



Land Use Planning and Agriculture: Measuring Farmland Conversion

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Project Funders

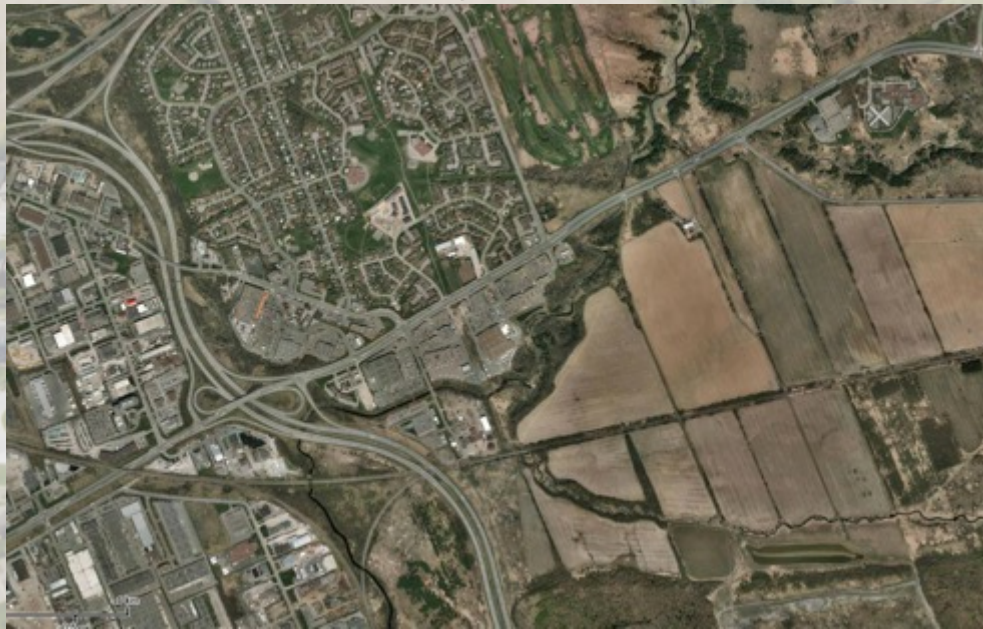
- This research project was funded through the OMAFRA-University of Guelph partnership and would not have been possible without this financial support
- Other graduate student support provided by Anissa McAlpine

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).

Land Approvals and Development

- Delay between approvals and land development
 - Land often comes out of production years after approvals have been granted
 - When new houses are built a former agricultural use is visibly lost
- *Assumed policy failure of Greenbelt or County or Regional Planning*
 - People see houses built on prime land or “sprawl” and assume that the planning instrument isn’t working



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.



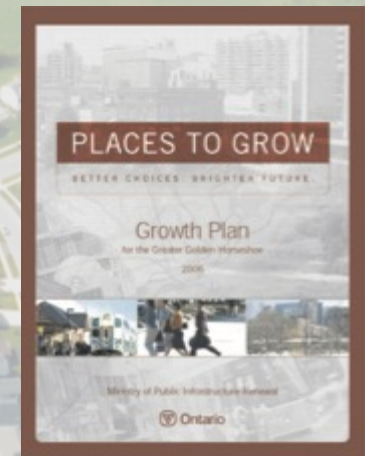
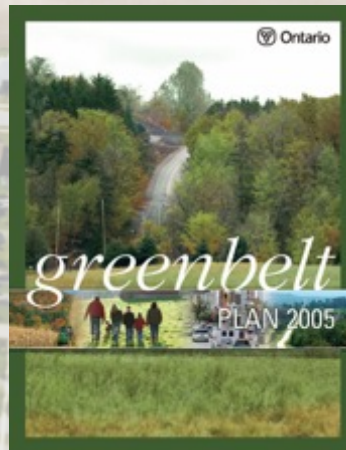
Source:
<http://elcr.org/rural-sprawl/>

