The Growth Plan and the Greenbelt Plan
Setting the Record Straight

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Abstract

For the last 5 years, elements of the development sector have invested significantly and intensively in mounting a multi-faceted communications campaign to undermine the Growth Plan and Greenbelt Plan. The campaign is comprised of:

- the commissioning and/or funding of reports and publications conveying incomplete, selective and/or inaccurate information;
- rhetorical opinion pieces released through various media, presentations and conferences; and,
- intensive lobbying of elected representatives and senior executives at both the provincial and municipal levels - relying on materials based on the reports/publications described above.

The key plank in the campaign is that the Growth Plan and Greenbelt Plan have constrained the supply of land for and/or the supply of ground related housing - and that this is largely responsible for increased housing prices in the Greater Golden Horseshoe.

Repetition of such claims in the absence of the real and complete facts has seemingly led to their acceptance - not only in individuals and the public - but also in the financial and real estate sectors, certain academic institutions and the federal government. The campaign is misleading and thus irresponsible for it is significantly contributing to instilling uncertainty and a profound anxiousness and frenzy that is leading to ill-informed blame on the plans, calls for pause, pulling back, or worse, changing direction.

The Niagara Escarpment Plan (1985), Oak Ridges Moraine Conservation Plan (2002), Greenbelt Plan (2005), Growth Plan (2006), Regional Transportation Plan (the Big Move - 2008)) and Lake Simcoe Protection Plan (2009) are the cornerstones of Ontario's vision and regional growth management framework for the Greater Golden Horseshoe (GGH).

They result from the cumulative efforts of the last generation, involving innumerable civil society organizations, members of the public, municipalities and provincial governments led by all 3 parties. They are demonstrably non-partisan and reflect a common understanding of the impacts and continued threats that urban sprawl poses to the region, province and country.

They are therefore a shared vision as to how to move forward to protect, manage and sustainably prosper from one of the world's most well-endowed landscapes. These internationally recognized and award winning efforts, despite ample room for improvement, have led to the GGH consistently being viewed as one of the world's most successful city-regions.

The claims that the plans are constraining the supply of land and ground-related housing are ill-founded. The available facts and evidence, including the vast inputs to the Crombie Commission, are clear:

- The Plans are absolutely the right direction to follow
- The evidence is irrefutable that the Plans do not go far enough to address the impacts of urban sprawl and provide for a truly sustainable future
- There is more than sufficient approved land and planned and existing ground related housing supplies to accommodate projected growth to 2031 - and likely 2041 - and any claims to the contrary are not borne out

Following is a two-part brief entitled: ***The Growth Plan and the Greenbelt Plan - Setting the Record Straight***. It cites the key evidence as to why we need to strengthen the Plans - the "*Case for Action*" - along with the key facts on the supply of land and ground related housing - which provides the "*Room to Act*" in moving forward to strengthen the Plans.

Introduction

Following a comprehensive, two year review, the Government of Ontario is on the verge of releasing new a Growth Plan and Greenbelt Plan (the Plans).

However, there has been, and continues to be, claims that these internationally recognized and award winning plans have led to a shortage of land for ground related housing, which is restricting the supply of ground related units, which in turn is driving the rapid increase in housing prices in the region. These claims ignore many of the other accepted drivers of the increase in housing prices (which this paper does not explore).

Moreover, these claims are based on incomplete, selective and/or inaccurate information about the measured, incremental and responsible approach the Plans take to shifting our planning framework over the coming decades. They also misrepresent the Plans approach and extensive municipal efforts to ensure an adequate supply of land and planned units for ground related housing – all while also ignoring the rationale that gave rise to these plans in the first instance. Following is a factual overview of the key information and evidence.

Origins

The Province of Ontario has been engaged in regional planning for the Greater Golden Horseshoe for over 50 years. These efforts have taken on an extremely heightened emphasis over the last generation (25-30 years) given the well documented, devastating impacts that low density urban sprawl was/is having on our health, environment, resources and economy.

Entering the 21st century, this renewed emphasis culminated in the Oak Ridges Moraine Conversation Plan (2002), the Greenbelt Plan (2005), the Growth Plan (2006), the Big Move (2008) and the Lake Simcoe Protection Plan (2009).

Notably, these efforts were initiated and/or supported by all 3 main political parties - together with the vast majority of municipalities and leading civil service organizations. They are thus demonstrably non-partisan and reflect a shared understanding of the impacts and continued threats that sprawl poses. They also comprise a shared vision as to how to move forward collectively to protect, manage and prosper from one of the most well-endowed landscapes and most successful city-regions in the world.

Part 1: "The Case for Action"

Before considering the primary issue around the supply of land for and planned supply of ground related units, it is critical to explore the underpinnings which gave rise to the Plans and which are conspicuously absent in the campaign to discredit them. Further, it is paramount to consider the evidence compiled to inform the review of the Plans.

Indeed, despite our best efforts in enacting and implementing the Plans, the evidence provided by our leading civil service organizations, academia and provincial ministries to the Coordinated Plan Review Advisory Panel (led by David Crombie) is irrefutable. Low density urban sprawl continues to have devastating and debilitating short and long-term negative impacts on our health, environment, resources and economy.

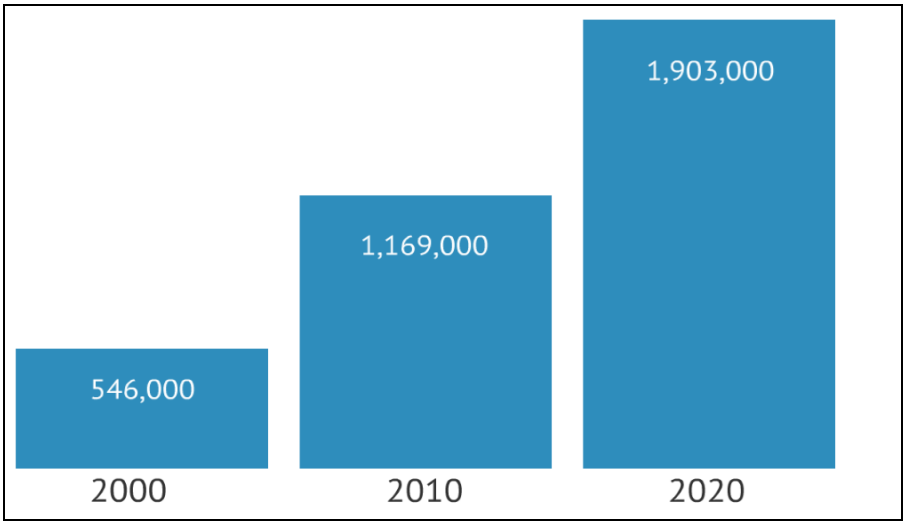
The evidence clearly provides the case for why the Plans have to be strengthened and enhanced and why our resolve to implement them needs to be even more determined.

1.1 Health

In their seminal report from July 2014, the **Chief Medical Officers of Health for the GTHA** concluded that low density, car dependent urban form ("urban sprawl") is a key contributor to a significant increase in chronic diseases such as obesity, diabetes and heart disease. This is leading to premature deaths and increased hospitalizations and illness - which are collectively costing Ontario billions of dollars in health care costs. Moreover, these are trends they predict will continue and worsen.

More specifically, the report concludes that car-dependent sprawl has contributed to a dramatic rise in chronic diseases (eg. diabetes, heart disease, obesity) – including premature deaths. For instance:

- Air pollution: 712-997 premature deaths /year and 2,812-3,939 hospitalizations /year in the GTHA
- 12,500 new cases of diabetes annually in the GTHA alone – with Ontario wide cases predicted to increase from 546,000 cases in 2000 to 1.9 million cases in 2020



This is leading to a dramatic increase in health care costs

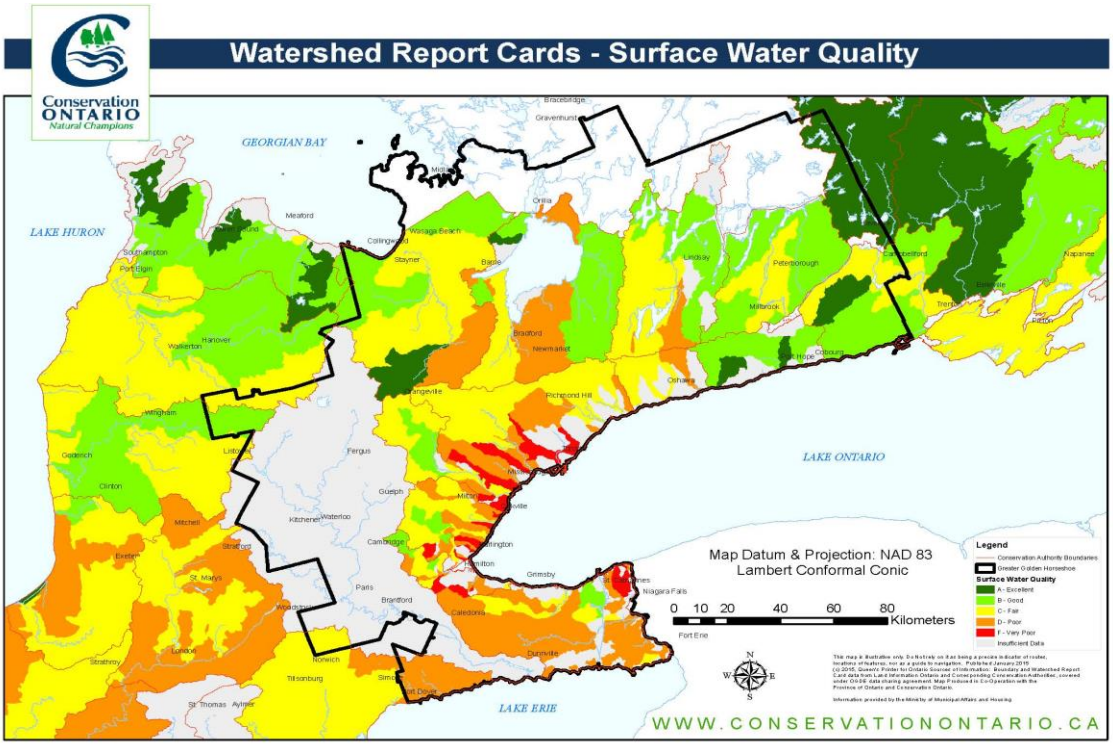
- $ 1.4 billion/annually in direct health care costs
- $305 million annually for the 12,500 new cases of diabetes in the GTHA – which at year 10 amounts to $3+ billion/year

It is for this reason the Report supports more compact, transit supportive urban form which supports active transportation. It views this as "preventative medicine" which can help address the projected significant increases in health care costs - rising from the current 40+% to 70% of Ontario`s budget in the coming decades.

