

ASSESSMENT OF THE URBAN STRUCTURE

A Technical Background Report for the
York Region Transportation Master Plan
(for discussion purposes only)

prepared by
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INTRODUCTION

The Region of York is undertaking a *Transportation Master Plan Study* to define a long-term transportation vision and plan for the Region. As background information to the preparation of the vision and plan, the existing and planned urban structure of the Region needs to be understood in order to develop a transportation strategy that will support the anticipated population and employment growth in the Region. This background report complements a series of eight policy papers being prepared as an initial step in assessing the current state of the urban structure and transportation system in York Region.

This report addresses a number of growth and urban structure issues in York Region. The paper is structured into five sections, addressing the following:

- Historical population and employment growth patterns and trends;
- Description of the existing urban structure;
- Existing and future residential areas in the Region and the 2026 population forecast prepared by the Region;
- Type and location of employment areas in the Region and the forecast employment to 2026;
- Outline of the regional urban structure policies that are in place in the *York Region Official Plan* and assessment of the Region's progress towards these goals to date.

A. YORK REGION CONTINUES TO EXPERIENCE RAPID POPULATION AND EMPLOYMENT GROWTH

Established in 1971, the Region of York is one of the fastest growing regions in Ontario and Canada both in terms of population and employment. Since 1971, York Region has increased in population by over four times, from 169,000 to well over 700,000 today¹. During this period, its share of the Greater Toronto Area's population has increased from less than six percent to over 14 percent.

During the 1970s, York Region grew rapidly, but less so than some other locations, particularly the Region of Peel. Growth was constrained by lack of availability of water and sewer services. Completion of the York-Durham water and sewer-servicing scheme in the late 1970s, led to the extraordinary levels of growth in York Region during the 1980s, a period of overall strong employment and population growth in the GTA. Population growth over the last three decades in York Region is shown in Exhibit 1.

Exhibit 1 Population Growth in York Region				
Year	Population	Growth	Annual Growth Rate	Share of GTA Population
1971	169,000	—	—	6 %
1981	258,000	89,000	4.3 %	7 %
1991	523,500	265,500	7.3 %	12 %
2001 Estimate	770,000	246,500	3.9 %	15 %

Source: Statistics Canada, Census of Canada 1971-1996, 2001 estimated by Hemson.

¹ All population figures in this document are expressed in "Total Population," consistent with the Region of York's forecast work. Total Population is the Census Population plus an estimated Census Undercount. In 1996, the Census Undercount in York Region was about 3.3 percent. Caution must be used in comparing to other sources (including most Hemson reports) which may only quote the Census Population.

York Region is an integral part of the economic region of the Greater Toronto Area and is highly integrated economically with the City of Toronto, other Regions in the GTA and Simcoe County. In the early stages of growth of York Region, before the 1980s, most work trips were oriented towards the City of Toronto as the municipalities in the Region were acting in large measure as bedroom communities. In the 1980s and 1990s, there were a number of economic changes which led to the decentralization of employment across the GTA. From 1981 to 1996, virtually all of the net employment growth in the GTA occurred in the Regions², with over one-third of GTA employment growth occurring in York Region.

With the completion of a number of key infrastructure projects including the York-Durham servicing scheme, Highway 404 and the Concord railway yards, York Region was able to capture a large share of the suburban employment growth in the GTA. In York Region, employment increased dramatically from 55,000 in 1971 to an estimated 385,000 in 2001, as shown in Exhibit 2.

Exhibit 2 Employment Growth in York Region					
Year	Employment	Growth	Annual Growth Rate	Share of GTA Employment	York Region Activity Rate
1971	55,000	—	—	4 %	33 %
1981	110,000	55,000	7.2 %	6 %	44 %
1991	248,000	138,000	8.5 %	11 %	49 %
2001 Estimated	385,000	137,000	4.9 %	13 %	50 %

Source: Statistics Canada, Census of Canada 1971-1996, 2001 estimated by Hemson.

Initially a predominantly rural-oriented agricultural and resource-based economy, York Region has now evolved into a large and diverse urban economy consisting of manufacturing, office, service, tourism and agricultural employment.

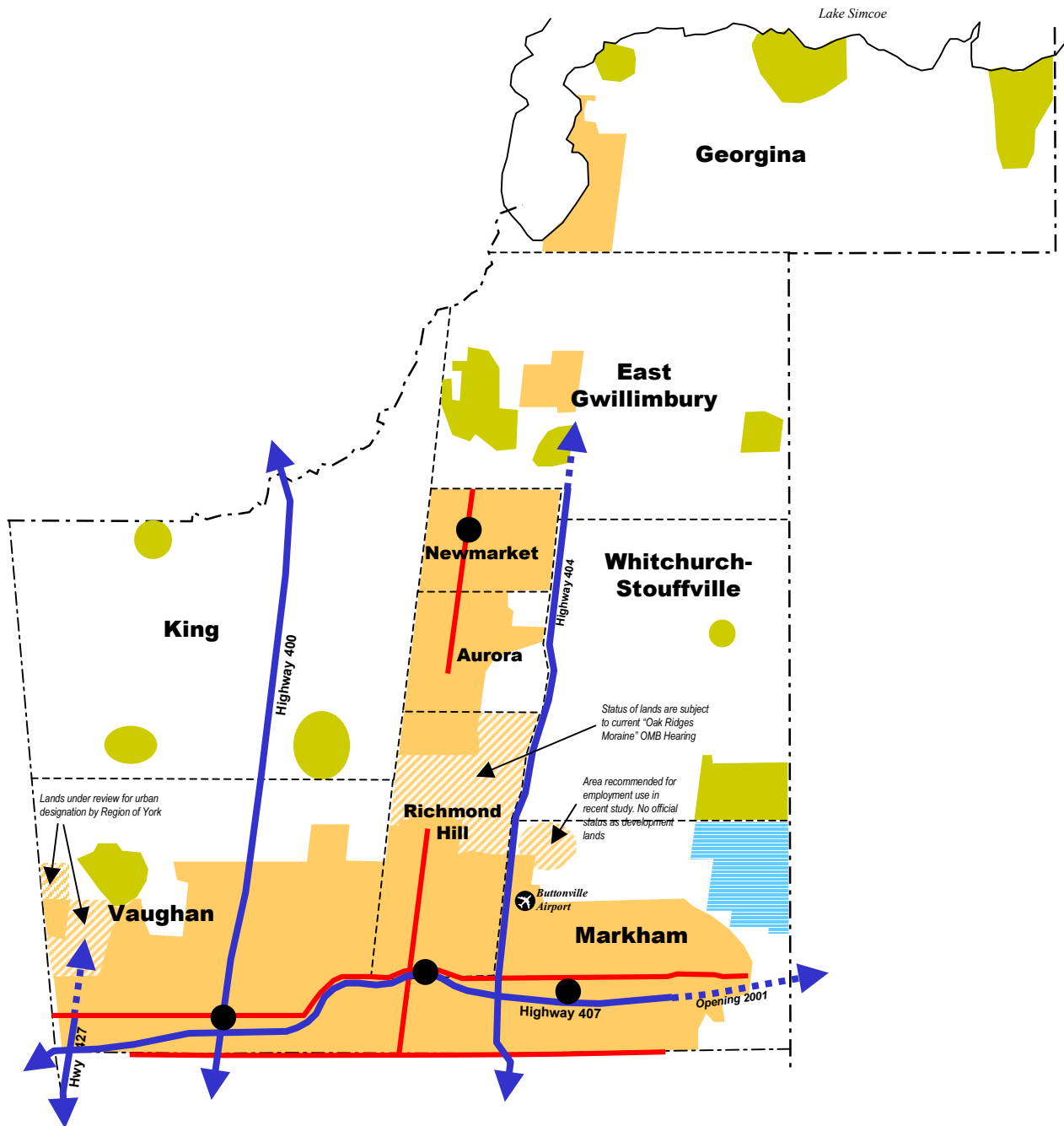
B. URBAN STRUCTURE REFLECTS HISTORICAL DEVELOPMENT PATTERNS, PHYSICAL CONSTRAINTS AND TRANSPORTATION INFRASTRUCTURE OF THE REGION

