

HOUSING ANALYSIS AND EMPLOYMENT LAND NEEDS

Prepared for:

Vaughan Tomorrow

O U R C I T Y . O U R V O I C E .

HEMSON
Consulting Ltd.

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I INTRODUCTION

Hemson Consulting Ltd. has been retained by the City of Vaughan to provide an analysis of housing and employment land needs. The study is being undertaken as input to the City's growth management program, *Vaughan Tomorrow*, the preparation of a new Vaughan official plan and conformity with the 2006 Provincial *Growth Plan for the Greater Golden Horseshoe* (the *Growth Plan*).

The purpose of the study is to provide additional technical details to the recently released report, *Where & How to Grow: Directions on Future Growth in the City of Vaughan to 2031* (the *Where & How to Grow* report),¹ and describe the implications of its main conclusions. The *Where & How to Grow* report is the first step in implementing the City's vision for growth and development over time.

As described in the report, a major element of the City's vision is to accommodate much of its future residential growth through intensification, particularly in the Vaughan Metropolitan Centre (VMC). The City's approach reflects, in part, new Provincial and Regional policies that also seek to achieve a more compact urban form.

¹ For details, see *Where & How to Grow: Directions on Future Growth in the City of Vaughan to 2031 prepared by Urban Strategies Inc., June 2009.*

A. THE PROVINCE HAS TAKEN A MORE DIRECT ROLE IN PLANNING IN ONTARIO

On June 16, 2006, the Province of Ontario adopted the *Growth Plan for the Greater Golden Horseshoe* (*Growth Plan*). The *Growth Plan* sets out a vision for growth in the Greater Golden Horseshoe (GGH) to 2031, including a set of long-range growth forecasts and direction on how that growth should be accommodated.

All municipalities in the GGH must conform to the *Growth Plan*, including the Region of York and the City of Vaughan. The Region of York, in order to update its planning policies and come into conformity with the *Growth Plan*, has prepared a new Regional official plan, a draft of which is now available for public review.

All of these policy directions have implications for planning in the City of Vaughan, particularly those related to the allocation of population and employment growth to the local municipalities within the Region, including the City of Vaughan, as well as *Growth-Plan*-related density and intensification targets. The City's approach to preparing a new official plan must reflect and support this new planning policy environment.

1. ***Growth Plan Provides the Forecasts to Be Used for Long-Range Planning***

The *Growth Plan* contains a set of population and employment allocations that municipalities in the GGH must use for long-range planning and managing growth. In total, the *Growth Plan* forecasts approximately 11.5 million people and 5.6 million jobs for the GGH.

Under the *Growth Plan*, future growth is to be concentrated mainly in the Greater Toronto Area and Hamilton (GTAH) where most of the population and employment already exists. Approximately 25% of the total population growth and 20% of the employment growth has been allocated to the Outer Ring¹.

Within the GTAH, the *Growth Plan* has allocated to the Region of York a total population of 1.5 million and 780,000 jobs by 2031. For the current planning period, these are the legislated, in-force growth target forecasts that must be used for growth management. The Province may revise the forecasts in five years. For the current planning period, however, the amount of growth that Vaughan must plan for has been determined by the Province and Region.

¹ The Outer Ring is defined in the *Growth Plan* as a geographic area containing various cities, regions and counties beyond the GTAH.

2. ***Growth Plan also Provides Direction on How Growth Must Be Accommodated***

In addition to setting the overall forecasts and growth allocations to be used for growth management, the *Growth Plan* also provides guidance on how that growth should be accommodated. Three sets of policies are of particular importance to the approach and methods used in this report as they set out specific quantitative measures of how growth is to be accommodated. The policies are:

- a. A minimum proportion of Regional growth to be accommodated through intensification;
- b. A minimum density of development to be planned for on greenfield areas of the Region of York; and
- c. A minimum density for planned development in the designated urban growth centres.

These policies, or rules, provide the “envelopes” in which planning for growth must occur:

- The first rule relates to intensification and states that:

By the year 2015 and for each year thereafter, a minimum of 40% of all residential development occurring annually within [the Region of York] will be within the built-up area (2.2.3.1).

This first rule provides direction on the proportion of development to occur within the built-up area (i.e. intensification) but not its density. Because the rule applies region-wide, the Region of York has applied lower rates of intensification in the northern and more rural municipalities, compensated by rates greater than 40% in the southern urban communities, including the City of Vaughan.

- The second rule states that the Region of York's greenfield areas, collectively, including any new areas designated for urban uses, must be planned to achieve a minimum of 50 persons plus jobs per gross hectare of land. This includes undeveloped areas at the edges of Vaughan's current urban designated area, plus any additional lands that may be designated through the new official plan or in the future for urban use, for both residential and employment uses; and
- The third policy concerns the density of development in York's three Urban Growth Centres (UGC) designated in the *Growth Plan*, which must be planned to achieve a minimum of 200 persons plus jobs per hectare. The VMC is identified as a UGC in the *Growth Plan*, and current plans envision a vibrant subway-based downtown area at high densities, consistent with *Growth Plan* policies.

In addition to these three quantitative targets, the *Growth Plan* seeks to preserve existing employment areas and reduce pressures for conversion of employment lands to non-employment uses. These policies have been further reinforced through recent amendments to the *Planning Act* through "Bill 51" in 2006.

3. Region of York Has Prepared a New Official Plan to Conform with the *Growth Plan*

The Region of York has prepared a new official plan to implement the *Growth Plan* by updating existing policies and including density and intensification targets as well as policies related to the UGCs. For the purposes of the analyses continued in this report the key policies in the June 2009 draft of the new *Region of York Official Plan* are:

- A population allocation for Vaughan to grow from 248,800 in 2006 to 418,800 by 2031;¹
- An employment allocation for Vaughan to grow from 162,200 in 2006 to 266,100 in 2031;

¹ Unless otherwise noted, all population figures in this report are total population, including the net census under-coverage consistent with Provincial and Regional plans. Other municipal work such as development charge background studies may use Census population, excluding census net under-coverage. Caution needs to be taken in comparing population figures from different sources.

- A target for 29,300 residential units to be accommodated within the existing built-up area of the City of Vaughan between 2006 and 2031, which translates into a share of approximately 45% of new housing units;¹
- A direction to focus growth in the VMC (an identified UGC under the *Growth Plan*) and along Highway 7, designated a Regional corridor in the Draft York Region Official Plan; and
- The identification of the Highway 400 North lands and the area north of the Vaughan Enterprise Zone along Highway 50 as a strategic Employment Area, an urban expansion area. The draft *Region of York Official Plan* recognises that some such urban expansions may be required, but the size and location have yet to be determined.

¹ *The Region of York, in its January 2009 land budget report, forecasts that 64,850 new housing units will be required to accommodate population growth to 2031 in the City of Vaughan. To implement the Growth Plan intensification target, the Region's draft official plan directs Vaughan to accommodate 29,300 units through intensification, or approximately 45% of the total housing unit forecast. As described in detail in Chapter 2, the Hemson method forecasts a somewhat lower total amount of units (56,600 units), however, the overall share of units to be accommodated through intensification is maintained, consistent with the Region's draft official plan and new Provincial policies.*

B. WHERE AND HOW TO GROW REPORT PROVIDES A BASIS TO IMPLEMENT THE PROVINCIAL VISION

As a first step in implementing the Provincial vision for growth and new Regional policies, the City of Vaughan has recently released the *Where & How to Grow* report. The *Where & How to Grow* report summarizes the growth outlook for the City of Vaughan and sets out a number of growth management policy directions to be considered as part of preparing a new official plan.

The preparation of the *Where & How to Grow* report has been informed by several background reports and has included extensive public consultation. Particularly relevant to the issue of accommodating growth, are two reports prepared in 2008 by Hemson Consulting Ltd.:

- *Background Paper on Population and Housing*, April 2008; and
- *Background Paper on Employment*, June 2008.

The work presented in these two reports provides essential background information for this *Housing Analysis and Employment Land Needs* report, which is being released as a companion document to the *Where & How to Grow* report, in order to assist the public and other interested stakeholders in their review and comment on the document.

As described in the *Where and How to Grow* report, the City of Vaughan has considerable potential to accommodate population growth through residential intensification. With significant intensification, approximately 90% of the City's forecast housing demand to 2031 can be accommodated within the existing urban area. The remaining 10% can be met through:

- additional intensification within the built boundary;
- additional development within the designated greenfield area;
- an urban boundary expansion; or
- a combination of some or all of the above.

Unlike population, however, the City's ability to change the way employment growth is accommodated is more limited. The key choice to be made in this regard is whether additional employment lands (lands that accommodate mainly industrial-type development) will be designated to accommodate economic growth and development.

Ultimately, the City of Vaughan Council will decide which path should be taken. The major growth management challenge will be to balance the need to improve the livability and economy of the community, while still meeting the goals of the *Growth Plan* and Regional plan.

C. PURPOSE OF REPORT

The purpose of this report is to provide a more detailed description and analysis of the population and employment growth outlook described in the *Where and How to Grow* report and the implications of the choices that need to be made in accommodating growth. The analysis presented in this report will also assist the City of Vaughan in establishing a position on urban expansion for the Region of York to consider as part of its long-range planning.

The report addresses the issue of intensification and of growth in new urban lands, including both residential and employment growth. These are the two most important quantitative aspects of the urban structure that the City will need to address in the new official plan. And on that note, it is worth repeating that the quantitative work presented in this report reflects a much different planning environment than has been in place in the past:

- While planning has always been a balance between policy goals and market forces, the *Growth Plan* has taken a much more ambitious approach to further shifting housing and employment land market patterns away from more traditional suburban forms. Over time, land markets will need to shift towards greater levels of intensification and more compact urban forms to achieve the Provincial vision.

