



Interim Report
2012 Ward Boundary Review

Prepared for
City of Markham
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*Dr. Robert J. Williams
Public Affairs Consultant
specializing in municipal electoral systems
Waterloo, Ontario*

Summary

This Interim Report sets out the background for the 2012 Ward Boundary Review in the City of Markham, including a sketch of previous changes to Markham's electoral system and the factors that frame this Review. A number of important assumptions (population figures, the number of wards and the process) are clarified and some attention is paid to the five principles that underpin the evaluation of ward options:

- consideration of representation by population
- protection of communities of interest and neighbourhoods.
- consideration of present and future population trends
- consideration of physical features as natural boundaries
- the overriding principle of "effective representation."

The initial task is to determine whether the present ward boundaries continue to be viable; the conclusion is that change is necessary. The report then sets out four Options that seek to improve on the existing ward configuration.

Working within the obvious limitations of the real world that is Markham today – and in the immediate future – these Options each fall short of a perfect solution but each offers something to the search for a suitable alternative. Among those limitations are, of course, the significant overall increase in population forecast by the Region of York, the concentration of that growth in identifiable locations in Markham and the sometimes formidable “natural boundaries” that must be considered in ward designs.

Ignoring the principles is not a choice that should be entertained to determine the best option for Markham's electoral arrangements. However, a very rigid reading of the five guiding principles helps to identify the strengths and weaknesses of the four Options. On this basis, Option D rises to the top of the list of alternatives, followed by Options C and B. Option A has some merits but contains one ward that makes the design less suitable as an alternative.

Introduction

This report is intended to take Markham's Ward Boundary Review to its next stage. Since June, I have been assembling background information on Markham and its political structure, conducting interviews with elected officials and City staff, holding public meetings with residents and designing a number of alternatives for electing City Councillors.

My work has been structured around the five guiding principles included in the Clerk's Report that laid out the parameters for the Review. This Interim Report offers an evaluation of the existing wards in terms of those criteria and presents four alternative designs for an eight-ward configuration. The same guiding principles are applied in the development of those alternatives.

The Interim Report serves in part as a resource to be used by the public and by Council to participate in this Review since it goes to some length to explain the guiding principles that will help to determine the most appropriate "redivision" of Markham for the 2014 municipal election. Public meetings have been held where these principles were explained and where the community was asked to evaluate some provisional options.

Individuals and community organizations are invited to continue to forward comments on the Interim Report and the Options included here. All further feedback will be considered in the preparation of a final report to Council due in the Spring of 2013. Council will make the final selection of a ward configuration at that time. The dates for the second round of public consultations and for Council meetings leading to a decision can be found on the City website.

Conducting the 2012 Ward Boundary Review in Markham has been a challenging exercise. The task of drawing boundaries in any jurisdiction is complex, both conceptually and practically, but feasible potential solutions for a community that is expected to grow as dramatically as Markham are remarkably elusive.

These Options are based on my interpretation of Council's guiding principles and my efforts to put them into practice. They are constructed on the best evidence as well as insights and judgments submitted by numerous residents who participated in the consultations. I am grateful for the interest and advice offered by so many people.

Robert J. Williams

Consultant

2012 City of Markham Ward Boundary Review

Part 1: Background

As of July 1, 2012 (that is, virtually at the outset of this Ward Boundary Review), the municipality known as the Town of Markham became the City of Markham. The change in status is largely symbolic but reflects the population size (the 16th largest municipality in Canada), complexity and vitality of Markham in 2012.

Change has been a constant theme in the area now called the City of Markham ever since European settlement began in the early 1790s; numerous communities like German Mills, Buttonville, Victoria Square and Mount Joy were scattered across what was ultimately the Township of Markham (itself created in 1850). Some of these settlements were eventually incorporated into separate municipalities such as the Town of Richmond Hill, the Villages of Markham and Unionville and the Police Village of Thornhill.

When the Region of York was established in 1971, the present municipal boundaries were set. Some of the lands that constituted the Township of Markham were transferred to neighbouring Richmond Hill and Whitchurch-Stouffville and Thornhill was split at Yonge Street between the new Town of Markham and the new Town of Vaughan (echoing Thornhill's status between about 1850 and 1931 before the community achieved municipal status). Markham now resembles two adjoining squares: a small square (encompassing Thornhill) is approximately 21 square kilometres and a large square is 191.5 square kilometres.¹ In other words, the smaller square is roughly ten percent of the area of the whole municipality.

The Town, now City, of Markham was largely based on the historic Township of Markham and at its creation absorbed numerous unincorporated

¹ Calculated from figures provided in a report to Committee of the Whole on Ward Boundaries, November 16, 2004, prepared by Sheila Birrell, the Town Clerk.

and incorporated areas lying within its new boundaries, many of which had long and noteworthy histories. However, since Markham is an amalgamated municipality, these communities disappeared as formal governmental units even though many continue to have strong identities.

In contrast to many Ontario municipalities, Markham has addressed its electoral arrangements with great regularity. In 1971, Town Councillors were elected in six wards; by 1976, permission was granted² to increase the number of wards to seven. Minor boundary adjustments to the seven ward system were also granted in 1978 and 1982 and in 1984 the Ontario Municipal Board (OMB) approved an eight ward Council – the number used today. Further changes to the ward configuration were made for the 1997 municipal election and finally – without the need for prior OMB approval - for the 2006 municipal election.

More-or-less regular boundary adjustments were necessary primarily because of the rapid population growth but also because that growth did not take place uniformly across the Town or in a steady pattern, say from south to north or in concentric rings around a core community. Given the existence of several pre-amalgamation population centres, the Town of Markham has always had a number of growth nodes scattered across the municipality. However, as residential development has taken place in areas that were formerly rural – or at least undeveloped - the proportion of Markham's population residing in those well-defined pre-amalgamation communities has decreased as a proportion of the overall population of the City. Moreover, the zone devoted to agriculture and, more importantly, the proportion of the population that could be truly considered rural, has dwindled in significance. Finally, residential intensification that will see many thousands of people located

² The language used here is deliberate. Until 1996, municipalities could only modify the number of councillors through provincial legislation and the boundaries used for municipal elections required the consent of the Ontario Municipal Board. This point will be addressed again in part 4 (page 9).

on the periphery of well-established communities (such as Markham Centre to the south of Unionville) will push the continued viability of some ward boundaries that were used successfully in earlier stages of growth – perhaps less than ten years ago!

Part 2: Markham's Political Structure

Since 1984, Markham has been governed by a thirteen member Council, consisting of three distinct parts:

1. The Mayor is elected at large and is, in the classic Ontario regional government model, both the Head of Council and one of the municipality's representatives on York Region Council. Every municipality must have what is described in the *Municipal Act* as a "head of council" (that is, a mayor) and the "head of council shall be elected by general vote." (section 217 (1) 3) Obviously this Review will not, therefore, consider the electoral arrangements for selecting Markham's head of council.
2. As a component part of the two-tier Regional Municipality of York, Markham is assigned four Regional Councillors who also sit on the City Council; this is referred to as a "double direct" system since popular election to this office places the individual in two positions, Regional Councillor and City Councillor. In York, Regional Councillors are elected in a general vote (that is at-large, with no reference to the number or configuration of wards); the determination of the number of Regional Councillors from each municipality is the responsibility of the Regional Council itself, subject to provincial approval.³ No change in the number of Markham's Regional Councillors is

³ *Municipal Act*, s. 218 (5): "A regional municipality shall not pass a by-law described in this section [to change the composition of regional council] until the Minister has, by regulation, authorized the regional municipality to exercise the powers described in this section."

anticipated by the 2014 municipal election but even if a change were implemented it would have no direct bearing on this Review.

3. Eight City Councillors (that is councillors who sit only on the City Council) are chosen in Markham in eight separate but parallel elections. As noted earlier, the number of these councillors increased from six to eight between 1971 and 1984. The legislative authority to determine the number of councillors (referred to as "the composition of council" in the *Municipal Act*, s. 217) today rests with the municipal council, as does the determination of the method by which they are to be elected, including the number and design of electoral districts, known in Ontario as wards (*Municipal Act*, s. 222). As will be discussed below, this Review is premised on such authority.

The 2012 Ward Boundary Review is expected to lead to the adoption of a by-law that "redivides" Markham into eight new wards to be used in the 2014 municipal election; the requisite by-law needs the support of a majority of the thirteen member council to pass but five of the positions around the Council table are not directly affected by the arrangements authorized in any such by-law.

Part 3: Markham's Population: Past, Present and Future

It is nothing less than astonishing to examine the pattern of population growth in Markham, one that seems to outstrip every population figure associated with the many ward boundary changes since the municipality was created. In 1974, the OMB decision on an application to redivide the six wards stated that Markham's population was approximately 55,000; a later OMB decision declared that the population of Markham increased from 98,000 in 1984 "to approximately 161,000 in 1994," although a 1995 staff report suggests that it was closer to 151,000 in 1994. By 2004, Markham's population was nudging 230,000. The 2005 Ward Boundary Review estimated that Markham's

2012 population would be 275,000 but the 2011 Census pegs it at almost 302,000, “or approximately 25,000 more than what was estimated in 2005.”⁴

The 2012 Ward Boundary Review is expected to give consideration to both the present population of the City and population growth over the next three elections (see part 4 and Appendix A). Solid evidence to underpin this part of any ward boundary review is always problematic and, at times, contentious. To obtain data that can be effectively aligned with potential ward boundaries and to be consistent throughout the Review, the data related to Markham’s population will be drawn from a single source: the population forecasts prepared by the Region of York that support the Regional Official Plan and a variety of financial and infrastructure studies and plans prepared by the Region. York Region prepares and monitors its forecasts in accordance with Provincial forecasts for the Greater Toronto and Hamilton Area, reflecting demographic, immigration and economic trends. The Region has the authority to set the population and employment forecasts for Markham under provincial legislation and these forecasts are binding on the City for planning purposes.

One minor complication is the fact that population forecasts are not determined on the same cycle as municipal elections; the former are determined at five-year intervals (2011, 2016, 2021, etc) and the latter on a four-year cycle (2014, 2018, 2022, etc). Rather than expend the resources required to get population figures to match the election cycle, Markham population forecasts for the entire municipality by five-year intervals will be used, as well as forecasts for what are known as traffic zones, that is, component parts of the City that were originally identified in 1996 to assess the impact of population and employment projections on the road network. Today data on traffic flows, population and employment forecasts are associated with each zone. The

⁴ Town of Markham, Report to General Committee, 091-S-12 Ward Boundary Review Process, May 28, 2012. p. 1.

population forecasts are also used by the City to inform its financial and infrastructure studies, assuring geographic consistency regarding forecast growth. While the Regional Official Plan includes forecasts out to 2031, only figures for 2011 (to serve as a benchmark), 2016 and 2021 will be used.