1. Structure of GTA & York Region Based on the Yonge Street Spine & Key East-West Routes

The current urban structure of York region is reflective of the history of its development and has been shaped by environmental features and the transportation network. The southern municipalities of Vaughan, Richmond Hill and Markham along with Aurora and Newmarket are highly urbanized with significant residential and employment areas. This pattern of development is similar to an inverted "T" shape with Yonge Street being the spine of the "T" and Highway 7 forming the base, as shown on Map 1. It is a replication of the historical development of the Toronto area where development was centred on the highway providing quickest access between the northern and southern lakes, Yonge Street and a major east-west highway along Lake Ontario (Kingston and Dundas roads in the case of Toronto and their Highway 7 reflection in York Region).

Overall, in the region, urbanization has proceeded northwards within the three southern municipalities and outwards in an east-west direction from Yonge Street in Aurora and Newmarket. The municipalities outside of the "T" area - King Township, Whitchurch-Stouffville, East Gwillimbury and Georgina — have remained more rural in character with urban

² While most employment growth is occurring in the Regions, the City of Toronto still has a share of growth which is hidden in these data by the chance timing of the census period and the business cycles. The former Metro Toronto experienced significant employment growth during the 1980s, but experienced significant declines during the recession of the early 1990s. With employment recovery only really taking hold after the 1996 census, the City of Toronto will likely see significant net employment growth over the 20 year period from 1981 to 2001.



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|---|-----------------------------------|---|---------------------|
|  | Existing & Designated Urban Areas |  | Regional Centres |
|  | Potential Future Urban Areas |  | 400 Series Highways |
|  | Towns & Villages |  | Regional Corridors |
|  | Pickering Airport Lands | | |

Notes
 1. Map is conceptual and not to scale
 2. Source: York Region Official Plan, July 13, 1999

MAP 1

Assessment of the Urban Structure
York Region Urban Structure



development largely restricted to small towns and villages within these municipalities including Stouffville, King City, Keswick and Sutton.

2. Environmental Features Also Structure Growth in the Region

Significant environmental features can structure the pattern of growth and development. In York Region, there are a variety of significant natural features including river systems, forests, lakes, wetlands and terrain features including the Oak Ridges Moraine which traverses in an east–west orientation through a large section of the central part of the Region. The Moraine is a rolling ridge of varying widths formed from glacial deposits. A number of major rivers have their headwaters near the Moraine including the Humber, Don and Rouge rivers draining to the south into Lake Ontario and the Holland, Black and Schomberg Rivers which drain to the north into Lake Simcoe. Three major environmental features largely define the urban edges of York Region - the Rouge River to the east, the upper Humber River valley in northern Vaughan forming a western edge and Lake Simcoe to the north.

3. Transportation Infrastructure Has Shaped Urban Structure of York Region

Transportation infrastructure — roads, transit, rail and air — have an interactive relationship with urban structure as both shape and influence each other over time. The key transportation infrastructure elements affecting urban structure in the Region are the following:

- Highways 7 and 407 are the major east-west transportation arteries for the Region and are also important components of the GTA transportation system. They have allowed for the continued urban expansion of Vaughan, Richmond Hill and Markham and also facilitated east-west movement across the GTA. Highways 400, 11 and 404 are the main north-south routes connecting York Region to Toronto and areas to the north. These routes have allowed Aurora and Newmarket to become significant urban centres in the Region and the GTA. The eventual extension of Highways 427 and 404 and the proposed Bradford By-Pass may open up new employment and residential opportunities in the Region, as well as serve existing areas within and beyond York Region. A grid system of concession roads and smaller highways feed into the major highways and provides access to all parts of the Region.
- Yonge Street is the central spine of the Region from which growth historically moved east and west in Newmarket, Richmond Hill, Aurora and Thornhill (Vaughan and Markham). It changes in function and character in different parts of the Region, from suburban arterial in Thornhill to historical main street in downtown Richmond Hill and Aurora and rural highway in other parts of Richmond Hill.
- Transit systems in York Region have generally responded to population and employment growth in the Region. GO Transit provides inter-regional rail and bus transit service oriented towards downtown Toronto. Three GO rail lines — Bradford, Richmond Hill and Stouffville — serve York Region during the weekday peak morning and afternoon hours. Local transit service is also provided in the more urban municipalities in the Region feeding into the GO stations, the TTC subway and serving the major residential and employment areas.
- Rail infrastructure has also helped in the development of industrial areas in the Region. In Vaughan, a large industrial area has developed around the CN Freight Classification Yard at Highway 7 and Keele Street. In addition, a new industrial area is being planned around the CP intermodal facility on Highway 50.
- Another form of transportation, air travel has also had an impact on the urban structure of York Region. The Region is served by the Buttonville Airport in Markham which provides executive business travel and small freight services. In addition, approximately 2,500 hectares of land in northeastern Markham is being reserved as part of a larger site for the potential Pickering Airport.

