Appendix A

Land Needs Assessment

February 2022

Regional Official Plan Review

HEMSON

Halton REGION

PREPARED BY HEMSON FOR THE REGION OF HALTON

PREFERRED GROWTH CONCEPT

LAND NEEDS ASSESSMENT

January 2022

The January 2022 Land Needs Assessment is part of the February 2022 reporting to Halton Regional Council on the Preferred Growth Concept. It will be revised, as necessary, for submission to the Province in conjunction with an implementing Regional Official Plan Amendment in 2022.

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GLOSSARY

Additional DGA Apartments (Greenfield Intensification) — apartments accommodated within the existing DGA beyond the small proportion of units normally expected in greenfield areas. The anticipated growth within the DGA does not exceed the number of units already planned for these areas. This additional greenfield high-density mixed-use development can all be accommodated with the existing supply potential, mainly in the planned greenfield Strategic Growth Areas. While the same type of development, these units do not count towards the Growth Plan's intensification target within the Delineated Built-Up Area.

Community Area – urban area where housing and population is accommodated, along with most population-related jobs, some major office employment and may include a small number of employment land jobs. Community areas maybe within the Delineated Built-Up Areas and Designated Greenfield Areas (as defined by the 2020 Land Needs Assessment Methodology).

Delineated Built-Up Area (DBUA) – formerly referred to as the Built-Up Area, but now known as the Delineated Built-Up Area, is defined by the Ministry of Municipal Affairs and Housing through the Growth Plan for the purposes of setting minimum intensification targets and reflects the DBUA as it was in 2006.

Densification – in the Halton IGMS, the term refers to the "Intensification" within the Delineated Built-Up Area plus the "Additional DGA Apartments (Greenfield Intensification)".

Employment Areas – Employment Areas are now required to be delineated in the Regional Plan and includes areas existing or planned exclusively for employment uses and mainly accommodate employment land employment jobs (i.e. employment in industrial-type buildings), as well as a substantial number of major office jobs. Employment Areas may be located in both Delineated Built-Up Areas and Designated Greenfield Areas.

Existing Designated Greenfield Area (DGA) – all urban designated lands not in the DBUA are in the Existing DGA, which includes all approved urban Community Area or Employment Area lands. In Halton, these are the lands are currently planned to accommodate a significant amount of the development to 2031 in the Region's Official Plan.

Intensification – references growth in the Delineated Built-Up Area, as defined on the Growth Plan. Unless seeking an alternative target, Municipalities must plan for a minimum of 50% of housing growth to occur within the Delineated Built-Up Area, up from the 40%

intensification rate that is in the current Regional Plan as was required by earlier Growth Plan policies.

New Designated Greenfield Area (DGA) – future Community Area or Employment Area lands that may be designated for development in order to accommodate some of the Region's growth to 2051 by expanding the area within the Region's urban boundary.

Preferred Growth Concept – the growth concept proposed as the basis for a Regional Official Plan Amendment to implement a strategy to accommodate growth to the 2051 planning horizon as part of the Region's Municipal Comprehensive Review (MCR) process. The Preferred Growth Concept (February 2022) is an updated version to the November 2021 Draft Preferred Growth Concept with revisions mainly based on consultation with local municipalities.

Rural Areas – all lands that are not within the urban designated areas of the Region. Rural areas include agricultural and natural areas as well as the housing and employment uses that occur in hamlets, rural settlements, estate residential subdivisions and other lots throughout the rural area.

EXECUTIVE SUMMARY

This Land Needs Assessment (LNA) is one of several reports that form part of Hemson Consulting's retainer with the Region of Halton to prepare background studies to support the Integrated Growth Management Strategy (IGMS) component of Halton's Official Plan update. The Region has completed a detailed assessment of five Growth Concepts which examined different rates of intensification and density throughout the Region. These Growth Concepts were evaluated and were made available for public consultation, resulting in the development of an initial Draft Preferred Growth Concept in November 2021. The Preferred Growth Concept (February 2022) is an updated version to the November 2021 Draft Preferred Growth Concept (November 2021) with revisions mainly based on consultation with local municipalities.

This report determines the land needs for the Region to accommodate population and employment forecasts to 2051 as it relates to the Preferred Growth Concept, which aligns with the forecasts contained in Schedule 3 to the Provincial growth management plan *A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019* (the Growth Plan).

The Land Needs Assessment uses a methodology prescribed by Growth Plan policy 2.2.1.5 and considers regional and local market trends, the demand for housing, lands required for employment activities, the Region's and local municipal current land supply, and the policy requirements of the Growth Plan.

Urban land needs are determined for two types of geography as defined in the Land Needs Assessment Methodology:

> **Community Area**, urban area where housing and population is accommodated, as well as most population-related jobs, some office employment and may include a small number of employment land jobs. Community areas include Delineated Built-Up Area (DBUA) and Designated Greenfield Areas (DGA), as defined by the Growth Plan and the 2020 Land Needs Assessment Methodology.
>
> **Employment Area,** which includes areas planned exclusively for employment uses and that mainly accommodate employment land employment jobs (i.e. employment in industrial-type buildings), as well as a substantial number of major office jobs. Employment Areas may be located in both the DBUA and the DGA.

The Community Area additional land need is determined by the amount of total housing development that can be accommodated within the existing designated urban area both through intensification and through the development of the remaining supply of greenfield lands that is already designated in the Region. Over the 30-year planning period, it is proposed that 45% of all housing be intensification within the existing Delineated Built-Up Area. In addition, it is proposed that about 13% of all housing growth be apartment development planned mainly for mixed-use, higher density, transit oriented nodes and corridors, just like intensification, but with the DGA area. In this report, this development is described as "densification." The Trafalgar Corridor in North Oakville and the Education Village in Milton are examples. As a result a total of nearly 60% of housing growth is proposed to be intensification or densification. The remaining 40% of development would be mainly ground-related housing occurring in the existing and new DGA areas. Using of the supply potential for the existing DGA takes about 25% of all development leaving approximately 15% of housing development proposed for new urban DGA areas.

To accommodate this 15% of growth, the Region requires approximately 1,120 hectares of developable land to be added to the urban area as Community Area. The 1,120 hectares of Community Area is proposed to be allocated as 710 hectares in Milton and 410 hectares in Halton Hills. 1,070 hectares of Community Area are justified by the needs for residential communities and supporting services at 65 persons plus jobs per hectare. The Town of Halton Hills has requested the additional 50 hectares to accommodate a number of town-wide community uses such as a community park and a possible hospital site.. Halton Hills 410 hectares of community area land is made up of about 360 hectares of regular community area, plus the addition of approximately 50 hectares. This land need has the added benefit allowing for logical boundaries for the area using roads and existing lot lines.

Employment growth is accommodated in both Community Area and Employment Area. Employment that occurs in the Community Area includes the vast majority of institutional and commercial uses and some of the Major Office employment. In 2021 the Community Area is estimated to accommodate about 124,000 jobs in the Region or 45% of total employment. The Rural Area of the Region has about 8,800 jobs or 3% of the total. Growth in the Community Area jobs to 2051 and the associated land need is determined as part of Community Land need calculations; it is the jobs part of the persons plus jobs per hectare measure in the DGA. Of the 103,000 Community Area job growth from 2021 to 2051, 99,000 would be accommodated in existing designated areas and 4,000 in the new Community Area Lands.

In 2021, the remaining 146,000 jobs in the Region are in Employment Areas. Employment Areas will accommodate about 118,000 employment growth from 2021 to 2051 within which 43,000 would be Major Office employment which consumes very little and the other 75,000 would be the more land extensive employment land employment. About two-thirds of these jobs can be accommodated through growth on existing vacant designated employment land, both within the DBUA and the DGA Employment area. The other third or about 24,000 jobs would need to be on new Employment Area lands amounting to 1,070 hectares of developable land area by 2051. for the 1,070 hectares of Employment Area (670 ha in Milton and 400 ha in Halton Hills). The total 2,190 hectares is needed in order to accommodate population and employment growth to 2051 under Schedule 3 to the Growth Plan.

Given there is virtually no potential for additional urban lands in Burlington or Oakville, urban boundary expansions are proposed to be located in Milton and Halton Hills. The appendices of this report details the land need and population and employment allocations to the Region's four local municipalities.

1. INTRODUCTION

In February 2021, the Region released the *Integrated Growth Management Strategy (IGMS) Growth Concepts Discussion Paper.* This report included a detailed assessment of four Growth Concepts – which represented a continuation of the work completed as part of the *IGMS Growth Scenario: Halton Region to 2041* report which examined eight growth scenarios. Following the release of the IGMS Growth Concepts Discussion Paper, a fifth Growth Concept was introduced and made available for public consultation.

Appendix A of the *IGMS Growth Concepts Discussion Paper* included a general land needs assessment (LNA) of Community Area and Employment Area needs arising from each Growth Concept. The LNA found in that report provided details on historical population, household and employment growth by concept and local municipality.

Following the public release of the *IGMS Growth Concepts Discussion Paper*, the Region consulted with the public, development industry stakeholders and local municipalities. Arising from this consultation, an initial Draft Preferred Growth Concept was prepared in November 2021 and a revised version prepared in February of 2022 after consultation with the local municipalities. This report provides the land needs assessment required by policy 2.2.1.5 of the Growth Plan.

A. POLICY CONTEXT AND LEGISLATIVE REQUIREMENTS

1. Legislative Requirements

This report provides the information required by the Province to address the LNA Methodology and will be submitted to the Ministry of Municipal Affairs and Housing (MMAH) as part of the Region's Municipal Comprehensive Review (MCR) process.

The LNA Methodology introduces important changes to the municipal land needs assessment process including:

- housing supply and demand be explicitly analyzed in terms of total housing and housing by type;
- market contingency factors be considered in the determination of available land supply; and

- that a “market-based supply of housing” be provided to the extent possible in determining lands required to accommodate growth while achieving Growth Plan policy targets.

Accordingly, this report sets out the approach used to determine the land needs for the Region to accommodate the Schedule 3 population and employment forecasts to 2051 under the Preferred Growth Concept. The approach considers Regional and local market trends, the demand for housing and land for the exclusive use of employment activities, the current land supply, and the policy requirements of the Growth Plan.

Ultimately, policy 5.2.4 of the Growth Plan requires that the Region will, at minimum, apply the forecasts in Schedule 3. The methodology for assessing land needs to implement Schedule 3, including relevant assumptions, is outlined in the LNA Methodology. The methodology will be used by upper- and single-tier municipalities to assess the quantity of land required to accommodate forecasted growth to the horizon of the Growth Plan (policy 2.2.1.5).

The LNA Methodology requires that the Region’s population forecast be translated into a forecast of households. To do this, the Methodology prescribes the use of age-specific household formation rates to determine household growth and then further determine growth in housing by dwelling unit type. Region-wide population, households, and housing are then distributed to the local municipalities and the policy areas within each.

Urban land needs in the Region are then determined for two types of geography (as defined by the LNA Methodology): Community Areas and Employment Areas. Figure 1 and 2 below provides a schematic overview of the approach required by the Methodology to complete the land needs assessment for these two land areas.

Figure 1: Components for Determining Community Area Land Need

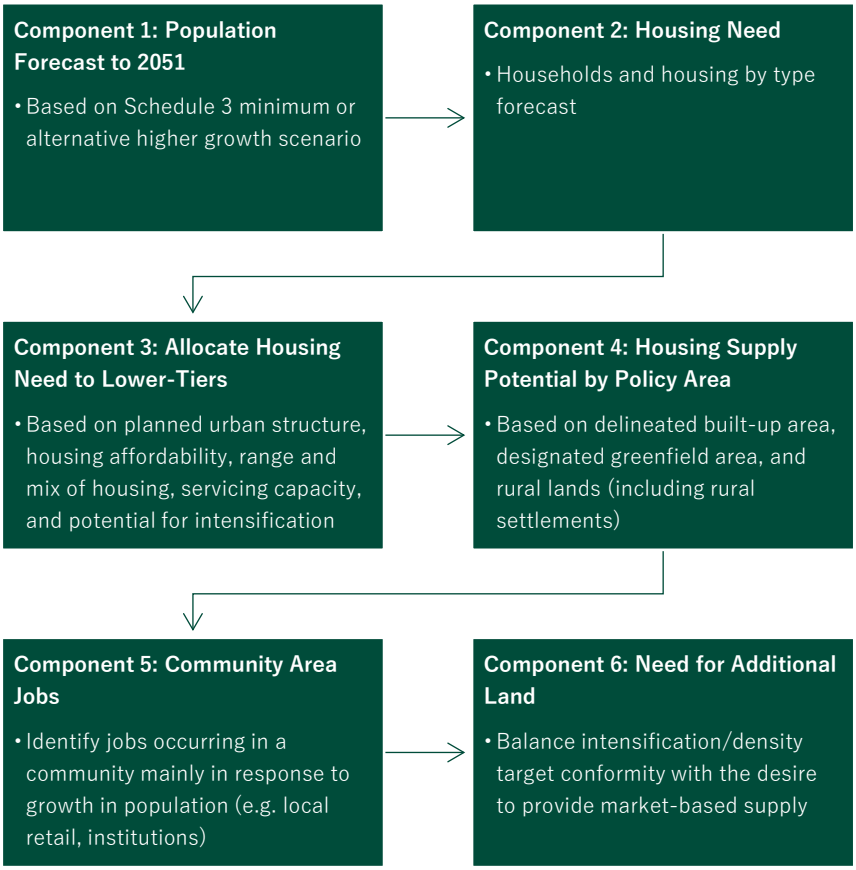
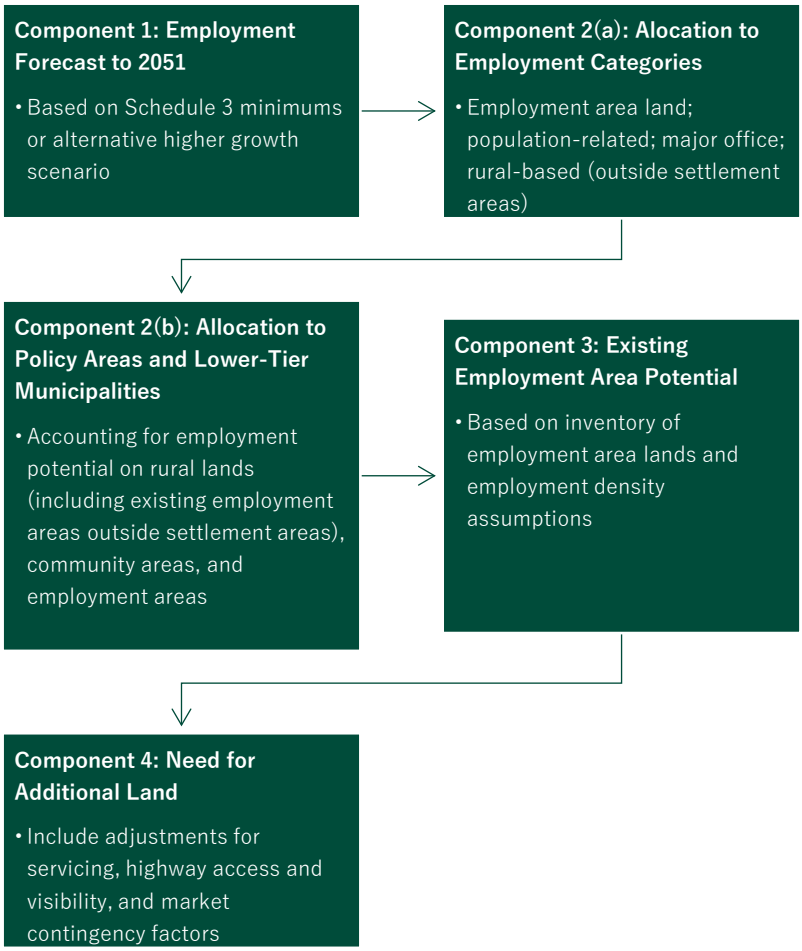


Figure 2: Components for Determining Employment Area Land Needs



The purpose of the LNA is to determine whether the Region has sufficient urban land to accommodate the Schedule 3 population and employment growth to 2051 within the approved settlement area boundary consisting of the built-up area (DBUA) and existing designated greenfield area (DGA). Should the analysis reveal a deficiency in Community and/or Employment Area land, the Region will need to consider ways to accommodate the growth including:

- through reconsideration of planned density and intensification;
- consideration of whether any lands in Employment Areas may be appropriate for conversion to non-employment uses to satisfy Community Area land needs (increasing the Employment Area land need); or
- a settlement area boundary expansion may be warranted.