Research Methods

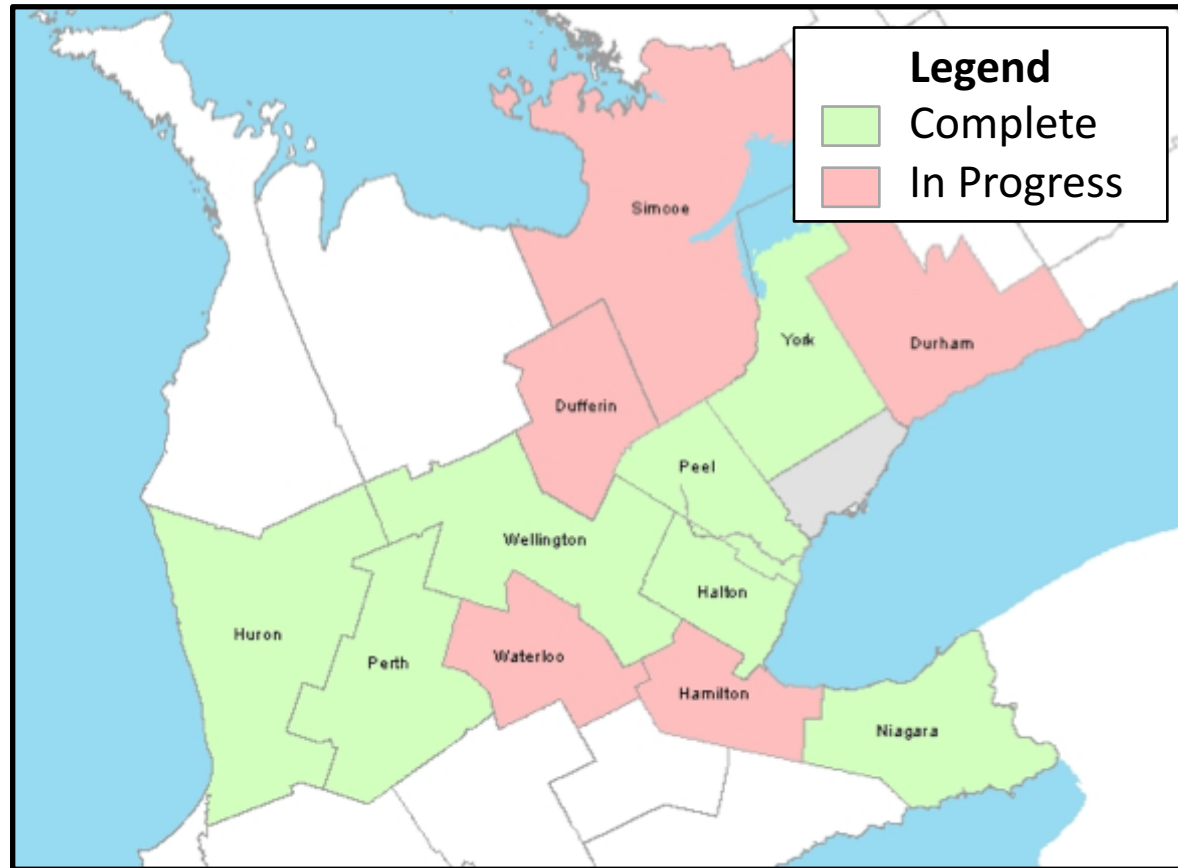
- The methodology also included reviewing planners' reports, official plan policies and provincial legislation
- 100s of files were reviewed on-site or when available, electronically
- Region/county staff have been consulted for aid in interpreting individual files when necessary.