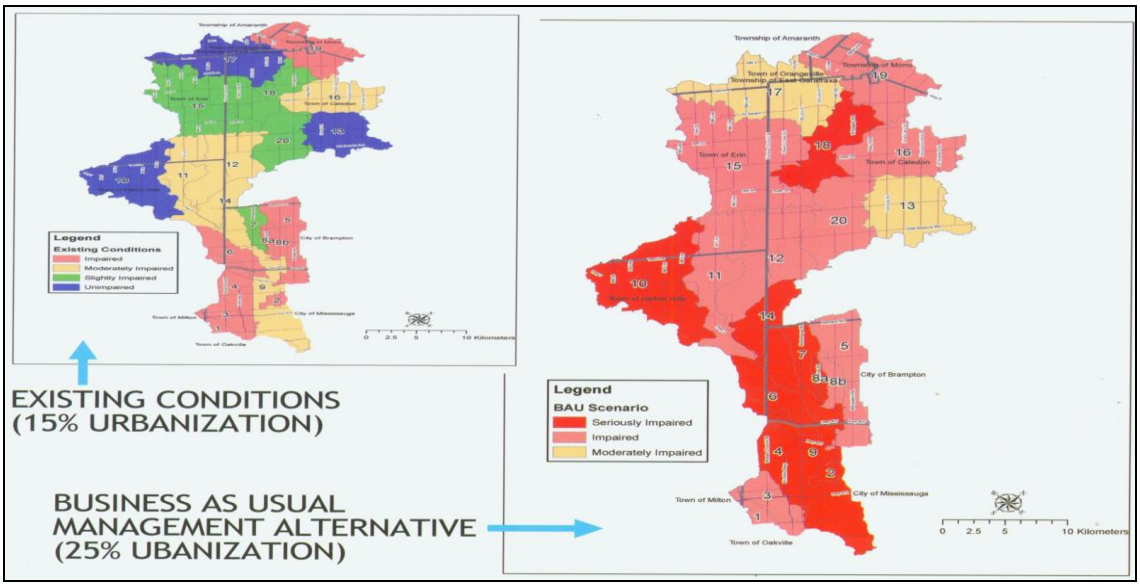
1.2 Water

Water is Ontario's most precious resource and an unparalleled economic advantage. However, urban sprawl has led to severe degradation of our rivers/streams/wetlands - with virtually all our inland lakes and rivers in the GGH at capacity in terms of receiving any further sewage effluent.

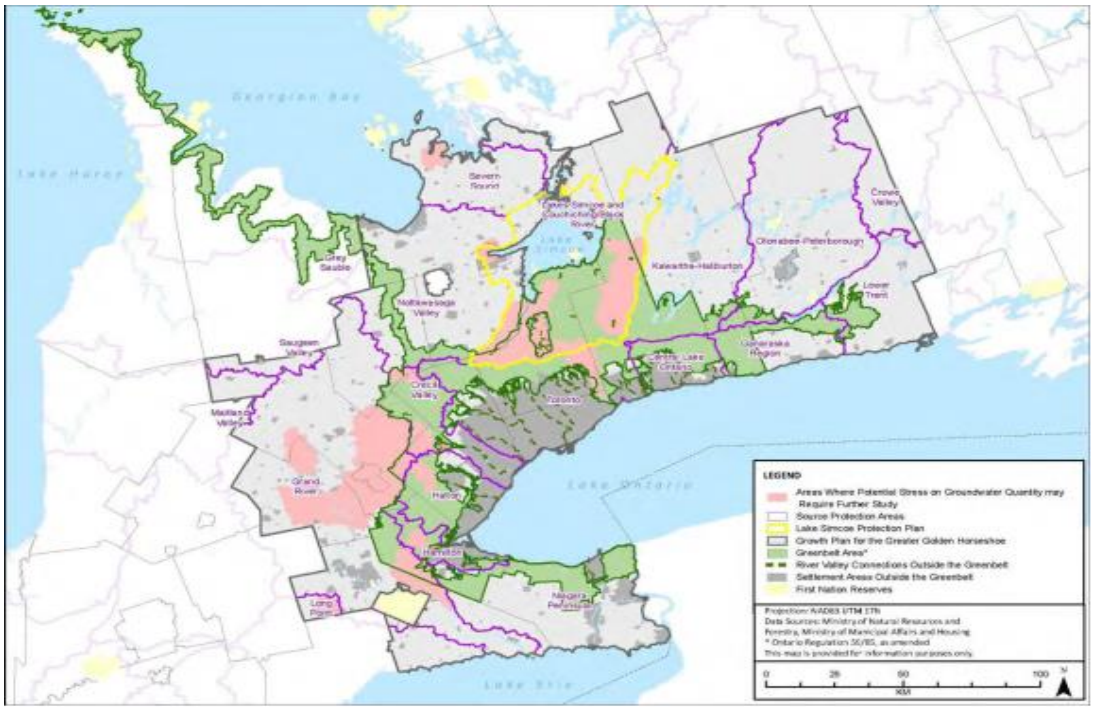
The Watershed Report Cards from the region's **Conservation Authorities** rank surface waters in the urbanized portions of the region as being "Very Poor" (red on map below) or "Poor" (gold on map).



Moreover, modelling from various Conservation Authorities predicts conditions to worsen. The Credit River Conservation Authority's study in 2007 modeled effects of urbanization on the Credit River watershed if we continue current planning and development practices (red = severely degraded, pink = degraded on map below). This is based on the amount of land that has already been approved to accommodate growth to 2031 - let alone from accommodating the forecast growth between 2031-2041.



Further, much of the region's groundwater within urbanized areas is also degraded, while several major aquifers are experiencing significant depletion (mining) (see pink areas on map below). This is leading to increasing numbers of sewage and water pipeline proposals which simply perpetuate outward sprawl and are not fiscally sustainable over the long term.



In addition, the **Ministry of the Environment** has concluded that contaminants are leading to the recent algae bloom proliferations in our Great Lakes while its predictive modelling shows water quality is expected to worsen with increased growth in the Lake Simcoe Watershed.

In its 2015 State of the Environment Report, the **Ontario Biodiversity Council** identified that the average Aquatic Stress Index for Ontario watersheds increased by 7.5% between 2003 and 2013 - with watersheds in the Mixedwood Plains Ecozone having the highest Stress Index values.

Lastly, the **International Joint Commission** has concluded that the cumulative impacts of major urbanization is contributing to a continued and/or renewed degradation of the Great Lakes where major storm water-related discharges exceed 90,000 tonnes/year of sediment, oil, metals and other contaminants.

Our water systems are invaluable in supporting life, provide billions of dollars in ecological goods and services to the Region, and are fundamental to our economic attractiveness and competitiveness - and yet as the evidence above show - we are unable to protect our water quality and quantity where we urbanize the landscape and thus need to control continued sprawl. And yet we have seen some modest arresting of the degradation on the Oak Ridges Moraine since enactment of the Oak Ridges Moraine Conservation Plan – thus showing that if we contain sprawl we can not only protect what remains, but potentially help to reverse some of the degradation that has occurred to this point – thus reinforcing the need to enhance the plans.

