

Working Paper #2:

Concepts for Addressing Halton Region's Land Needs to 2031



URBAN
STRATEGIES
INC

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Phase 3
Sustainable Halton Report 3.08



Prepared for Halton Region



Georgetown Rail Corridor, Halton Hills

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Executive Summary

Working Paper #2: Concepts for Addressing the Region's Land Needs to 2031

Purpose

This report is the second in a series that explores approaches for locating new urban lands in Halton Region, as part of Sustainable Halton. The purpose is to present the concepts being considered as potential locations for new mixed-use/residential areas and new employment lands outside the Region's current urban boundary.

Context

Halton Region is working toward a new Regional Growth Management Strategy (Sustainable Halton) that will provide a long-term plan for the Region to the year 2031, and bring the Region's official plan into conformity with [Places to Grow: The Growth Plan for the Greater Golden Horseshoe](#), adopted by the Province of Ontario, June 16, 2006.

Most of the growth anticipated in the Region will be accommodated within the lands already included within the existing urban area, either through intensification of already *built-up* areas or designated areas outside the *built-up area* (*greenfield*). Some additional land outside the existing urban area will be required to meet the growth targets set out by the *Places to Grow Plan*. This paper addresses how much additional land is needed, where it is located and what density of development might be anticipated in these areas.

In order to conform to the policies of the *Places to Grow Plan*, all *greenfield* lands, including the potential new urban lands identified in this report, must be planned to an overall density of at least 50 people and jobs per gross hectare.

Outcomes

New Urban Land Needs

Section 3.0 of the report summarizes the process for determining the Region's new urban land needs to 2031, based on achieving conformity with the *Places to Grow Plan*. The new urban land needs analysis is based on recent population and forecasting work carried out by the Region ([Report 3.07 - Accommodating Growth to 2031](#), Hemson Consulting Ltd., April 13 2009).

It is forecast the Region will require 2,780 gross hectares of new urban land (outside its currently designated urban area) to meet the targets set out in the provincial growth plan. The 2,780 hectares of new urban land includes 1,680 gross hectares of new mixed-use/residential land and 1,100 gross hectares of new employment land. They are anticipated to accommodate 97,600 people and 46,900 jobs ([Report 3.07 - Accommodating Growth to 2031](#), Hemson Consulting Ltd., April 13 2009).

The proposed new urban lands in Halton Region are being planned to achieve the minimum 50 people and jobs per hectare *greenfield* density target, which includes greenfield lands within the existing urban area. The result is an overall density of 66 people and jobs per hectare for new mixed-use/residential lands and 30.5 jobs per hectare for new employment lands. Based on the modeling work described in Section 5.0 of the report, meeting these targets will require a change in the current pattern of development in the Region, yet can be achieved through more compact development, a greater diversity of housing types, transit-supportive development and new approaches to community design.

Concepts for Locating New Urban Lands

The Region has been developing concepts for where its new urban lands might be located. Section 4.0 of the report describes the three concepts under consideration, which include:

Concept 1: Milton Centred plus Employment Lands in Halton Hills - in which all of the new mixed-use/residential lands are located in Milton.

Concept 2: Milton Centred plus 20,000 New Population in Georgetown - in which lands to accommodate a population of approximately 20,000 people are allocated around Georgetown, with the remaining mixed-use/residential lands in Milton.

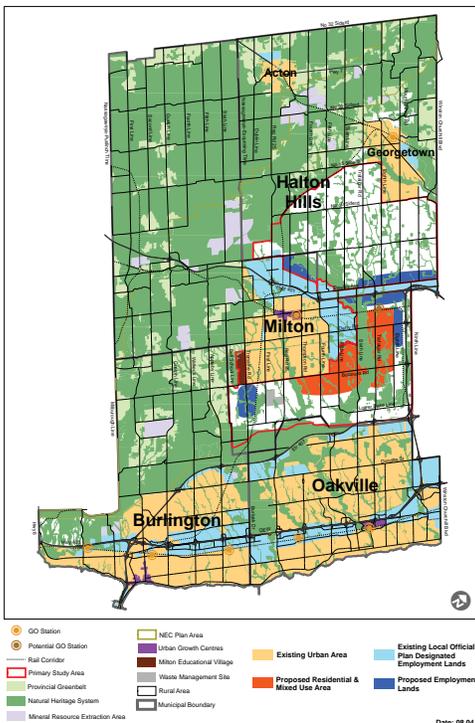
Concept 3: Milton Centred plus 40,000 New Population in Georgetown - in which lands to accommodate a population of approximately 40,000 people are accommodated around Georgetown, with a smaller amount of the remaining mixed-use/residential lands in Milton.

Generally, new employment lands are located along the 401 and 407 highway corridors, along the northern portion of the future James Snow Parkway, and around Tremaine Road and the rail corridor in south Milton. In all of concepts, the locations proposed for new employment lands are the same.

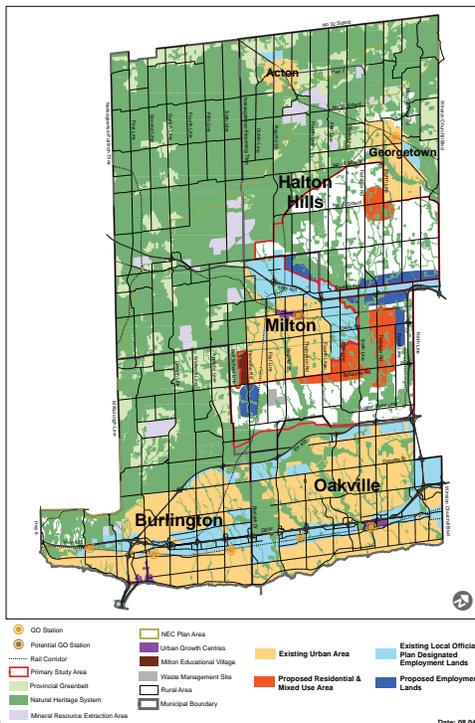
Next Steps

One of the three concepts will be selected as the basis for developing a preferred option for locating new urban lands in Halton Region. Both the concepts and options will be subject of public consultation in the spring of 2009. Selection of the preferred concept and option is anticipated in June 2009.

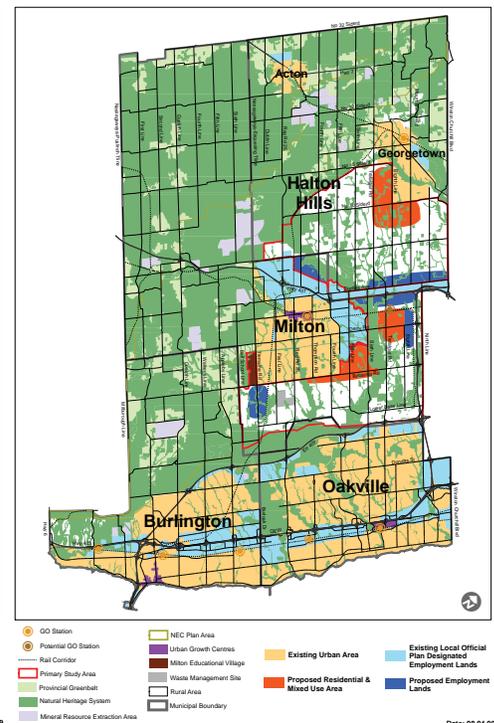
The reports [Report 3.09 - Summary of Evaluation of Growth Concepts](#) and [Report 3.10 Working Paper #3: Options Under the Preferred Concept](#), (Urban Strategies Inc, April 13, 2009) address the next steps in the selection of a preferred concept.



Concept 1 - Milton-Centred



Concept 2 - Milton-Georgetown 20,000



Concept 3 - Milton-Georgetown 40,000





1.0

Introduction

The Sustainable Halton Growth Management Strategy will provide a long-term land use plan for Halton Region to the year 2031.

It will ensure that Halton continues to be a place of high quality living and working for people today and future generations.

The Sustainable Halton Growth Management Strategy will define a framework for future population and employment growth that fosters healthy, complete and sustainable communities, and is compatible with the protection of the Region's distinctive landforms including the natural heritage system and agricultural lands. The strategy will also link long-term land use planning with transportation, water and wastewater infrastructure planning.

Note to the Reader:

This working paper contains a number of technical growth planning terms and concepts. A glossary is provided as Appendix A. Figure 3.1 (page 15) illustrates the key terms and concepts referred to in this report.

If you have any comments or questions on this document or the Sustainable Halton Process, please contact The Region of Halton at 905-825-6000 or www.halton.ca/sustainablehalton/

1.1 Why Plan for Growth?

The Region of Halton is a great place to live and work, and continues to attract people and jobs. The Province of Ontario, through *Places to Grow: The Growth Plan for the Greater Golden Horseshoe*¹ (“*Places to Grow Plan*”), has set targets that would see the Region’s population reach 780,000 people and 390,000 jobs by 2031. This means that annual population growth of 2.2% is anticipated over the next 25 years, slightly less than the 2.3% rate of growth over the previous 25 years.

The Sustainable Halton Growth Management Strategy is designed to ensure that the Region has a comprehensive plan for managing the growth anticipated by the *Places to Grow Plan*. Well-managed growth means that the Region’s economic competitiveness and community well-being are promoted with an emphasis on intensification, compact development and protection of cultural heritage sites as well as valuable rural, agricultural and natural areas.

The Sustainable Halton Growth Management Strategy is based on sustainable development principles and is part of planning for a sustainable region (Figure 1.1). The objective is to develop a strategy that promotes a vision for the Region of reducing urban sprawl, ensuring greater protection of farmland, making best use of infrastructure and promoting healthy, complete and sustainable communities. Similarly, the *Places to Grow Plan* speaks to the notion of “*complete communities*”, which meet people’s daily needs throughout their lifetime by providing convenient access to jobs, local services, a full range of housing and community infrastructure (such as schools, recreation and open space).

Halton Region has a strong history of comprehensive growth management.

The Region of Halton Official Plan reflects the last round of growth planning for the Region, which was completed in 1994 (Figure 1.2). The Sustainable Halton Growth Management Strategy is the

next iteration of growth planning in the Region and will respond to contemporary issues such as climate change, a growing and aging population, traffic congestion and housing affordability. It will be consistent with the *Provincial Policy Statement (2005)*, the *Places to Grow Plan*, the *Greenbelt Plan* and *Big Move: the Metrolinx Regional Transportation Plan*.

Through the Sustainable Halton Growth Management Strategy, the Region will conform to the new provincial policies set out in the *Places to Grow Plan* and the *Greenbelt Plan*. The Sustainable Halton planning team will provide Halton Region Council with the information it requires to decide how much and where growth can be accommodated.

The challenge in bringing forward the Sustainable Halton Growth Management Strategy is to find the best ways of accommodating growth, while making the most efficient use of land, utilities, transportation and social infrastructure while protecting natural, cultural and heritage assets. Promoting healthy, complete and sustainable communities will require a new understanding of how regional growth management can support communities that are transit-oriented, pedestrian-friendly and well-connected to schools, jobs, and services.



Figure 1.1: Planning for a Sustainable Region. The Sustainable Halton Growth Management Strategy is one of Halton Region’s many initiatives to promote sustainable development.

¹ The *Places to Grow Plan* was prepared by the Province of Ontario under the *Places to Grow Act*, 2005. It is the framework for managing growth and development in the Greater Golden Horseshoe. The Plan’s policies are designed to guide growth-related decisions so that they support economic prosperity, preserve and protect the environment and guide the creation of communities with a high quality of life.

1.2 Purpose of Working Paper #2

Working Paper #1: Locating New Urban Lands (Urban Strategies Inc., June 2008) provided a framework and preliminary concepts for where new urban areas might be located in the Region. This paper builds on Working Paper #1. It is a milestone in developing Halton's Growth Management Strategy. It confirms the fundamental elements on which the strategy will be developed:

- how much intensification can the Region accommodate?
- what is the capacity of existing (designated) *greenfield* areas?
- how much additional new *greenfield* land will be required to meet the 2031 population and employment targets?
- what is the right character and density for promoting complete communities in Halton's new development areas?

It is these, and other similar factors, which will form the basis for how Halton will grow over the next 25 years. This paper defines a number of growth concepts that will translate the Region's growth targets into the Region's Growth Management Strategy.

Going forward, the Region will test the growth concepts illustrated in this paper against the goals and objectives set out in the Sustainable Halton Evaluation Framework to arrive at a preferred concept. Building on Sustainable Halton's solid foundation of community input, ongoing public consultation will ensure an approach that reflects the values of the people of Halton.



Figure 1.2: Conceptual illustrations of future development in the North Oakville Secondary Plan area, which was part of the Region's last round of comprehensive growth planning. The area is planned as a compact, mixed-use community that is supported by higher-order transit service and includes an enhanced natural heritage system. Images: Brook McIlroy Inc.

2.0

Approach

The multi-year work plan for Sustainable Halton was initially laid out in a report to the Region in 2006 (PPW15-06), and was updated in 2007 (PPW01-07) and 2009 (LPS27-09). The reports outlined the steps toward achieving conformity with the *Places to Grow Plan* and developing the Region's Growth Management Strategy.

The steps in the process include: the Building Blocks (Phase I), Strategic Planning (Phase II), Decision-Making (Phases III) and Actions (Phase IV). The planning process has been evolving to meet the requirements of *Places to Grow*, and in response to public input; however, it is generally following the phases described in the original work plans (Figure 2.1).

This report marks the midpoint of Phase III. It feeds into the evaluation process, which will lead to the selection of a preferred growth concept and updates to the Regional Official Plan.



2.1 The Process

Phase I – The Building Blocks

Phase I of Sustainable Halton was completed in 2007 with a series of 22 background reports which formed the “Building Blocks” for the planning process. This first phase was essential in identifying the issues and goals of the Sustainable Halton Growth Management Strategy and laying the foundation for strategic planning and future decision-making. Some of the issues reviewed during this phase included: land supply analysis, demographic change, air quality, human services, the natural heritage system and an agricultural countryside vision.

Phase II – Strategic Planning

Phase II is the analysis and design stage of the process, building on the work completed as part of Phase I. In June of 2008, the Region issued the Sustainable Halton Evaluation Framework and Working Paper #1- Locating New Urban Land (Urban Strategies Inc.). Working Paper #1 included principles for managing growth and nine initial growth concepts, which were refined to five concepts for discussion and community consultation. Comments on the Evaluation Framework and initial ideas for locating new urban land were received from each of the Region’s four local municipalities and government agencies, as well as landowners, local businesses and residents. Feedback received was brought forward to Regional Council and has directly informed the three updated growth concepts presented in Section 4.0 of this report.

Phase III – Decision-Making

Phase III of Sustainable Halton began with the release of the five concepts in Working Paper #1 and includes the selection and refinement of a preferred growth strategy for the Region. The Evaluation Framework contains the Themes, Goals and Objectives that the Region will use to evaluate growth concepts and options. It will be used to determine which concept and, subsequently, which option, best meets Halton Region’s planning vision and goal of building healthy, complete and sustainable communities. Details on the evaluation framework and the evaluation process are presented in Report 3.09 - Summary of Evaluation of Growth Concepts, Urban Strategies Inc, April 13 2009.

Phase IV – Action

Phase IV is currently underway and is proceeding in parallel with Phase III. As part of the 5-year statutory review of the Region’s official plan, Phase IV of Sustainable Halton will include an official plan amendment containing the policies and actions for implementation of the preferred option, including strategies to encourage intensification and excellence in community design in accordance with local goals and provincial policies. Strategies will also be developed for ensuring effective implementation and ongoing monitoring.

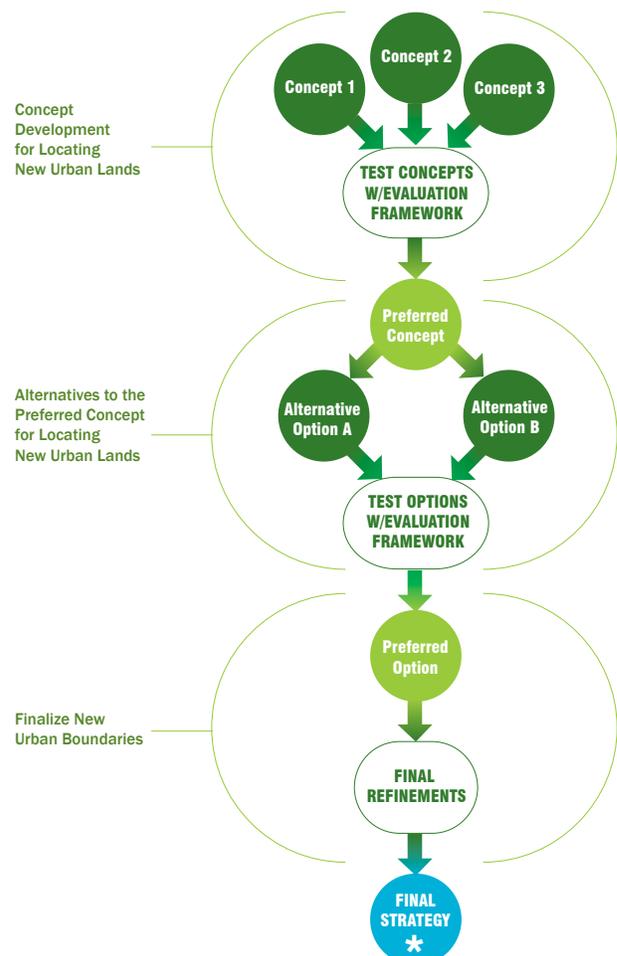


Figure 2.1: Approach to Evaluating Concepts and Options for New Greenfield Land in Halton

2.2 Recent Work

The Sustainable Halton planning process has progressed significantly since the release of the Evaluation Framework and Working Paper #1 in June 2008. The focus has been on detailing and confirming preliminary analyses conducted in Phase I, testing the initial growth concepts in Working Paper #1 and ensuring conformity with the *Places to Grow Plan*. Additional data analysis and modeling have produced a more in-depth understanding of the Region's land capacity and needs, which are reflected in this report.

Report 3.07 - Sustainable Halton Accommodating Growth to 2031 (Hemson Consulting Ltd., April 13 2009) includes updated growth forecasts and land capacity analysis for Halton Region. This information formed the basis for Urban Strategies' analysis of the land area, character and density for new urban areas presented in this report.

A series of public information centres on the Evaluation Framework and Working Paper #1 were conducted in each of the Region's local municipalities in September of 2008. Discussions on intensification capacity, land needs analysis, strategies for ensuring conformity with the *Places to Grow Plan* and where new urban lands should be located were also held with Region staff and advisory groups, representatives of each of the local municipalities, conservation authorities, school boards, the Niagara Escarpment Commission, the Ministry of Municipal Affairs and Housing and the Ontario Growth Secretariat.

A series of more detailed studies, building on the background studies conducted in Phase I, have also been developed. These include reports related to agriculture (including a Land Evaluation and Area Review Study), the natural heritage system, mineral resources and sustainable communities. The results of these studies have directly informed the analysis of the growth concepts presented in this paper.