In the discussions that follow, Regional population figures associated with existing traffic zones were reorganized by City Planning staff to relate to the various proposals for ward boundary arrangements included here. Readers are cautioned that population figures were not developed strictly for this Review and that many anticipated developments fall beyond the horizon of the population forecasts for 2016 and 2021 incorporated in the Region of York's Official Plan.

Part 4: Framing the 2012 Ward Boundary Review

In Ontario municipalities, the review of electoral boundaries is neither subject to a stipulated schedule nor to a standardized process.

The timing of a review is entirely at the discretion of each municipal council. The 2012 Ward Boundary Review is happening in Markham because during the 2005 Ward Boundary Review (that led to a realignment of ward boundaries), "Council directed that the boundaries be reviewed prior to the 2014 Municipal Election."⁵ Since that election will be run on the basis of the arrangements in place on January 1, 2014, and since there are a number of administrative preparations to be made that underpin a smooth election, any changes to electoral boundaries need to be confirmed well before the end of 2013.

The *Municipal Act* assigns authority to the municipal council to review the composition of council, to select the method by which members of council are

⁵ Town of Markham, Report to General Committee, 091-S-12 Ward Boundary Review Process, May 28, 2012. p. 1.

elected and “to divide, re-divide or dissolve existing wards.” Council exercises that authority by passing a by-law. Furthermore, despite a statement in the *Municipal Act* that the Minister “may prescribe criteria” (Section 222(2) (b)), none actually exist.

Before amendments to the *Municipal Act* passed in 1995, all boundary matters were referred to the OMB for approval. Since that time, the OMB is only involved in cases where “a petition to the council asking the council to pass a by-law dividing or redividing the municipality into wards or dissolving the existing wards” is not acted upon and Council’s failure to act is appealed to the OMB (section 223 of the *Municipal Act*). As well, a by-law passed under section 222 may be appealed to the OMB (another reason why the by-law must be approved well before the end of 2013). In other words, the municipal council is the normal final authority for the determination of the electoral arrangements that will be used for its own re-election.

Therefore, it is up to each municipal council to determine when a review should occur, to set the terms of reference for its review, including the process to be followed, and, ideally, to establish criteria or guiding principles to evaluate the municipality’s electoral system. In the absence of direction in the *Municipal Act* but with several previous reviews to serve as precedents, the Clerk’s Office presented a report to the General Committee of Council in May 2012 that set out a process⁶ and terms of reference for the 2012 Review. Council subsequently approved that report and its provisions frame this Review.

One of the gaps in Ontario legislation pertaining to ward boundaries is statutory provision for public engagement. Before 2006, Section 217(2) of the *Municipal Act* mandated that before passing a by-law regarding the composition and mode of election of its council, “the municipality shall give

⁶ Town of Markham, Report to General Committee, 091-S-12 Ward Boundary Review Process, May 28, 2012. pp. 4 - 5.

notice of its intention to pass the by-law and shall hold at least one public meeting to consider the matter." Today, the only notification related to a ward boundary review requires (Section 222 (3)) that the municipality give notice to the community that an implementing by-law has actually been adopted.

Nevertheless, public consultation is essential for the review process to be effective and a requirement is included in the May 28 report for extensive consultation "with the public, including current Members of Council, throughout the review process." In addition, the municipality "will undertake extensive advertising of the ward boundary, review to ensure that a wide cross section of Markham is engaged in the process."⁷

The 2012 Markham Ward Boundary Review will be comprehensive. That is, an entire ward configuration will be developed and evaluated, rather than just minor adjustments to some existing wards. The expectation is that "several" options for eight wards will be developed "to ensure 'effective representation' until 2022."

To ensure the Review does not lead to unfair or politically motivated results, criteria (or guiding principles) for the review are essential. The terms of reference to be used in Markham are based on the procedures and well-established principles adopted by numerous municipalities over the last several years.

The five principles may be summarized as:

- consideration of representation by population;
- protection of communities of interest and neighbourhoods;
- consideration of present and future population trends;
- consideration of physical features as natural boundaries;
- the overriding principle of "effective representation."

⁷ Town of Markham, Report to General Committee, 091-S-12 Ward Boundary Review Process, May 28, 2012. p. 3.

Table 1 – Interpreting the Guiding Principles		
Code	Criterion	Operational Interpretation
POP	Representation by Population	A simple descriptive code (see Table 2) is used to assess the degree of variation from the optimal size (that is, the population of each ward if the City were divided into equal electoral districts).
PCI	Protection of Communities of Interest and Neighbourhoods	Two perspectives: what is divided and what is joined together. Communities are not to be divided internally; lines are drawn around communities, not through them. Wards should group together communities with common interests; for example, the age, assessed value and configuration of housing, the life-stage and demographics of the residents and municipal service provision and amenities.
PFT	Present and Future Population Trends	The Region's population forecasts for 2016 and 2021 are used to anticipate overall and individual community change. The code described in Table 2 is used to evaluate the distribution of population across the wards.
NB	Physical Features as Natural Boundaries	"Natural boundaries" includes both the natural topography and "constructed" barriers. These features are considered suitable to serve as boundaries because they separate residents from one another who happen to live on opposite sides of the boundary.
ER	Effective Representation	Paramount principle – used as final test of the overall ward design option. A summary of the comprehensive evaluation of the success of the more explicit principles in meeting a series of applied tests. Subjective or qualitative element serving to capture intangible aspect of representation (a two-way relationship between residents and elected officials). e.g. Do wards constitute a plausible and reasonably coherent electoral unit? Is it possible for residents to identify with their ward as a politically meaningful unit? Are the resulting wards of a size, scale and shape that a representative can serve successfully?
Note: the Codes included above will be used in Part 5.		

The Guiding Principles are presented in full in Appendix A and the concepts are developed in Table 1 and in Appendix B.

The 2012 Ward Boundary Review was prompted primarily to address population disparities among the existing wards that had been anticipated in 2005. A ward design that perpetuates – or increases – population inequalities is not a desirable alternative. For the purpose of this Review, a simple descriptive code is used to assess the degree of variation from the optimal size (that is, the population of each ward if the municipality were divided into equal parts). See Table 2.

Code	Label	Description
OR+	Outside the Range - above	greater than 25% above the optimal size
O +	Above Optimal	6% to 25% above the optimal size
O	Optimal	within 5% above or below the optimal size
O -	Below Optimal	6% to 25% below the optimal size
OR -	Outside the Range - below	greater than 25% below the optimal size

The evaluation of the existing and proposed wards in terms of population will be based on the figures presented in Table 3 (below).

Year	Total Population (estimated)	Optimal Ward Size*	Lower Population Limit**	Upper Population Limit ***
2011	309,233	38,654	28,990	48,318
2016	337,877	42,235	31,676	52,794
2021	370,255	46,282	34,711	57,853
* City population divided by the number of wards				
** 75% of the optimal ward size				
*** 125% of the optimal ward size				

In the pages to follow, the guiding principles set out in May 2012 will be applied to develop and evaluate some alternative ward boundary

configurations for Markham. It is reasonable to expect that these factors can also be used to design more than one possible model for electing Councillors in Markham. The choice of which particular one is best will ultimately be made by Council, as provided for in Ontario's *Municipal Act*. This Review is intended to develop and evaluate some of the alternatives available to fit the needs of the City in 2012 - 2013 and beyond. It goes with saying that re-election incentives related to sitting Councillors are not a consideration in the guiding principles for the Review and ought not to be relevant in the selection of an alternative.

No ward system design can uniformly meet all of the guiding principles set out by this, or any other, Council. In the end, the ward design ultimately adopted by Markham Council should be the one that best fulfills the five guiding principles accepted by that same Council.

As former OMB member Ted Yao wrote in a 1994 decision involving ward boundaries in the City of Kingston:

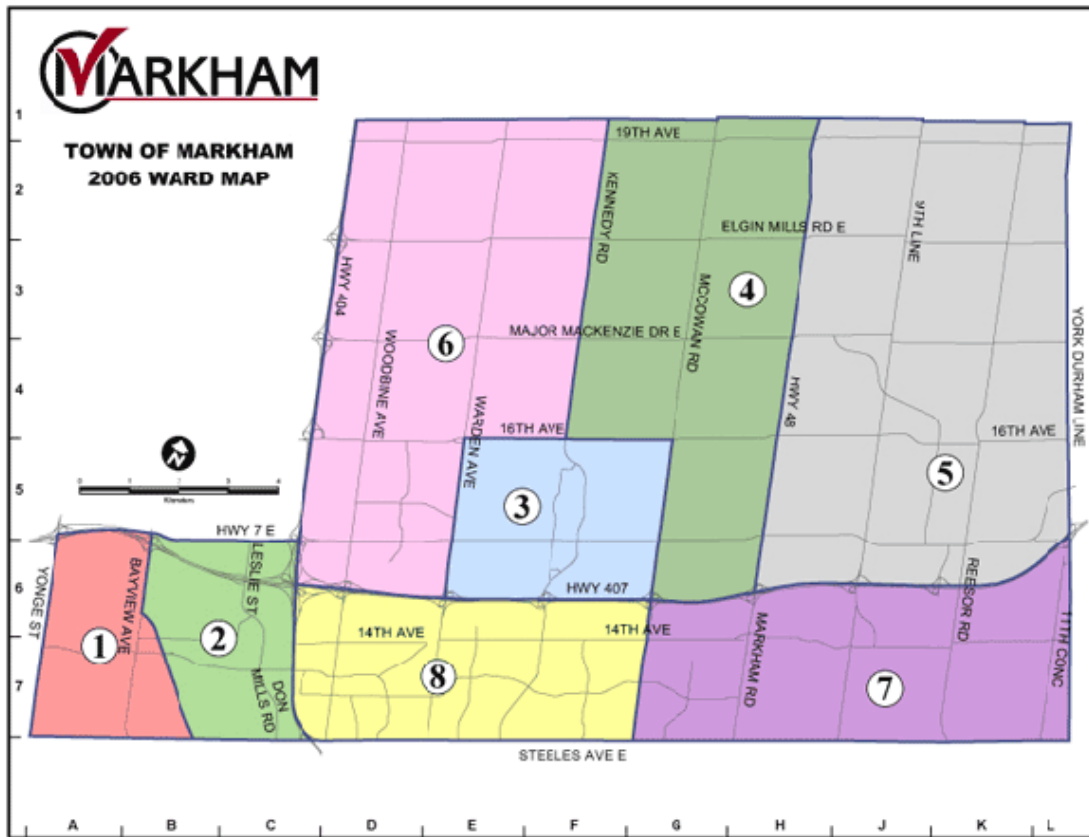
"If Kingston could be divided into ideal wards, they would all have equal population, be united around similar communities of interest (*i.e.* schools and community centres), and each be composed of citizens with similar socio-economic factors. The boundaries would be easily recognizable, preferably multi-lane streets or other barriers to neighbourhoods. The lines would also have been in existence for some considerable time so that residents would be familiar with them and feel a sense of allegiance to their wards. The municipality would also be static so that population growth will not upset this perfectly balanced arrangement.

