



Farmland, Farmers and Food Production in Peterborough County

Version 3.0

Prepared by:

**Sustainable Peterborough
Future of Food and Farming Working Group
Farmland Task Force**

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1. Introduction and Background

From September 2011 – April 2012, the Greater Peterborough Area (GPA) underwent a broad community-based process of consultation that resulted in the development of an *Integrated Community Sustainability Plan: Sustainable Peterborough*. Developing the Sustainability Plan was a collaborative endeavor by all members of the GPA, which includes both the City and County of Peterborough (including its eight member municipalities) along with Curve Lake First Nation and Hiawatha First Nation. The Plan establishes a 25-year vision for the region, as defined by the community.

One of the six Themes that emerged was [Agriculture and Local Food](#), which prioritized the Goal of **“feeding ourselves sustainably with local, healthy foods”**. Three strategic directions were identified as pathways to achieving this goal. Of these, the first was maintaining **“adequate farmland availability to support our sustainable agriculture needs”**.ⁱ

The [Sustainable Peterborough Future of Food and Farming Working Group](#) was created in early 2013 to follow up on the recommendations in the Report regarding Agriculture and Local Food. The Working Group now includes a range of organizations interested in food and farming issues, and there is an open invitation to others to join.

The Working Group established a small Task Force to look at the first of the three strategic directions, mentioned above. The Task Force consisted of representation from the City and County Planning Departments, Farms at Work (a local non-profit project) and the Peterborough Social Planning Council. The question that guided the original Task Force research over 2013 and 2014 was therefore taken from Sustainable Peterborough Plan: **“Will we, in 2036, have adequate farmland availability to feed ourselves sustainably with local, healthy foods?”** The Report has since been updated as version 3.0 (May 2017) to include new Census data.

The Task Force does not believe that Peterborough County residents will eat only food produced in Peterborough County. Nor do we believe that the community intended to suggest that this would be the case. Food will continue to be imported from abroad, and food produced elsewhere in the region, the province and the country will form a part of our diet.

However, the Goal set in the Plan, of “feeding ourselves sustainably with local, healthy foods” by 2036, provides an opportunity to investigate food production and consumption in our community. It provides an opportunity to ask what role local food plays today in our community, and what our prospects are, as a community, for meeting increasing demand for local food and for security of access to food.

Historic trends documented by sources such as Statistics Canada’s Census of Agriculture form the basis for the research undertaken. However, rather than rely on detailed growth forecasts that incorporate a multi-criteria analyses of the economic outlook for the region, sector or existing patterns of growth, this report simply intends to document trends and to show the potential consequences that the *continuation of documented historic trends through 2036* may have on our ability to feed ourselves. It does build in external factors that may change those trends over the next 20 years but invites dialogue with the community on this subject.

The work of the current Sustainable Peterborough Working Group can also be seen as a follow-up to the “*Agricultural Economic Impact and Development Study*” prepared for the City of Kawartha Lakes and the Greater Peterborough Area in 2006ⁱⁱ. The Executive Summary of the 2006 Report, including the 19 recommendations, is appended to this Study for reference. Many of those earlier recommendations are directly relevant to this current work.

With this background in mind, the Task Force has undertaken four pieces of research:

- A. A review of historical data and trends in farmland use in the County from 1976 to 2016, inclusive and a projection of farmland acres in the County through 2036, assuming trends continue.
- B. A review of farm businesses, as well as numbers and demographics of farmers in the County over time, with possible projections through 2036.
- C. An analysis of the level of land use planning protection provided to the farmland currently in production in the County; and
- D. An estimate of how much active farmland and food would be required to feed Peterborough’s population in 2011 and in 2036.

2. Research Findings

A. Farmland in Peterborough County, 1976-2016

This section includes a review of historical records of agricultural land in the County from 1976 to 2016, and projections through the following 20 years to 2036, assuming historical trends continue. This is a key metric needed to determine overall decline in the local industry.

To quote the authors of the 2006 *Agricultural Economic Impact and Development Study*, (p.4.4):

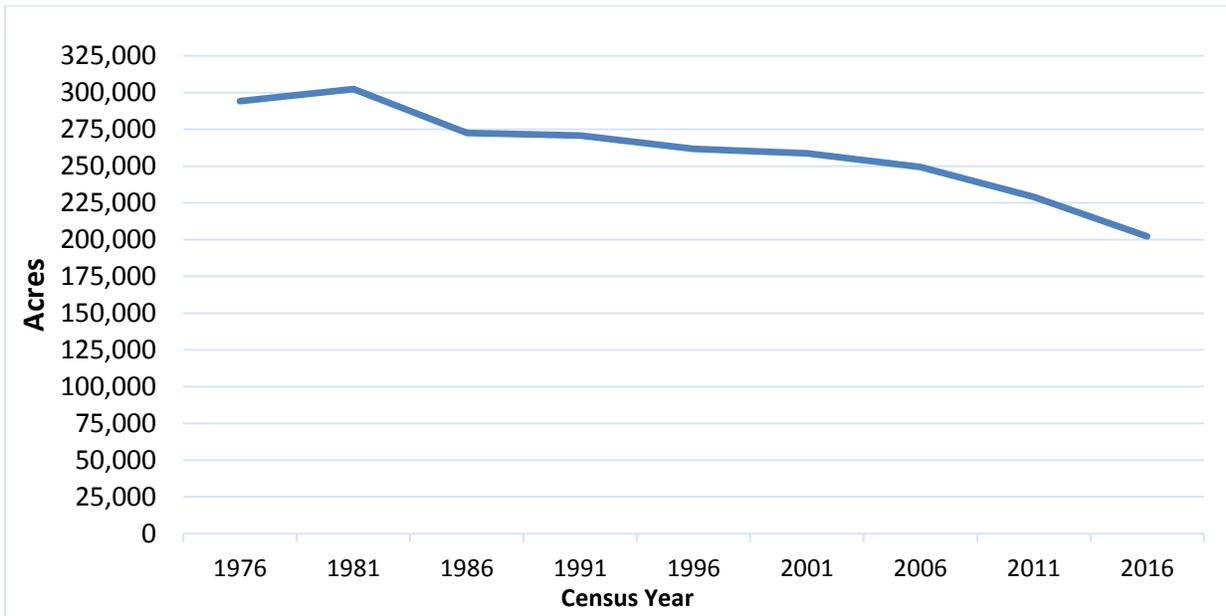
“A review of the number of farms does not necessarily provide a true indication of changes in the scale of the industry. Rather it provides an indication of the shift taking place in the size of farm operations. Overall there is a trend in agriculture toward larger farms and rationalization of operations.

Therefore an assessment of the change in farm acres...is more representative of actual change in production.”ⁱⁱⁱ

Since 1971, the County has experienced a steady reduction in the overall amount of land on farms reported by farmers in the County. This land is referred to in the Census of Agriculture as “total area”. Approximately 92,000 acres, or 31% of the land on farms in 1976, is no longer being reported in the Census by farmers, as seen in Figure 1.