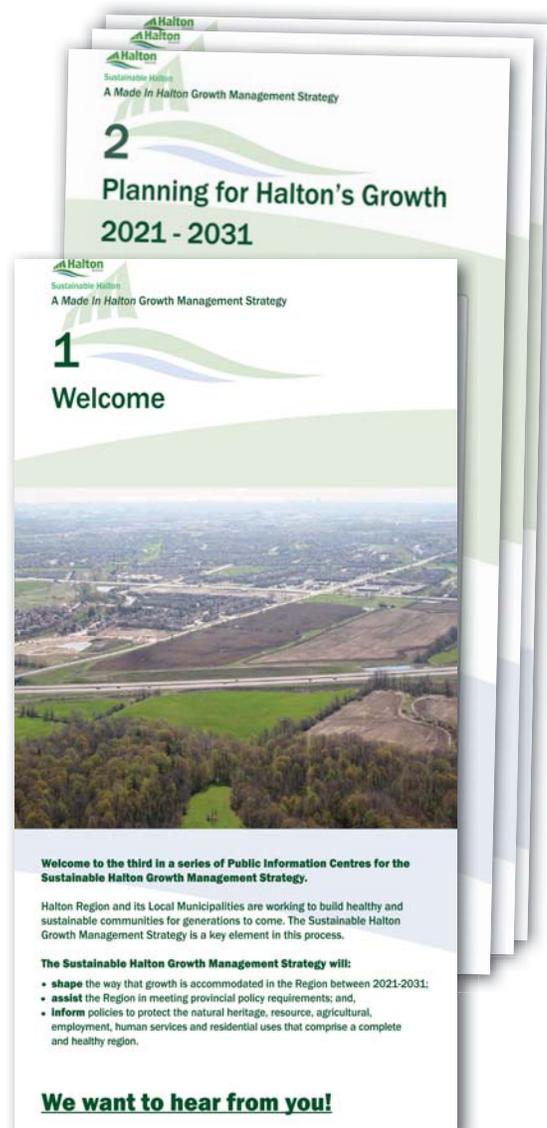


Figure 2.2 : Panels from the Public Information Centres on the Evaluation Framework and Working Paper #1, September 2008.



3.0

How much?

Summary of Land Needs

Based on provincial growth projections, Halton Region must plan for an additional 323,000 people and 172,000 jobs between 2006 and 2031 (Table 3.1).

The Region's current official plan will accommodate most, but not all, of the new people and jobs within the existing *built-up area* or within currently *designated greenfield lands*. Some additional urban land is needed to meet the Region's population and employment land needs to 2031.

Over the last several months, the Region has been confirming its intensification capacity and *greenfield land* availability in order to determine how much new urban land is needed.

This section summarizes the process for determining the Region's land needs and the implications for achieving conformity with the *Places to Grow Plan*.

Table 3.1: Halton Region Population and Employment Targets

	People	Jobs
Halton's 2006 Population (Source: 2006 Census including under count)	457,000	218,000
Halton Population Targets to 2031 (Source: <i>Places to Grow Plan</i>)	780,000	390,000
Total Growth 2006-2031	323,000	172,000

All numbers rounded to the nearest thousand.

Overview of Places to Grow Plan Targets

- Municipalities must plan for the population and employment targets set out in Schedule 3 of the plan.
- Beginning in 2015, and for every year after, at least 40% of new residential units must be within the *built boundary*.
- *Urban Growth Centres* must be planned to achieve a gross density of at least 200 people and jobs per hectare.
- Lands outside the built boundary must be planned to achieve a gross density of at least 50 people and jobs per hectare.

3.1 Land Needs Analysis - Context

A preliminary analysis of the Region's land requirements, [Land Supply Analysis](#) (Hemson Consulting Ltd., Nov. 2007), was conducted in Phase I of Sustainable Halton. This work provided initial estimates of the Region's future urban land needs and set the basis for more detailed analysis in Phase II. Since the initial work was completed, new information has been made available including new census data and updated land capacity information. This updated information, combined with additional refinement of Phase I analysis, has resulted in a number of changes to the land needs analysis, most notably:

- a reduction in the number of housing units to be accommodated on new *greenfield* land;
- an increase in the number of jobs to be accommodated on new *greenfield* land; and,
- a decrease in the anticipated density of future employment land development, particularly along the Highway 401 corridor.

Though the focus of this report is on proposed new urban areas in Halton, this section addresses each component of the land supply analysis:

- Intensification within the Built Boundary;
- Existing Greenfield Areas (Outside the Built Boundary, within the Existing Urban Area);
- New Employment Lands (Outside the Existing Urban Area); and,
- New Mixed-use-Residential Areas (Outside the Existing Urban Area).

The results of the most recent growth forecast analysis prepared by Hemson Consulting Ltd. ([Report 3.07 - Sustainable Halton Accommodating Growth to 2031](#) (April 13 2009)) provided the basis for determining the Region's additional land needs. Using this data, Urban Strategies has assessed the Region's additional land needs to meet the provincial population and employment growth targets (Figure 3.1), and achieve conformity with the other policies and targets of the *Places to Grow Plan*.

Using the model described in Section 5.0 of this report, Urban Strategies has been testing the amount of new urban land, and its potential location, density and housing mix, that would be required to conform to the *Places to Grow Plan*. The results are provided in this section.

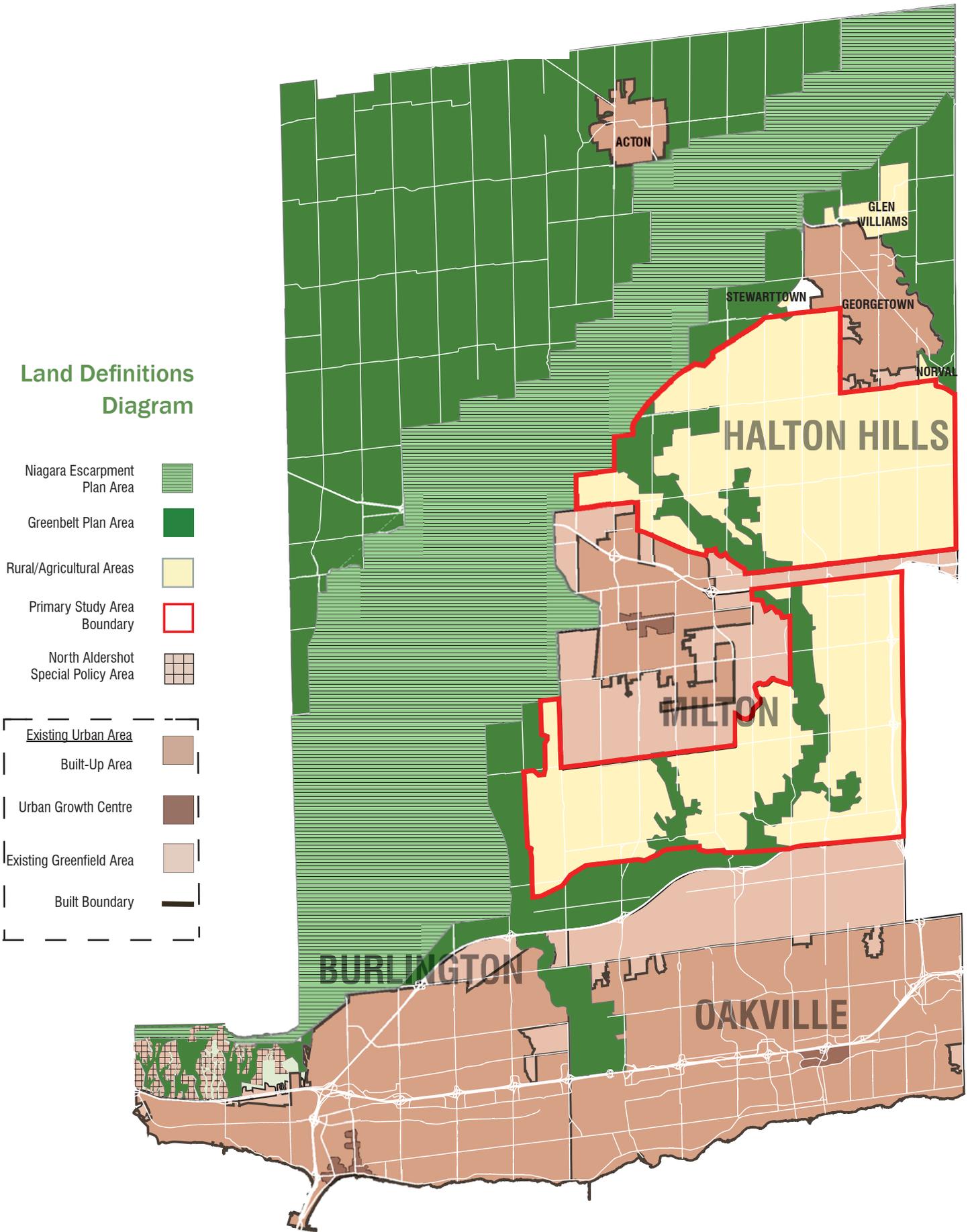


Figure 3.1 : Illustrative Diagram of the Terms and Concepts Used in the Land Analysis.

3.2 Intensification and Housing Demand

Intensification will significantly reduce the amount of new land required to meet the Region's population forecast, make better use of existing infrastructure and promote more pedestrian- and transit-friendly neighbourhoods. A number of intensification studies and plans are currently being undertaken by the Region's local municipalities with the aim of directing as much growth as possible to areas within the *built-up area*.

The Places to Grow Plan requires that by the year 2015, a minimum of 40% of all residential development occurring annually be within the built-up area.

Each of Halton's local municipalities have been seeking to maximize intensification potential within the Region's three *urban growth centres; intensification corridors;* and vacant or underused sites. As well, minor intensification will occur through sensitive infill of stable residential areas and hamlets. Through this process, the Region has identified sufficient capacity to accommodate at least 40% of new residential units as intensification within the existing urban area. Achieving at least 40% intensification will be challenging for the Region. It will require in a significant shift in the way that Halton has developed in the past, toward more compact development and high-density housing types.

Approximately 32,200 units of the Region's housing requirement to 2031 are planned as intensification in order to achieve the residential intensification target (Table 3.2).

Due to limited availability of land within the *built boundary*, most intensification will be in the form of apartments, requiring a significant shift in demand from ground-related housing to apartment forms³. Achieving at least 40% intensification may also require investment in existing transportation, water and wastewater and community infrastructure, as existing *built-up areas* were not planned to accommodate the proposed levels of intensification. Intensification will also likely require provision of stormwater management facilities and other strategies to protect natural

systems in the urban area. Robust implementation strategies and incentives will be required to ensure that intensification happens as planned.

Details on how the Region is planning for the 40% intensification targets are provided in [Report 3.07 - Sustainable Halton Accommodating Growth to 2031](#) (Hemson Consulting Ltd., April 13 2009).

Table 3.2: Housing Demand Based on the 40% Intensification Rule

	Steps in Determining Housing Demand	Calculation	Housing Units
A	Total Forecasted Residential Growth 2006 to 2031* (to accommodate a 323,000 increase in population, Table 3.1)		127,600*
B	Total Forecasted Residential Growth 2006 to 2016 (within existing urban area)*		47,100*
C	Total Forecasted Residential Growth 2016 to 2031*	Row A - B	80,500
D	40% of Total Residential Development 2016-2031 for Intensification within the <i>Built Boundary</i>	Row C X 0.4	32,200
E	Remaining Development on Existing & New Land Outside the <i>Built Boundary</i> (<i>greenfield</i>)	Row C - D	48,300
F	Capacity of currently designated <i>greenfield</i> land (post 2016) *		22,800*
G	Number of units to be planned on NEW mixed-use/residential land**	Row E - F	25,500
H	Additional apartment units to be planned to ensure a range of housing choice (post 2031)***		7,200
I	Total number of residential units being planned on NEW <i>greenfield</i> land (outside the existing urban area)	Row G + H	32,700 (97,600 people)

All numbers rounded to the nearest hundred.

* From [Report 3.09 - Sustainable Halton Accommodating Growth to 2031](#) (Hemson Consulting Ltd., April 13 2009)

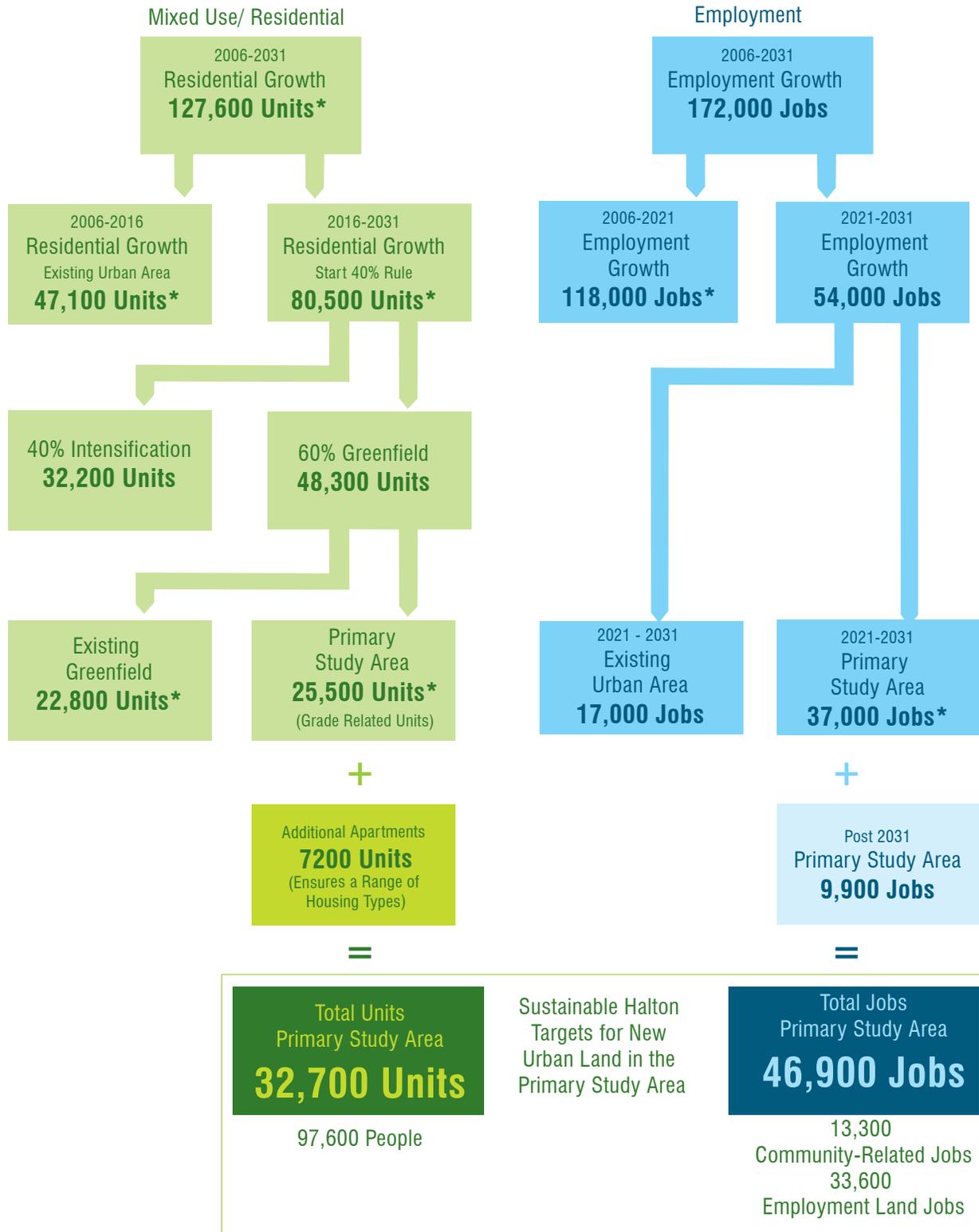
** Demand in the Primary Study Area is only for grade-related units due to high levels of intensification in the form of apartments within the built boundary Source: Hemson Consulting Ltd.

*** Based on providing a range of housing choices (approximately 80:20 ratio of ground-related housing to apartments) and ensuring transit supportive development.

³ Of Halton Region's housing completions (2001-2008) only 8% were apartments (2008 Annual Housing Report, Halton Region)

Sustainable Halton

Residential and Employment Growth Targets for New Urban Land in the Primary Study Area



*Source: Hemson Consulting Ltd.

Figure 3.2: Sustainable Halton Targets for Residential and Employment Growth on *Greenfield* Land in the Primary Study Area. Figures rounded to nearest hundred, and may not add due to rounding. Adapted from Report 3.07- Sustainable Halton: Accommodating Growth to 2031 (Hemson Consulting Ltd, April 13 2009).

3.3 Existing Greenfield Areas

Between the existing urban boundary (defined by the Halton Region Official Plan, 2006) and the provincially-defined *built boundary*, the Region has additional land designated for residential and employment growth. These lands, referred to as existing *greenfield* areas, have capacity for approximately 22,800⁴ residential units (See Figure 3.2).

New development planned for existing *greenfield* areas is being planned at higher densities than the new development areas of the past, with better strategies for supporting transit and enhanced parks and open space provision and natural areas protection. In Milton, for instance, planned density of designated *greenfield* areas is approximately 60.6 people and jobs per gross hectare and the most recent neighbourhoods are being built at densities of 65 people per gross hectare or more.⁴ North Oakville is being planned with capacity to achieve 45 people and jobs per gross hectare, including the Trafalgar corridor, which is being designed to support bus rapid transit service. The mixed-use and residential areas in North Oakville are in the range of 60 people and jobs per gross hectare⁵.

Existing greenfield lands in Halton are planned to a density of 49.7 people and jobs per gross hectare.

Based on current plans and policies, it is anticipated that the Region's currently designated (existing) *greenfield* lands have the capacity to achieve an overall density of 49.7 people and jobs per hectare⁴ once they are built out, only slightly less than the target in the *Places to Grow* Plan. In order to meet provincial policy, new *greenfield* lands created through the Sustainable Halton process need to be planned to make up for this shortfall and achieve a combined density of 50 people and jobs per gross hectare across existing and future *greenfield* lands.

