


TO: GENERAL COMMITTEE


SUBJECT: WARD BOUNDARY REVIEW RECOMMENDATION

WARD: ALL

PREPARED BY AND KEY CONTACT: D. MCALPINE, DIRECTOR OF LEGISLATIVE AND COURT SERVICES, EXT. #4421 

SUBMITTED BY: D. MCALPINE, DIRECTOR OF LEGISLATIVE AND COURT SERVICES

GENERAL MANAGER APPROVAL: E. ARCHER, CMA, GENERAL MANAGER OF CORPORATE SERVICES 

CHIEF ADMINISTRATIVE OFFICER APPROVAL: C. LADD, CHIEF ADMINISTRATIVE OFFICER 

RECOMMENDED MOTION

1. That the City of Barrie Ward Boundary Review Report prepared by Watson & Associates Economists Ltd. in association with Dr. Robert Williams, dated May 22, 2013 and attached as Appendix "A" to Staff Report CLK006-13, be received.
2. That a by-law be presented to adopt the Ward Structure identified in Appendix "B" to Staff Report CLK006-13 (Option 1 ward structure with revised ward numbering) as the City of Barrie's Ward Boundaries, effective December 2014.
3. That the suitability of the 2014 ward boundaries be considered following the 2018 Municipal Election, to determine their continued effectiveness in the context of actual population growth.

PURPOSE & BACKGROUND

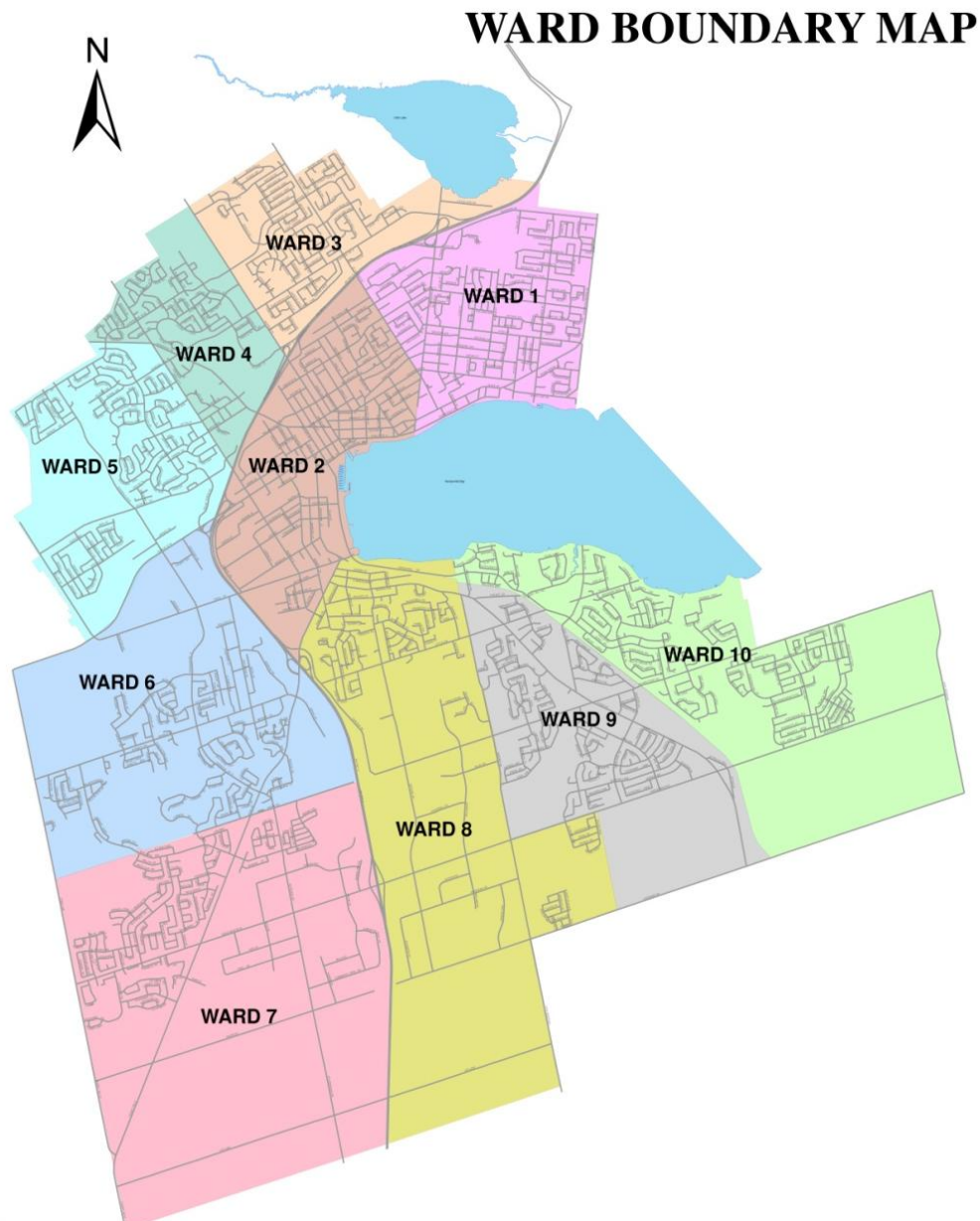
Overview

4. The purpose of this staff report is to recommend changes to the City of Barrie's ward boundaries to support the evolution of an effective and equitable system of representation and be prepared for overall projected growth within the municipality. The revised ward structure is to be in place for the 2014 Municipal Election, which requires that a by-law approving the revised boundaries be adopted prior to December 31, 2013. The recommended ward structure reflects one of the options developed by Watson & Associates Economists Ltd. in association with Dr. Robert Williams following a comprehensive analytical and public consultation process. It is anticipated that the ward structure would be in effect for the 2014 and 2018 Municipal Elections and reviewed after 2018 to determine its effectiveness for 2022. A key component of the Ward Boundary Review Project was the utilization of population allocations based on the 2012 City of Barrie Growth Management Strategy.

Purpose and Background

5. Council approved the Ward Boundary Review Project as a Program Change Form that formed part of the 2012 Business Plan. Due to the Ward Eight By-election, the ward boundary review process was deferred until 2013 with the carryover of the associated funds approved as part of the 2013 Business Plan.

6. The City of Barrie's ward boundaries were last reviewed in 2002 and the resulting adjustments to the ward boundaries were made effective for the 2003 Municipal Election. The 2002 ward boundary review process recognized and incorporated anticipated growth for planned populations over a further five to seven year window (generally anticipated to be "build out" of the City of Barrie under the existing municipal boundaries), in the development of the ward structure.
7. Bill 196, the Barrie-Innisfil Boundary Adjustment Act, 2009, resulted in annexation of a portion of the Town of Innisfil to the City of Barrie. Ontario Regulation 501/09 altered the City of Barrie's ward boundaries by adding the new lands from Innisfil to the southern most portion of the respective existing Barrie wards, resulting in the allocation of the 519 individuals in the area amongst wards 7, 8, 9 and 10.
8. The City of Barrie's current ward boundary map is illustrated below:



ANALYSIS

9. In early 2013, a Request for Proposals was issued for consulting services for the 2013 Ward Boundary Review Project. The Request for Proposals included the principles for the 2013 Ward Boundary Review that were established based on generally accepted principles that are regularly considered when defining or refining political boundaries, and in consideration of Ontario Municipal Board decisions on other municipalities' ward boundary reviews as well as a Supreme Court of Canada decision. The principles are as follows:
- **Representation by Population:** Considering representation by population or every Councillor generally representing an equal number of constituents within his or her respective wards. Given the geography and varying population densities and characteristics of the City, a degree of variation will be acceptable.
 - **Population and Electoral Trends:** Accommodating for and balancing future increases or decreases in population growth/decline to maintain a general equilibrium in the representation by population standard, until the year 2018 (at minimum).
 - **Means of Communication and Accessibility:** Arranging ward boundaries by primary and secondary road patterns, railway and public transit accesses, telephone exchanges, postal codes and servicing capabilities to help foster an identity and neighbourhood groupings.
 - **Geographic and Topographical Features:** Utilizing geographical and topographical features to provide for ward boundaries and compact and contiguous areas (similar to the use of man made features).
 - **Community or Diversity of Interests:** Recognizing settlement patterns, traditional neighbourhoods and community groupings (social, historical, economic, religious and political diversities) while, at the same time, not fragmenting a community;
 - **Effective Representation:** Considering an overriding principle of effective representation as described by the Supreme Court of Canada in its decision on the Carter case.
10. Watson & Associates Economists Ltd. and Dr. Robert Williams, Professor Emeritus, University of Waterloo, were retained to facilitate the review of Barrie's ward boundaries due to the specialized nature of this work. The Consultant Team was responsible for:
- a) Research;
 - b) Public consultation;
 - c) Formulation of options; and
 - d) Provision of a final report and recommendations
11. Watson & Associates Economists Ltd. and Dr. Robert Williams reviewed a number of documents including the report from the 2002 Ward Boundary Review Committee, Bill 196, census information, subdivision and condominium applications, projections for future population increases and timing associated with the Growth Management Strategy, etc.
12. One on one interviews were held with nine of the eleven members of Council, representatives of the English Public School Boards and the BIA. The information from the research component of the project, in conjunction with the results of interviews were utilized to develop four preliminary revised ward boundary options for the purposes of public consultation and to obtain feedback.

13. Three public consultation sessions were held from April 15- April 25th, 2013. The public consultation sessions were communicated through memorandums to Council, advertisements and an article in This Week in Barrie, announcements at Council and General Committee meetings, newspaper and radio coverage, a dedicated web page and through social media (Facebook and Twitter). Members of the Council and the City's Advisory Committees, as well as representatives of the Downtown BIA, Downtown Barrie Neighbourhood Association, Allandale Neighbourhood Association and the Historic Neighbourhood Strategy were sent emails regarding the public consultation sessions. The dedicated page on the City's website provided background information concerning the Ward Boundary Review Project, four preliminary options prepared by the Consultant Team, the details of the public consultation opportunities, a comment sheet and contact information for feedback regarding the four preliminary options.
14. An opportunity was provided at the start of the public consultations sessions for the individuals in attendance to review large scale images of the existing ward structure, future population growth forecasts, and the four preliminary options. A presentation was then provided at each of the public consultation sessions regarding the ward boundary review project principles, the forecasting of future population growth, the evaluation of the existing ward structure against the identified principles and an overview of the four preliminary options. Individuals in attendance at the public consultation sessions provided comments to the Consultant Team both prior to the presentation and after the presentation, as well as through the completion of comment sheets.
15. Although attendance at the public consultation sessions was not large and relatively few public comments were submitted, the individuals who either attended or provided comments provided valuable insight regarding the preliminary options. In general, limited public interest in ward boundary review projects across the province is not unusual.
16. Upon reviewing the comments received during the public consultation sessions and submitted on-line, Watson & Associates Economists Ltd. in association with Dr. Robert Williams prepared the City of Barrie Ward Boundary Review Report dated May 14, 2013 and attached as Appendix "A" to Staff Report CLK006-13.
17. The report reviews the background associated with the project including the size of council, guiding principles and the use of population (versus electors) for the process. The report incorporates an assessment of the existing population and forecast growth and provides an analysis of the existing ward structure against the guiding principles. Based on the comments received as part of the consultation process, the four preliminary options were further refined and consolidated into three options for consideration. The report includes an analysis of the three alternatives against the guiding principles, with a conclusion and recommendations.

