

York Region 2041 Preferred Growth Scenario Land Budget





Planning and Economic Development | Long Range Planning

1.0 Summary

Below are the highlights from the York Region Land Budget, which is based on York Region's preferred growth scenario. This report is the fourth in a series of attachment reports that bring forward supporting background material for the preferred growth scenario.

The preferred growth scenario is to be used as the basis for further discussion and refinement leading to a recommended scenario being presented to Council in the spring of 2016.

The Attachment reports in this series are:

- 1. 2041 Draft Growth Scenario Evaluation (Attachment 1)
- 2. York Region 2041 Population and Employment Forecasts (Attachment 2)
- 3. York Region 2041 Intensification Strategy (Attachment 3)
- 4. York Region Land Budget (Attachment 4)
- 5. Consistency and Conformity with Provincial Policy (Attachment 5)
- 6. Phase 2 Consultation Update (Attachment 6)

All six attachment reports are to be considered at the Committee of the Whole meeting on November 5, 2015 and should be read in the order in which they are listed above.

1.1 Highlights

The following observations are drawn from the York Region 45% Intensification Preferred Growth Scenario Land Budget analysis:

- 1. An urban boundary expansion is required to accommodate 2036 population growth and 2041 population and employment growth. 2036 urban boundary expansions are required in Markham and Vaughan, and 2041 urban boundary expansions are required in East Gwillimbury, King, Markham and Vaughan.
- 2. A total of 766 developable ha of expansion lands are required for residential uses in order to achieve the 2036 forecast. A total of 1,618 developable ha are required for residential and employment uses in order to achieve the 2041 forecast. This includes 1,458 ha for community land development and 160 ha for employment land development.
- 3. Fifty-three percent (53%) of the Region's employment growth will be accommodated within the Region's Built-Up Area.
- 4. The 2041 York Region Designated Greenfield Area density, which includes the Designated Greenfield Area and the proposed urban expansion areas, is 52 people and jobs per ha, which slightly exceeds the *Growth Plan* minimum density target of 50 people and jobs per ha.

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2.0 Purpose

This report is an update to the 2041 York Region Draft Growth Scenarios and Land Budget endorsed in principle by Council in April 2015. York Region's residential and employment land requirements to 2036 and 2041, the location of proposed expansion areas and the Region's ability to achieve the Growth Plan's Designated Greenfield Area minimum density target of 50 people and jobs per hectare are detailed in this report.

3.0 Background

3.1 Provincial and Regional Policy Context

The York Region Land Budget has been prepared in the context of Provincial policy and direction. Decisions made during the forecast and land budget process are consistent with the *Planning Act*, the *Provincial Policy Statement (PPS)* and the *Growth Plan for the Greater Golden Horseshoe (Growth Plan)*, and conform with direction provided in other provincial plans such as the *Oak Ridges Moraine Conservation Plan*, the *Greenbelt Plan* and the *Lake Simcoe Protection Plan*. The land budget and associated forecasts were also prepared to support Regional Policy direction provided in Vision 2051, YROP-2010 and the 2015 to 2019 Strategic Plan.

In April 2015 Council endorsed in principle three draft growth scenarios for further consultation and evaluation. The three draft growth scenarios were based on various levels of residential intensification: the 40% intensification scenario is the minimum standard established by the *Growth Plan*. Both the 40% and 50% intensification scenarios require an expansion to the urban area to accommodate growth to 2041. The no urban expansion scenario represents the highest level of intensification and would require no urban area expansions.

In September 2015 Council endorsed the Draft Growth Scenario Evaluation report which provided the basis for evaluating the draft growth forecast scenarios. The evaluation exercise is elaborated on in the 2041 Draft Growth Scenario Evaluation (Attachment Report 1 in this series of reports). Based on this exercise, staff recommend a preferred forecast scenario which will accommodate 45% of future growth as intensification in the Built-Up Area (detailed in Attachment Report 2 in this series of reports). The York Region Intensification Strategy has been updated to align with this 45% intensification preferred growth scenario to 2041 (Attachment Report 3 in this series of reports). The preferred growth scenario land budget contained in this report has been prepared in the context of the 45% preferred growth scenario forecast.

3.2 Urban boundary expansion requirements are based on York Region's 2036 and 2041 population and employment forecasts

Amendment 2 to the *Growth Plan* provides updated forecasts of population and employment for 2031 and introduces new population and employment forecasts for 2036 and 2041 (see Table 1).

York Region	2011 ¹	2031	2036	2041			
Population	1,065,200	1,590,000	1,700,000	1,790,000			
Employment	510,000	790,000	840,000	900,000			

Table 1					
Growth Plan Forecasts for York Region	ſ				

Source: Places to Grow, Growth Plan for the Greater Golden Horseshoe, 2006, Office Consolidation, June 2013, Schedule 3

1. 2011 figures are a York Region estimate for mid-year 2011

YROP-2010 forecasts will be updated to 2041. This land budget exercise provides a lands needs analysis to both 2036 and 2041. This land budget analysis uses a 2011 base, consistent with the York Region 2041 Population and Employment Forecast (Report Attachment 2 in this series of reports). It should be noted that the 45% intensification target provided in the updated York Region 2041 Intensification Strategy (Report Attachment 3 in this series of reports) uses a 2016 base and is not directly comparable to the data provided in this report.

3.3 The 2036 and 2041 forecast is distributed between three Land Use Categories

This land budget exercise distributes forecasted households and employment into the land area categories of the Built-Up Area, the Designated Greenfield Area, and the 'Whitebelt' Area. Figure 1 illustrates the location of each land area category and Appendix A provides detailed descriptions and policy considerations related to the three areas.



Figure 1: York Region Land Use Categories

3.4 Urban expansion may only occur as part of a Regional Municipal Comprehensive Review

The *Growth Plan* states that settlement area boundary expansions may only occur as part of a municipal comprehensive review which 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".

A municipal comprehensive review is a comprehensive plan to accommodate growth forecasts set out in the *Growth Plan*, including the establishment of intensification targets. This land budget provides an assessment of available residential and employment land supplies and demonstrates the need for proposed urban boundary expansions based on the 45% intensification preferred growth scenario. As part of this exercise, the planned achievement of the minimum Designated Greenfield Area density target of 50 people and jobs per hectare is confirmed and the location of urban expansion areas is discussed.

4.0 Residential Analysis

The residential analysis section of this report reviews forecasted household and unit growth (demand) against the existing long term supply of lands designated to accommodate residential growth. The analysis then determines the amount of additional lands required to accommodate growth to 2036 and 2041.

Household growth is distributed into the three land use categories shown on the map in Figure 1 based on an analysis that considers:

- 45% of forecasted growth being accommodated within the existing Built-Up Area (including the *Growth Plan* requirement to achieve a minimum density of 200 people and jobs per hectare in Urban Growth Centres);
- A capacity analysis of active development applications in process, and vacant developable lands designated "Urban" or Towns and Villages" that do not currently have development applications submitted; and
- Additional units required to be accommodated through urban expansion into the 'Whitebelt' Area, to meet the forecast demand

4.1 Residential Demand

The residential component of this land budget analysis is based on the Region's forecasted household growth from 2011 to 2036 and from 2011 to 2041(demand). Table 2 illustrates the forecast household growth by local municipality.

	2011 Units ²	2036 Units	2041 Units	2011- 2036 Unit Growth	2011- 2041 Unit Growth
Aurora	17,700	26,280	27,060	8,590	9,360
East Gwillimbury	7,550	31,920	36,140	24,380	28,600
Georgina	15,850	25,000	26,300	9,150	10,450
King	6,650	12,920	13,180	6,280	6,530
Markham	90,540	161,650	169,430	71,110	78,890
Newmarket	27,410	37,210	38,590	9,800	11,180
Richmond Hill	58,650	88,580	91,610	29,940	32,970
Vaughan	86,070	146,570	157,990	60,500	71,920
Whitchuch-Stouffville	13,040	22,700	23,260	9,660	10,220
York Region	323,440	552,840	583,550	229,400	260,110

Table 2Forecast Unit Growth by Local Municipality, 2011-2036 and 2011-20411

1. Figures may not sum due to rounding

2. Statistics Canada, 2011 Census of Population

4.2 Residential Forecast in the Built-Up Area

Table 3 illustrates York Region's 2011 to 2036 and 2011 to 2041 Built-up Area forecasts by local municipality.

	Ta	ıble 3				
Built-Up	Area Forecast by Local M	unicipality	, 2011-2	2036 and	2011-2	041 ¹

	2011-2036 Units	2011-2041 Units
Aurora	3,620	4,250
East Gwillimbury	1,090	1,380
Georgina	3,090	3,620
King	1,460	1,680
Markham	39,070	43,170
Newmarket	8,110	9,480
Richmond Hill	19,730	22,700
Vaughan	27,410	30,640
Whitchuch-Stouffville	1,570	2,060
York Region	105,150	118,980

1. Figures may not sum due to rounding

The units provided in Table 3 are greater than the number of units identified in the York Region 2041 Intensification Strategy (Attachment Report 3 in this series). The units provided in the Intensification Strategy use a 2016 base whereas the units provided here use a 2011 base consistent with the York Region 2041 Population and Employment Forecasts (Attachment Report 2 in this series of reports). Nonetheless, the Intensification Strategy provides information on the location and status of the units planned for in the Built-Up Area.

All units developed within the Built-Up Area contribute towards the intensification targets.

4.3 Residential Supply Potential in the Designated Greenfield Area

Table's 4a and 4b illustrate units forecast in the Region's Designated Greenfield and Agricultural and Rural Areas for the 2011 to 2036 and 2011 to 2041 time periods, which includes approved communities throughout the Region that were not built as of mid-year 2011.

Units planned for in the Agricultural and Rural Areas are primarily legacy applications that had some level of approval prior to the approval of the *Oak*

Ridges Moraine Conservation Plan and *Greenbelt Plan*, or in accordance with Ministerial Orders. Also, some small unit potential assumptions were made in consultation with local municipalities for the municipalities with large Agricultural and Rural areas. As part of the 2015 co-ordinated Provincial Plans Review Process, the Region recommended that the Province introduce a 'sunset' clause which would limit the amount of time legacy applications would have to develop within the Oak Ridges Moraine and Greenbelt.

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	Designated Greenfield Area	Agricultural/ Rural Area	Total		
Aurora	4,890	80	4,970		
East Gwillimbury	23,260	30	23,290		
Georgina	5,980	80	6,060		
King	4,500	320	4,820		
Markham	22,670	0	22,670		
Newmarket	1,690	0	1,690		
Richmond Hill	10,180	20	10,200		
Vaughan	26,680	460	27,140		
Whitchuch-Stouffville	7,820	270	8,090		
York Region	107,670	1,250	108,930		

 Table 4a

 Designated Greenfield Area Unit Potential by Local Municipality. 2011-2036¹

1. Figures may not sum due to rounding.

	Designated Greenfield Area	Agricultural/ Rural Area	Total
Aurora	5,030	80	5,110
East Gwillimbury	23,570	30	23,600
Georgina	6,760	80	6,840
King	4,530	320	4,850
Markham	22,730	0	22,730
Newmarket	1,700	0	1,700
Richmond Hill	10,240	20	10,260
Vaughan	28,250	460	28,720
Whitchuch-Stouffville	7,890	270	8,160
York Region	110,710	1,250	111,960

 Table 4b

 Designated Greenfield Area Unit Potential by Local Municipality, 2011-2041¹

There are more units forecast in the Designated Greenfield Area in the 2011 to 2041 time period than in the 2011 to 2036 time period. This is because it is assumed that some, predominately high density units, will not be built in this area until the end of the forecast period.