Time frame – Research Parameters

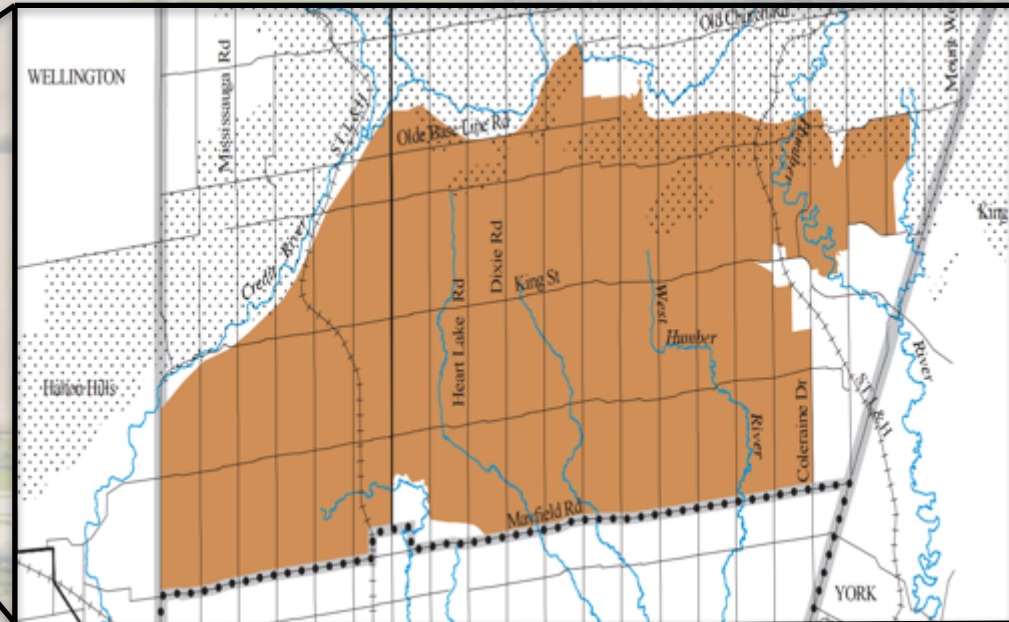
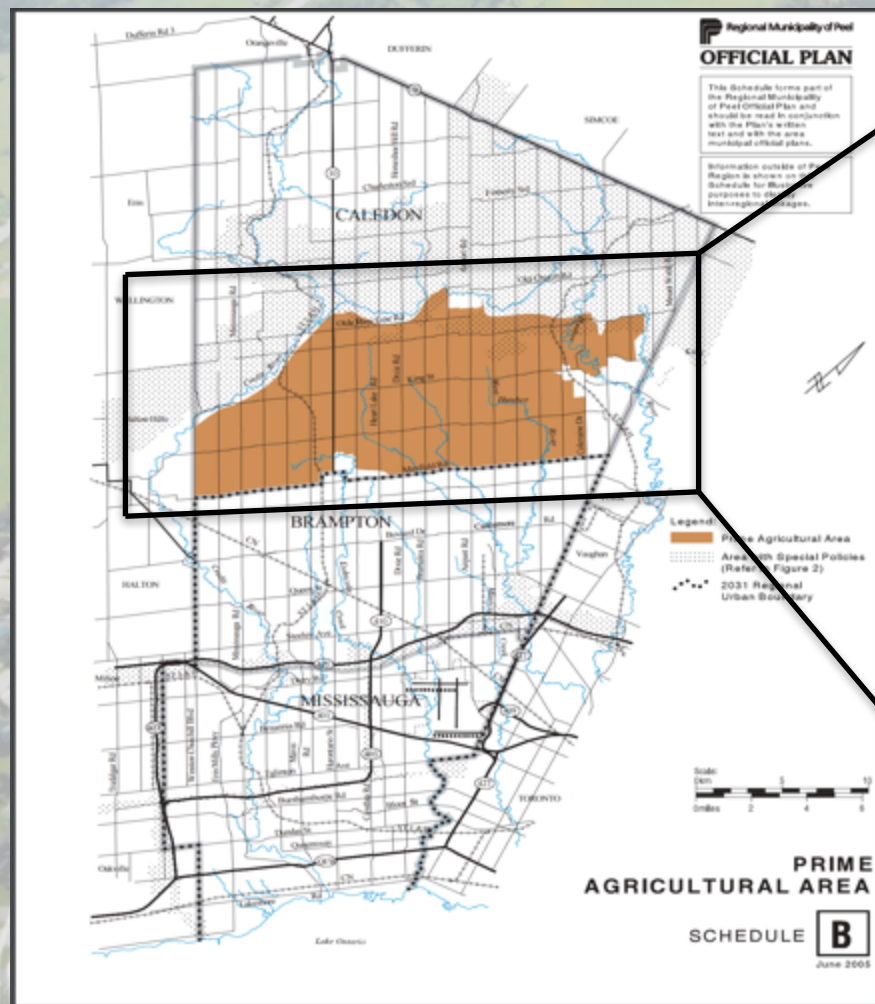
- Start with the year 2000 to 2014
- Captured both data before the 2005 PPS and before the Greenbelt



