INTENSIFICATION OPTIONS: IMPLICATIONS FOR THE TOWN OF MARKHAM

A Housing Stock Analysis

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TABLE OF CONTENTS

I INTRODUCTION

The Town of Markham is currently preparing a growth management strategy to guide growth and development in the community to 2031 and a new official plan to bring its planning into conformity with Regional and Provincial planning policies, in particular the 2006 Provincial *Growth Plan for the Greater Golden Horseshoe* (the *Growth Plan*) and the Region of York's implementation of its requirements. A key element of the Town's vision for the future, consistent with both Regional and Provincial planning objectives, is to accommodate more growth through intensification and infill within the Town's current settlement area than it has in the past, a period characterized largely by greenfield development.

Intensification is part of a long-established city-building process whereby communities change and renew to make way for new activities and land uses. Historically, communities in the Greater Toronto Area and Hamilton (GTAH) have accommodated a certain amount of intensification through the normal course of development. Most intensification occurs primarily with older buildings and central sites that are economically underutilised. Intensification is overwhelmingly residential and retail in nature. The intensification of employment areas or brownfields for other employment uses has been quite limited.

Over the last 20 years, the level of residential intensification that has been accommodated in the 905 areas of the GTAH has ranged between 10% and 15% of new units, with slightly higher shares observed in highly accessible communities such as the Town of Markham. In the future, as more communities mature and places such as Richmond Hill, Ajax, Mississauga and Burlington reach full development, intensification in 905 would be expected to average about 20 to 25% of new units in the normal course of events.

New Provincial and Regional policies seek to capitalize on these past and emerging trends and achieve an even more compact urban form, which is reflected in even higher shares of intensification:

- The *Growth Plan* requires that 40% of all new residential units occurring annually to be accommodated within the built-up area of each upper- and single- tier municipality by the year 2015 and for each year thereafter;

- The Region of York is currently bringing its planning into conformity with new Provincial policies, including the preparation of plans and strategies to accommodate the Provincial intensification target; and

- As part of this work, the Region is planning is for the Town of Markham, along with the Town of Richmond Hill and the City of Vaughan, to play a major role in achieving Regional and Provincial intensification targets.

This review of housing stock alternatives identifies some of the key implications of achieving the Regional and Provincial intensification targets, as well as even more aggressive targets being considered by Town staff and as suggested by Town Council. The review is based on work undertaken to date by the Town of Markham, in particular: *Toward a Markham Growth Management Strategy: Opportunities to Accommodate Growth* (Feb. 2009) and the Region of York's forecasting and land budget work undertaken as part of *Growth Plan* conformity.

The report begins with a description of the range of intensification targets being considered. This includes the amount and type of intensification the Town is expected to accommodate by the Region of York and higher targets tested by Town staff plus those suggested by Town Council. Some of the key challenges in meeting the various intensification targets are then described, including the implications of planning to achieve very high residential intensification targets. Our conclusion is that it will be a challenge to achieve the Region's intensification expectations over the period to 2031 and that setting higher intensification targets could pose significant risks to the Town.

Intensification of the Town housing stock beyond the Regional intensification target of 52% (Markham's share in order to meet the Provincial intensification target of 40%) or 55% (Markham's share based on a more balanced mix of housing units) involves the following key risks:

- there is the potential for a large mismatch between family-based demand and a supply of units serving non-family needs;

- there is the potential that Provincial, Regional and Town growth management policies and growth targets may not be achievable; and

- there is the potential for fiscal and service delivery impacts such as a reliance on unrealized revenues, inefficient infrastructure investments and difficulty in establishing front-ending agreements.

It is recommended that the Town adopt a more balanced approach; choosing an intensification option of 55% with a housing stock mix that does not depart too dramatically from the market, while still meeting Provincial and Regional growth objectives.

II THE TOWN OF MARKHAM IS CONSIDERING A RANGE OF INTENSIFICATION OPTIONS

This chapter describes the range of intensification options being considered by the Town, including the Regional intensification expectations, the two higher targets being considered as a sensitivity test by Town staff and the most aggressive option of all, a "no urban expansion" option, which Town Council has also asked be considered.

A. REGION OF YORK HAS ALLOCATED THE TOWN OF MARKHAM A TARGET OF 52% RESIDENTIAL INTENSIFICATION AFTER 2015

Under the *Growth Plan*, upper-tier municipalities are responsible for allocating the Schedule 3 population and employment forecasts to the local municipalities and setting the density and residential intensification targets. The Region of York, through its growth management strategy and new official plan, has allocated to the Town of Markham a total population of 423,500 in 2031 and target that 52% of all new residential units built annually after 2015 and each year thereafter will be accommodated within the built-up area. A number of key points with respect to the Region's work warrant attention.

- To achieve the overall 40% intensification target on a Region-wide basis, the Region has determined that the more urban communities in southern York Region will need to accommodate a greater share of the overall intensification target than either the more rural communities of York Region or in East Gwillimbury where a significant amount of greenfield development is anticipated.

- The Region's approach recognizes that the more urban communities in southern York Region are already planning for increased levels of higher density development and have both the services and locational advantages required to attract such development. The Region is also interested in concentrating higher density development in the southern communities to capitalize on planned investments into a rapid transit system and strategic investments into servicing infrastructure focussed in Regional centres and corridors. Further, the Region's approach reflects the more limited infrastructure of the northern municipalities and advances the general planning desire to maintain the rural character of the more outlying communities.

- Within this broader Regional context, it was quite reasonably determined that the Town of Markham, along with the Town of Richmond Hill and City of Vaughan, should accommodate relatively higher shares of intensification in order to achieve the Region-wide Provincial 40% target. In Markham's case, this higher Regional share translates into a residential intensification target of 52% within the Town's built up area.

- Accommodating 52% of all new residential units within the Town of Markham's built boundary after 2015 will require, according to the Region's work, approximately 20,000 new housing units, much of which can be accommodated through already-planned apartment unit development in the Urban Growth Centre of Markham Centre and the Langstaff Gateway and other designated locations in the Town's intensification strategy.

- The Town will, however, need to designate some additional greenfield lands currently located outside of the current settlement area under the Region's intensification scenario, to accommodate market demand for ground-related family-sized units, however, this amount of land would be much less than would have been designated under a "market-based" or "business as usual" forecast scenario.

