

**CITY OF VAUGHAN OFFICIAL PLAN
BACKGROUND PAPER
ON EMPLOYMENT**

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EXECUTIVE SUMMARY

The City of Vaughan is in the process of preparing a new Official Plan as part of the City's Consolidated Growth Management Strategy. The new Official Plan will be prepared to be in conformity with the Province of Ontario's *Growth Plan for the Greater Golden Horseshoe*. As part of the background information for this process, this paper describes the characteristics of Vaughan's employment structure. It focuses on the type of jobs found in the City and the employment lands on which most of them are accommodated.

Some of the key issues highlighted in the background paper include:

- Vaughan's employment has increased from 54,600 jobs in 1986 to 152,700 jobs in 2006. Vaughan's employment land employment, jobs accommodated primarily in low-rise industrial-type building space and multiples, accounts for the majority of the City's total employment, with manufacturing being the city's largest employment sector. Overall, Vaughan's economy is oriented to industrial-type employment.
- Out of a total employment land supply of 3,390 net ha, approximately 1,270 net ha are vacant and 2,120 net ha are occupied. For the past two decades or more Vaughan's employment lands have been in high demand due to such factors as its abundant supply and its good access to major highways. Another advantage is the make-up of the vacant employment land supply, which contains a high proportion of large parcels (10 ha and greater). Large parcels are beneficial because they provide the flexibility to accommodate employment land users that require a large space.
- Vaughan's short-term supply of vacant employment land is constrained with only 380 ha of the total supply of 1,270 ha readily available for development. A large proportion of Vaughan's vacant employment land supply is located in the Vaughan Enterprise Zone abutting Highway 427. This land is currently unavailable because the alignment of a planned extension of Highway 427 northward through the Vaughan Enterprise Zone has not been finalized.
- Vaughan's employment is forecasted by York Region to grow to 278,000 jobs in 2031. Employment land employment will continue to predominate in Vaughan in the future, and therefore the City will need to address such issues as the sufficiency of the land supply and employment land conversion.

- There are several questions to be considered during the remainder of the Official Plan process. These questions relate to:
 - The City's employment land supply;
 - The issue of employment land conversion;
 - Commuting patterns;
 - The use of the Vaughan Enterprise Zone;
 - The future of the City's major office market;
 - Employment land density; and
 - The infrastructure requirements associated with employment growth.

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I BACKGROUND AND INTRODUCTION

The City of Vaughan is in the process of preparing a new Official Plan as part of the City's Consolidated Growth Management Strategy. The new Official Plan will fulfill two requirements: firstly, to set out the City's vision for the future and, secondly, to meet the conformity requirements of the Provincial *Growth Plan for the Greater Golden Horseshoe* (the *Growth Plan*). The *Growth Plan* sets out the Provincial vision for growth in the Greater Golden Horseshoe (GGH). It includes the overall amounts of growth that should be planned for and the direction as to how it should be accommodated.

As part of the Official Plan review, the City of Vaughan is examining issues related to employment land. The purpose of this paper is to provide background information about employment on employment lands (business parks and industrial areas) and to identify some of the specific issues that should be addressed in the new Official Plan. While the discussion focuses on employment land employment, it also addresses other types of employment on employment lands and in the City as a whole, in particular major office employment and population-related employment. It focuses on the type of jobs found in the City and the employment lands on which most of them are accommodated. Separately, the City will also be undertaking a commercial strategy to address Vaughan's retail situation.

This paper is organized into five chapters:

- Following this introductory chapter, the second chapter discusses the economic and employment profile of the City of Vaughan;
- The third chapter provides a description of Vaughan's employment land supply, including the amount and competitive position of the currently designated employment land supply;
- The fourth chapter describes the outlook for employment land for 2031, including the employment growth forecast, the role that employment land will play and some of the issues affecting future demand;
- The fifth chapter sets out questions that need to be addressed through the Official Plan process. Among other issues these include the need for employment land to accommodate employment growth, pressure for the conversion of employment land to residential uses, and the role of major offices.

II VAUGHAN'S ECONOMY HAS BEEN PERFORMING EXTREMELY WELL

By numerous measures, the City of Vaughan's economy has been performing very well for over 25 years. The initial impetus came from the provision of urban services through the York-Durham Servicing Scheme in the 1970s and the construction of the Canadian National Railway's (CNR) York Subdivision and Concord Yards. Growth continues to be supported by the 400-series highway system and by a large and growing labour force. The City's economy is strongly oriented towards industrial-type activities, consistent with the make-up of the broader Greater Golden Horseshoe (GGH) economy. Recent patterns of investment in Vaughan indicate continued high levels of demand for both land and buildings.

This chapter provides an overview of Vaughan's employment growth and major employment sectors. It also discusses market trends for industrial-commercial development in the City.

A. VAUGHAN'S EMPLOYMENT CONTINUES TO GROW RAPIDLY

This section provides an overview of the growth of Vaughan's employment over the last 20 years.

1. Vaughan's Total Employment Increased by Almost 100,000 in 20 Years

Vaughan has one of the largest municipal economies in the Greater Toronto Area and Hamilton (GTAH), and one of its largest labour forces. As shown in Table 1 on the following page, between 1986 and 2006 total employment almost tripled from about 55,000 to over 150,000.

Table 1						
Total Employment by Place of Work City of Vaughan, 1986-2006						
		1986	1991	1996	2001	2006
Vaughan	Employment	54,600	65,100	83,200	126,700	152,700
	Employment Growth & Growth Rate	— —	10,500 3.6%	18,100 5.0%	43,500 8.8%	29,500 4.4%
York Region	Employment	169,800	247,600	288,100	383,700	453,900
	Employment Growth & Growth Rate	— —	77,800 7.8%	33,500 2.6%	102,600 6.4%	73,100 3.6%
GTAH	Employment	2,274,800	2,496,500	2,526,700	3,019,800	3,184,100
	Employment Growth & Growth Rate	— —	221,700 1.9%	30,000 0.2%	493,300 3.6%	164,700 1.1%

Source: Statistics Canada, Census of Canada.

Note: Employment by place of work is the total number of jobs accommodated within the City, irrespective of place of residence.

Vaughan's employment statistics for the last 20 years are indicative of substantial long-term growth. As shown in Table 1, during this period Vaughan's employment has increased at a faster rate than the growth rate for both York Region and the GTAH as a whole. The pace of growth has not always been even during this period, since short-term economic activity is cyclical. Nevertheless, for the purposes of long-term planning, long-term trends are more significant than short-term trends.

Vaughan's resident employed labour force (RELF) has increased at a rate close corresponding to total employment growth, growing from 47,400 in 1986 to 126,400 in 2006.¹

2. Vaughan Is a Net Importer of Labour

Table 2 indicates that on a net basis, Vaughan is an importer of labour with a daily net in-commute of 26,300 persons. Overall, more than 93,000 people come into Vaughan each day to work and at least 67,000 residents of Vaughan work outside the City.²

¹The resident employed labour force (RELF) is defined as the number of people who live in the city who are employed, irrespective of where they work.