Appendix B provides a map of designated areas that are forecast to accommodate significant ground related growth (greater than 500 units) as of 2011. This includes growth in single-detached, semi-detached and row structure types. Although the geographic extent of some of these areas includes the Built-Up Area, it is anticipated that the majority of the ground-related growth will be accommodated within the Designated Greenfield Area. The anticipated growth includes units that are in the development application review process (subdivisions, condominiums and/or site plans that are registered, draft approved and/or proposed) as well as unit assumptions for areas that are designated for growth, but do not currently have development applications in place. In addition to the areas identified on this map, smaller scale ground related growth is anticipated throughout the designated areas.

4.4 Remaining Units to be Accommodated through Urban Boundary Expansions

Residential units forecast in the Built-Up Area and Designated Greenfield Area do not meet overall forecast demand to 2036 or 2041.

As shown in Tables 5a and 5b, the unit supply forecast in the Built-Up Area and the development potential in the Designated Greenfield and Agricultural/Rural Areas can accommodate approximately 214,080 units of the required 229,410 units from 2011 to 2036 and approximately 230,940 units of the required 260,120 units from 2011 to 2041. The remaining units will need to be accommodated in new urban expansion areas within the 'Whitebelt' Area.

2036 Urban Expansion Residential Unit Requirement by Local Municipality							
	Forecast Unit Demand ²	Built-Up Area Forecast ³ Designated Greenfield Area Potential ⁴		Urban Expansion Requirement⁵			
Aurora	8,590	3,620	4,970	0			
East Gwillimbury	24,380	1,090	23,290	0			
Georgina	9,150	3,090	6,060	0			
King	6,280	1,460	4,820	0			
Markham	71,110	39,070	22,670	9,360			
Newmarket	9,800	8,110	1,690	0			
Richmond Hill	29,940	19,730	10,200	0			
Vaughan	60,500	27,410	27,140	5,950			
Whitchuch-Stouffville	9,660	1,570	8,090	0			
York Region	229,400	105,150	108,930	15,310			

Table 5a2036 Urban Expansion Residential Unit Requirement by Local Municipality1

1. Figures may not sum due to rounding

2. From Table 2

3. From Table 3

- 4. From Table 4a (includes Agricultural/Rural Area potential)
- 5. Forecast Unit Demand less Built-Up Area Forecast and Designated Greenfield Area Potential

		•		
	Forecast Unit Demand ²	Built-Up Area Forecast ³	Designated Greenfield Area Potential ⁴	Urban Expansion Requirement⁵
Aurora	9,360	4,250	5,110	0
East Gwillimbury	28,600	1,380	23,600	3,610
Georgina	10,450	3,620	6,840	0
King	6,530	1,680	4,850	0
Markham	78,890	43,170	22,730	12,980
Newmarket	11,180	9,480	1,700	0
Richmond Hill	32,970	22,700	10,260	0
Vaughan	71,920	30,640	28,720	12,560
Whitchuch-Stouffville	10,220	2,060	8,160	0
York Region	260,110	118,980	111,960	29,160

Table 5b2041 Urban Expansion Residential Unit Requirement by Local Municipality1

2. From Table 2

3. From Table 3

4. From Table 4b (includes Agricultural/Rural Area potential)

5. Forecast Unit Demand less Built-Up Area Forecast and Designated Greenfield Area Potential

East Gwillimbury, Markham and Vaughan have a supply of land for residential development in the 'Whitebelt' Area, and King and Whitchurch-Stouffville have more limited potential supply of land. Tables 6a and 6b provide 2011 to 2036 and 2011 to 2041 unit growth allocated to the 'Whitebelt' Area by local municipality and structure type.

Table 6a

2036 'Whitebelt' Area Unit Requirement by Structure Type and Local Municipality, 2011-2036¹

	Single	Semi	Row	Apt.	Total
Markham	5,540	450	3,140	240	9,360
Vaughan	3,550	240	2,030	140	5,950
York Region	9,090	680	5,170	370	15,310

1. Figures may not sum due to rounding

	Single	Semi	Row	Apt.	Total		
East Gwillimbury	2,070	170	1,280	100	3,610		
Markham	7,430	590	4,610	350	12,980		
Vaughan	7,190	570	4,460	350	12,560		
York Region	16,690	1,330	10,340	800	29,160		

Table 6b2041 'Whitebelt' Area Unit Requirement by Structure Type and Local
Municipality, 2011-20411

The 2041 'Whitebelt' Area residential unit requirement of 29,170 units includes a unit type mix (57% single detached, 5% semi-detached, 35% rows and 3% apartments) that represents a transit supportive density in a compact built form that is anticipated for the Region's New Communities. The York Region 2041 Population and Employment Forecasts (Attachment Report 2 in this series of reports) provides further information on how unit type mix was determined.

4.5 Community Land Requirements

As determined above, an urban area expansion is required to accommodate the York Region forecast for residential growth to 2036 and 2041. Ensuring that the Region meets or exceeds the density targets in the Growth Plan requires that expansions be done on a developable area basis. The York Region developable area has been updated based on the most current spatial information available. Appendix C provides a detailed explanation of how developable area was determined.

The community land area requirements for 2036 and 2041 were derived based on a 20 units per hectare density assumption, applied to the developable lands of the 'Whitebelt' Area. This density assumes that both residential and population related employment growth will be accommodated within the derived land area. The 20 unit per hectare density assumption is reflective of YROP-2010 policy requirements and supports the more compact transit-supportive communities the Region is planning.

Table 7 below shows the 2036 and 2041 community land requirements within the 'Whitebelt' Area.

Local Municipality, 2036 and 2041							
	2036			2041			
	Urban Expansion Units ²	Density (units per hectare)	'Whitebelt' Land Area Reqm't (ha) ³	Urban Expansion Units ²	Density (units per hectare)	'Whitebelt' Land Area Reqm't (ha) ³	
East Gwillimbury	0	20	0	3,610	20	181	
Markham	9,360	20	468	12,980	20	649	
Vaughan	5,950	20	297	12,560	20	628	
York Region	15,310	20	766	29,160	20	1,458	

Table 7Urban Expansion Requirements for Community Lands byLocal Municipality, 2036 and 2041¹

2. From Tables 5a and 5b

3. 'Whitebelt' Area Units divided by Density

5.0 Employment Analysis

The employment analysis section of this report reviews forecasted jobs (demand) against the existing long term supply of lands designated to accommodate employment growth. The analysis then determines the amount of additional lands required to accommodate growth to 2041.

5.1 Employment Demand

For the purposes of the forecast and land budget, York Region's employment is divided into three distinct types:

- 1. Employment Land (ELE)
- 2. Major Office (MO)
- 3. Population-Related (PR)

Definitions of each employment type are provided in Appendix D. Table 8 below illustrates the forecast employment growth by local municipality, employment type and forecast period. Details on the division of employment by employment type are found in the York Region 2041 Population and Employment Forecasts (Report Attachment 2 in this series of reports).

		2011-2036				2011-2041		
	ELE Job Growth	MO Job Growth	PR Job Growth	Total Job Growth	ELE Job Growth	MO Job Growth	PR Job Growth	Total Job Growth
Aurora	8,210	1,670	5,200	15,080	8,970	2,020	5,550	16,540
East Gwillimbury	13,390	600	13,000	26,990	20,930	960	15,790	37,670
Georgina	8,010	0	5,200	13,210	10,960	0	5,870	16,840
King	2,070	910	3,040	6,020	3,790	910	3,150	7,850
Markham	26,190	36,310	34,690	97,190	29,100	45,850	39,430	114,380
Newmarket	3,040	2,600	2,390	8,030	3,220	3,310	3,010	9,540
Richmond Hill	7,390	10,940	16,940	35,270	7,830	14,120	18,560	40,510
Vaughan	64,000	20,060	34,610	118,670	71,300	23,600	41,510	136,410
Whitchuch- Stouffville	4,770	90	4,700	9,560	5,240	90	4,930	10,270
York Region	137,060	73,190	119,760	330,010	161,340	90,860	137,810	390,010

Table 8Employment Growth by Type and Local Municipality,2011-2036 and 2011-2041

It has been determined that all employment growth to 2036 can be accommodated within the existing designated urban area. Therefore, an employment land needs analysis has been included here for the 2041 forecast only.

5.2 Employment Land Employment Supply in the Built-Up and Designated Greenfield Areas

The Vacant Employment Land Inventory, 2013 was endorsed by Council in May 2014. Since that time, a number of revisions have been made to the inventory, including:

- In the Town of Georgina the Sutton Employment Area has been removed, consistent with the updated Sutton/Jackson's Point Secondary Plan.
- In the City of Markham, employment lands in the Future Urban Area (ROPA 3) have been added to the inventory and a number of employment conversions approved by Council in April 2015 have been removed.
- In the Town of Richmond Hill, the North Leslie Employment Area was assumed to develop for non-employment land employment uses.

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This report analyzes the 2011 vacant supply of employment lands, adjusted as described above. These adjustments have resulted in 55 additional developable ha available for employment land employment development region-wide.

In addition to the adjustments above, the Region has received submissions from development proponents to consider converting employment lands to nonemployment uses. It is anticipated that additional submissions may be forthcoming. Regional staff will work with local municipal staff to determine local municipal aspirations for these lands. It is anticipated that there will be adjustments made to the employment supply between this preferred growth scenario land budget scenario and the recommended scenario that will be presented to Council in spring 2016.

A small amount of vacant employment land is forecast to be developed for Major Office type employment uses. The land budget assumes that all of the major office growth in Aurora and King, 35% of the major office growth in Richmond Hill, and 50% of the major office growth in Markham and Vaughan will be on employment lands. This major office land requirement of 163 net ha has been removed from the vacant employment land supply as it is not anticipated that these lands will accommodate employment land employment growth.

Table 9 shows the updated 2011 inventory of vacant employment lands by land use category and local municipality.

•				
	Built-Up Area	Designated Greenfield Area	Agricultural /Rural Area ⁴	Total Designated Lands
Aurora	20	130	0	150
East Gwillimbury	0	390	30	420
Georgina	0	300	0	300
King	0	70	0	70
Markham	160	320	0	480
Newmarket	40	0	0	40
Richmond Hill	110	0	0	110
Vaughan	80	1,210	0	1,290
Whitchuch-Stouffville	70	90	<5	170
York Region	480	2,520	30	3,030

Vacant Designated Employment Land by Land Use Category and Le	ocal
Municipality (net hectares), 2011 ^{1, 2, 3}	

Table 9

1. Figures may not sum due to rounding

2. Excludes Major Office requirements on employment lands (163 net ha)

3. Net area refers to the private lot areas available for development, and excludes roads, environmental features and public uses

4. Includes vacant lands in the Bales Drive Employment Area in East Gwillimbury and the Cardico and Vandorf Employment Areas in Whitchurch-Stouffville

Job potential from the vacant employment land inventory is derived by applying density assumptions to the available land supply by employment area. Table 10 provides job potential for vacant designated lands by land use category. Appendix E provides an employment density analysis by local municipality.

In addition to calculated job potential, it is assumed that a number of the employment land buildings vacated during the 2008/2009 recession would be reoccupied in the short to mid-term. These jobs are also captured in Table 10.

