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PLANNING CONSULTANTS INC.

Town of Markham
Employment Lands Strategy – Phase One

Prepared for: Town of Markham

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Executive Summary

The Town of Markham Will Remain a Market Leader for Business Attraction and Economic Growth for Years to Come

- The Town of Markham occupies a highly advantaged position within the regional, provincial and national economy.

- Markham has earned the reputation of being a progressive, forward-thinking, business-friendly community that is supported by a visionary economic strategy focused on partnership, innovation and talent. Markham has positioned itself clearly in the hearts and minds of business and the investment community as, *Canada's High Tech Capital*.

- Over the past twenty-five years, Markham has successfully capitalized on its strategic location just 25 minutes north of downtown Toronto. In doing so, it has attracted business investments from top-tier global firms, and is now the Canadian base of operations to some of the biggest, most successful corporations in the world.

- In addition to Markham's cluster of "blue-chip" companies, the Town is also home to a solid base of small and medium sized companies operating in a diverse range of industries, including those that serve local, domestic and international markets. Markham's business community is highly diverse. It includes business in virtually every sector, many of which are directly connected to, or are affiliated with, parent companies in the U.S., Europe or Asia.

- Markham is at the very forefront of the Greater Golden Horseshoe's (GGH's) transition into a globally-significant centre for information technology, innovation, business services and international trade. Any *smart* company looking to do business in the Toronto market will; almost certainly, consider the Town of Markham as one of its prospective locations from which to do business.

- The Town of Markham has a clear sense of itself, and its new economic development strategy, *Markham 2020*, released in 2008, is aggressively focused on driving new corporate investment by companies operating in the technology, health care, financial services and professional services/design industries. Markham also has its sites on expanding its market profile in the area of culture, entertainment, media and other creative based industries.

Markham Must Ensure that its Land Supply and Infrastructure Can Support Its Growth Potential

- Markham's ability to carry forward its well-established track-record of success depends, in large part, on the ability of new and existing companies to find or maintain business sites that provide a high-quality, engaging business environment for their employees.

- The challenge for the Town of Markham, over the long-term, is to ensure that there is a certain degree of balance between the supply of high-quality, competitively priced land which can support business formation; while at the same time, ensuring that existing and future employment areas are simultaneously supported by modern, high quality infrastructure, especially good quality transit. Increasingly, as the Town of Markham (and the region around it) grows in numbers, the availability of efficient and reliable public transit connected to key employment nodes will play a pivotal role in the decision making process of where businesses choose to locate.

- As Markham's residential base continues to grow over the next 25 years, it is fundamentally important that its economy grows in a measured response. While directing job growth and economic activity toward areas that have the highest opportunity to support transit remains a dominant theme in the Town's Growth Management Strategy, additional lands to accommodate new business and emerging industries over the same period are fundamentally important to ensure that a full range of job opportunities are available to Markham residents.

- The Town of Markham understands that a sustainable community is, first and foremost, predicated on the success of connecting Town residents with high-quality local job opportunities. But, Markham is not an island. It's an important regional node that attracts workers from a broad labour market. Improving local and regional transit opportunities that successfully connect its key employment areas with the broader regional labour market will be fundamental to Markham's stated interest in becoming a greener, healthier and more sustainable community.

Getting Ready for a Quarter Million Jobs in the Town of Markham

- Based on recent York Region Population and Employment forecasts (released in June 2008, and developed as part of the York Region Official Plan Update), the Town of Markham is projected to add approximately **139,000 new residents** and **90,000 new jobs** between 2008 and 2031.

- By 2031 Markham will need to physically accommodate a total of nearly 250,000 jobs.

- The ratio of jobs to people, referred to commonly as the *activity rate,* is expected to increase from 56% in 2006 to nearly 60% in 2031. From a growth management perspective, this means that job growth is expected to grow at a faster rate than population growth.

- Compared to other municipalities in the GGH an activity rate above 55% is already considered to be high. Expanding the activity rate upwards to 60% recognizes that the Town of Markham is poised to become an even more important employment node within Toronto's economy. The increase to 60% over the forecast period correctly reflects Markham's true economic potential, and also recognizes the physical capacity that it has to add a high number of jobs.

Markham's Industrial Areas are Integral to the Town's Success

- The Town of Markham's existing *industrial* areas (or "employment areas") are well-positioned to accommodate a significant amount of new economic growth. On-going investment by landowners and business in these areas over the next twenty-five years could involve infill of vacant or underutilized sites with new construction, as well as the adaptive re-use of older buildings with alternative and/or new types of economic activity.

- Mature employment areas in Markham such as Denison-Steeles, Risebrough and Thornlea are vitally important assets to the Town that will help strengthen the long-term competitive position the Town of Markham by providing affordable, timely and flexible options for new business to locate and existing business to expand.

- Markham's three major industrial-type employment land categories - *General Industrial Area (GIA)*, *Business Park Area (BPA)*, and *Business Corridor Area (BCA)* – provide a wide variety of land development and facility options for businesses engaged in manufacturing, wholesale, distribution, construction, research and development, software development, and business services.

- Markham's Business Park Areas are especially well-suited to accommodate large corporate head office-type functions, many of which provide a combination of administrative, product development, design, manufacturing, and distribution functions all under the same roof.

- In Markham, all three industrial land use categories support what is broadly known as **Employment Land Employment** (or ELE), which is now part of the planning lexicon under the Provincial Places To Grow Plan (the Growth Plan).

- It is estimated that approximately 35% of the Markham's total employment base (defined as jobs in Markham) is accommodated in buildings that are characterized as "industrial", "ground-oriented" or "multi-tenant/flex industrial" type buildings. In 2008, the Town of Markham supported about 55,000 ELE jobs. Based on York Region's employment projections, Markham's ELE employment base is expected to grow by nearly 31,500, reaching 86,500 by 2031.

- Over the longer-term, ELE growth is anticipated to grow at a healthy pace, reaching an estimated 107,400 by 2051. While the provincial growth plan does not require municipalities to accommodate growth beyond 2031, as part of this study, we have considered the long term capacity of Markham's land supply, and its ability to physically support on-going economic growth beyond the mandated 2031 planning horizon.

Major Office Buildings Are an Important Feature of Markham's Economic Landscape

- In addition to conventional industrial-type employment, Markham also has similarly large share of its employment base engaged in white collar occupations – that is, jobs found within in major office buildings.

- In 2008, Major Office Employment (or MOE) represented about 34% of all jobs in Markham. Based on York Region's estimates, the Town currently supports about 53,000 jobs in office buildings that are larger than 10,000 square metres.

- Based on York Region's long-range projections for Markham, MOE is expected to reach nearly 89,000 jobs by 2031; continuing to grow upwards to an estimated 115,500 by 2051.

- By 2016, it is expected that the number of jobs within major office buildings in Markham will, for the first time, exceed the number of jobs within more conventional, low-rise, industrial-type buildings.

- Over the 2008 – 2031 forecast period, it's anticipated that the number of MOE jobs in Markham will grow by nearly 36,000 jobs. In physical terms, this translates into approximately 1.0 million square metres (10.7 million square feet) [1] of new office space. For illustrative purposes, 1 million square metres is roughly comparable to *five* First Canadian Place[2] office towers; or, conversely, about the same amount of office space that exists today. In effect, Markham will need to double the size of its inventory to accommodate growth.

- At the present time, approximately 90% of Markham's major office jobs are in buildings located in the Town's industrial business park areas– particularly sites in the general vicinity of Highway 404 and Highway 7 (including the Allstate Business Park and Commerce Valley). The other 10% are located within the (emerging) Markham Centre area, Warden and Highway 407. Virtually all of Markham Centre's office employment is actually attributed to just three businesses: IBM, Honeywell and Motorola.

- The Markham Centre planning area, which is now designated as an *Urban Growth Centre* under the Province's Places to Grow Plan (aka 'the Growth Plan'), and subject to on-going planning by the municipality and a small group of private sector landowners, is intended to be developed as the *primary* destination for Major Office Employment (MOE).

- The Langstaff area, which is also designated as an Urban Growth Centre under the Growth Plan, is intended to be developed with a significant office component.

- While this area will accommodate several new office buildings going forward, it is also quite likely that other competing uses in Markham Centre – particularly residential - will exert some development limits on the overall amount of office space that can, and will be achieved at this particular location. Going forward, it is strongly encouraged that the policies in the Town's new Official Plan provide direct support, as well as clear incentives and inducements to actively encourage, facilitate and expedite the development of office buildings in Markham Centre to the very full extent possible. Such policies should also be applied to redevelopment sites along Highway 7 and Yonge Street (or Key Development Area), where high density office development can also be achieved. Particular focus should be placed on the development of office uses within walking distance of major transit services - both existing and proposed.

[1] Measured as Gross Floor Area (GFA) on the basis of 28 square metres GFA/employee.

[2] At 72 storeys, First Canadian Place located at King and Bay Street in Toronto is Canada's largest office complex at 200,000 square meters (2.2 million square feet) of office spaces.

- It is our view that Markham Centre will, over time, evolve into a highly specialized office node, providing opportunities for larger companies to build high-profile signature-type buildings. However, in order for Markham Centre to achieve its full potential, the Town will need to carefully consider new land use policies that help to level the playing field with competing locations that can also support office development. Innovative parking solutions and expanded transit service will be critically important to the successful take up of moderate to large amounts of office space in Markham Centre. Without direct local and regional policy support, however, Markham Centre could potentially build out predominately with residential-type uses.

- Notwithstanding the opportunities in Markham Centre, it is our view that the traditional business park areas of Markham will continue to support the highest number of office jobs - accounting for somewhere in the order of 75% to 90% of the total MOE in the Town by 2031.

- Under our "reference" employment forecast [3] we anticipate that Markham's 1.0 million square metres of new office space would be relatively evenly distributed between:

    - Markham Centre and under-utilized, non-business park parcels along Highway 7 and Yonge Street (47%), and

    - vacant lands in the Business Park Areas of the Town (53%).

- Development and physical accommodation of new MOE jobs based on typical space yields of 28 sm GFA/employee) would stimulate the development of nearly 475,000 square metres (5.1 million square feet) in Markham Centre plus other Key Development Areas, and 525,000 square metres (5.7 square feet) within existing more traditional business park areas.

- The development of 1.0 million square metres of office space over a 23-year planning horizon (2008 to 2031), translates into approximately 43,500 square metres (468,000 square feet) of new office space per year. This pattern of growth and development is generally consistent with building permit activity for new office construction in the Town of Markham over the past decade. Between 1996 and 2007, for example, new office construction has averaged about 50,000 square metres per year. For illustrative

[3] Reference Forecast for employment land requirements assumes that share of major office employment in Markham's industrial areas will decline gradually from its current level of 90% down to 75% by 2031.

purposes, annual growth of 43,500 square metres would generally translate into three to four new office buildings per year.

Commercial and Institutional Job Growth will also play an important role in Markham's Economy

- While industrial and office employment make up large and important sources of economic growth, the Town will also need to accommodate a healthy share of jobs that can directly support the day-to-day needs of its rapidly growing population base.[4] Jobs which directly support residents are commonly referred to as, Population Related Employment (or "PRE"). This category represents the third and final category of employment activity that must be considered as part of any long-term land need strategy.

- Population Related Employment (PRE) includes all jobs in government, healthcare and education. It also includes all jobs in retail, food services (restaurants), automotive sales and service, leisure and recreation, and places of worship.

- For the most part, PRE job growth is directly tied to population growth. Typically, PRE jobs grow at a rate commensurate with residential development. For definitional purposes, individuals that work at home are also included in the PRE category. But, for forecasting purposes, this segment of PRE must be excluded from our land needs calculations since these jobs are not supported by industrial, commercial or institutional land requirements.

- In 2008, PRE accounted for about 32% of Markham's total employment base. In total, just over 50,000 jobs within the Town were classified as PRE. This includes about nearly 12,000 individuals that worked at home. Between 2008 and 2031, our forecasts suggest that the total number of PRE jobs in the Town will increase by nearly 23,000 jobs.

- Excluding the growth in work at home segment (which is conservatively estimated at 5,400 new jobs), the actual number of PRE jobs that will require some form of commercial, industrial or institutional land support is estimated at 17,500 new jobs. For long-range planning purposes, the Town will need to be assured it can physically accommodate this level of PRE job growth.

[4] According to York Region forecasts (prepared in 2008) Markham's population is forecasted to grow from 284,900 in 2008 to 423,500 by 2031. This represents an increase of 138,600 persons.

- Based on our analysis of prevailing employment patterns, approximately 15% of the Town's PRE jobs[5] are situated within the Markham's industrial areas.

- While there are clearly PRE jobs in all three industrial categories, the Business Corridor Areas, by virtue of their orientation along key arterial roads, account for the largest share of PRE jobs on industrial lands.

- Over the forecast period, we have assumed that the share of PRE jobs on industrial lands will continue to represent about 15% of the PRE employment base. Our assumption takes into account that certain PRE uses will continue to seek out permitted locations within Markham's industrial areas where they can not only serve the needs of nearby workers (i.e. restaurants), they can also take advantage of more favourable (lower) rental rates compared to more conventional commercial sites. Moreover, we have also recognized that certain industrial sites in the Town offer highly attractive locational features in terms size, visibility and proximity to underserved and or growing residential neighbourhoods in Markham. This is a concern in regard to protection of industrial lands, because in many cases, the market opportunity for PRE development on some of the larger industrial sites (especially in the BCA category) can be more immediate and more supportive of PRE based developments.

- Based on our forecasts most of the new PRE jobs within industrial areas will be related to either retail, personal services and restaurants (accounting for approximately 990 new jobs); and automotive related businesses, such as vehicle dealerships and repair services (accounting for approximately 1,100 new jobs). Together these two categories will make up about 90% of the PRE jobs on employment jobs. The remaining 10% will relate to education, day care, leisure/recreation facilities and places of worship. In total, PRE jobs on industrial lands will account for just over 2,300 new jobs over the 2008 to 2031 forecast period.

- The bulk of new PRE jobs will be situated in other parts of Markham that are well-positioned next to/within residential areas, and which, from a land use perspective, can support new commercial and institutional activities as of right. Such areas of Markham would include:

    - ***Institutional Sites*** (schools, hospital, government employment)

[5] The 15% share is based on PRE jobs net of those that work at home. In other words, it is 15% of PRE jobs that take place outside of the home on commercial, industrial and institutional lands.

- ***Markham Centre*** (retail, services, restaurant, private healthcare, government, community and leisure)
- ***Key Development Areas on Highway 7 and Yonge*** (retail, services, restaurant, private healthcare and leisure)
- ***Vacant commercial sites*** (retail, services, restaurants, private healthcare and leisure)

- In total, we estimate that the Town of Markham will need to physically accommodate **about 14,350 new PRE jobs on non-residential/non-institutional lands over the 2008-2031 planning horizon**. The commercial lands in the Town of Markham are expected to play a significant role in accommodating these new PRE jobs. Our best estimates suggest that:
  - approximately 8,100 new PRE jobs (56%) will need to be accommodated on the vacant commercial sites over the forecast period;
  - 4,000 PRE jobs (28%) will need to be accommodated within Markham Centre (and underutilized sites along Highway 7 and Yonge Street, including new PRE retail uses in the Markham portion of the Langstaff Gateway); and
  - 2,300 (16%) will need to be accommodated on industrial lands.
- New commercial and institutional development will be required to support PRE job growth, and to ensure that future residents are adequately served by local shops and services. As part of the strategy we considered the physical space requirements, the land requirements as well as the per capita space ratios that would be needed to support an additional 138,600 new Markham residents over the 2008-2031 periods.
- Based on our analysis of existing and future conditions we have determined that Markham should be planning for a net, total increase in the order of 500,000 to 600,000 square metres (5.2 to 6.5 million square feet) of commercial space to support employment growth over the 2008 to 2031 planning horizon.
- Markham Centre, Highway 7 and Yonge Street, including Langstaff Gateway are intended to be built-out with complementary, street-related commercial space. Our estimates suggest that these areas, on a combined basis, should support approximately 140,000 to 155,000 square metres (1.5 to 1.7 million square feet) of new PRE space. This is approximately 25% to 28% of the total new PRE space required in the Town.

- Markham Centre, for example, is now being planned to accommodate upwards of 40,000 new residents. These new residents will need to be served by new, complementary PRE commercial businesses. Using a conservative estimate of 25 square feet (2.3 square metres) per capita for local/convenience oriented merchandise and services (i.e. food, pharmacies, restaurants, personal services, etc.), 40,000 residents stimulate the development of close to 1.0 million square feet (95,000 square metres) of new space. Additional retail/service space would also be supported in Markham Centre by a substantial influx of new office workers.

- While intensification will play an important role in the accommodation of new PRE/commercial space, the majority of PRE growth will ultimately be directed to Markham's vacant commercial sites.

- The Town of Markham currently has approximately 105 net hectares of vacant land designated for commercial development. This amount of land could realistically support, approximately 262,000 to 314,000 square metres (2.8 to 3.4 million square feet) of built space, assuming a build to land coverage factor ranging between 25-30%.

- Recognizing that there is typically one retail/service commercial job for every 400 square feet (37.2 square metres) of built commercial space, **Markham would require somewhere in the order of 300,000 square metres (3.2 million square feet) of new space to support 8,100 new PRE.** This is comparable to the amount of commercial space which could be supported on 105 hectares of vacant land identified above. On this basis, Markham's existing commercial land supply could physically support, all the new retail development warranted by growth to 2031.

- The existing supply however is extremely "tight" and would likely not allow for an adequate provision of vacant commercial land over the duration of the 23 year forecast period. Moreover, the type of commercial space which could be integrated into these areas may be limited by various competing development interests, since much of the vacant land is actually designated as a Community Area which provides for mixture of uses, including medium and high density housing.

- As a strategy, Markham should continue to encourage the timely development of complementary commercial facilities as part of the secondary and community planning process. Based on best practices, we suggest that future commercial facilities in Markham should be planned and evaluated on the basis of 35 to 45 square feet per capita.

- Over the planning horizon, as new residential areas in Markham come on stream it is recommended that the Town encourages developers to make adequate provisions for new retail and service commercial space. While the amount of commercial space will vary according to the presence of existing and proposed commercial space in the local area, applications for new commercial development should clearly demonstrate that there is sufficient market support at the location proposed; and that such facilities will not impact the planned function of other parts of the Town's commercial hierarchy, especially strategic nodes such as Markham Centre.

More Jobs Will Necessitate More Intensive Use of Existing Employment Land

- While Markham can reasonably accommodate all of its PRE-type employment within its vacant commercial land supply and use PRE to guide mixed use in Markham Centre, Langstaff Gateway and elsewhere; our analysis clearly suggests that Markham's industrial areas will require more careful attention. It is our view, that the amount of employment growth being planned over the long term will require the Town to make strategic additions of new land which are capable of supporting a diverse range of economic activity.

- The Town of Markham currently has an industrial (employment) land supply of approximately ±1,525 net hectares - of which, approximately ±1,040 net hectares are occupied, and ±485 net hectares are vacant or underdeveloped.

- Since the early 1980s, business interests in Markham have developed or "absorbed" about 830 hectares of industrial land. This translates into an average absorption rate of approximately 30 hectares per year. In more recent years, land development trends in Markham have compressed somewhat, falling to between 22 to 25 hectares per year.

- Assuming that future development patterns are carried forward at an annual rate of 25 hectares per year, and that all of Markham's industrial areas are fully-serviced on a timely basis, Markham's existing vacant supply of land (i.e. 485 net hectares) would be completely exhausted in less than 20 years. Even taking a more conservative approach whereby 20% of the existing vacant supply remains "structurally vacant" Markham's employment land supply would effectively be exhausted within 15 to 16 years.

- At the present time, the Town of Markham currently has less than 200 hectares of land which are zoned and serviced. These lands are commonly referred to as *market-ready industrial*. An inventory of 200 hectares, employing the same absorption levels, could potentially be exhausted in less than 8 to 10 years. There is now growing urgency to ensure that more lands in the Town are pre-zoned *and* serviced to ensure that the Town's competitive edge as a top-tier business location is preserved.

- While absorption is one way to evaluate future land requirements, there are some important limitations to this approach, especially when planning over a long time frame. The key problem with the absorption methodology is that it fails to capture the changing role that a municipality plays within a regional employment market over time. For example, industrial lands that were once considered *peripheral* begin to play a more central role as population, highways, public transport and other new infrastructure are introduced.

- The Town has firmly established itself regionally (and *nationally*) as a significant employment cluster for a number of high growth sectors. In turn, this reputation has accelerated the level of interest in Markham as a leading location for business investment, especially for companies in technology-intensive fields. Markham's profile as a business hot-spot has also helped accelerate residential activity as more workers and more business leaders choose to live in the community as well.

- In order for Markham to maintain this positive momentum, the business community will come to expect that a supply of equal - if not better – located lands is available, on an on-going basis, to support future investments. With a diminishing land base, however, investors will ultimately be faced with fewer and fewer "workable" development options. Over time, the sites that remain vacant are those that have some form of development impediment or constraint, such as a compatibility with a neighbouring use, fragmented ownership structures, lack of highway exposure, irregular parcel size, etc.

- The *preferred* method for calculating long-term land need is one that integrates employment growth and a variety of employment densities which are applied to different types of built forms.

- The research and analysis contained within this report strongly suggests that Markham's role as a major employment hub will continue to grow and evolve. Over time, it is fully expected that Markham will take on an even greater role as an *urban* office market in addition to the industrial market in which the Town has competed successfully for many years. Markham will need to maintain an adequate supply of land that is sufficiently large enough to physically accommodate a healthy share of combined ELE (industrial-oriented) and MOE (office-oriented) job growth over the next 25 years.

- The on-going importance of the manufacturing sector cannot, and should not, be overlooked in planning for the Town's economic future. Markham, because of its diversified economic base, and because of its international reputation as a top-tier business community, is precisely the type of place where the province's manufacturing base is most likely to flourish. Markham offers its manufacturing base a strong platform from which to build a successful future. The Town must ensure that it is doing everything possible to secure, protect and accommodate Markham's full economic potential.

- While the vacant employment land supply could "functionally' support the total amount of ELE growth, the net effect would be that no additional MOE or even PRE jobs (both of which are also poised for significant growth) could be physically accommodated in Markham's industrial areas. It is important to keep in mind that in 2008, about 90% of Markham's MOE jobs (or 47,800 office jobs) and about 15% of Markham's PRE jobs (or (5,100 retail/service commercial jobs) are situated on *industrial* land. On a combined basis, there are nearly as many MOE and PRE jobs on industrial lands as there are ELE jobs.

- Based on the analysis prepared in this report, Markham's employment areas will need to accommodate approximately 63% of all new jobs over the planning horizon.[6] Such an analysis assumes that Markham Centre - along with other Key Development Area along Highway 7 and Yonge Street which can support commercial intensification - are built out expeditiously over the next 20 to 25 years, *and* that they are built at relatively high densities.

- Markham's vacant and developable employment land supply (estimated at 485 net hectares) will be an important, albeit diminishing aspect of Markham's ability to support and maintain high quality employment growth on a go-forward basis. Certain land development opportunities in Markham – such as the Buttonville airport lands, Cathedral, 404 North and the Markham East Highway 407 lands– provide excellent opportunities for business investment. But, these areas are not sufficiently large enough to entirely meet Markham's employment forecasts.

- It is our view that Markham's existing employment nodes, such as Denison-Steeles, Risebrough and Thornlea will continue to adapt and respond to cyclical changes in the economy; and that over time, these areas will play a major defining role in helping Markham to stimulate new entrepreneurial ventures, and attract new fledgling industries

[6] Excluding work at home.

such as clean technologies and other emerging business opportunities. While new greenfield land development opportunities are required to accommodate economic growth, it will be equally important to manage the existing employment areas, and the quality of the building stock within them, in order to ensure that they can support a fully diversified economy.

The Town of Markham Needs More Than 400 Hectares of *New* Employment Land By 2031

- For analytical purposes we have "tested" the *total* land supply to determine whether Markham's existing industrial land base is sufficiently large enough to meet long-term growth requirements associated with 90,000 new jobs by 2031. In other words our analysis is predicated on the total ±1,525 net hectares of industrial land – rather than simply trying to apportion job growth to the ±485 net available hectares capable of supporting future development

- The Town of Markham's employment areas are among the best utilized employment lands anywhere in the GGH. The Town of Markham's employment areas, excluding properties with major office building, support about 60 jobs for each occupied hectare. By way of comparison, Markham is much "denser" on average than a number of other leading "employment-rich" municipalities such as: Vaughan (47 jobs/ha), Mississauga (44 jobs/ha), Brampton (42 jobs/ha) and Oakville (40 jobs/ha). For long-range forecasting purposes we have assumed that Markham's employment areas, net of future major office development, will continue to accommodate employment activity at a rate of 60 jobs/net hectare.

- The presence of major office buildings as well as population related employment within Markham's employment areas provides significant up-lift to the Town's overall employment density– particularly within the designated BPA and BCA lands. Our best estimate for 2008 indicates that the inclusion of MOE and PRE jobs in addition to ELE employment elevates Markham's average mixed density level to approximately **103 jobs per net hectare** (calculated as 107,600 jobs/1,040 occupied hectares).

- For long-range forecasting purposes, we have assumed Markham's employment lands are, and will continue to be, well-positioned to attract additional office development, and that these developments will continue to achieve higher job densities over time. For forecasting purposes we have assumed that Major Office development sites will be able to support about 280 to 285 jobs per net hectare.

- Based on Markham's current land supply estimate of 1,525 net hectares our calculations of future land need - including a very conservative 7.5% adjustment for "market contingency" [7] - suggests that the Town will reasonably require between 1,840 to 1,940 net hectares by 2031. In other words, even with the available designated vacant lands, including the potential represented by a possible redevelopment of the Buttonville Airport (approximately 48.0 net hectares) for business park purposes, Markham does not currently have sufficient employment land designated within the current settlement area to fully support its allocated employment growth to 2031.

- Markham will therefore require somewhere in the order of **315 to 415 net hectares of *additional* employment land** to adequately accommodate 2031 growth. On a gross land area basis (i.e. adjusting for additional lands needed to accommodate new roads, services, utility corridors, storm water management and other environmental features – calculated at net area x 1.25), the total amount of new industrial land would be in the order of **395 to 520 gross hectares of new land *outside* the current settlement area**. By way of comparison, this amount of land is roughly about the same size as the Denison-Steeles Employment Area which is now fully built out.

Markham Needs More Than 850 Hectares of *New* Employment Land To Accommodate Economic Growth to 2051

- Over the longer-term (2031-2051), the municipality will continue to require new land if it wishes sustain on-going economic growth opportunities over the next 40 years. Our best estimates suggest that Markham would require a total employment land supply of somewhere between 2,200 to 2,300 net hectares by 2051. Markham would therefore require somewhere in the order of 680 to 787 net hectares of additional land. On a gross land basis this would be in the order of **850 to 980 gross hectares of new land *outside* the current settlement area.**

- A *Regional Land Budget* was recently developed by York Region (January 2009) as part of their Regional Official Plan conformity exercise, as required under the new Provincial Growth Plan.

[7] Market Contingency is applied as a vacancy safeguard to ensure that there are lands available above and beyond what is immediately required to support current employment activity levels. A 7.5% market contingency is very low compared to what we would normally advocate. This rate has been used as a means to avoid any over designation of land.

- The Region is fully aware that several of its high growth local area municipalities (such as Markham) will require new urban land to support their on-going economic growth potential. The Region's own land forecast for Markham has arrived at a conclusion similar - specifically that the Town of Markham will require new employment lands between now and 2031 which are *outside* its current settlement area boundary. Specifically, the Region has identified a gross land need, exclusive of a "market contingency" for **437 developable hectares** of land outside the current settlement area to be set aside for *employment purposes* in the Town of Markham. The Region's numerical conclusions are generally consistent with analysis prepared above (i.e. 395 to 520 gross hectares of new land in Markham by 2031). The Region, however, has not yet identified longer-term land requirements (i.e. beyond 2031), but it is understood that additional land development capacity remains available above and beyond what is required for both community (residential and retail) and employment land requirements up to 2031.

Provision of High-Performance Employment Areas Will be Key to Accommodating Growth

- Markham's future employment areas should continue to build on the successful principles that have helped Markham establish a strong leadership position in the GGH market for developing high-quality, high-performance business areas. In many ways Markham's employment areas have helped "set the planning bar" for the greenfield development standards now included in Provincial planning policy (50 jobs/hectare).

- Outside of Markham Centre, Buttonville Airport represents one of, if not *the* strongest candidate sites in the Town to establish a large high performing business park area. Redevelopment of these lands (approximately 48 net developable hectares) could provide an excellent opportunity to concentrate a significant amount of future employment activity within a relatively well defined area that could be readily served by transit. Having said that, the development of the Buttonville Airport lands remains highly uncertain at this time. The decommissioning of the airport requires significant planning attention, and remains closely tied to a number of external forces, such as: (i) the advancement of the Pickering Airport over the long-term, (ii) the potential transfer of private aviation activities to Oshawa Airport on an "interim basis", and/or (iii) the ability of Pearson International Airport to adequately serve the commercial needs of private aviation interests on a short to medium term basis while Pickering Airport moves through the regulatory and development process. From a land use perspective

Buttonville Airport should be protected and maintained as a priority employment development opportunity.