²The RELF is made up of 67,800 employed people working outside Vaughan; 44,000 working within the City (including work at home); and 14,100 living in Vaughan with no fixed place of work, some of

Based on 2001 data, the majority of Vaughan's in-commuting labour comes from neighbouring municipalities, including Toronto, Brampton, Mississauga, Markham, and Richmond Hill. As well, a significant number come from beyond the metropolitan area from places such as Simcoe and Dufferin Counties. The majority of Vaughan's out-commuting labour is largely destined for employment areas in Toronto, Mississauga and Markham.

Like all communities within a metropolitan labour market, Vaughan's commuting patterns indicate substantial in and out commuting. An increased number of Vaughan's residents working within Vaughan would provide many advantages. Accordingly, the Vaughan Official Plan process will need to examine where there are opportunities through planning to provide a better balance.

Table 2		
Commuting Patterns City of Vaughan 2006		
	Number of Workers	Share
Where do Residents of Vaughan Work?		
Total <i>Resident Employed</i> Labour Force is comprised of:	126,400	100%
At Home	8,100	6%
In Vaughan	36,000	28%
In a Different Municipality in York Region	9,900	8%
Outside York Region	57,400	45%
No Fixed Workplace Address	14,100	11%
Other (outside Ontario/Canada)	500	0.4%
Where Do People Working in Vaughan Live?		
Total Employment	152,700	100%
Live In Vaughan (includes Work at Home)	44,000	29%
No Fixed Place of Work	15,100	10%
GTAH with No Fixed Place of Work Attributed to Vaughan)	93,500	61%
Net In-Commuting in Vaughan		
Share of Resident Employed Labour Force	—	21%
Share of Total Employment	—	17%

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

Note: Totals may not add due to rounding.

whom would be working within Vaughan on any given day, but many of whom would be working elsewhere.

3. Vaughan Has a High Activity Rate

The City of Vaughan has the highest activity rate of any municipality in the GTA. An activity rate is the ratio calculated by dividing a City's employment by its total population. Vaughan's activity rate is significantly above municipal and regional averages in York Region and the GTA, as shown in Tables 3 and 4 below. A key reason for this high activity rate is the significant net number of employees in-commuting to Vaughan. 2006 Census commuting patterns data will not be released until July of 2008, but the pattern is unlikely to have changed significantly since 2001.

Table 3	
Activity Rates: Vaughan Compared to Neighbouring Local Municipalities, 2006	
Vaughan	63.5%
Markham	53.9%
Newmarket	57.7%
Mississauga	62.7%
Brampton	38.1%
Toronto	58.6%
Hamilton	43.9%
Burlington	52.7%
Oakville	48.7%
Oshawa	47.7%
Whitby	39.1%

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

Table 4	
Activity Rates, GTA, 2006	
Vaughan	63.5%
Region of York	51.2%
City of Toronto	58.6%
Region of Peel	52.3%
Region of Halton	49.0%
Region of Durham	38.8%
City of Hamilton	43.9%
GTAH	52.9%

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

An activity rate in the 50% to 55% range indicates a balanced community where the number of residents with jobs is approximately equal to the number of jobs. Vaughan's activity rate of over 60% is much more characteristic of a central city. The most extreme example of a central city activity rate was the former City of Toronto, which had an activity rate close to 100% prior to amalgamation.

B. VAUGHAN'S ECONOMY IS ORIENTED TOWARDS INDUSTRIAL-TYPE ACTIVITIES

1. Manufacturing and Trade Account for the Largest Shares of Vaughan's Employment

As shown in Table 5 below, manufacturing and trade are the largest sectors in Vaughan's employment.

Employment By Type, City of Vaughan, 2001		Table 5
Sector	Number of Employees	Share of Total
Manufacturing	39,200	30.9%
Trade (Wholesale, Retail, Accommodation & Food)	29,200	23.1%
Construction	16,100	12.7%
Professional, Scientific, and Technical Services and Management and Administration	10,600	8.4%
Transportation and Warehousing and Utilities	7,600	6.0%
Education, Health, and Social Services	7,000	5.5%
Entertainment/Recreation and Cultural Industries	5,400	4.3%
Finance, Insurance and Real Estate	5,200	4.1%
Other	4,400	3.5%
Public Administration	1,500	1.2%
Mining and Agriculture (Primary Activities)	400	0.4%
Total	126,700	100.0%

Source: Hemson Consulting based on 2001 Statistics Canada, Census of Canada.

Notes: Totals may not add due to rounding.
When released, the 2006 data are not expected to indicate a significant change.

The trade sector, which is primarily retail employment, is disproportionately large in Vaughan relative to the City's population. This may in part be explained by the presence of the retail power centres near Highway 400 and Highway 7 and the Vaughan Mills Centre which serve an area much larger than Vaughan itself.

2. Collectively Industrial Related Activities Dominate Vaughan's Employment Base

As shown in Table 5, the core industrial-type activities of manufacturing, transportation and warehousing, and construction account for almost 50% of Vaughan's employment base. That the City has developed into such an industrial powerhouse is due in large measure to its prime location within a multi-modal transportation network, including 400-series highways, the CNR Concord Yards and CPR Kleinburg Yards, and finally its close proximity to the Lester B. Pearson International Airport.

3. Vaughan's Share of Manufacturing Employment Is More Than Twice the GTA Average

The importance of Vaughan's manufacturing sector and other leading sectors is particularly striking when Vaughan's employment by type is compared with employment by type in the GTA as a whole. As shown in Table 6 below, there is a much higher concentration of employment in manufacturing in Vaughan than elsewhere.

Employment concentration in Vaughan relative to the GTA is best reflected in the location quotients shown in Table 6.¹ In sectors for which Vaughan has a location quotient greater than 1, it has a relatively higher concentration of employment than the GTA as a whole. Conversely, in sectors for which Vaughan has a location quotient less than 1, it has a relatively lower concentration of employment. Vaughan has particularly high location quotients in industrial-type activities.

Taking into consideration only the "905" area of the GTA, and removing the City of Toronto and the City of Hamilton, Vaughan's high proportions of manufacturing, trade, and construction are still evident in the location quotients, while Vaughan has a smaller relative concentration of employment in professional services, finance and insurance, and other service-based activities.

¹A location quotient (also abbreviated as LQ) is a simple measure which shows a community's concentration of employment in a given sector compared to employment in that same sector within a larger jurisdiction, such as the GTA. In this case the location quotients compare the jobs per thousand resident population between Vaughan and the 905 area and Vaughan and the GTA.