As part of the MCR and through the IGMS, the scenarios and concepts tested the ranges of density and intensification as well as considering Employment Area conversions. This report is the conclusion of those analyses which support the direction of a significant proportion of Halton's growth to existing urban areas while recommending an expansion of the urban area to accommodate additional growth in both Community Area and Employment Area lands."

The LNA Methodology and the PPS Require Consideration of a "Market-Based" Supply of Housing

The need for land in Community Areas is driven by the demand for housing, mainly ground-related housing (singles, semis and rows), as apartments take up relatively little land and most are accommodated within the existing Urban Area, which is comprised of the DBUA and existing DGA. The implementation of Growth Plan policies requires the Region to plan for a shift in current housing mix and pattern so that:

- More growth is accommodated within the DBUA (where the vast majority of new units are apartments in medium and high density forms),
- Higher levels of intensification are intended to reduce the amount of new DGA land required for housing (typically DGA development is nearly all ground-related housing with a limited number of apartment buildings developed, at least during the first decades of development)[1]; and
- There is a significant share of higher density housing types, in addition to the ground-related housing so that the overall housing supply can accommodate a full range and diverse mix of household types and household sizes. Planning for a wider variety of housing in Halton is a key element of the Growth Plan vision (policy 1.2).

At the same time, the needs of the local population to have a full range of housing types available (the expected market-based demand) must be considered in assessing Community Area land needs.

Taken together, these policies require the Region to plan to shift the pattern of housing growth from the predominantly ground-related forms that have characterized Halton in the

[1] In the Halton context, high density development is directed to the Region's Strategic Growth Areas (e.g., Urban Growth Centres, Major Transit Station Areas, Nodes and Corridors etc.) a significant proportion of which are located within the existing DGA. In addition, the Region, when designated future Community Areas, ensures that "complete communities" as defined by the Growth Plan, are provided.

past, while also considering local market demand where most of the household growth continues to be in family households who favour ground-related units. The balancing of these interests is the most difficult matter to approach in the LNA, even though it is not precisely an LNA Component in itself.

2. Growth Plan Requires More Compact Built Form, Higher Density Housing, and Shifts in Transportation Mode Split

The Growth Plan emphasizes that the Schedule 3 forecasts be accommodated in "**complete communities**". Among other things, complete communities provide a full range of housing to accommodate a range of incomes and household sizes and support greenhouse gas emissions reductions (contributing to climate change) by planning for increased modal share of transit and active transportation and by building more of the community at transit-supportive densities in compact built form (section 2.1). To support **complete communities**, housing in the Region is to be:

- Diversified overall (section 2.2.6.2 d).
- Delivered in compact greenfield communities (section 2.1).
- Concentrated so that it supports a more diverse range and mix of housing options (section 2.1). In this regard:
    - Special emphasis is placed on providing higher-density housing options to address the challenge of housing affordability for smaller households; and
    - Higher density housing that can accommodate a range of household sizes in locations that can provide access to transit and other amenities.
- The Region must also consider tools to require that multi-residential development incorporate a mix of unit sizes to accommodate a diverse range of household sizes and incomes (section 2.2.6.4). This policy is a clear expression of the Growth Plan's intention to encourage a shift in housing market preference through planning policy and market incentives.

The Growth Plan also emphasizes an "intensification first" approach to development which focusses less on continuously expanding the urban area and more on optimizing the existing urban land supply. To support this approach, the Growth Plan prescribes minimum intensification and density targets for the Region:

1. A minimum intensification rate of 50% of all residential development occurring annually within the delineated DBUA;

2. A minimum density of 50 residents and jobs combined per hectare in the DGA; and

3. Minimum Density targets for the Region's Urban Growth Centres (UGCs in Downtown Burlington, Downtown Milton, and Midtown Oakville) and Major Transit Station Areas (MTSAs) on a Priority Transit Corridor (Lakeshore GO line from Oakville to Burlington GO station).

The Growth Plan encourages the Region, through its MCR, to go beyond the minimum intensification and density targets, where appropriate, except where doing so would conflict with other Provincial plans and policies (section 5.2.5.1). The Growth Plan (policy 2.2.2.4) also permits Councils to request an alternative target, demonstrating that the intensification target cannot be achieved and that the alternative target will be appropriate given the size, location and capacity of the DBUA.

Growth Plan Intensification Target for Built-Up Area and Density Target for Designated Greenfield Areas

The new minimum intensification target at 50% is higher than the 40% specified in the 2006 Growth Plan. The DGA density target appears as the same 50 persons plus jobs per hectare as in the 2006 Growth Plan. However, in 2017 the method of calculation changed so that Employment Areas are no longer included in the DGA density. Because Employment Areas have lower average densities, the previous 50 persons plus jobs per hectare density is now equivalent to about 60 to 65 persons plus jobs per hectare. The minimum standard in the new Growth Plan is much lower than the prior minimum density target.

Complete communities are also to be achieved through targeted infrastructure investments. For example, the Growth Plan promotes alternatives to the automobile by requiring that the Region develop policies to increase the modal share of transit and active transportation (section 3.2.2.4). Transit is to be the Region's first priority for transportation planning and investment (section 3.2.3.1) and transit-supportive development, particularly in Priority Transit Corridors and MTSAs. Other infrastructure, including public service facilities, is to be integrated with transit planning (section 3.2.8). In this way housing, as well as jobs, schools, cultural, and recreational opportunities can access the transportation network through a variety of transportation modes (section 3.2.2.2 d). Moreover, travel times, especially commuting distances, are to be kept to a minimum.

3. Market Demand Consideration in the LNA Is also Given Authority from the Provincial Policy Statement

In addition to the Growth Plan, Provincial planning policies, to which the Region of Halton and the local municipalities must be consistent with, are in the Provincial Policy Statement (PPS). As shown in Table 1 below, the new 2020 PPS notes the following, among other references to the market.

Table 1: Provincial Policy Statement – Market Housing Considerations

SECTION	PROVINCIAL POLICY STATEMENT POLICY
1.1.1	Healthy, liveable and safe communities are sustained by… accommodating an appropriate affordable and market-based range and mix of residential types (including single-detached, additional residential units, multi-unit housing, affordable housing and housing for older persons)…
1.1.3.8	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 and only where it has been demonstrated that: sufficient opportunities to accommodate growth and to satisfy market demand are not available through intensification, redevelopment and designated growth areas to accommodate the projected needs over the identified planning horizon…
1.4.3	Planning authorities shall provide for an appropriate range and mix of *housing options* and densities to meet projected market-based and affordable housing needs of current and future residents of the *regional market area* …

Notwithstanding Growth Plan policies that aim to shift the Regional housing market towards more apartment development, the PPS also requires sufficiency of supply reflecting market demand and the anticipated needs of the households in the communities in Halton. In managing growth, flexibility is given to Regional Council to respond to local needs and market demand in planning for housing. In this way, the Growth Plan requires that any shift in housing patterns influenced by planning policy not jeopardize the overriding goal to accommodate, at a minimum, the Schedule 3 population forecast.

The Ministry of Municipal Affairs and Housing has made quite clear in some other Greater Golden Horseshoe (GGH) municipalities that the market-based housing supply is to be

given significant weight in the MCR processes currently underway and that a desire to avoid settlement area expansions is not a sufficient basis to supersede need for a range of housing types in market.

The LNA Methodology provides additional direction on how to balance policy-induced market shifts with market demand, while acknowledging the necessity to adjust housing projections to meet Growth Plan policy targets. The Methodology states that providing a market-based supply of housing while conforming to the Plan and its minimum intensification and density targets is an objective.

The baseline for establishing a market-based supply is the Reference Growth Scenario set out in Appendix B to the background report prepared for the Province as part of the recent Growth Plan Schedule 3 forecast update.[2] The Methodology also requires that housing needs be considered by different dwelling types.[3] This housing-by-type analysis ensures that land is available to accommodate some growth in every housing type and, more generally, it aims to avoid housing shortages in all parts of the market.

Finally, the LNA Methodology requires that in assessing Community Area land needs, market contingency factors may be accounted for, including: rental vacancies; constrained lands; landowner unwillingness to develop; the length of the planning process; and other economic and demographic factors that may not have been anticipated in the Growth Plan Schedule 3 forecasts.

B. KEY ASSUMPTIONS

1. Statistics Canada Data and Other Available Information

The overall IGMS process and the LNA within it relies on Statistics Canada's 2016 Census, Statistics Canada's *Annual Demographic Estimates* (to 2021), and Canadian Mortgage Housing Corporation (CMHC) housing market data. As well, there is information from the Region and local municipalities from building permits, the annual employment survey, residential,

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[2] Hemson Consulting, *Greater Golden Horseshoe: Growth Forecasts to 2051*, August 2020.

[3] Although the Methodology provides four dwelling type categories that could be used, the categories do differ from how housing has been categorized to date in the IGMS work. As well, those types differ from the categories used for the baseline reference growth scenario in the Schedule 3 background report. All of these approaches, however, reflect reasonable ways of segmenting the housing market and all have the critical distinction for land needs assessment purposes between ground-related housing and apartment housing.

employment and mixed-use land supply and development expectations for areas of growth and change. The data involved is current up to 2016 for the Census and up to the end of 2021 (for some municipal and CMHC housing data). The analysis initially adjusts all of the data and statistics to a common estimated mid-2021 base. The estimated mid-2021 base aligns with Census that Statistics Canada conducted in May of 2021, which marks the beginning of the forecast period stretching for 30 years to 2051.

2. Impact of the COVID-19 Pandemic

The IGMS work and much of the information in this report was prepared during the COVID-19 pandemic. At time of writing in January 2022, the pandemic is almost at the two-year mark and at a time — again — when there is cautious optimism about the end of public health measures over the next few months. As of September 2021, total employment in Canada and Ontario had returned to pre-pandemic employment levels and the Toronto CMA reached that level by December of 2021. In October of 2021, Canada's Gross Domestic Product was just shy of the pre-pandemic level, at 0.3% below February 2020. It has been a significant comeback from the deepest economic downturn on record, based on comparable data. There are still challenges ahead, but growth is inching back to pre-pandemic patterns.

The Schedule 3 forecasts used for the purposes of the Region's LNA account for impacts of the COVID-19 pandemic on population and employment growth. The analysis assumed a reduction in growth within the GGH of approximately 110,000 persons in 2020 and 2021, which is down to about one-third of the expectation before the pandemic. The recently released Annual Demographic Estimates indicates that the dip in population growth was somewhat greater. Mid-2021 was about 70,000 fewer people than the GGH report estimate, owing to an extended delay in immigrant arrivals to Canada. Growth was rapidly returning by the third-quarter of 2021, which had the second highest quarterly growth ever recorded in over 70 years of that data series. The report also assumed a 15% decline in total GGH employment in Q2 2020 with three-quarters of those losses returning by May 2021 and the remainder by sometime in 2022. The May 2021 prediction was quite close, but growth to the end of 2021 has now put the economy ahead of the 2020 expectations. Additional information on the impacts of the COVID-19 pandemic and the Schedule 3 forecasts are presented in the *Greater Golden Horseshoe: Growth Forecast to 2051* report prepared by Hemson Consulting for MMAH.

Importantly, for the purposes of Schedule 3 and the Land Needs Assessment, the federal government proposes a 2022 total immigration level of over 400,000 people, the highest level since 1912 and far higher than the assumptions embedded within the current Schedule 3 forecast. It is very reasonable to expect that the population and employment

growth in the GGH will be back on the forecast trajectory after the pandemic setback within a few short years.

Some of the long-term impacts of COVID-19 are not yet clear, especially concerning employment location and the degree of working from home in the future. In the absence of a clear direction, for the purposes of the LNA, we have assumed that the pandemic will not affect growth and associated land needs in Halton Region beyond the assumptions incorporated into the Growth Plan Schedule 3 forecasts.

C. WHERE APPROPRIATE, COMMENTS FROM STAKEHOLDERS RECEIVED AS PART OF THE IGMS GROWTH CONCEPTS DISCUSSION PAPER HAVE BEEN ADDRESSED

The LNA Methodology requires public and agency input, completed through the release of the *IGMS Growth Concepts Discussion Paper*, which presented information on key growth management choices for the Region. Since the release of the *IGMS Growth Concepts Discussion Paper*, the Region has received a number of comments from stakeholders regarding the land needs assessment and municipal allocations. The comments and responses provided on all IGMS matters will be fully documented and will be brought forward as part of the report package supporting the Preferred Growth Concept.

Among the comments, questions and concerns specific to the technical work presented the draft LNA document in the Growth Concepts Discussion Paper report were:

- A number of comments about changes to housing and residential markets that arise from COVID-19. Some of these were reasonable potential outcomes and others not. As already noted, in the absence of any certainty as to the full effect of changes from COVID-19 we have limited the effects embedded in the analysis to those clearly known to be occurring.

- A desire by many to set a priority for no urban boundary expansions above the provision of a range of housing types, plus many who sought the opposite priority. The provision of a full range and mix of housing is a direction from the Province, as is the objective to minimize urban boundary expansion, and both must be considered.

- Concerns that the housing mix based on ground-related units versus apartment units did not follow the Province's methodology. The LNA Overview contained in the Growth Concepts Discussion Paper was intended only for the purposes of

comparative analysis amongst the growth concepts. The LNA is based on the four housing structure types, as required by the LNA Methodology.

- There was significant confusion in the written comments received and at consultation meetings about what was intended by the use of the terms "Intensification", "Additional DGA Apartments (Greenfield Intensification)" and "Densification," though there was a general description in the report. Hopefully greater clarity is provided by the addition of a glossary of terms at the beginning of this report. Densification refers to additional apartment units being added to strategic growth areas already planned for high density development, and not the introduction of high density development in areas already comprehensively planned for lower density development.

- Questions were raised about the type, number and size of households in Halton in the future and the associated persons per unit for the different housing types. These relationships, while complex, are addressed in the next section of the report.

- Many comments about employment type and density of employment development were raised by a number of stakeholders. What we see as reasonable expectations for the amount and location of different types of employment development have been applied in the report and explanations have been provided where appropriate.

Some of the public and stakeholders asked for specific statistics related to housing population, employment and density. Where possible these have been incorporated into the text and tables provided in this report.

D. POLICY AREAS USED IN HALTON'S LAND NEEDS ASSESSMENT

The Land Needs Assessment defines several policy areas and geographies to be utilized in determining the need for land to accommodate forecasted growth and achieving minimum density and intensification targets. Table 2 below describes the policy areas and related definitions used in Halton's LNA.

