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YORK REGION 2031 LAND BUDGET

The Planning and Economic Development Committee recommends:

- 1. Receipt of the communication from Rosemarie L. Humphries of Humphries Planning Group Inc., received March 3, 2010; and**
- 2. Adoption of the recommendations contained in the following report dated February 8, 2010, from the Commissioner of Planning and Development Services.**

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council receive the March 2010 York Region 2031 Land Budget Report and *Attachment 1*.
2. The Regional Clerk circulate this report to the Ministry of Energy and Infrastructure, the Ministry of Municipal Affairs and Housing, the Building Industry and Land Development Association and the local municipalities for information purposes.

2. PURPOSE

This report is an update to the York Region 2031 Land Budget presented to Planning and Economic Development Committee in January 2009. This report is part of the Region's *Growth Plan* conformity exercise and provides the basis for the proposed urban area expansions in the Regional Official Plan. Revisions have been made to the previous land budget report based on further discussions with the Province and the local municipalities.

This report outlines York Region's residential and employment land requirements to 2031 and demonstrates the Region's ability to achieve the *Growth Plan*'s Designated Greenfield Area density target of 50 people and jobs per hectare.

3. BACKGROUND

Upper and single tier municipalities are required to conform to the Provincial *Growth Plan*

The Province of Ontario released Places to Grow: Growth Plan for the Greater Golden Horseshoe (*Growth Plan*) in 2006. The *Growth Plan* guides decisions on issues relating to transportation, infrastructure planning, land use planning, urban form, housing, natural heritage and resource protection with the intent to help secure the future prosperity of the Greater Golden Horseshoe.

The *Growth Plan* contains population and employment growth forecasts for all upper and single-tier municipalities in the Greater Golden Horseshoe and includes specific policies for where and how to grow, including policies for designated greenfield areas and for settlement area boundary expansions.

The *Growth Plan* states that a settlement area boundary expansion may only occur as part of a municipal comprehensive review that is defined as “an official plan review, or an official plan amendment, initiated by a municipality which comprehensively applies the policies and schedules of the *Growth Plan*”. The municipal comprehensive review must include:

- The use of the *Growth Plan*’s forecasts
- The completion of an intensification strategy that identifies a minimum 40% residential intensification target between 2015 to 2031, and plans for a significant portion of future population and employment growth within the Built-up Area
- An assessment of the available residential and employment land supplies and demonstration of the need for a proposed urban expansion
- A demonstration of how the minimum Designated Greenfield Area density target of 50 people and jobs per hectare is to be achieved

The Region’s *Growth Plan* conformity exercise includes forecasting and land budget work, a Regional Intensification Strategy, a comprehensive public consultation exercise, infrastructure master plan updates for transportation, and water and wastewater, an updated Natural Heritage Strategy and a 25 year fiscal impact analysis.

The Regional Official Plan (ROP) implements the results of the municipal comprehensive review. The ROP was adopted by Regional Council in December 2009. Table 1 of the ROP includes population and employment forecasts by local municipality that are used to determine urban area expansion requirements to 2031.

A separate staff report outlining the proposed urban area expansions to 2031 is on this Planning and Economic Development Committee’s agenda.

2031 land requirements have been updated from January 2009 report

This report is an update to the York Region 2031 Land Budget presented to Planning and Economic Development Committee in January 2009 and used as a basis for the ROP. Revisions have been made to the land budget based on further discussions with the Province and the local municipalities. The changes to the land budget are minor and do not impact the adopted policies in the ROP.

Over the past three years, a series of technical meetings with local municipal staff were held to refine the forecasts and land budget. A background series of growth management reports that presented the preliminary forecast and land budget information were presented to the Planning and Economic Development Committee in April 2007, September 2008, and January 2009.

This report details York Region's residential and employment land requirements to 2031, provides the basis for the proposed urban area expansions in the ROP, and demonstrates the Region's ability to achieve the *Growth Plan's* designated greenfield area density target.

4. ANALYSIS AND OPTIONS

York Region's land budget is based on the Regional Official Plan 2031 forecasts

York Region's land budget analysis is based on the Region's 2031 population, household and employment forecast, which is consistent with the *Growth Plan* forecast. Table 1 of the ROP includes the population and employment forecasts by local municipality. The Region is anticipated to accommodate 1,507,480 people, 509,650 households and 780,270 jobs in the Region by 2031. This represents growth of 575,610 people, 234,110 households and 317,950 jobs from 2006 to 2031.

The January 2009 Land Budget report included an employment forecast for approximately 799,000 jobs in the Region by 2031. The employment forecast for York Region has been revised to 780,270 jobs by 2031, to be consistent with Schedule 3 of the *Growth Plan*.

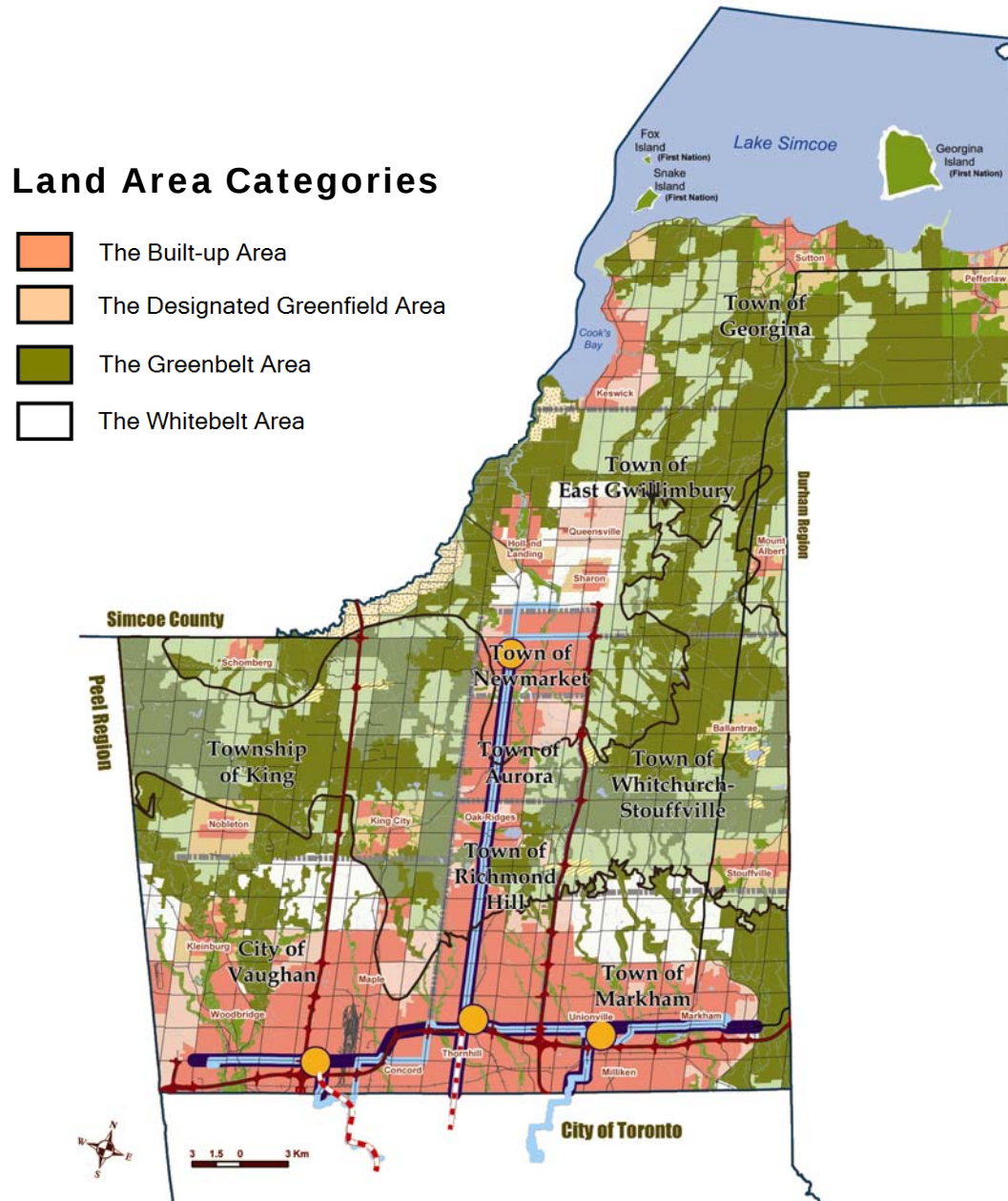
Revisions have been made to the January 2009 land budget report based on further discussions with the Province and the local municipalities. The refinements to the land budget are minor and do not impact the adopted policies in the ROP and result in a decrease of 363 hectares of land required for urban area expansion by 2031 from the previous report.

The forecasts and land budget are used for a number of regional initiatives including designating settlement and land use boundaries, planning for future transportation requirements, calculating water and wastewater capacity needs, determining housing needs and associated land requirements, estimating the need for social programs and new schools, and providing a basis for other services and program planning in the Region. The forecasts and land budget are also used by industry and business in making investment decisions.

Overview of Land Budget Methodology

The forecasted population and employment growth is distributed into three land area categories: the Built-up Area, the Designated Greenfield Area and the Whitebelt Area. The Built-up Area was “built-up” as of June 2006 and is defined by the provincially delineated built boundary. The Designated Greenfield Area is designated “Urban Area” or “Towns and Villages” in the Regional Official Plan and is outside of the built boundary. The Whitebelt Area is not currently designated “Urban Area” or “Towns and Villages” and is outside of the Greenbelt and Oak Ridges Moraine. The Whitebelt Area represents the remaining lands with development opportunities within the Region and are where urban area boundary expansions will occur. These categories are used in York Region’s land budget analysis. Figure 1 provides a graphic representation of the three categories.

Figure 1
Map of York Region Land Area Categories



Source: York Region Planning and Development Services, 2010.

York Region's 2031 land requirements were based on a comprehensive demand/supply analysis for residential and employment growth, a consideration of both residential and employment intensification and an analysis of the Region's ability to achieve the *Growth Plan's* designated greenfield area density target.

The residential demand was based on the Region's 2031 population and household forecast. The residential supply included an update of the unit growth potential in vacant designated lands in the Region's approved communities as well as the potential supply in the Built-up Area to meet the 40% intensification target. Additional unit requirements to accommodate the 2031 forecast were then determined.

The employment demand was based on the Region's 2031 employment forecast, distributed into three employment types: employment land employment, major office employment and population-related employment. An updated supply analysis was undertaken for employment land employment growth potential in the Region's vacant designated employment lands and additional job requirements to meet the 2031 forecast were then determined. A separate demand and supply analysis was undertaken for major office employment and population related employment (including major retail).

Additional land requirements included an analysis for both residential and employment intensification within the Region's Built-up Area and an evaluation of the Region's ability to achieve the *Growth Plan's* designated greenfield area density target of 50 people and jobs per hectare.

York Region's Land Budget Highlights

- York Region's forecast anticipates approximately 1,507,480 people, 509,650 households and 780,270 jobs by 2031. This represents growth of 575,610 people, 234,110 households and 317,950 jobs from 2006 to 2031.
- The York Region employment forecast has been revised from approximately 799,000 in the January 2009 York Region 2031 Land Budget Report to 780,270 to be consistent with the *Growth Plan* forecast.
- An urban area boundary expansion is required to accommodate the 2031 forecasted population and employment growth in York Region. Boundary expansions will occur on Whitebelt Area lands in East Gwillimbury, Markham and Vaughan.
- A total of 2,474 developable hectares (ha) of land in the Whitebelt Area are required for residential and employment uses in order to achieve the 2031 forecast. This includes 1,619 ha for community land development (including 206 ha for major retail uses) and 854 ha for employment land development. The Whitebelt Area land requirements are distributed to the three local municipalities based on the forecasts in Table 1 of the ROP.
- The analysis includes the identification of 90,720 households to be accommodated within the Built-up Area of the Region in order to achieve the minimum 40% residential intensification target.
- Forty-three percent (43%) of the Region's employment growth will be accommodated within the Region's Built-up Area, as defined by the *Growth Plan*.
- Community lands in the Whitebelt Area are planned based on achieving a density of 70 people and jobs per ha. Community and employment lands in the Whitebelt Area

- combined total 60 people and jobs per ha. Communities at these densities represent a more compact built form than traditionally built in York Region.
- Community lands in Designated Greenfield and Whitebelt Areas combined are planned based on achieving a density of 55 people and jobs per ha.
 - Employment lands in the Whitebelt Area are planned based on achieving a density of 40 jobs per ha. Employment lands in vacant Designated Greenfield and Whitebelt Areas combined are planned based on achieving a density of 36 jobs per ha.
 - The 2031 York Region Designated Greenfield Area density is 50 people and jobs per ha, which meets the *Growth Plan* target.