Table 6					
Employment Location Quotients Vaughan, "905" and GTAH, 2001					
Sector	Jobs per Thousand Population			Vaughan Location Quotient	
	Vaughan	905	GTAH	905	GTAH
Manufacturing	215	102	86	2.5	2.1
Trade (Wholesale, Retail, Accommodation & Food)	160	127	117	1.4	1.3
Construction	88	31	27	3.3	2.8
Professional, Scientific, and Technical Services and Management and Administration	58	58	72	0.8	1.0
Transportation and Warehousing and Utilities	42	39	31	1.4	1.1
Education, Health, and Social Services	38	57	73	0.5	0.7
Entertainment/Recreation and Cultural Industries	30	18	29	1.0	1.6
Finance, Insurance and Real Estate	28	29	47	0.6	1.0
Other	24	20	23	1.0	1.2
Public Administration	8	14	19	0.4	0.6
Mining and Agriculture (Primary Activities)	2	4	3	0.8	0.6
Total	695	499	527	1.3	1.4

Source: Hemson Consulting Ltd. based on 2001 Statistics Canada, Census of Canada.

Note: A location quotient is an indicator of the relative specialization in a sector related to a larger jurisdiction.

4. Many Major Employers Have Become Established in Vaughan

Reflecting the strong economic and employment base of the City, many large employers have become established in Vaughan, representing a variety of sectors but made up of a significant proportion of manufacturers. Table 7 identifies Vaughan's Top 10 private sector employers.

Table 7		
Top 10 Private Sector Employers, City of Vaughan, 2006		
Company	Business Activity	Number of Employees
Canada's Wonderland	Amusement Park	4,150
UPS (United Parcel Service)	Shipping/Tracking	2,000
Progressive Moulded Products Ltd	Auto Parts	1,500
Canadian National Railways	Railway	970
Sears Canada National Service Centre	Retail/Distribution	900
Co-Ex-Tel (Magna)	Automobile trim	820
Decoseal	Rubber seals	800
Rollstamp Manufacturing	Auto Parts	770
KTM Locks (Magna)	Auto Parts	630
Mytox Manufacturing (Magna)	Auto Parts	560

Source: City of Vaughan Economic and Technology Development Department, 2006.

5. Vaughan's Employment Can Be Divided into 3 Major Categories Based on Land Use

When considering employment in relation to land use, a broader grouping of employment is required. For this purpose, employment is defined based on three categories, as follows:

- **Employment land employment:** This category accounts for jobs accommodated primarily in low-rise industrial-type building space and multiples.
- **Major office employment:** Employment in free standing office buildings over 20,000 square feet.
- **Population-related employment :** Employment that exists in response to the resident population, and includes retail, education, health care and home-based employment.

In general, major office employment is located in downtown areas, along major highways or in newer employment areas. Employment land employment is largely located within employment areas, while population-related employment is in scattered locations throughout communities including commercial areas, schools and institutions, and work-at-home employment. However, these employment categories are not purely associated with specific geographic areas. For example, some employment land employment can be found outside of employment areas, in scattered locations. Likewise, some population-related employment will be situated in employment districts.

Table 8 following provides shows Vaughan’s employment by category, as compared to York Region. Given the industrial character of Vaughan’s employment, it is not surprising that employment land employment is the largest category of employment in Vaughan (about 69%).

Table 8				
Employment by Category City of Vaughan and Region of York, 2006				
Category	City of Vaughan		Region of York	
	Jobs	Share	Jobs	Share
Major Office Employment	8,200	5.4%	60,900	13.4%
Employment Land Employment	104,600	68.5%	139,600	55.8%
Population-related Employment	39,800	26.1%	253,300	30.8%
Total	152,700	100.0%	453,900	100.0%

Source: Hemson Consulting Ltd.

Note: Totals may not add due to rounding.

The predominance of Vaughan’s employment land employment is pronounced when compared to the Region of York. The table indicates that the Region overall has a larger share of major office employment, due mainly to the major office concentration in the Highways 404 and 7 area in Markham and Richmond Hill.

C. VAUGHAN HAS A STRONG DEVELOPMENT MARKET

As discussed below, Vaughan has had a strong industrial and commercial development market for several years.

1. Vaughan’s Industrial and Commercial Permits Average about \$350 Million per Year

Since 2001, Vaughan has averaged about \$150 million per year in industrial development and \$200 million in commercial development, for a combined average of about \$350 million per year, as shown in Table 9.

Table 9									
Construction Activity Based on Value of Building Permits City of Vaughan 2001–2007 (\$ millions)									
	2001	2002	2003	2004	2005	2006	2007	Average 2001–07	Share of Total
Industrial	157	121	200	148	159	141	136	152	43.4%
Commercial	192	78	209	193	186	156	377	199	56.9%
Total	348	199	408	341	345	297	513	350	100.0%

Source: Statistics Canada, Census of Canada.

Note: Totals may not add due to rounding.

Vaughan's industrial and commercial building permits constitute a sizable proportion of the GTA's total industrial and commercial permits. As shown in Table 10 below, Vaughan's share of the GTA's total industrial and commercial building permits has averaged about 11% between 2001 and 2007. This is a very large proportion considering that on a population basis Vaughan constitutes about 4% of the GTA.

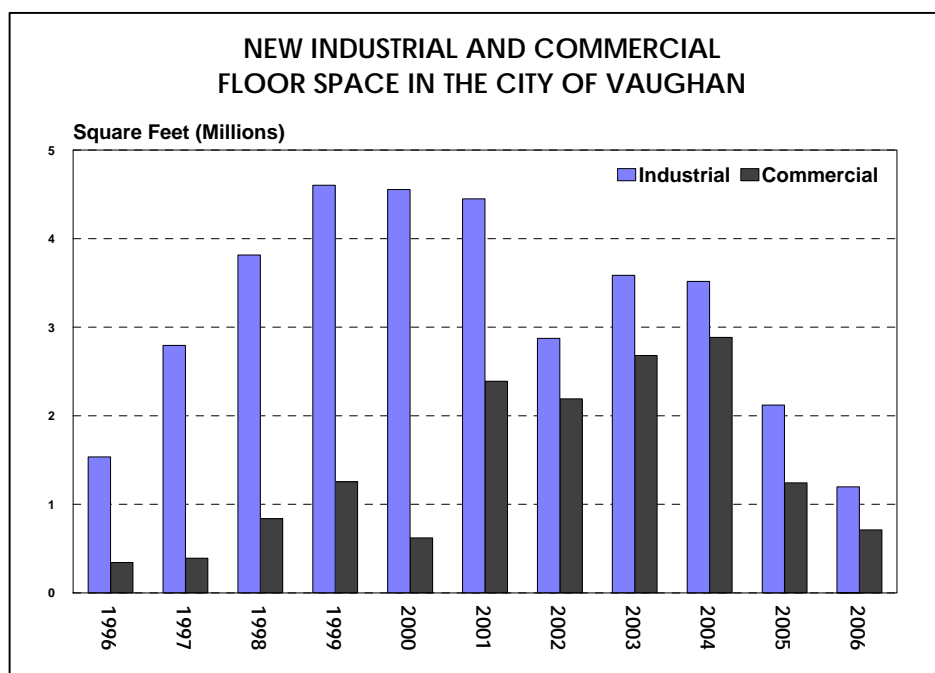
Table 10									
Industrial and Commercial Building Permits Vaughan and the GTA 2001–2007 (\$ Millions)									
	2001	2002	2003	2004	2005	2006	2007	Average 2001–2007	
Vaughan	348	199	408	341	345	297	513	350	
GTA	2,333	1,882	3,247	3,446	3,313	3,501	4,339	3,152	
Vaughan's Share of GTA	15.0%	10.6%	12.6%	9.9%	10.4%	8.5%	11.8%	11.1%	

Source: Statistics Canada, Census of Canada.