- Notwithstanding the potential for both Markham Centre and Buttonville Airport to accommodate new jobs, our analysis clearly indicates that Markham will still need *new* land *outside* the current settlement area to support its 2031 employment forecasts.

- The Town of Markham is looking to establish itself as a leader in the development of ecologically sustainable business environments. The Town is moving forward with District Energy facilities as well as specific waste diversion programs directed at industry. Markham's ability to stake out a clear leadership position in the sustainability arena – either through the development of a "best in class" eco-industrial business park or through the attraction of high profile pioneering companies in the fields of energy, recycling or advanced building material - has the potential to further elevate Markham's stature on a global stage as a centre of excellence for green industry and product innovation.

- The Town is also undertaking several studies in support of sustainability. The conclusions and recommendations of these studies will contribute to identifying sustainable practices to be applied in support of ecologically sustainable business environments.

So, Where Can Markham Logically Expand It's Industrial Land Base?

- The lands outside the current settlement area in Markham which are best suited for future employment uses are clearly those that are contiguous to the currently designated employment areas in the north end of the Town (i.e. the 404 North Employment Area). Lands which should be set aside for employment uses to meet 2021 and 2031 planning requirements should include all developable lands in the vicinity of 19th Avenue, extending easterly toward the Warden Avenue Corridor and southerly toward a corridor paralleling Elgin Mills Road.

- The addition of **350 to 400 net developable hectares** new lands in this area are considered beneficial for the following reasons;

- *Critical Mass:* larger employment areas are generally more successful because they provide greater stability to users, and provide for greater flexibility in terms of developing a range of accommodation opportunities for business activities with differing site size requirements.

- *Proximity to Highway 404:* the lands are well-positioned vis-à-vis Highway 404 which has been and continues to be the primary economic corridor of eastern York Region linking Markham, Richmond Hill, Aurora, Newmarket and Whitchurch-Stouffville.

- *Labour Access:* the provision of new employment uses in North Markham will help improve the live/work relationship for not only Markham residents, but indeed much of York Region's workforce including those in Richmond Hill, Aurora, Newmarket and Whitchurch-Stouffville.

- *Transportation & Transit:* a large new employment node in this area has the potential to alleviate traffic pressures elsewhere in Markham, and would also help minimize the distance travelled by workers living in other built up areas of York Region, including Richmond Hill, Aurora and Newmarket. Employment in this area has the potential to reduce commuting distances and improves the capacity of Highway 404 by enabling counter-flow commuting patterns.

Markham Should Take a Long-Range View of It's Industrial Land Assets

- Provincial and Regional policies designed to better protect the rural landscape around Markham are now firmly in place. These new policies put clear physical limitations on where future urban growth in Markham will occur. The intent of the policies are to encourage smarter, better integrated and more compact communities that help reduce the need for excessively long commuting patterns.

- Based on our assessment of anticipated growth requirements in Markham, there is *now* a window of opportunity that exists to firmly and clearly establish the right amount of employment land in the best possible location. The time in which this window will remain available is uncertain. It is quite possible that if these lands are not "reserved" for employment, that other competing interests such as residential and retail may undermine the objective of achieving a healthy live/work balance in Markham.

- On this basis, it would be prudent to protect the Town's long term interest in accommodating future employment growth now, while at the same time maintaining the ability to make future adjustments over time which may be in the best interests of the Town.

- In light of Markham's on-going need for employment land, and in recognition of a *fixed* and *finite* amount of developable land outside the current settlement area, the Town of Markham should consider the possibility of establishing a new designation in its OP – one that formally protects between 400 and 500 gross hectares of *additional* land for long range employment purposes beyond the current 2031 planning horizon.

- Such a designation would both support and extend the underlying core planning principles of achieving balanced community growth not only in the short to medium term, but indeed well into the future. It is recommended that a *Long-Range Employment Land Reserve, 2031-2051* designation be considered for further study. It is suggested that lands placed in this designation would, in effect, be protected from any form of urban land development, save and except, any potential employment uses that cannot reasonably be accommodated in other parts of Markham, due to factors such as: size, location, compatibility or other mitigating circumstances. The *Long Range Employment Land Reserve, 2031-2051*, could remain in effect until a specified date, at which time the lands would either be formally be designated for employment development purposes, or maintained in their Long Range Employment Land Reserve Status. The opportunity to actually convert these lands for alternative purposes (i.e. to residential or major retail) should be withheld until future planning has determined, the full extent of Markham's 2051 employment growth and land requirements.

- This designation is intended to provide a pre-emptive planning solution – one that seeks to avoid the need for future incremental additions to the land supply that could potentially involve sub-optimal or poorly located sites. At the same time, the designation would also ensure that the best remaining employment lands are not lost to residential and/or retail uses. The intent here is to avoid fragmentation of Markham's employment land supply. It is our opinion that the best lands will continue to be those that are (a) readily accessible to major 400 series highways; (b) connected to other employment areas; and (c) not cut-off or encumbered by intervening residential development patterns around them.

Markham Needs to Deal With Short-to Medium Term Employment Land Supply Issues

- Notwithstanding long-term employment land deficiencies, our analysis also demonstrates that Markham's current land supply may actually fall into a competitive shortfall position between 2016 and 2021. As a pre-emptive and short-term measure, Markham should support the addition of approximately 35 hectares new employment lands in the Cornell Secondary Plan, particularly the lands situated in the east, between Highway 407 and Highway 7. These lands, in our opinion, help establish a critical mass necessary for a viable employment node in East Markham - one that is tightly focussed around the Highway 407/Don Cousens Parkway interchange. Moreover, these lands have the potential to be developed as a unique, high-quality business park enclave – offering an attractive interface with Rouge Park, which is located immediately east of the site. Sites like these are indeed rare opportunities. There is an excellent precedent of lands which share similar location/site features that have been developed with quality employment uses. Lands in Mississauga adjacent to the Etobicoke Creek, for example are now home to HP, Bell, RIM and TD Financial Group.

The Town of Markham Should Resist Employment Land Conversions

- Past conversion of industrial lands, especially those well-suited to accommodating ELE and MOE jobs, to other uses have now impacted the supply of land for these employment types. In light of the employment land shortfall that exists, Markham should avoid any further conversions of its industrial land supply, including retail-based projects which seek to establish large format shopping facilities on parcels that are intended for conventional employment.

- Our analysis clearly demonstrates that Markham does not have sufficient industrial land to support its employment forecasts. Conversions of large tracts of industrial land to other uses only serves to exacerbate this condition, and ultimately accelerate the need to replenish these lands with new supply outside the current settlement area. The piece-meal conversion of portions of existing employment areas, such as along an 'edge' should also be avoided, since the effect of the conversion will create a climate for more conversions in the future.

A New Employment Land Policy Framework is Required in the Town's OP Update

Phase 2 of the Employment Lands Strategy will include the preparation of new planning policies for employment in Markham. Based on the work in Phase 1, we have identified the following policy proposals for consideration:

- While no major changes are recommended for the Business Park Area (BPA) designation, it is suggested that certain lands designated BPA should be reserved for only major offices uses. This can be achieved through modifications to the secondary plans and implementing zoning by-laws. The 'major office areas' would be focused on areas that are currently the site of only 'major office' uses and vacant lands at key intersections.

- There is a potential benefit in considering redefining the General Industrial Area (GIA) and Business Corridor Area (BCA) designations in order to better reflect the range of uses and transitions taking place within them, and to provide greater land use controls that prevent the encroachment of uses that should be located in other areas. To this end, a new designation is proposed for the Markham Official Plan - *Employment Area.* This designation would combine the GIA and certain lands within the BCA designations that provide a common and inter-related function. Use provisions in the new Employment Area designation would support a broad range of industrial based functions and business activities, including: manufacturing; wholesale trade; warehousing; storage; automotive, machinery and equipment repair; and only accessory retail and service commercial uses.

- There is also a need to reflect the fact that other lands now designated GIA and BCA as well certain lands in the Commercial Corridor Area (CCA) and Major Commercial Area (MCA) designations have, over the years evolved into more of a mixed use function. To this end, we are proposing consideration of a new designation - *Employment Mixed Use Area.* This designation would be applied to locations that have transitioned beyond conventional industrial functions, and/or which now include high concentrations of business that provide regional oriented services. It is our proposal too that these locations continue to be classified as *employment.*

- In reviewing the other commercial designations in Markham, we are proposing that most of the lands within the Community Amenity Area (CAA) designation and certain lands within the Commercial Corridor Area (CCA) designations be compressed into a single new designation, *Residential Mixed Use Area.* In addition there is also an opportunity to compress Major Commercial Area and Retail Warehouse Area into a single new designation called simply, *Retail Commercial.* Certain lands within the BCA designation could also be included within the new Retail Commercial designation.

- Consideration should be given to a new employment designation for Markham Centre that will help to support the creation of a broad range of uses that ensure that Markham can meet is density requirements on a timely basis as required under the Provincial Growth Plan. Major office buildings should be supported in Markham Centre, particularly on lands that provide good exposure to Highway 407 and the adjoining arterial roads and access to the wealth of higher order transit facilities that are planned. While major office uses are important from a density perspective, population related employment uses, namely institutional buildings and carefully planned retail amenities, will be an important aspect that will help shape the vitality and success of Markham Centre as a top-quality, master planned downtown area. The addition of residential uses in Markham Centre will also assist in establishing Markham Centre as a key destination in the Region of York.

- Finally, Highway 7 is also intended to develop as a mixed use corridor supported fully by Viva Transit service improvements. Major office uses should be encouraged throughout the entire Highway 7 Corridor. Consideration should be given, at a minimum, to as-of-right major office permissions on all properties along the Highway 7 frontage particularly in key development areas; consideration to mandating office development at key locations may be appropriate.

- Consideration will be given to the policies for office uses on Yonge Street especially in the vicinity of subway stations and Yonge and Highway 407 in Phase 2.

- A more detailed analysis of the recommended changes to the Official Plan will be conducted in Phase 2.

1. Introduction

The Town of Markham is a forward thinking community, and is home to an impressive concentration of innovative and leading edge companies. The Town has effectively positioned itself as a leading location in the Canadian market for foreign and domestic business investment. Exceptional access to downtown Toronto combined with well-established connections with other parts of the larger Toronto economic region make the Markham an excellent place from which to do business.

Over the past 25 years, Markham has expanded its profile thanks in large part to the creation of several modern and well-functioning business parks. While these areas are expected to flourish, the Town is also cognizant of the need to secure its economic future through the provision of new business park (or *employment*) lands that will facilitate the attraction of future business and economic growth.

The Town of Markham is a high growth community. Over the next 23 years (2008-2031), Markham will grow by 138,600 persons – or about 2.1% annual growth. The Town is also expected to increase its employment base significantly over the same period. Forecasts suggest that Markham will need to accommodate 90,000 new jobs. This translates into average annual growth of 2.5%.

With employment growing at a faster rate than the population, the Town of Markham needs to ensure that its own land use policies and its regulatory framework provide the "right" opportunities to encourage business investment, and, that these businesses can be adequately directed to the "right" areas of Markham to ensure balanced growth and improved transit options.

In addition, the Town of Markham also needs to ensure that its residents are appropriately served by convenient, accessible and well-located retail, service-commercial, and institutional facilities. The businesses and organizations responsible for providing these goods and services are an integral part of any community. These uses that help define the quality of life in an area, are often important decision factors that households use in determining where they chose to live.

The Town of Markham has a number of high profile nodes that provide not only amenity to residents, but they also provide a strong base of employment and economic activity.

1.1 Purpose of the Study

This study is intended to provide background and policy recommendations for a new Official Plan for the Town of Markham.

It is intended to provide strategic direction to the Town's Planning Department with respect to future land requirements, and to help inform future policy changes necessary to bring the Town's Official Plan into conformity with the forthcoming York Region Official Plan (a process that is now under-way), as well as the Provincial Growth Plan for the Greater Golden Horseshoe.

1.2 Study Objectives

The study team, working in close consultation with Markham Planning Staff have established three primary objectives to be achieved as part of this Phase One Employment Land Strategy:

- *Examine Markham's supply of employment lands and identify requirements to ensure the adequate future supply of employment lands.*

- *Evaluate current policies and identify potential policy changes to accommodate and direct future employment growth.*

- *Provide a recommended strategy for the location and quantity of future employment lands within the Town of Markham to 2031 and 2051, and articulate the preferred changes in planning policy to support this strategy.*

2. Policy Context

The Town of Markham has initiated this first phase of an Employment Land Strategy to help determine whether policy refinements to the Town's Official Plan are necessary and warranted in light of prevailing and anticipated development conditions.

While municipalities are required to update their Official Plans every five years, the introduction of a new *Provincial Growth Plan for the Greater Golden Horseshoe* (also known as "*Places To Grow Plan"* and referred to throughout this document as the *"PTGP"* or *"Growth Plan"*) requires that all municipalities need to revise their official plans by June 2009, ensuring conformity with Provincial Policy direction. Both the Town of Markham and the Region of York have been carefully evaluating their respective policies since the release of the Provincial Growth Plan in 2006. The Regional Official Plan is currently being revised, and Markham will also need to ensure that it's Official Plan, including its projections for future growth, are based on the appropriate growth allocations that the Region has now determined for its local area municipalities.

The current policy framework for land use planning in Ontario supports the protection of employment lands, and promotes a long-term approach to managing lands that are set aside for future employment uses.

Over the past several years, there have been numerous major Provincial policy changes that have had a direct impact on the way municipalities undertake land use planning and growth forecasting. These changes are intended to provide greater control to the upper and lower tier municipalities in terms of achieving balanced growth; and by determining where, when and how certain forms of growth should be implemented. The new Provincial planning policy framework, in essence, is intended to limit urban sprawl, and provide greater certainty to where infrastructure and other major public investments should be directed, so as to avoid unbalanced growth or duplication of service.

Starting in 2005 with the release of a new Provincial Policy Statement ("PPS"), and the subsequent passing of the Greenbelt Act, 2005, the Government of Ontario set a clear signal to the people of Ontario that it wanted to play a more active role in controlling and managing long term population and employment growth over the next 25 years (2031).

This section summarizes the overall policy context related to long-range planning for employment lands in Greater Golden Horseshoe, York Region and Town of Markham. Under the *Ontario Planning Act,* the OP policies for lower tier municipalities must conform to both Provincial and Regional Plans, and must be predicated on population and employment forecasts/allocations developed by both. This section highlights the specific policies at each level that provide the overall framework for making informed decisions about long range planning and the pursuit of well-balanced, sustainable and healthy community concepts which the Town of Markham remains firmly committed to.

2.1 Provincial Policy Context

2.1.1 Provincial Policy Statement (2005)

The Provincial Policy Statement ('PPS') is issued under Section 3 of the Ontario Planning Act. The PPS is intended to provide common direction to all municipalities on key areas of Provincial policy interests. Under the revised 2005 PPS, local and regional planning authorities are instructed that their policies "shall be consistent with" the policies of the PPS. This represents a "tightening of the language" compared to the previous PPS which stipulated that municipalities merely have "regard to" the stated Provincial policies.

In general terms, the policies contained in the PPS seek to ensure that all new development in the Province, whether urban or rural, is delivered in a sustainable fashion that helps build stronger communities, ensures wiser use and management of resources, and provides the necessary safeguards to public health and safety.

The PPS provides clear direction related to the promotion of economic development and the preservation of employment lands. Key sections about how employment lands are to be approached in Official Plans are as follows:

Section 1.1.2 states that -

> *The provision of sufficient land – through intensification and redevelopment and, if necessary and justified, designated growth areas – to promote employment opportunities and for an appropriate range and mix of housing to accommodate growth projected for a time horizon up to 20 years.*

With respect to employment lands, **Section 1.3.1** states that -

> *Planning Authorities shall promote economic development and competitiveness by:*
>
> *a) providing for an appropriate mix and range of employment (including industrial, commercial and institutional uses) to meet long-term needs;*
>
> *b) providing opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses which support a wide range of economic activities and ancillary uses, and take into account the needs of existing and future businesses;*
>
> *c) planning for, protecting and preserving employment areas for current and future uses; and*

d) ensuring the necessary infrastructure is provided to support current and projected needs.

With respect to the conversion of employment lands, **Section 1.3.2** states that -

Planning authorities may permit conversion of lands within employment areas to non-employment uses through a comprehensive review, only where it has been demonstrated that the land is not required for employment purposes over the long term and that there is a need for the conversion"

The PPS contains the following definition of employment areas:

***"Employment area:** means those areas designated in an official plan for clusters of business and economic activities including, but not limited to, manufacturing, warehousing, offices, and associated retail and ancillary facilities."*

The above definition of employment area is expansive, since it includes the words 'but not limited to', which has been interpreted to mean that 'major retail' uses could be permitted in employment areas, provided the Official Plan contains that express permission. However, the Growth Plan does clearly indicate that Major retail uses are considered to be 'non employment uses' for the purposes of the Growth Plan policy dealing with the conversion of employment lands.

2.1.2 Places to Grow Plan (2006)

In June 2006 the Province of Ontario approved the Places to Grow Plan for the Greater Golden Horseshoe (the "PTGP" or "the Growth Plan"). The new Growth Plan requires all upper, single and lower-tier municipalities within the Greater Golden Horseshoe to modify and update their Official Plan documents and bring them into full conformity with policies and targets of the new Provincial Plan by June 2009. In addition, The Growth Plan gives municipalities responsibility for achieving key elements of its planning framework, characterized generally by a shift in the amount and location of growth, toward greater intensification and higher densities. One of the key elements of the Growth Plan is articulated in Section 2.2.2.1 f) which states that *"population and employment growth will be accommodated by....ensuring the sufficient availability of land for employment to accommodate forecasted growth to support the GGH's economic competitiveness."*

Places to Grow Population and Employment Forecast (Schedule 3)

Schedule 3 of the PTGP includes the population and employment forecasts for 16 upper and single tier municipalities in the GGH, including York Region. NB: Schedule 3 does not include forecasts for any lower-tier, or "local area" municipalities, such as the Town of Markham.

Section 2.2.1.1 of the PTGP requires that these forecasts be used for all upper- and single-tier municipalities for the purposes of planning and managing growth in the Greater Golden Horseshoe. The following table, extracted from the PTGP summarizes the 2001 to 2031 forecasts determined by the Province, and allocated to York Region which are to be used for *all* planning purposes. These forecasts represent the *policy* numbers which York Region is formally required to plan for. These numbers are intended to be incorporated within the Region's updated Official Plan, on or before June 2009. The Province has indicated that they may revise the forecasts in five years (i.e. 2011), but this will not occur until after the June 2009 conformity deadline.

Figure 2.1 Employment and Population Forecast for York Region ("Schedule 3")

Year	Employment	Population
2001	390,000	760,000
2011	590,000	1,060,000
2021	700,000	1,300,000
2031	780,000	1,500,000

Source: Places to Grow Plan, 2006

Based on the above "Schedule 3" forecasts, it is anticipated that growth is expected in York Region between 2001 and 2011, growing by 300,000 persons over this period. This rate of annual growth (3.9%) amounts to approximately 30,000 new persons per year.

Beyond 2011, the rate of growth in the Region is expected to decelerate somewhat. Between 2011 and 2021, for example, the rate of annual growth is expected to slow to 24,000 persons per year, and then slow again to a rate of 20,000 persons per year over the subsequent 2021 to 2031 period.

The PTGP requires municipalities to maintain and adequate land supply that can physically accommodate the population and employment forecasts. While accommodating physical growth is important there is also clear policy emphasis on the importance of maintaining economic competitiveness through a range of land use options.

<u>Urban Growth Centres</u>

One of the cornerstones of the PTGP is the identification of 25 Urban Growth Centres ("UGCs"). These UGCs are spread out across the entire GGH area, including 17 UGCs situated within the inner-ring portion of the GGH.

The UGCs are identified in **Schedule 4** of the PTGP. They represent important "downtown" and "secondary centres" within the GGH, and are intended to be those areas that are best suited to both accommodate and achieve urban intensification goals and targets set forth in the Plan.

Section 2.2.4 of the PTGP indicates that Urban Growth Centres will be planned –

a) As the focal areas for investment in institutional and region-wide public services, as well as commercial, recreational, cultural, and entertainment uses

b) To accommodate and support major transit infrastructure

c) To serve as high density major employment centres that will attract provincially, nationally or internationally significant employment uses

d) To accommodate a significant share of population and employment growth

With respect to Markham, *Markham Centre* and the *Richmond Hill/Langstaff Gateway* are the two UGCs established in the Municipality[8]. Under the PTGP, all four UGCs in York Region (the other two being *Vaughan Corporate Centre* and *Newmarket Centre*) are expected to achieve a target of 200 residents and jobs per hectare by 2031. In developing the policies related to the UGCs, future developments are intended to be delivered at higher built densities including townhouses, apartment buildings, street-related store fronts, major institutional buildings, and multi storey office buildings. It is expected that office development will constitute the main source of employment to be added in each of the UGCs, however no specific employment/resident policy targets are set for any of the UGC in the PTGP. This remains for the municipalities to address.

General Intensification

While urban growth centres are an integral part of the PTGP, the Plan also emphasizes the importance of intensification, and the optimization of developable land supplies within existing settlement areas over the next 25 years. In fact, much of PTGP is predicated on the notion that intensification of existing built-up areas can, and indeed, must be developed more extensively and efficiently in order to accommodate a significantly higher share of future growth relative to past trends which have historically shaped the current structure of the GGH.

While no density targets have been allocated for employment in intensification areas, the PTGP states that all intensification areas will be planned and designed to cumulatively attract a significant portion of employment growth.[9]

8 Only the portion south of Highway 407 of the Richmond Hill/Langstaff Gateway UGC is part of the Town of Markham the rest being located in Richmond Hill. The boundaries of Markham Centre UGC include lands east of Rodick Road to the railway and between Highway 407 and Highway 7.

9 The definition of the Intensification Areas is defined in the PTGP as: “land within the settlement area that include urban growth centres, intensification corridors, major transit corridors, major station areas, and other major opportunities that may include infill, redevelopment, brownfield sites, the expansion or conversion of existing buildings and greyfields”.

The Town of Markham already has an established urban boundary ("Current Settlement Area" or the "CSA"). This area is intended to be the primary area of all urban-related growth and physical development. Notwithstanding the commitments regarding the CSA, municipalities are required (through provincial policy) to maintain an adequate supply of lands to accommodate future growth requirements. In the case of Markham, like many other high-growth jurisdictions across the GGH, there is a mounting pressure by landowners to make available new lands outside the CSA to respond to future market forces. However, even in the absence of external market pressure, the Town still has to ensure that it has the land supply required to meet its obligations, and to fully accommodate its share of projected growth in York Region.

At the present time, the CSA contains a significant amount of both vacant "greenfield", and some "greyfield" land development opportunities.

While undeveloped and designated *greenfield* areas are most prevalent in the northern, north-eastern and eastern reaches of the municipality, the Town also has an inventory of previously developed or under-developed *greyfield* lands that are also prime candidates for infill and intensification-type redevelopment of varying scale (such as Buttonville Airport or other large sites that are used by space extensive uses). Moreover, many of the Town's established commercial areas are also capable of supporting innovative, dynamic and more intensively developed projects that can - and indeed *should* - include both higher density residential and non-residential development opportunities in addition to necessary commercial uses.

Preservation of Employment Lands

Another policy foundation of the PTGP is the strong emphasis given to matters related to the protection and preservation of employment (or "industrial") areas within the GGH. In recent years many jurisdictions across southern Ontario have voiced their growing concerns related to the difficult challenges of protecting their long-term industrial land base from conversions to other uses.

Market forces in many areas of the GGH have dictated higher-demand, and therefore more immediate returns for residential and large-scale retail development compared to conventional industrial uses such as manufacturing plants, warehouses, construction and transportation yards all of which require larger sites. The loss of these industrial employment lands, it is argued, has the potential to undermine the competitiveness and economic stability of some municipalities and regions, and therefore weaken their ability to develop, over the long term, as "complete" and "balanced" communities comprised of both people *and* jobs. Conversion also reduces the supply of land within the CSA and increases the requirement for compensating additional land outside the CSA.

Section 2.2.6.2 of the PTGP establishes the new policy context for providing and maintaining a healthy supply of employment land, stating that -

"Municipalities will promote economic development and competitiveness by -

a) providing for an appropriate mix of employment uses including industrial, commercial and institutional uses to meet long term needs;

b) providing opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses which support a wide range of economic activities and ancillary uses, and take into account the needs of existing and future businesses;

c) planning for, protecting and preserving employment areas for current and future uses;

d) ensuring the necessary infrastructure is provided to support current and forecasted employment needs."

Under this specific policy, York Region will need to ensure that "sufficient" employment lands are available over the long term to support an estimated **390,000 new jobs** between 2001 and 2031. Effectively this is a doubling of the 2001 employment base of the Region.

While the preservation of employment land is intended to be an important policy thrust, municipalities are afforded the opportunity under the Growth Plan, if needed, to permit conversions of employment land, provided that such lands (or a portion thereof) are not required or developable for employment purposes. Before a municipality can approve the conversion of employment land, it must first complete a *Municipal Comprehensive Review* ('MCR"). The completion of an MCR must be undertaken by the municipality and must meet six criteria, as set out in Section 2.2.6.5 below:

"a) There is a need for the conversion

b) The municipality will meet the employment forecasts allocated to the municipality pursuant to[the] Plan

c) The conversion will not adversely affect the overall viability of the employment area, the achievement of intensification target, density targets and other policies of [the] Plan

d) There is existing or planned infrastructure to accommodate the proposed conversion

e) The lands are not required over the long term for the employment purposes for which they are designated

f) Cross jurisdictional issues have been considered.

For the purposes of the policy, major retail uses are considered non employment uses."

Of primary importance here is the fact that conversions of employment land need to be considered within the context of the baseline employment forecasts of the Growth Plan (i.e. Schedule 3). While we recognize that other employment growth scenarios may unfold over the 25-year duration of the Plan[10], the underlying policy basis for permitting a conversion must be grounded in a *reasonable* expectation of how much employment growth - vis-à-vis the 390,000 new jobs allocated to the Regional Municipality of York between 2001 and 2031 – could be accommodated within a local area municipality (i.e. Markham), and the extent to which vacant lands are needed to fulfill a certain portion of the total job growth that could only be accommodated in a municipality's employment areas.

<u>Preservation of Employment Lands - Distinction between Planning Act and Growth Plan</u>

The need for a Municipal Comprehensive Review (MCR) when an application to convert employment lands (however defined) to a non-employment land uses is clear, according to the Growth Plan. However, the recent changes to the *Planning Act* (Bill 51) that resulted in the inclusion of an "Area of Employment" definition within the Act also have to be taken into account. Section 1(1) of the Planning Act now indicates that an area of employment is "*an area of land designated in an Official Plan for clusters of business and economic uses including, without limitation, the uses listed in Sub-Section (5), whereas otherwise prescribed by regulation."* Sub-Section (5) indicates that *"the uses referred to in the definition of area employment in Sub-Section (1) are:*

a) manufacturing uses;

b) warehousing uses;

c) office uses;

d) retail uses that are associated with uses mentioned in clauses a-c; and

e) facilities that are ancillary to uses mentioned in clauses a-d."

The inclusion of the term "Area of Employment" in the *Planning Act* has a number of implications on planning policy in the Town. For example, an application to remove lands from an area of employment cannot be appealed to the Ontario Municipal Board, if the application is refused, according to Section 22 (7.3) of the Planning Act. However, what is interesting about

[10] The PTG is a based 2001 base line data and incorporates a time frame stretching outward to 2031. The duration of the plan – that is from its effective release date (2006)- provides for a 25 year horizon (2006 to 2031).

this section of the Planning Act is that it does not include 'major retail', since retail uses have to be 'associated with' manufacturing, warehousing and office uses. This means that any application to convert lands that the site of uses that are within an 'area of employment', such as manufacturing to 'major retail' could be refused by Council with that decision not being appealable by the applicant, even if such an application was not the subject of a MCR.

2.2 Regional Policy Context

2.2.1 York Region Official Plan (Consolidation 2007)

The York Region Official Plan was approved by the Province in October 1994. The Region's Official Plan provides a set of objectives and specific policies designed to both support and more effectively manage growth within a large region that is made up of 9 local area municipalities.