Ideal wards are impossible. The question is how far from the ideal is acceptable."

Part 5: Evaluating Ward System Scenarios

5a. Why not just keep the present wards?

The boundaries now used to elect City councillors in Markham were put in place for the 2006 municipal election. Council directed that the boundaries be “reviewed” prior to the 2014 Municipal Election. This begs a legitimate question: “is the status quo an option?” In other words, are new boundaries actually needed? The current wards should not be dismissed out of hand as unworkable but should be evaluated in terms of the same five guiding principles that Council adopted to evaluate new options for Markham’s ward boundaries.



2006 Ward Boundaries – Town of Markham

Representation by population (POP)

Using 2011 total population figure from the Regional Official Plan, an “optimal” ward would be considered one with a population of 38,654 (the total

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population of 309,233 divided into eight wards). The third column below shows the relationship between each present ward and that optimal value and the fourth column is the code that describes the relationship to that optimal value (as described in Table 2). This format will apply in similar tables related to the Options developed in this Report.

Ward 1	27,030	0.70	OR -
Ward 2	26,907	0.70	OR -
Ward 3	35,596	0.92	O -
Ward 4	52,693	1.37	OR +
Ward 5	53,026	1.37	OR +
Ward 6	40,013	1.04	O
Ward 7	39,684	1.03	O
Ward 8	34,283	0.89	O -

Four of the eight wards varied in 2011 by more than 25% above or below the optimal size. Two wards were classified as having an optimal population.

Protection of communities of interest and neighbourhoods (PCI)

The existing wards in Markham are generally successful in meeting this criterion since the boundaries – with one notable exception - enclose well-established residential and other communities, for example Thornhill, Milliken and Unionville. The one exception is the boundary between Wards 4 and 5 north of Highway 7 where Markham Main Street splits both a Heritage Conservation District and a Business improvement Area. Both of these designations have legislative status and dividing these communities of interest between two wards is an anomaly in Markham.

Present and future population trends (PFT)

Using the York Region Official Plan population forecasts for 2016, an “optimal” ward would be considered one with a population of 42,235 (the total estimated population of 337,877 divided into eight wards).

Ward 1	26,740	0.63	OR -
Ward 2	26,530	0.63	OR -
Ward 3	39,912	0.94	O -
Ward 4	59,259	1.40	OR +
Ward 5	61,856	1.46	OR +
Ward 6	46,967	1.11	O +
Ward 7	41,601	0.98	O
Ward 8	35,011	0.82	O -

Using the York Region Official Plan population forecasts for 2021, an “optimal” ward would be considered one with a population of 46,282 (the total estimated population of 370,255 divided into eight wards).

Ward 1	28,594	0.62	OR -
Ward 2	26,187	0.56	OR -
Ward 3	47,153	1.02	O
Ward 4	62,431	1.35	OR +
Ward 5	66,092	1.43	OR +
Ward 6	61,926	1.34	OR +
Ward 7	42,968	0.93	O -
Ward 8	34,905	0.75	O -

On the basis of these population forecasts, at least half of the present eight wards would vary by more than 25% from the optimal size in 2016 and 2021.

Natural boundaries (NB)

The existing wards in Markham make exclusive use of “constructed” barriers as boundaries. Most of the boundaries successfully adhere to the principle that ward boundaries already serve as physical boundaries of communities; however, to design eight satisfactory wards in 2005, some arterial roadways took precedence over others. For example, the existing Ward 2 includes communities on both sides of Highway 407 while Wards 3, 4, 5 and 6 all

cross the municipality's traditional east-west thoroughfare, Highway 7. As noted earlier, the converse is the case in relation to the Ward 4 – 5 boundary north of Highway 7 where a significant arterial roadway (Markham Main Street) is used as a boundary that splits a historic community of interest. As well, the placement of the Leitchcroft community is problematic because of the significant physical boundaries that surround it: this fairly recent residential area lies between the Markham boundary with Richmond Hill (Highway 7) on the north, Highway 407 on the south and Highway 404 on the east. Without exception (as will be evident in the four Options that follow), its placement requires disregarding one or more of what would otherwise be “natural” boundaries.

Effective representation (ER)

There are three perspectives to take in relation to “effective representation” in Markham's present wards. First, do the wards constitute politically meaningful units of representation? That is, do they encompass groups of communities and neighbourhoods that are likely to hold reasonably coherent perspectives on municipal issues. To the extent that most of the wards contain housing stock of a similar age or style, or are at a similar stage of “completeness”⁸, the existing wards meet this principle. Obviously as growth – especially intensification - occurs on the fringes of long-standing communities (for example, in areas like Leitchcroft or Markham Centre) the cohesiveness of the existing wards will inevitably be tested.

Secondly there is the capacity of elected Councillors to represent a ward that is home to a large population, with the associated calls, consultations and communications that go with political life. It seems reasonable to conclude

⁸ The concept of a “complete” community is discussed in *York Region Official Plan 2010*, part 5 (“An Urbanizing Region: Building Cities and Complete Communities”)

(without the need to provide comparative data) that some of Markham's ward Councillors represent wards that are among the largest in population in the GTA outside the City of Toronto. The ratio of councillors to residents in Wards 4 and 5 is over 1:52,000 and by 2021 three of the existing wards would have ratios greater than 1:60,000. At the same time, there is a serious discrepancy in the access of Markham residents to their ward councillors since in two wards the ratio is less than 1:28,000. By 2021, the discrepancy is in the range of 40,000 residents per ward councillor. On this dimension, concluding that the existing wards have the capacity to deliver equitable, let alone effective, representation would be implausible.

Thirdly, the two largest wards in area (Wards 4 and 5) are also the wards with the largest populations. Conversely, the smallest wards in area (Wards 1 and 2) are the smallest in population. Not only would each councillor elected in Wards 4 and 5 have far more people to represent, he or she would have the largest constituency to cover to maintain personal contact with issues in the Ward. This relationship works directly contrary to the principle of effective representation articulated by the Supreme Court of Canada in the *Carter* decision (see Appendix B, part e) and impairs the capacity of the existing ward configuration to meet this principle .

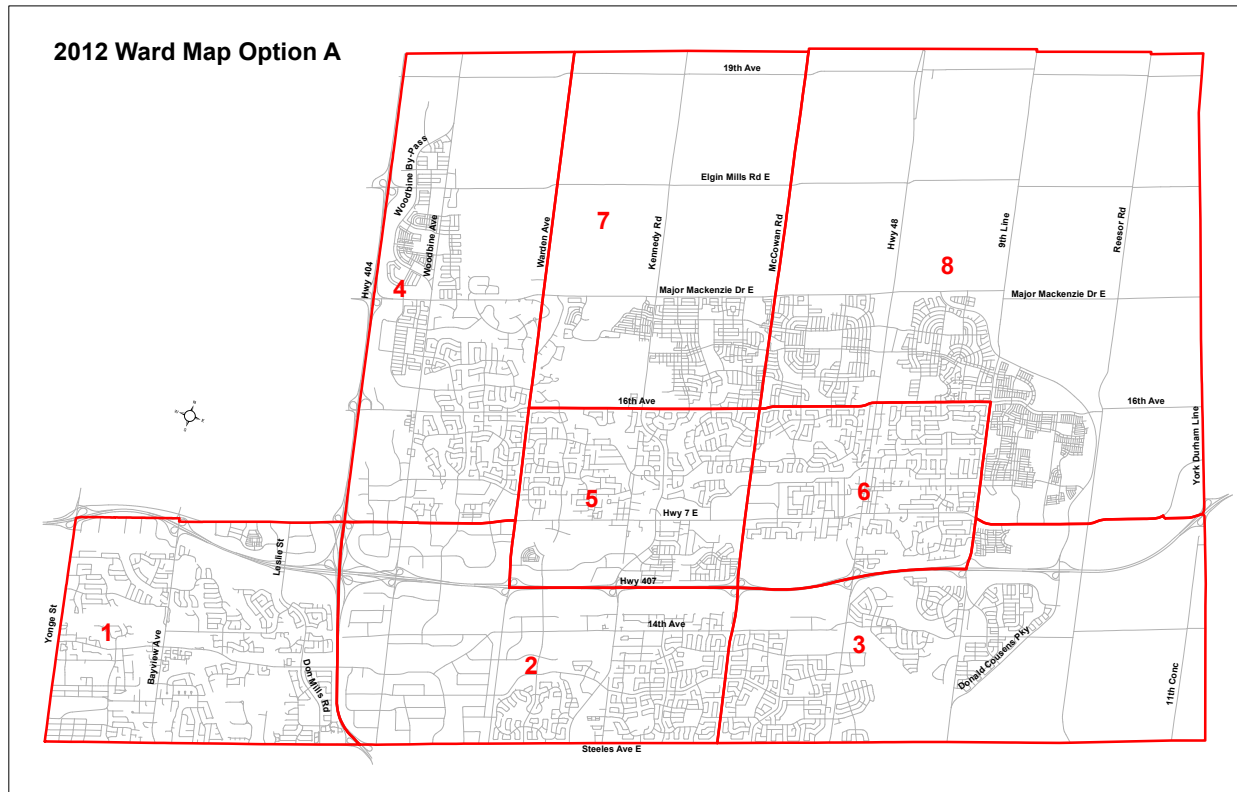
Overall Assessment: Existing Wards

Part 5.a has been included in the Interim Report to do two things. First it shows how the five guiding principles for this Ward Boundary Review will be used to evaluate alternative options for wards in Markham. Second, it demonstrates clearly that the existing wards can no longer ensure effective representation to Markham's residents. In simple terms, the population disparity and other flaws in the existing ward design will not correct themselves if those boundaries remain

“as is.” A change is necessary. Most people probably knew that, but this discussion helps to explain why.