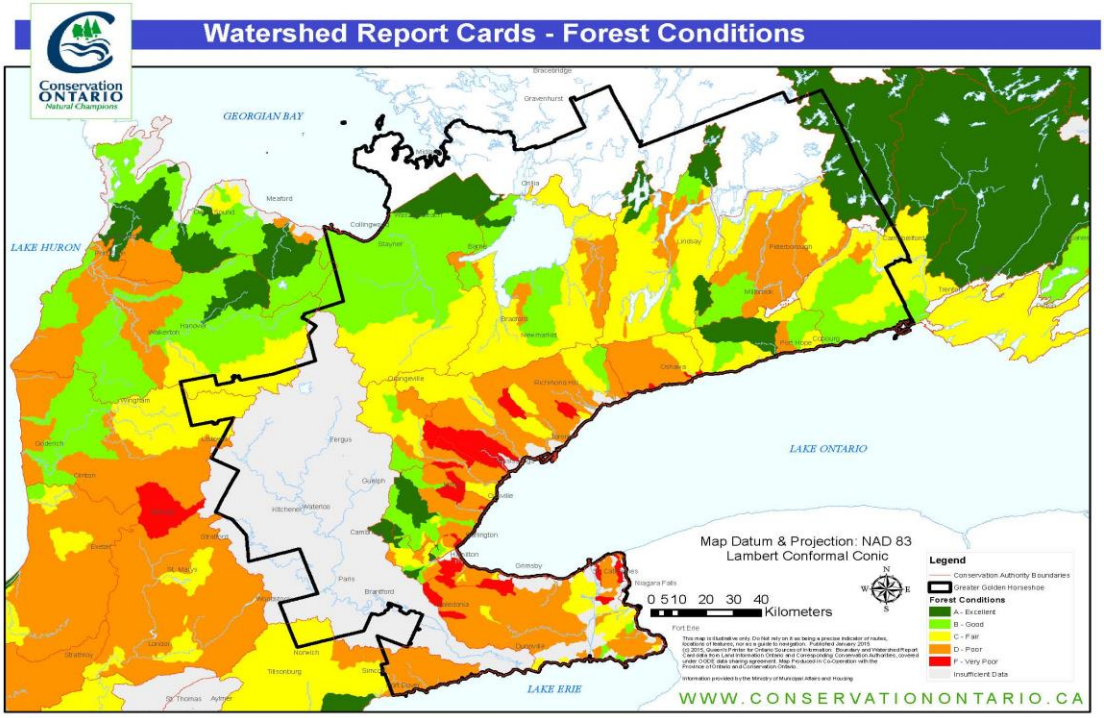
1.3 Natural Heritage/Biodiversity/Endangered Species/Forests/Wetlands

In addition to our water resources, our biodiversity and natural heritage contributes significantly to the billions of dollars of ecological goods and services mentioned above - playing a critical role in providing clean air, land and water. However, as reported by **Ontario's Biodiversity Council** in its 2015 State of Ontario's Biodiversity Report, our natural heritage and biodiversity - and the ecological functions they perform - continue to be lost and experience significant degradation.

The **Biodiversity Council** has identified that urban sprawl is the major cause of habitat loss which in turn is the key cause of the loss of biodiversity. It concluded that habitat loss and fragmentation threaten close to 90% of species at risk in Ontario – including 97% of Greenbelt species at risk. It also found that while Ontario's Ecological Footprint has been reduced, it is now larger than the bio-capacity of the entire province, which has decreased - a clearly unsustainable trend.

Forests directly support maintenance of our water systems and provide the bulk of habitat for species - while also playing significant roles in absorbing pollutants, sequestering carbon, cooling temperature and controlling increased run-off.

However, similar to surface water, the **Conservation Authority** Watershed Report Cards show forest conditions in the urbanized portions of the region to be in "Very Poor" to "Poor" shape (see red and gold on map below).



Wetlands also play a fundamental role and yet the **Ministry of Natural Resources** has determined that 72% of historic wetlands in Ontario have been lost. This includes our larger wetlands where, between 1982-2002, an average of 8,600 acres of wetlands 10ha or greater were lost each year. Moreover, the trend of loss continues for between 2002 and 2011, another 6,152 ha of wetlands were lost - primarily due to urbanization and related infrastructure. Given the critical role of wetlands and the historic loss, continued loss is an alarming trend that needs to be halted.

As with water, our biodiversity provides extensive economic value – as well as the necessities of life. To this end, the **Suzuki Foundation** has estimated that the Greenbelt alone (which only comprises about 21% of the Greater Golden Horseshoe land area) contributes $2.6 billion worth of ecological services annually - or $50 billion over the 25 year horizon of the Plans (2006-2031) - with long-term values much higher over the centuries ahead. At a broader level, the **Ministry of Natural Resources** estimates that ecological goods and services of southern Ontario contribute approximately $84 billion annually.

Ontario Nature has also compiled research showing a direct correlation between healthy and robust natural environments and the mental health and/or the overall social condition of people.

Again, as with heath and water, based on past trends and predictive modelling, loss and degradation of our biodiversity are forecast to continue – thus underscoring another reason to strengthen and enhance the plans.

1.4 Agriculture

Nowhere do the impacts of urban sprawl show themselves more starkly than in the unprecedented loss of agricultural land. Since 1921, Ontario has lost of 40% of its farmland - which is the best in all of Canada with fully 50% of all Class 1 soils found here.

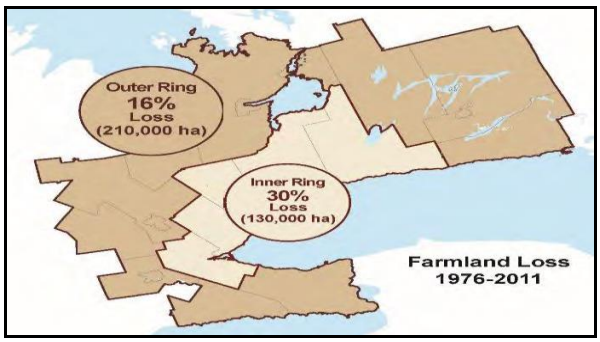
The **Ministry of Agriculture Food and Rural Affairs** has documented that since 1976 the Greater Golden Horseshoe has lost an additional 20% of its remaining farmland. This includes another 160,000 ac or 4.3% just between 2006-2011 (see table below). Combined with existing losses, this means the GGH has only about 40% of its original farmland left (3.5 million acres).

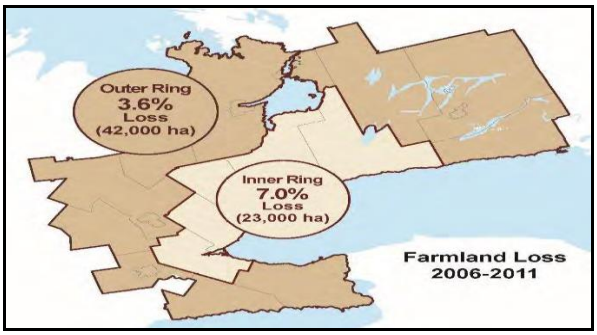
Land in Farming – Change Per Census Period					PPS 1997		PPS 2005, GB 2005, GPGGH 2006	
Geography	Change in Acres 1976-1981	Change in Acres 1981-1986	Change in Acres 1986-1991	Change in Acres 1991-1996	Change in Acres 1996-2001	Change in Acres 2001-2006	Change in Acres 2006-2011	Total Acres Lost 1976-2011
Greater Golden Horseshoe	-92,338 (-2.10%)	-332,970 (-7.74%)	-98,136 (-2.47%)	158,057 (+4.08%)	-262,273 (-6.51%)	-53,599 (-1.42%)	-161,557 (-4.35%)	-842,816 (-19.18%)

Ontario wide, the Ministry estimates that about 130,000 acres were lost each year during the 2006-2011 period, which equates to a loss of about 350 acres every day. Further, there is well over another 100,000+ ha (250,000+ ac) or 7% of our remaining farmland in the GGH that have already been approved for urban uses.

Particularly troubling is that the loss of agricultural land has been much more significant in the outer ring for while representing a lower percent loss (16% compared to the inner ring (30%) - the absolute loss is significantly higher (61%) in the outer ring (210,000 ha) versus the inner ring (130,000 ha).

When combined with the fact that the outer ring is only to accommodate 25% of total population growth to 2031 versus 75% in the inner ring, it means the outer ring is converting farmland at 8 times the rate as the inner ring on a per capita basis.





Even more troublesome is the fact that development interests continue to be speculatively buying or securing huge land assembly's (tens of thousands of additional acres) of farmland in the outer ring (ie. beyond the Greenbelt) in the expectation of continued urban sprawl into the middle to latter part of this century (noting that the sector already controls immense tracts of farmland). This is raising agricultural land values, which creates a lack of affordability to purchase land for farming purposes. It also is leading to de-investment in agricultural infrastructure. Cumulatively, this is fostering a cycle of further speculation, particularly in areas along the extension of sewer and water pipelines into the countryside.

Most troubling of all is the fact major pension funds are now actively looking at investing in land speculation and land banking - tying our collective future retirement security to the very pattern of urban sprawl that the Plans and the work of the past generation has been trying to halt. It is arguably for this reason (in part) that in their submissions to the Government, for the first time ever, the **Ontario Federation of Agriculture**, the **Ontario Farmland Trust** and the **Ontario Fruit and Vegetable Growers' Association** all sought a firm urban boundary for the next 20-25 years. It is noteworthy that both Saskatchewan and Manitoba have laws in place to prevent pension funds (and foreign companies) from purchasing farmland.

In addition to the moral obligation to ensure we protect this irreplaceable and finite resource for future generations, the agri-food sector in the region annually contributes over $12 billion and upwards of 212,000 jobs (while at the provincial level agri-food contributes $35 billion and 720,000 jobs). It is also identified as a growth sector and the Premier has challenged the agri-food sector to create 120,000 new jobs over the coming years. And while the Greenbelt Plan helps to stem this loss (through a variety of stronger policies – but which still allow for some potential urban expansion) - it only covers 21% of the region leaving the vast majority open to a continued pattern of incremental conversion to urban use – and thus to the speculation described above.

1.5 Climate Change/Energy

The **Environmental Commissioner of Ontario** has identified that Ontario is on a path to fall well short of its 2020 and its 2050 greenhouse gas emission reduction targets.

Car dependent, low density sprawl is highly energy consumptive, and a significant source of greenhouse gas (GHG) emissions. This is fundamental given that transportation and buildings account for over 50% of Ontario's GHG emissions – and that over 70% of Ontario's population lives in the region. The **Canada Mortgage and Housing Corporation** estimates that car dependent development produces 3 times more emissions than compact, mixed use areas.

Looking to the future, there are currently well over 250,000 acres of land approved for primarily business as usual, car dependent, low density sprawl. Projected population growth in the GGH to 2041 is expected to add 2 million more cars. While the Big Move will help, many existing and approved urban areas of the GGH will not be served and much of the greenfield development approved is for a continuation of low density, car dependent development – with no ability to support transit.