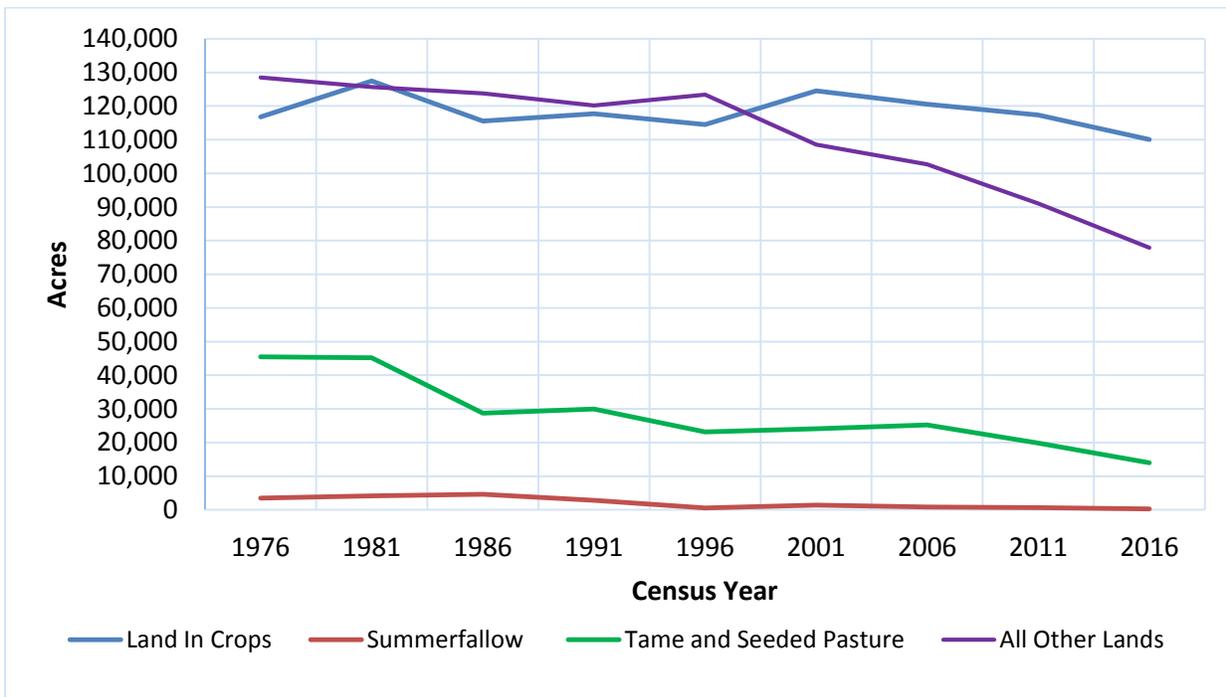
If the average rate of shrinkage of farmed acres over the 40 years from 1976 to 2016 is assumed to continue into the future, then another 46,000 acres could be out of production by the time of the Census in 2036. This would result in a total reduction by 47% of the farmed acres in the County over a 60 year period.

Figure 1: “Total Area” on farms in Peterborough County, 1976-2016 ^{iv}



In 1976, the Census of Agriculture began to capture more detailed information on the use of farmland, as reported by farmers. Figure 2 shows the more detailed changes in the use of farmland in the County over 40 years that have contributed to the 92,000 acre decline.

Figure 2: Graph of Agriculture Land Use Changes in Peterborough, 1976 to 2016



The number of acres in “crops” has been variable, probably in relation to market prices, but overall during 40 years, the total number of acres in crops has been remarkably stable, as shown in Figure 3. Summerfallow land^v, in which land is left bare for a season, has become negligible over time.

The main change affecting production is the steady decline of tame and seeded pasture. In 2016, 70% fewer acres were in pasture than in 1976, a reduction of more than 31,000 acres. Significant reduction is also seen in the amount of land reported as “other land”.

Figure 3: Summary of Changes in Agricultural Land Use in Peterborough County, 1976 and 2016^{vi}

	1976 Acres*	2016 Acres	Change in Acres over 40 years	Percentage of Change in Acres over 40 years
Land in Crops	116,798	110,042	6756	6%
Summer Fallow	3,465	310	3155	91%
Tame and Seeded Pasture	45,524	13,960	31564	69%
All other land including: Wetland, Woodlot, Christmas Trees & Other	128,466	77,928	50538	39%
Total Area of Farms	294,253	202,240	92,013	31%

There are three factors that are most likely at work in our County, causing land on farms to decline over time.

First, it is likely that some land that was farmed in 1976 has been gradually abandoned, as part of a long process of abandonment of “marginal” land that began in the 1800’s. Marginal land might, for example, be wet late into the season, too steep or stony. There has also been a significant decline in wetland and woodland acreages on farms. Unfortunately, it is not possible to track farmland acres on a township by township basis without access to more detailed historical Census data. However, a further research project (which would involve purchasing

additional data from StatsCan) would help to determine how much of the decline in each land use has occurred in each township, and whether declines can be largely attributed to townships with difficult soils and topography.

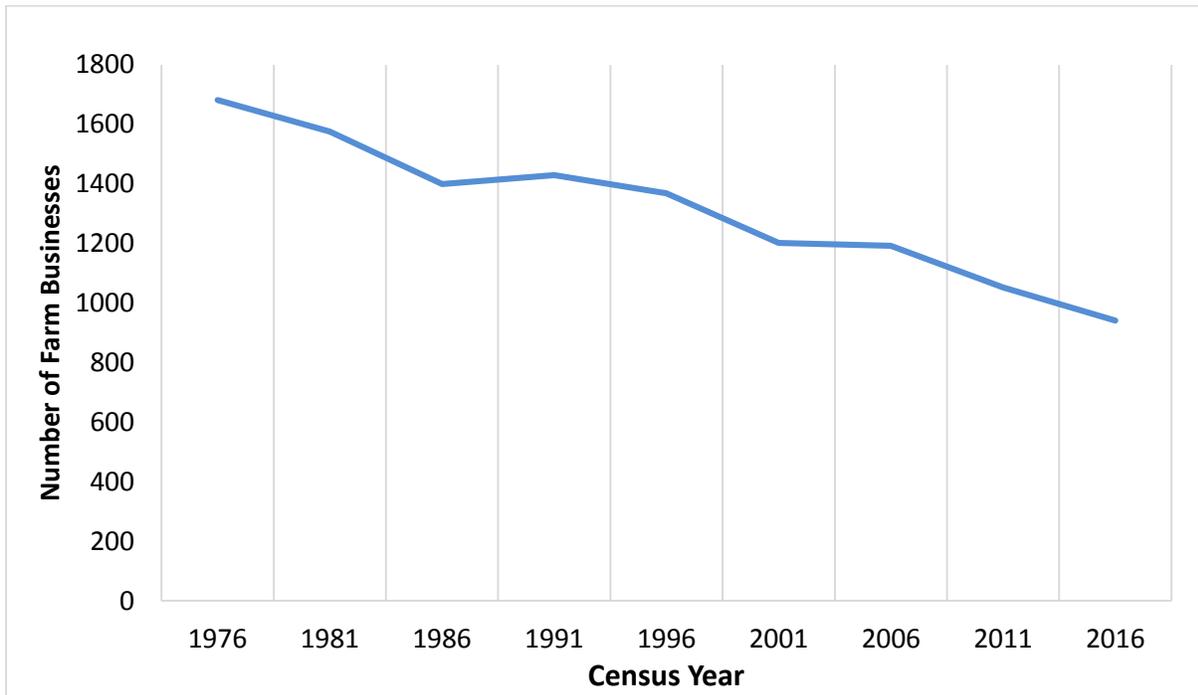
Urban expansion has also played some part in farmland reduction. Between 1971 and 2013, the City of Peterborough annexed approximately 3300 acres of primarily agricultural land for the purpose of accommodating long-term urban development. Since that time, approximately 3600 acres of land have been developed in the City, including 800 acres on lands annexed since 1971 and 2800 acres on lands already within the City prior to 1971. Presently, the City has approximately 2800 acres of land within its boundary to accommodate future development.^{vii} Information on the impact of expansion of hamlets located in the County would require further research.

While marginal land retirement and urban expansion have played some role in reduction of land in production, the Task Force believes the economics of farming have also played a major role. Over the past 40 years, many farm businesses have been discontinued, and young people have not been fully replacing retiring farmers. When farms are sold to by retiring farmers to non-farmers, land tends to go out of production.

B. Farm businesses and farmers

The declining number of farm businesses between 1976 and 2016 is documented in Figure 4 below. The loss of 741 businesses represents a decline of 44% over 40 years.

Figure 4: Number of Farm Businesses in Peterborough County, 1976-2016.^{viii}



Over the 40 year period from 1976 to 2016, the average size of Peterborough County farms increased from 175 acres to 215 acres. The average size of farms across Ontario increased from 174 acres to 250 acres over the same period.