Code	Meets Criterion	Comment
POP	no	<ul style="list-style-type: none"> • two wards optimal but four unacceptable (outside range of tolerance)
PCI	mixed	<ul style="list-style-type: none"> • most wards successfully embrace recognizable communities of interest • historic Markham village and BIA divided
PFT	no	<ul style="list-style-type: none"> • population forecast shows only one ward in optimal range in 2015 and 2021, at east half of the eight wards outside range of tolerance
NB	mixed	<ul style="list-style-type: none"> • most boundaries adhere to suitable natural boundaries, some disregarded
ER	no	<ul style="list-style-type: none"> • most wards coherent but capacity to deliver effective representation hampered by discrepancies among wards and mismatch of population and area

5b. Option A



Representation by population (POP)

Using 2011 total population figure from the Regional Official Plan, an “optimal” ward would be considered one with a population of 38,654 (the total population of 309,233 divided into eight wards). For Option A, the distribution is as follows:

Ward 1	53,937	1.40	OR +
Ward 2	36,626	0.95	O
Ward 3	42,943	1.11	O +
Ward 4	32,693	0.85	O -
Ward 5	35,596	0.92	O -
Ward 6	36,888	0.95	O
Ward 7	22,493	0.58	OR -
Ward 8	48,383	1.25	O +

In this scenario, two of the eight wards would have fallen outside the acceptable range of variation in 2011 and a third would be at the cusp on the

top end. Two wards were classified as having an optimal population.

Protection of communities of interest and neighbourhoods (PCI)

The proposed wards are generally successful in meeting this criterion since the boundaries enclose well-established residential and other communities and group together neighbourhoods with traditional affinity, including the former village of Markham. The boundary used between Wards 3 and 8, however, places the Grand Cornell community (just south of Highway 7) with Cedar Grove, Box Grove and Milliken below Highway 407. The Leitchcroft community is placed with German Mills (as in the present Ward 2) and with Thornhill.

Present and future population trends (PFT)

Using the York Region Official Plan population forecasts for 2016, an “optimal” ward would be considered one with a population of 42,235 (the total estimated population of 337,877 divided into eight wards).

Ward 1	53,270	1.26	OR +
Ward 2	38,527	0.91	O -
Ward 3	44,751	1.06	O +
Ward 4	36,449	0.86	O -
Ward 5	39,912	0.94	O -
Ward 6	36,379	0.86	O -
Ward 7	29,398	0.70	OR -
Ward 8	59,191	1.40	OR +

On the basis of these population forecasts, three of the proposed eight wards would vary by more than 25% from the optimal size in 2016 (Wards 1 and 8 above and ward 7 below) and two (Wards 3 and 5) are just outside the optimal category.

Using the York Region Official Plan population forecasts for 2021, an “optimal” ward would be considered one with a population of 46,282 (the total estimated population of 370,255 divided into eight wards).

Ward 1	54,781	1.18	O +
Ward 2	39,568	0.85	O -
Ward 3	46,888	1.01	O
Ward 4	44,897	0.97	O
Ward 5	47,153	1.02	O
Ward 6	35,965	0.78	O -
Ward 7	36,783	0.79	O -
Ward 8	64,220	1.39	OR +

On the basis of these population forecasts, three of the proposed eight wards would be at the optimal size in 2021 but one (Ward 8) far exceeds the permissible variation and another three vary by approximately 20% above or below.

Natural boundaries (NB)

The wards proposed in Option A make exclusive use of “constructed” barriers as boundaries. Most of them successfully adhere to the principle that ward boundaries already serve as physical boundaries of communities: this includes Highway 404 and portions of Warden Avenue, 16th Avenue, McCowan Road, Highway 7 and Highway 407. However, in three instances proposed wards (1, 2 and 3) overlie one of the most conspicuous “natural boundaries” in south Markham: Highway 407.

Effective representation (ER)

Three perspectives on “effective representation” were set out in the evaluation of the present ward configuration. Option A proposes wards that appear to constitute politically meaningful units of representation in that substantial and discrete communities (Thornhill, Unionville, Markham Village and Milliken) form the nucleus of four of the wards. These wards are different from the three northern wards where extensive and more recent residential development will dominate communities already located in those wards – and will largely

define – those wards. In time, intensification - especially in the proposed Wards 1, 5 and 6 - may intrude into the cohesiveness that characterises these proposed wards.

The population of some of the wards proposed in Option A are significantly larger than others, thereby perpetuating inequities among Markham residents in terms of access to their ward councillors. The variation in the ratio of councillors to residents in Wards 7 and 8, for one example, would have been unacceptable in 2011 and does not improve as time goes on. By disregarding the two “outliers” at the top of the population distribution, the picture is more reasonable – but this Option must be evaluated in terms of all eight wards in the mix. The capacity of Option A to deliver equitable representation across Markham would be doubtful.

Finally, the challenge of “trading off” area and population is largely successful, especially in the long run (defined here as the 2022 election). The proposed Ward 2 is much larger than other wards and is home to the largest population (well beyond the range of tolerance), but given that a significant part of the Ward lies outside the urban boundary and will never be subject to residential development, the situation is not as drastic as it might appear.

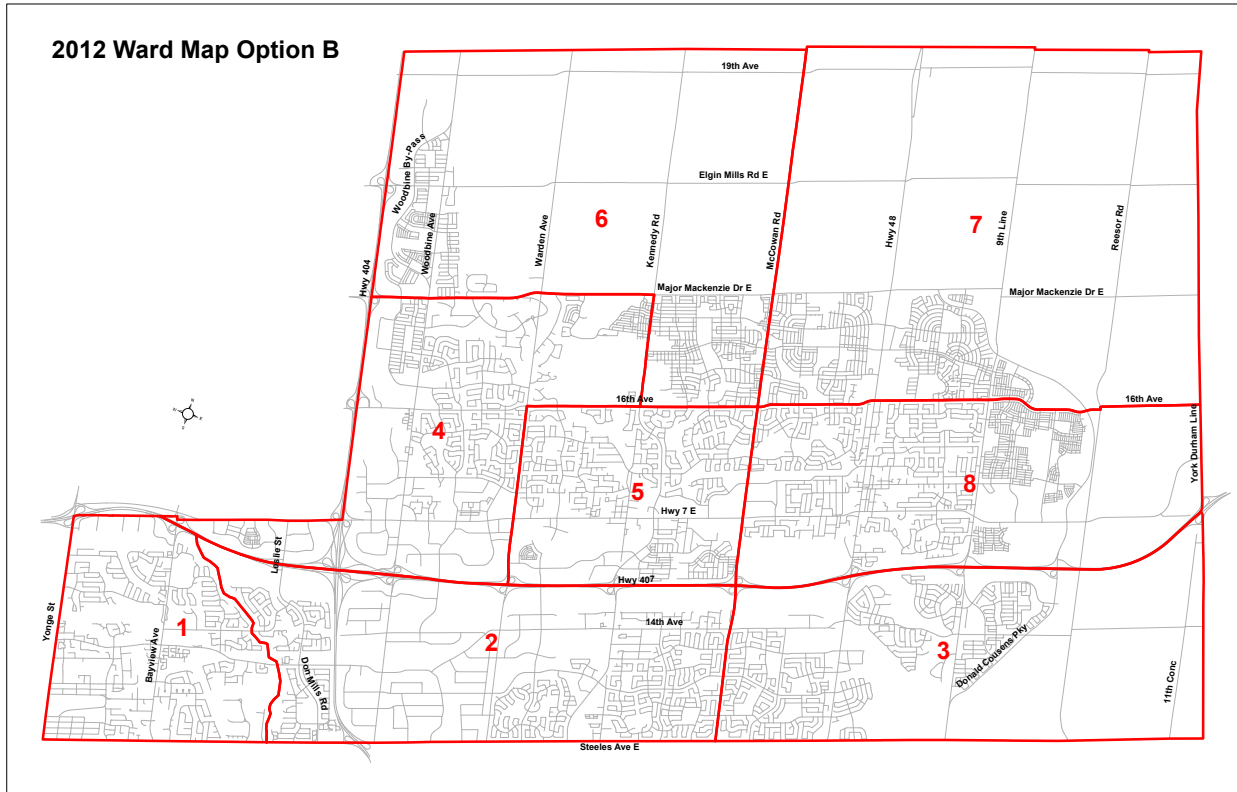
Overall Assessment: Option A

Option A achieves mixed success on three of the five principles set out for this Ward Boundary Review. In each case, living with the particular drawback could be justified in favour of a design that successfully achieves the other principles. Unfortunately, the wards proposed in Option A also fail to deliver a design that will come close to meeting the two principles associated with the distribution of population – the very condition that precipitated the 2012 Review.

Option A would not be a marked improvement to the existing wards in Markham.

Code	Meets Criterion	Comment
POP	no	<ul style="list-style-type: none"> • two wards optimal but two clearly outside range of tolerance, another at the cusp
PCI	mixed	<ul style="list-style-type: none"> • most wards successfully embrace recognizable communities of interest • placement of the Grand Cornell community and Leitchcroft potentially problematic
PFT	no	<ul style="list-style-type: none"> • population forecast shows three wards outside the optimal range in 2016 and two in 2021; none at optimal in 2016 and three in 2021
NB	mixed	<ul style="list-style-type: none"> • most boundaries adhere to suitable natural boundaries, some wards cross Highway 407
ER	mixed	<ul style="list-style-type: none"> • most wards coherent but capacity to deliver effective representation hampered by discrepancies among wards populations

5c. Option B



Representation by population (POP)

Using 2011 total population figure from the Regional Official Plan, an “optimal” ward would be considered one with a population of 38,654 (the total population of 309,233 divided into eight wards). For Option B, the distribution is as follows:

Ward 1	35,332	0.91	○ -
Ward 2	46,075	1.19	○ +
Ward 3	39,684	1.03	○
Ward 4	38,166	0.99	○
Ward 5	35,596	0.92	○ -
Ward 6	26,428	0.68	OR -
Ward 7	37,580	0.97	○
Ward 8	50,373	1.30	OR +

In this scenario, two of the eight wards would have fallen outside the acceptable range of variation in 2011. Three wards were classified as having an

optimal population.

Protection of communities of interest and neighbourhoods (PCI)

The proposed wards are generally successful in meeting this criterion since the boundaries do not divide well-established residential and other communities internally and for the most part group together neighbourhoods with traditional affinity, including the former village of Markham. As far as grouping distinct communities together, the design breaks new ground in placing Leitchcroft community with neighbourhoods east of Highway 404 in the proposed ward 4. In addition, the communities along the Leslie Street-Don Mills Road corridor are placed in a ward with neighbourhoods well east of Highway 404. The proposed Ward 6 also ties Cathedraltown and Victoria Square with a community directly north of Unionville (below Major Mackenzie Drive).

Present and future population trends (PFT)

Using the York Region Official Plan population forecasts for 2016, an “optimal” ward would be considered one with a population of 42,235 (the total estimated population of 337,877 divided into eight wards).