	Built-Up Area Job Potential		Designated Greenfield	Agricultural/ Rural Area
	Re- Occupancy	Vacant Land	Job Potential	Job Potential
Aurora	1,180	780	7,010	0
East Gwillimbury	250	30	18,180	780
Georgina	110	190	10,670	0
King	140	20	2,110	0
Markham	5,090	8,100	15,910	0
Newmarket	520	2,700	0	0
Richmond Hill	1,290	6,540	0	0
Vaughan	11,930	4,910	51,290	0
Whitchuch-Stouffville	650	1,100	3,290	200
York Region	21,160	24,360	108,460	980

Table 10Designated Employment Land Job Potential by Land Use Category and
Local Municipality, 20111

Similar to the previous land budget exercise, no assumption for a vacancy factor was made for the employment potential on vacant designated lands.

5.3 Remaining Employment Land Employment Jobs to be accommodated in through Urban Boundary Expansions

The employment potential from vacant designated employment lands is subtracted from the 2011 to 2041 forecast growth of employment land employment to generate jobs that require additional lands for approval. Table 11 displays the number of jobs required on urban expansion employment lands in the 'Whitebelt' Area to meet the 2041 employment land employment forecast.

	Forecast Job Demand ²	Designated Potential ³	Urban Expansion Job Requirement ⁴		
Aurora	8,970	8,970	0		
East Gwillimbury	20,930	19,240	1,690		
Georgina	10,960	10,960	0		
King	3,790	2,260	1,530		
Markham	29,100	29,100	0		
Newmarket	3,220	3,220	0		
Richmond Hill	7,830	7,830	0		
Vaughan	71,300	68,140	3,160		
Whitchurch-Stouffville	5,240	5,240	0		
York Region	161,340	154,960	6,380		

Table 11Employment Land Employment Urban Expansion Job Requirements by
Local Municipality, 2011-20411

2. From Table 8

3. From Table 10

4. Forecast Jobs Demand less Designated Potential

Similar to the residential analysis, East Gwillimbury, Markham and Vaughan are the three municipalities with a considerable potential supply of land for employment development through expansion into the 'Whitebelt' Area and King and Whitchurch-Stouffville have more limited potential supply of land for employment development in the 'Whitebelt' Area. Based on the forecast, an urban expansion will be required in East Gwillimbury, King and Vaughan to accommodate employment growth to 2041.

5.4 Employment Land Requirements to 2041

Similar to community land 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 developable 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 storm water management.

Table 12 below shows the 2041 employment expansion land requirements.

Local municipality, 2041							
	Urban Expansion Employment Land Employment Jobs ¹	Density (jobs per hectare)	'Whitebelt' Land Area Requirement (ha) ²				
East Gwillimbury	1,700	40	43				
King	1,520	40	38				
Vaughan	3,160	40	79				
York Region	6,380	40	160				

Table 12
2041 Urban Expansion Requirements for Employment Lands by
Local Municipality, 2041 ¹

2. From Table 11

3. 'Whitebelt' Area Jobs divided by Density

The employment land requirements are consistent with the requirements articulated in the Draft Growth Scenarios despite the adjustments made to the overall existing supply of vacant lands. A more thorough review of available supply and density assumptions was undertaken resulting in a slightly lower job potential in the existing designated area.

5.5 Major Office Employment

Major office employment typically includes high quality jobs with higher densities. Growth in office development is a key component of the Region's Centres and Corridors strategy and is needed to support the Region's major transit infrastructure investments. In April 2015 Regional Council endorsed a York Region Office Space Financial/Market Analysis and Marketing Plan Study that aims to attract office development in the Region, particularly in Centres and Corridors. All major office growth to 2041 is forecast to occur within the current urban and towns and villages boundaries.

The following assumptions have been made with regard to the distribution of major office growth by land use category:

- Aurora and King: All growth is assumed to occur in Designated Greenfield Area employment areas adjacent or close to 400-series highways.
- East Gwillimbury: All growth is assumed to occur in the Designated Greenfield Area, in proximity to the Green Lane Go Station (outside of employment areas).
- Markham: The majority of growth (97%) is assumed to occur within the Built-Up Area, and the remainder is assumed to occur in the north-west corner of the municipality, within the Highway 404 North Employment Area. Within the Built-Up Area, 49% of growth is assumed to occur within employment areas, and the remainder is assumed to occur within Centres and Corridors.

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- Newmarket and Whitchurch-Stouffville: All growth is assumed to occur in the Built-Up Area, outside of employment areas.
- Richmond Hill: All growth is assumed to occur in the Built-Up Area, 35% of which is assumed to occur within employment areas with the remainder planned to locate in Centres and Corridors.
- Vaughan: The majority of growth (88%) is assumed to occur within the Built-Up Area, and the remainder is assumed to occur within employment lands along Highway 400 in the Designated Greenfield Area. Within the Built-Up Area, 43% of growth is assumed to occur within employment areas.

Table 13 provides the breakdown of the growth by land use category and by employment land status.

Table 13

Major Office Employment Growth by Land Use Category and Local Municipality, 2011-2041

	Built Up Area Jobs		Designated Greenfield Area Jobs		Total Jobs ³	
	On Employment Lands	Outside of Employment Areas ²	On Employment Lands	Outside of Employment Areas ²	On Employment Lands	Outside of Employment Areas ²
Aurora	0	0	2,020	0	2,020	0
East Gwillimbury	0	0	0	960	0	960
Georgina	0	0	0	0	0	0
King	0	0	910	0	910	0
Markham	21,630	22,920	1,290	0	22,920	22,920
Newmarket	0	3,310	0	0	0	3,310
Richmond Hill	4,940	9,180	0	0	4,940	9,180
Vaughan	8,850	11,800	2,950	0	11,800	11,800
Whitchuch- Stouffville	0	90	0	0	0	90
York Region	35,420	47,310	7,170	960	42,600	48,260

1. Figures may not sum due to rounding

 Outside of Employment Lands refers predominately to Regional Centres and Corridors

The distribution of major office jobs to land use categories is based on development applications, local municipal input and reflects support for the Region's urban structure and transportation networks.

5.6 Population Related Employment

The land budget exercise assumes that population-related employment will be located within community lands. Population-related employment growth estimates in the Designated Greenfield Area have been derived by applying employment estimates to vacant sites for schools and commercial development in existing secondary plan areas. Population-related employment estimates for the 'Whitebelt' Area are based on similar people to job ratios as those projected for the Designated Greenfield Areas.

Table 14 below displays the distribution of 2011 to 2041 population related employment growth to the three land use categories.

	Built-Up Area Jobs	Designated Greenfield Area Jobs	Whitebelt Area Jobs
Aurora	3,880	1,670	0
East Gwillimbury	3,490	10,810	1,490
Georgina	3,060	2,810	0
King	1,240	1,910	0
Markham	23,450	10,580	5,400
Newmarket	2,670	350	0
Richmond Hill	14,670	3,890	0
Vaughan	24,570	11,650	5,300
Whitchuch-Stouffville	1,790	3,150	0
York Region	78,810	46,810	12,190

Table 14

Population Related Employment Growth by Land Use Category and Local Municipality, 2011-2041^{1, 2}

1. Figures may not add due to rounding

2. Includes Work at Home

5.7 Total Employment by Land Use Category

Based on the analysis described above, Table 15 provides 2011 to 2041 total employment growth by Land Use Category. Although the *Growth Plan* does not include an intensification target for employment growth, York Region has directed over half of 2011 to 2041 total employment growth to the Built-Up Area.

		-				
		Land Use Category				
	Built-Up Area Jobs	Designated Greenfield Area Jobs	Whitebelt Jobs	All Areas Jobs	Built-Up Area Jobs (%)	
Employment Land Employment ^{2, 3}	44,770	110,190	6,380	161,340	28%	
Major Office Employment ⁴	82,730	8,130	0	90,860	91%	
Population Related Employment ⁵	78,810	46,810	12,190	137,810	57%	
Total Employment	206,320	165,120	18,570	390,010	53%	

Table 15York Region Employment Growth by Land Use Category, 2011-20411

2. From Tables 10 and 11

3. Designated Greenfield Area Includes 1,310 jobs in the Agricultural/Rural Area

4. From Table 13

5. From Table 14

6.0 Land Requirements Summary

A breakdown of 2011 to 2041 growth by land use category is graphically depicted in Appendix F. An urban area expansion is required to accommodate the York Region forecast for residential growth to 2036 and 2041, and employment growth to 2041.

Community land expansions include residential and population-related employment growth. It has been determined that 766 developable ha of community land are required to 2036 and an additional 693 developable ha of community lands are required to meet population needs to 2041.

Employment land expansions are for employment land employment growth. It has been determined that no new employment lands are required to 2036 and that 160 developable ha of employment lands are required to 2041.

As discussed above, new major office growth to 2041 is forecast to locate in currently designated areas.

Table 16 provides the allocation of Urban Expansion Area lands needed to accommodate growth to 2036 and 2041.

	Total 'Whitebelt' Area		2036 Urban Expansion		2041 Urban Expansion ¹		Remaining Whitebelt			
	(ha)	(%)	(ha)	(%)	(ha)	(%)	(ha)	(%)		
East Gwillimbury	980	100%	0	0%	223	23%	757	77%		
Markham/ Whitchurch- Stouffville	1,921	100%	468	24%	181	9%	1,271	66%		
Vaughan/ King	1,344	100%	297	22%	448	33%	598	45%		
York Region	4,245	100%	766	18%	852	20%	2,627	62%		

Table 162041 Urban Expansion Land Area by Local Municipality

1. Lands in addition to 2036 Urban Expansion

Based on this land budget analysis, approximately 18% of the developable 'Whitebelt' Area will be required to the year 2036 and approximately 38% of the developable 'Whitebelt' Area will be required to the year 2041.

7.0 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 the Designated Greenfield Area and to urban expansions in the 'Whitebelt' Area.

The 2041 density analysis is summarized in Table 17 below and more detailed information is provided in Appendix G.

U	,	<u> </u>	
	Area (ha)	People and Jobs	Density
Community Land in the Designated Greenfield Area	8,915	479,580	54
Employment Land In the Designated Greenfield Area	3,292	125,940	38
Community Land in the 'Whitebelt' Area	1,458	109,680	75
Employment Land in the 'Whitebelt' Area	160	6,380	40
Overall Designated Greenfield Area Density	13,825	721,580	52

Table 172041 York Region Density Target Analysis^{1,2}

2. Analysis is conducted based on calculated land needs

The following key observations, by category can be made with respect to the density analysis:

- 1. Community lands in the Designated Greenfield Area have an overall density of 54 people/jobs per hectare. These lands are all within approved community plans. As shown in Appendix G, densities are higher within communities linked to the York Durham Sewage System (YDSS).
- 2. Employment lands in the Designated Greenfield Area have an overall density of 38 jobs per hectare. However, densities vary considerably by employment area depending on the nature and type of business activity. As shown in Appendix G, on a local municipal scale densities range from a low of 26 jobs per hectare in Whitchurch-Stouffville to a high of 47 jobs per hectare in Aurora.
- 3. Community lands in the 'Whitebelt' Area are based on a density assumption of 20 units per developable hectare.
- 4. Employment lands in the 'Whitebelt' Area are based on a density assumption of 40 jobs per developable hectare.

The land budget analysis includes targets for achieving more compact, pedestrian and transit supportive communities.

8.0 Geographic location of Urban Boundary Expansions

The land budget analysis in this Attachment Report indicates the need for approximately 1,460 hectares of additional Urban Area lands to 2041 for

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community uses and about 160 hectares for employment uses. The YROP-2010, *Growth Plan* and *PPS, 2014* contain policies that provide criteria for determining appropriate locations for expansion. This section of the land budget report evaluates potential locations for expansions of the Urban Area. The proposed locations for urban expansion have been developed based on the policy criteria contained in the YROP-2010, *Growth Plan* and *PPS, 2014* along with extensive consultation with local municipal staff and Transportation and Water and Wastewater infrastructure planning Regional staff. All existing 'Whitebelt' lands were considered for expansion of the Urban Area. The proposed areas are those that best meet the evaluation criteria.