In all urban communities, the nature of intensification and infill development is that the vast majority of units provided are in an apartment form, but typically with some opportunities for rowhouse units and just a handful of single and semi-detached infill opportunities. As a result, the key implication of accommodating more growth through intensification is a shift in the overall housing mix away from ground-related housing forms (single and semi detached) towards higher density unit types such as rowhouses, stacked rowhouses, multiples and apartment buildings.

The implications for the Town of Markham of planning to achieve the Region's target of 52% intensification target is illustrated in Table 1. The table indicates that while under a business as usual approach a continued shift towards higher density forms is expected, it is not as dramatic a shift as is envisioned by the *Growth Plan*. The table compares the historic mix of housing units in the Town to two scenarios: a base case which is a more market-based forecast that represents what we would have expected to occur in the absence of the *Growth Plan* policies; and the growth scenario proposed for the Town in the Region of York's recent work.

Table 1

Town of Markham Housing Historical and Forecast Housing Mix
Region of York Scenario (52% Intensification) and a More Market-Based Forecast

	Base Scenario (Expectation Without Growth Plan)				Region of York Proposed Allocation			
	Single & Semi	Row	Apt.	Total	Single & Semi	Row	Apt.	Total
1986–96	74%	3%	23%	100%	74%	3%	23%	100%
1996–06	59%	19%	22%	100%	59%	19%	22%	100%
2006–31	51%	19%	30%	100%	35%	19%	46%	100%

Source: Hemson Consulting Ltd., 2009 and information provided by the Town of Markham.

The minimum requirements of the *Growth Plan*, as allocated to the Town of Markham by the Region of York, indicates a significant shift in housing demand patterns in favour of apartments from the levels experienced historically. The shift to apartments required is also much higher than the current levels of construction, which are considered quite high, given recent success of Markham Centre and other development areas.

B. AS A SENSITIVITY TEST, HIGHER INTENSIFICATION OPTIONS ARE ASSESSED

Given the commitment of the Town to achieving a more compact urban form, Town staff has considered two higher targets for intensification, 60% and a no boundary expansion option. As can be seen with the Region's target of 52% intensification or a 55% intensification option, achieving these higher targets also involves achieving greater shifts towards higher density housing unit types, particularly apartments. The Town's 55% intensification option is similar to the Region's but incorporates a more diverse mix of ground-related units, reflecting the mix of the ground-related housing stock in Markham today, according to the Town's data. The slightly higher intensification percentage in the 55% option results from the greater diversity in the housing mix, and should offer greater market competitiveness.

Under the no-urban-boundary-expansion option Council asked that all future housing growth be accommodated within the existing urban boundary. All growth within the existing urban boundary means approximately 84% of projected residential growth would need to be accommodated in intensification units located within the current settlement area.

These shifts in housing market mix in favour of apartments are shown in Table 2 as well as the downward shift in singles and semis as part of the market.

Table 2

Town of Markham Housing Historical and Forecasting Housing Mix
Range of Intensification Scenarios

	Base Scenario	52% Intensification (Region)	55% Intensification (Town Staff)	60% Intensification (Town Staff)	Fixed Urban Boundary, 84% Intensification (Council)
Single and Semi-Detached Units					
1986–96	74%	74%	74%	74%	74%
1996–06	59%	59%	59%	59%	59%
2006-2031	51%	35%	32%	30%	17%
Row house Units					
1986–96	3%	3%	3%	3%	3%
1996–06	19%	19%	19%	19%	19%
2006-2031	19%	19%	21%	19%	14%
Apartment Units					
1986–96	23%	23%	23%	23%	23%
1996–06	22%	22%	22%	22%	22%
2006-2031	30%	46%	47%	51%	69%

Source: Hemson Consulting Ltd., 2009 and information provided by the Town of Markham

It is clear from the above table that achieving any of the intensification targets currently being considered by the Town will require a shift in current housing preferences away from single and semi-detached units and towards apartments. While these types of shifts can be assumed from an analytical perspective, from a practical perspective, achieving them presents some key challenges, which are discussed in the next chapter.

III ACHIEVING A MORE INTENSE URBAN FORM PRESENTS A NUMBER OF KEY CHALLENGES

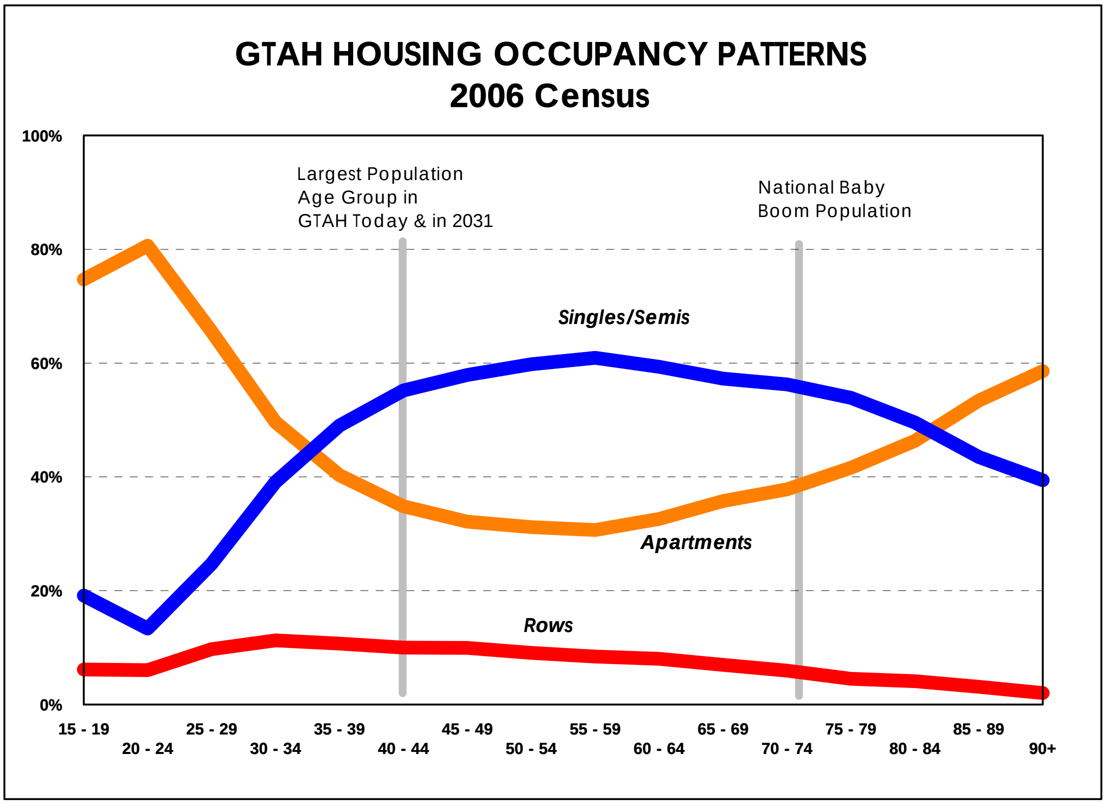
The Town of Markham is very well-positioned to accommodate more intensive forms of development. The Town enjoys an excellent geographic location within the GTAH with good transportation access and central position within the high-performance office employment node focussed generally on the highly accessible intersection of Highways 404 and 7. The Town also enjoys many other community assets, such as a well-educated and active labour force and a strong and established economic base.

