative efforts by farmers and farm organizations, processors, retailers and other players in the supply chain, as well as planners, policy makers and regulatory authorities at municipal, watershed, provincial and national levels.

Ontario’s Greenbelt is a success because it is a working landscape, supporting a diverse, productive agricultural sector. Investments in the agricultural system and in the Greenbelt’s farmers will ensure that rural communities in the Greenbelt continue to thrive, and the 7 in 10 Ontarians who live in close proximity to the Greenbelt continue to benefit from its bounty.

1

Introduction

This report profiles agriculture in the Greenbelt based on data from the 2016 Census of Agriculture and the earlier Census in 2011 reflecting information provided by farm operators. It highlights changes over time and uses quantitative and qualitative data to explain those changes. In addition, the report places the data in context by examining agriculture in Ontario as a whole, the Ontario area outside of the Greenbelt, and in the Golden Horseshoe and the Greater Golden Horseshoe.[1]

The report is organized as follows:

Chapter 1	Describes the Greenbelt and the study methodology;
Chapter 2	Provides an overview of agriculture in the Greenbelt, including area farmed, number of farms, farm size, and land tenure;
Chapter 3	Examines farmland use by type of farming activity, with some comparisons to the rest of the province;
Chapter 4	Provides analysis of plant agriculture in the Greenbelt;
Chapter 5	Provides analysis of animal agriculture in the Greenbelt; and,
Chapter 6	Offers concluding observations on Greenbelt agriculture.

1 The Golden Horseshoe includes the Regions of Niagara, Hamilton, Halton, Peel, York, and Durham, as well as the City of Toronto and the City of Hamilton. The Greater Golden Horseshoe includes the Golden Horseshoe, as well as the Counties of Haldimand, Brant, Wellington, Dufferin, Simcoe, Kawartha, Peterborough and Northumberland, in addition to the Region of Waterloo. See Figure 1.2.

1.1 Ontario's Greenbelt

Agriculture has always been an integral part of the geographical area now referred to as the Greenbelt. The Greenbelt surrounds the western shores of Lake Ontario, from Niagara-on-the-Lake, through the Greater Toronto Hamilton Area (GTHA), to just north of Cobourg in Northumberland County (see Figure 1.1).

The purpose of the Greenbelt Plan is to permanently protect farmland and support the agricultural system, as well as the natural system and features within it. The Greenbelt includes lands within the Protected Countryside, as well as areas in the Oak Ridges Moraine and the Niagara Escarpment (see Figure 1.3).

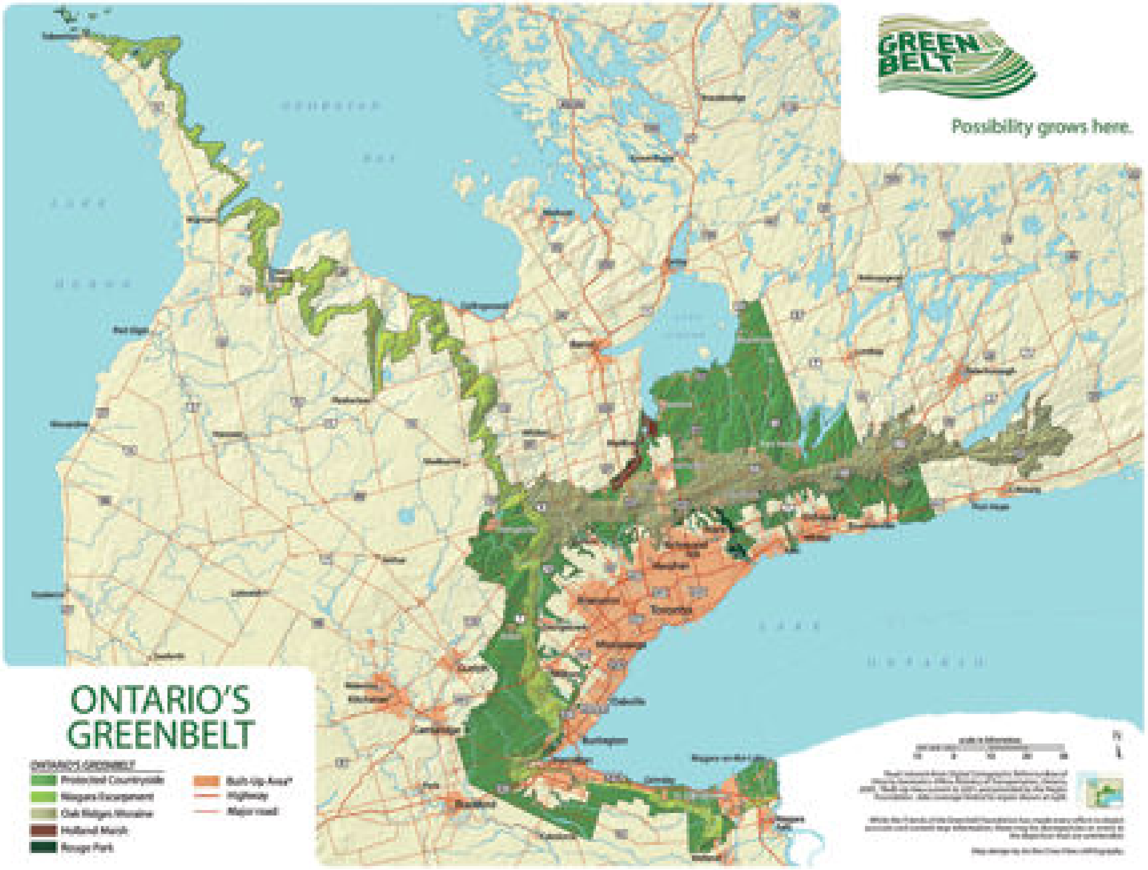


Figure 1.1 The Protected Countryside, Niagara Escarpment, and Oak Ridges Moraine within Ontario's Greenbelt

The lands in the Moraine and Escarpment are subject to their own provincial plans, each with their own more specific purpose and objectives. In the case of the Escarpment Plan, the primary purpose is to provide for the maintenance of the Escarpment and land in its vicinity as a continuous natural environment, which includes farm uses. The primary purpose of the Moraine Plan is to protect the ecological and hydrological features and functions that support the health of the region's residents and ecosystems. It similarly protects prime farmland and encourages agricultural uses.

The almost 2 million acres in the Greenbelt lie primarily within the Golden Horseshoe, as can be seen in Figure 1.2, which provides a view of the Greenbelt within the Greater Golden Horseshoe.

Figure 1.2 The Greenbelt within the Greater Golden Horseshoe

1.2 Methodology

The quantitative information for this profile came largely from the 2011 and 2016 Census of Agriculture data. The Census forms were completed by farmers and reflect what they reported. Since the Greenbelt geography does not map directly with Census boundaries, the Foundation requested Statistics Canada do a custom analysis for the Greenbelt, as well as for its component parts: the Niagara Escarpment, the Oak Ridges Moraine, and the Protected Countryside.

To undertake the custom analysis, Statistics Canada prepared a "custom-area-to-standard-area" concordance file. This file was based on dissemination areas (DAs)[2], which are the smallest geographic units used for Census data. The file took the DAs in a custom area and determined what percentage they comprised of all the DAs in the standard area. An agricultural land mask (derived from satellite imagery) was also used to better identify where agricultural activity took place. This latter step was used in 2011 and used again in 2016, and Statistics Canada believes that this methodology improves the accuracy of the custom analysis. This approach means, however, that Greenbelt-specific requests made to Statistics Canada prior to 2011 are not directly comparable to the current analysis.

2 A dissemination area is a small, stable geographic unit, with a population between 400 and 700.

The resulting percentage of DAs was used to extract the data from Statistics Canada's Census Geographic Component database. The percent of DAs for each custom area was directly applied on the values for each measured variable (e.g. acreage planted with a specific crop), as well as on the number of farms reporting for each of these factors.

This data then went to a confidentiality program where suppression was applied as required. Statistics Canada also changed its confidentiality and suppression policies in 2011, so that some data that were previously available are no longer provided for geographical areas that do not conform exactly to Census areas.

Statistics Canada was unable to provide data for financial and operational variables. OMAFRA used a methodology to partition Census subdivision data in the Greenbelt area to provide estimates for Greenbelt financial and operational data not made available by Statistics Canada for the Greenbelt. Therefore, this report uses the OMAFRA data and data for the Golden Horseshoe as a reasonable estimator or comparator.

2

Agriculture in the Greenbelt

This chapter places Greenbelt agriculture in the context of agriculture Ontario-wide as well as in the Golden Horseshoe and the Greater Golden Horseshoe. It also highlights key facts about Greenbelt farms, including acreage, number, and size, and then examines land tenure and types of farming businesses.[3]

2.1 Overview of Agriculture in the Greenbelt

Overall, 37.6% of the area within the Greenbelt was used for agricultural purposes in 2016. As reported in Table 2.1, the percentage of land in farming ranges from 23.4% in the Niagara Escarpment to 46% in the Protected Countryside. The Protected Countryside accounts for almost two thirds of the acres being farmed, while the Oak Ridges Moraine accounts for 21% and the Niagara Escarpment for 15% in 2016. This distribution of farmland within the Greenbelt is comparable to the distribution of farms within the Greenbelt, with 64.4% of the farms in the Protected Countryside, 15.7% in the Niagara Escarpment, and just under 20% in the Oak Ridges Moraine (see Figure 2.1).

3 Data for the Golden Horseshoe is used to characterize Greenbelt agriculture in cases when Statistics Canada could not partition the Census data into the Greenbelt regions.

Table 2.1 Distribution of Area Farmed, Percentage of Land in Farming and Number of Farms in the Greenbelt, 2016

Item	Units	Niagara Escarpment	Oak Ridges Moraine	Protected Countryside	Greenbelt Total
Area farmed	acres	112,449	157,912	478,352	748,713
Distribution of acres	%	15.0%	21.1%	63.9%	100.0%
Total area	acres	480,224	469,500	1,040,800	1,990,524
Percentage in farming	%	23.4%	33.6%	46.0%	37.6%
Farms	no.	749	953	3,081	4,782
Distribution of farms	%	15.7%	19.9%	64.4%	100%

Source: Greenbelt, CGC database, Census of Agriculture, Statistics Canada

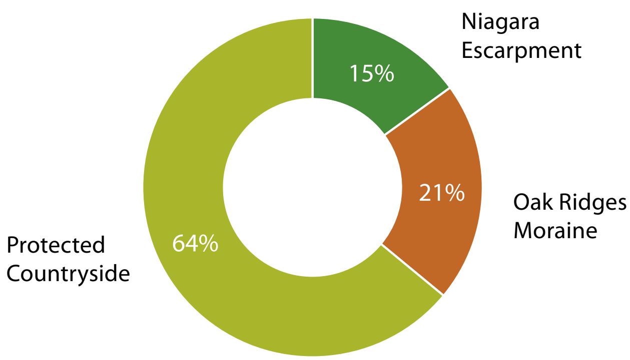


Figure 2.1 Distribution of Acreage Farmed in the Greenbelt, 2016

2.2 Greenbelt Agriculture Within the Golden Horseshoe and Ontario

Greenbelt agriculture is part of the larger Ontario agriculture industry. The Greenbelt accounts for 6.1% of Ontario's farmland, which is slightly less than its 6.8% share in 2011 (see Table 2.2). The Greenbelt has a larger share of the province's farms at 9.6% of all of Ontario's farms, reflecting that the dominant types of farming conducted in the Greenbelt do not require as large a land base as the typical Ontario farm to be commercially viable. For example, significantly more horticultural production occurs within the Greenbelt, with these operations requiring less land and more labour.

Table 2.2 Distribution of Area Farmed and Number of Farms in the Greenbelt, the Golden Horseshoe, the Greater Golden Horseshoe and Ontario, 2016

Item	Units	Greenbelt	Golden Horseshoe	Greater Golden Horseshoe	Ontario less Greenbelt	Ontario Total
Area farmed	acres	748,713	934.198	3,391,486	11,599,750	12,348,463
Distribution of acres	%	6.1%	7.6%	27.5%	93.9%	100.0%
Greenbelt share of acres	%	100.0%	79.7%	22.0%	-	6.1%
Farms	no.	4,782	5,604	16,703	44,818	49,600
Distribution of farms	%	9.6%	11.3%	33.7%	90.4%	100.0%
Greenbelt share of farms	%	100.0%	85.3%	28.6%	-	9.6%

Source: Greenbelt, CGC database, Census of Agriculture, Statistics Canada; Golden Horseshoe Crosstabs, Census of Agriculture, Statistics Canada; Census of Agriculture, Statistics

As shown in Table 2.2, the Greenbelt accounted for just under 80% of the area farmed in the Golden Horseshoe (compared to 88% in 2011), and 85.3% of the total number of farms in the Golden Horseshoe (compared to 90% in 2016). This smaller share may be attributed to Greenbelt land that was farmed in 2011, but zoned for residential or other uses, and by 2016 developed for its previously approved non-agricultural use. It may also be attributed to marginal farm land that is no longer viable to farm, land acquisition by conservation authorities, or conversion of agricultural land to mineral resource extraction.

> “The average size of farm within the Greenbelt is smaller than in the rest of Ontario.

In the Greater Golden Horseshoe, the Greenbelt made up 22% of farmland and 28.6% of farms. The second last column in Table 2.2 shows the area farmed and number of farms for the area farmed in Ontario outside of the Greenbelt, with the last column showing Ontario-wide values.

The average size of farm within the Greenbelt, at 157 acres, is smaller than in the rest of Ontario, at 259 acres (see the Ontario less Greenbelt column in Table 2.3). As well, the average farm in the Greenbelt operates fewer acres than the average farm in the Golden Horseshoe or the Greater Golden Horseshoe.