8.1 Proposed Urban Area expansions meet YROP-2010 policy requirements

In the context of urban boundary expansion, all of the policies of the YROP-2010 have been reviewed and applied at a Regional scale and specifically those policies related to geography. Policy 5.1.12 specifically addresses requirements related to expansions of the Urban Area. The policies and how the proposed Urban Area expansions meet the requirements are discussed below.

Policy 5.1.12 states that expansions of the Urban Area, shall only be initiated by the Region, in consultation with local municipalities, as part of a Regional *municipal comprehensive review* in conformity with Policy 2.2.8 of the *Growth Plan* and the following:

a. Population and employment forecasts for the Region;

The quantum of 'Whitebelt' community and employment lands and the location by local municipality has been determined through the preferred growth scenario and land budget analysis which indicates the need for an expansion to the Region's Urban Area to accommodate growth to 2036 and to 2041.

b. The Role of the lands proposed for expansion in the context of local municipal growth management;

The potential role of urban expansion lands in relation to local municipal growth management has been considered in determining appropriate locations for urban expansion. The proposed urban expansions are logical extensions of either existing or planned communities.

c. The protection of and integration with the Regional Greenlands System;

The Regional Greenlands system, which encompasses the majority of the larger and more significant environmental features in the Region, remains protected under any urban expansion scenario. York Region's environmental systems have the benefit of protection under the *Oak*

Ridges Moraine Conservation Plan and the *Greenbelt Plan*, which among other key objectives, protects the sensitive headwater areas and environmental features in the Region. In defining developable areas in the 'Whitebelt' area in the Region, these environmentally sensitive areas are already protected. When examining the 'Whitebelt' areas in the Region, the environmental attributes are fairly comparable within and around the proposed urban expansion areas. While some site-specific functions, features and species located within or adjacent to the urban expansion areas would be considered significant, the policies of Chapter 2 of the YROP-2010, supported by the Province and the Conservation Authorities, are comprehensive and sufficient to protect the system as development proceeds.

d. The Amendment is large enough (e.g. a concession block) with clear and identifiable boundaries, such as concession streets, major natural features, rail or major utility corridors;

Logical planning boundaries including major roads and environmental features have been used as urban expansion boundaries. The proposed urban expansion areas are either sufficiently large enough or are extensions to the existing or planned communities in the Urban Area.

e. The role of the lands proposed for expansion that is supportive of the Region's urban structure including centres and corridors, <u>Regional Rapid</u> <u>Transit Corridors and GO commuter rail line</u>; (Note: underlined text indicates modifications that have been requested of the Ontario Municipal Board as part of the settlement of appeals related to the YROP-2010)

Consistency with this policy is discussed as part of the more detailed discussion below on the proposed Urban Area expansions by local municipality which demonstrates that the expansions support the Regional Corridors and GO commuter rail line.

f. That expansions of the Urban Area are contiguous to an existing Urban Area;

All of the proposed expansions to the Urban Area are contiguous to an existing Urban Area.

g. The completion of local municipal strategies and policies to phase in and achieve the intensification targets in this Plan;

All nine local municipalities have completed or are in the process of completing intensification strategies to address the intensification targets in YROP-2010.

h. The existing or planned infrastructure required to accommodate the proposed expansion can be provided in a financially and environmentally sustainable manner;

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Infrastructure issues associated with the preferred growth scenario are outlined in the discussion below on the proposed Urban Area expansions by local municipality. Additional financial analysis of the required infrastructure will be undertaken following Council's consideration of the preferred growth scenario.

i. Future expansions, to the Urban Area as shown on Map 1 of this Plan, are directed to lands outside the boundary of that Urban Area and outside the Greenbelt Plan Area Boundary;

All of the proposed urban expansion areas are outside of the existing Urban Area and outside of the Greenbelt Plan area.

j. The Region and local municipalities shall protect for the opportunity for new community areas and employment lands within such lands that could be considered through any future municipal comprehensive review; and,

The proposed Urban Area expansions do not preclude the opportunity for new community areas and employment lands through future municipal comprehensive reviews. The development timing, phasing of infrastructure and other site-specific issues have been reviewed and applied in consideration of future additional settlement boundary expansions.

k. Other policies of this Plan.

The proposed expansions to the Urban Area have been reviewed in the context of other polices of the YROP-2010.

8.2 Growth Plan Settlement Area expansion criteria related to geography are met

All of the policies of the *Growth Plan* have been reviewed and applied at a Regional scale and specifically those policies related to geography. The full set of requirements contained in Policy 2.2.8 of the *Growth Plan* are addressed separately in Attachment Report 5 in this series of reports. The parts of Policy 2.2.8 that deal specifically with issues of where urban expansion should occur are contained in the following sections:

e. the existing or planned infrastructure required to accommodate the proposed expansion can be provided in a financially and environmentally sustainable manner

This is addressed in the discussion under YROP-2010 Policy 5.1.12.h above.

f. in prime agricultural areas: i) the lands do not comprise specialty crop areas;
 ii) there are no reasonable alternatives that avoid prime agricultural areas; iii)

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there are no reasonable alternatives on lower priority agricultural lands in prime agricultural areas

The proposed Urban Area expansions do not comprise specialty crop areas. Nearly all of the 'Whitebelt' area in York Region is comprised of prime agricultural areas; there are no reasonable alternatives on lower priority agricultural lands. It is noted that the comprehensive work of Planscape Inc. has examined the issue of the long term protection of agricultural areas and has been incorporated into this analysis.

Under retainer to the Region, Planscape Inc. provided input on the draft growth scenarios and the preferred growth scenario from an agricultural perspective. That input is summarized in a Scoped Agricultural Assessment which is attached as Appendix H. The assessment comments on the existing agricultural landscape within York Region, advises of the varying significance of the agricultural lands being proposed for urban expansion and makes recommendations. Those recommendations have been considered in conjunction with the other planning considerations as articulated throughout the York Region 2041 Preferred Growth Scenario report and attachments. It is the opinion of Planscape Inc. that the no urban expansion option is preferred, but accepting that farmland is required to accommodate growth, the preferred growth scenario as recommended by staff is consistent with Provincial policy.

g. impacts from expanding settlement areas on agricultural operations which are adjacent or close to the settlement areas are mitigated to the extent feasible.

Impacts from the proposed expansions to the Urban Area on nearby agricultural operations can be mitigated through the secondary planning process for these areas. In May 2015, as part of the Co-ordinated Provincial Plan Review the Region recommended that polices be developed in the *Greenbelt Plan* to ensure compatibility at the urbanagricultural interface where development in new communities is adjacent to permanently protected lands in the Greenbelt. The Scoped Agricultural Assessment in Appendix H includes a ranking of 'Whitebelt Area' parcels in terms of potential impacts on adjacent or nearby agricultural areas. It should be noted that areas not included in the proposed 2041 Urban Area boundary expansions are at the bottom of this ranking.

 in determining the most appropriate location for expansions to the boundaries of settlement areas, the policies of Sections 2 (Wise Use and Management of Resources) and 3 (Protecting Public Health and Safety) of the PPS, 2014 are applied

The policies in these sections of the PPS, 2014 have been taken into account, where applicable in defining the locations for the Urban Area boundary expansions.

8.3 Provincial Policy Statement 2014

All of the policies of the *PPS, 2014* have been reviewed and applied at a Regional scale and those policies specifically related to geography including Section 2.1 on Natural Heritage, Section 2.3 on Agriculture, Section 2.5 on Mineral Aggregate Resources and Section 3.1 on Natural Hazards. Natural heritage and agriculture issues have been discussed above in the YROP-2010 and *Growth Plan* criteria; the policies on mineral aggregate resources and natural hazards are not applicable to the proposed Urban Area expansions.

8.4 Other General Principles for Urban Expansion

In addition to the principles listed above, other general principles used in determining appropriate locations for urban expansion in the Region consist of the following:

- 1. Within local municipalities requiring urban expansion, fill in existing 'Whitebelt' "gaps" in the urban fabric before extending outwards from the existing urban area, avoiding "leap frog" development patterns.
- 2. Supports the Region's investment and planned investment in transit and other transportation infrastructure.
- 3. Urban expansion area should be easily accessible by existing and potential future road infrastructure.
- 4. Areas adjacent to existing or future 400 series highways should be generally reserved for employment uses.
- 5. Promote live/work opportunities and reduced commuting distances.

8.5 Allocation of Urban Expansion Areas to York Region local municipalities

Figure 1, shown earlier in this report, identifies the location of the remaining 'Whitebelt' lands in the Region. In determining appropriate expansion lands for 2036 and 2041, no 'Whitebelt' urban expansion for community uses has been provided for in the Township of King or the Town of Whitchurch-Stouffville. Most of the 'Whitebelt' lands in these municipalities are currently not abutting any existing or planned residential communities.

Urban expansion for community lands have been allocated to East Gwillimbury, Markham and Vaughan to 2041 to provide urban expansion in both southern and northern York Region. For employment land uses, urban expansion is proposed in East Gwilimbury, King and Vaughan, in areas contiguous to existing designated employment areas. The following table summarizes the land area by local municipality.

	-		-	_	-		
	2036			2041			
	Lands for Dev't (ha) ²	Additional Lands (ha)	Total Area (ha)	Lands for Dev't (ha) ²	Additional Lands (ha)	Total Area (ha)	
East Gwillimbury	0	0	0	227	0	227	
King	0	0	0	38	0	38	
Markham	465	31	496	660	31	691	
Vaughan	296	0	296	679	0	679	
York Region	761	31	792	1,604	31	1,635	
2036 Calculated Land Need ³		766 ha		2041 Ca Land	1,618 ha		
Difference		5 ha		Diffe	14 ha		

Table 18Urban Area Expansion Lands (developable hectares)1

2. Lands for Development indicates actual land area proposed for urban expansion as depicted in Appendix I

3. Calculated Land Need from Table 16

The "additional lands" required referred to in Table 18 are approximately 31 developable ha for sports fields in Markham.

The total lands proposed for Urban Area expansion lands are slightly less than the calculated need. However, the proposed boundaries represent good planning based on logical boundaries and the resulting density is slightly above 20 units per developable hectare, the standard used for new community areas.

The following sections outline the justification for the location of the 'urban expansion' lands in East Gwillimbury, Markham, Vaughan and King. Appendix I provides maps showing the proposed expansions to the York Region Urban Area for these four municipalities. The blue hatched area shows expansions to the Urban Area by 2036 and the red hatched areas indicate urban expansions by 2041.

East Gwillimbury

Urban expansion in East Gwillimbury is proposed for post 2036. There is no urban expansion prior to 2036 because of the relatively abundant existing ground-related residential supply in the Town, and the anticipated pace of development in East Gwillimbury.

• New urban expansion for employment lands are being proposed for the east side of Highway 404. These lands will provide accessible employment lands

adjacent to a 400-series highway and will fill in the gap between employment lands in Queensville and those in ROPA 1.

