



Before the Bulldozer Hits the Ground: Measuring Farmland Loss in Ontario

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An aerial photograph showing a rural landscape. On the left, there are large green agricultural fields with some brown patches. To the right, a residential area with numerous houses and trees is visible. A road runs horizontally across the middle of the image.

Project Funders

- This research project was funded through the OMAFRA-University of Guelph partnership and would not have been possible without this financial support

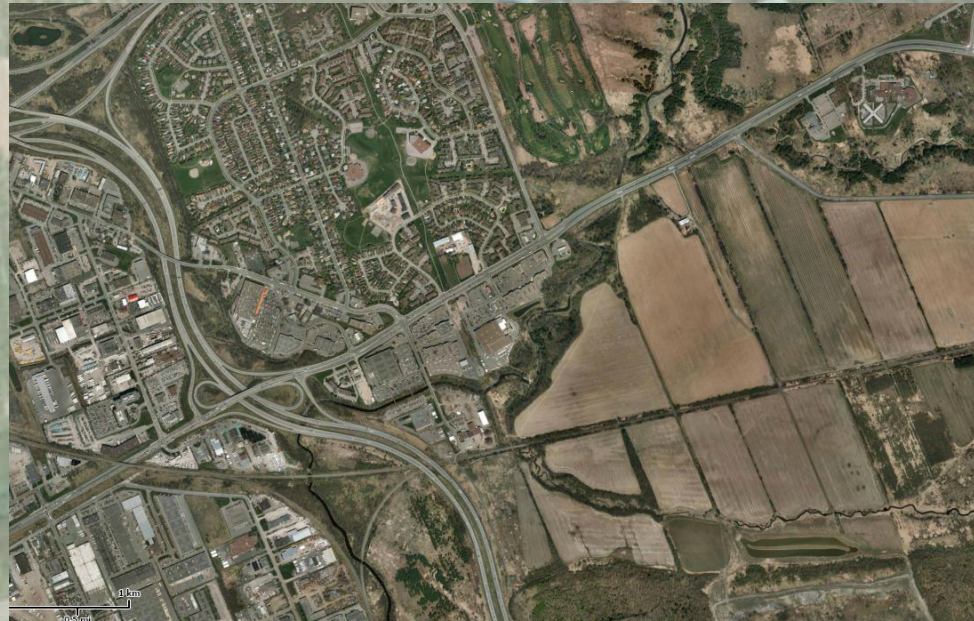


Presentation Outline

- Starting premise
 - Challenges with existing measurement tools
- Research Method
- Findings
- Challenges
- Next Steps

Starting Premise

We are challenged by the absence of data to accurately document changes to farmland availability over time



Source:
GeoOttawa

Existing Methods Come With Challenges

- **Census** – Only documents land in production (e.g. commodity prices). It may be decades before land comes out of production following a land use decision.
- **Aerial imagery** – Varies across the province and may or may not document the impact of land use decisions.
- **Municipal Performance Measurement system** – Provincially mandated and may be helpful but has challenges associated with data accuracy and consistency (methodology is erratic between municipalities and over time).



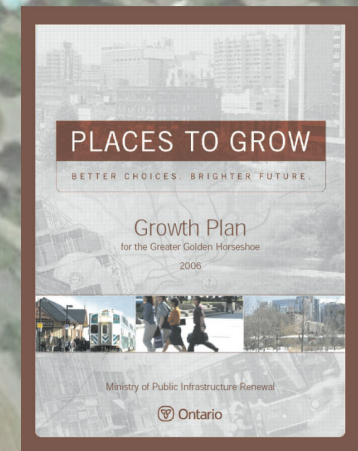
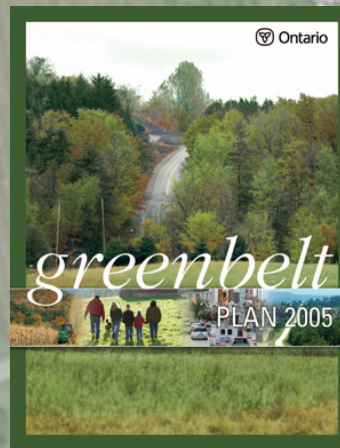