Size and Composition of Council

18. During the public consultation stage, there were questions regarding the size of Council, specifically related to additional members of Council. An ideal Council size and/or population to ward ratio is not established in legislation and is commonly based on the the history, characteristics and needs of the community. A letter was also submitted to the local newspapers suggesting that Barrie required a Deputy Mayor similar to much smaller communities in the area and that most cities of Barrie's size in Ontario and Canada have the position of deputy mayor.

19. The following chart illustrates the information collected by City staff concerning the size of Council, composition of Council and population per ward of comparator municipalities:

Municipality	Population	Size of Council	Type	Description of composition	Population per Councillor
Brantford	92,000	11	Single Tier	Mayor and ten City Councillors (2 from each of the 5 wards)	9,200
Burlington	175,779	7	Lower Tier	Mayor and six Councillors	29,297
Guelph	115,000	13	Single	Mayor and twelve councillors (2 for each of 6 wards)	9,583
Kingston	123,363	13	Single Tier	Mayor and twelve councillors	10,280
Oakville	185,000	13	Lower Tier	Mayor and twelve councillors, 2 for each ward, one of whom sits as a Regional and local councillor	15,417
Oshawa	152,000	11	Lower Tier	Mayor and seven Regional Councillors and three City Councillors	15,200
Richmond Hill	185,000	9	Lower Tier	Mayor, two regional and local councillors, six local councillors	23,125
Sudbury	160,274	13	Single Tier	Mayor and twelve Councillors	13,356
Thunder Bay	108,359	13	Single Tier	Mayor, five Councillors at Large, and seven Ward Councillors	9,030
Whitby	127,403	8	Lower Tier	Mayor and three Regional Councillors (elected at large) and four local Councillors elected by Ward	18,200
AVERAGE	142,418	11.10			15,269
Barrie	136,985	11	Single	Mayor and ten Councillors	13,698

20. The chart above indicates that the average size of comparator municipalities' Councils is 11.10. Barrie City Council is composed of 11 members. The average population per Councillor number based strictly the population of the municipality divided by the number of Councillors (regardless of regional/at large or local/ward) is 15,269 compared to Barrie's population per ward of 13,698 in 2013. It should be noted that a number of the surveyed municipalities include Councillors serving at large as well as ward councillors, resulting in larger populations per ward or per Councillor than under the formula of population divided by number of Councillors.
21. The survey information suggests that neither the size of Barrie City Council nor the population per ward is outside of the norm for a municipality of Barrie's size. The survey results also indicate that none of the similar sized municipalities have a Deputy Mayor position. Based on the survey results, it was not deemed necessary to develop alternative options with a larger or smaller sized Council or the inclusion of a Deputy Mayor position.

22. Should Council wish to consider changing its composition, it would be prudent to make the decision on the composition, then revisit the ward boundaries. The timing available is insufficient to address both aspects in advance of the 2014 Municipal Election, as additional public consultation on the revised ward boundary options would need to be undertaken prior to the adoption of a by-law that is appealable to the Ontario Municipal Board and is required to be in effect as of December 31, 2013. Revisiting both Council composition and the resulting ward boundary options could be addressed for the 2018 Municipal Election timeframe.

Existing and Forecasted Population

23. Watson & Associates utilized the 2011 Statistics Canada Census data for the City of Barrie to determine the 2011 population (16,000, excluding census undercount of approximately 4%) to determine a 2013 population, by adding the residential building permits issued since the Census and factoring a decline in population in existing housing units. An estimated population 2013 City of Barrie population was determined to be 136,985, excluding the Census undercount of approximately 4%. The 2013 population of existing wards based on Watson & Associates Economists Ltd.'s calculations are presented below:

Ward	2013
Ward 1	16,715
Ward 2	13,650
Ward 3	12,160
Ward 4	9,540
Ward 5	15,740
Ward 6	14,415
Ward 7	15,175
Ward 8	9,020
Ward 9	14,970
Ward 10	15,610
Total	136,985¹

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

¹ Excludes Census undercount of approximately 4%

24. The long-term growth forecast presented in the 2012 City of Barrie Growth Management Strategy prepared by Watson & Associates was utilized to determine a population and household forecast for the 2013-2022. The net population growth was calculated based on new development (registered not built, draft approved, pending approval and intensification and other development potential) less the population decline in existing units. The forecast for the City's population for 2013, 2014, 2018 and 2022 is as follows:

Year	Total Population
2013	136,985
2014	137,630
2018	149,815
2022	167,300

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

¹ Excludes Census undercount of approximately 4%

25. The City-wide housing forecast was then broken down between the former City limits and the annexation lands, and the phasing and timing of residential growth was allocated based on the draft Secondary Plan study information. Intensification growth allocations were based on the 2012 City of Barrie Growth Management Strategy. While some intensification is anticipated within the City Centre and in major nodes and corridors, it is partly offset by an anticipated decline in population in the existing population. It is important to note that this same allocation of population is utilized for Barrie's entire Growth Management Strategy.
26. The Consultant Team utilized geographic information systems (ArcGIS 10.1) to present the existing and future population in a special format, on a neighbourhood level. The GIS system was utilized to develop alternative ward boundary configurations and estimate existing and future year populations for each alternative. This is an intensive analysis requiring expertise, statistics and awareness of legislation. As a result of the Growth Management Strategy, the Consultant Team was able to access more detailed levels of data than are typically the basis of ward boundary review projects. While the result appears simply to be a map with new lines on it to show revised boundaries, the analysis leading to that result is complex. Changes to the boundaries require careful consideration in the context of the project parameters and past Ontario Municipal Board decisions.

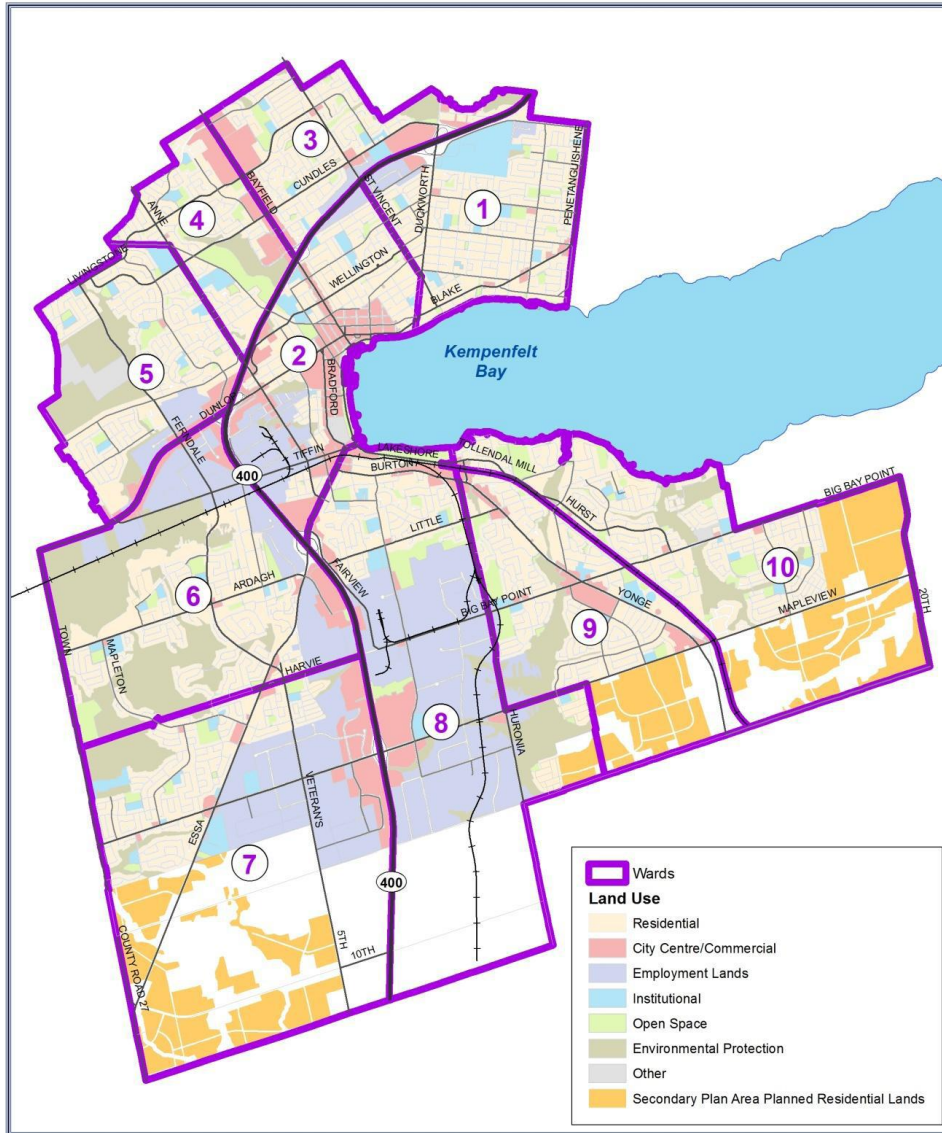
Ward Boundary Structure Timeframe

27. One of the parameters associated with the Ward Boundary Review Project was the development of a structure that would provide for an effective and equitable system of representation with reference to overall projected growth within the municipality until the year 2018 (at minimum). The Consultant Team has prepared options that consider population forecasts for 2014, 2018 and 2022. While some municipalities may maintain the same ward boundaries for several decades, in a municipality such as Barrie that has experienced a substantial amount of growth and where significant growth is forecasted to continue over the next decade, it would not be unreasonable to review the ward boundaries after the 2018 Municipal Election, in preparation for the following election in 2022. The scope of the review could include a high level consideration of planned growth versus actual growth to determine whether a more in-depth review is required.
28. Even with the incredible amount of effort undertaken to prepare the 2012 City of Barrie Growth Management Study, it is a prediction of future household and population growth, and not a guarantee of the timeframes identified in the Study. Plans for development could be impacted by appeals of the planning decisions associated with the Study, appeals of individual applications, financial institutions' lending policies and more importantly, changes in economic conditions resulting in slower than forecasted development.
29. The scope of the planned growth for the community and its focus in the southern portion of the municipality, in conjunction with the lack of certainty with respect to the actual construction of the planned units in the identified timeframes, warrant a focus on Options that address 2014 and 2018, rather than 2022. As a result, it is staff's recommendation that the ward boundary review recommendation address 2014 and 2018.