Ward 1	34,921	0.82	○ -
Ward 2	46,640	1.10	○ +
Ward 3	41,601	0.98	○
Ward 4	41,180	0.97	○
Ward 5	39,912	0.94	○ -
Ward 6	34,903	0.83	○ -
Ward 7	43,374	1.03	○
Ward 8	55,345	1.31	OR +

On the basis of these population forecasts, only one of the proposed eight wards would vary by more than 25% from the optimal size in 2016 (Ward 8) and three wards would have been deemed optimal (with one other below the optimal designation by about 200 people).

Using the York Region Official Plan population forecasts for 2021, an “optimal” ward would be considered one with a population of 46,282 (the total estimated population of 370,255 divided into eight wards).

Ward 1	36,673	0.79	○ -
Ward 2	46,381	1.00	○
Ward 3	42,968	0.93	○ -
Ward 4	44,104	0.95	○
Ward 5	47,153	1.02	○
Ward 6	48,871	1.06	○ +
Ward 7	45,847	0.99	○
Ward 8	58,258	1.26	○R +

On the basis of these population forecasts, four of the proposed eight wards would be at the optimal size in 2021 and one (Ward 6) is about 300 people outside the optimal designation. The proposed Ward 8 exceeds the permissible range of variation by about 400 people.

Natural boundaries (NB)

The wards proposed in Option B make exclusive use of “constructed” barriers as boundaries. Most of them successfully adhere to the principle that ward boundaries already serve as physical boundaries of communities: this includes portions of Warden Avenue, most of 16th Avenue, McCowan Road and Highway 407. Neither Highway 404 nor Highway 7 are used as ward boundaries.

Effective representation (ER)

Three perspectives on “effective representation” were set out in the evaluation of the present ward configuration. Option B proposes several wards that appear to constitute politically meaningful units of representation in that substantial and discrete communities (Thornhill, Unionville, Markham Village and Milliken) form the nucleus of four of the wards. These wards are different from the

two northern wards where extensive residential development will eventually dominate communities already located in those wards – and will largely define – those wards. The proposed Wards 2 and 4 are less coherent than might be desirable; in both proposed wards, extensive areas of employment lands and Highway 404 isolate component communities from one another. In the proposed Ward 6, the two main population clusters are now also isolated from one another and are likely to remain so for period addressed in this Review. The impact of intensification in the proposed Wards 1, 5 and 8 will again be a potential difficulty.

The population of one of the wards proposed in Option B (Ward 8) is significantly at odds with the others, thereby skewing the overall capacity of the design to ensure equitable representation.” By disregarding the “outlier,” the access of most Markham residents to their ward councillors is reasonably balanced – even for 2016.

Finally, the challenge of “trading off” area and population is not completely successful, especially in the long run (defined here as the 2022 election). The proposed Ward 1 is home to the smallest population and is among the smallest by area. The two largest wards by area (proposed wards 6 and 7) are close to optimal size on the basis of the 20121 population forecasts so the larger area does not pose insurmountable problems of access. More problematic may be the isolation of the component communities from one another in the proposed Wards 2 and 4.

Overall Assessment: Option B

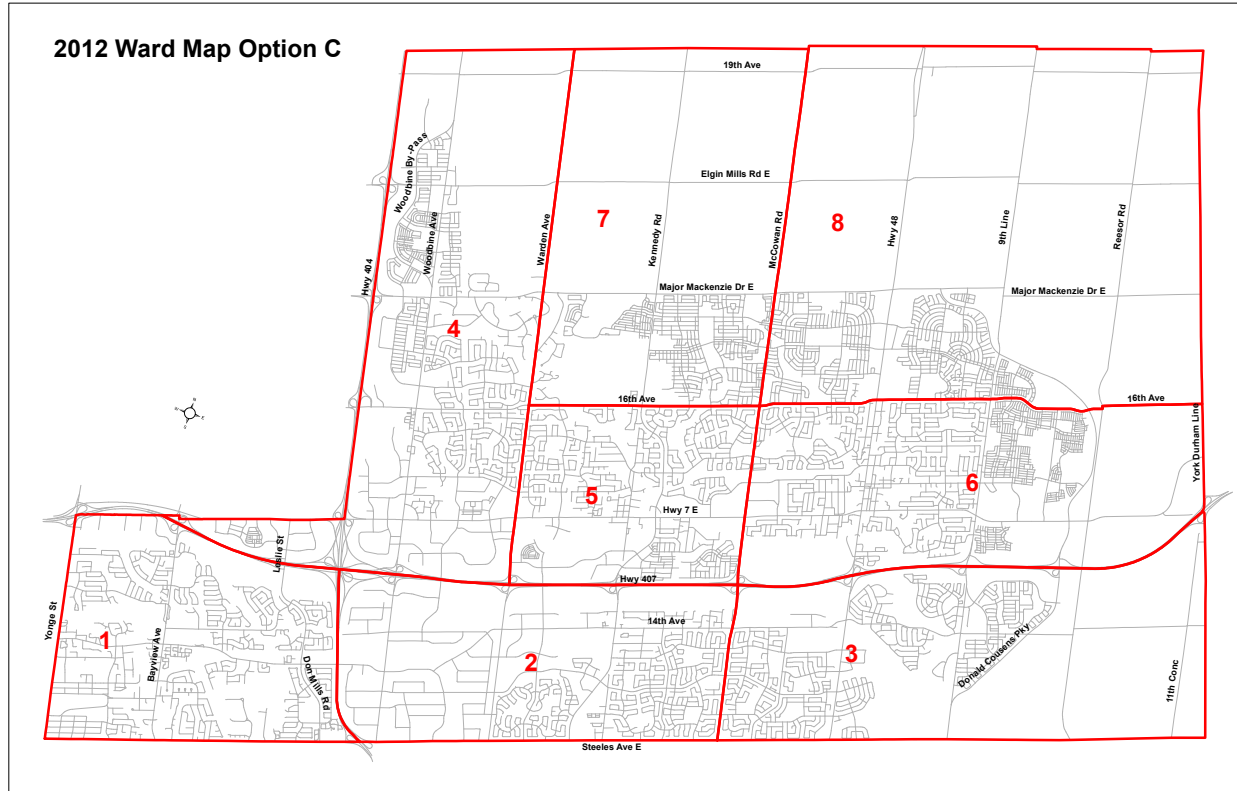
Option B achieves mixed success on three of the five principles set out for this Ward Boundary Review. In each case, living with the particular drawback could be justified in favour of a design that successfully achieves the other principles. In terms of the two principles associated with the distribution of

population, six of the wards proposed in Option B can be judged to be acceptable. Indeed the population distribution in those wards improves over the 2011 – 2021 period. However, because one ward falls outside the range of tolerance articulated for this review (and then only slightly in 2021), the Option is deemed not to have met the population criteria.

Option B could be an acceptable substitute for the existing wards in Markham if the problems it solves are given greater weight than its flaws.

Code	Meets Criterion	Comment
POP	no	<ul style="list-style-type: none"> • three wards optimal but two outside range of tolerance
PCI	mixed	<ul style="list-style-type: none"> • most wards successfully embrace recognizable communities of interest • placement of Leitchcroft and Leslie Street-Don Mills communities potentially problematic
PFT	no	<ul style="list-style-type: none"> • population forecast shows one ward outside the optimal range in 2016 and one narrowly outside in 2021; three at optimal in 2016 and four (effectively five) in 2021
NB	mixed	<ul style="list-style-type: none"> • most boundaries adhere to suitable natural boundaries; two wards cross Highway 404
ER	mixed	<ul style="list-style-type: none"> • most wards coherent and capacity to deliver effective representation generally strong • internal cohesion impeded in three wards because of physical isolation of component communities

5d. Option C



Representation by population (POP)

Using 2011 total population figure from the Regional Official Plan, an “optimal” ward would be considered one with a population of 38,654 (the total population of 309,233 divided into eight wards). For Option C, the distribution is as follows:

Ward 1	47,123	1.22	O +
Ward 2	34,283	0.89	O -
Ward 3	39,684	1.03	O
Ward 4	42,100	1.09	O +
Ward 5	35,596	0.92	O -
Ward 6	50,373	1.30	OR +
Ward 7	22,493	0.58	OR -
Ward 8	37,580	0.97	O

In this scenario, two of the eight wards would have fallen outside the

acceptable range of variation in 2011. Two wards were classified as having an optimal population.

Protection of communities of interest and neighbourhoods (PCI)

The proposed wards are generally successful in meeting this criterion since the boundaries do not divide well-established residential and other communities internally and for the most part group together neighbourhoods with traditional affinity, including the former village of Markham. As far as grouping distinct communities together, the design breaks new ground in placing Leitchcroft community with neighbourhoods east of Highway 404 in the proposed Ward 4.

Present and future population trends (PFT)

Using the York Region Official Plan population forecasts for 2016, an “optimal” ward would be considered one with a population of 42,235 (the total estimated population of 337,877 divided into eight wards).

Ward 1	46,550	1.10	○ +
Ward 2	35,011	0.83	○ -
Ward 3	41,601	0.98	○
Ward 4	46,684	1.11	○ +
Ward 5	39,912	0.94	○ -
Ward 6	55,345	1.31	OR +
Ward 7	29,398	0.70	OR -
Ward 8	43,374	1.03	○

On the basis of these population forecasts, two of the proposed eight wards would vary by more than 25% from the optimal size in 2016 (Ward 6 is over the range and Ward 7 is below). Two wards are optimal (with another below the optimal designation by about 200 people).

Using the York Region Official Plan population forecasts for 2021, an “optimal” ward would be considered one with a population of 46,282 (the total estimated population of 370,255 divided into eight wards).

Ward 1	48,149	1.04	○
Ward 2	34,905	0.75	○ -
Ward 3	42,968	0.93	○ -
Ward 4	56,192	1.21	○ +
Ward 5	47,153	1.02	○
Ward 6	58,258	1.26	OR +
Ward 7	36,783	0.79	○ -
Ward 8	45,847	0.99	○

On the basis of these population forecasts, three of the proposed eight wards would be at the optimal size in 2021 and one (Ward 6) exceeds the permissible variation by about 400 people.

Natural boundaries (NB)

The wards proposed in Option C make exclusive use of “constructed” barriers as boundaries. Most of them successfully adhere to the principle that ward boundaries already serve as physical boundaries of communities: this includes portions of Warden Avenue, 16th Avenue and Highway 404 , plus all of McCowan Road and Highway 407 within Markham. The proposed Ward 4 crosses Highway 404.

Effective representation (ER)

Three perspectives on “effective representation” were set out in the evaluation of the present ward configuration. Option C proposes several wards that appear to constitute politically meaningful units of representation in that substantial and discrete communities (Thornhill, Unionville, Markham Village and Milliken) form the nucleus of four of the wards. These wards are different from the northern wards where extensive residential development will eventually dominate communities already located in those wards – and will largely define - those wards. The proposed Ward 4 is less coherent than might be desirable because extensive areas of employment lands and Highway 404 isolate

component communities from one another. The impact of intensification in the proposed Wards 1, 5 and 8 will again be a potential difficulty.