Notwithstanding these advantages, some significant cultural and economic shifts would be required to achieve the levels of residential intensification being considered by the Region and the Town. These shifts have fundamental implications for the overall physical and social character of the community. As discussed in more detail below, there are challenges on both the demand and supply side of the issue.

A. 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. In the main, housing demand in the GTAH and North America generally follows a well-established pattern. It begins with apartment occupancy for new households started by young adults, often in a rental form. This typically progresses to ground -related housing when families are formed and have children. The pattern 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." However, among aging households, apartment occupancy has not historically become the dominant choice until people are in their 80s.

Of course, some individual households do make different choices, reflecting economic circumstances, familty structure or personal preference, however, the patterns described remain the dominant housing choice patterns across the broader population and have become well-established over a very long period of time. The pattern of age structure and housing is illustrated in the following graphic. The graphic shows the relationship between age of household head and housing unit preference.



Source: Hemson Consulting Ltd. based on Statistics Canada, 2006 Census

As can be seen above in the graph, the largest age group in the GTAH today is just entering the peak years for family formation and peak demand for ground-related housing. 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 exceed demand for single and semi-detached units, the GTAH population will remain much younger still.

The housing market in Markham as part of the GTAH housing market demonstrates similar trends by age. What does differ between Markham and the GTAH market area overall is Markham's age structure which is generally younger than the overall market, increasing local demand for family-oriented ground-related product relative to the larger market. In the current market, housing demand in the Town of Markham is driven by young families seeking ground-related units, particularly rowhouses and stacked rowhouses[1] for first time buyers. 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.

The age structure and housing preferences shown in the graph reflect the entire population and so incorporate variations in housing preferences that may occur between the different cultural communities in the GTAH. Over the long term, most studies have indicated that immigrants, after an initial period settlement period of five to ten years, have very similar housing characteristics and preferences of the population overall. It is commonly held that the large Asian community in Markham is one of the factors responsible for its recent high demand for new apartment units, distinguishing Markham from, say, neighbouring Vaughan where different cultural communities predominate. In so far as culturally-based preferences do affect housing demand in Markham, these are already incorporated into growth outlook and are not a factor that can be relied upon to be the source of further changes in the housing market.

The national population is aging, as widely discussed in the media. In the GTAH and in Markham, the population remains relatively young, owing in large part to the continued large numbers of relatively young immigrants. Over the planning period the age groups with the most growth remain those most interested in ground-related housing. As shown in the following graph, in the GTAH overall it is the age groups that show the strongest propensity for ground-related forms that are forecast to grow most rapidly, and given its central location and the historic dominance of these forms, the Town of Markham is likely to be highly competitive in this market.

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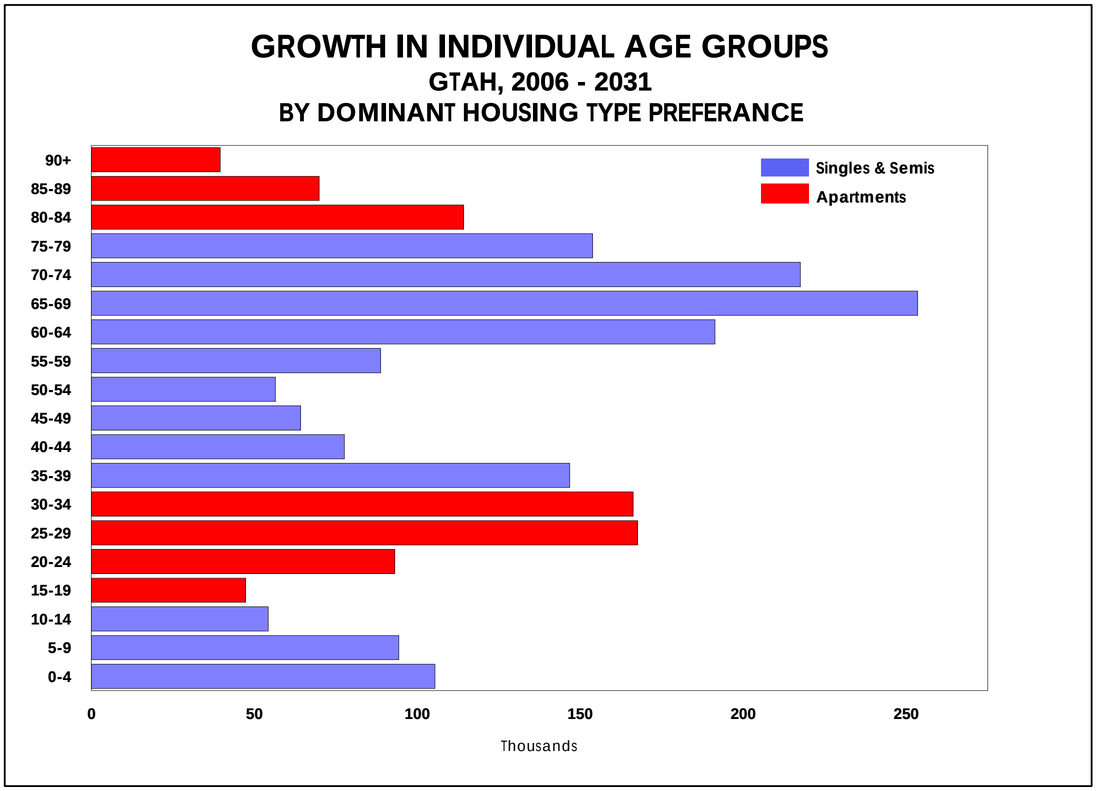
[1] *Within the forecast, stacked rowhouses are considered low rise apartment units in accordance with the Census definition. However, the larger family-oriented unit in a stacked rowhouse can be considered, from a market perspective, as a ground-related unit.*



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.