Similar to the Provincial Policy Statement, the Region's OP policies are grounded in a desire for more efficient use of land within the current settlement area, and to better manage the relationships that exist between urban and rural parts of a very large and diverse municipality. The following policies in the Region's Official Plan have been identified as "relevant" to our analysis in the context of Markham's long-term requirement for maintaining employment land:

Policy 3.3 states that –

1. *That government, institutional, major office, cultural and entertainment uses be located to support the centre and corridor structure of this Plan.*
2. *That the Region, together with the area municipalities, monitor the location, type and characteristics of business and the supply of serviced lands for new business … [and] … That where the needs of business cannot be met in existing locations, best efforts be made to facilitate relocation to another site within the Region or the Greater Toronto Area.*
3. *That employment areas be planned to accommodate a variety of business uses using the following criteria:*
    a) *areas are transit-accessible;*
    b) *mixed-use areas are focused along centres and corridors;*
    c) *the overall form of fully serviced employment areas is compact and encourages a higher ratio of workers per hectare with an overall minimum of 50 workers per gross hectare. Workers per hectare will be higher adjacent to centres and corridors; and*
    d) *industrial or commercial uses requiring separation are located so as not to interfere with potential mixed-use areas or other uses that may be affected.*

4. *That as older employment areas begin to redevelop, consideration be given to reuse of older buildings as well as to intensification and/or mixed-use developments that support corridors and centres.*
5. *That business and industrial enterprises be directed to fully serviced employment areas. A limited amount of industry on private services will be permitted in keeping with Sections 5 and 6.*

The Region is currently preparing a new Official Plan. Policies adopted by the Town must be consistent with those of the Region, including new policies that the Region may adopt to address Provincial policy.

The Region has adopted employment forecasts for Markham for the period 2006 to 2031. The adopted 2031 forecast is for 248,500 jobs in 2031, broken down as follows:

Major Office Employment – 88,700

Employment Land Employment – 86,500

Population Related Employment – 73,300.

2.3 Municipal Policy Context

2.3.1 Markham Official Plan (Consolidation 2005)

Employment lands play a key role in achieving many of the economic development policy objectives that are set out in Markham's Official Plan. These include the "*expansion and diversification of the Town's Economic base*" and the maintenance of the *"fiscal health of the community"* through the development of its non-residential land.

Part 5, Section 3 of the Town's Official Plan provides the local policies that help facilitate the development and expansion of business activities in the Town. The policies of the Official Plan recognize the important contribution that all industry sectors play in creating job opportunities and economic growth. By and large the Town's existing OP polices seek to maintain a strong and competitive industrial base for the Town.

Policy 3.5.1 describes the ***goals*** for industrial development–

a) *To plan for a pattern of industrial development and commercial uses in industrial areas that provides for a range of business activities at appropriate locations.*

b) *To anticipate and accommodate emerging trends in the industrial and commercial sectors, consistent with the Town's goals and objectives for development.*

c) *To encourage transit and pedestrian supportive industrial development and improved transit services for riders traveling to industrial areas.*

d) *To encourage the mixing of compatible uses with industrial uses at appropriate locations.*

e) *To ensure that the built form of development is consistent with the Town's urban design policies and guidelines.*

Policy 3.5.2 states the ***objectives*** for industrial development–

a) *To identify locations to accommodate, and to establish policies to guide industrial development, and commercial uses in industrial areas, resulting from planned growth within the Town of Markham and the surrounding region, and emerging trends in the industrial and commercial sectors.*

b) *To develop and implement urban design and land use compatibility criteria to guide industrial development and commercial uses in industrial areas.*

c) *To implement the Town's strategy for economic development in the Town.*

d) *To establish a harmonious interface between industrial and other land uses.*

e) *To facilitate the safe and efficient movement of pedestrians and vehicles within industrial areas, and on adjacent roads.*

2.3.2 Markham Growth Management Studies

In response to the mounting interest by the public in the amount and type of growth that Markham should be striving to accommodate; the need for better transit options; and its underlying requirement to implement the new Provincial policy directions in a timely manner, Markham has developed a comprehensive growth management study framework. This study is intended to inform part of that process, and to guide future planning decisions that determine the appropriate distribution and location of employment lands within the Current Settlement Area and if required, how much *additional* land outside the Current Settlement Area will be needed.

Other parts of Markham's on-going growth management study process include:

- Environmental Policy Review
- Intensification Analysis
- Growth Forecasts Analysis and Growth Opportunities
- Agricultural Analysis
- Sustainable Development Guidelines
- Intensification Guidelines
- Urban Growth Centres and Key Development Areas Studies

3. Markham's Current Employment Policy Framework

Dating back to 1993, the Town of Markham undertook a study of the employment land use policies in the Official Plan to determine if the policies were still relevant and appropriate. As the employment areas were then evolving to respond to market needs, it was felt that the policy framework had to be reviewed to both recognize the changing nature of the employment areas and to provide some basic ground-rules for its continued evolution and development.

The Commercial Uses Policy Study, completed in 1994 by Hemson Consulting, recommended that new employment land use categories be included within the Official Plan. It was also recommended that the range of permitted uses in each category be expanded, where appropriate, to provide the market with greater flexibility. In addition, it was recommended that the Town carefully control the built form in the employment areas, through the preparation of new urban design guidelines and zoning by-laws. These recommendations were translated into policy, and an Amendment to the Official Plan (OPA No. 26) was then prepared and approved. Schedule H to the Official Plan illustrates where the Industrial and Commercial land use categories are located.

The policies of the Official Plan, as amended by OPA No. 26, have generally remained unchanged since 1994. However, the policies dealing with funeral homes and places of worship were refined as a consequence of a separate studies on these land uses. The policies respecting planned function and maximum permitted retail floor space in the Business Corridor Area (BCA) designation were modified by OPA 132 as recommended by the Commercial Policy Review in 2004.

The Town's current policy framework divides employment uses (which are broadly defined to include commercial uses) into two distinct categories – Industrial and Commercial. Within the Industrial category are three designations (Business Park, General Industrial and Business Corridor) and within the Commercial category there are five designations (Community Amenity, Major Commercial, Retail Warehouse, Corridor Commercial and Heritage Main Street).

It is noted there are a number of policies in many of the Town's Secondary Plans that further refined the policies of the Official Plan in specific geographic areas.

An opportunity exists as part of the current Employment Lands Strategy process to identify opportunities to enhance the employment lands policy framework to:

1. *Simplify the policy approach by creating specific designations only if the planned function of each designation is clearly unique;*
2. *Ensure that the uses which support the planned function of each designation are identified and permitted;*
3. *Rationalize the location of the land use designations to reflect both current and future use;*
4. *Encourage the further intensification of employment areas as long as the scale and type of intensification is consistent with the planned function of the area and meets required development standards;*
5. *Ensure that the policy framework is sufficiently flexible to address the Town's economic development strategy, and is better positioned to facilitate the expansion of new and expanding knowledge-based industries; and,*
6. *Provide for the protection of additional urban employment lands outside of the current settlement area from incompatible or alternative development that may otherwise limit the Town's full employment growth potential.*
7. *Ensure that future OP policy changes in the Town are consistent with the general policy direction provided for in both the Provincial and Regional policy framework, including the protection of employment lands.*

The intent of this section of the report is to:

1. Review the planned function and the permitted uses in each designation;

2. Make a series of recommendations on how the policy framework can be streamlined and simplified; and,

3. Make a series of recommendations on how a new policy framework should be implemented by the Town.

3.1 PLANNED FUNCTION – INDUSTRIAL DESIGNATIONS

3.1.1 General Industrial Area

The *General Industrial Area* designation in Markham's OP is intended to accommodate traditional industrial uses, such as manufacturing, processing, repair and servicing, storage and warehousing and other similar uses. A limited range of accessory retail uses are permitted in this designation. Other permitted uses include restaurants, commercial fitness centres and institutional uses. Major traffic generating uses such as banquet halls, places of worship and day care centres may be conditionally permitted. There are about 413 hectares in this land use designation (25.2% of total land in Industrial category).

3.1.2 Business Park Area

It is the intent of the Official Plan to permit office/industrial parks *"characterized by development displaying high design standards including corporate head offices and research facilities"* in the *Business Park Area* designation. The designation applies to such lands as Highway No. 7 at Leslie Street, Allstate Parkway and Birchmount Road, between Denison Street and Fourteenth Avenue. The lands in this designation have a land area of 783 hectares (47.5% of total land in Industrial category). Almost 50% of the jobs in this designation are related to scientific, technical and management related occupations. This is indicative of the role Markham plays in the 'high-tech' sector of the economy.

3.1.3 Business Corridor Area

It is the intent of the Official Plan to permit high quality business activities in corridors along major road frontages. Such uses are primarily intended to serve the business and the service needs of nearby companies and employees they serve, and to accommodate, at appropriate locations, certain uses that also serve the general public. However the Official Plan also clearly states that retail uses in this designation are not intended to accommodate the needs of the general public as their primary function. Certain forms of development that do not meet a high standard of development will be discouraged from locating on such lands. The *Business Corridor Area* is a widely used designation, used along the majority of arterials (collector road corridors other than 'Business Park' industrial areas), and in locations where industrial lands adjoin (or are in close proximity to) established residential areas.

There are 450 hectares of land in this designation (27.3% of total land in the Industrial category). The major job categories in Business Corridor designation are – Manufacturing (17%), professional, scientific and technical (16%) and administration and support (13%).

3.2 PLANNED FUNCTION – COMMERCIAL DESIGNATIONS

3.2.1 Major Commercial Area

The *Major Commercial Area* designation is intended to accommodate primarily large-scale commercial developments, including major office complexes and retail facilities, containing an extensive range of store types and sizes. The designation is intended to encourage the formation of major nodes of intense local and regional activity and an identifiable employment, shopping, recreation, entertainment and hospitality destination. There are about 187 hectares in this land use designation.

The designation also recognizes and provides for the inclusion of other compatible and complementary commercial and non-commercial uses such as office development and medium and high density housing. The designation applies to lands at the northeast corner of Steeles and Kennedy, north of Highway 7 on either side of McCowan Road (the Markville Mall), the Shops on Steeles at Don Mills Road and to lands on Highway 48 south of Major Mackenzie Drive East.

3.2.2 Community Amenity Area

The *Community Amenity Area* designation is intended to be the site of multi-use, multi-purpose centres offering a diverse range of retail, service, community, institutional and recreational uses serving several nearby residential and/or business areas. There are about 301 hectares of land used for primarily commercial purposes in this designation and an additional 156 hectares of land used primarily for residential uses. This designation has been applied in Markham Centre and to many areas planned for mixed-use development on major roads in the Town.

3.2.3 Commercial Corridor Area

The *Commercial Corridor Area* designation is intended to recognize the existing linear highway commercial development that has occurred along major roads. There are about 39 hectares of land in this designation. This designation applies to a number of long-standing strip plazas along Highway 7, generally near or at major intersections and a number of motor vehicle dealerships throughout the Town. This designation has also been applied to stand-alone gas stations at major intersections. Retail and other activities primarily serving the traveling public or which require a location with direct exposure to traffic on major roads are intended to be accommodated in the *Commercial Corridor Area* designation. Other uses, some of which are highway commercial in nature, such as automobile service stations and car washes, are also conditionally permitted. Medium and high density housing may also be permitted provided a number of criteria are satisfied. This designation applies to lands on Woodbine Avenue between John Street and Fourteenth Avenue and Highway 7 west of McCowan Road.

3.2.4 Retail Warehouse Area

It is the intent of the *Retail Warehouse Area* designation to permit large format retail stores, often referred to as 'retail warehouses', 'big box', 'power centres' and other large scaled 'themed' retail development. There are about 65 hectares of land included in this designation. Other complementary uses, such as offices, recreational uses, industrial uses and smaller scale uses are also permitted. Uses which are conditionally permitted include multiple-unit retail developments in multi-storey buildings, automobile service stations and car washes. Residential uses are prohibited in this designation. The designation applies to lands to the east of Woodbine Avenue south of Highway 7, Woodbine North near Major Mackenzie and Markham Road south of

Fourteenth Avenue. The designation also applies to underdeveloped lands at the southeast corner of Yonge Street and Highway 407 (known as the Langstaff area).

3.2.5 Heritage Main Street Area

The Heritage Main Street designation applies to lands within the historic centres of Markham (former Highway 48), Thornhill and Unionville. The designation is supported by area-specific Secondary Plans and Heritage District Conservation Plans. Permitted uses are typical of 'main street' areas. The policies also require that the built form in these areas be consistent with the heritage character of the areas.

4. RECENT POLICY CHANGES AND STUDIES

As noted in the previous section, the employment policy framework has not been updated since OPA 26 came into effect in 1994. There were, however, a few studies completed and new lands have been designated for employment use since that time.

Below is a brief review of these studies and the specific amendments to Markham's Official Plan.

4.1 Employment Lands - Industrial

Hemson Consulting completed an Employment Lands Strategy for the Town in February 2000. This study examined the prevailing supply of employment lands and recommended that an effective supply of 271 hectares which existed at the time was insufficient to support growth to 2021. On this basis it was determined that "*without additional land, it will be virtually impossible for the Town to meet its employment objectives and non-residential assessment growth targets*". It was recommended that the Highway 407 Markham East and 404/Elgin Mills areas be considered as candidates for new employment areas. The Employment Lands Strategy was endorsed by Council in 2000, and this provided the basis for four subsequent Amendments to the Official Plan as set out below:

OPA 112 came into effect on June 29, 2006 and it applies to the lands east of Woodbine and north and south of Highway 407 (Highway 407/Rodick Road Land Use Study Area). These lands were already the site of a number of older industrial uses and were included within the Parkway Belt West Plan. The Amendment affected about 186 hectares of land, of which 72 hectares were placed in the Industrial designation. A further OPA is required to determine which designation is to be applied (Business Park, General Industrial and/or Business Corridor).

OPA 113 came into effect on July 21, 2005 and it applies to lands on the east side of Highway 404 and located both the north and south of 19th Avenue. The effect of the OPA was that it included 182 hectares of land within the current settlement area and established the policy basis for the preparation of a Secondary Plan for the area, with most of the land to be planned for employment uses.

OPA 135 came into effect on April 12, 2005 and it applies to lands on the north side of 14th Avenue to the east of McCowan Road. The lands were previously designated for urban residential uses and located within the current settlement area. About 26 hectares of land were affected and the 14th Avenue frontage was designated *Business Corridor* with the remaining area being designated General Industrial. No subdivision or zoning approval has been requested and development has been initiated.

OPA 149 came into effect on May 8, 2008 and it is the Secondary Plan that is intended to implement the policies included within the Official Plan by OPA 113. About 123 hectares of land was designated for employment purposes by this OPA, as Business Park Area. Development of one property is underway; however no general subdivision or zoning approval has been requested.

The Employment Lands Strategy has been effective at securing the designation of additional lands, but the marketing and development of these lands has not proceeded. This effectively limits the value of the designation and the Town's ability to offer these lands in a competitive marketplace.

4.2 Employment Lands - Commercial

In 2004 John Winter and Associates provided a full commercial policy review for the Town of Markham. The Commercial Policy Review determined that the Town had sufficient commercial land vacancy to support needs to 2011, but that beyond this date additional retail needs would be required to support growth.

The Key recommendations coming out of the 2004 Commercial Policy Review included the need for Markham to:

1. Identify key locations for Neighbourhood Commercial and Community Commercial in the Secondary Planning Process.

2. Reduce the store size caps in the Business Corridor to 1,000 square metres (with exceptions for office supply and computer stores)

3. Collapse the Retail Warehouse Area (RWA) Designation with the Major Commercial Area designation

4. Encourage Commercial Intensification

5. Reduce the number of commercial designations (possible merge of CAA with CCA)

The general conclusions supported in the detailed analysis prepared by Winter are based on per capita retail/service-commercial benchmark of 53 square feet per person. This number is generally consistent with the standard range employed by most commercial market analysts, including those employed by urbanMetrics to evaluate an urban market with above average household incomes. The overarching conclusions in the JWA 2004 report suggest that additional commercial lands will be needed to support growth beyond 2011, moving out toward a 2021 build-out of Markham's Current Urban Service Area boundary. These conclusions are likely now overstated, somewhat, since a number of large-scale retail facilities have been approved in the interim, including developments that have involved large industrial designated sites.

Since the release of the JWA report in 2004, there has been a significant policy shift in terms of how municipalities are expected to plan for growth for and accommodate growth. The new provincial Growth Plan requires regional and local planning authorities to direct economic activities (including retail) to areas of intensification, namely Urban Growth Centres (Markham Centre and Langstaff Gateway), as well as other key nodes and corridors which are supported by transit (Highway 7 and Yonge Street).

In 2005, Tate Economic Research (TER) was commissioned by the Town to undertake a Peer Review of the JWA 2004 report to review the appropriateness of the Major Commercial designation on lands along Highway 48, north of 16th Avenue. Specifically, TER provided market commentary on the appropriateness of JWA use of 50 square feet per capita, and tested an alternative approach at 35 square feet per capita. Under both the low and high per capita assumptions, it was determined that nearly 2.0 million square feet of *additional* major commercial space on the Highway 48 - built out over time - would be warranted and supportable in this area of Markham.

The Town is committed to developing more compact forms of development, and in doing so, is looking to concentrate a larger share of its retail base within more compact, pedestrian oriented forms of development. The Town's desire to concentrate and absorb new commercial activities in the Highway 48 corridor, for example, provides an example of how it is looking to integrate various forms of commercial activity in a cohesive way that makes them easily accessed by surrounding area residents.

5. POLICY ANALYSIS

As mentioned previously, the policy framework in the Town divides non-institutional employment uses of all types into two distinct categories – Industrial and Commercial. Within the Industrial category there are three use designations (Business Park, General Industrial and Business Corridor) and within the Commercial category there are five use designations (Community Amenity, Major Commercial, Retail Warehouse, Commercial Corridor and Heritage Main Street).

While the existing policy framework, on paper, sets out two relatively distinct and broad land use categories, some of the individual designations permit a broad range of both industrial and commercial uses. Examples include permissions for major office uses in the Community Amenity Area designation, light industrial uses in the Major Commercial designation and retail and service uses serving residential areas in the Business Corridor designation. As a result, distinctions between some of land use designations have become *blurred* in recent years. It is our opinion that if the current policy framework continues, there will continue to be a blurring of the distinctions between the designations and more pressure to open up some of these designations even further to a wider range of uses. The objective therefore, in our opinion, should be to ensure that the designations themselves are appropriate and then to ensure that they are applied to the right locations.

Based on our review of the extent of the designations, it is our opinion that the location of certain designations have an impact on the original planned function of that designation. For example, while the original intent of the Business Corridor Area designation was to primarily provide for uses that served surrounding business areas, the Business Corridor Area designation was applied in some cases to areas that are not adjacent to business areas (it is acknowledged that the Official Plan also recognized that some of these areas would serve multiple functions).

Notwithstanding their original planned function, many Business Corridor areas are now the site of a range of retail uses that either have a regional focus, or serve adjacent residential neighbourhoods. While some of these uses were in existence in 1994 when the current policy framework was developed, many more of these uses have established in these areas. For example, the Business Corridor designation was applied to a number of destination retail areas that existed in 1994, such as the Doncaster area east of Yonge Street. Other Business Corridor areas were the site of a number of automotive commercial uses that were clustered together and which continue to be well known areas for residents in southern York Region and northern Toronto. One such area is located to the north of John Street east of Bayview. Similarly, the cluster of automotive repair and automotive body shops located at the north east corner of McCowan and Highway 7 also has a *regional* draw.

In our opinion, there is a need for a more simplified approach to employment uses. This approach should recognize (a) the location of various employment areas, (b) recognize how their function has evolved over time and (c) how it will continue to evolve in the future.

5.1.1 The Nature of Employment Uses

It is important to recognize that not all jobs are to be situated in employment areas (such as those intended for high performance industrial and office development). Many jobs, especially in more urban areas, are geared toward serving the needs of the local and regional population base. Service-based jobs such as those in retail, education, government and healthcare have traditionally not located in business park areas. That said however, the need for large, well-located sites for a variety of service-type uses such as larger retail facilities, private schools, college campuses, sports facilities, places of worship, automotive dealerships, public storage, etc. have necessitated larger land users to target sites within employment areas as an economically viable means of securing sufficient land to adequately support their operational requirements.

The encroachment of *population related employment* (or "PRE") into business park areas in recent years has provided additional challenges in terms of determining the extent to which employment areas need to be sufficiently flexible. They have also raised some challenges with respect to how certain uses can be developed, integrated and/or co-located along side more traditional industrial and office uses. These challenges are widely shared by all municipalities right across the GGH, and are by no means unique to the Town of Markham.

The other major category of employment are those jobs which are also *service*-related, but which do not necessarily serve the direct, day-to-day needs of local or regional customers. For planning purposes, these types of jobs are now referred to as, *major office employment* (or "MOE"). This term is defined in the PTGP as freestanding buildings larger than 10,000 square metres, or with 500 or more employees. Major Office generally refers to buildings that support employment activities such as corporate head offices, business services, banking, finance, insurance, real estate, information technology, engineering, etc. Outside of downtown areas, Major Office concentrations are typically located at major highway interchanges and higher order transit stations.

With respect to 'major retail' uses and in the case of the Town of Markham, it is our opinion that 'major retail' uses should not be permitted in employment areas (which for the purposes of this discussion are the lands designated General Industrial Area, Business Park Area and Business Corridor Area). This approach would be consistent with the 'Area of Employment' definition in the Planning Act and consistent with the policy framework in the Growth Plan which considers major retail uses to be non-employment uses when considering conversion applications. At the present time, 'major retail' uses are not permitted in any of these designations. However, Section 3.5.4.6 of the Official Plan does provide a policy framework to consider 'large scale retail development', and this policy framework is 'nested' within the Industrial policy framework section of the Official Plan. Given the Town's desire to encourage new retail to be integrated with residential uses where possible, permitting 'major retail' uses in employment areas would not be consistent with that intent since residential uses are not permitted within employment areas.

5.1.2 Establishing an Approach

Given that the Province has categorized employment uses into three types (Major Office, Employment Area Employment and Population Related Employment), we have considered the types of uses permitted in each in an effort to develop a new policy approach for the Town.

5.1.2.1 Major Office Employment

The Growth Plan for the Greater Golden Horseshoe defines *Major Office* as freestanding buildings that have in excess of 10,000 square metres of floor space, or where 500 jobs are located. The Growth Plan directs Major Office uses to Urban Growth Centres and major transit corridors. There is no designation that permits Major Office only in the Markham Official Plan at the present time. Such uses as defined by the Province are currently permitted in:

- both the Business Park and Business Corridor designations;
- the General Industrial designation if the use was permitted in the zoning by-law in 1994; and,
- the Community Amenity Area, Commercial Corridor, Major Commercial and Retail Warehouse designations.

Notwithstanding the above, most Major Office development has occurred in the Business Park and Community Amenity Area designations, with the Major Office development in the latter designation being located almost exclusively in Markham Centre, which has been identified as an Urban Growth Centre by the Growth Plan. In Markham, lands within the Business Park Area designation are currently the site of single use buildings, multi use office buildings and hotels, educational facilities, as well as some high performance industrial services.

Establishing a land use designation that permits only Major Office uses as narrowly defined in the Growth Plan is not recommended in Markham. Instead, it is recommended that the existing Business Park Area designation be maintained and that the permissions within that designation also be maintained since the potential is high for Major Office development to be combined with warehousing and/or manufacturing (such as the case with the new Honda Canada head office on Highway 404). However, it is recommended that consideration be given to zoning certain areas in the Town for Major Office uses only, particularly if they are or will be located adjacent to higher order transit. In addition, areas that have developed historically with only Major Office uses could also be placed in this same zone. Examples of such areas include Allstate Parkway and Commerce Valley Drive. Zoning these areas to permit only Major Office uses will assist in ensuring that potentially incompatible uses are not permitted.

It is recognized that there has been demand recently to permit free-standing or un-integrated restaurants and other retail/service uses in this designation, including an increasing interest in developing private elementary and secondary schools. While these uses are desirable generally, they should not be permitted within the Business Park Area designation, since these uses have the potential to affect the overall planned function of the designation, which is to support higher order office uses and manufacturing/processing facilities. Given that all of the Business Park areas are located adjacent to, or near, lands within the current Business Corridor designation where these types of uses are permitted, there is no need to extend these use permissions into Business Park areas. In addition, introducing some of these types of uses into these areas may also have an impact on the ability of industrial uses to expand or to locate, as a result of land use compatibility concerns.

It is recognized that a different approach is required in Markham Centre, where a range of uses are permitted (including a combination Major Office, Major Commercial, Institutional and Residential uses). As a result, **it is suggested that a new 'Markham Centre' category be included in the Official Plan and that a new Markham Centre schedule which clearly delineates where distinct uses are to be located.** In other words, maintaining the Community Amenity Area designation in Markham Centre is not recommended.

Within the General Industrial Area, freestanding office buildings should continue to not be permitted, because they are generally not located on transit corridors and because office buildings may have an impact as well on the development and/or expansion of 'heavier' industrial uses and uses that involve outdoor storage.

5.1.2.2 Employment Land Employment

The Employment Land Employment (ELE) category, as identified by the Province, is intended to apply to manufacturing, processing, warehousing and distribution related uses that typically occur within traditional industrial areas, and are usually sited away from major roads and other high profile locations. Service employment uses also fit into this category with these uses supporting Employment Land Employment uses including copy shops, restaurants, banquet halls, hotels, convention centres, and other like supporting uses. These uses are more likely located on arterial roads where they can serve employees in both Major Office and Employment Land Employment areas and nearby residential uses.

In the Town of Markham, Employment Land Employment lands as described above are located within a number of different land use designations, including the Business Park, General Industrial, Business Corridor and Major Commercial designations. Based on our review of the location of these land use designations and their current use and function, **it is our opinion that there are *three* generic types of Employment Land Employment areas in Markham**.

The first such area applies to almost all of the lands that are currently within the **General Industrial** designation. The only exception is the lands fronting on Harlech Court, which are almost exclusively the site of autobody repair uses.

The second area includes *certain* lands (but not all lands) within the **Business Corridor** designation that are the site of service commercial type uses that primarily support the adjacent employment area. Examples of Business Corridor Areas that contain primarily service employment uses include:

- 14th Avenue, John Street and Denison Street east of Highway 404;
- Parts of Woodbine south of Highway 407 (including the Commercial Corridor area); and,
- West Side of Warden Avenue south of Highway 407.

It is recommended that the two areas identified above (General Industrial and Business Corridor) be blended into one new land use designation called 'Employment Area'. A more detailed review of all of the lands in Business Corridor areas would have to be undertaken in the Phase 2 of the Employment Lands Strategy to determine which components would be included within this new land use designation. Nonetheless, the intent of this **new Employment Area** designation is to provide for the maintenance and establishment of business hubs that produce, assemble or distribute a wide variety of products, technologies and services that support innovation, technology and creativity. Examples of the latter are film and television studios along with other media-related production facilities. In addition, while this new designation would be a blend of two existing designations, it is suggested that two implementing zones be utilized, with one zone permitting a wider range of uses, most notably retail, being applied to former Business Corridor areas and the second zone permitting a more limited range of uses applying to the former General Industrial areas. The policy framework would have to establish the basis for the two zones. The intent of the dual zoning is to protect the former General Industrial areas from uses that may have an impact on its function. Uses that are media/entertainment based would be permitted in both zones.

The third type of employment land employment area includes certain other lands within the Business Corridor Area designation, and certain lands within the Major Commercial Area and

Commercial Corridor Area designations along with a handful of lands in the General Industrial areas, that are the site of employment uses that are primarily 'destination - oriented'. In many cases, these uses are located in these areas primarily because land costs and rents are generally lower than in other more high profile locations or because like uses historically located adjacent to like uses. Examples of these areas include:

- Parts of Woodbine North of Highway 7;
- the Heritage Road/Laidlaw Boulevard/Bullock Drive area;
- the Green Lane/Harlech Court and John Street area; and,
- Doncaster and Glen Cameron east of Yonge Street.

It is our opinion that the above lands (and potential other areas as identified through further study) should all be placed in a new 'Employment Area - Mixed Use' designation which could permit a range of service commercial and specialty retail uses which are primarily destination oriented and not particularly related to, or supportive of immediately adjacent land uses. These service commercial and retail commercial uses also do not generally require the same degree of *profile* on major roads to attract business. While these areas have primarily a service focus, permissions for light industrial uses should be retained, since many of these areas are the site of more affordable properties and units in multi-unit buildings that would be suitable for small 'start-ups' and for the development of new business ideas. Notwithstanding the range of permitted uses recommended above, the policy framework established for this new designation should also continue to restrict the size of retail uses, since larger retail uses will continue to be directed to commercial areas. In cases where such uses already exist in this designation, such uses should be placed in a commercial designation to recognize the existing use.

In addition to the above, there will need to be a careful assessment of land use compatibility issues in all areas that are located adjacent to residential areas (such as Laidlaw Boulevard, and parts of the John/Green Lane, and Harlech Court area in Thornhill). This type of assessment would be within the scope of Phase 2 of the Employment Lands Strategy.

5.1.2.3 Population Related Employment

The Population Related Employment (PRE) category includes uses that clearly serve the population along with the needs of the traveling public. Examples of these uses, include supermarkets, grocery stores, banks, automotive sales and service, residential real estate office, insurance brokers, pharmacies, medical clinics, restaurants, dry cleaners, daycares, convenience stores, appliance stores, large retail warehouses as well as large regional shopping centres.

