

# Sustainable Halton



## Urban Structure: Potential Long-Term Growth Areas

November 2007



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Consulting Ltd.

## EXECUTIVE SUMMARY

The purpose of the study, based on the land use information for the “Primary Study Area”, is to provide possible locations for new urban areas in Halton. For major employment uses, the objective is to provide for the implementation of the Region’s economic strategy through Sustainable Halton based on the identified land and infrastructure needs associated with the economic potential of the Region. For residential development, it will explore the potential for expanding existing communities or developing “new towns” at appropriate locations and present a series of options for Halton. The intention is to explore these issues at a very high level to complement the other more detailed studies looking at related issues.

## CONTEXT AND FINDINGS

The Primary Study Area is the rural area of Halton located south and east of the principal Greenbelt area that is not otherwise designated Urban in the *Halton Region Official Plan*. The Primary Study Area incorporates the Region’s Greenlands system and the “fingers” of the Province’s Greenbelt system within the area. Within the Primary Study Area, 3,000 to 4,200 ha of land need be located to accommodate the urban land need established in the Sustainable Halton land supply study.

In considering the location of urban land uses, at a regional scale the major employment areas have more specific location needs than major residential communities. Access to transportation infrastructure and proximity to large-scale infrastructure facilities are the key factors in guiding the location of future employment land areas. In addition to the already existing major transportation and infrastructure facilities in the Region, there are a number of major future transportation and infrastructure facilities. These existing and future facilities will be the major feature defining the available employment land options. Potential future transportation and infrastructure facilities include:

1. Highways QEW, 401 and 407 as may be upgraded in the future;
2. Proposed CN Intermodal facility in southwestern Milton;
3. Halton Waste Management facility and potential energy from waste facility;
4. North-south connecting highway from Highway 407 eventually connecting up with the future GTA west Economic Corridor; and
5. The potential future Economic Corridor connecting Niagara to Halton (commonly referred to as the Mid-Peninsula highway).

The future location of residential communities is determined in a much different manner. Firstly, strategic decisions must be made on all other land uses, including environmental, agricultural, resource and employment land. Secondly, the remaining lands, after all other land uses are accounted for, must then be assessed on the cost and availability of servicing the lands with necessary infrastructure. The lands not

designated for any other land use and which can be economically and adequately serviced constitute the future available residential lands. Finally, since there is likely more available and suitable land for future residential development than is needed, it must be determined whether it is appropriate to expand existing communities or to develop “new towns” at appropriate locations.

As part of the analysis, consideration is also being given to mature state development of the Region beyond 2031. If the Primary Study Area were to be entirely designated for urban uses (while accommodating a significant natural heritage system and existing non-agricultural land uses), the Region could accommodate ultimate development of about 1.1 million people and 530,000 jobs.

## **OPTIONS**

In considering the appropriate location for urban uses, it is important to distinguish between the major employment areas and the primarily residential areas. The preferred locations for employment areas are those with good accessibility and proximity to major infrastructure facilities. There are several options available in both Milton and Halton Hills for significant employment areas that fit these criteria. However, as part of the consideration of the potential mature state development of the region and recognizing the importance to the Region of achieving its economic goals, consideration should be given to protect most or all of the areas for potential employment development. This protection would provide for strategic long-term economic opportunities beyond 2031.

For the residential land need, the location options are largely determined by the other Sustainable Halton studies. In particular, choices concerning future agricultural and environmental areas in the region as well as other land uses will direct the location of future residential lands in the Primary Study Area. From an urban service perspective, infrastructure and infrastructure financing issues will also be critical to the selected lands for residential development. Part of the choice here relates to the costs of providing piped services to different geographic locations in the Region. Specific locations for future residential development will only be able to be determined through the Sustainable Halton process, once all other land uses are accounted for and infrastructure availability and costs are assessed.

However, the Region also faces choices about the degree to which new areas are expansions of existing communities versus “new towns.” New town options may have significant financial implications for both the Region and local municipalities as most physical and community infrastructure needs to be provided from “scratch” rather than building upon an existing base of municipal facilities. The geography of the Region, however, means that there is not an absolute choice between one

approach or other, but rather one of degree, balancing the various community and infrastructure needs.

For mature state development, the Region's options lie between establishing the 2031 urban boundaries as permanent (meaning an ultimate population of about 860,000) up to full urbanisation of the Primary Study Area (with an ultimate population of 1.1 million). Within this range the Region may have the option of establishing a boundary for mature state development, depending largely on the choices that may be made respecting the establishment of an agricultural land reserve and the spatial extent of a permanent natural heritage system.

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## I INTRODUCTION

In June of 2006, the Province of Ontario released the *Growth Plan for the Greater Golden Horseshoe*. The document, *Places to Grow — Better Choices, Brighter Future*, provides a framework for implementing the Provincial vision for managing growth in the Greater Golden Horseshoe (GGH) to 2031. The *Growth Plan* sets out Provincial interests and directions on many issues, including: the distribution of population and employment growth; where and how that growth will be accommodated; infrastructure requirements; and the protection of key heritage and natural resources.