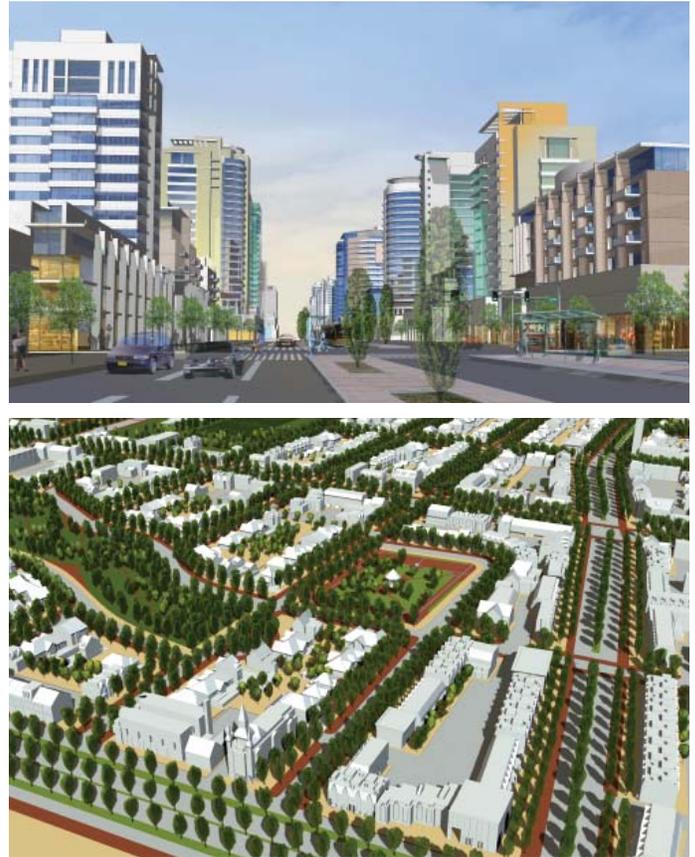


Figure 3.3: North Oakville Secondary Plan Area: Gross mixed-use/residential density of 60 people+jobs/ha. Planned housing mix: 45-55% detached, 20-25% row houses, 20-35% apartments. Source: Town of Oakville OPA 272. Images: Brook McIlroy.



Figure 3.4: Milton's Bristol Community: Gross mixed use/residential in excess of 75 people+jobs/ha. Planned housing mix: 71% detached, 22% row houses, 7% apartments. Source: Hemson Consulting Ltd.

⁴ Source: Report 3.07 - Sustainable Halton Accommodating Growth to 2031, Hemson Consulting Ltd., April 13 2009.

⁵ Source: Town of Oakville OPA 272.

3.4 New Employment Lands

Employment Areas are designated areas for business and economic uses that require some degree of separation from residential areas, either to facilitate their operations or to prevent negative impacts on other land uses. Halton Region maintains a supply of readily available employment lands to meet its strategic goals for economic growth and prosperity. In planning for the future, the Region will continue to ensure that there is an adequate supply of employment land to support its prosperity and ensure a healthy balance of living and working opportunities.

The Phase I Sustainable Halton employment land analysis (May 2007) concluded that the majority of employment land required to meet 2031 projections is already available within the Region’s existing urban areas, and only a small amount of additional land is required (estimated at 600 gross ha).

Since the initial analysis was conducted, updated census information and more detailed inventories of available employment land were completed (see [Report 3.07 - Sustainable Halton Accommodating Growth to 2031](#), Hemson Consulting Ltd. April 13 2009). The result of these studies is an increase in the Region’s forecasted employment land need to 1,100 gross ha, an increase of 500 gross hectares from initial forecasts (May 2007). Two of the primary reasons for this change are summarized below, and additional details are provided in [Report 3.07 - Sustainable Halton Accommodating Growth to 2031](#), Hemson Consulting Ltd, April 13 2009.

Increased Demand for Employment Land In The PSA

The most recent analysis indicates that the number and density of jobs on existing employment land is lower than anticipated, which has the combined effect of reducing the capacity of existing employment areas to accommodate new jobs, and increasing the number of jobs to be planned for in order to meet the employment targets set by the *Places To Grow Plan*.

Updated Density Assumptions

The updated employment land analysis also found that the employment density assumptions used to calculate future land

needs did not recognize the current pattern of employment development in Milton and Halton Hills, particularly along the Highway 401 corridor. Recent employment development in these municipalities has been at a significantly lower employment density than the assumptions that were used in the initial employment lands studies conducted in 2007. The employment land density assumptions used for Sustainable Halton have been updated as a result (See Table 3.3).

New Employment Lands to planned in the Primary Study Area: 1,100 ha at 30.5 jobs per gross hectare

Table 3.3: Employment Land Density Assumptions

	Job Type	Number of Jobs	Jobs Density (jobs/ha gross)	Land Area (ha)	Total Land Need
Base Scenario	All types	33,600	35	960	960 ha (gross)
Alternate Scenario (Continued demand for low density logistics/warehouse uses)	Highway-related logistics	4,900	17.5	280	1,100 ha (gross) (30.5 jobs/ha)
	All others	28,700	37.5	820	

Source Data: Hemson Consulting Ltd., April 13 2009



Figure 3.5 Milton Employment Lands: James Snow Parkway & Highway 401.

⁵ Source: [Report 3.07 - Sustainable Halton: Accommodating Growth to 2031](#), Hemson Consulting Ltd, April 13 2009.

3.5 New Mixed-use and Residential Areas

Mixed-use and residential areas support a range of urban land uses and building types: residential, office, retail, institutional, parks and community facilities. For the purposes of the Sustainable Halton planning exercise, new mixed-use/residential areas include all of the proposed new urban areas outside the *existing urban area*, with the exception of lands identified as potential new *employment areas*.

Halton Region is committed to curbing sprawl and minimizing the need for new development on *greenfield* land. A significant proportion of the Region's new mixed-use/residential development is planned to occur within the *built-up area*. As stated previously, the Region is working towards a 40% intensification target for new residential development, most of which will be in the form of apartments.

In new residential areas, the Region is planning for higher density forms of housing and apartment living. While higher density, land-efficient development is a primary planning objective, it is also recognized that responsible growth management involves incremental change and that Halton will continue to require a sufficient supply of ground-related housing to meet the needs of families and larger households, albeit in more compact forms.

Housing Demand and Unit Types

As shown in Figure 3.2, Sustainable Halton is planning for 32,700 units of housing on new *greenfield* land (97,600 people) to meet the Region's growth forecast to the year 2031. Approximately, 80% of units will be in ground-related forms (singles, semi-detached and row houses) and 20% are planned as higher density apartment forms.

Ground-Related Housing: It is forecast that additional urban land (outside what is currently designated) is required to supply **approximately 25,500 units of ground-related forms of housing** (single, semi-detached and row housing for families and larger households) (See Table 3.2 and Figure 3.2).

In order to achieve more compact development and meet provincial density targets, Sustainable Halton envisages a shift away from single-detached housing towards denser ground-related forms such as townhouses and semi-detached.

Apartment Housing: Forecasts do not predict demand for apartments on new urban lands in the *Primary Study Area* until after 2031, as there are already a high number of apartments being planned as intensification within the *built boundary*. However, planning for apartments in mixed-use/residential areas ensures that new urban areas continue to develop in a manner that promotes active transportation, supports efficient transit service and results in a balance of nodes, corridors and living areas within the urban fabric. Planning for apartment forms along nodes and corridors does not require a significant increase in land need.

In order to ensure a range of housing choices and promote transit-supportive development over the long-term, **an additional 7,200 apartment units are being included in planning new mixed-use/residential areas in Halton**. Planning for additional apartments in new residential areas will ensure that Halton continues to work towards an 80:20 split between ground-related housing and apartment forms, as set out in the Joint Municipal Housing Statement (2001). It will ensure that new residential areas are planned to support the creation of *complete communities* as they mature.

Jobs on Mixed-use/Residential Lands

The new mixed-use/residential lands will also be planned to accommodate services, employment uses and community facilities to support a growing population and create healthy, complete and sustainable communities. Using standard estimates of jobs generated by residential growth provided by Hemson Consulting Ltd., it is estimated that 13,300 jobs will be created within the new mixed-use/residential areas, including office, professional, retail, work-at-home and public service uses (schools, hospitals, recreation centres and social services).

Housing Target for New Mixed-use Residential Land: 32,700 Units (97,600 people)⁶

Forecast Jobs on New Mixed-use Residential Land: 13,300⁶

⁶ Source: Report 3.07 - Sustainable Halton Accommodating Growth to 2031, Hemson Consulting Ltd., April 13 2009.

Density of New Mixed-use/ Residential Lands

The policies of the *Places to Grow* Plan state that *greenfield lands*, including new mixed-use/residential land, new *employment areas* and existing urban lands outside the built boundary, must be planned to achieve at least 50 people and jobs per gross hectare.

It should be noted that the *greenfield* land areas are gross figures inclusive of roads, parks, community facilities and stormwater management areas. Lands proposed for inclusion in the Region’s enhanced natural heritage system are not included in the land needs calculation and will be protected from urban development. This approach is consistent with regional policy and the high standards for environmental protection adopted in the North Oakville Secondary Plan. It is also consistent with provincial policies for protecting the long-term ecological function and biodiversity of natural heritage systems and maintaining, restoring or improving recognized linkages between and among natural heritage features and areas (Provincial Policy Statement, 2005, Policy 2.1.2).

As mentioned previously, currently *designated greenfield* areas are planned to achieve approximately 49.7 people and jobs per gross hectare. In order to meet the *greenfield* density target set out in the *Places to Grow Plan*, new mixed-use/residential lands and new employment lands in the Primary Study Area need to be planned to exceed 50 people and jobs per hectare. To achieve this, the Region is planning for approximately 1,680 hectares of new mixed-use/residential land at a density of 66.0 people and jobs per hectare (see Table 3.4 and Figure 3.7).

Combined with proposed new employment land, the proposed area and density of new mixed-use/residential land results in a density of 52.0 people and jobs per hectare in the Primary Study Area and an overall *greenfield* density of 50.5 people and jobs per hectare, which would put the Region in conformity with the provincial minimum *greenfield* density target (see Table 3.4 and Figure 3.7).

***New mixed-use/residential land need to meet the Places to Grow Plan targets:
1,680 hectares at a minimum density of 66.0 people and jobs per gross hectare.***

Table 3.4: Land Need and Minimum Gross Greenfield Density Required to Meet the Places to Grow Plan.

	People (P)	Jobs (J)	Land Area (ha)	Density (P+J/ha)
A. Existing Greenfield	293,200		5,890	49.7
B. New Employment Lands	0	33,600	1,100	30.5
C. New Mixed-use/ Residential Lands	97,600	13,300	1,680	66.0
TOTALS	437,700		8,670	50.5
Total Primary Study Area (B+C)	144,500		2,780	52.0

*Population rounded to the nearest hundred. Population and Employment forecasts and existing *greenfield* density provided by Hemson Consulting Ltd.

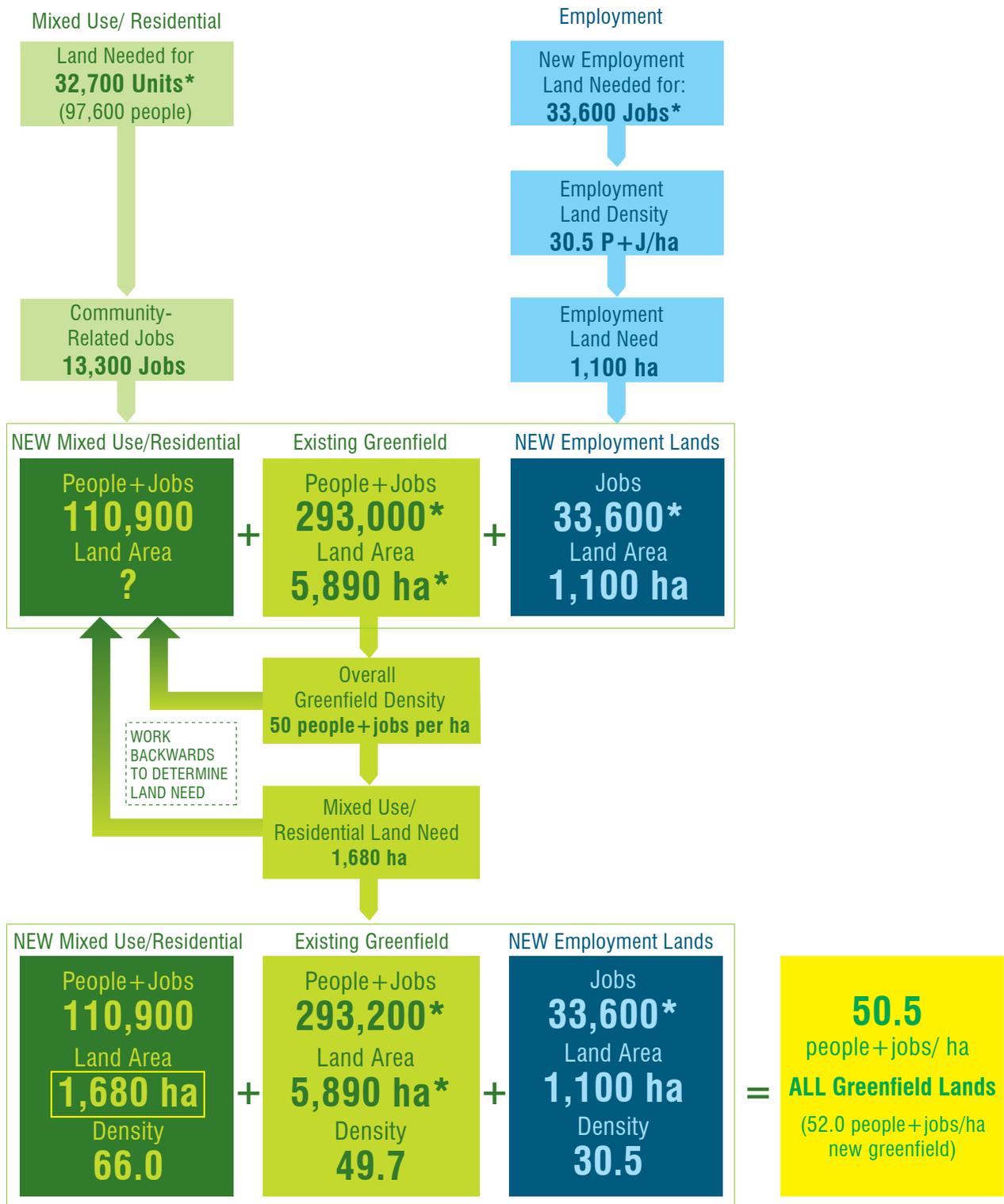
⁷ Source: Report 3.07 - Sustainable Halton Accommodating Growth to 2031, Hemson Consulting Ltd., April 13 2009.



Figure 3.6: Compact ground-related housing in Oakville: In order to meet the provincial density targets new development in Halton Region will need to shift toward more compact housing types that are suitable for families.



Testing Conformity with Greenfield Density Targets - 50 people + jobs/ ha



*Source: Hemson Consulting Ltd. **All land areas represent gross figures.

Figure 3.7: Summary of Land Needs Analysis Based on Meeting the Places to Grow Plan Greenfield Density Target.

Implications of the Proposed Density of New Mixed-use/ Residential Lands

As illustrated in Section 5.0 of this report, an average density of at least 66.0 people and jobs per gross hectare across new mixed-use/residential lands is achievable, yet it will require changes to the Region's current development pattern. It will require that the Region shift toward more compact development, in the form of higher density housing and more efficient public space standards.

The proposed density of development would enable transit-supportive mixed-use nodes and corridors, as well as lower-density family-oriented residential areas (see Section 5.0 for examples of the combination of nodes, corridors and residential areas that might be created).

Based on the modelling work done by Urban Strategies (see Section 5.0 of this report), the targeted housing mix would need to be in the range of 35% singles and semi-detached, 45% rows or townhouses and 20% apartments. The [Joint Municipal Housing Statement](#) (2001) sets targets for a mix of 55% singles, 25% semi-detached, rows or townhouses and 20% apartments. By comparison, Milton's Bristol community is planned to achieve a housing mix in the range of 71% singles and semis; 22% townhouses and 7% apartments and a density of over 75 people and jobs per gross hectare.⁷

A mixed-use/residential density of at least 66.0 people and jobs per gross hectare will also result in efficient use of land at higher density than typical subdivision development in Halton. Yet, it still allows new communities to be designed in keeping with the family-oriented character of the Region. The proposed minimum density is also in keeping with the form and density of more recent plans for North Oakville and Milton's Sherwood and Bristol communities.

Combined with comprehensive planning and good community design, a mixed-use/residential density of 66 creates a basis for the healthy, complete and sustainable community development that is in keeping with the quality and character of the Region.

⁷ Derived from Registered or Draft Approved Plans provided by Halton Region.

3.6 Conclusions of the Land Needs Analysis and Places to Grow Plan Conformity Testing

On the basis of the land needs analysis summarized in this section and in Figure 3.7, the Region would need to plan for a maximum of approximately 2,780 hectares of new urban land in order to meet the *Places to Grow Plan* policies.

The combined density of existing and proposed new greenfield land would produce an overall greenfield density of 50.5 people and jobs per hectare, exceeding the provincial target of minimum 50 people and jobs per hectare. This would result in an overall density of 52.0 people and jobs per gross hectare on new greenfield land in the Primary Study Area (See Table 3.4 and Figure 3.7).

Based on the modelling work described in Section 5.0 of this report, it is Urban Strategies' view that achieving a minimum greenfield density of 50 people and jobs per hectare is ambitious, yet achievable in Halton Region, provided that new planning and community design approaches are brought forward to support more compact development.

Sections 4.0 and 5.0 of this report describe where new urban lands would be located in the Primary Study Area, and what they might look like in terms of land use mix, building form and density.