The population of two of the wards proposed in Option C are significantly larger than the population of the other wards, thereby skewing access to ward councillors. The overall capacity of the design to ensure equitable representation is weakened.

Finally, the challenge of “trading off” area and population is not completely successful, especially in the long run. The proposed Ward 2 is home to the smallest population (and in fact at the lower periphery of variance by 2021) and is among the smallest by area in terms of the residential neighbourhoods included. The population of one of the largest wards by area (the proposed Ward 4) is approaching the upper limit of tolerance and furthermore includes a large area of non-residential land lying between one community and the rest of the ward.

Overall Assessment: Option C

Option C achieves mixed success on two of the five principles set out for this Ward Boundary Review and, with one notable exception, is considered in general to have met the “natural boundaries” criterion. On closer inspection, the mixed verdicts on “communities of interest” and “effective representation” (and even the notable exception just mentioned) stem from one dilemma: where to place Leitchcroft. The design of Ward 4 in Option C boosts the population of the proposed ward 4 to the high end of the range and combines communities that are isolated by Highway 404 and extensive employment lands. These realities alone preclude assessing Option C as successful in meeting the “communities of interest” and “effective representation” principles.

In terms of the two principles associated with the distribution of population, some difficulties in achieving better balanced wards emerge. In

particular the northern and eastern configuration (including the proposed Wards 4, 7 and 8, and also Ward 6) is challenging. The proposed Ward 8 remains at a optimal population throughout the Review period, but its western neighbour Ward 7 is consistently under-populated while the proposed Ward 6 to the south remains unacceptably high. The observation made about the existing wards is pertinent: this design does not fix itself over time. Although the proposed Ward 1 does move from being “well above optimal” to “optimal” as growth occurs elsewhere in the City, the population in the proposed Ward 4 becomes less acceptable over time.

As in the case of Option B, the presence of even one ward (let alone two in 2011 and 2016) falling outside the range of tolerance adopted for this Review, means that Option C is also deemed not to have met the population criteria.

Option C could be a possible substitute for the existing wards in Markham if the problems it solves are given greater weight than the riddles that remain.

Code	Meets Criterion	Comment
POP	no	<ul style="list-style-type: none"> • two wards optimal but two outside range of tolerance
PCI	mixed	<ul style="list-style-type: none"> • most wards successfully embrace recognizable communities of interest • placement of Leitchcroft community potentially problematic
PFT	no	<ul style="list-style-type: none"> • population forecast shows two wards outside the optimal range in 2016 and one narrowly outside in 2021; effectively three at optimal in 2016 and three in 2021
NB	yes	<ul style="list-style-type: none"> • all boundaries adhere to suitable natural boundaries; one ward crosses Highway 404
ER	mixed	<ul style="list-style-type: none"> • most wards coherent and are capable of delivering effective representation but range of populations weakens equitable access • internal cohesion and effective representation impeded in one ward because of physical isolation of component communities and large population

acceptable range of variation in 2011, although the proposed Ward 1 is nudging the upper limit. Three wards were classified as having an optimal population.

Protection of communities of interest and neighbourhoods (PCI)

The proposed wards are generally successful in meeting this criterion since the boundaries do not divide well-established residential and other communities internally and for the most part group together neighbourhoods with traditional affinity, including the former Village of Markham. As far as grouping distinct communities together, the design places Leitchcroft community with neighbourhoods east of Highway 404 and south of Highway 407 in the proposed Ward 2. All other groupings are sound and coherent.

Present and future population trends (PFT)

Using the York Region Official Plan population forecasts for 2016, an “optimal” ward would be considered one with a population of 42,235 (the total estimated population of 337,877 divided into eight wards).

Ward 1	46,550	1.10	○ +
Ward 2	45,246	1.07	○ +
Ward 3	41,601	0.98	○
Ward 4	39,912	0.94	○ -
Ward 5	36,379	0.86	○ -
Ward 6	36,449	0.86	○ -
Ward 7	49,534	1.17	○ +
Ward 8	42,204	1.00	○

On the basis of these population forecasts, two of the proposed wards would have been deemed optimal with three others within 10 percentage points of optimal. Three further wards would vary by approximately 15% from the optimal size in 2016 (Wards 5, 6 and 7); therefore all wards are within the range of tolerance.

Using the York Region Official Plan population forecasts for 2021, an “optimal” ward would be considered one with a population of 46,282 (the total estimated population of 370,255 divided into eight wards).

Ward 1	48,149	1.04	○
Ward 2	46,199	0.99	○
Ward 3	42,968	0.93	○ -
Ward 4	47,153	1.02	○
Ward 5	35,965	0.77	○ -
Ward 6	44,897	0.97	○
Ward 7	58,226	1.26	OR +
Ward 8	46,696	1.01	○

On the basis of these population forecasts, five of the proposed eight wards would be at the optimal size in 2021. However, the proposed Ward 5 is only over the lower population threshold by about 1250 people. The proposed Ward 7 exceeds the permissible variation, but by fewer than 400 people.

Natural boundaries (NB)

The wards proposed in Option D make exclusive use of “constructed” barriers as boundaries. Most of them successfully adhere to the principle that ward boundaries already serve as physical boundaries of communities: this includes portions of Highway 404, Warden Avenue, 16th Avenue, McCowan Road, Ninth Line, Highway 48, Highway 7 and Highway 407. The proposed Ward 2, however, crosses both Highway 404 and Highway 407.

Effective representation (ER)

Three perspectives on “effective representation” were set out in the evaluation of the present ward configuration. Most of the wards proposed in Option D appear to constitute politically meaningful units of representation in that substantial and discrete communities (Thornhill, Unionville, Markham Village and Milliken) form the nucleus of four of the wards. These wards are different

from the three northern wards where extensive residential development will eventually dominate communities already located in those wards – and will largely define – those wards. The proposed Ward 2 is less coherent than might be desirable; extensive areas of employment lands and Highways 404 and 407 isolate component communities from one another. The impact of intensification in the proposed Wards 1, 4 and 5 will again be a potential difficulty.

The population of one of the wards proposed in Option D (Ward 7) is significantly at odds with the others by 2016, thereby skewing the overall capacity of the design to ensure equitable representation. By disregarding the “outlier,” the access of most Markham residents to their ward councillors is otherwise reasonably balanced.

Finally, the challenge of “trading off” area and population is not completely successful, especially in the long run. The proposed Ward 5 is home to the smallest population and is among the smallest by area. The largest ward by area (the proposed Ward 8) is at the optimal size on the basis of the 2016 and 2021 population forecasts so the larger area does not pose insurmountable problems of access. More problematic is the presence of the largest population in Ward 7, a large geographic area.

Overall Assessment: Option D

Option D achieves mixed success on three of the five principles set out for this Ward Boundary Review and would have been an acceptable configuration in terms of the 2011 population – as assessment not conferred on the present ward system or any of the other three Options. On closer inspection, the mixed verdicts on “natural boundaries” and “communities of interest” stem again from one dilemma: where to place Leitchcroft. The design of Ward 2 in Option D combines communities that are isolated by both Highways 404 and 407 and by extensive employment lands. These realities alone preclude assessing Option D

as successful in meeting the “natural boundaries” and “communities of interest” principles.

In terms of the future population issue, Option D actually only becomes unworkable in relation to the 2021 population forecast. In neither the 2011 population forecast nor the 2016 forecast do any wards fall outside the range of tolerance adopted for this Review. In other words, if the overall assessment is made on the basis of the 2016 forecast, Option D would meet the future population principle.

As has been the case throughout this analysis, the presence of just one ward that falls outside the range of tolerance means that Option D is deemed not to have met the population criteria. It should be noted, though, that the “over population” in the proposed Ward 7 is calculated to be about 400 people – about 0.001 percent of the City's projected population in 2021.

Like Option C, Option D is challenged by the task of including a balanced distribution of population across the northern and eastern part of the City. The population of the two proposed wards that bracket Ward 7 (the “over populated” ward) are both well within the range of tolerance; indeed the proposed Ward 8 is at or near the optimal figure in both 2016 and 2021 and the proposed Ward 6 grows very close to the optimal size between 2016 and 2021.

Option D is a viable alternative for the existing wards in Markham if the problems it solves are given greater weight than the shortfalls that remain.

Code	Meets Criterion	Comment
POP	yes	<ul style="list-style-type: none"> • three wards optimal; none outside range of tolerance
PCI	mixed	<ul style="list-style-type: none"> • all wards successfully embrace recognizable communities of interest • placement of Leitchcroft in Ward 2 potentially problematic
PFT	no	<ul style="list-style-type: none"> • population forecast shows one ward narrowly outside the optimal range in 2021 • five wards within ten points of optimal in 2016; six wards within ten points of optimal in 2021
NB	mixed	<ul style="list-style-type: none"> • most boundaries adhere to suitable natural boundaries; one wards crosses Highway 404 and Highway 407
ER	mixed	<ul style="list-style-type: none"> • most wards coherent and capacity to deliver effective representation generally strong • internal cohesion impeded in Ward 2 because of physical isolation of component communities; largest population in a ward with large area

5f. Ranking the Options

Working within the obvious limitations of the real world that is the City of Markham today, these four Options each fall short of a perfect solution. Among those limitations are, of course, the significant overall increase in population forecast by the Region of York, the concentration of that population growth in identifiable locations in Markham and the sometimes formidable “natural boundaries” that must be considered in all ward designs.

However, the evaluation just concluded has been deliberately stringent in its application of the guiding principles. A very rigid reading of the five guiding principles helps to identify the strengths and weaknesses of the four Options but may set the bar too high for making a reasonable and viable choice.

It is important to recall that ward boundaries are not “eternal” nor “total” features of municipal life; they are a means to an end. As discussed in Part 1, Markham’s ward boundaries have been regularly reviewed and evaluated to ensure that effective representation is customarily available to the community. The Option implemented for the 2014 municipal election is expected to continue to deliver effective representation in 2018 and 2022. It is highly unlikely that wards designed in 2012 will still be valid after those three elections and, as a municipality, Markham has recognized that clinging to outmoded wards is not justifiable. Ward boundaries are not, therefore, eternal but are temporary solutions to the challenge of delivering effective representation over the next decade in a rapidly growing municipality.

In addition, ward boundaries will not change what is already “on the ground” in Markham; they do not, in other words, constitute a total change in municipal life. Thornhill will still be Thornhill. Unionville will still be Unionville. Dickson Hill will still be Dickson Hill. Community facilities will still be built and in locations that are identified by a delineated planning process, not on the basis of what wards they happen to be located in. The residents may elect their

representatives in a different configuration than in 2010 but the services delivered to them, the amenities they enjoy and the taxes they pay will not be altered because they live in a different ward. New ward boundaries change only one thing: the Markham citizens who are grouped together to select a City Councillor.