When children do not take over the family farm business, and farms are sold out of the family, they may be sold to other farmers who are expanding their land base. However, over the last 20 years, much land has also been sold to non-farmers looking for a “rural” lifestyle. Today, although no one tracks this data, it is common knowledge that many acres of farmland in the County are owned by non-farmers.

When farms are purchased by non-farmers, the new owners have a strong incentive to keep some portion in production, because they can reduce their property tax on the farmland if they

have a farming tenant. However, it is not necessary that the entire farm remain in production, and therefore it is possible that much land has simply gone out of production on these farms. Fields have been allowed to grow up as “meadows” or planted to trees, contributing to the pastoral lifestyle desired by the owner.

In the future, as retiring farmers move off the land, the lack of incentive for non-farming owners to keep land fully-utilized for agriculture could result in continuing erosion of the farmed land base in the County.

Given that farmer retirement appears to be a key factor in land changing hands and going out of production, the age make-up of the existing farming population can also provide insight into changes that could occur over the coming years. Figure 5 illustrates the trends over the period 1991 to 2016 in each of three age groups. Prior to 1991, data was collected differently and is not comparable.

The number of farmers under 35 has declined significantly over just this 25 year period, while numbers have risen in the “over 55 years” category in every Census year.^{ix} By 2016, well over half the farmers in the County were over the age of 55 and only 95 farmers (7%) were under the age of 35. This signals a wave of retirements and potential sales of farmland that has already begun in the County.

Figure 5: Percentage of Farmers in three age groups in Peterborough County, 1991-2016

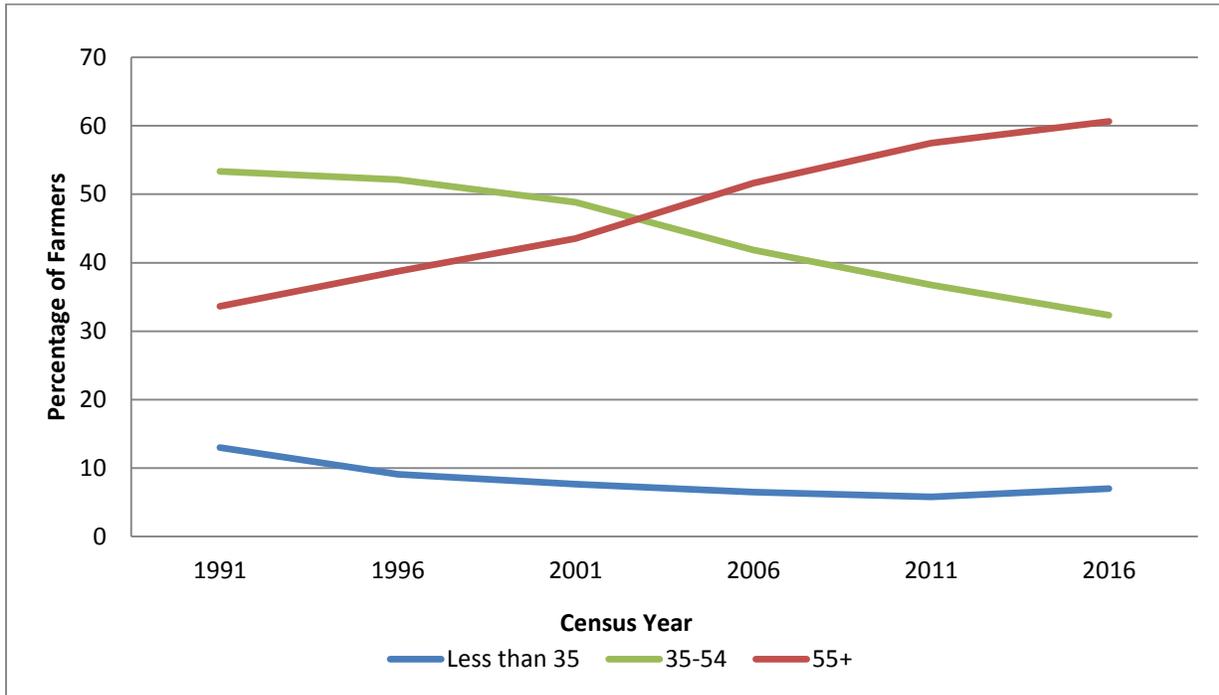


Figure 6 progresses the ages of County farmers, starting with 2016 data, to estimate the number that might be operating in the County by 2036.

Figure 6: Number of Farmers by Age in Peterborough County, 2016, and age progression through to 2036.^x

	2016	2026	2036	20 Year Percentage Change
Under 35	95	95	95	Held Constant
35-54	440	418	383	13%
Over 55	825	633	525	36%
Total	1360	1204	974	26%

The assumptions made in Figure 6 are that:

- farmers on average will retire at age 75
- the number of farmers under the age of 35 will remain constant, and that
- 25% of all retiring farmers have a successor in the family who is currently not reported in the Census as a decision-maker on the farm (ie. who will move from being an employee to an operator once the parent retires).

Using these conservative assumptions, Figure 6 suggests that in only 20 years, by 2036, the County may have 26% fewer farmers than at present, and 52% fewer farmers than in 1976. If action were taken to attract, train and retain new and young farmers, who have solid business plans for the future, at least some of this impact could be prevented.

C. Current protection of farmland in the County

Farmland in Ontario is provided some protection from urban and rural non-farm development as a matter of policy. The Provincial Policy Statement (PPS) is the statement of the government's policies on land use planning. It provides direction for the entire province on matters of provincial interest related to land use planning and development. The PPS is issued under Section 3 of the *Planning Act* which directs that all decisions affecting land use planning matters "shall be consistent with" the Provincial Policy Statement.

Section 2.3.1 of the PPS states that "Prime agricultural areas shall be protected for long-term use for agriculture" and that "Prime agricultural areas are areas where prime agricultural lands predominate."^{xi} Between March 1, 2005 and April 29, 2014, the PPS defined prime agricultural land as follows:

"Prime agricultural land: means land that includes specialty crop areas and/or Canada Land Inventory Classes 1, 2 and 3 soils, in this order of priority for protection."

To guide decision making at a local level, municipalities prepare Official Plans. An Official Plan contains locally-established goals, objectives and policies that manage and direct physical

change and its effects on the social, economic and natural environment of the municipality. In accordance with provincial legislation, the municipal official plan must be consistent with the PPS. Accordingly, between 2005 and 2014, municipal Official Plans and all municipal planning decisions were required to protect areas where specialty crop areas and class 1, 2 and 3 soils predominate for agriculture. Limited lot development and non-agricultural uses were only to be permitted in specific circumstances.

Soils capability classes are based on their suitability for sustained production of common field crops. In Peterborough County, while Class 1, 2 and 3 soils are common in the southern part of the County, many acres of Class 4 land are also farmed. In the summer of 2016, OMAFRA undertook to review the soil mapping and soil classifications in the County, and this could have an impact on what farmland in the County qualifies for protection under the PPS in the future.

Peterborough County is known for its drumlins and wetlands, the result of glacial melting at the end of the last ice age. For this reason, the County has always been best known for its pastured animals, especially beef and dairy. The north half of the County, in particular, is challenging for row cropping and most other types of agriculture, as the limestone of southern Ontario gives way to the granite of the Canadian Shield and soils become thinner.

Figure 7 illustrates the amount of land currently being protected as “Agricultural” by municipal Official Plans in the County as a percent of the land actually farmed. The Township of Cavan Monaghan recently designated all of its “Rural” land as “Agricultural”, essentially providing protection for 100% of farmed acres.

In addition to the 2011 Census of Agriculture, information for this analysis was obtained by County Planning staff from two sources:

1. The County had GIS mapping of Official Plan layers for Selwyn, Asphodel-Norwood and North Kawartha. County GIS staff was able to derive accurate calculations for the protected areas using these mapping attributes.

2. For Otonabee-South Monaghan, Cavan Monaghan, Douro Dummer, Trent Lakes (formerly Galway-Cavendish and Harvey) and Havelock Belmont Methuen, the County office did not have GIS mapping, and so the Official Plan maps were used. The map images were projected by County staff onto GIS and the Agricultural areas were traced manually. The mapping tools then allowed the enclosed area to be calculated. These values were then rounded to the nearest 500 acres. This method was not exact, but produced very good estimates for the purposes of this project.