Climate change impacts are already being felt and expected to worsen with climate change now the biggest cause of disaster relief expenditures in Ontario - a figure that has risen dramatically over the last two decades. The **Ministry of the Environment and Climate Change** estimates that extreme weather in Ontario costs about $6 billion/year and is expected to increase given the above.

$4.5 to **$5.4 billion**	**$500** to **$600 million**	**$100** to **$200 million**	**$75** to **$100 million**
Ontario Ice Storm	**Toronto Extreme Rain**	**Ontario Thunderstorms**	**Goderich Tornado**

1.6 Transportation

Low density, car dependent sprawl is the cause of severe congestion/gridlock which the **Toronto Region Board of Trade** and **Metrolinx** estimate cost the region $6 billion/year in lost productivity - which is predicted to rise to $15 billion/year by 2031. Further, this doesn't include the huge foregone personal time to spend with families, recreating or doing other meaningful things. This pattern of development is in part responsible for the increase in chronic diseases and the growth of GHG emissions discussed earlier.

And, as mentioned, while the Big Move will help, many existing and approved areas of the GGH will not be served and much of the greenfield development approved is for a continuation of low density, car dependent development – with no transit and projected modal splits well under 10% in vast majority of GGH.

Moreover, intensification and greenfield density targets have been reduced significantly in a number of outer ring municipalities thus further hampering the prospect of any form of transit supportive development. As the charts below show, the modal split is still predominantly car oriented – particularly in the outer ring. Hence, the proposal to enhance the requirements for transit supportive densities in the Proposed Growth Plan is extremely well-founded.

MORNING COMMUTE

		INNER RING	OUTER RING	ENTIRE REGION
2006	Auto	74%	94%	78%
	Occupants per vehicle	1.118	1.100	1.113
	Transit	21%	2%	17%
	Bicycle	1%	1%	1%
	Walk	4%	3%	4%
	Other	0%	0%	0%
2011	Auto	72%	94%	77%
	Occupants per vehicle	1.107	1.085	1.101
	Transit	23%	2%	18%
	Bicycle	1%	1%	1%
	Walk	4%	3%	4%
	Other	0%	0%	0%

ALL TRIPS

		INNER RING	OUTER RING	ENTIRE REGION
2006	Auto	78%	89%	81%
	Occupants per vehicle	1.253	1.247	1.251
	Transit	13%	2%	10%
	Bicycle	1%	0%	1%
	Walk	6%	4%	5%
	Other	2%	4%	3%
2011	Auto	78%	90%	81%
	Occupants per vehicle	1.256	1.243	1.252
	Transit	14%	3%	11%
	Bicycle	1%	1%	1%
	Walk	5%	3%	5%
	Other	2%	4%	2%

Note:

Mode shares are based upon a 24-hour period and all trip purposes, as well as morning commute. TTS morning peak hour home-based work trips data is a subset of TTS 24-hour all trips data. A home-based work trip starting during the morning peak hour is represented in both data tables.

Auto: Includes auto trips, whether the trip was made by a driver or a passenger.

Transit: Includes trips made by GO Transit, joint GO Transit and public transit, and public transit.

Other: Includes trips made by school bus, motorcycles, taxis and other modes.

These tables show the different modes of transportation that people in the region take, and how this is changing through time.

The **Pembina Institute** currently estimates that more than two million automobile trips are made during the peak travel period each morning in the GTHA, with that number forecast to approach three million trips by 2031. However, if the Growth Plan density target for the Designated Greenfield Areas (approved but unbuilt urban area) is increased to 70 people/jobs/hectare and the intensification target increased to 60%, **Pembina** estimates we could offset the anticipated increase in vehicle miles traveled, as our population grows towards the 2041 forecasts.

1.7 Infrastructure

Ontario currently has an infrastructure deficit of approximately $100 billion - in large part driven by low density sprawl. This is because, despite significant recent and planned investments, we will never conquer this deficit because low density residential, commercial or industrial development creates a structural infrastructure deficit as it does not generate enough revenue to cover the life time costs (capital, maintenance, operation, replacement) of the extensive linear infrastructure it necessitates.

We are driven by the myth that development charges provide an endless source of infrastructure funding. One need look no further than Mississauga to see living proof of the fallacy of this myth – for once development charges from greenfield development dried up as the city was built out - it is now looking at property tax increases, user fees and/or decreased services to be able to afford to maintain, operate and replace that infrastructure. Alternatively, intensifying and re-urbanizing the vast tracts of underutilized land – which the Growth Plan champions – is clearly the most logical and fiscally sustainable way to approach this challenge.

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To that end, there is extensive research from Ontario and across Canada and U.S. showing how compact urban form can save from 30-50% compared to low density development patterns. This includes a 2009 Study from Calgary which concluded that a development pattern 25% more compact could save $11.2 billion (33%) in capital, operation and replacement of infrastructure costs over a 25 year period.

1.8 Housing

Low density, car dependent sprawl is costly to service, thus contributing to higher housing costs. This is reflected in development charges in greenfield communities which can be 3x higher than developing/redeveloping in already built up areas where infrastructure is in place.

Multi-residential dwelling types (rowhouses, 3 and 4 plexes, small and larger apartment buildings) - including purpose built rental units - have long been recognized as more affordable housing forms to serve the full range of household incomes and people's needs.

The median household income in the GGH is about $78,000. Given the household income distribution of the region, based on income alone (ie. not including other equity) less than 50% of households could afford (or obtain a mortgage for) a house costing $350,000 without spending more than 30% of their gross income (assuming 25% down payment, at 5% interest over a 25 year period). At the same time, car ownership can cost $10,000 per year or more – such that over a 25-year mortgage, a household could save up to $250,000 if only needing one rather than two cars.

Clearly, the shift in the type of housing completions in the region from single-detached to multi-residential house forms - beginning in 2001 - is a trend directly related to the ability of the population to pay for housing (see discussion in the Room to Act)

Synopsis

The evidence is compelling and irrefutable. While moving us in the right direction, our efforts to manage the Greater Golden Horseshoe have not been sufficient to halt or sufficiently reduce the devastating impacts urban sprawl is causing to our health, environment, resources and economy.

From a purely economic perspective, the costs of this form of development are staggering in terms of direct costs (eg. health, infrastructure), indirect costs (eg. gridlock) and lost opportunities (eg. farmland, ecological goods and services).

Compact urban form achieved through strengthening of the Growth Plan and Greenbelt is the key to saving hundreds of billions of dollars as we move further into the middle and latter parts of the 21st century - funds we need and can use to invest in transit, affordable housing and poverty reduction. This will also help address the impacts to our health, the loss of farmland, and our depleted biodiversity and the ecological goods and services it provides- all of which will position the GGH to continue to be one of the leading and sustainable regions in the world.

Given that over 70% of Ontarian's call the region home, the Growth Plan and Greenbelt Plan are therefore central and fundamental to many of the Government's other signature initiatives including:

- the Ministry of Health's Strategic Plan - Make no Little Plans
- the Great Lakes Strategy and proposed Protection Act
- the Clean Water Act and Source Protection Plans
- Ontario's Biodiversity Strategy
- the Local Food Act
- Ontario's Climate Change Strategy and Action Plan
- Ontario's Asset Management Planning and Invest Ontario initiatives
- the Long Term Affordable Housing Strategy

As such, the "Case for Action" is compelling.

Part 2: "The Room to Act"

As stated at the outset of this paper, there has been, and continues to be, claims that the internationally recognized and award winning Growth Plan and Greenbelt Plan have led to a shortage of land for "ground related housing" which in turn is restricting supply and helping to drive the rapid increase in housing prices the region is experiencing. Ground related housing is defined by industry and government alike to mean single-detached, semi-detached and row dwellings - all of which typically have at least 3 bedrooms and some form of private open space - and are thus suitable for families/households with children.

Following is a summary of the key evidence and data which clearly shows that the Plans have not limited the supply of land or planned supply of ground related housing. In fact, what the evidence reveals is that we have actually fallen short in our efforts related to containing the expansion of the urban footprint while also showing that we have barely moved the needle in relation to changing the amount of ground related housing. Lastly, newer evidence related to existing ground related units has revealed that we will have an oversupply of ground related housing to accommodate our forecast growth to 2031, and likely 2041.

These claims have led to a concerted effort by elements of the greenfield development sector to advocate for substantial expansion of our urban boundaries - including identifying the entire "whitebelt" as a "future urban reserve" while also advocating for continued and increased leap-frogging of the Greenbelt - in order to urbanize more land for these housing types.

However, contrary to such claims, it is clear that the Plans were developed in a measured, incremental and thus responsible way. They are the beginnings of planning for a long term shift in how we accommodate increased growth in a healthier and environmentally/fiscally sustainable way. The approach recognizes one cannot change direction overnight in a city region of 9 million people.

Collectively, the following evidence and data demonstrates this measured approach and how we have the "Room to Act" to strengthen and enhance the Plans.

2.1 Land Supplies

The Harris Conservative Government initiated the Smart Growth Panels in 2001/02 in part to respond to the following statement – as documented by the Neptis Foundation and others - which formed the basis for the 2004 Growth Plan Discussion Paper:

"If we continue to consume land for urban development at the rate we have been for the past three decades, we will jeopardize the financial, social and environmental factors that make the region so attractive to new residents and new economic growth. Business-as-Usual development will consume 1,000 sq. km of primarily agricultural land by 2031, an area twice the size of Toronto."

