APPENDIX E: Capacity Analysis Results

1.0 Introduction

The "Where and How to Grow" report, prepared by Urban Strategies as part of the City-wide Official Plan review (http://www.vaughantomorrow.ca/OPR/where%20report.html), identifies new development options and re-development potential in the City of Vaughan in conformity with the Growth Plan for the Greater Golden Horseshoe. City-wide, 64,850 new dwelling units are predicted to accommodate 113,700 new jobs and 170,000 new people. Of the 64,850 new dwelling units forecasted for the entire City of Vaughan, 30,000 dwelling units can be made available through re-development (i.e. intensification) within the existing built area. Of this, the "Where and How to Grow" report identifies intensification of 1,000 dwelling units in the Woodbridge area along Kipling Avenue and Woodbridge Avenue.

A more detailed capacity analysis was conducted for the Special Policy Area review of the Woodbridge Focused Area Study. The approach and methodology are provided below and in Appendix F. The objectives of the capacity analysis for the SPA review are to design build-out scenarios to assess change in flood risk based on increases or decreases in the number of dwelling units and estimated population. The build-out scenarios provide a range of additional dwelling unit counts to understand the change in risk as a result of potential flooding. The development scenarios are not intended to be options to select a preferred scenario. Rather, the findings of the risk assessment are used to recommend land use designations and densities in the final Woodbridge Centre Secondary Plan.

2.0 Current Built Form

Statistics Canada dissemination data identifies a total of 2,350 dwelling units and a population of 8,826 for the study area. This is an approximation based on 8 different census areas. Table E.1 provides a breakdown of the unit counts by building type.

Table E.1 Dwelling unit counts based on interpretation of eight dissemination areas from Statistics Canada.

Building Type	Dwelling Unit Counts
Single detached houses	1210
Semi-detached houses	-
Row Houses	120
Apartments (duplex)	115
Apartment Building (5 storeys or more)	650
Apartment Building (fewer than 5 storeys)	255
TOTAL	2350

A separate capacity analysis based on the parcel fabric, using individual parcels located within the SPA and grouping parcels outside of the SPA, indicates a total of 2,343 dwelling units for the study area. Using the assumption of 3.1 persons per unit (PPU) as the Region-wide average PPU for 2016, as noted in the York Region 2031 Land Budget (2009), the estimated population in the study area is 7,254 people.

The separate dwelling unit count based on City of Vaughan data differs from the Statistics Canada estimate by less than 1% while the population estimate differs by about 18%. The City of Vaughan data includes approved applications (i.e. Zoning By-Law amendments and Site Plan

approvals in place) to date and may be an overestimate compared to Statistics Canada 2006 census data. Furthermore, the Statistics Canada dissemination data is not coincident with the study area boundaries, so the interpretation of the dissemination data is prone to some estimation error. Nevertheless, the similarity of the residential unit counts suggests that the City of Vaughan data can be used for more detailed analysis of dwelling units based on specific parts of the study area.

Of the 2,340 existing and approved dwelling units in the study area, 40% or 926 units are located in the SPA. Using the York Region assumption of 3.1 persons per unit (PPU) for the 2016 Region-wide average PPU, the estimated population in the SPA is 2,870 people.

For the Woodridge Core area only, as depicted on Schedule 'B' of OPA #240 or Schedule 'l' of OPA #440, the City of Vaughan data indicates a total of 1,173 current and approved dwelling units. Of these, 613 dwelling units are in the SPA while 560 units are outside of the SPA.

An independent analysis of existing dwelling units and capacity according to current approved policies for the Woodbridge Core area identified 909 existing dwelling units of which 508 units are in the SPA (Weston Consulting Group 2008). The theoretical capacity was calculated to be 1,825 units for the entire Core area and 1,033 units for the SPA portion of the Core area. This represents a theoretical increase of 101% for the entire Core area and 103% for the SPA portion of the Core using the independent findings. Relating the theoretical capacity derived independently to existing dwelling units determined in this study, the capacity represents an increase of 56% and 69%, respectively, for dwelling units in the entire Core area and the SPA portion of the Core.

3.0 Build-out Scenario Descriptions

Build-out scenarios based on the capacity analysis are used to assess changes in risk for potential future development in the SPA. Assessment of risk is determined primarily by evaluating changes in the number of dwelling units for re-development scenarios. These are not intended to test future development options. That is, it is not intended to select one of the development scenarios as a recommended land use option. Rather, the development scenarios will be used in the risk assessment and the findings will inform the final land use designations selected for the Woodbridge Centre Secondary Plan.