Table 2.3 Area Farmed, Size in the Greenbelt, the Golden Horseshoe, the Greater Golden Horseshoe and Ontario, 2016

	Units	Greenbelt	Golden Horseshoe	Greater Golden Horseshoe	Ontario less Golden Horseshoe	Ontario Total
Area farmed	acres	748,713	934,198	3,391,486	11,599,750	12,348,463
Farms	no.	4,782	5,604	16,703	44,818	49,600
Farm size	acres/farm	157	168	203	259	249

2.3 Trends in Area Farmed

The Greenbelt reflects province-wide trends toward decreasing farmed acreage. From 2011 to 2016, reported active farmland acres decreased by 107,711 acres within the Greenbelt, as shown in Table 2.4. The decrease occurred differently across the Greenbelt. The largest decrease occurred in the Niagara Escarpment with 25.4% fewer acres dedicated to farming over the five-year period, although the net loss of farmed acreage was higher in the Protected Countryside.

Table 2.4 Trend in Area Farmed in the Greenbelt, 2011 to 2016

Item	Units	2011	2016
Greenbelt total	acres	856,424	748,713
Change by 2016	acres	-107,711	
Change by 2016	%	-12.6%	
Niagara Escarpment	acres	150,692	112,449
Change by 2016	%	-25.4%	
Oak Ridges Moraine	acres	178,127	157,912
Change by 2016	%	-11.3%	
Protected Countryside	acres	527,605	478,352
Change by 2016	%	-9.3%	

Between 2011 and 2016, the reported area farmed in the Golden Horseshoe decreased by 4.4% (see Table 2.5) which compares to a 4.5% decline in the Greater Golden Horseshoe,[4] and a 12.6% decline in the Greenbelt. Across all of Ontario, the reported area farmed decreased by 2.5% between 2011 and 2016.

4 When Golden Horseshoe and Greater Golden Horseshoe comparisons are made over time, the data for Toronto are excluded since Toronto data are only reported in 2016. In tables showing only 2016 data the Golden Horseshoe data includes Toronto, with 73 farm operations with 5,240 acres of farmland reported.

Table 2.5 Trend in Area Farmed in the Greenbelt, the Greater Golden Horseshoe, Ontario and Ontario less the Greenbelt, 2011 to 2016

Item	Units	2011	2016
Greenbelt total	acres	856,424	748,713
Change by 2016	%	-12.6%	
Golden Horseshoe	acres	977,481	934,198
Change by 2016	%	-4.6%	
Greater Golden Horseshoe	acres	3,551,289	3,391,486
Change by 2016	%	-4.7%	
Ontario	acres	12,668,236	12,348,463
Change by 2016	%	-2.5%	
Ontario less Greenbelt	acres	11,811,812	11,599,750
Change by 2016	%	-1.8%	

> **“61% of the reduction in farmland between 2011 and 2016 was land that was rented or sharecropped.**

Table 2.5 indicates the average annual change in farmland between 2011 and 2016. In the Greenbelt, annual decline is 12.6% at 2.5%. which compares to the rest of Ontario at 2.5%.

The reduction in the total area farmed can occur for a number of reasons. It could be that the land was zoned for development prior to the establishment of the Greenbelt Plan in 2005, and was developed sometime between the 2011 and the 2016 Agriculture Census. Typically, the non-farmer owner of land that was in production before they bought it would rent the land out to a farmer until such time as they were ready to develop some or all of it. The loss of reported area farmed would occur when the owner stops leasing the land to the farmer with the result that the farmer no longer reports that acreage when completing the Agriculture Census. It may also be land that was farmed at the time of the 2011 Agriculture Census, but was subsequently purchased and used as a rural estate lot.

Farmland could also have been lost because it was:

- marginal land and it became no longer economically viable to farm it;
- purchased by an aggregate operator to open or expand a pit or quarry;
- purchased/used by the province to build a highway;
- purchased/used by a regional or county government to build or widen a regional road; or,
- acquired by a land trust or Conservation Authority.

The reduction in farmed acreage in the Greenbelt is correlated to the trend in farm numbers. The 4,782 farm operations in the Greenbelt in 2016 are 13.1% fewer than there were five years prior (see Table 2.6). The number of farm operations decreased by 4.6% and 4.7% between 2011 in the Golden Horseshoe and the Greater Golden Horseshoe respectively.

Table 2.6 Trend in Farm Numbers in the Greenbelt, 2011 to 2016

Item	Units	2011	2016
Greenbelt total	no.	5,501	4,782
Change by 2016	%	-13.1%	
Niagara Escarpment	no.	845	749
Change by 2016	%	-11.4%	
Oak Ridges Moraine	no.	1,008	953
Change by 2016	%	-5.4%	
Protected Countryside	no.	3,648	3,081
Change by 2016	%	-15.6%	

The average size per farm in the Greenbelt increased to 157 acres which is, still smaller than the average farm size in the rest of the province at 259 acres, reflecting the predominance of fruit production (see Chapters 3 and 4).

Table 2.7 Trend in Number of Farms, Area Farmed and Average Farm Size in the Greenbelt Compared to the Rest of Ontario, 2011 to 2016

Item	Units	2011	2016
Greenbelt			
Farms	no.	5,501	4,782
Change by 2016	%	-13.1%	
Area farmed	acres	856,424	748,713
Change by 2016	%	-12.6%	
Average farm size	acres	156	157
Change by 2016	%	0.6%	
Rest of Ontario			
Farms	no.	46,449	44,818
Change by 2016	%	-3.5%	
Area farmed	acres	11,811,812	11,599,750
Change by 2016	%	-1.8%	
Average farm size	acres	254	259
Change by 2016	%	1.8%	

Farm size trends are not uniform across the Greenbelt. The average size decreased by 15.7% in the Niagara Escarpment and by 6.2% in the Oak Ridges Moraine, with the average farm size increasing by 7.4% in the Protected Countryside. When the decline in number of farm operations is less than the decline in acreage, average farm size will increase; this is the case in the Protected Countryside where the 7.4% increase in farm size compares to the 15.6% decrease in farm numbers, and also exceeds the 9.3% decrease in acreage farmed.

Table 2.8 Trend in Acres Per Farm in the Greenbelt, 2011 to 2016

Item	Units	2011	2016
Greenbelt total	acres	156	157
Change by 2016	%	0.6%	
Niagara Escarpment	acres	178	150
Change by 2016	%	-15.7%	
Oak Ridges Moraine	acres	177	166
Change by 2016	%	-6.2%	
Protected Countryside	acres	145	155
Change by 2016	%	7.4%	

The most prominent farm size category in the Greenbelt, between 10 and 69 acres, compares with the larger farm size category of between 130 and 399 acres in the rest of the province, as illustrated in Figure 2.2.

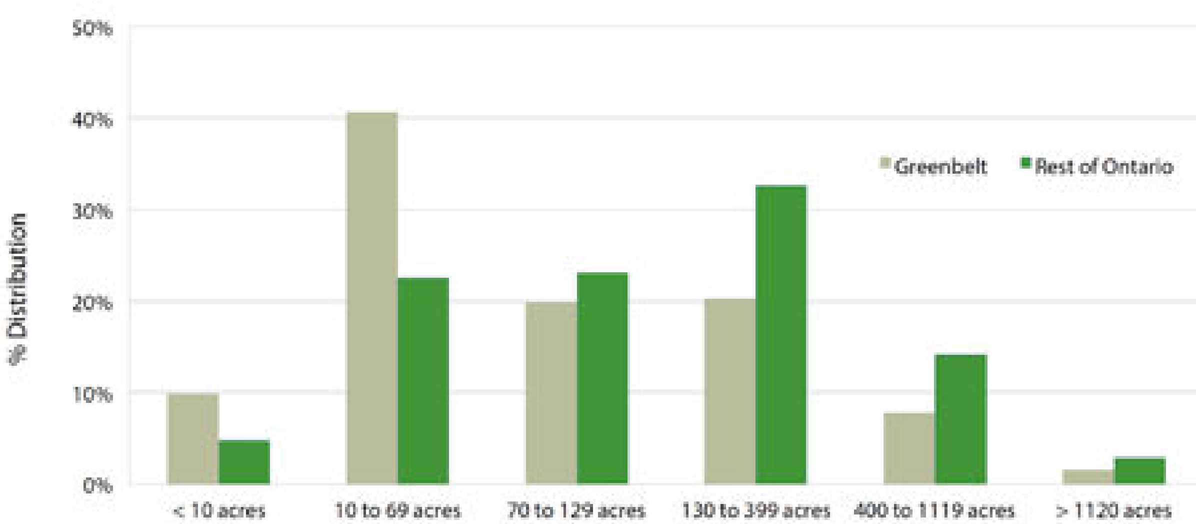


Figure 2.2 Size Distribution of Farm in the Greenbelt and Rest of Ontario, 2016

The proportion of farms with less than 129 acres is 70.7% of Greenbelt farms in 2016, which compares with 51.3% in the rest of Ontario (see Table 2.9). Over time, the proportion of farms over 400 acres has been increasing in the Greenbelt (8.3% in 2006 and 9.6% in 2016). The same phenomenon occurred in the rest of Ontario, with a larger portion of farm operations larger than 400 acres (at 17.4%).

Table 2.9 Size Distribution of Farms in the Greenbelt and in the Rest of Ontario, 2011 to 2016

Farms Size	Greenbelt				Rest of Ontario	
	2011		2016		2011	2016
	farms	%	farms	%	%	%
< 10 acres	544	9.9%	574	12.0%	4.7%	5.5%
10 to 69 acres	2,237	40.7%	1,936	40.5%	22.5%	23.8%
70 to 129 acres	1,094	19.9%	868	18.2%	23.0%	22.0%
130 to 399 acres	1,113	20.2%	942	19.7%	32.5%	31.1%
400 to 1,119 acres	428	7.8%	383	8.0%	14.1%	14.0%
> 1,120 acres	86	1.6%	79	1.6%	3.1%	3.4%
All	**5,501%**	**100%**	**4,782**	**100%**	**100%**	**100%**

Table 2.10 illustrates the size distribution of farms within each region of the Greenbelt. The distributions are not materially different, with the Oak Ridges Moraine having slightly more farms greater than 400 acres at 10.9%, compared to the Greenbelt average of 9.6%.

Table 2.10 Size Distribution of Farms by Region Within the Greenbelt, 2016

	Greenbelt		Greenbelt Niagara Escarpment		Oak Ridges		Protected Countryside	
	farms	distribution	farms	distribution	farms	distribution	farms	distribution
< 10 acres	579	12.0%	78	10.4%	70	7.4%	426	13.8%
10 to 69 acres	1,936	40.5%	294	39.2%	381	40.0%	1,261	40.9%
70 to 129 acres	868	18.2%	144	19.2%	195	20.4%	530	17.2%
130 to 399 acres	942	19.7%	160	21.3%	202	21.2%	580	18.8%
400 to 1,119 acres	383	8.0%	63	8.4%	89	9.3%	231	7.5%
> 1,120 acres	79	1.6%	11	1.4%	16	1.6%	53	1.7%
All	**4,782**	**100%**	**749**	**100%**	**953**	**100%**	**3,081**	**100%**

Environmental Land Management

The 2016 Census of Agriculture confirmed several positive trends with respect to farm practices that benefit the environment. From 2001 to 2016 farmers in the Greenbelt have done more to protect and improve soil health and water quality

Many farms are adopting precision agricultural techniques, allowing more efficient use of inputs that can have a negative environmental impact. For example, the use of herbicides, insecticides, fungicides and commercial fertilizer are all down from 2001 levels:

Use of herbicides and has **DECREASED** by **25%** since 2001

Use of commercial fertilizer has **DECREASED** by one-third since 2001

Use of **insecticides** is **down 22%** and **fungicides** use is **down** by **10%** since 2001

These declines lower the risks of contamination to waterways and harm to beneficial insects such as pollinators.

Productive soil for agriculture is a finite resource and needs careful management to sustain and enhance it. There have been several changes in land management practices since 2001 that support soil health improvement and retention, including:

No-till or zero-till seeding has **increased** by **25%**. No-till seeding helps soil health by reducing soil disturbance, which results in loss of soil carbon.

Tillage retaining **crop residue** is **up 20%**. Retaining crop residue helps return carbon and nutrients to the soil.

The use of winter cover **crops increased** by **50%**. Cover crops help prevent soil erosion and can be used as a green manure the following season.

The number of farms using **windbreaks** has more than doubled since 2001. Windbreaks help **prevent soil erosion** and can protect crops from extreme weather. They also provide habitat and migratory routes for wildlife.

All of these practices help maintain and improve soil health which has many knock-on benefits for farmers, the communities they live in, and the wider environment.

2.4 Farmland Tenure in the Greenbelt

> **From 2011 to 2016, more Greenbelt farmers owned the lands they farmed.**

From 2011 to 2016, more Greenbelt farmers owned the lands they farmed. In 2016, Greenbelt farmers owned, on average, 56.1% of the land used for farming, compared to the 2011 levels at 53.9%. The remainder of the land used in Greenbelt agriculture is either rented or part of a sharecropping agreement.

In 2016, 42.9% of farm operations in the Greenbelt rented land and/or used sharecropping agreements with the land owner. This same trend is occurring in the rest of Ontario, with 39.5% of farms renting/sharecropping as part of their land base.

Table 2.11 Farmland Tenure in the Greenbelt and Rest of Ontario, 2011 to 2016

Items		Greenbelt		Rest of Ontario	
	Units	2011	2016	2011	2016
Farmland owned by operator	acres	461,742	420,009	8,490,312	8,326,538
Change by 2016	%	-9.0%		-1.9%	
Percent of area owned	%	53.9%	56.1%	67.0%	67.4%
Farms renting & sharecropping	no.	2,203	2,053	17,603	17,707
Change by 2016	%	-6.8%		0.6%	
Percent of farms renting/ sharecropping	%	40.1%	42.9%	37.9%	39.5%
Change by 2016	%	7.18%		4.3%	
Area rented & sharecropped	acres	394,682	328,705	3,764,023	3,674,163
Change by 2016	%	-16.7%		-2.4%	
Percent of land rented/ sharecropped	%	46.1%	43.9%	31.9%	31.7%
Change by 2016	%	-4.74%		-0.6%	

The higher share of rented farmland in the Greenbelt and Golden Horseshoe is a structural feature, as shown by the consistently higher rates of rented farmland in these two areas compared to the rest of Ontario. This pattern reflects such factors as retired farmers not wanting to sell their assets, land being held by investors and developers, or individuals wanting to live a rural lifestyle without farming and renting out part of the property to nearby farmers.