Since the present ward configuration falls short of the principles applied in this Review, a suitable alternative must be found. Each Option offers something constructive to that search and the selection of one Option over another may necessitate ordering the five principles differently. By itself, for example, if a premium is placed on including Leitchcroft with communities south of Highway 407 (a component of the “protection of communities of interest and neighbourhoods criterion”) Options A and D would be more desirable than Options B and C but would probably not be enough to discard Options B and C categorically.

As suggested earlier, the selection of one Option necessitates affirming which principles are the most pertinent (and which less feasible) and which Option comes closest to delivering on those principles in 2012.

On this basis, Option D appears to rise to the top of the list of alternatives, followed by Options C and B. Option A has some merits but contains one ward that makes the design less suitable – but not completely unworkable - as an alternative.

Part 6: The Composition of Council Question

The four Options developed and assessed in this report are all designed to elect eight City Councillors, as mandated in the report to General Committee that set out the Ward Boundary Review process. That Report, however, anticipated the possibility that additional options “to increase the size of council from the current eight local wards” would be included. This idea of increasing

the size of Markham's municipal council was also raised – and endorsed - during public consultations, primarily as a way to retain two wards in Thornhill.

The premise is that with more wards (either nine or ten), what is called here the optimal size of a ward would be reduced since the total population would be divided by a number larger than eight and that, as a result, the population of some communities that do not fall within the acceptable range of variation in an eight-ward configuration might be sufficient to justify a ward in a nine- or ten-ward configuration. Table 3 (page 12) and Table 4 (below) may be used to make to test such suppositions.

Table 4 – Population Indicators in the Wards				
Year	Total Population (estimated)	Optimal Ward Size*	Lower Population Limit**	Upper Population Limit ***
Nine Ward System				
2011	309,233	34,359	25,769	42,949
2016	337,877	37,542	28,156	46,815
2021	370,255	41,139	30,855	51,424
Ten Ward System				
2011	309,233	30,923	23,192	38,654
2016	337,877	33,788	25,341	42,235
2021	370,255	37,026	27,769	46,283
* City population divided by the number of wards				
** 75% of the optimal ward size				
*** 125% of the optimal ward size				

In the *Municipal Act*, the authority to increase the size of council, referred to as “the composition of council” (section 217), is a separate matter from the authority “to divide, re-divide or dissolve existing wards” (section 222). As such, the two decisions should be treated separately.

The Interim Report does not, then, include nine- or ten-ward alternatives; the 2012 Ward Boundary Review will not do so unless Council specifically directs that it wishes to add the composition of council question to this Review. For one

thing, the analysis presented so far suggests that a viable eight-ward design is available. For another, there is no guarantee that additional nine- or ten-ward options will be any better at “ticking all of the boxes” associated with the guiding principles than the eight-ward options.

Most importantly, however, the decision to increase the number of ward councillors is a matter that should be addressed at the outset, rather than as a way to get around what some may perceive as undesirable consequences resulting from the application of the guiding principles. Furthermore, sound governmental practices suggest that considerations such as cost, workload and council operations (committees and the like) should be carefully addressed in conjunction with - or as foundations for - an adjustment to the composition of council rather than as consequences of a change to the electoral system.

It may very well be that a strong case can be made for a change in the composition of Markham council (either an increase or a reduction) but this Review was not designed to provide that evidence nor to undertake the analysis.

Part 7: What's Next?

The process accepted by Council in May 2012 sees this Interim Report as the culmination of Phase 2 of the Ward Boundary Review. General Committee will be asked on December 10, 2012 to provide direction on which options should be presented for further public consultation. Depending on what direction is given, one or more Options will be placed before the community for comment and a final report incorporating further analysis will be submitted to Council. The expectation is that the Final Report will lead to Council passing the required by-law on a new ward configuration before March 31, 2013. Dates for consultation meetings and Council deliberations will be advertised on the City website and through the City's regular channels of communication.

Appendix A

Guiding Principles

The ward boundary review, including any reports and draft options for revised ward boundaries, will be guided by the following well-established principles:

1) CONSIDERATION OF REPRESENTATION BY POPULATION

- To the extent possible, wards should have relatively equal population totals.
- Given the geography and varying population densities and characteristics of the municipality, a degree of variation will be acceptable.

2) PROTECTION OF COMMUNITIES OF INTEREST AND NEIGHBOURHOODS

- It is desirable to avoid fragmenting traditional neighbourhoods or communities of interest within the municipality.
- It is considered desirable to keep historic communities contained within a ward.
- New communities should be represented within a single ward when possible.

3) CONSIDERATION OF PRESENT AND FUTURE POPULATION TRENDS

- Given the varying rates of population growth across Markham, any proposed ward designs should take account of projected population changes so that wards will be equitable for up to three (3) terms of Council.

4) CONSIDERATION OF PHYSICAL FEATURES AS NATURAL BOUNDARIES

- Consideration will be given to using natural and man-made features as ward boundaries that already serve as physical boundaries of communities.
- Where feasible, the preferred features to define a ward boundary are arterial roads, highways, railway lines, rivers and creeks.

5) THE OVERRIDING PRINCIPLE OF "EFFECTIVE REPRESENTATION"

- The specific principles are all subject to the overriding principle of "effective representation" as enunciated by the Supreme Court of Canada in its decision on the Carter case.

Source: Town of Markham, Report to General Committee, 091-S-12 Ward Boundary Review Process, May 28, 2012. pp. 3 - 4.

Appendix B

Understanding the Guiding Principles in Markham

Recommendations for an electoral system for Markham were developed around four explicit principles and an “overriding principle.” These criteria – articulated in these exact words or in very similar language - are widely used in electoral boundary determinations in Canada. Their meaning should be clear to all who participate in this Review if the process is to be successful and the recommendations viable. Furthermore, without such provisions in place there is a risk that the review may lead to unfair or politically motivated results.⁹

a. Consideration of representation by population

The guiding principles for this Review state that “to the extent possible, wards should have relatively equal population totals.” This principle recognizes that absolute parity in the size of electoral districts is impossible to achieve and, at times, inappropriate. The point is a core element of what might be called “the Carter perspective” and will be developed at greater length in part e below.

To evaluate the extent to which ward boundaries actually have “relatively equal population totals,” it is helpful to adopt a simple descriptive scale to assess the degree of variation from an optimal size. The basic starting point is to calculate an optimal size for a standard ward in Markham by dividing the estimated total population of the municipality by the number of wards. In passing, note that this calculation is described as an “electoral quotient” in the federal *Electoral Boundaries Readjustment Act*.

Optimal size itself can then be understood as a mid-point on a scale where the term “optimal” will describe a ward with a population within 5% on

⁹ See Robert J. Williams, “Democratic Renewal: Time to start taking municipal elections seriously,” *Municipal World* volume 115, no. 3 (March 2005), 31 – 33, 44.

either side of the calculated optimal size. The phrase “below/above optimal” describes a ward with a population between 6% and 25% on either side of the optimal size, but obviously the closer to optimal the better. A ward that is labelled “outside the range” means that its population is greater than 25% above or below the optimal ward size.

The choice of 25% as a tolerable outer limit is used in this exercise since it is the standard used for some years in a number of Canadian jurisdictions. In particular, the federal *Electoral Boundaries Readjustment Act* requires provincial boundary commissions to stay within a variance of ± 25 percent of the electoral quotient for a province. Commissions can only go beyond the 25 percent variance in “circumstances viewed by the commission as being extraordinary.” There is nothing inherently sacrosanct about ± 25 percent – indeed in some jurisdictions the variance is as low as ± 10 or even ± 5 percent – but in the absence of precise directions from Markham Council (“a degree of variation will be acceptable”), departures from the optimal in the present and future population of proposed wards will be evaluated through this more-or-less conventional lens.

Based on the Region of York’s Official Plan forecasts, then, proposed wards containing a 2011 population between 28,990 and 48,318 would at least fall within the acceptable range described above (see Table 3, page 12); the closer to the 38,654 optimal size the better. These categories are applied in this Review, then, to determine the extent to which individual wards are “relatively equal” in population.

b. Protection of communities of interest and neighbourhoods

Extrapolating from the perspectives of the *Carter* decision (again, see part e below), electoral districts in Canada are not traditionally considered to be merely arithmetic divisions of the electorate designed to achieve “relative parity

of voting power." Rather, they are part of a system "which gives due weight to voter parity but admits other considerations where necessary." (*Carter decision*, page 35) One of the customary "other considerations" is "community of interest." As Alan Stewart suggested in a research study prepared for the Royal Commission on Electoral Reform and Party Financing in Canada, the theory and practice of political representation in Canada is built upon the "principle of the representation of community."

The rationale of the principle of community of interest is that electoral districts should be more than arbitrary, random groupings of individuals. They should be, as far as possible, cohesive units, areas with common interests related to representation.¹⁰

In the municipal context "community of interest" is frequently linked to "neighbourhoods" since the neighbourhood is the most identifiable geographic point in most people's lives; it is where they live. More importantly, the responsibilities of the municipality are closely associated with where people live: their roads and sidewalks, public transit and bicycle paths, the utilities that are connected to or associated with their dwelling and a myriad of social, cultural and recreational services are intertwined with residential "communities." Even municipal taxation is inextricably linked to one's dwelling.

In most municipalities there are more communities of interest and neighbourhoods than there are electoral districts, so the latter will of necessity have to be created by grouping together such building blocks for the purposes of representation. Three points are important here in the development and evaluation of wards in this Review.

¹⁰ Alan Stewart, "Community of Interest in Redistricting," in David Smart, editor, *Drawing the Map: Equality and Efficacy of the Vote in Canadian Electoral Boundary Reform* Volume 11 of the Research Studies: Royal Commission on Electoral Reform and Party Financing in Canada. Toronto and Oxford: Dundurn Press, 1991, p. 124.

The first is the application of Alan Stewart's "principle of the representation of community" in the design of a ward configuration for Markham. So that representation contributes to the "protection of communities of interest," wards, to the extent possible, should be composed of "areas with common interests" rather than a deliberate mix of explicitly dissimilar neighbourhoods and communities of interest. However, given the diversity of existing neighbourhoods in Markham – especially in terms of the age of the housing stock – all wards are likely to be mixed to some degree. One important implication of this principle that a series of narrow north-south wards that group the diversity of Markham in a single ward (for example, neighbourhoods on the Toronto border with high-rise intensification along Highway 7 with settled communities below Sixteenth Avenue and possibly rural farmland above Major Mackenzie Drive or Elgin Mills Road) would not be plausible, even though such wards existed in the past.