From a policy perspective, as the planned level of intensification increases, 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. A major shift in demand from this ground-related pattern to apartment-style units would be required to achieve even the *Growth Plan* intensification target. Such a shift is not what is happening in Markham to date: the shift in preference has been from single to semis and rowhouses. In effect, the Town of Markham, through land use planning policy and other intensification strategies such as financial incentives, would need to intervene to facilitate a market condition that is achievable rather than attempt to "force" large numbers of new residents to live in a higher density form than they otherwise may have chosen.

Given the current and forecast age structure of the population in the GTAH and the Town of Markham, it is clear that much of the future housing demand will be for ground-related forms such as single detached units and, increasingly, semi-detached units and rowhouses. While some continued shift towards higher density forms would have been expected under the pre-*Growth Plan* policy context, new Provincial planning policies are aggressive and require a much greater shift to higher density forms. The Town must plan for at least the minimum levels in the *Growth Plan* as expressed through the Region of York's forecast. In theory the Town can plan for even higher levels of change. In order to achieve even the minimum policy targets, however, significant cultural and economic shifts will need to occur with respect to how families make choices about how and where to live. This is not likely to be something that the Town can control.

B. INTENSIFICATION AND REDEVELOPMENT ARE PROCESSES THAT OCCUR INCREMENTALLY OVER A LONG PERIOD OF TIME

On the housing supply side, there are also challenges to increasing the planned level of intensification. In addition to questions on the demand-side of the likelihood of more families choosing apartment-stye units over those which are ground-related, major changes to the timing and nature of the development and intensification process would be required.

Intensification, or increasing the density of development within Markham's current settlement area, can occur in a number of ways:

- through redevelopment of underutilised lands;
- infill of vacant lands or spaces between existing buildings;
- expansion or conversion of existing buildings; and
- development or redevelopment of large land areas within the current settlement area such as Markham Centre and the Langstaff Gateway lands.

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. But the amount of intensification expected by new Provincial policies exceeds this. Intensification occurs when reinvestment is warranted for older buildings or sites that are no longer viable in their current use. In the case of greenfield development, the investment and often long-term commitment must be warranted by the competitive market demand over a substantial period. Intensification is a process that tends to occur incrementally and over a very long period of time.

1. The Probability of a Site Undergoing Intensification Is Guided by Four Factors

The amount of intensification and redevelopment that occurs within a community is driven mainly by the demand for various land uses and local land market conditions, which vary according to factors such as building age, access to the transportation network, landscape setting and proximity to goods and services. More specifically, a number of factors need to be in place to increase the probability of intensification occurring on a particular site. Intensification, on the supply side, is driven by four key factors:

- **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[1], 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 (re)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 interests**. 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 which 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.

  Many properties, such as aging highway strip malls, or walk-up rental apartment buildings, may appear to be attractive redevelopment sites from a planning perspective. However, many of these properties provide their owners a continuous

[1] *Some potential intensification sites are remnant greenfield lands that were parsed over during the initial wave greenfield development. While such sites are technically greenfield because they have been previously developed, most of these remnant sites have similar characteristics to true intensification sites form the perspective of development conditions and prospects.*

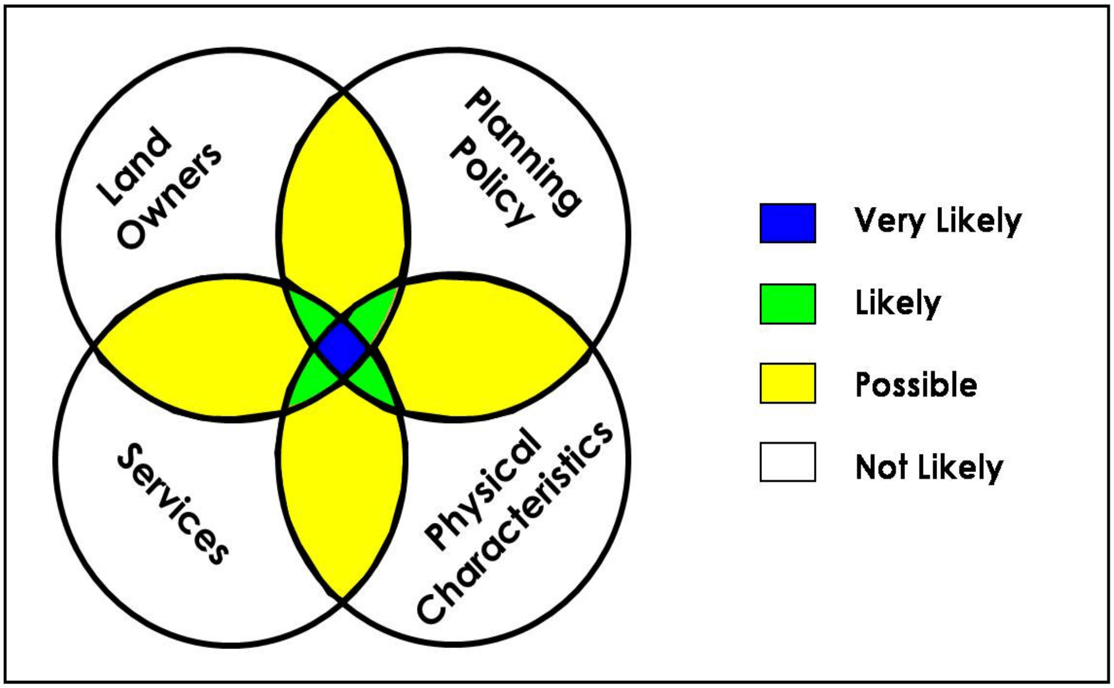
very low risk revenue stream requiring a minimum of ongoing operational costs or capital investment by the owner. For many owners, the known income, while perhaps relatively modest, is far more attractive than undertaking a lengthy and complex redevelopment project, which even in the strongest of markets is an exercise which carries a certain amount of risk.

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. It should be recognized that many of these properties also provide, modest, relatively inexpensive accommodation for the residents and businesses they serve and are therefore a valued commodity to the community.

- **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 (re)development, 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 easily make the difference with respect to the economic viability of a site for redevelopment.

- **Services**: Existing or planned services, in particular transportation, but not excluding other hard and soft services must be in place or the costs toimprove them must be economically viable to support intensification.