The Kipling Avenue study for the development of OPA #695 identified an additional 1,022 dwelling units (see Schedule 'D' of the Kipling Avenue Study). As this is a recent study and since OPA #695 is not affected by flood risk, the identification of the additional 1,022 units along Kipling Avenue is not modified in the build-out scenarios for the flood risk assessment. Hence, each of the five scenarios is additive to the 1,022 dwelling units identified along Kipling Avenue.

Specified density for four designations in OPA #440 is modified in the various scenarios to change the dwelling unit counts. The four affected designations are Mixed Use Commercial, Mixed Use Office, Residential High Density and Residential Medium Density.

Specified density for two designations in OPA #597 is modified in the various scenarios to change the dwelling unit counts. The two affected designations in OPA #597 are Residential High Density and Residential Medium Density.

In OPA #661, only the Transit Stop Centre designation is used in select build-out scenarios. Note that the Transit Stop Centre currently does not include the portion of the SPA south of

Avenue #7. Hence, including the Transit Stop Centre in an intensification scenario reflects a significant change from current policy.

3.1 Build-out Scenarios

There are five build-out scenarios described below.

Scenario 1

The first scenario considers lands with re-development potential built to existing policy affected by OPAs #440 and #597 (Figure E-1). The parts of OPA #597 that have been deferred regarding the SPA are not included in this scenario as it is not considered to be approved policy.

Scenario 2 – Intensification Scenario A

The second scenario considers only the recommended designation changes from residential low density to either medium density or high density for the deferred portions of OPA #597 along Islington Avenue (Figure E-2). This is effectively an intensification scenario as these recommended changes were not approved by the Region of York. Portions of Islington Avenue identified as "Areas of no change" according to the Islington Avenue study are not included in the second build-out scenario.

Scenario 3- Intensification Scenario B

The third scenario represents a further intensification and includes all redevelopment parcels from the first two scenarios (Figure E-3) and increases the density (see Table E.2). Additional parcels along Islington Avenue are also included as redevelopment parcels in this scenario, namely:

- 8372 and 8382 Islington Avenue (OP.06.026);
- 4, 6, 12 and 10 Hartmann Avenue as well as 8307, 8311, 8319, 8327 and 8331
 Islington Avenue: and
- 8234, 8238, 8244, 8246, 8250, 8254 and 8258 Islington Avenue.

Scenario 4 - Intensification Scenario C

The fourth scenario represents a further intensification scenario and includes all redevelopment parcels from the previous scenarios and increases the density for most designations (Figure E-4 and Table E.4). Additional lands along Islington Avenue included in the scenario are:

• 8451, 8457, 8469, 8473, 8477, 8487, 8495, 8507, and 8519 Islington Avenue.

Scenario 5

The fifth scenario reflects flood depth risk for select parcels in the SPA by altering the gross site area to remove areas in the > 3 metre and > 2 metre flood depth zone. The two flood depth zones are applied to parcels for Scenarios 1 and 2 as a base case and to Scenario 3. This results in 4 combinations of build-out estimates using flood depth data (see Table A.7). These are referred to as Scenarios 5a to 5d and are described in further detail below. Scenarios 5a to 5d reflect possible decreases in future residential units if future policies reflect reduced risk simply by avoiding areas of a particular flood depth rather than through a requirement for floodproofing. Hence, this represents an example of avoiding risk through design rather than by mitigation.

Scenarios 5a and 5b modify the gross site area for select parcels in the SPA by excluding flood depths > 3 metres. Scenario 5a applies the modified gross site area to

the parcels selected in Scenarios 1 and 2, while still using the same values for coverage and FSI. Scenario 5b applies the modified gross site area to the parcels selected in Scenario 3, one of the intensification scenarios, and applies the same values for coverage and FSI as used in Scenario 3. For example, modelled flood depths > 3 metres overlapping 50% of a 1,000 square metre parcel results in a gross site area of 500 square metres. If the parcel is assumed to redevelop to medium density, then the coverage proportion (70%) is multiplied by the reduced gross site area of 500 square metres. Reduced site areas were calculated in GIS by intersecting the modelled flood data by the parcel fabric.