Study Sites Completed and in Progress

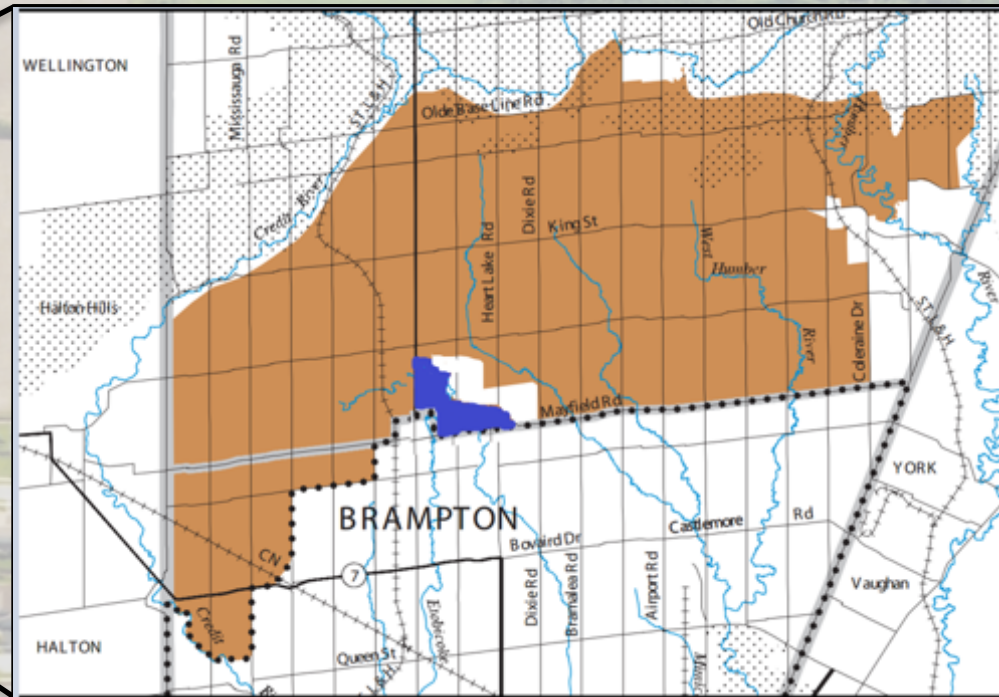
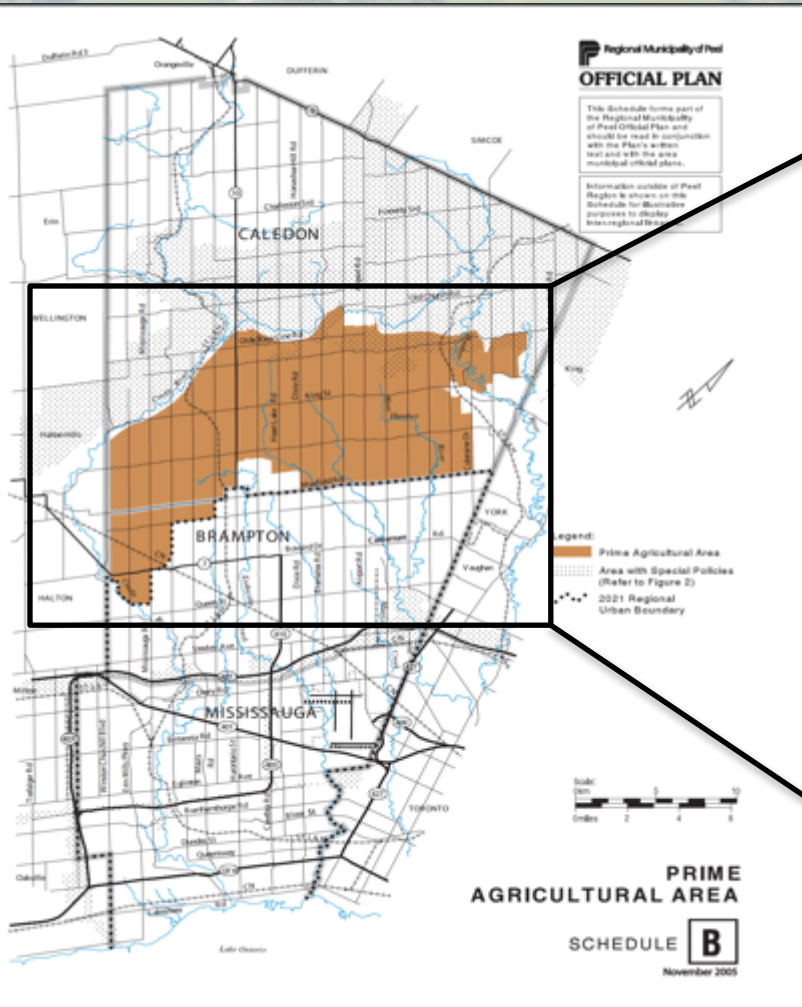