- In general, the expansion lands fill in gaps from a south to north progression between the Green Lane corridor and Urban Areas in Holland Landing and Sharon.
- The Urban Area expansion will be supported by transit and road infrastructure investments along Yonge Street, Green Lane and 2nd Concession Road as well as cycling paths that provide connections to the East Gwillimbury GO station.
- The proposed Urban Area expansion can be serviced by further expansion of the proposed Water Reclamation Centre and expansion of the lake-based water supply system. The required infrastructure and corresponding timing for implementation will be identified through the Water and Wastewater Master Plan.
- Urban Area expansion in northern East Gwillimbury was not included as it would constitute "leap frog" development at this time. In addition, the timing of the Bradford By-pass remains uncertain.

Markham

In Markham, expansions of the Urban Area are proposed for both 2036 and 2041. To 2036, new community lands are proposed from west to east, filling in the gap along the Major Mackenzie future rapid transit corridor to the Rouge River. A portion of the block bounded by Warden Avenue, Kennedy Road, Elgin Mills Road and the City boundary is also part of the 2036 expansion. The 2036 to 2041 proposed expansion brings in the remainder of the concession block, located west of the arm of the Greenbelt in this area and a northerly extension of the ROPA 3 area located between Kennedy Road and McCowan Road.

- Expansion of the Urban Area between ROPA 3 and the Rouge River is preferred to expansion east of the Rouge River due to the closer proximity to existing infrastructure.
- Expansion of the Urban Area eastwards from ROPA 3 is supported by the planned Regional transit improvements along Major Mackenzie Drive East as well as the existing Mount Joy GO station and a new GO station being considered in the Transportation Master Plan update that would be located in the vicinity of the Donald Cousins Parkway and Major Mackenzie Drive East. The Mount Joy GO Station is planned to be part of the Regional Express Rail plan which provides frequent peak directional service during weekday rush hours and two-way service during midday, evenings and weekends.

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- The Markham Urban Area expansions will be supported by the planned extension of the Donald Cousins Parkway through North Markham. The alignment and timing of construction of this road infrastructure has not yet been determined.
- The Urban Area expansion between ROPA 3 and the Rouge River will require construction of the North Markham Collector Sewer prior to 2031.

Vaughan and King

Expansion to the Urban Area in Vaughan is proposed for community lands by 2036 and for both employment lands and community lands by 2041. Map 3 in Appendix I displays the currently proposed alignments for the GTA West Corridor, which has potentially significant impacts on the choice of location for urban expansion areas. Urban Area expansion in King Township is proposed for employment lands post 2036.

- An Urban Area expansion for employment lands is proposed post 2036 for a portion of the 'Whitebelt'in King Township that would form a northern extension to the ROPA 52 employment lands, along Highway 400.
- Due to the uncertainty around the final alignment of the Highway 427 Extension and GTA West Corridor, only the lands east of Highway 400 are being proposed for urban expansion for community uses (mainly Block 28) by 2036. These lands are located immediately north of ROPA 2 community lands and east of the ROPA 2 employment area. They are also in close proximity to the future GO station in the ROPA 2 lands to the south.
- From 2036 to 2041, the lands in Block 42 are proposed for urban expansion, as it provides a logical extension to ROPA 2 community lands. It is recognized, however, that due to the uncertainty around the final alignment of the GTA West Corridor through these lands, the boundary and assumed land uses in the land budget in this block may need to be refined as part of the recommended growth scenario.
- Both proposed Urban Area expansions for community lands can be serviced by water and wastewater services through the Northeast Vaughan servicing initiative which is scheduled for completion in 2028.
- Urban expansion employment lands are proposed in west Vaughan from 2036 to 2041, as it builds upon the existing designated employment lands and takes advantage of the highway infrastructure and proximity to the CP intermodal terminal. Land can be serviced with wastewater services by the West Vaughan servicing project which is scheduled for completion in 2028. Additional water supply infrastructure, if required, will be considered in the Water and Wastewater Master Plan update.

9.0 Conclusion

Based on this land budget analysis, approximately 1,460 hectares of additional Urban Area lands are required to 2041 for community uses and 160 hectares for employment uses. Of these requirements, approximately 765 hectares of community lands are required to 2036.

The proposed locations for urban expansion have been developed based on the policy criteria contained in the YROP-2010, *Growth Plan* and *PPS, 2014* along with extensive consultation with local municipal staff and Transportation and Water and Wastewater infrastructure planning Regional staff. All existing 'Whitebelt' lands were considered for expansion of the Urban Area, the proposed areas are those that best meet the evaluation criteria.

The land budget analysis includes targets for achieving more compact, pedestrian and transit supportive communities designed to achieve an average minimum density of 52 people and jobs per hectare. This slightly exceeds the minimum Designated Greenfield density target in the Growth Plan of 50 people and jobs per hectare.

The preferred growth scenario was determined through extensive evaluation and consultation (see Attachments 1 and 6 in this series of reports). This preferred growth scenario incorporates a 45% intensification target (see Attachment 3 in this series of reports) and conforms with Provincial legislation (see Attachment 5 in this series of reports). The land budget analysis contained within this report for the preferred growth scenario is based on a foundation of good planning principles and the method previously used in the YROP-2010 land budget exercise.
Land Use Categories related to the Land Budget

The **Built-Up Area** was built-up as of June 2006 as defined by the provincially delineated built boundary. In addition to the areas delineated by the built boundary, the Province has identified a number of "undelineated areas", which are predominately Hamlets that were considered to be built-up as of June 2006. For forecasting and land budgeting purposes, staff have delineated these areas as shown on Figure 1 on page 3 of the body of this report. Also, York Region and the City of Markham have taken the position that the planning principles and objectives of Cornell Centre merit inclusion within the Built Boundary and thus this area is included as "built-up" in all forecasting and monitoring exercises.

The *Growth Plan* stipulates that "By the year 2015 and for each year thereafter, a minimum of 40 percent of all residential development occurring annually within each upper- and single-tier municipality will be within the Built-Up Area".

Staff are recommending that Council approve a forecast scenario that allocates 45% of all residential development to the built up area. In the YROP-2010, policies within sections 5.3 (Intensification), 5.4 (Regional Centre's and Corridors), and 5.5 (Local Centres and Corridors) pertain predominately to the Built-Up Area.

The **Designated Greenfield Area** is designated "Urban Area" or "Towns and Villages" in the YROP-2010 and is outside of the Built-Up Area.¹

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. The 'Whitebelt' Area is predominately located in East Gwillimbury, Markham and Vaughan, with small portions in King and Whitchurch-Stouffville.

Within the *Growth Plan*, the "Designated Greenfield Area" refers to lands in the Designated Greenfield Area, as well as expansion lands in the 'Whitebelt' Area. The *Growth Plan* requires that these areas be planned to achieve a density target that is not less than 50 residents and jobs combined per hectare.

In the YROP-2010 the New Community Area policies embedded in section 5.6 (Building Complete, Vibrant Communities) pertain to the 2031 Urban Expansion Area described in footnote #1 below, as well as any lands within the 'Whitebelt' where an urban boundary expansion occurs. In particular, policy 5.6.3 requires that these areas "shall

¹ The Designated Greenfield Area includes the 2031 Urban Expansion Area which is the urban expansion area that was required in East Gwillimbury, Markham and Vaughan based on the March 2010 land budget exercise. These Area's include Regional Official Plan Amendment #52 to the YROP-1994 (Highway 400 North Employment Lands in Vaughan) as well as YROP-2010 Amendment #'s 1 (Green Lane Secondary Plan and Employment Lands in East Gwillimbury), 2 (Blocks 27 and 41 Community Lands in Vaughan) and 3 (Future Urban Area in Markham).

be designed to meet or exceed a minimum density of 20 residential units per hectare and a minimum density of 70 residents and jobs per hectare in the developable area."

The York Region New Community Guidelines provide guidance on implementing the Sustainable Building and New Communities Area policies in the YROP-2010.



York Region Developable Area Methodology

Developable Area is defined in the Growth Plan, policy 2.2.7.3:

This *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.

This definition is used to conform with/monitor policies in Places to Grow, such as policy 2.2.7.2:

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.

The definition is also used to conform with/monitor policies in the YROP-2010, including:

4.3.16: That development on fully serviced employment lands be compact and achieve a region-wide average minimum density of 40 jobs per hectare in the developable area. This target is expected to be higher for lands adjacent to centres and corridors.

5.2.14: To require that the designated greenfield area achieve an average minimum density that is not less than 50 residents and jobs per hectare combined in the developable area.

5.6.3: That new community areas shall be designed to meet or exceed a minimum density of 20 residential units per hectare and a minimum density of 70 residents and jobs per hectare in the developable area.

The York Region developable area is calculated by excluding the following features from the gross area of the region:

- 1. Environmental Exclusions
 - a. Significant Wetlands, including all wetlands in the Lake Simcoe Watershed and in the Greenbelt and evaluated wetlands outside of those areas (30m buffer)
 - b. Significant Forests (30m buffer in East Gwillimbury New Community 2031 Area and Whitebelt, and the Greenbelt, 10m buffer outside of those areas)
 - c. Engineered Floodplains (TRCA lands only assume to be captured within local Natural Heritage Networks for LSRCA lands)
 - d. Areas of Natural and Scientific Interest (Life Science only)
 - e. Waterbodies (30m buffer in East Gwillimbury New Community 2031 Area and Whitebelt, and the Greenbelt, 15m buffer outside of those areas)
 - f. Watercourses (30m buffer in East Gwillimbury New Community 2031 Area and Whitebelt, and the Greenbelt, 15m buffer outside of those areas)
 - g. Environmentally Sensitive Areas (Biological and Physical only)
- 2. Natural Heritage Exclusions in the New Community 2031 and Whitebelt Areas
 - a. East Gwillimbury Core Natural Heritage System
 - b. Markham Green Way System
 - c. Vaughan Core Natural Heritage Network
- 3. Infrastructure Exclusions
 - Water/wastewater infrastructure (Holland Landing Lagoons and Water Reclamation Centre in East Gwillimbury and Water Treatment Facility in Markham)
 - b. Cemetaries (best available data)
 - c. Transmission Lines (45m ROW)
 - d. Rail Lines (20m ROW)
 - e. Trans Canada Pipelines (20m ROW)
 - f. Trans Canada Compressor Station (140m buffer from parcel line)
 - g. 400-Series Highways
 - i. Highway 400 (85m ROW)
 - ii. Highway 404 existing and proposed (110m ROW)
 - iii. Highway 407 (150m ROW)
 - iv. Highway 427 (110 ROW south of Hwy 7, 170 ROW north of Hwy 7)
 - v. Highway 407 (170m ROW)
 - vi. GTA West Corridor (170m ROW)
 - vii. Bradford By-pass (110m ROW)

- 4. Existing Uses Exclusions in the New Community 2031 and Whitebelt Areas
 - a. East Gwillimbury: Valley Trail Estate Subdivision
 - b. Markham: north/west of Steeles Avenue and Ninth Line (Rouge Park), Boynton Circle Estate Subdivision
 - c. Vaughan: Belsite Court Estate Subdivision, High Valley Estate Subdivision, Stephanie Blvd Estate Subdivision, Phillips Lane Estate Subdivision

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 roads and stormwater management ponds).

Employment Type Definitions

Employment Land Employment: Refers to employment within the Region's employment lands, excluding major office employment. This category typically includes business activities such as manufacturing, research and development, warehousing and also includes ancillary retail and service uses.

Major Office Employment: Employment occurring in office buildings of 1,860 square metres (20,000 square feet) or larger (does not include city of town halls, hospitals or school board offices). Major office employment forms a key part of the Region's strategy for maintaining and attracting high quality jobs. Growth in office development is also a key component of the Region's Centres and Corridors strategy and is needed to support the Region's major transit infrastructure investments.

Population-Related Employment: Employment serving the local population such a retail, services, education, municipal government, institutions and community services. This type of employment tends to grow mainly in response to population growth.