*Total New Greenfield Land Being
Planned As Part Of the Sustainable Halton Growth
Management Strategy:*

*1,680 gross ha of New Mixed-use/Residential Land
1,100 gross ha of New Employment Land*

TOTAL NEW GREENFIELD LAND: 2,780 gross ha





4.0

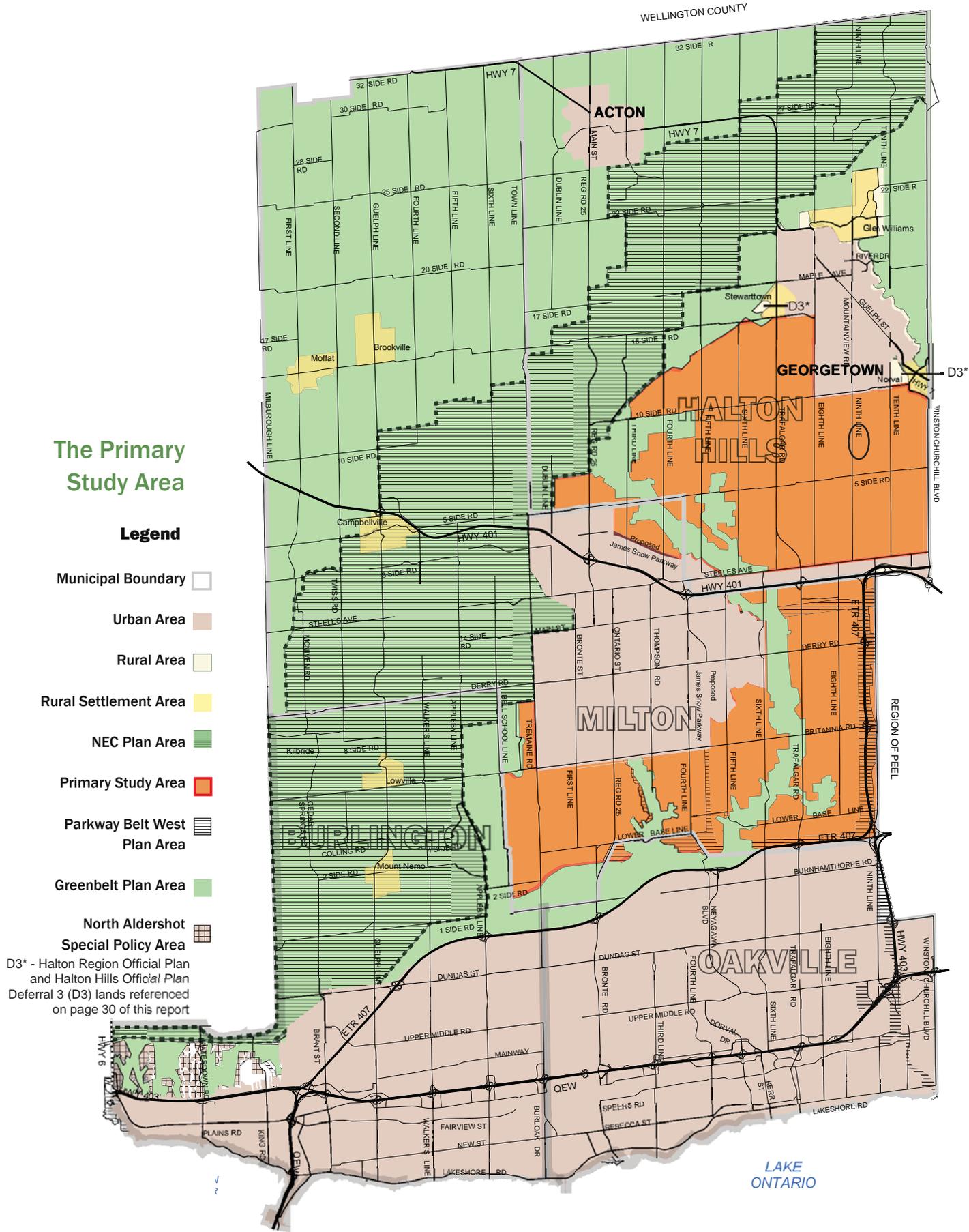
Where?

Potential locations for new urban lands

During the first phase of Sustainable Halton, the Primary Study Area (PSA) was defined as those lands that might be considered for future urban development.

The PSA, outlined in red on Figure 4.1, includes those lands that are not currently designated as part of the *urban area* and outside the designated *Greenbelt Area and Niagara Escarpment Plan Area*. Future urban development is only being considered within the PSA; however, some rural development and intensification will also occur in the Region's hamlets outside the PSA.

This section explores where Halton's new urban lands might be located within the PSA.



The Primary Study Area

Legend

Municipal Boundary

Urban Area

Rural Area

Rural Settlement Area

NEC Plan Area

Primary Study Area

Parkway Belt West Plan Area

Greenbelt Plan Area

North Aldershot Special Policy Area

D3* - Halton Region Official Plan and Halton Hills Official Plan Deferral 3 (D3) lands referenced on page 30 of this report

Figure 4.1: The Primary Study Area

4.1 Approach and Principles

Working Paper #1, released in June 2008, initiated the discussion on where expansion of Halton's urban area might occur within the Primary Study Area (PSA). It was informed by:

- the 22 background studies undertaken in Phase I;
- two sets of public workshops in each of Halton's local municipalities, which focused on identifying community priorities and objectives for managing growth in Halton;
- consultations with the Region's Inter-Municipal Liaison Committee and technical advisory groups; and,
- focused discussions with stakeholders and local high school students.

Working Paper #1 established a set of principles on where new urban lands might be located. The principles included:

- **A Holistic Approach** - A holistic approach was applied in the creation of the concepts, ensuring that future growth reinforces the existing physical, transportation, and land use structure of the Region, as well as protecting and enhancing the Region's natural and cultural heritage.
- **Enhancing the Greenlands System** - Halton Region Council has endorsed a systems-based approach to defining and protecting the Region's natural heritage system as a permanent component of the landscape.
- **Protecting the Rural System** - Ensuring a sustainable rural and agricultural presence in the Region is a priority for Halton. Agriculture and rural countryside are recognized as key elements of the Region's identity, landscape, economy, as well as a source of local food.
- **Wise Management of Mineral Resource Extraction Areas** - Provincial and regional policies require protection of mineral resource areas.
- **Maintaining and Improving the Urban System - Transit First** - Opportunities are being sought to enhance transit service and increase ridership through higher density development, a greater mix of uses and a focus on nodes and corridors.
- **Extending the Pattern of Mixed-use Nodes & Corridors** - In addition to supporting efficiency of movement and local and inter-regional transit systems, a pattern of mixed-use nodes and corridors enables a variety of land uses and building types to come together to promote vitality and high quality of life.
- **Protecting Lands for Employment Uses** - Key criteria for attracting and locating new *employment areas* include access to highways and railways and proximity to infrastructure.
- **Making the Most of Existing Infrastructure** - Maximizing use of existing infrastructure is a fundamental component of the Sustainable Halton Growth Management Strategy.
- **Protecting Critical Infrastructure** - The location and function of critical infrastructure (such as hydro and rail corridors, and the Halton Waste Management Site) are key considerations in determining the most appropriate areas for new urban development and ensuring land use compatibility.

4.2 Preliminary Concepts – Working Paper #1

Using the principles listed in Section 4.1 as a foundation, Working Paper #1 described nine preliminary growth concepts and a refined set of five concepts. The five concepts illustrated in Working Paper #1 were developed around three general directions:

Concept 1: Milton-Centred

in which all of the new mixed-use/residential development area is located in Milton.

Concept 2: Milton-Georgetown 20,000

in which lands to accommodate approximately 20,000 people are located around Georgetown, with the remaining mixed-use/residential lands in Milton. This concept included two variations (2a and 2b) for where new mixed-use/residential lands might be located.

Concept 3: Milton-Georgetown 40,000

in which lands to accommodate an additional population of 40,000 people are located in Georgetown, with a smaller amount of remaining mixed-use/residential land in Milton. This concept included two variations (3a and 3b) for where new mixed-use/residential land might be located.

The approach to new employment lands was the same in all three concepts and focused around the Highway 401 Corridor in Milton and Halton Hills.

The three conceptual directions (Milton centred growth, and population growth of 20,000 people and 40,000 people around Georgetown) have been carried forward to the final growth concepts illustrated in this report. The locations of new urban areas have generally remained consistent with the five refined concepts in Working Paper #1, however, some modifications have been made based on updated information and comments received.

The following section outlines the changes made to the concepts in response to feedback received, the updated land needs analysis and additional studies.

Consultation on the Preliminary Concepts

Following the release of Working Paper #1, the Region launched consultations on the five refined growth concepts put forward in the report.

The aim of the consultations was to arrive at a final set of concepts that reflected community input and could be tested using the Sustainable Halton Evaluation Framework.

Each of the Region's four local municipalities and various public agencies submitted responses to the preliminary concepts, as did approximately 80 landowners, planning consultants, community organizations and members of the public. The Region also conducted public workshops in each of the local municipalities to get additional input into the concepts. In September of 2008, the Region formed a working group represented by staff from each of the local municipalities, the Region, the provincial government, the school boards, the conservation authorities, and the Niagara Escarpment Commission in order to address any concerns/suggestions related to the concepts.

A document including all of submissions received on Working Paper #1, as well as responses to each submission, has been prepared by Region of Halton staff. Appendix C of this report includes a list (and associated map) of submissions that referenced specific locations or properties for consideration as new urban land. Responses to each of these submissions are provided in the Region's [Report 3.01 - Response Document: Staff Analysis of Comments Received on the Sustainable Halton Phase II Work June 11, 2008 to March 20, 2009 \(April 7, 2009\)](#).

Following the consultation process and the review of submissions, a number of changes have been made to the concepts; **however, the concepts continue to reflect the general direction of the preliminary concepts and are still in keeping with the principles and objectives of Sustainable Halton.**

4.3 What Has Changed From Working Paper #1?

The evolution of the concepts since Working Paper #1 was released (June 2008) is outlined below. The evolution and refinement of the concepts reflects the input the Region has received to date, as well as the results of recent studies. These changes primarily represent refinements to locations and the extent of proposed land uses - not a change from the original intent and strategies that informed the concepts.

Land Needs Analysis

As described in Section 3.0 of this report, updates to the land needs analysis have resulted in a change in the amount of new urban land being considered in the planning process. The concepts now reflect a decrease in the amount of new mixed-use/residential land needed (from 2,400 gross hectares to 1,680 gross hectares) and an increase in the area of new employment land needed (from 600 gross hectares to 1,100 gross hectares).

Overall, the total potential new *greenfield* land need has decreased from approximately 3,000 gross hectares to 2,780 gross hectares.

Urban Structure and Density Designations

In all of the concepts, the intended urban structure is one of nodes and corridors, as described in Working Paper #1 and Section 5.0 of this report.

Nodes - In order to promote development of *complete communities* in Halton, one or two nodes of high density mixed residential/commercial/office uses are envisaged at key intersections of major corridors within new mixed-use/residential areas.

Transit Nodes - A Transit Oriented Development (TOD) node made up of higher density residential, commercial and office uses is envisaged adjacent to a potential new GO Transit station at Trafalgar Road just south of Highway 401. The intent is to develop specific land use policies and density requirements for the lands within walking distance of the station in order to ensure maximum transit ridership, support more efficient land use and create a focal point of activity and social interaction.

Corridors - Nodes or centres are reinforced by mixed-use corridors which would include a range of services to support the surrounding community, such as professional services, community and civic services, retail and grocery stores, as well as mix of medium and high density housing. The density of development would facilitate efficient transit service along the corridor.

The locations of nodes and mixed-use corridors will be determined at later stages of the planning process, but will generally follow major arterial roads such as Trafalgar Road, Derry Road and 10 Sideroad.

Trafalgar Road Corridor

Considerable interest in the potential for development along the Trafalgar Road corridor in the Town of Milton became apparent through consultation with government agencies, the public, landowners, the Region's local municipalities and others. Trafalgar Road has been identified in Metrolinx's *Big Move* plan as the planned route for future bus rapid transit service connecting the urban growth centres in mid-town Oakville and downtown Milton. The corridor is also the main spine for planned water and wastewater infrastructure investments in the Region.

The concepts have been modified to position a larger proportion of new urban lands along the Trafalgar Road corridor.

Proposed New Highway Corridors

Three new regional highway corridors are currently being considered that have implications for Halton Region; the Niagara to GTA Corridor, the GTA West Corridor and the North-South Transportation Corridor along the Halton/Peel boundary north of Highway 401. Halton Region and Peel Region are collaborating on the Halton Peel Boundary Area Transportation study to look at the transportation network in the boundary area. Both proposed highways are in the early stages of planning and no alignments have been selected. The Region recognizes that once the alignments are selected, there may be implications on proposed new urban areas and modifications to the Growth Management Strategy may be required.

Stewarttown Expansion

The Region of Halton and the Town of Halton Hills have received requests for expansion of Stewarttown to include lands immediately outside of the hamlet boundary. These lands form part of Deferral 3 (D3) of the Halton Region and Halton Hills Official Plans (see Figure 4.1). Though not included within the Primary Study Area, any expansion to Stewarttown must be considered in the context of the *Places to Grow Plan* and the Sustainable Halton comprehensive review. The Region is continuing to work with the Town of Halton Hills to determine the most appropriate course of action for potential growth in this area.

Rounding the Georgetown Urban Boundary

Following the release of the initial concepts, Halton Hills Council requested that the Region consider the small pocket of rural land in the northeast quadrant of Tenth Line and 10 Sideroad for inclusion within the Georgetown urban area. These lands are part of Deferral 3 (D3) in both the Regional and Halton Hills Official Plans (See Figure 4.1). The inclusion of these lands, as a natural rounding of the Georgetown urban area, will be considered in the options stage, once a preferred concept is selected.

Milton Education Village

The Town of Milton has been planning for a post-secondary college or university campus on the lands referred to as the Milton Education Village, west of Tremaine Road and north of Britannia Road. These lands will be required within the Sustainable Halton planning horizon (2006 – 2031), and therefore, are proposed to be identified as a special policy area. The boundaries of the area have been identified on the concept maps provided in Section 4.4 of this report. Provincial/national education uses are not included in municipal demand forecasts and have not been counted as part of the Region's lands needs analysis.

Employment Lands

In response to the Working Paper #1, Milton Council (Report No. PD 076-08) advised that it wished to retain the Derry Road Business Park Phase 2 lands as *employment area*, rather than residential, as shown in some of the original concepts. These lands have been maintained as employment lands in all of the final concepts presented in this report.

The approach to locating new employment lands is the same for each of the concepts, and is illustrated on Figure 4.2. The location of the original 600 gross hectares of employment land remains generally the same as illustrated in Working Paper #1 on all of the latest concepts, maintaining the Region's priority for employment land along the Highway 401 corridor. There will be approximately 340 gross hectares of new employment land north of Steeles Avenue in Halton Hills and about 270 gross hectares south of highway 401 and west of highway 407 in Milton.

An additional 200 gross hectares of new employment land are located around the rail line along Tremaine Road in south Milton, to take advantage of opportunities for rail-oriented goods movement. About 140 gross hectares of new employment land have also been added along the Highway 407 frontage below Highway 401. Finally, approximately 150 gross hectares of employment land have been located north of Highway 401 along the future James Snow Parkway as an extension of the existing *employment area* to the south. The total new employment land being planned in the Primary Study Area is 1,100 gross hectares.

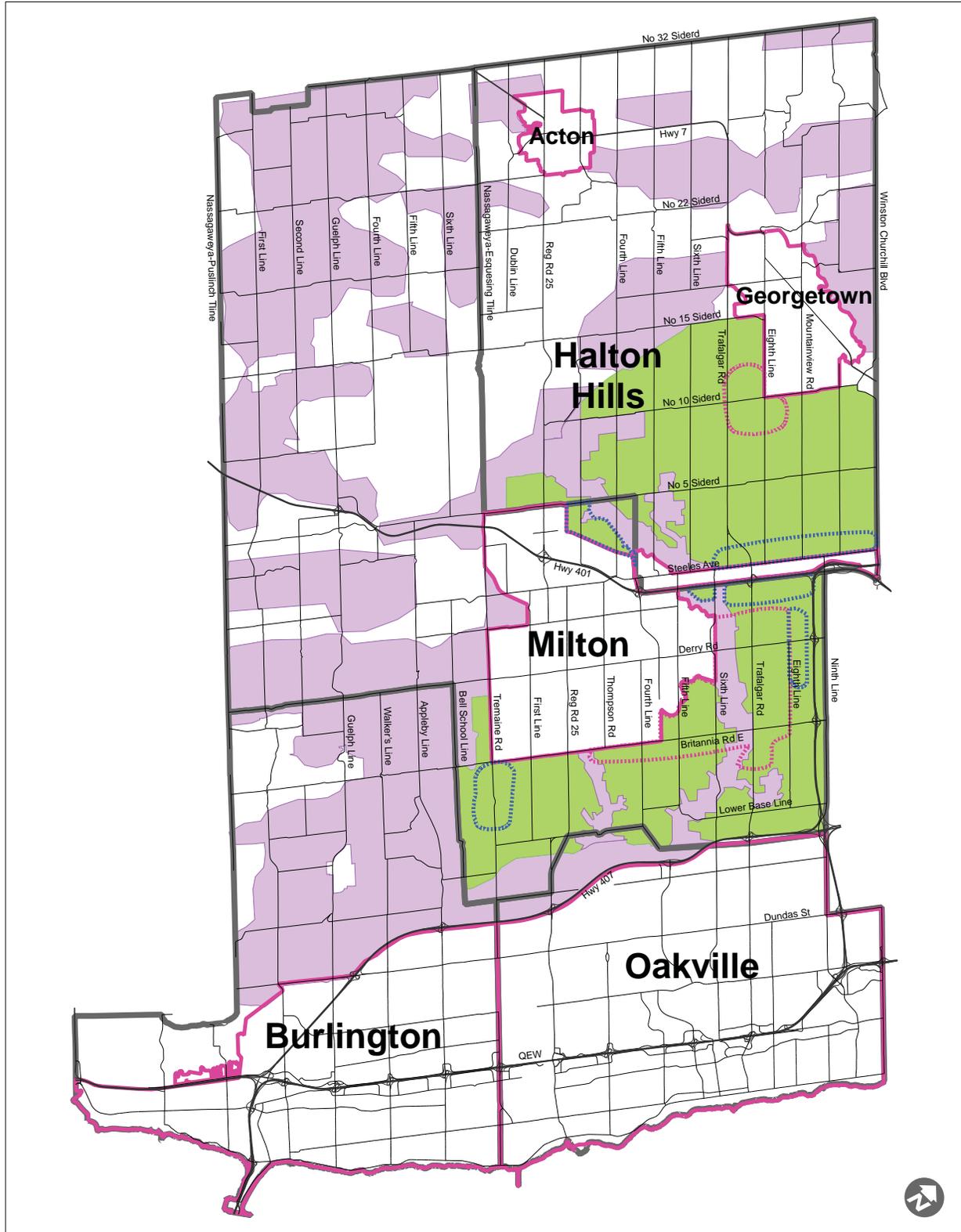
In addition to proposed new employment lands to meet the anticipated growth to 2031, Halton Region has also identified additional strategic employment lands that should be protected to meet long-term employment land needs beyond 2031. These lands are shown on Figure 4.2, but not proposed to be included in the urban area at this time.

Rural and Agricultural Land

Ensuring a sustainable agricultural presence and protecting the infrastructure that supports farming are priorities for the Region and the Sustainable Halton process. In planning for intensification and new urban lands, the Region is seeking to minimize development of prime agricultural lands.

As part of the Agricultural Countryside Vision being developed through Sustainable Halton, a Land Evaluation and Area Review (LEAR) was completed ([Report 3.04 - Sustainable Halton Phase 2: An Agricultural Evaluation](#), Planscape, April 7 2009). The LEAR confirmed that the PSA is a prime agricultural area as defined by the Provincial Policy Statement (See Figure 4.3).

Prime Agricultural Areas in Halton



- Potential Prime Agricultural Area - Within Greenbelt
- Potential Prime Agricultural Area - Within PSA
- Proposed Mixed Use/Residential Lands to 2031
- Proposed Employment Lands to 2031
- Current Urban Area
- Municipal Boundary

Figure 4.3 : Primary Agricultural Lands (Source: Planscape/Halton Region) The proposed new mixed-use/residential and new employment lands being considered under Concept 2 are outlined on the map for illustrative purposes only.

The study found that the best lands are in south Milton, although this area is impacted by potentially conflicting uses - golf courses, the Halton Waste Management Facility and the rail corridor. The lands south and west of Georgetown were recognized as having the best potential for sustaining ongoing agricultural uses.

The LEAR results and the recommendations of the [Report 3.04 - Sustainable Halton Phase 3: Agricultural Countryside Strategy](#) (Planscape April 7, 2009) will be used in the evaluation and selection of a preferred concept.