2. An Average of Over 5.2 Million Square Feet of Industrial and Commercial Buildings per Year Has Been Constructed in Vaughan Between 1996 and 2006

The development of Vaughan's industrial and commercial land has led to the construction of a large area of industrial and commercial floor space. As shown in the figure below, Vaughan has seen an average development of about 325,000 m² (3.5 million square feet) of industrial building space and an average development of about

155,000 m² (1.7 million square feet) of commercial building space per year between 1996 and 2006, for a combined total of about 480,000 m² (5.2 million square feet per year).



Source: Hemson Consulting Ltd. based on data from Vaughan Building Standards Department, January 2007

From the above figure it can be seen that construction of new industrial and commercial buildings has slowed in recent years. Industrial development peaked in 1999 and has slowed significantly since then. Commercial development did not start to decline until 2004, but it too has decreased substantially. The data in the graph are only available to 2006, so do not yet reflect the substantial increase in the value of 2007 commercial permits shown in the Statistics Canada building permit value data in Tables 9 and 10. This slowdown is due to constraints in the availability of vacant employment land in employment areas abutting Highway 427 (also known as the Vaughan Enterprise Zone), Highway 400, Highway 407, and the CNR lands in Concord. It is also due to cyclical trends in manufacturing, the rising value of the Canadian dollar, and other factors. The issue of Vaughan's constrained supply of vacant employment land is examined in greater detail in Chapter III.

3. Vaughan Has One of the Lowest Industrial Vacancy Rates in the GTAH

Vaughan has one of the lowest industrial vacancy rates of any municipality in the GTAH, as shown in Table 11 below. The only municipality in the GTAH with a lower vacancy rate is the City of Toronto, which effectively is completely built-out.

Municipality	Vacancy Rate
Vaughan	4.0%
Markham	5.3%
Brampton	4.8%
Toronto	4.7%
Mississauga	6.6%
Burlington	12.2%
Oakville	4.1%
Oshawa	4.8%
Whitby	4.2%
Vacancy Rate in GTAH Overall	5.5%

Source: Cushman, Wakefield LePage Greater Toronto Industrial Report, Fourth Quarter 2007.

4. Vaughan Has High Levels of Employment Land Absorption

Due to its strong development market, Vaughan's rate of employment land absorption has been high, as shown in Table 12. From 1995 to 2005, development in Vaughan has absorbed an average of 64 ha of employment land per year. During the same period, in the GTAH as a whole an average of over 400 ha of employment land per year have been absorbed. Vaughan has therefore made up over 15% of the GTAH's total land absorption during a ten-year period, which is very high for a single municipality. Chapter III of this paper contains a more detailed discussion regarding the specifics of Vaughan's land market.

Table 12												
Employment Land Absorption (ha) City of Vaughan and GTAH, 1995-2005												
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average
Vaughan	39	45	63	86	92	93	76	46	51	51	58	64
GTAH	164	232	268	624	540	549	475	270	339	533	488	401
Vaughan's Share of GTAH	24%	19%	24%	14%	17%	17%	16%	17%	15%	10%	12%	16%

Source: Hemson Consulting Ltd. based on municipal data.

Note: The incorporated data for the City of Hamilton are not complete for the entire time series. Hamilton represents a small proportion of the total GTAH.

This chapter has examined Vaughan's labour force, economic sectors, and development market. It has illustrated that Vaughan has a strong industrial economy within the GTAH. Given the importance of Vaughan's manufacturing base, the next chapter turns to a detailed examination of Vaughan's employment land.

III VAUGHAN HAS A LARGE AND COMPETITIVE EMPLOYMENT LAND SUPPLY

One of the main reasons for Vaughan's strong economic and employment growth is its large and competitive employment land supply. Employment land accommodates a significant proportion of the City's total employment and will accommodate a large proportion of its future employment growth.

This chapter starts with a description of the characteristics of Vaughan's employment land supply, explains its contribution to the City's economic development, and identifies some of the main factors that have led to its success. This is followed by a discussion of the role of major office employment on Vaughan's employment lands. It concludes with a discussion of the reason for the delay in bringing on additional employment land supply.