Municipal official plans are required to conform to the *Growth Plan* within three years of its final release, as stipulated in both the *Greenbelt Act, 2005* and the *Places to Grow Act, 2005*. In response, the Region of Halton has initiated *The Sustainable Halton Plan*. Building upon the updated *Regional Official Plan*, *Sustainable Halton* is to be Halton's long-term growth management strategy to address the forecast growth in the Region — a near-doubling of existing population and employment by 2031.

This report is one of a series that is being prepared as part of *Sustainable Halton*, in order to conform to the Provincial *Growth Plan* and *Provincial Policy Statements* and also to meet current *Regional Official Plan* directions. The purpose of this report is to discuss potential locations for new urban areas in Halton within the Sustainable Halton Primary Study Area.<sup>1</sup> For major employment uses, the objective is to implement the Region's economic strategy based on the identified land and infrastructure needs associated with the economic potential of the Region. For residential development, the objective is to explore the potential for expanding existing communities or developing "new towns" at appropriate locations and present a series of options for Halton. The intention is to explore these issues at a very high level to complement the other more detailed studies looking at related issues. Finally, the report gives initial consideration to what mature state development, far beyond 2031, could look like and what options the Region may want to consider for mature state development.

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<sup>1</sup>Within the Region of Halton, the Primary Study Area is the rural area of Halton located south and east of the principal Greenbelt area that is not otherwise designated Urban in the Halton Region Official Plan. The Primary Study Area incorporates the Region's Greenlands system and the "fingers" of the Province's Greenbelt system within the area.



## **II FORM AND LOCATION OF NEW URBAN AREAS**

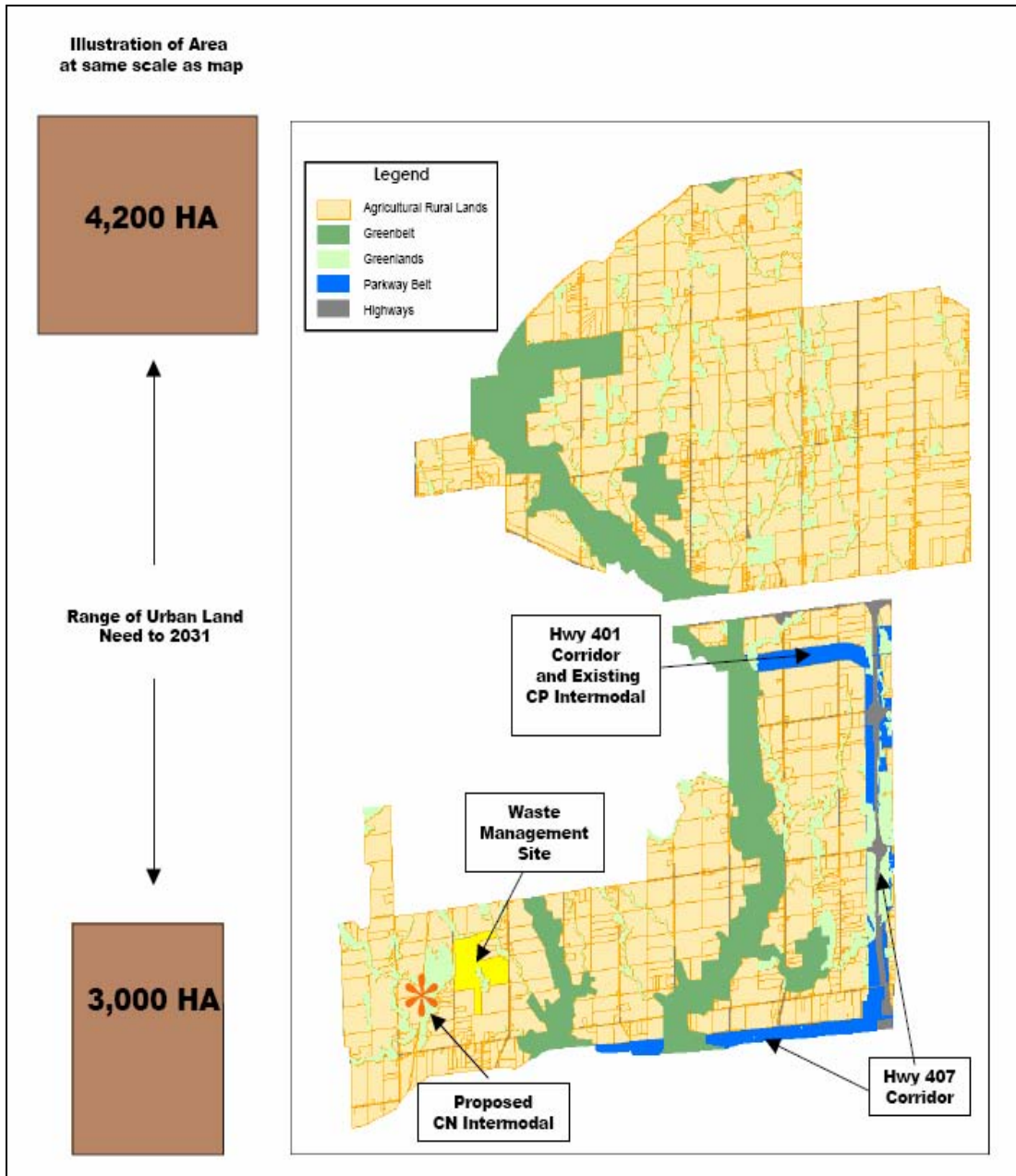
In considering the appropriate form and location of urban uses, it is important to distinguish between the major employment areas and the primarily residential areas, as well as the land that may be urbanised beyond 2031. It was concluded in the Sustainable Halton report, entitled *Land Supply Analysis: Accommodating Urban Growth in Halton*, that there is a need for additional land beyond current urban boundaries of between 3,000 to 4,200 hectares to 2031. Of this, roughly 600 hectares will be employment land while between 1,800 to 2,800 hectares will be residential land, with the remainder in other urban land uses. The only potential area in the Region for this additional urban land is the Primary Study Area. The Primary Study Area and urban land need are illustrated in the map on the following page.