C. POPULATION GROWTH WILL BE LARGELY ACCOMMODATED IN NEW RESIDENTIAL AREAS

1. Major Residential Areas in York Region Are in Southern Municipalities

The major residential areas in York Region are located mainly in the urban municipalities of Vaughan, Richmond Hill, Markham, Aurora and Newmarket, as shown in Map 2. These residential areas developed as the supply of greenfield sites in the former Metro Toronto became increasingly depleted in the late 1970s. Most of the residential areas in York Region have been developed since 1980. Prior to that time, during the 1960s and 1970s, a large share of residential development in the GTA occurred in Scarborough, North York and Etobicoke in the form of single-detached houses at low densities and a large number of high rise apartment units. While factors influencing housing type are complex, the apartment boom of this period was largely providing accommodation for the baby boom population, who were starting their first households but not yet seeking family-oriented housing.

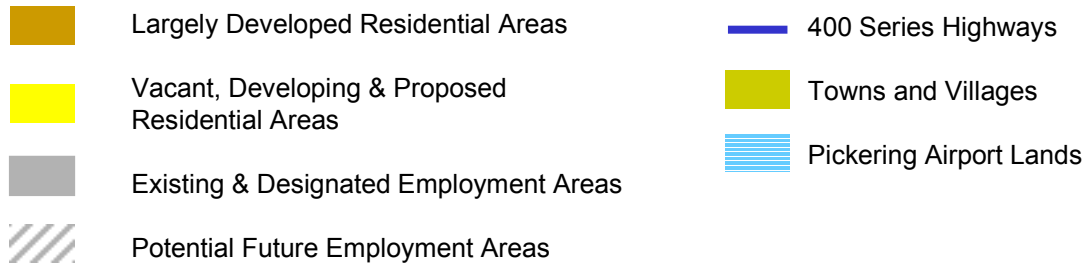
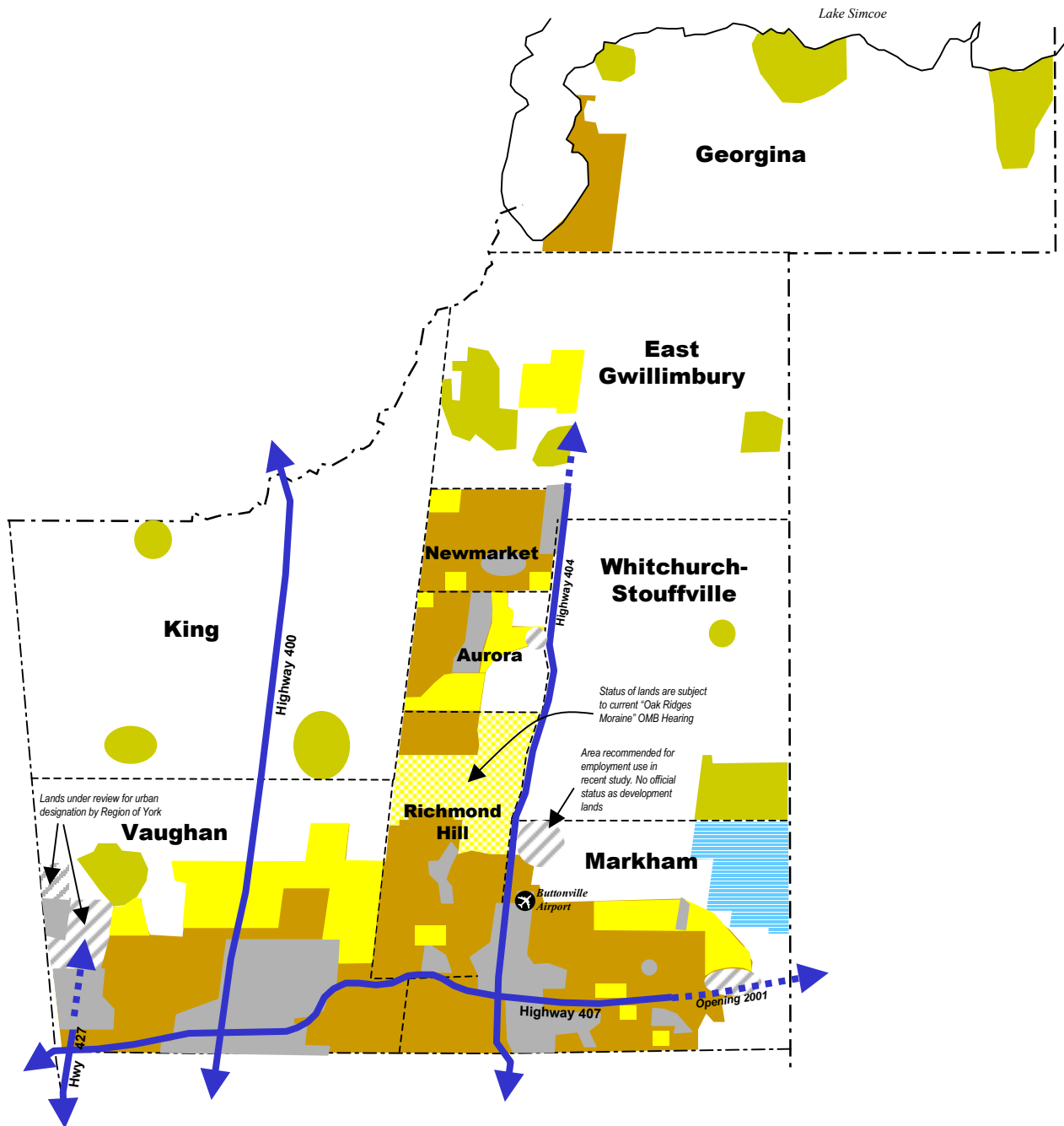
In York Region, the predominant housing form is single detached, as much of its growth occurred during the period when the baby boomers were moving into more family-oriented housing. The single-detached housing in York generally occurs at higher densities than the suburban development in North York and Scarborough in the 1960s and 1970s (i.e. the lots are smaller in the past two decades). However, overall densities tend to be lower because there are much fewer apartment units in York Region than in the suburban parts of Toronto.

Higher density residential areas can only be found in York Region near the City of Toronto and along some of the major transportation corridors such as Major Mackenzie Drive in Richmond Hill and Davis Drive in Newmarket. Within the Region, residential densities are generally lower in the more rural municipalities of King, Whitchurch-Stouffville, East Gwillimbury and Georgina.

Quantitative comparisons of densities between different areas must be treated with caution. The way in which density is defined can have a dramatic effect on the density value associated with a particular area, depending on what is included or excluded in the calculation. Unfortunately, there are not consistent standards applied across all municipalities when defining net or gross residential density. For this reason, we have used data from a single source, the Region of York, when comparing densities. The more established communities in York Region that were built mainly in the 1980s tend to be in the order of 18 to 20 units per hectare on a net basis. More recently, net densities in York Region and in many urban parts of the GTA Regions have generally been increasing as shown in Exhibit 3.