In PRE classified areas, the principal use is retail and service commercial oriented toward personal, although there may be residential permissions. It is recognized that population related uses are also located in Employment Land Employment areas as well, but to a lesser degree. Broadly speaking, these are uses that the general population relies upon for their daily (or not so daily) needs. These are not uses typically relied upon by Employment Land Employment uses (i.e. local area businesses or their employees) to support their daily operation or function. It is recognized however, that employees within Major Office and Employment Land Employment areas will visit or rely upon these population related uses if it is convenient to do so. As a result, there is some blurring between the functions, since population related uses do not solely serve the existing population. Similarly, service uses in Employment Areas do not always serve solely the Employment Land uses around it.

In the context of Markham's non-residential land uses, lands in the Major Commercial Area, Retail Warehouse Area, Commercial Corridor Area and certain lands within the Community Amenity Area designation fall into the Population Related Employment category. Within some of these areas, there is currently an intent in the Official Plan to encourage mixed-use development that combines residential and commercial development. In these cases, provided that the principal use is *residential*, it is suggested that these lands be included within the residential designation (rather than employment), and that a **'Residential Mixed Use' designation be created**.

Examples include the live/ work areas on Bur Oak Avenue and potentially portions of Markham Road that are now being contemplated for high density residential uses. Portions of Yonge Street could be treated in this manner as well. Given that the principal use in these areas is residential, changing the land use designation from Community Amenity Area to a new Residential Mixed Use designation would not be considered an employment land conversion. Retail uses however would continue to be permitted within these areas. A further review of each of the areas would be required as part of Phase 2 of the Employment Lands Strategy.

The remaining lands should be placed in a new Retail Commercial designation (and for simplicity and clarity, be separated out from the employment categories), especially where the principal use is *retail*. It is recommended, however, that other uses such as Major Office and residential uses also be permitted in these areas, with a few exceptions. While lands in the new Retail Commercial designation will have the same function, in terms of providing goods and services to primarily the resident population, there are distinctions that will need to be made in the implementing zoning by-law that are based on the scale and market draw of the commercial uses in this category and the location and nature of the other uses which may also be operating within in this category.

In addition, and as noted previously, there are certain land uses in the Business Corridor Area designation that should be placed in the new Retail Commercial designation. The intent of this change in designation is to recognize existing uses only and to re-affirm that such uses are not contemplated in the former Business Corridor designation and the new Employment Mixed-Use designation.

In our opinion, there are four primary implementing zones in this regard, with each requiring a policy basis in the Official Plan which provides for their distinction. The first applies to lands that are the site of commercial uses which have a Town-wide and Regional draw. In the Town of Markham, this would apply to most of the lands in the Major Commercial category (with exceptions being along Highway 48 and in the McCowan/Highway 7 area), and the Retail Warehouse designation that is focused on Highway 407 east of Woodbine and on certain lands on Highway 404 and Highway 48. **These lands could all be combined into one new Major Commercial zone**. A decision will need to be made on whether residential uses should be permitted as-of-right on lands within each of the Retail Warehouse designations. In the case of lands now designated RW on Woodbine Avenue, it may not be appropriate to include residential permission at this time. The second zone would apply to neighbourhood shopping centres and commercial strips that may have both a 'neighbourhood' function and a 'highway commercial' function. Residential uses would be permitted, but the principal use would be retail. The third zone would provide for automotive commercial uses such as gas stations and dealerships that are primarily in the Commercial Corridor designation at the present time. The fourth zone would apply to Main Street Markham, Unionville and Thornhill, with these areas still within the retained Heritage Main Street designation.

Notwithstanding all of the above, it is also our opinion that there is a need to create a Highway 7 and Key Development Areas Policy Area that extends from one end of Markham to the other in which higher employment densities and transit oriented design is strongly encouraged.

5.2 OTHER POLICY ISSUES

5.2.1 Secondary Plan Revisions

Given the many recommendations in this report about how the Town's policy framework should be structured, there will be a need to review each of the existing Secondary Plans to determine how those policies will be refined so that they are consistent with the recommendations being made in this report.

5.2.2 Updating the Zoning Regime

OPA #26, which came into effect in 1994, has not been implemented on a comprehensive basis in a zoning by-law. The zoning by-law is the legal document prepared in accordance with the Planning Act that sets out what uses are permitted on each and every property. If a use is not specifically listed as a permitted use, it is not permitted. In addition, it is the zoning by-law that controls the built-form, since it sets out where a building can be located and under what conditions on every property.

At the present time, the 1,900 parcels of land in the employment areas in the Town of Markham are subject to ten free-standing zoning by-laws. Each by-law was prepared at a different time and contains different terminology and performance standards. Most importantly, however, the by-laws do not effectively implement OPA #26, since the land use zones do not match the land use categories defined in OPA #26. These by-laws will become even further out of date as the employment area policy framework is updated. It is recommended that, once the employment policy framework has been finalized, the myriad of current zoning by-laws be updated to both simplify and modernize the zoning regulations that currently exist to ensure that the by-law is effective and responsive to an evolving, innovative and dynamic economy.

It is recognized that at the present time, landowners affected by any proposed change in the zoning regime have a number of land use rights, in accordance with current zoning. These rights may be enshrined in the current parent by-law or may have been obtained through a by-law amendment process. In addition, some landowners may have obtained minor variances to existing by-laws to permit specific types of development. It is our opinion that the majority of these existing land-use rights will be maintained in the new By-law since every effort will be made to:

i. Broaden the permissions in every land use category, as opposed to taking uses away;

ii. Introduce greater flexibility in the zone standards applying to development in every land use category; and,

iii. Recognize existing use permissions (particularly those granted through a by-law amendment process).

Notwithstanding the above, there may be circumstances where existing uses are no longer permitted in the new by-law. Reasons for making such a decision may include changes in Official Plan policies, the location of the use in relation to other uses and/or the very nature of the use itself. In cases such as these, such an existing use would be considered a legal non-conforming use by the new by-law, provided the use was legally established on the lands on the date the new by-law is passed by Council.

With respect to standards, there may be situations where an existing building may no longer comply with a setback requirement in the new by-law. Although this is extremely unlikely, given that additional flexibility is being introduced, it may happen. In this case, the existing building would then become a legal non-complying building, provided the building was legally in that non-complying location on the date the by-law was passed.

Minor variances passed under existing by-laws would cease to exist when the legacy by-laws are repealed. In most cases, the variances would not be needed any longer, since the new by-law will be more flexible with respect to zone standards. However, in the few cases where an existing building no longer complies with the by-law, but was subject to a minor variance previously, such a building would then become a legal non-complying building.

Notwithstanding any of the above, there may be circumstances where there will be a need to carry forward existing exceptions into the new by-law. This need should be assessed as part of this process. In addition to the above, there is a need to consider the following in developing both a new Official Plan policy framework and a new zoning regime.

1. Given that restaurants could potentially be introduced as permitted uses on lands now zoned for industrial use throughout the Town, it is our opinion that the Official Plan should contain policies which set out the criteria under which lands would be zoned for restaurant use as-of-right in the implementing zoning by-law in the new Employment Area land use designation, and formerly within the Business Corridor Area designation. At this point, it is suggested that restaurants not be permitted as-of-right in any former Business Corridor zone that abuts a residential zone. While we could select areas that we deem to be more appropriate for restaurant use as part of the Employment Zoning By-law process, it is submitted that there should be some policy basis for making these decisions in the Official Plan, if only to avoid interpretation issues in the future.

2. Commercial Self Storage establishments are permitted as-of-right in the General Industrial Area designation in the Official Plan. Free-standing restaurants are also permitted. It is our opinion that both of these uses could detract from the role of the industrial area as employment areas. On this basis, it is recommended that commercial self storage establishments should be deleted as a permitted use in the General Industrial designation and that restaurants only be permitted, if the use is small-scale (less than 75 square metres in area) and clearly serves the surrounding employment area). Commercial self storage areas could be permitted in the new Employment Mixed Use designation, subject to appropriate design criteria being satisfied.

3. The current interpretation of the Official Plan is that Automobile Sales establishments are not permitted as-of-right in any designation, but are subject to rezoning. The basis

for this interpretation is that the outdoor display and merchandise is only conditionally permitted in certain circumstances. Automobiles, given that they are stored outside, would fall under this description. However, it is our opinion that there would be some merit in clarifying the intent of the Official Plan with respect to vehicle dealerships and the outdoor storage component that is associated with such an establishment. On this basis, it is our opinion that the Official Plan should specifically set out the criteria under which such uses would be permitted conditionally in the affected designations.

5.2.3 Restricting Employment Land Conversions

Section 1(1) of the Planning Act indicates that an area of employment is "*an area of land designated in an Official Plan for clusters of business and economic uses including without limitation, the uses listed in Sub-Section (5), whereas otherwise prescribed by regulation.*" Sub-Section (5) indicates that *"the uses referred to in the definition of area employment in Sub-Section (1) are:*

a) manufacturing uses;
b) warehousing uses;
c) office uses;
d) retail uses that are associated with uses mentioned in clauses a-c; and
e) facilities that are ancillary to uses mentioned in clauses a-d."

The inclusion of the term "Area of Employment" in the Planning Act has a number of implications on planning policy in the Town. For example, an application to remove lands from an area of employment cannot be appealed to the Ontario Municipal Board, if the application is refused, according to Section 22 (7.3) of the Planning Act.

This is distinguished from the Growth Plan requirement for a Municipal Comprehensive Review (MCR) to support the conversion of employment land. The completion of an MCR must be undertaken by the municipality and must meet six criteria, as set out in Section 2.2.6.5 below:

a) There is a need for the conversion

b) The municipality will meet the employment forecasts allocated to the municipality pursuant to [the] Plan

c) The conversion will not adversely affect the overall viability of the employment area, the achievement of intensification target, density targets and other policies of [the] Plan

d) There is existing or planned infrastructure to accommodate the proposed conversion

e) The lands are not required over the long term for the employment purposes for which they are designated *f) Cross jurisdictional issues have been considered*

For the purposes of this policy, major retail uses are considered to be non-employment uses."

As noted previously, it is our opinion that major retail uses not be considered an employment use. The inclusion of the Growth Plan criteria set out above is considered to be a 'minimum requirement'. Additional criteria should be considered in Phase 2.

5.2.4 Achieving Mixed Use

The original intent of the Community Amenity Area designation was to provide the basis for developing mixed-use projects which combine both residential and retail/service uses, along with office uses. However, the majority of the lands within the Community Amenity Area designation have either been developed only with residential uses or only with retail/service uses. Examples include the Leitchcroft area where permissions were built into the policy framework to permit a wide range of commercial uses. However, while a number of small convenience type retail uses have been developed in Leitchcroft, the majority of land has been taken up with residential uses. In other cases, the Community Amenity Area designation has been applied to community shopping centre sites where there was an expectation that, over time, residential uses would also be developed. While this still may be the case, these community shopping centre sites are now only the site of retail uses.

The Town's policy framework was written in a manner that strongly encourages a range of uses in all Community Amenity Areas. However, a supportive policy framework and implementing Zoning By-law framework, which permits mixed-uses as-of-right in many locations has not proven to be enough to ensure that mixed-use developments actually get constructed.

To a very large extent the retail and service commercial uses encouraged by the Town in the Community Amenity Area designation are all largely population related uses. This means that there is a need for a certain population base to support the establishment of these uses. Without this population base there is no market support for these uses and until such a market exists, these uses will not be developed. The presence of other areas which are the site of population related uses will also have an impact on how many of these types of uses will locate in identified Community Amenity Areas. For example, a wide range of population related uses are located within the Highway 7 corridor and within a number of the Business Corridor areas in the Town. Given the number of major corridors and the extent to which they can accommodate PRE, opportunities may be limited from a market perspective to develop additional retail and service commercial uses in some of the Community Amenity Areas designated in the Official Plan.

One way to potentially encourage the development of more mixed-use in Markham is to actively discourage the development of commercial areas that are devoted exclusively to large format retail uses. While there is and will likely continue to be a market for these kinds of uses, locating them on larger tracts of land will have an impact on the Town's desire to blend together different kinds of land uses on the same site. In this regard, establishing a policy framework that permits these kinds of uses but only in the context of a mixed-use development would be an appropriate policy direction to take.

An example would be a requirement on behalf of an applicant to deliver a certain number of appropriately located residential units relative to retail floor space. Such a policy would make sure that future retail/service commercial developments are immediately integrated into mixed use concepts, and that the lands are fully developed in a manner that improves the public realm in a more immediate and tangible way. The municipality doesn't necessarily need to require that commercial and residential uses are vertically mixed, the more central feature is that the two elements are balanced; that the connections between the various elements are thoughtfully linked together; and that they are supportive of and compatible with existing and future uses on adjacent sites.

5.2.5 Pre-Zoning

Once a determination has been made on the extent of each of the land use designations, an analysis of the potential for these lands to be pre-zoned for development (if they are vacant and not zoned at the present time) should be carried out. The intent of the analysis would be to identify the pros and cons of pre-zoning and the methods by which certain public interest objectives can be met if the lands are pre-zoned. In this regard, the use of Holding provisions to control development would be a key planning tool. Another option to consider is whether utilizing a Development Permit system would make sense, particularly in larger undeveloped areas where the actual pattern of development is not known at this time, but there is a desire to advance the "market readiness" of the lands for development as soon as possible.

5.2.6 Enhancing the Built Form and Streetscape in Developed Areas

An assessment of the options available to the Town with respect to upgrading features such as the built form, landscape treatment, transit accessibility and public realm within existing Employment Areas should be carried out. A range of options and their potential implications from a procedural perspective and a financial/economic perspective should be considered. While municipal licensing may not be considered an incentive to development, it is one possible approach, since conditions of the license can deal with the appearance of the proposed use. Other options include the preparation of Community Improvement Plans for Employment Areas and/or the establishment of Business Improvement Associations, which would receive some funding for its activities from the Town of Markham.

With respect to the public realm, an understanding of where public lands are located within these Employment Areas and their options for land use should be assessed. However, the most important part of the public realm in these Employment Areas is the street itself and on this basis, it is suggested that a review of the current design standards for these streets from primarily a landscape architecture perspective be carried out to determine how these streetscapes might be improved over time.

6. The Market Context for Employment Land

The Greater Toronto Area (GTA) is a vital contributor to the Canadian economy, accounting for over one-fifth of the country's Gross Domestic Product. The importance of Toronto's economic scale is further evidenced by the sheer size of its industrial and commercial land base, and the role that the commercial and industrial development sector plays as a leading indicator of economic growth.

In the North American marketplace, the GTA contains the second largest concentration of industrial space and the fourth largest concentration of office space. Toronto has long been - and is fully expected to remain - the primary manufacturing, commercial and cultural/media hub of Canada.

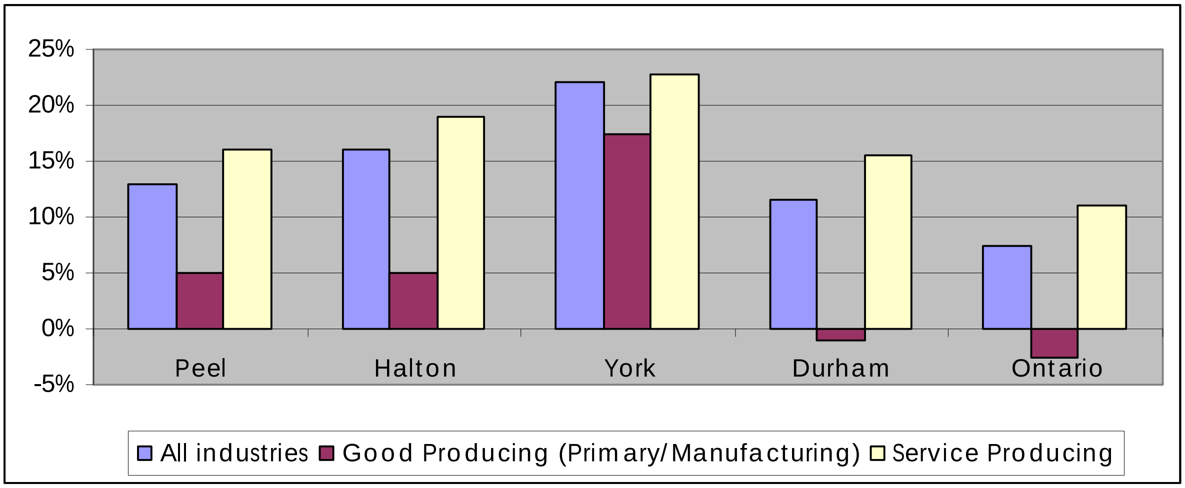
Before the meltdown of the global economy in late-2008, the indicators in Ontario were already suggesting that the regional economy of southern Ontario was beginning to show some signs structural weakness:

- **Exports growth rates in Ontario had already begun to retreat**. Ontario exports (in percentage terms) reached their plateau in 2000 and have remained relatively stagnant. In real terms, exports fell by more than 2.5% in the second quarter of 2008, marking the fifth consecutive quarterly decline. The third and fourth quarters have shown more precipitous drops. Exports of automotive products along with machinery and equipment, industrial goods and building materials were all major areas of export weakness, reflecting very weak U.S. demand for manufactured goods.

- **Employment growth was skewing toward the service and construction sectors**. Since the 1996 Census, employment in the GTA has grown in the range of 2.5 to 4.0 percent annually. According to Statistics Canada, the highest rates of employment growth in the past two decades (1986 to 2006) were in the areas of wholesale trade, business services, and other services. Employment in business services, in particular, has shown exceptional promise, growing at nearly twice the rate of all other sectors.

- **Employment growth was stable or negative for manufacturing and primary industries**. Figure 6-1 below illustrates that prevailing business trends such as, process automation, off-shoring and business process outsourcing have contributed to a net contraction of manufacturing in the Province of Ontario.

FIGURE 6.1 CHANGE IN EMPLOYMENT, 2001-2006



Source: Statistics Canada

While Ontario, as a whole, shed jobs in the primary/manufacturing sector between 2001 and 2006, most parts of the 905 - with the exception of Durham - actually remained quite strong and recorded growth. In percentage terms, York Region clearly led GTA in terms employment growth across key sectors, witnessing above average gains in both the goods producing and service producing sectors. The above figure underscores the growing confidence that business leaders have exhibited toward York Region as an ideal business location. It also highlights that the service sector is outpacing the goods producing sector. This is true across the all key parts of the 905 Region.

- **Looking forward, many existing trends are likely to continue**. Overall, Ontario's labour force and total employment over the long term are projected to grow, albeit at a slowing pace over the next two decades[11]. Employment in the goods producing sector is likely to remain stable in some areas, and decline in many others. Labour costs in manufacturing will be a major determinant of where job growth and contraction will take place. Employment in service-sector occupations/businesses, however are likely to increase over time.

On a go-forward basis, the sectors which are anticipated to see significant job growth are those related to healthcare and education, followed by retail and wholesale trade, financial services

[11] Ministry of Finance, Province of Ontario, Toward 2025: Assessing Ontario's Long-Term Outlook.

and the very broadly defined business service sector. These trends suggest that real growth in the economy will, to a large extent, be dictated by *commercial* and *service* based occupations as opposed to those in the traditional manufacturing and wholesale trade sectors.

On the ground, this will translate into more development emphasis on major office buildings, industrial multiples, mixed use projects, research and development facilities and expanded institutional facilities, such as: university campus, hospitals, courthouses and other government/public service related facilities. It is important to recognize that while much of this growth with be attributed to "white-collar" occupations, it would be inaccurate to assume that all jobs can simply be accommodated within new high-rise office towers, much of the activity will still be low-rise, ground-oriented development, which continues to be both a popular and favoured form of development across a wide spectrum of industries – regardless of whether they are goods or service producing companies. For example, the companies in Markham 2020's key sectors are located in a wide range of building types and forms, reflecting the variations in accommodations preferred by a high proportion of smaller companies.

6.1 Markham Historical Employment

Markham has experienced rapid population and employment growth over the past two decades.

Between 1986 and 2006 Markham's employment base (that is the number of jobs in Markham) has increased from approximately 61,100 to 144,800 jobs. In effect, Markham has more than doubled its employment base in just two decades. While the economic downturn in the early 1990s resulted in a pronounced slowdown in terms of job growth, Markham continued to post strong positive gains in terms of average annual growth.

FIGURE 6.2 MARKHAM HISTORIC EMPLOYMENT PROFILE

Year	Activity Rate	Employment	Share of Region	Growth
1986	53%	61,100	36%	
1991	60%	91,900	37%	30,800
1996	56%	97,600	33%	5,700
2001	59%	122,900	32%	25,300
2006	55%	144,800	31%	21,900

Source: York Region

For forecasting and growth management purposes, employment is broadly organized into the following categories:

- **Major Office Employment**: Major office employment (MOE) is comprised of all jobs located within freestanding office buildings of 20,000 square feet or more[12]. Finance, insurance and real estate activities and business services are typical examples of this industry's sectors that locate in major office structures. These buildings are typically located at the edges of Markham's business parks, close to major roads. Municipal offices, police stations, hospitals and school boards are not included in this category, and are classified as population related employment. Major office employment in Markham, in 2006, represents about one-third (33%) of the employment base of the Town, which translates into 47,400 jobs.

- **Population Related Employment**: Population-related employment (PRE) is employment activity that exists in direct relationship to a resident population. PRE includes a wide range of occupations and employers in sectors such as retail services, education services, municipal government services and local office uses (local banks, legal and accounting offices, etc). Population Related Employment represented 33% (47,500 jobs) of total employment in Markham and 42% in York Region in 2006. Current estimates by the Town suggest that locally oriented institutional employment, specifically school and places of worship employment, is equivalent to about 9% of the total 2006 PRE.

- **Employment Land Employment**: Employment Land Employment (ELE) is typically located in the interior of business parks and is exemplified by industrial activities such as manufacturing, research and development, distribution, wholesale trade and warehousing. Employment Land Employment accounted for 34% (49,400 jobs) of total employment in Markham and 43% in York Region.

Figure 6.3 indicates that the Town of Markham has successfully achieved a very well balanced distribution of jobs across all three major categories of employment - each representing about one third of the total employment base.

[12] It is important to note that Ontario's Places to Growth Plan defines Major Office as "freestanding office buildings of 10,000 m^2 (107,640 square feet) or greater, or with 500 jobs or more. The Region of York utilizes a much smaller definition of Major Office Employment defining it as any employment within a building larger than 1,860 square metres (20,000 square feet). Our analysis is relies on the Region's definition.

FIGURE 6.3 Estimated Employment in Markham by Major Category (July 2006)

Employment Category	Total	Share
Employment Land Employment	49,900	34%
Major Office Employment	47,400	33%
Population Related Employment	47,500	33%
Total	144,800	100%

Source: York Region

Fundamental to the success of Markham's economy has been its ability to attract a diverse pool of major office users. Compared to all other leading employment centres in the GTA, Markham maintains the second highest share of jobs in Major Office Employment, and the second lowest share of Employment Land Employment. The only municipality to outperform Markham in this regard was the City of Toronto, which , in addition to having a downtown core that rivals most global centres of international finance, is also made up of more than a half dozen major office sub-areas spread out across the city.

FIGURE 6.4 Percent Total Employment by Employment Categories (2006)

Municipality	Major Office Employment	Population Related	Employment Land
Markham	33%	33%	34%
Mississauga	18%	25%	57%
Brampton	6%	37%	57%
Vaughan	5%	32%	63%
Toronto	38%	37%	25%
York Region	14%	42%	44%

Source: York Region and Hemson Consulting Ltd.

Markham's prominence as a major office node is attributed to two key factors.

First, is Markham's development history. Markham was an attractive location for speculative office construction in the late 1980s - much of this activity was concentrated in the Highway 404 corridor between Steeles and 16th Avenue. Following the recession of the late 1980s/early 1990s a high vacancy rate provided the right market and business conditions needed to support fast-growth companies, especially in the burgeoning area of technology, and health sciences.

Second, is Markham's aggressive approach to economic development and self promotion. Efforts in branding Markham's as the Canada's High-Tech Capital of Canada have been very successful. These efforts have helped to significantly advance the business community's perception and confidence of the Town as an innovative, business-friendly community. In effect, Markham is now held up as Canada's equivalent to "Silicon Valley" in San Jose or "Route 128" in Boston. Today, most companies considering a new business location in the Toronto market, are very likely to consider Markham as one of their prime candidate options as a business address.

6.2 Commuting Trends

Notwithstanding the large scale of Markham's large and diversified economic base, and the rather fast pace at which it has grown over the past twenty years, a substantial portion of Markham's resident labour force is actually employed *outside the* Town. Figure 6.5 below summarizes commuting patterns for both residents and employees of Markham.

FIGURE 6.5 DESTINATION OF MARKHAM LABOUR FORCE & ORIGIN OF MARKHAM EMPLOYEES (TOP 10 LOCATIONS)

Where do Markham's Residents Work?	2001	2006	Where do Markham's Employees Live?	2001	2006
Toronto	52.1%	50.1%	Toronto	34.9%	35.4%
Markham	33.6%	30.3%	Markham	29.9%	28.7%
Richmond Hill	5.4%	5.6%	Richmond Hill	7.5%	7.4%
Vaughan	3.6%	5.4%	Vaughan	3.9%	4.1%
Mississauga	1.9%	3.2%	Pickering	2.8%	2.1%
W'church-Stouffville	0.5%	0.7%	W'church-Stouffville	2.6%	1.7%
Pickering	0.4%	0.5%	Newmarket	2.3%	2.1%
Newmarket	0.4%	0.9%	Ajax	1.9%	2.2%
Aurora	0.4%	0.6%	Aurora	1.7%	1.5%
Brampton	0.4%	0.6%	Whitby	1.6%	2.5%
TOTAL	99%	98%	TOTAL	88%	85.1%

Source: Statistics Canada, Censuses 2001 & 2006

Key observations regarding *Markham residents' commuting patterns* are summarized as follows:

- Approximately one-third of Markham's residents (that work) are employed by businesses located in Markham.

- The majority of those who leave Markham for employment elsewhere are most likely to travel south to Toronto (52%) or west to Richmond Hill (5%) and Vaughan (4%).

- Since 2001, the proportion of Markham's labour force employed elsewhere in York Region has increased while the proportion working in Toronto and in Markham has actually decreased.

Key observations regarding those who maintain jobs in *Markham* suggests that:

- More employment positions in Markham are actually maintained by residents of Toronto than residents of Markham.

- The majority of the non-residents working in Markham travel north from Toronto (35%) or east from Richmond Hill (8%) and Vaughan (4%).

- Since 2001, the proportion of Markham's employment from residents living elsewhere in York Region and in the City of Toronto has increased while the proportion living in Markham has actually decreased.

Other important findings related to commuting activities suggest that:

- Only 22% of workers in the 404/407/Warden employment node actually live in Markham[13].

  Based on data from Transportation Tomorrow Survey (2001) approximately 94% of the morning trips to jobs in Markham were made by automobile, compared to 93% at the Airport Corporate Centre (Mississauga), 68% within the North York City Centre, and 31% in Downtown Toronto Core.

The strong outbound commuting patterns of Markham's resident labour force underscores the need for more robust and more plentiful employment opportunities locally – *in Markham* - to reduce the overall travel distance and commuting habits of its residents. With about two-thirds of Markham's labour force leaving the community each and every work day, there is clearly an

[13] City of Toronto, *Don Valley Corridor Transit Master Plan-Interim Report No.2* based on data from the 2001 Transportation Tomorrow Survey

opportunity to stem the tide of commuter outflow, and provide a wider range of development options to a wide range of employers that can directly tap into Markham's highly regarded labour force.

The Town of Markham and the City of Toronto appear to have very tight labour market linkages. From a transit planning perspective, it is critically important that Markham's existing and future employment areas are functionally supported by vastly improved two-way transit connections, especially those that facilitate better access from Toronto into Markham during the AM-peak period. GO Train service, for example, only supports outbound commuters leaving Markham. A concerted municipal and regional planning effort is absolutely imperative to ensure that the all of Markham's transit hubs – particularly Markham Centre and the Langstaff Gateway area - are supported by in-bound service bringing workers from Toronto into the Town.

Over the long-term, it is expected that Markham will continue to play an important role in York Region as a leading employment destination. Opportunities to provide frequent, express-type services connecting not only Markham residents, but also Richmond Hill, Vaughan, Newmarket, Aurora residents, with existing and future employment nodes in the Town must be pursued. The expansion of York Region's VIVA service along Highway 7 is an important step in the evolution of transit service, but greater efforts to expand north-south transit services which are linked into the Highway 404 employment areas of Markham must be pursued as an important municipal and regional planning initiative.