Land Budget work will provide the basis for proposed urban area boundary expansions in the Regional Official Plan

York Region's Official Plan was adopted by Regional Council in December 2009. The ROP was developed within the context of the guiding principles found in the York Region Sustainability Strategy. The Sustainability Strategy advocates the triple bottom line approach, integrating the environment, economy and community, as well as emphasizing engagement, monitoring and continuous improvement.

The ROP represents York Region's ongoing collaboration with its partners and stakeholders to rethink the way communities are designed, serviced and supported. Key elements of the ROP include:

- City building, focusing on Regional Centres and Corridors and including innovation in urban design and green building
- A minimum of 40% residential intensification within the Built-up Area across the Region
- New community areas, designed to a higher standard that includes requirements for sustainable buildings, water and energy management, public spaces, mixed-use, compact development, and urban design
- The protection of employment lands from non-employment use.
- Promotion of a well-designed and intensified built form for new commercial, industrial and institutional developments
- Updated York Region Master Plans for transportation and transit, water and wastewater, and pedestrian and cycling
- Enhanced mobility systems using a "people and transit first approach" to connect land use and transportation planning
- Progressively higher standards in energy and water efficiency, renewable energy systems and waste reduction
- Urban development and infrastructure projects that contribute enhancements to the Regional Greenlands System
- A natural heritage legacy based on a linked and enhanced Regional Greenlands System
- A minimum 25% affordable new housing units

- A full-cost accounting approach to financial management that considers the economic, environmental and social costs.
- Protection of the rural and agricultural countryside.

Table 1 outlines the amount of developable land required to accommodate the forecasted population and employment growth to 2031.

Table 1
2031 Whitebelt Area Requirements by Local Municipality

	Community Lands (ha)	Employment Lands (ha)	Total (ha)
East Gwillimbury	427	150	577
Markham	682	328	1,010
Vaughan	510	376	886
Total	1,619	854	2,474

Source: York Region Planning and Development Services, 2010.

Note: Figures may not add due to rounding.

The forecast and land budget will be carefully monitored

There is a level of uncertainty attached to any forecast and land budget exercise. The accuracy of forecasts declines as the time horizon increases. Careful monitoring and management of risks will be a key component of the Region's growth management strategy. This forecast and land budget exercise involves a considerable number of assumptions including a shift to intensification units, a declining average persons per unit, a decreasing demand for ground related units, a continued demand for employment land based on the Region's existing economic structure and a host of other factors. The forecast and land budget will be reviewed at least every five years.

Identified key risks include:

- There is a possibility that the pace of growth could spike higher than the forecast, especially for ground related housing units. An increased demand in the market place for ground related units will have implications for the land budget.
- Similarly, there may be a shift to more land extensive warehousing and distribution type employment uses that would impact the amount of employment land required.
- The identification and protection of employment lands required to accommodate employment growth over the long term is critical in order to match job creation to population growth.
- It will be a challenge to finance and construct infrastructure to match the pace of growth, especially transportation, water, wastewater and human services. Stronger policies to control the pace, phasing and sequencing of growth will be required.
- The magnitude and timing of infrastructure investment will require significant provincial/federal investment and a new municipal fiscal model.

Therefore, there is a need to carefully monitor the forecast and land budget. These risks could have significant implications for land supply shortages, a loss of strategic lands for employment uses, and fiscal impacts.

Relationship to Vision 2026

The decisions made around the forecast and land budget will support and advance every goal area in Vision 2026:

- Quality Communities for a Diverse Population
- Enhanced Environment, Heritage and Culture
- A Vibrant Economy
- Responding to the Needs of Our Residents
- Housing Choices for Our Residents
- Managed and Balanced Growth
- Infrastructure for a Growing Region
- Engaged Communities and a Responsive Region

Planning new communities in the Whitebelt Area, as well as development in the existing urban area, will provide the opportunity to implement each of the goal areas and to achieve the Region's Vision.

5. FINANCIAL IMPLICATIONS

The financial implications of growth should continue to be monitored

Financial forecasts for the Region are based on the population and employment forecasts summarized in this report. The forecasted growth for the Region will require investment in transportation, water and wastewater infrastructure and human services. The Region has completed a detailed fiscal impact assessment and an economic implications analysis for the forecast and land budget.

It is estimated that the annual assessment growth over the forecast period will be 1.5 to 2%. The infrastructure that will be constructed by the Region and subsequently recovered from development charges will be approximately \$6.4 billion (figures in 2008 dollars).

There is a level of risk based on the forecast and land budget assumptions, related to development charges revenue stream. An urban area expansion is required to accommodate demand for the ground-related housing market. The forecast for high density units will require a significant shift in housing preferences for the Region's residents. A lower than anticipated growth rate for either the ground-related housing market or the high density housing market will result in a shortfall of projected development charges revenue. This will cause delays in capital cost recovery, impact costs for debt repayment and result in a potential deferral of elements in the capital

program. There may also be a requirement to fund regional capital programs through water/wastewater rates or property taxes. Careful ongoing monitoring of financial implications is necessary.

6. LOCAL MUNICIPAL IMPACT

The forecasts and land budget exercise were prepared in consultation with local municipalities and agencies. Over the past three years, a series of technical meetings with local municipal staff were held to refine the forecasts and land budget. A background series of growth management reports that presented the preliminary forecast and land budget information were presented to the Planning and Economic Development Committee in April 2007, September 2008, and January 2009. Consultation with local municipal staff resulted in modifications to the forecasts and land budget based on their feedback.

The Region appreciates the considerable amount of time and effort that local municipal staff have provided to complete the forecast and land budget exercise.

The Town of East Gwillimbury, City of Vaughan and the Town of Markham have all been engaged in growth management work. The Town of East Gwillimbury has completed a draft Official Plan. The City of Vaughan will be releasing a draft Official Plan in the spring of 2010. The Town of Markham is in the process of finalizing their growth management work. A separate staff report outlining the proposed urban area expansions to 2031 for each of these three municipalities is on this Planning and Economic Development Committee's agenda.

The local municipalities will use the forecasts, intensification targets and land budget to guide their long term planning initiatives, including growth management studies, capital infrastructure projects and social and health service programs.

7. CONCLUSION

York Region's land budget was prepared in conformity with key policies in the *Growth Plan* regarding the protection of the natural environment, the development of more compact transit supportive communities, aggressive intensification targets and density targets in urban growth centres and the designated greenfield area.

This report details York Region's residential and employment land requirements to 2031, provides the basis for proposed urban area expansions in the ROP, and demonstrates the Region's ability to achieve the *Growth Plan's* designated greenfield area density target of 50 people and jobs per hectare. An urban area boundary expansion is required to accommodate the forecasted growth in York Region.

The overall approach to the January 2009 land budget report was sound. Revisions have been made to that report based on the revised employment forecast and on further discussions with the Province and the local municipalities. The refinements to the land budget are minor and do not impact the adopted policies in the ROP and result in a decrease of 363 ha of land required for urban area expansion by 2031.

A total of 2,474 developable hectares of land in the Whitebelt are required for residential and employment uses in order to achieve the 2031 forecast. This includes 1,619 ha for community land development (including 206 ha for major retail uses) and 854 ha for employment land development.

Urban area boundary expansions will be required on Whitebelt Area lands in the three municipalities of East Gwillimbury, Markham and Vaughan in order to accommodate the 2031 forecast. The Town of East Gwillimbury requires 577 ha of urban area expansions lands, the Town of Markham requires 1,010 ha and the City of Vaughan requires 886 ha.

The Region's *Growth Plan* conformity exercise includes forecasting and land budget work, a Regional Intensification Strategy, a comprehensive public consultation exercise, infrastructure master plan updates for transportation, and water and wastewater, an updated Natural Heritage Strategy and a 25 year fiscal impact analysis.

The ROP implements the results of the municipal comprehensive review. The ROP was adopted by Regional Council in December 2009.

This report is an update to the York Region 2031 Land Budget presented to Planning and Economic Development Committee in January 2009. Revisions have been made to the report based on further consultations with the Province and the local municipalities.

For more information on this report, please contact Paul Bottomley, Manager of Growth Management at (905) 830-4444, Ext. 1530 or John Waller, Director of Long Range and Strategic Planning at Ext. 1525.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)

York Region 2031 Land Budget

York Region Planning and Development Services

March 2010

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Executive Summary

York Region's Official Plan (ROP) was adopted by Regional Council in December 2009. Table 1 of the ROP includes population and employment forecasts by local municipality that are used to determine urban area expansion requirements to 2031.

This report is an update to the York Region 2031 Land Budget report presented to Planning and Economic Development Committee in January 2009. Revisions have been made to the report based on further discussions with the Province and the local municipalities. This report provides the basis for the urban area expansions in the ROP.

The Province of Ontario released Places to Grow: Growth Plan for the Greater Golden Horseshoe (*Growth Plan*) in 2006. The *Growth Plan* contains population and employment growth forecasts for all upper and single-tier municipalities in the Greater Golden Horseshoe (GGH) and includes specific policies for where and how to grow and policies for Designated Greenfield Areas and for settlement area boundary expansions.

The *Growth Plan* states that a settlement area boundary expansion may only occur as part of a municipal comprehensive review, where certain criteria are met.

This report details York Region's residential and employment land requirements to 2031 and demonstrates the Region's ability to achieve the *Growth Plan*'s designated greenfield area density target of 50 people and jobs per hectare.

The following observations and conclusions can be drawn from the analysis.

- York Region's forecast anticipates approximately 1,507,480 people, 509,650 households and 780,270 jobs by 2031. This represents growth of 575,610 people, 234,110 households and 317,950 jobs from 2006 to 2031.
- The York Region employment forecast has been revised from approximately 799,000 in the January 2009 York Region 2031 Land Budget Report to 780,270 to be consistent with the *Growth Plan* forecast.
- An urban area boundary expansion is required to accommodate the 2031 forecasted population and employment growth in York Region. Boundary expansions will occur on Whitebelt Area lands in East Gwillimbury, Markham and Vaughan.
- A total of 2,474 developable hectares (ha) of land in the Whitebelt Area are required for residential and employment uses in order to achieve the 2031 forecast. This includes 1,619 ha for community land development (including 206 ha for major retail uses) and 854 ha for employment land development. The Whitebelt Area land requirements are distributed to the three local municipalities based on the forecasts in Table 1 of the ROP.

- The analysis includes the identification of approximately 90,720 households to be accommodated within the Built-up Area of the Region in order to achieve the minimum 40% residential intensification target.
- Forty-three percent (43%) of the Region's employment growth will be accommodated within the Region's Built-up Area, as defined by the *Growth Plan*.
- Community lands in the Whitebelt Area are planned based on achieving a density of 70 people and jobs per ha. Community and employment lands in the Whitebelt Area combined total 60 people and jobs per ha. Communities at these densities represent a more compact built form than traditionally built in York Region.
- Community lands in Designated Greenfield and Whitebelt Areas combined are planned based on achieving a density of 55 people and jobs per ha.
- Employment lands in the Whitebelt Area are planned based on achieving a density of 40 jobs per ha. Employment lands in vacant Designated Greenfield and Whitebelt Areas combined are planned based on achieving a density of 36 jobs per ha.
- The 2031 York Region Designated Greenfield Area density is 50 people and jobs per ha, which meets the *Growth Plan* target.

In addition to the updated ROP, York Region's forecasting and land budget work is an important component of the Region's municipal comprehensive review that forms part of the *Growth Plan* conformity exercise.

The Region's conformity exercise also includes a Regional Intensification Strategy, a comprehensive public consultation exercise, infrastructure master plan updates for transportation, and water and wastewater, an updated Natural Heritage Strategy and a 25 year fiscal impact analysis.

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YORK REGION 2031 LAND BUDGET

Background

Prepared in context of the Provincial Growth Plan

The Province of Ontario released Places to Grow: Growth Plan for the Greater Golden Horseshoe (*Growth Plan*) in 2006. The *Growth Plan* guides decisions on issues relating to transportation, infrastructure planning, land use planning, urban form, housing, natural heritage and resource protection with the intent to help secure the future prosperity of the Greater Golden Horseshoe (GGH).

The *Growth Plan* contains population and employment growth forecasts for all upper and single-tier municipalities in the GGH and includes specific policies for where and how to grow and policies for designated greenfield areas and for settlement area boundary expansions.

The *Growth Plan* states that a settlement area boundary expansion may only occur as part of a municipal comprehensive review that is defined as “an official plan review, or an official plan amendment, initiated by a municipality which comprehensively applies the policies and schedules of the *Growth Plan*”. The municipal comprehensive review includes:

- The use of the *Growth Plan*’s forecasts;
- The completion of an intensification strategy that identifies a minimum 40% residential intensification target between 2015 to 2031, and plans for a significant portion of future population and employment growth within the Built-up Area;
- An assessment of the available residential and employment land supplies and demonstration of the need for a proposed urban expansion; and
- A demonstration of how the minimum designated greenfield area density target of 50 people and jobs per hectare is to be achieved.