In its 2013 report, "Implementing the Growth Plan for the Greater Golden Horseshoe – Has the strategic regional vision been compromised?", the **Neptis Foundation** identified that there was a total of 107,000+ ha (1007 sq km or 264,000 acres) of designated greenfield land (approved for urban use) in the GGH to accommodate growth to 2031 (see map below) . This is a conservative estimate as it did not include smaller communities and uses like estate residential subdivisions, along with rural industrial, commercial, institutional and recreational uses. As well, additional urban lands have been approved since the compilation of that report. Clearly, we have failed to reduce the expected expansion of the region's urban footprint. In its 2016 Report – "An update on the total land supply: Even more land available for homes and jobs in the Greater Golden Horseshoe" - **Neptis** now estimates that, as of the end of 2016, there were over 125,000 ha or about 308,000 acres of greenfield land that had been approved to accommodate the 2031 population and employment forecast for the GGH.

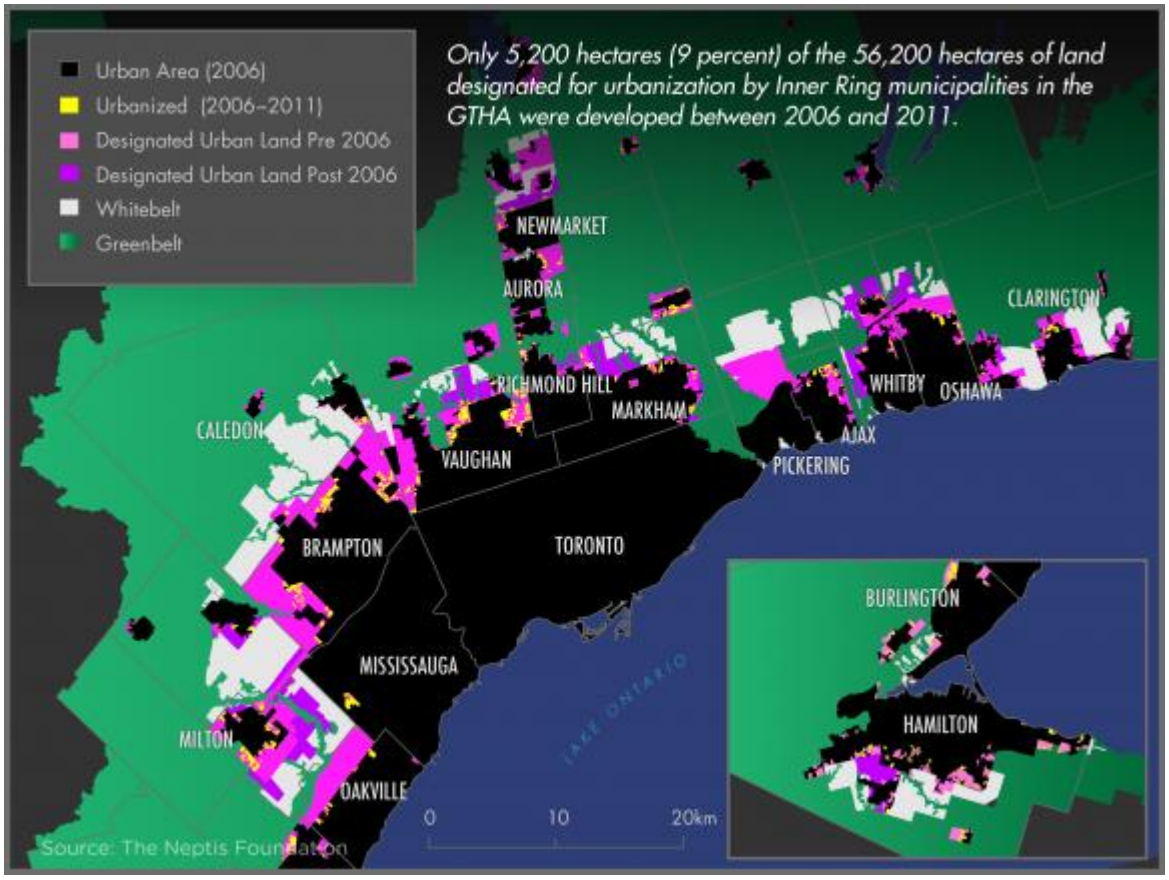
What the map also shows is that, as of 2006 the GTHA already had about 75% of the land it needed to accommodate growth to 2031 (see red areas on map). As such, collectively the GTHA (Regions of Durham, York, Peel and Halton and the City of Hamilton) only needed a total of about 11,000 additional hectares (see purple areas on map) to accommodate the forecast growth to 2031.

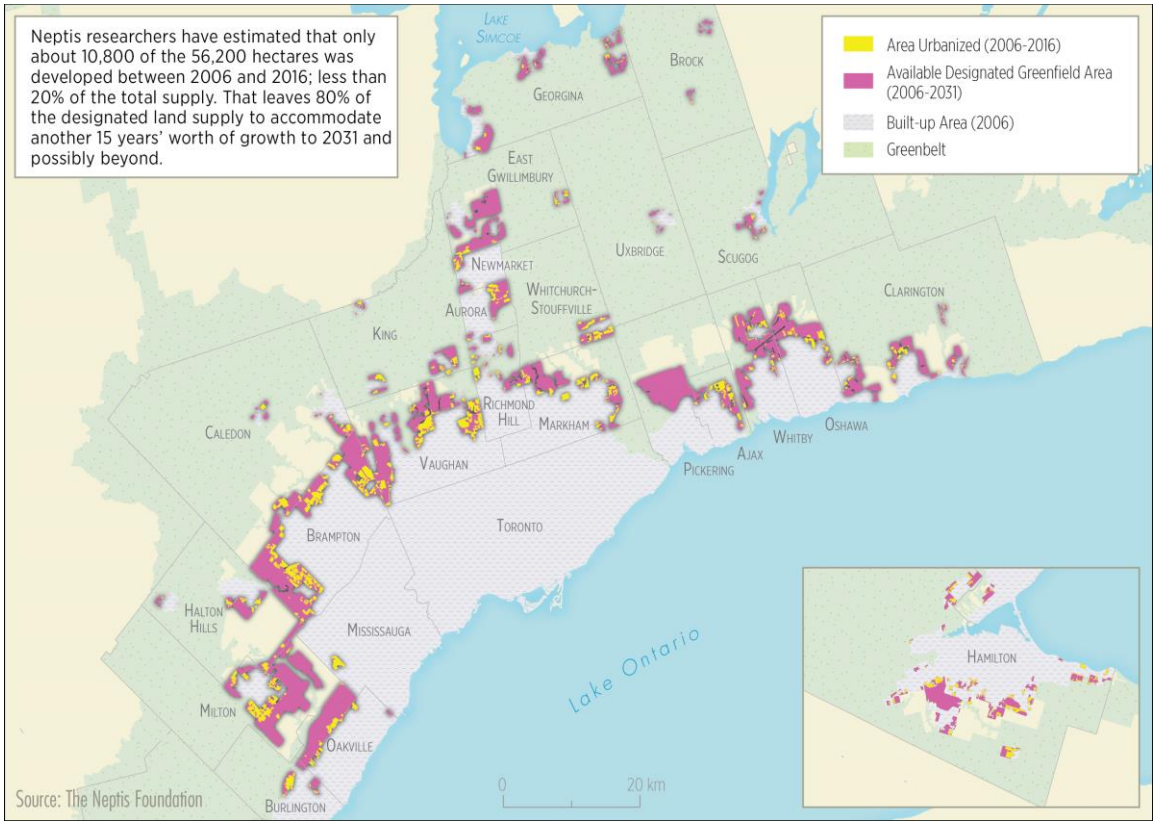
This is important because the GTHA was planned to accommodate about 75% of the forecast growth for the entire GGH – which meant that in 2006 there was already almost enough land to accommodate the vast majority of forecast growth. Thus the vast majority of land has been approved in the upper tier plans for 10 years or longer - thereby allowing significant time to for undertaking infrastructure and more detailed local municipal planning. Conversely, apart from the City of Barrie and the Region of Waterloo (the latter of which only felt it needed 80 ha for urban expansion), there were no new urban lands added in the outer ring. Indeed most outer ring upper tier municipalities had sufficient land to accommodate growth to 2041 or beyond.