This increase in residential density has been a result of both a shift in unit mix and an increase in net densities within housing categories. The mix has shifted across the GTA housing market. Over the last few years, there has been a much greater number of semi-detached and townhouse units constructed as a proportion of total units. From 1986 to 1991, single detached houses comprised nearly 80 percent of the total new housing completions in the Region while from mid 1996 to July 2000, singles were only 64 percent of the completions in the York housing market. There have also been increases in net density within the single and semi-detached housing types as a result of a number of factors including: increases in land prices and decreasing developer profit margins, an increase in the number of first-time home buyers as a share of the market and regional and municipal policies designed to encourage higher density forms of housing. However, on a gross basis, densities in many new areas are not significantly higher than existing areas because of the greater amount of land being taken out of development for the public realm including environmental lands and public infrastructure (as shown by the more modest increases in gross density shown in Exhibit 3).

In addition to building at higher densities on a net basis, a number of the planned new communities such as Cornell, Markham Centre and the Vaughan Corporate Centre are promoting a greater mix of land uses to facilitate the potential for closer live/work relationships



Notes
 1. Map is conceptual and not to scale
 2. Source: York Region Official Plan, July 13, 1999

MAP 2

Assessment of the Urban Structure
Major Residential & Employment Areas



and reduce the need for automobile use for non-work related trips. Many of these new communities are also being designed to support transit, walking and cycling opportunities.

Exhibit 3		
Net Densities in the Three Largest Municipalities in York Region		
Municipality	Net Density Per Hectare (Units/Ha)	Gross Density per Hectare (Units/Ha)
Vaughan		
1981-90	20	12
1991-95	19	10
1996-00	25	14
Draft Approved	32	15
Markham		
1981-90	19	12
1991-95	17	11
1996-00	28	15
Draft Approved	36	15
Richmond Hill		
1981-90	18	10
1991-95	17	11
1996-00	28	15
Draft Approved	26	12

Source: York Region Planning Department based on registered and draft approved subdivision applications.

Note: In this table, net density refers to total residential units divided by land used for residential lots; streets and environmental lands are not included. Gross Density is total residential units divided by all lands within residential subdivisions including streets, open space and commercial areas.

2. York Region Population Forecast to Grow to 1.3 Million by 2026

In June 2000, the Region of York's Planning Department updated population and employment forecasts for the Region and its local municipalities to the year 2026. From a 1996 population of approximately 612,000, the Region is forecast to grow to approximately 1.3 million by 2026. The population forecast by area municipality is shown in Exhibit 4.

Exhibit 4				
York Region Population Forecast By Area Municipality				
Municipality	1996	2026	Absolute Increase	Percent Increase
Aurora	36,000	75,000	39,000	108%
East Gwillimbury	20,418	60,000	39,582	194%
Georgina	35,917	74,000	38,083	106%
King	18,820	35,000	16,180	86%
Markham	179,068	348,000	168,932	94%
Newmarket	58,998	98,000	39,002	66%
Richmond Hill	105,060	219,000	113,940	108%
Vaughan	136,892	330,000	193,108	141%
Whitchurch-Stouffville	20,485	41,000	20,515	100%
York Region	611,700	1,280,000	668,300	109%

Source: York Region Population, Household and Employment Forecasts to 2026, June 2000

The majority of the population growth, over 70 percent, is to be accommodated in the three largest municipalities in the Region. Collectively, they have the largest vacant land supply under urban designation and are likely to experience the greatest growth pressures. The largest percentage increase in population is forecast to be in East Gwillimbury where a new urban community is being planned in Queensville.

Map 1 shows the current urban boundaries within the Region. In the Region's Official Plan, it is stated that a minimum of 20 percent of the Region's forecast population is to be accommodated in existing built-up portions of urban areas, towns and villages, consistent with the centres and corridors structure of the plan, and by redevelopment of under-utilized areas and areas in transition.

This is a commendable long-term goal, especially for the provision of transit and the efficient use of other infrastructure, but it may be difficult to achieve in the short term given the lack of significant levels of market demand for higher density forms of housing in York Region. In the longer term, as communities in York Region become more mature, there will be greater demand for a full range of housing types and therefore, greater likelihood of intensification in existing urban areas.

Exhibit 5 highlights where residential growth is to be directed within each of the area municipalities in the Region as identified in local Official Plans and the Regional Official Plan.

Exhibit 5 New Residential Areas in York Region	
Vaughan	<ul style="list-style-type: none"> • New future urban areas located to north of existing urban area • Currently experiencing rapid population growth, residential areas along Highway 400 are developing quickly • Vaughan Mills Centre was recently approved, a 1.7 million square foot shopping and entertainment complex near Rutherford Road & Highway 400
Markham	<ul style="list-style-type: none"> • New residential areas planned north to Major Mackenzie Drive • New areas under development include Cornell, planned community expected to contain approximately 30,000 people when completed • Other major secondary plan areas where growth is to be directed include areas near Highway 407 as well as new areas north of the existing urban area up to Major Mackenzie Drive
Richmond Hill	<ul style="list-style-type: none"> • Future residential growth allocated to Richmond Hill urban area and the Oak Ridges/Lake Wilcox community • Oak Ridges Moraine Ontario Municipal Board Hearing will determine the extent of permitted development on the Oak Ridges Moraine. The results of this hearing will have implications on Richmond Hill's ability to meet population targets.
Aurora	<ul style="list-style-type: none"> • New residential areas being planned for areas east of Bayview, north and south of Wellington Street
Newmarket	<ul style="list-style-type: none"> • New residential areas to be located in southeast and northwest corners of Newmarket as well as both sides of Mulock Drive east of Yonge Street
King Township	<ul style="list-style-type: none"> • Majority of new growth to be accommodated within urban boundaries of King City and Nobleton and a smaller share to the Community of Schomberg
Whitchurch-Stouffville	<ul style="list-style-type: none"> • Approximately 70 percent of population growth is to be allocated to the Stouffville area because of its potential for additional servicing capacity • Remainder of growth to be accommodated mainly in Ballantrae-Musselman Lake area with limited growth in rural areas
East Gwillimbury	<ul style="list-style-type: none"> • Large share of the new residential growth is to be accommodated in Queensville where a major new community is being planned • Queensville is planned to have 20,000 people by 2021 and ultimately develop to accommodate 30,000 people • Majority of remaining growth is to be allocated to the towns of Sharon, Mount Albert and Holland Landing-River Drive Park.
Georgina	<ul style="list-style-type: none"> • Majority of new population growth to be accommodated in the existing urban areas of Keswick and Sutton

Therefore, while the majority of population growth in the Region will continue to be in greenfield areas on the periphery of the more urban municipalities (filling out of the "T" pattern of development), a substantial share of the growth is moving outside of the traditional development pattern with major new growth areas in Queensville and expansion of urban areas in the more rural municipalities.