Scenarios 5c and 5d modify the gross site area for select parcels in the SPA by excluding flood depths > 2 metres. This results in a further decrease in net developable area for select parcels from that used in Scenarios 5a and 5b. Scenario 5c applies the modified gross site area to the parcels selected in Scenarios 1 and 2. Scenario 5d applies the modified gross site area to the parcels selected in Scenario 3, one of the intensification scenarios, and applies the same values for coverage and FSI as used in Scenario 3.

3.2 Build-out Scenario Parameters

As noted above, the scenarios differ by the number of parcels considered to have redevelopment potential as well as altering dwelling unit density. Coverage and Floor Space Index (FSI) are modified to achieve densities appropriate for the build-out scenario (Table E.2).

Densities specified in OPA #440 are the starting point to recognize current approved policies. Densities in OPA #440 are expressed in units per hectare (uph) and are specified for Residential Medium Density (35 uph) and Residential High Density (99 uph).

Densities are not specified in OPA #440 for the Mixed Use Commercial designation. Policy 4.2.3 (v) in OPA #440 notes that "building heights should generally not exceed three storeys with an opportunity for a fourth storey to be incorporated into the roof area". This suggests that the densities in the Mixed Use Commercial designation are similar to those for the Residential Medium Density (35 uph). An average density of 143 units per hectare was derived from an assessment of units and parcel areas for buildings located at 121, 131 and 141 Woodbridge Avenue. Given the difference between the policy interpretation and actual approved development, a density of 90 uph was used to interpret current approved policy in OPA #440. This is more consistent with the density specified for Residential High Density than for Residential Medium Density. This was increased to 136 uph for Scenario 3 and 170 uph for Scenario 4. There is little information in OPA #440 regarding an appropriate density for the Mixed Use Office designation. However, this constitutes only a small portion of the study area. Coverage and FSI for the Transit Stop Centre are outlined in OPA #661.

The ratio of residential to commercial area is based on the type of designation and remains the same in each of the build-out scenarios (Table E.3). Residential Medium Density designations apply to lands affected by OPA #440 and OPA #597 are assumed to be entirely residential with no commercial space. Residential High Density designations apply to lands affected by OPA #440 and OPA #597 are assumed to be four floors with commercial space at grade, such that the residential space is 75% of the gross floor area and commercial space is 25% of the gross floor area. The Mixed Use Commercial designation applies to parcels in OPA #440 and is assumed to be 75% residential and 25% commercial. The Mixed Use Office designation applies to lands in OPA #440 and is assumed to be 50% residential and 50% commercial. The

Transit Stop Centre designation applies only to lands in the portion of the SPA south of Avenue Seven and is assumed to be 50% residential and 50% commercial.

Table E.2 Coverage and FSI parameters for four build-out scenarios.

Scenario Coverage an	Residential	Residential	Mixed Use	Mixed	Transit
Cooriano	Medium	High	Commercial	Use	Stop
	Density	Density	Commercial	Office	Centre
1. Approved Policies	Donony	Donoity		Omoo	Contro
Intended Density (uph)	35	99	90*		
Coverage (%)	70	60	60	60	-
FSI	0.5	2.0	1.5	1.0	-
2. Council-adopted					
Policies – Intensification					
Scenario A					
Intended Density (uph)	35	99	90		
Coverage (%)	70	60	60	60	-
FSI	0.5	2.0	1.5	1.0	-
3. Intensification					
Scenario B					
Intended Density (uph)	70	126	136		
Coverage (%)	70	60	80	60	60
FSI	1.0	2.5	2.0	1.5	2.0
4. Intensification					
Scenario C					
Intended Density (uph)	80	136	170		
Coverage (%)	80	80	80	60	80
* Circuit a difference in a scient	1.0	2.0	2.5	1.5	2.0

^{*} Given the difference in residential densities between the policy interpretation and actual approved development for the Mixed Use Commercial designation, a density of 90 uph was used to interpret current approved policy in OPA #440. See the discussion on Page 4 above for more explanation of this assumption.

Table E.3 Ratio of residential to commercial floor area for each relevant designation.