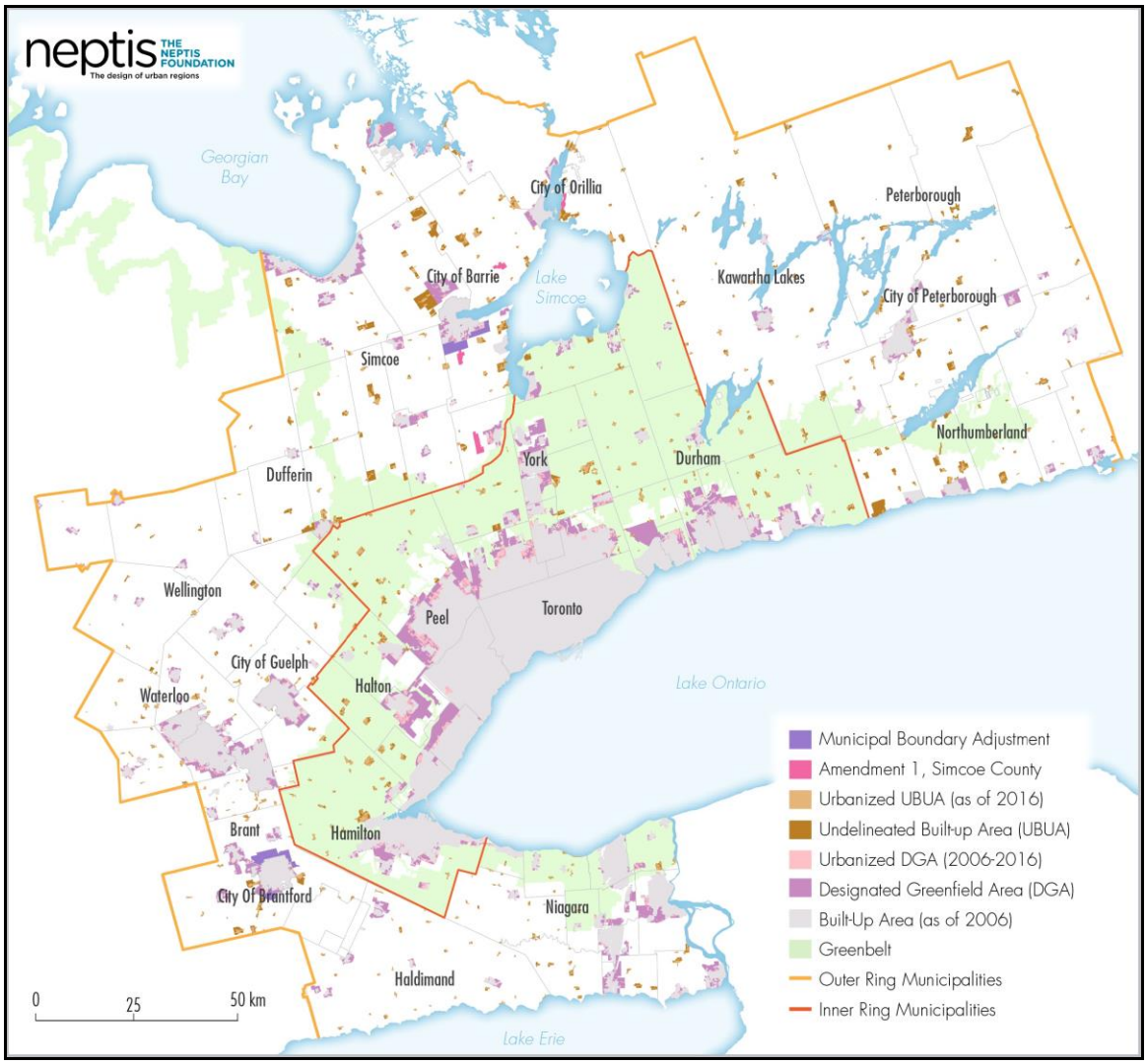
What this map also clearly shows is that, despite development sector claims that the "land is in the wrong place", in fact virtually all the approved greenfield urban land supply is contiguous to the built-up areas of all our major cities and towns in the GTHA and the outer ring. Indeed it is contiguous to the built up parts of our cities/town and thus is completely in keeping with logical and efficient patterns of urban and infrastructure expansion contemplated and advocated by the Province and practiced by the regions and separated cities.

Not only are there ample land supplies to accommodate growth to 2031, in its 2015 report "Understanding the Fundamentals of the Growth Plan", the **Neptis Foundation** documented that we were using this land at a much slower rate compared to the past. It discovered that between 1991- 2001 the urban footprint of the GTHA expanded by 24% to accommodate about 1.1 million people. However, between 2001- 2011 the urban footprint only expanded by 9% to accommodate about 1 million people. This revealing conclusion was discovered after the efforts by the Region's to plan to implement the Growth Plan. This likely led to a situation where the amount of land needed to accommodate growth to 2031 was over-estimated as it was based largely on the land consumption trends of the prior decade (1991-2001). This would in part explain why we have been consuming the approved land supplies at about half the rate expected (see below) - particularly given that housing starts are essentially keeping pace with population growth.

To this end, in relation to land consumption, as Neptis research delved deeper, its 2015 "Growing Pains" report (and more recent updates) concluded that only 9% of the approved greenfield land was developed between 2006-2011 and only another 9-10% between 2011-2016. As maps of the GTHA below clearly show - and particularly the second map, in 2016 the vast majority of the approved land supply (80%) has yet to built on (see purple/pink areas).


Urban Area (2006)
Urbanized (2006–2011)
Designated Urban Land Pre 2006
Designated Urban Land Post 2006
Whitebelt
Greenbelt
Only 5,200 hectares (9 percent) of the 56,200 hectares of land designated for urbanization by Inner Ring municipalities in the GTHA were developed between 2006 and 2011.
NEWMARKET
AURORA
CLARINGTON
RICHMOND HILL
MARKHAM
WHITBY
OSHAWA
CALEDON
AJAX
VAUGHAN
PICKERING
BRAMPTON
TORONTO
BURLINGTON
MISSISSAUGA
HAMILTON
MILTON
OAKVILLE
0
10
20km
Source: The Neptis Foundation


Neptis researchers have estimated that only about 10,800 of the 56,200 hectares was developed between 2006 and 2016; less than 20% of the total supply. That leaves 80% of the designated land supply to accommodate another 15 years' worth of growth to 2031 and possibly beyond.
Area Urbanized (2006-2016)
Available Designated Greenfield Area (2006-2031)
Built-up Area (2006)
Greenbelt
Lake Simcoe
Brock
Georgina
East Gwillimbury
Uxbridge
Scugog
Newmarket
Whitchurch-Stouffville
Clarington
Aurora
King
Richmond Hill
Markham
Caledon
Whitby
Oshawa
Vaughan
Ajax
Pickering
Toronto
Brampton
Halton Hills
Mississauga
Lake Ontario
Hamilton
Milton
Oakville
Burlington
0
20 km
Source: The Neptis Foundation



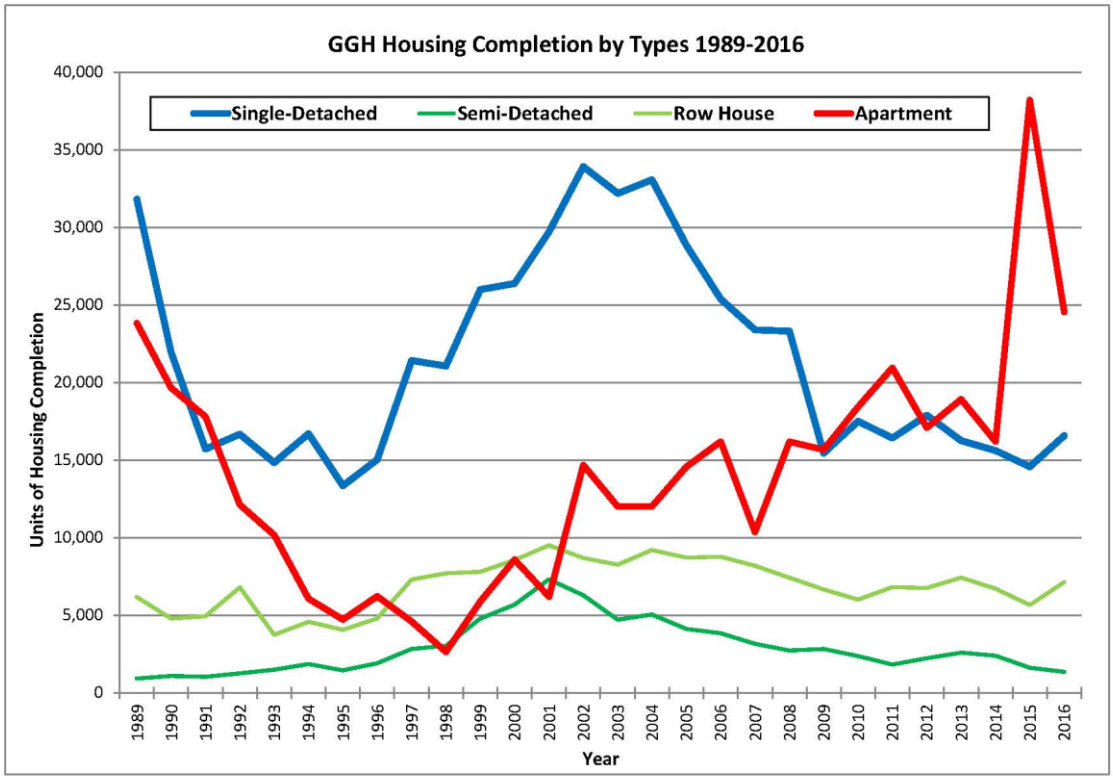
Given that 2006-2031 is a 25 year time frame, this means that every five years, roughly 20% of the greenfield land should be expected to be developed (particularly as forecast growth rates were higher in the first decade of the planning horizon).

However, the period 2006-2016 represents 40% of the 25 year horizon (2006-2031) of the Growth Plan and yet we have only developed 20% of the approved greenfield land during this period. What this reveals is that greenfield land is being consumed at less than half the anticipated/planned rate (similar to the urban expansion pattern between the 1991-2001 and 2001-2011 periods). This dramatic reduction in land consumption means much of the approved, vacant greenfield land has yet to be built upon which will result in the approved greenfield land supplies lasting longer than originally planned. As mentioned earlier, these maps again clearly reveal that virtually all the approved urban land is in locations adjacent to all our cities and towns - thus providing for the most efficient extension of transportation, sewer and water infrastructure.

2.2 Shifting Housing Completions

In relation to residential uses, the reduced land consumption is driven by increased density of ground related housing on the greenfields as well as a shift from greenfield development to intensification (ie. redevelopment of existing built-up areas). In its 2015 Performance Indicators report for the Growth Plan the **Ontario Growth Secretariat** shows that, from 2007-2010, almost 60% of all new residential growth was through intensification. Even excluding Toronto, where 100% of growth is via intensification, the overall intensification rate is still 44% - revealing the significance of this dramatic shift and trend.