7. The Industrial Land Supply

Aside from human capital, land availability (or land supply) is a key decision factor that influences where businesses choose to invest and what the scale of investments will likely be. The notion of land supply also includes a number of sub-factors which businesses use to carefully evaluate the benefits of one location against another. The most basic elements of the supply are:

- **Location** – *Are the lands situated in high-profile locations? Do they reflect the right corporate image?*
- **Access** – *Do the lands provide easy access to labour, customers and markets?*
- **Price** – *Are the lands competitively priced compared with other jurisdictions in the same regional market?*
- **Quantity** – *Are there sufficient opportunities to grow and expand business operations over time?*

While having a vast supply of cheap industrial land isn't necessarily a guarantee of economic success - a market without land has a relatively low probability of ever meeting its full economic potential.

Companies looking to build new premises or to expand their base of operations will be forced to look elsewhere if lands cannot be secured in a timely and affordable manner. Municipalities must recognize the important role that a competitive land supply plays in fostering a healthy climate for economic growth and business investment. One of the most powerful levers that a municipality has at its discretion is the legislated authority to protect, maintain and expand areas which are intended to accommodate new jobs and new forms of economic growth.

Provincial planning policies in Ontario continue to recognize the important role that industrial land (or employment land) plays in the development and preservation of competitive economies.

The Provincial Policy Statement, for example, expressly requires that all municipalities protect and maintain their economic competitiveness by ensuring that there is both a range and choice of suitable sites for employment uses; and that these sites are able to maintain a wide variety of economic activities. To this end, all planning authorities in Ontario are required to: *plan for, protect and preserve employment areas for current and future uses.*

While some jurisdictions in the province may anticipate slower to moderate economic growth over the foreseeable future, the same cannot be said of York Region, and more specifically, the

Town of Markham. Both jurisdictions are expected to play a leading role in shaping the GGH's economic expansion. In fact, York Region is expected to account for about 1 out of every 5 new jobs added in the GGH over the 2031 planning horizon. A significant amount of York Region's job growth will be directed to, absorbed by, the Town of Markham, where highly skilled labour markets already reside; where significant future development potential exists; and where a strong base of supporting infrastructure (road, highways, transit) can be better utilized.

Over the next 23 years, Markham is expected to see its employment base grow by nearly 90,000 jobs, reaching nearly a 250,000 jobs by 2031. On average, Markham will be adding 4,000 new employees each and every year

From an economic development perspective, high growth municipalities such as Markham need to be acutely aware of their long-term physical capacity to support balanced growth, especially where there is intense, competing pressure to accommodate other forms of growth. Municipalities cannot simply grow their residential base. They must ensure that there are commensurate opportunities to create and stimulate local jobs and economic activity.

The following sub-sections summarize York Region and Markham's vacant industrial (employment) supply.

7.1 York Region Vacant Employment Land Supply

The total supply of *vacant* employment land in York Region is approximately 3,000 net hectares (2006). This is approximately 40% of the total *designated* employment land base in the Region.

On a GTA-wide basis, York Region's inventory of ±3,000 hectares of vacant, developable employment lands is in line within its neighbouring jurisdictions including: Peel Region (±2,900 hectares), Durham Region (±2,900 hectares), and Halton Region's (±2,700). While they all have about the same amount of land, York Region is fully expected to accommodate vastly more job growth, meaning: (a) it will need to utilize its land base more efficiently; and (b) it will likely need to increase its supply of land just to remain competitive with other jurisdictions in the GTA.

Within York Region, the City of Vaughan has the single largest supply of vacant employment land at 1,300 hectares (or nearly half of the total York Region inventory). The Town of Newmarket has the smallest vacant supply at 60 net hectares. Nonetheless, the vast majority of vacant employment land is concentrated in the five urban municipalities of York Region, namely: Aurora, Markham, Newmarket, Richmond Hill and Vaughan.

Although 3,000 hectares are designated, a significant portion of the land base is not yet *market-ready* for development. The City of Vaughan accounts for the largest share of non-market ready employment lands. Approximately 900 hectares of Vaughan's vacant employment land supply are encumbered by 400-series highway planning. This large area represents almost one third of the total vacant land supply in York Region.

Figure 7.1 below summarizes the supply of vacant employment lands in York Region as calculated in July 2006, and clearly illustrates how a significant proportion of the total vacant employment land in York still requires significant planning and servicing investment before they are ready to be developed by private or public sector interests.

In total, nearly 60% (or 1,770 hectares) of the vacant land supply is currently beyond the reach of the marketplace. The Town of Markham, which has the second largest supply of vacant land in the Region, also has the second largest amount of land that is not market ready. At the present time approximately 60% of Markham's vacant lands are not market ready.

FIGURE 7.1 YORK REGION VACANT EMPLOYMENT LAND INVENTORY: PLANNING STATUS, 2006

Municipality	Market Ready 1)	Not Market Ready 2)	Total
Aurora	9	46	137
East Gwillimbury	101	239	340
Georgina	36	72	108
King	52	44	96
Markham	198	287	485
Newmarket	36	23	59
Richmond Hill	143	67	210
Vaughan	381	888	1,269
Whitchurch-Stouffville	89	107	196
Total	1,127	1,767	2,894

Source: York Region and Town of Markham
1) Market ready includes vacant lands in registered plan of subdivision that are un-built, and proposed lots in a plan of subdivision which received draft plan approval
2) Not market-ready lands include areas with approved official plan designation but do not have received draft approval

7.2 Markham Industrial Land Supply

The Town of Markham's supply of *market ready* vacant land is sufficient to accommodate the immediate employment growth (and economic development) needs of the municipality. Generally, the location of sites that are zoned and serviced, and which have draft or registered

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approvals in place tend to be those located in the southern end of the Town, whereas most of the lands in North 404 area, which represent the future growth area, are still subject to zoning and land servicing.

The availability of ±200 hectares of market ready employment land would only support about 8 to 10 years of development, on the basis of 20 - 25 net hectares of land per year. The reduced supply also impacts the range of site opportunities available, when competing to attract new companies. This is a very tight condition that will need to be immediately rectified. Servicing and pre-zoning of lands will help to ensure that Markham's competitive position is maintained

As a general rule, the Town should closely monitor the annual consumption patterns of its employment lands supply and be prepared to work closely with developers, land-owners and perspective businesses to bring additional lands into a market-ready position at a rate that is commensurate with those being taken out of the vacant inventory. The Town of Markham should monitor the annual absorption patterns year over year, and ensure that new, market ready lands are always available. As a guideline, the municipality should consider a 10 year supply of market-ready lands to be the absolute minimum need to support balanced economic growth. Falling below a 10 year supply threshold is likely to exert undue upward pressure on pricing. This would put Markham at a competitive disadvantage vis-à-vis other nearby markets. Markham is now in a position where it needs to service new lands to remain competitive

The industrial (employment) land supply is made up of both developed (*occupied*) and vacant (*greenfield*) lands.

On developed industrial land in Markham there is both "employment land employment" and "major office employment." There is also a reasonably strong presence of activities that are more truly characterized as "population related employment". Based on the existing policies of the Town, vacant industrial lands can generally develop to accommodate either industrial or office type buildings. And while other uses (such as retail and other PRE-oriented facilities) may be permitted, they are generally not provided for, "as-of-right". Such uses, if built as stand alone operations, are subject to further considerations by Council.

According to the most up-to date Town of Markham records, the municipality has a current (2008) total industrial land supply of ±1,525 net ha of industrial (employment) land, including ±485 net ha of vacant and ±1,040 net hectares occupied.

In Markham, vacant lands situated along Highway 404 are considered to be well-located and are widely regarded by most real estate professionals and market analysts to be among the best, and indeed the most valuable industrial lands anywhere in the suburban 905 market.

Industrial land prices in Markham average about $700,000 per acre in 2007. This was substantially higher than land values in other competitive GTA area municipalities[14].

While industrial land prices are partially a function of desirability, they are also closely tied to supply, market timing, and 400-series exposure/access. With fewer than 200 hectares of vacant, *market-ready*, industrial land available, the supply of land is a major contributing factor to Markham's affordability situation. Above average pricing levels are likely to place some limitations on market access, especially for smaller, start up ventures and other independent companies wanting to do business in Markham.

Increasingly, businesses choosing to locate their operations in Markham – under a constrained land supply scenario - will be those that are less sensitive to land prices (major corporations), and/or those who intend to develop at higher densities (taller buildings). Over time it is anticipated that low intensity employment uses will become less commonplace in new development areas, and that existing companies that have low levels of employment - yet require large sites to operate -will be priced out of the market by more intensive employment uses.

From the Municipality's perspective, higher land prices (and by extension higher rents) tend to stimulate more compelling and well-conceived development concepts, including: higher density built forms, more appealing design features, less warehousing and outdoor storage, less trucking activity, and less area allocated to parking and landscaped lawns. Conversely, higher land prices may limit certain forms of investments, or it may stymie small business growth. To address these possibilities, the Town should support the retention of older, cost effective buildings, especially multi-unit buildings, that offer more flexible and affordable accommodation.

Figure 7.2 illustrates that most of Markham's remaining land supply consists of small sites.

Currently, almost 80% of all parcels in the vacant inventory are less than 3 hectares - half of which are less than 1 hectare. Conversely, only 4% of all vacant parcels are greater than 10 hectares. Based on the available range of site sizes it appears that the supply of vacant land is well-positioned to accommodate prestige, high density development, but is less capable of supporting large-scale, campus style developments (e.g. IBM), or land extensive employment uses such as large manufacturing plants or large scale warehouses and distribution facilities (eg. Honda).

[14] In comparison, land value in the City of Toronto is $400,000/acre, Burlington $400,000/acre, Mississauga $700,000/acre, Vaughan $760,000/acre, Brampton $650,000/acre and Pickering $275,000/acre.

FIGURE 7.2 VACANT EMPLOYMENT LAND SITE SIZE PROFILE (2008)

Size Range	Number of Site in each Category	% of Total
Less than 1 ha	96	41%
1 ha to 3 ha	88	38%
3 ha to 5 ha	26	11%
5 ha to 10 ha	14	6%
10 ha to 20 ha	8	3%
20 ha +	2	1%
TOTAL SITES	234	

Source: Town of Markham

In order to attract business growth and maintain its focus on high profile employment functions, it is important that the Town of Markham continues to offer a diverse and well balanced selection of employment sites. In other words, a land inventory that caters to a wide variety of projects in terms of: size, location, exposure/profile and accessibility should be considered a priority. Such an approach generally supports the provincial and regional policies that speak directly to the importance of maintaining a healthy supply of employment land to accommodate growth.

7.2.1 Changes to the Town's Land Supply

In 2000 the Town released an *Employment Lands Strategy* (ELS) to address the supply of land needed to accommodate forecast growth 2021. The Study concluded that the Town needed more land in order to keep up with the requirements of future economic growth. At the time the study was completed, the net supply of vacant employment land in Markham was estimated at 380 hectares. This quantum of land was determined to be *insufficient* to accommodate nearly 45,000 new jobs between 2000 and 2021. At that time, it was recommended by the Town's consultant (Hemson), that an additional 600 to 1,100 gross hectares of land would be required to round out the employment land base for the period to 2021.

Since endorsing the last Employment Land Strategy, the Town has pursued all available options identified in Markham to effectively increase the supply of employment land. These include:

- 2003: Eastern Markham Strategic Review- Council recommends identification of lands adjoining Cornell for Business Park (BP) employment (45 ha)

- 2004: Box Grove, OPA 92/SP (45 ha)
- 2005: 404 North, OPA 113 (121 ha)
- 2005: N/S 14th Ave OPA 135/SP (26 ha)
- 2006: Rodick/407 OPA 112 (9 ha)
- 2007:Cornell Secondary Plan Review (78 ha, includes the 45 ha identified in 2003)

Some of these additions are still awaiting approval. These additions only partially covered the full quantum of lands that Hemson recommended over a decade ago that the Town would need to support 2021 growth. During the same timeframe the Town granted a series of approvals that collectively reassigned +/- 100 hectares of land from contributing to the business park land supply. Town of Markham staff has advised urbanMetrics that all the available additions to the industrial employment land supply within the current settlement area have now effectively been realized, and that no other lands inside the boundary can or will be designated for employment (industrial) purposes.

7.2.2 Supply by Designation

Figure 7.3 below provides a breakdown of developed (occupied), vacant (greenfield) and total employment lands by Markham's three major industrial use designations.

Currently, the bulk of Markham's employment lands, (approximately 47%), are concentrated in the Business Park Area (BPA) designation. Vacant BPA lands are largely concentrated in locations along Highway 404, notably within the new development areas of Highway 404 North, Cathedral and Cachet. In addition, more than 50 hectares of BPA lands are still available on undeveloped sites within the Allstate and Commerce Valley employment areas in the vicinity of Highway 404 and Highway 7. Much of this land is attributed to the privately owned/operated Buttonville Airport, which has development potential, but continues to operate as a busy airport.

FIGURE 7.3 MARKHAM INDUSTRIAL LAND SUPPLY BY DESIGNATION (NET HA)

Designation	Developed	Vacant	Total	Percentage Vacant
BPA	370	325	695	47%
GIA	325	60	385	16%
BCA	345	100	445	22%
TOTAL	1,040	485	1,525	32%

Source: Town of Markham

The Town of Markham has a vacant supply of approximately 60 ha of General Industrial Area land. More than half of these lands are situated in the Armadale employment area in the vicinity of 14th Avenue and Markham Road.

The General Industrial Areas around Steeles and Highway 404 account of the largest concentration of industrial land in Markham, and are made up of companies engaged in a broad cross-section of activities including: manufacturing, wholesaling, construction and building trades, financial services and a range of other business activities. By their nature, General Industrial Areas are expected to accommodate the vast majority of Markham's ELE job growth. With only 60 hectares of vacant land available, the existing GIA designations in Markham would only support about 3,600 ELE jobs (assuming 60 employees per net hectare). The growth forecasts however suggest that Markham will need to accommodate 32,000 new ELE jobs between now and 2031. Clearly, Markham will need additional industrial land to bridge this gap.

Even if the 50% of the 325 hectares of vacant Business Park Area lands were occupied by ELE (with the other 50% for MOE) and 30% of the Business Corridor Areas were occupied by ELE (with the other 70% utilized for MOE and PRE), Markham would still need to physically accommodate close to 17,000 additional ELE workers by 2031 on new lands. Assuming 60 hectares per employee this would translate into a *minimum* of 285 net hectares - with no land whatsoever left for vacancy.

Business Corridor Areas have developed incrementally with a wide assortment of industrial and commercial activities. By and large, the BCA generally provides a high degree of flexibility in terms of permitted uses, but the form of development has generally involved lower density buildings that do not as readily support high levels of transit ridership or pedestrian activities along the main arterial road ways on which they are located (such as Woodbine Avenue, 14th Avenue and Denison Avenue).

While the BCA's planned function is to accommodate a mix of high quality business activities, increasingly the designation has been moving toward more retail and service commercial businesses, including those that serve both a local and regional customer base. For example, the BCA applies to properties along Doncaster (east of Yonge) which are now occupied by retail-based businesses. It also applies to lands at the corner of Highway 7 and Woodbine which are now occupied by a supermarket-anchored shopping centre. Most recently, Business Corridor lands in Box Grove have been utilized for retail interests serving local and regional markets.

7.2.3 Land Supply by Employment Nodes

Markham has 17 different employment nodes. These are illustrated in Figure 7.4 and summarized in Figure 7.5, respectively.

FIGURE 7.4 MAKHAM EMPLOYMENT AREAS

The Denison-Steeles Employment Area is Markham's largest industrial area. At 375 net developed hectares it represents more than one-third of the Town's occupied industrial land. This area is also fully built out and is comprised of all three categories of industrial land.

The Allstate Employment Area is Markham's largest industrial business park. In total, it comprises about 176 net hectares. While much of this area is built out with office towers and low-rise office campuses, it is also home to the Buttonville Airport. For analytical purposes we have assumed these lands to be *vacant,* since re-development of these lands as business park is expected sometime in the future. While there are some vacant parcels left, the vast majority of these vacant 65 hectares are actually utilized for airport purposes.

In terms of vacant land development opportunities, most of Markham's industrial areas contain sites or pockets that will support future development.

The most significant employment areas that will support new development - outside of Markham Centre - are those in the north end of Markham, namely Highway 404 North, Cathedral and Cachet. Combined, these three areas provide approximately about 213 net developable hectares of industrial employment land. This is about 44% of the total amount of vacant land.

Investment interest in these areas is expected to be very strong reflecting the high degree of exposure offered to many of the sites. Honda Canada is now building its Canadian headquarters in this area. This move is expected to accelerate new business activity in this area in the near to medium term.

While development continues to progress northward along Highway 404 corridor, the eastern portion of Markham has seen very little in the way of any new industrial or office type activity, despite having high-quality land development characteristics.

At present, the designated industrial parcels in the east end of the Town, including those in Cornell and Box Grove, have yet to be developed for any other purpose other than PRE (retail) uses, with the exception of one medical office building in Box Grove.

Over the long term, however, it is envisioned that the take-up of office and other business activities will begin to take shape once the residential components of these areas are more firmly established. Specifically, an opportunity exists to establish a high-profile business cluster, such as an eco-focused business park, a clean energy park or an industry/government led R&D campus. Successfully developing these lands in the near to medium term, will depend - to a large extent - on the ability of major landowners in Markham East to creatively position their holdings as part of a highly unique business *enclave* in the GTA - one that is complemented and supported by:

- exceptional natural amenities (Rouge Park),
- a full service interchange at Donald Cousens Parkway and the Highway 407;
- proximity to a rapid transit terminal and a transit gateway, and
- the potential for business and research linkages with Markham-Stouffville Hospital.

FIGURE 7.5 MARKHAM EMPLOYMENT LAND SUPPLY BY EMPLOYMENT AREAS (NET HA)

Area	Developed	Vacant	Total	Percentage Vacant
Allstate	111	65	176	37%
Armadale	22	55	77	72%
Box Grove	6	40	46	87%
Bullock	29	0	29	0%
Cachet	44	45	89	51%
Cathedral	0	68	68	100%
City Centre	24	0	24	0%
Commerce Valley	54	28	82	34%
Cornell	0	33	33	100%
Denison-Steeles	375	0	375	0%
Fourteen Avenue	54	3	57	5%
Riseborough	153	21	174	12%
Rodick/407	65	17	82	21%
Thornhill	19	0	19	0%
Thornlea	29	0	29	1%
Woodbine-Cochrane	55	10	65	15%
404 North	0	100	100	100%
Total	**1,040**	**485**	**1,525**	**32%**

Source: Town of Markham, June 2008

While East Markham and the Highway 404 North/Cathedral/Cachet employment area remain largely undeveloped at this time, the Town's older industrial areas, such as Dension-Steeles, Fourteen Avenue, Thornhill, and Riseborough are, for all intents and purposes, *full*. Figure 7.6 illustrates the extent to which Markham's industrial lands in the south end of the Town are built out, whereas the lands to the north (and east) sections of the town constitute the undeveloped portion.

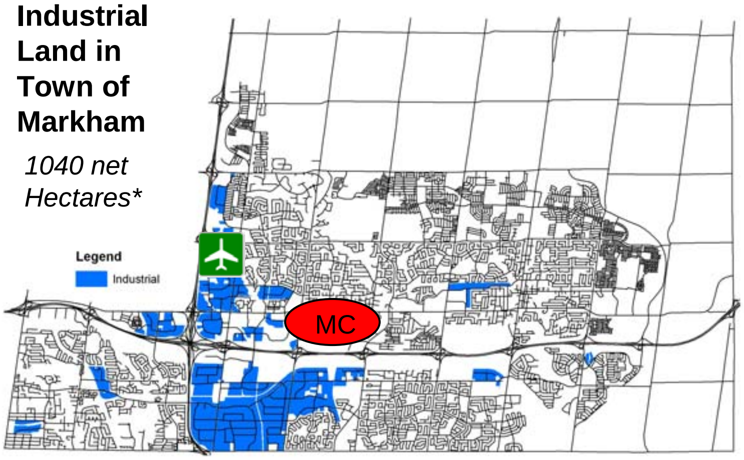
It is important to recognize that Employment areas are considered fully built out when they achieve 85% to 90% occupancy level. Once this level is achieved, it is quite likely that certain residual parcels will likely remain "structurally" or "frictionally" vacant over the long-term as a consequence of specific site development constraints and/or other encumbrances such as irregular lot patterns or fractious land ownership patterns.

Figure 7.6

Markham Industrial Land - Developed and Vacant Inventory

Developed Industrial Land in Town of Markham

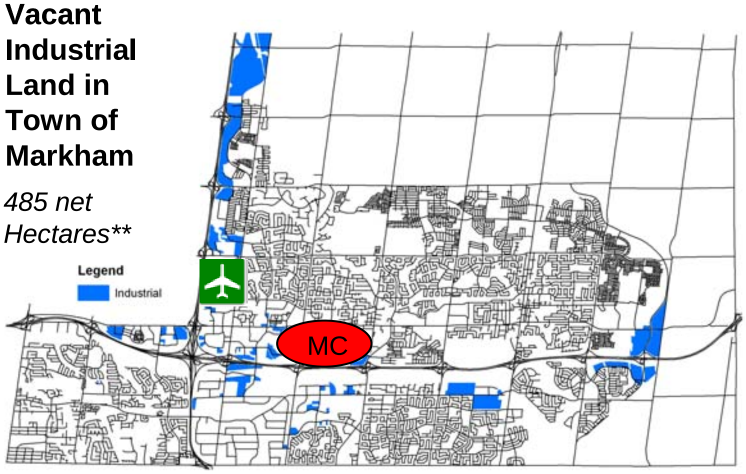
*1040 net Hectares**



* 1040 Net Hectares of occupied land excludes developed office parcels such as IBM and Motorola in Markham Centre (MC). It also excludes Buttonville Airport Lands.

Vacant Industrial Land in Town of Markham

*485 net Hectares***



** 485 Net Hectares of vacant land excludes undeveloped parcels in Markham Centre (MC) and other potential intensification sites along Highway 7 and Yonge Street which could support office developments. Vacant land *includes* Buttonville Airport lands.

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Much of Markham's historic economic success is due in large part to the development of two large and diverse employment nodes – Denison-Steeles, adjacent to Highway 404 and, more recently, Highway 7 and Highway 404. Combined, these two areas account for a very large share of the Town's overall employment base, including: 88% of employment land employment, 93% of major office employment, and more than two thirds (67%) of the total employment. The area centred on Highways 404 and 407 has been identified as a potentially provincially significant employment area. The importance of these areas as key concentrations of economic and employment activity is summarized in the Figure 7.7 below.

FIGURE 7.7 EMPLOYMENT IN STEELES/404 AND HIGHWAY 7/404 NODES VERSUS OTHER AREAS

Node	Employment Land Employment 2006	Share	Major Office Employment 2006	Share	Total	Share
Denison-Steeles	34,131	68%	17,681	37%	53,686	37%
Highway 7/404	9,955	20%	26,580	56%	43,802	30%
Sub Total	**44,086**	**88%**	**44,261**	**93%**	**97,488**	**67%**
All Other Areas	5,901	12%	3,096	7%	47,340	33%
Total	**49,987**	**100%**	**47,357**	**100%**	**144,828**	**100%**

Source; Town of Markham and York Region
Note: Each node includes several employment areas.

Based on the pattern of historical development it is clear that Highway 404 has been a dominant influence on the locational preferences of many businesses in the Town. The progression and phasing of industrial development in Markham has consistently flowed in a northerly direction – first from Steeles Avenue up to Highway 7, then from Highway 7 to Major Mackenzie , and now, from Major Mackenzie up to 19th Avenue, with Honda Canada being the first major investor.

To a large extent, the master planned business park model has proven to be the most successful element of Markham's leadership position as a *preferred* location for business in the GGH. In general, the larger business parks have proven to be far more effective, and have tended to build-out more expeditiously than smaller, more isolated pockets. Moreover, larger industrial areas such as Denison Steeles have also proven to be far more stable and resilient over time. While there is normal business turn-over as tenants come and go, the truth remains that most of Markham's mature employment areas continue to attract a diverse pool of businesses, ranging from small start-up enterprises all the way to major Fortune-500 companies.

7.3 Employment Land Absorption

Figure 7.8 below summarizes absorption of employment lands in Markham by area over the period 1981 to 2005.

FIGURE 7.8 - EMPLOYMENT LAND ABSORPTION (BPA, GIA, BCA) 1990-2005

Employment Land Absorption (ha)				
	MARKHAM	OTHER YORK REGION	TOTAL YORK REGION	**SHARE OF TOTAL**
1981-1985	**277.0**	533.2	810.2	**34%**
1986-1990	**203.6**	928.6	1132.2	**18%**
1991-1995	**27.9**	131.0	158.9	**18%**
1996-2000	**140.3**	490.6	630.9	**22%**
2001-2005	**79.8**	520.6	600.4	**13%**
Annual Average Absorption (ha)				
1981-2005	**29.1**	104.2	133.3	**22%**
1996-2005	**22.0**	101.1	123.1	**18%**

Source: York Region

The following observations have been taken from this analysis:

- Accelerated real estate development activity in the mid-late 1980s in Markham was largely fuelled by speculative office and industrial construction. This activity lead to a major *bump* in the total amount of office space added to the market, especially in the Highway 404/Highway 7 area.

- The recession of the early 1990s hit the GTA's manufacturing sector extremely hard. As a direct result, the ICI real estate community suffered a severe setback. Between 1991 and 1995, employment land was virtually unmarketable, with almost no new construction taking place.

- The technology boom in the mid to late 1990s helped provide a significant lift to Markham after nearly five years of market stagnation. Much of the take-up of Markham's office and prestige industrial properties – especially by technology-related firms - was attributed to the high vacancy rates found within premium-quality buildings constructed just before the recession hit.

- Since 2001, new construction activity has been primarily concentrated in the southern part of York Region (Vaughan, Richmond Hill and Markham). The opening of Highway 407 has contributed significantly to the surge in economic activity within southern York Region.

- From a location perspective, employment land absorption has been highest in the southern parts of York Region, particularly the Town of Markham and the City of Vaughan.

- Overall, these two municipalities alone have accounted for more than 75% the total employment land development activity (in terms of land absorption) within York Region. The City of Vaughan on its own accounts for half of the total lands absorbed, due primarily to its proximity to Pearson International Airport as well as major transportation corridors such as Highway 400, Highway 407, and Highway 427. Vaughan's orientation toward industrial and large warehousing activities is a major factor for its high share of regional absorption.

- Markham has been particularly successful in the *prestige* components of the employment land market. Markham is home to some of the best business park facilities in North America.

- Over the past 25 years, on average, Markham has absorbed just under 30 hectares of employment land per year. Since the high point in early 1980s, the amount of employment land absorbed in the Town of Markham has been steadily declining. Markham's transformation as a major office node has enabled it to achieve strong employment growth, yet at the same time consume less land.

- Over the past ten years Markham's average annual land absorption rates have fallen to 22 hectares. While the reasons for this are not entirely clear, the declining supply of land, the rising cost of industrial real estate and the growing prevalence of office-type construction are likely the main reasons behind the compression.

- Over the past five years, Markham's and Vaughan's combined absorption has fallen to about 60% of all land absorbed in York Region compared to more than 80% in the 1980s. This trend reflects the more recent rates of industrial activity in Richmond Hill, Newmarket and Aurora.

- Notwithstanding the lower absorption rate, the demand for land in Markham is forecast to continue, requiring both the protection of existing lands and buildings accommodating this employment, plus the establishment/protection of a supply of additional land for new development, including those that are able to respond to market needs, helping Markham to maintain its competitive position.

7.4 Location and Built Form

7.4.1 Major Office

In York Region, major office buildings are heavily concentrated in the Highway 404 and Highway 407 area of Markham and Richmond Hill, and along Steeles Avenue and Highway 7. Although some office activity has been edging northward into Aurora and Newmarket, these concentrations of office space are still relatively small by comparison, and generally lack the scale of a true regional node.

The City of Vaughan, by contrast, has very little office development, save and except for a few smaller buildings along Highway 7 and Steeles Ave near Highway 400.

Figure 7.9 summarizes the distribution of Major Office space throughout York Region. In total, there are approximately 307 net hectares of major office sites on employment lands within York Region accommodating approximately 1.46 million square meters (15.8 million square feet) of office floor space.