- The analysis presented in this report therefore provides details on the amount and type of growth for which the City is being directed by the Province and Region to plan. A position need not be taken on whether or not the desired changes are currently supported by prevailing market patterns, because it is the very intention of the *Growth Plan* to change those patterns.
- An analysis based strictly on historic patterns in housing and business location is of interest to help decision makers understand the scale and nature of the market shifts required to implement the *Growth Plan*. The market, however, is less relevant for the purposes of conformity with the *Growth Plan*. The *Growth Plan* will affect land markets across the entire urban region and, indeed, is specifically intended to shift development markets in both residential and employment land.

Accordingly, this report is structured into three main sections. Following this introduction, the next chapter describes the residential growth outlook, including the growth forecast allocated to the City of Vaughan and the shifts in housing demand required to achieve intensification objectives.

Following the residential growth outlook is a chapter discussing employment growth, including the outlook for employment lands. The final chapter provides our overall conclusions, including some of the challenges associated with planning for significantly increased levels of intensification over time.

II THE RESIDENTIAL GROWTH OUTLOOK

This chapter describes the residential growth outlook for the City of Vaughan over the period to 2031 within the context of the *Growth Plan* rules and targets and the forecasts shown in the draft *Region of York Official Plan*.

Under the *Growth Plan*, the Region of York has been allocated a total population of 1.5 million in 2031 and is responsible for allocating that forecast to the local municipalities. The Region has allocated to the City of Vaughan a total population of 418,800 in 2031 representing growth of 170,000 from the 2006 population of 248,800. This represents a significant amount of growth, both in absolute terms and relative to other GGH communities.

Consistent with the *Growth Plan*'s minimum 40% intensification rule, the Region's forecast for the City of Vaughan includes significant intensification. In order to achieve the Region's target, however, a shift in the demand for family-oriented housing will need to be encouraged: from a range of ground related housing (single and semi detached and some rowhouse units) to more rowhouse and apartment units. One of the advantages that the City of Vaughan has in this regard is a relatively large supply of rowhouse units, which are typically somewhat better suited for families than apartment units.

A three-step analysis has been undertaken to allocate the housing growth to the geographic locations defined by the *Growth Plan* and to estimate how much housing growth may need to be accommodated on new urban land:

1. Estimate the supply of residential units in both greenfield and intensification locations;
2. Identify the demand and where it needs to be met to conform to the *Growth Plan* targets; and
3. Compare supply and demand to identify the amount and location of new urban lands.

A. VAUGHAN HAS A SIGNIFICANT POTENTIAL FOR RESIDENTIAL INTENSIFICATION

The first step in the housing analysis is to estimate the City's supply of residential units. The residential supply that is used for the analysis is based on information prepared by Urban Strategies as part of the *Where & How to Grow* report. The supply information is adjusted by Hemson Consulting Ltd. to a mid-2006 base for comparison to Census information and stated in terms of the housing unit types required for the second step of the analysis. The housing unit potential is shown in Table 1 below and includes a significant number of apartment and rowhouse units.

Table 1					
Identified Housing Supply Potential in City of Vaughan (Adjusted to a Mid-2006 base, in units)					
		Single & Semi	Row	Apt	Total
Inside Built Boundary	Units Under Construction Mid-2006	920	430	590	1,940
	Remaining Vacant Land	<u>2,320</u>	<u>1,080</u>	<u>0</u>	<u>3,400</u>
	Sub-Total	3,240	1,510	590	5,340
	<u>Intensification Potential</u>				
	Regional Centre	0	2,680	10,340	13,020
	Regional Corridors	0	3,170	13,790	16,960
	GO Transit	0	800	4,320	5,110
	Local Centre	0	2,020	8,760	10,780
	Other Major Corridor	0	920	8,630	9,550
	Local Infill	<u>0</u>	<u>260</u>	<u>1,050</u>	<u>1,310</u>
Sub-Total	0	9,850	46,870	59,040	
Total Inside Build Boundary		3,240	11,360	49,460	64,060
Share (%)		5%	18%	77%	100%
Designated Greenfield	<u>Designated Greenfield (2006)</u>				
	Carrville	8,160	1,080	7,260	16,500
	Block 20	290	90	60	450
	Vellore	5,490	1,360	1,370	8,220
	Kleinburg–Nashville	<u>2,760</u>	<u>1,200</u>	<u>1,000</u>	<u>4,960</u>
	Total Greenfield (Outside Built Boundary)	16,710	3,730	9,690	30,130
Share (%)		55%	12%	32%	100%
Total Supply Potential		19,950	15,090	59,150	94,190
Share (%)		21%	16%	65%	100%

Source: Urban Strategies Inc. and Hemson Consulting Ltd., incorporating some Region of York and City of Vaughan data and CMHC housing construction data.

B. DEMAND OUTLOOK INCLUDES SIGNIFICANT RESIDENTIAL INTENSIFICATION

A range of residential unit demand has been prepared in order to compare the Region's forecasting work to the results of this analysis. While the range of unit demand is different in a numerical sense, it is not substantially different in terms of the key decisions to be made as will be described at the end of this chapter.

Under the Hemson method, the forecast population growth translates into a need for approximately 56,600 units, of which a relatively large share is directed by the Province and Region to be accommodated through intensification. The Region forecasts a greater number of units, related mainly to assumptions about more rapid declines in persons per unit (ppu) factors. Under both methods, however, a significant share of the unit forecast is expected to be accommodated within the built up area with only limited new units to be accommodated through a potential urban expansion.

1. Hemson Forecasts that Vaughan Will Need About 56,000 Units to Reach Its Target Population

The City of Vaughan is forecast by the Region to continue to grow rapidly from a 2006 population of 248,800 to 418,800 in 2031, representing growth of 68% over 25 years. Approximately 56,600 new housing units will be required to accommodate this growth forecast.

The housing unit forecast and the allocation of housing unit growth by type in Vaughan to meet the Region's population allocation is shown in Table 2. The housing units by type that are shown in Table 2 represent the expected market demand for units before any significant local policy-based adjustments are made to the housing type mix to meet the *Growth Plan* policies (as proposed to be implemented in the draft *York Region Official Plan*).

	Single & Semi	Row	Apt	Total
Existing Units 2006	53,700	6,700	9,200	69,500
Units Added 2006–31	<u>31,600</u>	<u>10,300</u>	<u>14,700</u>	<u>56,600</u>
Total Units 2031	85,200	17,000	23,900	126,100
Persons per unit	3.50	3.02	2.08	3.17
Household population				399,200
Total population including institutional population and Census net under-coverage				418,800

Source: Statistics Canada Census of Canada and Hemson Consulting Ltd.

Note: Totals may not add due to rounding.

2. The Total Units Required Are Somewhat Less Than Forecast in the Region's Work

The key difference between the forecast prepared by the Region of York and the forecast prepared by Hemson Consulting Ltd. is in the number of households that are required to accommodate future growth in population both regionally, and in the City of Vaughan. The Hemson forecast is set to meet the Region's 2031 forecast of 1,507,000 which we would agree is a reasonable planning target.

Of more importance to actual land use planning, however, is the number of residential units required to accommodate population growth. As shown in Table 3, the household forecast prepared by Hemson is somewhat less than in the Region's 2031 forecast.

In our view, the Region has assumed a larger decline in average household size over the next 25 years than we would expect from the current data. The difference is briefly explained as follows.

- The Hemson forecast starts with a Greater Toronto Area plus Hamilton-wide (GTAH) household forecast which incorporates the social and economic factors affecting household size such as the population age structure, life expectancy, fertility rates, age young adults leave their parents' home and frequency of single-person households.

- The result of this method is a forecast of households by size for the GTAH, the vast majority of which will remain family households. The households are then allocated within the GGH indicating that York Region and Vaughan growth is forecast to continue to be driven primarily by young families desiring ground-related housing.

	Region of York		Hemson	
	Households (000s)	Average Household Size	Households (000s)	Average Household Size
1981	77	3.55	77	3.55
1986	105	3.29	105	3.29
1991	150	3.32	150	3.32
1996	178	3.31	178	3.31
2001	223	3.25	223	3.25
2006	276	3.22	276	3.22
2011	326	3.13	319	3.18
2016	375	3.05	364	3.11
2021	425	2.95	407	3.05
2026	470	2.87	446	3.01
2031	510	2.82	481	2.98
Change 2006-31	234 85%	(0.40) (12.4%)	205 75%	(0.23) (7.2%)

Source: Statistics Canada, Census of Canada, Region of York Planning and Hemson Consulting Ltd.

- The Region of York appears to have taken a somewhat different approach, suggesting that because there will be a larger number of apartment units in the future due to greater intensification, there will be more smaller households, reflective of household types in apartments today.
- While convenient for the local analysis in York Region, this approach cannot hold in a metropolitan context since the overall household sizes are determined by economic and social factors, not the unit type in which people are housed. The intent of the *Growth Plan* is to shift how GGH households are accommodated, not to change the nature of the households themselves.

For the purposes of preparing this analysis for the new Vaughan official plan, the two approaches provide a reasonable range of housing unit growth for long-term planning.

3. Timing and Location of Residential Growth Needs to be Understood in Terms of Three Groupings

On this last point, it is worth clarifying that the object of the *Growth Plan* is not to change the characteristics of households in the GGH but rather to change *the types of units households occupy* and the land consumed by the new units. Because of the way the *Growth Plan* rules are constructed and then implemented by the Region, the timing and location of residential growth can be understood in terms of three groupings, which are described below.

- Group A is the housing unit growth that is forecast to occur between 2006 and 2016. Housing growth in this

period includes growth both within and outside the built-up area. Census Day 2016 housing unit completions are used to approximate the *Growth Plan*'s 40% Regional intensification rule start date of 2015, which is based on building permits issued¹;

- Group B is the unit growth to be accommodated within the built-up area beyond 2016 as required to meet the *Growth Plan*'s 40% Regional intensification rule, which requires 45% of Vaughan's medium and density units to be provided through intensification in accordance with the Region of York's implementation of the *Growth Plan*². The Region has also estimated that 2000 low density units will be accommodated within the built-up area, most of which are expected to be built prior to 2016 (as part of Group A).