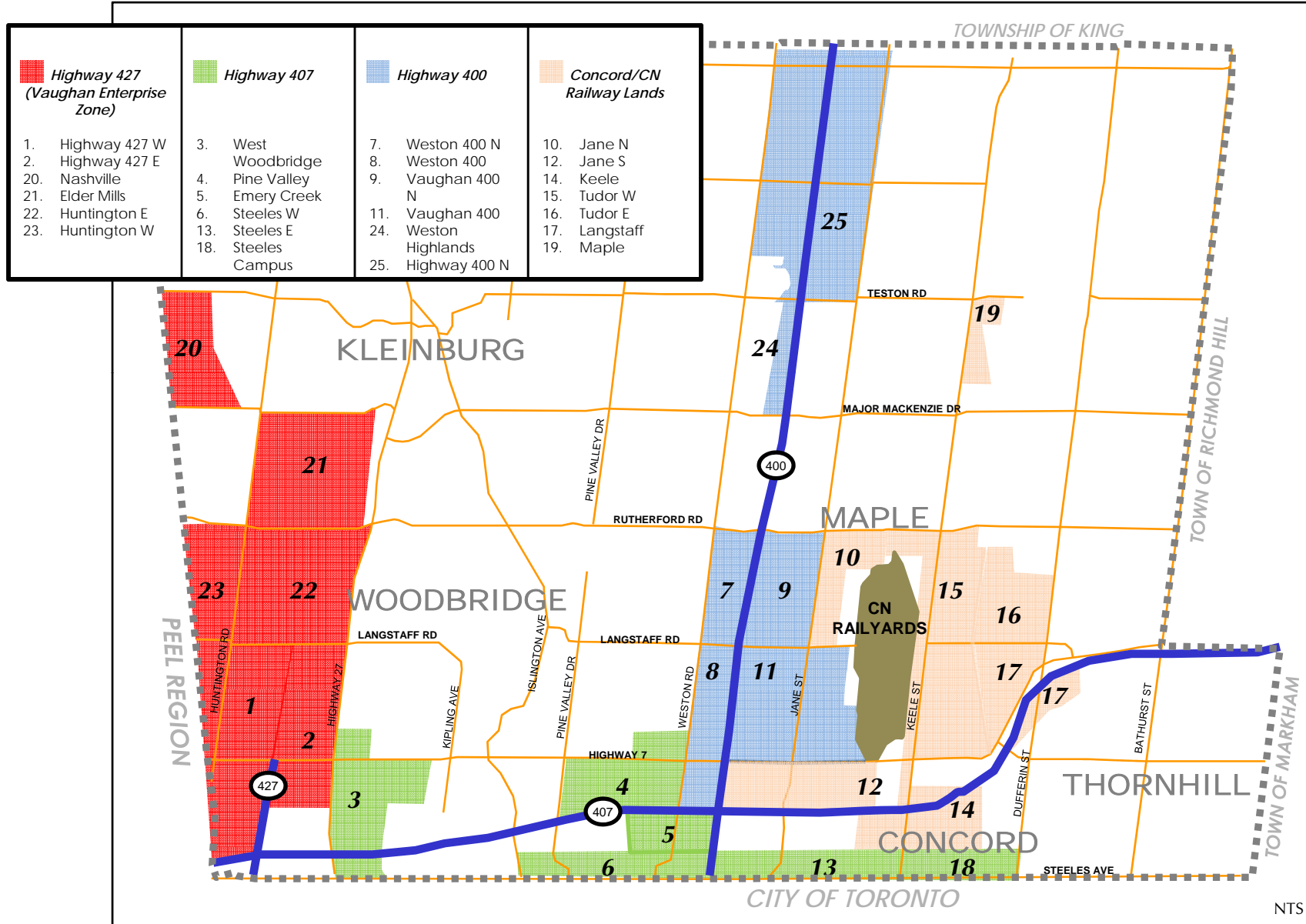
A. VAUGHAN'S EMPLOYMENT LANDS ARE ORIENTED TO HIGHWAY CORRIDORS

Vaughan's employment lands are primarily oriented to highway corridors in the south of the City. There are 25 separate employment areas in Vaughan¹, which can be grouped into four broad areas based on their proximity to Highway 427, Highway 407, Highway 400, and the railway lands in Concord, respectively. The base map below identifies the 25 employment areas and their groupings.

Table 13 following the map provides a brief profile of the employment areas by the four corridors. The data is based on the Regional information in the following tables.

¹These employment areas have been defined based on mapping from the Region of York. The Region of York has completed a detailed 2006 inventory of Vaughan's vacant and occupied employment land, and this information is used in this paper. Therefore, York Region's delineations of Vaughan's employment areas are also used in this paper.

City of Vaughan Employment Areas Are Oriented to Transportation Infrastructure



Source: Hemson Consulting Ltd. based upon City of Vaughan's base map and Regional Municipality of York employment areas, 2007.
 The Highway 400 North lands, shown as area 25, have been added to the map based on City of Vaughan Official Plan Amendment 637.
 Note: The designation of the Highway 400 North lands has been adopted by Vaughan Council but has not been approved by York Region.

Table 13		
Profile of Vaughan's Employment Areas by Corridor Area		
Major Transportation Corridor	Employment Areas	Description
Highway 427 (Vaughan Enterprise Zone)	Nashville, Elder Mills, Huntington West, Huntington East, Highway 427 West, Highway 427 East In total, these areas contain approximately 1,230 ha.	Comprised almost exclusively of vacant land which can only be developed when the alignment of the Highway 427 extension is finalized. Highway 427 is to be extended north and will pass through this area. The employment lands in this area have already been designated for employment use by the City of Vaughan. Manufacturing accounts for the majority of the occupied employment lands in the area. More information about this area is provided in Chapter III of this paper.
Highway 407	West Woodbridge, Steeles West, Steeles East, Steeles Campus, Emery Creek, Pine Valley In total, these areas contain approximately 570 ha.	Comprised primarily of occupied land abutting Highway 407. This area is approximately 95% occupied. This area is primarily comprised of manufacturing, but has a variety of other uses.
Highway 400	Weston 400, Weston 400 North, Vaughan 400, Vaughan 400 North, Weston Highlands In total, these areas contain approximately 700 ha. The Highway 400 North lands (about 1,200 ha) are within the Highway 400 corridor. While approved for development by the City of Vaughan, they have yet to be approved by the Region of York. This potential supply cannot be considered as part of the urban land supply, under the <i>Planning Act</i> , until fully approved. Consideration of the justification for the long-term use of these lands will be incorporated into the Vaughan Official Plan review.	Comprised primarily of manufacturing, but has a variety of other uses. Most of the southerly parts of the Highway 400 corridor are fully developed. Weston Highlands is currently under development. No development can occur in the Highway 400 North area until fully approved for urban employment land development.
Concord/CN Railway Lands	Keele, Langstaff, Tudor East, Tudor West, Jane North, Jane South and, Maple. In total, these areas contain about 900 ha of employment land. These lands are nearly fully developed.	The Jane and Keele employment lands contain primarily manufacturing, but also have strong construction and trade sectors. Much of the land in Jane South is within the planned Vaughan Corporate Centre and is planned for future redevelopment.

B. VAUGHAN'S EMPLOYMENT LAND SUPPLY TOTALS ABOUT 3,390 NET HA

This section provides an overview of Vaughan's occupied and vacant employment land.

1. About 1,270 Net ha Are Vacant and 2,120 Net ha Are Occupied

Of the total employment land supply of 3,390 net ha in Vaughan, about 2,120 net ha, or 62.5%, are occupied. The remaining 37.5%, or about 1,270 net ha, are vacant. Table 14 below provides an overview of Vaughan's occupied and vacant employment land based on the employment area groups. Table 14 shows that most of the vacant employment land is located in the Vaughan Enterprise Zone abutting Highway 427, while most of the City's occupied lands abut the other transportation corridors.

Table 14				
Approved Employment Land Supply by Major Transportation Corridor, 2006				
Employment Area	Occupied Area	Vacant Area	Total	Vacant Share
Vaughan Enterprise Zone / Highway 427	220	1,000	1,230	82.1%
Highway 407	520	50	570	5.1%
Highway 400	550	150	700	21.4%
Rail/Concord	830	80	910	8.5%
Total	2,120	1,270	3,390	37.5%

Source: York Region Planning and Development Services Department, 2006 and 2007.

Notes: Totals may not add due to rounding.

This table does not include the Highway 400 North potential employment land supply. The designation of these lands has been adopted by Vaughan Council but has not been approved by York Region.

2. Vaughan's Net Effective Vacant Supply Is About 1,100 Net ha

While there is a vacant supply of approximately 1,270 net ha, not all of it is likely to be developed. Experience shows that in most municipalities a small portion of the designated supply remains vacant over the long term, usually about 5% of the total supply (occupied and vacant).