As outlined in the Sustainable Halton report *Regional Land Analysis*, there are roughly 10,700 hectares of potentially developable land in the Primary Study Area. This is more than sufficient land to accommodate the forecast demand. However, the specific form and location depends on a number of factors. The remainder of this chapter discusses some of the considerations that must be made in determining the form and location of future employment and residential growth within the Primary Study Area to 2031.

### **A. OBJECTIVE FOR FUTURE EMPLOYMENT AREAS IS TO PROVIDE THE MOST COMPETITIVE LOCATIONS POSSIBLE**

There is an identified need of 600 additional hectares of employment land beyond the already designated built boundaries to 2031, to be possibly located in the Primary Study Area. The possible location of these lands is closely tied to employment's specific location needs. The form of employment lands is driven by the structure of the regional and broader economy. As a result, a number of potential locations for employment land in the Primary Study Area have been identified.

Figure 1 Future Urban Land Need in the Primary Study Area



Source: Hemson Consulting Ltd. and Region of Halton

The Region's *Comprehensive Economic Development Strategy* adopted in 2006 provides the basis for planning for future employment land need and location in Halton. The strategy is organised into a number of strategic themes. Within the *Strategic Theme of Planning for Economic Growth and Prosperity*, the following two goals provide the direction to Sustainable Halton concerning the location of major employment land areas:

Maintain an adequate supply of serviced industrial/commercial land to support economic growth. Sufficient, well-located employment land designations should be provided to accommodate the needs of Halton to 2031, providing choice, competition and flexibility in the land market.

Create strategies for non-residential, non-retail development in the key highway corridors.

#### **1. Location of Employment Land Is Driven by Access to Major Economic Infrastructure, Primarily Transportation Access**

The principle influence on the location of employment land is the need to ensure the land is as competitive as possible. A limited number of factors combine to produce competitive well-located employment land. As mentioned in the Region's recently adopted economic strategy, from a strategic perspective, transportation access and large areas are the most important factors contributing to the competitiveness, and, therefore, the location of employment land.

Significant components of Ontario's economy are made up of sectors that depend upon good transportation access. Manufacturing, trade, transportation and warehousing activities make up a large share of the provincial economy, and also dominate Halton's economic base. A large part of this economy depends on goods trade within the province, Canada and the United States. Proximity to transportation infrastructure, primarily large highways as well as airports and rail, facilitates the movement of goods. Future employment land should be located in close proximity and with exposure to the existing 400-series highways and rail corridors, as well as any future planned transportation infrastructure in the Region. Existing and possible future highway transportation corridors in the Region are:

- a) The GTA West Economic Corridor, identified in the *Growth Plan*, is proposed as a major east–west transportation corridor connecting from Highways 400
- b) or 427 in York Region across northern Peel, Halton and ultimately to Guelph and Waterloo. While the conceptual location in Halton places this corridor well north of any potential development land, it will still be a critical part of the Region's transportation infrastructure.
- c) A north–south highway corridor is also proposed to connect Highway 407 with the GTA West Economic Corridor. The location is yet to be determined, but will be near the Peel–Halton boundary either within Halton Hills or on the other side of the boundary in Brampton. In either location, it will still be an

important part of Halton's transportation infrastructure, from a strategic economic perspective.

- d) The *Growth Plan* also identifies a GTA to Niagara Economic Corridor connecting Niagara to Halton commonly known as the Mid-Peninsula Highway.
- e) The Queen Elizabeth Way (QEW) and Highways 401 and 407 are key existing corridors. All three are likely to be upgraded in the long term, with work on the QEW widening already underway.

The designation of large contiguous blocks of land is also important to the success of employment areas. This is due to the fact that such areas maximize opportunities to provide a wide range of sites in terms of size, price and ownership options. This permits flexibility in responding to changes in functional space requirements and shifts in demand for different types of employment land employment. Also, large contiguous areas can be more easily buffered from surrounding land uses, avoiding land use conflicts. To provide large contiguous blocks of land, the bulk of employment lands should not be in thin strips along highway frontages. While workable in some locations, the preferred arrangement of employment land areas would have a depth of two or more lots from the highway frontage.

Finally, other large scale infrastructure facilities may also influence the location of future employment lands. In Halton, there are two areas of interest. In southwestern Milton, on adjacent sites, are the proposed CN Intermodal facility and the Halton waste management site which includes a potential energy from waste facility. Along Highway 401, east of developed Milton, there is the CP Intermodal facility and significant hydro infrastructure, including a new generating station recently approved on the north side of Highway 401 in Halton Hills.