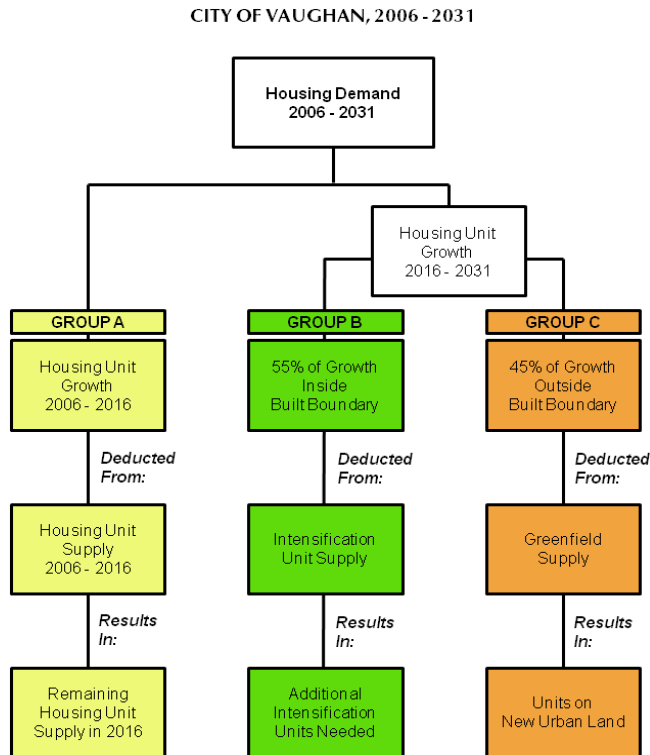
¹ *The difference between the 2015 building permits and the 2016 unit occupancy is primarily the construction period which ranges from 8 months for Single Detached and 18-24 months for Apartments.*

² *For the purposes of its analysis, the Region of York has defined intensification as only medium and higher density units constructed within the built boundary. Additional low density units are also anticipated within the built boundary, though the Region has not counted these toward the intensification target. Strictly speaking the Growth Plan rule concerning 40% intensification includes all units inside the built boundary including low density infill units and those on remnant greenfield. To minimize any confusion on the matter, this report uses the Region's definition for intensification.*

- Group C is the housing unit growth forecast allocated to greenfield locations, outside of the 2006 built-up area between 2016 and 2031.

The three groupings are illustrated by the flow chart below:

ILLUSTRATION OF METHOD USED TO ESTIMATE LAND REQUIRED TO ACCOMMODATE RESIDENTIAL GROWTH Fig. 1



Source: Hemson Consulting Ltd., August 2009.

The City of Vaughan is directed by the Region to accommodate 45% of new units from 2006–31 inside the built boundary. To meet the Regional target the total unit allocation to the three groups is shown in Table 4. The allocation of the 56,600 unit units required to accommodate population growth in the City of Vaughan to the three groupings is shown in Table 4 below.

Timing	Location	Housing Units	Reference to Figure 1
Unit Growth, 2006–2016	Greenfield (57% of new units)	14,600	Group A
	Within Built Boundary (43% of new units)	10,900	
Unit Growth, 2016–2031	Within Built Boundary (58% of new units)	17,900	Group B
	Greenfield (42% of new units)	13,100	Group C
Totals	Unit Growth, 2006–16	25,600	
	Unit Growth, 2016–31	<u>31,000</u>	
	Total, 2006–2031	56,600	

Source: Hemson Consulting Ltd., 2009

Note: Totals may not add due to rounding.

The growth indicated for the period to 2016 can be accommodated within the designated supply described in Table 1 without either significant shifts in housing mix or the designation of additional new greenfield lands. The forecast unit absorption for the 2006–16 period (Group A) is shown in Table 5.

Table 5				
Location of Housing Growth 2006–2016 (Group A in Figure 1)				
	Single & Semi	Row	Apt	Total
Inside Built Boundary	3,240	2,000	5,680	10,930
Outside Built Boundary	13,180	1,470	0	14,640
Total 2006–16	16,420	3,470	5,680	25,570

Source: Hemson Consulting Ltd., 2009, based on the Census and available Regional and local information.

Note: Totals may not add due to rounding.

The growth allocation to 2016 in Table 5 between the areas inside and outside the built boundary is largely dictated by units already built or started since 2006 and by units that are fully planned and expected to be built within a few years. Market shifts in the demand for units by location or type or changes to planned development forms will primarily affect development activity related to buildings completed after 2016.

While the current supply is adequate to 2016, the growth both inside and outside the built boundary needs to be further analysed as undertaken in the following sub-sections, first for the area inside the built boundary, then for the greenfield lands.

4. A Shift in Housing Unit Demand by Type Is Required to Achieve the Forecast Inside the Built Boundary

Most of the housing unit potential identified for intensification is in medium and higher density forms. As shown previously in Table 1 (the residential unit supply) about 18% of the City's intensification potential is in rowhouse units and 77% is in apartment units. This is different from the current market profile, where most of the demand is for single and semi-detached family-oriented housing units.

As a result, in order to conform to the *Growth Plan* targets and new Regional policies, a shift in the demand for housing units by type needs to be encouraged. Table 6 on the following page provides details on the scope and nature of the shift that is required by comparing the profile of housing units as the market would demand them to the profile required under the *Growth Plan*.

	Single & Semi	Row	Apt	Total
1. Growth Based on Unit Demand by Type	8,360	2,320	7,200	17,880
2. Single and semi detached units needing to be accommodated within the Built Boundary, but for which there is no Identified supply potential of the correct unit type	8,360	0	0	8,360
3. Households who would have occupied single and semi-detached units "reallocated" to forms that can be accommodated inside the built boundary	(8,360)	2,500	5,860	0
4. Total units built inside the built boundary after "reallocation" of singles and semi-detached units to row and apartment	0	4,830	13,050	17,880

Source: Hemson Consulting Ltd., 2009, based on the Census and available Regional and local information.

Note: Totals may not add due to rounding.

Provided below is a more detailed description of the information shown in the numbered sections (1, 2, 3 and 4) in Table 6:

- Line 1 shows the profile of demand by unit type that would arise under a normal market or "business as usual" scenario to 2031. Of the 17,880 units required to be accommodated within the built boundary, about half would be single and semi-detached units
- Line 2 isolates the single and semi-detached unit component of the market demand, which is just under a total of 8,400 new units. None of these units can be accommodated within the built boundary because there is no available supply. The lower density units inside the built boundary are assumed to be built out by 2016.
- Accordingly, Line 3, reallocates the demand for 8,360 single and semi-detached units that cannot be accommodated within the built-boundary, to those units that can. Just over 2,500 units are reallocated to the rowhouse category and the remaining 5,860 units to the apartment unit category.

The allocation between rows and apartments is based on an assumption that, within the row category, 60% of the identified 2006 row unit potential within the built boundary will be built by 2031. Given that much of the supply potential relies on infill and redevelopment projects on existing developed land, this is considered to be a relatively optimistic expectation. The factors needed to bring this supply potential to market are discussed in detail in Chapter 4.

- Line 4 adds the market demand to the reallocated totals to create a “shifted” forecast of demand by unit type to achieve the *Growth Plan* targets.

5. In the Greenfield Areas, Only a Small Shortage of Residential Lands Is Shown over the Period to 2031

The residential growth outlook is based on achieving a much more compact urban form, primarily through higher levels of intensification within the built-up area. This is a policy-driven forecast that seeks to change the traditional pattern of housing development that has been dominated by ground-related forms such as single and semi-detached units.

Because of the redirection of growth to intensification, only a limited amount of new urban lands would potentially be required to accommodate the forecast population. The area is referred to by the Region as the “whitebelt”, lands lying between the existing urban designated areas and the Greenbelt lands.

As shown in Table 7 below, the total demand of 13,120 housing units is made up of the remaining units from the total forecast growth (from Table 2) after the pre-2016 units (Group A) and post-2016 intensification units (Group B) have been accounted for.

The 7,600 units of demand which can be accommodated on the greenfield lands in the existing urban designated area after 2016 is just the remaining greenfield supply at that time (Table 1 greenfield supply less units built between 2006 and 2016). Based on this analysis, additional lands to accommodate about 5,500 ground-related housing units would be required.

	Single & Semi	Row	Apt	Total
Currently Designated	3,530	2,270	1,800	7,600
Additional Required	3,260	2,260	0	5,520
Total Greenfield	6,790	4,530	1,800	13,120

Source: Hemson Consulting Ltd., 2009, based on the Census and available Regional and local information.

Note: Totals may not add due to rounding.

The result of this analysis is that many fewer units would need to be accommodated in new urban areas than would be anticipated in the absence of Provincial and Regional policies to accommodate more growth through intensification. This result is consistent with one of the key goals of the *Growth Plan*. The units to be accommodated in new urban areas to 2031 represent just 10% of the total unit demand between 2006 and 2031, which includes a large number of apartments.¹

6. Overall Results Indicate a Major Shift in the Way Growth Will Be Accommodated in Vaughan

Taking together the three components of growth shown in Tables 4, 6 and 7, the summary housing growth outlook for the City is shown in Table 8. The growth outlook involves a significant shift in housing unit preference away from single and semi detached units towards apartments.

It is in achieving the market shift shown and described in this report — households who would otherwise desire lower density housing being accommodated in medium and high density units — that is one of the key challenges for Vaughan in implementing the *Growth Plan*.

¹ While the analysis does not indicate a need for additional apartment units in new urban areas during the period to 2031, when the actual planning for these areas is undertaken, the complete community should include a full range of housing types including apartments, even though the units may not be built by 2031.