Primary jobs (i.e. agricultural and aggregates) are classified in the population related category for the employment forecast and are removed from the land budget analysis as this type of employment occurs outside of designated lands and does not require additional lands for development.

Local Municipal Employment Area Density and Capacity Analysis

Table 1 below provides a 2011 capacity analysis for York Region Employment Areas. Below the table are comments on the methodology used to derive the capacity as well as a detailed description of assumed densities by local municipality.

Local Municipality	2013 Occupied Land (net ha) ²	2013 Jobs ³	2013 Calculated Density ⁴	Refined Density for Capacity Analysis ⁵	2011 Vacant Land (net ha) ⁶	2011 Capacity ⁷
Aurora	200	10,050	50	52	150	7,790
East Gwillimbury	420	3,150	27	45	420	18,990
Georgina	20	950	41	36	300	10,850
King	70	1,060	20	30	70	2,130
Markham	890	50,220	56	50	480	24,010
Newmarket	200	11,990	61	74	40	2,700
Richmond Hill	340	26,560	79	59	110	6,540
Vaughan	2,110	114,280	54	44	1,290	56,200
Whitchurch- Stouffville	180	4,610	26	27	170	4,590
York Region	4,430	222,870	50	44	3,030	133,800

 Table 1

 York Region Employment Land Capacity, 2011¹

1. Figures may not sum due to rounding

 Derived from the 2013 Employment Land Inventory. Major Office parcels (410 net hectares) have been removed from the analysis based on the York Region Major Office Inventory. Also, single unit built parcels that were unoccupied as of mid-year 2013 were removed from the analysis.

3. Derived from the 2013 York Region Employment Survey (excludes major office jobs).

4. 2013 Jobs divided by 2013 Occupied Land.

5. Average local municipal density assumed to be achieved on 2011 vacant lands in the long term (excluding major office).

6. Derived from the York Region 2011 Employment Land Inventory. Forecasted Major Office needs (163 net hectares) have been removed from this supply.

7. Refined Density for Capacity Analysis multiplied by the 2011 Vacant Land.

The Employment Land Employment growth density assumptions by local municipality are as follows:

Aurora: A density of 52 jobs per net hectare has been assumed, which is slightly higher than the existing density of 50 jobs per net hectare. In Aurora, the lands with the greatest remaining capacity are located along Highway 404 and are expected to achieve a higher density than lands located further from the highway. Therefore, the available vacant supply is expected to achieve a slightly higher density than the base.

East Gwillimbury: A density of 45 jobs per net hectare has been assumed, which is substantially higher than the existing density of 8 jobs per net hectare. A portion of the existing built employment lands are Industries on Private Services, which typically achieve much lower densities than serviced employment lands. It is assumed that over the forecast period the new Employment Areas in ROPA 1 and Queensville/404 will achieve a density of 50 jobs per net hectare. The remaining Employment Areas are anticipated to achieve densities ranging from 20 to 35 jobs per net hectare, depending on proximity to Highway 404 and availability of servicing.

Georgina: An overall density of 36 jobs per net hectare includes as assumption that the Keswick Business Park will achieve a density of 40 jobs per net hectare, consistent with the Secondary Plan. It is expected that the Keswick West Employment Area will achieve a density of 50 jobs per net hectare and that Pefferlaw Employment Area (which is on private services) will achieve 10 jobs per net hectare.

King: The assumed density of 30 jobs per net hectare is consistent with existing densities in King City and Schomberg Employment Areas, and applies a density of 25 jobs per net hectare to the Nobleton Employment Area.

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: Almost 78% of the available vacant land supply is in the Town of Newmarket is in the Leslie South Employment Area, which has a relatively high density of 80 jobs per net hectare and results in a higher density used for the capacity analysis compared to the overall calculated density.

Richmond Hill: Densities by employment area used to determine capacity are generally consistent with existing densities. The employment areas with large vacant

areas have lower densities than those that are mostly built out, which results in a lower average density for the capacity analysis than what is achieved in the existing base.

Vaughan: The assumed employment density of 44 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, distributing and warehousing sectors which have lower densities than the overall base.

Whitchuch-Stouffville: The assumed density of 27 jobs per net hectare is consistent with Whitchuch-Stouffville's existing densities, except for the Stouffville North Employment Area which is a partially developed employment area that is expected to achieve increased densities from 13 to 25 jobs per net hectare over time.

York Region 2011 to 2041 Growth by Land Use Category

Residential Units

Built-Up Area	Designated Greenfield Area	Whitebelt
46%	43%	11%
(118,980 Units)	(110,710 Units)	(6,380 Units)

Employment Land Employment Jobs



Major Office Jobs



Designated Greenfield Are 9% (8,130 Jobs)

Population Related Jobs

Built-Up Area	Designated Greenfield Area	Whitebelt
57%	34%	9%
(78,810 Jobs)	(46,810 Jobs)	(12,190 Jobs)

All Jobs

Built-Up Area 53% (206,320 Jobs)	Designated Greenfield Area 42% (163,820 Jobs)	Л

Whitebelt 5% (18,570 Jobs)

- 1. Figures may not sum due to rounding
- 2. Does not include growth in the Agricultural/Rural Areas (1,250 units and 1,310 ELE Jobs)

2041 Density Analysis Inputs

Designated Greenfield Area Community Land Density, 2041												
	Area			2041	Units			Don ⁴	Major	Pop-	Pop +	Density ⁵
	(ha) ³	Single	Semi	Row	Apt.	Duplex	Total	Рор	Office	Emp't	Jobs	Density
Aurora	525	3,840	210	1,110	850	220	6,230	18,720	0	2,100	20,820	40
East Gwillimbury	1,400	13,150	2,060	6,810	1,430	500	23,940	78,440	960	11,160	90,550	65
Georgina	663	5,820	170	880	40	320	7,220	20,120	0	3,380	23,500	35
King	598	4,180	60	320	140	180	4,880	14,460	0	2,100	16,560	28
Markham	1,542	11,770	3,070	7,510	2,630	430	25,400	82,670	0	12,870	95,540	62
Newmarket	209	1,620	140	920	0	120	2,800	8,500	0	530	9,030	43
Richmond Hill	705	5,390	230	5,400	770	350	12,140	38,830	30	5,510	44,370	63
Vaughan	2,640	21,200	3,290	7,800	5,480	1,010	38,780	126,660	130	16,650	143,440	54
Whitchuch- Stouffville	633	6,720	970	2,430	1,100	370	11,580	31,890	0	3,880	35,770	57
York Region	8,915	73,680	10,190	33,170	12,430	3,490	132,960	420,280	1,120	58,180	479,580	54

 Table 1

 Designated Greenfield Area Community Land Density, 2041^{1, 2}

1. Figures may not add due to rounding

2. Includes 2011 base and 2011-2041 Growth

3. Developable Area as described in Appendix C. Area and development potential outside of the serviced area boundaries of Nobleton, Pefferlaw and Sutton have excluded from this analysis.

4. Population is based on 2041 PPU's, local municipal institutional adjustments and a 3.22% undercount adjustment

	Area	2041 Units						– 4	Pop-	Pop +	D 245	
	$(ha)^3$	Single	Semi	Row	Apt.	Duplex	Total	Рор	Related Emp't	Jobs	Density	
East Gwillimbury	181	2,070	170	1,280	100	0	3,610	11,890	1,490	13,380	74	
Markham	649	7,430	590	4,610	350	0	12,990	43,210	5,400	48,620	75	
Vaughan	628	7,190	570	4,460	350	0	12,560	42,390	5,300	47,690	76	
York Region	1,458	16,690	1,330	10,340	800	0	29,160	97,500	12,190	109,680	75	

2. Includes 2011 base and 2011-2041 Growth

3. Developable Area as described in Appendix C

4. Based on 2041 PPU's, local municipal institutional adjustments and a 3.22% undercount adjustment

	•••••••		<u> </u>		, ,
	Area (ha) ³	ELE Jobs	Major Office Jobs	Total Emp't	Density ⁴
Aurora	263	8,740	3,520	12,260	47
East Gwillimbury	419	18,820	0	18,820	45
Georgina	281	11,070	0	11,070	39
King	95	2,440	910	3,350	35
Markham	455	15,920	1,780	17,700	39
Newmarket	0	0	0	0	0
Richmond Hill	0	0	0	0	0
Vaughan	1,617	54,600	3,900	58,500	36
Whitchuch- Stouffville	160	4,230	0	4,230	26
York Region	3,292	115,820	10,110	125,940	38

Table 3Designated Greenfield Area Employment Land Density, 2041^{1, 2}

2. Includes 2011 base and 2011-2041 Growth

3. Developable Area as described in Appendix C

				-	
	Area (ha) ³	ELE Jobs	Major Office Jobs	Total Emp't	Density ⁴
East Gwillimbury	42	1,690	0	1,690	40
Markham	38	1,530	0	1,530	40
Vaughan	79	3,160	0	3,160	40
York Region	160	6,380	0	6,380	40

Table 4'Whitebelt' Area Employment Land Density, 2041

2. Includes 2011 base and 2011-2041 Growth

3. Developable Area as described in Appendix C

	Area (ha) ³	Рор	ELE Jobs	Major Office Jobs	Pop Related Jobs	Total Pop+ Jobs	Density ⁴
Aurora	788	18,720	8,740	3,520	2,100	33,080	42
East Gwillimbury	2,042	90,330	20,510	960	12,650	124,450	61
Georgina	944	20,120	11,070	0	3,380	34,570	37
King	732	14,460	3,970	910	2,100	21,440	29
Markham	2,646	125,880	15,920	1,780	18,270	161,850	61
Newmarket	209	8,500	0	0	530	9,030	43
Richmond Hill	705	38,830	0	30	5,510	44,370	63
Vaughan	4,965	169,050	57,760	4,030	21,950	252,790	51
Whitchuch-Stouffville	793	31,890	4,230	0	3,880	40,000	50
York Region	13,825	517,780	122,200	11,230	70,370	721,580	52

Table 5Designated Greenfield and 'Whitebelt' Area Density, 2041^{1, 2}

2. Includes 2011 base and 2011-2041 Growth

3. Developable Area as described in Appendix C

4. Total Population and Jobs divided by Area

Region of York

Municipal Comprehensive Review

Scoped Agricultural Assessment of Preferred Growth Scenarios 2036/2041

Prepared for:

York Region

Prepared by:

Margaret Walton M.PI. RPP. PLANSCAPE Inc. October, 2015

PLANSCAPE

BUILDING COMMUNITY THROUGH PLANNING



Region of York

Municipal Comprehensive Review

SCOPED AGRICULTURAL ASSESSMENT OF PREFERRED GROWTH SCENARIOS 2036/2041

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FIGURES

YROP Map 8
YROP Map 1 (includes Whitebelt Areas)
Lear Result York Region
Land Evaluation Result York Region
Area Review Result York Region
Land Evaluation Score Markham
Land Evaluation Score Vaughan
Land Evaluation Score East Gwillimbury
Area Review Score Markham
Area Review Score Vaughan
Area Review Score East Gwillimbury
Fragmentation Result Markham
Fragmentation Result Vaughan
Fragmentation Result East Gwillimbury
Production Result Markham
Production Result Vaughan
Production Result East Gwillimbury
Production Result Markham
Production Result Vaughan
Production Result East Gwillimbury

SCOPED AGRICULTURAL ASSESSMENT OF PREFERRED GROWTH SCENARIO 2036/2041

1. Purpose

York Region is currently undertaking a Municipal Comprehensive Review (MCR) and five year update of the Regional Official Plan (YROP) as required under the Planning Act. As part of this process, the Region will be planning for and managing growth as forecast for the Region in Amendment 2 to the Growth Plan for the Greater Golden Horseshoe (Growth Plan). Amendment 2 projects that York Region will grow to a population of 1.79 million with employment of 900,000 by 2041.