## **2. Form of Employment Land Is Driven by Structure of Regional Economy**

The form of the future employment lands within the Primary Study Area will likely be very similar to most employment areas currently found within the Region of Halton and the Greater Toronto Area. That is, large contiguous areas filled with mostly large-scale industrial buildings as well as some office buildings and research and development facilities. Much like the need to be close to major transportation facilities, the nature of the regional economy as a manufacturing, trade, transportation and warehousing centre will result in a considerable portion of future employment land being developed in a similar manner to what is currently found within the Region. As is the case in developed areas today, it is likely that some of the best located future employment lands will be able to be developed as office or high technology centres.

### **3. Preferred Location of Future Employment Areas Is Determined by the Need for Competitive Well-Located Land**

Taking into consideration the location requirements of competitive employment land and the likely form of such employment land, several options within the Primary Study Area for preferred employment areas have been identified and are illustrated on the map on the following page:

#### **a. Area Surrounding CN Intermodal & Halton Waste Management Site in Milton**

The area around the future CN Intermodal and Halton Waste Management site in southern Milton has existing transportation advantages in its proximity to Highway 407. If the CN Intermodal terminal is built, that would add a very significant additional transportation advantage. There may also be an opportunity here, particularly related to green industries, for a convergence of uses related to energy-efficient rail transport waste management and the possible energy from waste facility.

#### **b. Highway 401 Corridor and CP Intermodal in Milton & Halton Hills**

The Highway 401 corridor in Milton and Halton Hills is also a highly attractive location as Highway 401 remains the “main street” of Ontario’s trade economy. Future employment lands on the north and/or south side could build on the near-term development of the Halton Hill 401 frontage lands, the CP Intermodal terminal and, of course, Highway 401 itself.

#### **c. Highway 407 Corridor in Milton**

The highway frontage areas in Milton along Highway 407, both the north–south segment on the Mississauga boundary and the east–west segment on the Oakville boundary, offer attractive transportation access for employment development.

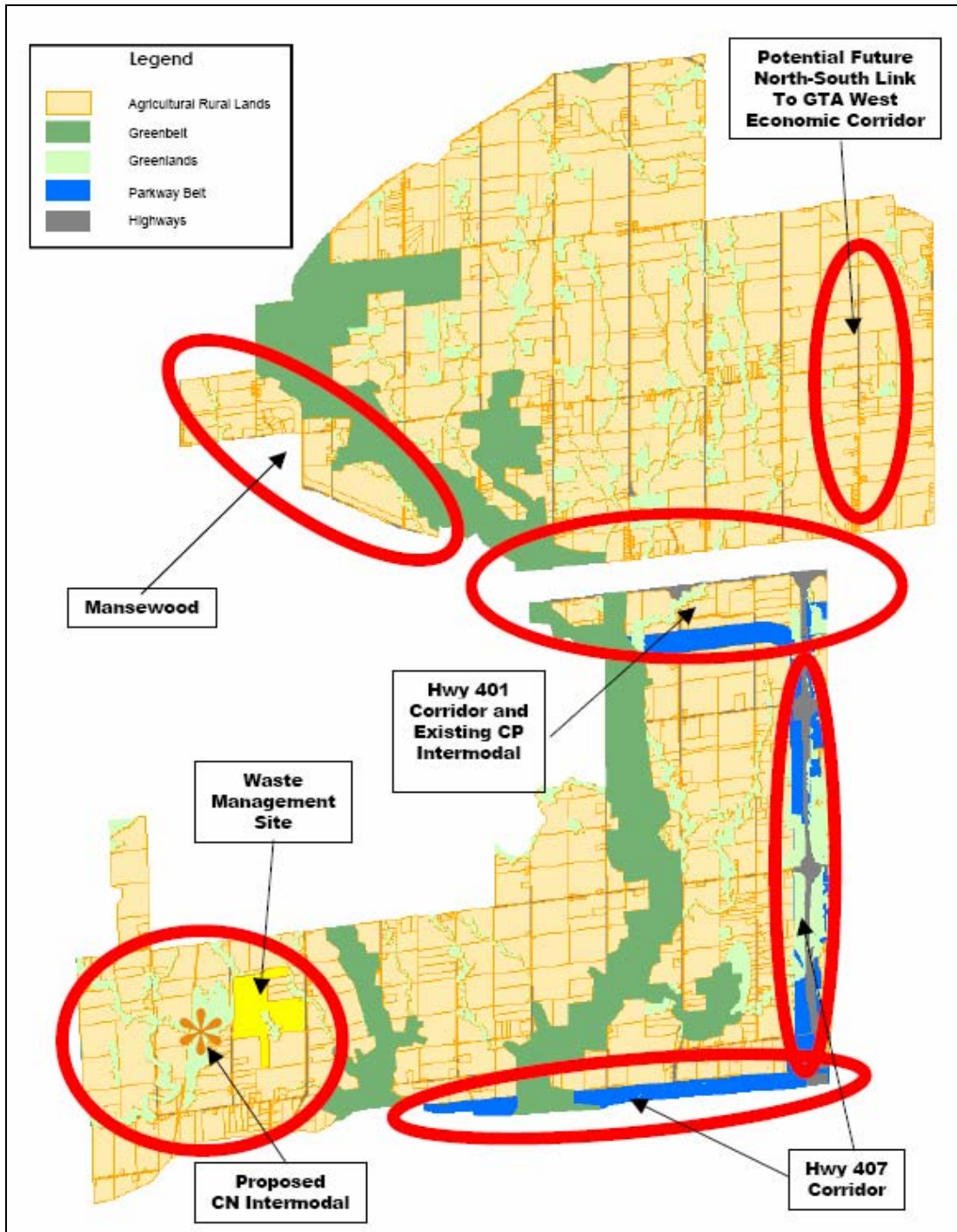
#### **d. Future North–South Link in Halton Hills**

The future north–south connector road from the GTA West corridor to Highway 407 offers long-term improved transportation access for the areas of Halton Hills, generally along the Brampton boundary.