Research Methods

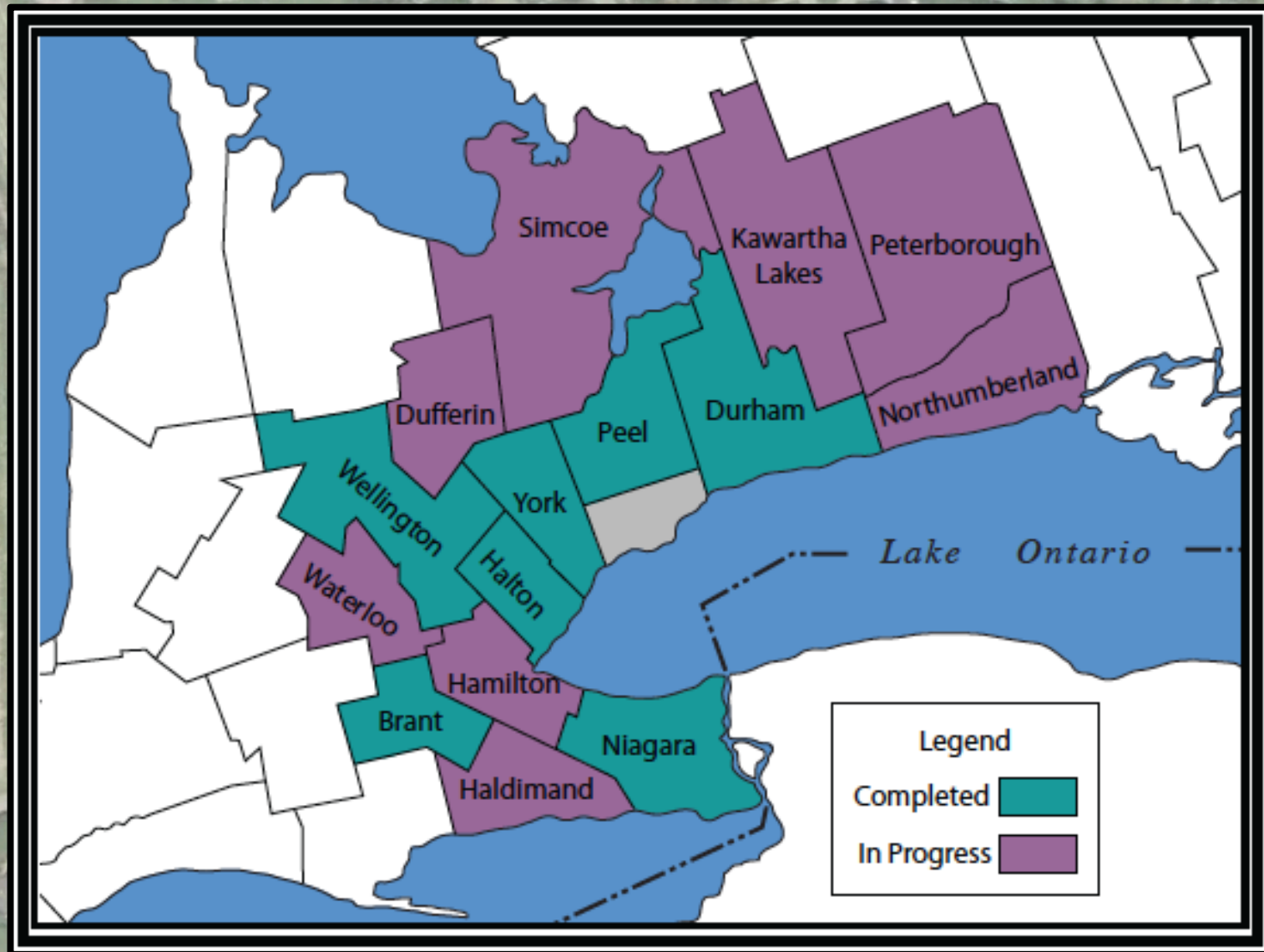
This research specifically looked at approved official plan amendments by region/county to identify the amount of land lost to urban expansion and other non-agricultural land uses.