The Region’s *Growth Plan* conformity exercise includes forecasting and land budget work, a Regional Intensification Strategy, a comprehensive public consultation exercise, infrastructure master plan updates for transportation, and water and wastewater, an updated Natural Heritage Strategy and a 25 year fiscal impact analysis.

The Regional Official Plan (ROP) implements the results of the municipal comprehensive review. The ROP was adopted by Regional Council in December 2009. Table 1 of the ROP includes population and employment forecasts by local municipality that are used to determine urban area expansion requirements to 2031. Proposed urban area expansion requirements to the ROP will be forthcoming.

This report is an update to the York Region 2031 Land Budget presented to Planning and Economic Development Committee (PEDC Report No. 1) in January 2009. Revisions have been made to the report based on further discussions with the Province and local

municipalities. This report details York Region's residential and employment land requirements to 2031, provides the basis for the urban area expansions in the ROP, and demonstrates the Region's ability to achieve the *Growth Plan's* designated greenfield area density target.

A Greater Toronto and Hamilton Area (GTHA) working group was established under the direction of the Regional Planning Commissioners of Ontario (RPCO) to establish a consistent methodology to measure land needs. The analysis detailed below on land budget and measuring the 50 people and jobs per hectare designated greenfield area density target is based on the methodology defined by the GTHA working group.

Land Budget based on York Region's 2031 Forecast

York Region's land budget analysis is based on the Region's 2031 population, household and employment forecast, which is consistent with the *Growth Plan* forecast. Table 1 of the ROP includes the population and employment forecasts by local municipality. The Region is anticipated to accommodate 1,507,480 people, 509,650 households and 780,270 jobs in the Region by 2031. This represents growth of 575,610 people, 234,110 households and 317,950 jobs from 2006 to 2031.

The January 2009 Land Budget report included an employment forecast for approximately 799,000 jobs in the Region by 2031. The employment forecast has been revised to 780,270 jobs by 2031, to be consistent with the *Growth Plan* forecast.

The Forecast is distributed to three Land Area Categories

The land budget exercise distributes the population and employment forecast into the three land area categories of the Built-up Area, the Designated Greenfield Area and the Whitebelt Area. *Figure 1* on the following page illustrates the location of each land area category

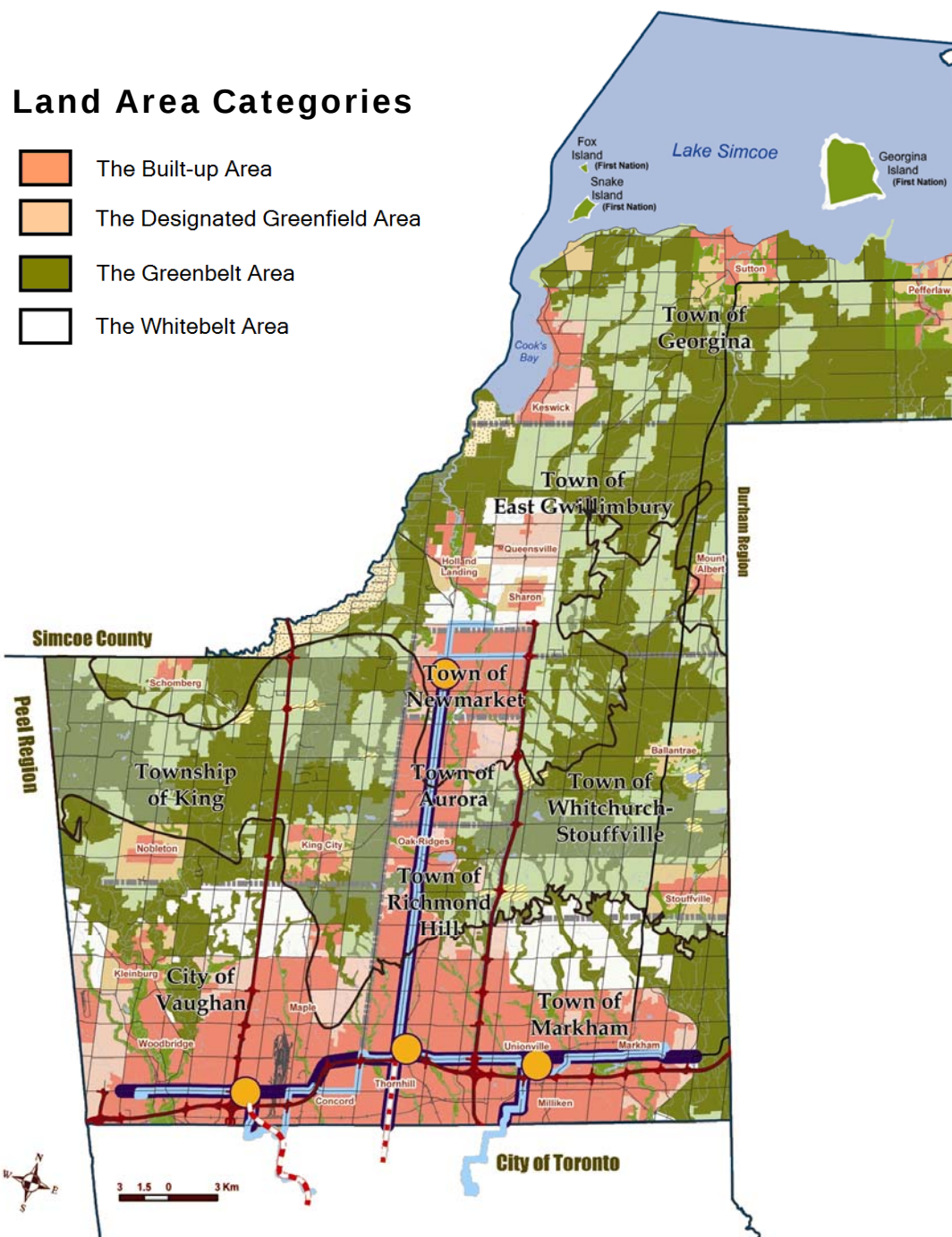
The Built-up Area was built-up as of June 2006 as defined by the provincially delineated built boundary. Clause 2.2.3.1 of the *Growth Plan* stipulates that "By the year 2015 and for each year thereafter, a minimum of 40 per cent of all residential development occurring annually within each upper- and single-tier municipality will be within the *built-up area*". In addition to the areas delineated by the built boundary, the Province has identified a number of "undelineated areas", which are predominantly Hamlets that were considered to be built-up as of June 2006. Growth in the undelineated areas also counts towards intensification in the land budget.

The Designated Greenfield Area is designated "Urban Area" or "Townships and Villages" in the Regional Official Plan and is outside of the built boundary.

The Whitebelt Area is not currently designated "Urban Area" or "Townships and Villages" and is outside of the Greenbelt and Oak Ridges Moraine. The Whitebelt Area represents the remaining lands with development opportunities within the Region and are where

urban area boundary expansions will occur. The Whitebelt Area is predominantly located in East Gwillimbury, Markham, and Vaughan, with small portions in Whitchurch-Stouffville and King.

Figure 1: Map of York Region Land Area Categories

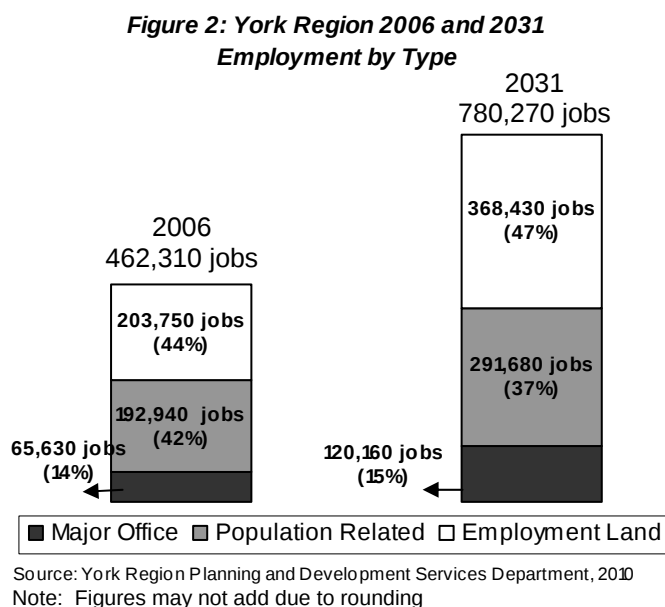


Overview of Land Budget Methodology

York Region's 2031 land requirements were based on a comprehensive demand/supply analysis for residential and employment growth, a consideration of both residential and employment intensification and on an evaluation of the Region's ability to achieve the *Growth Plan's* designated greenfield area density target.

As mentioned above the residential demand was based on the Region's 2031 population and household forecast. The residential supply included an update of the unit growth potential in vacant designated lands in the Region's approved communities as well as the potential supply in the Built-up Area to meet the 40% intensification target. Additional unit requirements to meet the forecast demand were then determined.

The employment demand was based on the Region's revised 2031 employment forecast, consistent with the *Growth Plan*, and contained in Table 1 of the ROP. The revised forecast is distributed into three employment types: employment land employment, major office employment and population-related employment. An updated supply analysis was undertaken for employment land and employment growth potential in the Region's vacant designated employment lands and additional job requirements to meet the forecast were then determined. A separate analysis was undertaken for major office employment and population related employment (including major retail). *Figure 2* depicts 2006 and 2031 total employment by type. The revised 2031 employment forecast was decreased from approximately 799,000 to 780,270 jobs. The distribution of the three employment types is illustrated in *Figure 2*.



The land budget exercise includes an analysis of both residential and employment intensification within the Region's Built-up Area and an evaluation of the Region's ability to achieve the *Growth Plan's* designated greenfield area density target of 50 people and jobs per hectare.

Residential Analysis

Residential Demand

The residential component of the land budget analysis is based on the Region's forecasted household growth from 2006 to 2031. The Region's forecast of households is divided into four dwelling types: single detached, semi-detached, rows (townhouses), and apartments. The apartment category includes both low-rise and high-rise apartment units, as well as duplex units.

Table 1 below illustrates the forecast household growth by dwelling type and local municipality.

Table 1: York Region Forecast Unit Growth by Local Municipality 2006-2031

	Single	Semi	Row	Apt ¹	Total
Aurora	3,530	690	1,590	3,000	8,800
East Gwillimbury	12,880	2,390	5,290	4,280	24,840
Georgina	5,890	470	1,520	3,390	11,270
King	3,490	420	860	1,300	6,060
Markham	15,330	3,750	11,890	31,140	62,110
Newmarket	3,240	590	1,040	4,960	9,820
Richmond Hill	8,940	3,060	5,790	12,640	30,430
Vaughan	21,310	4,930	11,010	28,930	66,180
Whitchurch-Stouffville	7,770	1,680	2,340	2,800	14,590
York Region	82,380	17,980	41,330	92,430	234,110

Source: York Region Planning and Development Services Department, 2010

Note: Figures may not add due to rounding

1. For the purposes of the land budget exercise, the duplex forecast of 9,065 units was assumed to locate within the Designated Greenfield Area and is included with the apartment category. This is a revision from the January 2009 land budget report, when the duplex forecast was accommodated in the single detached unit category (two duplex units were assumed to equate to one single detached unit). This update results in a unit growth forecast total of 234,110 by dwelling type that is consistent with the household forecast in the York Region 2031 Population and Employment Forecast Report (January 2009), as compared to 229,290 in the January 2009 land budget.

The household growth forecast by dwelling type is distributed into the three land area categories of Built-up Area, Designated Greenfield Area and Whitebelt Area based on a demand/supply analysis that considers:

- the forecast demand;
- the potential supply required within the Built-up Area to achieve the 40% intensification target;
- the potential supply in the vacant Designated Greenfield Area; and
- the additional units required in the Whitebelt Area to meet the forecast demand.

Residential Supply

Potential Residential Supply in the Built-up Area

Table 2 illustrates York Region's intensification targets by local municipality. This intensification total of approximately 90,720 units was derived based on detailed spatial analysis by regional staff using the final built boundary released by the Province. The local municipalities will be using these targets to identify the appropriate locations for intensification as part of their individual intensification strategies.

Based on local municipal consultation, there has been a minor change to the municipal assignments from the January 2009 land budget report. The intensification targets are now consistent with Table 2 of the ROP.

Of the required 90,720 units, over 50,000 already have some level of approval. This includes existing applications for communities within the Built-up Area, including Regional Centres and Corridors. Planning is underway for York Region's four urban growth centres (regional centres) of Markham, Vaughan, Richmond Hill and Newmarket. These centres are required to plan for a minimum of 200 people and jobs per hectare. The targets listed in Table 2 for those four municipalities include assumptions on meeting the urban growth centre density requirements.