Agricultural Designations Over the Years - 2005



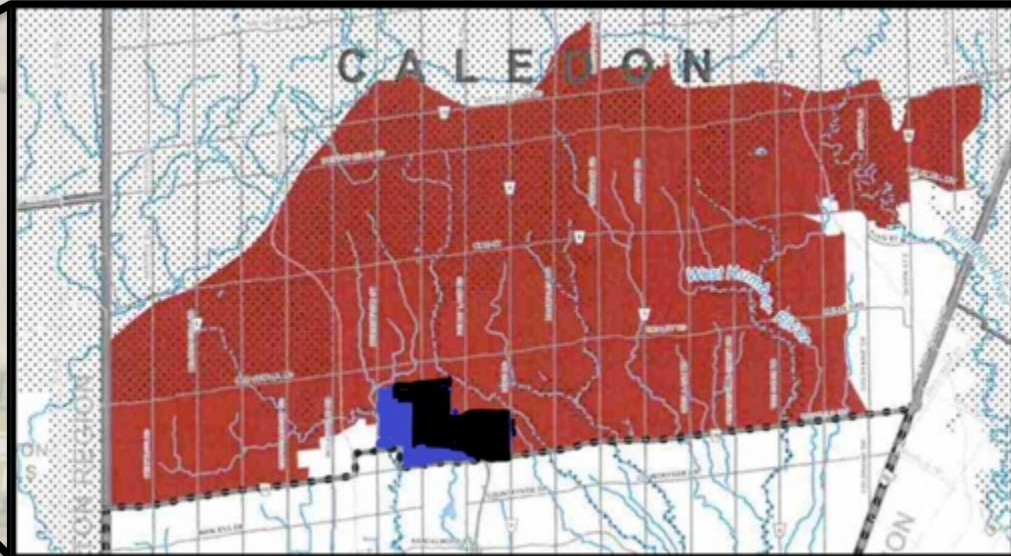
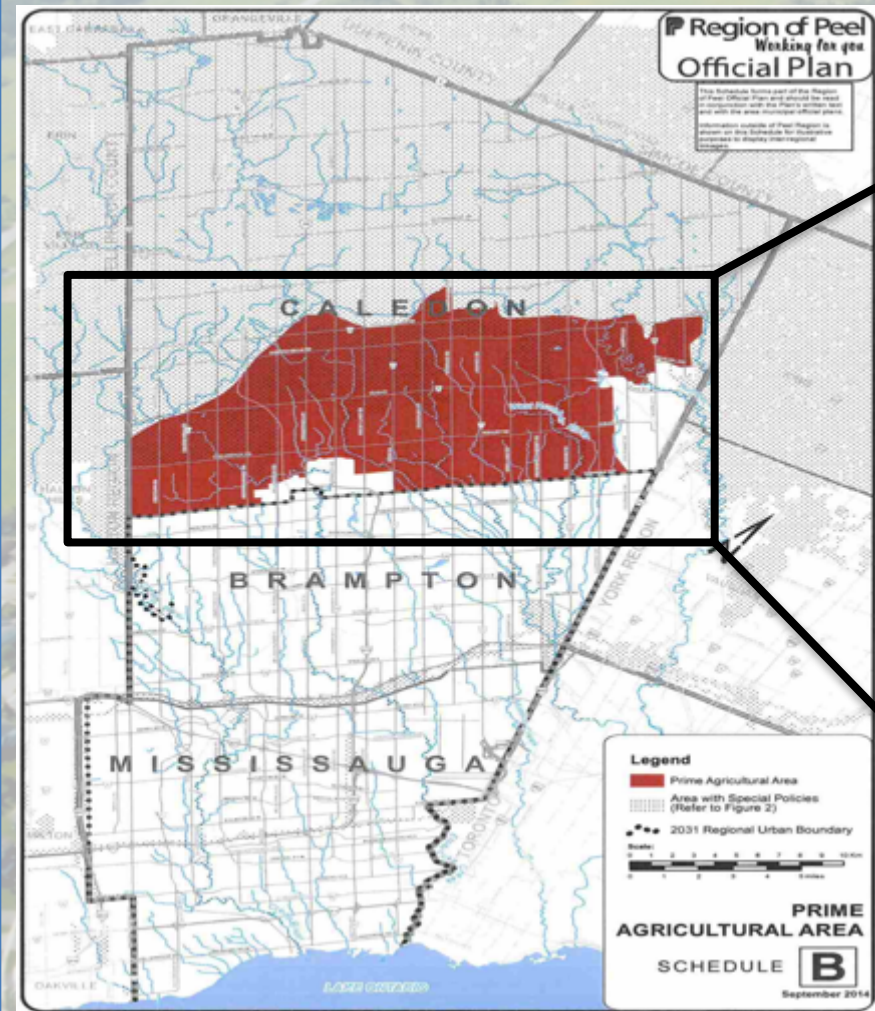
Approved by Region June 2005
Appealed to the OMB
Approved by OMB December 2006 – 2,428
hectares of land