FIGURE 7.9 YORK REGION'S MAJOR OFFICE DEVELOPMENT ON EMPLOYMENT LANDS

Building (sq.m)	Area HA	Employment Area	Area Municipality	Jobs*
268,587	67.80	ALLSTATE EMPLOYMENT AREA	MARKHAM	10,597
25,548	7.23	CACHET EMPLOYMENT AREA	MARKHAM	1,008
67,995	9.30	COCHRANE EMPLOYMENT AREA	MARKHAM	2,683
203,556	27.56	COMMERCE VALLEY/LEITCHCROFT EMPLOYMENT AREA	MARKHAM	8,031
268,123	49.90	DENISON STEELES EMPLOYMENT AREA	MARKHAM	10,579
25,316	4.63	FOURTEENTH AVENUE EMPLOYMENT AREA	MARKHAM	999
135,560	47.56	RISEBROUGH EMPLOYMENT AREA	MARKHAM	5,348
118,994	0.66	TOWN CENTRE EMPLOYMENT AREA	MARKHAM	4,695
2,787	0.66	THORNHILL EMPLOYMENT AREA	MARKHAM	110
1,113,679	214.64	SUMMARY	MARKHAM	44,050
151,140	30.99	BEAVER CREEK EMPLOYMENT AREA	RICHMOND HILL	5,963
4,084	2.39	EDWARD AVENUE EMPLOYMENT AREA	RICHMOND HILL	161
15,569	2.62	HEADFORD EMPLOYMENT AREA	RICHMOND HILL	614
170,792	35.99	SUMMARY	RICHMOND HILL	6,739
21,796	5.42	KEELE EMPLOYMENT AREA	VAUGHAN	860
3,159	0.60	LANGSTAFF EMPLOYMENT AREA	VAUGHAN	125
22,669	5.99	PINE VALLEY EMPLOYMENT AREA	VAUGHAN	894
24,812	6.74	STEELES CAMPUS EMPLOYMENT AREA	VAUGHAN	979
16,047	17.13	STEELES EAST EMPLOYMENT AREA	VAUGHAN	633
40,094	8.06	STEELES WEST EMPLOYMENT AREA	VAUGHAN	1,582
4,088	2.03	TUDOR EAST EMPLOYMENT AREA	VAUGHAN	161
22,337	5.76	VAUGHAN 400 EMPLOYMENT AREA	VAUGHAN	881
20,439	4.52	WESTON 400 EMPLOYMENT AREA	VAUGHAN	806
175,440	56.25	SUMMARY	VAUGHAN	6,922
28,215	4.83	WELLINGTON/404	AURORA	1,054
28,215	4.83	WELLINGTON/404	AURORA	1,054
1,459,912	307	TOTAL	YORK REGION	58,764

Source: York Region Planning and Development Services
* Estimate: Based on a 13.2% vacancy rate and a 22 sq.m/employee conversion rate.

A key factor pushing office development from Toronto into the 905 – particularly places like Markham - has been the heightened real estate focus on residential condo construction, especially in more central parts of City that are well-supported by transit. A number of areas which had traditionally been planned as major office nodes have been, and continue to be, transformed by condo tower developments. Such areas include North York City Centre, Yonge-Eglinton Centre, Etobicoke Centre and Scarborough Town Centre. The same can be said for the Mississauga City Centre, where new condominium towers have single-handedly transformed the City's skyline. Office development has, in effect, been shut out of these areas altogether, despite strong land use policies which fully support high-rise office towers.

Another major driver for why suburban office buildings have gained such rapid market acceptance, in places like Markham has much to do with the changing scope of business activities being carried out by tenants.

Office buildings today encompass more than simply desks jobs. The technology and life sciences sector, for example utilizes office space much differently than, say, an accounting firm or a law practice. In the case of technology firms (a major source of employment in Markham), flexibility and expandability both with respect to buildings and land area, are considered key attributes. Demand has been growing for new types of space often referred to as: *flex space, tech space*, or *hybrid space*, which can easily accommodate varying degrees of manufacturing, laboratory R&D and conventional office functions all within the same building. The environment is easiest to implement in single or two storey buildings on large sites in suburban business parks which is a common approach in the Town, but Markham also has a growing number of examples such as IBM, AMD (formerly ATI) and Lucent Technologies, where low rise (+/- four storeys), larger floor-plate buildings are preferred, and the outward appearance of the building is that of an office building. Diversity in business operations requires diversity in accommodation, reflecting a range of building sizes and forms.

In addition, land use policies are also a major factor that cannot be overlooked. In fact, policy has been, and continues to be, a major market driver contributing to the dispersal of major office employment, particularly to areas outside of Toronto's downtown core.

Designated office nodes such as North York City Centre, Mississauga City Centre and Scarborough City Centre have long been favoured by a variety of regional planning policy measures as a preferred model to achieve compact form and to help improve transit ridership, thus minimize commuting distances.

Using a policy-driven approach, many municipalities have, with varying degrees of success, implemented measures that try to direct office development to specific sites or to desired nodes and/or corridors. A policy driven approach was used, for example, in the 1970's to encourage the development of new office buildings beyond just the downtown core of Toronto. These measures helped to encourage growth in midtown Toronto as well as more suburban locations along the subway such as Islington and Bloor, and Scarborough Town Centre. In many ways the PTGP and York Region Regional Centres and Corridors seek to emulate this policy approach. The PTGP, for example, clearly discusses the importance of achieving major office (and major institutional uses) primarily within the various Urban Growth Centres and secondarily at locations which are proximate to major transit stations.

Figure 7.10, below illustrates the extent to which the suburbanization of office functions began to take shape and accelerate in the 1970s, 1980s and 1990s. Since 1993, suburban office parks have out-paced all other markets in the GTA. During this time, for example, nearly 12 million square feet of new space was added in suburban business ("office") parks compared to only 1 million square feet being added in the downtown/mid town area of Toronto, which has traditionally been the main hub of business activity in Toronto.

FIGURE 7.10 COMMERCIAL OFFICE SPACE FOR THE GTA IN SQ.FT. (1954-2005)

	1954-70	1971-81	1982-92	1993-05	Commercial Space ***	Total sq. ft.
Financial District	10,312,065	10,467,484	10,862,253	555,740	274,712	32,472,254
Midtown Toronto	5,478,480	5,749,853	4,268,660	398,096	470,090	16,365,179
Toronto(outside Financial and Midtown)	10,473,415	4,618,045	11,696,388	1,884,671	1,936,142	30,608,661
Office Parks *	84,400	9,002,252	16,998,104	11,795,032	2,028,016	39,907,804
Office Commercial Subcentres **	196,513	4,116,031	11,201,945	1,118,807	213,084	16,846,380
Dispersed Locations	2,585,728	4,573,186	8,129,192	3,168,591	1,757,355	20,214,052

Note: Class G (government) buildings were not included.
* Airport, Highway 404 and Steeles, Highway 407 and Highway 7, Consumers Road, Don Mills.
** Meadowvale, Highway 427, Heartland centre and Duncan Mills, North York City Centre, Scarborough Town Centre, Etobicoke Six Points and Mississauga City Centre.
*** Additional commercial office space with unknown completion date.

Source: Canadian Urban Institute, Business Competitiveness in the GTA: Why Toronto is Losing Ground(June 2005)

Escalating land costs, increased traffic congestion and high parking rates in addition to ongoing changes in our work-force (i.e. more people engaged in knowledge intensive occupations) are expected to push demand for suburban office development higher in the future. Increasingly, office developments will be the major drivers of employment, and Markham is very well positioned to capture a higher share of this development because of its location and its firmly established-competitive position as a leading centre for business in the GTA.

7.4.2 Industrial Land Development Trends

The big structural change for industrial-based employment land in Toronto over the past decade has been the extent to which warehousing functions have emerged as the single dominant form of new development, and how the "goods movement" sector has quickly become a critical underpinning of the economy.

In the context of Toronto - which is Canada's largest consumer market *and* Canada's largest industrial market - there are two factors that are driving this phenomenon:

- **The Rise of Big Box Retail** – with a greater share of store merchandise flowing in from overseas markets, major retailers have not only transformed the retail landscape, they are now having a significant impact on the size of industrial buildings being constructed throughout the larger urban region. Over the past decade a number of major warehouse buildings (larger than 1 million square feet) have been built to directly support the needs of big box retailers and other large scale retail industry interests, such as supermarkets and department store.

- **The De-coupling of manufacturing and distribution**: Changes in technology and the speed at which supply-chain relationships need to be maintained have helped stimulate a rapidly growing market for *third party logistics providers* or *fulfilment specialists*. Increasingly, many companies, especially manufacturers, and companies engaged in e-commerce are turning toward these types of companies to pick-up, store, manage and re-distribute both finished and semi-finished products to downstream customers. These companies typically rely on very sophisticated tracking and inventory control systems to manage product inventories.

The emergence of identifiable distribution nodes has become increasingly more commonplace across the GTA. New real estate terms such as "distribution parks" and "cargo parks" are now being applied to master-planned developments that are being marketed directly (and in some cases, exclusively) to these types of companies. In most major North American markets, these parks are commonly found in the vicinity of major international airports or in proximity to large intermodal rail terminals, such as CN's facility in Maple. Generally speaking, the western GTA has attracted the highest concentration of new warehousing facilities over the past 20 years. And in turn, the rapid take up of these facilities have helped to accelerate the land absorption rates of certain markets, such as: Mississauga, Brampton, Vaughan, Milton and Burlington. While several warehouse structures larger than one million square feet have been completed over the past decade, the modern proto-typical warehouse facility in the GTA is considered to be somewhere in the order of 200,000 to 350,000 square feet in total size. Assuming a conservative 40 per cent building to lot coverage factor, such a facility would normally require a site ranging somewhere between 5 to 8 hectares. In many cases however, companies opt for even larger sites in order to facilitate future expansion opportunities.

Most Canadian real estate investment professionals expect distribution and wholesale activities to remain the primary drivers of industrial land absorption; and this segment of the market is considered an important source for future tenancies for existing industrial buildings – especially in the wake of a shrinking manufacturing sector in Canada.

Toronto, Montreal, Calgary have proven to be the most active markets for new warehouse development. Despite the continued growth and prevalence of this activity, the Town of Markham, by virtue of its high land value and its relatively tight land supply has not generally been considered for this type of new development activity. Moreover, such uses have and will continue to be concentrated around major transportation hubs such as airports and rail terminals. For these reasons, Markham will not likely experience the same degree of development pressure for such activities.

The majority of Markham's employment sites are occupied by single-storey industrial structures. In newer applications, industrial buildings are also accompanied with corporate/administrative office components located at the front of the buildings. Often the corporate offices attached to these buildings are two to three stories high (e.g. Honda). This type of development is commonly characterized as *prestige-industrial*, and is common-place throughout much of the Business Park Areas of the Town. This pattern of development is expected to be the prevailing format for future *industrial* type growth in Markham.

7.4.3 Major Retail

A common concern for policy and land use planners throughout the Greater Golden Horseshoe has, and continues to be the extent to which large shopping centre and big box outlets (power centres) should be permitted within areas that have been planned for more conventional employment uses, namely those that support industrial and office type functions.

In the case of Markham, most of the recent applications to convert employment land have involved industrially designated lands. These conversions have generally involved sites that are on highly trafficked arterials such as Woodbine, or on sites that are located adjacent to burgeoning residential communities.

The extent to which future conversion pressure will take place in the immediate term remains uncertain (largely because of the prevailing economic downturn), but the Town of Markham should, as a matter of policy, cease the conversion of industrial land for retail uses given the land shortfall that exists for accommodating future ELE and MOE growth. It is our view that Markham can readily accommodate the entirety of its PRE employment growth over the next 23 years on lands currently designated for commercial purposes, including vacant sites along on arterial roads and designated locations in Key Development Areas on Regional Corridors.

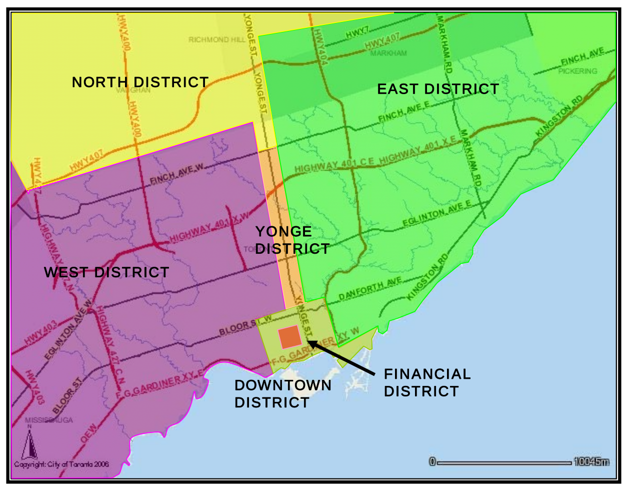
Consideration to approve large, major retail facilities should only be given once it has been determined that all commercially designated sites are exhausted, *and* that local-area market demand patterns dictate a clear and compelling need for new retail and service commercial space to support the economy of Markham. Major retail facilities do not offer the density or variety of retail development that Markham should be pursuing, nor is their primary focus on regional, rather than local markets, preferred.

8. Market Trends for Employment Lands

8.1 Suburban Offices Trends

Given the sheer size the GTA's office market, it is necessary to subdivide the GTA into smaller sub-markets to highlight area-specific trends. While there are no universal boundaries for the GTA sub-markets, most commercial analysts sub-divide the suburban GTA office landscape into three primary markets (note that these boundaries are not demised according to municipal boundaries):

- **GTA East:** Encompassing a wide area, this sub-market stretches from east of the Downtown to north of Hwy 7 in Markham. The office conditions in this sub-market vary greatly by location but are defined in large part by three main nodes: the Hwy. 404-407 node, the Hwy. 401/404 node and Scarborough City Centre. The Hwy 404-407 node (including Markham's Highway 7 corridor and Beaver Creek in Richmond Hill) has enjoyed rapid take-up of office development since the late 1980s, and now has a significant and well recognized profile. Much of the new office development in this area has been fuelled by the "design-build" corporate office segment of the marketplace, whereby a single company occupies an entire building. While the Hwy. 404-407 node has been extremely active in terms of new construction, neither the Hwy. 401-404 node, nor the Scarborough City Centre have seen any meaningful inventory expansions over the past 15 years.



- **GTA North:** Comprised of Vaughan, Aurora, Newmarket and a portion of Richmond Hill.[15] This district has the lowest office space inventory of all of the GTA sub-markets. Over the past decade this market has experienced some growth with the addition of the global head office of Magna International and the national headquarters for State Farm Insurance Canada. However, this market continues to occupy a small fraction of the total

[15] Richmond Hill area excludes the Hwy. 404-407 node

share of office in the GTA, with less than 6 per cent of the total market. The plan to extend the Spadina Subway into the City of Vaughan is anticipated to trigger office development that could reach a total of 3.9 million square feet by 2036[16].

- **GTA West:** This geographically large sub-market incorporates the area west of Downtown. Included in this area are the former municipality of Etobicoke and the municipalities of Mississauga, Brampton, Milton, Burlington and Oakville. Office growth in this area has been led, in large part by Mississauga, which has benefited from its proximity to Lester B. Pearson Airport, an extensive network of highway infrastructure, a competitive municipal tax structure, and early comprehensive planning for the Mississauga City Centre district. Together, these factors have resonated with commercial, as well as, industrial business interests. The GTA West office market comprises approximately 33 per cent of all office space in the GTA market. Healthy vacancy and rental rates have also helped to sustain growth in new construction. There is currently 1.5 million square feet of office space under construction in the GTA West, representing approximately 28 per cent of all new space being built across all sub-markets.[17]

Between 1986 and 2003, the number of corporate head offices located in the City of Toronto (as measured by the *Financial Post Top-500*) fell from 171 to 136, while at the same time the number of head offices in the suburban 905-region rose from 32 to 62, many of which are in Markham or Mississauga.

The GTA's suburban office market includes well-established nodes such as the Airport Corporate Centre (11 million square feet), North York City Centre (9 million square feet), Scarborough Town Centre (5 million square feet) and growing nodes such as Burlington (3 million square feet), Brampton (2 million square feet) and the Highway 404 and 407 node (9 million square feet) located in the Town of Richmond Hill and the Town of Markham.

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[16] In 2006, urbanMetrics provided York Region with an analysis of the development potential adjacent to three proposed stations on the portion of the Spadina Subway that would extend into York Region. The market forecasts suggest that the subway would stimulate the formation of a regional office sub-market ranging between 3.5 and 4.0 million square feet of space by 2036. This is significantly higher than the estimated 1.4 million square feet that would be anticipated in the absence of a subway in Vaughan.

[17] GTA West commercial office space construction as a percentage of total GTA commercial office space construction would have been significantly higher had the three prominent office projects in the Downtown and Financial Core sub-markets not been announced in 2006.

8.2 Markham's Office Market

Over the past two decades, Markham has become one of the most attractive locations for business in the GTA. Today, it is one of only a few high-profile locations where substantial new office construction continues to be taking place. Markham has established itself as a signature business location in Canada. The current roster of businesses operating in the Town includes a number of international companies, including IBM, AMD, Apple, Motorola and Nike. Many of Markham's companies are engaged in high-tech, product innovation and design and knowledge-intensive business activities, including financial, engineering and consulting services.

At the present time the vast majority of large office buildings in Markham are clustered around the Highways 404/7/407 interchange. Overall this node (a portion of which is actually in Richmond Hill), contains some 9 million square feet of office and technology space. Over the past year, the overall vacancy rate in this node declined from 7.9% to 6.9%. The current rate is marginally higher than the overall rate for the GTA, but is still well below the larger GTA East market of which it is an integral part. [18]

There are approximately 40 Class A office buildings within the Highway 404/407 node, with a cumulative square footage of 4.2 million square feet. Although office development in Markham was began at the same time as North York City Centre (in the 1980's), office growth in Markham has continued forward at a strong pace, whereas office development in North York has largely stagnated, and the centre has taken on a decidedly more residential orientation.

There are a number of designated areas in Markham that permit office uses as-of-right, including many with no limitations on building size or height. While this has obvious advantages from a land use and density perspective, there are certain downsides to such a policy framework. Most notably, these broad-based policy permissions might potentially diminish the speed at which the Town of Markham can achieve a higher concentration of office growth - particularly in strategic places such as Markham Centre. Some policies may need to be developed or refined to stimulate greater and faster office take-up in Markham Centre. In this regard, the Town of Markham is now considering reduced on-site parking standards and the possible development of publicly-accessible, shared parking structures as a means of attracting additional office construction, and the achievement of greater building densities, nearing or exceeding 1 times coverage (1.0 FAR).

[18] Cushman & Wakefield LePage, 4th Quarter Toronto Office Report.

8.3 Industrial Market Trends

In a recent *Industrial Market Report,* Colliers International, one of the Canada's leading real estate brokerage firms suggested, "the industrial class of property has become increasingly connected with the movement of goods into and around the region, as opposed to the manufacturing of goods. This shift has insulated Toronto's industrial market from the severity of declines seen [elsewhere] in the manufacturing sector.[19]"

The shift towards low density, space expansive industrial development required for logistics and warehousing operations has significant implications for the achievement of density targets in terms of the number of jobs to be expected on a per hectare basis.

Although job losses in manufacturing have been significant over the past five years, there does appear to be some bright spots within the sector, especially as they related to emerging fields. Manufacturing in Canada has seen developments in several niche technology areas such as: nanotechnology, advanced materials, micro-electrical systems, robotics, semiconductors, and energy and environment. In the future, growth in the manufacturing sector is expected to be more closely focused on four broad types of activities[20]:

- Design and engineering work;
- Fabrication of higher value-added, knowledge-intensive goods;
- Fabrication of goods that are not easily/economically shipped long distances; and
- Fabrication of semi-processed, resource-based goods exported for further processing in low-cost jurisdictions such as China.

Markham's industrial base is in fact very well positioned to meet these changes in the manufacturing sector.

19 Colliers International, Greater Toronto Area Industrial Market Report & Forecast, Fall 2008

20 BMO Industry Update: Manufacturing in Canada - Longer-Term Prospects in a Challenging Environment, February 2007

9. Markham Employment Forecasts

In this section we briefly review the long term employment projections for the Town of Markham prepared by York Region in late 2008 and early 2009. These projections form the basis of our analysis of future employment land needs in Markham. The long term forecasts prepared by York Region are intended to be the policy forecasts that Markham must adopt for its own planning purposes. Markham is moving forward with its own Official Plan update. This update must conform to York Region's new Official Plan.

The forecasts contained in this section are based on 5-year increments and consider the 2031 time frame mandated by the Provincial Growth Plan. Our analysis also takes into consideration a longer-term, 2051 time horizon, in order to ensure that all land-use decisions reflect the need to achieve balanced and complete communities for generations to come. The decisions that we make today, will influence the way we provide services in the future. As such, it is critically important that Markham establishes a coherent foundation for sustained economic growth, and that its employment areas are not threatened, weakened or compromised by other important uses which will also need to be accommodated.

9.1 Markham Employment Forecast (York Region)

Based on the most up-to-date planning forecasts provided by the Region, the Town of Markham will need to accommodate an additional 103,700 jobs between 2006 and 2031, plus an additional 64,200 jobs by 2051. This corresponds to an average annual growth rate of 2.6%.

Figure 9.1 Markham Employment Forecast (York Region forecast)

	Activity Rate	Employment	Share of Region	Growth
2006	53%	144,800	31%	21,900
2011	61%	178,200	31%	33,400
2016	64%	206,300	31%	28,100
2021	64%	226,800	31%	20,500
2026	62%	238,000	31%	11,200
2031	61%	248,500	31%	10,500
2036	59%	268,500	31%	20,000
2041	60%	288,400	32%	19,900
2046	61%	301,500	32%	13,100
2051	61%	312,700	32%	11,200

Source: York Region, June 2008

Land use planning now relies on three broad employment categories for planning purposes.

York Region's has established the following employment forecasts for PRE, MOE and ELE jobs. These are summarized in Figure 9.2 below.

TABLE 9.2 EMPLOYMENT FORECAST IN MARKHAM 2006-2051

	Population-Related Employment (PRE)		Major Office Employment (MOE)		Employment Land Employment (ELE)		
	Employees	% share	Employees	% share	Employees	% share	Total
2006	47,500	33%	47,400	33%	49,900	34%	144,800
2011	54,600	31%	61,550	35%	62,050	35%	178,200
2016	61,600	30%	73,000	35%	71,700	35%	206,300
2021	67,500	30%	80,600	36%	78,700	35%	226,800
2026	70,500	30%	84,700	36%	82,800	35%	238,000
2031	73,300	29%	88,700	36%	86,500	35%	248,500
2036	78,300	29%	95,700	36%	94,500	35%	268,500
2041	83,700	29%	103,600	36%	101,100	35%	288,400
2046	87,300	29%	110,000	36%	104,200	35%	301,500
2051	89,700	29%	115,600	37%	107,400	34%	312,700

Source: York Region, June 2008

10. Industrial Land Forecasts (ELE, MOE, PRE)

Given the long-range time frames used for employment land forecasting (i.e. 20+ years), the risk of a critical shortage of employment land in most municipalities is relatively low since municipalities are required to undertake five year OP reviews which normally require a thorough review of land supply conditions. These reviews provide municipalities with appropriate opportunities to make systematic corrections or adjustments to the land supply in order to avoid land deficits which may materialize in future years.

The analysis prepared in this section utilizes the employment growth forecasts now adopted by York Region as part of its own Official Plan update. These forecasts are applied to the designated industrial land supply within the Town, as a means to determine whether the municipality's existing lands are capable of supporting the full scale of job growth anticipated over the long term.

This section deals specifically with Markham's industrial land base, and its physical capacity to accommodate the allocated employment growth over the planning horizon, including:

- all of the regionally allocated ELE jobs (100%),
- a moderate-to-significant amount of regionally allocated MOE jobs (50% to 90%) , and
- a small but stable share of the regionally allocated PRE jobs (15% excluding work at home).

10.1 Methodology

The current Provincially-accepted approach to forecasting industrial land needs was developed nearly 15 years ago. In 1995, as part of the Planning Act review, the Province published a document entitled, *Projection Methodology Guideline: A Guide to Projecting Population, Housing Need, Employment and Related Land Requirements*. This document was intended to be used as a guideline to assist in the preparation of municipal level population and employment forecasts for land use planning purposes.

It is our perspective that there is no one 'best' methodology that can be applied universally in each and every municipality. Pending further guidance on forecasting methodologies from the Province, however, the current starting point for the approach remains the 1995 Guideline. The employment categories set out in that document have been employed as the basis for the forecasts developed in this section and include: ELE, MOE and PRE. These are the same categories of employment identified in the Growth Plan, and have been discussed at length elsewhere in this report.

The Regional Planning Commissioners of Ontario (RPCO) have recommended that planning land requirements for employment land should be based on a long term horizon, and that addressing only the 2031 time frame could potentially preclude opportunities for managing lands wisely and efficiently beyond this horizon. As a result, 2051 has been cited as a longer term horizon and the Region's forecasts have been prepared to reflect this commitment toward a longer term perspective. We understand that York Region will be moving toward the protection of employment land for the period from 2031 to 2051. Accordingly, the analysis prepared in this section also includes assumptions to determine the scale of industrial land requirements in Markham out to that end date.

10.2 Employment Land Needs Analysis

Our analysis of land need (or demand) is predicated on the employment forecasts prepared by York Region and the designated industrial land supply which are now available within the current settlement area of Markham. The land supply includes all lands that are designated for industrial purposes (covering BPA, BCA and GIA designations).

The following subheadings explain the underlying rationale and assumptions used to drive our long range forecasts of industrial land need for the Town of Markham.

10.2.1 Work at Home

For forecasting purposes, work at home employment is embedded within the PRE category. These jobs are entirely directed to residential areas of Markham. For industrial and commercial forecasting purposes, the work at home segment of the labour market is projected outwards on the basis of a stabilized 7% of total employment. These employees (jobs) are subsequently *excluded* from future land need calculations.

10.2.2 Job Density

While employment areas may intensify over time, recent evidence in suburban markets across the province suggest that overall employment densities on industrial lands are actually dropping. In fact, the supporting background work relating to employment lands analysis prepared by the Province, entitled, *Planning for Employment in the Greater Golden Horseshoe*, suggests that employment densities in manufacturing are expected to decline as automation practices and outsourcing of certain business functions become more prevalent. In Markham, manufacturing employment accounts for roughly one third of the total ELE. The rapid expansion of large warehouse and distribution facilities across the province is also having a significant impact on employment densities.

The Growth Plan has established a density target for future greenfield development. These are set at 50 employees per gross hectare gross - or 58 employees per net hectare - assuming a conversion of gross to net of 85%.

The employment densities laid out in the Growth Plan are entirely consistent with those already being achieved in Markham.

Markham's ELE density as of 2006 is 58 jobs per net hectare compared to 50 jobs net per hectare for the Region as a whole. The 2008 estimate has been calculated at closer to 65 employees per net hectare. For forecasting purpose, however, we have utilized what we believe to be a "best in class" estimate of **60 jobs per net hectare**, recognizing that: (a) Markham has become, and will remain a strong business environment, and (b) above average land prices will continue to dictate that land users will maximize their operations in Markham to the fullest extent possible.

In terms of major office space, we support the notion that Markham can and will continue to achieve greater efficiencies over time. On this basis, we suggest that Markham will yield significantly higher employment densities on lands that are built out with major office buildings. In this regard we have established a density target at **285 employees per net hectare by 2031**. In developing our forecast targets we have assumed that office buildings would generally achieve a coverage factor in the order of 0.8 FAR (e.g. a 1 hectare site at 0.8 FAR, would support, on average, 8,000 square metres of GFA), and that there would be 1 employee for every 28 square metres of GFA (e.g. 8,000 square metres GFA / 28 square metres per employee = 285 employees per net hectare).

In recognition that PRE occupies an important economic function within Markham's industrial areas, we have assumed that PRE within such areas will achieve a density level that supports, on average about **90 jobs per net hectare**. This density assumes built forms between 0.35 and 0.40 FAR, and that there would be 1 employee for every 42 square metres of GFA.

On a combined ELE/MOE/PRE, Markham's industrial areas are expected to sustain total density levels in the order of 90 to 95 employees per net hectare.

10.2.3 Share of Major Office Employment on Industrial Land

The present time, virtually all of Markham's MOE jobs are actually located on industrial designated lands, principally within the *business park* area designation. Current land uses policies at the provincial and the regional level seek to direct MOE to nodes served by high order transit stations such as those in the newly defined Urban Growth Centres (UGC) (e.g. Markham Centre, Langstaff Gateway) or along key transit corridors such as Highway 7 and Yonge Street, commonly referred to as Key Development Areas (KDAs).

Markham is ambitiously moving forward with its growth management strategy to integrate and maximize the amount of Major Office development to be achieved within these areas.

For forecasting purposes, we recognize that Markham's ability to redirect all of the MOE growth to the UGCs and KDAs such as those along Highway 7 and Yonge Street is somewhat unrealistic, and in fact, would not be in the best interests of the Town's economic base.

Today, about 90% of the 53,060 MOE jobs in Markham are situated on industrially designated lands (principally in the Allstate and Commerce Valley areas). This represents 47,750 jobs. The remaining 10% of MOE jobs are largely attributed to three large enterprises (IBM, Hopewell and Motorola) - all of which are located on lands within Markham Centre (or Downtown Markham), which are broadly designated as Community Amenity Area.

Between 2008 and 2031, the total number of MOE jobs in Markham is forecast to grow by 35,640 new office jobs, representing the single largest category of growth. On a go forward basis, we fully recognize that Markham's efforts to intensify and concentrate office development within Markham Centre -- in addition to key sites along major transit corridors, such as Highway 7 and Yonge Street, can and will be achieved – albeit with varying degrees of success.

To this end, we have modeled *three* different development scenarios which all recognize that Markham's MOE job growth will stimulate the need for nearly 1.0 million square metres (10.7 million square feet) of new office space over the next 23 years.