3. Retail and Community Facility Areas Structure Residential Communities

Major retail and community facilities structure residential communities and provide a focus for activities. They are also generators of traffic at various times during the day and week. In York Region, there are three major regional shopping centres - Markville in Markham at Highway 7 and McCowan Road, Upper Canada Mall in Newmarket at Davis Drive and Yonge Street and the Promenade Mall in Vaughan at Bathurst and Centre Street. In addition to providing retail services to residents and businesses in York Region, these regional retail centres also draw in people from outside the Region. There are also smaller retail facilities of various scales located mainly within the urban municipalities. Community facilities such as schools, recreation centres, institutions, municipal facilities are also centres of activity within the Region. They are generally located at along major arterial roads to provide maximum access for the local community.

D. CONTINUED STRONG EMPLOYMENT GROWTH IN YORK REGION INCREASES OPPORTUNITIES FOR COMMUTING CONTAINMENT

1. Areas Within York Form a Diverse Employment Base, Expected to Grow Significantly Over the Next 25 Years

For the purposes of forecasting, employment is grouped into three land-use based categories:

- *Major Office Employment* consists of employment in office buildings over 20,000 square feet.
- *Population-Related Employment* is employment that exists in response to a resident population. It includes retail, education, social community services and municipal government.
- *Employment Land Employment* occurs in employment or industrial areas and accommodates a wide range of industrial uses and industrial support services in a variety of built forms.

The main focus of discussion in this section will be on employment land since it accommodates most of the Region's employment and is contained within well-defined and identifiable districts.

The Region of York has experienced very high levels of employment growth over the past 15 years. Even during the recession period from 1991 to 1996, employment in York Region grew by over 40,000 or 16 percent while employment in the total GTA only grew by about two percent.

The diversity of the economic base of the Region has also increased over the last twenty years with the Region developing strengths in a number of different sectors. For example, Markham has evolved as a focus for high-tech manufacturing and office centre, while Vaughan and Aurora have strong bases in manufacturing, especially in the auto parts sector. The more rural municipalities have economic strengths in recreation and tourism and agriculture.

For employment land users, accessibility to major transportation infrastructure and proximity to a labour force are key factors in locational decisions. Not surprisingly, most of the major employment lands in York Region tend to be located in the southern urban municipalities and in close proximity to a 400 series highway. Vaughan and Markham are clearly the areas with the highest employment levels and also the greatest potential for future growth over the next 20 to 30 years. The higher density employment areas tend to be concentrated in the Highway 407 and 404 areas, in Richmond Hill and Markham, which has the largest concentration of office buildings in the Region.

Exhibit 6 summarizes the main industries and the locations of the major employment areas within each of the area municipalities, as also shown on Map 2.

Exhibit 6			
Major Employment Areas in York Region			
Municipality	1998 Employment	Industry Strengths	Location Within Municipality
Vaughan	111,000	Transportation equipment, plastics, furniture, fabricated metal products manufacturing	Main industrial area located between Highway 400 and Dufferin from Steeles to Rutherford Road
Markham	95,000	High tech manufacturing and corporate head offices	Business parks along east side of Highway 404 from Steeles Avenue to Buttonville Airport
Richmond Hill	41,700	Manufacturing, finance and insurance, business services	Beaver Creek Business Park near Highway 404 and smaller, older industrial area located near Major Mackenzie and Yonge Street
Newmarket	28700	Medical services, public administration, transportation equipment manufacturing, retail	Industrial park at end of Highway 404, York County Hospital on Davis Drive, York Regional Offices and Courthouse on Yonge Street
Aurora	10,900	Auto parts manufacturing (headquarters for Magna International), printing and publishing	Business parks along Bayview from Vandorf Sideroad to St. John's Sideroad
Whitchurch-Stouffville	6,000	Agriculture, resource extraction, manufacturing, recreation and tourism	Small industrial park located near Stouffville, construction material industries located in Vandorf industrial area
Georgina	5,200	Tourism, Recreation, accommodation, retail, personal services	Recreation areas located near Lake Simcoe, small industrial parks in Sutton and Keswick
King	3,800	Agriculture, recreation, small-scale manufacturing	Mainly in towns of King City, Nobleton and Schomberg (also spread throughout the Township)
York Region	302,300		

Source: Region of York web site and Hemson Consulting

Note: The York Region Employment Survey is not comparable to the census definition of employment. These employment survey figures are much lower than would be shown by the census place of work employment. The above 302,000 cannot be compared directly to the 285,000 1996 employment or the estimated 385,000 2001 employment.

In the Region's recently prepared forecast, Vaughan and Markham are anticipated to continue to be the main centres for employment in York Region accounting for just over 60 percent of the total forecast employment for the Region in 2026, maintaining their current share. The forecast is shown in Exhibit 7.

The forecast growth in employment for each municipality includes all three types of employment as defined earlier. Population-related employment growth is tied directly to the forecast growth in population. The largest anticipated percentage increase in employment is in East Gwillimbury, which is largely due to the employment arising from the planned Queensville community.

Exhibit 7				
Forecast Employment in York Region				
Area Municipality	1996 Employment	2026 Employment	Change	Percent
Vaughan	83,315	215,000	131,685	158%
Markham	97,590	212,000	114,410	117%
Richmond Hill	43,090	119,000	75,910	176%
Newmarket	27,240	46,000	18,760	69%
Aurora	14,620	33,000	18,380	126%
Georgina	7,525	22,000	14,475	192%
Whitchurch-Stouffville	7,470	17,000	9,530	128%
King	6,125	12,000	5,875	96%
East Gwillimbury	4,635	20,000	15,365	331%
Total York Region	291,600	696,000	404,400	139%

Source: York Region Population, Household and Employment Forecasts to 2026, June 2000

The growth in employment in the Region is to be accommodated in existing urban areas and business parks and through the designation of additional employment land. The major future employment areas are located in Vaughan and Markham and in close proximity to major 400 series highways in the Region, as described in Exhibit 8.