Agricultural Designations Over the Years - 2006



Two expansions totaling approximately 7,000 hectares

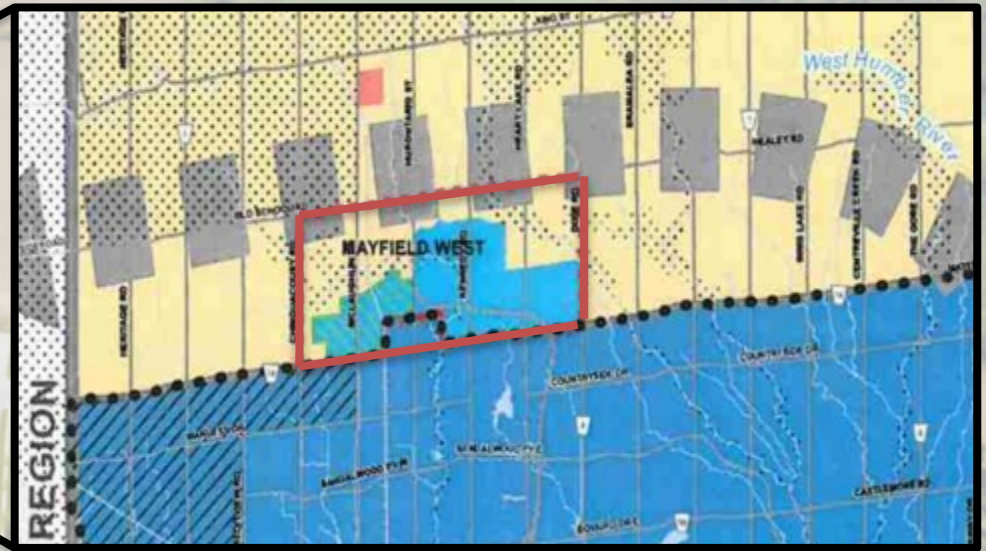
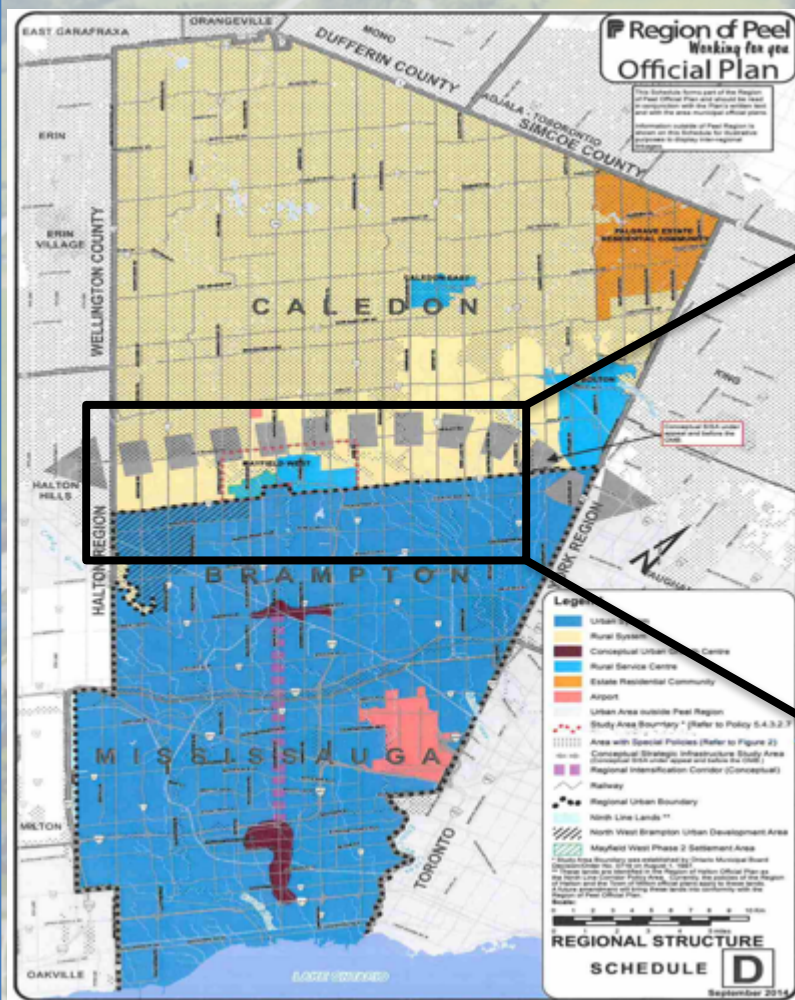
Agricultural Designations Over the Years - 2014