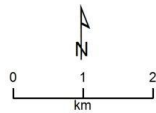
Report Findings – Existing and Optional Ward Boundary Configurations

30. The following portion of the Staff Report is a summary of the Consultant Team's findings with respect to the existing ward boundary configuration as well as three options for ward boundary changes. As any new ward boundaries would not become effective until 2014 and the recommended motion is to focus on Options that address 2014 and 2018, the information in the Staff Report has been limited to the 2014 and 2018 forecasts. The full report including forecasts for 2022 are included as Appendix "A".

Existing Boundaries



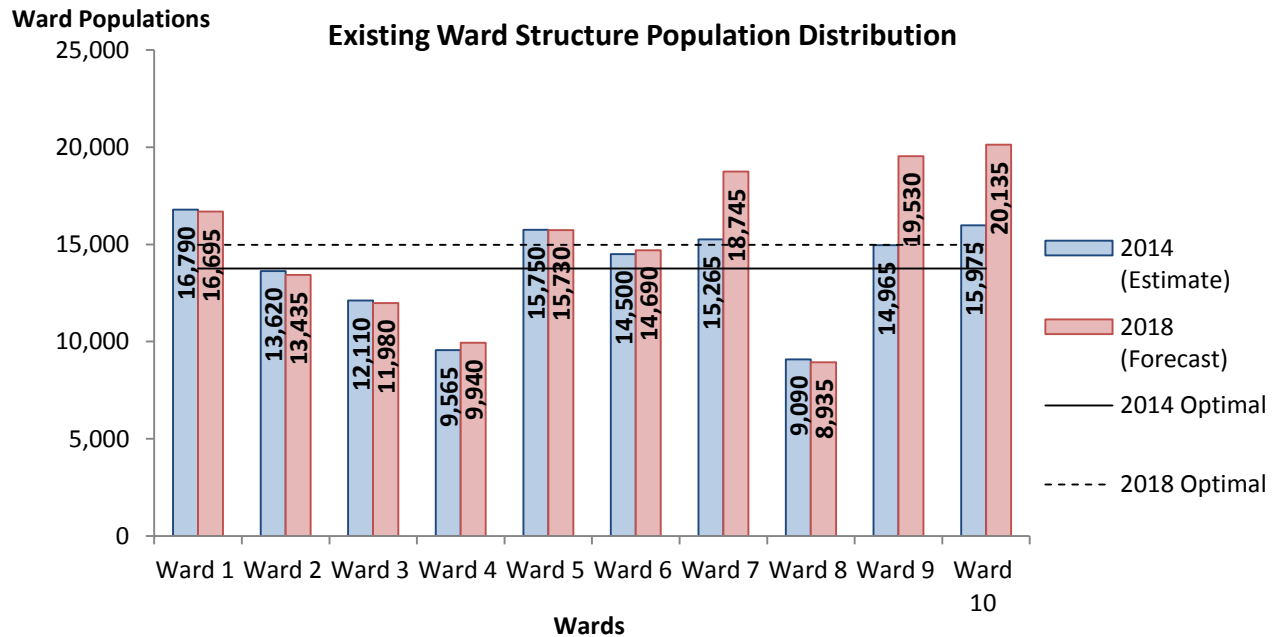
In association with:
Dr. Robert J. Williams



**CITY OF BARRIE
EXISTING WARD STRUCTURE**

2013 Ward Boundary Review

31. The estimates for 2014 (when the next municipal election is scheduled) and 2018 forecasts are presented below:



Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams
Excludes Census undercount of approximately 4%

32. The following is an overall summary provided by the Consultant Team with respect to the existing ward structure when evaluated against the guiding principles, specifically for the review for the years 2014 and 2018 only:

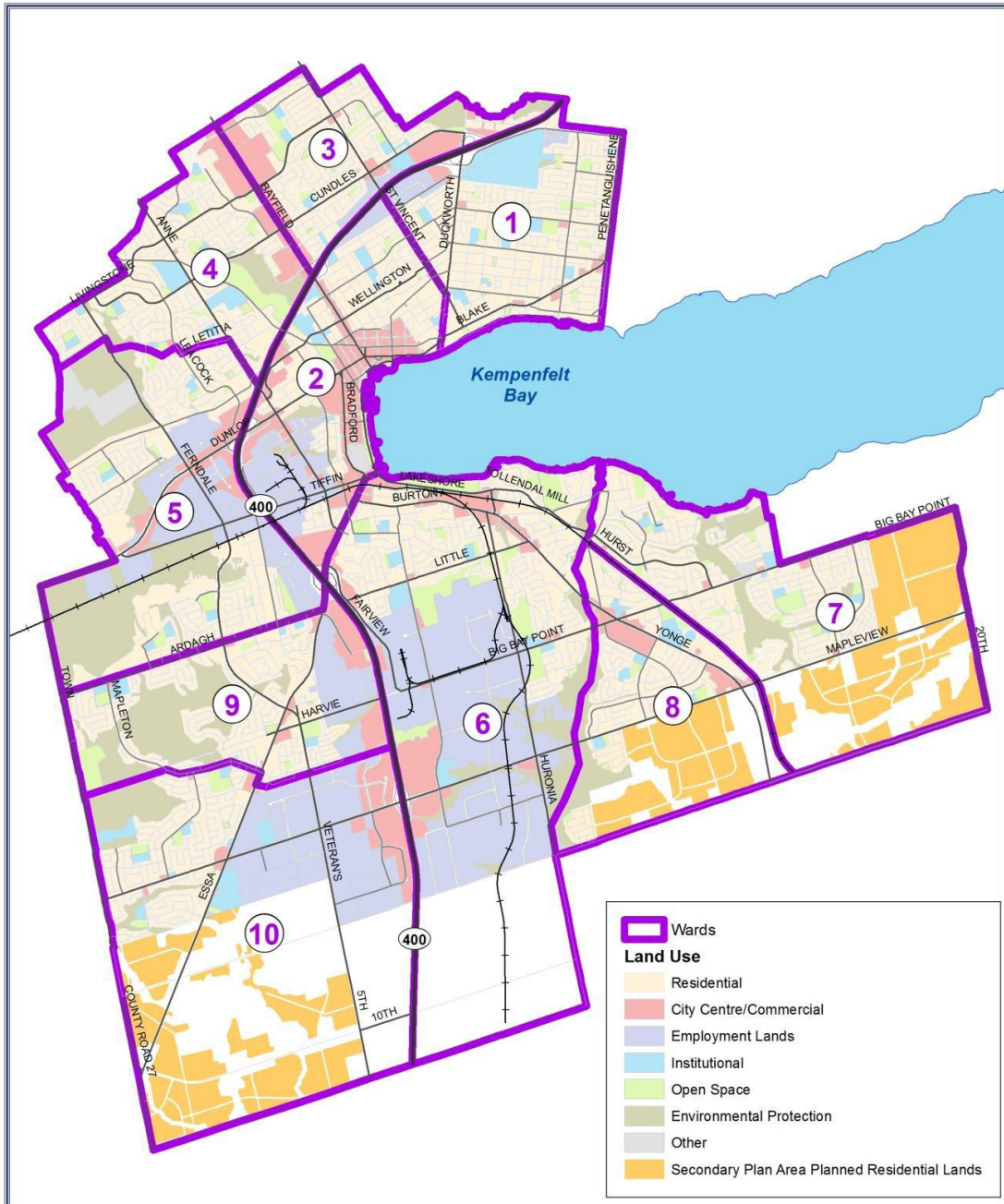
Existing Ward Boundary Configuration Evaluation Summary

Principle	Evaluation	Comment
Representation by Population	No	Only two wards are optimal, two wards below range of variation.
Population & Electoral Trends	No	Two wards are optimal in 2018; two outside range below, two outside range above, one at limit
Means of Communication & Accessibility	Yes	Hwy 400, GO railway line, Bayfield, Dunlop used as dividers; only one unfavourable line (between Wards 6 and 7).
Geographical & Topographical Features	Yes	Major natural features respected in ward boundaries.
Community or Diversity of Interests	Mixed	Ward 1-2 boundary divides similar neighbourhoods; also Ward 4-5 boundary. Others are favourable. Ward 2 increasingly less coherent with intensification.
Effective Representation	No	Population imbalances dilute votes of many electors. Ward 8 includes non-adjointing communities. Ward 4: small population, small area. Wards 7-9-10 large populations, large areas.

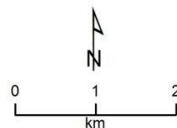
Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

33. The Consultant Team concluded that the existing ward boundary configuration does not meet the expectations for three of the six principles. As the trend in the representation by population is anticipated to only grow worse over time, maintaining the existing ward boundaries is not recommended.