Based on the assumption of a 5% allowance, the long-term vacancy in the City of Vaughan would amount to about 170 net ha. Accordingly, Vaughan's net effective vacant supply is about 1,100 net ha (Table 15). This is the appropriate supply number to be used for long-

range planning purposes, since the reduced employment capacity caused by long-term vacancy must be taken into account.

Table 15	
Net Effective Vacant Employment Land Supply City of Vaughan, 2006	
Component of Estimate	Net ha
Estimated Net Vacant Land Supply	1,270
Long-Term Vacancy Adjustment (5% of the total Supply of 3,390 net ha)	170
Estimated Net Effective Vacant Land Supply	1,100

Source: Hemson Consulting Ltd. based on York Region Planning and Development Services Department, 2006.

Note: This table does not include the Highway 400 North potential employment land supply. The designation of these lands has been adopted by Vaughan Council but has not been approved by York Region.

C. VAUGHAN'S INDUSTRIAL ORIENTATION HAS IMPORTANT IMPLICATIONS

Vaughan's economy is strongly oriented towards industrial-type activities such as manufacturing and distribution.

As a result, Vaughan's employment lands accommodate the majority of employment in the City. Employment lands therefore play a key role in the City's existing and future economic base.

1. Vaughan's Employment Land Density Has Increased Over Time but Some Recent Developments Have Low Densities

Table 16 indicates that excluding major offices, Vaughan has an employment land density of 47 jobs per net ha. Including major offices, the City's employment land density is 49 jobs per net ha, as shown in Table 16.

Table 16				
Employment Land Density City of Vaughan and York Region				
	Occupied Area (ha)	Employment Land Employment	Major Office Employment	Employment Land Density (Jobs/ha)
Employment Land Density Excluding Major Office Development				
Vaughan	2,080	97,700	0	47
York Region	4,000	199,600	0	50
Employment Land Density Including Major Office Development				
Vaughan	2,130	97,700	6,910	49
York Region	4,310	199,600	58,600	60

Source: York Region Planning and Development Services Department, 2006 and 2007.

Although Vaughan's employment density is below the average in York Region, particularly when major office employment is included in the density calculation, it has increased substantially in recent years, rising above 45 jobs per ha only in the last decade. To provide comparisons within the GTA West, Vaughan's employment land density is now slightly above Mississauga and Brampton's densities in the range of 40 jobs per net ha.

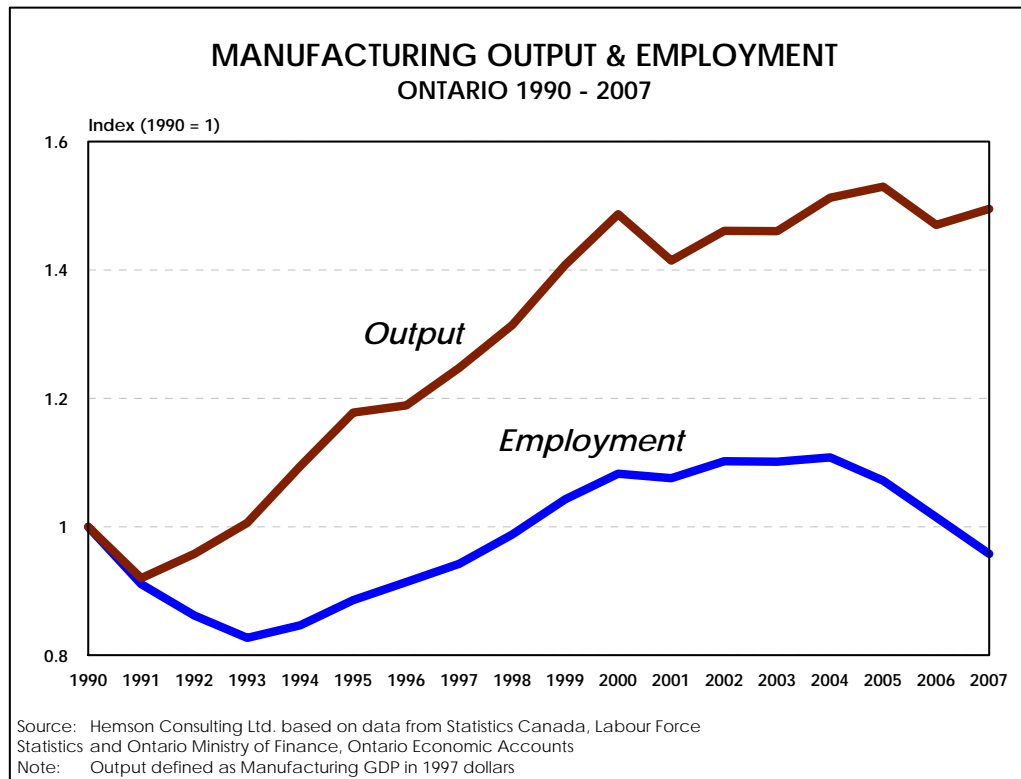
Nonetheless, the employment land densities in some recent developments in the GTA, particularly distribution centres, are low (below 30 jobs per ha). This is due to a number of factors, including increased efficiency and automation in manufacturing and the growing role of warehousing and distribution functions, which require fewer persons for any given amount of space.

Overall, although Vaughan's employment land densities have increased in recent years, some newer developments may have been built at much lower densities. An important question for the Vaughan Official Plan process, therefore, will be whether Vaughan's employment land density will increase or decrease in the long term.

2. The Evolution of Manufacturing Has Not Reduced the Importance of Employment Land

When considering the overall importance of employment land in relation to Vaughan's economic base and employment densities, it should be noted that while manufacturing has changed significantly in recent years, its importance to the economy has not diminished. As noted previously, increased automation and more timely distribution

systems have made manufacturing and other industries that locate on employment land more productive. As the figure below shows, since 1990 throughout Ontario manufacturing has become increasingly more productive, with manufacturing output increasing at a faster rate than manufacturing employment.