Considering the expense of acquiring or holding land, renting provides an economically viable option for many farmers. There can be other benefits as well. For example, renting frees up capital for other investments and provides flexibility for farmers to respond to market conditions and engage in entrepreneurial endeavours. In many cases, longer-term leases permit necessary investments by the farmer to maintain productivity levels on rented land, though the extent of this cannot be confirmed since the Census survey did not track the type of renting arrangements or length of leases.

The absolute number of acres, either rented or used in sharecrop agreements, decreased in the Greenbelt by 16.7% since 2011. This absolute reduction in rented land of 65,977 acres represents 61% of the reduction in farmland that was rented or sharecropped between 2011 and 2016. It is very likely that a portion of this reduction in rented farmland was acreage that was zoned for development prior to the formation of the Greenbelt and is now converted to alternative uses.

The Greenbelt's Agricultural Contribution to Ontario's Economy

Agriculture in the Greenbelt makes a significant contribution to Ontario's economy. Farms in the Greenbelt are highly productive, spend more on infrastructure, and connect more closely with consumers via direct sales than farms elsewhere in the province.

Although smaller on average than farms in the rest of Ontario, farms in the Greenbelt generate 68% more revenue. In 2015, the average farm in Ontario's Greenbelt produced $309,252 in annual farm revenues, while farms in the rest of Ontario had an average annual farm revenue of $304,521. Greenbelt farms were significantly more productive per acre, producing an average of $1,975 in revenue compared with $1,177 per acre for farms in the rest of the province. Greenbelt farms also tend to have higher operating expenses. This results in a somewhat lower operating margin per farm at $42,018 within the Greenbelt, compared to the rest of the province at $47,658.

Farm Cash Receipts in the Greenbelt and in the Rest of Ontario, 2016

Item	Units	Greenbelt	Rest of Ontario	Ontario
Farm cash receipts	$ million	$1,479	$13,648	$15,127
Distributions	%	9.8%	90.2%	100.0%
Farms	no.	4,782	44,818	49,600
Distributions	%	9.6%	90.4%	100.0%
Cash receipts/farm	$/farm	$309,252	$304,521	$304,977
Cash receipts/acre	$/acre	$1,975	$1,177	$1,225
Operating expenses/farm	$/farm	$267,224	$256,863	$257,862
Operating margin/farm	$/farm	$42,028	$47,658	$47,115

*Note: Financial data for the Greenbelt estimated by OMAFRA using Census of Agriculture data

Agriculture requires investment in long term assets, such as land and buildings. At the Ontario-wide level, 8.7 years of farm sales equals the value of capital employed to earn those sales. The ratio is slightly higher at 8.9 years for Greenbelt farms.

The market value of assets employed within the Greenbelt of $13.2 billion[5] is 10.0% of Ontario agriculture's entire capital base of $131.8 billion.

5 Capital employed in the Greenbelt is based on the OMAFRA partitioning of Census of Agriculture data.

Capital Employed in Agriculture in the Greenbelt and in the Rest of Ontario, 2016

Item	Units	Greenbelt	Rest of Ontario	Ontario
Capital employed	$ million	$13,217	$118,569	$131,785
Distributions	%	10.0%	90.0%	100.0%
Capital/farm	$/farm	$2,763,732	$2,645,571	$2,656,964
Capital Turnover	years	8.9	8.7	8.7

*Note: Financial data for the Greenbelt estimated by OMAFRA using Census of Agriculture data

Direct to consumer sales are an important revenue stream for Greenbelt farmers. In fact, 19.2% of Greenbelt farmers report selling directly to consumers through various means, including: farm gate sales, farmers' markets, or Community Supported Agriculture (CSA) sales. This compares with the rest of the province's farms, of which 14.6% report selling directly to consumers.

The Greenbelt's proximity to urban population centres helps to shape the way direct to consumer sales are executed. Across Ontario, farms involved in direct sales to consumers are most likely to be involved in farm gate sales. This means they have farm stands, kiosks, and u-pick operations. Within the Greenbelt, 16.6% of farms engage in this type of activity. In the rest of Ontario, the share of farms engaged in farm gate sales is lower at 13.2%.

Farmers' market sales are another way consumers interact with farm fresh produce. In the Greenbelt, 4.9% of farms are engaged in farmers' market sales. Within the rest of the province, only 3.1% of farmers sell at farmers' markets.

CSAs are another way of selling directly to consumers. In the Greenbelt, 51 farms (1.1% of total Greenbelt farms) sold in this way, compared to 0.8% of farms in the rest of Ontario.

Direct to Consumers Sale Data in the Greenbelt and in the Rest of Ontario, 2016

Item	Units	Greenbelt	Rest of Ontario	Ontario
Direct sales to consumers	no.	918	6,556	7,474
Distributions	%	12.3%	87.7%	100.0%
Share of farms in the region	%	19.2%	14.6%	15.1%
Farm gate sales to consumers	no.	795	5,914	6,709
Distributions	%	11.9%	88.1%	100.0%
Share of farms in the region	%	16.6%	13.2%	13.5%
Farmers' market sales	no.	234	1,385	1,619
Distributions	%	14.5%	85.5%	100.0%
Share of farms in the region	%	4.9%	3.1%	3.3%
CSA sales	no.	51	352	403
Distributions	%	12.7%	87.3%	100.0%
Share of farms in the region	%	1.1%	0.8%	0.8%

*Note: Direct sales data for the Greenbelt estimated by OMAFRA using Census of Agriculture data

3

How Farmland is Used in the Greenbelt

Farmland in the Greenbelt has more diverse uses than the rest of Ontario's farmland. This chapter describes how farmland is used by acreage and about overall farmland use in the Greenbelt. Use of farmland for types of crop production can vary from how many farms report production by various crop kinds, as reported in the previous Chapter.

3.1 Land Use in the Greenbelt Compared to the Rest of Ontario

One of the more notable features of the Greenbelt is the fact that this region, with only 6.1% of Ontario's farmland, accounts for more than 50% of the acreage devoted to fruit production in the province (at 52.6% as illustrated in Figure 3.1), as well as 45.6% of all nursery crop acreage.

The Greenbelt also has 28.9% of Ontario's Christmas tree production acreage, and 27.2% of acreage in sod production. Vegetable crops, at 10.7% of Ontario's vegetable crop acreage, provide another example where the acreage share is above the Greenbelt farmland acraege, which is 6.1% of Ontario's total farmland.

These percentages suggest that the Greenbelt has a locational advantage due to its proximity to major urban centres, and a natural advantage due to its unique soils, geographies, and climates. Examples of farm types that reflect locational advantage include sod farming, tree nursery operations, and Christmas tree production. Examples of farm types that reflect natural advantage include vegetable production in the Holland Marsh, as well as tender fruit, grape and wine production in the Niagara region.

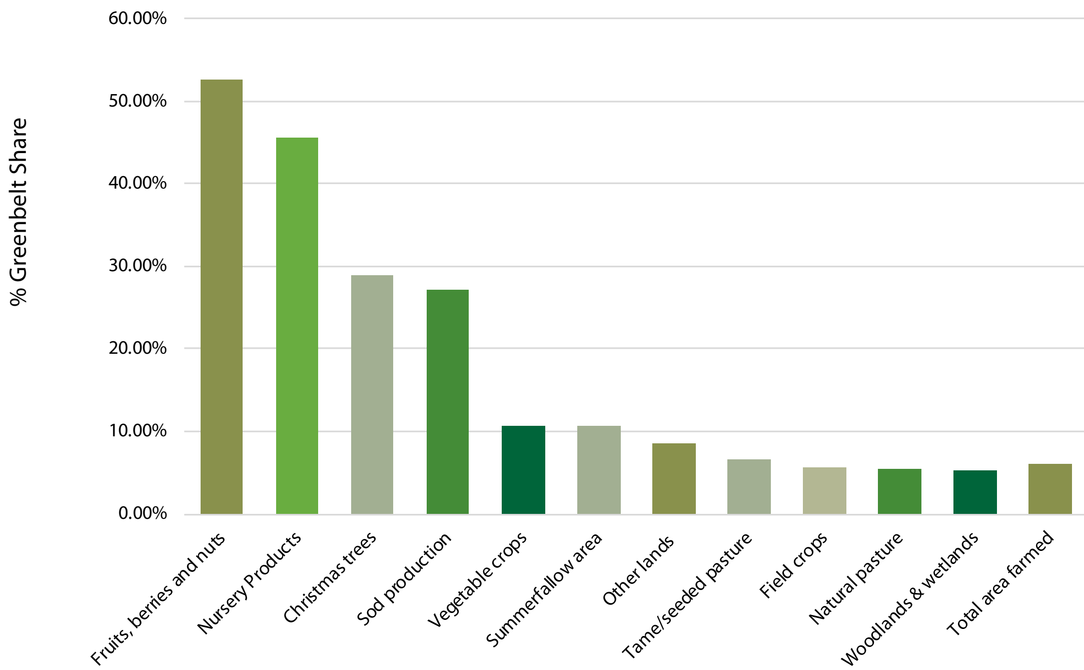


Figure 3.1 Greenbelt Share of Ontario Farmland by Land Use, 2016

Farmland use is more diverse in the Greenbelt when compared with the rest of Ontario, as seen in Table 3.1. Although the Greenbelt had a sizable portion of the province's land in fruit and vegetable production, the largest use of farmland in the Greenbelt is in field crops, as seen in Table 3.1 (with 487,786 acres). Field crops accounted for 65.2% of farmed acreage in the Greenbelt, followed by woodlands and wetlands at 10.8%, and fruits and vegetables (combined) at 5.5%. The two major uses of farmland in the rest of Ontario were field crops and then woodlands and wetlands.

Table 3.1 Uses of Farmland in the Greenbelt and in the Rest of Ontario, 2011 and 2016

	Greenbelt				Rest of Ontario				Greenbelt
	2006		2016		2011		2016		Share 2016
	acres	%	acres	%	acres	%	acres	%	%
Field crops	546,152	63.8%	487,786	65.2%	8,147,475	69.0%	8,302,311	71.6%	5.6%
Woodlands and wetlands	91,031	10.6%	81,121	10.8%	1,506,699	12.8%	1,450,506	12.5%	5.3%
Natural pasture	55,246	6.5%	43,156	5.8%	929,562	7.9%	740,410	6.4%	5.5%
Other lands	43,690	5.1%	40,275	5.4%	425,137	3.6%	430,634	3.7%	8.6%
Tame/seeded pasture	50,106	5.9%	33,980	4.5%	598,652	5.1%	480,188	4.1%	6.6%
Fruits, berries and nuts	29,205	3.4%	26,912	3.6%	23,535	0.2%	24,280	0.2%	52.6%
Vegetable crops	16,376	1.9%	14,525	1.9%	113,219	1.0%	120,895	1.0%	10.7%
Nursery products	9,570	1.1%	9,875	1.3%	15,700	0.1%	11,801	0.1%	45.6%
Sod production	9,307	1.1%	6,213	0.8%	19,107	0.2%	16,620	0.1%	27.2%
Christmas trees	2,489	0.3%	3,178	0.4%	12,226	0.1%	7,832	0.1%	28.9%
Summerfallow area	3,259	0.4%	1,692	0.2%	20,191	0.2%	14,193	0.1%	10.7%
Total area farmed	**856,424**	**100%**	**748,712**	**100%**	**11,811,812**	**100%**	**11,599,751**	**100%**	**6.1%**

3.2 Change in Land Use Within the Greenbelt

The share of farmland that is used has not changed in a material way over the 5-year timeframe, however, acreage in farmland has decreased. Table 3.2 illustrates the change in farmland use over the 2011 to 2016 period. The largest decrease was in field crops, with 58,366 fewer acres, or 54.2% of the overall acreage reduction. This is followed by seeded pasture with 16,127 fewer acres, and then natural pasture with 12,090 fewer acres; together total pasture accounted for 26.2% of the loss in farmland acreage.

Table 3.2 Acreage Change by Use of Farmland, 2011 to 2016

	Greenbelt			Distribution
	2011	2016	Change	of Change
	acres	acres	acres	%
Field crops	546,152	487,786	-58,366	54.2%
Tame/seeded pasture	50,106	33,980	-16,127	15.0%
Natural pasture	55,246	43,156	-12,090	11.2%
Woodlands and wetlands	91,031	81,121	-9,910	9.2%
Other lands	43,690	40,275	-3,415	3.2%
Sod production	9,307	6,213	-3,094	2.9%
Fruits, berries and nuts	29,205	26,912	-2,293	2.1%
Vegetable crops	16,376	14,525	-1,852	1.7%
Summerfallow area	3,259	1,692	-1,567	1.5%
Nursery products	9,570	9,875	305	-0.3%
Christmas trees	2,489	3,178	689	-0.6%
Total area farmed	**856,424**	**748,712**	**-107,711**	**100%**

> **Over 95% of the decrease in farmland in the Greenbelt occurred in the combination of field crops, pasture, woodlands and wetlands, other lands, and sod farms.**

It is not surprising that over 95% of the decrease in farmland occurred in the combination of field crops, pasture, woodlands and wetlands, other lands, and sod farms. A large portion of this land may have been zoned before 2005 for other uses but used for agricultural purposes until sometime before 2016 when its use was changed. Such lands would most likely not be in other uses such as fruit and vegetable products or Christmas tree production, given the longer-term investments required.

More acres were devoted to nursery products and Christmas tree production in 2016 compared to 2011. This increase likely reflects the locational advantage of a large market in close proximity to farms in the Greenbelt.