Table E.5 Ratio of residential to commercial floor area for each relevant designation						
Designation	Proportion of	Proportion of Commercial				
	Residential Floor Area	Floor Area				
Residential Medium Density	100%	0%				
Residential High Density	75%	25%				
Mixed Use Commercial	75%	25%				
Mixed Use Office	50%	50%				
Transit Stop Centre	50%	50%				

The proportion of commercial area for Residential High Density and Mixed Use Commercial designations is higher than has been established in existing developments. Hence, the build-out scenarios are likely lower estimates than will be achieved in the 2031 time period. However, consistently ensuring commercial space at grade in select designations will be important in establishing a mixed use form for the Woodbridge area.

4.0 Build-out Scenario Results

Scenario 1

The first scenario considers lands with re-development potential built to current approved policy affected by OPAs #440 and #597. The parts of OPA #597 that have been deferred are not included in this scenario. As noted in the two OP amendments, residential high density is assumed to intensify to 99 units per hectare and residential medium density is assumed to intensify to 35 units per hectare. The density for Mixed Use Commercial is set to 90 units per hectare as described above in Section 3.2.

As shown in Table E.4, this results in an additional 306 dwelling units, of which 199 are in the SPA in the Woodbridge Core (i.e. primarily Woodbridge Avenue and Clarence Street). Of the 107 additional dwelling units outside of the SPA, 45 are located in the Woodbridge Core (Table E.5) and 62 are located along the Islington Avenue corridor (Table E.6) (also Character Area 7).

It should be noted that the approximately 6,025 square metres of the Mixed Use Commercial area of Market Lane is used in the calculations. This area coincides with the SPA boundary and, hence, is considered part of the residential unit count in the SPA.

Scenario 2

The second scenario considers only the recommended designation changes to either medium density or high density for the deferred portions of OPA #597. This results in 187 additional dwelling units (Table E.4), most of which (110 units) is provided on the east side of Islington Avenue opposite Woodbridge Avenue as this was recommended for Residential High Density designation.

Scenario 3

The third scenario reflects intensification above existing policies and results in 1,093 additional dwelling units (Table E.4). This represents an increase of 600 dwelling units above the previous scenarios. This scenario identifies 770 additional units in the SPA, an increase of 384 units above the previous scenarios. The SPA in the Woodbridge Core includes an additional 348 units, which is an increase of 149 units from previous scenarios (Table E.5). The SPA along Islington Avenue includes an additional 335 units, which is an increase of 148 units above the previous scenarios (Table E.6). A total of 87 units is calculated for the SPA south of Avenue 7.

Scenario 4

The fourth scenario reflects further intensification and results in 386 dwelling units in addition to the previous scenarios. That is, 1,479 dwelling units are identified primarily along Woodbridge Avenue, Islington Avenue and the south side of Avenue 7 at Islington Avenue. Of this, 899 units are located in the SPA, which reflects an increase of 129 units from the previous scenarios (Table E.4).

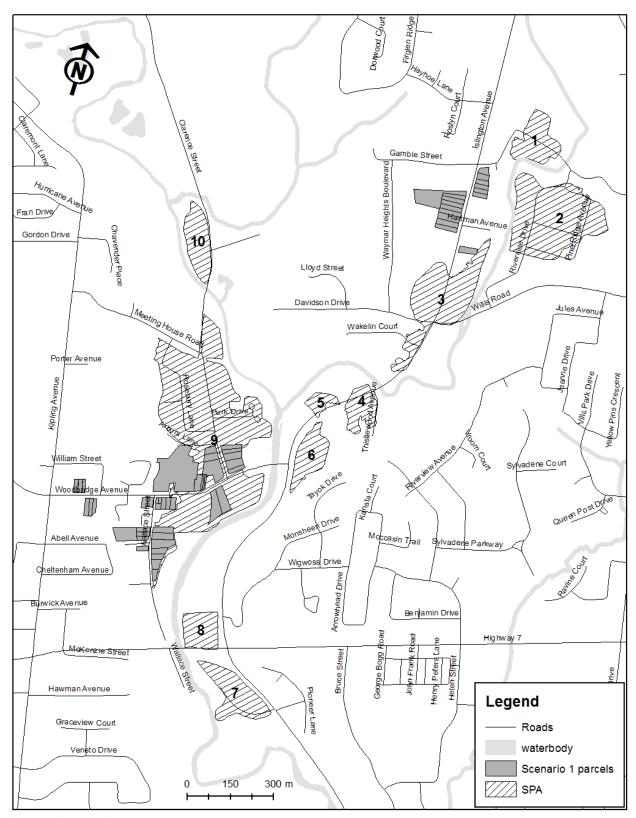


Figure E-1 Parcels with redevelopment potential according to development scenario 1.