As illustrated in the following graph. The overall likelihood of realizing intensification opportunities depends on the number of factors in place and on the compatibility or "fit" between these factors. While any one factor by itself may represent a *potential* for intensification, the probability of actually bringing that opportunity to market is comparatively low. In other words, not all possible intensification opportunities have an equal likelihood of being realized within a given time frame. From the Town's perspective, only two of the factors – the planning and services factors – are within its control. The Town's policy and practice *may* increase the probability of intensification, but if the other factors are not in place, the Town simply cannot count on redevelopment occurring in any given time frame.



Source: Hemson Consulting Ltd.

2. Redevelopment Tends to Occur Mainly with Older Buildings and Properties that Are Economically Underutilized

Intensification through infill and redevelopment occurs primarily with older buildings and sites, typically late in the development cycle for a particular area. These are the circumstances where all four factors converge: 1) there is an economic opportunity, 2) the landowner is likely more interested if his building is obsolete and under-occupied, 3) planning policy, and 4) 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. A number of key points warrant attention on this matter.

- Except for highly under-utilized sites, the value of a building and related site improvements are typically far greater than the value of the land itself at the time of construction. The landowner has little or no economic incentive to lose existing capital investment and redevelop a property simply (from his or her point of view) for the sake of advancing an abstract urban planning goal.

- For most suburban businesses, real estate costs are typically only a small part of the overall financial picture. 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.

- Only over the very long term in suburban locations will land costs increase relative to diminishing building value to the extent to which there begins to be an interest or economic incentive to demolish and redevelop.

With the exception of a few especially high value locations, suburban-type retail, commercial or industrial buildings are generally not considered to be good candidates for redevelopment until they are at least 40 to 50 years old. Among the most popular redevelopment sites in the GTAH, for example, are the mid-size grocery stores of the 1950s or 1960s that were abandoned in the 1970s and 1980s, subsequently occupied by population-serving uses such as gyms or karate and dance studios and then more recently been redeveloped for higher density residential or commercial use. These buildings were no more temporary in their time and context than the large format buildings that have recently been developed in the current period.

Under this redevelopment scenario, the building stock in Markham today is almost entirely too young to be desirable for redevelopment, except in a small number of high-value locations. Over the next 25 years, some more of the building stock in Markham will be entering the age range where the attractiveness for redevelopment begins to increase. Also, where all of the factors converge, some redevelopment will occur as these buildings age, but for this and many other reasons, redevelopment is almost always a slow evolutionary process within the developed urban fabric.

Predicting the locations and timing of such redevelopment will be difficult. Consequently, there is risk in heavily relying on it occurring in order to meet planning policies.

3. Large-Scale Development and Redevelopment Projects Take a Long Time to Realize

Given the factors that need to combine and the unique circumstances that need to be in place for intensification to occur, it is no surprise that large-scale development and redevelopment projects tend to take many years to realise. Experience from the Greater Toronto Area and Hamilton (GTAH) has also shown that large-scale intensification projects can take decades to complete:

- In the City of Toronto, plans for redevelopment of the Harbourfront area have taken nearly 40 years to be realized. The initial project was announced by the Federal government in 1974, saw significant development in the 1980s, and then again in the 2000s. At year 35, the majority (but not yet all) of the identified residential development sites have been absorbed.

- Similarly, the Toronto Railway lands was identified in the 1960s for redevelopment. Once in the hands of a substantial developer , the first residential unit was constructed in 1999. The project is now in year 10 of construction and the area is still only half completed — and most of this took place during the largest condominium apartment boom in history. The Railway lands will be only about two-thirds complete when current buildings are finished by 2012 and overall completion cannot be expected to occur until about year 20 from the start of major residential construction.

- In a 905 context, many of the long-planned intensification areas, without the challenges of redevelopment, such as Mississauga's City Centre and the Markham Centre, are now developing rapidly, but up to 30 years after the inception of Mississauga City Centre and more than10 years after in the case of Markham.

- Even older industrial sites identified for intensification in highly desirable locations, such as St. Lawrence Starch in Mississauga, have taken many years to plan and develop. In the case of this site, which is much smaller than the above examples, the plant was closed in 1990 and demolished in 1993, but residential construction only began in 2001 was completed by about 2005, still a total of 15 years from availability to completion for a small project in a very highly desirable lakefront location.

These examples illustrate the amount of time it can take for large-scale development and redevelopment to occur even in the most robust part of the market cycle in the more desirable areas in Ontario.

Markham is unique in that it has a number of vacant, brownfield and underutilized land holdings located within its centres and corridors where the four factors affecting the probability of large-scale development and redevelopment of the land at an intensified level have already been met or are likely to be met early in the planning period. Development of the Markham Centre lands is well underway and redevelopment of the Langstaff Gateway lands and the Markville Mall could potentially occurring through the next 20 years or more.

Markham Centre is not likely to be fully built out by 2031, which means full build out will be well in excess of 30 years from the start of planning. Other large-scale proposals such as the Langstaff Gateway area extending over Markham and Richmond Hill are likely to have a development time frames similar to Markham Centre or the other above examples. Experience shows that the Town cannot force or count on the *rapid* delivery of large-scale development or redevelopment as the primary means of delivering a high level of intensification.

C. PLANNING FOR SIGNIFICANT AND RAPID SHIFTS IN THE NATURE OF HOUSING DEMAND HAS ADVANTAGES AND RISKS

Planning for increased levels of intensification to occur in the Town of Markham over the planning period to 2031 has a number of key implications for the physical and social character of the community. As described in more detail below, planning for a significantly intensified urban form has municipal fiscal implications, implications for housing affordability and implications for the urban landscape. These are discussed in turn in the following sections.

1. Municipal Fiscal Impacts

Much has been written on the municipal fiscal impacts of intensified, or "compact" urban form versus more traditional greenfield development patterns. While is it difficult in the absence of a detailed financial analysis to identify the specific municipal fiscal impacts that may be associated with accommodating increased levels of intensification in the Town of Markham, a number of general comments on the matter can be provided.

Broadly speaking, under a more intensified urban growth scenario, it is primarily the cost of "linear" or spatially-driven services that is affected. The cost of "people-oriented" services is less affected, since these must be provided to existing and future residents regardless of the housing types they may occupy:

- Services for which delivery is affected by spatial factors tend to have lower per unit costs as development densities increase. Fire protection is a good example: fire protection requirements are broadly linked to response times which are governed by the travel times between fire stations and the properties they service. As a result, a single fire station can serve more units if it is built within a community designed at a higher density. All other things being equal, the costs per unit for operating fire stations could generally be lower for areas built at higher densities.