Figure 7: Percentage of farmed land protected in Official Plans, Peterborough County, 2014

Township	# of Farms Reporting in Census, 2011	# of Acres Farmed, 2011 Census	# Acres Designated as Agriculture in the OP, 2014	% Protected
Cavan-Monaghan	186	36,311	36,311	100%
Otonabee-South Monaghan	223	51,007	43,000	84%
Asphodel-Norwood	136	28,903	17,500	61%
Smith-Ennismore-Lakefield (now Selwyn)	188	36,845	12,500	34%
Havelock-Belmont-Methuen	58	13,435	1,500	11%
Douro-Dummer	206	45,074	0	0%
Galway-Cavendish and Harvey (now Trent Lakes)	56	17,361	0	0%
COUNTY TOTAL:	1053	228,936	110,811	48%

Note: Due to confidentiality constraints, Statistics Canada suppresses geographic areas having very few farms. Accordingly, 2011 Census data for the Township of North Kawartha has been combined with the Municipality of Trent Lakes (formerly the Township of Galway-Cavendish and Harvey), while data for the City of Peterborough has been combined with the Township of Selwyn (formerly Smith-Ennismore-Lakefield).

As Figure 7 illustrates, 48% of the land (reported by farmers as farmed land in the 2011 Census of Agriculture) is protected in Official Plans as “Agricultural” as opposed to the broader “Rural”

designation. Only “Agricultural” land is afforded maximum protection from severance for small house lots, and non-agricultural uses. It is notionally protected “for long term use for agriculture”. The remaining 52% of land being farmed is designated “Rural” and is therefore more vulnerable to other forms of rural development.

As of April 30, 2014, The Provincial Policy Statement was updated to be more explicit in its direction to municipalities regarding the protection of farmland. Section 2.3.1 has been amended to clarify that class 4 to 7 lands are a priority for protection when they are associated with Class 1 to 3 lands. Additionally, Section 2.3.2 now clearly requires planning authorities to designate "Prime Agricultural Areas" in their Official Plans. Over time, to maintain consistency with the new PPS, municipalities in Peterborough County may need to update their Official Plans to identify and protect additional areas of farmland that meet the new PPS criteria.

It is important to note that decisions about farmland protection do not necessarily impact tax revenues. Municipal tax revenue from actively farmed land is reduced through the Ontario Farm Property Tax Program which depends on actual land use declarations by farmers, and not by the status of the land in the Official Plan. On the other hand, residential severances from farmland (regardless of its OP designation) are taxed at higher rates than active farmland.

D. Food and farmland required to feed Peterborough’s population in 2036

In order to address the question of how much food and farmland would be needed to “feed ourselves sustainably” by 2036 (the goal set out in the Sustainable Peterborough Plan), the Task Force tackled a series of sub-questions:

- How much food is being produced now
- How many people would that feed using Canada’s Food Guide
- Whether that level of production would have fed the population of our City and County in 2011, and
- How much land and food would be required to produce enough food to feed the City and County’s projected population in 2036

While the methodology used was very detailed, it was not intended as a scientific study – but merely a “best guess” exercise.

Only production in Peterborough County is considered, even though the community definition of “local” may go beyond the County. The Sustainable Peterborough consultation process did not define “local” food. However, a 2013 Peterborough Social Planning Council survey asked respondents to rank their personal definitions of local^{xii}. The top five definitions of local food among respondents were, in descending order: grown in my region, grown within 100 km, grown in Ontario, grown in my county, and grown on a family farm. The top term, “region” is somewhat ambiguous. The choice of this ambiguous definition makes sense considering that some respondents on the survey said that local food is a relative term - the shorter the distance from farm to table, the more local it is. Lack of availability causes consumers to buy food grown further afield while still considering it local, up to a certain point. “My county” was not a popular choice, suggesting that political boundaries are not a priority for consumers, and that collaboration across boundaries may facilitate development of “local” food systems.

It is not suggested that current production is *in fact* being directed to the local market. The calculation relates only to the amount of food being produced in the County, regardless of its current destination.

In February 2011, Ontario Farmland Trust (OFT) issued a Report entitled “*Farmland Requirements for Ontario’s Growing Population: 2010 to 2036*”^{xiii}. The Task Force approached OFT for help in generating scenarios for Peterborough County and City using the same general methodology. The main sources of data were:

- Canada’s Food Guide (for recommended servings and serving sizes)^{xiv}
- The 2011 Census of Agriculture (for actual production and yields where possible)^{xv} and,
- The 2011 Census and the Ontario Ministry of Finance (for population data and projections)^{xvi}.

Essentially, production levels reported by farmers in the Census of Agriculture for 2011 are translated into servings of different foods. The population of Peterborough City and County was

analyzed demographically to determine how many servings of different food groups would be needed to feed them, using Canada’s Food Guide to recommended serving sizes and serving quantities by weight. The available servings, based on reported production in the County, are then compared to the required servings.

In the case of fruit, vegetables and grains, it was possible to make a reasoned estimate of the land base required to produce the required servings, based on yields as reported in the Census of Agriculture and by OMAFRA. However, it was much more difficult to relate yields of dairy and meat products to the acreage required to produce those products. The acreage required for feed must be used as a proxy for estimating how much land is required to support the reported livestock population, and those values can vary widely depending on efficiencies. For this reason, the Task Force refrained from estimating the additional acreage needed for dairy and meat, and reports instead on the number of additional servings required for those foods. In both the 2011 and 2036 population scenarios, the Task Force’s modelling reveals that the City and County is predictably deficient in its production of fruits and vegetables. In contrast, the County has, and will continue to have, enough land in production of cereal crops if present production and acreage is maintained. Figure 8 illustrates the estimated number of acres of excess or shortfall in production for each food group in 2011 and 2036 relative to the County’s dietary needs.

Figure 8: Peterborough County – Farmland Shortage/Excess for Fruits & Vegetables and Cereals

	Planted in 2011	For 2011 population	For 2036 population
Fruit & Vegetables	500 ac	2700 ac short	3600 ac short
Cereals	15,000 ac	3500 ac excess	1500 ac excess

By 2036, almost 3,600 additional acres of fruit and vegetables would be required to feed the County’s population – seven times the current acres in production (about 500 ac). This

deficiency is already becoming noticeable, as new farmers’ markets have had difficulty in finding enough local vegetable producers. The most common demand for locally-produced product is for fruits and vegetables. The 2013 survey and report prepared by the Peterborough Social Planning Council found that 96% of respondents had purchased local vegetables in the past 6 months, and 85% had purchased local fruits. Purchases of other products fell far below these percentages, but this may also reflect lower availability through channels such as farmers’ markets^{xvii}.

Figure 9 summarizes the number of additional servings of dairy and meat products that the County needed in 2011, and would need in 2036, to meet the daily dietary needs of County and City residents. Production of milk is already insufficient to provide Peterborough’s population the number of recommended dairy servings in Canada’s Food Guide. A shortfall of approximately 24,000 tonnes of milk is the equivalent of about 2500 additional cows, based on Dairy Farmers of Ontario information on their website^{xviii}. Production of meat/eggs/beans was adequate in 2011, but by 2036 an estimated 3500 tonnes of additional “table ready” meat and alternatives (eggs, dry beans) would be required.

The complex methodology and background spreadsheets used in making these estimates could be documented and made available if needed.

Figure 9: Peterborough County – Shortfall in Dairy and Meat Production

Food Group in Canada’s Food Guide	2011 Shortfall in Servings	Equivalent in Tonnes	2036 Shortfall in Servings	Equivalent in Tonnes
Dairy products	48,002,001	12,006	95,123,655	23,781
Meat, eggs and dry beans	40,808	4	33,688,880	3470

It is interesting that a 2007 study in New York State found that it took just over an acre to feed a person an average diet including modest amounts of meat (across all ages) ^{xix}. It is projected

that Peterborough County will have about 177,000 residents by 2036^{xx}. Coincidentally, in 2011, the number of farm acres available in the County was about 175,000. If New York State's ability to produce food is fairly comparable to Peterborough County's, this suggests that the 2011 land base available here, if fully conserved and used optimally for local food production through to 2036, might be able to support the projected 2036 population. However, it is unlikely that production yields in Peterborough are quite as high as those in New York, due to climatic differences.