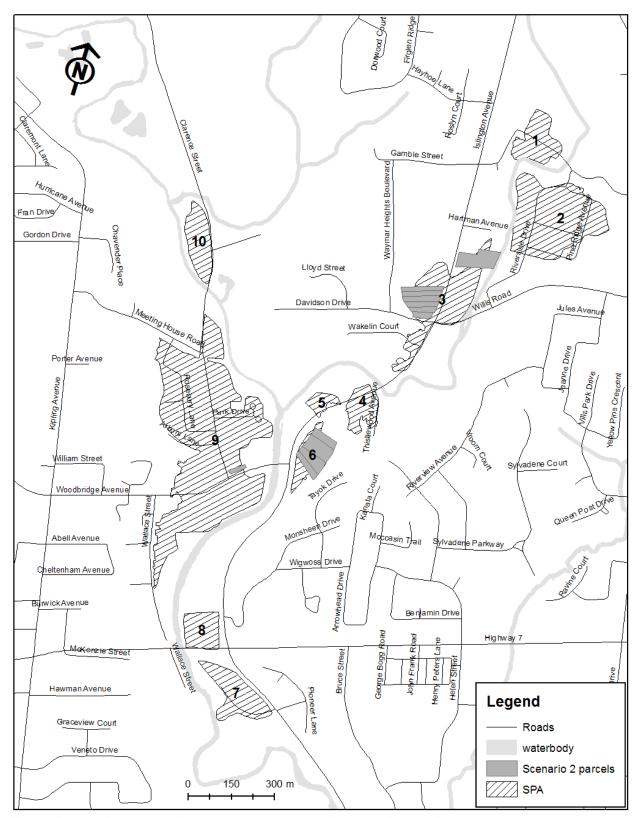


Figure E-2 Parcels with redevelopment potential according to development scenario 2.

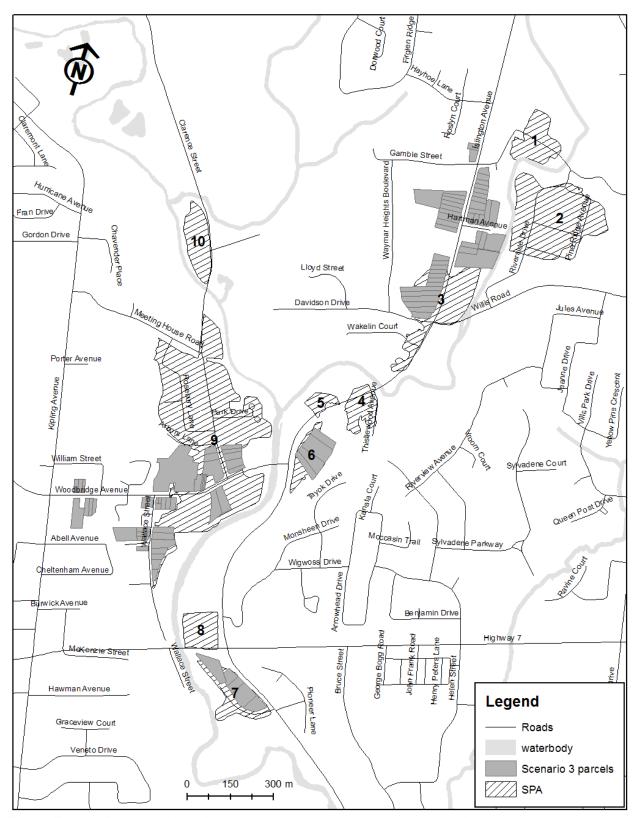


Figure E-3 Parcels with redevelopment potential according to development scenario 3.