Similarly, road repairs and winter maintenance are also good examples of the type of linear service for which costs are driven by spatial factors. The length of local roads per person associated with condominium apartment buildings is considerably less than for streets containing single-family houses. Hence, maintenance costs can be lower, with other things being equal.

- Unlike linear or spatially-driven services, the costs of "people-oriented" services are less sensitive to density. For people-oriented services, the per unit costs are driven not by the location of development but rather by the number of people that demand those services. Libraries, recreation facilities and parks are good examples of services that need to be provided to support an existing population, regardless of the density at which they might live.

- While some services, of course, can be delivered more cost-effectively if development is at higher densities, such development may in turn generate new service needs. For example, under an intensified future growth pattern, the Town of Markham will accommodate more apartment buildings (and office buildings) suggesting a need for additional fire fighting vehicles and equipment specifically designed to service high-rise buildings.

- Existing services and infrastructure will also be used more intensely under a more compact form of development. For example, the road network will not be expanded at the same rate as it has in the past, but intensity of use for the road network already in place will increase. This will have operating cost implications particularly with respect to road maintenance.

- Balanced against the potential for increased use of the road system is greater use of the transit system, which is expected to grow and achieve a higher cost recovery ratio as usage increases. Although the specific costs are difficult to estimate within the scope of this study, it is clear that the intensity of both the existing road system and future and planned transit system will increase under an intensified growth scenario.

  Similarly, the accommodation for delivering soft services may be more challenging and costly to provide in an intensification environment.

Balancing some of the additional costs, however, intensified forms of development also have the potential to yield higher municipal revenues, particularly with respect to property taxes which, in turn are driven by assessments and property values. Under an intensified pattern of development property values in general are likely to increase since, with the greater density being contemplated, land values are likely to rise. With a greater proportion of new development being in the form of apartments and office buildings, both of which on a comparative level have higher values, assessment generation should be greater compared to lower density forms of development, all other things being equal.

Capital spending may also be affected in a more intensified urban environment, particularly with respect to a greater emphasis on services such as fire protection and transit. For the taxpayer, however, the impacts of such changes in the short term are likely to be small since such a large share (80%) of the community's growth-related capital costs are funded through development charges (DCs) and the gas tax.

New capital assets to be added to service growth in the Town of Markham are also likely to have a limited effect on the annual non-growth share of the capital budget for a couple of reasons. First the Town has an interest in using existing infrastructure as efficiently as possible and only add new infrastructure as necessary. The capital assets that are added to support growth will largely be new meaning the need for maintenance and replacement will be low in the short term, though, like all infrastructure, will eventually require repair and replacement. Further analysis, however, would be required to more precisely gauge the fiscal impacts of a more intensified pattern of development.

2. Shift to Higher Density Forms of Housing Is Also a Shift to a More Expensive Form: Apartments Are More Costly per Square Foot than Lower Density Forms

A more intensified pattern of development also has implications for housing affordability, particularly as it relates to unit type. Under an intensified urban form, more new units would need to be provided in an apartment form than has been the case in the past. Typically, on a square-footage basis, the cost of apartments tends to be higher than other ground-related forms. This market condition acts a distinct economic disincentive to family households choosing apartment units; yet this is just the shift that will need to occur to achieve the intensification goals.

As illustrated in Table 3, in the Town of Markham, recent sales activity reflects this broad pattern. Based on a sample of recent listings, the typical price of new units in Markham on a square foot basis is highest for apartment units, at approximately $300 per square foot, and ground related units averaging about $220 square foot. At about one-third more per square foot a family-sized apartment unit is much more expensive than the same amount of space in a ground-related form, even before considering other attributes of ground-related forms such as private outdoor space (a yard), more convenient parking and a stronger market in the event of resale. Put another way, a family who can afford to pay $300,000 for a unit, and has no other option but to live in an apartment building, will need to settle for significantly less space than might otherwise be the case.

Table 3

Example Sales Price Per Square Foot for Existing Units by Major Unit Type
Town of Markham, May 2009

Unit Type	Listing Price	Size (sq.ft)	Price Per Sq.ft.
Town House	$289,988	1,110	$261
Town House	$449,000	2,062	$218
Town House	$299,900	1,544	$194
Single Family	$2,888,000	10,000	$289
Single Family	$799,000	3,100	$258
Single Family	$849,900	3,700	$230
Single Family	$500,000	2,500	$200
Single Family	$695,000	3,528	$197
Single Family	$548,800	3,237	$170
Single Family	$489,900	3,118	$157
Apartment	$429,900	1,130	$380
Apartment	$425,000	1,400	$304
Apartment	$205,000	700	$293
Apartment	$236,900	810	$292
Apartment	$319,900	1,120	$286
Apartment	$358,800	1,514	$237

Source: Hemson Consulting Ltd., 2009 based on MLS Listings

Other types of households, mainly those without children at home, are attracted to apartments by a different set of needs such as an interest in reduced maintenance, reduced need for space or the ability to afford a unit at all (notwithstanding the higher price per square foot, a 700 square foot apartments is much more affordable than a 1,200 square foot townhouse).

A similar price relationship exists in the new housing market, as shown by the sample asking prices in Table 4. To understand part of the reason why there is a large difference in price between unit types, including an even larger gap for new construction than existing sales, is the difference in construction costs. According to the Altus Group's Construction Cost Guide 2008, the basic construction cost per square foot in the Greater Toronto Area for a medium quality finish single detached unit in the range of $105 to $160 per square foot. Rowhouses are slightly less expensive to build at $96 to $121 per square foot. However, poured concrete apartment buildings are far more expensive to build than wood frame units with standard finish apartments in a range of $175 to $259 and taller point towers over 40 storeys, much more costly again in a range of $283 to $460 per square foot[1].