The change in acreage by type of land use within the Greenbelt and the rest of Ontario is provided in Table 3.3. For a closer look at the changes between acreage by crop in Greenbelt regions, see Appendix Table A1.8. Generally speaking, the trend in each region is similar to the overall Greenbelt trend. An exception is vegetable crops where acreage in the Oak Ridges Moraine increased by 1,672 acres (a 59.9% increase in 2016 over 2011 levels). Acreage in nursery products has increased as well in each region, except for in the Protected Countryside.

Table 3.3 Trend in Area Farmed by Farm Land Use in the Greenbelt and the Rest of Ontario, 2011 to 2016

Area in	Units	Greenbelt		Rest of Ontario	
		2011	2016	2011	2016
Field crops	acres	546,152	487,786	8,147,777	8,302,311
Change by 2016	acres	-58,366		154,534	
Change by 2016	%	-10.7%		1.9%	
Vegetable crops	acres	16,506	16,376	113,219	120,895
Change by 2016	acres	-129		7,677	
Change by 2016	%	-0.8%		6.8%	
Fruits, berries and nuts	acres	29,205	26,912	23,535	24,280
Change by 2016	acres	-2,943		745	
Change by 2016	%	-7.9%		3.2%	
Nursery products	acres	9,570	9,875	15,700	11,801
Change by 2016	acres	305		-3,899	
Change by 2016	%	3.2%		-24.8%	
Sod production	acres	9,307	6,213	19,107	16,620
Change by 2016	acres	-3,094		-2,487	
Change by 2016	%	-33.2%		-13.0%	
Tame or seeded pasture	acres	50,106	33,980	691,518	598,652
Change by 2016	acres	-16,127		-118,463	
Change by 2016	%	-32.2%		-19.8%	
Natural pasture	acres	55,246	43,156	929,562	740,410
Change by 2016	acres	-12,090		-189,152	
Change by 2016	%	-21.9%		-20.3%	
Summerfallow area	acres	3,259	1,692	20,191	14,193
Change by 2016	acres	-1,567		-5,998	
Change by 2016	%	-48.1%		-29.7%	
Christmas tree production	acres	2,489	3,178	12,226	7,832
Change by 2016	acres	689		-4,394	
Change by 2016	%	27.7%		-35.9%	
Woodlands and wetlands	acres	91,031	81,121	1,506,699	1,450,506
Change by 2016	acres	-9,910		-56,193	
Change by 2016	%	-10.9%		-3.7%	
All other lands	acres	43,690	40,275	425,137	430,634
Change by 2016	acres	-3,415		5,497	
Change by 2016	%	-7.8%		1.3%	
Total area farmed	**acres**	**856,424**	**748,713**	**11,811,812**	**11,599,750**
Change by 2016	***acres***	***-107,711***		***-212,062***	
Change by 2016	***%***	***-12.6%***		***-1.8%***	

Table 3.3 outlines the change in acreage by farm land use from 2011 to 2016 for both the Greenbelt and the rest of Ontario. In the case of field crops, the acres in the non-Greenbelt area increased by 1.9% or 154,614 acres, while field crop acreage in the Greenbelt declined by 58,366 acres, a 10.7% decrease. Acres in fruit production also increased in the rest of Ontario by 745 acres, while it decreased in the Greenbelt by 2,293 acres.

Trends in Agricultural Land Conversion

Ontario's Greenbelt protects the fertile soils found surrounding the Greater Toronto Area. A study by University of Guelph Professor Wayne Caldwell, Sara Epp, and Emma Drake examined the conversion of farmland in and around the Greenbelt based on municipal land use decisions. The study found that no farmland in the Greenbelt was redesignated by municipalities since the enactment of the Greenbelt Plan in 2005.

The Ontario Farmland Availability study looked for changes to farmland availability as a result of amendments to Official Plans from 2000-2014. In addition to reviewing Official Plan Amendments (OPAs), planners' reports and Official Plan policies were also examined to ensure a complete understanding of the decisions to re-designate farmland.

The study found that within the Greenbelt, a total of 652 hectares of farmland had been re-designated to development or rural designations prior to the establishment of the Greenbelt Plan in 2005, while zero hectares had been re-designated from 2005-2014.

This compares with outside of the Greenbelt, where 9,739 hectares had been re-designated in the period from 2000 to 2004. From 2005-2014, the re-designation of lands outside of the Greenbelt continued, albeit with a slightly lower number of hectares converted (9,245). It may be years before the farmland comes out of production following the re-designation, and the land is typically rented on a year-to-year basis. While this can provide opportunities to try new crop varieties or new approaches, it does not provide an incentive to invest in either the health of the soil or to produce crops that require a significant investment in the land.

The largest re-designation of farmland outside of the Greenbelt occurred in York Region, where 16 Official Plan Amendments resulted in the re-designation of 6,988 hectares.

The loss of farmland has economic ramifications. For example, Niagara Region saw re-designation of 2,020 hectares of farmland to development designations or through site-specific amendments. If the farmland lost was as productive as the average farmland in that region, this represents the loss of as much as $19,123,340 in potential agricultural revenue. These losses are substantial for the agriculture sector and for the broader regional economy.

		Hectares of Prime Agriculture Area Re-designated			
		Outside Greenbelt		In Greenbelt	
	Nature of change of land	2000-2004	2005-2014	2000-2004	2005-2014
Durham	Prime agriculture area redesignated to a development or rural designation (ha)	0	1,588	87	0
	Prime agriculture area with site-specific policies allowing additional uses (ha)	0	0	18	0
Halton	Prime agriculture area redesignated to a development or rural designation (ha)	0	2,656	0	0
	Prime agriculture area with site-specific policies allowing additional uses (ha)	112	62	113	0
Niagara	Prime agriculture area redesignated to a development or rural designation (ha)	943	10	218	0
	Prime agriculture area with site-specific policies allowing additional uses (ha)	182	547	120	0
Peel	Prime agriculture area redesignated to a development or rural designation (ha)	2,865	208	0	0
	Prime agriculture area with site-specific policies allowing additional uses (ha)	0	0	127	0
York	Prime agriculture area redesignated to a development or rural designation (ha)	2,887	3,844	257	0
	Prime agriculture area with site-specific policies allowing additional uses (ha)	0	0	0	0
Non-Golden Horseshoe Regions and Counties	Prime agriculture area with site-specific policies allowing additional uses (ha) and redesignated to a development or rural designation (ha)	2,750	330	90	0
TOTALS		9,739	9,245	1,030	0

Note: City of Hamilton not included

Source: Measuring Farmland Availability, W.J. Caldwell, University of Guelph

3.3 Agricultural Production in the Greenbelt Compared to the Rest of Ontario

> "The Greenbelt accounts for 52.6% of Ontario's fruit acreage, and 17.6% of the Ontario's greenhouse production area, 10.7% of the provincial vegetable acreage.

Certain types of agriculture thrive in the Greenbelt because of close proximity to population centres in the Golden Horseshoe, rich soils, and amenable climate. For example, the Greenbelt accounts for 52.6% of Ontario's fruit acreage (see Table 3.4), and 17.6% of the Ontario's greenhouse production area, both of which can be linked to the soil, climate and geography attributes of the Greenbelt. The Greenbelt share of 10.7% of the provincial vegetable acreage is also primarily based on these attributes.

The 45.6% share of Ontario's nursery crop acreage and 27.2% of Ontario's sod production occurring within the Greenbelt relates to the location of the Greenbelt to the nearby population centres. The 17% share of all of Ontario's horse and ponies within the Greenbelt, as measured by the Census of Agriculture[5], is also a function of proximity to the GTHA (see Table 3.5).

Some agriculture types are underrepresented in the Greenbelt. For example, there is a lower share of large animal agriculture in the Greenbelt in comparison with the rest of Ontario. Under five percent (4.6%) of all cattle and calves and 0.7% of Ontario's pig population are located in the Greenbelt (see Table 3.5). In contrast, the Greenbelt has slightly more poultry (with 10.2% of the Ontario total) when compared to farm numbers, and 14.1% of honey bee colonies (see Table 3.4).

The Census data also indicated that 9.1% of Ontario's certified organic farms are located within the Greenbelt, slightly lower than its percentage of total farms (9.6%).

5 The Census of Agriculture may not capture the total horse and pony population since a number of horses and ponies can be owned by non-farmers and/or located on premises that are not classified as farms for Census purposes.

Table 3.4 Comparing Agricultural Production to the Rest of Ontario, 2016

Item	Units	Greenbelt	Rest of Ontario	Ontario
Land in crops	acres	610,611	8,410,687	9,021,298
distribution	%	6.8%	93.2%	100.0%
Farms reporting	no.	4,460	39,171	43,631
Cropland/farm	acres/farm	137	215	207
Field crops	acres	487,786	8,302,311	8,790,097
distribution	%	5.5%	94.5%	100.0%
Farms reporting	no.	2,818	37,746	40,564
Field crops acres/farm	acres/farm	173	220	217
Vegetables	acres	14,525	120,895	135,420
distribution	%	10.7%	89.3%	100.0%
Farms reporting	no.	566	3,204	3,770
Vegetable acres/farm	acres/farm	25.7	37.7	35.9
Fruit area	acres	26,912	24,280	51,192
distribution	%	52.6%	47.4%	100.0%
Farms reporting	no.	816	1,780	2,596
Fruit acres/farm	acres/farm	33.0	13.6	19.7
Nursery products	acres	9,875	11,801	21,676
distribution	%	45.6%	54.4%	100.0%
Farms reporting	no.	250	637	887
Nursery acres/farm	acres/farm	39.5	18.5	24.4
Sod products	acres	6,213	16,620	22,833
distribution	%	27.2%	72.8%	100.0%
Farms reporting	no.	21	52	73
Sod acres/farm	acres/farm	292.2	321.2	312.8
Greenhouses	million sq. ft.	27.9	131	158.5
distribution	%	17.6%	82.4%	100.0%
Farms reporting	no.	303	1,169	1,472
Area/farm	sq. ft./farm	92,235	111,684	107,684
Honeybee colonies	no.	12,098	73,985	86,083
distribution	%	14.1%	85.9%	100.0%
Farms reporting	no.	187	1,317	1,504
Colonies/farm	colonies/farm	65	56	57
Certified organic farms	no.	66	666	732
distribution	%	9.1%	90.9%	100.0%

Table 3.5 Comparing Livestock Production to the Rest of Ontario, 2016

Item	Units	Greenbelt	Rest of Ontario	Ontario
Cattle and calves	no.	74,912	1,548,798	1,623,710
distribution	%	4.6%	95.4%	100.0%
Farms reporting	no.	1,143	16,309	17,452
Number/farm	acres/farm	66	95	93
Pigs	no.	23,931	3,510,173	3,534,104
distribution	%	0.7%	99.3%	100.0%
Farms reporting	no.	127	2,633	2,760
Number/farm	no./farm	188	1,333	1,280
Sheep and lambs	no.	25,101	296,394	321,495
distribution	%	7.8%	92.2%	100.0%
Farms reporting	no.	274	2,845	3,119
Number/farm	no./farm	92	104	103
Goats	no.	5,844	124,375	130,219
distribution	%	4.5%	95.5%	100.0%
Farms reporting	no.	183	1,753	1,936
Number/farm	no./farm	32	71	67
Poultry	no.	5,698,376	50,086,893	55,785,269
distribution	%	10.2%	89.8%	100.0%
Farms reporting	no.	1,192	9,607	10,799
Number/farm	no./farm	4,782	5,213	5,166
Horses and ponies	no.	10,950	53,586	64,536
distribution	%	17.0%	83.0%	100.0%
Farms reporting	no.	1,021	8,273	9,294
Number/farm	no./farm	11	6	7

4

Plant Agriculture

Farmers in the Greenbelt produce a wide array of plant products for consumption and processing, such as fruit and vegetables. This chapter examines fruit, field vegetable, greenhouse, mushroom, and field crop production.

> “The Greenbelt accounted for 52.6% of all Ontario’s fruit acreage.

4.1 Fruit Products

The Greenbelt had 26,912 acres in fruit production in 2016, which accounted for 52.6% of all Ontario’s fruit acreage. As noted in the last column in Table 4.1 the Greenbelt accounts for over 80% of all of Ontario’s acreage in grape production, peaches, plum and prunes, and apricots. Many of these crops are produced in the Niagara region. Apple production in the Greenbelt accounts for 11% of fruit acreage within the Greenbelt and represents more than 50% of fruit acreage in the rest of Ontario.

Table 4.1 Distribution of Area in Fruit Crops, the Greenbelt and the Rest of Ontario, 2016

		Greenbelt		Rest of Ontario		Greenbelt Share
	Units	2011	2016	2011	2016	2016
Grapes	acres	15,572	15,256	2,811	3,462	81.5%
	%	53.3%	56.7%	11.9%	14.3%	
Peaches	acres	5,642	4,601	813	631	87.9%
	%	19.3%	17.1%	3.5%	2.6%	
Apples	acres	3,201	2,951	12,629	12,942	18.6%
	%	11.0%	11.0%	53.7%	53.3%	
Pears	acres	897	905	486	355	71.8%
	%	3.1%	3.4%	2.1%	1.5%	
Other fruits, berries & nuts	acres	795	849	704	787	51.9%
	%	2.7%	3.2%	3.0%	3.2%	
Plums and prunes	acres	890	840	185	138	85.8%
	%	3.0%	3.1%	0.8%	0.6%	
Cherries (sour)	acres	871	485	1,471	1,636	22.9%
	%	3.0%	1.8%	6.3%	6.7%	
Strawberries	acres	590	459	2,693	2,456	15.8%
	%	2.0%	1.7%	11.4%	10.1%	
Cherries (sweet)	acres	432	285	144	150	65.6%
	%	1.5%	1.1%	0.6%	0.6%	
Raspberries	acres	181	123	721	557	18.1%
	%	0.6%	0.5%	3.1%	2.3%	
Apricots	acres	83	100	19	19	84.4%
	%	0.3%	0.4%	0.1%	0.1%	
Blueberries	acres	43	48	749	997	4.6%
	%	0.1%	0.2%	3.2%	4.1%	
Saskatoon berries	acres	10	x	46	56	x
	%	0.0%		0.2%	0.2%	
Total area of fruits	**acres**	**29,205**	**26,912**	**23,535**	**24,280**	**52.6%**
	%	**100%**	**100%**	**100%**	**100%**	

Grape production on 15,256 acres accounted for 56.7% of all acreage in Greenbelt fruit production, as shown in the first two rows in Table 4.1. The grape growing region is primarily in the Protected Countryside, followed by the Niagara Escarpment. The second largest acreage in Greenbelt fruit production are peaches (with 17.1% of acreage), followed by apples (at 11.0%). The high fruit acreage share in the Greenbelt relates to the natural advantages of soils and climate in some of the regions, as well as proximity to population centres.