Secondly, the stated principle unequivocally prohibits the division of identified communities and neighbourhoods when organizing wards. This includes both existing communities and those still in the development stage. Thirdly, present-day Markham includes a collection of identifiable residential developments that have many observable and interconnected characteristics (in terms of housing styles, real estate values, amenities and the like). The developmental history of Markham therefore bequeaths a significant number of coherent communities of interest in the municipal context that can be used as building blocks for wards.

Alternative ward configurations will therefore be evaluated in terms of their capacity to reflect and protect Markham's neighbourhoods and communities of interest.

c. Consideration of present and future population trends

This principle affirms the previous search for “relatively equal population totals” based on the population in Markham in 2011, but seeks to consider ward boundary scenarios that “take account of projected population changes” so that wards will be “equitable for up to three (3) terms of Council.” As the terms of reference observe, population growth rates vary across the municipality. It is therefore appropriate “to look at long-term growth patterns” in this Review. As discussed in part a, the core evaluation premise will be the concept of an optimal size of proposed wards in the future.

Municipal elections in Ontario are now scheduled to occur at four-year intervals, in 2014, 2018 and 2022. A set of ward boundaries that could be used in Markham for those three elections will therefore be the objective. This time period also approximates the federal redistribution cycle of ten years as set out in the *Electoral Boundaries Readjustment Act*.

The basis for determining projected population totals for this Review will be the *Region of York Official Plan - December 2009* (the OP). Both population and employment forecasts are integral to the OP and are calculated on the basis of customary professional assumptions and methodology. Such forecasts are monitored constantly and up-dated as new circumstances arise. As well, they are widely accepted as policy tools since they

“aid in designating settlement and land use boundaries, planning for future transportation requirements, calculating water and wastewater capacity needs, determining housing needs and associated land requirements, estimating the need for social programs and new schools, and providing a basis for other services and program planning in the Region. These forecasts are also used by industry and business in making investment decisions.”¹¹

The calculations used to determine the estimated population of current

¹¹ *York Region Official Plan - December 2009*, part 5.1.

and proposed wards are based on units of measurement called traffic zones. These geographic areas were assembled through a GIS program to arrive at the figures used in this report. Therefore, this Review will rely on OP projections to provide a consistent database to provide growth projections in terms of potential ward scenarios.

As discussed on pages 6 - 8 (above), the most recent forecasts for York Region and the City of Markham (in the December 2009 OP) includes population figures for 2011 and for five year intervals to 2031. The population forecasts for Markham in 2016 and 2021 will therefore be used to determine the optimal size of wards. The decision to consider population estimates for 2016 as well as populations for the end of the review period recognizes that the pace and distribution of residential growth in Markham is uneven. Population forecasts on growth part way through the review period will give some insight into possible anomalies in ward populations over the course of the three election cycle. The Review recognizes that the figures applied in the alternatives are estimates but presupposes that these figures have a measure of authenticity since they are developed to be used in just such planning tasks as are embodied in this review.

In the eight-ward scenario, proposed wards containing a projected population between 31,676 and 52,794 in 2016 would fall within the acceptable range; the closer to the 42,235 optimal size the better. Proposed wards containing a projected population between 34,711 and 57,583 in 2021 would fall within the acceptable range; the closer to the 46,282 optimal size the better.

d. Consideration of physical features as natural boundaries

Political boundaries for municipal electoral purposes are the means by which members of the community are grouped together to elect a representative. As the concept has been developed here, these groupings are

both reasonably equal in number but also reflective of the component communities in the municipality. But political boundaries are not arbitrary lines drawn on pieces of paper. Rather, they are intended to demarcate one group of people from another to, in the words of Madam Justice McLachlin, give them “a voice in the deliberations of government.”

This demarcation is both temporary and permanent. That is, electoral boundaries should only be in place for a limited period of time since they are intended to create units of representation to give voice to an optimal number of residents as determined at a particular time; specific ward boundaries should not be considered a permanent fixture of the municipal system. However, to capture a coherent community of interest (consistent with the community of interest and neighbourhood principle), boundaries should rely on “markers” that themselves are permanent, as well as easily identified and readily remembered. Municipalities usually have many such markers: arterial roadways, utility corridors, waterways and railway lines are the most obvious and the most commonly utilized as ward boundaries.

Markham has traditionally accepted a number of arterial roadways as both “natural” boundaries or as the spine of some of its historic settlements. Modern multi-lane arterial roadways like Woodbine Avenue, Kennedy Road, Major Mackenzie Drive, 16th Avenue and Highway 7 are the descendants of a colonial settlement grid and have been regularly used as electoral boundaries. Markham Main Street (known in part as Markham Road and elsewhere as Highway 48) carries the name of a pre-amalgamation village and township, as well as the contemporary municipality, a Business Improvement Area and a Heritage Conservation District. More recently, controlled access highways like 404 and 407 have been added to the municipal landscape and have served as electoral boundaries. Natural features and railway lines are also “natural” boundaries in Markham but have been used rarely for electoral purposes in

recent times. In fact, since 1971, the most enduring boundaries used to demarcate wards have been Highway 404, 16th Avenue, McCowan Road and Markham Road, all of which were incorporated into every design. Once it was constructed, of course, Highway 407 has been viewed not just as a potential electoral boundary but as a substantial barrier between communities.

However, as the principle states, physical features are to be “considered” in the development of a ward system; this guiding principle is probably the easiest to visualize but is only one of four empirical principles. In some designs, the “natural” boundaries that are most compatible with the principles of representation by population, growth and community of interest may not be these historically important physical features just identified. Other options may place greater emphasis on the historically important physical features but be less successful at achieving the other guiding principles. This is, in part, what Ted Yao was alluding to in 1994 when he commented on the challenge of determining ward boundaries in Kingston.

e. The overriding principle of "effective representation"

What is the principle of "effective representation" and why is it “overriding”? The basic starting point to answer to both questions is the same: the terminology and its primacy stem from a reference case heard by the Supreme Court of Canada – the *Reference re Provincial Electoral Boundaries (Saskatchewan)* (1991), commonly known as the *Carter* decision – that has become a touchstone guiding the development and evaluation of electoral boundaries at all levels in Canada by courts, tribunals (such as the Ontario Municipal Board), federal and provincial electoral boundary commissions and governments, including municipalities, engaged in determining electoral boundaries.

The Court's majority decision, written by Madame Justice Beverly

McLachlin (before her elevation to Chief Justice), stated that the “purpose of the right to vote enshrined in s. 3 of the Charter [that is, the *Canadian Charter of Rights and Freedoms*] is not equality of voting power *per se* but the right to ‘effective representation’.” In turn, to achieve “effective representation,” McLachlin asserted that electoral boundaries cannot – and often should not – adhere slavishly to the goal of “absolute voter parity” because “absolute parity is impossible” and “effective representation often cannot be achieved without taking into account countervailing factors” such as “geography, community history, community interests and minority representation.” (p. 33) In simple terms, a variance in electoral populations can be tolerated in the quest for “effective representation.”

Notwithstanding the view of some observers that this reading differs conceptually and practically from the guarantee in section 3 of the Charter that every citizen of Canada has the right to vote in federal and provincial elections, the interpretation of “effective representation” derived from *Carter* prevails in Canadian electoral jurisprudence and practice.

The *Carter* decision is also significant in another respect. Simply put, the interpretation found in the *Carter* decision emphasizes the process of representation – something that happens between elections - rather than the act of voting itself that takes place on an election day that occurs at designated intervals. The process of representation also potentially implicates all residents of the municipality while the act of voting involves only eligible electors. Issues and problems dealt with on a routine basis by municipal governments do not only arise from electors but from non-citizens, children and youth or newcomers to the municipality, none of whom would have had a vote in the previous election (but many of whom pay taxes in the municipality).

The second point to observe is the framing of the process of representation by Madam Justice McLachlin. A widely quoted statement is the

sentence already cited above: "It is my conclusion that the purpose of the right to vote enshrined in s. 3 of the *Charter* is not equality of voting power *per se*, but the right to 'effective representation'". Less frequently noted are the following sentences:

Ours is a representative democracy. Each citizen is entitled to be represented in government. Representation comprehends the idea of having a voice in the deliberations of government as well as the idea of the right to bring one's grievances and concerns to the attention of one's government representative; as noted in *Dixon v. B.C. (A.G.)*, [1989] 4 W.W.R. 393, at p. 413, elected representatives function in two roles -- legislative and what has been termed the "ombudsman role". (p. 32)

This perspective goes to the heart of an important question: what or who does a representative represent? What role is that individual representative expected to play as an elected official? How does the representative provide "effective representation"? One implication of the phrase "effective representation" is that electoral arrangements themselves should take account of the potential responsibilities to residents by those who serve in an elected office.

The Terms of Reference for this Review therefore require that "effective representation" as developed in the *Carter* decision be given the highest priority in the design of wards in Markham. "Effective representation" is a kind of summary or comprehensive evaluation of the success of the four specific principles in meeting a series of applied tests. In other words, diagnostic judgments are still pertinent. Are the proposed wards plausible as a means to provide "effective representation"? Are they coherent units of representation? Are they drawn in such a way that representatives can readily play the role expected of them? Do they provide equitable (that is, fair) access to Councillors for all residents of Markham?

Questions of this kind will be used to determine whether the proposed ward configuration can deliver "effective representation."

Appendix C

The Consultant

The Markham Clerk's Department retained Dr. Robert J. Williams, Professor Emeritus, Department of Political Science, University of Waterloo, to conduct the 2012 Ward Boundary Review. Dr. Williams has been referred to as the "preeminent consultant to Ontario municipalities on representation issues."

Since retiring from the University of Waterloo at the end of 2006, he has conducted independent ward boundary reviews for the City of Kitchener, the Town of Milton, the Town of Whitchurch-Stouffville, the Town of New Tecumseth, the City of Windsor and the Town of Oakville. Dr. Williams also worked in collaboration with Watson and Associates on ward boundary reviews in the Town of Bradford West Gwillimbury and the Town of Gravenhurst. He has also provided advice and support for ward boundary reviews to municipal clerks in Waterloo and Durham Regions and the City of Brantford.

Dr. Williams has served as an expert witness at numerous Ontario Municipal Board hearings on electoral systems and ward boundaries, beginning in the late 1980s. He last appeared in 2009 and 2010 as an expert witness before the Board on behalf of petitioners in the Town of Kearney, the City of Vaughan and the Town of East Gwillimbury on matters pertaining to the electoral arrangements in those municipalities.

In 2011 Dr. Williams prepared reports for the Nova Scotia Utility and Review Board providing recommendations on the optimal number or range of numbers of councillors for each of Halifax and Cape Breton Regional Councils.