		Single & Semi	Row	Apt	Total
2006–16	Inside Built Boundary	3,250	2,000	5,680	10,930
	Greenfield	13,180	1,470	0	14,640
	Sub-Total	16,420	3,470	5,680	25,570
2016–31	Inside Built Boundary	0	4,820	13,050	17,870
	Greenfield	6,790	4,530	1,800	13,120
	Sub-Total	6,790	9,350	14,850	30,990
Total 2006–31	Inside Built Boundary	3,250	6,820	18,730	28,800
	Greenfield	19,970	5,990	1,800	27,760
	Sub-Total	23,210	12,810	20,530	56,550

Source: Hemson Consulting Ltd.

The shift to apartment units is shown in Table 9, where it can be seen that the proportion of new households being accommodated in apartment units shifts from below 15% currently to over 45% by 2031; about double the proportion that would otherwise be expected under a market or “business as usual” approach.

	Single/Semi	Row	Apt	Total
1971–1986	83.5%	4.2%	12.3%	100%
1986–1996	81.1%	7.4%	11.5%	100%
1996–2006	71.9%	14.1%	14.0%	100%
2006–2016	64.2%	13.6%	22.2%	100%
2016–2031	21.9%	30.2%	47.9%	100%

Source: Hemson Consulting Ltd., 2009

C. KEY CHOICE IS HOW TO ACCOMMODATE ADDITIONAL GREENFIELD UNITS

The analysis presented in this report indicates a need to accommodate an additional 5,500 ground-related units on new greenfield lands by 2031. The Region's analysis resulted in a forecast need for about 9,400 units in new urban areas.

At either end of this range, these units are a relatively small number to be accommodated through an urban boundary expansion as a proportion of the overall growth. This conclusion is based on the City of Vaughan achieving but not exceeding the intensification targets set by the Region in implementing the *Growth Plan*.

As noted in the *Where and How to Grow* report, and confirmed through this analysis, this relatively small shortage of greenfield residential units over the period to 2031 leads to some choices to be made by the City. The main choice to be made at this point in the growth management program is how and where to accommodate this growth in the community. Options for accommodating the City's residential unit shortage to 2031 are:

- designation of sufficient greenfield lands to accommodate the forecast growth;
- additional intensification within the built boundary, recognising that this would require an additional market shift in favour of apartments and rows beyond that already forecast;
- increased density (with or without a change in unit type) on the unplanned portions of the existing designated greenfield area; or
- A combination of some or all of the above.

It is important to reiterate that the analysis in this report, which shows only a limited shortage of residential units over the period to 2031, already includes a significant amount of intensification and a shift in housing unit types towards apartments. The conclusion is based on the City of Vaughan achieving but not exceeding the intensification targets set by the Region in implementing the *Growth Plan*.

The number of units to be accommodated on new greenfield land could, in theory, be reduced to zero if the amount of intensification within the built-up area were increased above the minimum requirement. However, notwithstanding the City's ability to put in place a land use plan and policies to accommodate the necessary shift in unit types, there are going to be challenges in even achieving the minimum Regional requirement, let alone exceeding it.

In any event, the City of Vaughan, along with all other municipalities in the GTA, needs to plan for these shifts in order to conform to the *Growth Plan*, under either the Hemson or Region's forecasting approach. The growth option that is ultimately chosen remains a matter for Council to consider through the remainder of the *Vaughan Tomorrow* process. Likewise, Council will also need to make some choices regarding how to accommodate forecast growth in employment, which is discussed in more detail in the next chapter.

III THE EMPLOYMENT GROWTH OUTLOOK

This chapter describes the employment growth outlook for the City of Vaughan over the next 25 years, within the context of the *Growth Plan* rules and targets and the forecasts shown in the draft *Region of York Official Plan*.

Total employment in the City of Vaughan is forecast to grow to approximately 266,100 jobs in 2031, representing an increase of nearly 65% from the 2006 employment of approximately 160,000 jobs. This is a significant amount of employment growth, reflecting the strong long-term economic outlook for the GTA, the structure of the economy and the City of Vaughan's strategic location. Notwithstanding the current period of economic uncertainty, the long-term outlook remains positive.

Over half of the City's future employment growth will be employment land employment, which will be characterized by modern, high-value industrial development including manufacturing, warehousing and logistics activities. The major office sector is not forecast to grow as rapidly, reflecting the presence of established office markets in other southern York Region communities and their capacity to accommodate growth, particularly in the Towns of Markham and Richmond Hill.

The outlook for major offices has implications for employment land as well as the range of uses that should be planned to be accommodated within the VMC and the Highway 7 mixed-use corridor.

A. EMPLOYMENT IS FORECAST TO GROW STEADILY

The employment forecast for the City of Vaughan is the forecast prepared by the Region of York, within the context of the overall economic outlook for the GTA, and the *Growth Plan*, which provides a total employment allocation of 780,000 jobs to the Region of York in 2031, growing from approximately 460,000 jobs in 2006.¹

Notwithstanding the current economic slowdown, in our view the fundamentals are in place for continued, long-term growth once the recovery takes hold. Within the context of continued economic growth in Canada, Ontario and the GGH and strong policy directions to encourage economic vitality, employment in the City of Vaughan is forecast to grow to approximately 266,100 jobs by 2031.

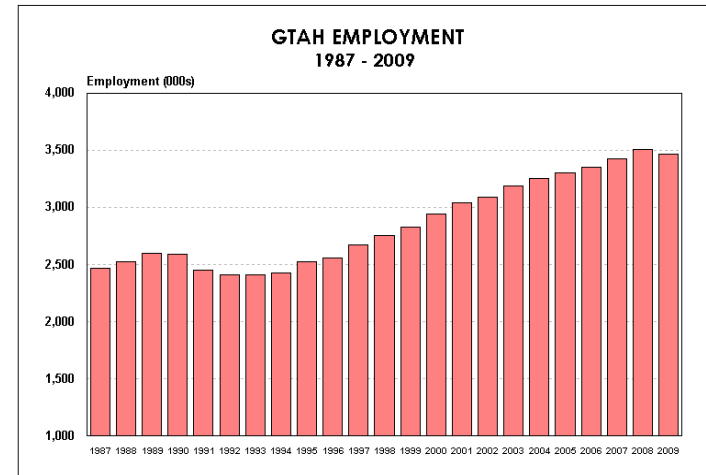
¹ For details, see *The Growth Outlook for the Greater Golden Horseshoe, Hemson Consulting Ltd, January 2005.*

1. Forecast Is for Continued Economic Growth in the GTAH to 2031

It is important to note that, as this study is being undertaken, the national and global economies are in a period of great uncertainty. Reflecting current conditions, a period of slower growth can be expected over the 2006 to 2011 census period. The manufacturing sector, in particular, is likely to face significant challenges along with both residential and commercial land markets.

While the global real estate problems are mostly related to the housing market to date, non-residential land markets have in some degree followed patterns in the housing market. It is important, however, that the local effects of these international markets not be overstated. There are fundamental differences between the Toronto area, some other Canadian and almost all major United States markets. In particular, the real estate “bubble” and all its attendant implications for the financial system and for individual households was very restrained in the GTAH relative to the excessive price increases and declines elsewhere.

Notwithstanding the current economic uncertainties, however, the pattern of sustained employment growth in the GTAH over the long term is clear. As shown in the graph below, since the end of the recession of the early and mid-1990s, employment has grown rapidly and steadily in the GTAH.



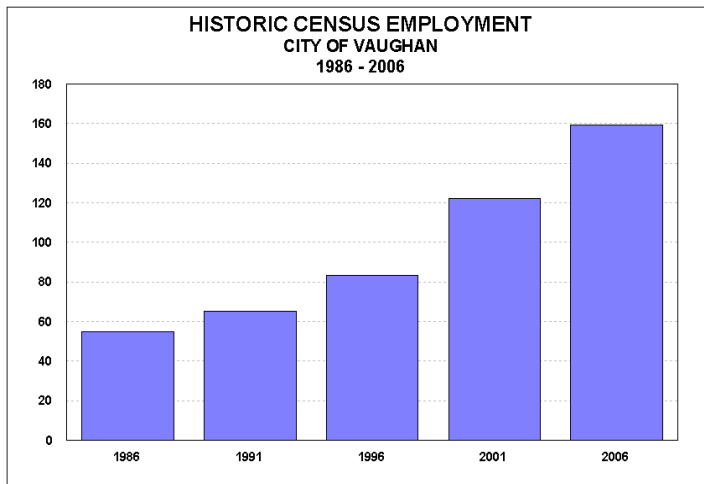
Source: Statistics Canada, Labour Force Historical Review June 2009;
Note: GTAH defined as Toronto, Hamilton & Oshawa CMA's

Since the focus of this report is on planning and development, it should also be recognized that the current recession will have short-term effects on the residential and non-residential and real estate and development sectors in the GTAH. Not only is a general reduction in demand likely, but the financial crisis has made buyers nervous and investors cautious, and has significantly reduced the level of risk many lenders are willing to tolerate.

As a result, and within a broader national and global context, our view is that the GTAH remains well-positioned to be a focus of growth when the economic recovery occurs. Over the forecast period to 2031, economic output is anticipated to continue to grow over the forecast period, accompanied by associated growth in employment and income across the GTAH as well as in the Region of York and the City of Vaughan.

2. Vaughan Economy Has Been Performing Very Well

Within the broader GTAH context, and as described in our June 2008 background paper on employment, the City of Vaughan economy has been performing strongly in recent decades. As shown below, employment has almost tripled since 1986.