3. Questions for community discussion

1. Is ongoing reduction of farmed acreage a concern? Are there influences that will change the patterns experienced over the last 40 years? Should action be taken to prevent ongoing loss and/or put idle farmland back to work?
2. Is the reduction in the number of farmers and farm businesses a concern to our community? If so, what could be done to reverse current trends?
3. Are there actions that could be taken to increase the economic and practical feasibility of local food production to help Peterborough feed itself?
4. Could the recommendations in the 2006 Agricultural Economic Impact and Development Study for the Greater Peterborough Area (see Executive Summary, Appended) be helpful in supporting the future of farming in the County?
5. Who can carry out these actions?
6. Is further research required? How could this be accomplished?
7. Can urban agriculture and community gardening contribute to the provision of local food? Do urban activities reduce the need to protect rural farmland?
8. What is our community definition of "local" food? How will we measure progress toward the goal set in the Sustainable Peterborough Plan?

Works Cited

- ⁱ Greater Peterborough Area Economic Development Corporation (2012), Greater Peterborough Community Sustainability Plan: Sustainable Peterborough, accessed online: http://sustainablepeterborough.ca/wp-content/uploads/2015/01/SP_Plan_Final_Plan.pdf
- ⁱⁱ Planscape, Regional Analytics Inc. (2006). *City of Kawartha Lakes and the Greater Peterborough Area: Agricultural Economic Impact and Development Study*. Bracebridge, Ontario: Planscape. <http://www.planscape.ca/planscapePDFs/57-plan2.pdf>
- ⁱⁱⁱ Planscape, Regional Analytics Inc. (2006), see endnote ii.
- ^{iv} Statistics Canada, Census of Agriculture, 1976 through 2016
- ^v Definition of Summerfallow: Statistics Canada (2016). Glossary: Summerfallow. Found at <http://www.statcan.gc.ca/eng/ca2011/gloss#gt30>
- ^{vi} Statistics Canada, Census of Agriculture, 1976 and 2016.
- ^{vii} City of Peterborough Planning Division (2014), Personal Communication
- ^{viii} Statistics Canada, Census of Agriculture, 1976 through 2016
- ^{ix} Figure 4 goes back only to 1991 because the term “farm operator” was re-defined then. Prior to 1991, there were differences in reporting that are significant. See explanation at: <http://www.statcan.gc.ca/pub/95-629-x/2007000/4123857-eng.htm#operators>
Since 1991, "farm operators" has been defined as those persons responsible for the day-to-day management decisions made in the operation of a census farm or agricultural operation. Up to three farm operators could be reported per farm. Prior to the 1991 Census of Agriculture, the farm operator referred to only one person responsible for the day-to-day decisions made in running an agricultural operation.”
- ^x Statistics Canada, Census of Agriculture, 2016
- ^{xi} Government of Ontario (2014), Provincial Policy Statement (under the Planning Act), page 24, accessed online: <http://www.mah.gov.on.ca/AssetFactory.aspx?did=10463>.
- ^{xii} Peterborough Social Planning Council (2013), *Synopsis report: Results of the PSPC Local Food and Farming Survey*, p. 5, accessed online: <http://sustainablepeterborough.ca/wp-content/uploads/2015/01/Synopsis-Report-PSPC-Food-and-Farming-Survey.pdf>
- ^{xiii} McCallum, C.P. (2012), *Farmland Requirements for Ontario's Growing*

Population to 2036 (Revised February 14, 2012), Retrieved from Ontario Farmland Trust, accessed online: <http://ontariofarmlandtrust.ca/wp-content/uploads/2014/01/Farmland-Requirements-Report-Ontario-Farmland-Trust.pdf>

^{xiv} Health Canada (2011), *Eating Well with Canada's Food Guide*, Ottawa: Her Majesty the Queen in Right of Canada, accessed online: http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/food-guide-aliment/print_eatwell_bienmang-eng.pdf

^{xv} Statistics Canada, Census of Agriculture, *Farm and Farm Operator Data*, catalogue no. 95-640-XWE

^{xvi} Ontario Ministry of Finance (2012), *Ontario Population Projections Update, 2012 - 2036*. Toronto, Ontario. Retrieved 10 08, 2014, accessed online: <http://www.fin.gov.on.ca/en/economy/demographics/projections/table10cen.html?>

^{xvii} Peterborough Social Planning Council (2013), p.3, see endnote xiii.

^{xviii} Dairy Farmers of Ontario (2014), *FAQ-Dairy Cattle*, Retrieved Oct 7 2014, accessed online: <https://www.milk.org/corporate/view.aspx?content=Faq/DairyCattle>

^{xix} Peters, C. J., Wilkins, J.L. & Fick, G.W. (2007), Testing a complete-diet model for estimating the land resource requirements of food consumption and agricultural carrying capacity: The New York State example, *Renewable Agriculture and Food Systems*, 22(2): 145-153.

^{xx} Ontario Ministry of Finance (2012), see endnote xvii.

Appended: *City of Kawartha Lakes and the Greater Peterborough Area: Agricultural Economic Impact and Development Study, Sept. 2006 – Executive Summary*

CITY OF KAWARTHA LAKES AND THE GREATER PETERBOROUGH AREA

- Agricultural Economic Impact & Development Study -

Executive Summary

October 27, 2006



**CITY OF KAWARTHA LAKES AND
THE GREATER PETERBOROUGH
AREA**

**- AGRICULTURAL ECONOMIC IMPACT AND
DEVELOPMENT STUDY -**

PLANSCAPE
104 Kimberley Ave.,
Bracebridge, ON P1L 1Z8

IN ASSOCIATION WITH:

REGIONAL ANALYTICS INC.
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BUILDING COMMUNITY THROUGH PLANNING

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The City of Kawartha Lakes and The Greater Peterborough Area acknowledges the financial contributions of the following:

Kawartha Lakes Community Futures Development Corporation

Peterborough Community Futures Development Corporation

Peterborough County Federation of Agriculture

Victoria / Haliburton Federation of Agriculture

Greater Peterborough Area Economic Development Corporation

City of Kawartha Lakes

Workforce Development Board

Industry Canada



List of Funding Partners, Committee Membership and Affiliations

Funding Partners

Kawartha Lakes Community Futures Development Corporation
Peterborough Community Futures Development Corporation
Peterborough County Federation of Agriculture (PCFA)
Victoria/Haliburton Federation of Agriculture (VHFA)
Greater Peterborough Area Economic Development Corporation (GPAEDC)
City of Kawartha Lakes
Workforce Development Board
Industry Canada

Volunteer Steering Committee

Kawartha Lakes

Steve Bent	Victoria/Haliburton Federation of Agriculture
Evelyn Chambers	representing the Agricultural Development Advisory Board, City of Kawartha Lakes
Bill Hawman	Victoria/Haliburton Federation of Agriculture
Donna Villemare	Councillor, City of Kawartha Lakes
Carolyn Puterbough	Agricultural Development Officer City of Kawartha Lakes Economic Development
Kelly Maloney	Agricultural Development Officer City of Kawartha Lakes Economic Development

Greater Peterborough Area

Ron Millen (Chair)	Reeve, Smith-Ennismore-Lakefield
Scott Stewart	Peterborough County Federation of Agriculture
Wayne Warner	Peterborough County Federation of Agriculture
Gord Evans	Workforce Development Board
Ann-Marie Kelleher	Manager, Rural Economic Development, Greater Peterborough Area Economic Development Corporation
Judy Coward	Economic Development Consultant Ontario Ministry of Agriculture, Food & Rural Affairs
Brian Hancock	Service Representative, Ontario Federation of Agriculture

Executive Summary

Background and Purpose

Agriculture has traditionally been a dominant land use and economic force in both the City of Kawartha Lakes and the Greater Peterborough Area. Agriculture and agriculturally related businesses generate significant economic activity through direct and indirect employment and through the buying and selling of products, goods and services.