Table 2: York Region Residential Intensification Targets by Local Municipality 2006-2031

	Units
Aurora	3,140
East Gwillimbury	1,030
Georgina	2,690
King	920
Markham	31,590
Newmarket	5,250
Richmond Hill	15,300
Vaughan	29,300
Whitchurch-Stouffville	1,500
York Region	90,720

Source: York Region Planning and Development Services Department, 2010

Note: Figures may not add due to rounding

The final built boundary released by the Province included areas of low-density greenfield development in the vicinity of major transportation corridors and along the edges or fringe areas of the Built-up Area. From a technical perspective these greenfield areas are within the Built-up Area, but have not been included as part of the intensification target analysis since large-scale low density greenfield development does not meet the intent of intensification policies in the *Growth Plan*.

An estimated 16,430 single detached and semi-detached units are being planned for within the Built-up Area and are located across the Region in planned communities such as Cathedral and Box Grove in Markham, Newmarket Southeast in Newmarket, Kleinburg in Vaughan and within various secondary plans on the fringe of the built boundary. The majority of these units will be built within the next few years. These low density greenfield units are classified as a sub-total within the Built-up Area strictly for the purpose of measuring the Designated Greenfield Area density target, but are not considered to be intensification.

Residential Unit Supply Potential in Designated Greenfield Areas

The vacant residential supply analysis reported in the January 2009 land budget report was based on an update of the Region's mid-year 2005 vacant residential unit supply inventory, presented to Planning Committee in February, 2006. The update to the inventory included the addition of the 2C lands in Aurora and the North Leslie secondary plan in Richmond Hill as well as minor adjustments to the potential supply of approved communities throughout the Region. The updated inventory also separated the vacant supply in the Designated Greenfield Area from the supply in the Built-up Area.

Further minor refinements have been made to the supply subsequent to the January 2009 report based on local municipal growth management work. The vacant Designated Greenfield Area supply includes approved communities throughout the Region that were not built as of mid-year 2006. In addition, the City of Vaughan has proposed a re-designation of Block 60 (62 developable hectares) within the existing urban area from employment uses to residential uses as part of their local municipal comprehensive review and Official Plan exercise. This area has been included in the potential residential supply for the Designated Greenfield Area and removed from the employment land employment supply. The re-designation of Block 60 will require supporting analysis and Official Plan amendment approval.

The potential unit supply in the vacant Designated Greenfield Area is presented in *Table 3*.

Table 3: York Region Designated Greenfield Area Unit Potential by Local Municipality 2006-2031

	Single	Semi	Row	Apt.	Total
Aurora	3,140	690	740	720	5,280
East Gwillimbury	9,160	1,650	2,880	2,720	16,410
Georgina	5,520	460	990	1,220	8,200
King	3,490	420	670	560	5,140
Markham	6,190	1,890	3,400	3,190	14,670
Newmarket	1,630	40	260	480	2,410
Richmond Hill	5,460	140	1,110	2,020	8,730
Vaughan	15,150	3,560	4,020	3,140	25,870
Whitchurch-Stouffville	6,730	1,680	1,860	1,770	12,040
York Region	56,470	10,530	15,930	15,820	98,750

Source: York Region Planning and Development Services Department, 2010

Note: Figures may not add due to rounding

Residential Unit Requirements in the Whitebelt Area

Residential Units in the Built-up Area and in the Designated Greenfield Area do not meet the forecast demand.

As illustrated in *Table 4*, the potential supply from the vacant Designated Greenfield Area and potential growth within the Built-up Area can accommodate approximately

205,910 units of the required 234,110 units from 2006 to 2031. The remaining 28,200 units will need to be accommodated in the Region's Whitebelt Area.

East Gwillimbury, Markham and Vaughan are the three municipalities with a considerable potential supply of land for residential development in the Whitebelt Area. Each of these municipalities will play a significant role in accommodating growth to 2031 as shown in Table 5 below.

The Whitebelt Area residential unit

requirement of 28,200 includes a unit type mix (50% single detached, 10% semi-detached, 30% rows and 10% apartments) that represents a transit supportive compact built form anticipated in the Region's new communities.

Table 4: York Region 2031 Residential Unit Requirements in the Whitebelt Area

	Units
Forecast Demand, 2006-2031¹	234,110
2031 Intensification Target²	90,720
Low Density Supply in the Built-up Area³	16,430
Designated Greenfield Area Potential⁴	98,750
Sub-Total⁵	205,910
Whitebelt Area Residential Requirement⁶	28,200

Source: York Region Planning and Development Services Department, 2010

1. From Table 1
2. From Table 2
3. Singles and semi's within the built boundary
4. From Table 3
5. Supply in Built-Up and Designated Greenfield Areas
6. Forecast demand less supply Sub-Total

Note: Figures may not add due to rounding

Table 5: York Region 2031 Whitebelt Area Unit Requirement by Structure Type and Local Municipality

	Single	Semi	Row	Apt.	Total
East Gwillimbury	3,680	740	2,210	740	7,360
Markham	6,070	1,210	3,640	1,210	12,140
Vaughan	4,350	870	2,610	870	8,700
York Region	14,100	2,820	8,460	2,820	28,200

Source: York Region Planning and Development Services Department, 2010

Note: Figures may not add due to rounding

Residential Unit Growth Summary by Land Area Category

Figure 3 below graphically displays the forecast unit growth by the three land area categories, showing that approximately 47% of the Region's residential growth can be accommodated within the Built-up Area, which includes 90,720 intensification units and 16,430 low density units. Approximately 42% of the growth can be accommodated within the Designated Greenfield Area and 12% will be accommodated in the Whitebelt Area.

Figure 3: York Region 2006-2031 Residential Unit Growth by Land Area Category

Intensification Target 40% (90,720 units)	Low Density Supply 7% (16,430 units)*	Designated Greenfield Area Potential 42% (98,750 units)	Whitebelt Area Requirement 12% (28,200 units)
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Source: York Region Planning and Development Services Department, 2010

The Built-Up Area includes the Intensification Target and Low Density Supply figures

* The low density supply is not included in the intensification target

Note: Figures and percentages may not add due to rounding

Employment Analysis

Employment Demand

The revised ROP employment forecast of approximately 780,270 jobs has been used in the updated land budget. This is approximately 19,000 fewer jobs than was reported in the January 2009 land budget report.

Table 6 below indicates that 317,950 new jobs are anticipated within York Region by 2031.

Table 6: York Region Employment Forecast by Local Municipality 2006-2031

	Total Employment 2006 ¹	Total Employment 2031	Employment Growth 2006-31	2006-31 Share of Growth (%)	2006-31 Avg Annual Increase (%)
Aurora	20,260	34,200	13,940	4%	2.1%
East Gwillimbury	5,870	34,410	28,540	9%	7.4%
Georgina	8,030	21,240	13,210	4%	4.0%
King	7,060	11,910	4,860	2%	2.1%
Markham	144,830	240,570	95,740	30%	2.1%
Newmarket	42,080	49,440	7,360	2%	0.6%
Richmond Hill	61,090	99,390	38,300	12%	2.0%
Vaughan	162,160	266,050	103,900	33%	2.0%
Whitchurch-Stouffville	10,920	23,030	12,110	4%	3.1%
York Region	462,310	780,270	317,950	100%	2.1%

Source: York Region Planning and Development Services Department, 2010

1. 2006 employment data is based on the York Region Employment Survey

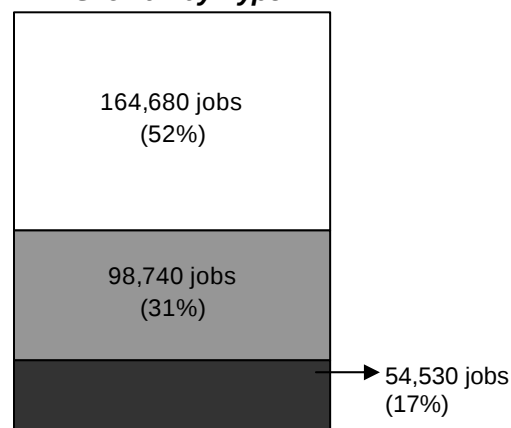
Note: Figures may not add due to rounding

Employment Forecast is distributed into Three Types

For the purposes of the forecast and land budget, York Region's employment has been divided into three distinct types: Employment Land, Major Office and Population Related Employment. Figure 4 shows total 2006-2031 employment growth by employment type.

Employment Land Employment: Located on Employment Lands (industrial or business parks) and typically requires large areas of vacant designated greenfield land in strategic

Figure 4: York Region 2006-2031 Employment Growth by Type



■ Major Office ■ Population Related □ Employment Land

Source: York Region Planning and Development Services Department, 2010

Note: Figures and percentages may not add due to rounding

locations along major transportation routes (i.e. 400-series highways), with full servicing and near existing markets. Employment lands also accommodate a limited amount of ancillary uses such as small scale office and retail.

Major Office Employment: Occurs in office buildings of 1,860 square metres (20,000 sq. ft.) or larger. Policies in the *Growth Plan* attempt to direct the location for Major Office within the Built-up Areas along transit routes and in centres and corridors. Major Office employment does not typically require large vacant lands for development and can locate on both employment lands and within a community.

Population-Related Employment: Located within communities and includes services that serve the local population such as retail services, education services, municipal government services, social, community and health services, and local office uses. Major Retail, which is also classified as population-related employment, is calculated separately and requires significant land in addition to land requirements for a typical new community.

Table 7 shows the York Region forecast for the three distinct employment types described above.

Table 7: York Region Forecast Employment Growth by Type and Local Municipality 2006-2031

	Employment Land	Major Office	Population Related	Total
Aurora	8,350	1,590	4,010	13,940
East Gwillimbury	18,320	580	9,640	28,540
Georgina	9,110	0	4,100	13,210
King	2,330	0	2,530	4,860
Markham	32,680	37,440	25,620	95,740
Newmarket	3,010	830	3,520	7,360
Richmond Hill	16,320	8,190	13,790	38,300
Vaughan	69,160	5,910	28,830	103,900
Whitchurch-Stouffville	5,410	0	6,700	12,110
York Region	164,680	54,530	98,740	317,950

Source: York Region Planning and Development Services Department, 2010

Note: Figures may not add due to rounding

Employment Supply

Employment Lands in the Designated Greenfield and Built-up Areas

The Vacant Employment Land Inventory 2006, presented in PEDC Report No. 10, 2007, was updated and used as the basis for the January 2009 land budget report. The updates for the January 2009 report included a modification to the supply in Georgina by removing commercial/retail lands from Sutton and Keswick and adding subsequent approvals in Georgina for the Keswick Business Park, the 2C Lands in Aurora and North Leslie in Richmond Hill. As mentioned above in the residential supply analysis section,

block 60 (62 developable hectares) in the City Vaughan has been removed from the employment land supply and included in the residential supply in the Designated Greenfield Area. The Highway 400 North employment lands in the City of Vaughan, located within ROPA 52, which was adopted by Regional Council, are not included in the supply for the Designated Greenfield Area. ROPA 52 has been appealed to the OMB by the Province.

A small amount of the employment land supply accounts for a portion of the major office land requirement. The land budget assumes that all of the major office growth in Aurora and fifty percent of major office growth in Markham and Vaughan will be on employment lands, and this major office land requirement has been removed from the employment land supply.

Table 8 shows the updated inventory of employment land employment inside and outside the Built-up Area by local municipality.

Table 8: York Region Vacant Designated Employment Land Supply by Local Municipality (Net Hectares) 2006¹

	Built-up Area	Designated Greenfield Area	Total Designated Lands
Aurora	33	169	203
East Gwillimbury	12	282	294
Georgina	1	188	189
King	2	90	93
Markham	252	139	391
Newmarket	59	0	59
Richmond Hill	210	76	286
Vaughan	329	874	1,203
Whitchurch-Stouffville	9	90	99
York Region	908	1,909	2,816

Source: York Region Planning and Development Services Department, 2010

1. Excludes Industries on Private Services (191 net hectares) and Major Office requirements on Employment Land (130 net hectares)

Note: Net area refers to the private lot area available for development, and excluded roads, open space, and other public uses.

The job potential from the vacant employment land inventory is derived by applying density assumptions to the available supply. The density assumptions are based on the York Region Employment Land Area Analysis report, presented at PEDC Report No. 5, 2008. Densities on employment lands vary considerably due to the nature and type of business and employment activity that occurs at various locations across the Region. Table 9 displays York Region densities on designated occupied employment lands for each local municipality in 2006.

**Table 9: York Region Employment Land Employment Densities
by Local Municipality, 2006¹**

	2006 Occupied Land (net ha)	2006 Jobs on Occupied Land	2006 Net Density ²
Aurora	187	7,910	42
East Gwillimbury	62	800	13
Georgina	23	910	40
King	37	960	26
Markham	850	49,990	59
Newmarket	212	14,350	68
Richmond Hill	333	21,750	65
Vaughan	2,077	101,820	49
Whitchurch-Stouffville	61	2,880	47
York Region	3,842	201,370	52

Source: York Region Planning and Development Services Department, 2010

1. Major Office and Industries on Private Services are not included

2. Density figures are rounded

The Land Budget exercise removes IPS (Industries on Private Services) lands from the analysis. These lands are located within Towns and Villages within the Built-up Area or within existing designated areas in the Greenbelt.