Table 2: Schedule 3 Policy Area Definitions

POLICY AREA	DEFINITION
Delineated Built-Up Area (DBUA)	Formerly referred to as the Built-Up Area, but now known as the Delineated Built-Up Area, is defined by the Ministry of Municipal Affairs and Housing through the Growth Plan for the purposes of setting minimum intensification targets and reflects the DBUA as it was in 2006.
Community Areas	Urban area where housing and population is accommodated, as well as most population-related jobs, some office employment and may include a small number of employment land jobs. Community areas include Delineated Built-Up Areas and Designated Greenfield Areas (as defined by the 2020 Land Needs Assessment Methodology).
Employment Areas	Employment Areas are identified (and are now required by the Growth Plan to be delineated) in the Regional Official Plan and include areas existing or planned exclusively for employment uses and mainly accommodate employment land employment jobs (i.e. employment in industrial-type buildings), as well as a substantial number of major office jobs. Employment Areas may be located in both Delineated Built-Up Areas and Designated Greenfield Areas. For clarity, Employment Areas must includes areas otherwise known as industrial areas or office parks, but do not necessarily include stand-along retail development or employment in institutions.
(Existing) Designated Greenfield Area (DGA)	All other urban designated lands not in the DBUA are in the DGA. All developed or vacant designated urban area lands are either DBUA or DGA and are either Community Area or Employment Area. Environmental and Natural Heritage System also occur within the policy area identifiers. Whether or not these lands are in a particular area has no bearing on the status of lands for preservation or conservation.
(Potential or New) Designated Greenfield Area (DGA)	Potential Community Area or Employment Area land that may be designated for development to accommodate some of the Region's growth to 2051.
Rural Areas	All lands that are not within the urban designated areas of the Region. Rural areas include agricultural and natural areas as well as the housing and employment uses that occur in hamlets, rural settlements, estate residential subdivisions and other lots throughout the rural area.

E. HOW TO READ THIS REPORT

This report is intended to be reviewed by the Ministry of Municipal Affairs and Housing (MMAH), Region Council, local municipalities and stakeholders. The main body of the report describes the methodology and findings related to the Region LNA. Details regarding local municipal growth allocations are provided in the technical appendices of this report.

2. COMMUNITY AREA LAND NEEDS

The approach for determining Community Area land needs for the Preferred Growth Concept follows the six-component approach set out in the Provincial LNA Methodology. These Components are discussed in greater detail in the following sections.

A. COMPONENT 1: POPULATION GROWTH OUTLOOK

The LNA Methodology requires that population projections determining housing needs be based on the Schedule 3 (or higher) forecast in the Growth Plan. To satisfy this requirement, the Region's land needs assessment is based on the population age structure summarized in Appendix B to the background report prepared for the Province as part of the recent Schedule 3 update.[4] The Reference Forecast at 2051 in this report forms the basis of the Schedule 3 forecasts.

1. Historical and Forecast Population Growth in Halton

The Region's annual population growth rate has fluctuated since the early 2000s (see Table 3). At the time of the last Census in 2016 the population was 565,000. The Region's population from the 2021 Annual Demographic Estimates, released in January of 2022 estimate Halton's population to be 619,000 in mid-2021 (an annual growth rate of 1.8% from 2016).

As shown in Table 3, the Schedule 3 forecast shows the Region's population to be 1.1 million by 2051. This represents growth of 481,000 persons over the 30-year period 2021 to 2051 at a compound annual growth rate of 1.9%. This growth rate is lower than the historical rate from 1991-2021 of 2.2%. However, the most recent 5-year growth in Halton has been 1.8% compound annual rate, about the same as is expected over the next 30 years. Population growth in Halton includes natural increase from the current population, which accounts for nearly one-quarter of the growth since 2006, with net in-migration accounting for more than three-quarters of population growth. In Halton, migration is mainly net in-migration from other parts of the Greater Toronto Area and Hamilton (GTAH). Over the past 14 years since 2006, population growth in Halton has averaged 10,700 per year made up of 2,600 natural increase (births less deaths) and 8,100 net in-migration, about

[4] Hemson Consulting, *Greater Golden Horseshoe: Growth Forecasts to 2051*, August 2020.

two-thirds of which are migrants from elsewhere in Ontario, mostly Peel and the City of Toronto.

Table 3: Historic and Forecast Population and Population Growth in Halton Region

Halton Region Population Forecast to 2051			
Census Year	**Total Population***	**Population Growth**	**Annual Growth Rate**
1986	280,000		
1991	**322,000**	**42,000**	**2.8%**
1996	349,000	27,000	1.6%
2001	391,000	42,000	2.3%
2006	458,000	67,000	3.2%
2011	517,000	59,000	2.5%
2016	565,000	48,000	1.8%
2021	**619,000**	**54,000**	**1.9%**
2026	687,000	68,000	2.1%
2031	767,000	80,000	2.2%
2036	848,000	81,000	2.0%
2041	931,000	83,000	1.9%
2046	1,017,000	86,000	1.8%
2051	**1,100,000**	**83,000**	**1.6%**
1991-2021		**297,000**	**2.2%**
2021-2051		**481,000**	**1.9%**

Source: Statistics Canada and Hemson Consulting

*Total population includes Census Net Undercoverage

According to the Census, those moving to Halton are mainly families between their late 20s and early 40s, often with children. Because of the large numbers arriving in these age groups, the types of households, the size of households and their preferences as to housing type, drive much of the overall housing demand in Halton.

New policies in the Growth Plan (sections 2.2.1 and 5.2.4.1) now establish the Schedule 3 forecasts of population and employment at 2051 as minimums. The Region may now choose higher forecasts through its MCR process. The IGMS Growth Concepts work to date and the preparation of the Preferred Growth Concept have been premised on the Schedule 3 forecasts being reasonable for the purposes of long-term planning of the Region and that a higher forecast is not warranted. The forecast for Toronto, Hamilton and the other Regions of the GTAH, as well as the rest of the Greater Golden Horseshoe (GGH), call for a

significant amount of growth over the next 30 years. In our view, the likelihood is low that either a significantly higher overall GGH forecast occurs or that Halton could attract a higher share of the current forecast growth. In the current forecast, Halton has a higher growth rate than either the neighbouring City of Hamilton or Region of Peel. Regional Council has endorsed the use of the Schedule 3 forecast rather than a higher forecast for the current MCR.

B. COMPONENT 2: HOUSING NEEDS

The LNA Methodology requires that the population forecast by age group be translated into a forecast of households. To do this, the Methodology prescribes the use of Statistics Canada's Census age of primary household maintainer data to calculate initial household formation rates for each age group to determine household growth. Having established the forecast households, the age-specific occupancy patterns are applied to the households to yield a housing unit forecast by dwelling structure type. Finally, the housing growth by type must be adjusted to account for any replacement of units (e.g. through demolition), changes in rental vacancies, market contingency factors, and other mitigating considerations.

1. Historical and Forecast Housing Growth

The determination of housing need first requires the translation of the population forecast into a forecast of households based on age-specific household formation rates (or headship rates). The Region's 2016 and estimated 2021 household formation rates as well as the 2021 and 2051 households by age and the resulting growth within each age group are provided in Table 4.

The table provides the 2016 household formation rates, based on Statistics Canada Census. 2021 Census housing data will not available until the summer of 2022. For 2021, the background work to Schedule 3 had a forecast population and age structure. Based on municipal building permits and the published new housing construction data from CMHC, the total number of occupied housing units in 2021 can be estimated. If the 2016 household formation rates are applied directly to the 2021 population, the resulting growth in the total number of households would be larger than is actually expected from the CMHC data. To accommodate the decline in household formation rates that appears to have occurred, the 2016 rates are factored down to yield the estimated number of 2021 households. This phenomenon of declining headship rates has been occurring for over 30 years, with the peak age specific rates having occurred in most age groups in 1986. In the media, this has been reported as how Canada is under-housed relative to other western industrialized countries. In accordance with the method used in the *Greater Golden Horseshoe: Growth*

Forecasts to 2051 report, the household formation rates have been assumed to recover back to the 2016 rates by 2041.

Table 4: Region of Halton Household Forecast by Age of Primary Household Maintainer

Occupied Households by Age of Primary Household Maintainer						
Age	2016 and 2051 Household Formation Rate	2021 Adjusted Household Formation Rate	2021 Household by Age	2051 Households by Age	2021-2051 Growth	2021-2051 Growth %
15-19	0.5%	0.5%	220	360	140	63.6%
20-24	4.5%	4.4%	1,640	2,730	1,090	66.5%
25-29	24.5%	24.3%	8,170	13,880	5,710	69.9%
30-34	41.8%	41.5%	13,990	25,990	12,000	85.8%
35-39	48.1%	47.7%	17,820	33,170	15,350	86.1%
40-44	51.2%	50.8%	21,840	37,860	16,020	73.4%
45-49	54.9%	54.5%	24,860	40,700	15,840	63.7%
50-54	56.5%	56.0%	24,330	39,060	14,730	60.5%
55-59	57.1%	56.6%	23,720	36,140	12,420	52.4%
60-64	55.8%	55.3%	19,760	31,450	11,690	59.2%
65-69	56.2%	55.8%	15,930	28,940	13,010	81.7%
70-74	56.9%	56.4%	14,050	27,050	13,000	92.5%
75-79	57.5%	57.0%	10,620	24,700	14,080	132.6%
80-84	60.2%	59.7%	7,650	21,430	13,780	180.1%
84-89	55.3%	54.8%	4,430	14,780	10,350	233.6%
90+	37.3%	37.0%	1,970	8,570	6,600	335.0%
Total	**43.7%**	**42.9%**	**210,990**	**386,800**	**175,810**	**83.3%**

Between 2021 and 2051 households headed by those between 30 and 39 and those 65 and over grow faster than the overall rate for households. These two age groups have the lowest average household size and the highest occupancy of apartment units because the younger age group are mostly prior to having children and the older age group are “empty-nesters.” In addition, these age groups have the most single-person households, either being prior to family formation for the younger adults or increasing numbers of those divorced or widowed in the older age groups.

Table 5 shows the household forecast based on the household formation rates set out in Table 4. The total number of households in the Region is forecast to be 386,800 in 2051. This represents growth of 175,800 households over the 30-year period from 2021-2051 at an annual growth rate of 2.0%. This growth rate is slightly lower than the historical annual growth rate of 2.3% between 1991 and 2021.

Table 5: Household Forecast to 2051

Halton Region Household Forecast to 2051			
Census Year	Household (Occupied Dwelling Units)	Household Growth	Annual Growth Rate
1986	89,800		
1991	**106,400**	**16,600**	**3.5%**
1996	118,100	11,700	2.1%
2001	133,700	15,600	2.5%
2006	157,100	23,400	3.3%
2011	179,000	21,900	2.6%
2016	193,000	14,000	1.5%
2021	**211,000**	**18,000**	**1.8%**
2026	235,300	24,300	2.2%
2031	266,300	31,000	2.5%
2036	296,500	30,200	2.2%
2041	326,800	30,300	2.0%
2046	357,500	30,700	1.8%
2051	**386,800**	**29,300**	**1.6%**
1991-2021		**104,600**	**2.3%**
2021-2051		**175,800**	**2.0%**

Source: Statistics Canada and Hemson Consulting Ltd.

2. Market-Based Housing Forecast

The social construct of the household is translated into the physical housing units by structure type by applying age specific occupancy patterns to the age structure of the households. The "market-based" forecast of housing by type based on the propensity of households by age to occupy different types of housing. Age of primary household maintainer is a primary determinant of the type of household: single person, single-parent, couple households with or without children at home, and non-family households. In accordance with the Provincial LNA Methodology, the background work to Schedule 3 contains housing "forecasts [that] reflect the baseline reference scenario to be used by municipalities and form the basis for establishing a market-based supply of housing". The following unit types were distinguished for this purpose in the background work to Schedule 3 population forecast. The resulting categorization better aligns with how units are considered in land use planning policy (see Table 6).

Table 6: Schedule 3 Residential Unit Type Definitions

UNIT TYPE	DEFINITION
Singles/Semis	Includes single-detached and semi-detached houses as well as movable dwellings as defined by Statistics Canada for the Census. In this categorization, Singles/Semis also includes existing houses where an accessory unit has been added. The primary unit of the few (if any) purpose-built duplexes in Halton would also be in this category.
Rows	Row houses, as defined by the Census, include street townhouses, condominium plan or purpose built rental townhouse complexes and back-to-back townhouses, but does not include stacked townhouses. Any triplex or quadraplex where no part of any unit is above another is also a rowhouse, even if the front of the units are not "in a row."
Apartments in Apartment Buildings	Apartments in apartment buildings is not a Statistics Canada term but was applied by Hemson to describe all apartment units except those which are considered accessory apartments. Any multiple dwelling units that are not otherwise a rowhouse or accessory unit are apartments in a building.
Accessory Units	Statistics Canada defines a duplex as two units where one is at least partly above the other. In practice in Ontario, the vast majority are units added to a pre-existing single or semi-detached house. Statistics Canada counts a unit added to a house as the addition of two duplex units to the housing stock and the deduction of one single or semi-detached unit. To better reflect how planning typically thinks of these units, we have a called the added unit an accessory unit and kept the primary unit in the single or semi-detached category. Garden suites and laneway houses would also be counted as accessory units.

Tables 7 and 8 sets out the market housing growth by type forecast. The premise of the market-housing forecast is to adjust the occupancy patterns so that the housing growth generally reflects the mix of the past 20 years, but with an upward share adjustment to apartments to reflect the higher household growth among young adults and seniors, both groups with a higher preference for apartments. Looking at the historic data, there has been some upward shift in the rowhouse shares over the past 30 years and a very significant

increase in the share of apartments within the Halton market in the recent 10 years. While not shown on its own in the table, in the most recent five years (mid-2016 to the mid-2021 estimate) apartments represented 41% of housing completions.

While longer-term average mixes change gradually, one year or period to the next can show quite significant swings between different housing types. The shorter-term shifts in preference reflect affordability, lending rules and the general economic and employment conditions of the time. Taking the longer twenty-year view of these cycles, the result is an expectation of a market based housing demand mix of about 50% singles and semis and about 25% each or rows and apartment buildings. Accessory units only represent about 1% of the stock and 1% of the housing growth in Halton.