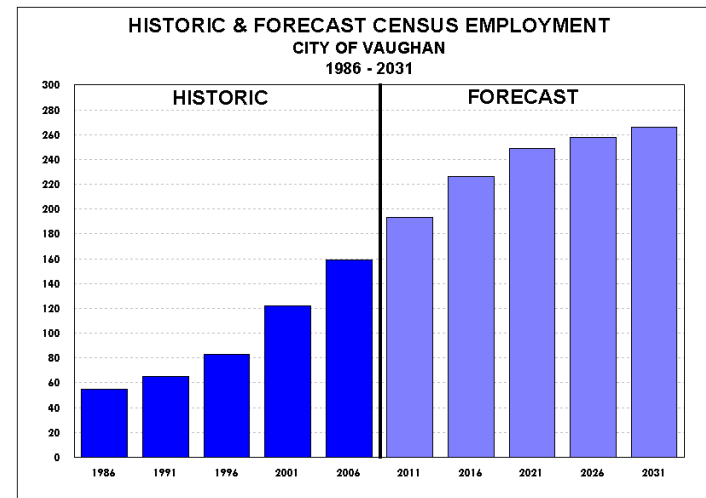
Source: Hemson Consulting Ltd., based on Statistics Canada Census Data.

Today, the City of Vaughan has one of the largest local municipal economies in the GTAH and one of its largest labour forces. Reflecting strong employment growth, the City is a net importer of labour and has an activity rate of over 60%, which is significantly above the York Region average and more characteristic of a central city, rather than suburban community.

3. Employment in Vaughan Is Forecast to Grow to Over 266,000 Jobs by 2031

The employment forecast for the City of Vaughan has been prepared by the Region of York within the context of the economic outlook for the GTAH in the Provincial *Growth Plan*, which in our view remains a reasonable long-term economic outlook.

According to the Region, employment in the City of Vaughan is forecast to grow to just over 266,000 jobs in 2031, largely maintaining the City's past strong economic performance. The Region's employment forecast for Vaughan is illustrated in the graph below.



Source: Hemson Consulting Ltd., based on York Region Official Plan, June 2009 Draft.

We have reviewed the Region’s forecast and consider it to be reasonable and appropriate for long range planning purposes in the City of Vaughan. Under the Region’s forecast, the rate of employment growth in the City of Vaughan is anticipated to slow towards the end of the period, although the City of Vaughan is forecast to maintain its current share of approximately 35% of the overall Regional employment.

B. EMPLOYMENT LAND WILL PLAY A MAJOR ROLE IN ACCOMMODATING GROWTH

The approach taken by Hemson Consulting Ltd. to forecasting employment growth is based on three land use-based categories—major office, population-related and employment land employment. The categories and their main characteristics are summarized below.

- **Major Office Employment** is employment contained within free-standing buildings over 20,000 net sq. ft. in size. This is distinct from the term “major office” as used in the *Growth Plan*.¹

¹ For employment forecasting and most land-use planning purposes, the “major office” label has been defined as freestanding office buildings greater than 20,000 net sq. ft. (1,860 m²) in size. The Growth Plan uses the same expression — major office — for a different purpose. In the Growth Plan, major office policies address the desire to locate large office buildings of 10,000 m² (108,000 sq. ft.) or greater in transit-oriented locations to encourage greater transit use. Except as otherwise noted, this report’s use of major office is the 20,000 sq. ft. or more definition.

- **Population-Related Employment** is employment that exists in response to a resident population that is primarily not located in employment areas or major office jobs. This category includes retail, education, health care, local government and work-at-home employment.
- **Employment Land Employment** refers to jobs accommodated in primarily low-rise industrial-type building space and multiples, the vast majority of which are located within business parks and industrial areas.

It is for employment land employment where there is the most competition with other communities, and where land use planning and local economic development policy can have the strongest influence on the amount of employment that is accommodated:

- Population-related employment is driven by growth in local population and is accommodated within existing neighbourhoods and commercial areas and through the normal course of secondary planning for most new residential communities.
- Major office employment occurs at very high densities and as a result the land supply is virtually unlimited. The location of major office development is driven mainly by market forces and is typically less responsive to planning policy than population-related or employment land employment.

1. More Than Half of Future Employment Growth Will Be Accommodated on Employment Land

As described in our June 2008 background paper on employment, employment land employment is forecast to account for more than half of the total employment growth over the 2006 to 2031 period. This reflects the role that employment land currently plays in accommodating economic development and the type of development:

- By type, employment land employment currently accounts for approximately 112,000 jobs, or nearly 70% of the City's total employment.
- An estimated 37,000 jobs, or approximately 25% of the City's employment, are population-related in a variety of locations throughout the community, including residential neighbourhoods and the downtown, but also within employment areas, primarily as retail and institutional use; and
- The remainder, approximately 10,000 jobs or just over 5% of the total employment, is employment in major offices.

The estimated employment by type for the City of Vaughan in 2006 is shown in Table 10 below.

Table 10		
City of Vaughan Employment by Type, 2006		
Employment Type	Number of Jobs	Percentage
Major Office Employment	10,000	5%
Population-related employment	37,300	25%
Employment Land Employment	111,900	70%
Total	159,200	100.0%

Source: Hemson Consulting Ltd based on Statistics Canada, Census of Canada

By geography, employment areas in the City of Vaughan accommodate an even larger share of employment because they contain virtually all of the city's employment land employment, in addition to much of the city's office employment and even some of the population-related employment, including retail and institutional uses. This is consistent with other communities in the GTA where all types of employment cluster within the geographic employment areas.

Measured either by type, or geography, it is clear that employment land has played a major role in accommodating employment in the City of Vaughan in the past, and this relationship is anticipated to continue over the forecast period. The employment forecast by type is summarized in Table 11.

Table 11				
Employment Forecast By Major Type				
City of Vaughan, 2006 to 2031				
Employment Type	2006	2031	Growth	Share
Major Office	10,000	19,500	9,500	9%
Population-related	37,300	64,700	27,400	26%
Employment Land	111,900	181,900	70,000	65%
Total	159,200	266,100	107,900	100%

Source: Hemson Consulting Ltd.

Note: Totals may not add due to rounding.

As with the residential growth outlook, the forecast of employment by type is somewhat different than in the Region's work, particularly the forecast for major office.¹ Again however, the difference is the result of differences in method and does not significantly affect the conclusion. Under either the Region's forecasting work or the analysis undertaken by Hemson Consulting Ltd., the City of Vaughan will accommodate a significant amount of employment land employment over the period to 2031. At least the currently designated land supply is required to accommodate this forecast.

¹ The Region of York, in its January 2009 land budget report, provides a forecast of employment growth by employment type. In the Region's work, major office employment is forecast to account for approximately 6% of total growth. Population-related employment is forecast to account for 26% of the growth and employment land employment to account for the balance, and majority of growth, approximately 68% of the total.

2. Major Office Employment is Not Forecast to Grow as Rapidly Over the Planning Period

Currently, the City of Vaughan does not have a large office market. Major offices account for only 10,000 jobs, or approximately 5% of total employment. Vaughan, like most other GTAH municipalities has not attracted a high proportion of major office employment to date. In the 905 offices are concentrated in just a few locations mainly in Mississauga, Markham and Richmond Hill.

We expect this pattern may change somewhat over the planning period as the City grows and matures, but the potential for significant new major office development in the short term is limited. The most competitive areas for major office development in the GTAH are relatively well-established and have abundant capacity to accommodate future development.²

The location of future demand for major offices in Vaughan is anticipated to be largely on employment land, particularly locations with superior transportation access. Over time, however, it is anticipated that some limited major office development will be attracted to the VMC and will take advantage of the redevelopment of sites along the Highway 7 corridor as one result of major transit investments.

² Outside of the City of Toronto, there are three major suburban office nodes: one in southern York Region in the Towns of Markham and Richmond Hill, along Highway 401 in the City of Mississauga and along the Queen Elizabeth Way corridor in the Town of Oakville and City of Burlington.

3. A Key Planning Issue Will be the Extent to Which Vaughan Can Direct the Location of Offices

Under the *Growth Plan*, municipalities are encouraged to direct major office development to major transit stations and intensification corridors (Section 2.2.5) and away from designated Employment Areas (Section 2.2.6.4). Historically, however, land use planning has had a weak influence on the location of major offices.

- The experience in the GTAH has been that the location of major offices is driven primarily by market demand. Most major office development outside of the City of Toronto has occurred not in planned transit nodes, but rather in greenfield business parks with high visibility and easy access to major expressways.
- Despite the success of some other municipalities in attracting offices, for instance the City of Mississauga, few office concentrations have actually been built in planned transit nodes or, in Mississauga's case, in the City Centre. Offices have instead been attracted to locations easily accessed by Highway 401. This is consistent with the experience of other communities in the GTAH.¹

¹ For details, see *The Growth Outlook for the Greater Golden Horseshoe*, Hemson Consulting Ltd., 2005, page 49.

The City of Vaughan's current growth management work is based on attracting a significant amount of major office development to occur in VMC. Offices are also contemplated to occur as part of the mixed-used development envisioned to occur at certain nodes along the Highway 7 corridor.

While there may be many *opportunities* spatially and from an urban design standpoint to provide for major office development in these locations, the potential supply of major office sites as envisioned vastly exceeds any reasonable expectation of demand by businesses to occupy them before 2031. One of the key challenges Vaughan will face in achieving the City's and *Growth Plan* intensification and employment objectives, especially in the VMC, is the extent to which the major offices can be encouraged to locate in other locations.

C. LAND SUPPLY IS NOT SUFFICIENT TO ACCOMMODATE DEMAND

As discussed in the 2008 employment background paper, one of the main reasons for the City of Vaughan's strong economic performance has been a large and competitive employment land supply. A wide range of economic activities is accommodated on employment land in Vaughan, including major concentrations of traditional industrial activity, and the current supply is not sufficient to accommodate the Region's employment forecast.

The City of Vaughan's employment land requirements are estimated by applying a density factor to the employment land employment that is forecast in 2031. While the land need estimate depends strongly on the density that is chosen, it is clear that at prevailing densities — either City-wide or for more recent development — there will be a shortage of employment land to 2031.

Based on this analysis, at least the current supply of employment land should be maintained. Approximately 200 gross ha of additional employment land is required to meet the City's needs, in addition to the proposed Highway 400 North Lands. Additional employment land designations would be required should the City choose to convert employment land to achieve other planning objectives.