Timeframe – Research Parameters

- Start with the year 2000 to 2014
- Captured both data before the 2005 PPS and before the Greenbelt



Study Sites



Some Findings Thus Far

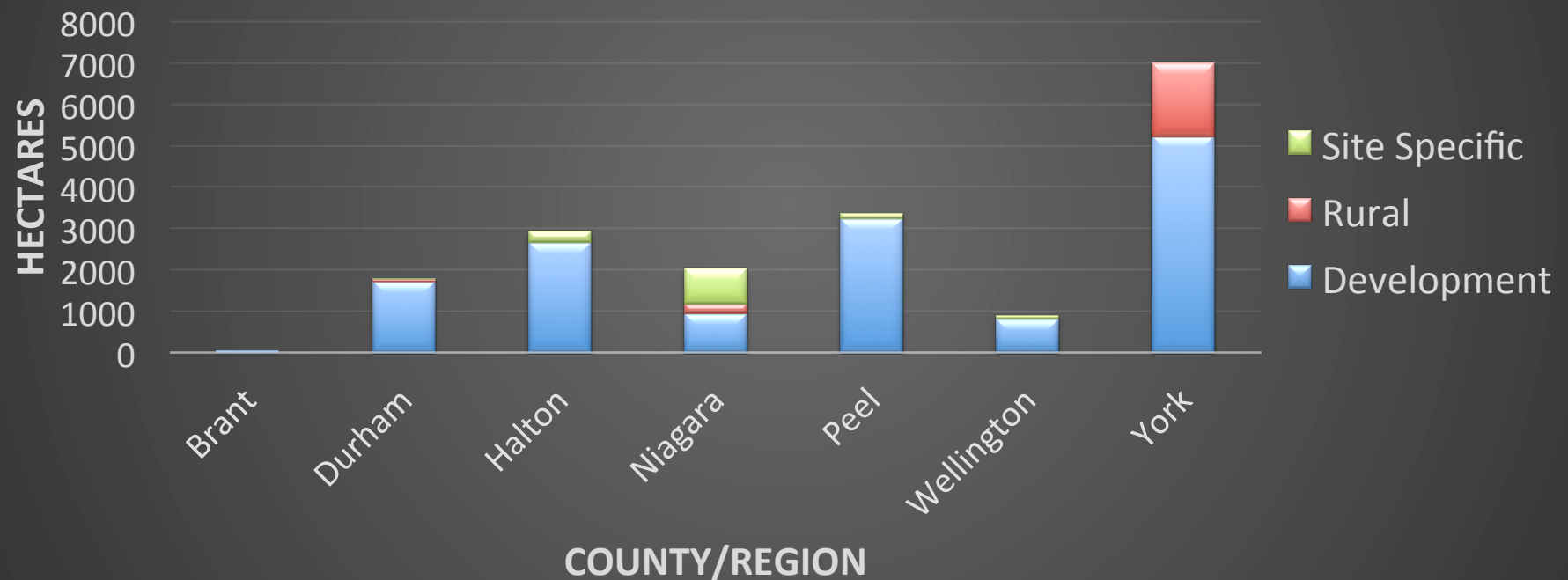
County/ Region	Number of approved OPAs related to the loss of prime agriculture land	Prime agriculture redesignated for:		
		Development designation (Ha)	Rural designation (Ha)	Non-farm uses through site- specific policy amendments (Ha)
Brant	4	47	0	0
Durham	5	1,723	56	18
Halton	12	2,656	0	287
Niagara	42	943	240	849
Peel	4	3,274	0	127
Wellington	27	812	0	86
York	16	5,233	1,755	0

Greenbelt Area Totals

	Outside the Greenbelt Plan Area		Within the Greenbelt Plan Area		Total
	pre-2005	2005- 2014	pre-2005	2005-2014	
Prime Agriculture Land Lost (Hectares)	7,364	10,180	649	0	18,193 ha
Site Specific Non-Agricultural Uses (Hectares)	333	656	396	0	1,385 ha
Total	7,697 ha	10,856 ha	1,045 ha	0 ha	19,578 ha