Exhibit 8		
Major Future Employment Areas in York Region		
Municipality	Location	Status
Vaughan	Extension of Vaughan West Employment areas, north of Langstaff Road	Designation under review by the Region, would add over 2,500 hectares of employment land, large part of area would not be available for development until alignment for Highway 427 extension is finalized
Markham	To be finalized, potential areas include east side of Highway 404 north of Buttonville Airport and the Box Grove area at the eastern edge of the urban area near Highway 407	Markham is considering the designation of future employment areas
Aurora	Just west of Highway 404 near Aurora Road	Secondary plan is under review

2. Emerging Live–Work Patterns in York Region

From a transportation perspective, it is desirable to develop a wide range of employment opportunities within relatively close proximity to residential areas in order to reduce the demand on the peak hour direction. The Region's Official Plan encourages initiatives at the regional and area municipality level to improve opportunities to live and work in the same area. Within York Region, the number of employed residents working within the Region has been steadily increasing, from about 46 percent in 1986 to over 50 percent in 1996 (see Exhibit 9). As a result, the transportation demands on the main north-south routes are being reduced, *relative to the population*, as more jobs are created within the Region. From 1986 to 1996, nearly three quarters of new peak period trips in York Region were contained within the Region³. The

³Source: Eric J. Miller and Amer Shalaby, *Travel in the Greater Toronto Area: Past and Current Behaviour And Relation to Urban Form*, January 2000, University of Toronto.

forecast growth in employment will continue to provide opportunity for closer live-work relationships in York Region.

Exhibit 9		
Patterns of Commuting Between York Region and Rest of Ontario		
	Origin of Employees Working in York Region	Destination of York Region's Resident Employed Labour Force
York Region	52%	51%
Toronto	31%	41%
Peel Region	6%	5%
Durham Region	5%	1%
Simcoe County	4%	1%
Other	3%	1%
Total	100%	100%

Telecommuting and working at home, combined with flexible work hours has spread peak times out during the morning and especially the afternoon and has also had an effect on direction of travel. While not sufficient to have a significant effect on total transportation demand, telecommuting and working at home can have an effect on congestion since a small change in the amount of traffic on a major highway can make a large difference in the speed of traffic flow and is very important to capacity levels of major transportation routes.

In the GTA, the number of people working at home or with no fixed place of work increased from six percent of total employment in 1991 to twelve percent in 1996. The increase over this period can be attributed to the recession in the early 1990s as well as longer-term structural changes in employment⁴. In York Region, people working at home and those with no fixed place of work each constituted about seven percent of total employment in the Region. Over the next 20 to 30 years, the shares of total employment in these categories are likely to increase as new technology allows more flexibility to more people. However, in our view, the change will be less than predicted by technology proponents because the vast majority of employees will continue to have jobs requiring fixed places of work.

Another factor which has contributed to the use of transportation infrastructure in off-peak directions and times is the changing pattern of trip purpose within the GTA. While the number of home-based work trips per person has remained relatively constant, there has been a significant increase in the number of home-based other and non-home based trips.

All of these factors have the effect of making trips patterns more complex in purpose, more dispersed in location and more varied in time. The more complex and dispersed the trips are, often the more difficult it is to service these trips by transit.

3. Demographic Trends Could Reduce Demand on Road System in Long Term

The changing age and social structure of York Region's population over the next 30 years will influence the Region's future transportation infrastructure requirements, transit use and demand for particular types of housing. In the GTA, and throughout Canada, there is an overall aging of population as a large proportion of baby boomers reach middle age years. With this aging of the population, there will be increased demands on providing appropriate housing forms and effective public transit service. However, seniors do not tend to move to higher density forms of housing until after reaching age 70. In addition, seniors tend to keep using their automobiles until a similar age after which increasing numbers become local transit riders. Compared to

⁴"Work at home" and "No Usual Place of Employment" should be combined in comparing 1991 and 1996 because the way in which the question on the census was asked changed from the 1991 to the 1996 census.

other regions in the GTA, York's population age structure is relatively young. Therefore, the effects of the aging of the population are not likely to have a large impact on the demand for higher density forms of housing or the use of transit services until near the end of the planning period for the transportation master plan.

In addition to the aging of the population, over the next 25 to 30 years, York Region will experience significant growth in the number of non-family households, single person households and increased levels of ethnic diversification. These demographic changes will increase the demand for a more diversified housing stock, including more medium and higher density housing forms. Recognizing these trends, the Region has set a 50/50 target between single detached and other housing types for new units to 2026. If successful, the resulting increased levels of higher density housing could result in greater use of public transit along corridors in the Region and reduce demands on the road system. It should be emphasized, however, that major changes in the demands on the transportation system as a result of demographic factors should not be expected in a short period of time. Rather, these changes will have an impact over the longer term as York Region evolves and matures into a more diversified community.

E. REGIONAL URBAN STRUCTURE POLICIES SEEK TO DEVELOP CENTRES AND CORRIDORS

1. Regional Official Plan Designates Corridors and Centres

The *Region of York Official Plan* describes a regional structure which defines a greenlands system, sets boundaries for future urban growth and establishes a system of centres and corridors to provide a focus for residential and commercial development. The centres and corridors are planned to focus mixed-use development in areas that can be serviced effectively by transit. The Plan requires area municipalities to prepare official plan and secondary plan policies incorporating community design policies to support the system of centres and corridors. Four regional centres are designated in the Regional Official Plan, as listed in Exhibit 10.

Exhibit 10 York Regional Centres		
Municipality	Name	Location
Vaughan	Vaughan Corporate Centre	At Highways 7 and 400
Richmond Hill	Bayview Glen (Langstaff)	Near Yonge St. and Highways 7 & 407
Markham	Markham Centre	Near Warden and Highways 7 & 407
Newmarket	Yonge Street Regional Centre	Yonge Street between Davis Drive and Mulock Drive

Secondary plans have been approved for the Vaughan, Richmond Hill and Markham regional centres. The Newmarket regional centre does not have a secondary plan but is recognized through a special designation in their Official Plan.

In addition to the regional centres identified, the plan also encourages the establishment of urban and local centres to be identified in area municipal official plans. The centres are to be focal points and concentrations of residential, community, institutional, retail, office and service uses. They are to be compact in form and be integrated with transit facilities where appropriate. These centres include the historic village centres found throughout the Region including centres such as Unionville and Kleinburg. The plan also encourages the creation of new centres at appropriate locations within the Region.

The hierarchy of regional and urban centres is to be connected by a system of “regional corridors”. The corridors should support transit services and have potential for more intensive, mixed-use development. Regional corridors identified in the Official Plan are Yonge Street (in the urbanized parts of the Region), Highway 7 and Steeles Avenue. The Regional Official Plan also designates “urban corridors” which are major arterial and concession roads in existing and proposed urban areas. The plan envisions that the provision of transit services would also be feasible along these corridors.