Table 7: Halton Historic and Forecast Total Housing Units – Number of Units

Halton Historic and Forecast Total Housing Units by Type Market-Based Demand Forecast to 2051					
Year	**Singles & Semis**	**Rows**	**Apartment Building**	**Accessory Units**	**Total**
1991	**74,500**	**10,600**	**20,800**	**500**	**106,400**
2001	90,700	17,300	25,100	600	133,700
2011	118,700	29,700	29,500	1,200	179,100
2021	**130,000**	**39,400**	**39,700**	**2,000**	**211,100**
2031	157,900	53,800	52,100	2,700	266,500
2041	188,900	68,900	65,700	3,500	327,000
2051	218,200	83,900	80,500	4,400	387,000
Historic Housing Mix By Census Period					
1991-2001	16,200	6,700	4,300	100	27,300
2001-2011	28,000	12,400	4,400	600	45,400
2011-2021	11,300	9,700	10,200	800	32,000
Historical 20-Year Housing Mix					
2001-2021	39,300	22,100	14,600	1,400	77,400
Forecast Market					
2021-2031	27,900	14,400	12,400	700	55,400
2031-2041	31,000	15,100	13,600	800	60,500
2041-2051	29,300	15,000	14,800	900	60,000
2021-2051	**88,200**	**44,500**	**40,800**	**2,400**	**175,900**

Table 8: Halton Historic and Forecast Total Housing Units – Percentage of Units

Halton Historic and Forecast Total Precentage of Housing Units by Type Market-Based Demand Forecast to 2051					
Year	Singles & Semis	Rows	Apartment Buildings	Accessory Units	Total
Historic Housing Mix By Census Period					
1991-2001	59%	25%	16%	0%	100%
2001-2011	62%	27%	10%	1%	100%
2011-2021	35%	30%	32%	3%	100%
Historical 20-Year Housing Mix					
2001-2021	51%	29%	19%	2%	100%
Forecast Market					
2021-2031	50%	26%	22%	1%	100%
2031-2041	51%	25%	22%	1%	100%
2041-2051	49%	25%	25%	2%	100%
2021-2051	**50%**	**25%**	**23%**	**1%**	**100%**

C. COMPONENT 3: HOUSING NEEDS ALLOCATION TO LOCAL MUNICIPALITIES

Component 3 of the LNA Methodology indicates that the housing forecast can be allocated to the local municipalities. The allocation of future housing and population to local municipalities depends on the future potential supply by policy area, the allocation of regional housing growth by policy area, the amount, if any, of new urban area for housing purposes and the amount of such land allocated to each of the local municipalities. In the case of Halton Region, the potential for urban area expansion is limited to Milton and Halton Hills, as Oakville and Burlington do not have any remaining lands outside of the existing Urban Area and the Provincial Greenbelt.

Local municipal allocations must follow the final Component 6 of the LNA Methodology, and although not necessary to complete the LNA, are necessary to complete any settlement area boundary expansions and other elements of the MCR. The housing allocation to the local municipalities are shown in Appendix 1 of this report.

D. COMPONENT 4: HOUSING SUPPLY POTENTIAL BY POLICY AREA

The allocation of housing need to the local municipalities is informed by the ability of each municipality to accommodate the range of dwelling types that informed the overall housing need for the Region.

Housing supply potential has been catalogued by policy area for each municipality. This has been an ongoing process mostly completed in the fall of 2018 using a mid-2016 base to match Census years. The information has been updated on an ongoing basis since that time, to account for any approved new secondary plans, general official plan amendments, and any of the requested employment land conversions that are being supported in the MCR process. The supply has taken account of estimated housing unit completions from mid-2016 to mid-2021 to bring the supply up the 2021 base year.

1. Rural Area

Future supply in the rural area is in the small number of lots in legacy rural estate residential subdivisions, available lots within hamlets and existing lots-of-record, where a house can be built.

Regional Official Plan policy does not permit any expansion to hamlets, any new estate residential subdivisions and only a minimum amount of new lot creation by rural severance, based on strict policy criteria. Supply for new construction is very limited and will not grow. However, there are two exceptions, where somewhat more substantial rural growth is to be accommodated. There is supply potential in the hamlet of Glen Williams in Halton Hills where about 140 new units are to be accommodated. The other area is the North Aldershot area of Burlington, where there is a potential supply of approximately 500 units.

Nearly all net new units built in Halton's rural area are on existing lots of record. It is exceedingly difficult to determine the number of lots of record that could be built on and, of those, how many are likely to be built in the next 30 years. Instead of attempting to determine a supply, expected demand is forecast based generally on the level of rural construction in recent periods.

This approach means the demand for units and supply potential are assumed equal. If the demand does not materialize or the supply is not available as estimated, both figures adjust accordingly. Unlike other policy areas, there is no expectation that the Region now or at any time in the future would take any action to create new rural housing supply in order to satisfy the estimated number of units that might be built in the rural area.

2. Delineated Built-Up Area (DBUA)

The Province defined the DBUA in 2008 as areas within the Built Boundary, which approximates the limit of existing residential development in June 2006. In accordance with the policies of the Growth Plan, only development occurring within the DBUA is used to meet the 50% intensification target requirement. That said, high density development is also occurring within Halton's Strategic Growth Areas located within the existing DGA that reinforce Regional and Local Urban Structures. For the purposes of this analysis, densification refers to both the intensification in the DBUA and the additional apartments in the DGA (greenfield intensification).

With the exception a few remnant vacant parcels, the DBUA is fully developed. Almost all of the future supply is through redevelopment. For the LNA, the purpose of identifying future supply is to demonstrate that the allocation of unit growth to the DBUA can reasonably be accommodated. Typically, it is desirable to have a larger identified supply potential than required, since there is always great uncertainty about how and when redevelopment sites may be brought to market within any given time period.

Most of the supply potential is in Nodes and Corridors and other Strategic Growth Areas (inside the DBUA), such as the Urban Growth Centres, Major Transit Station Areas, and other mixed-use nodes and corridors identified within the DBUA.

In addition, there are smaller amounts of scattered intensification that occurs in communities across the DBUA, such as a former gas station, small commercial property or place of worship that is redeveloped with a few rowhouses or, perhaps, a large former rural or lakefront lot re-subdivided to accommodate a few single or semi-detached houses. Sometimes larger sites accommodate a more substantial amount of development. Over time, these add up to a substantial number of units, but there is no reasonable or reliable way to identify the locations where these will occur. Like the rural area, units are allocated to DBUA on the assumption that the sites continue to be assembled and come to market, as they have in the past.

3. Existing Designated Greenfield Area (DGA)

Nearly all of the DGA is subject to secondary plans and supply is a relatively straightforward matter of determining how much of the land and associated units are remaining from the total units planned after deducting those that have been built. However, the SGAs in the greenfield area, which we have called densification in the IGMS, are, in fact, dense, mixed use areas which play the same role in reducing new urban land need by following an "intensification first" approach, just as the SGAs in the DBUA do. The DGA Strategic Growth Areas playing this role in Halton are the Trafalgar GO MTSA and the Education Village in Milton and the Trafalgar Corridor, Dundas Corridor, Hospital District and the North Palermo area in North Oakville.

A 2.5% unit or land vacancy assumption is applied to the existing DGA supply, since not every greenfield parcel will come to market. Nearly all do come to market eventually but larger former rural lots that come into the urban area often persist for decades before being redeveloped.

4. Housing Supply by Policy Area for Preferred Growth Concept

Table 9 below provides the housing supply for each of the policy areas in the Region. The analysis includes the identification of available supply potential within the three policy areas (Rural Area, DBUA and DGA), including the Region's Strategic Growth Areas. The additional DGA apartments (greenfield intensification) (shown as 9,900 apartments in the DGA Strategic Growth Area) are an additional "policy area" used in Halton. These are treated separately from the general DGA because all units are accommodated within currently planned areas, so they will not affect any needs for additional DGA lands. These are the DGA SGA units describe in the previous section.

The analysis examines each housing type separately: singles/semis, rows and apartments.[5]

[5] Accessory structures are included within the supply of single and semi-detached units.

Table 9: Halton Housing Supply Potential by Policy Area, 2021-2051 Growth

Halton Housing Supply Potential by Policy Area 2021-2051 Growth				
Policy Area	**Singles & Semis**	**Rows**	**Apartments**	**Total**
Rural Area				
Rural Area	0	0	0	0
Sub-Total	**0**	**0**	**0**	**0**
Built-Up Area				
Built-Up Area Strategic Growth	0	4,700	92,300	97,020
Rest of Built-Up Area	1,900	2,200	9,400	13,470
Sub-Total	**1,900**	**6,900**	**101,700**	**110,500**
Desginated Greenfield Area				
Strategic Growth Areas	300	5,300	34,500	40,100
Rest of Existing Designated Gr	27,600	20,400	23,700	71,600
Sub-Total	**27,900**	**25,700**	**58,200**	**111,800**
Total Identified Supply	**29,800**	**32,600**	**159,900**	**222,300**

E. COMPONENT 5: COMMUNITY AREA EMPLOYMENT

Most of the Community Area jobs are Population-Related Employment defined as jobs occurring in a community mainly in response to the provision of services to a resident population. On a neighbourhood basis, Population-Related Employment is those jobs in local retail and service, schools and other local institutions and work-at-home employment[6]. Beyond the neighbourhood, but within the Community Area, population-related employment includes jobs in larger retail concentrations, and jobs in larger institutions such as high schools, post-secondary education, hospitals and other government services. Community Area employment also includes some Major Office jobs, though most offices are in Employment Areas in Halton.

[6] Work-at-home employment relates to those that work at home or run a home-based business as their primary job. Work-at-home employment does not include workers who might work at home a few days a week, but otherwise have an office or work station elsewhere. Because of the extent of the work at home period during the pandemic and the way the Census question is worded, many of those working at home on a temporary basis will report home as a usual place of work, while others may not on the basis that they will be returning to the corporate work location at some future date. It is, however, quite uncertain how people may answer the questions in the 2021 Census, what will be revealed by results and, because of the timing of the Census and the pandemic,

Community Area employment is considered for two purposes. Firstly, it is to demonstrate that Community Area employment has been accommodated in the land need. This employment is typically part of the “net to gross” calculations where lands for school sites, places of worship and local retail uses are considered. In larger tracts of new DGA, an additional factor for large institutions and major retail may be added. The 65 persons plus jobs per hectare used in this LNA work accommodates all of the Community Area employment required.

The second purpose of Community Area employment is for calculating the DGA density as shown in Table 10. The overall existing Community Area DGA density at 2051 is 68.6 persons plus jobs per hectare. In order to avoid the redundancy of repeating similar tables a number of times in this LNA report, the table below includes the proposed new community DGA lands calculated in the next component of the LNA. In the land need calculations, the new Community Area DGA is ultimately planned for at least 65 persons plus jobs per hectare. In Milton the density is shown as 63.8 person plus jobs per hectare because not all of the higher density housing nor all of the planned community jobs will be fully built by 2051. The same is true of the Halton Hills lands, plus in Halton Hills there is an addition of approximately 50 ha of town-wide community uses reducing the density further to 54 persons plus jobs per hectare. Employment for any of these town-wide community uses, including a possible new hospital site, may be substantial. While not included in the density calculation currently, the employment would increase the density up toward the 65 persons plus jobs per hectare target. As well, this takes account of the recommended employment land conversions addressed in the employment section.

Table 10: Total Designated Greenfield Community Area Population, Jobs and Density

Community Area Population, Jobs and Density in the Designated Greenfield Area Preferred Growth Concept to 2051							
			Burlington	Oakville	Milton	Halton Hills	Halton Region
Existing DGA Community Area (developable ha)			270.0	1,620.0	3,310.0	680.0	5,880.0
New Community Area DGA (developable ha)			0.0	0.0	710.0	410.0	1,120.0
Total Community Area DGA (developable ha)			270.0	1,620.0	4,020.0	1,090.0	7,000.0
Population and Employment		Year					
DGA Population	Existing DGA	2021	12,600	25,000	67,300	7,000	111,800
	Existing DGA		18,600	116,400	187,700	32,900	355,600
	New DGA	2051	0	0	41,200	20,600	61,800
	Total DGA		18,600	116,400	228,900	53,500	417,400
Employment in Existing DGA Community Area	Existing DGA	2021	3,100	6,400	9,100	400	19,100
	Existing DGA		3,800	14,400	25,300	4,300	47,900
	New DGA	2051	0	0	2,200	1,700	3,900
	Total DGA		3,800	14,400	27,500	6,000	51,800
Total Population and Employment in Existing Community Area	Existing DGA	2021	15,700	31,400	76,400	7,400	130,900
	Existing DGA		22,400	130,800	213,000	37,200	403,400
	New DGA	2051	0	0	43,400	22,300	65,700
	Total DGA		22,400	130,800	256,400	59,500	469,100
Community Area Density for the Currently Designated Greenfield Area (persons plus jobs per ha)							
Density (Persons plus Jobs per ha)	Existing DGA		83.0	80.7	64.4	54.7	68.6
	New DGA	2051	0.0	0.0	61.1	54.4	58.7
	Total DGA		83.0	80.7	63.8	54.6	67.0

F. COMPONENT 6: NEED FOR ADDITIONAL LAND

1. Housing Supply/Potential

Table 11 summarizes the occupied household forecast between the Rural, DBUA and DGA showing how the allocation is made in respect of 2021-2031 versus 2031-2051 and how the additional DGA apartments (greenfield intensification) are determined and allocated.

The allocation of growth to policy areas (and ultimately to the policy areas within the local municipalities) is a critical step in the LNA and the step that requires careful judgement. It is here that the balance is struck between a desire to provide a market-based supply of housing and the desire to minimize new greenfield expansions and provide growth through intensification. The allocation of units to the policy areas largely dictates the overall mix of housing types to accommodate growth based on following considerations:

- Rural units are entirely single detached units;
- The DBUA, because it is almost all redevelopment is higher density and is assumed to be about 80% apartments in apartment buildings with the remainder primarily

being infill row house units plus a small number of infill single and semi-detached units plus the accessory units, most of which is added to the DBUA;

- The DGA is the converse of DBUA where between 90% and 95% of units are ground-related, made up of a similar number of singles/semis and rows. New apartments in the general DGA area are limited in number, although currently there are far more new apartments in the DGA than there have been in the past. Particularly, in recent years, Milton had about 12% of DGA units being built as apartments; and

- The Additional DGA Apartments category is, by definition, entirely made up of apartments in apartment buildings.

The Region of Halton contains several planned higher density mixed-use strategic growth areas within the DBUA. These include the three Urban Growth Centres in Burlington, Oakville and Milton. As well, all MTSAs, but the proposed Trafalgar GO MTSA in Milton are within the DBUA. And there are a number of other additional planned corridors and SGAs, including Oakville's Uptown Core.

In addition to those in the DBUA, there are also similar mixed-use high-density Strategic Growth Areas planned in the DGA. In Milton, these are the Trafalgar GO MTSA and the Education Village and in Oakville there is the Trafalgar and Dundas Corridors in North Oakville. Also in North Oakville is the Neyagawa Urban Centre, the Hospital District and the north expansion of Palermo Village.

The very particular problem that Halton has is the way the Growth Plan intensification rules are constructed. As a starting point, the minimum 50% intensification can be assigned to the built up area. As noted above we would expect these units to be about 80% apartments in apartment buildings. In addition, it is necessary to assign a significant amount of apartment development to the greenfield SGAs. There is not a choice about making this allocation as there has been significant numbers of apartment units completed in the Dundas corridor in North Oakville. Nearly 1,000 apartment units are currently under construction in the Dundas and Trafalgar corridors. In addition, there are several projects in the pre-sales stage and a large number of applications for units in the development application review process. It is this area where a significant portion of Halton's dense mixed-use development is occurring. Unfortunately, this development has all the positive attributes of intensification, but cannot count toward the 50% intensification target.

If intensification is assumed to proceed as 50% of development and if an appropriate amount of higher density development is attributed to the greenfield SGAs, the combination

becomes a significant majority of the development in the Region. And nearly all of it is in the form of apartments. The result of proceeding in exactly this way is a very high proportion of total units would be in apartments — apartments at a level that is somewhat unlikely to occur and is at a level that could not be considered to address the Provincial direction with respect to a market-based supply of housing.

The resolution to this dilemma is proposed to be a reduced intensification rate of 45% instead of the Growth Plan's 50%, but premised on the difference between 45% and 50%, about 8,800 units, would be built as apartments in these critical DGA strategic growth areas. In fact, an allocation of 13% of all units built between 2021 and 2051, nearly 23,000 additional units, would be these "Additional DGA Apartments." The resulting housing mix in the Region from this approach would be 49% apartment in apartment buildings plus 2% accessory units. In the absence of the alternative intensification rate the apartment mix would need to be well above the 50% level. Again, mixes of well above 50% depart significantly from the Provincial direction to provide a market-based supply of housing. Over 60% of development from 2021 to 2051 would be either intensification inside the DBUA or would be greenfield intensification that would not contribute demand for additional urban land designations beyond what is currently being proposed.