The Provincial Policy Statement (2005) requires that the Region protect prime agricultural areas for long-term use for agriculture. It limits the conditions under which prime agricultural land can be converted for settlement areas. It states that:

“A planning authority may identify a settlement area or allow the expansion of a settlement area boundary only at the time of a comprehensive review”

Through Sustainable Halton, the Region is undertaking a comprehensive review of its official plan and is seeking to maximize opportunities for growth through intensification, redevelopment and densification. However, as illustrated by the land needs analysis provided in Section 3.0 of this report, additional urban lands are required to accommodate the provincially-mandated growth targets.

Policy 1.1.3.9 of the Provincial Policy Statement also sets out the criteria by which settlement areas may be expanded into prime agricultural areas, which include:

- “1. the lands do not comprise specialty crop areas;*
- 2. there are no reasonable alternatives which avoid prime agricultural areas; and*
- 3. there are no reasonable alternatives on lower priority agricultural lands in prime agricultural areas.”*

The Provincial Policy Statement (2005) further states that: *“impacts from new or expanding settlement areas on agricultural operations which are adjacent or close to the settlement area are mitigated to the extent feasible.”*

All of the lands available for urban expansion (i.e. the Primary Study Area lands) constitute prime agricultural lands and, therefore, there are no reasonable alternatives to some expansion of the urban area into prime agricultural land in order to meet the policies of the *Places to Grow Plan*. Using the results of the LEAR analysis, the Sustainable Halton growth concepts are being developed so as to minimize development in the areas that have the most potential for long-term agricultural production. The concepts have also been designed to avoid development in areas where potential for speciality crop farming have been identified, such as the Eighth Line Corridor ([Report 3.03 - Sustainable Halton Phase 2: An Agricultural Evaluation](#), Planscape April 7, 2009).

As part of the evaluation process, the concepts will be assessed based on their capacity to maximize opportunities for protection of agricultural land and farming. The Region is preparing the Agricultural Countryside Vision and supporting policies in concert with its growth management strategy in order to minimize the impact of urbanization on agricultural lands and support a sustainable agricultural presence in the Region.

Natural Heritage System (NHS)

As part of Sustainable Halton, the Region is defining its natural heritage system, with the intent of adopting a systems-based approach to preservation of natural heritage and protection of the system from future urban development. The aim is to create a system of interconnected natural areas sufficient to ensure the long-term ecological integrity and protection of natural heritage for future generations.

Where possible, the limits of proposed new urban areas have been defined by the prominent components of the NHS. This is particularly true for the new urban lands illustrated in the Town of Milton, where the Sixteen Mile Creek valley has a strong physical presence.

Following the release of Working Paper #1, numerous comments and submissions were received from the Region’s local municipalities, landowners and members of the public, regarding the rationale for a more robust Natural Heritage System (NHS). There were also concerns raised as to the flexibility of the

Sustainable Halton NHS in specific locations and the implications of the system on farming in the Region. The Region is continuing to define the Sustainable Halton NHS, and the supporting policy framework, as well as responding to these concerns. The aim, intent and structure of the system have been maintained in the updated concepts, with minor modifications in some areas.

The updated plans for the Sustainable Halton NHS resulted in some modifications to the system boundaries. Most notably for the development of the concepts, is the reconfiguration of the centre for biodiversity southwest of Trafalgar and Britannia Roads. The centre still serves the same purpose and meets the same environmental objectives, but its location and configuration has been modified to better align with existing natural features and minimize conflicts with planned infrastructure along the Trafalgar Road corridor. The centre for biodiversity at Trafalgar Road north of Steeles Avenue has also been relocated around natural features west of Sixth Line.

An initial policy framework and implementation strategy for the Sustainable Halton Natural Heritage System is contained in the report [Report 3.02 - Natural Heritage System Definition and Implementation](#) (North-South Environmental, April 7, 2009).

Mineral Aggregate Resources

Halton Region has considerable mineral aggregate resource areas. Most notably for the location of new urban areas, the Primary Study Area (PSA) contains large tracts of shale resources. The Provincial Policy Statement (2005) requires that:

“as much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible”.

An updated map of shale resource areas was released by the Province of Ontario in early 2009 (as illustrated on Figure 4.4). The map shows that Halton Region has between 12,000 - 15,000 ha of shale resource areas located in PSA, amounting to an 1,800 - year supply. While not all of the resource is readily available and some is at a depth that makes extraction more difficult, there is still a very long-term supply of shale available in the Region.

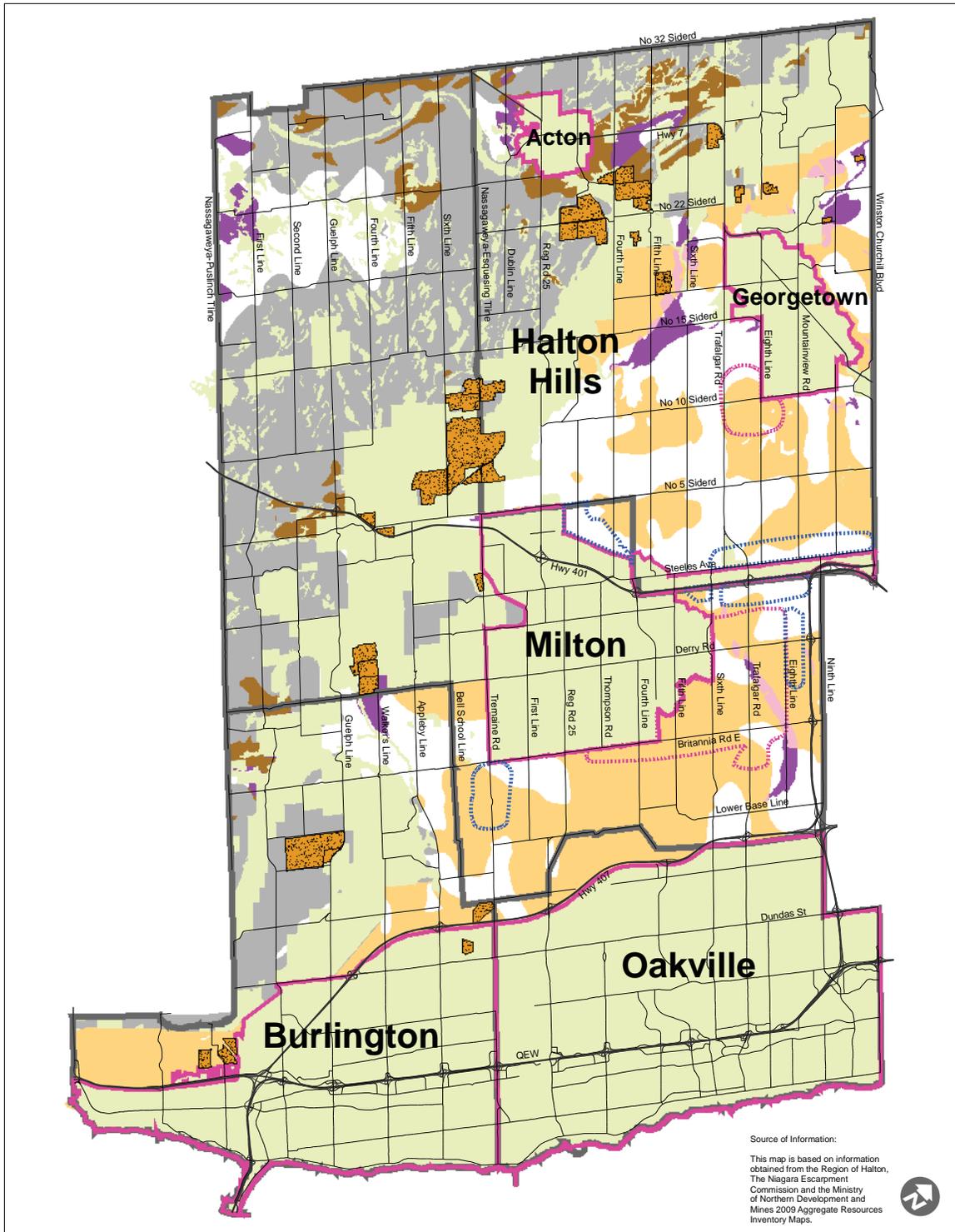
Given the extent of shale resources in the PSA, it is not realistically achievable to protect all of the resource areas from urban development, since doing so would conflict with the intent of the *Places to Grow Plan*, which requires the Region of Halton to accommodate additional population and employment on lands within the *built boundary* and on new lands to be designated for urban development. In addition, the area(s) of land to be protected for potential shale extraction should reflect the need to provide a land base to supply future shale extraction needs for a ‘reasonable’ amount of time, taking into account:

- a. the extent and location of shale resources that have the potential to be accessed outside of the Region of Halton;
- b. the impact of locating shale extraction areas outside of the GTA on the economic viability of extracting the resource for use in the GTA market; and,
- c. the extent to which alternative land uses serve a greater long-term public interest, particularly taking into account the goals, objectives and policies of the *Places to Grow Plan*.

With respect to the latter, urban development that is located in a manner that supports the establishment of *complete communities* in accordance with Provincial policy serves a greater long term public interest, as long as reasonably sized resource areas in the Region of Halton can be protected from urban development.

Draft policies for mineral aggregate resources are contained in [Report 3.05 - Aggregate Resource Management in the Region of Halton, Part 2—Establishing a Policy Framework](#) (Meridian Consulting, April 2 2009).

Provincially Identified Aggregate Resources in Halton



- | | | |
|------------------------------------|--|--|
| Sand & Gravel Resource | Licensed Pits and Quarries | Primary Constraints
NEP Natural Area
NEP Protection Area
NEP Publicly Owned Lands
NEP Minor Urban Centre
Provincially Significant Wetlands
Urban Areas Hamlets and Rural Clusters |
| Bedrock Resource | Proposed Mixed Use/Residential Lands to 2031 | |
| Shale Resource | Proposed Employment Lands to 2031 | |
| Sand & Gravel and Bedrock Resource | Current Urban Area | |
| Sand & Gravel and Shale Resource | Municipal Boundary | |
| Primary Constraint | | |

Date: 08.04.09

Figure 4.5: Provincially Identified Aggregate Resources in Halton Region (Source: Meridian Planning/ Halton Region). The proposed new mixed-use/residential and new employment lands being considered under Concept 2 are outlined on the map for illustrative purposes only.

4.4 The Final Concepts

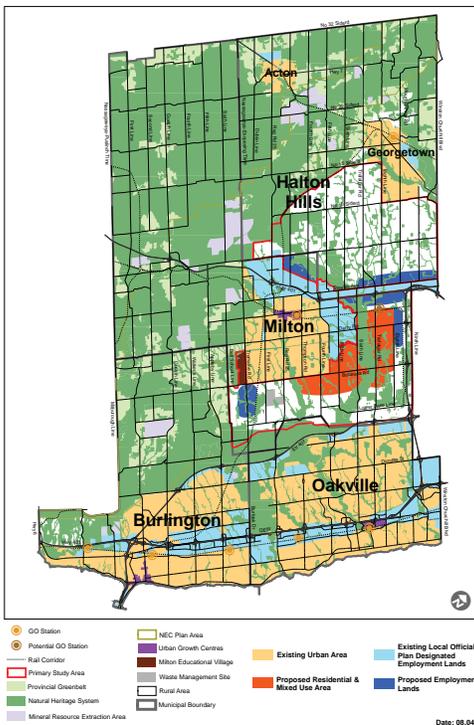
The following section illustrates the final Sustainable Halton concepts that will be the basis for testing and analysis.

The diagrams associated with each concept are intended to be schematic and illustrative. The potential new urban areas shown here are representative of the 2,780 gross hectares of new land identified through the land analysis work summarized in Section 3.0 of this report.

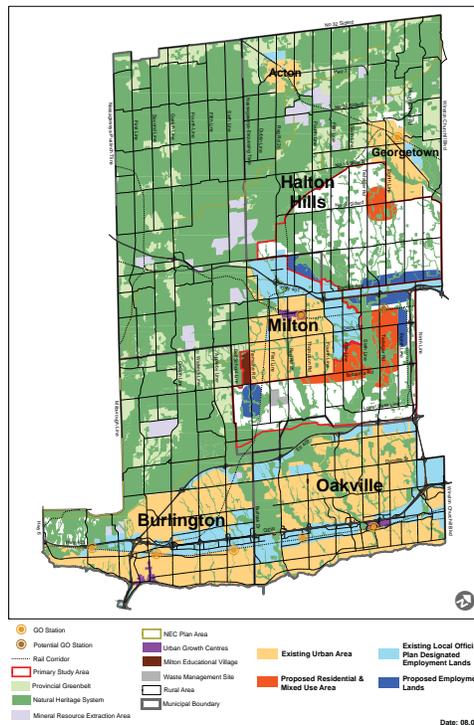
Each concept is being tested to arrive at a preliminary assessment of what might be the structure, land use mix and density of new development areas. The Region is also conducting high-level analyses of potential transportation, water and wastewater servicing impacts and costs associated with new infrastructure needs. Each concept is being assessed using the goals and objectives of the Sustainable Halton Evaluation Framework and a preferred concept will be selected on the basis of that evaluation.

Once a preferred concept is selected, one or more options will be developed. The options will illustrate alternative approaches for implementing the preferred concept and will include more clearly defined boundaries for new growth areas.

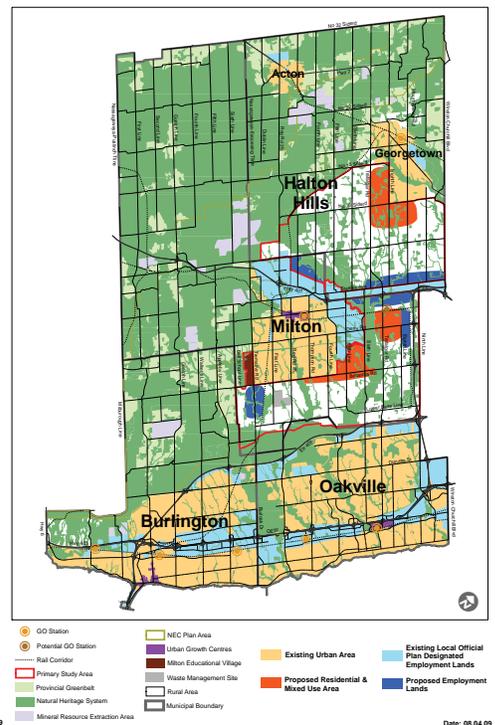
One of the three concepts will be selected as the basis for developing a preferred option for locating new urban lands in Halton Region. Both the concepts and options will be subject of public consultation in the spring of 2009. Selection of the preferred concept and option is anticipated in June 2009.



Concept 1 - Milton-Centred



Concept 2 - Milton-Georgetown 20,000



Concept 3 - Milton-Georgetown 40,000

Concept 1

Milton Centred plus Employment Lands in Halton Hills

New Mixed-Use/Residential Areas - This concept positions all potential new mixed-use/residential areas within the Town of Milton. Most are located south and east of the Milton urban boundary. New mixed-use/residential uses in this concept are centred on the Trafalgar and Britannia Road corridors and the proposed new GO Transit station in east Milton.

The Sustainable Halton Natural Heritage System plays a significant role in defining the boundaries of new mixed-use/residential areas in this concept. Those boundaries not defined by the Natural Heritage System will be further defined through the development of growth options (Report 3.10 Working Paper #3: Options Under the Preferred Concept, (Urban Strategies Inc, April 13, 2009)).

New Employment Lands - Generally, new employment lands are located along the 401 and 407 highway corridors, along the northern portion of the future James Snow Parkway, and around Tremaine Road and the rail corridor in south Milton (See Figure 4.2). In all of the concepts, the boundaries of the proposed new employment lands are the same.

In Halton Hills, approximately 340 gross hectares of new employment land are proposed north of Steeles Avenue between Winston Churchill Boulevard to the east and the stream corridor west of Trafalgar Road to the west.

In Milton, 270 gross hectares of new employment land are proposed south of Highway 401 to the Parkway Belt/Milton rail corridor, between Highway 407 to the east and the Natural Heritage System boundary east of Fifth Line. About 140 gross hectares of new employment lands are also proposed west of Highway 407 to Eighth Line, from the Milton rail corridor south to approximately mid-way between Derry and Britannia Roads.

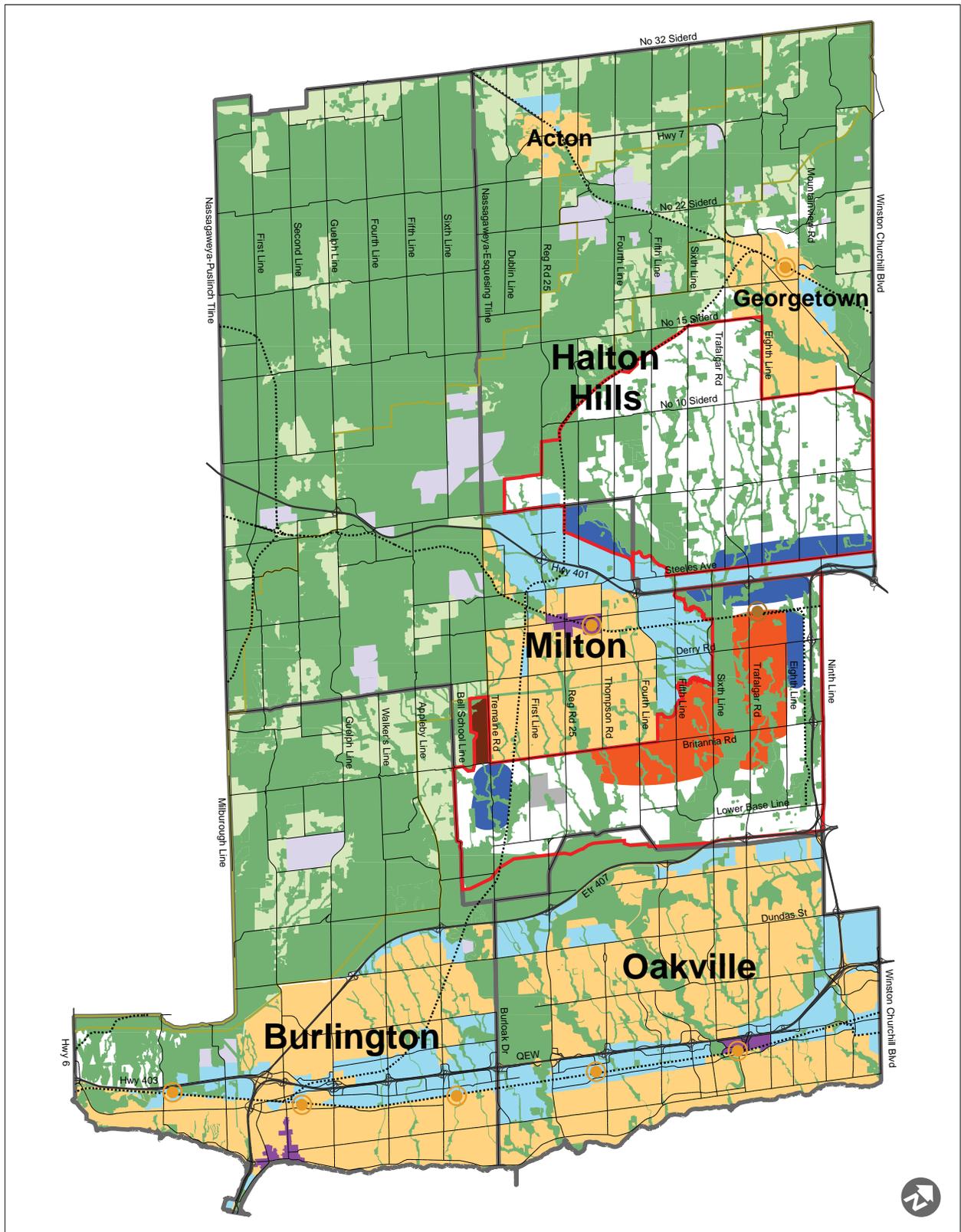
North of Highway 401 in Milton, a further 150 gross hectares of new employment lands are proposed, north of the future James Snow Parkway to the Milton town line/Natural Heritage System boundary.