- **Scenario 1:** Assumes that 85% of all new MOE jobs between 2008 and 2031 will be located in MC and other KDAs. At this rate, Markham's industrial business park areas (BPAs) would support 60% of the total office jobs in 2031;

- **Scenario 2:** Assumes that nearly half (or 47%) of all new MOE jobs between 2008 and 2031 are located in MC and other KDAs. At this rate, Markham's BPAs would still support 75% of the total office jobs in 2031; and

- **Scenario 3:** Assumes that 10% of all new MOE jobs between 2008 and 2031 are located in MC and other KDAs. At this rate the *status quo* will prevail with Markham's BPAs continuing to support 90% of all MOE jobs in 2031.

The results of our MOE share analysis are summarized in the Figure 11.0 below:

TABLE 11.0 – GROWTH SCENARIOS OPTIONS FOR MAJOR OFFICE EMPLOYMENT AND SPACE IN MARKHAM, 2008-2031

	2008		2031		GROWTH		ADDITIONAL GFA REQUIRED	
TOTAL MOE JOBS IN MARKHAM	**53,060**	**jobs**	**88,700**	**jobs**	**35,640**	**jobs**	SM /job @ 28	SF/job @ 300
Scenario 1: Markham Centre/KDAs becomes a Major Success								
MOE Jobs							Square Metres	Square Feet
Inside MC/KDA	5,306	10%	35,480	40%	30,174	85%	845,000	9,052,000
INDUSTRIAL LANDS (Outside MC/KDA)	47,754	90%	53,220	60%	5,466	15%	153,000	1,640,000
Total	53,060	100%	88,700	100%	35,640	100%	998,000	10,692,000
Scenario 2: Markham Centre /KDAs Successfully Achieves a Balanced amount of MOE Job Growth								
MOE Jobs								
Inside MC/KDA	5,306	10%	22,175	25%	16,869	47%	472,000	5,061,000
INDUSTRIAL LANDS (Outside MC/KDA)	47,754	90%	66,525	75%	18,771	53%	526,000	5,631,000
Total	53,060	100%	88,700	100%	35,640	100%	998,000	10,692,000
Scenario 3: Markham Centre/ KDAs Build out as a Predominately Residential Nodes								
MOE Jobs								
Inside MC/KDA	5,306	10%	8,870	10%	3,564	10%	100,000	1,069,000
INDUSTRIAL LANDS (Outside MC/KDA)	47,754	90%	79,830	90%	32,076	90%	898,000	9,623,000
Total	53,060	100%	88,700	100%	35,640	100%	998,000	10,692,000

Source: urbanMetrics

10.2.4 Share of Population Related Employment on Industrial Lands

Recognizing that certain PRE businesses have specific land, building and/or economic requirements that can't be realized in more conventional commercial or institutional areas; and that the day-to-day needs of workers within industrial areas also need to be met with convenient PRE uses (such as restaurants, banks, etc.), we have conservatively allocated 15% of Markham's PRE job base (net of work at home) to the Town's industrial employment lands.

Over the 2008 to 2031 period a 15% share yields about 2,330 new PRE jobs. These uses will need to be accommodated within the BCA, GIA and BPA designations. Further analysis and discussion of these jobs is provided in the following section of this report (Section 11).

10.2.5 Market Contingency

For long range forecasting purposes, our customary approach is to assign a market contingency for industrial land in the order of 10 to 25%.

A market contingency is an adjustment factor that is applied as a planning *safeguard*, to ensure that a certain proportion of land should remain vacant – at all times - to provide the business and investment community with a healthy range of land development options at a variety of locations and price points to sustain on-going industrial development. Another practical benefit of using a market contingency adjustment is that it provides a certain degree of flexibility for a municipality, especially when confronted with unanticipated opportunities for economic development (i.e. a major new manufacturing plant or a new post-secondary educational campus that has above average land requirements). While the application of a market contingency is

FIGURE 10.1

SCENARIO 1: LOWER DEVELOPMENT PRESSURE ON EMPLOYMENT LANDS

MARKHAM CENTRE & KEY DEVELOPMENT AREAS BECOME HIGH DENSITY OFFICE NODE (9 million square feet by 2031)

LONG TERM INDUSTRIAL EMPLOYMENT LAND REQUIREMENTS - Town of Markham

		Baseline		Forecast								
		2006	2008	2011	2016	2021	2026	2031	2036	2041	2046	2051
Population (live in Markham)		**272,500**	**284,900**	**303,500**	**337,800**	**370,500**	**399,100**	**423,500**	**453,500**	**479,500**	**496,400**	**508,900**
Incremental Growth			12,400	18,600	34,300	32,700	28,600	24,400	30,000	26,000	16,900	12,500
Annual Growth Rate			2.3%	2.2%	2.3%	1.9%	1.5%	1.2%	1.4%	1.1%	0.7%	0.5%
Activity Rate		53%	56%	59%	61%	61%	60%	59%	59%	60%	61%	61%
Employment (Jobs in Markham)		**144,800**	**158,160**	**178,200**	**206,300**	**226,800**	**238,000**	**248,500**	**268,500**	**288,400**	**301,500**	**312,700**
Employment Land Employment		49,900	54,760	62,050	71,700	78,700	82,800	86,500	94,500	101,100	104,200	107,400
	Share	*34.5%*	*34.6%*	*34.8%*	*34.8%*	*34.7%*	*34.8%*	*34.8%*	*35.2%*	*35.1%*	*34.6%*	*34.3%*
Major Office Employment		47,400	53,060	61,550	73,000	80,600	84,700	88,700	95,700	103,600	110,000	115,600
	Share	*32.7%*	*33.5%*	*34.5%*	*35.4%*	*35.5%*	*35.6%*	*35.7%*	*35.6%*	*35.9%*	*36.5%*	*37.0%*
Population-Related Employment		47,500	50,340	54,600	61,600	67,500	70,500	73,300	78,300	83,700	87,300	89,700
	Share	*32.8%*	*31.8%*	*30.6%*	*29.9%*	*29.8%*	*29.6%*	*29.5%*	*29.2%*	*29.0%*	*29.0%*	*28.7%*
Minus: Work at Home (PRE)		11,000	11,900	12,500	14,400	15,900	16,700	17,400	18,800	20,200	21,100	21,900
	Share	*7.6%*	*7.5%*	*7.0%*	*7.0%*	*7.0%*	*7.0%*	*7.0%*	*7%*	*7%*	*7%*	*7%*
Minus: Employment in Residential Areas (PRE)		4,038	4,279	4,641	5,236	5,738	5,993	6,231	6,656	7,115	7,421	7,625
	Share	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*
Employment Requiring Non-Residential Land		**133,800**	**146,260**	**165,700**	**191,900**	**210,900**	**221,300**	**231,100**	**249,700**	**268,200**	**280,400**	**290,800**
ELE		49,900	54,760	62,050	71,700	78,700	82,800	86,500	94,500	101,100	104,200	107,400
MOE		47,400	53,060	61,550	73,000	80,600	84,700	88,700	95,700	103,600	110,000	115,600
PRE		32,460	34,160	37,460	41,960	45,860	47,810	49,670	52,840	56,390	58,780	60,180
Employment Land Requirement												
ELE share in BPA/BCA/GIA	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
ELE jobs in BPA/BCA/GIA		49,900	54,760	62,050	71,700	78,700	82,800	86,500	94,500	101,100	104,200	107,400
ELE Job Density (employees per net hectare)		58	65	60	60	60	60	60	65	65	65	65
Land Required (net ha) @ 58 eph, increasing to 60 eph by 2031 and 65 eph by 2051.		860	842	1,034	1,195	1,312	1,380	1,442	1,454	1,555	1,603	1,652
MOE share in BPA/BCA/GIA	90% falling to 65% in 2051	90%	90%	80%	75%	70%	65%	60%	65%	65%	65%	65%
MOE jobs in BP/BC/GI		42,552	47,754	49,240	54,750	56,420	55,055	53,220	62,205	67,340	71,500	75,140
MOE Job Density (employees per net hectare)		275	280	280	285	285	285	285	290	290	295	300
Land Required (net ha) @ 280eph, increasng to 285 by 2031 and 300 by 2051		155	171	176	192	198	193	187	215	232	242	250
PRE share in BPA/BCA/GIA	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
PRE jobs in BPA/BCA/GIA		4,869	5,124	5,619	6,294	6,879	7,172	7,451	7,926	8,459	8,817	9,027
PRE Job Density (employees per net hectare)		90	90	90	90	90	90	90	90	90	90	90
Land Required (net ha) @ 90 eph		54	57	62	70	76	80	83	88	94	98	100
Total Jobs on Employment Land (ELE+MOE+PRE)	*Rounded to Nearest 100*	**97,300**	**107,600**	**116,900**	**132,700**	**142,000**	**145,000**	**147,200**	**164,600**	**176,900**	**184,500**	**191,600**
Density Yields (employees per net hectare) - calculated			*103*	*92*	*91*	*90*	*88*	*86*	*94*	*94*	*95*	*96*
Sub-Total Employment Land Required (ELE+MOE+PRE)			**1,040**	**1,272**	**1,457**	**1,586**	**1,653**	**1,711**	**1,756**	**1,882**	**1,943**	**2,003**
plus: Market Contingency (Land Vacancy Safeguard)	7.5%		78	95	109	119	124	128	176	188	194	200
TOTAL EMPLOYMENT LAND REQUIRED (net ha)			**1,118**	**1,368**	**1,566**	**1,705**	**1,777**	**1,840**	**1,932**	**2,070**	**2,138**	**2,203**
CUMULATIVE LAND REQUIRED (net ha)				**250**	**448**	**587**	**659**	**722**	**814**	**952**	**1,020**	**1,085**
Employment Land Supply 2008												
Occupied Employment Lands (net hectares)			**1,040**									
Vacant Employment Lands (net hectares)			**485**									
Total Employment Lands (net hectares)			**1,525**									
EMPLOYMENT LAND SURPLUS (SHORTFALL) - NET HECTARES				**157**	**(41)**	**(180)**	**(252)**	**(315)**	**(407)**	**(545)**	**(613)**	**(678)**
EMPLOYMENT LAND SUPLUS (SHORTFALL) - GROSS HECTARES (@ 1.25 NET to GROSS FACTOR)				**196**	**(52)**	**(225)**	**(315)**	**(393)**	**(509)**	**(681)**	**(766)**	**(848)**

Shortfall

Source: urbanMetrics inc.

FIGURE 10.2

SCENARIO 2: REFERENCE FORECAST

MARKHAM CENTRE & KEY DEVELOPMENT AREAS YEILD HEALTHY/BALANCED OFFICE TAKE-UP (5 million square feet office by 2031)

LONG TERM INDUSTRIAL EMPLOYMENT LAND REQUIREMENTS - Town of Markham

		Baseline		Forecast								
		2006	2008	2011	2016	2021	2026	2031	2036	2041	2046	2051
Population (live in Markham)		272,500	284,900	303,500	337,800	370,500	399,100	423,500	453,500	479,500	496,400	508,900
Incremental Growth			12,400	18,600	34,300	32,700	28,600	24,400	30,000	26,000	16,900	12,500
Annual Growth Rate			2.3%	2.2%	2.3%	1.9%	1.5%	1.2%	1.4%	1.1%	0.7%	0.5%
Activity Rate		53%	56%	59%	61%	61%	60%	59%	59%	60%	61%	61%
Employment (Jobs in Markham)		144,800	158,160	178,200	206,300	226,800	238,000	248,500	268,500	288,400	301,500	312,700
Employment Land Employment		49,900	54,760	62,050	71,700	78,700	82,800	86,500	94,500	101,100	104,200	107,400
	Share	*34.5%*	*34.6%*	*34.8%*	*34.8%*	*34.7%*	*34.8%*	*34.8%*	*35.2%*	*35.1%*	*34.6%*	*34.3%*
Major Office Employment		47,400	53,060	61,550	73,000	80,600	84,700	88,700	95,700	103,600	110,000	115,600
	Share	*32.7%*	*33.5%*	*34.5%*	*35.4%*	*35.5%*	*35.6%*	*35.7%*	*35.6%*	*35.9%*	*36.5%*	*37.0%*
Population-Related Employment		47,500	50,340	54,600	61,600	67,500	70,500	73,300	78,300	83,700	87,300	89,700
	Share	*32.8%*	*31.8%*	*30.6%*	*29.9%*	*29.8%*	*29.6%*	*29.5%*	*29.2%*	*29.0%*	*29.0%*	*28.7%*
Minus: Work at Home (PRE)		11,000	11,900	12,500	14,400	15,900	16,700	17,400	18,800	20,200	21,100	21,900
	Share	*7.6%*	*7.5%*	*7.0%*	*7.0%*	*7.0%*	*7.0%*	*7.0%*	*7%*	*7%*	*7%*	*7%*
Minus: Employment in Residential Areas (PRE)		4,038	4,279	4,641	5,236	5,738	5,993	6,231	6,656	7,115	7,421	7,625
	Share	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*
Employment Requiring Non-Residential Land		133,800	146,260	165,700	191,900	210,900	221,300	231,100	249,700	268,200	280,400	290,800
ELE		49,900	54,760	62,050	71,700	78,700	82,800	86,500	94,500	101,100	104,200	107,400
MOE		47,400	53,060	61,550	73,000	80,600	84,700	88,700	95,700	103,600	110,000	115,600
PRE		32,460	34,160	37,460	41,960	45,860	47,810	49,670	52,840	56,390	58,780	60,180
Employment Land Requirement												
ELE share in BPA/BCA/GIA	100% - Stable	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
ELE jobs in BPA/BCA/GIA		49,900	54,760	62,050	71,700	78,700	82,800	86,500	94,500	101,100	104,200	107,400
ELE Job Density (employees per net hectare)		58	65	60	60	60	60	60	65	65	65	65
Land Required (net ha)		860	842	1,034	1,195	1,312	1,380	1,442	1,454	1,555	1,603	1,652
MOE share in BPA/BCA/GIA	90% falling to 65% in 2051	90%	90%	90%	85%	77.5%	75%	75%	70%	70%	65%	65%
MOE jobs in BP/BC/GI		42,552	47,754	55,395	62,050	62,465	63,525	66,525	66,990	72,520	71,500	75,140
MOE Job Density (employees per net hectare)		260	280	280	285	285	285	285	290	290	295	300
Land Required (net ha)		164	171	198	218	219	223	233	231	250	242	250
PRE share in BPA/BCA/GIA	15% - Stable	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
PRE jobs in BPA/BCA/GIA		4,869	5,124	5,619	6,294	6,879	7,172	7,451	7,926	8,459	8,817	9,027
PRE Job Density (employees per net hectare)		90	90	90	90	90	90	90	90	90	90	90
Land Required (net ha)		54	57	62	70	76	80	83	88	94	98	100
Total Jobs on Employment Land (ELE+MOE+PRE)	*Rounded to Nearest 100*	97,300	107,600	123,100	140,000	148,000	153,500	160,500	169,400	182,100	184,500	191,600
Density Yields (employees per net hectare) - calculated			*103*	*95*	*94*	*92*	*91*	*91*	*96*	*96*	*95*	*96*
Sub-Total Employment Land Required (ELE+MOE+PRE)			1,040	1,294	1,483	1,607	1,683	1,758	1,773	1,899	1,943	2,003
plus: Market Contingency (Land Vacancy Safeguard)	7.5%		78	97	111	121	126	132	177	190	194	200
TOTAL EMPLOYMENT LAND REQUIRED (net ha)			1,118	1,392	1,594	1,728	1,809	1,890	1,950	2,089	2,138	2,203
CUMULATIVE LAND REQUIRED (net ha)				274	476	610	691	772	832	971	1,020	1,085
Employment Land Supply 2008												
Occupied Employment Lands (net hectares)			1,040									
Vacant Employment Lands (net hectares)			485									
Total Employment Lands (net hectares)			1,525									
EMPLOYMENT LAND SURPLUS (SHORTFALL) - NET HECTARES				133	(69)	(203)	(284)	(365)	(425)	(564)	(613)	(678)
EMPLOYMENT LAND SUPLUS (SHORTFALL) - GROSS HECTARES (@ 1.25 NET to GROSS FACTOR)				167	(86)	(254)	(355)	(456)	(531)	(705)	(766)	(848)

Shortfall

Source: urbanMetrics inc.

urbanMetrics inc. market, economic and strategic advisors

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FIGURE 10.3

SCENARIO 3: HIGHER DEVELOPMENT PRESSURE ON EMPLOYMENT LANDS

MARKHAM CENTRE & KEY DEVELOPMENT AREAS BUILD OUT WITH PREDOMINATELY RESIDENTIAL USES (1 million square feet office)

LONG TERM INDUSTRIAL EMPLOYMENT LAND REQUIREMENTS - Town of Markham

		Baseline		Forecast								
		2006	2008	2011	2016	2021	2026	2031	2036	2041	2046	2051
Population (live in Markham)		**272,500**	**284,900**	**303,500**	**337,800**	**370,500**	**399,100**	**423,500**	**453,500**	**479,500**	**496,400**	**508,900**
Incremental Growth			12,400	18,600	34,300	32,700	28,600	24,400	30,000	26,000	16,900	12,500
Annual Growth Rate			2.3%	2.2%	2.3%	1.9%	1.5%	1.2%	1.4%	1.1%	0.7%	0.5%
Activity Rate		53%	56%	59%	61%	61%	60%	59%	59%	60%	61%	61%
Employment (Jobs in Markham)		**144,800**	**158,160**	**178,200**	**206,300**	**226,800**	**238,000**	**248,500**	**268,500**	**288,400**	**301,500**	**312,700**
Employment Land Employment		49,900	54,760	62,050	71,700	78,700	82,800	86,500	94,500	101,100	104,200	107,400
	Share	*34.5%*	*34.6%*	*34.8%*	*34.8%*	*34.7%*	*34.8%*	*34.8%*	*35.2%*	*35.1%*	*34.6%*	*34.3%*
Major Office Employment		47,400	53,060	61,550	73,000	80,600	84,700	88,700	95,700	103,600	110,000	115,600
	Share	*32.7%*	*33.5%*	*34.5%*	*35.4%*	*35.5%*	*35.6%*	*35.7%*	*35.6%*	*35.9%*	*36.5%*	*37.0%*
Population-Related Employment		47,500	50,340	54,600	61,600	67,500	70,500	73,300	78,300	83,700	87,300	89,700
	Share	*32.8%*	*31.8%*	*30.6%*	*29.9%*	*29.8%*	*29.6%*	*29.5%*	*29.2%*	*29.0%*	*29.0%*	*28.7%*
Minus: Work at Home (PRE)		11,000	11,900	12,500	14,400	15,900	16,700	17,400	18,800	20,200	21,100	21,900
	Share	*7.6%*	*7.5%*	*7.0%*	*7.0%*	*7.0%*	*7.0%*	*7.0%*	*7%*	*7%*	*7%*	*7%*
Minus: Employment in Residential Areas (PRE)		4,038	4,279	4,641	5,236	5,738	5,993	6,231	6,656	7,115	7,421	7,625
	Share	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*
Employment Requiring Non-Residential Land		**133,800**	**146,260**	**165,700**	**191,900**	**210,900**	**221,300**	**231,100**	**249,700**	**268,200**	**280,400**	**290,800**
ELE		49,900	54,760	62,050	71,700	78,700	82,800	86,500	94,500	101,100	104,200	107,400
MOE		47,400	53,060	61,550	73,000	80,600	84,700	88,700	95,700	103,600	110,000	115,600
PRE		32,460	34,160	37,460	41,960	45,860	47,810	49,670	52,840	56,390	58,780	60,180
Employment Land Requirement												
ELE share in BPA/BCA/GIA	100% - Stable	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
ELE jobs in BPA/BCA/GIA		49,900	54,760	62,050	71,700	78,700	82,800	86,500	94,500	101,100	104,200	107,400
ELE Job Density (employees per net hectare)		58	65	60	60	60	60	60	65	65	65	65
Land Required (net ha)		860	842	1,034	1,195	1,312	1,380	1,442	1,454	1,555	1,603	1,652
MOE share in BPA/BCA/GIA	90% Stable	90%	90%	90%	90%	90.0%	90%	90%	90%	90%	90%	90%
MOE jobs in BP/BC/GI		42,552	47,754	55,395	65,700	72,540	76,230	79,830	86,130	93,240	99,000	104,040
MOE Job Density (employees per net hectare)		275	280	280	285	285	285	285	290	290	295	300
Land Required (net ha)		155	171	198	231	255	267	280	297	322	336	347
PRE share in BPA/BCA/GIA	15% - Stable	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
PRE jobs in BPA/BCA/GIA		4,869	5,124	5,619	6,294	6,879	7,172	7,451	7,926	8,459	8,817	9,027
PRE Job Density (employees per net hectare)		90	90	90	90	90	90	90	90	90	90	90
Land Required (net ha)		54	57	62	70	76	80	83	88	94	98	100
Total Jobs on Employment Land (ELE+MOE+PRE)	*Rounded to Nearest 100*	**97,300**	**107,600**	**123,100**	**143,700**	**158,100**	**166,200**	**173,800**	**188,600**	**202,800**	**212,000**	**220,500**
Density Yields (employees per net hectare) - calculated			*103*	*95*	*96*	*96*	*96*	*96*	*103*	*103*	*104*	*105*
Sub-Total Employment Land Required (ELE+MOE+PRE)			**1,040**	**1,294**	**1,495**	**1,643**	**1,727**	**1,805**	**1,839**	**1,971**	**2,037**	**2,099**
plus: Market Contingency (Land Vacancy Safeguard)	7.5%		78	97	112	123	130	135	184	197	204	210
TOTAL EMPLOYMENT LAND REQUIRED (net ha)			**1,118**	**1,392**	**1,608**	**1,766**	**1,857**	**1,940**	**2,023**	**2,168**	**2,240**	**2,309**
CUMULATIVE LAND REQUIRED (net ha)				**274**	**490**	**648**	**739**	**822**	**905**	**1,050**	**1,122**	**1,191**
Employment Land Supply 2008												
Occupied Employment Lands (net hectares)			**1,040**									
Vacant Employment Lands (net hectares)			**485**									
Total Employment Lands (net hectares)			**1,525**									
EMPLOYMENT LAND SURPLUS (SHORTFALL) - NET HECTARES				**133**	**(83)**	**(241)**	**(332)**	**(415)**	**(498)**	**(643)**	**(715)**	**(784)**
EMPLOYMENT LAND SUPLUS (SHORTFALL) - GROSS HECTARES (@ 1.25 NET to GROSS FACTOR)				**167**	**(103)**	**(301)**	**(415)**	**(519)**	**(622)**	**(804)**	**(894)**	**(980)**

Shortfall

Source: urbanMetrics inc.

urbanMetrics inc.
market, economic and strategic advisors

MERIDIAN PLANNING CONSULTANTS INC.

purely discretionary[21], we strongly suggest that municipalities maintain their vacant industrial land inventories at levels that are at least 10% above what is projected. In the case of Markham, which hopes to maintain a strong agricultural base, and which also has exceptional opportunities for intensification, we have taken a much more conservative approach. For forecasting purposes we have assumed a market contingency of 7.5%. This is the lowest level we would ever advocate, but we have elected to do so on the basis that the Town does not want to over prescribe the amount of rural land to be redesignated for urban (and industrial) purposes.

10.3 Industrial Land Requirements – The Results

Over the forecast period, our independent analysis suggests that Markham's current base of industrial land --1,525 net hectares (including 485 hectares of vacant land), is simply not large enough to support the employment growth allocations for ELE and MOE jobs, as well as a working allocation for PRE uses.

The results of our analysis which are provided in Figures 10.1, 10.2 and 10.3 suggest that:

1. **Markham will begin to experience a competitive shortfall of land as early as 2016. This shortfall is apparent under all three scenarios. The extent of this shortfall is expected to fall somewhere between 40 to 80 net hectares (or 50 to 125 gross hectares). The Town must begin to address this shortfall now.**

2. **Over the 2008 to 2031 study period, the extent of this shortfall will continue to grow. If no additional industrial lands are provided, the Town of Markham will clearly experience a serious shortfall of industrial land over the 2031 planning horizon. Our analysis suggests that the extent of the shortfall is in the order of 315 to 415 net hectares (or 395 to 520 gross hectares).**

3. **Over the extended, 2051 longer term planning horizon, the extent of this shortfall will continue to magnify if no industrial lands are added. By 2051, Markham will require at total of 680 to 785 net hectares (or 850 to 980 gross hectares) in addition to the lands that are presently designated.**

[21] While the MMAH&MPIR suggested in their comments for the Durham Region Growth Management exercise that "The Provincial Projection Methodology Guideline does not support the use of vacancy factors when dealing with long term planning horizons", York Region uses a combined value of 30% to which is assumed to also include market flexibility and vacancy allowances.

It is important to stress that, under all three scenarios - including a scenario whereby a significant amount of employment growth is directed toward more intensive development in Markham Centre and other Key Development Areas - Markham's ability to support its full economic potential, and to support the Regional and Provincial 2031 growth forecasts are compromised by the size of Markham's current industrial land supply. It is also important to recognize that the analysis of land need is also predicated on "best-case" assumptions regarding density and market contingency.

10.4 Forecasts are Consistent with Region's Estimate for Markham

York Region has recently prepared a Land Budget for long-term employment land needs. This study, released in January 2009, concluded that York Region as a whole does not have sufficient employment land, and that lands outside the current settlement areas would be needed for employment (industrial) development purposes before 2031**.** Specifically, the report recognized the need for an additional 1,066 hectares of developable land outside the current settlement areas in York Region be set aside for employment purposes. In recognition of the strategic role that Markham has as a major employment centre, and the location of certain lands outside the current settlement area in Markham (i.e. near 400 Series Highways), it was determined that **437 hectares of new employment land would be needed in the Town of Markham to accommodate both local and regional employment growth by the year 2031**.

While the forecast methodology used by urbanMetrics under the three scenarios presented in the section above is somewhat different than the approach used by the Region, **our analysis has yielded very similar results suggesting that between 395 and 520 gross hectares of new employment land** outside the current settlement area will be needed to support the allocated employment growth.

11. Commercial Land Forecasts (PRE)

In the previous section we prepared a long-range forecast of industrial land requirements for Markham, determining that the Town would need additional land to support a diversified base of employment and economic functions. As part of that analysis, it was determined that an allocation in the order of 15% of Markham's PRE jobs could be functionally situated within the Town's industrial areas. Over the 2031 forecast period, a total of 2,335 new jobs have been allocated as part of Markham's industrial land budget.

Based on York Region's forecasts, the Town of Markham is expected to grow by 138,600 residents between 2008 and 2031. By the end of the forecast period Markham's total population is expected to reach 423,500 persons. As the population of the Town grows, so too does the need for jobs that directly serve Markham residents. Population growth will drive the need for teachers, doctors, sales clerks, auto mechanics, government staff, etc. Since PRE jobs are intended to serve the needs of the population, it is in the best interest of the community that the majority of PRE jobs are actually situated close to residential areas as well as appropriate transportation routes.

11.1 PRE Job Growth

Recognizing that PRE jobs are directly linked to population growth, we have prepared forecasts that are predicated on the notion that each new PRE job in Markham is supported by approximately 6 persons. In other words, for every 6 residents there will be one corresponding job created.

Over the forecast period, Markham is expected to support a total of 22,900 new PRE jobs. This includes approximately 5,400 new home-based (work at home) PRE jobs. For planning purposes, home-based occupations are included in the PRE category since they tend to be concentrated in residential areas. For long range forecasting, however, this segment of the town's employment base needs to be separated out. On this basis, a total of 17,500 new PRE jobs are expected to serve the needs of 138,600 new residents. This translates into a ratio of a 1 new PRE job created for every 8 new residents.

11.2 PRE Employment Groupings

While PRE encompasses a wide variety of economic activity, we have established a grouping of PRE uses which we believe provides a reasonably strong basis from which to allocate and distribute PRE jobs across key areas of Markham that can fully support jobs.

For forecasting purposes these PRE employment groupings are summarized as follows:

- **Retail, Services and Restaurants:** includes employment within all stores, all personal services (salons, dry cleaners, shoe repair etc.), all bank branches, and all professional offices geared to household (real estate agents, personal insurance brokers, financial advisors, etc.), and all types of restaurants.

- **Automotive Sales and Service:** includes all automobile dealerships, vehicle repair, and fuelling stations. Note that this category does not include Canadian Tire stores.

- **Health/Education/Daycare**: includes hospitals, private clinics and other medical establishments, primary and secondary schools, post secondary schools and other vocational schools, and daycare centres.

- **Government/Public Utilities:** includes jobs in municipal, provincial and federal government, as well as jobs in public government utilities.

- **Leisure/Community/Worship:** includes jobs in public and private recreation facilities, including gyms, health centres and arenas, golf courses, theatres, museums, libraries and places of worship.