This shift is revealed in housing completion data from **Canada Mortgage and Housing Corporation** which shows that single detached completions in the GGH have dropped by 50% from about 35,000/yr (2002) to about 17,000/yr (2013) while apartments have grown by almost 200% from about 6,000/yr (2001) to about 18,000 year (2013) – with much higher completions of 35,000 units in 2015 and 25,000 units in 2016.



While accelerating greatly in the last 5 years, the shifting trends to apartments and intensification began in 2002, thus reflecting that these are market based rather than policy based trends. Survey research by **Pembina and RBC** reveal that the majority of households would choose a dwelling in communities with nearby services and amenities served by transit. Arguably, these trends are also strongly driven by changing demographics (smaller households) and the historic and growing disconnect between regional household incomes and housing prices in which multi-residential dwellings (common in intensification developments) are much more affordable for many households (see section 1.8 Housing above).

2.3 Planned Housing

Despite these trends, the following data clearly reveals that the province and municipalities have taken a measured approach in shifting the housing stock – with ground related housing still by far the predominant form of planned housing. Based on data from municipal land budgets prepared to accommodate growth in accordance with the Growth Plan, as of 2006 (excluding the City of Toronto), there were about 800,000 new ground related units (singles, semis and row dwellings) being planned by the GGH municipalities to accommodate projected population growth to the year 2031. Of this, about 503,000 units are in the GTHA. In total, about 540,000 of these units are single-detached (see detailed breakdown in the Appendix).

	Total Residential Units		**Ground-Related Units**		**Apartment Units**	
	Total	**%**	**Total**	**%**	**Total**	**%**
Planned/Estimated Units for 2006-2031	1,121,792	100	798,374	100	323,418	100
Housing Completion 2006-2016	360,458	32.1	287,452	36.0	73,006	22.6
Remaining Planned Units for 2017-2031	761,334	67.9	510,922	64.0	250,412	77.4

Using a conservative assumption of 3 persons/per/unit, these 800,000 planned ground related units could accommodate almost 2.4 million people.

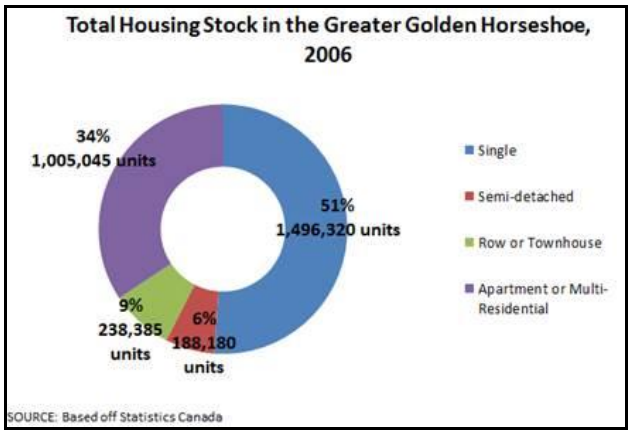
The Growth Plan forecasts growth for the GGH of about 3.5 million between people 2006-2031. Excluding Toronto's portion of this projected population growth (581,000 people), this means that projected growth is about 2.9 million persons for the rest of the GGH for this period. (Toronto is excluded because it did not prepare a land budget since it is fully built out)

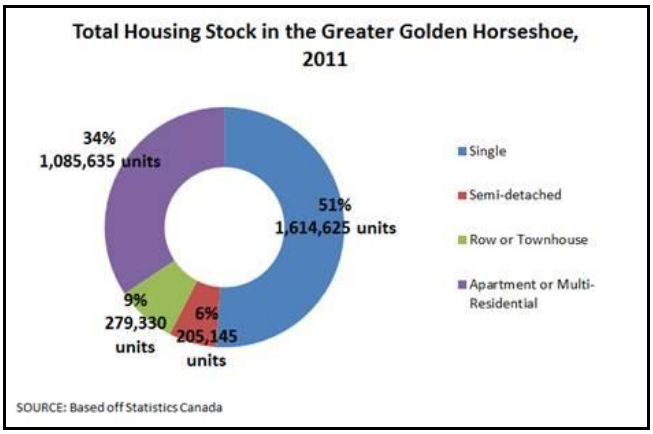
This means that the 800,000 planned ground related units could accommodate about 83% (2.4 million people) of all projected population growth (2006-2031) for the remainder of the GGH (2.9 million people).

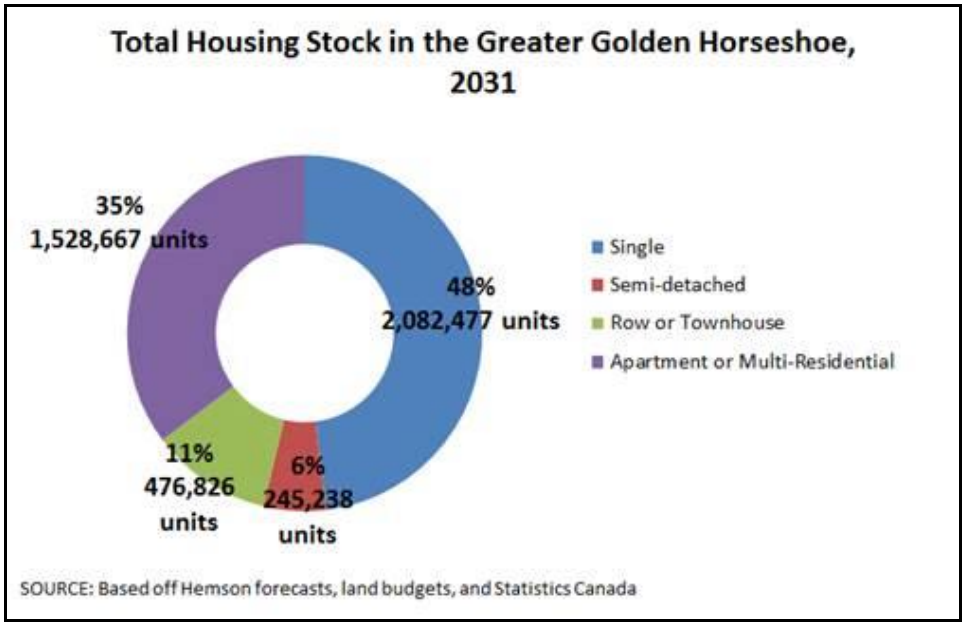
Of the planned 800,000 ground related units, there were about 287,000 completions from 2006-2016 representing about 36% of the total planned ground related units. About 203,000 of these completions were in the GTHA.

This means that there are over 510,000 (a half million) ground related units still in the planned supply pipeline, including 300,000 in the GTHA – again reflecting that there is ample planned long-term supply of these housing types.

The Growth Plan and Greenbelt Plan are not constraining the planned supply of ground related units. In fact, as the graphic below shows, the overall housing mix for the region will barely shift by the year 2031 - with apartments shifting from 34% to 35% of the overall stock while singles decreased from 51% to 48% of the overall stock. This also underscores the need to strengthen the plans given the documented impacts of low density residential sprawl, changing demographics and increasing challenges for the majority of households in affording a ground related unit.







2.4 Ground Related Units owned by those 55+

In addition to this massive supply of planned new ground related units, it is fundamentally important to consider the existing stock of ground-related housing as we have entered a unique period in the history of the region in relation to the aging of our population. **Statistics Canada** data reveals that in 2006 there were 700,000 ground related units in the GGH owned by those 55+.

Age Group	GGH		GTA	
	Total	%	Total	%
55-64 Years Old	333,280	47%	204,510	50%
65-74 Years Old	204,485	29%	117,745	29%
75+ Years Old	164,000	23%	89,740	22%
Total (55+ Years Old)	701,765	100%	411,995	100%

Of these units, in 2006, 370,000 were owned by people 65+ which means the youngest will be 90 years old in 2031 and, as a result, virtually all these units will come to market by 2031.

By 2041, the youngest of those 55+ in 2006 will be 90 meaning virtually all of the remaining 330,000 ground related units will come to market by 2041. At a modest 3 persons/per/unit these 700,000 units could accommodate 2.1 million people. These units will play a significant role in achieving our intensification targets – recognizing that there are hundreds of thousands of apartments also planned within our currently built up areas (that have not been discussed in this brief).

These units all have existing infrastructure and are closer to transit, amenities and jobs – while also providing "family" housing stock as they virtually all have 3 bedrooms and some form of private open space.

Combined with the 800,000 planned ground related units described above, the 700,000 ground related units owned by older households creates an overall supply of 1.17 million ground related units by 2031 or 1.5 million by 2041 (and this does not include additional ground related units municipalities may plan for to accommodate growth from 2031-2041). Combined, this 1.5 million ground related units alone (at a modest 3 persons per unit) could accommodate 4.5 million people.

The Growth Plan projects growth of about 5 million people for the GGH between 2006-2041. Deducting Toronto's 2006-2041 projected growth of about 900,000 people, this means the rest of the GGH will grow by about 4.1 million people.

Based on the planned and existing supply numbers above, we could house more than all forecast population growth to the year 2041 in ground related housing. Further, this does not include the additional ground related units that municipalities will undoubtedly plan for to accommodate the projected growth between 2031-2041.

2.5 Forecasts and Actual Growth Rates

The GGH 2041 population forecast of 13.5 million people contained in the Growth Plan is a "reference" forecast. It is slightly below the mid-point between the "low" forecast of 11.7 million and the "high" of 15.4 million. However, it is generally considered an optimistic forecast and represents a growth rate somewhat higher than past trends.