Table 10 below lists the densities assumed for each local municipality and the resulting job potential for vacant designated lands. There are minor adjustments to density assumptions for the municipalities of Aurora, Georgina, King, Newmarket and Whitchurch-Stouffville since the January 2009 land budget report, while the average density of 46 jobs per net hectare across the Region remains the same. A detailed description on the assumed densities by local municipality is provided in *Appendix 1*.

Table 10: York Region Designated Employment Land Potential by Local Municipality, 2006¹

	Designated Employment Land Density ²	Job Potential in Built-up Area	Job Potential in Designated Greenfield Area	Total Employment Land Potential
Aurora	41	1,370	6,970	8,350
East Gwillimbury	40	500	11,400	11,900
Georgina	46	30	8,670	8,700
King	25	50	2,250	2,300
Markham	50	12,610	6,960	19,560
Newmarket	51	3,010	0	3,010
Richmond Hill	57	11,990	4,330	16,320
Vaughan	45	14,800	39,320	54,120
Whitchurch-Stouffville	46	390	4,140	4,530
York Region	46	44,760	84,030	128,790

Source: York Region Planning and Development Services Department, 2010

1. Excludes jobs on lands designated for Industries on Private Services

2. Densities are expressed in net density. Refer to Appendix 1 for density assumptions.

Note: Figures may not add due to rounding

As Table 10 illustrates, an analysis of employment land employment growth potential in the Built-up Area indicates that 44,760 jobs can be counted as intensification.

The employment potential on vacant designated lands made no assumption for a vacancy factor, which historically has been used for land budget work the Region has completed. A number of parcels in employment lands tend to remain vacant over the long term for reasons related to site size, location and other factors. Since the Region has not made use of a vacancy factor, a greater number of jobs have been assumed for employment lands within the Built-up Area, thereby accounting for an increasing amount of potential intensification.

Employment Land Employment Requirements in the Whitebelt Area

The employment potential from vacant designated employment lands is subtracted from the 2006-2031 forecast growth of employment land employment to generate jobs that require additional lands for approval. Table 11 displays the number of jobs required on employment lands in the Whitebelt Area to meet the 2031 employment land employment forecast. The adjustment of the 2031 employment forecast from approximately 799,000 to 780,270 jobs has resulted in the Whitebelt Area employment land employment requirement decreasing from 42,620 in the January 2009 land budget report to 34,170.

Table 11: York Region 2031 Employment Land Employment Requirement

Forecast Demand, 2006-2031¹	162,960
Built-up Area Potential	44,760
Designated Greenfield Potential	84,030
<i>Supply Sub-Total²</i>	128,790
Whitebelt Area Employment Land Requirements³	34,170

Source: York Region Planning and Development Services Department, 2010

1. Excludes jobs on lands designated for Industries on Private Services

2. Built-up Area + Designated Greenfield Potential from Table 10

3. Forecast Demand less Supply Sub-Total

Employment Land Employment by Land Area Category

Figure 5 below graphically depicts the distribution of employment land employment by land area category, showing that approximately 27% of the Region's growth of employment land employment is within the Built-up Area. Approximately 52% of the growth can be accommodated within employment lands in the Designated Greenfield Area and 21% will be accommodated in the Whitebelt Area.

Figure 5: York Region 2006-2031 Employment Land Employment Growth by Land Area Category

Built-up Area Potential 27% (44,760 jobs)	Designated Greenfield Area Potential 52% (84,030 jobs)	Whitebelt Area Requirement 21% (34,170 jobs)
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Source: York Region Planning and Development Services Department, 2010
Note: Figures and percentages may not add due to rounding

Major Office Employment

York Region's major office employment has been increasing rapidly over the past twenty years. This increase has been fuelled by the growth of significant clusters of knowledge based employment in the Towns of Markham and Richmond Hill. There are also major office sites in the City of Vaughan, the Town of Aurora and the Town of Newmarket. York Region's land budget exercise assumes that a portion of major office growth will locate near existing major office locations on employment lands and also assumes a significant increase in major office employment in Regional Centres and along Regional Corridors. In particular, it is anticipated that large numbers of major office employment will locate within the Region's four urban growth centres over the 25 year period of the forecast.

As illustrated in *Table 12*, there were approximately 1.6 million square meters of major office space in York Region in 2006. The vast majority (93%) of the existing major office space is within employment lands.

Table 12: York Region 2006 Major Office Building Space by Local Municipality

	Total Major Office Space in 2006 (sq.m.)	Major Office Space on Employment Lands (sq.m.)	Share of Total on Employment Lands
Aurora	N/A	N/A	N/A
East Gwillimbury	N/A	N/A	N/A
Markham	1,134,480	1,113,680	98%
Newmarket	2,030	0	0%
Richmond Hill	229,530	170,790	74%
Vaughan	206,120	175,440	85%
York Region	1,572,150	1,459,910	93%

Source: York Region Planning and Development Services Department, 2010

Note: Major Office space includes both occupied and vacant

Note: Figures may not add due to rounding

The revised major office employment forecast anticipates growth of approximately 54,530 jobs by 2031 within approximately 1,377,000 square metres of office space.

The majority of the major office growth is anticipated to locate in the Town of Markham, the Town of Richmond Hill and the City of Vaughan, where a large proportion of the major office growth will be directed to the regional centres in each of these municipalities. Major office growth in the Town of Aurora will be located adjacent to existing major office uses as areas have been identified in local planning documents. Newmarket's major office growth will be focused in the Regional Centre. The Town of East Gwillimbury's detailed official plan review identifies the area adjacent to the existing GO Train Station as a potential location for major office. *Table 13* below illustrates the distribution of major office space and land area required by local municipality to 2031.

Table 13: York Region 2031 Major Office Land Requirements by Local Municipality

	2031 Major Office Space Forecast (sq.m.)	2006 Major Office Space (sq.m.) ¹	Growth in Major Office Space 2006 to 2031 (sq.m.) ²	Total Land Area Required (net ha) ³
Aurora	37,290	0	37,290	8.3
East Gwillimbury	14,260	0	14,260	3.2
Markham	2,081,350	1,134,480	946,870	210.4
Newmarket	21,720	2,030	19,700	4.4
Richmond Hill	436,100	229,530	206,570	45.9
Vaughan	358,580	206,120	152,460	33.9
York Region	2,949,310	1,572,150	1,377,150	306.0

Source: York Region Planning and Development Services Department, 2010

1. From Table 12

2. 2031 Major Office Space Forecast less 2006 Major Office Space (includes occupied and vacant)

3. Assumes 45% coverage

Note: Figures may not add due to rounding

As shown in *Table 14* below, the land budget exercise assumes that approximately 43% of the 306 net hectares required to accommodate the forecasted major office growth will be located on employment lands. In total, approximately 130 net hectares of employment land will be required to accommodate major office growth between 2006 and 2031, while 176 net hectares (57%) of land for major office uses is assumed to locate outside of employment lands, predominantly in regional centres and corridors.

Table 14: York Region 2031 Major Office Land Requirements by Local Municipality

	Total Land Area Required (net ha) ¹	Share of Growth on Employment Lands	Major Office Growth on Employment Lands (net ha) ²	Major Office Growth in Centres and Corridors (net ha)
Aurora	8.3	100%	8.3	0.0
East Gwillimbury	3.2	0%	0.0	3.2 ³
Markham	210.4	50%	105.2	105.2
Newmarket	4.4	0%	0.0	4.4
Richmond Hill	45.9	0%	0.0	45.9
Vaughan	33.9	50%	16.9	16.9
York Region	306.0	43%	130.4	175.6

Source: York Region Planning and Development Services Department, 2010

1. From Table 13

2. 100% of Aurora major office growth is assumed to locate within the Designated Greenfield Area.

80% of Markham major office growth on employment lands is assumed to locate within the Built-up Area, while 20% is assumed to locate within the Designated Greenfield Area.

100% of Vaughan major office growth on employment lands is assumed to locate in the Built-up Area.

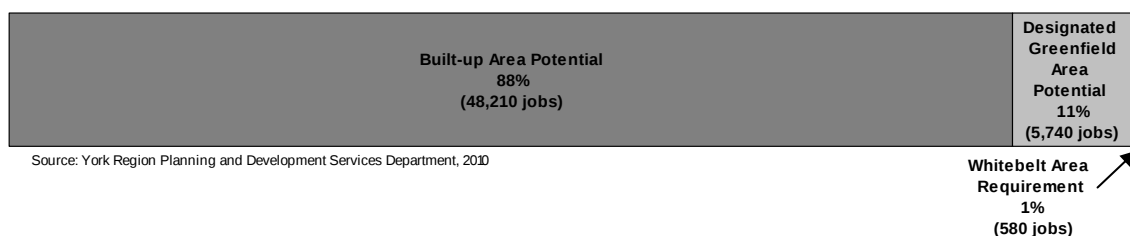
3. 100% of East Gwillimbury major office growth is assumed to locate in the Whitebelt Area.

Major Office Employment by Land Area Category

Figure 6 below graphically depicts the distribution of major office employment by land area category, showing that approximately 88% of the Region's growth of major office employment is within the Built-up Areas. This includes major office employment within centres and corridors as well as a portion of major office growth on employment lands

within the Built-up Area. In addition, approximately 11% of major office growth will be accommodated within existing approved communities in the Designated Greenfield Area, while 1% will be accommodated in the Whitebelt Area.

Figure 6: York Region 2006-2031 Major Office Growth by Land Area Category



Source: York Region Planning and Development Services Department, 2010

Population Related Employment

The land budget exercise assumes that population related employment will be located within communities. Land area requirements for population related jobs have therefore been included in community land density assumptions. The only exception to this is major retail employment, which includes retail outlet big box stores and shopping centres, and is dealt with separately from a land budget perspective. A more detailed discussion on the major retail portion of the land budget exercise is provided in the major retail section below.

Population related employment occurs in step with the population growth in communities. Therefore, the distribution of population related employment growth to the three land area categories of Built-up Area, Designated Greenfield Area and Whitebelt Area is based on the distribution of household growth. Primary jobs (i.e. agricultural and aggregates) are classified in the population related category for the employment forecast and removed from the land budget analysis as this type of employment occurs outside of communities and employment lands and does not require additional lands for development.

Table 15 below displays the distribution of 2006-2031 population related employment growth to the three land area categories.

Table 15: York Region Population Related Employment Growth by Land Area Category and Local Municipality, 2006-2031

	Population Related Employment Growth		Residential Unit Growth by Land Area Category (%) ³			Population Related Employment Growth by Land Area Category ⁴		
	Total ¹	Revised Total ²	Built-up Area	DGF Area ⁵	Whitebelt Area	Built-up Area	DGF Area ⁵	Whitebelt Area
Aurora	4,010	4,010	40%	60%	0%	1,610	2,400	0
East Gwillimbury	9,640	7,400	4%	66%	30%	320	4,890	2,190
Georgina	4,100	4,100	27%	73%	0%	1,120	2,980	0
King	2,530	2,530	15%	85%	0%	390	2,140	0
Markham	25,620	22,620	57%	24%	20%	12,860	5,340	4,420
Newmarket	3,520	3,520	75%	25%	0%	2,650	870	0
Richmond Hill	13,790	13,790	71%	29%	0%	9,830	3,960	0
Vaughan	28,830	25,830	48%	39%	13%	12,340	10,090	3,400
Whitchurch-Stouffville	6,700	6,700	17%	83%	0%	1,170	5,530	0
York Region	98,740	90,500	46%	42%	12%	42,280	38,210	10,010

Source: York Region Planning and Development Services Department, 2010

1. From Table 7

2. Total growth less major retail

3. Proportion of residential growth in each land area category by local municipality

4. Revised population related employment growth distributed to land area categories based on distribution of residential growth

5. Designated Greenfield Area

Note: Figures may not add due to rounding

The distribution of population related employment is based on the distribution of residential growth by the three land area categories. The units classified as low density supply in the Built-Up Area have been included in the Built-up Area category along with the intensification units.

Major Retail Employment

Retail trade is an essential component of a healthy economy. The appropriate amount of retail activity allows both residents and workers to purchase goods and services locally. However, it is important to consider the appropriate location for these major retail uses. Major retail includes retail outlet big box stores and shopping centres.

As York Region's population grows, additional major retail uses are anticipated. There are a number of applications for major retail within the existing urban area that will accommodate some of the forecast demand. It is also assumed that over time, some existing major retail sites will intensify. In addition, a portion of the major retail demand will need to be accommodated within the Region's new communities and therefore will need to be considered as part of the Region's urban expansion land area requirements. In the Whitebelt Area, major retail was treated as a separate category of population-related job growth.