Despite the natural advantage for fruit production in the Greenbelt, acreage in fruit production has been in decline (see the last row in Table 4.2). The largest percentage decline has been in cherries, raspberries, and strawberries. At the same time, acreage increases are being observed in other fruits and berries, notably apricots and blueberries.

Fruit acreage in the rest of the province also declined over the decade, with reductions in peach, pear, plum and prune, and raspberry acreage. Acreage has been increasing in sour cherries, blueberries, and grapes outside of the Greenbelt.

Table 4.2 Trend in Fruit Crop Acreage in the Greenbelt and the Rest of Ontario, 2011 to 2016

	Units	Greenbelt		Rest of Ontario	
		2011	2016	2011	2016
Grapes	acres	15,572	15,256	2,811	3,462
Change by 2016	%	-2.0%		23.1%	
Peaches	acres	5,642	4,601	813	631
Change by 2016	%	-18.5%		-22.4%	
Apples	acres	3,201	2,951	12,629	12,942
Change by 2016	%	-7.8%		2.5%	
Pears	acres	897	905	486	355
Change by 2016	%	0.9%		-27.0%	
Other fruits, berries, and nuts	acres	795	849	704	787
Change by 2016	%	-6.7%		11.9%	
Plums and prunes	acres	890	840	185	138
Change by 2016	%	-5.7%		-25.2%	
Cherries (sour)	acres	871	485	1,471	1,636
Change by 2016	%	-44.3%		11.2%	
Strawberries	acres	590	459	2,693	2,456
Change by 2016	%	-22.1%		-8.8%	
Cherries (sweet)	acres	432	285	144	150
Change by 2016	%	-34.0%		4.0%	
Raspberries	acres	181	123	721	557
Change by 2016	%	-32.2%		-22.7%	
Apricots	acres	83	100	19	19
Change by 2016	%	21.8%		-4.9%	
Blueberries	acres	43	48	749	997
Change by 2016	%	13.0%		33.0%	
Saskatoon berries	acres	10	x	46	46
Change by 2016	%			-0.9%	
Total area of fruits	**acres**	**29,205**	**26,912**	**23,535**	**24,280**
Change by 2016	**%**	***-7.9%***		***3.2%***	

Overall, acreage devoted to fruit crops decreased in the Greenbelt, but by a lower rate and a lesser absolute amount than in the rest of the province. These statistics reflect a unique feature of the Greenbelt: its importance as the major supplier of Ontario-grown fruits. Within the province, the Greenbelt has a natural advantage in most fruit crops. At the same time, this production faces competition from imports and other parts of Canada, such as British Columbia.



Tender Fruit Innovation

The tender fruit industry is a valuable asset to the Greenbelt and the broader provincial economy, supported by the fertile soils and amenable climate found in the Niagara area. The industry continues to evolve and grow in exciting ways.

In the last five years, the tender fruit industry has shown its hunger for innovation. The Ontario Tender Fruit Growers (Growers) collaborated with MaRS Solutions Lab, the Waterloo Institute of Social Innovation and Resilience, their supply chain partners, education institutions, and other stakeholders to look at some of the challenges facing the sector and possible solutions. The discussions provided the tender fruit industry with new insights into the perspective of businesses engaged in the industry and stakeholders.

Growers established a partnership with two key players to look at new varieties: University of Guelph (UofG) through the Tender Fruit Evaluation Committee and the Vineland Research and Innovation Centre (VRIC). VRIC is evaluating plum, peach, and nectarine trees from the UofG's breeding program to identify superior varieties that meet consumer preferences. Efforts include researching across a variety of jurisdictions for fresh grape varieties better suited to the local climate. Originally a four-year research project, the new variety development will hopefully continue with government financial support.

New software and technologies are being used to improve production capacity. As tender fruit crops are very sensitive to climate fluctuation, work is underway to develop a tool to provide growers with information on the likelihood of cold weather damage. This information would help growers to more accurately judge when to use wind machines, frost fans, cold air drains, sprinklers, and other measures to manage the effects of cold weather.

A recently developed advantage for the tender fruit industry is Crop Tracker, the operational software management system for growers and shippers that promotes further efficiency of crops.

Tender fruit growers are also closing gaps in the value chain through significant co-investment efforts. In 2016, significant expansion in cold-storage capacity was achieved through a 30,000 square-foot expansion of cold storage facilities by Vineland Growers' Cooperative Ltd, which represents 300 members and 70 grower families. Most recently, 21 tender fruit growers collaborated to form the Canadian Fruit Tree Nursery Cooperative to ensure access to consistent supply of good-quality trees.

Ongoing innovation will contribute to the tender fruit industry's continued success.

4.2 Field Vegetable Crops

The Greenbelt had 14,525 acres in vegetable production in 2016, which accounted for 10.7% of all Ontario's vegetable acreage (see Table 4.3). There were 1,851 fewer acres in the Greenbelt or 11.3% (see Table 4.4). In the rest of Ontario, vegetable acreage increased by 6.8% (or 7,676 acres).

Table 4.3 Distribution of Area in Vegetable Crops, the Greenbelt and the Rest of Ontario, 2011 to 2016

		Greenbelt		Rest of Ontario		Greenbelt Share
	Units	2011	2016	2011	2016	2016
Other vegetables	acres	2,470	2,801	7,868	10,287	21.4%
	%	15.1%	19.3%	6.9%	8.5%	
Carrots	acres	3,491	2,724	6,364	6,977	28.1%
	%	21.3%	18.8%	5.6%	5.8%	
Dry onions	acres	2,322	2,006	4,134	3,978	33.5%
	%	14.2%	13.8%	3.7%	3.3%	
Sweet corn	acres	1,758	1,288	23,782	21,622	5.6%
	%	10.7%	8.9%	21.0%	17.9%	
Pumpkins	acres	681	700	3,977	4,981	12.3%
	%	4.2%	4.8%	3.5%	4.1%	
Chinese cabbage	acres	801	648	1,054	1,263	33.9%
	%	4.9%	4.5%	0.9%	1.0%	
Cauliflower	acres	545	626	1,104	706	47.0%
	%	3.3%	4.3%	1.0%	0.6%	
Cabbage	acres	246	472	3,108	3,198	12.9%
	%	1.5%	3.2%	2.7%	2.6%	
Squash & zucchini	acres	597	470	2,993	4,345	9.8%
	%	3.6%	3.2%	2.6%	3.6%	
Celery	acres	367	409	247	206	66.5%
	%	2.2%	2.8%	0.2%	0.2%	
Beets	acres	310	388	1,061	905	30.0%
	%	1.9%	2.7%	0.9%	0.7%	
Broccoli	acres	690	325	3,816	3,938	7.6%
	%	4.2%	2.2%	3.4%	3.3%	
Spinach	acres	219	303	571	597	33.7%
	%	1.3%	2.1%	0.5%	0.5%	
Tomatoes	acres	271	232	16,287	15,512	1.5%

	%	1.7%	1.6%	14.4%	12.8%	
Asparagus	acres	104	215	3,067	3,931	5.2%
	%	0.6%	1.5%	2.7%	3.3%	
Lettuce	acres	266	158	351	442	26.3%
	%	1.6%	1.1%	0.3%	0.4%	
Radishes	acres	121	151	231	484	23.8%
	%	0.7%	1.0%	0.2%	0.4%	
Rutabagas & turnips	acres	13	132	1,521	1,535	7.9%
	%	0.1%	0.9%	1.3%	1.3%	
Cucumbers	acres	88	117	3,396	4,397	2.6%
	%	0.5%	0.8%	3.0%	3.6%	
Green peas	acres	153	103	14,968	16,165	0.6%
	%	0.9%	0.7%	13.2%	13.4%	
Green & wax beans	acres	621	103	8,565	9,629	1.1%
	%	3.8%	0.7%	7.6%	8.0%	
Peppers	acres	133	102	3,759	4,876	2.1%
	%	0.8%	0.7%	3.3%	4.0%	
Brussels Sprouts	acres	76	31	571	597	4.9%
	%	0.5%	0.2%	0.5%	0.5%	
Shallots & green onions	acres	49	75	408	273	21.4%
	%	0.3%	0.5%	0.4%	0.2%	
Total vegetable area	**acres**	**16,376**	**14,525**	**113,219**	**120,895**	**10.7%**
	%	**100%**	**100%**	**100%**	**100%**	

The Protected Countryside accounts for 66% of all field vegetable acreage in the Greenbelt (see Appendix Table A1.8). The category of other vegetables accounts for the largest share of Greenbelt vegetable acreage at 19.3%, which is followed by carrots as 18.8% and then dry onions at 13.8%, reflecting strong production in the Holland Marsh area.

Table 4.4 Trend in Vegetable Crop Acreage in the Greenbelt and the Rest of Ontario, 2011 to 2016

		Greenbelt		Rest of Ontario	
	Units	2011	2016	2011	2016
Other vegetables	acres	2,470	2,801	7,868	10,287
Change by 2016	%	13.4%		31%	
Carrots	acres	3,491	2,724	6,364	6,977
Change by 2016	%	-22.0%		9.6%	
Dry onions	acres	2,322	2,006	4,134	3,978
Change by 2016	%	-13.6%		-3.8%	
Sweet corn	acres	1,758	1,288	23,782	21,622
Change by 2016	%	-26.7%		-9.1%	
Pumpkins	acres	681	700	3,977	4,981
Change by 2016	%	2.9%		25.2%	
Chinese cabbage	acres	801	648	1,054	1,263
Change by 2016	%	-19.1%		19.9%	
Cauliflower	acres	545	626	1,104	706
Change by 2016	%	14.9%		-36.1%	
Cabbage	acres	246	472	3,108	3,198
Change by 2016	%	91.5%		2.9%	
Squash & zucchini	acres	597	470	2,993	4,345
Change by 2016	%	-21.3%		45.2%	
Celery	acres	367	409	247	206
Change by 2016	%	11.3%		-16.5%	
Beets	acres	310	388	1,061	905
Change by 2016	%	25.1%		-14.7%	
Broccoli	acres	690	325	3,816	3,938
Change by 2016	%	-52.9%		3.2%	
Spinach	acres	219	303	571	597
Change by 2016	%	38.3%		4.6%	
Tomatoes	acres	271	232	16,287	15,512
Change by 2016	%	-14.3%		-4.8%	
Asparagus	acres	104	215	3,067	3,931
Change by 2016	%	107.9%		28.1%	
Lettuce	acres	266	158	351	442
Change by 2016	%	-40.8%		26.2%	
Radishes	acres	121	151	231	484
Change by 2016	%	24.6%		109.7%	
Rutabagas & turnips	acres	13	132	1,521	1,535
Change by 2016	%	906%		0.9%	

Cucumbers	acres	88	117	3,396	4,397
Change by 2016	%	32.5%		29.5%	
Green peas	acres	153	103	14,968	16,165
Change by 2016	%	-32.9%		8.0%	
Green & wax beans	acres	621	103	8,565	9,629
Change by 2016	%	-83.5%		12.4%	
Peppers	acres	133	102	3,759	4,876
Change by 2016	%	-23.0%		29.7%	
Brussels Sprouts	acres	76	31	571	597
Change by 2016	%	-59.6%		4.6%	
Shallots & green onions	acres	49	75	408	273
Change by 2016	%	51.9%		-33.0%	
Total vegetable area	**acres**	**16,376**	**14,525**	**113,219**	**120,895**
Change by 2016	**%**	**-11.3%**		**6.8%**	

> **"The Greenbelt had 14,525 acres in vegetable production in 2016, which accounted for 10.7% of all Ontario's vegetable acreage.**

Over 66% of Ontario's celery is grown in the Greenbelt followed by cauliflower at 47% (see Table 4.3). The Greenbelt accounts for over 25% of lettuce, spinach, beet, Chinese cabbage, and carrot acreage, predominantly grown in the Holland Marsh area.

As reported in Table 4.4 above, vegetable crops that have increased in area since 2006 include other vegetables (by 219.3%), cabbage (by 16.6%), celery (by 7.3%), spinach (by 80.6%), asparagus (by 56.3%), rutabagas and turnips (by > 100%), and Brussel sprouts (by 17.6%).

In some field vegetables, acreage in production increased in the rest of Ontario when a decline was observed in the Greenbelt. Examples include carrots, pumpkins, Chinese cabbage, squash and zucchini, broccoli, radishes, cucumbers, and peppers.

Over a five-year period, acreage of individual vegetable crops can increase or decrease due to relative prices of crops and weather conditions. For example, higher prices for a certain vegetable crop can result in more planted acres, and lower prices can result in fewer acres planted.

4.3 Enclosed Crop Production – Greenhouse Crops and Mushrooms

The Greenbelt has 17.6% of Ontario's greenhouse production capacity and 37.9% of area devoted to mushroom production (see last column in Table 4.5). In the greenhouse sector the area in production in 2016 is 11.4% above 2011 levels within the Greenbelt and 19.3% higher in the rest of the province.