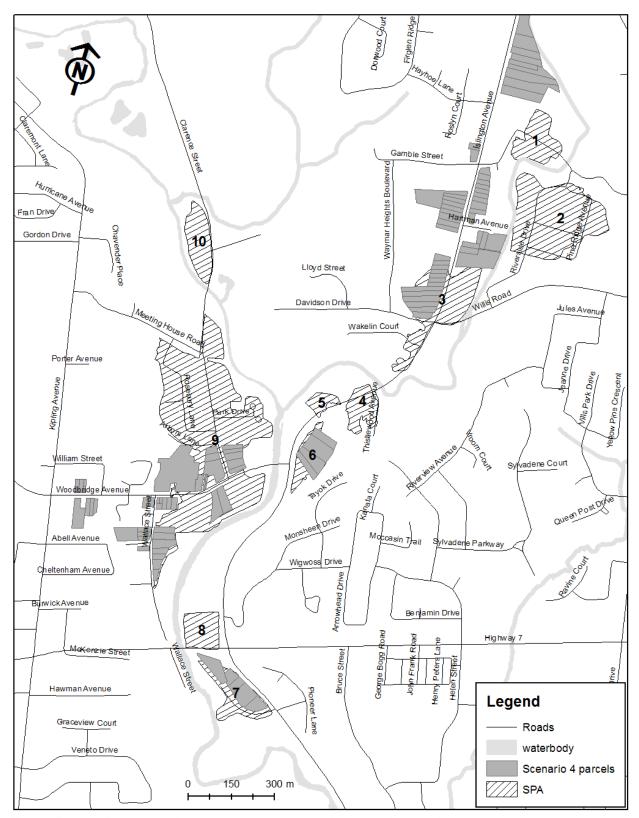


Figure E-4 Parcels with redevelopment potential according to development scenario 4.

Scenario 5

As described above, Scenario 5 reflects decreases in additional dwelling unit counts by avoiding areas of known risk based on TRCA flood depth data. A comparison of additional dwelling unit counts when reducing the net developable area to avoid the > 3 metres and > 2 metres flood depths with the original scenarios is provided in Table E.7.

The combination of Scenario 1 (current approved policies in OPA #440 and #597) and Scenario 2 (deferred part of OPA #597) resulted in 386 additional dwelling units in the SPA. Modifying the net developable area to avoid areas of > 3 metre flood depth (Scenario 5a) only reduced the number of additional dwelling units in the SPA to 314. Further reducing the net developable area by avoiding areas > 2 metres flood depth (Scenario 5c) resulted in a reduction to 210 additional dwelling units from 386 in the original scenarios. These represent 19% and 46% differences, respectively.

The intensification scenario described in Scenario 3 would result in 770 additional dwelling units in the SPA. This is reduced to 607 additional dwelling units if the net developable area is reduced by avoiding areas of > 3 metre flood depth (Scenario 5c). This represents a change of 21%. Further reducing the net developable area by avoiding areas > 2 metres flood depth (Scenario 5d) results in 426 additional dwelling units rather than 770 Scenario 3. This represents a change of 45%.

Two parts of the SPA account for most of the differences in scenario results when considering flood depth. For example, OPA #597 recommended a change to high density residential for the portion of the SPA on the east side of Islington Avenue across from Woodbridge Avenue. This could result in an additional 125 units in 1.4 hectares of land. Considering > 3 metres and > 2 metres flood depths, while assuming high density residential development, reduces the number of units to 69 and 40, respectively. Similarly, the portion of the SPA south of Avenue 7 on the west side of Islington results in 87 units if developed to densities of a Transit Stop Centre as specified in OPA #661. Avoiding > 3 metres flood depths reduces the number of units to 17 while avoiding > 2 metres flood depths reduces the number of units to just one.

5.0 Discussion

5.1 Current Approved Policies

As shown in Table E.5, the number of dwelling units in the Woodbridge study area is likely to increase from 2,343 units to just under 3,700 units under current approved policies (OPA #440, OPA #695 and approved policies of OPA #597) and based on the build-out assumptions in this assessment. This represents a potential 57% increase over existing and approved developments. This is likely an under-estimate as the analysis in this study assumes (a) more commercial space than has been incorporated into existing developments and (b) that lands in the Mixed Use Commercial designation will build out to 90 units per hectare.

Most of the future build-out to current approved policies in OPA #440 will occur in the SPA. This will occur along Woodbridge Avenue and parts of Clarence Street and Wallace Street. Policies have been deferred regarding the portions of the SPA in OPA #597. The potential addition of 199 units in the SPA represents a 21% increase over the current number of units in the entire SPA and a 32% increase over the current number of units in the Woodbridge Core.