Option 1 Ward Structure - Recommended Option



In association with:
Dr. Robert J. Williams

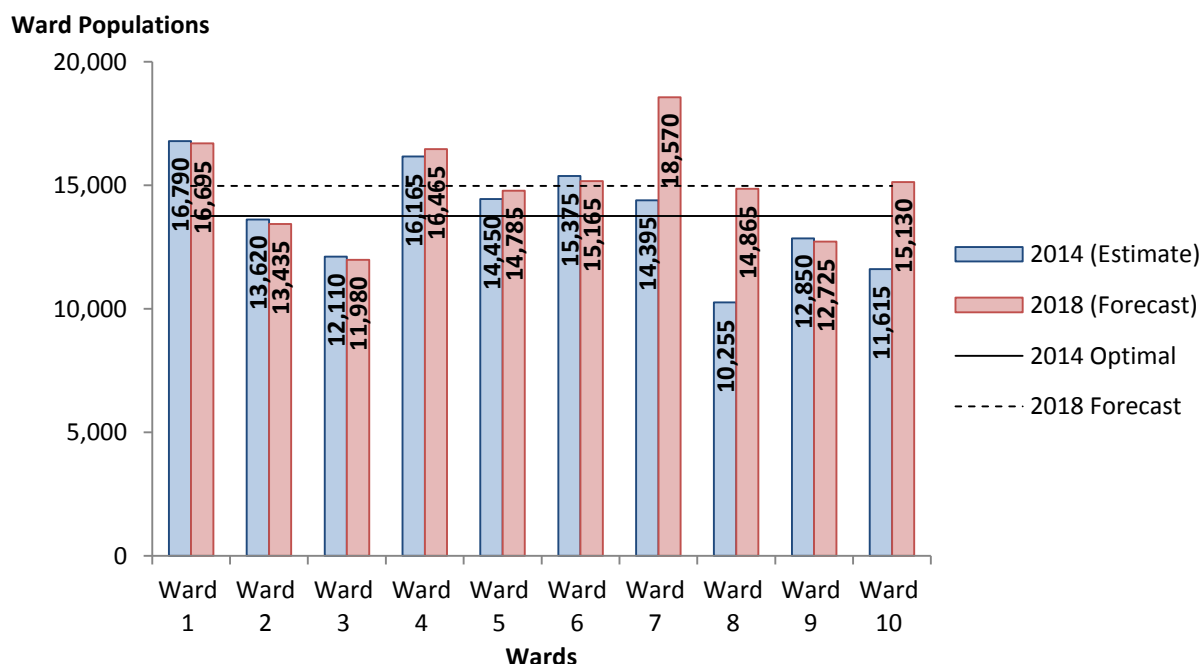


**CITY OF BARRIE
OPTION ONE WARD STRUCTURE**

2013 Ward Boundary Review

34. The Option 1 Population Distribution by Ward estimates for 2014 (when the next municipal election is scheduled) and 2018 Forecast are presented below:

Option 1 Ward Structure Population Distribution



Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams
Excludes Census undercount of approximately 4%

35. The following is an overall summary provided by the Consultant Team with respect to the Option 1 ward structure when evaluated against the guiding principles, specifically for the review for the years 2014 and 2018 only:

Option 1 Ward Boundary Configuration Evaluation Summary

Principle	Evaluation	Comment
Representation by Population	Yes	Only three wards are optimal, but all within the defined range of variation for 2014.
Population & Electoral Trends	Yes	Design plausible for 2018. Four wards are optimal in 2018; one at limit of range.
Means of Communication & Accessibility	Yes	Hwy 400, GO railway line, Bayfield used as dividers; some less traditional lines (between Wards 4 and 5, 9 and 10).
Geographical & Topographical Features	Yes	Natural features used extensively. Major natural features respected in ward boundaries.
Community or Diversity of Interests	Mixed	Ward 1-2 boundary divides similar neighbourhoods; also Ward 4-5 boundary. With the exception of the proposed Ward 5, others good. Ward 2 increasingly less coherent with intensification.
Effective Representation	Mixed	Acceptable level of population imbalances related to the dilution of votes. Proposed Ward 5 includes non-adjointing communities. Area-population relationship works against effective representation.

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

Evaluation of Options 2 and 3 Ward Structures

36. A detailed analysis of each of the options is included in the City of Barrie Ward Boundary Review Report attached as Appendix “A”. The following is an overall summary provided by the Consultant Team with respect to Options 2 and 3 structures when evaluated against the guiding principles, specifically for the review for the years 2014 and 2018 only:

Options 2 and 3 Ward Boundary Configurations Evaluation Summary

Principle	Option 2 Evaluation	Comment	Option 3 Evaluation	Comment
Representation by Population	No	Four wards outside the defined range of variation in 2014. Two wards at optimal size.	No	Only one ward is optimal, but one ward below range in 2014. All others within the defined range of variation with one at top extremity in 2014.
Population & Electoral Trends	No	Population distribution uneven for 2018. Two wards are optimal in 2018. Two wards outside range in 2018.	Yes	Three wards are optimal in 2018; one at lower limit of range in 2018.
Means of Communication & Accessibility	Yes	Hwy 400, GO railway line and BCRY, Tiffin Street used as dividers; some less traditional lines (between Wards 5 and 6, 9 and 10).	Yes	Many familiar transportation corridors retained with new components added. Hwy 400 not used in its entirety; some less traditional lines incorporated into design.
Geographical & Topographical Features	Yes	Major natural features respected in ward boundaries.	Yes	Natural features used effectively. Major natural features respected in ward boundaries.
Community or Diversity of Interests	Mixed	Ward 1-2 boundary divides similar neighbourhoods; also Ward 3-4 boundary. With the exception of the proposed Ward 5, others good. Ward 2 increasingly less coherent with intensification.	Mixed	Seven of the wards contain conventional groupings of neighbourhoods. Proposed Wards 2 and 8 include adjoining areas across Highway 400; Ward 5 a novel combination of Bayshore neighbourhoods. Downtown core divided.
Effective Representation	No	Population imbalances dilute votes of many electors. Proposed Ward 5 more linear than compact. Area-population relationship works against effective representation in the south.	No	Population imbalances dilute votes of many electors. Downtown communities divided. Area-population relationship works against effective representation.

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

Recommended Option

37. By focusing on 2018 timeframe as the anticipated conclusion of the revised ward structure, the benefits associated with changing the ward boundaries are apparent. The disparity between population from the ward with the lowest population and the ward with the highest population is anticipated to increase from 7,695 in 2013 to 11,200 in 2018.
38. Option 1 (with a revised numbering of the wards) is being recommended. In reviewing, the three options presented by the Consultant Team, the Option 1 ward structure reduces the inequity between lowest and highest ward population in the 2014 timeframe the greatest (1,170 and 1,165 respectively), as compared to the existing ward structure. While the Option 3 ward structure reduces the difference between the low and high population wards by a greater amount than Option 1 (650 persons), this number is reliant on forecasted growth occurring as planned.
39. In terms of the principle of Representation by Population, three of the wards in the Option 1 structure would have populations within +/- 5% of the Optimal population. All of the wards would be within +/- 25% (range of variation) in 2014. In reviewing the Population and Electoral Trends principle, four of the wards in the Option 1 structure would have populations within +/- 5% of the Optimal population in 2018. Eight of the wards except two would be within +/- 15% of the Optimal Population in 2018, and none would be outside of the acceptable range of variation (+/- 25%). The chart below illustrates the population forecasts for Option 1 for 2014 to 2018:

Ward	2014 (Estimate)	2018 (Forecast)
Ward 1	16,790	16,695
Ward 2	13,620	13,435
Ward 3	12,110	11,980
Ward 4	16,165	16,465
Ward 5	14,450	14,785
Ward 6 (similar to existing ward 8)	15,375	15,165
Ward 7 (similar to existing ward 10)	14,395	18,570
Ward 8 (similar to existing ward 9)	10,255	14,865
Ward 9 (similar to existing ward 6)	12,850	12,725
Ward 10 (similar to existing ward 7)	11,615	15,130

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams
Excludes Census undercount of approximately 4%

40. Both the Means of Communication and Accessibility principle and Geographical and Topographical Features principle are achieved in Option 1. The Community or Diversity of Interests principle is deemed by the Consultant Team to be accomplished with mixed results as the boundary between Ward 1 and 2 divides similar neighbourhoods, as well as the one between Wards 4 and 5. More significantly, the proposed Ward 5 has two separated neighbourhoods. It should be noted that the boundary between Ward 1 and 2 is the same as the current boundary.
41. The Consultant Team determined that the Effective Representation principle was not achieved in the Option 1 ward structure design (or in any of the structures) due to population imbalances, the non-adjointing communities in Ward 5 and the population variation and area aspect (larger populations in smaller geographic areas being preferred). However, the attainment of the principle was impacted by the consideration of the 2022 population numbers. Restricting consideration to the 2018 populations improves the realization of this principle, which is somewhat subjective and it is acknowledged as improving on the existing communities of interest.

42. Option 1 represents the ward structure that is closest to the existing ward structure. The numbering of the wards in the recommended ward structure in Appendix “B” has been modified to more closely reflect the existing ward numbering.

ENVIRONMENTAL MATTERS

43. There are no environmental matters related to the recommendation regarding revised ward boundaries.

ALTERNATIVES

44. The following alternatives are available for consideration by General Committee:

Alternative #1

General Committee could maintain the existing council size and ward boundaries for the 2014 Municipal Election and review both matters (or the ward boundaries alone) in preparation for the 2018 Municipal Election.

The significant disparity in the populations of the existing wards would continue (and increase to an extent) until the 2018 Municipal Election, another four years after this term is completed.

Based on the survey of comparator municipalities, the current size and composition of Council is not outside the norm for a municipality of Barrie’s size.

Alternative #2

General Committee could recommend the Option 2 ward structure, effective for the 2014 Municipal Election.

The Option 2 ward structure would increase the gap between the lowest and highest ward populations in 2014 and 2018 and is only anticipated to begin to decrease the gap beyond 2022. Relying on the population growth to happen as planned is a key consideration for this Option, as it has the longest view.

Alternative #3

General Committee could recommend the Option 3 ward structure, effective for the 2014 Municipal Election.

The Option 3 ward structure would reduce the difference between the lowest and highest ward populations as compared to the existing ward structure. The decrease in the gap would not be as large as in Option 1 in 2013/2014, but is anticipated to be improvement over Option 1 in 2018. It divides the City Centre into two different wards and allows wards to cross boundaries. These are not negative matters, merely a different approach to dividing the wards that may have alternative advantages.

Alternative #4

General Committee could alter the boundary lines on any of the proposed Options.

This alternative will result in different population numbers that would need to be determined through additional GIS modelling. It would be prudent to review the revised boundaries against the six principles, to determine whether they are supportable, if appealed to the Ontario Municipal Board.

Alternative #5

General Committee could alter the ward numbers on any of the proposed Options.

This alternative is available. Any change to ward boundaries will require significant communication effort as part of the 2014 Municipal Election and beyond.

FINANCIAL

45. There are no direct financial implications for the Corporation resulting from the proposed recommendation to alter the City's ward boundaries.

LINKAGE TO 2010-2014 COUNCIL STRATEGIC PLAN

46. The recommendation(s) included in this Staff Report are not specifically related to the goals identified in the 2010-2014 City Council Strategic Plan, although a more equitable allocation of Councillors across the City may result in improved communications and interactions with residents.