[1] *These costs are provided for the purposes of comparing between different unit types. In all cases the costs are for the basic construction and do not include various "soft costs" such as engineering and design,*

Table 4

Example Sales Price Per Square Foot for New Construction
Town of Markham, May 2009

Unit Type	Listing Price	Size (sq.ft)	Price Per Sq.ft.
Single Detached	$473,000	2,856	$166
Single Detached	$307,000	1,760	$174
Single Detached	$498,000	2,800	$178
Single Detached	$624,000	3,367	$185
Single Detached	$561,000	2,852	$196
Single Detached	$609,000	3,000	$203
Single Detached	$535,000	2,258	$237
Semi-Detached	$434,000	2,327	$187
Semi-Detached	$432,000	2,262	$191
Semi-Detached	$430,000	2,241	$192
Townhouse	$420,000	2,559	$177
Townhouse	$340,000	1,925	$164
Townhouse	$385,000	2,068	$186
Townhouse	$355,000	1,792	$198
Apartment	$295,000	994	$297
Apartment	$223,000	655	$340
Apartment	$239,000	687	$348
Apartment	$235,000	628	$374

Source: Hemson Consulting Ltd., based on selected newspaper and website advertisements

Where there are significant opportunities for more affordable intensification is in rowhousing, stacked rowhousing and plexes. A greater proportion of rowhouse and multiple units tend to be achieved through intensification than single and semi-detached units because this is a popular built form for redevelopment areas. Because land values and construction costs are lower for wood-frame rowhouses than poured concrete high-rise apartments, similar-sized units can be delivered at much more affordable prices than apartments. As a result, providing for family-type units through intensification is likely to be the most successful where the rowhouse and other multiple forms can be delivered to the marketplace.

fees or taxes. For apartments the construction cost applies to the apartment unit and all hallways, lobbies and common areas. The quoted square feet for the new sales in Table 4, however, is just for the unit area itself.

3. In Markham Like Elsewhere in the GTA: New Affordable Housing, Especially Rental, Cannot Be Delivered Without Government Assistance

The existing purchase and rental affordability in Markham is currently quite close to the GTA average for new units and for the rental market. As indicated in Table 5, various price and availability measures for Markham indicate that Markham is facing issues of affordability from a similar footing as other communities. Ownership housing remains relatively affordable in historic terms as rising prices have been compensated by the historically low interest rates on mortgages.

Table 5

Comparison of New Units Pricing and Apartment Rental Availability and Pricing Between Markham and the GTAH

Unit Type	Tenure	Measure	Markham	GTA
Single Detached	Owned Owned	2007 Median Price of "Absorbed Units"	$447,000	$429,900
		2008 Median Price of "Absorbed Units"	$467,000	$461,900
Apartment	Rental	Private Apartment Vacancy Rate, October 2007	0.3%	2.1%
		Private Apartment Vacancy Rate, October 2008	1.1 %	3.2%
Apartment, 1 Bedroom	Rental	Monthly Rent, 2007	$ 909	$ 897
		Monthly Rent, 2008	$ 944	$ 923
Apartment, 2 Bedroom	Rental	Monthly Rent, 2007	$ 1,049	$ 1,051
		Monthly Rent, 2008	$ 1,103	$ 1,082
Apartment, Total	Rental	Monthly Rent, 2007	$ 998	$ 980
		Monthly Rent, 2008	$ 1,054	$ 1,008

Source: CMHC Housing Market and Rental Market Statistics

It should be noted that the new house prices shown here for comparison are the 2008 averages which showed an increase over 2007 prices. Due to the recession, beginning in the Fall of 2008, housing prices have been declining and are expected to decline overall during 2009. Coupled with low borrowing rates, the declining prices do provide a significant increase in affordability. However, as economic shifts are largely cyclical effects, once an economic recovery takes hold prices can be expected to recover, reducing affordability again in Markham and the GTA.

The only difference between Markham and the GTA averages of some significance is the much lower rental vacancy rate in Markham. Markham's rates remain low, at similar levels to the GTA a few years ago. The GTA rate has risen rapidly in recent years, largely because of many renters moving to either new purchase housing during the recent housing boom or renting newer investor-owned condominium apartment units. As the more condominium units come on stream in Markham (and the recession has its effects on the housing market), Markham's vacancy rates are likely to rise toward the levels of the GTA average.

While the challenges are similar to the region overall, this does mean that Markham is especially challenged in providing supply to the rental market. As has been the case since the late 1970s, supplies of new purpose built new private rental housing has been extremely limited. Some investor-owned condominiums have been added to the rental market, but those units are typically at a higher end of the market than the purpose-built rental stock. Most of the additional rental stock has been generated through government assistance programs, particularly in the late 1980s and early 1990s. It remains clear that in Markham and the GTA purpose-built rental housing, with the exception of second suites, has little economic attraction for the private investor. Any substantial rental housing stock additions will still need to rely on funding or tax expenditures from senior levels of government.

4. Town's Physical Landscape Would Be Significantly Altered by High Levels of Intensification

In order to achieve even the low-end of the range of intensification targets currently being considered — the Region's 52% allocation which translates generally to a 55% intensification allocation based on Markham's housing mix — a significant amount of new apartment units need to be constructed. Under the Region's forecast allocation, the Town will accommodate a total of 28,700 apartment units to 2031. At the high end, in order to give a sense of what this would mean in terms of new construction:

- 28,700 new apartment units over the forecast period to 2031 translates into approximately 1,100 new units, per year, to 2031.

- At a typical size of approximately 200 units per building, delivering 1,100 new apartment units per year to 2031 would require the construction of between 5 and 6 new apartment buildings annually.

- Considering that a typical large apartment building takes approximately two to three years to build, that would mean that a total of between 12 and 15 apartment buildings would need to be under construction, at all times, in the Town of Markham starting now and continuing to 2031.

- Over the long-term, the apartment buildings would be a dominant presence and require significant design intervention to ensure compatibility in context, pedestrian comfort and livability at street level.

5. Greenfield Development Meets a Key Part of the Housing Market

While providing more residential units through intensification advances a number of sound planning objectives, it is also important to provide some greenfield development lands in order to maintain a balanced housing stock to address the full range of market needs. The predominant unit types provided through intensification are higher density forms such as apartment and rowhouses and other multiple types, with very little single and semi-detached units typically provided through intensification. Single and semi-detached units are an important part of providing a good mix of housing, but are to be provided primarily through new greenfield development land.

The Town should take efforts, consistent with the *Growth Plan*, to minimize the amount of greenfield land that is designated. Some new lands will, however, need to be provided to satisfy demand for ground-related family-oriented housing which has historically driven the need for lands to accommodate housing.

While such a high level of residential construction may have a number of positive local economic benefits, it would also have major effects on the physical landscape of the community and its municipal financial position. Fewer and fewer families would also likely be able to afford single detached housing, which may have some consequences for broader social planning objectives in the community. Our recommendations on the appropriate residential intensification option and housing stock target that should be used for planning in the Town of Markham are provided within the context of these conclusions.