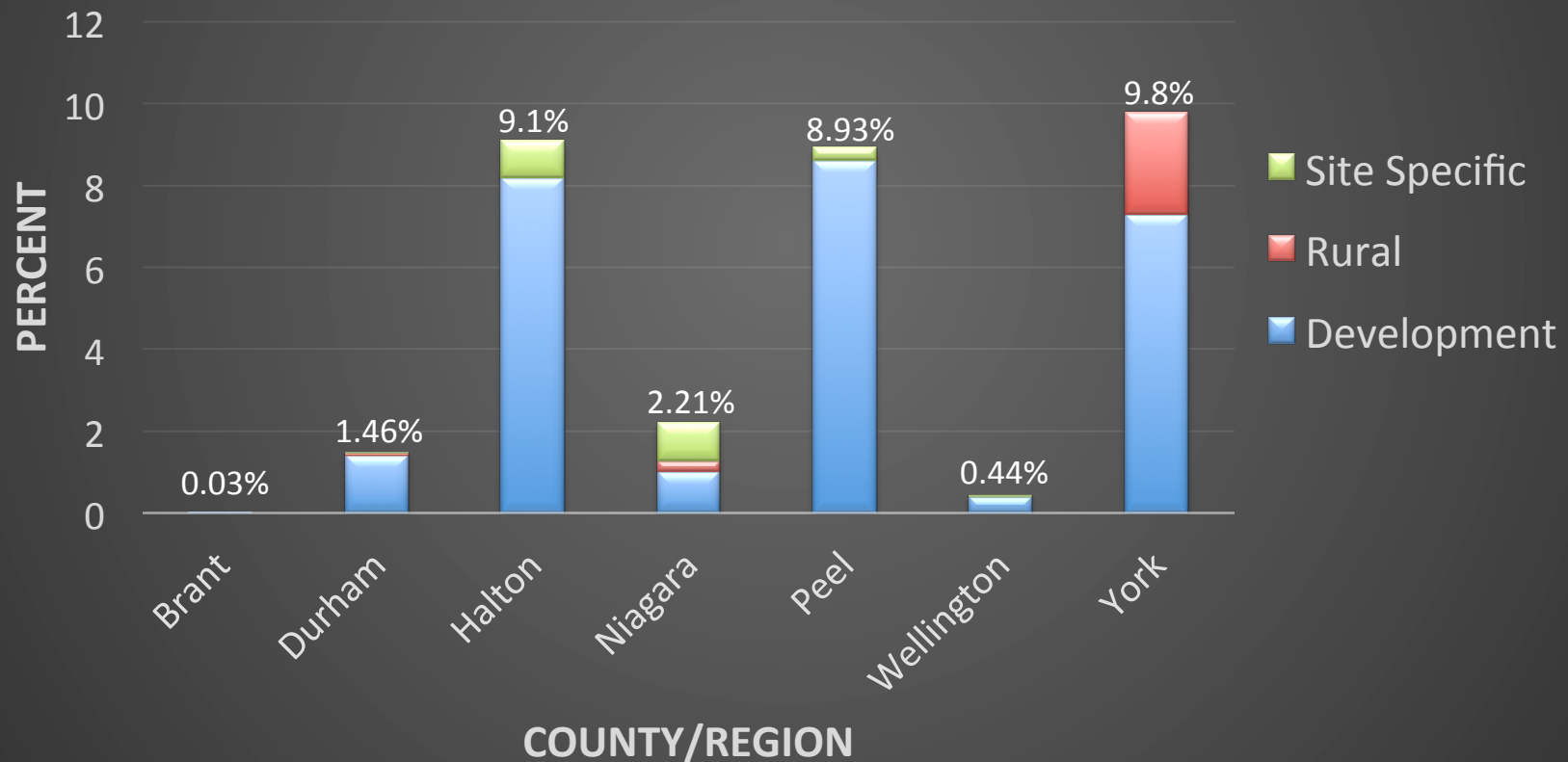
Farmland Loss

Prime Agricultural Land Redesignated by County/Region, 2000-2014



Farmland Loss

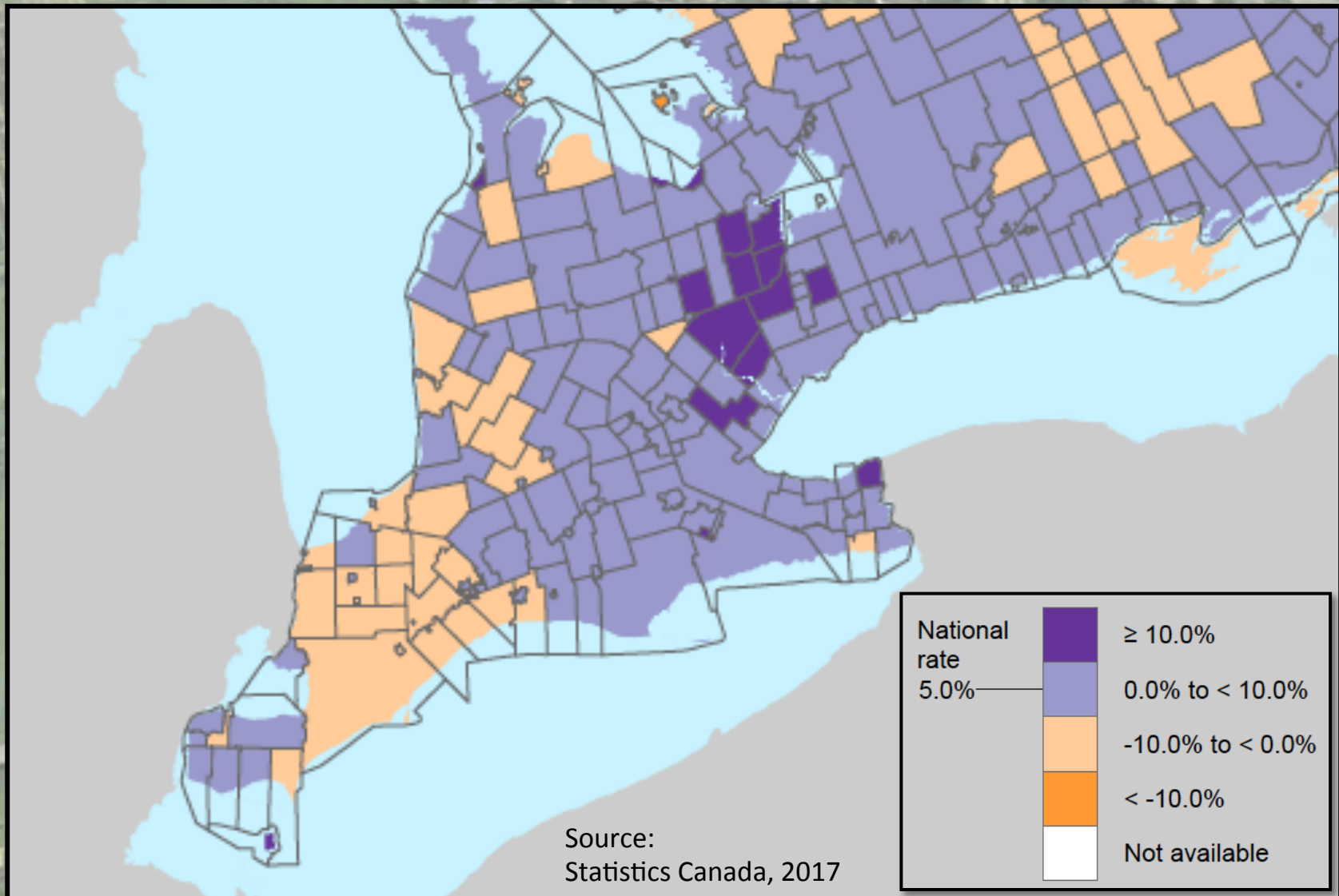
Prime Agricultural Land Redesignated by County/Region as a Proportion of Census Farms, 2000-2014



Farmland Loss vs. Growth Pressure

County/ Region	Average Population Growth Rate (%)	Percentage of Census Farmland redesignated to Development Designation	Average Growth Rate for Every 1% of Census Farmland Redesignated (%)
	2001-2011	2001-2011	2001-2011
Brant	7.15	0.07	102.14
Durham	9.55	1.43	6.68
Niagara	2.5	1.03	2.42
Peel	14.5	7.54	1.92
Wellington	5.5	0.39	14.06
York	19.05	5.33	3.57

Population Change from 2011 - 2016





Challenges

- Regional Variation
 - Site specific policies
 - Permitted uses
- Definition of farmland
 - Secondary agriculture and rural designations



Next Steps

- Complete case studies within the Greater Golden Horseshoe
 - Simcoe, Dufferin, Waterloo, Peterborough, Northumberland, Kawartha Lakes, Hamilton and Haldimand
- Analysis/report
- Toolkit
 - Outline of methodology
 - Best practices
 - Focus group with planners late spring



Thank You

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