APPENDIX "A"

CITY OF BARRIE WARD BOUNDARY REVIEW REPORT
PREPARED BY WATSON & ASSOCIATES ECONOMISTS LTD.
IN ASSOCIATION WITH DR. ROBERT WILLIAMS,
DATED MAY 14, 2013

CITY OF BARRIE
WARD BOUNDARY REVIEW

In Association with:
DR. ROBERT J. WILLIAMS

MAY 22, 2013



Plaza Three
101-2000 Argentia Rd.
Mississauga, Ontario
Canada L5N 1V9

Phone: (905) 272-3600

Fax: (905) 272-3602

e-mail: info@watson-econ.ca

www.watson-econ.ca

 **Planning for growth**

CONTENTS

	<u>Page</u>
1. INTRODUCTION	
1.1 Terms of Reference	1-1
1.2 Why A Ward Review Now	1-1
1.3 Barrie's Ward Boundary Review Process	1-3
1.4 The Size of Council Issue	1-4
1.5 Guiding Principles	1-5
1.6 Why Representation by Population and Not Electors	1-7
2. EXISTING POPULATION AND FORECAST GROWTH	
2.1 City of Barrie Overview	2-1
2.2 Existing (2013) Population and Structure	2-2
2.3 City-Wide Population and Housing Forecast, 2013-2022	2-2
2.4 GIS Data Modelling	2-4
2.5 Anticipated Population Growth by Geographic Area, 2014-2022	2-5
3. THE STATUS QUO: AN EVALUATION	
3.1 Barrie's Existing Ward Structure	3-1
3.1.1 Representation by Population	3-1
3.1.2 Population and Electoral Trends	3-3
3.1.3 Means of Communication and Accessibility	3-3
3.1.4 Geographic and Topographical Features	3-4
3.1.5 Community or Diversity of Interests	3-4
3.1.6 Effective Representation	3-4
3.1.7 Overall Evaluation	3-5
3.2 Barrie's Existing and Forecast Population Structure under Current Ward System	3-6
4. ALTERNATIVES	4-1
4.1 Option One	4-1
4.1.1 Representation by Population	4-1
4.1.2 Population and Electoral Trends	4-3
4.1.3 Means of Communication and Accessibility	4-4
4.1.4 Geographic and Topographical Features	4-4
4.1.5 Community or Diversity of Interests	4-5
4.1.6 Effective Representation	4-5
4.1.7 Overall Evaluation	4-6
4.2 Option Two	4-7
4.2.1 Representation by Population	4-7
4.2.2 Population and Electoral Trends	4-9
4.2.3 Means of Communication and Accessibility	4-10
4.2.4 Geographic and Topographical Features	4-10
4.2.5 Community or Diversity of Interests	4-10
4.2.6 Effective Representation	4-11
4.2.7 Overall Evaluation	4-12

CONTENTS

	<u>Page</u>
4.3 Option Three	4-13
4.3.1 Representation by Population	4-13
4.3.2 Population and Electoral Trends	4-14
4.3.3 Means of Communication and Accessibility	4-16
4.3.4 Geographic and Topographical Features	4-16
4.3.5 Community or Diversity of Interests	4-16
4.3.6 Effective Representation	4-17
4.3.7 Overall Evaluation	4-18
5. CONCLUSIONS AND RECOMMENDATIONS	5-1
<u>APPENDICES</u>	
A 2013 CITY OF BARRIE WARD BOUNDARY REVIEW PRINCIPLES	A-1

1. INTRODUCTION

1. INTRODUCTION

1.1 Terms of Reference

In February 2013, Watson & Associates Economists Ltd. (Watson & Associates) in association with Dr. Robert J. Williams, hereafter referred to as the Consultant Team, was retained by the City of Barrie to conduct a ward boundary review. Watson & Associates and Dr. Williams have jointly conducted a number of ward boundary reviews for municipalities across Ontario, including the Towns of Bradford West Gwillimbury and Gravenhurst.

Watson & Associates is one of Canada's leading land economics firms, known for their quality of analysis and insightful interpretation of the issues at hand. Watson & Associates has served municipalities, school boards, provincial ministries/agencies (and to a limited extent, landowners) throughout Ontario for more than 30 years. Over this time period, the firm has undertaken numerous studies related to housing and population forecasting, growth management studies and ward boundary reviews. Watson & Associates has carried out over 20 studies for the City of Barrie during the past decade including, most recently, the Barrie Growth Management Strategy (2012) and the 2012 Development Charge Background Study. Further, as part of the consulting team retained by the City to prepare the South Barrie Secondary Plan, Watson & Associates has prepared a fiscal impact study for the Annexed Area and has also developed detailed growth allocations by traffic analysis zone to inform the infrastructure master plans. These studies provide direct experience related to the subject assignment.

Dr. Robert Williams is a retired faculty member from the Department of Political Science at the University of Waterloo. During his 35-year career, Dr. Williams' research and teaching has included municipal government and electoral systems. Dr. Williams has served as an expert witness in nine OMB hearings on ward boundaries. Since retirement he has conducted independent ward boundary reviews for Kitchener, Milton, Whitchurch-Stouffville, Windsor, New Tecumseth, Oakville and Markham.

1.2 Why A Ward Review Now

Barrie City Council is comprised of eleven members, including the Mayor and ten ward Councillors. Barrie's ward boundaries were last reviewed in 2002 and the resulting adjustments to the ward boundaries were made effective for the 2003 municipal election. The City's population in 2002 was approximately 109,000¹ and since that time, the City has experienced

¹ Estimate derived by Watson & Associates Economists Ltd.

significant population growth. As of 2013, the City's population is estimated to be 137,000, an increase of 26% from 2002.¹

To accommodate future growth, the Province took steps to adjust the City's urban boundary and added land to the City. On June 4, 2009, *Bill 196 the Barrie-Innisfil Boundary Adjustment Act, 2009* was introduced. The legislation extended the southern boundary of Barrie to include 2,293 hectares (5,700 acres) of land previously in the Town of Innisfil. Bill 196 received Royal Assent on December 16, 2009 and came into effect on January 1, 2010. Ontario Regulation 501/09 altered the City of Barrie's ward boundaries for the 2010 municipal election by extending existing wards 7, 8, 9 and 10 southward to cover the Annexed lands and was considered a temporary measure.

With the strong population growth experienced over the past decade and changes to the geographic area of the City of Barrie, there is a need to review the City's existing ward boundary structure, including an assessment of the current population distribution between the wards. Based on 2013 population estimates, the average population per ward should optimally be 13,700²; however, two wards (Wards 4 and 8) have populations less than 10,000, while four wards (Wards 1, 5, 7, and 10) have populations greater than 15,000, as presented in Figure 1. Only four wards (Wards 2, 3, 6 and 9) are reasonably well balanced in terms of population. Forecast population growth over the next decade, largely concentrated in South Barrie within the Annexed lands, is expected to exacerbate the imbalance in population by ward. Based on this preliminary assessment, there is a need to review Barrie's existing ward boundaries and generate alternative configurations that may serve the City better moving forward.

Figure 1
City of Barrie
Population by Ward, 2013

Ward	Population
Ward 1	16,715
Ward 2	13,650
Ward 3	12,160
Ward 4	9,540
Ward 5	15,740
Ward 6	14,415
Ward 7	15,175
Ward 8	9,020
Ward 9	14,970
Ward 10	15,610
Total	136,985
Average	13,700

Source: Watson & Associates Economists Ltd.

¹ 2013 estimate by Watson & Associates Economists Ltd.

² City-wide population of 136,985 divided by 10 wards = approximately 13,700.

1.3 Barrie's Ward Boundary Review Process

In Ontario municipalities, the review of electoral boundaries is not subject to a standardized process. The decision to undertake a ward boundary review (that is, the timing of a review) is entirely at the discretion of each municipal Council. The *Municipal Act, 2001*, at section 222 (1), authorizes a municipality "to divide or redivide the municipality into wards or to dissolve the existing wards" through a by-law. Furthermore, despite a statement in the *Municipal Act* that the Minister "may prescribe criteria," none actually exist.

Because of the Act's silence, it is therefore up to each municipality 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.

On the basis of a recommendation from the City Clerk under the City's 2012 Business Plan, an RFP for consulting services to conduct a Ward Boundary Review was issued in January 2013. The contract for this project was awarded to the Consultant Team, who was engaged "to conduct a comprehensive review of Barrie's ward boundaries to develop an effective and equitable system of representation with reference to overall projected growth within the municipality," with the revised ward structure to be in place for the 2014 municipal election. The overall expectations and parameters for the ward boundary review, as well as principles to be followed, are summarized in Section 1.5 herein. The review will enable Council to make a decision within the timeline anticipated in Section 222 of the *Municipal Act*.

Initial consultations were held by the Consultant Team with a number of stakeholders in February 2013. This included the Mayor, Council members, senior City staff, and representatives of the Simcoe County District School Board, the Simcoe Muskoka Catholic School Board and the Downtown BIA. These discussions were designed to understand and evaluate the operation of the present ward system and to determine what directions might be considered in developing options for the future.

In March 2013, ten-year population forecasts and a GIS-based growth modelling system were prepared by the Consultant Team and a number of ward boundary configuration alternatives were developed and tested. This led to the development of four preliminary ten-ward alternatives which were presented and discussed at three public information meetings in April 2013 where comments were solicited through an evaluation comment sheet. Maps of the preliminary alternatives, background information and the comment sheet were also made available on a dedicated project webpage through the City's website. Additional comments were invited through a dedicated email address. Based on consultation feedback and further refinement, three ten-ward boundary alternatives were finalized (hereafter referred to as the Options) and are presented herein.

This report and its recommendations will be directed to the General Committee of Council for action at its May 27, 2013 meeting.

1.4 The Size of Council Issue

The parameters for the 2013 Ward Boundary Review include the following statement: “Provide options for a re-alignment of the existing ten (10) wards and for a change in the number of wards, if deemed appropriate.” The possibility that additional ward boundary options could be developed in conjunction with a change in the size of Barrie’s municipal Council was raised and endorsed by some members of the community during public consultations sessions.

Under 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 issues require separate decisions since the latter matter may be appealed to the Ontario Municipal Board but not the former.

As such, this review was not designed to provide specific evidence for changing the composition of the City’s Council or to undertake an analysis of governance arrangements in the City of Barrie. Accordingly, this report does not address a Council of a different size or for a different number of wards and the Options developed and assessed in this report are all designed to elect ten City Councillors in ten wards.

The decision to change the number of ward Councillors is a matter that should be addressed at the outset, rather than as a way to get around the consequences resulting from the application of the guiding principles. Indeed sound governmental practices suggest that considerations around the composition of Council would be better addressed as a foundation for, rather than as consequences of, a change to the electoral system.

The determination of the appropriate size for a municipal Council is another key issue that is overlooked in the *Municipal Act*. There is no provincial guidance, prescription or “rule of thumb” to determine the size of a municipal Council. An appropriate size likely depends on a range of factors, including governmental practices such as cost, workload and Council operations (committees and the like), as well as an evaluation of what might be called the representative norms in the City (such as the customary responsibilities of part-time councillors). Further, the analysis contained in this report suggests that a ten-ward design is viable. In addition, there is no certainty that additional options for a larger or smaller Council will be any better at meeting the criteria associated with the guiding principles than the ten-ward Options.