Table 4.5 Trend in Area of Enclosed Crops, the Greenbelt and the Rest of Ontario, 2006 to 2016

		Greenbelt			Rest of Ontario			Greenbelt Share
	Units	2006	2011	2016	2006	2011	2016	2016
Greenhouse flowers	million sq ft	20.8	18.3	18.4	28.60	24.3	21.2	46.4%
Change by 2016	%	-11.6%	0.6%		-25.7%	-12.6%		
Greenhouse vegetables	million sq ft	3.0	6.3	7.9	66.8	79.9	104.0	7.1%
Change by 2016	%	165.9%	25.5%		55.6%	30.1%		
Other greenhouse	million sq ft	1.0	0.5	1.6	4.9	4.3	5.4	22.9%
Change by 2016	%	56.2%	244.8%		9.7%	26.3%		
Total greenhouse	**million sq ft**	**24.8**	**25.1**	**27.9**	**100.3**	**109.5**	**130.6**	**17.6%**
Mushrooms	million sq ft	1.4	1.1	1.2	2.0	2.5	2.0	37.9%
Change by 2016	%	-14.8%	25.3%		-2.8%	-21.0%		
Change by 2016	**%**	**12.6%**	**11.4%**		**30.2%**	**19.3%**		

The Greenbelt accounts for nearly 50% (at 46.4%) of Ontario's greenhouse flower production[6], with production capacity slightly up from 2011 levels. Conversely, this capacity has decreased outside of the Greenbelt.

Greenhouse vegetable production capacity has increased in the Greenbelt by 166% since 2011 and by 56% in the rest of the province. Greenhouse vegetable production in the rest of the province occurs primarily in the Leamington area in southwestern Ontario.

Mushroom production capacity increased by 25% in the Greenbelt over the 2011 to 2016 period and decreased by 21% in the rest of the province.

6 The Golden Horseshoe accounted for 57.6% of all of Ontario's value of floriculture production in 2016.

4.4 Field Crops

> "Field crops account for the largest use of Greenbelt farmland with alfalfa at 8.4%, potatoes at 11.3%, and canola at 8.2%. Corn and soybeans are underrepresented in the Greenbelt.

Field crops, with 487,786 acres, account for the largest use of Greenbelt farmland, with soybeans, corn, alfalfa (hay), winter wheat, and other tame hay and fodder crops accounting for 89% of all field crop acreage (see Appendix Table A1.9). With the Greenbelt accounting for 6.1% of all Ontario farmland, the three crops with a larger acreage share are alfalfa (at 8.4% of Ontario's acreage in the crop), potatoes at 11.3%, and canola at 8.2% (see Appendix Table A1.9).

The lower acreage share in crops such as corn and soybeans is indicative of the unique features of the Greenbelt with more diversification and production of crops and products, such as nursery products in demand from the nearby urban population (the Greenbelt's locational advantage), and crops grown due to natural advantage (of soils and climate) such as carrots, celery, grapes and tender fruit.

Even though corn and soybeans are underrepresented in the Greenbelt (based on less than 6.1% Ontario acreage share), the area devoted to corn and soybeans has increased over the 10-year period (2006 to 2016) by 15.4% and 23.7% respectively (see Table 4.6). The other field crops that have more planted acreage in the Greenbelt over this period include other dry beans, potatoes, canola, and other field crops.

Overall field crop acreage is down by 12.2% since 2006 and is up by 1.1% in the rest of the province, with the largest increase accounted for by corn and soybeans.

Table 4.6 Trend in Field Crop Acreage in the Greenbelt and the Rest of Ontario, 2006 to 2016

	Units	Greenbelt			Rest of Ontario		
		2006	2011	2016	2006	2011	2016
Soybeans	acres	110,385	134,195	136,502	2,045,499	2,330,675	2,646,941
Change by 2016	%	23.7%	1.7%		29.4%	13.6%	
Corn for grain	acres	104,470	123,624	120,531	1,473,392	1,908,732	2,041,473
Change by 2016	%	15.4%	-2.5%		38.6%	7.0%	
Alfalfa and alfalfa mixtures	acres	152,239	129,572	94,261	1,510,131	1,216,638	1,024,933
Change by 2016	%	-38.1%	-27.3%		-32.1%	-15.8%	
Winter wheat	acres	53,599	61,870	51,613	974,877	1,038,133	1,028,765
Change by 2016	%	-3.7%	-16.6%		5.5%	-0.9%	
Other tame hay and fodder crops	acres	49,052	38,314	32,182	851,215	693,387	569,838
Change by 2016	%	-34.4%	-16.0%		-33.1%	-17.8%	
Corn for silage	acres	16,523	12,205	12,053	304,236	259,496	283,607
Change by 2016	%	-27.1%	-1.2%		-6.8%	9.3%	
Barley	acres	19,283	11,309	7,409	201,746	115,572	96,308
Change by 2016	%	-61.6%	-34.5%		-52.3%	-16.7%	
Mixed grains	acres	14,535	8,202	7,048	158,919	97,960	85,789
Change by 2016	%	-51.5%	-14.1%		-46.0%	-12.4%	
Spring wheat (excluding durum)	acres	9,777	4,829	4,388	193,125	109,814	116,094
Change by 2016	%	-55.1%	-9.1%		-39.9%	5.7%	
Other dry beans	acres	1,248	1,402	4,234	69,958	50,970	73,449
Change by 2016	%	239.3%	202.0%		5.0%	44.1%	
Potatoes	acres	3,101	4,374	3,921	35,054	33,010	30,764
Change by 2016	%	26.4%	-10.4%		-12.2%	-6.8%	
Canola (rapeseed)	acres	3,004	7,873	3,247	15,571	80,406	36,296
Change by 2016	%	8.1%	-58.8%		133.1%	-54.9%	
Oats	acres	10,652	4,081	3,644	121,300	66,959	78,562
Change by 2016	%	-65.8%	-10.7%		-35.2%	17.3%	
Other field crops	acres	814	1,248	1,423	20,713	27,046	29,440
Change by 2016	%	74.9%	14.0%		42.1%	8.9%	
Total field crops	**acres**	**555,689**	**546,152**	**487,786**	**8,212,121**	**8,147,777**	**8,302,311***
Change by 2016	**%**	***-12.2%***	***-10.7%***		***1.1%***	***1.9%***	

*Total field crop numbers are sums of the above rows as well as additional types not shown here. The total field crop figure in 2016 was obtained from Statistics Canada and does include suppressed values not otherwise available.

For most field crops, relative profitability is a major driver of what crops are planted in any given year. In addition, advances in genetics have allowed soybean production to become a larger share of the cropping base across Ontario.

Photo: Michael Manett

Holland Marsh Growers Association Water Project

Water health and quality is critical to farmers and rural communities. The Holland Marsh Growers Association (HMGA) spearheaded a four-year research project to protect freshwater supplies and reduce risks to water quality in the Lake Simcoe and Georgian Bay areas. Using innovative whole-farm approaches, the Association sought to find effective and efficient treatment technologies and methods.

The Holland Marsh is known for its muck soil, an incredibly productive soil type. It can, however, prove challenging to remove this soil from vegetables because its gravity is similar to water, so it does not settle as regular soils do. This means its nutrients wash into vital watersheds, compromising the water health by introducing additional minerals such as phosphorous. It can also cloud the water, causing a concern for fish populations.

The HMGA Water Project identified levels and types of contaminants that are discharged due to vegetable washing practices on participating farms. The project then tested different technologies to reduce risks to water quality. It included greenhouse operations as well as farms with packing sheds. For optimal adoption, the technologies under evaluation were retrofitted into existing on-farm systems for vegetable washing.

The Water Project found that the most critical step in improving water health and quality on vegetable producing lands is removing a significant amount of soil before the washing process begins. The project used carrots, beets, and parsnips to test the effectiveness of this idea, and the information has gone on to influence apple and mushroom processing facilities. Farmers from Nottawasaga, Niagara, and Chatham-Kent have been in touch to learn from the project, according to Charles Lalonde, the Water Project manager.

Workshops, articles, fact sheets, and blogs were produced to highlight and explain the work done within this project. The project represents a collaborative effort to reduce the impact of agricultural uses on the health and quality of water within the Greenbelt. It has resulted in guidance for growers on the various pathways to water treatment that are appropriate for a variety of agricultural scenarios. Importantly, the HMGA worked with OMAFRA staff to develop Vegetable and Fruit Washwater Manual, Publication 154, a manual for the agriculture sector. For more information, visit hmgawater.ca.

5

Animal Agriculture

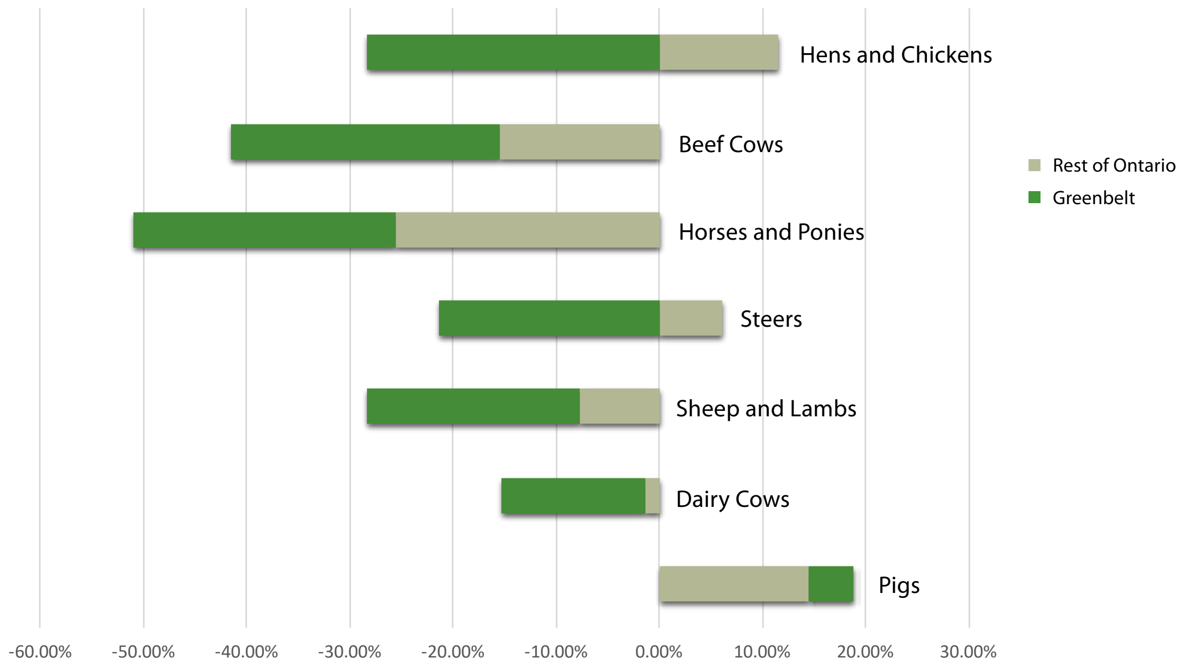
While the Greenbelt specializes in horticultural crops (floriculture, nursery crops, fruits and vegetables), the region also accounts for 17% of Ontario's horse and ponies, 8.0% of broiler chicken production, 7.8% of sheep and lambs, and 6.7% of beef cows.

The majority of Greenbelt horses, ponies, pigs, sheep, and lambs are located in the Protected Countryside (see Appendix Table A1.6). This would be expected, based on its much larger land base with 64% of Greenbelt farmland and farms. The rather large share of horses and ponies in the Greenbelt is due to the Greenbelt's location near urban centres.

Animal numbers in the Greenbelt are decreasing at a much faster rate than in the rest of the province. For example, steers in feedlots decreased by 21% between 2011 and 2016, while they increased by 6% in areas outside of the Greenbelt (see Table 5.2). The percentage change in animal numbers over the five-year period is illustrated in Figure 5.1.

More rural areas provide a more advantageous location for these operations (e.g., beef feedlots, large dairy operations, and swine operations) where it is easier to meet minimum distance separation (MDS) regulations and nutrient management regulations and their associated acreage requirements, and the associated infrastructure is in closer proximity (e.g. abattoirs).

Figure 5.1 Change in Number of Animals in the Greenbelt and Rest of Ontario, by Livestock Type, 2011 to 2016



5.1 Poultry

Poultry numbers and poultry production are on a downward trend within the Greenbelt, while the opposite is occurring in the rest of the province.

For example, total chicken and hen numbers decreased by 28.4% between 2011 and 2016, with 2.7 million reported in 2016, while the population increased by 11.5% in the rest of the province (see Table 5.1).

The majority of poultry production occurs in the Protected Countryside with its much larger land base within the Greenbelt.

Table 5.1 Poultry Numbers, Production in the Greenbelt and Rest of Ontario, and Change Between 2011 and 2016

	Units	Greenbelt 2011	Greenbelt 2016	Rest of Ontario 2011	Rest of Ontario 2016	Greenbelt Share 2016
Laying hens and broiler breeders	no.	253,308	220,235	8,180,077	9,099,667	9.6%
Change by 2016	%	-13.1%		11.2%		
Broilers, roasters, and Cornish	million	3.4	2.4	28.5	31.4	9.6%
Change by 2016	%	-31.2%		10.5%		
Turkeys	million	0.15	0.13	3.3	3.6	3.5%
Change by 2016	%	-10.4%		9.1%		
Broilers, roasters, and Cornish production	million kgs	41.6	39.1	395.1	446.7	8.0%
Change by 2016	%	-6.1%		13.0%		
Turkey production	million kgs	4.1	4.8	83.1	87.5	5.2%
Change by 2016	%	17.9%		5.3%		
Table eggs	M. dozen	6.8	5.7	207.7	233.2	2.4%
Change by 2016	%	-15.5%		12.3%		
Hatching eggs	M. dozen	1.1	1.1	23.5	20.9	4.8%
Change by 2016	%	-4.2%		-10.9%		
Total hens and chickens	**million**	**3.8**	**2.7**	**43.1**	**48.0**	**5.4%**
Change by 2016	**%**	**-28.4%**		**11.5%**		

Note: Some items such as table egg production were not reported in the 2006 Census.