In south Milton, 200 gross hectares of new employment land are proposed along Tremaine Road south of the current Milton urban boundary and west of the rail corridor.

Table 4.1: Summary Statistics Concept 1

	Additional Population at Full Build Out	Total New Urban Land (gross ha)	New Employment Land (gross ha)	New Mixed-use/ Res. Land (gross ha)
Halton Hills	n/a	340	340	n/a
Milton	97,600	2,440	760	1,680

Source Data: Urban Strategies Inc, April 13 2009. Figures are approximate.



- GO Station
- Potential GO Station
- Rail Corridor
- Primary Study Area
- Provincial Greenbelt
- Natural Heritage System
- Mineral Resource Extraction Area
- NEC Plan Area
- Urban Growth Centres
- Milton Educational Village
- Waste Management Site
- Rural Area
- Municipal Boundary
- Existing Urban Area
- Proposed Residential & Mixed Use Area
- Existing Local Official Plan Designated Employment Lands
- Proposed Employment Lands

Date: 08.04.09

Figure 4.6: Illustrative Diagram of Concept 1: Milton Centred Plus Employment Lands in Halton Hills

Concept 2

Milton Centred plus 20,000 New Population in Georgetown

New Mixed-Use/Residential Areas - This concept positions new mixed-use/residential development southwest of Georgetown with capacity to accommodate approximately 20,000 people. The remaining mixed-use/residential land in Milton would accommodate approximately 77,600 people.

In Halton Hills, Concept 2 is illustrated based on expansion of Georgetown to the southwest, alternatively new mixed-use/residential lands could be located to the south or west. The Town of Halton Hills is also considering minor expansions of the Stewarttown hamlet boundary and expansion of the Georgetown urban boundary to include the small pocket of land in the northeast quadrant of Tenth Line and 10 Sideroad. These proposals will be further considered at the options stage.

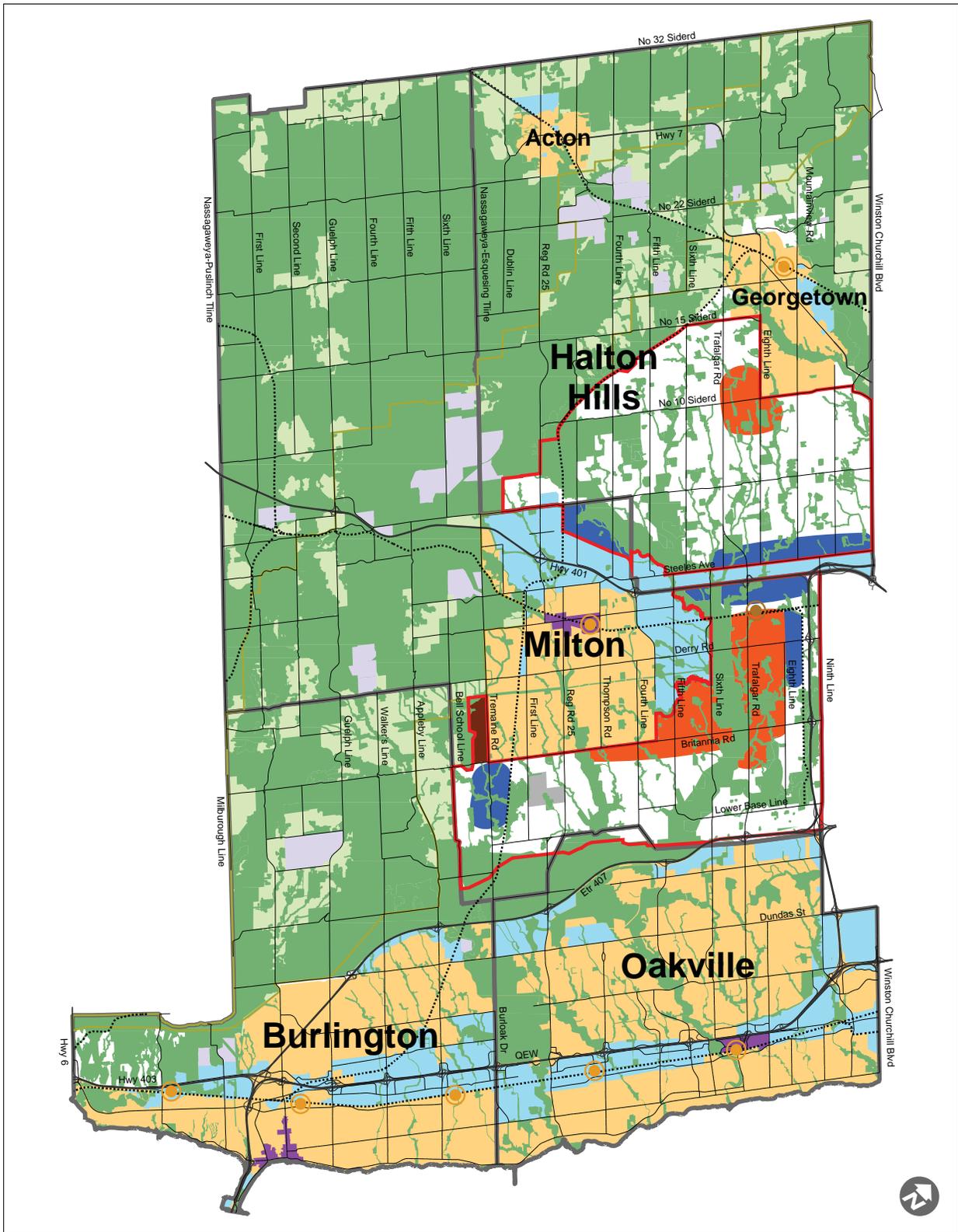
In Milton, Concept 2 is oriented around Trafalgar Road and Britannia Road, which are potential mixed-use corridors. New mixed-use residential areas are located so as to support a proposed new GO Transit station in east Milton. The southern boundaries of this concept are less easily defined by natural features or concession roads and may take a number of different forms. The configuration of new mixed-use/residential areas in south Milton will be further refined at the options stage.

New Employment Lands - As in all of the concepts, new employment lands are generally located along the 401 and 407 highway corridors, along the northern portion of James Snow Parkway, and around Tremaine Road and the rail corridor in south Milton (See description for Concept 1).

Table 4.2: Summary Statistics Concept 2

	Additional Population at Full Build Out	Total New Urban Land (gross ha)	New Employment Land (gross ha)	New Mixed-use/Res. Land (gross ha)
Halton Hills	20,000	740	340	400
Milton	77,600	2,040	760	1,280

Source Data: Urban Strategies Inc, April 13 2009. Figures are approximate.



- GO Station
- Potential GO Station
- Rail Corridor
- Primary Study Area
- Provincial Greenbelt
- Natural Heritage System
- Mineral Resource Extraction Area
- NEC Plan Area
- Urban Growth Centres
- Milton Educational Village
- Waste Management Site
- Rural Area
- Municipal Boundary
- Existing Urban Area
- Proposed Residential & Mixed Use Area
- Existing Local Official Plan Designated Employment Lands
- Proposed Employment Lands

Date: 08.04.09

Figure 4.7: Illustrative Diagram of Concept 2: Milton Centred Plus 40,000 New Population in Georgetown

Concept 3

Milton Centred plus 40,000 New Population in Georgetown

New Mixed-Use/Residential Areas - This concept positions new mixed-use/residential areas south and southwest of Georgetown, accommodating an increase in population of approximately 40,000 people. The remaining mixed-use/residential land in Milton would accommodate approximately 57,600 people.

In Halton Hills, the new mixed-use/residential areas are shown south and southwest of the current Georgetown urban boundary, extending south toward 5 Sideroad. Alternatively, greater emphasis might be placed on the 10 Sideroad corridor, with new mixed-use/residential areas extending eastward toward Winston Churchill Boulevard.

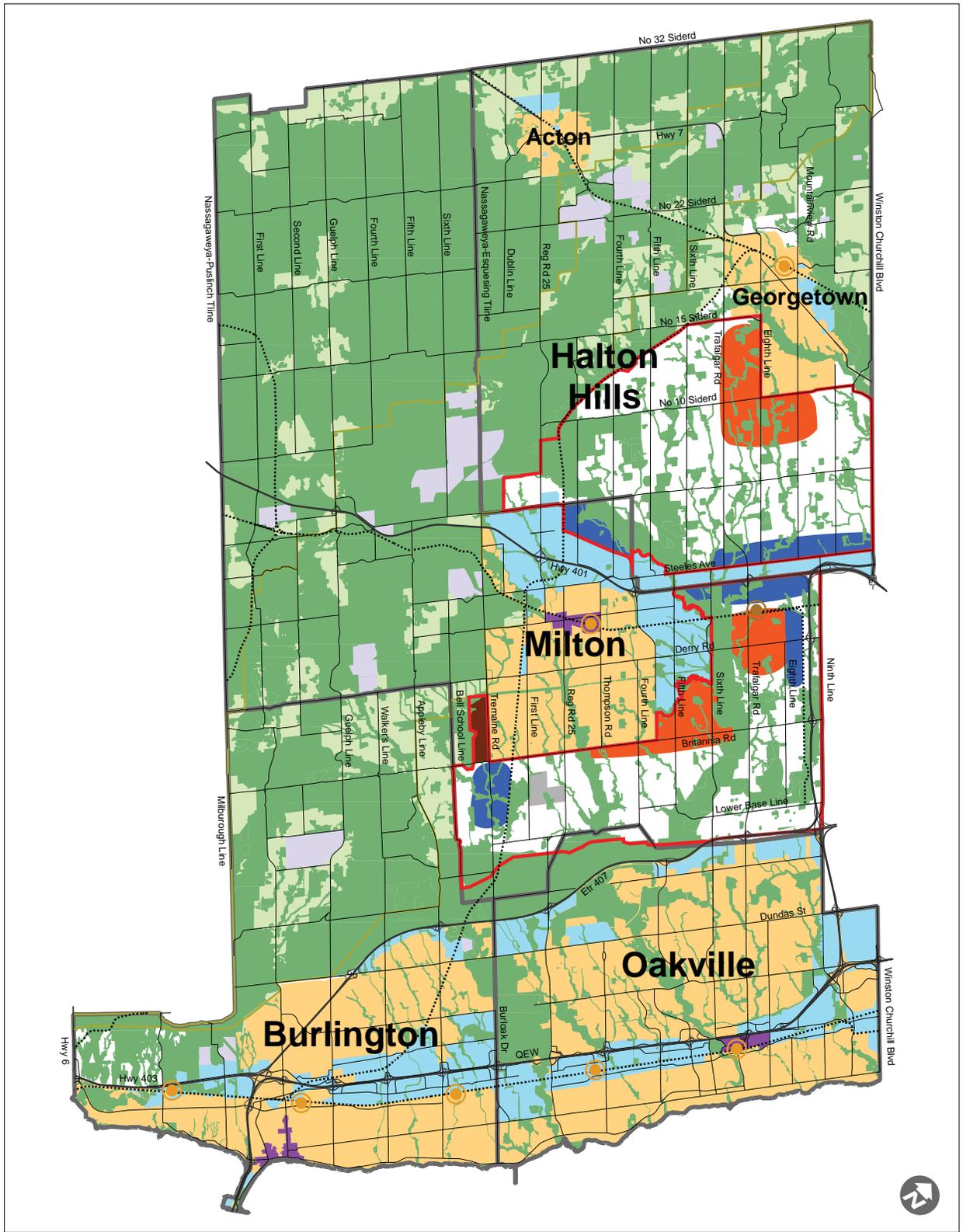
In Milton, this concept illustrates new mixed-use/residential areas in two general locations. The first is an extension of the existing Milton urban boundary, generally to the east and along Britannia Road. The second is centred on the Trafalgar Road corridor and a potential new GO Transit Station in east Milton. Alternatively, this concept might be more focused around south Milton and the future James Snow Parkway corridor.

New Employment Lands - As in all of the concepts, new employment lands are located along the 401 and 407 highway corridors, along the northern portion of James Snow Parkway, and around Tremaine Road and the rail corridor in south Milton (See Concept 1 for description).

Table 4.3: Summary Statistics Concept 3

	Additional Population at Full Build Out	Total New Urban Land (gross ha)	New Employment Land (gross ha)	New Mixed-use/Res. Land (gross ha)
Halton Hills	40,000	1,120	340	780
Milton	57,600	1,660	760	900

Source Data: Urban Strategies Inc, April 13 2009. Figures are approximate.



- GO Station
- Potential GO Station
- Rail Corridor
- Primary Study Area
- Provincial Greenbelt
- Natural Heritage System
- Mineral Resource Extraction Area
- NEC Plan Area
- Urban Growth Centres
- Milton Educational Village
- Waste Management Site
- Rural Area
- Municipal Boundary
- Existing Urban Area
- Proposed Residential & Mixed Use Area
- Existing Local Official Plan Designated Employment Lands
- Proposed Employment Lands

Date: 08.04.09

Figure 4.8: Illustrative Diagram of Concept 3: Milton Centred plus 40,000 New Population in Georgetown

5.0

What does it look like?

The Character, Density and Form of New Development

The land needs assessment carried out for Sustainable Halton includes statistical and spatial modeling of land uses, density and built form across the new mixed-use/residential lands.

The model aims to assist planners, municipal staff, members of Halton Region Council and the public in understanding the potential implications of the concepts illustrated in Section 4.0. The model also illustrates what the forecasts and targets will look and feel like when they are implemented.

This chapter is aimed at providing a greater understanding of the potential structure and character of new communities created through the Sustainable Halton process. More detailed design and planning of new communities will be conducted by each of the local municipalities.

Secondly, the aim is to describe the approach or modeling of new greenfield lands, which was developed to test the feasibility of achieving the Places to Grow Plan targets in a manner that is in keeping with the values and character of Halton.



5.1 Urban Structure Designations

Each of the growth concepts was developed based on a potential urban structure, densities and character of new urban areas that might be created. As illustrated below (Figure 5.0a, 5.0b, 5.0c), the structure includes four mixed-use/residential land use designations (transit oriented development node; mixed-use centres & nodes; mixed use corridors along main streets and avenues; and primarily residential districts), as well as employment areas. Each is associated with a unique mix of housing, community services, parks, retail, local commercial and other public land uses to support the development of *complete communities*.

The urban structure applied to each of concepts for modeling purposes reflects best practice in planning and urban design, current standards for public land allocation used by Halton’s local municipalities and successful built form precedents found throughout Halton Region.

The four urban structure designations used to define the mixed-use/ residential area in each of the concepts all reflect key Regional policies and *Sustainable Halton* goals. They provide a diverse mix of land uses including residential, community, local retail and institutional uses to support vibrant neighbourhoods. Minimum densities (people & jobs/gross hectare) are recommended for each designation within the Primary Study Area so that they are planned for walkable, transit-supportive communities and meet the *Places to Grow Plan greenfield* targets.

Residential uses are a significant component of each designation and provide for a range of housing choices and development densities. They are organized into four categories, according to density (dwelling unit/net hectare). These categories reflect current best practices for completed and/or proposed residential developments across Halton Region, and are described in Fig 5.1.

The general character, density and uses of each mixed-use/ residential designation is described over the following pages. A complete summary of the components of each designation is contained in Appendix table B.1.

Figure 5.0: Illustrative Land Use Designations and Density Assumptions for Growth Concepts, Used for Testing and Modeling Purposes Only

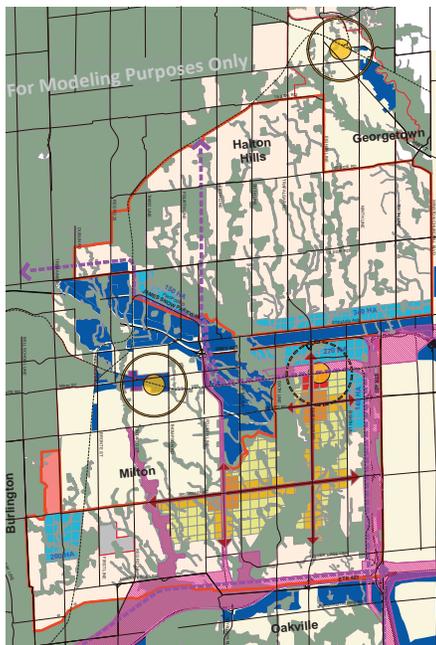


Figure 5.0a:
Concept 1

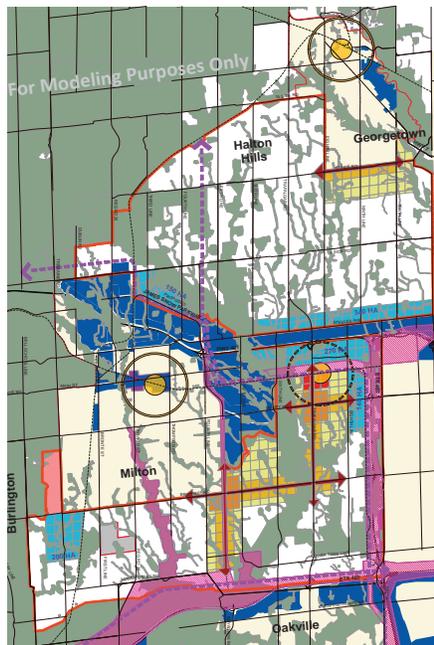


Figure 5.0b:
Concept 2 Milton - Georgetown 20,000

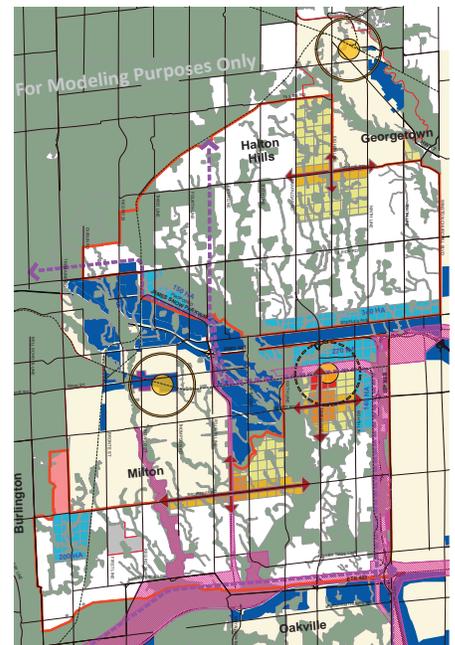


Figure 5.0c:
Concept 2 Milton - Georgetown 40,000



Transit Oriented Development Node

Transit-oriented development (TOD) is generally defined as development that is located within a 10-minute walk, or approximately 800m, from a light rail, heavy rail, or commuter rail station. It also includes development along heavily used bus and bus rapid transit corridors.