As part of this process the Region has generated three draft growth scenarios based on fundamental guiding principles contained in the Provincial Policy Statement (PPS) and the Growth Plan. The three draft growth scenarios are "no urban expansion", "40% intensification" and "50% intensification". Both the 40% and 50% intensification scenarios will require urban boundary expansions. In response, the Region has developed a preferred growth scenario and has identified where boundary expansions are being considered.

Each of the three identified growth scenarios must be evaluated based on a number of factors, one of which is the impact on the Regional agricultural resource. If an option is selected that requires adjustments to urban boundaries, the impact of potential urban boundary expansions on the Regional agricultural community and whether and how those impacts can be minimized or mitigated, must also be considered. The purpose of this report is to address these issues in a scoped agricultural assessment that builds on analysis previously conducted by the Region.

2. Background

The Region of York is home to some of the most productive agricultural land in Canada. Agricultural is recognized by the Region as a significant resource and an important part of the Regional economy. Protecting this resource and supporting the agricultural industry as an "essential component of the Regional fabric"¹ is a fundamental goal of Regional planning policies.

To implement this goal, as part of the 2010 update of the YROP, a Land Evaluation Area Review (LEAR) was undertaken. This study analyzed soil / land capability, land fragmentation, potentially conflicting uses and the production profile to identify agricultural and rural areas. Both the farm community and local municipalities were involved in the analysis. The result of this process was the identification of Agricultural and Rural Areas as designated on Map 8 of the YROP (**Figure 1**). The designated Agricultural Areas, along with the provincially designated Specialty Crop Area of the Holland March, were given the highest level of protection for ongoing agricultural use in the YROP. The results of the LEAR have been used by the Region on an ongoing basis to evaluate development proposals. As part of the MCR, the results of the LEAR will be helpful in determining how to best address protection of the Regional agricultural resource while satisfying the requirement to accommodate projected growth. The results of the LEAR can be used to determine where, if deemed necessary, boundary expansions should be directed to minimize the impact on the Regional agricultural community.

¹ York Region Official Plan, June 30, 2013 Office Consolidation Section 6, pg. 81



Region of York-Municipal Comprehensive Review Scoped Agricultural Assessment of Preferred Growth Scenario 2036/2041

Figure 1

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Assessment of how the Regional agricultural land resource should be managed in conjunction with accommodating projected growth must be part of the MCR and YROP update. With respect to prime agricultural areas (currently designated in the YROP as Agricultural Areas) Section 1.1.3.8 of the 2014 PPS directs that:

A planning authority may identify a settlement area or **allow the expansion of a settlement area boundary only at the time of a comprehensive review and only where it has been demonstrated that:**

- a) sufficient opportunities for growth are not available through intensification, redevelopment and designated growth areas to accommodate the projected needs over the identified planning horizon;
- b) the infrastructure and public service facilities which are planned or available are suitable for the development over the long term, are financially viable over their life cycle, and protect public health and safety and the natural environment; PROVINCIAL

c) in prime agricultural areas:

1. the lands do not comprise specialty crop areas;

2. alternative locations have been evaluated, and

i. there are no reasonable alternatives which avoid prime agricultural areas; and

ii. there are no reasonable alternatives on lower priority agricultural lands in prime agricultural areas;

d) the new or expanding settlement area is in compliance with the minimum distance separation formulae; and

e) impacts from new or expanding settlement areas on agricultural operations which are adjacent or close to the settlement area are mitigated to the extent feasible.

In determining the most appropriate direction for expansions to the boundaries of settlement areas or the identification of a settlement area by a planning authority, a planning authority shall apply the policies of Section 2: Wise Use and Management of Resources and Section 3: Protecting Public Health and Safety.²

These policies are reiterated in the Growth Plan and provide the focus for consideration of agricultural issues in relation to growth management and boundary expansions.

Much of the agricultural land in York Region is part of the Greenbelt and is therefore also protected under the policies of the Greenbelt Plan (GBP) and Oak Ridges Moraine Conservation Plan (ORMCP). Therefore the policies in these plans must also be considered as part of the MCR and YROP update.

The policies in the GBP and the ORMCP limit settlement area expansions within their boundaries. Given that York has rural lands outside of the Greenbelt, any boundary expansions necessary to accommodate projected growth to 2036/2041, must be directed to these lands. The rural areas outside of the GBP and

² Province of Ontario, Provincial Policy Statement 2014, Section 1.1.3.8. pg. 8-9.

ORMCP areas under the current YROP are shown in white on **Figure 2** (YROP Map 1) and for reference purposes only in this report, are numbered from 1 to 11.

3. Analysis and Options

This assessment is a scoped review which focuses specifically on Section 1.1.3.8 c and e of the PPS and related policies in the GPGGH, GBP and ORMCP. It is assumed that the other issues in Section 1.1.3.8 are being considered as part of the comprehensive review conducted by the Region in arriving at the three draft growth scenarios and the preferred scenario.

It should also be noted that given that this assessment was scoped, site inspections were not conducted of potential boundary expansion areas. The work done for the LEAR in 2009 and existing knowledge of the subject areas was relied on as the basis of the scoped analysis of which potential boundary expansions would have the least impact on the agricultural community.

The analysis in this report focuses first on the three scenarios identified by the Region for accommodating growth to 2014. After commenting on these scenarios, analysis and recommended options are provided addressing factors to be considered should the ultimate decision for growth management include boundary expansions.

3.1 Growth Scenarios

The three scenarios selected for consideration by Regional Council are:

- 1. No urban expansion.
- 2. 50% intensification requiring re-designation of approximately 1,260 ha of land (1,100 ha of community lands and 160 ha of employment lands); and
- 3. 40% intensification which would result in a requirement for inclusion of an additional 2,460 ha of land (2,300 ha of community and 160 ha of employment lands).

From an agricultural perspective, the scenario with the least impact is no urban expansions; followed by the 50% intensification which will minimize the amount of land re-designated; with the least desirable option being 40% intensification which maximizes the loss of currently designated farmland.

In considering the options, there are a number of factors related to the ongoing sustainability of the Regional agricultural sector that need to be addressed. These include how that various scenarios will impact on criteria that are critical to sustaining agricultural production. These criteria include:

- Certainty based on firm urban boundaries;
- Edge planning that addresses the interface between urban and rural communities;
- Systems planning that defines and supports a contiguous, linked agricultural system;
- Connection to rural communities that support agriculture;
- Provision of infrastructure that supports agriculture;
- Accommodation of farm services;
- Management of potentially conflicting uses;
- Management of agricultural land as a non-renewable resource;
- Recognition that certain lands due to a combination of circumstances (soils, climate, topography) have a higher productive capability and are therefore of higher productive value.



Region of York - Municipal Comprehensive Review Scoped Agricultural Assessment of Preferred Growth Scenario 2036/2041



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In making the decision of how to respond to provincial requirements while sustaining agriculture, the Region should consider these factors.

Selection of the "no expansion" option will satisfy the intent of these criteria and would be consistent with the Provincial policies in the PPS, GPGGH, GBP and ORMCP. Accepting that farmland may have to be re-designated for urban growth (Options 2 or 3) is also consistent with Provincial policy. Adopting a 50% or 40% intensification target will meet the provincial requirements since the required Provincial target is a minimum of 40%. A review of the background reports confirms that the Region has conducted sufficient analysis to confirm conformity with Provincial policies. The final decision will therefore be one based on what, in the Region's opinion, is the preferred option for accommodating growth, greater intensification or boundary expansion.

If the Region selects boundary expansion as the option, the areas chosen to accommodate the expansion must in addition to other tests, satisfy the tests related to prime agricultural areas set out in Section 1.1.3.8 c, d and e of the PPS, and Section 2.2.8 f, g and h of the GPGGH. Whether the potential areas for expansion that have been chosen meet these tests is assessed in the next section.

Regardless of the option chosen, to effectively support the agricultural sector in the future, the criteria outlined above as being critical to the ongoing sustainability of the agricultural sector should be specifically addressed by the Region. Prioritizing the designation of land based on the specific value of the resource, creating certainty about the future, implementing controls to manage the interface between agricultural and non-agricultural uses, establishing an integrated agricultural system, providing infrastructure, supporting strong rural communities and accommodating a network of essential farm services is essential to the long term sustainability of the Regional agricultural sector. York should plan for agriculture using a systems based approach that considers the resource comprehensively and not react to provincially established growth targets by "nibbling away" at the agricultural resource around urban boundaries with the focus always on accommodating urban growth. When setting goals for planning for complete communities, supporting a complete rural community that sustains a prosperous agriculture sector should be a key consideration.

3.2 Boundary Expansion Options

If the growth option that is selected triggers a requirement for boundary expansions, the Region's options for addressing this are limited. As noted previously, the focus for possible expansions is on lands in what is often referred to as the "white belt", the areas outside both current urban boundaries and the boundary of the Greenbelt. These areas are as shown in white, and numbered from 1 to 11 on **Figure 2³**.

The purpose of this section of this report is to analyse this proposed option in reference to all of the areas where boundary expansions could occur. The analysis will focus on considering the results of the 2009 LEAR, applying the tests associated with prime agricultural areas in Regional and Provincial policy and good planning principles.

³ The delineation of areas is not exact, it is for identification purposes only, and the numbers have no significance beyond being for reference purposes in this report. Note from this point forward all referenced figures are attached at the end of the report.

3.2.1 Options Analysis

To ensure consistency with Provincial policy, specifically Section 1.1.3.8 c of the PPS and Section 2.2.8 f of the GPGGH, the options for accommodating boundary expansions have been assessed using the research and findings generated through the LEAR process conducted in 2009.

The scores from the LEAR analysis are summarized on **Figure 3.** This Figure maps the overall rankings of lands in terms of suitability for agriculture with 0.0 to 0.2 being the lowest and 8.01 to 10.00 being the highest. The result of the LEAR confirms that York Region has a very high capability for agriculture. All of rural lands in the white belt satisfy the criteria for and have been designated as prime agricultural land in prime agricultural areas.

To fully understand the nature of the eleven areas of the whitebelt, the analysis that supported the LEAR was reviewed. The LEAR analysis was comprised of two components:

- 1. Land Evaluation
- 2. Area Review

The Land Evaluation focused on soil capability and was conducted by a team of soil scientists, (Soil Resource Group, SRG) who worked from existing soils data and mapping which was confirmed through field work and consultation with local farmers. As part of the process, the farm community asked that climatic conditions associated with Regional microclimates be factored into the analysis. This was considered but due to a lack of data this variable could not be used.

The result of the Land Evaluation is shown on Figure 4.

In the report summarizing the findings of the LEAR it was concluded that:

The map clearly shows that highly favourable soil conditions exist for agriculture in northern Vaughan, north and eastern Markham, southern Whitchurch-Stouffville, northeastern Richmond Hill, western East Gwillimbury, central and eastern Georgian and all areas excluding a large central portion of King.⁴

Figure 4 confirms that the land in the south part of the region (Markham, Whitchurch-Stouffville and Vaughan) is the best in the Region under the criteria considered in the Land Evaluation.