The Greenbelt accounts for 9.6% of Ontario's egg laying hens, and breeders produced 4.8% of the province's hatching eggs (for 2016). Similarly, the region produced 8.0% of Ontario's chicken meat production (broilers, roasters and Cornish) and 2.4% of the province's eggs for consumption.

The Census indicates that turkey production within the Greenbelt accounts for 5.2% of Ontario's production and has increased over the last decade; at the same time, the number of turkeys was lower when the Census was taken.

5.2 Cattle and Calves

Total cattle and calf numbers in the Greenbelt in 2016 were lower than five years earlier by 21.2%, with less of a decline in the rest of Ontario (see Table 5.2). Across Ontario, there is a general downward trend in dairy cattle numbers, as milk production per cow increases over time.

In the rest of Ontario, steers in feedlots have increased since 2011, as well as beef heifers that are destined to become beef cows (and provide replacement animals for feedlots). This same trend did not occur in the Greenbelt as the beef industry migrates to other regions of the province. At the same time, the Greenbelt accounted for 6.7% of Ontario's beef cows and 7.6% of beef replacement heifers (that will become beef cows after calving).

Table 5.2 Cattle and Calves in the Greenbelt and Rest of Ontario, and Change Between 2011 and 2016

	Units	Greenbelt		Rest of Ontario		Greenbelt
		2011	2016	2011	2016	Share 2016
Beef cows	no.	21,536	15,912	260,526	220,341	6.7%
Change by 2016	%	-26.1%		-15.4%		
Heifers for beef herd replacement	no.	3,389	3,435	38,597	41,986	7.6%
Change by 2016	%	1.4%		8.8%		
Steers, 1 year and over	no.	12,749	10,035	278,514	295,479	3.3%
Change by 2016	%	-21.3%		6.1%		
Dairy cows	no.	14,715	12,677	303,443	299,283	4.1%
Change by 2016	%	-13.9%		-1.4%		
Heifers for dairy herd replacement	no.	8,648	6,698	164,497	152,197	4.2%
Change by 2016	%	-22.5%		-7.5%		
Total cattle and calves	**no.**	**95,040**	**74,912**	**1,646,341**	**1,548,798**	**4.6%**
Change by 2016	**%**	***-21.2%***		***-5.9%***		

5.3 Pigs, Goats, Sheep and Lamb

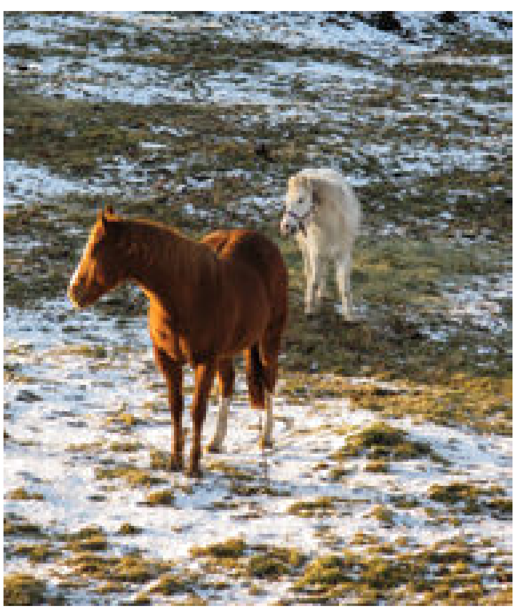
The Greenbelt accounted for less than 1.0% of Ontario's pig production, with an inventory of 23,931 head in May of 2016. These numbers are down by almost 55% compared to 2006 (see Table 5.3). Total sheep and lamb numbers were also lower compared to a decade earlier by 14.6%, with the Greenbelt having 7.8% of Ontario's sheep and lamb population.

The population of goats is increasing in Ontario, with the Greenbelt's number of goats at 5,844 up 48% since 2006, while the growth was at 72% in the rest of the province. Four percent of Greenbelt farms had goats, with an average number on the farm of 32 in 2016 (see Appendix Table A1.7 and Table 3.5).

Table 5.3 Pigs, Goats, Sheep and Lamb in the Greenbelt and Rest of Ontario, and Change Between 2011 and 2016

	Units	Greenbelt		Rest of Ontario		Greenbelt
		2011	2016	2011	2016	Share
Total pigs	no.	22,943	23,931	3,065,703	3,510,173	0.7%
Change by 2016	%	4.3%		14.5%		
Total sheep and lambs	no.	31,658	25,101	321,149	296,394	7.8%
Change by 2016	%	-20.7%		-7.7%		
Goats	no.	5,342	5,844	110,918	124,375	4.5%
Change by 2016	%	9.4%		12.1%		

5.4 Horses and Ponies



Compared to the acreage base and number of farms as a share of Ontario's, the Greenbelt had proportionally more horses and ponies on farms, accounting for 17% of Ontario's total in 2016 (see Table 5.4). These numbers included horses and ponies held on farms counted in the Census, but not those found on other types of rural properties[7].

As reported in Table 5.4, over the 2006-2016 period, the equine population decreased in both the Greenbelt and in the rest of the province by at least one-third. There were 3,740 fewer horses and ponies on Greenbelt farms in 2016 compared to 5 years earlier.

7 The Census of Agriculture does not account for all horses and ponies since the Census of Agriculture only captures information for farms and other operations that had agricultural products intended for sale.

Table 5.4 Horse and Ponies in the Greenbelt and Rest of Ontario, and Change Between 2006 and 2016

	Units	Greenbelt			Rest of Ontario			Greenbelt
		2006	2011	2016	2006	2011	2016	Share
Total horses and ponies	no.	17,073	14,690	10,950	80,212	71,952	53,586	17.0%
Change by 2016	%	-35.9%	-25.5%		-33.2%	-25.5%		

Across the Greenbelt, 21% of all farms (a total of 1,021) had horses or ponies on the farm, with each of these having on average 11 horses and/or ponies (see Appendix Table A1.7 and Table 3.5). The percentage of farms with equine on the farm was higher in the Oak Ridges Moraine at 28%.

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Appendix – Tables on Agriculture in the Component Plan Areas of the Greenbelt

Table A1 Gross Farm Revenues in the Golden Horseshoe by Farm Type, 2016

Item	Farms	Area Farmed	Acreage Per Farm	Gross Farm Revenue	Revenue Per Farm
	no.	*acres*	*acres*	*$*	*$*
Grain and oilseed farming	1,122	475,757	424	$253,953,968	$226,340
Other animal production	988	66,781	68	$101,574,319	$102,808
Fruit and tree nut farming	707	39,802	56	$164,801,262	$233,099
Greenhouse, nursery & floriculture	677	51,532	76	$839,383,953	$1,239,858
Other crop farming	654	78,126	119	$43,722,774	$66,854
Beef cattle, including feedlots	406	68,622	169	$55,594,692	$136,933
Vegetable and melon farming	347	33,564	97	$101,575,308	$292,724
Poultry and egg production	304	31,640	104	$252,352,746	$830,108
Dairy cattle and milk production	192	72,523	378	$106,714,530	$555,805
Sheep and goat farming	106	6,237	59	$5,476,263	$51,663
Hog and pig farming	28	9,614	343	$34,022,486	$1,215,089
All Farms	**5,531**	**934,198**	**169**	**$1,959,172,301**	**$354,217**

Source: Statistics Canada, Golden Horseshoe Crosstabs, Census of Agriculture (based on NAICS classification)

Table A1.1 Distribution of Farms, Acreage and Revenues in the Golden Horseshoe by Farm Type, 2016

Item	Gross Farm Revenue	Share of Farms	Share of Acreage	Share of Revenue
	$	%	%	%
Oilseed and grain farming	$253,953,968	20.3%	50.9%	13.0%
Other animal production	$101,574,319	17.9%	7.1%	5.2%
Fruit and tree nut farming	$164,801,262	12.8%	4.3%	8.4%
Greenhouse, nursery & floriculture	$839,383,953	12.2%	5.5%	42.8%
Other crop farming	$43,722,774	11.8%	8.4%	2.2%
Beef cattle, including feedlots	$55,594,692	7.3%	7.3%	2.8%
Vegetable and melon farming	$101,575,308	6.3%	3.6%	5.2%
Poultry and egg production	$252,352,746	5.5%	3.4%	12.9%
Dairy cattle and milk production	$106,714,530	3.5%	7.8%	5.4%
Sheep and goat farming	$5,476,263	1.9%	0.7%	0.3%
Hog and pig farming	$34,022,486	0.5%	1.0%	1.7%
All Farms	**$1,959,172,301**	**100.0%**	**100.0%**	**100.0%**

Source: Statistics Canada, Golden Horseshoe Crosstabs, Census of Agriculture (based on NAICS classification)

Table A1.2 Farm Cash Receipts, Employment in Farming and Food Manufacturing and Employment per Farm in the Golden Horseshoe and Ontario, 2016

Item	Units	Golden Horseshoe	Greater Golden Horseshoe	Ontario	Ontario less Golden Horseshoe
Farm cash receipts	$ million	$1,966	$5,615	$15,127	$13,161
Distribution	%	13.0%	37.1%	100.0%	87.0%
Farms	no.	5,604	16,703	49,600	43,996
Distribution	%	11.3%	33.7%	100.0%	88.7%
Farm employment	no.	17,490	38,455	89,805	72,315
Distribution	%	19.5%	42.8%	100.0%	80.5%
Food manufacturing employment	no.	56,590	73,490	95,150	38,560
Distribution	%	59.5%	77.2%	100.0%	40.5%
Farm employment per farm	no.	3.2	2.3	1.8	1.6

Source: Statistics Canada: Industry - North American Industry Classification System (NAICS) (427A), Class of Worker (7A), Labour Force Status (3), Age (13A) and Sex (3) for the Labour Force Aged 15 Years and Over in Private Households of Canada, Provinces and Territories and Census Divisions, 2016 Census - 25% Sample Data

Table A1.3 Farms Reporting Crop Farming Businesses within the Greenbelt

Item	Units	2011	2016	Distribution 2016
Farms in field crops				
Greenbelt total	**no.**	**3,304**	**2,818**	**100.0%**
Change by 2016	**%**	***-14.7%***		
Niagara Escarpment	no.	532	452	16%
Change by 2016	%	-15.0%		
Oak Ridges Moraine	no.	688	622	22%
Change by 2016	%	-9.5%		
Protected Countryside	no.	2,085	1,744	62%
Change by 2016	%	-16.4%		
Farms in fruits, berries and nuts				
Greenbelt total	**no.**	**901**	**816**	**100%**
Change by 2016	**%**	***-9.5%***		
Niagara Escarpment	no.	162	151	18%
Change by 2016	%	-6.7%		
Oak Ridges Moraine	no.	37	52	6%
Change by 2016	%	40.7%		
Protected Countryside	no.	703	613	75%
Change by 2016	%	-12.7%		
Farms in vegetable crops				
Greenbelt total	**no.**	**495**	**566**	**100.0%**
Change by 2016	**%**	***14.3%***		
Niagara Escarpment	no.	49	69	12%
Change by 2016	%	40.1%		
Oak Ridges Moraine	no.	84	127	22%
Change by 2016	%	50.7%		
Protected Countryside	no.	362	370	65%
Change by 2016	%	2.3%		
Farms in nursery products				
Greenbelt total	**no.**	**287**	**250**	**100%**
Change by 2016	**%**	***-13.0%***		
Niagara Escarpment	no.	42	33	13%
Change by 2016	%	-21.0%		
Oak Ridges Moraine	no.	54	47	19%
Change by 2016	%	-13.4%		
Protected Countryside	no.	191	170	68%
Change by 2016	%	-11.1%		
Farms in sod production				
Greenbelt total	**no.**	**40**	**21**	**100%**
Change by 2016	**%**	**-46.4%**		
Niagara Escarpment	no.	3	0	0%
Change by 2016	%	-100.0%		
Oak Ridges Moraine	no.	6	4	21%
Change by 2016	%	-24.1%		
Protected Countryside	no.	31	17	79%
Change by 2016	%	-45.2%		

Table A1.4 Farms Reporting Crop Farming Businesses within the Greenbelt

Item	Units	2011	2016	Distribution 2016
Greenhouses				
Greenbelt total	**no.**	**329**	**303**	**100.0%**
Change by 2016	***%***	***-8.1%***		
Niagara Escarpment	no.	34	36	12%
Change by 2016	%	6.6%		
Oak Ridges Moraine	no.	33	38	13%
Change by 2016	%	16.9%		
Protected Countryside	no.	263	1,744	75%
Change by 2016	%	-13.1%		
Mushrooms				
Greenbelt total	**no.**	**19**	**33**	**100%**
Change by 2016	***%***	***78.4%***		
Niagara Escarpment	no.	4	6	17%
Change by 2016	%	42.8%		
Oak Ridges Moraine	no.	4	10	29%
Change by 2016	%	126.7%		
Protected Countryside	no.	11	18	54%
Change by 2016	%	71.9%		
Maple Syrup Taps				
Greenbelt total	**no.**	**156**	**178**	**100.0%**
Change by 2016	***%***	***13.6%***		
Niagara Escarpment	no.	29	28	16%
Change by 2016	%	-1.6%		
Oak Ridges Moraine	no.	39	39	22%
Change by 2016	%	1.8%		
Protected Countryside	no.	89	110	62%
Change by 2016	%	23.6%		
Honey Bees				
Greenbelt total	**no.**	**133**	**187**	**100%**
Change by 2016	***%***	***40.6%***		
Niagara Escarpment	no.	19	28	15%
Change by 2016	%	43.3%		
Oak Ridges Moraine	no.	29	48	26%
Change by 2016	%	69.0%		
Protected Countryside	no.	85	111	59%
Change by 2016	%	30.5%		

Table A1.5 Farms Reporting Poultry and Bovine Farming Businesses within the Greenbelt