#### **e. Mansewood in Halton Hills**

There is a small area of land in the vicinity of Mansewood in Halton Hills that lies between the Milton business park and a portion of the Greenbelt. From a planning and land use perspective, this may be a logical additional employment area to consider.

**Figure 2 Potential Future Employment Land Areas**



Source: Hemson Consulting Ltd. and Region of Halton

Taken together, lands in all of these areas would far exceed the established need for additional employment land in the period to 2031, and it is recommended that one or more of these locations be considered to meet the employment land needs to 2031. As part of a long-term strategy, it is further recommended that the other areas be considered for protection for potential employment use in the future. In the next phase of the Sustainable Halton work these potential employment areas will be more clearly delineated, based on overall land need, topography, environmental constraints, and buffers.

#### **4. Long-term Strategy to Identify and Protect for Future Major Employment Areas Is Recommended**

Among the options that Halton is recommended to consider as part of the Sustainable Halton process is the principle that most or all of these strategic employment areas be considered for possible long-term employment development (beyond those lands required for development to 2031). At this stage of the Sustainable Halton process, it is recommended that all these strategic employment areas should not be considered for residential or other urban uses.

#### **B. LOCATION OF FUTURE RESIDENTIAL AREAS LARGELY DETERMINED BY OTHER STRATEGIC DECISIONS**

The range of future residential land needs to 2031, as discussed in the *Land Supply Analysis: Accommodating Urban Growth in Halton* report, are based on how much future growth will be accommodated in already existing urban areas and how much will likely be accommodated within the Primary Study Area. At a minimum, 2,400 hectares of residential land and other related urban lands uses is likely needed within the Primary Study Area to 2031. Since the location of residential land is more flexible than most other land uses, including employment land, its location can be determined after other strategic land uses have been considered, as well as the cost and availability of necessary infrastructure. The preferred form and location of residential land, is then, dependent on a variety of policy choices.

#### **1. Location of Potential Residential Areas Is Determined Following Strategic Decisions on Other Land Uses**

The process of determining potential residential land within the Primary Study Area is much different than determining the location of potential employment areas. In order to determine the suitable land for residential development within the Primary

Study Area the location and form of all other urban uses within the Primary Study Area must first be established. The remaining lands, after other strategic land uses have been considered, represent the potential areas for future residential development. The major land uses that must be considered before determining appropriate land for residential communities include:

- a. **Environmental Lands** —The location of the natural heritage system within the Primary Study Area, including the existing Greenbelt and Regional Greenlands, will be significant in determining future residential growth patterns.
- b. **Agriculture** — Much of the Primary Study Area is comprised of lands with high agricultural capability. Most of these lands will continue to be protected for agricultural purposes in the *Halton Regional Plan* through the planning period to 2031. Preferred locations to maintain agriculture are addressed in the Sustainable Halton agricultural study.
- c. **Aggregates** — There are a number of locations within the Primary Study Area that have been identified by the Province as potential aggregate resource areas, mostly shale resources used mainly for making bricks. Those that are determined to be of importance may be protected against development for some period of time or until after the resource is extracted. The Sustainable Halton aggregate resource study addresses these issues.
- d. **Employment Lands** — The location of future employment lands, outlined in the previous section, will also influence residential development locations. Avoiding the strategic locations identified for potential future employment areas will act to restrict potential locations within the Primary Study Area for residential development.
- e. **Roads** — The location of future highways and regional roads will absorb a portion of potentially developable land. Residential locations relative to these major roads will need to be considered.

In addition to considering other competing land uses, potential urban development locations must also be assessed in terms of the cost and availability of servicing the land with necessary infrastructure. From a Regional perspective, water and wastewater servicing and transportation are most critical (as they are the most costly) in this decision. These services will necessarily be a significant part of the location decisions for any new urban areas in Halton.

Notwithstanding the other land uses and the servicing and financing issues, there are still a wide range of choices available in considering residential locations in the Primary Study Area. Only about one-third of the Primary Study Area lands would be required for urban uses under the land needs analysis, allowing a range of choices in the residential location. A number of critical policy decisions must be made to determine the preferred location(s) of future residential land within the Primary Study Area.



## 2. Future Residential Areas Are a Choice Between Expanding Existing Areas or Developing New Towns

In order to arrive at preferred location(s) of residential development within the Primary Study Area, additional critical policy decisions must be made. This is the choice between expanding existing urban areas or developing “new towns”. The expansion of existing towns would mean building upon existing settlements in Milton and Halton Hills by adding new urban lands in a suitable location immediately abutting either the Milton urban area or Georgetown. This approach of expanding existing communities was the clear policy approach in the HUSP process in the early 1990s that resulted in the expansion of existing urban areas in Milton and Oakville. For the purposes of Sustainable Halton, the development of “new towns” would mean the creation of new urban areas, separated from any existing urban communities and intended as a distinct community within the municipality.