To better understand the industry, and plan for its future, the Economic Impact and Development Study Steering Committee commissioned this study of agriculture within the geographical boundaries of the City of Kawartha Lakes and the County of Peterborough. In recognition of their common interests, the two regions agreed to work together on this important initiative and so the steering committee was comprised of representatives from both the City of Kawartha Lakes and the Greater Peterborough Area.

The study objective was to assess the importance of agriculture to the area economy. In doing so, a profile of the agriculture and agriculturally related businesses was prepared and issues including the societal value of agriculture, labour market trends, human resource issues and economic opportunities were examined.

The Land Base

The physiography, soil capability/suitability and climate that characterize Kawartha Lakes and Peterborough combine to create a valuable agricultural area. Specifically, the southern parts of Kawartha Lakes and Peterborough contain areas extremely well suited to supporting traditional agricultural commodities such as cash crops, livestock and dairy. The northern sections of the study area contain predominantly Class 6 and 7 soils associated with the Canadian Shield and tend to be dominated by cattle, livestock, nursery and maple syrup operations.



Photograph: John Field, 2004.

There is an existing policy framework in place in the study region that addresses the preservation of agricultural land. As in other areas of the province, some of these policies are dated and not always effective in the face of development pressure. Currently, there is a unique opportunity to create a set of policies that will be effective in protecting agricultural land. The coincidence of a new Provincial Policy Statement, the Greenbelt Plan, the Places to Grow Act, a new County Official Plan, a new City Official Plan, and an ongoing political commitment to the agricultural community, creates an environment where new directions are possible.

As the process to update the policy framework for Kawartha Lakes and the Greater Peterborough Area unfolds, agriculture needs to be a major factor in decision making. Hopefully, by providing this snapshot of the industry at a point in time, and quantifying its contribution to the area's economy, this report will be an helpful tool in establishing policy that will support agriculture.

Agricultural Profile

The Kawartha Lakes / Peterborough area contributed approximately 2% of the gross farm receipts generated in Ontario in 2001. According to Statistics Canada, in 2001 there were 2,718 farms in the study region, occupying 620,000 acres and generating approximately \$156 million in gross farm receipts. In terms of productivity in 2001, the region generated average gross farm receipts of \$251 per acre. These ranged from a high of approximately \$450 per acre in Asphodel-Norwood to a low of less than \$50 per acre in the most northerly parts of the region.

The major commodity groups in the study region, based on percentage of total gross farm receipts, include cattle (beef) (32%), dairy (28%), poultry and egg (8%) and wheat/grain and oilseed (7.6%). This commodity mix is fairly consistent across the region with the one anomaly being Manvers in Kawartha Lakes, where hog and miscellaneous specialty are prevalent and dairy is not a factor.

Over the past fifteen years, the face of agriculture in the region has not shifted dramatically. A review of the percentage distribution of gross farm receipts confirms that dairy and cattle have always dominated the agricultural profile. Over time, poultry has increased slightly, cash crop has remained fairly constant and hog has declined.

Overall, the face of agriculture in Kawartha Lakes / Peterborough is reflective of the nature of the resource on which it is based. The physical characteristics of the area lend themselves to livestock operations, the dairy sector benefits from access to a strongly established agricultural service network and the terrain dictates smaller field sizes which support mixed operations.

There was a consistent decline in the number of farms across Ontario during the period from 1971 to 2001. This decline was slightly less pronounced in Kawartha Lakes and Peterborough, where between 1971 and 2001, 931 farms disappeared (479 farms in Kawartha Lakes and 452 farms in Peterborough). This represents a 25.5% decline, as compared to a 37% decline at the provincial level. Historically, in Kawartha Lakes and Peterborough, the number of farms fluctuates up and down in small increments indicating that these areas are predominately stable farming communities. Between the census years of 1996 and 2001, the data showed a decline of 361 farms. This represented an 11.7% decline, somewhat higher than in Ontario as a whole where the number of farms declined by 11.5% during the same period, and somewhat lower than in the Central Ontario Region where the decline was 14.1%.

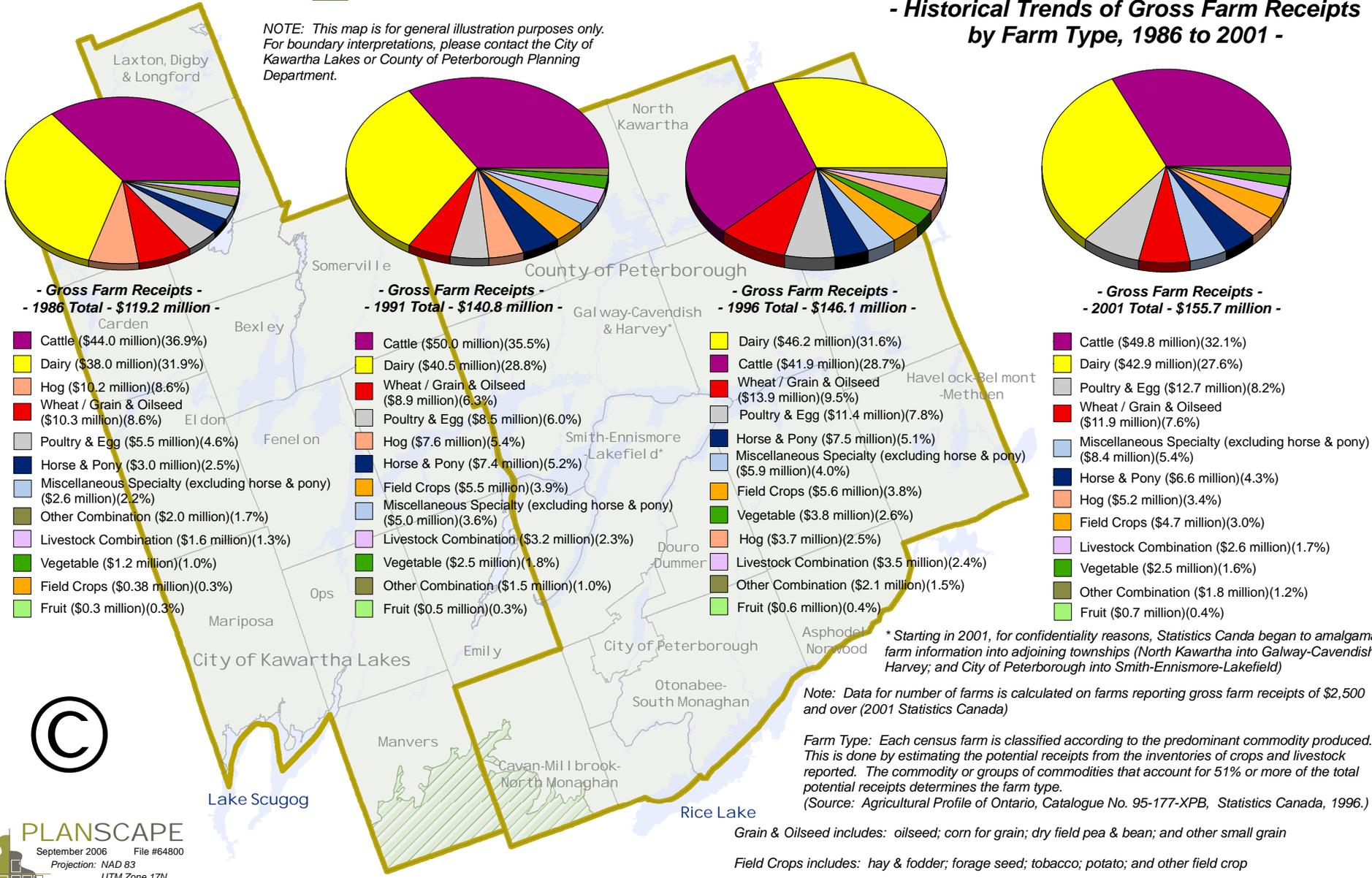
A review of the change in the number of farms from 1971 to 2001 does not necessarily provide a true indication of changes in the scale of the industry. Rather it provides an indication of the shift that is taking place in the size of farm operations. Overall there is a trend in agriculture toward larger farms and rationalization of operations. In the combined area of Kawartha Lakes / Peterborough between 1971 and 2001, the number of acres classified as farmland declined by 121,418 acres. This represents a 16.4% decline as compared to the provincial decline of 15.4% and a 24.0% decline in the Central Ontario Region.