The unit allocations to policy areas for the Preferred Growth Concept is based on a Region-wide intensification rate of 45 percent, and a direction of more than 85 percent of housing units within the existing urban area, thereby meeting the "intensification first" and minimization of urban expansion objectives of the Growth Plan. The allocation to the policy areas is provided in Table 11. Careful attention should be paid to the two last columns, which summarize two key features of the Preferred Growth Concept:

- The combined DBUA intensification and the additional greenfield apartment "densification" units in the greenfield area at 58% over the 30-year period or 59% of just the latter 20 years is total of intensification and intensification-like development which is seen as an equivalent to the Growth Plan intensification rate policy. The combined rate well exceeds the 50% intensification policy.

- The total existing urban area plus rural area in the last column is all of the development expected in existing planned areas, that is, all housing development except that proposed to be accommodated in new urban expansion areas. This amounts to over 90% of growth over the year period and 86% over the latter 20 years of the planning period. This figure has been rounded to 85% in most of the IGMS reporting.

Table 11: Household Forecast to 2051 by Policy Area

Halton Household Forecast to 2021 to 2051 by Policy Area and 2031 to 2051 by Policy Area								
Census Period	Rural Area	Delineated Built Up Area (Intensification)	Designated Greenfield Area (DGA)			Total	Total Delineated Built-Up Area Intensification and Greenfield Intensification (Densification)	Total Existing Designated Urban Area (Delineated Built-Up Area Intensification and Greenfield Intensification) and the Rural Area
			Additional DGA Apartments (Greenfield Intensification)	Existing DGA (Except Additional Apartments)	New DGA Community Area			
	❶	❷	❸	❹	❺	❶+❷+❸+❹	❷+❸	❶+❷+❸+❹
For the Full 30 Year Period from 2021 to 2051								
Share of Growth by Policy Area, 2021 to 2051								
2016-21	1.1%	44.4%	0.0%	54.4%	0.0%	100.0%	44.4%	100.0%
2021-31	0.9%	45.0%	10.5%	43.6%	0.0%	100.0%	55.5%	100.0%
2031-41	0.8%	45.0%	13.1%	34.5%	6.6%	100.0%	58.0%	93.4%
2041-51	0.7%	45.0%	15.5%	17.8%	21.0%	100.0%	60.5%	79.0%
2021-2051	**0.8%**	**45.0%**	**13.1%**	**31.7%**	**9.4%**	**100.0%**	**58.1%**	**90.6%**
Unit Growth by Policy Area, 2021 to 2051								
2016-21	200	8,000	0	9,800	0	18,000	8,000	18,000
2021-31	500	24,900	5,800	24,100	0	55,300	30,700	55,300
2031-41	500	27,200	7,900	20,900	4,000	60,500	35,100	56,500
2041-51	400	27,000	9,300	10,700	12,600	60,000	36,300	47,400
2021-2051	**1,400**	**79,100**	**23,000**	**55,700**	**16,600**	**175,800**	**102,100**	**159,200**
For the 20 Year Period 2031 to 2051 Extending from the Horizon Date of the Current Regional Plan								
Share of Growth by Policy Area, 2031 to 2051								
2031-41	0.8%	45.0%	13.1%	34.5%	6.6%	100.0%	58.0%	93.4%
2041-51	0.7%	45.0%	15.5%	17.8%	21.0%	100.0%	60.5%	79.0%
2021-2051	**0.7%**	**45.0%**	**14.3%**	**26.2%**	**13.8%**	**100.0%**	**59.3%**	**86.2%**
Unit Growth by Policy Area, 2031 to 2051								
2031-41	500	27,200	7,900	20,900	4,000	60,500	35,100	56,500
2041-51	400	27,000	9,300	10,700	12,600	60,000	36,300	47,400
2021-2051	**900**	**54,200**	**17,200**	**31,600**	**16,600**	**120,500**	**71,400**	**103,900**

1) "Delineated Built-Up Area" and "Additional Existing DGA Apartments" relates to development already planned within the DBUA and existing DGA (mostly higher density residential development in mixed use areas such as UGCs, MTSAs and other Strategic Growth Areas)
2) Existing DGA relates to the development on DGA lands within the existing urban designations and New Community Area DGA are lands proposed for urban area expansion.

The next Component in the LNA Methodology is to compare the supply by unit type to determine if the intensification and the DGA additional apartments fit within the identified supply. The main purpose of Table 12 is to determine whether or not there is a shortfall in supply for the DGA. The analysis is done in reference to unit type as required by the LNA. Any shortfall would indicate the need for additional Community Area land to be designated. There is a total of just over 15,000 single/semis and rows in shortfall for DGA development to 2051. The 15,400 units represents only 9% of the total additional housing units to be added in the Region from 2021 to 2051.

Table 12: Halton Identified Housing Growth and Surplus/Shortfall 2021-2051

Halton Identified Housing Growth and Supply/Surplus or Shortfall/Supply 2021-2051				
Supply and Growth by Policy	**Singles & Semis**	**Rows**	**Apartments**	**Total**
Rural Area				
Identified Supply	0	0	0	0
Housing Growth	0	0	0	0
Built-Up Area				
Identified Supply	1,900	6,900	101,700	110,500
Housing Growth	8,000	12,200	60,200	80,400
Desginated Greenfield Area				
Identified Supply	27,900	25,700	58,200	111,800
Housing Growth	36,600	32,400	26,700	95,700
Surplus/(Shortfall)	**(8,700)**	**(6,700)**	**31,500**	

2. Community Area Land Need

Having determined the unit shortfall in the DGA, it can now be translated into a land need. The ground-related unit shortfall drives the land need, since there is a significant surplus of DGA apartments. In the context of considering market-based housing supply, the surplus in apartments cannot simply replace the shortfall in ground-related units.

The housing shortfall for ground-related units is first restated in terms of population, applying a person per unit factor, which also accommodates factors for non-household population, and Census net undercoverage to assure population is always being measured the same way. Once the total population associated with the unit shortfall is established, a factor for Community Area employment is added at one job for every 11 residents (or 91 jobs per 1,000 population).

With total persons plus jobs in the potential expansion areas known, the land need can be calculated on based on a Growth Plan density of 65 persons plus jobs per hectare.

For the Community Area land need the following is calculated:

- Need for 8,700 single and semis plus 6,700 rows for a total 15,400 units.
- Because Halton would not build an entire community with no apartment (or accessory) units, the total planned units would become 16,700 with the addition of 1,300 apartment units, representing 8% of total units.
- Adding a long-term vacancy factor results in new Community Areas to be planned for a total 17,300 units.

- Applying an “all in” person per unit factor of 3.61 (all-in includes non-household population and the Census net undercoverage). This results in 62,000 population. Adding the Community Area jobs expected within these neighbourhoods (10% of total person and jobs) yields a total person and jobs of 68,900.

- At the assumed DGA density of 65 persons plus jobs per developable hectare, results in nearly 1,070 hectares of new community area land.

- The Community Area designation is made up to 1,120 hectares of Community Area (710 ha in Milton and 410 ha in Halton Hills). The additional 50 hectares is to be added at the request the Town of Halton Hills to accommodate the stormwater management that serves existing DGA area, the need for community park lands serving all of Georgetown and providing a site for the new hospital. Halton Hills 410 ha of community area land would be made up of about 360 hectares of regular community area, plus the additional 50 ha. This land need has the added benefit allowing for logical boundaries for the area using roads and existing lot lines.

This analysis results in a total Community Area Land Need of 1,120 hectares.

3. EMPLOYMENT AREA LAND NEEDS

The Employment Area Land Needs Assessment relies on the employment forecasts contained in Schedule 3 of the Growth Plan to determine the forecasted numbers of jobs by type. The Provincial forecast anticipate that Halton Region will accommodate a significant amount of the job growth forecasted for the Greater Golden Horseshoe.

A. EMPLOYMENT BY LAND USE TYPE

Employment Area land needs must be based on Schedule 3 employment forecasts or forecasts that exceed Schedule 3. There are a number of ways to categorize and forecast employment. For the purpose of this exercise, the following categories are defined:

- **Major Office Employment** refers to refers to all employment housed within freestanding office buildings more than 20,000 sq.ft. (1,858 m^2) or more. For an unrelated policy purpose in the Growth Plan, the same expression — Major Office — is used to encourage office buildings of 4,000 m^2 or more to develop near transit.

- **Population-Related Employment** is all employment within the urban Community Area of Halton (except major office in the Community) plus the large community uses. As already described in the discussion of Community Area employment, retail, education, health care, local government and urban work-at-home employment that will primarily serve the Region's resident population is included in this category.

- **Employment Land Employment** refers to employment accommodated primarily in single storey industrial-type buildings in industrial areas and business parks. Nearly all such buildings and nearly all Employment Land Employment are in designated urban Employment Areas. For analysis purposes, large institutions and retail concentrations within Employment Areas are excluded from Employment Land Employment. These uses are added to Population-Related Employment so as not to skew the employment counts and densities for the categories[7].

[7] In Halton the uses in Employment Areas that are categorised as Population-Related Employment are: Toronto Outlets in Halton Hills, the power centre on both sides of Highway 401 at Steeles Avenue and the Maplehurst Institution in Milton and the retail areas at the north end of Winston Park, in Burloak Business Park, Oakville Place Mall and the Oakville Trafalgar Hospital in Oakville. There are no such uses of this magnitude in Employment Areas in Burlington.

- **Rural employment** refers to all jobs located in rural areas, including agriculture and primary industries, local commercial and institutional jobs in hamlets or elsewhere in the rural area, rural recreational and entertainment uses. In addition, all work at home employment in the Rural Area is included. Work at home employment is much higher in rural than urban areas as a rate to persons or households.

B. COMPONENT 1: HISTORICAL AND FORECAST EMPLOYMENT

Table 13 provides the forecast total employment for Halton, historically and for the period to 2051. The employment growth is also compared to the population growth and an activity rate is calculated. Activity rate is an overall relationship between Census population and employment and a rate of about 50% represents a balanced community where the number of jobs in the community is about the same as the number of people living in the community who have jobs. Halton's activity rate is anticipated to remain relatively stable throughout the 2021-2051 planning period.

Table 13: Historical and Forecast Employment in Halton

Halton Region Employment Forecast to 2051					
Census Year	Total Employment	Employment Growth	Annual Growth Rate	Census Population	Activity Rate
1986	119,200			271,390	43.9%
1991	**141,300**	**22,100**	**3.5%**	**313,135**	**45.1%**
1996	159,600	18,300	2.5%	339,875	47.0%
2001	189,400	29,800	3.5%	375,200	50.5%
2006	217,800	28,400	2.8%	439,300	49.6%
2011	234,000	16,200	1.4%	501,700	46.6%
2016	263,300	29,300	2.4%	548,400	48.0%
2021	**278,200**	**14,900**	**1.1%**	**602,500**	**46.2%**
2026	318,000	39,800	2.7%	666,900	47.7%
2031	350,000	32,000	1.9%	744,400	47.0%
2036	384,000	34,000	1.9%	822,900	46.7%
2041	420,000	36,000	1.8%	903,600	46.5%
2046	460,000	40,000	1.8%	987,700	46.6%
2051	**500,000**	**40,000**	**1.7%**	**1,068,300**	**46.8%**
1991-2021		**136,900**	**2.3%**		
2021-2051		**221,800**	**2.0%**		

Source: Hemson Consulting Ltd.

Table 14 and 15 show the forecast employment growth by non-residential land use category over the historical period from 1986-2016 and the forecast period from 2021-2051.

Table 14: Historical and Forecast Employment by Land Use Type in Halton

Halton Region Employment by Land Use Type Forecast to 2051					
Census Year	**Major Office**	**Population Related**	**Employment Land**	**Rural**	**Total**
1986	7,700	50,800	52,000	8,700	119,200
1991	**9,100**	**59,500**	**63,700**	**9,000**	**141,300**
1996	10,300	60,700	79,500	9,100	159,600
2001	15,600	68,000	96,600	9,200	189,400
2006	20,600	79,000	108,800	9,400	217,800
2011	23,900	96,400	104,200	9,500	234,000
2016	34,000	112,200	112,200	9,000	267,400
2021	**33,000**	**119,600**	**116,800**	**8,800**	**278,200**
2026	41,600	134,600	132,400	9,400	318,000
2031	48,500	146,800	144,900	9,800	350,000
2036	57,600	160,600	155,900	9,900	384,000
2041	67,100	175,500	167,400	10,000	420,000
2046	80,500	192,600	176,900	10,000	460,000
2051	**89,800**	**207,900**	**192,300**	**10,000**	**500,000**
1991-2021	**23,900**	**60,100**	**53,100**	**(200)**	**136,900**
2021-2051	**56,800**	**88,000**	**75,800**	**1,200**	**221,800**

Source: Statistics Canada Census 1986 to 2016, Hemson forecasts.

Note: The employment forecast by type shown here includes the shift of 4,000 jobs in "flex" office space within Employment Land Employment to Major Office in the planned mixed-use areas. The basis of this shift is explained in detail later in the LNA report.

Table 15: Shares of Historical and Forecast Employment by Land Use Type in Halton

Halton Region Shares of Employment by Land Use Type, Historic and Forecast to 2051					
Census Year	**Major Office**	**Population Related**	**Employment Land**	**Rural**	**Total**
1986	6.5%	42.6%	43.6%	7.3%	100.0%
1991	**6.4%**	**42.1%**	**45.1%**	**6.4%**	**100.0%**
1996	6.5%	38.0%	49.8%	5.7%	100.0%
2001	8.2%	35.9%	51.0%	4.9%	100.0%
2006	9.5%	36.3%	50.0%	4.3%	100.0%
2011	10.2%	41.2%	44.5%	4.1%	100.0%
2016	12.7%	42.0%	42.0%	3.4%	100.0%
2021	**11.9%**	**43.0%**	**42.0%**	**3.2%**	**100.0%**
2026	13.1%	42.3%	41.6%	3.0%	100.0%
2031	13.9%	41.9%	41.4%	2.8%	100.0%
2036	15.0%	41.8%	40.6%	2.6%	100.0%
2041	16.0%	41.8%	39.9%	2.4%	100.0%
2046	17.5%	41.9%	38.5%	2.2%	100.0%
2051	**18.0%**	**41.6%**	**38.5%**	**2.0%**	**100.0%**
1991-2021	**17.5%**	**43.9%**	**38.8%**	**-0.1%**	**100.0%**
2021-2051	**25.6%**	**39.7%**	**34.2%**	**0.5%**	**100.0%**

Source: Statistics Canada Census for historical information.

C. COMPONENT 2: EMPLOYMENT ALLOCATION

The local municipal allocation of employment to local municipalities depends on the land need identified for Employment Areas and on the population allocation from the Community Area LNA. The allocation to the local municipalities is not required for the LNA; however, Table 16 below shows the allocation of employment growth over the 2021-2051 period.

Appendix 1 provides additional details on the allocation by category for each of the Region's local municipalities.