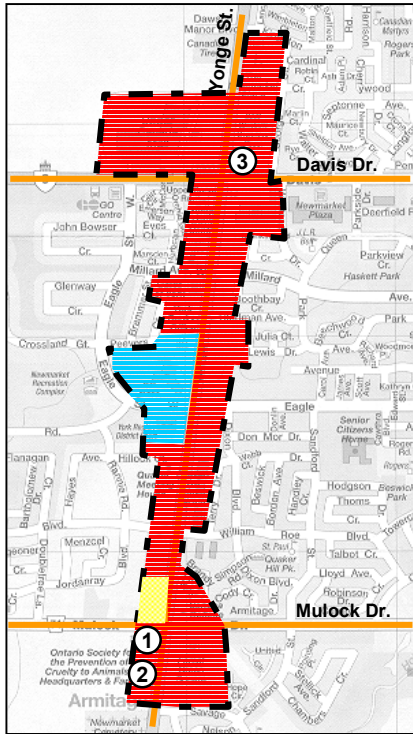
2. It Will Take Some Time to Achieve Urban Structure Goals

The Region of York has a policy framework in place to encourage the development of a system of centres and corridors to promote a more compact urban form and allow the more efficient provision of transit services. The *Region of York Official Plan* sets out general population and employment targets for the regional centres. At full build-out, each centre is targeted to contain 5,000 to 10,000 residents, 20,000 to 30,000 jobs and a mix of uses including retail, services, offices, and community services and facilities. The overall density target is 400 to 600 residents and workers per hectare. It should be noted that these are general guidelines for all four centres, they are not meant as strict goals as each centre is unique in terms of size, location, extent of existing and potential development and other characteristics. Neither the Region nor the local municipalities have set employment or population targets for the designated corridors in York Region.

In order to provide an assessment of the progress to date on achieving these goals, the following is a description of what has been developed at the four designated regional centre locations and what is planned in the near future. Map 3 shows the location of each centre and the major existing uses. Exhibit 11 shows the approved and proposed developments in each centre.

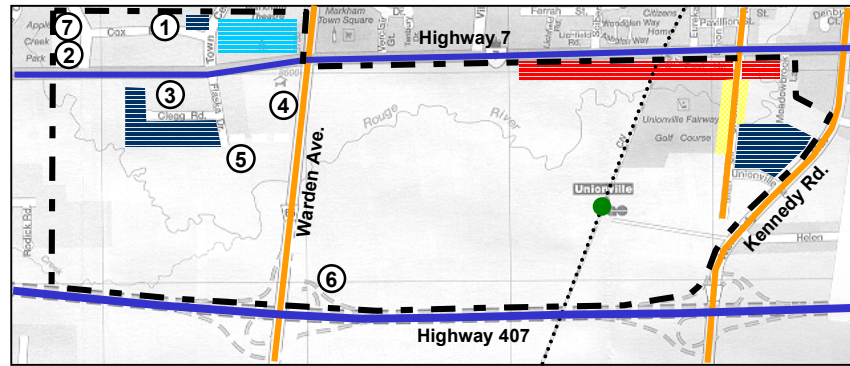
Exhibit 11 Proposed Developments in Regional Centres		
Regional Centre	Approved	Proposed
Vaughan Corporate Centre	1. Two-storey 60,000 sq.ft. office building	2. Six storey, 144 room hotel 3. Retail warehouse 100,000 sq.ft. 4. Three small retail buildings
Bayview Glen, Richmond Hill	1. Small commercial building	2. 4 storey office building 3. 9 storey, 144 unit apt. building 4. 207 residential units 5. 80 townhouse units at 3 sites
Markham Centre	1. 80 Townhouses 2. Single storey industrial building, 95,000 sq.ft. 4. Addition to hotel for a banquet/convention facility and 75 new hotel rooms 5. IBM Phase 1 facility, 566,000 sq.ft. 6. Seven storey office building, 233,000 sq.ft.	3. Seven office buildings, total of 445,000 sq.ft. and two industrial buildings, total of 72,000 sq.ft. 7. Proposed industrial building
Newmarket Regional Centre	2. Retail plaza, 100,000 sq.ft.	1. Rezoning for commercial strip plaza 3. Rezoning for additional commercial uses

Source: Vaughan, Richmond Hill, Markham, Newmarket planning departments



NEWMARKET
REGIONAL
CENTRE

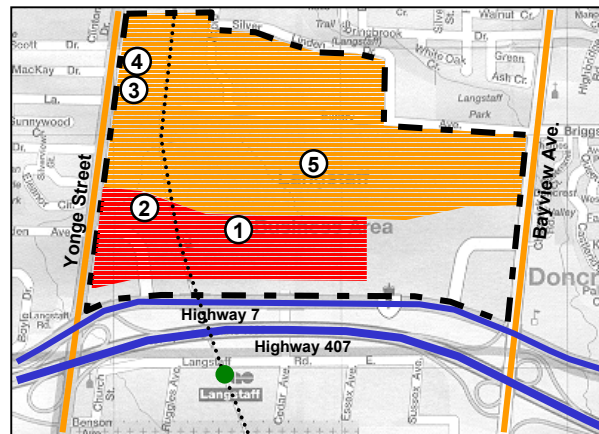
MARKHAM
CENTRE









VAUGHAN
CORPORATE
CENTRE



BAYVIEW
GLEN



MAJOR EXISTING & DEVELOPING LAND USES

-  Existing Residential
-  Employment Land
-  Developing Residential
-  Institutional
-  Retail & Entertainment
-  Development Application (see accompanying table)

Notes
 1. Location of development applications and boundary of uses are approximate
 2. Maps are not to scale nor are they comparable in terms of scale.

MAP 3

Assessment of the Urban Structure

York Region - Regional Centres



Vaughan Corporate Centre

- In the City of Vaughan's Official Plan, the Vaughan Corporate Centre is planned to be the location of the City's future downtown with a mix of office, residential and recreational facilities. A secondary plan was recently approved. An extension to the Spadina subway line has been proposed by the City of Vaughan as a key transportation link which will promote higher density development. The development of an interregional transit service along Highway 7 would also help to increase densities and speed up the rate of development of the area. The central part of the area, from east of Highway 400 to just east of Jane Street, is intended to be a high density, transit and pedestrian oriented main street with through traffic diverted via a ring road.
- The area west of Highway 400 is largely developed with retail and entertainment uses including the Colossus Theatre and a number of retail warehouse uses. The section east of Jane Street consists of mainly older industrial users. The central area, south of Highway 7 is currently developing with additional retail and entertainment uses including the AMC Theatres. The central area north of Highway 7 is largely undeveloped and includes the existing Royal Bank office building and Wal-mart. Consistent with recent re-zoning approvals, a hotel, office building and a number of additional retail buildings have been recently proposed.
- The City of Vaughan has set an ultimate development targets for the Vaughan Corporate Centre of 5,000 residents and 30,000 employees, just over 20 percent of the City's forecast growth in employment to 2026. To date, no residential buildings have been developed or proposed for the area. Currently most of the area consists of relatively low-density retail and older existing industrial areas. Existing employment is estimated to be about 7,700. Approximately one third of the total Corporate Centre area is vacant.