The growth concepts identify a TOD node associated with a potential new GO Transit station at Trafalgar Road just south of Highway 401 in Milton. The intent of this designation is to develop policies to achieve a high intensity mix of uses within walking distance to the transit station, including a variety of higher density apartment and some grade-related residential forms. Examples include high-rise, mid-rise, and low-rise apartment buildings, garden flats, town houses and row houses, and semi-detached dwellings. To plan for complete communities, local commercial (retail), office, open spaces and civic uses are also targeted.

TOD nodes should be planned to a minimum average density of 165 people and jobs/gross ha.



Mixed-use Node

Neighbourhood centres, or nodes, are the areas of more intensive urban uses within a community. They provide area residents with a hub to meet a variety of daily needs (goods and services) and serve as a social focus for a community.

The growth concepts include one or two such areas at key intersections of major corridors within the suggested new mixed-use/residential communities. To achieve the desired character, transit-supportive density, walkability, and other important community design criteria, the local municipalities should develop policies to achieve a significant amount of high, and medium density housing forms (high-rise; mid-rise apartments; garden flats; rows and towns) and a smaller amount of low density housing (single detached and semi detached dwellings).

Mixed-use nodes should be planned to a minimum average density of 85 people and jobs/gross ha.



Mixed-use Corridor

Mixed-use corridors along main streets, avenues or regional roads should offer convenient access for residents and businesses to a variety of goods and services, and a pleasant community environment. Design and physical appearance contribute directly to livability and economic success.

The growth concepts allow for a number of mixed-use corridors, of varying length and character. Some sections may develop as main streets or avenues. Others may cross between established and planned urban areas, providing connections and serving the needs of nearby neighbourhoods, towns and cities.

In every case, corridors should include a mix of uses, including: sidewalk-fronting shops or businesses, offices, civic uses, appropriately scaled and designed public spaces; and a broad mix of residential forms and densities.

Mixed-use corridors should be planned to a minimum average density of 75 people and jobs/gross hectare.

Primarily Residential Areas

Neighbourhoods of all kinds of styles and characters are possible in the new urban areas. However, a number of common characteristics should apply to primarily-residential areas planned within the Primary Study Area. Though generally planned for ground-related housing, each should contain a mix of forms, including single-detached and semi-detached dwellings and some medium density forms (rows, towns, garden flats). These areas should also include local commercial and retail uses, open spaces and parks, community and civic spaces.

Primarily residential neighbourhoods should be planned to a minimum average density target of approximately 55 people and jobs/gross ha.

Employment Areas

Future *employment areas* will include a range of industrial-type buildings, as well as office and supporting services employment (i.e. business-related retail and restaurants). The gross job density across all new *employment areas* is 30.5 employees / gross hectare (see Sections 3.4 and 3.6).

5.2 Modeling the Growth Concepts

This section describes the land use and density model that was created for Sustainable Halton to test how land uses, residents, dwelling units and jobs anticipated in the land needs analysis might be distributed across the new urban lands.

As a statistical and spatial tool, the Sustainable Halton land needs model serves a number of purposes. It allows the Region to test the feasibility of their growth management plans and compare them to current development patterns. It clarifies future needs for physical infrastructure, such as roads and sewers. It assists local municipalities in preparing more detailed planning requirements for these areas in official and secondary plans. It provides a more detailed understanding of how the growth concepts will meet the goals and objectives embedded in the Evaluation Framework, as well as how they might support provincial targets for population, density and *complete communities*.

The model illustrates one approach as to how new urban land might be developed to meet the Region's objectives and the *Places to Grow Plan* policies.

5.3 How the Model Works

Each of the mixed-use land designations is defined by a series of land use inputs representing all of the components that make up a *complete community*, including: residential uses; community uses (schools, libraries); *employment areas* (local retail, office); and infrastructure uses (roads, utility corridors).

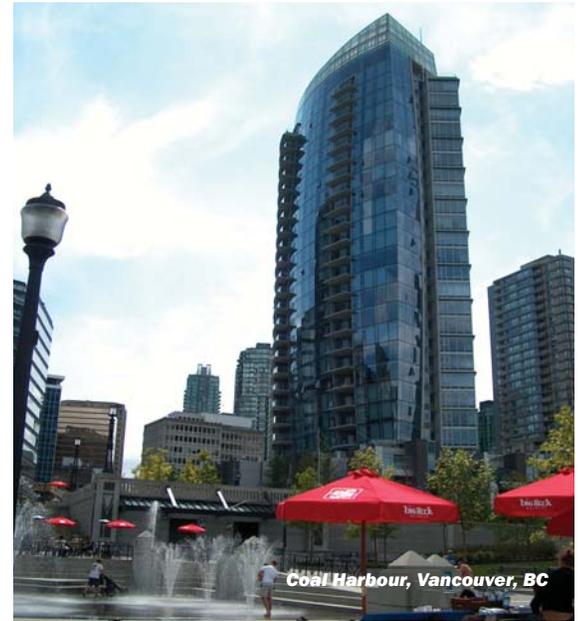
The designations differ from one another by the relative mix of land uses. For example, each designation contains a range of residential land uses, including low density (single and semi detached housing); medium density (rows, towns, garden flats) and high density (apartments). The *Transit Node* has the highest proportion of high density housing (such as apartments), while *Primarily Residential Areas* have the highest proportion of low density housing forms (single detached and semi-detached homes).

A number of assumptions have been made to determine the most appropriate reference standards for land uses included in modelling new mixed-use/residential areas. These assumptions reflect research on best practices and standards applied to recently developed and proposed communities in Milton, North Oakville and other GTA suburbs. A summary of resulting land use and density assumptions is detailed in Appendix B, Table B1.

In the model, one of the four land use designations is applied to the proposed mixed-use/residential areas shown on each growth concept using a grid of cells. Figures 5.1, 5.2, and 5.3 illustrate how this works. When all of the cells that form a growth concept are taken together, the model produces a number of outputs, including estimates of total new people, jobs, dwelling units and land area for each designation.

FIGURE 5.4

Residential Density Precedents



Residential Density: Transit Oriented Development (350 du/net ha)



Residential Density: High (90 du/net ha)



Residential Density: Medium (50 du/net ha)



Residential Density: Low (30 du/net ha)

SUSTAINABLE HALTON MODEL

The diagrams below (and associated statistics to the right) describe the components that make up the Sustainable Halton model used to test the population, density, character and form associated with new mixed-use/residential areas.

FIGURE 5.1
Sustainable Halton Model
Neighbourhood Scale

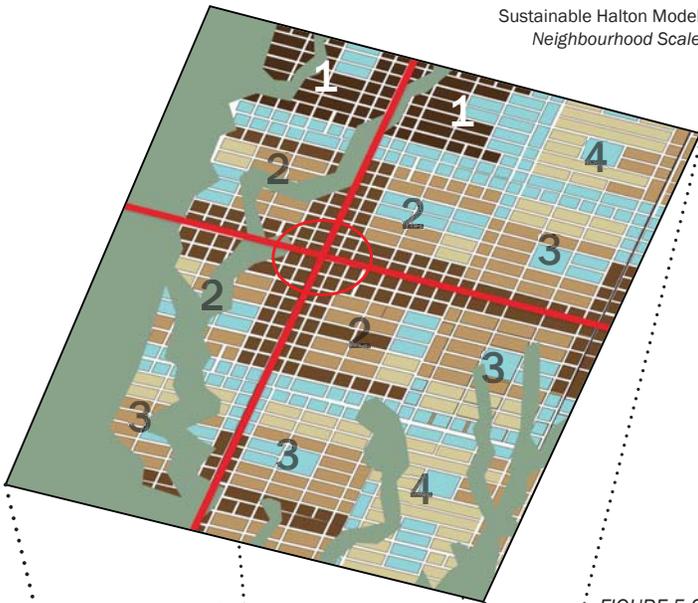


FIGURE 5.2
Sustainable Halton Model -
Intermediate Scale

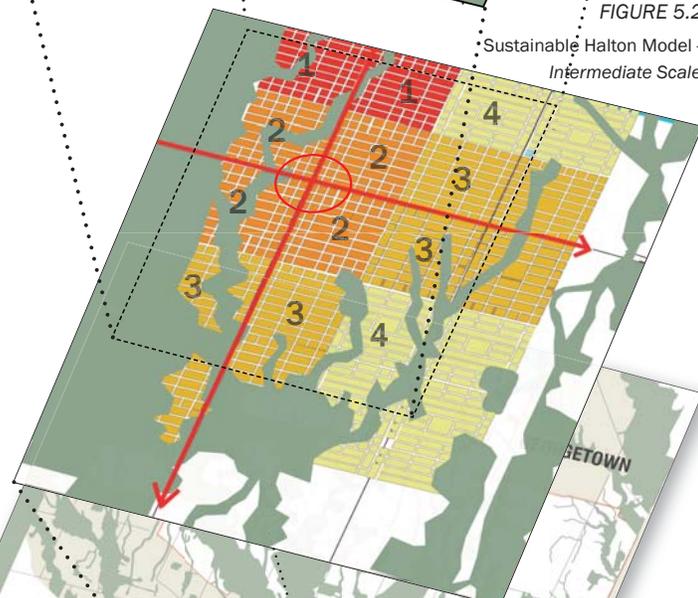


FIGURE 5.3
Sustainable Halton Model
Regional Scale

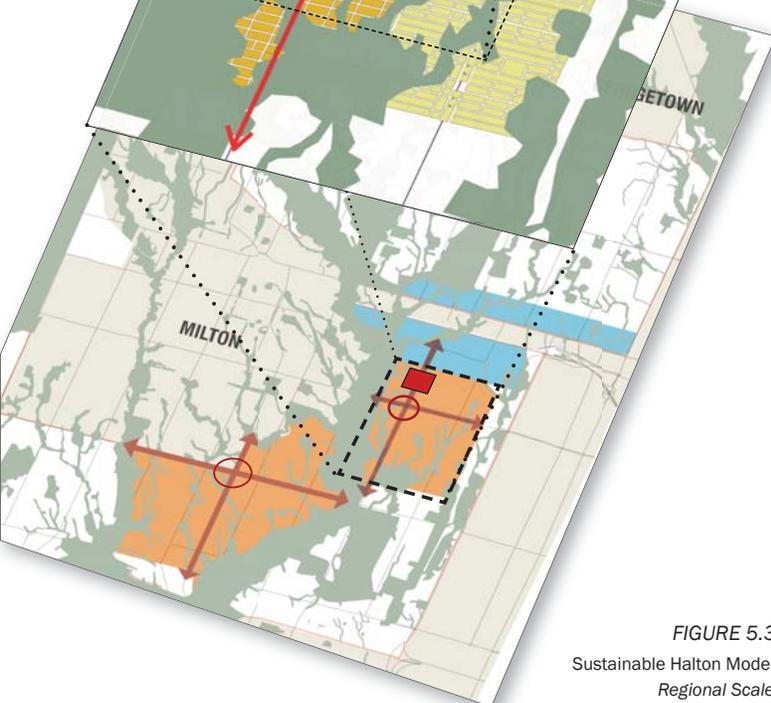
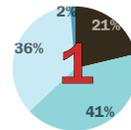


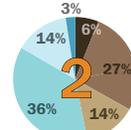
FIGURE 5.1 Land Use Components

Residential Densities (DU/Net HA)

Net housing density refers to the number of dwelling units in an area net of any land that is not for private use.



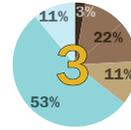
TOD: 350
(low-rise / mid-rise / high-rise apartments)



HIGH: 90
(towns / stacked towns / low-rise apartments)

MEDIUM: 50
(semi detached / towns)

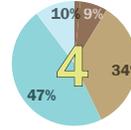
LOW: 30
(single detached, semi-detached)



Non Residential Land Uses

Office Employment
(office buildings; professional offices above grade)

Neighbourhood Land Uses
(elementary schools; local parks; neighbourhood retail; local roads; SWM; utilities)



Other Community Land Uses
(secondary schools; community parks; regional commercial; arterial roads; other land uses)

* pie chart figures represent percentage of land devoted to the respective category of land use.

FIGURE 5.2

Mixed-Use / Residential Designations & Minimum Density Requirement

- 1** **Transit Oriented Development Node**
165 (People & Jobs / Gross HA)
- 2** **Mixed-use Node**
85 (People & Jobs / Gross HA)
- 3** **Mixed-use Corridor**
75 (People & Jobs / Gross HA)
- 4** **Neighbourhood**
55 (People & Jobs / Gross HA)

FIGURE 5.3

New Urban Lands

-  **New Employment Land**
27 People & Jobs / Gross HA
-  **New Mixed-use/Residential Land**
70.1 People & Jobs / Gross HA
-  **Transit Oriented Development Node**
-  **Mixed-use Corridor**
-  **Mixed-use Node**

5.4 Model Outcomes and Conclusions

Land Area and Density of Each Designation

Modeling of the mixed-use land designations provides a more detailed assessment of how each of the growth concepts might achieve the Region's targets for density, population and dwelling units. As discussed in Section 3, a land need of 1,680 gross ha and an overall density of 66.0 people and jobs per gross hectare is planned across all mixed-use/residential lands. To test the feasibility of these targets, the Sustainable Halton model was used to generate scenarios that apportion people, homes and jobs across the new urban lands in a manner that reflects the structure of nodes, corridors and neighbourhoods. Table 5.1 illustrates a scenario that achieves densities appropriate to the character of each designation, and which combine to meet the *greenfield* density targets.

TABLE 5.1
MIXED-USE DESIGNATIONS & DENSITIES: Illustrative Scenario

Land Designation	Land Area	Population + Community Jobs	Gross Density
Transit Oriented Development Node	50	8490	170
Mixed Use Node	170	15300	90
Mixed Use Corridor	560	42000	75
Mixed Use Neighbourhood	900	45110	50
TOTAL	1680	110900	66.0

Each growth concept will have a unique land use mix for each designation, as the location and size of nodes, corridors and neighbourhoods varies between them. Also, a range of housing mix scenarios are possible for each growth concept to achieve the target of 32,200 dwelling units. For instance, an illustrative housing mix scenario is described in table 5.2.

TABLE 5.2
DWELLING UNIT CAPACITY: Growth Concept Illustrative Scenario

Description	Net Density (DU/HA)	Mix	DU
Low Density (<i>Singles, Semi's</i>)	30	35%	11130
Medium Density (<i>Semi's; Rows; Towns</i>)	50	45%	14490
High Density (<i>Stacked Towns; Apts</i>)	90	10%	3080
Highest Density (<i>Apartments</i>)	350	10%	3500
TOTAL			32200

Housing Mix

In May 2007, the Region of Halton and SHS Inc. published Housing Directions, a background report to Sustainable Halton that recommended housing targets to guide the planning of new urban lands. The targets were shaped by the Joint Municipal Housing Statement (Table 5.3), and the *Places to Grow Plan* policies for *complete communities* - which include a full range of housing choice (type and mix), and affordable housing.

In comparison, the mix of housing modeled for the growth concepts approximates: 35% low density forms (singles and semi-detached homes), 45% medium density forms (towns and rows) and 20% high density housing forms (apartments). This continues a trend - seen in recently developed and proposed communities across Halton Region - away from single-detached forms towards denser ground-related forms such as semi-detached, townhouses and garden flats. The mix also provides the Region's local municipalities with flexibility in achieving goals related to the provision of affordable housing, assisted housing, and an appropriate balance of rental and ownership housing.

TABLE 5.3
Comparative Residential Housing Mixes

	LOW (Singles & Semis)	MEDIUM (Rows)	HIGH (Apts.)
<i>Joint Municipal Housing Statement</i> source: Hardy Stevenson & Assoc., MHS 2001, Revised by Halton Region, 2007	55	25	20
<i>Hew Housing Development (1996-2005)</i> source: 2006 Annual Housing Report, Halton Region. Mix based on completions from 1996-2005.	67	25	8
<i>Milton HUSP</i> source: Town of Milton Municipal Housing Statement	60	15	25
<i>North Oakville (proposed)</i> source: Town of Oakville OPA 272, February 2008. Page 11	55-45	25-20	20-35

Form & Character: Comparison to Recently Developed & Proposed Areas

In comparison to recently developed and proposed communities across the Region, the outcomes of the modeling work done for the growth concepts suggests that the Region will need to continue the existing trends towards more compact development. A comparative analysis of the modeling result with the Milton Bristol area and the proposed North Oakville Secondary Plan Area (east of 16 Mile Creek) reveals a number of key findings.



Milton Bristol

TABLE 5.4

MILTON BRISTOL: Residential Development (2006)

	Land		Density (DU/HA)	PPU	Population	Population Density (P/HA)
	Area (HA)	Dwelling Units				
Net Residential Lands						
Single/Semi	254.6	8662	34.0	3.19	27632	108.5
Row	50.7	2634.0	52.0	2.56	6743	133.0
Apartment	9.6	886.0	92.3	1.79	1586	165.2
Total	315	12182			35961	114.2

First, the density of housing units in these areas is consistent with the density assumed for the growth concepts. For instance, the proposed average density of detached housing forms is 30 du/ha, which is within the range established by Milton Bristol (34 dwelling units/ha - Table 5.4) and proposed for North Oakville (28.7 du/ha to 32.4 du/ha - Table 5.5).

Second, the net to gross ratio of residential land to overall mixed use/residential community land (including parks, schools, roads, and other uses), is consistent with the range proposed for North Oakville. Based on the assumptions used in Sustainable Halton modeling work, the net residential lot area is approximately 43% of the overall total of new mixed use/residential community land (Table 5.6), and approximately 28% of total new urban land (including employment land). North Oakville Secondary Plan Area (East of 16 Mile Creek) proposes net residential lot area approximating 26% of total land, and associated net population density of 116.2 p/HA (table 5.5). When measured across all new urban lands, the gross population density is much lower, in the range of 40-50 people & jobs / gross hectare.