Beyond the need to identify other major land uses and servicing potential, there are numerous other considerations related to planning, community, social preferences and finance, which will also influence the form and location of potential residential development in the Primary Study Area and the decision to accommodate future new residential development either in new towns or by expanding existing towns. Some of these include:

- f. **Growth Plan Policies:** A number of policies laid out in the *Growth Plan* relate to growth management and could potentially influence future residential growth location within the Primary Study Area. For instance, it is likely more difficult to achieve minimum density targets in a “new town” than through the expansion of existing communities, since some community facilities (arenas, high schools and libraries) will be provided within the existing community. Many such facilities occupy a lot of space with little employment, and, if all built anew in a new town, would reduce overall densities.

*Growth Plan* policies, as well as those in Halton, speak to the creation of complete communities. By integrating new communities at the edge of existing communities would, in our view, make it easier and more likely to achieve complete community than in a new town environment.

- g. **Size of Community and Amount of Land:** How much urban actual land is needed depends on density choices, and how many new development areas are preferred.
- h. **Regional Infrastructure:** The provision of critical Regional infrastructure, including water, wastewater and transportation needs to be considered, as well as identifying if there are ways to build upon existing capacity.
- i. **Municipal Infrastructure:** The provision of local municipal infrastructure is more critical to the “new town” decision as most of the local services are of the

type where there could be significant advantages to building on existing infrastructure, rather than having to start from “scratch” for parks, recreation, libraries, fire services and local transit, to name a few.

- j. **Role of Downtown:** The role of existing downtowns also needs to be considered. Should existing downtowns remain, in an expanded form, the significant locations of retail and community services, or should new areas be developed to provide many of the services required by new populations? And, can the existing downtowns even be expanded to provide these services or are they becoming too distant from new areas?
- k. **Transportation:** The dependence on the automobile and public transit is a major policy challenge. The ability to shift transportation preferences may be related to the “new town” decision, but also to the location of trunk transit services.
- l. **Public Desire and Willingness:** The desire of existing communities and their residents to accommodate some growth and where they would prefer growth to be accommodated.
- m. **Separate Versus Contiguous Urban Areas:** Whether there is a desire to have the major urban areas separated by some form of natural feature, such as a park or greenbelt, or whether they should be contiguous. For example, is it desirable to have Milton nearly contiguous with Oakville or is there a desire for a separation wider than the greenbelt along this boundary area?

Determining the preferred locations for residential development in the Primary Study Area through balancing all of the considerations listed above as well as the issues in all of the other Sustainable Halton background reports will constitute much of the further work in the Sustainable Halton process.

### **III THE REGION SHOULD BEGIN TO PLAN FOR MATURE STATE DEVELOPMENT**

The majority of this report has focussed on potential future residential and employment land development within the Primary Study Area to 2031. However, in order to make sound decisions about the Region for a 2031 time horizon, consideration should also be given to planning beyond 2031 to a mature state. Since the Primary Study Area is the only remaining potentially developable land area in the Region, it is critical that land use decisions made today consider some strategic matters of how the growth beyond 2031 may be managed. Ultimately, the decisions made on how and where to accommodate growth to 2031 will have a considerable impact on growth management beyond 2031 (just as decisions made in the HUSP

process in the 1990s influenced the range of choices in Sustainable Halton). The recommended strategy to reserve lands in strategic employment land areas from other urban uses is one of those decisions that will affect the post-2031 character of Halton.

The intention here is to give consideration to a potential mature state for the Region as part of the comprehensive Sustainable Halton process. In terms of actual implementation, any *Halton Regional Plan* amendments arising from conformity to the *Growth Plan* would only be for the 2031 time horizon.

Options for mature state development for the Region largely relate to the ultimate status of the Primary Study Area lands. The Region's options will ultimately lie between establishing the 2031 urban boundaries as permanent, meaning an ultimate population of about 860,000 and employment of 430,000, up to the urbanization of the entire developable area of the Primary Study Area and only minimum land set aside for natural heritage, with an ultimate population of about 1.1 million and employment of 530,000. While there are numerous possible scenarios that fall within this range, three other scenarios between the two extremes have been tested. The five scenarios are the following:

- Scenario 1: All of Primary Study Area designated urban with a minimum (25%) Natural Heritage System (existing Greenbelt and Regional Greenlands).
- Scenario 2: All of Primary Study Area designated urban with a recommended (30%) Natural Heritage System (including existing Greenbelt and Regional Greenlands).
- Scenario 3: After accounting for recommended (30%) Natural Heritage System, the remaining 70% of lands allocated as 25% rural and 45% urban.
- Scenario 4: After accounting for recommended (30%) Natural Heritage System, the remaining 70% of lands allocated as 35% rural and 35% urban.
- Scenario 5: After accounting for recommended (30%) Natural Heritage System, the remaining 70% of lands allocated as 45% rural and 25% urban. This approximates the upper end of the range of urban land need identified in the Sustainable Halton land supply report of 3,000 to 4,200 ha of new urban land.