D. SEVERAL FACTORS ACCOUNT FOR THE SUCCESS OF VAUGHAN'S EMPLOYMENT LANDS

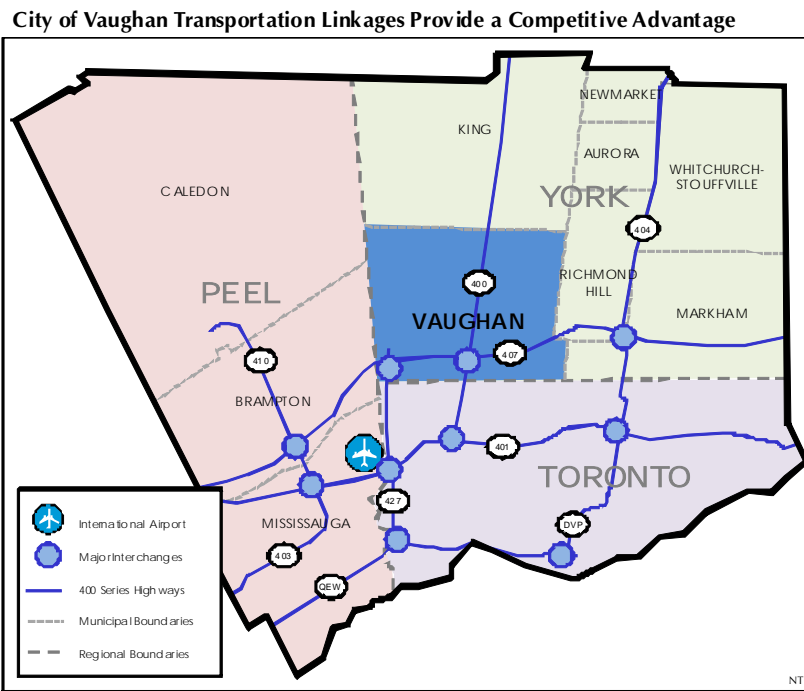
As discussed previously, Vaughan's employment lands accommodate a large proportion of the City's total employment and hence its total economic output. Vaughan's employment areas have numerous beneficial characteristics which have given it a number of competitive advantages. The following are two key characteristics.

1. Locational Advantages

The combination of a favourable position with respect to major US markets, a well-developed transportation network (access to railways, several 400-series highways and the Lester B. Pearson International Airport), and its location north of Toronto within the GTA West market give the City of Vaughan strong locational advantages with respect to employment land development. Vaughan has been branded as the ‘City Above Toronto’, which is a reflection of these advantages. The map below situates Vaughan within its local context.

2. Large Contiguous Parcels

Vaughan’s vacant employment land supply is characterized by a significant number of large parcels. Specifically, Vaughan has 36 parcels greater than 10 ha in size, collectively amounting to 690 ha (Table 17). These parcels represent more than 50% of the vacant supply (690 ha out of 1,270 ha).



	<1 ha	1-10 ha	10+ ha	Total
Number of Sites	90	150	35	280
Total ha	45	535	690	1,270

Source: York Region Planning and Development Services Department, 2007.

Vaughan also has more large vacant employment land parcels than any other municipality in York Region (Table 18). Having large parcels is important, since they provide flexibility to adapt to changing market conditions. It is also valuable for the rare but important opportunities when a very large user is in the market for a site.

Municipality	Number of Parcels	Size (ha)	Percentage of Total in York Region By Size
Vaughan	36	692	45%
Aurora	4	65	15%
East Gwillimbury	11	223	4%
Georgina	5	61	5%
King	3	71	11%
Markham	10	163	1%
Newmarket	1	11	9%
Richmond Hill	6	132	7%
Whitchurch-Stouffville	6	10	7%
York Region	82	1,528	100%

Source: York Region Planning and Development Services Department, 2007.

Note: Totals may not add due to rounding.

E. SHORT-TERM LAND SUPPLY IS CONSTRAINED

Vaughan's large supply of vacant employment land would give the impression that there is a large amount readily available for development. This is not the case at present. Out of the total vacant supply of 1,270 net ha, only 380 ha of registered and draft approved employment lands are readily available for development (Table 19). As a share of the Region's readily developable land, Vaughan's component is smaller than its share of the

Region's total vacant land supply. This situation stems from the fact that nearly half of Vaughan's vacant land supply is encumbered and currently unavailable for development.

York Region Vacant Employment Land Inventory Planning Status, July 1, 2006 (net ha)					Table 19
	Registered Unbuilt	Draft Approved	Proposed	No Application	Total
Vaughan	240	140	190	700	1,270
York Region	800	330	400	1,370	2,890

Source: York Region Planning and Development Services Department, 2006 and 2007.

1. Highway 427 Environmental Assessment Process Is Delaying Development

A significant component of Vaughan's potential land supply in the Vaughan Enterprise Zone is currently unavailable for development. It is located along the route of the future Highway 427 extension, the alignment of which has not yet been finalized.

The City of Vaughan has already approved these Highway 427 lands for industrial uses. However, until the alignment of the extension has been finalized, development cannot proceed. As noted previously, commercial and industrial construction has dropped in recent years, in part because Vaughan's current supply of available employment lands (380 ha) is limited compared to the level of employment land demand.

2. If Approved, Highway 400 North Lands Will Offer Additional Supply

Vaughan has another potential source of employment land supply along Highway 400 just north of the City's current urban boundary. The Highway 400 North lands are located north of Teston Road and south of King-Vaughan Road, and bounded by Weston Road to the west and Jane Street and Keele Street to the east. This area has been adopted for employment uses by Vaughan Council but is unapproved by York Region. To permit the development of this land, the Region of York will need to approve an expansion of the urban boundary, which may occur as a result of the Regional and City *Growth Plan* community and Official Plan review processes.

F. MAJOR OFFICE EMPLOYMENT DOES NOT PLAY A MAJOR ROLE IN VAUGHAN

In addition to accommodating employment land employment, the new Official Plan must also consider the role of major office developments in the City, now and in the future. In contrast to industrial development, the amount of major office construction in Vaughan's employment areas and the City as a whole remains low, with only a few office buildings being built since 1992.

There are about 50 major office buildings in Vaughan. A significant proportion of these buildings was constructed between 1981 and 1991. Most are located in the City's employment areas. Regional data indicate that within the employment areas, major offices occupy over 50 ha of land, accommodating about 7,000 jobs. Table 20 below provides specific information about the major concentrations of office employment on employment lands, much of which is located along 400-series highways.

Employment Area	Office Space (m ²)	Jobs
Keele	21,800	860
Langstaff	3,200	130
Pine Valley	22,700	890
Steeles Campus	24,800	980
Steeles East	16,000	630
Steeles West	41,100	1,580
Tudor East	4,100	160
Vaughan 400	22,300	880
Weston 400	20,400	810
Total	175,400	6,910

Source: York Region Planning and Development Services.

Note: Totals may not add due to rounding.

Although major office employment does not have a large role in Vaughan either within employment areas or elsewhere, this pattern will change as the City matures. Given the development capacity of such areas as the Vaughan Corporate Centre, Vaughan has the potential to accommodate a substantially greater number of major office buildings in the future. Moreover, since major offices are a high-density land use which require limited areas of land, Vaughan is not restricted in its ability to accommodate many more office buildings in the future.

At the same time, historically other parts of the GTAH have attracted much larger shares of office employment than Vaughan. Aside from the City of Toronto, areas that have achieved great success with office buildings include the Airport Corporate Centre and the City Centre, both in the City of Mississauga. An important question for the Vaughan Official Plan process to address is whether or not the City can viably compete for major office employment with other parts of the GTAH, and whether there are strong enough reasons for doing so.

This chapter has described the importance of Vaughan's employment land to the City's overall employment, and outlined some of the most important characteristics of the City's employment land supply. Vaughan has a large vacant employment land supply, with locational competitive advantages and a significant number of large parcels, but much of this is in the Vaughan Enterprise Zone and unavailable until the route of Highway 427 is finalized.