The January 2009 report included an analysis of major retail to determine the amount of additional major retail employment required to 2031. The basis for the analysis in the January report was the York Region Employment Land Area Analysis, PEDC Report No. 5, 2008, which identified large-scale major retail locations in the Region.

The Employment Land Area Analysis report identified approximately 24,000 major retail jobs across York Region, resulting in an average of one major retail job for every 39

people in York Region. This benchmark was applied to the forecasted 2031 population growth of 575,610 to derive an additional 14,810 major retail jobs in York Region by 2031.

The January 2009 land budget report assumed that the entire forecast of 14,810 major retail jobs would locate within the Whitebelt Area of the Region. The updated land budget assumes that part of the major retail demand would be accommodated within the existing urban area, where a number of existing applications are currently in process, and along Centres and Corridors, and as intensification of existing sites. It is estimated that 6,570 jobs of the 14,810 would locate within the existing urban area across a number of municipalities throughout the Region. The remaining major retail jobs will need to be accommodated within the Region's new communities of the Whitebelt Area.

The Employment Land Area Analysis Report identified the density of major retail big box locations across the Region as 42 jobs per hectare. The updated land budget assumes a density of 40 major retail jobs per hectare to determine major retail land requirements in the Whitebelt Area, resulting in 206 hectares of land required. In keeping with the policies of the ROP, it is assumed that the major retail jobs and land requirement would be integrated within the Region's new communities of the Whitebelt Area.

Table 16 below depicts major retail land area and job requirements by local municipality.

Table 16: York Region 2031 Whitebelt Area Major Retail Requirements by Local Municipality

	Forecast Employment	Density	Land Area Required (ha) ¹
East Gwillimbury	2,240	40	56
Markham	3,000	40	75
Vaughan	3,000	40	75
York Region	8,240	40	206

Source: York Region Planning and Development Services Department, 2010

1. Hectares represent developable area

Note: Figures may not add due to rounding

Population Related Employment by Land Area Category

Figure 7 below graphically depicts the distribution of population related employment (including major retail employment) by land area category, showing that approximately 43% of the Region's growth of population related employment is within the Built-up Area. Approximately 39% of the growth can be accommodated within existing approved communities in the Designated Greenfield Area and 18% will be accommodated in the Whitebelt Area.

Figure 7: York Region 2006-2031 Population Related Employment Growth by Land Area Category

Built-up Area Potential 43% (42,280 jobs)	Designated Greenfield Area Potential 39% (38,210 jobs)	Whitebelt Area Requirement 18% (18,250 jobs)
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Source: York Region Planning and Development Services Department, 2010

Total Employment by Land Area Category

York Region's land budget analysis accounts for employment growth within the Built-up Area. Although the *Growth Plan* does not include an intensification target for employment growth, York Region has directed a significant portion of its employment growth to its Built-up Area, as depicted in *Table 17*.

Table 17: York Region Employment Growth by Land Area Category, 2006-2031

	Land Area Category				Built-up Area (%)
	Built-up Area	Designated Greenfield Area	Whitebelt Area	All Areas	
Employment Land Employment¹	44,760	84,030	34,170	162,960	27%
Major Office Employment²	48,210	5,740	580	54,530	88%
Population Related Employment³	42,280	38,210	18,250	98,740	43%
Total Employment	135,250	127,980	53,000	316,230	43%

Source: York Region Planning and Development Services Department, 2010

1. From Figure 5

2. From Figure 6

3. From Figure 7

Note: Figures may not add due to rounding

Note: Employment growth on Industries on Private Services is not included (1,720 jobs)

Figure 8 below graphically depicts the distribution of total employment growth by land area category, showing that approximately 43% of the Region's employment growth is classified as intensification. Approximately 40% of the growth can be accommodated within existing approved communities in the Designated Greenfield Area and 17% will be accommodated in the Whitebelt Area.

Figure 8: York Region 2006-2031 Total Employment Growth by Land Area Category

Built-up Area Potential 43% (135,250 jobs)	Designated Greenfield Area Potential 40% (127,980 jobs)	Whitebelt Area Requirement 17% (53,000 jobs)
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Source: York Region Planning and Development Services Department, 2010

Whitebelt Area Land Requirements Analysis

An urban area expansion is required to accommodate the York Region forecast for residential and employment to 2031. The *Growth Plan* defined the Whitebelt Area within York Region, which represents six percent (6%) of the Region's land area. The municipalities of Markham, Vaughan and East Gwillimbury have a modest potential land supply for housing and employment opportunities in the Whitebelt Area.

The York Region developable area was determined for both Designated Greenfield and Whitebelt Areas by excluding the features listed in the *Growth Plan* as well as the Regional Greenlands System, major infrastructure right-of-ways, and some existing uses (e.g. cemeteries and estate subdivisions). The developable area includes all land available for development for both private and public uses, including residential and employment uses, open space and infrastructure. *Appendices 2 and 3* provide a detailed explanation of how the developable area was determined.

The land requirements to 2031 for major retail and major office have been discussed above. Major retail job growth is assumed to locate within the existing urban area and in the Whitebelt Area integrated within new communities. Major office jobs are assumed to locate primarily within the Built-up Area and the Designated Greenfield Area. There are a small amount of major office jobs assumed to locate in the Whitebelt Area of the Town of East Gwillimbury.

The following analysis determines land requirements for residential, population related employment and employment land employment.

Community Land Requirements

Community land requirements within the Whitebelt Area include both residential and population related employment growth.

The community land area requirements for 2031 were derived based on a 20 units per hectare (20 uph) density assumption, applied to the developable lands of the Whitebelt Area. This density assumes that both residential and population related employment growth (excluding major retail) will be accommodated within the derived land area. The 20 unit per hectare density assumption is reflective of the more compact transit supportive communities that the Region is planning.

As indicated above, the land area requirement for major retail is in addition to the community land density assumption of 20 uph. *Table 18* below shows the 2031 community land requirements within the Whitebelt Area. These community land densities in the Whitebelt Area, when combined with major retail, are planned to achieve 70 people and jobs per hectare.

Table 18: 2031 Community Land Requirements in the Whitebelt Area by Local Municipality

	Whitebelt Area Units ¹	Density (units per hectare)	Land Area Requirement (ha) ²	Major Retail Land Area Requirement (ha) ³	Major Office Land Area Requirement (ha) ⁴	Total Land Area Requirement (ha)
East Gwillimbury	7,360	20	368	56	3	427
Markham	12,140	20	607	75	0	682
Vaughan	8,700	20	435	75	0	510
York Region	28,200	20	1,410	206	3	1,619

Source: York Region Planning and Development Services Department, 2010

1. From Table 5

2. Whitebelt Area Units divided by Density

3. From Table 16

4. See Table 14 notes (Town of East Gwillimbury)

Note: Hectares represent developable area

Employment Land Requirements

Similar to community land area requirements, employment land area requirements are derived based on a density assumption that is applied to the developable lands of the Whitebelt Area. In the case of employment land employment, the density assumed is 40 jobs per hectare. The 40 jobs per hectare density assumption measured across the developable area is equivalent to 50 jobs per net hectare. This assumption is based on 20% of the developable land area being required for public uses such as roads, utility rights-of-way, open space and stormwater management.

Table 19 below shows the 2031 employment land requirements within the Whitebelt Area. The Highway 400 North employment lands in the City of Vaughan (ROPA 52) will be accommodated within the City's Whitebelt Area employment land requirement. Appendix 6 provides more detail on the land budget analysis for these lands.

Table 19: 2031 Employment Land Requirements in the Whitebelt Area by Local Municipality

	Forecast Demand, 2006-2031 ²	Job Potential on Designated Lands ³	Employment Land jobs in the Whitebelt Area ⁴	Density (jobs per ha)	Land Requirement (ha) ⁵
East Gwillimbury	17,910	11,900	6,010	40	150
Markham	32,680	19,560	13,120	40	328
Vaughan	69,160	54,120	15,040	40	376
York Region¹	119,750	85,580	34,170	40	854

Source: York Region Planning and Development Services Department, 2010

1. York Region total only includes East Gwillimbury, Markham and Vaughan

2. From Table 7, excluding jobs on lands designated for IPS

3. Built-up Area + Designated Greenfield Area Potential from Table 10

4. Forecast Demand less Job Potential on Designated Lands

5. Employment Land jobs in the Whitebelt Area divided by Density

Note: Hectares represent developable area

Table 20 below shows that based on the community and employment land requirement analysis above, approximately 34% of the developable Whitebelt will be required to the year 2031.

Table 20: 2031 Whitebelt Area Requirements by Local Municipality

	Total Whitebelt Area (ha) ¹	2031 Whitebelt Area Requirement (ha)	2031 Percent of Total
East Gwillimbury	1,671	577	35%
Markham/Whitchurch-Stouffville	2,876	1,010	35%
Vaughan/King	2,681	886	33%
York Region	7,227	2,474	34%

Source: York Region Planning and Development Services Department, 2010

1. Portions of the Whitebelt Area located in Whitchurch-Stouffville and King are included in the figures and are not anticipated to be required prior to 2031

Note: Hectares represent developable area

The Designated Greenfield Area Density Target Analysis

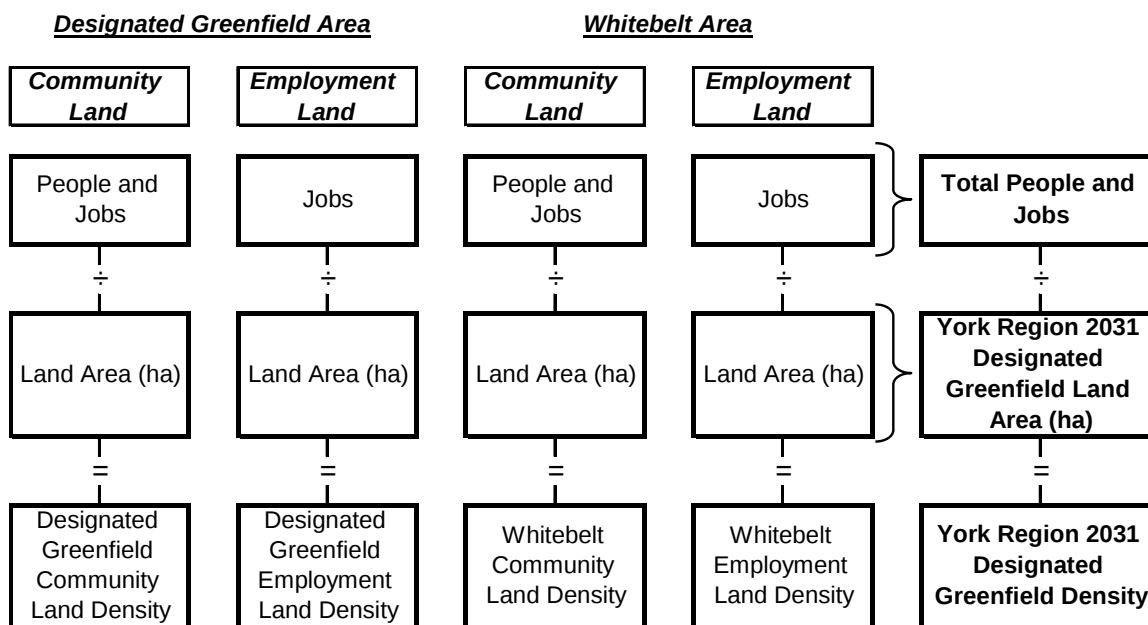
Clause 2.2.7.2 of the *Growth Plan* stipulates that “the *designated greenfield area* of each upper- or single-tier municipality will be planned to achieve a minimum *density target* that is not less than 50 residents and jobs combined per hectare”. This density target applies to both the Designated Greenfield Area and the Whitebelt Area.

The analysis for the York Region Designated Greenfield Area density target is organized into four categories based on the land budget information detailed above:

- Community Land in the Designated Greenfield Area
- Employment Land in the Designated Greenfield Area
- Community Land in the Whitebelt Area
- Employment Land in the Whitebelt Area

Figure 9 below describes the approach used to determine the 2031 Designated Greenfield Area density in York Region. The population and employment growth from 2006 to 2031 for each of the four categories is summed to derive the people and jobs in the 2031 Designated Greenfield Area. This people and jobs total is divided by the total land area of the four categories to determine the 2031 Designated Greenfield Area density. For comparison purposes, the densities for each of the four categories were also determined.