1.5 Guiding Principles

As criteria for ward boundary reviews have not been addressed in provincial legislation, the principles included in the RFP for this study were designed to reflect principles cited in Ontario Municipal Board decisions with respect to appeals of ward boundary reviews and criteria adopted in recent ward boundary reviews across Ontario. The following provides a summary of the set of guiding principles established for evaluating the existing ward boundary structure and alternative Options presented herein. A verbatim list of the principles as found in the RFP is included as Appendix A of this report.

Representation by Population

One of the basic premises of representative democracy in Canada is the belief that the geographic areas used to elect a representative should be reasonably balanced with one another in terms of population. In a successful ward system, every Councillor will represent generally the same number of constituents. This figure will be referred to as the “optimal” size for a ward; as the overall population changes, the optimal size of a ward will also change.

Since, however, there will inevitably be variations in the densities and characteristics of residential neighbourhoods across the City, some flexibility in terms of representation by ward is acceptable. In the absence of guidance on this question in the *Municipal Act*, population variations of up to 25% above or below the optimal size will be considered acceptable, a range consistent with legislated federal redistribution provisions.

Population and Electoral Trends

It is generally not practical to change electoral boundaries for every election, hence, the wards designed in 2013 will accommodate anticipated changes in the size and distribution of the population and electors over the next two elections in 2014 and 2018 (at minimum). As in the previous principle, the goal is to design a system that will comprise wards that are generally in equilibrium to one another as growth takes place. The concept of an optimal ward size (with an associated range of variation) will be used to assess the success of the individual wards and the overall configuration.

Means of Communication and Accessibility

The theory and practice of political representation in Canada is built upon what has been termed the “principle of the representation of community.” The rationale is that electoral districts (including wards) should be more than arbitrary, random groupings of individuals that constitute an optimal size for electoral purposes.

Electoral districts should be designed to reflect common interests related to representation. This principle recognizes that there are “man-made” features that shape patterns of life within the City of Barrie (such as road patterns, railway and public transit accesses) and that ward designs should be mindful of the way residents move around the City, communicate with each other and participate in government services since these attributes foster such community identities.

Geographic and Topographical Features

Various “natural” features such as hills, valleys, waterways and the like, influence the physical layout of the City of Barrie. Residential neighbourhoods tend to be defined by such features. Green spaces serve as parks, trails or demarcations for neighbourhoods and communities. This principle recognizes that there are natural features that shape patterns of life within the City of Barrie and that ward designs should work within these features to keep wards compact and contiguous.

Community or Diversity of Interests

This principle addresses two perspectives: what is divided by ward boundaries and what is joined together. The first priority is that communities ought not to be divided internally; as a rule lines are drawn around communities, not through them. Secondly (as alluded to in relation to the previous two principles), wards should group together communities with common interests.

There are more than ten such communities of interest in Barrie, but only ten wards. Therefore, a ward will be a collection of discrete communities where there is some identifiable similarity, for example, in terms of the age, assessed value and configuration of housing, the life-stage and demographics of the residents and municipal service provisions and amenities.

Effective Representation

This principle attaches importance to a seemingly abstract idea derived from a case heard by the Supreme Court of Canada called “effective representation” that is, moreover, “overriding.” The case in question, the Reference re Provincial Electoral Boundaries (Saskatchewan) (1991), is commonly known as the *Carter* decision and is accepted as speaking to the development and evaluation of electoral boundaries at all levels in Canada.

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.” In simple terms, a variance in electoral populations can be tolerated in the quest for “effective representation.”

In this ward boundary review, “effective representation” will be the final test of any proposed ward system: it will be a kind of summary or comprehensive evaluation of the success of the five specific principles in meeting a series of applied tests. 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? Does the design offer effective and fair representation conducive to good government? In the absence of any direction from the Province through the *Municipal Act* or any other legislation or regulation, the ruling of the Supreme Court of Canada will be considered paramount.

1.6 Why Representation by Population and Not Electors

This ward boundary review considers representation by population (that is, both electors and non-electors) as the basis for the evaluation instead of just electors, consistent with the majority of ward boundary reviews undertaken in Ontario. There are several reasons for this:

First, the argument found in the *Carter* decision emphasizes the process of representation – something that happens between elections – not just the number of voters in an electoral district on the day of voting. The process of representation 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 and elected officials do not only arise from electors but from non-citizens, as well as 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). For this reason the population of the wards is arguably more important than the number of electors living in the ward.

Secondly, since one of the principles requires that the ward boundaries anticipate future growth, it would be necessary to make assumptions about the number of eligible electors residing in the growth areas to generate growth projections. Such projections would require an analysis of the relationship between eligible electors and the overall population among existing inhabitants and extrapolating those findings onto the new developments. Given the difficulty in compiling such data at the level of detail required for this study, the Consultant Team has only considered representation by population in this study.

Finally, the *Electoral Boundaries Readjustment Act* allocates seats in the House of Commons among and within the Provinces exclusively on the basis of population figures derived from the decennial census. Nowhere in that process is the number of electors calculated or applied to

the design of the representation system. Again, in the absence of legislative or regulatory guidance from the Province, practices are adopted to be consistent with statutory federal redistribution provisions.

2. EXISTING POPULATION AND FORECAST GROWTH

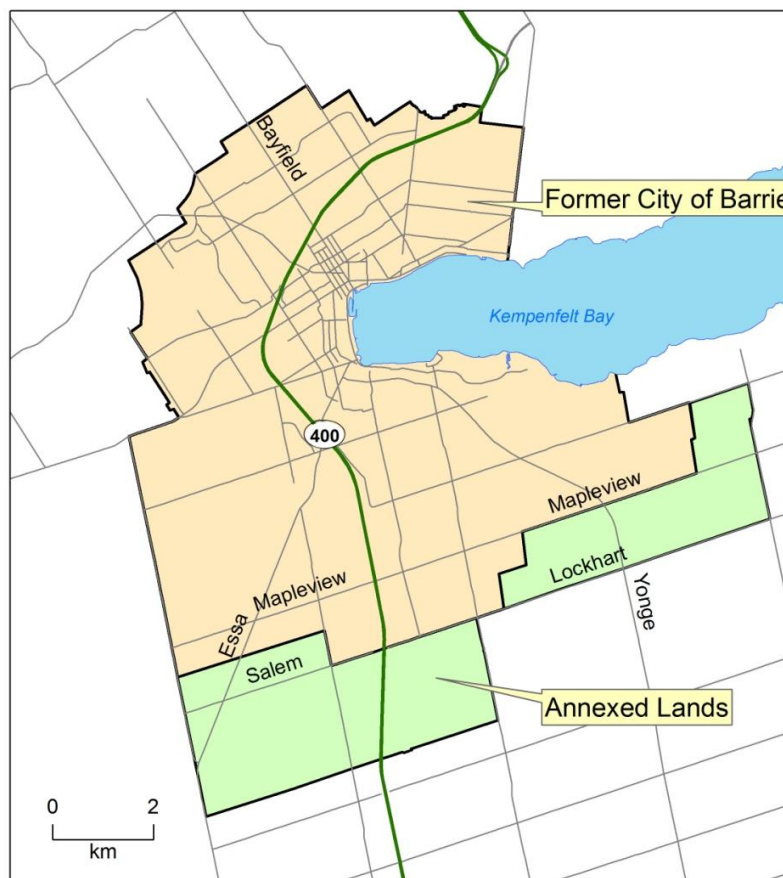
2. EXISTING POPULATION AND FORECAST GROWTH

2.1 City of Barrie Overview

Over the past decade, the City of Barrie has experienced significant population growth, growing from 103,700 in 2001 to 136,000 people in 2011, an increase of 31% over the period.¹ Barrie's current urban area is now approaching build-out and a significant share of growth over the forecast period is expected to occur within the Annexed lands, as illustrated in Figure 2.

Over the next decade, Barrie is forecast to experience significant population growth. Based on the growth forecast identified in the 2012 Barrie Growth Management Strategy, Barrie's population is expected to increase to 167,300 by 2022.²

Figure 2
City of Barrie – Former City and Annexed Lands



¹ 2001 and 2011 population based on 2001 and 2011 Census data, respectively. Population excludes Census undercount of approximately 4%.

² Barrie Growth Management Strategy growth forecast is consistent with the growth targets identified in Amendment 1 (2012) to the Growth Plan for the Greater Golden Horseshoe. Excludes Census undercount of approximately 4%.

2.2 Existing (2013) Population and Structure

According to the latest Statistics Canada Census, the City of Barrie had a 2011 population of 136,000. Building on the 2011 Census data, a City-wide 2013 housing and population estimate was derived based on 2011 and 2012 residential building permit activity and factoring in a decline in population in existing housing units. The Consultant Team estimates the 2013 City of Barrie population to be 136,985.¹

2.3 City-Wide Population and Housing Forecast, 2013-2022

Given the significant forecast population growth over the next decade, largely concentrated in South Barrie, it is critical that the ward boundary review assess not only representation by population for the next municipal election in 2014, but also for the 2018 and 2022 elections (if possible). As such, the Consultant Team prepared a City-wide population and housing forecast for Barrie for the 2013-2022 period using Watson & Associates' "household formation" model, based on the long-term growth forecast presented in the 2012 City of Barrie Growth Management Strategy prepared by Watson & Associates. The City of Barrie population and housing forecast for 2014, 2018 and 2022 is presented in Figure 3. As shown, the City's population is anticipated to increase to 137,600 in 2014, 149,800 in 2018 and 167,300 in 2022.¹ This represents an increase of 12,200 over the 2014-2018 period and 29,700 over the 2014-2022 period. The City is forecast to accommodate 5,974 new housing units over the 2014-2018 period and 14,270 housing units over the 2014-2022 period.

Figure 3
City of Barrie
Forecast Population and Housing Growth¹, 2013-2022

Year	Population (Excluding Census Undercount)	Population (Including Census Undercount) ²	Housing Units				Total Households
			Singles & Semi's (Low Density)	Townhomes (Medium Density)	Apartments (High Density)	Other	
2013	136,985	142,650	33,753	8,175	8,818	130	50,876
2014	137,630	143,325	33,978	8,300	8,918	130	51,326
2018	149,815	156,010	36,321	9,284	11,565	130	57,300
2022	167,300	174,220	39,251	11,474	14,741	130	65,596
2014-2018	12,185	12,685	2,343	984	2,647	0	5,974
2014-2022	29,670	30,895	5,273	3,174	5,823	0	14,270

Source: Watson & Associates Economists Ltd.