IV OUTLOOK IS FOR CONTINUED STRONG EMPLOYMENT GROWTH

This chapter provides an overview of employment growth for the City of Vaughan for 2031. Growth is expected to be strong, with employment land employment continuing as the dominant category. As to employment land supply, Vaughan will need to ensure that there is an adequate supply of appropriate land to meet this anticipated future demand.

A. VAUGHAN'S TOTAL EMPLOYMENT IS FORECASTS BY THE REGION TO REACH 278,000 JOBS BY 2031

The *York Region Official Plan* calls for planned employment of 215,000 jobs in 2026 in Vaughan. This growth target should be viewed in the context of the current expectation that York Region will grow in employment from about 476,000 jobs today to about 696,000 jobs in 2026.

Of note, just as the City of Vaughan is reviewing its Official Plan, including planned employment targets, so is York Region; both are required to update them to conform to the Province's *Growth Plan*. The *Growth Plan* contains targets for York Region for 2031, five years farther out than the current *York Region Official Plan*. The new target for York Region is 780,000 jobs.

Based on the *Growth Plan* employment forecasts, York Region has prepared municipal forecasts of employment to 2031. The mid-range target for Vaughan in these draft forecasts is 278,000 jobs in 2031. This is a much higher figure for Vaughan than previous planning forecasts which reflects a higher starting point of nearly 155,500 jobs in 2006¹ and a higher overall employment growth in the Region. Additionally, the *Growth Plan* contains employment targets for the Region of York for 2031, five years farther out than the current *York Region Official Plan*.

¹York Region's base figure for employment in 2006 is an estimated 155,500 jobs, which is very close to the total employment indicated in the Census of Canada data release (152,700 jobs).

B. MOST OF VAUGHAN'S EMPLOYMENT GROWTH WILL BE EMPLOYMENT LAND EMPLOYMENT

Given the forecast growth to 278,000 jobs, employment on Vaughan's employment lands can be expected to grow substantially in the future. Table 21 provides a breakdown of the total employment in 2031 by estimated major employment type.

Projected Employment by Type, City of Vaughan , 2006-2031			Table 21
	2006	2031	Growth 2006-2031
Major Office	8,200	21,000	12,800
Population-Related	39,800	68,000	28,200
Employment Land	104,600	189,000	84,400
Total	152,700	278,000	125,300

Source: Hemson Consulting Ltd. based on York Region Planning and Development Services Department, 2007.

Note: Totals may not add due to rounding.

Based on these forecasts, the growth and total number of employment land employment jobs will continue to exceed other types of employment. These new jobs will result in the demand for a substantial amount of employment land. As well, an increase in major office employment and population-related employment located on employment land will further add to demand. Nonetheless, if some of this demand were to be redirected to other parts of the City to locations outside employment lands, it may have a minor effect on the long-term land supply requirements.

As noted in Chapter III, Vaughan has a large supply of vacant employment land, although a significant component of it is not currently available for development. A key question for the Vaughan Official Plan process will be whether or not the land supply will be sufficient to accommodate the City's future employment growth. Planning for the future employment land supply, particularly in the Vaughan Enterprise Zone, the Highway 400 North Lands and other areas, will be addressed during the process.

C. PRESSURE FOR EMPLOYMENT LAND CONVERSION COULD AFFECT SUPPLY

As development in the City of Vaughan continues, not only will the employment land supply tighten, so too will the supply of land for housing. The high demand for residential coupled with the much higher value this use can support provides a strong incentive for landowners to seek conversions of employment land to residential use. Similar forces are at work where owners have an interest in the conversion of industrial-type employment land to higher-value retail uses.

However, as employment offers municipalities a range of benefits, these are diminished if the employment land area is reduced. Employment land is important to the City because it is a source of future economic prosperity and competitiveness. Employment land also provides Vaughan with the ability to continue to accommodate high-quality jobs, generate wealth and investment, and maintain long-term fiscal security. Furthermore, because of the importance of maintaining a supply of employment land, the *Growth Plan* contains a requirement that employment land can only be redesignated to other uses after a “comprehensive review” which examines the full costs and benefits of conversion is completed. Given the potentially competing interests associated with employment land conversion, the Vaughan Official Plan process will need to consider how employment land conversion issues should be addressed in the future.

This chapter has provided an outlook for employment growth in Vaughan to 2031. Vaughan’s employment can be expected to grow substantially, and the importance of industrial land uses will remain. Vaughan’s employment growth will raise questions about the availability of employment land needed to accommodate these jobs, which should be addressed in the Vaughan Official Plan process. Additionally, when the City is addressing issues related to its supply of employment land, it will need to consider how to address potential pressures to convert employment lands to residential use.

V QUESTIONS TO BE ADDRESSED IN THE OFFICIAL PLAN REVIEW

This review of employment in the City of Vaughan raises a number of important questions that need to be considered through the subsequent phases of the Vaughan Official Plan process.

- Is there an adequate supply of employment land to accommodate Vaughan's employment growth by 2031? What are the land supply implications of Vaughan's future employment growth, given that the largest growth will be in employment land employment but there will also be significant growth in major office employment and population-related employment?
- The commuting patterns in Vaughan indicate that the City is a net importer of labour, which indicates the strength of the Vaughan economy. Overall, however, more than 93,000 people come into Vaughan each day to work while at least 67,000 residents of Vaughan work outside the City. What policies can the City implement to provide more opportunities for a better balance in Vaughan's commuting patterns?
- Vaughan's employment land density has increased substantially in recent years. Some recent developments, however, exhibit lower densities due to increased automation in manufacturing and an increase in the number of distribution centres, among other factors. How might employment land density change in the future?
- Once the alignment of Highway 427 is determined, Vaughan will be able to develop the Vaughan Enterprise Zone as an employment area. Are there any actions that the City of Vaughan should take now, or after the alignment of the highway is approved, to ensure the successful development of the Vaughan Enterprise Zone once this area is available?
- Will Vaughan need the Highway 400 North lands to ensure that there is an adequate supply of employment land (these are the lands adopted for employment use by Vaughan Council, but the urban boundary expansion has not been approved by York Region)?
- Given that there is likely to be a pressure to convert employment lands in Vaughan to residential use or retail use, what are the implications of conversion, and how can Vaughan respond to applications for conversion? Whatever approach is taken on this issue, Vaughan will need to ensure that a comprehensive review is completed.

- Vaughan has benefited greatly from having access to several major roads and the Lester B. Pearson International Airport. However, what additional transportation infrastructure does Vaughan require to ensure the competitiveness of its employment lands in the future?
- Vaughan currently has a limited amount of major office employment. How can Vaughan increase its attractiveness for major office uses? Given that other parts of the GTA have much larger shares of major office employment, what is the nature of Vaughan's opportunity to compete with these municipalities for larger shares of major office employment in the future?
- As a high-density employment land use, what is the potential role of major office employment in achieving the requirements of the *Growth Plan*?