TABLE 5.6

MIXED-USE DESIGNATION NET/GROSS: Illustrative Scenario

Land Designation	Mixed-Use Land Area (HA)	Net Residential Land (HA)	Net Residential Land (%)
Transit Oriented Development Node	50	19	37.0%
Mixed Use Node	170	79	46.5%
Mixed Use Corridor	560	253	45.1%
Mixed Use Neighbourhood	900	376	41.8%
TOTAL	1680	726	43.2%

TABLE 5.5

North Oakville (East) Secondary Plan: Proposed Residential Development (Higher End of the Policy Density Range)

	Land Area		Density (uph)	PPU	Population	Population Density (P/HA)
	(HA)	Dwelling Units				
Net Residential Lands						
Single/Semi	263.6	8536	32.4	2.99	25523	96.8
Row	107.8	4687	43.5	2.84	13311	123.5
Apartment	84.3	8547	101.4	1.65	14103	167.3
Total	456	21770	47.8		52936	116.2

Allocation of Land for Public Facilities:

The overall density of mixed-use lands is directly affected by the amount of land allocated to parks, schools and other public facilities. To achieve the appropriate character and density of nodes, corridors and neighbourhoods, the Sustainable Halton model applies a set of assumptions about public space needs. In general, more public land is allocated to family oriented residential areas, and less public land to higher density nodes and transit oriented development areas.

As described in Appendix Table B.1, the highest standards for public land allocations sourced by this report are those currently in use by the Town of Milton. The figures used represent an overall and general approximation of standards applied to the Town's secondary plans. Relative to these standards, the Sustainable Halton model allocates approximately 25% less land to parks and schools (Table 5.7), when measured across all new mixed-use lands. This allocation aligns more closely with standards applied

TABLE 5.7

MIXED-USE DESIGNATION PUBLIC FACILITIES LAND: Illustrative Scenario (INCLUDES: Local & Community Parks; Elementary & Secondary Schools)

Land Designation	Mixed-Use Land Area (HA)	Public Facilities Land (HA)	Public Facilities Land (%)
Transit Oriented Development Node	50	4	8.2%
Mixed Use Node	170	15	8.6%
Mixed Use Corridor	560	74	13.2%
Mixed Use Neighbourhood	900	207	23.0%
TOTAL	1680	300	17.8%

If Milton Public Land Standards Applied: 400



North Oakville - Proposed view of Trafalgar Road
Source: Brook McIlroy Inc.

by other GTA municipalities¹, and can be achieved by reduced rights-of-way; co-locating parks and school yards, or locating parks adjacent to Natural Heritage lands. It also corresponds with appropriate levels of housing density for each of the designations, and a housing mix of 35% singles & semis; 45% towns & rows; 20% apartments.

Alternatively, development scenarios that allocate more land to public uses would require a corresponding increase to the density of housing accommodated on the reduced residential land area to maintain the same overall totals for dwelling units and residential population. For instance, a scenario that allocates 350 HA of land to parks and schools (in comparison to 300 HA as illustrated in Table 5.7) would result in a housing mix with less single detached housing: approximately 20% singles and semis; 55% towns and rows, and 25% apartments, representing a significant change from the targets set by the Joint Municipal Housing Statement (Table 5.3).

Achievable, Flexible:

The Sustainable Halton approach to modeling new mixed-use/residential development is designed to provide the Region and its local municipalities with a flexible framework for meeting its target population, density and housing mix. By targeting higher

density development to locations where it makes the most sense, the four mixed/residential designations used in the model provide for a broad range of housing forms and densities to contribute to the overall average targets. Similarly, applying a minimum average density across the lands of each designation allows local municipalities the flexibility to plan for a variety of housing types and densities at the later stages of the planning process.

May Take Time To Fill In:

Sustainable Halton is planning for a total of 7,200 apartment units on new urban lands to ensure a full range of housing choices. The majority of these units are planned within the Mixed-use Nodes and Transit Oriented Development Node designated lands. However, forecasts predict that until 2031 the demand for apartments will likely remain concentrated within the built boundary, where high numbers of apartments have already been planned. Consequently, some areas within the Transit Oriented Development Node, and Mixed-use Nodes will likely develop beyond the Sustainable Halton planning period. Longer term planning for apartments ensures that new urban areas continue to develop in a manner that promotes active transportation, supports efficient transit service and results in a balance of urban places that minimizes the consumption of land.

¹ Source: *Shaping the Toronto Region, Past, Present, and Future*. Neptis Foundation, 2008.

Appendix A: Glossary

Built Boundary - The limits of the developed urban area as defined by the Province of Ontario in accordance with Policy 2.2.3.5 of the *Places to Grow Plan*. (Places to Grow, 2006) (See Figure 3.1).

Built-Up Area - Built-up Area is all land within the *built boundary* (Places to Grow, 2006). (See Figure 3.1)

Complete Community - Communities that meet people's needs for daily living throughout their entire lifetime by providing convenient access to an appropriate mix of jobs, local services, a full range of housing, and community infrastructure including affordable housing, schools, recreation and open space for residents. Convenient access to public transportation and options for safe, non-motorized travel is also provided (Places to Grow, 2006).

Designated (Existing) Greenfield Area/Land - The area within the *settlement area* (urban boundary) that is not *built-up area*. (Places to Grow, 2006). (See Figure 3.1).

Employment Areas are areas defined in an official plan for clusters of business and economic activities including, but not limited to, manufacturing, warehousing, offices, and associated retail and ancillary facilities (Provincial Policy Statement, 2005).

New Greenfield Land - Agricultural Rural Area (see Map 1 of the Region of Halton Official Plan) within the Primary Study Area to be designated as urban through the Sustainable Halton process.

Greenbelt Area - The area defined and protected by the Greenbelt Act, 2005 as described by Ontario's Greenbelt Plan www.mah.gov.on.ca

Intensification - Intensification is the development of a property, site or area at higher density than currently exists through: redevelopment, including the reuse of brownfield sites; the development of vacant and/or underused lots within previously developed areas; infill development; or, expansion or conversion of existing buildings (Provincial Policy Statement, 2005).

Intensification Corridor - Intensification areas along major roads, arterials, or higher order transit corridors that have the potential to provide a focus for higher density mixed-use development (Places to Grow, 2006).

Natural Heritage System - an interconnected system of natural areas, open spaces, buffers and linkages, including the Greenbelt Area and the Niagara Escarpment Natural and Protection Areas, that will preserve areas of significant ecological value and allow some opportunities for recreation.

Primary Study Area - Agricultural Rural Area (see Map 1 of the Region of Halton Official Plan) outside of the Greenbelt Area and Niagara Escarpment Plan area being considered for future urban development through the Sustainable Halton process.

Settlement Area - Urban Areas and rural settlement areas within municipalities where development is concentrated and there are a mix of land uses (Places to Grow, 2006).

Urban Area - Settlement areas that have been designated in an official plan for development over the long term planning horizon. Halton Region's urban areas are defined on Map 1 of the Official Plan and include Oakville, Burlington, Milton, Georgetown and Acton.

Urban Growth Centre - Areas identified as focus areas for intensification and infrastructure investment under the *Places to Grow Plan*. (See Size and Location of Urban Growth Centres in the Greater Golden Horseshoe (Ontario Ministry of Energy and Infrastructure 2008) Halton has three urban growth centres: Downtown Milton, Downtown Burlington and Midtown Oakville.

The Big Move Metrolinx Regional Transportation Plan - Regional Transportation Plan (RTP) for the Greater Toronto and Hamilton Area (GTHA) www.metrolinx.com.

Places to Grow: The Growth Plan for the Greater Golden Horseshoe - The Places to Grow Plan was prepared by the Province of Ontario under the Places to Grow Act, 2005. It is the framework for managing growth and development in the Greater Golden Horseshoe. The Plan's policies are designed to guide related decisions so that they support economic prosperity, preserve and protect the environment and guide the creation of communities with a high quality of life.

Appendix B

TABLE B.1

NEW URBAN LAND USES & REFERENCE SOURCE ASSUMPTIONS				
LAND USE DESCRIPTION	REFERENCE STANDARD	SOURCE (S)		
TOD Density Residential <i>(low rise / mid rise / high rise apts)</i>	350 dwelling units / ha	Urban Strategies Inc. - Net residential density ranges reflect a survey of best practice, recent or proposed developments in Milton, North Oakville, and other GTA municipalities.		
High Density Residential <i>(towns/stacked towns/low rise apts)</i>	90 dwelling units / ha			
Med Density Residential <i>(semis / rows / towns)</i>	50 dwelling units / ha			
Low Density Residential <i>(singles / semis)</i>	30 dwelling units / ha			
NEIGHBOURHOOD LAND USES	elementary schools	<i>TOD Node:</i> 1 ha per 3000 units <i>Mixed Use Node:</i> 1 ha per 1000 units <i>Mixed Use Corridor:</i> 1 ha per 800 units <i>Primarily Residential Area:</i> 1 ha per 800 units	Urban Strategies Inc. Urban Strategies Inc. Urban Strategies Inc. Hemson Consulting Ltd. / Town of Milton	
	local parks	<i>TOD Node:</i> 1 ha per 2000 units <i>Mixed Use Node:</i> 1 ha per 600 units <i>Mixed Use Corridor:</i> 1 ha per 300 units <i>Primarily Residential Area:</i> 1 ha per 100 units	Urban Strategies Inc. Urban Strategies Inc. Urban Strategies Inc. Hemson Consulting Ltd.	
	other institutional uses (community centres, library, etc.)	10% of Park and School Area	Hemson Consulting Ltd.	
	Neighbourhood Retail	<i>TOD Node:</i> 1 ha per 1200 units <i>Mixed Use Node, Corridor, Residential Area:</i> 1 ha per 550 units	Urban Strategies Inc. Hemson Consulting Ltd.	
	Local Roads	Set to 20% to 24% of Nbhd Land.	Hemson Consulting Ltd.	
	Stormwater Management	Set to 6% of Nbhd Land.	Hemson Consulting Inc.	
	Utilities	Set to 2% of nbhd land	Hemson Consulting Ltd.	
	OTHER COMMUNITY LAND USES	Secondary Schools	<i>TOD Node:</i> 1 ha per 3000 units <i>Mixed Use Node:</i> 1 ha per 2000 units <i>Mixed Use Corridor:</i> 1 ha per 1500 units <i>Primarily Residential Area:</i> 1 ha per 1000 units	Hemson Consulting Ltd. Urban Strategies Inc. Urban Strategies Inc. Hemson Consulting Ltd. / Town of Milton
		Community Parks	<i>TOD Node:</i> 1 ha per 2000 units <i>Mixed Use Node:</i> 1 ha per 1000 units <i>Mixed Use Corridor:</i> 1 ha per 600 units <i>Primarily Residential Area:</i> 1 ha per 300 units	Urban Strategies Inc. Urban Strategies Inc. Urban Strategies Inc. Hemson Consulting Ltd. / Town of Milton
		Regional Commercial	<i>TOD Node:</i> 1 ha per 1500 units <i>Mixed Use Node:</i> 1 ha per 900 units <i>Mixed Use Corridor:</i> 1 ha per 450 units <i>Primarily Residential Area:</i> 1 ha per 450 units	Urban Strategies Inc. Urban Strategies Inc. Urban Strategies Inc. Hemson Consulting Ltd.
Arterial Roads		Set to 4% of Urban Land.	Hemson Consulting Ltd.	
Other Land Uses (cemeteries, rail, etc.)		2% of Urban Land	Hemson Consulting Ltd.	
Office Employment		(.5 FSI) / (28 sm / employee)	Hemson Consulting Ltd.	

Appendix C:

Table of Site Specific Submissions in Response to Working Paper # 1

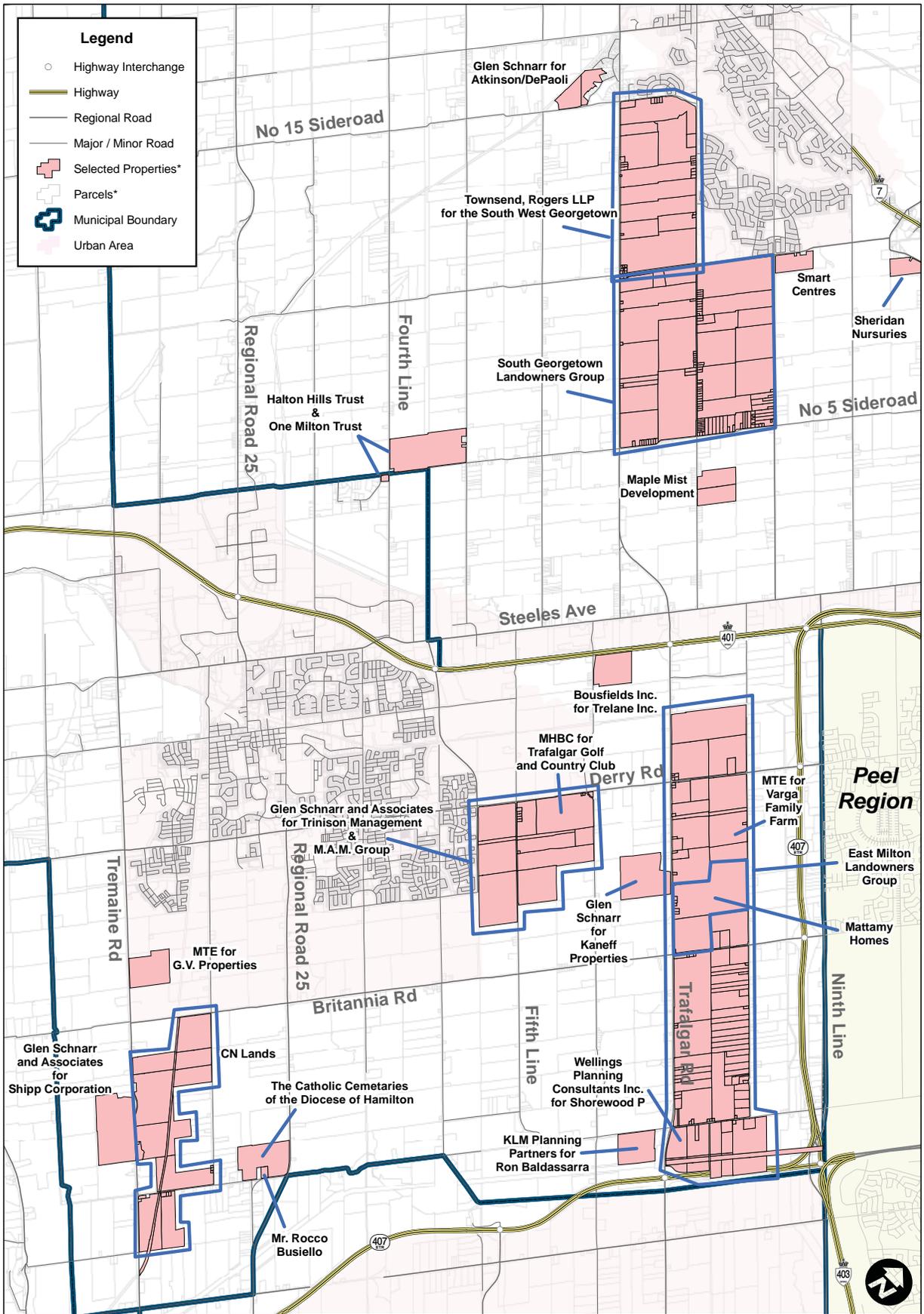
Table of Site Specific Landowner Submissions in Response to Working Paper # 1 June 2008

The following is a list of submissions in response to Working Paper #1: Locating New Urban Land received from landowners in relation to specific properties,. A map of properties referenced in the submissions is provided overleaf and full text of each submission is provided in Staff Analysis of Comments Received on Sustainable Halton June 11, 2008 to March 20, 2009 prepared by Halton Region. In addition to those listed here, submissions were also received that were more general in nature. These are provided in the Region's report.

Comments and suggestions received through all the submissions relating to Working Paper #1, and the feedback received from Public Information Centres held in September 2008, were used to inform the creation of the growth concepts presented in this report.

Submissions Relating to Specific Properties

<u>Submission</u>	<u>Date</u>	<u>Referenced Property</u>
Atkinson/DePaoli Properties	09/19/08, 03/02/09	Adjacent to existing Georgetown Urban Area and the Hamlet of Stewarttown
Mr. Rocco Busiello	01/12/09	Lower Base Line Rd. and Bronte Rd.
Ron Baldassarra	09/30/08	South side of Lower Baseline, west of Trafalgar Road
Canadian National	06/18/08, 09/12/08	Southwest Milton, near Burlington Tremaine Rd. Boundary
Catholic Cemeteries of the Diocese of Hamilton	09/12/08, 10/07/08	Lower Base Line Rd at Bronte Rd.
East Milton Land Owners Group	09/29/08	Bounded to the north by the C.P.R., west by Trafalgar Road, to the east by 8 th Line, and south to Highway 407
G.V. Properties Ltd.	09/30/08	Tremaine Road, North of Britannia Road
Halton Hills Trust Inc.	10/01/08	9117 Fourth Line, Halton Hills
Kaneff Properties Limited	09/22/08	West side of Trafalgar Road, south of Derry Road
M.A.M. Group	01/26/09	South of Derry Road in the Derry Green Corporate Business Park II planning area
Maple Grove United Church	09/29/08	346 Maple Grove Road in Oakville
Maple Mist Development Corporation	09/03/08	East of the Eighth Line between 5 Side Road and Steeles Avenue
Mattamy Development Corporation	09/24/08	North of Britannia Road, East of Trafalgar Road
One Milton Trust Inc.	10/01/08	8677 Esquesing Line, Milton
Shipp Corporation	09/30/08	West side of Tremaine Road just south of Britannia Road
Sheridan Nurseries	03/16/09	Between 10th Line and Winston Churchill Blvd, South of Norval
Shorewood Properties Inc.	10/10/08	Southeast corner of Trafalgar Road and Lower Base Line
SmartCentres	09/30/08	Southeast corner of the intersection of 10 Side Road and the Ninth Line
South Georgetown Landowners Group	08/26/08	East of Trafalgar Road, north of the 5th Side Road, south of the 10th Side Road and west of Ninth Line
South West Georgetown Land Owners Group	09/30/08	15 th Sideroad to the North, 8 th Line (Main St.) to the East, 10 th Sideroad to the South and Trafalgar Road to the West
Trafalgar Golf and Country Club	09/30/08	Southwest corner of Derry Road and 6 th Line.
Trelane Inc.	09/29/08	6 th Line, South of Highway 401
Trinison Management Corporation	09/30/08	Bounded by Derry Road to the north, James Snow Parkway to the west, Sixth Line to the east and a tributary to the Sixteen Mile Creek to the south.
Trinison Management Corporation, Fieldgate Developments and Medallion Homes (Britannia South Land Owners)	09/30/08	Bounded by Derry Road to the north, James Snow Parkway to the west, Sixth Line to the east and a tributary to the Sixteen Mile Creek to the south.
Varga Family Farm Partnership	09/30/08	West side of Eighth Line, South of Derry Road



Sustainable Halton Phase II

Comments Received Regarding Specific Properties

GIS Services

April 2009

Produced by Public Works & Engineering
Transportation Division, Halton Region ©

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