Settlement Area Boundary Expansion -
208 hectares

Agricultural Designations Over the Years

– Future Growth Expectations



Red box indicates the Mayfield West Rural Service Study Area of approximately 5,000 acres

Some Findings So Far

County/ Region	Number of approved OPAs related to the loss of prime agriculture land	Prime agriculture redesignated for:		
		Development Designation (residential, commercial, industrial, recreational, etc.) (Ha)	Secondary Agriculture (Ha)	Non-farm uses through site- specific policy amendments (Ha)
Halton	12	2,656	0	287
Huron	2	25	0	0
Niagara	42	943	240	849
Peel	4	3,274	0	127
Perth	61	217	7	413
Wellington	35	817	16,295	86
York	16	5,233	1,755	0

Niagara Region Findings

organized by application date and geography

	Outside the Greenbelt Plan Area		Within the Greenbelt Plan Area		Total
	pre-2005	2005- 2014	pre-2005	2005-2014	
Prime Agriculture Land Lost (Ha)	943	10	218	0	1,171 ha
Site Specific Non-Agricultural Uses (Ha)	182	547	120	0	849 ha

Greenbelt Area Totals

(Halton, Niagara, Peel, Wellington and York)

	Outside the Greenbelt Plan Area		Within the Greenbelt Plan Area		Total
	pre-2005	2005- 2014	pre-2005	2005-2014	
Prime Agriculture Land Lost (Ha)	23,656	6,901	7,615	48	54,515 ha
Site Specific Non-Agricultural Uses (Ha)	370	619	360	0	1,349 ha

Challenges

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

Next Steps

- Complete case studies
- Analysis/report
 - Summary of findings
 - Trends
- Toolkit
 - Outline of methodology
 - Best practices

An aerial photograph showing a suburban residential area in the foreground with many houses and winding streets. A large, rectangular, brownish undeveloped lot sits in the middle ground, bordered by green fields and trees. In the background, more green fields and a small pond are visible under a clear sky.

Thank You