Item	Units	2011	2016	Distribution 2016
Broiler chicken				
Greenbelt total	**no.**	**252**	**209**	**100.0%**
Change by 2016	**%**	***-16.8%***		
Niagara Escarpment	no.	30	29	14%
Change by 2016	%	-2.3%		
Oak Ridges Moraine	no.	49	41	20%
Change by 2016	%	-17.0%		
Protected Countryside	no.	172	139	66%
Change by 2016	%	-19.3%		
Laying hens				
Greenbelt total	**no.**	**490**	**570**	**100%**
Change by 2016	**%**	***16.3%***		
Niagara Escarpment	no.	62	86	15%
Change by 2016	%	39.6%		
Oak Ridges Moraine	no.	99	135	24%
Change by 2016	%	36.7%		
Protected Countryside	no.	329	348	61%
Change by 2016	%	5.9%		
Turkey				
Greenbelt total	**no.**	**104**	**81**	**100.0%**
Change by 2016	**%**	***-22.3%***		
Niagara Escarpment	no.	12	14	18%
Change by 2016	%	21.8%		
Oak Ridges Moraine	no.	22	20	25%
Change by 2016	%	-8.4%		
Protected Countryside	no.	70	46	57%
Change by 2016	%	-34.0%		
Dairy cows				
Greenbelt total	**no.**	**246**	**197**	**100%**
Change by 2016	**%**	***-20.0%***		
Niagara Escarpment	no.	24	21	11%
Change by 2016	%	-13.2%		
Oak Ridges Moraine	no.	40	36	18%
Change by 2016	%	-8.8%		
Protected Countryside	no.	183	140	71%
Change by 2016	%	-23.3%		
Beef cows				
Greenbelt total	**no.**	**963**	**738**	**100%**
Change by 2016	**%**	***-23.4%***		
Niagara Escarpment	no.	183	149	20%
Change by 2016	%	-18.6%		
Oak Ridges Moraine	no.	214	167	23%
Change by 2016	%	-22.0%		
Protected Countryside	no.	566	423	57%
Change by 2016	%	-25.4%		

Steers > 1 yr.				
Greenbelt total	**no.**	**518**	**389**	**100%**
Change by 2016	***%***	***-24.9%***		
Niagara Escarpment	no.	98	80	21%
Change by 2016	%	-17.6%		
Oak Ridges Moraine	no.	106	90	23%
Change by 2016	%	-15.0%		
Protected Countryside	no.	314	218	56%
Change by 2016	%	-30.5%		

Table A1.6 Farms Reporting Other Livestock Farming Businesses within the Greenbelt

Item	Units	2011	2016	Distribution 2016
Pigs				
Greenbelt total	**no.**	**93**	**127**	**100.0%**
Change by 2016	***%***	***36.5%***		
Niagara Escarpment	no.	12	20	16%
Change by 2016	%	66.9%		
Oak Ridges Moraine	no.	15	30	22%
Change by 2016	%	101.0%		
Protected Countryside	no.	66	77	62%
Change by 2016	%	16.5%		
Sheep and lambs				
Greenbelt total	**no.**	**336**	**274**	**100%**
Change by 2016	***%***	***-18.5%***		
Niagara Escarpment	no.	45	43	16%
Change by 2016	%	-3.7%		
Oak Ridges Moraine	no.	77	70	25%
Change by 2016	%	-10.2%		
Protected Countryside	no.	214	161	59%
Change by 2016	%	-24.7%		
Goats				
Greenbelt total	**no.**	**198**	**183**	**100.0%**
Change by 2016	***%***	***-7.4%***		
Niagara Escarpment	no.	26	23	13%
Change by 2016	%	-10.8%		
Oak Ridges Moraine	no.	47	47	26%
Change by 2016	%	-0.8%		
Protected Countryside	no.	124	113	62%
Change by 2016	%	-9.2%		
Horses and ponies				
Greenbelt total	**no.**	**1,305**	**1,021**	**100%**
Change by 2016	***%***	***-21.8%***		
Niagara Escarpment	no.	191	151	15%
Change by 2016	%	-21.1%		
Oak Ridges Moraine	no.	300	263	26%
Change by 2016	%	-12.4%		
Protected Countryside	no.	815	608	60%
Change by 2016	%	-25.4%		

Llama and alpacas				
Greenbelt total	**no.**	**91**	**80**	**100%**
Change by 2016	**%**	**-12.9%**		
Niagara Escarpment	no.	14	14	17%
Change by 2016	%	-0.7%		
Oak Ridges Moraine	no.	22	19	23%
Change by 2016	%	-16.8%		
Protected Countryside	no.	55	47	59%
Change by 2016	%	-14.4%		
Deer				
Greenbelt total	**no.**	**14**	**6**	**100%**
Change by 2016	%	-52.4%		
Elk				
Greenbelt total	**no.**	**5**	**1**	**100%**
Change by 2016	%	-79.9%		
Mink				
Greenbelt total	**no.**	**7**	**1**	**100%**
Change by 2016	%	-85.9%		
Rabbits				
Greenbelt total	**no.**	**99**	**92**	**100%**
Change by 2016	**%**	***-7.6%***		

Table A1.7 Farms Reporting by Farming Business; the Greenbelt and Rest of Ontario, 2016

Farms Reporting	Greenbelt	Percent of Greenbelt Farms	Rest of Ontario	Percent Rest of Ontario
All Farms	4,782	100%	44,818	100%
Field crops	2,818	59%		
Horses and ponies	1,021	21%	8,273	18%
Fruit crops	816	17%	1,780	4.0%
Beef cows	738	15%	8,943	20%
Egg laying hens	570	12%	5,832	13%
Vegetable crops	566	12%	3,204	7.1%
Steers > 1-year	389	8.1%	5,656	13%
Greenhouses	303	6.3%	1,169	2.6%
Sheep and lamb	274	5.7%	2,845	6.3%
Nursery products	250	5.2%	637	1.4%
Broiler chicken	209	4.4%	2,318	5.2%
Dairy cows	197	4.1%	4,203	9.4%
Honey bees colonies	187	3.9%	1,317	2.9%
Goats	183	3.8%	1,753	3.9%
Maple syrup taps	178	3.7%	2,825	6.3%
Pigs	127	2.7%	2,633	5.9%
Rabbits	92	1.9%	858	1.9%
Turkey	81	1.7%	770	1.7%
Llamas and alpacas	80	1.7%	584	1.3%
Mushrooms	33	0.7%	100	0.2%
Sod products	21	0.4%	52	0.1%
Deer	6	0.1%	62	0.1%
Elk	1	0.0%	28	0.1%
Mink	1	0.0%	45	0.1%

Table A1.8 Change in Area Farmed by Land Use Within the Greenbelt, 2011 to 2016

Item	Units	2011	2016	Distribution
Field crops				
Greenbelt total	**acres**	**546,152**	**487,786**	**100.0%**
Change by 2016	***%***	***-10.7%***		
Niagara Escarpment	acres	89,385	61,462	12.6%
Change by 2016	%	-31.2%		
Oak Ridges Moraine	acres	116,793	100,813	20.7%
Change by 2016	%	-13.7%		
Protected Countryside	acres	339,974	325,511	66.7%
Change by 2016	%	-4.3%		
Fruits, berries and nuts				
Greenbelt total	**acres**	**29,205**	**26,912**	**100%**
Change by 2016	***%***	***-7.9%***		
Niagara Escarpment	acres	5,679	4,942	18.4%
Change by 2016	%	-13.0%		
Oak Ridges Moraine	acres	289	374	1.4%
Change by 2016	%	29.3%		
Protected Countryside	acres	23,237	21,596	80.2%
Change by 2016	%	-7.1%		
Vegetable crops				
Greenbelt total	**acres**	**16,376**	**14,525**	**100.0%**
Change by 2016	***%***	***-11.3%***		
Niagara Escarpment	acres	779	471	3.2%
Change by 2016	%	-39.5%		
Oak Ridges Moraine	acres	2,789	4,461	30.7%
Change by 2016	%	59.9%		
Protected Countryside	acres	12,808	9,593	66.0%
Change by 2016	%	-25.1%		
Nursery products				
Greenbelt total	**acres**	**9,570**	**9,875**	**100%**
Change by 2016	***%***	***3.2%***		
Niagara Escarpment	acres	749	1,244	12.6%
Change by 2016	%	66.0%		
Oak Ridges Moraine	acres	1,784	1,949	19.7%
Change by 2016	%	9.3%		
Protected Countryside	acres	7,037	6,682	67.7%
Change by 2016	%	-5.0%		
Sod production				
Greenbelt total	**acres**	**9,307**	**6,213**	**100.0%**
Change by 2016	***%***	***-33.2%***		
Niagara Escarpment	acres	42	0	0.0%
Change by 2016	%	x		
Oak Ridges Moraine	acres	2,142	592	9.5%
Change by 2016	%	-72%		
Protected Countryside	acres	7,123	5,621	90.5%
Change by 2016	%	-21.1%		
Christmas tree production				
Greenbelt total	**acres**	**2,489**	**3,178**	**100%**
Change by 2016	***%***	***27.7%***		

Niagara Escarpment	acres	478	167	5.3%
Change by 2016	%	-65.0%		
Oak Ridges Moraine	acres	717	2,282	71.8%
Change by 2016	%	218.5%		
Protected Countryside	acres	1,294	728	22.9%
Change by 2016	%	-43.8%		
Natural pasture				
Greenbelt total	**acres**	**55,246**	**43,156**	**100%**
Change by 2016	***%***	***-21.9%***		
Niagara Escarpment	acres	11,939	8,785	20.4%
Change by 2016	%	-26.4%		
Oak Ridges Moraine	acres	14,719	10,744	24.9%
Change by 2016	%	-27.0%		
Protected Countryside	acres	28,588	23,627	54.7%
Change by 2016	%	-17.4%		
Tame or seeded pasture				
Greenbelt total	**acres**	**50,106**	**33,980**	**100%**
Change by 2016	***%***	***-32.2%***		
Niagara Escarpment	acres	14,670	10,228	30.1%
Change by 2016	%	-30.3%		
Oak Ridges Moraine	acres	10,898	7,646	22.5%
Change by 2016	%	-29.8%		
Protected Countryside	acres	24,539	16,106	47.4%
Change by 2016	%	-34.4%		
Summerfallow area				
Greenbelt total	**acres**	**3,259**	**1,692**	**100%**
Change by 2016	***%***	***-48.1%***		
Niagara Escarpment	acres	359	322	19.0%
Change by 2016	%	-10.3%		
Oak Ridges Moraine	acres	804	299	17.7%
Change by 2016	%	-62.8%		
Protected Countryside	acres	2,095	1,071	63.3%
Change by 2016	%	-48.9%		
Woodlands and wetlands				
Greenbelt total	**acres**	**91,031**	**81,121**	**100%**
Change by 2016	***%***	***-10.9%***		
Niagara Escarpment	acres	18,665	17,519	21.6%
Change by 2016	%	-6.1%		
Oak Ridges Moraine	acres	18,037	20,547	25.3%
Change by 2016	%	13.9%		
Protected Countryside	acres	54,329	43,054	53.1%
Change by 2016	%	-20.8%		
All other lands				
Greenbelt total	**acres**	**43,690**	**40,275**	**100%**
Change by 2016	***%***	***-7.8%***		
Niagara Escarpment	acres	7,948	7,308	18.1%
Change by 2016	%	-8.1%		
Oak Ridges Moraine	acres	9,163	8,204	20.4%
Change by 2016	%	-10.5%		
Protected Countryside	acres	26,579	24,763	61.5%
Change by 2016	%	-6.8%		

Table A1.9 Distribution of Area in Field Crops, the Greenbelt and the Rest of Ontario

	Units	Greenbelt		Rest of Ontario		Greenbelt Share
		2011	2016	2011	2016	2016
Soybeans	acres	134,195	136,502	2,330,675	2,646,941	4.9%
	%	24.6%	28.0%	28.6%	31.9%	
Corn for grain	acres	123,624	120,531	1,908,732	2,041,473	5.6%
	%	22.6%	24.7%	23.4%	24.6%	
Alfalfa and alfalfa mixtures	acres	129,572	94,261	1,216,638	1,024,933	8.4%
	%	23.7%	19.3%	14.9%	12.3%	
Winter wheat	acres	61,870	51,613	1,038,133	1,028,765	4.8%
	%	11.3%	10.6%	12.7%	12.4%	
Other tame hay & fodder crops	acres	38,314	32,182	693,387	569,838	5.3%
	%	7.0%	6.6%	8.5%	6.9%	
Corn for silage	acres	12,205	12,053	259,496	283,607	4.1%
	%	2.2%	2.5%	3.2%	3.4%	
Barley	acres	11,309	7,409	115,572	96,308	7.1%
	%	2.1%	1.5%	1.4%	1.2%	
Mixed grains	acres	8,202	7,048	97,960	85,789	7.6%
	%	1.5%	1.4%	1.2%	1.0%	
Spring wheat (excl. durum)	acres	4,829	4,388	109,814	116,094	3.6%
	%	0.9%	0.9%	1.3%	1.4%	
Other dry beans	acres	1,402	4,234	50,970	73,449	5.5%
	%	0.3%	0.9%	0.6%	0.9%	
Potatoes	acres	4,374	3,921	33,010	30,764	11.3%
	%	0.8%	0.8%	0.4%	0.4%	
Canola (rapeseed)	acres	7,873	3,247	80,406	36,296	8.2%
	%	1.4%	0.7%	1.0%	0.4%	
Oats	acres	4,081	3,644	66,959	78,562	4.4%
	%	0.7%	0.7%	0.8%	0.9%	
Other field crops	acres	1,248	1,423	27,046	29,440	4.6%
	%	0.2%	0.3%	0.3%	0.4%	
Total field crops	**acres**	**546,152**	**487,786**	**8,147,777**	**8,302,311**	**5.6%**
	%	**100%**	**100%**	**100%**	**100%**	