1. Vaughan Has a Total Supply of Approximately 4,100 Net Hectares of Employment Land

Currently, the City of Vaughan has a total employment land supply of approximately 4,090 net hectares, excluding lands occupied by major retail uses, but including the small amount of land occupied by major offices.

A detailed area by area review of the employment land supply has been prepared as an appendix to this report, including detailed mapping of employment lands with block numbers, and is provided under separate cover.

The supply analysis is based on the employment land within the City's employment areas. For analytical purposes the employment land supply does not include the small number of scattered remnant employment sites generally abutting railway lines in the City¹. For the long-term analysis, these scattered sites do not contain any significant amount of the existing base or future growth potential.

Of the total employment land supply, approximately 2,490 net hectares, or just under two-thirds, are occupied. The remainder of the employment land supply, 1,600 net hectares, are vacant and include the approximately 420 net hectare Highway 400 North lands. The Highway 400 North lands are included in the supply because OPA 637, which applies to them, has been adopted by the City of Vaughan, although it has not yet been approved by the Region of York. As described in our June 2008 background paper on employment:

- Vaughan's employment land supply is primarily oriented towards highway corridors. There are 25 separate employment areas in Vaughan, which can be grouped into four broad areas based on their proximity to Highway 427, Highway 407, Highway 400 and the Concord Railway yards in central Vaughan; and

¹ *The limitation of the inventory to the employment areas is strictly for analytical purposes in this report. The exclusion of any employment land parcel from the inventory is not in any way to be interpreted as a recommendation or opinion respecting the conversion of any of these sites to other land uses. The policies of the Provincial Policy Statement, the Growth Plan and Regional and local official plans apply for these matters.*

- Most of the occupied employment land supply is accommodated in the southern and more developed part of the community, whereas most of the vacant supply is located near the edges of the community in new greenfield areas.

The City of Vaughan's employment land supply is illustrated by the map on the following page. From a market perspective, virtually the entire supply of employment land is suitable and marketable for continued employment uses, based primarily on its superior transportation access and proximity to major economic infrastructure, such as the rail yards.

2. Current Trends Suggest That the Density of New Employment Land Development Is Declining

Currently, the City-wide employment land density is estimated to be approximately 47 jobs per net ha. Despite planning objectives to the contrary, however, economic trends indicate that densities on employment land are likely to continue to decline as a result of two factors:

- First, over the forecast period, Vaughan's employment land density is likely to decrease because of the continued development of larger, more efficient and more automated industrial buildings, which result in employment densities lower than the current City-wide density; and
- Second, the employment density of existing areas, particularly the larger and somewhat older areas in central Vaughan will begin to decline.

- Most employment areas follow a pattern of maximizing employment densities when first built, and then after a couple of decades begin to decline in employment density as buildings age and the use of space fluctuates. This is referred to as "declines in the existing base" and in our view is a key factor to be considered in long-range planning.

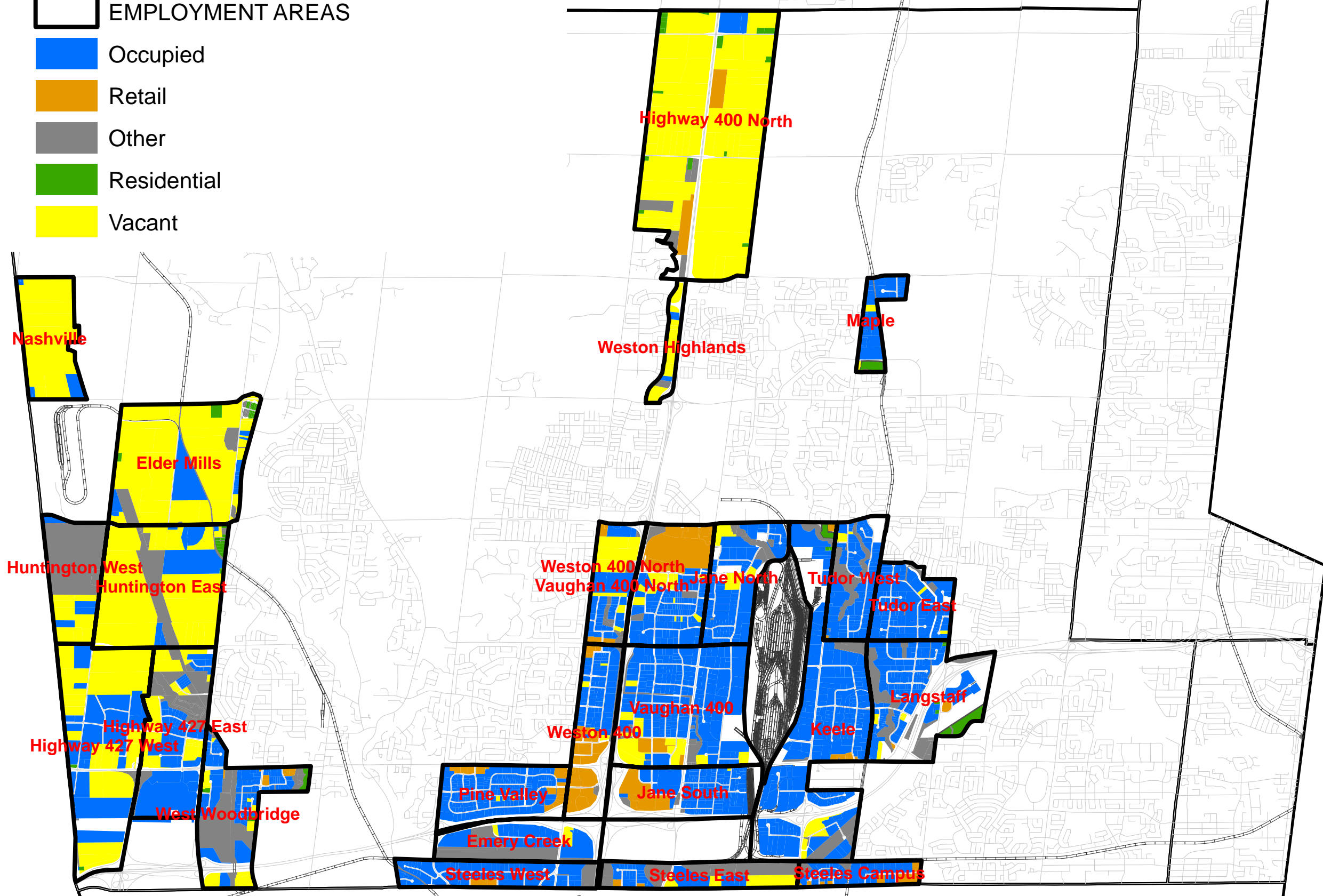
The Province, in their background report on employment lands notes that:

The manufacturing sector is expected to continue to be a major contributor to the economy of the Greater Golden Horseshoe and the whole of Ontario. Productivity is expected to continue to grow in this sector, primarily due to new technologies and increases in production efficiencies. Research shows that the Greater Golden Horseshoe is following North American and global trends of building bigger and more efficient industrial facilities that house fewer employees, particularly in the logistics and distribution sectors. So, even as employment density (jobs per hectare) in manufacturing declines, it is expected that this important economic sector will continue to generate significant land demand.¹

¹ Planning for Employment in the Greater Golden Horseshoe *Background Paper*, May 2008, prepared by the Ontario Growth Secretariat, Ministry of Public Infrastructure Renewal, Province of Ontario.

City of Vaughan Employment Land Supply

- EMPLOYMENT AREAS
- Occupied
- Retail
- Other
- Residential
- Vacant



The nature of the GTAH economic base is such that a significant share of employment is accommodated in large, land-extensive, single-storey, industrial-type buildings on employment land. This built form is related to the structure of the GTAH economy and is not anticipated to change rapidly or significantly through the forecast period.

3. Even at Relatively High Employment Densities, the City Will Face a Shortage of Employment Land

Forecasting employment land need requires striking a balance between the policies seeking higher employment density and economic forces suggesting the opposite direction. The need for employment land in the City of Vaughan is therefore estimated using the existing density of 47 jobs per net hectare on currently developed lands and 45 employees per net hectare for the development of vacant lands between now and 2031.

While somewhat lower than other communities such as Richmond Hill and Markham, a density of 45 jobs per net hectare is similar to other major employment land markets to the west in Mississauga, Brampton and Halton Region, which are more comparable to Vaughan. In our view, this approach represents a reasonable balance between economic forces which suggest a declining employment density over time and new Provincial and Regional policies which seek to increase employment densities.

In addition to assuming a relatively high future density, the calculation does not take into account any significant declines in the existing employment land base, nor does it account fully for the portion of population-related employment that typically locates on employment land. Should future development occur at lower densities the need for employment land would be even greater.

Using a density of 45 jobs per net hectare for new development, it is estimated that demand for employment land will just slightly exceed the current supply in Vaughan, including the City-approved Highway 400 North lands. As shown in Table 12 on the following page, demand exceeds the current employment land supply by approximately 50 gross ha.

The overall shortage that is shown in Table 12 is extremely small, when considered within the context of the size of the existing supply and expected demand for employment land. For practical purposes the results of the analysis in Table 12 should be interpreted as meaning that the supply and demand for employment land in the City of Vaughan are in balance over the forecast period to 2031.

Table 12			
Estimated Capacity of Employment Land to Accommodate Growth, City of Vaughan, 2008 to 2031			
Existing Land Capacity	Occupied Employment Land, 2008	2,490	net ha
	Vacant Employment Land, 2008	1,180	net ha
	Highway 400 North Lands	420	net ha
	Total Employment Land, 2008	4,090	net ha
	Less Long-Term Land Vacancy of 5%	(200)	net ha
	Developed Land at Full Development	3,890	net ha
Employment Land Employment Capacity	Developed Land at Full Development (net ha)	3,890	net ha
	Employment Density (Existing)	47.0	jobs per ha
	Employment Density (New)	45.0	jobs per ha
	Employment Land Employment Capacity	180,000	jobs
Employment Demand	Employment Land Employment in 2031	181,900	jobs
	Employment Land Employment Capacity	180,000	jobs
	Requirements for Additional Land	1,900	jobs
Need for Additional Employment Land	Requirements for Additional Land	1,900	jobs
	Employment Density	45.0	jobs per ha
	Additional Land Need	40	net ha
	Total Land Need (in gross ha at 80% net to gross)	50	gross ha

Source: Hemson Consulting Ltd. based on information provided by the City of Vaughan.