IV PLANNING FOR BALANCED GROWTH AS SUGGESTED BY THE REGION OF YORK IS RECOMMENDED

Within the context of the many challenges to achieving significantly increased levels of intensification and the key implications of actually accommodating such a future urban growth pattern, our recommendation is that the Town should adopt the Region's intensification objectives and plan accordingly. Over time, should the Town ultimately accommodate more or less intensification than the Regional target, these changes can be addressed at the time of the 5-year official plan review.

It is also possible that performance of the GTAH market, could over time trigger revisions to the *Growth Plan* requirements and the Regional targets. Significant departure from the policy context could further increase risks to the Town.

It is important to note that, notwithstanding new Provincial or Regional objectives for a more compact urban form, the Town of Markham has been planning to achieve these objectives for many years. The Town's current housing profile reflects the already relatively higher share of apartments than many other GTA communities.

The Town is well-positioned to accommodate intensification and the existing urban structure has been largely planned for higher-density urban form. Seeking to achieve, through planning, an even higher share of new units through intensification may not be achievable nor desirable, considering some of the consequences.

A. INTENSIFICATION IS ONLY ONE OF MANY SOUND PLANNING GOALS

It is also important to note that intensification, in and of itself, is not the only goal of the *Growth Plan*. At its foundation the *Growth Plan* seeks to strike a balance between the economy, the environment and the development of "complete communities"[1]. More specifically, the *Growth Plan* states that:

[1] *Defined generally as having an appropriate mix of jobs, local services and housing, community infrastructure and affordable housing, schools, recreation and open space and convenient access to public transportation.*

- Major growth be directed to settlement areas—defined as existing areas and those designated for growth in official plans — that offer full municipal servicing;

- Development outside settlement areas generally be restricted, except for some resource-based or recreational activities and rural uses that cannot be located in settlement areas and in site-specific rural locations with existing approvals; and that
- A set of specific intensification and density targets be achieved — a minimum 40% of all residential development be accommodated within the built-up area after 2015 and new greenfield development achieve a density of 50 residents and jobs combined per hectare.

The *Growth Plan* also identifies a set of Urban Growth Centres that are intended to be a focus for investment, high-density major employment centres and major transit infrastructure. Preserving employment land is another objective of the *Growth Plan*. There is a strong emphasis on providing an adequate supply of employment land to ensure the vitality of the GGH and Provincial economy.

Particularly with respect to commercial development, the *Growth Plan* is also seeking to change the way major retail development is accommodated. In addition to policies restricting the conversion of land within designated *Employment Areas* to major retail uses, the *Growth Plan* also encourages municipalities to plan for new retail areas as an integrated component of vibrant, mixed use nodes. New approaches to commercial planning are increasingly recognizing the key role that retail development can play in urban place making, and the role it can play in supporting the type of development envisioned by the *Growth Plan* and the Region's centres and corridors strategy, particularly as it relates to intensification and infill:

- A significant retail node can act as a centre within in the overall urban structure of the community;

- By focussing market demand and combining other uses within the centre, it becomes not only a retail destination, but also an employment, service, cultural recreation and government destination; and

- Combining these activities with higher density residential areas can create a live-work node where people can walk to services, retail activities and employment and can become the focus for higher order transit.

All of these policy directions are important, including those seeking to achieve higher densities and urban intensification, promote transit-supportive development and generally encourage growth within a structure of centres and corridors. Intensification, in and of itself, is not the only objective of the *Growth Plan* and it is within this broad policy context that our recommendations regarding the appropriate residential intensification target for the Town of Markham are made.

B. THE REGION'S TARGET FOR INTENSIFICATION IS AN APPROPRIATE BASIS FOR PLANNING IN THE TOWN OF MARKHAM

There is no question that the Town of Markham, more than other communities within southern York Region, is very well-positioned to accommodate more intensive forms of development. There are, however, in our view significant limits to the amount of change than can reasonably be achieved, particularly with respect to the required shift in housing preference towards apartments.

Achieving even the Regional intensification target will already involve major shifts in housing preferences, and the ability of planning (even at the Provincial level) to actually compel this cultural shift is limited. In our view, the Town should at a minimum carefully consider the potential consequences of planning to achieve much higher levels of intensification given some of the potential risks, in particular the risk that the planned pattern of development will not occur as anticipated, *Growth Plan* targets will be affected and, in turn, the anticipated revenue will be lower than anticipated.

None of these consequences are in the best interest of the Town, or the Region, or the public in general. As a result, our view is that the Town of Markham should accept the Region's target for just over 50% intensification, recognizing that this in itself is a very aggressive target. Should the pattern of development be significantly different than planned, the Town will have the opportunity to review its policy context during the next official plan five-year review. As a result, our key recommendations regarding the Town's plan for residential growth are as follows:

- The Town should adopt the Region's target to accommodate 52% (Markham's share in order to meet the Provincial intensification target of 40%) or 55% (Markham's share based on th ea more balanced mis of housing units) of new residential units through intensification after 2015. The shift in housing preferences required to meet even this target is already very dramatic in a short period of time, and means that a significant number of family households would need to choose apartment living over more traditional ground-related forms which, in turn, means a significant cultural shift in the housing market. It is unclear what the incentive would be, where space is at a premium, to pay significantly more per square foot for new housing in Markham, if a preferred housing product is available elsewhere in the GTAH.

- The Town should designate at least approximately 600 ha of land located outside the current settlement area to accommodate new ground-related housing, to maintain a good balance in the housing mix over the forecast and to mitigate some of the potential risks that the planned housing mix is not achieved over the planning period;

- The one type of land that may not be necessary to designate within the lands located outside the current settlement area may be additional commercial lands, notwithstanding the Region's recommendation to do so. Our understanding is that the Town is considering not designating new commercial retail land in an effort to focus new development within the nodes and corridors, and advance broader Provincial and Regional policy directions. Further analysis, however, may be required to identify the extent to which new retail should be accommodated within the existing developed urban area or in new greenfield forms of development.

Overall, a balanced approach to long-term planning in Markham is recommended which includes: the Region's allocation of intensification to meet the Provincial *Growth Plan* residential intensification target of 40% and make more efficient use of existing and planned infrastructure, particularly transit. This will result in a reduction in the amount of additional land required outside of the current settlement area for residential and employment use, providing assurance that the Town will have a residential land supply available to accommodate a full mix of housing types.