City of Kawartha Lakes and The Greater Peterborough Area - Agricultural Economic Impact & Development Study -

- Historical Trends of Gross Farm Receipts by Farm Type, 1986 to 2001 -

 City / County Boundary
 Oak Ridges Moraine

NOTE: This map is for general illustration purposes only. For boundary interpretations, please contact the City of Kawartha Lakes or County of Peterborough Planning Department.



* Starting in 2001, for confidentiality reasons, Statistics Canada began to amalgamate farm information into adjoining townships (North Kawartha into Galway-Cavendish & Harvey; and City of Peterborough into Smith-Ennismore-Lakefield)

Note: Data for number of farms is calculated on farms reporting gross farm receipts of \$2,500 and over (2001 Statistics Canada)

Farm Type: Each census farm is classified according to the predominant commodity produced. This is done by estimating the potential receipts from the inventories of crops and livestock reported. The commodity or groups of commodities that account for 51% or more of the total potential receipts determines the farm type. (Source: Agricultural Profile of Ontario, Catalogue No. 95-177-XPB, Statistics Canada, 1996.)

Grain & Oilseed includes: oilseed; corn for grain; dry field pea & bean; and other small grain

Field Crops includes: hay & fodder; forage seed; tobacco; potato; and other field crop

Miscellaneous Specialty includes: sheep & lamb; goat; fur; other specialty livestock; mushroom; greenhouse product; nursery product & sod; maple & christmas tree

Livestock Combination includes: cattle & hog; cattle, hog & sheep; and other livestock combination

Other Combination includes: fruit & vegetable combination; other field crop combination; and all other types



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September 2006 File #64800
Projection: NAD 83
UTM Zone 17N

Source: Statistics Canada 2001, Catalogue No. 95F030XIE
City of Kawartha Lakes & County of Peterborough Planning Department



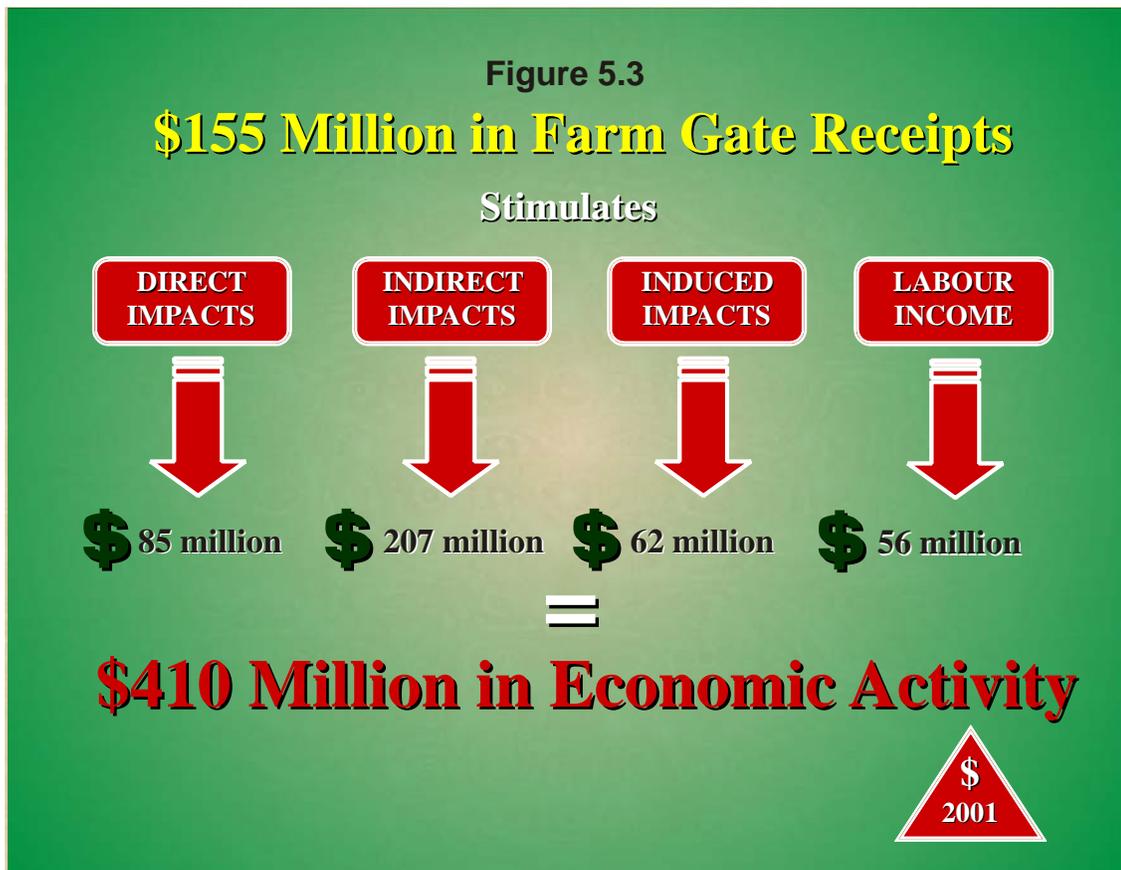
Between 1971 and 2001, the number of acres classified as farmland declined by 60,239 acres in Kawartha Lakes and 61,179 acres in Peterborough. The loss in terms of actual area for Kawartha Lakes is similar to the provincial average and lower than the Central Ontario average; whereas in Peterborough the loss is greater than the provincial average but lower than in the Central Ontario region. The numbers reflect the fact that neither area experienced extraordinary changes in comparison to other parts of the province.

In 2001, 33% of the land being farmed in Kawartha Lakes and Peterborough was rented. This percentage is on par with the provincial average of 31% and the Central Ontario Region average of 33%.

Economic Impact

Agriculture in the Peterborough / Kawartha Lakes generated more than \$155 Million in gross farm receipts in 2001. Assuming this to be a benchmark for current activity in the region, it can be concluded that agricultural activities will generate the following impacts on an annual basis:

- a total impact in excess of \$353 Million (\$85 Million in direct impacts, \$207 Million in indirect impacts and \$62 Million in induced impacts); and,
- a labour income impact in excess of \$56 Million.



The importance of agriculture in Peterborough / Kawartha Lakes is clearly illustrated by the fact that for each one dollar reduction in the output of any of the top five commodity groups there will be, at minimum, a two dollar reduction in total regional economic output. Any industry with a multiplier in the neighbourhood of 2.0 should qualify for significant policy attention. Agriculture and its various components in the study region all possess such multipliers. This confirms that the industry represents a key sector in the regional economy, and one which should be monitored, nurtured and protected.

The agricultural economy in Peterborough / Kawartha Lakes is made up not only of farms (primary producers) but also of businesses associated with agriculture. These businesses are providers of agriculturally related goods and services or processors of agricultural product. Broadly defined, these include manufacturers, wholesalers and retailers of agricultural products. Although not involved in primary production, these businesses are an integral part of the agricultural economy.



Victoria Feed – Horse & Hound

Peterborough and Kawartha Lakes contain numerous businesses that service the agricultural sector, many of which have been in business for considerable time. Included in

these businesses are some very large corporations with either head offices or national head offices located in the study area. When asked why this was the case, the responses noted the attractiveness of the area as a place to live and work, and the well established nature of the agricultural industry. Also cited as an important factor, was the acceptance of agriculture and agricultural practices as part of the environment.