Table 16: Employment Allocation by Local Municipality and Halton

Total Employment Growth by Municipality and Region of Halton					
Year	Burlington	Oakville	Milton	Halton Hills	Halton Region
2021	98,400	110,800	44,400	24,600	278,200
2031	106,900	138,900	68,100	35,900	349,800
2041	115,600	160,700	95,800	47,800	419,900
2051	125,000	180,000	130,000	65,000	500,000
Growth 2021-2031	**8,500**	**28,100**	**23,700**	**11,300**	**71,600**
Growth 2021-2041	**17,200**	**49,900**	**51,400**	**23,200**	**141,700**
Growth 2021-2051	**26,600**	**69,200**	**85,600**	**40,400**	**221,800**

D. COMPONENT 3: EXISTING EMPLOYMENT AREA POTENTIAL

This Component estimates the employment potential on existing land designated as Employment Area. The estimate begins with an inventory of Employment Area lands, both occupied and vacant. Several adjustments are made to account for vacant parcels not yet subdivided, employment land conversions, expected development of non-employment area uses[8], long-term vacancy, etc. The adjustments made are as follows:

- The larger retail concentrations and institutions, described above, are set aside from the supply;
- The vacant supply in areas where the land parcels are not yet subdivided are subject to a standard 80% net to gross ratio to account for local roads and utilities in employment areas. This assures that the land need is on a common comparable basis in net hectares.
- Employment land conversions are deducted from the occupied or vacant supply.
- Lands can be deducted to account for expected Major Office Employment development that may occur within an employment area. If there is an expectation of additional major retail areas or large institutions being built within the Employment Areas, these lands should be removed, as they would not be available to accommodate Employment Land Employment. We are not aware of any such proposals.

[8] Includes Major Office as well as large retail areas and large institutions built within Employment Areas

- A factor for long-term vacancy is applied as 3% of the total occupied and vacant lands. Long-term vacancy accounts for parcels that do not develop usual due to challenging access or configuration or are regular parcels that are just never brought to market or never sold to an end user.

- Applying the local Employment Land Employment density in this analysis to the remaining available supply will indicate how much Employment Land Employment is accommodated at the full build out of the adjusted supply.

- The analysis is based on an assumption that any impediments to development such as the corridor protection areas or the provision of major infrastructure will be cleared well within the 30 year planning such that the land can be developed within 30 years.

The conclusion of these Components is the total occupied and vacant supply of Employment Area lands and the total Employment Land Employment that these lands could accommodate at full development (as shown in Table 17).

Demand for lands can then be considered as the following:

- The starting point is growth in Employment Land Employment from the 2021 base year to 2051.

- For some employment land conversions, employment demand is added to the base 2021 to 2051 demand to account for replacing the equivalent jobs / land pushed out by conversion. This need not be considered for vacant lands, since the overall land need does account for this loss of vacant land supply. Lands occupied that are converted only need to be replaced in the employment demand for the types of uses expected in urban Employment Areas. Most industrial uses would be replaceable and infrastructure uses, such as GO Train Stations and parking areas do not need replacement. Existing services or retail uses would also not require replacement in any new land designation.

The conclusion of the demand analysis is an employment figure that needs to be accommodated on lands in an Employment Area. The demand can be attributed to the vacant supply up to full development of those lands. Any excess Employment Land Employment that cannot be accommodated becomes the basis for employment land need (see Tables 18-20).

Table 17: Halton Region 2021 Employment Land Base

Halton Region Employment Land Base 2021 (net ha)	Burlington	Oakville	Milton	Halton Hills	Halton
Employment Land Inventory, 2016					
Occupied	1,109.2	1,491.1	842.3	291.9	3,734.5
Vacant	206.9	757.9	1,083.9	658.5	2,707.2
Total	1,316.1	2,249.0	1,926.2	950.4	6,441.8
Employment Land Inventory, 2016					
Large-Scale Retail and Institutional Uses Excluded from Employment Land Analysis	0.0	(64.0)	(81.2)	(22.3)	(167.5)
Employment Land Inventory, 2016 After Large-Scale Retail and Institutional Uses Excluded from Analysis					
Occupied	1,109.2	1,427.1	761.1	269.6	3,567.0
Vacant	206.9	757.9	1,083.9	658.5	2,707.2
Total	1,316.1	2,185.0	1,845.0	928.1	6,274.3
Absorption 2016-2021					
Occupied	26.7	38.3	90.2	78.8	234.0
Vacant	(26.7)	(38.3)	(90.2)	(78.8)	(234.0)
Total	0.0	0.0	0.0	0.0	0.0
Supply Changes through Conversions					
Occupied, to 2021 where redev is incremental	(9.9)	(11.0)	(15.5)	(2.3)	(38.7)
Occupied, to 2021-31, where redev is incremental	(16.5)	(12.0)	(5.6)	(1.1)	(35.2)
Occupied, to 2031-41, where redev is incremental	(16.5)	(16.0)	0.0	(3.0)	(35.5)
Occupied, to 2041-51, where redev is incremental	(13.3)	(23.3)	0.0	0.0	(36.6)
Vacant, total as of 2021 (no incremental change)	(10.6)	(86.4)	(125.6)	0.0	(222.6)
Total	(66.8)	(148.7)	(146.7)	(6.4)	(368.6)
2021 Revised Overall Land Base (including incremental changes to 2051)					
Occupied	1,079.7	1,403.1	830.2	342.0	3,655.0
Vacant	169.5	633.2	868.1	579.7	2,250.6
Total	**1,249.3**	**2,036.3**	**1,698.3**	**921.7**	**5,905.7**

Note: All figures are in net hectares (the area of the private parcel after lands are subdivided and local roads and utilities are removed). On larger sites that will be subdivided a standard 80% net to gross ratio is applied.

Table 18: Halton Region Employment Land Employment Density

Halton Region Employment Land Employment Density at 2016, 2019 and 2021	Burlington	Oakville	Milton	Halton Hills	Halton
Employment Land Employment Density, 2016					
Occupied Land, 2016	1,109.2	1,427.1	761.1	269.6	3,567.0
Less Lands in Major Office Use	(77.2)	(76.5)	(7.6)	0.0	(161.3)
Net Land Occupied by Employment Land Employment	1,032.0	1,350.6	753.5	269.6	3,405.7
2016 Employment Land Employment (Based on Census)	39,639	43,787	15,366	9,278	108,070
2016 Density (employees per net ha)	38.4	32.4	20.4	34.4	31.7
Employment Land Employment Density, 2019					
Occupied Land, 2019	1,119.9	1,442.4	797.2	301.1	3,660.6
Less Lands in Major Office Use	(82.4)	(94.4)	(10.2)	0.0	(187.0)
Net Land Occupied by Employment Land Employment	1,037.5	1,348.0	787.1	301.1	3,473.7
2019 Employment Land Employment	45,195	47,197	19,979	9,506	121,877
2019 Density (employees per net ha)	43.8	34.9	26.5	35.3	35.8
Employment Land Employment Density, 2021					
Occupied Land, 2021, before Conversions	1,135.9	1,465.4	851.3	348.4	3,801.0
Less Lands in Major Office Use	(84.5)	(103.7)	(10.2)	0.0	(198.3)
Net Land Occupied by Employment Land Employment, before conversions	1,051.4	1,361.7	841.2	348.4	3,602.7
2021 Employment Land Employment	41,213	47,562	17,961	10,095	116,830
2021 Density (employees per net ha)	**39.2**	**34.9**	**21.4**	**29.0**	**32.4**

Note: All figures are in net hectares (the area of the private parcel after lands are subdivided and local roads and utilities are removed). On larger sites that will be subdivided a standard 80% net to gross ratio is applied.

Table 19: Halton Total Employment Land Employment and Growth 1991-2051

Halton Total Employment Land Employment and Growth			
Year	Total	Growth	Growth Rate
1991	63,700		
2001	96,600	32,900	4.3%
2011	104,200	7,600	0.8%
2021	119,600	15,400	1.4%
2031	144,900	25,300	1.9%
2041	167,400	22,500	1.5%
2051	192,300	24,900	1.4%

One key assumption that warrants a clear explanation is that 75% of future major office development will occur in Employment Areas, with the remainder in community areas. Over the last 35 years, since 1986, about 75% of the major office stock in the Region has been built. Employment Areas have accommodated about 80% of this space. In the most recent 10-years 85% of the space has been built in Employment Areas. Municipalities are expecting that a substantial portion of new office development will occur in the planned SGAs and MTSAs. Attracting this development would be beneficial to these mixed-use areas. Currently, there is a limited established market for Major Office in these areas, but local municipalities are likely to make significant efforts to shift that market pattern. The assumed 75% of future major office in Employment Areas, would be a significant change from the current market. To assume that more the 25% of major office might occur in the Region's various SGAs is simply unlikely. Municipalities have few tools to incent such development.

Table 20: Halton Employment Land Employment and Land Base Change 2021-2051

Halton Employment Land Employment and Land Base Change Change 2021 to 2051						
		Burlington	Oakville	Milton	Halton Hills	Halton
2021 Land and Employment Base						
Occupied Employment Land		1,079.7	1,403.1	830.2	342.0	3,655.0
Vacant Employment Land		169.5	633.2	868.1	579.7	2,250.6
Total Employment Land		**1,249.3**	**2,036.3**	**1,698.3**	**921.7**	**5,905.7**
Remaining Employment Land Conversions and Result Revised Land and Employment Base (1)						
Occupied Lands "to be replaced" by 2051		(56.2)	(62.3)	(21.1)	(6.4)	(146.0)
Density for current or potential occupancy (employees/ha)		35.0	35.0	29.0	29.0	33.9
Dislocated Employment Potential from Occupied Lands		**(1,966)**	**(2,182)**	**(612)**	**(186)**	**(4,945)**
Occupied Employment Land, 2021 less 2021-2051 conversion		1,023.6	1,340.7	809.1	335.6	3,509.0
Vacant Employment Land, 2021		169.5	633.2	868.1	579.7	2,250.6
Total Employment Land Supply for LNA Purposes		**1,193.1**	**1,974.0**	**1,677.2**	**915.3**	**5,759.7**
Applying Long- Term Vacancy and Establishing Net Effective Supply						
Long-Term Vacancy in Existing Base	**3.0%**	(35.8)	(59.2)	(50.3)	(27.5)	(172.8)
Results in Net Effective Supply in Existing Land		133.8	574.0	817.8	552.3	2,077.8
Less Lands Occupied by Major Office Uses, 2021-2051						
Major Office Employment Growth 2021-2051		14,204	27,675	8,889	6,048	56,815
Share of Major Office in Employment Areas		75%	75%	75%	75%	75%
Major Office Growth on Employment Land 2021-2051		10,653	20,756	6,666	4,536	42,611
Denisity of Office on Employment Land		180.0	180.0	180.0	180.0	180.0
Major Office Growth on Employment Land 2021-2051		59.2	115.3	37.0	25.2	236.7
Results in Net Effective Supply in Existing Land		**74.6**	**458.7**	**780.7**	**527.1**	**1,841.1**

(1) Change in use on these properties will occur slowly and incrementally over the forecast period

1. Treatment of "Flex" Office Space in Halton

As already described there are a number of uses occupying Employment Area lands that are not part of the Employment Land Employment base. These include Major Office buildings within Employment Areas as well large retail or institutional concentration that occur within the Employment Areas. There is additional employment that does not fall neatly into the categories and is what is being described here as "flex" office space. , Many industrial-type buildings particularly along the QEW frontage in Oakville and Burlington as well as in Winston Park are fully occupied with office uses though they appear at first glance to be industrial buildings with relatively high ceilings.

Often know as "flex space", these buildings and the employment they house are rarely inventoried as Major Office Employment. But for the purposes of the Preferred Growth Concept, an assumption has been made that some of the future flex office employees are shifted from the Employment Land Employment category into Major Office Employment and further directed to mixed-use UGCs and MTSAs. The idea is that, if the MTSA locations are successful in attracting significant residential development they may become more attractive for these office employment uses. other employment uses.

In order to reasonably analyze the existing Employment Areas including their current uses and densities to apply to the forecast need for employment lands, the focus needs to be on the Employment Land Employment. This narrowed focus occurs by doing two things:

- Major Office employment which occurs in Employment Areas as well as Community Areas is analyzed and forecast separately from the predominant employment types in these areas. In analytical work, Major Office is employment in buildings of 20,000 sq.ft. (1,830 m^2) no matter which economic sector those office workers belong to. The term Major Office is also used in the Growth Plan for a policy purpose that currently sets its threshold at 4,000 m^2. Major Office is treated separately, in part, because it has much higher densities than most industrial uses, the presence or absence of a few buildings in an Employment Area often governs its overall density, while occupying a very small amount of land. Treating Major Office separately allows the density analysis to focus on Employment Land Employment, the primary user of land in these areas. Major Office is separated out of the Employment Areas as shown in Table 18.

- Similarly, larger-scale retail uses and institutional uses can skew the analysis of employment area densities for the purposes of land needs assessment. The largest of these are also removed from the Employment Areas, *for the purpose of analysis*, to allow for a clear focussed analysis on Employment Land Employment in the Employment Areas. There are eight of these in Halton's employment areas that are separated out of the Employment Areas for analysis purposes: large-scale retail at Burloak Drive and South Service Road, Oakville Place Mall and on Dundas Street between Winston Churchill and Highway 403 in Oakville; Milton Crossroads and Maple Avenue Centre on the north and south sides of Highway 401 at Steeles in Milton; and the Toronto Premium Outlets on Highway 401 in Halton Hills; the two large institutions in Employment Areas that are separated out are the Oakville-Trafalgar Memorial Hospital and the Maplehurst Correctional Complex in Milton. These are listed with their site areas on Table 21. In addition to removal for the purposes of this analysis, a number of these areas are also proposed to be removed from the Employment Areas as part of the Preferred Growth Concept. Those changes to Employment Area boundaries would apply to six of the eight areas leaving only Maplehurst and the Toronto Premium Outlets within Employment Areas, as both are entirely surrounded by Employment Area uses. These conversion process is as discussed elsewhere in this document.

2. Treatment of Employment Conversions

One of the major matters to be addressed in the LNA is the conversion of employment lands and how any approved conversions should be replaced or not. The LNA contains the quantitative analysis of the employment lands conversions. The policy basis for the conversions is addressed elsewhere in the MCR work. The LNA analysis includes both the conversions already adopted by Halton Region in ROPA 48 and approved by the Ministry of

Municipal Affairs and Housing, as well as others that are recommended and that will be brought forward in a separate ROPA as part of the Region's MCR.

The recommended conversions are provided in the LNA in three groups. These are only the conversions recommended for approval by Regional Council and, ultimately, the Ministry of Municipal Affairs and Housing. The many requests for conversions not recommended for approval are not addressed in the LNA, but are addressed with all of the conversions elsewhere in the MCR.

The first group are in Table 21, which shows the major retail or institutional uses separated from the Employment Areas for analysis purposes and proposed to be removed from the Region's Employment Area. Of the eight large-scale retail centres and institutions in Employment Areas, six are proposed to be removed from the Employment Area, all four in Oakville plus the two retail centres in Milton. No conversion is suggested for Maplehurst or Toronto Premium Outlets. The conversion of any of these existing uses is of little consequence to the LNA quantitative work. The sites for all six areas fully developed in these non-employment-land-employment uses and are never likely to be occupied by Employment Land Employment in the future. As a result, there is no need to replace these lands within the supply of land in Employment Areas.