Figure 9: York Region Density Target Analysis Flow Chart



Source: York Region Planning and Development Services Department, 2010

The population in the analysis was derived by applying a 2016 region-wide persons per unit factor (PPU) by structure type to the residential unit growth. The analysis assumed that the Designated Greenfield and Whitebelt Areas would have a higher PPU than the Built-up Area. Newer communities, whose residents include a higher proportion of young families with children, have historically averaged higher PPU values than more mature communities. The basis for this assumption was an analysis of York Region's dwelling unit data by age of construction. This analysis showed that the average PPU for dwelling units under 20 years of age was 3.45, while dwelling units 20 years or older averaged 2.84. The PPU's in Designated Greenfield and Whitebelt Areas were adjusted upwards to 3.32 from the region-wide 2016 average of 3.1. A subsequent adjustment was made to the PPU's within the Built-up Area to maintain the overall 2016 region-wide PPU. An undercount adjustment was then applied to the population.

Table 21 below shows a summary for each category illustrating land area, people and jobs, and density. More detail by local municipality is provided in *Appendices 4 and 5*.

Table 21: 2031 York Region Density Target Analysis

	Area (ha)	People and Jobs	Density ¹
Community Land in Designated Greenfield Area	7,336	382,300	52.1
Employment Land in Designated Greenfield Area	2,584	89,770	34.7
Community Land in Whitebelt Area	1,619	113,960	70.4
Employment Land in Whitebelt Area	854	34,170	40.0
York Region 2031 Designated Greenfield Area²	12,394	620,200	50.0

Source: York Region Planning and Development Services Department, 2010

1. People and Jobs divided by Area

2. Represents current Designated Greenfield Area and Whitebelt Area required by 2031

Note: Hectares represent developable area

Community Land in Designated Greenfield Area – The overall density for this category is 52 people/jobs per ha. These lands are all within approved community plans. As shown in *Appendix 4*, the densities are higher within communities that are linked to the York Durham Sewage System (YDSS).

Employment Land in Designated Greenfield Area – Employment land densities within the Designated Greenfield Area vary considerably depending on the nature and type of business activity and range from a low of 21 jobs per hectare in King to a high of 58 jobs per hectare in Markham. The overall density for this category is 35 jobs per hectare.

Community Land in Whitebelt Area – This category includes the three municipalities of East Gwillimbury, Markham and Vaughan and is based on an assumption of 20 units per developable hectare. The major retail land requirement is also included as is the major office forecast for the Town of East Gwillimbury. The density average is 70 people/jobs per hectare.

Employment Land in Whitebelt Area – The assumed density for this category is based on 40 jobs per developable hectare.

The land budget analysis includes targets for achieving more compact, pedestrian and transit supportive communities designed to achieve an average minimum density of 50 people and jobs per hectare.

Community lands in the Whitebelt Area are planned based on achieving a density of 70 people and jobs per hectare. Community and employment lands in the Whitebelt Area combined total 60 people and jobs per hectare. Communities at these densities represent a more compact built form than traditionally built in York Region.

Community lands in the existing Designated Greenfield Area and the Whitebelt Area combined are planned based on achieving a density of 55 people and jobs per ha.

Employment lands in the Whitebelt Area are planned based on achieving a density of 40 jobs per hectare. Employment lands in the vacant Designated Greenfield Area and the

Whitebelt Area combined are planned based on achieving a density of 36 jobs per hectare.

The overall York Region 2031 Designated Greenfield Area density is 50 people and jobs per hectare.

It is very difficult to alter the densities for planned development within approved community lands. Similarly, employment densities are also virtually impossible to change due to business requirements and the structure of the Region's economy. A large portion of the Region's vacant employment land within the existing Designated Greenfield Area is anticipated to attract manufacturing, distribution and warehousing uses, which typically have lower employment densities. Existing and planned employment densities within the Region are amongst the highest in the Greater Toronto and Hamilton Area. Further analysis has been conducted on the density information by category and is detailed in *Appendices 4 and 5*.

Summary of Analysis

York Region's land budget was prepared in the context of key policies in the *Growth Plan* regarding the protection of the natural environment and the development of more compact transit supportive communities and considered targets for intensification, urban growth centres and new community densities.

This report details York Region's residential and employment land requirements to 2031 and provides an analysis of the Region's ability to achieve the *Growth Plan's* designated greenfield area density target of 50 people and jobs per hectare.

The following is a technical summary of the land budget exercise.

The residential analysis included a comprehensive demand/supply analysis that considered:

- The forecast demand of 234,110 households (575,610 people) from York Region's 2031 population and household forecast.
- The intensification target of 90,720 units and an additional 16,430 low density units within the Built-up Area.
- The potential unit supply of 98,750 in the vacant Designated Greenfield Area.
- An additional requirement of 28,200 units in the Whitebelt Area on 1,410 hectares.

The employment land budget included a comprehensive analysis of the forecast demand of 317,950 new jobs from York Region's 2031 employment forecast. This included:

- A demand/supply analysis of employment land employment growth that considered:
 - o The forecast demand of 164,680 jobs on employment land.
 - o The potential supply of 1,720 jobs on vacant IPS lands (industries on private services).

- o The potential supply of 128,790 jobs on vacant designated employment land.
- o The additional requirement of 34,170 employment land jobs on 854 hectares of land in the Whitebelt Area.
- An analysis of where the forecast 54,530 major office jobs will be accommodated:
 - o New major office building space of 1.38 million square metres will be accommodated on 306 net hectares of which 88% is in the Built-up Area, 11% in the Designated Greenfield Area, and 1% within the Whitebelt Area.
- An analysis of where the 98,740 population related job forecast will be accommodated:
 - o The majority of population related jobs will be accommodated within the Built-up Area (43% or 42,280 jobs) and within the Designated Greenfield Area (39% or 38,210 jobs).
 - o Eight percent (8%) of the population related jobs are classified as major retail jobs. These 8,240 major retail jobs will be accommodated on 206 hectares of land in the Whitebelt Area.
 - o The remaining 10% (10,010) of population related jobs will be accommodated within new communities in the Whitebelt Area.

Observations and Conclusions

The following observations and conclusions can be drawn from the analysis.

- An urban area boundary expansion is required to accommodate the 2031 forecasted population and employment growth in York Region. Boundary expansions will occur in the Whitebelt Area within the municipalities of East Gwillimbury, Markham and Vaughan.
- A total of 2,474 developable hectares of land in the Whitebelt Area are required for residential and employment uses in order to achieve the 2031 forecast. This includes 1,619 hectares for community land development (including 206 hectares for major retail uses) and 854 hectares for employment land development. The Whitebelt Area land requirements are distributed to the three local municipalities based on the forecasts in Table 1 of the ROP. *Table 22* shows Whitebelt Area land requirements by local municipality.

**Table 22: 2031 Whitebelt Area Land Requirements (hectares)
by Local Municipality**

	Community Land	Employment Land	Total
East Gwillimbury	427	150	577
Markham	682	328	1,010
Vaughan	510	376	886
York Region	1,619	854	2,474

Source: York Region Planning and Development Services Department, 2010

Note: Hectares represent developable area

Note: Figures may not add due to rounding

- The analysis includes the identification of 90,720 households to be accommodated within the Built-up Area of the Region in order to achieve the minimum 40% residential intensification target.
- Forty-three percent (43%) of the Region's employment growth will be accommodated within the Region's Built-up Area, as defined by the *Growth Plan*.
- Community lands in the Whitebelt Area are planned based on achieving a density of 70 people and jobs per hectare. Community and employment land in the Whitebelt Area combined total 60 people and jobs per hectare. Communities at these densities represent a more compact built form than traditionally built in York Region.
- Community lands in the existing Designated Greenfield Area and the Whitebelt Area combined are planned based on achieving a density of 55 people and jobs per ha.
- Employment lands in the Whitebelt Area are planned based on achieving a density of 40 jobs per hectare. Employment lands in the vacant Designated Greenfield Area and Whitebelt Area combined are planned based on achieving a density of 36 jobs per hectare.
- The overall York Region 2031 Designated Greenfield Area density is 50 people and jobs per hectare.

The Region's *Growth Plan* conformity exercise includes forecasting and land budget work, a Regional Intensification Strategy, a comprehensive public consultation exercise, infrastructure master plan updates for transportation, and water and wastewater, an updated Natural Heritage Strategy and a 25 year fiscal impact analysis.

The Regional Official Plan (ROP) implements the results of the municipal comprehensive review. The ROP was adopted by Regional Council in December 2009. Table 1 of the ROP includes population and employment forecasts by local municipality that are used to determine urban area expansion requirements to 2031.

This report is an update to the York Region 2031 Land Budget presented to PEDC Report No. 1, 2009 in January 2009. Revisions have been made to the January 2009 land budget

report based on further discussions with the Province and the local municipalities. The refinements to the land budget are minor and do not impact the adopted policies in the ROP and result in a decrease of 363 hectares of land required for urban area expansion by 2031 from the previous report. This report details York Region's residential and employment land requirements to 2031, provides the basis for the urban area expansions in the ROP, and demonstrates the Region's ability to achieve the *Growth Plan's* designated greenfield area density target.

Appendix 1 - Employment Land Employment Growth Density Assumptions in the Designated Greenfield Area

Aurora: A density of 41 jobs per net hectare is assumed for the Town's vacant Designated Greenfield Area. The existing density of 42 jobs per net hectare is maintained across all employment lands in the Town by 2031.

East Gwillimbury: The assumed density (40 jobs per net hectare) is an average based on 50 jobs per net hectare for the Queensville employment lands and 25 jobs per net hectare for employment lands of Holland Landing, Mount Albert and Green Lane. It was assumed that full water and wastewater servicing would be available to the community of Holland Landing and employment lands along Green Lane. Employment densities would rise from the 2006 average of 13 jobs to 25 jobs per net hectare, yet still remain lower than comparable densities in Queensville due to the existing nature and type of employment and site characteristics of these areas.

Georgina: The assumed density of 46 jobs per net hectare is based on 40 jobs per net hectare in remaining existing vacant lands in Keswick, which is consistent with the 2006 density, and a higher density of 47 jobs per net hectare in the Keswick Business Park.

King: The assumed density of 25 jobs per net hectare is consistent with existing densities for employment land in King.

Markham: The land budget analysis uses a cautious, prudent approach in determining the density assumption for new employment land growth in Markham, since it is difficult to determine the nature and type of employment activity that will locate in new growth areas. Therefore, the York Region average of approximately 50 jobs per net hectare was assumed for this analysis.

Newmarket: The land budget analysis uses a cautious, prudent approach in determining the density assumption for new employment land growth in Newmarket, since it is difficult to determine the nature and type of employment activity that will locate in new growth areas. Therefore, a density of 51 jobs per net hectare was assumed, consistent with the existing Regional average.

Richmond Hill: The assumed density of 57 jobs per net hectare for new employment growth in the Town is more conservative than the existing density of 65 jobs per net hectare since it is difficult to determine the nature and type of employment activity that will locate in new growth areas. A higher density than the York Region average of approximately 50 jobs per net hectare was used in new growth areas to provide a better balance of population and employment and to promote a healthier live/work relationship for the Town.

Vaughan: The assumed density of 45 jobs per net hectare is a conservative estimate for new employment growth in the City of Vaughan. It is anticipated that a significant

portion of future employment activity in Vaughan will be within the manufacturing, transportation, distribution and warehousing sectors. The forecast assumes that the City of Vaughan will build on its existing strong base of employment activity in these sectors.

Whitchurch-Stouffville: The assumed density of 46 jobs per net hectare is consistent with Whitchurch-Stouffville's existing density on fully serviced employment lands.

Note: 'Net' area refers to the private lot area available for development and excludes roads, open space and other public uses.

Appendix 2 – The Developable Area within the Designated Greenfield and Whitebelt Areas

Clause 2.2.7.3 of the *Growth Plan* states that the “*density target* will be measured over the entire *designated greenfield area* of each upper- or single-tier municipality, excluding the following features where the features are both identified in any applicable official plan or provincial plan, and where the applicable provincial plan or policy statement prohibits development in the features: wetlands, coastal wetlands, woodlands, valley lands, areas of natural and scientific interest, habitat of endangered species and threatened species, wildlife habitat, and fish habitat. The area of the features will be defined in accordance with the applicable provincial plan or policy statement that prohibits development in the features.”

The York Region developable area was determined for both the Designated Greenfield and Whitebelt Areas by excluding:

- environmental features identified in the *Growth Plan*;
- the Regional Greenlands System;
- key natural heritage features and key hydrologic features;
- major infrastructure right-of-ways (i.e. existing 400-series highways and finalized route alignments for extensions or future 400-series highways, utility lines, and rail lines); and,
- existing uses (e.g. cemeteries, estate subdivisions).

Appendix 3 provides a detailed list of the excluded areas.

The developable area includes all lands available for development for both private and public uses, including residential and employment uses, open space and infrastructure (e.g. local and Regional streets and stormwater management ponds).

The table above provides the total developable area within York Region’s Whitebelt and Designated Greenfield Areas.