Detailed summaries of all five scenarios tested are provided in Appendix A. Table 1 provides a summary of the land analysis and the development potential of the five scenarios tested. For the minimum NHS in Scenario 1, the 16,800 hectares total

area less 25% NHS (4,100 hectares) leaves 12,700 hectares to consider for other designations. For the recommended NHS in Scenarios 2 through 5, the 16,800 hectares total area less 30% NHS (5,000 hectares) leaves 11,800 hectares to consider for other designations.

The total population and employment shown in Table 1 is at an “ultimate” development, including all existing and currently planned development in the Region.

Within this range the Region can consider options of trying to establish permanent urban boundaries for mature state development at the boundaries designated for growth to 2031, up to the eventual urbanization of the entire developable area within the Primary Study Area. As discussed in the previous chapter, in terms of employment land planning for mature state development means that all strategic employment areas should not be considered for residential or any other urban uses. For residential development, similar to the choices having to be made for growth to 2031, mature state development is largely dependent on the choices that may be made respecting the establishment of an agricultural land reserve and the spatial extent of a permanent natural heritage system.

<b>Table 1 Alternative Options for the Primary Study Area</b>	
Scenario 1: All of Primary Study Area Designated Urban with Minimum (25%) NHS	
Remaining Lands in Primary Study Area after NHS (ha) Share Designated Urban	12,700 100%
Total Region Population Total Region Employment Regional Activity Rate at Ultimate Development	1,120,000 560,000 50%
Scenario 2: All of Primary Study Area Designated Urban with Recommended (30%) NHS	
Remaining Lands in Primary Study Area after NHS (ha) Share Designated Urban	11,800 100%
Total Region Population Total Region Employment Regional Activity Rate at Ultimate Development	1,090,000 550,000 50%
Scenario 3 : Land Use in Primary Study Area is 30% NHS, 25% Rural and 45% Urban	
Remaining Lands in Primary Study Area after NHS (ha) Share Designated Urban	11,800 100%
Total Region Population Total Region Employment Regional Activity Rate at Ultimate Development	960,000 480,000 50%
Scenario 4 : Land Use in Primary Study Area is 30% NHS, 35% Rural and 35% Urban	
Remaining Lands in Primary Study Area after NHS (ha) Share Designated Urban	11,800 100%
Total Region Population Total Region Employment Regional Activity Rate at Ultimate Development	910,000 460,000 50%
Scenario 5 : Land Use in Primary Study Area is 30% NHS, 45% Rural and 25% Urban	
Remaining Lands in Primary Study Area after NHS (ha) Share Designated Urban	11,800 100%
Total Region Population Total Region Employment Regional Activity Rate at Ultimate Development	860,000 430,000 50%

#### **IV OPTIONS FOR SUSTAINABLE HALTON URBAN STRUCTURE**

In considering the appropriate location for urban uses, it is important to distinguish between the major employment areas and the primarily residential areas. The preferred locations for employment areas are those with good accessibility and proximity to major infrastructure facilities. There are several options available in both Milton and Halton Hills for significant employment areas that fit these criteria. However, as part of the consideration of the potential mature state development of the region and recognizing the importance to the Region of achieving its economic goals, consideration should be given to protect most or all of the areas for potential employment development. This protection would provide for strategic long-term economic opportunities beyond 2031.

For the residential land need the location options are largely determined by other land uses. In particular, choices concerning future agricultural and environmental areas in the region as well as other land uses will direct the location of future residential lands in the Primary Study Area. From an urban service perspective, infrastructure and infrastructure financing issues will also be critical to the lands selected for residential development. Part of the choice here relates to the costs of providing piped services to different geographic locations in the Region. Specific locations for future residential development can only be determined through the Sustainable Halton process, once all other land uses are accounted for and infrastructure availability and costs are assessed.

However, the Region also faces choices about the degree to which new areas are expansions of existing communities versus “new towns.” New town options may have significant financial implications for both the Region and local municipalities as most physical and community infrastructure needs to be provided from “scratch” rather than building upon an existing base of municipal facilities. The geography of the Region, however, means that there is not an absolute choice between one approach or another, but rather one of degree, balancing the various community and infrastructure needs.

For a mature state, Halton could consider establishing the 2031 urban boundaries as permanent (meaning an ultimate population of about 860,000) up to full urbanisation of the Primary Study Area (with an ultimate population of 1.1 million). Within this range the Region may have the option of establishing boundaries for mature state development, depending largely on the choices that may be made respecting agricultural lands and the spatial extent of a permanent natural heritage system.