Richmond Hill - Bayview Glen

- The regional centre in Richmond Hill was conceived to be a Gateway Centre which in the long term, would result in the development of an inter-modal transit and transportation terminus. The southern part of the regional centre is intended to contain a range of employment uses including, warehousing, retail warehousing, office, institutional uses. The majority of the lands are planned for low and medium density residential.
- To date, a cinema has been built at Highway 7 and Yonge Street and a number of retail warehouse uses have been developed just north of Highway 7. The residential areas, consisting of mainly townhouses and single detached houses are developing quickly. Given the predominantly retail nature of recent development in the area, the planned relocation of the Langstaff GO Station is not currently programmed. However, a new commuter parking lot is currently being developed which will increase station accessibility and usage, and further station improvements will proceed with implementation of the planned Yonge busway.
- The Town of Richmond Hill has set a housing target of 3,500 to 4,000 units for Bayview Glen which would result in a slightly higher population than the regional target. There are no specific employment targets in the Bayview Glen secondary plan. To date, mainly retail uses have been developed. Given recent developments that have occurred it is very unlikely that the area will meet the regional employment targets.

Markham Centre

- Located at Highway 7 and Warden Avenue, Markham Centre is intended to be the future urban core of Markham. Based on the principles of new urbanism, the plan for Markham Centre proposes a mix of uses with higher density development along Highway 7. The secondary plan provides for a mix of residential, employment, commercial, recreational, cultural and institutional activities in a compact form with complementary lower density communities in adjacent neighbourhoods.

- Currently, Markham Centre is largely undeveloped. There are a number of new developments and proposals including a small townhouse project, expansion of a hotel and conference facility, an office building complex and industrial buildings (including a new IBM facility). The plan for the largest single parcel of the secondary plan area (bounded by Warden Avenue, Highway 407, the rail tracks and the Rouge River) is being re-considered.
- The Town of Markham has set targets of 25,000 residents and 17,000 new office employment positions for ultimate development of the area. The area currently contains only a very small share of these targets, as it is largely undeveloped.

Newmarket Regional Centre

- The Newmarket Regional Centre is comprised of the Yonge Street corridor from Mulock Drive to just north of Davis Drive. In the Newmarket Official Plan, the intention is for the area to be a focal point for business, government, entertainment and cultural activity. A mix of uses is permitted including residential, community, institutional, office and retail and services.
- The corridor is largely developed and currently contains the York Regional Offices and Courthouse and a number of retail uses on Yonge Street including the Upper Canada Mall at Yonge Street and Davis Drive. The Newmarket GO Bus Terminal is located adjacent to the designated area.
- The Town of Newmarket has not set any specific population or employment targets for the Newmarket Regional Centre. The area is currently largely developed with retail and government uses and no major residential developments within the designated regional centre area.

Although not currently developed at a high density, the designated regional centres and the urban and local centres located throughout the Region have the potential to become more urban with more intensive mixed-use development, as York Region matures. The designated Vaughan and Markham regional centres would appear to have the best potential since they both have significant development and redevelopment potential in strategic locations.

- While currently employment and population in the Vaughan Corporate Centre are well short of local and regional targets, there is the potential for higher density uses in the central part of the area assuming that the planned ring road and grid street system is developed. Currently, the majority of development in the VCC is very auto-oriented and at relatively low densities.
- Most of Markham Centre is undeveloped at this time but the area has potential for high density development given the attractiveness of Markham as major office centre in the GTA and the presence of the Unionville GO station which may allow for the development of higher density forms of residential development.
- The Richmond Hill regional centre while very strategically located, especially with the nearby GO station has been largely planned and developed as a low and medium density residential area with retail warehouse uses.
- The Newmarket Yonge Street Regional Centre resembles more of a corridor with the development pattern and character largely established by the existing auto-oriented development.

The designated regional corridors in the York Official Plan — Highway 7, Steeles Avenue and Yonge Street — reflect the main transportation corridors around which the Region has been

developing. The Regional Official Plan states that these corridors have the greatest opportunity for higher density and mixed-use development which would support efficient transit service. There are no specific population or employment targets for the corridors at the regional or local level. Highway 7 and Yonge Street are designated as transitways in the Regional Official Plan. Various options are being examined to facilitate greater transit service in these corridors. The Highway 407 corridor is shown in the Regional Official Plan as a potential inter-regional transitway.

Highway 7 and Steeles Avenue are the primary east-west transportation routes across York Region. Currently, these corridors pass through mainly low density residential and arterial retail and employment areas in York Region. Limited local transit service is provided by Vaughan and Markham along Highway 7 and by the TTC on Steeles Avenue. Yonge Street is the north-south spine of the Region and the GTA. The older main street areas of the Yonge Street corridor in York Region (in Richmond Hill and Aurora) are already developed as mixed use areas. Hourly GO Bus service is already provided from Finch to Newmarket. The frequency of this service would likely increase as the corridor develops more intensely. Implementation of the transitways may encourage intensification to occur along the corridors more quickly than under the current level of transit service.

This section has provided a description of the Region's urban structure policies regarding the promotion of centres and corridors and has assessed the progress achieved to date. For both the centres and corridors, the goals set out in the Region of York Official Plan are a long term prospect. For most of the current planning period, there will likely be a continuation of the same type of low density development as has taken place along the majority of the corridors and in the regional centres. Currently, the majority of the commercial and industrial demand in York Region is for auto-oriented commercial and employment land development. Similarly, there is limited demand for higher density housing in the Region. Most new residential growth will likely still occur in greenfield areas adjacent to existing urban areas in the Region. Over time, as the communities in the Region mature, key areas within the Region including the centres and parts of the corridors will be developed and redeveloped at higher densities and likely with a greater mix of uses.

SUMMARY

This report has provided a description of the urban structure of York Region including a discussion of the historical growth pattern, location of the major residential and employment areas and forecast population and employment growth. The report concludes by describing the Region's urban structure policies regarding centres and corridors and assesses the progress towards these goals to date. In the long term, as communities in the Region mature, increased levels of redevelopment and intensification will likely occur in the designated regional centres and corridors. As described earlier, transportation and urban structure shape and influence each other. Through investing in both transit infrastructure and in strategic urban design improvements in the centres and corridors, the urban structure and intensification goals of the Region will become attainable in a shorter time frame.