Given the assumptions used for build-out densities for each designation and the amount of redevelopment potential, most of the redevelopment outside of Kipling Avenue will occur in the

Mixed Use Commercial designation in the Woodbridge Core, which is located in the less sensitive portions of the SPA (see Appendix G: Flood Risk Assessment for further details). This designation is the most variable in terms of delivering commercial space and residential units. In this analysis, 25% of the Gross Floor Area in the Mixed Use Commercial designation is assumed to be commercial space. In any build-out scenario, however, it is likely that the Mixed Use Commercial designation will deliver between one-fifth to one-quarter of the residential units in the entire Study Area even when including the intensification potential along Kipling Avenue.

Looking more closely at each of the Character Areas, most of the increase in dwelling units will occur in the Woodbridge Heritage Conservation District (Character Area #9), which could see an increase of 329 units from 1,179 units. This represents an increase of 28%. If the redevelopment potential identified in OPA #695 along Kipling Avenue is included, then it represents about a 60% increase in dwelling units for the entire study area. Dwelling units could increase by 15% in the Islington Avenue Corridor (Character Area #7) from 400 existing and approved units to 462 units. The 62 additional units would occur outside of the SPA.

5.2 Intensification Scenarios

The intensification scenarios are more critical for assessing potential risk associated with the SPA than for determining future build-out potential. The three intensification scenarios (Scenarios 2, 3 and 4) would respectively add 386, 770 and 899 residential units in the SPA. Hence, even a modest increase in densities for the Residential Medium Density, Residential High Density and Mixed Use Commercial designations can result in dramatic increases in additional dwelling units in the SPA.

The change in the cumulative total units in the SPA (Table E.4) from existing development (926 units) to build-out under current approved policies (Scenario 1 - 1125 units) represents a 21% change. The change from existing developments to Scenario 2 (Intensification A - 1312 units) represents a 42% increase. The percent increase as a result of Scenarios 3 and 4 are 83% and 97%, respectively. Clearly, nearly doubling the residential units in the SPA is not consistent with the direction expressed in the Provincial Policy Statement.

For the Islington Avenue Corridor (Table E.6), existing dwelling units in the SPA comprise 60% of the total dwelling units (237 of 405). The proportion of dwelling units in the SPA increases marginally to 65% (425 of 655) if the deferral areas of OPA #597 are developed according to the densities recommended in OPA #597. The proportion of the dwelling units in the SPA of the Islington Avenue corridor decreases in the further intensification scenarios to 60% and 49% for Scenario 3 and Scenario 4, respectively. This is primarily a result of including additional parcels for redevelopment outside of the SPA that are identified in OPA #597 as "areas of no change".

6.0 Capacity Assessment for the Woodbridge Centre Secondary Plan Land Use Designations

The results of the capacity analysis and flood risk assessment inform the resulting land use designations in the SPA for the Woodbridge Secondary Plan. The most relevant land use changes are described in more detail in the main SPA Justification Report.

The development scenarios described here are useful for the risk assessment. The Woodbridge Centre Secondary Plan, however, describes proposed dwelling unit densities in terms of Floor Space Index as a ration of Gross Floor Area to Gross Site Area. Hence, this is a straight-forward application of FSI to determine dwelling unit counts and is explored in more detail in Section 6.0 of the main SPA Justification Report.

7.0 Conclusions

The scenarios developed for this analysis largely continue the pattern of development described in current approved policies and the direction of recent studies, such as the Kipling Avenue Corridor Study and the Woodbridge Heritage Conservation District Study. These studies have essentially described redevelopment potential to mixed use communities along Kipling Avenue and Woodbridge Avenue, with some residential redevelopment potential along Islington Avenue.

Given the scenarios tested in this analysis, it is clear that intensification above current approved policies in the SPA are not required to meet the targets in the "Where and How to Grow" report.

While the development scenarios are useful to understand changes in flood risk as explored in Appendix G, the use of FSI in relation to Gross Site Area in the Woodbridge Centre Secondary Plan will alter forecasted dwelling unit counts. As noted in this Appendix, the use of parameters such as site area coverage and the ratio of residential to commercial Gross Floor Area likely results in an underestimate of potential dwelling unit build-out. As a result, Section 6.0 of the main SPA Justification Report describes dwelling unit build-out provided for in approved policies in comparison to the Woodbridge Centre Secondary Plan.