4. It Is Difficult to Change This Pattern Through Land Use Planning Policy

Many planners and policy-makers have suggested that the current pattern of low-density employment land development should be changed. Suggestions include increasing density or encouraging the intensification of existing areas, including the re-purposing of the standing building stock. As we have argued in other reports, these involve changes to the industrial market and both are exceptionally difficult objectives to achieve through land use planning.

Planning policy can regulate land and buildings, but cannot control the density of employment or the structure of the economy. Similarly, when municipalities face constraints to their employment land supplies, there is often the expectation that employment intensification will enable higher densities and reduce overall employment land requirements. This is also an increasingly common argument advanced in support of applications to convert employment land to other non-employment uses.

There is little evidence, however, to support this argument. In the past, the potential for employment intensification has been limited. There is no established economic base, i.e. a range of types of industries, for employment intensification, and the experience of most other communities in the GTA is that planning policy — if not in combination with significant public sector financial assistance — has a weak influence on employment land density or employment intensification.

D. RESULTS FROM HEMSON AND THE REGION INDICATE LITTLE OR NO ADDITIONAL LAND NEED

The analysis presented in this report indicates that demand for employment land slightly exceeds supply, but, for practical purposes, could be considered in balance in Vaughan, once the Highway 400 North lands are fully designated.

The Region's January 2009 land budget report indicates a need for 540 gross hectares of employment land, which translates into approximately 430 net ha of employment land using a gross-to-net factor of 80%. The Region's work, however, excludes the approximately 400 net hectare Highway 400 North lands from the supply calculation. Including the Highway 400 North lands in the Region's work would suggest that only a moderate amount of new employment land is required, approximately 30 net ha.

The Region's January 2009 analysis, however, was based on an employment forecast somewhat higher than contained in the *Growth Plan*. The new draft *Region of York Official Plan* is now based on the 2031 *Growth Plan* employment forecast which, in turn, means that the approximately 30 net hectares of additional employment land may no longer be required under the Region's assumptions.¹

¹ This is only a high-level interpretation of what the results of the Regional employment land need analysis would be under the new employment forecasts. The Region has not re-issued the land need report with the new forecasts.

While additional lands may not be required at this time, substantially maintaining the existing employment land supply, including Highway 400 North lands, is required. As described earlier in this report, the City of Vaughan economy has performed well in the past and is well-positioned to continue performing well to 2031.

One of the major reasons for the City's success has been a large and competitive supply of employment land, for which demand is anticipated to remain strong. The City will need to maintain the current supply of employment land to take full advantage of future economic opportunities. If the density of future economic development is lower than anticipated, additional employment land designations may be required through subsequent official plan reviews. Based on this analysis, for employment purposes the key choices to be made by Council in establishing a new official plan are:

- The degree to which major offices uses, which do wish to invest in Vaughan, can or should be subject to restrictive policies or incentives to redirect these uses to desired transit-oriented locations;
- Whether or not the need for a small amount of new employment land should be met now as part of the current process or be considered through a later official plan review process; and
- The extent to which employment land conversion should be planned to be permitted or discouraged in strategic areas.

When taken together with the issue of accommodating residential growth discussed in Chapter II of this report, there are clearly a number of challenges. Accordingly, the final chapter of this report describes some of the implications of the growth outlook and policy choices to be made as part of the City's new official plan.

IV KEY CHALLENGES

The Where & How to Grow report describes how Vaughan is looking to a future with a more intensified urban form and a compact pattern of development, including higher residential densities and a more intensive pattern of economic development involving more offices and a shift in their location to the key transit nodes.

In each of the residential and employment land analyses some challenges in meeting the minimum requirements of the Province and the Region were noted. The decisions suggested for Council at the conclusion of each of these chapters are decisions on how much change may be envisioned in the built form and character of the City.

While it is possible for the City to plan for any such changes, actually implementing and achieving them presents challenges. The preliminary growth scenario that is being considered through the City's growth management work meets the Region's and the *Growth Plan* vision and targets, but balancing these objectives with market forces will not always be easy.

The key challenge will be to encourage the necessary shift in housing demand away from traditional ground-related forms and towards apartments. There may also be challenges from

a supply perspective, since urban intensification and redevelopment are both processes that occur incrementally, and over a long period of time. This final chapter describes some of these challenges to assist the City in its decision-making as the official plan process unfolds.

A. ENCOURAGING A SHIFT IN DEMAND TOWARDS APARTMENT UNITS IS THE KEY CHALLENGE

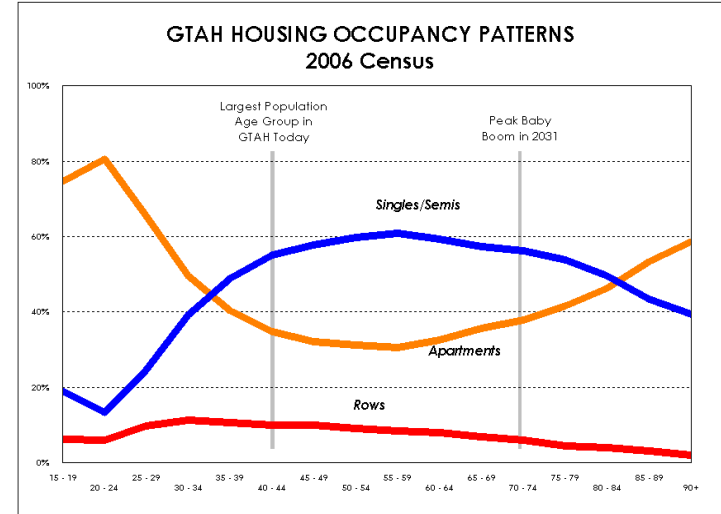
Vaughan is well-positioned to accommodate more intensive forms of development in the future as the community matures and major investments are made in transit and other urban infrastructure. The City has already been experiencing a certain level of residential intensification, as reflected in a gradually rising share of apartment unit construction shown previously in Table 9. However, some significant cultural and economic shifts will be required to achieve the higher levels of residential intensification being directed by the Province and envisioned by the Region,.

1. Housing Demand Continues to Be Driven by Young Families Seeking Ground-Related Units

One of the major factors driving demand for housing — the type of housing people rent or buy at any given time (single detached, rows, apartments) — is the age structure of the population.

Housing demand in the GTAH and North America generally follows a well-established pattern, which begins with apartment occupancy for new households started by young adults, often in a rental form. The pattern typically progresses to ground-related housing when families are formed and have children then begins a gradual move again back towards apartment occupancy as the number of divorced or widowed people increase in numbers, and as children move out of the family home and some empty nesters seek to “downsize.”

Of course, some individual households do make different choices, reflecting specific economic circumstances, family structure or personal preference. When observed across the entire metropolitan population, however, the patterns described above hold and have become well-established over a long period of time. The relationship between age structure and housing unit choice is illustrated by the graphic following.



Source: Hemson Consulting Ltd., based on Statistics Canada Census Data.

As can be seen above, the largest age group in the GTAH today is just entering the peak years for family formation and peak demand for ground-related housing. As the population ages, demand for apartments will increase. However, among aging households, apartment occupancy has not historically become the dominant choice until people are in their 80s. At the same time, the population of both the GTAH and City of Vaughan is forecast to remain relatively young.

2. The City of Vaughan and GTAH Age Structure is Forecast to Remain Relatively Young

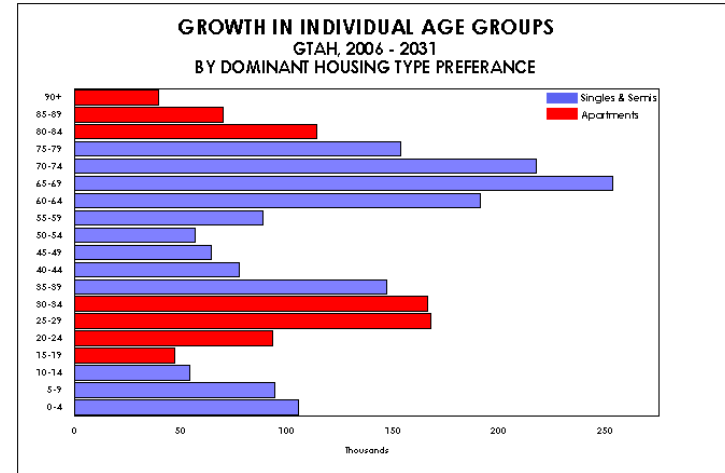
It is relatively well understood that, on a national basis, the population is ageing. The ageing of the population is widely discussed in the media and amongst planners. What is not as well understood is how these broader trends translate to the metropolitan level and then further to local communities such as the City of Vaughan.

In the GTAH and Vaughan, the population remains relatively young, owing in large part to the continued large numbers of relatively young immigrants. Because of continued immigration of relatively young people (20s and 30s) and out-migration from the GTAH of somewhat older families (40s and 50s), the peak population age group in 2031 is forecast to *still* be at about the same age. While as a country Canada’s peak baby boom population in 2031 will still have not reached the point at which demand for apartments overall will equal (much less exceed) demand for single and semi-detached unit, the GTAH population will remain much younger still.