1. Derived from City of Barrie 2012 Growth Management Strategy prepared by Watson & Associates Economists Ltd.

2. Census Undercount estimated at approximately 4%.

The City-wide housing forecast was broken down between the former City of Barrie and the Annexed Area, based on the long-term growth forecast presented in the 2012 City of Barrie Growth Management Strategy and the phasing/timing of residential growth identified for the Annexed lands in the associated Secondary Plan studies. Figure 4 summarizes the forecast growth within the former City of Barrie and the Annexed Area over the 2014-2022 period. Of the

¹ Excludes Census undercount of approximately 4%.

total housing growth, approximately 80% (11,400 housing units) is expected to occur in the Annexed Area while 20% (2,800 housing units) of growth has been allocated to the former City of Barrie. The former City of Barrie is anticipated to accommodate residential growth through units in development approvals (registered un-built units, draft approved or pending approval), intensification and development of other designated residential lands.

Figure 4
City of Barrie
Forecast Population¹ and Housing Growth, 2014-2022

Geographic Area	Housing Unit Growth				Gross Population Increase	Population Decline in Existing Units	Net Population Change
	Singles & Semi's (Low Density)	Townhomes (Medium Density)	Apartments (High Density)	Total			
Former City of Barrie	528	1,220	1,090	2,838	6,330	4,125	2,205
Annexed Area	4,745	1,954	4,733	11,432	27,815	350	27,465
Total	5,273	3,174	5,823	14,270	34,145	4,475	29,670

Source: Watson & Associates Economists Ltd.

1. Population excludes Census undercount estimated at approximately 4%.

The population associated with new housing units (gross population) within the former City of Barrie is based on the housing mix and average number of persons per new dwelling type based on custom PPU¹ data derived from the 2012 Growth Management Strategy. Similarly, gross population estimates for the Annexed Area are based on housing mix and average number of persons per new dwelling type based on custom PPU¹ data consistent with the Secondary Plan for the Annexed lands.

The population decline in the former City of Barrie over the forecast period reflects a forecast decline in average occupancy levels in existing housing units based on the 2012 Growth Management Strategy. As in other communities in Ontario, the downward trend in housing occupancy in Barrie is driven by the continued aging of the population which increases the proportionate share of “empty-nester” and single occupancy households. However, Barrie’s population base is younger and is not aging as quickly as the provincial average, reflecting a decline which is not as significant as that in many other communities.

The net population change was determined by the population growth from new unit development (gross population) less the population decline in existing units. The former City of Barrie is expected to have a net population increase of 2,200 over the 2014-2022 period and the Annexed lands an increase in population of 27,500.

¹ Persons per unit (PPU)

2.4 GIS Data Modelling

The Consultant Team utilized geographic information systems (ArcGIS 10.1) software to present the existing City-wide population (2013), forecast growth (2013-2022) and future year 2014, 2018 and 2022 population in a spatial format on a neighbourhood/block level. GIS was also utilized to generate alternative ward boundary configurations and estimate existing and future year populations under each alternative.

The following provides a synopsis of how the spatial data was compiled and utilized.

Existing (2013) Population

The 2013 municipal population structure was developed on a GIS-based Census dissemination block level mapping basis, a level of sufficient detail for the purposes of this study. The 2011 Census dissemination block level population and housing data served as the basis for establishing the 2013 population base and the growth modelling exercise. To complete this, the Consultant Team used the 2011 Census dissemination block level data and to derive 2013 population, based on recent residential development activity over the 2011 to 2012 period, and factored in a decline in population in existing housing units over the period.

Forecast Growth (2013-2022)

The forecast (i.e. 2013-2022) housing and corresponding population growth by geographic area (i.e. former City of Barrie and Annexed Area) presented in Figure 4 was disaggregated to a dissemination block/neighbourhood level basis in GIS.

Growth within the former City of Barrie over the forecast period is expected to be accommodated in new residential development through units in the development approvals process (registered not built, draft approved, pending approval), intensification and other development potential on designated residential greenfield lands. The location/type of housing growth in development approvals was based on spatial/tabular data provided by the City of Barrie reflecting developments as of January 2013. The location, housing type and amount of intensification growth allocated were based on the 2012 Growth Management Strategy which identified intensification supply opportunities and forecast timing of development. Additional residential development on other designated greenfield lands was based on the 2012 Growth Management Strategy. Based on the forecast housing growth, a corresponding population in new units (based on the number of housing units anticipated to be constructed during the forecast period and PPU by housing type¹) was derived.

¹ Assumed persons per unit (PPU) based on data used in City of Barrie Growth Management Strategy.

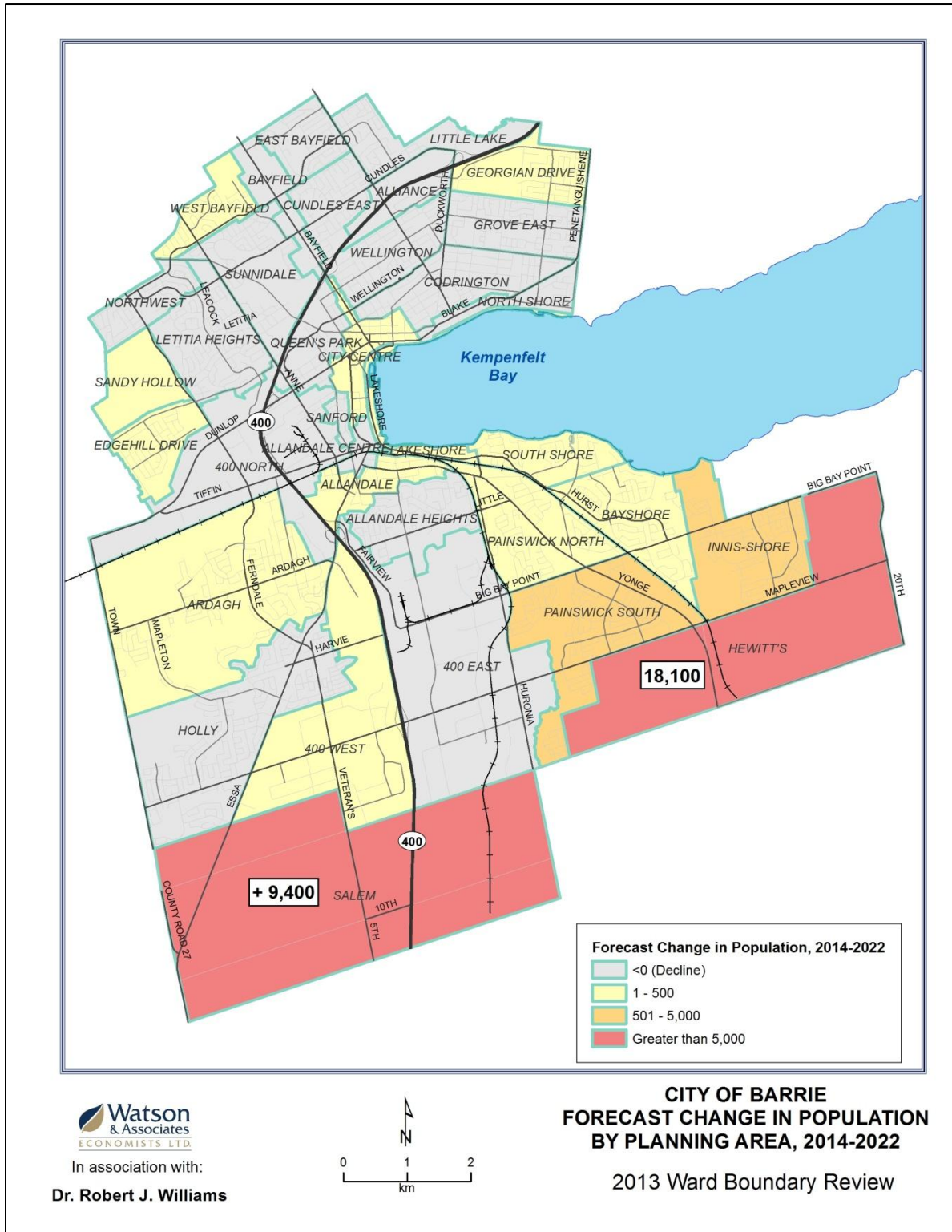
Population estimates for the Annexed Area were presented spatially on a neighbourhood level based on data derived from the City of Barrie Annexed Area Secondary Planning exercise.

Subsequently, a GIS layer with 2014, 2018, and 2022 population estimates on a dissemination block/neighbourhood level were derived consisting of existing residential units (reflecting existing unit population adjusted for the population decline) and new residential development growth.

2.5 Anticipated Population Growth by Geographic Area, 2014-2022

Map 1 illustrates the distribution of population growth over the 2014-2022 forecast period by City of Barrie Planning Area. As shown, the vast majority of forecast population growth is expected to be accommodated in South Barrie – within the Annexed Area and remaining greenfield areas. Within the Annexed lands, the population of Salem and Hewitt's is expected to increase by 9,400 and 18,100, respectively, over the forecast period. Some intensification is expected to occur within the City's downtown and major nodes/corridors within the built up area; however, the gross increase is partly offset by the decline in population in existing housing units.

Map 1



3. THE STATUS QUO: AN EVALUATION

3. THE STATUS QUO: AN EVALUATION

3.1 Barrie's Existing Ward Structure

The 2013 Ward Boundary Review in Barrie is directed to have regard for six principles in the development of an “effective and equitable system of representation.” Hence, it is not unreasonable to apply the same principles to the existing system of representation (a) to elaborate on and explain the application of these principles in relation to a design that Barrie residents will be familiar with and (b) to highlight the shortcomings that may have developed in the system designed in 2002 in terms of the principles that are guiding the 2013 Review.

This section reviews the City's existing ward structure against the identified guiding principles. The existing ward structure is presented in Map 2 for reference purposes.

3.1.1 *Representation by Population*

The goal of this review is to design a system of representation that achieves relative parity in the population of the wards, with some degree of variation acceptable in the light of population densities and demographic factors across the City. The indicator of success in a ward design is the extent to which the individual wards approach an “optimal” size. Based on the City's overall population and a ten-ward system, the optimal population size for 2013 and 2014 is 13,700 and 13,763, respectively, as summarized in Figure 5.