York Region Developable Area

	Developable Area (ha)
Designated Greenfield Area	9,920
Whitebelt Area¹	7,230
Total	17,150

Source: York Region Planning and Development Services Department, 2010

1. The Whitebelt Area figure represents the entire developable Whitebelt Area in the Region, including post-2031 requirements

Appendix 3 - York Region Developable Area Exclusions

Environmental Exclusions

- Provincially and locally significant wetlands (30m buffer)
- Watercourses (15m buffer)
- Waterbodies (15m buffer)
- Significant Woodlands (10m buffer)
- TRCA Engineered Floodplains
- ANSIs (earth and life science)
- ESAs (biological and physical)
- Town of Markham draft Natural Heritage Network in the Whitebelt Area
- LSRCA Level 1-3 Component Data in the Whitebelt Area as captured in the Town of East Gwillimbury growth management work
- TRCA draft Target Terrestrial Natural Heritage System in the Whitebelt Area, (modified by York Region) for City of Vaughan, Township of King, and Town of Whitchurch-Stouffville

Note: 30m buffer applied to wetlands, watercourses, waterbodies and significant woodlands in East Gwillimbury Whitebelt as per the Lake Simcoe Protection Plan

Infrastructure Exclusions

- Transmission Lines (45m ROW)
- Rail Lines (20m ROW)
- Trans Canada Pipelines (20M ROW)
- Trans Canada Compressor Station in the City of Vaughan (140M ROW)
- Existing and proposed 400-Series Highway, as follows:
 - Highway 400 Existing (85m ROW)
 - Highway 404 Existing (110m ROW)
 - Highway 404 north to Ravenshoe Sdrd. (110m ROW). Alignment based on approved Environmental Assessment.
 - Highway 404 Bradford Bypass (110m ROW). Alignment based on approved Environmental Assessment.
 - Highway 407 Existing (150m ROW)
 - Highway 427 Existing (110m ROW)

- o Highway 427 Proposed (170m ROW). Alignment is proposed.

Existing Uses Exclusions

- East Gwillimbury Whitebelt Area:
 - o Queensville Cemetery
 - o Holland Landing Lagoons
 - o Green Lane West Employment Area
 - o Valley Trail Estate Subdivision
 - o Sharon Cemetery
- Markham/Whitchurch-Stouffville Whitebelt Area:
 - o Tompian Lands - N/W of Steeles and Ninth Line (part of Rouge Park)
 - o Boynton Circle Estate Subdivision
 - o Cemeteries
- Vaughan/King Whitebelt Area:
 - o Belsite Court Estate Subdivision
 - o High Valley Court Estate Subdivision
 - o Stephanie Blvd. Estate Subdivision
 - o Phillips Lane Estate Subdivision
 - o Keele Valley Landfill Site
- Aurora:
 - o Public Natural Heritage Lands east of Bathurst St. and north of Bloomington Sdrd. (based on York Region Greenlands System)
- Newmarket:
 - o Undeveloped lands within the Oak Ridges Moraine in the south-west corner of the Town (based on Ontario Municipal Board decision)
 - o Floodplain Lands along southern edge of Town (based on York Region Greenlands System)

Appendix 4 - York Region Density Analysis Summary

Table 1: Designated Greenfield Area Community Land Density

	Developable Area (ha)	2031 Units ¹					Population ²	Population Related Employment ³	Population + Employment ⁴	Density ⁵
		Single	Semi	Row	Apt	Total				
Aurora	545	3,140	690	740	720	5,280	18,570	2,400	20,980	38.5
East Gwillimbury	1,112	9,160	1,650	2,880	2,720	16,410	55,940	4,890	60,830	54.7
Georgina	796	5,520	460	990	1,220	8,200	28,560	2,980	31,540	39.6
King	588	3,490	420	670	560	5,140	17,920	2,140	20,070	34.1
Markham	803	6,190	1,890	3,400	3,190	14,670	50,470	5,340	55,810	69.5
Newmarket	176	1,630	40	260	480	2,410	8,770	870	9,640	54.7
Richmond Hill	670	5,460	140	1,110	2,020	8,730	30,610	3,960	34,570	51.6
Vaughan	1,975	15,150	3,560	4,020	3,140	25,870	92,080	10,090	102,170	51.7
Whitchurch-Stouffville	670	6,730	1,680	1,860	1,770	12,040	41,160	5,530	46,690	69.7
York Region	7,336	56,470	10,530	15,930	15,820	98,750	344,090	38,210	382,300	52.1

Source: York Region Planning and Development Services Department, 2010

1. From Table 3 in body of report

2. Based on 2016 PPU's and a 4.16% undercount adjustment

3. From Table 15 in body of report

4. Population + Population Related Employment

5. Population and Employment divided by Developable Area

Note: Figures may not add due to rounding

Table 2: Whitebelt Area Community Land Density

	Developable Area (ha) ¹	2031 Units ²					Population ³	2031 Jobs		Population + Employment ⁶	Density ⁷
		Single	Semi	Row	Apt	Total		Population Related ⁴	Major Office ⁵		
East Gwillimbury	427	3,680	740	2,210	740	7,360	24,820	4,440	580	29,840	69.8
Markham	682	6,070	1,210	3,640	1,210	12,140	40,960	7,420	0	48,380	70.9
Vaughan	510	4,350	870	2,610	870	8,700	29,350	6,390	0	35,740	70.1
York Region	1,619	14,100	2,820	8,460	2,820	28,200	95,130	18,250	580	113,960	70.4

Source: York Region Planning and Development Services Department, 2010

1. From Table 18 in body of report

2. From Table 5 in body of report

3. Based on 2016 PPU's and a 4.16% undercount adjustment

4. From Table 15 and Table 16 in body of report

5. From Table 14 and Figure 6 in body of report

6. Population + Employment (Population Related & Major Office jobs)

7. Population and Employment divided by Developable Area

Note: Figures may not add due to rounding

Table 3: Designated Greenfield Area Employment Land Density

	Developable Area (ha)	2031 ELE Jobs ¹	2031 Major Office Jobs ²	2031 Total Employment ³	Density ⁴
Aurora	274	6,970	1,590	8,560	31.2
East Gwillimbury	348	11,400	0	11,400	32.8
Georgina	291	8,670	0	8,670	29.7
King	108	2,250	0	2,250	20.9
Markham	191	6,960	4,150	11,110	58.2
Newmarket	0	0	0	0	0.0
Richmond Hill	78	4,330	0	4,330	55.8
Vaughan	1,159	39,320	0	39,320	33.9
Whitchurch-Stouffville	136	4,140	0	4,140	30.4
York Region	2,584	84,030	5,740	89,770	34.7

Source: York Region Planning and Development Services Department, 2010

1. Employment Land Employment - From Table 10 in body of report

2. From Table 14 and Figure 6 in body of report

3. Employment Land jobs + Major Office jobs

4. Total Employment divided by Developable Area

Note: Figures may not add due to rounding

Table 4: Whitebelt Area Employment Land Density

	Developable Area (ha)¹	2031 ELE Jobs²	Density³
East Gwillimbury	150	6,010	40.0
Markham	328	13,120	40.0
Vaughan	376	15,040	40.0
York Region	854	34,170	40.0

Source: York Region Planning and Development Services Department, 2010

1. From Table 19 in body of report

2. From Table 19 in body of report

3. Employment Land Employment divided by Developable Area

Note: Figures may not add due to rounding

Appendix 5 - York Region Density Analysis by Land Area Category and Land Use

Table 1: Total Designated Greenfield and Whitebelt Areas Density

	Developable Area (ha)	Population + Employment	Density
Aurora	820	29,540	36.0
East Gwillimbury	2,037	108,070	53.0
Georgina	1,087	40,210	37.0
King	695	22,310	32.1
Markham	2,004	128,430	64.1
Newmarket	176	9,640	54.7
Richmond Hill	747	38,900	52.0
Vaughan	4,020	192,280	47.8
Whitchurch-Stouffville	807	50,830	63.0
York Region	12,394	620,200	50.0

Source: York Region Planning and Development Services Department, 2010

Note: Includes Community Land and Employment Land in Designated Greenfield and Whitebelt Areas

Note: Figures may not add due to rounding

Table 2: Community Land Density

	Developable Area (ha)	Population + Employment	Density
Aurora	545	20,980	38.5
East Gwillimbury	1,540	90,660	58.9
Georgina	796	31,540	39.6
King	588	20,070	34.1
Markham	1,485	104,200	70.1
Newmarket	176	9,640	54.7
Richmond Hill	670	34,570	51.6
Vaughan	2,485	137,920	55.5
Whitchurch-Stouffville	670	46,690	69.7
York Region	8,955	496,260	55.4

Source: York Region Planning and Development Services Department, 2010

Note: Includes Community Land in Designated Greenfield and Whitebelt Areas

Note: Figures may not add due to rounding

Table 3: Whitebelt Area Density

	Developable Area (ha) ¹	Population + Employment	Density
Aurora	0	0	0.0
East Gwillimbury	577	35,850	62.1
Georgina	0	0	0.0
King	0	0	0.0
Markham	1,010	61,500	60.9
Newmarket	0	0	0.0
Richmond Hill	0	0	0.0
Vaughan	886	50,790	57.3
Whitchurch-Stouffville	0	0	0.0
York Region	2,474	148,130	59.9

Source: York Region Planning and Development Services Department, 2010

1. Only includes Developable Area required to 2031

Note: Includes Community Land and Employment Land in the Whitebelt Area

Note: Figures may not add due to rounding

Table 4: Employment Land Density

	Developable Area (ha)	Employment	Density
Aurora	274	8,560	31.2
East Gwillimbury	498	17,410	35.0
Georgina	291	8,670	29.7
King	108	2,250	20.9
Markham	519	24,230	46.7
Newmarket	0	0	0.0
Richmond Hill	78	4,330	55.8
Vaughan	1,535	54,360	35.4
Whitchurch-Stouffville	136	4,140	30.4
York Region	3,439	123,940	36.0

Source: York Region Planning and Development Services Department, 2010

Note: Includes Employment Land in the Designated Greenfield and Whitebelt Areas

Note: Figures may not add due to rounding

Table 5: Designated Greenfield Area Density

	Developable Area (ha)	Population + Employment	Density
Aurora	820	29,540	36.0
East Gwillimbury	1,460	72,220	49.5
Georgina	1,087	40,210	37.0
King	695	22,310	32.1
Markham	994	66,930	67.3
Newmarket	176	9,640	54.7
Richmond Hill	747	38,900	52.0
Vaughan	3,134	141,490	45.2
Whitchurch-Stouffville	807	50,830	63.0
York Region	9,920	472,070	47.6

Source: York Region Planning and Development Services Department, 2010

Note: Includes Community Land and Employment Land in the Designated Greenfield Area

Note: Figures may not add due to rounding

Appendix 6 – ROPA 52 Land Budget Summary

ROPA 52 Land Budget Summary

	Developable area (ha)
City of Vaughan Whitebelt Area Employment Land Requirement¹	376
<i>ROPA 52 developable area²</i>	557
Less: ROPA 52 deferral areas and mixed use commercial area ³	42
<i>Less: 400-series highway interchange⁴</i>	80
<i>Less: Additional 400-series highway interchange study area⁵</i>	60
<i>Effective employment land supply in ROPA 52 area</i>	375

1. From Table 19 in body of report

2. Environmental areas, an 85m ROW along highway 400, Trans-Canada pipelines (20m ROW), and existing uses have been excluded to determine the developable area

3. Includes Deferral Areas 1 & 2 and mixed use commercial area in north-east corner of ROPA 52

4. An interchange for two 400-series highways requires a minimum of 80 hectares

5. The exact alignment for the interchange has yet to be determined by the Ontario Ministry of Transportation and an additional study area has been assumed for the purposes of determining the interchange location

HUMPHRIES PLANNING GROUP INC.

March 3, 2010
HPGI File: 0449

Region of York
Corporate Services Department
17250 Yonge Street
Newmarket, Ontario
L3Y 6Z1

Attn: Mr. Denis Kelly
Regional Clerk

Dear Mr. Kelly

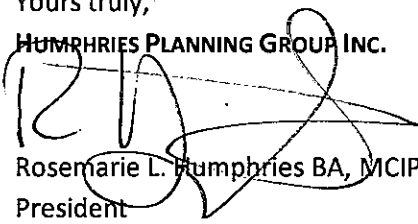
Re: March 3 2010 Planning & Economic Development Committee Meeting
York Region 2031 Land Budget

Humphries Planning Group Inc., represents the Vaughan 400 North Landowners Group which lands are located within the ROPA 52 area.

The above noted report is being considered by Committee today and we formally request that the Region provide any and all information that it has utilized in making assumptions regarding the information outlined in Table 19 and Appendix 6 to the report.

We look forward to hearing from you when this will be available.

Yours truly,
HUMPHRIES PLANNING GROUP INC.


Rosemarie L. Humphries BA, MCIP, RPP
President

cc. Vaughan 400 North Landowners Group
Region of York Planning Dept.