The second group of recommended Employment Area Conversions is shown in Table 22. These are most of the conversions being recommended for approval. All of this group of conversions are for the purposes of implementing higher density mixed use Strategic Growth Areas in the Region of Halton in accordance with the Growth Plan. All GO Rail stations in Burlington, Oakville and Milton are (or at least were at one time) largely in Employment Areas. To meet density targets for the three UGCs, plus the four additional MTSAs being defined, conversions of Employment Lands is necessary to allow for denser mixed-use communities that might achieve the density targets mandated by the Ministry. Conversions within the UGC already occurred in Oakville and Milton during the original implementation of the Growth Plan through ROPA 38. The revised boundaries of the Downtown Burlington UGC (and overlapping MTSA) mean the proposed conversions are necessary for there to be any reasonable prospect of achieving the density targets. The Bronte GO MTSA is now entirely within an Employment Area as is much of the Appleby GO MTSA. Conversion of portions of Bronte GO MTSA is necessary to meet targets. In the case of Appleby Line, conversion is not possible because of existing uses, so an alternative density target was requested by the Region and approved by the Ministry for Appleby as a nearly-all-employment MTSA. While the Growth Plan does not require density targets at Aldershot GO or in Milton's proposed Trafalgar Road GO Station and MTSA, they are necessary to provide a reasonable prospect for any substantial amount of mixed-use

development within these areas. There are no conversions proposed for the Georgetown GO MTSA and only a small conversion within the Acton MTSA.

In addition to the UGCs and MTSAs, there are four other mixed-use areas proposed to be implemented by conversions. These are the Hospital District, Northwest Palermo Mixed Use Area and the Neyagawa Urban Centre in Oakville and the Education Village in Milton. Two of these — the Hospital District and the Neyagawa Urban Centre — are similar to the MTSAs but on a smaller scale, each being about half the size of an MTSA. Neyagawa is expected to be a station on the Highway 407 busway and the Hospital District will be on whatever type of higher order transit ultimately comes to the Dundas Street in Oakville and Burlington. While somewhat similar in the desire for higher density mixed-use development, the northwest Palermo lands and the Education Village lands are not precisely conversions at this time.

The conversion of most of the lands proposed for the Education Village in Milton has already be approved by way of a Minster's Zoning Order. It has been kept in this analysis as a conversion in order to be properly addressed in the LNA.

The northwest Palermo lands on the east side of Bronte Road, north of Dundas to Highway 407 were considered part of the Region's future employment land supply, since being designated urban by ROPA 8 in 1999. The lands were similarly identified for employment use by the Region through the background work to ROPA 25 in 2004. ROPA 25 was appealed to the then Ontario Municipal Board by the land owners. The Town of Oakville through the North Oakville West Secondary Plan in 2008 designated the lands for employment and the Region specifically included of these lands within the Regional Employment Area established through the Sustainable Halton process implemented by ROPA 38 in 2009. With the appeal unresolved, no employment designation was in force for these lands. As a resolution to the appeal, the Region and the Town are proposing to allow mixed-use on the southern portion of the lands, while the northern portion would develop into employment. The southerly mixed-use area is not technically a conversion of Employment Lands because of the outstanding appeal. However, it is shown in Table 22 as a conversion since it would change the Region and Town proposed land uses and remove the long-standing inclusion of the lands in the future land supply.

In total there are 330 hectares proposed for conversion to implement Strategic Growth Areas in Halton. Of this, about 280 hectares should be replaced in the supply because they are occupied by Employment Land Employment or are vacant and could otherwise be developed. The other 50 hectares that is not "replaced" is to recognize that some of the lands in Aldershot are highly underutilized and the large parking areas at Aldershot,

Burlington UGC and Bronte GO Stations within the conversion areas are not suggested for replacement as they are infrastructure tied to that location rather than an employment use that could locate there or elsewhere.

The third group, as shown in Table 23, provides the much **smaller single site conversions recommended for approval**. Of the total 50 hectares of land, a little under one-half is proposed not to be replaced, mostly because they area existing retail uses. The conversion is on the same basis as large-scale retail uses, but are just much smaller. The other lands not replaced are some of the under-utilized lands in the Bronte/Main area in Milton. The 27 hectares suggested to be replaced in the supply are either occupied or vacant lands that could be reasonably used for Employment Land Employment as part of the long term supply of lands in Halton.

The effect of the conversions on the overall 2021 land supply in the Region is provided in Table 17.

Table 21: Large-Scale Retail and Institutional Sites

Large-Scale Retail and Insititutional Uses, Excluded for Analysis Purposes, from Employment Area lands and from Employment Land Employment							
Map Reference in IGMS Concepts	**Site**	**Occupancy**	**Site Area, Vacant or Occupied (net ha)**	**Area Not Replaced in Land Budget (net ha)**	**Area Replaced in Land Budget (net ha)**	**In ROPA 48 or Final MCR ROPA?**	**Note on Replacement**
City of Burlington							
	None						
	Total		**0.0**	**0.0**	**0.0**		
Town of Oakville							
O-10	RioCan Centre Burloak (Burloak Drive and South Service Road)	Occupied	5.0	5.0	0.0	Final ROPA	All four sites are proposed to be removed from Employment Area mapping either in ROPA
O-07	Oakville-Trafalgar Memorial Hospital (Dundas Street and Third Line)	Occupied	17.5	17.5	0.0	ROPA 48	48 or through the later amendment. No replacement required as lands are either
O-03	Oakville Place Shopping Centre (QEW at Trafalgar Road)	Occupied	11.7	11.7	0.0	ROPA 48	occupied wtih major retail or major institutional uses. As lands are not occupied with
O-09	Winston Park Retail on Dundas Street Street Frontage	Occupied	29.8	29.8	0.0	Final ROPA	employment land employment, conversion does not affect the supply of land for employment area uses.
	Total		**64.0**	**64.0**	**0.0**		
Town of Milton							
M-05	Milton Crossroads (Highway 401 North Side at Steeles Ave.)	Occupied	20.3	20.3	0.0	Final ROPA	Proposed to be removed from Employment Area mapping, no replacement required as
M-06	Maple Avenue Retail Centre (Highway 401 South Side at Steeles Ave.)	Occupied	15.7	15.7	0.0	Final ROPA	lands are not occupied with employment land employment and conversion does not affect the supply of land for employment area uses.
*	Maplehurst Correctional Complex	Occupied	45.2	n/a	n/a	No Conversion	Major institution in an Employment Area is excluded from analysis. No conversion has been proposed
	Total		**81.2**	**36.0**	**0.0**		
Town of Halton Hills							
*	Toronto Premium Outlets (Highway 401 at Trafalgar Road)	Occupied	22.3	n/a	n/a	No Conversion	Large-scale retail centres in Employment Areas are excluded from the land, employment and density analysis as they skew the anlaysis of employment land densities. This is strictly for analysis purposes and is not a land use planning policy matter.
	Total		**22.3**	**0.0**	**0.0**		
Region of Halton							
	Lands excluded from analysis where conversion is requested		100.0	100.0	0.0		
*	Lands excluded from analysis where no conversion is requested		67.5	n/a	n/a		
Total Halton Region			**167.5**	**100.0**	**0.0**		

Note: All figures are in net hectares (area of the private parcel after lands are subdivided and local roads and utilities are removed). On larger sites that will be subdivided a standard 80% net to gross ratio is applied.

* Denotes areas not subject to conversion requests

Table 22: Recommended Employment Land Conversions to Accommodate Mixed-Use Transit Oriented Development

Recommended Employment Land Conversions to Accommodate Mixed Use Transit Oriented Development in the UGCs, MTSAs, Nodes or Corridors							
Map Reference in IGMS Concepts	Site	Occupancy	Site Area, Vacant or Occupied (net	Area Not Replaced in Land Budget	Area Replaced in Land Budget (net ha)	In ROPA 48 or Final MCR ROPA?	Note on Replacement
	City of Burlington						
	Downtown Burlington UGC / Burlington GO MTSA	Mostly Occupied	13.4	4.8	8.6	ROPA 48	Only GO station and parking area not replaced
	Aldershot GO Station MTSA	Mostly Occupied	38.5	28.7	9.9	ROPA 48	Only GO station and parking area not replaced
	Total Burlington		**51.9**	**33.5**	**18.4**		
	Town of Oakville						
O-06	Bronte GO MTSA Mixed Use Area	Occupied	61.8	10.5	51.3	ROPA 48	Only GO station and parking area not replaced
O-05	Northwest Palermo Mixed Use Area (see Note 2)	Vacant	25.8	0.0	25.8	ROPA 48	Vacant Employment Area land supply to be replaced in long term land need
O-07	Hospital District (Hospital Site Not In Supply)	Mostly Vacant	31.4	2.2	29.2	ROPA 48	Vacant land replaced, existing office site not replaced, as mixed-use area will require
O-02	Neyagawa Urban Centre (Expansion NE)	Vacant	9.0	0.0	9.0	Final ROPA	Vacant Employment Area land supply to be replaced in long term land need
O-22	Neyagawa Urban Centre (Expansion West)	Vacant	10.3	0.0	10.3	Final ROPA	Vacant Employment Area land supply to be replaced in long term land need
—	Neyagawa Urban Centre (Expansion farther West)	Vacant	5.6	0.0	5.6	Final ROPA	Vacant Employment Area land supply to be replaced in long term land need
	Total Oakville		**144.0**	**12.7**	**131.3**		
	Town of Milton						
M-01a	Education Village Central and North (see Note 3)	Vacant	41.6	0.0	41.6	ROPA 48	Vacant Employment Area land supply to be replaced in long term land need
M-01b	Education Village South	Vacant	28.8	0.0	28.8	ROPA 48	Vacant Employment Area land supply to be replaced in long term land need
M-02	Trafalgar GO MTSA west side of Trafalgar Road	Vacant	53.4	0.0	53.4	ROPA 48	Vacant Employment Area land supply to be replaced in long term land need
—	Trafalgar GO MTSA southeast quadrant (on east side Trafalgar Road)		24.6	0.0	24.6		Vacant Employment Area land supply to be replaced in long term land need
	Total Milton		**148.4**	**0.0**	**148.4**		
	Town of Halton Hills						
HH-01 & 02	Acton GO MTSA	Occupied	4.2	2.8	1.4	ROPA 48	Only need to replace the occupied portion of the Perth Street site
	Total Halton Hills		**4.2**	**2.8**	**1.4**		
Total Halton Region			**348.6**	**49.0**	**299.5**		

Note 1: All figures are in net hectares (the area of the private parcel after lands are subdivided and local roads and utilities are removed). On larger sites that will be subdivided a standard 80% net to gross ratio is applied.

Note 2: The northwest Palermo lands on the east side of Bronte Road, north of Dundas to Highway 407 were considered part of the Region's future employment land supply, since being designated urban by ROPA 8 in 1999. The lands were similarly identified for employment use by the Region through the background work to ROPA 25 in 2004. ROPA 25 was appealed to the then Ontario Municipal Board by the land owners. The Town of Oakville through the North Oakville West Secondary Plan in 2008 designated the lands for employment and the Region specifically included of these lands within the Regional Employment Area established through the Sustainable Halton process implemented by ROPA 38 in 2009. With the appeal unresolved, no employment designation was in force for these lands. As a resolution to the appeal, the Region and the Town are proposing to allow mixed use on the southern portion of the lands, while the northern portion would develop in employment. The southerly mixed-use area is not technically a conversion of employment lands because of the outstanding appeal. However, it is shown on this table as a conversion since it would change the Region and Town proposed land uses and remove the long-

Note 3: After Regional Council's approval of ROPA 48, the conversion of central and north portions of the Education Village was completed through a Minister's Zoning Order (MZO). On these lands, rather than being the conversion, ROPA 48 will now be the recognition of the the MZO within the Regional Plan.

Table 23: Recommended Employment Land Conversions of Single Sites

Recommended Employment Land Conversions of Single Sites Not in Urban Growth Centres or Major Tranit Station Areas							
Map Reference in IGMS Concepts	**Site**	**Occupancy**	**Site Area, Vacant or Occupied (net ha)**	**Area Not Replaced in Land Budget (net ha)**	**Area Replaced in Land Budget (net ha)**	**In ROPA 48 or Final MCR ROPA?**	**Note on Replacement**
City of Burlington							
B-01	238 Sumach Drive	Vacant	1.5	0.0	1.5	ROPA 48	Replaced as vacant land that would otherwise be part of future employment land supply
B-08	2258 Mountainside Drive	Occupied	0.4	0.0	0.4	ROPA 48	Replaced as occupied land that would otherwise be part of future employment land suppl
B-09	Industrial Street (at North Service Road) Retail	Occupied	3.7	3.7	0.0	Final ROPA	Retail only lands not replaced in future employment land supply
B-11	800 Burloak	Vacant	2.0	0.0	2.0	ROPA 48	Replaced as vacant land that would otherwise be part of future employment land supply
B-16	3270 Harrison Court (Lowes Building Supplies)	Occupied	4.3	4.3	0.0	Final ROPA	Retail only lands not replaced in future employment land supply
B-18	4103 Palladium Way (conversion for retirement home)	Vacant	1.5	0.0	1.5	ROPA 48	Replaced as vacant land that would otherwise be part of future employment land supply
—	Halton Court Services Provincial Offenses	Occupied	1.5	1.5	0.0	Final ROPA	New court facility completed in 2019, adjacent to conversion for retirement home, likely to remain in current employment use indefinitely
	Total		**14.9**	**9.5**	**5.4**		
Town of Oakville							
O-11	497 Pinegrove	Occupied	0.8	0.8	0.0	Final ROPA	Retail only lands not replaced in future employment land supply
O-13	Winston Park West Core Commercial	Mostly Occupied	6.1	6.1	0.0	Final ROPA	Retail only lands not replaced in future employment land supply
O-14	584 Ford Drive	Occupied	1.5	1.5	0.0	Final ROPA	Retail only lands not replaced in future employment land supply
O-16	2680 Sheridan Gardens Drive	Occupied	1.9	1.9	0.0	Final ROPA	Retail only lands not replaced in future employment land supply
O-17	103 Burnhamthorpe/4115 Sixth Line	Vacant	4.9	0.0	4.9	ROPA 48	Replaced as vacant land that would otherwise be part of future employment land supply
	Total		**15.2**	**10.3**	**4.9**		
Town of Milton							
M-03, 04 & 10	Meritor Site and Nearby Bronte/Main Lands	Mostly Occupied	17.4	2.9	14.5	ROPA 48	Replaced except for some highly underutilized portions of Bronte Main
M-07	405 Martin Street	Mostly Occupied	0.5	0.5	0.0	Final ROPA	Retail only lands not replaced in future employment land supply
	Total		**17.9**	**3.4**	**14.5**		
Town of Halton Hills							
HH-03	344 Guelph	Occupied	2.3	0.0	2.3	ROPA 48	Replace: the site (and vacant building) were in an industrial use and should be replaced in the total land supply of the Region.
	Total		**2.3**	**0.0**	**2.3**		
Total Halton Region			**50.3**	**23.2**	**27.1**		

Note: All figures are in net hectares (area of the private parcel after lands are subdivided and local roads and utilities are removed). On larger sites that will be subdivided a standard 80% net to gross ratio is applied.

E. COMPONENT 4: NEED FOR ADDITIONAL LAND

Once the demand and supply comparison is prepared, the additional land need is calculated based on excess employment that cannot be accommodated within the existing supply by 2051.

As shown in Table 24, for the purposes of this analysis, an assumed net employment density of 29.0 employees per net hectare is used to determine the net land area need. The density assumption accounts for non-employment land employment uses that will occupy Employment Areas. The need for additional land is also adjusted to reflect an 80% net to gross ratio, and a 3% long-term vacancy rate.