The Peterborough / Kawartha Lakes area is well serviced by farm service industries such as feed and farm supply, large animal veterinarians, farm equipment and services. In fact, the comprehensive nature of the service sector is striking. Relationships with the agricultural sector and other agriculturally related businesses are important within each of Peterborough and Kawartha Lakes but there is also surprising strength in relationships outside of the area, provincially, nationally and internationally. This bodes well for expansion of businesses and attraction of new businesses to the area.



Pickseed - <http://www.pickseed.com/en/index.php>

The surveys and analysis conducted for this study confirm that the agricultural economy is a critical part of the economic structure of the area. In fact, agriculture and tourism are the leading economic sectors and ones that have potential to grow. Interconnections between tourism and agriculture are well developed in the study area, to the benefit of both sectors.

Social, Cultural and Environmental Benefits

The benefits of maintaining a strong agricultural community include:

- Control over food security, quality and safety;
- Ability to respond to changing cultural demands for variety in food;
- Enhancement of the environment through careful agricultural management techniques;
- Preservation of biodiversity;
- Preservation of our history and traditions;
- Opportunities for alternative lifestyle and employment choices that are land based;
- Provision of recreational opportunities for non-rural residents; and
- Support for a strong agri business economy.



These benefits are not easily quantifiable and are often ignored in economic analysis. However these are benefits that improve quality of life and make an area a desirable place to live. The presence of a healthy, vibrant agricultural community in Peterborough / Kawartha Lakes enhances its attractiveness for all residents. Recognition of the multifaceted value of the agricultural land base and implementation of policies to allow agriculture to flourish, is of benefit to all residents of the area.

Human Resources

In 2001 there were 3,795 farm operators in Kawartha Lakes / Peterborough, and 4,780 people¹ employed in the agricultural sector. The average age of farm operators was 52.2 years.

Training needs for agriculture are multifaceted and are catered to by a number of institutions. Interviews with farmers confirmed that there is potential for apprenticeship and cooperative programs. In addition to primary training needs, there are numerous ongoing training requirements for farmers to ensure that they remain current with ongoing development associated with pesticides, nutrient management, veterinary medicine and equipment operation.

One of the largest challenges for the agricultural community is to ensure that there is informed understanding of modern agriculture in society generally. As Canada has moved from a rural to an urban-based society the understanding of the rural lifestyle and the opportunities it has to offer have also declined. This acts as a natural barrier to the involvement of non-rural residents in the agricultural industry.

Conclusions

Agriculture in Peterborough / Kawartha Lakes is a major component of the economy and is consistently acknowledged in municipal plans and strategies as one of the areas leading economic sectors. There is a strong well-established agricultural tradition that has evolved from, and reflects the historic development of the area. The agri business network that supports the industry is strong and comprehensive and serves a market much larger than the study area.

¹ Standard Industrial Code

Although the traditional agricultural sectors, dairy and cattle (beef), continue to dominate, their percentage share of the area's total gross farm receipts declined from 69% in 1986 and to 60% in 2001. Growth in the percentage of gross farm receipts generated by other sectors, including "other livestock" and "horse and pony", sectors that the economic impact assessment identified as particularly "propulsive" in stimulating the area economy, accounted for the shift. There is also evidence of increased activity in catering to newly evolving and niche markets. This is a healthy sign of the entrepreneurship that characterizes agriculture.

The Greater Peterborough Area and the City of Kawartha Lakes are areas with strong agricultural tradition. Management of the resource coupled with progressive economic development policies should allow this resource to adapt and flourish.

The Greater Peterborough Area and the City of Kawartha Lakes are blessed with an outstanding agricultural resource that is worth protecting and promoting. Currently agriculture generates in excess of \$409 million in annual economic activity in the study region and is associated with a broad range of related businesses. Although not without its issues, the agriculture sector in Peterborough / Kawartha



Sheep Milking - DeLaval (<http://en.delaval.ca>)

Lakes is a critical component of the area's economy. Both the agricultural sector and the agriculturally related economy have potential to grow and diversify.

The face of agriculture is changing. Innovative practices are leading to new products and improvements in traditional sectors. Increasing interest in innovative food and natural products is opening new markets and opportunities. The study region, with its established agricultural base and

strong support infrastructure, is well positioned to take advantage of these opportunities. Continued support and promotion of this world class, naturally based industry as part of the regional economic development strategy for the 21st century would be both appropriate and progressive.

Recommendations

To capture the potential and prevent decline in the agricultural sector in Peterborough / Kawartha Lakes, the following actions are recommended.

Economic Development

- Strengthen the economic development function that is specific to agriculture.
- Compile a comprehensive inventory of available farm services to be used as the basis for a campaign to promote Peterborough / Kawartha Lakes as a farm service area for farmers outside of the region. Monitor this inventory on an ongoing basis to ensure that the service sector continues to meet the needs of area farmers. Where problems or weaknesses are noted; take immediate steps to address them.
- Encourage partnerships between local producers and local processors.

- Identify alternative and niche markets and assist local producers in catering to and accessing them.
- Co-ordinate the various agri tourism programs in the area to prevent confusion and duplication. Make efforts to promote agri tourism as a priority.

Land Use Planning

- Implement strong land use policies to support the agricultural industry and respond to growth pressures from the Greater Toronto area.
- Co-ordinate planning and economic development initiatives so they are mutually supportive of the agricultural sector.
- Do not permit non farm uses and residential development in predominantly agricultural areas. Rigorously uphold both the right to farm and to follow standard agricultural practises in rural areas where there are existing non farm uses or lots.



- Designate large contiguous agriculture areas in planning policy to prevent fragmentation of the land base. Where non prime land is located in proximity to prime land include it in the agricultural designation to protect the integrity of the agricultural area.
- Permit agriculturally related, value added operations on farms subject to controls to ensure the agricultural use dominates.
- Vet land use and other decisions affecting agriculture through agricultural advisory committees to ensure that the needs of the agricultural sector are addressed.
- Strengthen the role of agricultural advisory committees where they currently exist; and create them where they do not.

Extension

- Encourage senior levels of government to implement programs to improve financial stability for farmers and provide access to affordable investment capital, retirement funds and entry level support for new operators.
- Maintain an up-to-date inventory of farm oriented programs, workshops, seminars and information sessions. Work together with Provincial farm agencies and government to co-ordinate programming.
- Establish mentoring programs linking experienced farmers with new farmers.

Education

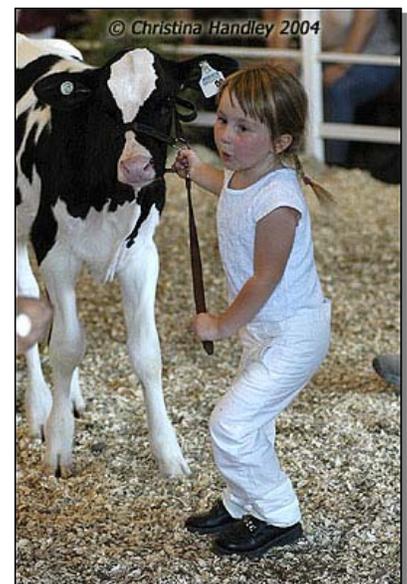
- Encourage educational institutions at the elementary, secondary and post secondary levels to offer programs related to agriculture in their curriculum both to inform their students and to promote careers in agriculture.
- Work with post secondary institutions to identify and implement research and training programs that draw on and support the local agricultural sector.

Awareness and Promotion

- The information contained in this study should be widely disseminated so it becomes the base for programs and policies to support agriculture.
- This report and the recommendations contained within it should be endorsed by the Councils of Kawartha Lakes and Peterborough as the basis for a strategic plan to support agriculture in the area.



Various Photos from the "Photo Gallery" on the Lindsay Central Exhibition website (<http://www.lindsayex.com/gallery.htm>)





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CITY OF KAWARTHA LAKES AND THE GREATER PETERBOROUGH AREA - AGRICULTURAL ECONOMIC IMPACT & DEVELOPMENT STUDY - OCTOBER 27, 2006 -