11.3 Service Ratios- PRE Jobs per Capita -

Taking guidance from employment yields on a per-capita basis at the Toronto Census Metropolitan Area level, urbanMetrics has developed typical service-level ratios for population related employment. Based on our analysis, we believe the following yields represent a reasonable allocation for Markham:

- **Retail, Service Commercial and Restaurants:** 1 job per 14 residents

- **Automotive Sales and Service:** 1 job per 70 residents

- **Health/Education/Daycare**: 1 job per 45 residents

- **Government/Public Utilities:** 1 job per 200 residents

- **Leisure/Community/Worship:** 1 job per 75 residents

Excluding persons who work at home (5,400), Markham will need to accommodate a total of 17,500 new PRE jobs between 2008 and 2031. For the most part these jobs will be directed to vacant sites and other properties throughout Markham which are designated for Commercial, Recreation, Institutional and Industrial uses.

11.4 Allocation of PRE Jobs in Markham

In carrying forward our analysis of PRE employment accommodation, we have determined that PRE uses can and should be reasonably directed toward four distinct areas of the Town where the needs of residents (and workers) are best served. These areas are summarized as follows:

- Commercially Designated Lands

- Markham Centre and Key Development Areas along Highway 7 and Yonge Street (including Langstaff Gateway)

- Industrial Designated Lands

- Residential and Institutional Lands

Figure 11.1 provides a summary of the share allocations assigned to each of these areas, which are also distributed by major PRE Employment Grouping.

Figure 11.1
Distribution of Population Related Employment (PRE) by Key Land Category

			Population Related Employment Distribution (2008 -2031 Growth)							
			Jobs Allocated to Industrial (ELE) Lands		Jobs Allocated to Residential/ Institutional Lands		Jobs Allocated to MC/KDA (UGC)		Jobs Allocated to Commercial Land	
Markham Population Growth - 2008-2031	new residents:	**138,600**	Share	Job Yield	Share	Job Yield	Share	Job Yield	Share	Job Yield
PRE Employment Groupings	Service Ratios (persons per job) *									
Retail, Services and Restaruants	14 persons/job	**9,900**	10%	990	0%	-	25%	2,475	65%	6,435
Automotive Sales and Service	70 persons/job	**2,000**	55%	1100	0%	-	0%	-	45%	900
Health/Education/Daycare	45 persons/job	**3,100**	5%	155	50%	1,550	30%	930	15%	465
Government/Public Utilities	200 persons/job	**700**	0%	0	20%	140	80%	560	0%	-
Leisure/Community/Worship **	75 persons/job	**1,800**	5%	90	20%	360	15%	270	15%	270
PRE Jobs Requiring Non-Residential Land				**2,335**		**2,050**		**4,235**		**8,070**
Plus: Home Based Occupations (Work at Home)		5,400	0%	0	95%	5,130	5%	270	0%	-
TOTAL NEW PRE JOBS IN MARKHAM		**22,900**	jobs:	**2,335**	jobs:	**7,180**	jobs:	**4,505**	jobs:	**8,070**
	6.1 persons/ PRE job		*share:*	***10%***	*share:*	***31%***	*share:*	***20%***	*share:*	***35%***

Source: urbanMetrics inc
* urbanmetrics estimates based on guidance of 2006 Toronto Census Metropolitan Area employment and population data
**assumes that a significant portion attributed to recreation and rural lands within Markham

The new PRE jobs allocated to **Industrial** areas (2,335) corresponds to the number used in the previous section. Our analysis assumes that about 90% of the future PRE job growth accommodated in Markham's industrial area will be those related to Retail, Service Restaurants (±990 jobs) and Automotive Sales and Service (±1,100 jobs). The remaining 10% will be those tied to more institutional type employment such as places of worship, education, daycare, leisure and recreation facilities.

The number of new PRE jobs allocated to **Residential and Institutional** areas (±2,050), are generally those related to local retail/service, healthcare (hospitals), education (public schools, daycares etc) and new government jobs to be located within existing facilities (such as Markham Civic Centre).

New PRE jobs allocated to intensification areas such as **Markham Centre and Key Development Areas** along Highway 7 and Yonge, including Langstaff Gateway will be fundamental to the success of these nodes and corridors as people oriented, mixed use destinations. It is estimated that these areas – on a combined basis - should support approximately one quarter of all new PRE jobs in Markham (±3,950 jobs). By virtue of their location and accessibility, these nodes and corridors are expected to be developed as *regionally significant* areas that will attract new economic activity which in turn, will support the interests and needs of local residents and surrounding MOE workers alike. In terms of Retail, Service and Restaurant jobs, these areas are expected to accommodate about a 25% all jobs in this sector over the next 23 years. In total we estimate that nearly 2,500 retail, service and restaurant jobs should be supported within planned commercial projects in Markham Centre along with other mixed use development in the Key Development Areas that are supported by transit. While commercial jobs will make about 60% of the new PRE jobs in these areas, it is also expected that other important PRE jobs will evolve and gravitate toward these areas over time. Based on new provincial policy directions, Markham Centre will be a preferred location for future government and institutional type development. To this end, the amount of PRE based employment growth is anticipated to account for about 1,760 jobs. These will include a wide variety of jobs typically associated with higher order urban locations. However, it expected that a significant number of these jobs, especially those associated government and healthcare will be located in major office buildings.

Finally, new PRE jobs allocated to **commercially designated lands** represent approximately 8,100 jobs, accounting for about 45% of the total new 17,500 PRE jobs in Markham that need to be assigned. Retail, Service and Restaurants are expected to make-up the largest segment of these jobs, representing nearly 6,440 jobs, or about 80% of the jobs assigned to commercially designated lands. In total, commercially designated lands are expected to absorb about two-thirds of all new retail-oriented PRE jobs in Markham over the duration of the 2031 period. In addition to retail-based employment, commercially designated lands in Markham are also expected to accommodate other important PRE jobs, including those related to automotive sales and service (±900), health and education (±465) and leisure/community/place of worship (±270).

11.5 Commercial Space Requirements

Building on the analysis above, this section provides an assessment of the amount of commercial space that the Town of Markham will need to supply in order to support the PRE growth forecasts.

In this analysis we have *excluded* the following types of PRE employment

- 2,050 new jobs assigned to residential and institutional lands (school, hospital, etc), and
- 560 new jobs in the Major Office MOE (government and public utilities).

Figure 11.2 below summarizes the extent of commercial space that will need to be developed in Markham in order to accommodate 14,350 new PRE jobs requiring commercial-type space.

Figure 11.2
Town of Markham Commercial Space Needs to Support PRE Growth, 2008-2031

	PRE JOBS GROWTH 2008-2031	SF PER EMPLOYEE Range			SM PER EMPLOYEE Employee			Million SF Commercial Space Yield			SM Commercial Space Yield		
			ref			ref		low	ref	high	low	ref	high
PRE on Commercial Lands	8,070	350	400	450	32.5	37.2	41.8	2,824,500	3,228,000	3,631,500	262,400	299,900	337,400
PRE in MC/KDA *	3,945	375	400	425	34.8	37.2	39.5	1,479,375	1,578,000	1,676,625	137,400	146,600	155,800
PRE in Industrial Areas	2,335	400	450	500	37.2	41.8	46.5	934,000	1,050,750	1,167,500	86,800	97,600	108,500
TOTAL	14,350							5,237,875	5,856,750	6,475,625	486,600	544,100	601,700
Population Growth in Markham: 2008-2031									138,600				
Per Capita Space Service Level Yields for Future Population Growth								38	42	47	3.5	3.9	4.3
									Square Feet Per Capita			Square Metres Per Capita	

Source: urbanMetrics inc

* excludes MOE based government/public utilities jobs

In developing our forecasts, we have utilized a "working range" to represent a typical commercial allocation of built space for each employee. Based on our experience, we have established 400 square feet of commercial space for each employee as our "reference" point. On commercial lands we have tested a range stretching from (350-450 sf/emp). For Markham Centre/KDA we have employed a narrower range (375-425 sf/emp) recognizing that higher rental rates in these areas will likely alter utilization patterns. Conversely, for industrial areas, we have employed a more generous allocation (400 to 500) recognizing that lower rental rates provide greater flexibility for businesses to assume leases on larger floor-plates.

By applying these ranges to our employment forecast, Markham will need to support an additional ±545,000 square metres (±5.9 million square feet) of new commercial space to support its full PRE employment allocation.

Industrial areas will account for the smallest share of new PRE commercial space. In order to accommodate 2,300 new PRE jobs, approximately 97,600 square metres (1.05 million square feet) of additional built space will be required. It is expected that much of this space could be absorbed by transitioning lands and buildings within the established and built-out areas of Markham where the use permissions are presently in place, especially in the BCA designation along main roads. Since we are only forecasting about, 1,000 new retail-oriented PRE jobs within industrial areas over the duration of 2031 planning horizon, it is envisioned that only 400,000 square feet (37,300 sm) of retail space is actually needed to support our projected volume of retail oriented PRE job growth at appropriate locations within industrial areas.

Markham Centre and the KDAs are expected to function as the prime locations for economic, leisure and recreational activities which are supported on a community-wide basis. Since these areas are to be supported by higher-order transit, it is expected that PRE-oriented uses will follow suit.

Current planning estimates suggest that Markham Centre alone could support 40,000 residents and 40,000 jobs. In light of this growth we have developed PRE employment estimates that suggest that MC and other KDA along Highway 7 and Yonge could support approximately 3,950 jobs (which works out to about 10% of all jobs directed to Markham Centre). On the basis of built space, 3,950 jobs would stimulate the need for about 1.6 million square feet (146,600 square metres) of new commercial space. We accept that this is a big number, and that accommodating this amount of commercial space will be a significant planning challenge given the high concentration of residential and major office uses which will also need to be integrated into these areas. However, in order for the Town to move forward with its vision of creating engaging mixed use areas, all available options and planning tools, including incentives (i.e. density bonuses) will be necessary to stimulate and support new commercial space as part of this mixed use vision.

Markham's **Commercial Lands** are expected to support nearly 8,100 new jobs over the forecast period. At 400 square feet (37.2 sm) of commercial space per employee, Markham will need to expand its commercial space inventory (on commercially designated lands) by an estimated 3.2 million square feet (300,000 sm). While some of this space could be absorbed by vacant stores and or under-developed parts of existing commercial properties, we have assumed, for planning purposes, that this quantum of space represents the total amount of new construction, which can/should be expected to develop on vacant commercial parcels within the current settlement area; and over time, in new growth areas outside the current settlement area as dictated by future residential growth patterns.

11.6 Per Capita Space

In 2004 John Winter and Associates (JWA) provided a full commercial policy review for the Town of Markham. The Commercial Policy Review determined Markham maintained a sufficient amount of vacant land to support commercial market growth to 2011, but that additional lands would be needed to support growth beyond that year.

The general conclusions were based on a Per Capita analysis that suggests that each Markham resident should support about 53 square feet (4.9 square metres) of built space. While this level is generally consistent with typical ratios used in market analysis there are clear opportunities to achieve greater space efficiencies, especially in a market such as Markham where land prices tend to be well above average.

Notwithstanding the JWA analysis, the Town of Markham's growth momentum has changed significantly, and a heightened focus has now been placed on concentrating and containing development in a more intensive and strategic manner. As Markham moves forward with this push to intensify land and to direct growth to mixed use centres and corridors, it is fully anticipated that there will be some downward adjustments in the per-capita space requirements. Moreover, as part of our forecasting of total allocated PRE growth to Markham it has been determined that Town's future population will need be supported by ±14,500 *commercial* oriented PRE jobs. To this end, we have come up with an alternative, *lower* measure of per capita space, which we believe should serve as a more reasonable basis for using land as efficiently as possible, and to ensure that Markham aspirations of directing growth and commercial activity in locations that support more compact forms of development can gain a higher degree of market traction.

The analysis, provided at the bottom of Figure 11.2, suggests that Markham can and should be conducting its commercial space planning on the basis of 38 to 47 square feet per capita (3.5 to 3.9 square metres). The reference forecast is 42 square feet (3.9 square metres) per capita. While the methodology is somewhat different than JWA which is based on standard (or *status quo*) forms of development including big box, we believe that our approach is very well grounded in terms Markham's ability to accommodate its anticipated population *and* job growth requirements, as per York Region's long-range forecasts.

11.7 Warranted Commercial Land Needs in Markham

The Town of Markham currently has approximately 105 net hectares (285 net acres) of vacant land designated for commercial development. By applying a relatively standard 25-30% building coverage factor, this amount of land could realistically support approximately 262,000 to 314,000 square metres (2.8 to 3.4 million square feet) of built space.

In Figure 11.3 below we provide an analysis of how much land would be required to support the PRE commercial job growth (±8,100 jobs) broken down by various key PRE Employment Groupings.

Figure 11.3
Accomodation of PRE Commercial Growth in Commercial Areas, 2008-2031

	New PRE Jobs In Commercial Areas	Jobs Per Net Commercial Hectare (Range)			Total Net Hectares Required For PRE Employment in Commercial Areas		
PRE Employment Groupings			ref		High	Ref	Low
Retail, Services and Restaurants	6,435	80	85	90	80	76	72
Automotive Sales and Service	900	45	55	65	20	16	14
Health/Education/Daycare	465	70	75	85	7	6	5
Government/Public Utilities	-						
Leisure/Community/Worship	270	75	80	90	4	3	3
TOTAL	**8,070**				**111**	**102**	**94**
Net Vacant Commercial Land (Net Hectares) inside built boundary						**105**	
Surplus **(Deficit)**					**(6)**	3	11

Souce: urbanMetrics inc.

The analysis prepared in this figure is predicated on a range of employee yields for a variety of commercial activities on standard or typical jobs per net hectare basis.

For Retail, Service and Restaurants – which is the single largest segment in terms of jobs – Markham would need to support a commercial inventory of ±75 net hectares, at a reference level of 85 jobs per hectare.

Recognizing that other PRE functions will also need to be supported on Commercial Lands we have applied a similar approach, recognizing that certain uses, such as car dealerships generally achieve lower employment yields on a per hectare basis. On a combined basis, these other uses will reasonably require about ±25 hectares of additional land over the forecast period.

Given that Markham currently has 105 hectares of vacant commercial land inside the current settlement area, our long range forecasts suggest that Markham's vacant land supply is actually very closely aligned with its long term need. Other than retail, service and restaurants, the only other significant driver of commercial land are those related to the automotive sales and service category. Such uses are estimated to account for somewhere between 15%-18% the long-term warranted commercial land. Recognizing the massive transition that is now re-shaping the entire automotive industry, it is reasonable to suggest that long term land requirements for new car dealerships, and potentially even repair shops, may be somewhat overstated on a go-forward basis. As such it is possible that these lands could be reallocated for more conventional retail, service and restaurant activities.

Notwithstanding this "flexibility", the existing supply is extremely "tight" and would likely not allow for an adequate provision of vacant commercial land over the duration of the forecast period.

As a strategy, Markham should continue to encourage the timely development of complementary commercial facilities as part of the normal secondary and community planning process. Based on best practices, we suggest that future commercial facilities in Markham should be delivered on the basis of 40 to 45 square feet per capita.

Over the planning horizon, as new residential areas in Markham come on stream it is recommended that the Town encourage developers to make adequate provisions for new retail and service commercial space. While the amount of commercial space will vary according to the presence of existing and proposed commercial space already established in the local area, applications for new commercial development should clearly demonstrate that there is sufficient market support for the proposed facility, *and* that such facilities will not impact the planned function of other parts of the Town's commercial hierarchy, especially strategic nodes such as Markham Centre.

11.8 Commercial Land Requirements – The Results

Over the forecast period, our independent analysis suggests that the Town of Markham's current vacant commercial land base– 105 net developable hectares - is in fact sufficiently scaled to meet the long term growth requirements associated with 138,600 new residents over the 2008-2031 period.

The results of our analysis suggest that:

1. **Markham's commercial lands are expected to support 8,100 new PRE jobs. This represents about 46% of the new PRE jobs (excluding work at home).**

2. **Markham's commercial lands will accommodate nearly two-thirds of all new retail-based jobs. In total, Markham commercial lands will need to accommodate just over 6,400 new retail, service and restaurant jobs, along with 1,700 additional commercial jobs in other commercial categories.**

3. **Markham will require somewhere in the order of 95 to 100 hectares of vacant commercial land, supporting between 262,000 to 337,000 square metres (2.8 to 3.6 million square feet) of built space.**

4. **Markham Centre and other Key Development Area will play an important role in accommodating a substantial amount of new PRE employment growth. The forecasts suggest these nodes and corridors will accommodate approximately 4,000 PRE jobs driving a need for 137,000 to 155,000 square metres (1.5 to 1.7 million square feet).**

In recognition of the close balance that exists between Markham's vacant land supply and its policy requirement to support an appropriate share of the PRE growth, it is our opinion that Markham's commercial land supply is reasonably balanced.

While adding new commercial facilities to support community development outside the current settlement area is likely warranted (to ensure that future residents are conveniently served by local shops and services), we would not support the allocation of any lands, outside the current settlement area for "major", or *regionally serving* commercial purposes over the 2031 planning period. In our opinion, any decision to expand the commercial land supply outside the current settlement area would ultimately decrease the commercial viability of clustering PRE-oriented commercial activities within key growth nodes and corridors such as Markham Centre, Highway 7 and Yonge Street. For this reason, we are recommending that no physical expansions to the Town's commercial land supply be entertained as part of the forthcoming Markham Official Plan update.

12. Conclusions & Recommendations

12.1 Conclusions

LAND USE POLICY REFINEMENTS ARE REQUIRED

Based on our analysis of Markham's current employment land policies it is clear that a new framework is needed to better deal with the blurred distinctions that now exist between commercial and industrial oriented land uses throughout the town.

To this end we believe that Markham's existing Official Plan policy framework needs to be streamlined into fewer designations, and that these new designations are more closely aligned with the Employment Land Employment (ELE); Major Office Employment (MOE) and Population Related Employment (PRE) that are now being widely employed through the Places To Grow Plan.

In effect, the Town's existing employment land use policies and its implementing zoning by-law need to better reflect the prevailing and future development conditions that are shaping Markham as a leading-edge business community.

ADDITIONAL INDUSTRIAL LANDS ARE REQUIRED TO ACCOMMODATE MARKHAM'S EMPLOYMENT GROWTH

The results of our analysis indicate quite clearly that Markham' existing industrial land supply is not sufficiently large enough to accommodate future employment growth expectations.

Planning and executing well-planned employment areas that are designed to meet the needs of the key business sectors will be a fundamental aspect of Markham's path toward greater economic prosperity and more well-balanced community growth that places a strong emphasis on achieving better live-work opportunities.

At this time Markham has less than 200 hectares of "market-ready" land that is zoned and serviced. It is our opinion that this amount of land is not sufficient. At an average annual absorption rate of 20-25 hectares, Markham's market ready supply of land will be exhausted in less than 8 to 10 years. Failure to maintain a healthy supply of industrial land puts the community at risk of being over priced, and potentially, beyond the reach of many business operators, including small to medium sized companies. As a top-priority Markham will need to pre-zone and extend servicing to key lands, especially those in the Highway 404 North Employment Area.

Protecting Markham's employment land supply must remain a high priority in dealing with applications that seek to convert major parcels of land for non-office, or non-industrial uses. Conversion of employment lands to other uses, including major retail, in our opinion would only serve to *accelerate* the Town's pending industrial land deficit. For this reason, we suggest that Markham prohibit thereby avoiding all conversions to its current base including all lands designated Business Park, General Industrial and Business Corridor Area.

In very specific terms, our analysis indicates that Markham's existing "urban" land supply does not have enough industrial employment land designated to fully meet the forecasted growth of employment land jobs to 2031.

Notwithstanding the market opportunities to accommodated major office buildings in Markham Centre and elsewhere along Highway 7 and Yonge Street, the Town will not be able to meet its full needs without relying on *new* lands located *outside* the CSA boundary.

The lands that are best suited to accommodate future employment needs include:

- *Lands* situated in the north-westerly reaches of the Town outside the current settlement area, and

- Vacant lands in East Markham/Cornell. These lands which comprise only 35 hectares are currently defined as 'deferred' and "study area" in the Cornell Secondary Plan.

The lands that are *least* suited to future employment areas are those that are small, isolated, fragmented or cut-off from highway access by intervening residential uses. We would not, for example endorse the creation of any new employment areas on lands that are not already contiguous to an existing employment area, nor would we support the creation of a stand-alone employment area oriented in the northeast part of Markham, such as lands in the vicinity of Highway 48 and Major Mackenzie.

12.2 Recommendations – Land Supply Requirements

Based on the market and quantitative analysis carried out by the study team, it is suggested that Markham take appropriate measures to increase its overall employment land base. Specifically, it is recommended that:

1. The Town of Markham responds quickly to add new employment lands in east Markham. Such a move would help to mitigate the looming medium-term (2016) shortfall of employment land, and will help to establish and stimulate the necessary critical mass of business opportunities in the area. Planning should move toward the establishment of business park uses in this area. This designation, in our opinion will help to ensure that these lands remain closely linked with the types of business activities envisioned in Markham's Economic Development Strategy, focusing primarily on innovative and research intensive companies that would ultimately benefit from a business address at the edge of Rouge Park.

2. All future boundary expansions in the northwest quadrant of the town must give priority consideration to employment uses first and foremost. These lands are *the* best option that the Town of Markham has for making suitable adjustments to its undersized employment land base. Moreover these lands are well located and will help to round out the Markham/Richmond Hill employment corridor along Highway 404. A minimum reserve for employment lands, for 2031 planning purposes should be in the order of 500 gross developable hectares.

3. Markham should consider the creation of a new *Employment Land Reserve, 2031-2051* designation in its Official Plan update. The application of this land-use is intended to reflect the on-going need for employment land beyond 2031. It is expected that such a reserve should include upwards of 400 to 500 gross hectares of developable employment land outside the current settlement area to accommodate on-going growth beyond 2031. The Employment Land Reserve should be contiguous to the lands identified in recommendation 2 above, forming a single unified employment node. The new designation would effectively protect lands outside the current settlement area from all forms of non-employment type development (including retail) until at least 2051. It is envisioned that lands within the Reserve could be developed for employment uses in advance of this horizon, however it would need to be demonstrated that no other lands in Markham could support such a use by virtue of size, location or other site specific requirements.

4. Markham should guide, promote, encourage and incentivize the development of retail-commercial space within Markham Centre, the Key Development Areas of Highway 7 and Yonge Street, including Langstaff Gateway. Opportunities to maximize the amount of commercial (retail-oriented) space which can be delivered in mixed use projects should be pursued to the fullest extent possible. Retail and service commercial uses in these areas need to be developed at a commensurate rate with population and major office developments. Markham should establish a PRE commercial development target

of 147,000 square metres (1.6 million square feet) to 2031 as a combined total for Markham Centre, Highway 7 and Yonge Street, including Langstaff Gateway.

5. Markham should protect the full inventory of vacant commercially designated land within Markham's current settlement area. Markham's 105 hectares of vacant land are sufficiently balanced to support the allocated PRE growth to 2031. Markham should establish a PRE commercial target for these lands at 300,000 square metres (3.2 million square feet).

6. Markham should not entertain designating any lands outside the current settlement area for the purposes of Major Retail, or any other *regionally* oriented commercial developments.

7. Markham only should support the development of local and convenience oriented retail outside the current settlement area on the basis that it is commensurate with and supported by population growth. Such uses would need to demonstrate that they will not destabilize the planned function of existing and approved commercial facilities.

12.3 Recommendations – Policy Directions & Refinements

Based on the policy analysis prepared by the study team, it is suggested that the following specific recommendations be the basis for further consideration in Phase 2 of the Employment Lands Strategy:

Specifically:

8. The Business Park designation be retained in its present form;

9. Certain areas within the Business Park designation be zoned to permit only major office development;

10. Use permissions in Business Park areas continue to be tightly controlled to ensure that the long-term function of these areas can be maintained;

11. Lands within the General Industrial designation be included within a new Employment Area designation (with one exception – Harlech Court);

12. Certain lands within the current Business Corridor designation that are functionally related to lands within adjacent General Industrial areas be included within the new Employment Area designation;

13. Use permissions are broadened in the new Employment Area designation to permit a range of businesses that produce, assemble or distribute a wide variety of products, technologies and services, including those that support innovation, technology and creativity.

14. Business Corridor lands to be included within the Employment Area designation should be zoned in a manner which provides for a wider range of uses than those in the General Industrial areas;

15. Business Corridor, General Industrial, Major Commercial and Commercial Corridor areas that are the site of a number of destination oriented service and retail uses should be placed in a new Employment Mixed-Use designation that permits a range of retail and service employment type uses;

16. The size and scale of retail uses permitted in the new Employment Mixed use designation should be controlled to ensure that larger scale such uses are directed to commercial areas.

17. Community Amenity and Commercial Corridor areas that are currently (or will be in the future) the site of a mix of both residential and retail uses should be placed within a new Residential Mixed Use designation;

18. Lands within the Community Amenity area designation that are primarily the site of residential uses and are, or may be, the site of a limited range of convenience type commercial uses should be placed in an Urban Residential designation;

19. Lands within the Commercial Corridor designation that are only the site of gas stations and uses should be placed within the Urban Residential designation;

20. Lands within the Commercial Corridor designation that are the site of automotive dealerships and other retail uses should be placed within the Employment Area Mixed Use designation, or in some cases, the Residential Mixed Use designation, if the long term intent is that these lands be considered suitable for residential use, particularly if these areas are located adjacent to residential uses.

21. A new Retail Commercial designation be created from lands within the Major Commercial, Retail Warehouse, Community Amenity and Commercial Corridor designations;

22. Certain lands within the Business Corridor designation that are the site of larger retail uses should also be placed in the new Retail Commercial designation to recognize the existing use.

23. A new Markham Centre designation and policy framework be created to support a mix

of uses supporting higher densities, including Major Offices; and,

24. Policies should be developed for the Key Development Areas in Regional Corridors that encourage mixed uses and transit supportive development.

12.4 Recommendations - Next Steps, Phase 2

Based on the policy analysis, it is suggested that the following *additional* recommendations be the basis for further consideration in Phase 2 of the Employment Lands Strategy:

25. Addressing the requirements of senior government policy regarding employment including the definition of 'Employment Area' in Markham.

26. The uses to be permitted in each land use designation should be carefully analyzed and take into account the uses that are currently permitted in the Official Plan, Secondary Plans and Zoning By-laws. In some cases, it is noted that the uses are permitted within the Zoning By-law that are not necessarily provided for by existing policy. In addition, new uses supportive of the Economic Development Strategy key sectors that may have not otherwise been expressly permitted should be identified and considered for inclusion. These include uses related to the creative industries, such as studios.

27. A determination needs to be made on the boundaries of the new Employment Area and Mixed Use Employment Area designations. Previously, these designations were called General Industrial and Business Corridor. There are also areas currently designated Major Commercial and Commercial Corridor that should also be considered for inclusion within the Employment Mixed Use designation.

28. The boundaries of the new Residential Mixed Use designation should also be determined. For example, much of the lands within the Community Amenity Area designation along Bur Oak should be redesignated with the exception of those areas at intersections that have a strong commercial focus. One alternative to consider is to include all such lands within the Residential Mixed Use designation and then to implement that designation through the use of multiple zones with one zone providing for a broader range of retail uses than the other.

29. Once a determination has been made on the extent of each of the land use designations, an analysis of the potential for these lands to be pre-zoned for development (if they are vacant and not zoned at the present time) should be carried out. The intent of the analysis would be to identify the pros and cons of pre-zoning and the methods by which certain public interest objectives can be met if the lands are pre-zoned. In this regard, the

use of Holding provisions to control development would be a key planning tool. Another option to consider is whether utilizing a Development Permit system would make sense, particularly in larger undeveloped areas where the actual pattern of development is not known at this time, but there is a desire to advance the "market readiness" of the lands for development as soon as possible.

30. An assessment of the options available to the Town with respect to upgrading the built form, landscape treatment and public realm within existing Employment Areas such as South Don Mills should be carried out. A range of options and their potential implications from a procedural perspective and a financial/economic perspective should be considered. While municipal licensing may not be considered an incentive to development, it is one possible approach, since conditions of the license can deal with the appearance of the proposed use. Other options include the preparation of Community Improvement Plans for Employment Areas and/or the establishment of Business Improvement Associations, which would receive some funding for its activities from the Town of Markham.

31. With respect to the public realm, an understanding of where public lands are located within these Employment Areas and their options for land use should be assessed. However, the most important part of the public realm in these Employment Areas is the street itself and on this basis, it is suggested that a review of the current design standards for these streets from primarily a landscape architecture perspective be carried out to determine how these streetscapes can be improved over time.

32. The criteria to be established with respect to employment land conversions need to be further considered, with the criteria contained within the Growth Pan being the 'minimum'.

33. The determination of how to translate minimum required density into policy and zoning, recognizing that the Town has no control over the number of employees in any use.

34. The Town should continue to examine sustainable initiatives and practices as they relate to employment lands.

35. Lastly, there should be some analysis carried out on how the new land use designations will be implemented in Secondary Plans and the Zoning By-law through the preparation of a new stand-alone by-law for Employment Areas in the Town.