The Area Review conducted by PLANSCAPE focused on three criteria:

- 1. **Fragmentation** considered the extent to which land in the evaluation units (lot/concession polygons) had been divided into smaller units.
- 2. Lands under production through aerial photography, site inspections and with the assistance of area farmers, the production profile of the polygons was identified and assessed.
- 3. **Conflicting land use** Assessment codes and planning designations were used to identify uses which were then assessed using the provincial criteria for conflict contained in guidelines supporting minimum distance separation requirements.

The results of these analyses were evaluated and mapped individually and then the results were combined to produce the Area Review which was mapped as shown on **Figure 5**. The results of this

⁴ PLANSCAPE and SRG. The Region of York, Land Evaluation and Area Review Summary Report, November 2009, pg. 19.

evaluation confirm that the land in the southern part of the Region also scored in the top category in the Area Review assessment. Other, more rural areas in the northern part of the Region scored higher in the Area Review than in the land evaluation.

To evaluate the specific nature of the areas available to accommodate projected growth should boundary expansions be required, specific mapping for areas where this land is located (Markham/Stouffvile, Vaughan, and East Gwillimbury) was evaluated. **Figures 6a to c** are the Land Evaluation scores for these areas, **Figures 7a to c** are the Area Review scores.

To further inform the analysis of the proposed boundary expansion, the breakdown of the three factors that contributed to the final Area Review score (fragmentation, production and conflicts) were reviewed. Detailed maps of each of the areas where expansion could occur were produced.

- Fragmentation (Figures 8a, 9a, 10a)
- Lands Under Production (Figures 9a, b and c)
- Conflicting Land Uses (Figures 10a, b and c)

Acknowledging that all of the lands that are subject to this assessment are prime agricultural lands, the analysis focused on assessing the nature of the prime agricultural land in response to the direction in Section 1.1.3.8 c) 2. ii, of the PPS that if there are "no reasonable alternatives which avoid prime agricultural areas then "lower priority lands in prime agricultural areas" should be considered. Based on the findings of the LEAR, lands that are of lower priority, in ascending order are:

- Area 9 Vaughan
- Area 5 East Gwillimbury;
- Area 6 East Gwillimbury
- Area 1 Vaughan
- Area 2 Vaughan
- Area 7 East Gwillimbury
- Area 11 Markham
- Area 3 Markham
- Area 10 Markham
- Area 8 East Gwillimbury
- Area 4 Markham

In reaching this conclusion it should be noted that it was based on an analysis conducted in 2009, and that the differences between the various areas are subtle.

3.2.2 Impact on Agricultural Operations

The other tests to be applied in this analysis are good planning principles, including the tests contained in Section 1.1.3.8 e. of the PPS. This policy requires that the impacts of a boundary expansion on agricultural operations "adjacent to or in close proximity to the new settlement areas" be considered.

To assess the potential impact and assess the factors associated with good planning, the criteria identified in the previous section of the report as key to sustainability for agricultural areas were considered. These include:

- Certainty for the future;
- Opportunities to implement edge planning to address the interface between urban and rural communities;
- Potential for the area as part of an contiguous, linked agricultural system;
- Connection to existing rural communities that support agriculture;
- Presence of infrastructure that supports agriculture;
- Access to farm services;
- Ability to avoid potentially conflicting uses;
- Status of the area that could contribute higher productive value;
- Impact on agricultural operation adjacent or in close proximity to the new settlement area.

With respect to the impact of a boundary expansion on the certainty about the future for agriculture in proximity to each of the subject areas, the impact will be negative. However it is probable that a lack of certainty has already negatively impacted some, if not all of these areas. Research conducted in the GGH over the past decade has confirmed that designation as "whitebelt" sent a signal to farmers that the future for agriculture on their lands was limited. Farmers plan in generations, not years and so many of those interested in farming over the long term have sold their land and moved to areas where the future is more certain. Significant areas of farmland in the "whitebelt" have been optioned or sold to non- farm interests, the farm infrastructure has deteriorated and farm services have disappeared. This impact ripples out to abutting area which are impacted by the decline in the farm community around them. The challenge for the Region will be, after this current process of boundary expansions, to create certainty in the abutting areas.

With respect to edge planning, depending on the predominant production in the area, the separation between the agricultural and non-agricultural uses varies. For livestock production, separation can be significant; for fruit, vegetable, greenhouse and nursery requirements are much smaller. In British Columbia, a Canadian jurisdiction that has done considerable work on edge planning, the minimum separation between agricultural and non-agricultural uses has been set at 15 meters. Certain American and Australian jurisdictions have established much greater separations, some as high as 500 metres. In assessing each of the options the potential to implement effective edge planning will be a factor.

Connection as part of a system is important for agricultural sustainability. A system of connected agricultural land provides the opportunity to develop support services and infrastructure to sustain production. With the ongoing trend to increasing size of farm operations, many operators farm multiple properties and need to be able to move between them efficiently. Road standards that accommodate farm equipment are different from urban road standards. A continuous connected route that accommodates farm equipment can be an effective tool for supporting ongoing agricultural production in an area, even those where the land parcels may be fragmented. Therefore each of the areas was assessed based on its location in reference to other agricultural lands.

This factor needs to be considered not just in reference to the status of certain areas as part of a system but in their role in sustaining the system. Areas 5, 6 and 7 in East Gwillimbury are constrained by many factors that would suggest their future for agriculture is limited. However if these lands are urbanized this will sever a corridor of agricultural land that currently connects agricultural areas on the east side of the municipality to those to the west. In this time when operators farm large disparate parcels of land the ability to move equipment between properties is critical. Moving through urban areas is challenging if not impossible. There is already a wall of urban development running north- south from Richmond Hill to East Gwillimbury. Incorporating these area into the urban boundary will sever one of the last rural corridors through this strip and isolate farmers to the east and west.

With respect to a systems approach to planning for agriculture, to date planners have not addressed what the optimum size is for agricultural systems. The size will vary depending on the type of production that characterizes an area. Areas where cash crops dominate can be land extensive. Livestock areas where cash crop is grown for feed and separation from non- agricultural uses is critical will be large. However areas where fruit, greenhouse or vegetable predominate can be much smaller. The Niagara tender fruit lands are an example of this where operations are significantly smaller and therefore an associated system could be more compact. It is not always the size of the system that supports its sustainability, it is whether it is supportive of the optimal type of production that can occur in an area.

This point is of prime consideration in Markham where the land is extremely productive and fruit and vegetable production has been strong in the past. In this area there is still a large contiguous of area of highly productive land which could form the basis for a linked agricultural system focused perhaps on a fruit, vegetable and greenhouse sector. These products tend to thrive on smaller land holdings close to large urban markets. Part of the reason Markham continues to have a large rural area is because of the public holdings in the municipality. Depending on how these lands are managed, the presence of large areas of publically owned land could strengthen an agricultural system in this area.

With respect to infrastructure, the observation in the areas designated as "whitebelt" is that much of the farm related infrastructure has been allowed to deteriorate. Farmers are not inclined to invest in land that may or may not be available to them for long periods of time. If the land is owned by non-farmers the interest will be even lower. Therefore the infrastructure required to sustain optimal production (e.g. tile drainage, fences, buildings) is allowed to deteriorate. Crops associated with a long term return on investment (e.g. greenhouse, fruit, nursery) are not cultivated or cease production in areas that are vulnerable to re-designation. This trend could be reversed if there was more certainty about the future but at present it is a factor.

As with most businesses, farm services typically locate in areas where there is a critical mass of customers. As the number of customers dwindle, services such as grain elevators, farm equipment dealers and mechanics, large animal veterinarians, seed and fertilizer dealers and custom operators tend to move away forcing farmers to travel larger distances and pay more to access services. Sustaining a farm community with sufficient mass to support these services increases the efficiency and therefore profitability of farms. Access to services is a factor that needs to be considered in assessing the strength of a farming area. Those areas that are closer to rural areas which do have farm services will be benefit from proximity to services.

With respect to conflicts, in reviewing the eleven areas where boundary expansions are possible, the areas most vulnerable to negative impacts are those surrounded by urban development, potentially impacted by expansion of urban infrastructure (e.g. planned transportation corridors) or that are constrained in sustaining a connection to a larger agricultural community. Two of the areas in Vaughan are part of a proposed future transportation route. Should that route be developed their potential for agriculture will be seriously degraded.

With respect to productivity, this factor was addressed by the Land Evaluation conducted for the LEAR. The other factor to be considered with respect to productivity is climate. Farmers involved in the LEAR provided anecdotal input indicating that productivity increases as you move south in York. This is not unexpected given the moderating influence of Lake Ontario. The area in Markham was identified by farmers as being extremely productive and positively impacted by slightly improved climatic conditions.

The final factor considered in this analysis was the requirement in the PPS to consider the impact of boundary expansion on adjacent or closely proximate agricultural areas. The impact will be greater in areas where the agricultural sector is still reasonably intact, less significant in areas already impacted by non-agricultural development. Addressing this factor involves consideration of all of the other factors discussed. To address this each of the factors was considered in reference to the eleven areas shown on **Figure 2**. Impacts for each factor were ranked as high, medium or low and the results considered. Again, as with the analysis of the LEAR results, the differences between areas was small and somewhat subjective. Based on the assessment, from an agricultural perspective, the areas where inclusion in a settlement boundary would result in less impact on adjacent agricultural operations from least to most impact are:

- Area 1 Vaughan
- Area 5 East Gwillimbury
- Area 7 East Gwillimbury
- Area 6 East Gwillimbury
- Area 9 Vaughan
- Area 2 Vaughan
- Area 3 Markham
- Area 4 Markham
- Area 10 Markham
- Area 11 Markham
- Area 8 East Gwillimbury

4. Conclusions

From an agricultural perspective the "no expansion" option is the preferred option. It is consistent and conforms to Provincial policies in the PPS, GPGGH, GBP and ORMCP and will meet the test of good planning. However, accepting that farmland may have to be re-designated for urban growth, Options 2 or 3 are also consistent with provincial policy. Adopting a 50% or 40% intensification target (or some value in between) will meet the provincial requirements. A review of the background reports confirms that the Region has conducted sufficient analysis to confirm conformity with provincial policies. The final decision will therefore be one based on the preferred option for accommodating growth, greater intensification or boundary expansion.

With respect to the options for boundary expansions, based on the LEAR analysis, each of the areas where boundary expansions are possible ranked high in terms of agricultural potential. They all comprise prime agricultural areas but there are small subtle differences that respond to the direction in Section 1.1.3.8 of the PPS to consider "*lower priority lands in prime agricultural areas*".

With respect to the other factors identified and discussed there are also small subtle differences between the 11 "whitebelt" areas. As a result of the analysis conducted for this report it was concluded that the impact would be lower in East Gwillimbury and Vaughan, higher in Markham. The exception to this conclusion is Area 8 in East Gwillimbury. The location of this area on the north side of the urban cluster in proximity to a large rural area supports the potential for ongoing agricultural production in that area.

In reaching the conclusions outlined above, it was noted that two of the "whitebelt" areas in Vaughan have been identified as potential future transportation routes. If development of these provincial expressways proceeds, potential for settlement expansions in these areas will be reduced or eliminated, If these transportation routes are a reality, lands in Markham will likely need to be considered to satisfy demand. If this is the case, expansion into Area 3 as shown on Figure 2 would be the least intrusive.

In conclusion, based on the assessment of the LEAR and consideration of relevant policies and principles of good planning, if the decision is to expand urban boundaries to accommodate growth to 2041, the option for expansions that would have the least impact on adjacent agricultural operations and would be oriented to the lowest priority agricultural lands is East Gwillimbury, then Vaughan with Markham being the are proposed for expansion with the highest impact.

Respectfully submitted,

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