Table 24: Halton Need for Additional Employment Land

Determining Additional Regional Employment Land Need, 2021 to 2051 (Net hectares)						
Forecasting Build Out of Existing Supply						
Step 1: Forecast Employment Land Employment Growth	2051 Forecast Employment Land Employment					196,600
	Less 2021 Employment Land Employment					(116,800)
	2021 to 2051 Growth					79,800
Step 2: Add dislocated employment from the incremental redevelopment of converted lands	2021 to 2051 Growth					79,800
	Dislocated employment to be accommodated					4,945
	Total Employment Land Employment to be Accommodated					84,745
Step 3: Shift some "flex" office space out of employment lands into the mixed use centres	2021 to 2051 Growth					84,745
	Less "flex office" going elsewhere					(4,000)
	Jobs in new space on vacant land					80,745
Step 4: Build out existing lands		**Burlington**	**Oakville**	**Milton**	**Halton Hills**	**Halton**
Land Supply in net ha		74.6	458.7	780.7	527.1	1,841.1
At assumed future average density		*35.0*	*35.0*	*29.0*	*29.0*	*30.7*
Provides jobs on available vacant supply		2,610	16,060	22,640	15,280	56,590
Step 5: Remaining Employment Land Employment Generates Need for New Urban Employment Lands						
Demand for jobs on new urban employment land	Jobs in new space on vacant land					80,745
	Less jobs accomodated on net effective supply					(56,590)
	Jobs to be accommodated on new urban employment land					**24,155**
Employment Density Assumption (1)				at	29.0	jobs per net ha
Net hectares of new urban Employment Area					833	net ha
Adding a factor for long term vacancy	**3%**				859	net ha
Step 6: Apply standard net to gross ratio for employment areas of 80%					**1,070**	**net ha**

(1) Region-wide average is now about 32 employees per net ha. In both Sustainable Halton and HUSP 32 to 34 were used as a density and it remains reasonable basis for planning

After these adjustments, the Employment Area land need is determined. Approximately 1,070 net hectares will need to be accommodated within new Employment Areas located within Milton (400 ha) and Halton Hills (670 ha).

Additional details on the employment land employment growth by local municipality is shown in Appendix I.

F. EMPLOYMENT AREA DENSITY

While not a specific part of the Land Needs Assessment, the Growth Plan does require the Region to have an employment area density target in the Regional Plan. That target has no time line to be met, nor does it have a significant influence on development approvals or other planning matters. The calculation of the Density in accordance with the Growth Plan is like the UGC and MTSA densities where there are no deductions for the Natural Heritage System or for large infrastructure that is within the Employment Areas. The result is that the density is not easily comparable to the usual measure of employment density which are typically based on either the net private land area or on the developable area, in the fashion of DGA density calculations. Policies and a proposed target will be prepared for the Regional Official Plan Amendments. Table 25 provides the calculated employment density for existing designations in 2021 and 2051 and for the proposed expansion areas in at 2051.

Table 25: Halton Employment Area Density

Employment Area Density for Growth Plan Employment Target Purposes		
Employment Area Density	**2021**	**2051**
Existing Designated Areas in Jobs		
Employment Land Employment	116,800	192,300
Major Office Employment	26,400	69,000
Population-Related Employment	2,600	2,600
Total in Employment Area	145,800	263,900
Proposed New Employment Area Designations in Jobs		
Employment on new Employment Area Lands 2021 to 2051	0	24,200
Total Jobs in Employment Area	**145,800**	**288,100**
Land and Density in Developable Hectares		
Land Area (Developable land area, net of NHS)	7,520	8,590
Density in jobs per developable hectare (net of NHS)	19.4	33.5
Land and Density in Gross Hectares (for Employment Area Target Purposes)		
Gross Land Area (per Growth Plan employment density target)	8,810	10,360
Density in jobs per gross hectare	16.5	27.8

4. Conclusion: Summary of Land Need

Based on the Land Needs Assessment described in this report, the Region requires additional land to accommodate long-term population and employment growth to 2051 established by Schedule 3 to the Growth Plan.

Table 26 below summarizes the Community and Employment Area land need. Given the limited availability of future urban lands in the communities of Burlington and Oakville, urban boundary expansions are proposed in Milton and Halton Hills.

Table 26: Summary of Community and Employment Area Land Need

MUNICIPALITY	COMMUNITY AREA (HA)	EMPLOYMENT AREA (HA)	TOTAL LAND NEED (HA)
Milton	710	670	1,380
Halton Hills	410	400	810
TOTAL	**1,120**	**1,070**	**2,190**

APPENDIX 1

ALLOCATION BY LOCAL MUNICIPALITY

POPULATION AND HOUSEHOLD FORECASTS BY LOCAL MUNICIPALITY

The following provides a summary of the allocation of population and households by local municipality in Halton Region.

Table A1: Total Population Growth by Municipality and Halton

Total Population Growth by Municipality and Region of Halton					
Year	Burlington	Oakville	Milton	Halton Hills	Halton Region
2001	156,800	150,700	33,200	50,300	391,000
2011	180,900	187,700	87,900	60,600	517,100
2021	193,500	221,500	138,500	65,600	619,100
2031	216,800	282,700	185,600	81,800	766,900
2041	240,500	328,700	261,700	100,100	931,000
2051	265,000	375,000	335,000	125,000	1,100,000
Growth 2001-2011	24,100	37,000	54,700	10,300	126,100
Growth 2011-2021	12,600	33,800	50,600	5,000	102,000
Growth 2021-2031	23,300	61,200	47,100	16,200	147,800
Growth 2021-2041	47,000	107,200	123,200	34,500	311,900
Growth 2021-2051	71,500	153,500	196,500	59,400	480,900

Table A2: Person per Unit for New Units by Municipality and Halton

Person Per Unit (PPU) Assumptions for New Units by Municipality and Region of Halton					
Housing Type	Burlington	Oakville	Milton	Halton Hills	Halton Region
2006-2016					
Single & Semis	3.42	3.72	3.81	3.53	3.69
Rows	2.32	2.78	2.91	2.33	2.73
Apartments	1.60	1.77	1.59	1.12	1.64
Overall PPU	**2.57**	**3.10**	**2.96**	**2.74**	**2.81**
Housing Type	Burlington	Oakville	Milton	Halton Hills	Halton Region
2021-2031					
Single & Semis	3.56	3.78	3.83	3.60	3.75
Rows	2.50	2.80	2.95	2.58	2.81
Apartments	1.81	1.84	1.89	1.72	1.83
Overall PPU	**2.04**	**2.51**	**2.96**	**2.74**	**2.57**
Housing Type	Burlington	Oakville	Milton	Halton Hills	Halton Region
2031-2041					
Single & Semis	3.60	3.90	3.99	3.71	3.92
Rows	2.69	2.94	3.21	2.87	3.07
Apartments	1.90	1.98	2.04	1.93	1.96
Overall PPU	**2.10**	**2.53**	**3.27**	**2.80**	**2.75**
Housing Type	Burlington	Oakville	Milton	Halton Hills	Halton Region
2041-2051					
Single & Semis	3.55	3.88	3.99	3.75	3.89
Rows	2.77	2.97	3.29	3.03	3.08
Apartments	1.91	2.02	2.14	2.02	2.00
Overall PPU	**2.11**	**2.54**	**3.08**	**2.83**	**2.60**

Note: PPUs are a result of household population and occupied households

Table A3: City of Burlington, Total Household Growth by Type 2021-2051

Preferred Growth Concept Summary by Local Municipality					
City of Burlington: Total Household Growth by Type 2021-2051					
Year	**Singles & Semis**	**Rows**	**Apartments**	**Accessory Units**	**Total**
2021	40,551	13,790	19,214	570	74,125
2031	41,576	14,838	27,826	847	85,088
2041	42,257	16,144	37,075	1,134	96,610
2051	42,798	17,616	45,979	1,370	107,763
Growth 2021-2051	**2,246**	**3,826**	**26,766**	**800**	**33,638**
Housing Mix	**7%**	**11%**	**80%**	**2%**	**100%**

Table A4: Town of Oakville, Total Household Growth by Type 2021-2051

Town of Oakville: Total Household Growth by Type 2021-2051					
Year	**Singles & Semis**	**Rows**	**Apartments**	**Accessory Units**	**Total**
2021	46,003	13,770	14,268	630	74,670
2031	51,825	18,392	26,920	973	98,109
2041	54,183	21,630	40,399	1,420	117,632
2051	56,198	24,530	54,312	1,694	136,734
Growth 2021-2051	**10,195**	**10,760**	**40,044**	**1,064**	**62,063**
Housing Mix	**16%**	**17%**	**65%**	**2%**	**100%**

Table A5: Town of Milton, Total Household Growth by Type 2021-2051

Town of Milton: Total Household Growth by Type 2021-2051					
Year	**Singles & Semis**	**Rows**	**Apartments**	**Accessory Units**	**Total**
2021	26,292	9,636	4,075	394	40,397
2031	31,373	15,793	7,733	780	55,679
2041	39,852	24,754	13,173	1,157	78,937
2051	47,480	32,581	19,158	1,742	100,961
Growth 2021-2051	**21,188**	**22,945**	**15,083**	**1,348**	**60,563**
Housing Mix	**35%**	**38%**	**25%**	**2%**	**100%**

Table A6: Town of Halton Hills, Total Household Growth by Type 2021-2051

Town of Halton Hills: Total Household Growth by Type 2021-2051					
Year	**Singles & Semis**	**Rows**	**Apartments**	**Accessory Units**	**Total**
2021	17,111	2,159	2,167	360	21,796
2031	19,263	4,167	3,554	478	27,462
2041	21,478	6,258	5,260	659	33,656
2051	24,322	9,034	7,130	822	41,309
Growth 2021-2051	**7,211**	**6,875**	**4,963**	**463**	**19,513**
Housing Mix	**37%**	**35%**	**25%**	**2%**	**100%**

EMPLOYMENT FORECASTS BY LOCAL MUNICIPALITY

The following provides a summary of the allocation of employment by local municipality in Halton Region.

Table A7: Total Employment by Land Use Type by Municipality and Halton

Total Employment by Land Use Type by Municipality and Region of Halton					
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**Halton Region**
2001					
Major Office	9,900	5,400	100	200	15,600
Population Related	26,400	24,400	9,000	8,300	68,000
Employment Land	37,100	38,900	13,500	7,500	96,600
Rural	2,300	100	3,700	2,600	9,200
Total	**75,700**	**68,800**	**26,300**	**18,600**	**189,400**
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**189400**
2011					
Major Office	12,400	10,700	600	200	23,900
Population Related	37,700	33,400	14,200	11,200	96,400
Employment Land	39,500	42,300	15,200	7,600	104,200
Rural	2,400	100	3,800	2,700	9,500
Total	**92,000**	**86,400**	**33,800**	**21,700**	**234,000**
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**Halton Region**
2021					
Major Office	12,400	18,000	2,300	300	33,000
Population Related	42,800	45,100	20,200	11,600	119,700
Employment Land	41,200	47,600	18,000	10,100	116,800
Rural	2,100	100	4,000	2,600	8,800
Total	**98,500**	**110,800**	**44,500**	**24,600**	**278,300**
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**Halton Region**
2031					
Major Office	16,300	27,000	4,000	1,300	48,600
Population Related	46,700	57,000	28,900	13,000	145,600
Employment Land	41,500	55,200	29,300	18,600	144,600
Rural	2,300	100	5,700	2,900	11,000
Total	**106,800**	**139,300**	**67,900**	**35,800**	**349,800**
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**Halton Region**
2041					
Major Office	20,400	35,300	6,400	2,900	65,000
Population Related	50,800	65,000	41,600	15,600	173,000
Employment Land	41,600	60,000	40,300	25,500	167,500
Rural	2,500	100	8,200	3,500	14,300
Total	**115,300**	**160,400**	**96,500**	**47,500**	**419,800**
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**Halton Region**
2051					
Major Office	26,600	45,700	11,100	6,400	89,800
Population Related	53,800	72,900	54,300	18,900	199,900
Employment Land	41,900	61,400	54,000	35,300	192,600
Rural	2,600	100	10,700	4,300	17,700
Total	**124,900**	**180,100**	**130,100**	**64,900**	**500,000**

Note: Numbers may not add due to rounding

Table A8: Total Employment Growth by Land Use Type by Municipality and Halton

Total Employment Growth by Land Use Type by Municipality and Region of Halton					
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**Halton Region**
2001-2011					
Major Office	2,500	5,300	500	0	8,300
Population Related	11,300	9,000	5,200	2,900	28,400
Employment Land	2,400	3,400	1,700	100	7,600
Rural	100	0	100	100	300
Total	**16,300**	**17,600**	**7,500**	**3,100**	**44,600**
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**Halton Region**
2011-2021					
Major Office	0	7,300	1,700	100	9,100
Population Related	5,100	11,700	6,000	400	23,300
Employment Land	1,700	5,300	2,800	2,500	12,600
Rural	(300)	0	200	(100)	(700)
Total	**6,500**	**24,400**	**10,700**	**2,900**	**44,300**
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**Halton Region**
2021-2031					
Major Office	3,900	9,000	1,700	1,000	15,600
Population Related	3,900	11,900	8,700	1,400	25,900
Employment Land	300	7,600	11,300	8,500	27,800
Rural	200	0	1,700	300	2,200
Total	**8,300**	**28,500**	**23,400**	**11,200**	**71,500**
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**Halton Region**
2031-2041					
Major Office	4,100	8,300	2,400	1,600	16,400
Population Related	4,100	8,000	12,700	2,600	27,400
Employment Land	100	4,800	11,000	6,900	22,900
Rural	200	0	2,500	600	3,300
Total	**8,500**	**21,100**	**28,600**	**11,700**	**70,000**
	Burlington	**Oakville**	**Milton**	**Halton Hills**	**Halton Region**
2041-2051					
Major Office	6,200	10,400	4,700	3,500	24,800
Population Related	3,000	7,900	12,700	3,300	26,900
Employment Land	300	1,400	13,700	9,800	25,100
Rural	100	0	2,500	800	3,400
Total	**9,600**	**19,700**	**33,600**	**17,400**	**80,200**

Note: Numbers may not add due to rounding

Table A9: Halton Allocation of Employment by Existing and New Employment Area Designations by Local Municipality

Halton Region Employment Allocation of New Employment Area Designations					
2021 to 2031	**Burlington**	**Oakville**	**Milton**	**Halton Hills**	**Halton**
2021 Employment Land Employment	**41,200**	**47,600**	**18,000**	**10,100**	**116,800**
Growth within Existing Designations	200	7,700	11,300	8,500	28,000
New Designations	0	0	0	0	0
2021-2031 Growth	200	7,700	11,300	8,500	28,000
2031 Employment Land Employment	**41,500**	**55,200**	**29,300**	**18,600**	**144,900**
2031 to 2041	**Burlington**	**Oakville**	**Milton**	**Halton Hills**	**Halton**
2031 Employment Land Employment	**41,500**	**55,200**	**29,300**	**18,600**	**144,600**
Growth within Existing Designations	200	4,800	8,400	5,100	18,300
New Designations	0	0	2,600	1,900	4,500
2031-2041 Growth	200	4,800	11,000	6,900	22,800
2041 Employment Land Employment	**41,600**	**60,000**	**40,300**	**25,500**	**167,400**
2041 to 2051	**Burlington**	**Oakville**	**Milton**	**Halton Hills**	**Halton**
2041 Employment Land Employment	**41,600**	**60,000**	**40,300**	**25,500**	**167,400**
Growth within Existing Designations	200	1,400	2,300	1,500	5,300
New Designations	0	0	11,400	8,300	19,700
2041-2051 Growth	200	1,400	13,700	9,800	24,900
2051 Employment Land Employment	**41,900**	**61,400**	**54,000**	**35,300**	**192,300**