Between 2001-2016, the Growth Plan forecasted GGH wide growth of about 635,000. Based on the 2016 Census, actual growth (not including the undercount) was about 488,000 or 23% less than forecast.

The Ontario Ministry of Finance June 2016 Forecast projects a total of 12.994 million people by 2041. This is a reduction of 485,000 (11%) compared to the Growth Plan forecast of 13.480 million. This forecast includes a slightly higher estimate for the GTHA (+43,000 people) but a dramatic reduction of 528,000 persons for the outer ring representing a 45% decrease.

In a similar vein, Statistics Canada 's 2014 forecast projects that Ontario will grow by 1.4 million fewer people by the year 2036 than its 2012 forecast (which constitutes about 1 million fewer in the Greater Golden Horseshoe given the GGH makes up about 70+% of Ontario's population)

Based on actual and forecast growth rates, it appears that the GGH has planned to accommodate higher amounts of growth than more recent forecasts. As a result, the planned and existing supply of ground related units over the 2041 horizon of the plan should last even longer than anticipated.

Synopsis

The above facts reveal that the Growth Plan and Greenbelt Plan have not constrained the supply of land for or planned supply of ground related housing. Moreover, there is new evidence that the existing supply of ground related housing will play an ever increasing role in meeting demand as the population continues to age.

As well, trends related to housing preferences and land consumption have changed dramatically over the last 15 years, compared to the last decade of the 20th century on which much of our current land consumption planning was based. Housing preferences in particular have been changing significantly since 2001 and are thus market based and arguably reflect both changing preferences and demographics - as well as a major and growing disconnect between household incomes and the cost of single-detached houses. Last, our most recent provincial and federal forecasts are meaningfully lower than those in the Growth Plan - all of which mean we have the "Room to Act".

Appendix. Planned Residential Units for 2006-2031 and Housing Completion from 2006-2016 in the GGH

1. Municipalities with Planned Residential Units Data (Based on municipal land budget studies)

Geography	Potential Units Planned from 2006 to 2031						Housing Completion from 2006 to 2016 (inclusive)						Remaining Planned Units for 2017-2031					
	Single	Semi	Row	Apt	Total	**Ground**	Single	Semi	Row	Apt	Total	**Ground**	Single	Semi	Row	Apt	Total	**Ground**
York	87,000	13,350	24,390	109,360	234,100	124,740	45,221	7,114	15,630	23,594	91,559	67,965	41,779	6,236	8,760	85,766	142,541	56,775
Durham	78,987	*	40,494	40,494	159,975	119,481	23,373	1,364	7,146	2,211	34,094	31,883	55,614	*	33,348	38,283	125,881	87,598
Halton	58,000	*	38,500	31,100	127,600	96,500	18,815	2,584	11,243	7,804	40,446	32,642	39,185	*	27,257	23,296	87,154	63,858
Peel	55,650	19,398	30,864	53,106	159,018	105,912	30,903	9,461	11,681	17,296	69,341	52,045	24,747	9,937	19,183	35,810	89,677	53,867
Hamilton	33,000	7,000	17,000	23,000	80,000	57,000	11,269	680	6,868	1,748	20,565	18,817	21,731	6,320	10,132	21,252	59,435	38,183
Simcoe	65,036	*	12,458	9,856	87,350	77,494	15,237	787	2,490	860	19,374	18,514	49,799	*	9,968	8,996	67,976	58,980
Barrie	12,379	*	9,635	14,485	36,499	22,014	2,993	80	1,034	1,878	5,985	4,107	9,386	*	8,601	12,607	30,514	17,907
Guelph	7,900	*	8,800	9,900	26,600	16,700	3,192	550	2,212	2,383	8,337	5,954	4,708	*	6,588	7,517	18,263	10,746
Kawartha Lakes	7,527	*	2,160	995	10,682	9,687	2,640	36	200	70	2,946	2,876	4,887	*	1,960	925	7,736	6,811
Northumberland	7,280	170	250	1,440	9,140	7,700	2,806	156	552	332	3,846	3,514	4,474	14	-302	1,108	5,294	4,186
Brant	3,678	*	966	396	5,040	4,644	1,189	34	197	28	1,448	1,420	2,489	*	769	368	3,592	3,224
Brantford	7,002	*	1,401	7,158	15,561	8,403	2,194	72	928	425	3,619	3,194	4,808	*	473	6,733	11,942	5,209
Wellington	10,187	*	965	745	11,897	11,152	1,615	70	115	416	2,216	1,800	8,572	*	850	329	9,681	9,352
Dufferin	4,881	*	1,338	892	7,111	6,219	2,278	80	369	136	2,863	2,727	2,603	*	969	756	4,248	3,492
Niagara	29,855	*	12,370	6,240	48,465	42,225	9,756	894	3,553	1,190	15,393	14,203	20,099	*	8,817	5,050	33,072	28,022
Waterloo **	62,100	*	15,300	12,600	90,000	77,400	13,207	1,058	5,523	11,700	31,488	19,788	48,893	*	9,777	900	58,512	57,612
Haldimand	3,680	*	560	440	4,680	4,240	990	84	187	75	1,336	1,261	2,690	*	373	365	3,344	2,979
Total ***	534,142	39,918	217,451	322,207	**1,113,718**	**791,511**	187,678	25,104	69,928	72,146	**354,856**	**282,710**	346,464	14,814	147,523	250,061	**758,862**	**508,801**

** No data on semi-detached dwellings for these municipalities.*

*** Reflects an estimate of units by type for the Region of Waterloo*

**** Housing Completion data are derived from CMHC data.*

***** This table does not include data from the City of Toronto.*

2. Municipalities without Unit Data from Land Budgets*

Geography	Pop Growth	PPU (ON avg)	Estimated PPU 2006-2031			Housing Completion from 2006 to 2016 (inclusive)						Remaining Planned Units for 2017-2031					
			Total PPU	Ground%	**Ground**	Single	Semi	Row	Apt	Total	**Ground**	Single	Semi	Row	Apt	Total	**Ground**
Peterborough County	1,023	2.6	393	0.85	334	1,077	4	52	27	1,160	1,133	No detail data				-767	-799
Peterborough City	10,363	2.6	3,986	0.85	3,388	1,948	36	713	418	3,115	2,697					871	691
City of Orillia	9,606	2.6	3,695	0.85	3,140	504	6	402	415	1,327	912					2,368	2,228
Total *	20,992		**8,074**	n/a	**6,863**	3,529	46	1,167	860	**5,602**	**4,742**	No detail data				**2,472**	**2,121**

* Housing Completion data are derived from CMHC data. This table does not include data from the City of Toronto.

GGH Summary Table - Planned, Completed and Remaining for 2017-2031

	Total Residential Units		Ground-Related Units		Apartment Units	
	Total	%	Total	%	Total	%
Planned/Estimated Units for 2006-2031	1,121,792	100%	798,374	100%	323,418	100%
Housing Completion 2006-2016	360,458	32.1%	287,452	36.0%	73,006	22.6%
Remaining Planned Units for 2017-2031	761,334	67.9%	510,922	64.0%	250,412	77.4%

Note: This table does not include data from the City of Toronto. The table indicates that there are still over 60% of planned residential units available for development for 2017-2031.

Summary of Facts about Ground Related Housing Supplies:

- Upwards of 125,000 ha of land in the GGH (308,000 acres) have been approved for urban use to accommodate projected growth to 2031.

- Of this, only 20% has been used to date - reflecting drastically lower land consumption trends than in prior decades (eg. from 1991-2001 the urban footprint expanded by about 26% to accommodate 1.1 million people whereas between 2001-2011 it only expanded about 9% to accommodate 1 million people). Between 2006-2011 and 2001-2016 only about 20% of approved urban land was consumed (10% each decade).

- As of 2006, about 800,000 ground related units (single detached, semi-detached and row houses - all of which typically have 3 bedrooms and a yard) were planned on this land supply - with about 500,000 of these in the GTHA. Of these, about 540,000 are single-detached houses.

- As of the end of 2016, about 288,000 of these ground related units had been built GGH wide - of which 203,000 were in the GTAH.

- This means there are over 500,000 (half million) ground related units still in the planned supply in the GGH of which 300,000 are in the GTHA.

- These 800,000 units can accommodate about 2.45 million people (using a conservative assumption of 3 persons/unit) or about 83% of all planned population growth to 2031 (excluding the City of Toronto).

- In addition, as of 2006, there were 700,000 single, semi-detached and row houses owned by people 55 or older. Of these, 370,000 were owned by those 65+ - the youngest of which will be 90 years old in 2031 meaning virtually all these units will come to market by that time. Of the remaining 330,000 owned by those 55+, the youngest of those will be 90 in 2041 such that all those houses will come to market as well. Collectively, these units could accommodate at least another 2.1 million people.

- Combined, the planned supply and existing supply of ground related homes that will come to market by 2041 can accommodate about 4.6 million people whereas the total growth projected to 2041 is only 4 million (excluding Toronto).

- The overall mix of ground related vs apartment units will barely shift between 2006 and 2031.

About the Author:

Victor Doyle has been at the epi-centre of provincial planning in the Greater Golden Horseshoe for almost 30 years – serving 9 provincial government administrations under all 3 parties.

In this capacity, he has been intimately involved in leading the design, development, implementation, and defence of, and educational outreach on, the Greenbelt Plan, Oak Ridges Moraine Conservation Plan and Growth Plan.

This includes leading provincial involvement and review of upper tier municipal land budgets in the Greater Golden Horseshoe during the initial round of Growth Plan conformity (2006-2010) which identified land and housing supplies to the year 2031.