8.0 References

Urban Strategies Inc. 2009. Where and How to Grow: Directions on the future growth in the City of Vaughan to 2031. 89 pp.

Weston Consulting Group. 2008. Population Analysis Report: Woodbridge Core Area and Special Policy Area Population Analysis. Submitted for Official Plan Amendment 691 (OP.06.009 and Z.06.023).

York Region 2009. York Region 2031 Land Budget. York Region Planning and Development Services. 48 pp.

Table E.4 Summary of additional dwelling units for build-out scenarios.

	Scenario	Additional	Additional	Cumulative	Cumulative	Cumulative	Cumulative
	Result	Units	Units in	Additional	Additional	Total in	Total in
			SPA	Units	Units in SPA	Study Area	SPA
Existing Dwelling Units						2343	926
Kipling Avenue Study		1022	N/A	1022	N/A	3365	926
Scenario 1 (Approved OPA 440	306	306	199	1328	199	3671	1125
and 597)							
Scenario 2 - Intensification A	187	187	187	1515	386	3858	1312
(Deferred OPA 597)							
Scenario 3 - Intensification B	1093	600	384	2115	770	4458	1696
Scenario 4 - Intensification C	1479	386	129	2501	899	4844	1825

Table E.5 Summary of build-out scenario results for the Woodbridge Core. The Woodbridge Core is defined by the boundary shown in Schedule 'I' of OPA #440 and does not coincide entirely with the Woodbridge Heritage Conservation District (Character Area 9). Note: The estimates do not include the portion of Kipling Avenue considered to be in the Woodbridge Core according to Schedule 'I' of OPA #440. Intensification along Kipling Avenue is described in Schedule 'D' of the Kipling Avenue Study for OPA #695.

	Additional	Additional	Additional Units	Cumulative	Cumulative	Cumulative Total
	Units	Units in SPA	outside SPA	Total	Total in SPA	Outside SPA
Existing Dwelling Units				1176	613	563
Scenario 1 (Approved OPA	244	199	45	1420	812	608
440 and 597)						
Scenario 2 - Intensification A	N/A	N/A	N/A	1420	812	608
(Deferred OPA 597)						
Scenario 3 - Intensification B	200	149	51	1620	961	659
Scenario 4 - Intensification C	80	63	17	1700	1024	676

Table E.6 Summary of build-out scenario results for Islington Avenue (Character Area 7).

	Additional	Additional	Additional Units	Cumulative	Cumulative	Cumulative Total
	Units	Units in SPA	outside SPA	Total	Total in SPA	Outside SPA
Existing Dwelling Units				405	237	168
Scenario 1 (Approved OPA 440	62	-	62	467	237	230
and 597)						
Scenario 2 - Intensification A	187	187	-	654	424	230
(Deferred OPA 597)						
Scenario 3 - Intensification B	375	147	228	1029	571	458
Scenario 4 - Intensification C	277	37	240	1306	608	698

Table E.7 Scenario comparisons of additional dwelling units counts by consideration of areas in the > 3 metres and > 2 metres flood depth zones.

	Special Policy Area (refer to map for identification numbers)							
	1 ^a	3	6	7 ^b	9			
Scenarios 1 and 2	n/a	62	125	87	199			
Scenario 5a	13	54	69	12	165			
Scenario 5c	11	17	40	1	142			
Scenario 3	n/a	187	147	116	348			
Scenario 5b	27	165	93	17	306			
Scenario 5d	22	83	54	1	266			

^a Parcels in SPA Area #1 were not considered in any of the build-out scenarios and only considered for the scenarios in which the developable land base is reduced by omitting parts of parcels in flood depths > 3 metres and > 2 metres.

- Scenario 5a Areas > 3 metres flood depth removed from the net developable area and applying same parameters from Scenarios 1 and 2
- Scenario 5c Areas > 2 metres flood depth removed from the net developable area and applying same parameters from Scenarios 1 and 2
- Scenario 5b Areas > 3 metres flood depth removed from the net developable area and applying same parameters from Scenario 3
- Scenario 5d Areas > 2 metres flood depth removed from the net developable area and applying same parameters from Scenario 3

^b Scenarios 1 and 2 did not include build-out options for SPA #7. Hence, for SPA #7, scenarios 1 and 2 are replaced by the results of Scenario 3. Scenario 3 is replaced by the results for Scenario 4.