The housing market in Vaughan as part of the GTAH housing market demonstrates similar trends by age. What does differ between Vaughan and the GTAH market area overall is Vaughan’s generally younger age structure. As noted previously, demand in Vaughan is driven by young families seeking ground-related units. Most of this demand is from people moving from Toronto, either native-born Canadians or immigrants who initially settled in Toronto. For both types of households, it is most typically a move from a central-city apartment to ground-related housing or a “move up” within the ground-related market.

3. To Achieve Intensification Targets, More Families Will Need to Choose an Apartment Lifestyle

As shown in the graph previously, age structure exerts very strong influence on housing unit choice by type. And, as shown below, over the planning period to 2031 it is the age groups that are more interested in ground-related housing that are forecast to grow most rapidly.



Source: Hemson Consulting Ltd., based on Statistics Canada Census Data.

Note: Children aged 0 to 14 live with their parents and largely are occupants of single and semi detached dwellings. The 15 to 19 age group are shown here as having the apartment occupancy characteristics, when they are heads of households. However, most of this population still lives with their parents largely in single and semi-detached units.

To achieve the intensification targets, the number of families choosing apartment-style units over single family or even rowhouse units must also increase. The key challenge to achieving intensification objectives, therefore, is to encourage a significant shift towards apartment units, one that the market on its own is unlikely to deliver.

In plainer terms, the challenge will be to make apartment living more attractive to family households than it is today, including the provision of family-appropriate unit sizes and a level of community amenity that will help to encourage the necessary shift in unit type preference.

B. INTENSIFICATION AND REDEVELOPMENT OCCURS INCREMENTALLY OVER A LONG TIME

In addition to the challenge of encouraging more families to choose apartments over ground-related units, change to the timing and nature of development may also be required. The housing profile set out in this report indicates development of 27,400 apartment units within the built boundary over the 25 year period from 2006 to 2031. Accommodating these units will be a challenge for Vaughan because of the nature of the redevelopment process and the conditions that need to be in place for such development to occur.

1. Intensification Is Driven by a Set of Specific Development Factors and Circumstances

Throughout the GTA, intensification and redevelopment can occur in a number of ways, including: the redevelopment of underutilised lands; infill of vacant lands or spaces between existing buildings; the expansion or conversion of existing buildings; or development or redevelopment of larger sites in the built up area such as planned for the VMC or the Highway 7 corridor.

All of these types of intensification represent development to higher value uses and, under the right set of circumstances, are to be expected in the normal course of urban development. The overall amount of intensification that actually occurs, however, is driven by four key factors, as described below.

The Existing Development Pattern, or Physical Characteristics of the Site and of the Area

An economic opportunity must exist for intensification to occur through greenfield, infill or redevelopment. The actual configuration, size and access to a site as well as the surrounding existing land uses will determine whether a reasonable return on investment will induce a property owner or developer to build.

Often remnant vacant lands within a community have remained vacant in the first instance for good reasons, which may well still be present as the site is considered for later infill development. If the right site and surrounding conditions are not in place, the economic viability of a potential project is reduced.

Land Ownership and Interest

The owner of the property must have an interest in undertaking redevelopment and embarking on a project if intensification is to occur. A potential project must first be economically viable, a threshold many properties that may be identified as potential intensification sites will simply not meet.

Even if a site may be shown to have economic redevelopment potential, the current land owner must be interested. Some properties, such as highway strip malls, may appear to be attractive redevelopment sites from a planning perspective. However, many of these properties provide their owners a continuous very low risk revenue stream requiring a minimum of ongoing operational costs or capital investment.

For many owners, the prospect of undertaking a lengthy and complex redevelopment project may be perceived as too uncertain and risky. Still other landowners may be owner-occupants of the properties, meaning that their fundamental interest is in the long-term operation of the business rather than real estate speculation. In these cases, the real estate asset is treated more as a retirement saving for later sale than a shorter-term development asset.

Planning Policy

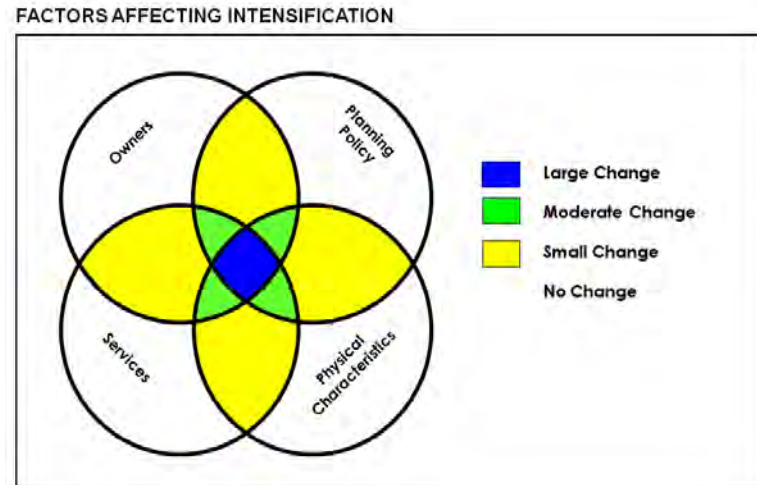
Planning policies, development regulation and the approvals process must specifically encourage intensification. This is necessary both at the general level of planning permission of sufficient density to warrant redevelopment, but also in detailed zoning and site planning regulations. For example, on small sites or those with an irregular configuration, design standards for access, parking and loading standards can make the difference with respect to the economic viability of a site for redevelopment

Services

And finally, existing or planned services, in particular transportation, but not excluding other hard and soft services must be in place or the costs to improve them must be economically viable to support intensification.

2. Not All Potential Intensification Opportunities Will Be Realized

The overall likelihood of realizing intensification opportunities depends on the number of factors in place and on the compatibility or “fit” between these factors. As illustrated in the graphic below, while any one factor by itself may represent a *potential* for intensification, the probability of actually bringing that opportunity to market is comparatively low.



Source: Hemson Consulting Ltd.

Or in other words, not all possible intensification opportunities have an equal likelihood of being realized within a given time frame. From Vaughan's perspective, only two of the factors – the planning and services factors – are within its control. City policy and practice *may* increase the probability of intensification, but if the other factors are not in place, it is unlikely that redevelopment will occur within the period to 2031.

3. There Is Little Pressure for Redevelopment Within Newer Suburban Environments

One of the particular challenges Vaughan faces in delivering large amounts of intensification is that most of the City is relatively new. As discussed, intensification and redevelopment typically occur primarily with older buildings and sites, typically late in the development cycle for a particular area. These are the circumstances where a) there is an economic opportunity, b) the landowner is interested and c) planning policy and services are in place or can be provided to support it.

Very little pressure exists for newer buildings in recently-developed areas to be demolished and redeveloped for other uses. With the exception of a few especially high value locations, suburban-type retail, commercial or industrial buildings are generally not redeveloped until they are at least 40 to 50 years old. Only over the very long term in suburban locations will land costs increase relative to diminishing building value to the point that there arises an interest or economic incentive to demolish and redevelop.¹

¹ A good example from the GTA/H are the mid-size grocery stores of the 1950s or 1960s that were abandoned in the 1970s and

In addition, the cost of real estate is only a small part of the overall costs for most suburban businesses. Other factors such as labour, transportation and distribution costs, financing, utilities and taxes, as well as other municipal charges and fees tend to figure more prominently into the overall short-term cost structure.

Much of the building stock in Vaughan is too young to be desirable for redevelopment, except in a small number of high-value locations. Over the next 25 years, however, parts of the building stock will be entering the age range where the attractiveness for redevelopment begins to increase and the City may have the opportunity to increase intensification through the rowhouse market.

4. The City May Have an Opportunity to Increase Intensification in the Rowhouse Market

Over the past two decades, there has been considerable success in redirecting housing markets in the GTA/H through policy. The restrictive urban land designation policies relative to elsewhere in Canada or the USA have been at least, in part, responsible for generating a significant rise in the semi-detached and rowhouse market.

1980s, then subsequently occupied by population-serving uses such as gyms or karate and dance studios — and only recently have started to come under interest for redevelopment with higher density residential or commercial use. In the past few years, large-format retail stores have been considered "temporary" but this must be seen only within the context of very long-term

One of the advantages that the City of Vaughan has in this regard is the potential for a relatively large supply of rowhouse units, which are somewhat better suited for families than apartment units. Any opportunities for intensification that are based on rowhousing rather than apartments are more likely to be successful in the marketplace in the near term and, therefore, more likely to contribute to the desired outcomes for the long-term planning of the City.

C. DECISION MAKING NEEDS TO BE MINDFUL OF BOTH OPPORTUNITIES AND CHALLENGES

Notwithstanding some of the challenges involved, the City of Vaughan, along with all other GTAH municipalities, is compelled by new Provincial and Regional policies to plan more intensive urban forms and the *Vaughan Tomorrow* program is committed to such a vision for transformation.

As the *Vaughan Tomorrow* process moves forward, the City will need to consider how, through land use planning policy, to facilitate a market condition that produces occupied units at the planned target levels. Based on the residential and employment analysis presented in this report, the key choices to be made by Council in establishing a new official plan are:

- Whether the minimum target for intensification established by the Region should be applied, in accordance with the analysis in this report, or whether a higher intensification target should be established to eliminate the need for urban boundary expansion;

- Whether the City should establish policies to maximize the probability of intensification, particularly planning for rowhousing and stacked rowhousing wherever possible and desirable in intensification areas;

Whether the City should establish policies restricting major office in the City's employment areas, in order to encourage their location in other high-priority locations, particularly the VMC and other transit nodes along the Highway 7 corridor; and

- Establishing a sufficient supply of competitive employment land, balancing strategies respecting new land designations, conversion of existing employment lands, and the development of the Highway 400 North lands.

Ultimately, the decision on how to accommodate growth will be made by the City of Vaughan Council. We trust that the analysis and discussion presented in this report is of assistance, particularly as it relates to some of the challenges in planning for a more intensified urban form. The City of Vaughan will need to consider these challenges carefully along with their implications, as decisions are made regarding how future growth is to be accommodated.