## APPENDIX A

**OPTIONS FOR MATURE STATE DEVELOPMENT**

<b>Scenario 1: All of Primary Study Area Designated Urban with Minimum (25%) NHS</b>	
Total Land in the Primary Study Area (ha)	16,800
Less Natural Heritage System of 25% (ha)	4,120
Remaining Lands in Primary Study Area	12,680
Share of Remaining Lands Developed (including share of existing land uses)	100%
Land Area Developed (ha)	12,680
Residential Use (57%)	7,190
Employment Use (23%)	2,950
Other Urban Uses (20%)	2,540
<u>Residential Development</u>	
Housing Units (21 uph gross)	151,000
Mature Population in Primary Study Area	405,000
<u>Employment Development</u>	
Employment Land and Major Office Employment	105,000
Population Related Employment	49,000
Total Employment in Primary Study Area	154,000
<u>Ultimate Population for Region</u>	
Existing Area Mature Population (Based on 30% intensification Scenario)	720,000
Mature Population in Primary Study Area	405,000
Total	1,125,000
<u>Ultimate Employment for Region</u>	
Existing Area Mature Employment	408,000
Mature Employment in Primary Study Area	154,000
Total	562,000
Regional Activity Rate at Ultimate Development	50%

<b>Scenario 2: All of Primary Study Area Designated Urban with Recommended (30%) NHS</b>	
Total Land in the Primary Study Area (ha)	16,800
Less Natural Heritage System of 25% (ha)	5,040
Remaining Lands in Primary Study Area	11,760
Share of Remaining Lands Developed (including share of existing land uses)	100%
Land Area Developed (ha)	11,760
Residential Use (57%)	6,690
Employment Use (23%)	2,720
Other Urban Uses (20%)	2,350
<u>Residential Development</u>	
Housing Units (21 uph gross)	141,000
Mature Population in Primary Study Area	375,000
<u>Employment Development</u>	
Employment Land and Major Office Employment	97,000
Population Related Employment	45,000
Total Employment in Primary Study Area	142,000
<u>Ultimate Population for Region</u>	
Existing Area Mature Population (Based on 30% intensification Scenario)	720,000
Mature Population in Primary Study Area	375,000
Total	1,095,000
<u>Ultimate Employment for Region</u>	
Existing Area Mature Employment	405,000
Mature Employment in Primary Study Area	142,000
Total	547,000
Regional Activity Rate at Ultimate Development	50%



<b>Scenario 3 : Land Use in Primary Study Area is 30% NHS, 25% Rural and 45% Urban</b>	
Total Land in the Primary Study Area (ha)	16,800
Less Natural Heritage System of 25% (ha)	5,040
Remaining Lands in Primary Study Area	11,760
Share of Remaining Lands Developed (including share of existing land uses)	45%
Land Area Developed (ha)	7,560
Residential Use (58%)	4,360
Employment Use (22%)	1,690
Other Urban Uses (20%)	1,510
<u>Residential Development</u>	
Housing Units (21 uph gross)	91,000
Mature Population in Primary Study Area	245,000
<u>Employment Development</u>	
Employment Land and Major Office Employment	61,000
Population Related Employment	29,000
Total Employment in Primary Study Area	90,000
<u>Ultimate Population for Region</u>	
Existing Area Mature Population (Based on 30% intensification Scenario)	720,000
Mature Population in Primary Study Area	245,000
Total	965,000
<u>Ultimate Employment for Region</u>	
Existing Area Mature Employment	392,000
Mature Employment in Primary Study Area	90,000
Total	482,000
Regional Activity Rate at Ultimate Development	50%

<b>Scenario 4 : Land Use in Primary Study Area is 30% NHS, 35% Rural and 35% Urban</b>	
Total Land in the Primary Study Area (ha)	16,800
Less Natural Heritage System of 25% (ha)	5,040
Remaining Lands in Primary Study Area	11,760
Share of Remaining Lands Developed (including share of existing land uses)	35%
Land Area Developed (ha)	5,880
Residential Use (57%)	3,420
Employment Use (23%)	1,280
Other Urban Uses (20%)	1,180
<u>Residential Development</u>	
Housing Units (21 uph gross)	72,000
Mature Population in Primary Study Area	190,000
<u>Employment Development</u>	
Employment Land and Major Office Employment	46,000
Population Related Employment	23,000
Total Employment in Primary Study Area	69,000
<u>Ultimate Population for Region</u>	
Existing Area Mature Population (Based on 30% intensification Scenario)	720,000
Mature Population in Primary Study Area	190,000
Total	910,000
<u>Ultimate Employment for Region</u>	
Existing Area Mature Employment	387,000
Mature Employment in Primary Study Area	69,000
Total	456,000
Regional Activity Rate at Ultimate Development	50%

<b>Scenario 5 : Land Use in Primary Study Area is 30% NHS, 45% Rural and 25% Urban</b>	
Total Land in the Primary Study Area (ha)	16,800
Less Natural Heritage System of 25% (ha)	5,040
Remaining Lands in Primary Study Area	11,760
Share of Remaining Lands Developed (including share of existing land uses)	25%
Land Area Developed (ha)	4,200
Residential Use (59%)	2,490
Employment Use (21%)	870
Other Urban Uses (20%)	840
<u>Residential Development</u>	
Housing Units (21 uph gross)	52,000
Mature Population in Primary Study Area	140,000
<u>Employment Development</u>	
Employment Land and Major Office Employment	31,000
Population Related Employment	17,000
Total Employment in Primary Study Area	48,000
<u>Ultimate Population for Region</u>	
Existing Area Mature Population (Based on 30% intensification Scenario)	720,000
Mature Population in Primary Study Area	140,000
Total	860,000
<u>Ultimate Employment for Region</u>	
Existing Area Mature Employment	382,000
Mature Employment in Primary Study Area	48,000
Total	430,000
Regional Activity Rate at Ultimate Development	50%