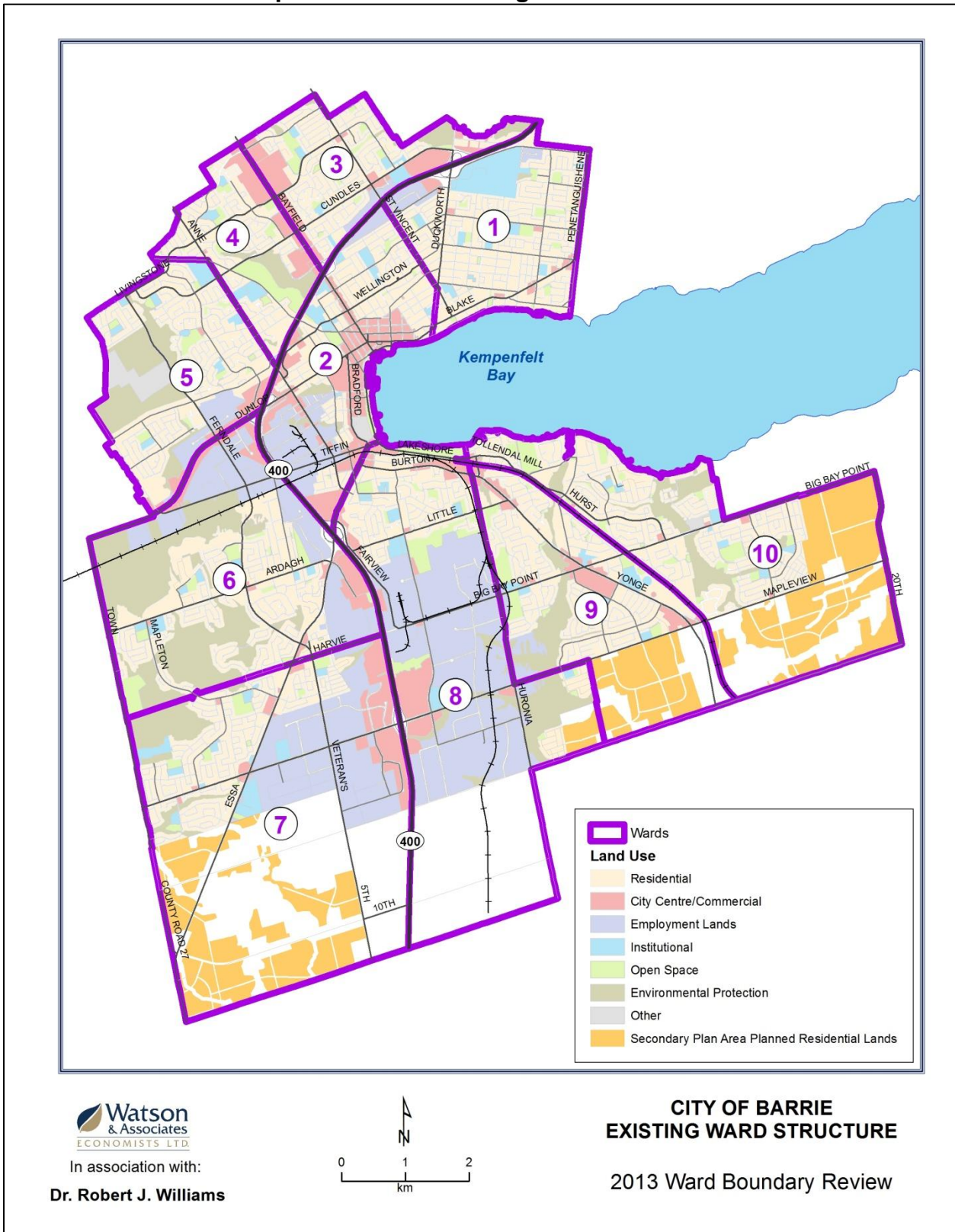
Optimal size, itself, can be understood as a mid-point on a scale where the term “optimal” (O) describes a ward with a population within 5% on either side of the calculated optimal size. The phrase “below/above optimal” (O+ or O-) describes a ward with a population between 6% and 25% on either side of the optimal size. A ward that is labelled “outside the range” (OR+ or OR-) indicates that its population is greater than 25% above or below the optimal ward size. The adoption of a 25% maximum variation is based on federal redistribution legislation.

Figure 5
Population by Existing Ward, 2013 and 2014

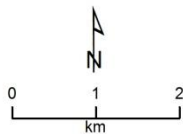
Ward	2013			2014 (Estimate)		
Ward 1	16,715	1.22	O +	16,790	1.22	O +
Ward 2	13,650	0.99	O	13,620	0.99	O
Ward 3	12,160	0.89	O -	12,110	0.88	O -
Ward 4	9,540	0.70	OR -	9,565	0.69	OR -
Ward 5	15,740	1.15	O +	15,750	1.14	O +
Ward 6	14,415	1.05	O	14,500	1.05	O
Ward 7	15,175	1.11	O +	15,265	1.11	O +
Ward 8	9,020	0.66	OR -	9,090	0.66	OR -
Ward 9	14,970	1.09	O +	14,965	1.09	O +
Ward 10	15,610	1.14	O +	15,975	1.16	O +
Total	136,985			137,630		
Optimal	13,700			13,763		

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

Map 2 – Barrie’s Existing Ward Structure



In association with:
Dr. Robert J. Williams



**CITY OF BARRIE
 EXISTING WARD STRUCTURE**

2013 Ward Boundary Review

The analysis illustrates that only two of the ten wards (Wards 2 and 6) are within the optimal category in 2013 and by the 2014 municipal election only the same two would be deemed optimal. Two other wards (Wards 4 and 8) are below the acceptable range of variation and, thus, render the entire design unsuccessful in meeting this principle.

3.1.2 Population and Electoral Trends

The second principle directs that wards be generally in equilibrium to one another as population growth takes place. Chapter 2 provided a detailed analysis of the forecast growth for Barrie and Figure 6 identifies 2018 and 2022 population forecasts for the existing ward boundary configuration. As shown, the imbalance in population in the present wards in 2013 and 2014 (as shown in Figure 5) will become more pronounced over the forecast period. Only two wards (Wards 5 and 6) are considered optimal in 2018 and four of the ten wards (Wards 4, 8, 9 and 10) are outside the 25% range of variation: two below and two above, with a fifth right at the upper limit. By 2022, only one ward is considered optimal (Ward 1) and six of the ten wards (Wards 3, 4, 7, 8, 9 and 10) are outside the 25% range of variation: three below and three above. This suggests strongly that the population inequities that have appeared in the present system under existing conditions will not correct themselves over time.

Figure 6
Forecast Population by Existing Ward, 2018 and 2022

Ward	2018 (Forecast)			2022 (Forecast)		
Ward 1	16,695	1.11	O +	16,400	0.98	O
Ward 2	13,435	0.89	O -	13,850	0.83	O -
Ward 3	11,980	0.80	O -	11,855	0.71	OR -
Ward 4	9,940	0.66	OR -	9,845	0.59	OR -
Ward 5	15,730	1.05	O	15,540	0.93	O -
Ward 6	14,690	0.98	O	14,550	0.87	O -
Ward 7	18,745	1.25	O +	24,520	1.47	OR +
Ward 8	8,935	0.60	OR -	11,075	0.66	OR -
Ward 9	19,530	1.30	OR +	25,835	1.54	OR +
Ward 10	20,135	1.34	OR +	23,835	1.42	OR +
Total	149,815			167,300		
Optimal	14,982			16,730		

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

3.1.3 Means of Communication and Accessibility

Significant “man-made” features – exclusively transportation corridors – that tend to be perceived as important barriers or boundaries between communities, are boundary lines in Barrie’s present ward structure. This includes Highway 400, the GO railway line, Bayfield Street, and Dunlop Street West. Some other roadways are also utilized (such as Anne Street north of Highway 400, Essa Road between Kempenfelt Bay and Highway 400 and Huronia

Road). The Ward 6 – 7 boundary that follows Harvie Road west of Essa Road is a less satisfactory delineation since Harvie Road is a residential street rather than an arterial roadway.

3.1.4 Geographic and Topographical Features

“Natural” features are not widely used in Barrie’s existing ward design, with two minor exceptions:

- The Ward 8-9 boundary between Kempenfelt Bay and the GO railway line which makes some use of green space north of Lakeshore Drive;
- A portion of the Ward 6-7 boundary that follows Harvie Road west of Essa Road cuts across green space between Mapleton Avenue and Town Line Road; and

Conversely, significant natural features such as the Ardagh Bluffs and the Bear Creek Wetlands are not divided by ward boundaries.

3.1.5 Community or Diversity of Interests

Given the heavy reliance on major arterial roadways (and the GO railway line) as ward boundaries in 2002, no significant communities or neighbourhoods are divided internally in the existing structure. Where boundaries cut across neighbourhoods of a similar age and housing stock (such as Anne Street above Highway 400 and St. Vincent Street below Highway 400), the principle is less clearly met.

The existing configuration of neighbourhoods across most of the City means that wards will naturally group together communities with common interests: neighbourhoods in the north and the south (especially the newest) are significantly different from one another but are not combined in a single ward. The coherence issue may arise in the present Ward 2 as intensification leads to more densely populated condominium communities built in proximity to the Kempenfelt Bay that are grouped together with older residential and commercial neighbourhoods in the downtown core and its northern fringes.

3.1.6 Effective Representation

The cumulative test for “effective representation” is probably more subjective than the evaluations applied to the previous five principles. Some indicators have already been discussed from another viewpoint but other perspectives are new. Together, they shed light on the capacity of the design to offer effective and fair representation conducive to good government in Barrie.

One of the implications of the population imbalance identified in sections 3.1.1 and 3.1.2 is that the voice of many residents is diluted in comparison to others; for example, the ±16,700 residents of the present Ward 1 are entitled to one representative but so are the ± 9000 residents of the present Ward 8. By 2022, the population of the present Ward 8 compared to the present Ward 9 dilutes the representation of residents of the latter. The Councillor-to-resident ratio is projected to vary from approximately 1:11,000 to 1:25,000 between the two wards. These variations are not consistent with the principle of effective representation and pose a challenge in delivering fair representation.

The discussion in section 3.1.5 suggests that, on the whole, the present structure successfully preserves and aggregates communities of interest. However, some wards are less than coherent units of representation because of their configuration; most notably, the present Ward 8 includes clusters of residential communities (Allandale and Allandale Heights on the one hand and newer neighbourhoods south of Mapleview and east of Huronia on the other) that are physically isolated from one another by extensive areas of employment lands, making effective representation more difficult to achieve. In addition, since the present Wards 8 and 10 extend from Kempenfelt Bay to the new southern municipal boundary with Innisfil, they are more linear than compact; this is not an ideal characteristic for a unit of representation.

Finally, the concept that a degree of population variation is acceptable (sections 3.1.1 and 3.1.2) is not only based on the distribution of population across the City but is also a tool to assist in achieving effective representation. One component of a ward design is ensuring that representatives can readily play the role expected of them as a voice for residents and communities; implicitly, a kind of rough trade-off between population and land area can be tolerated. It is not equitable to have one elected official to represent a large population dispersed across a large geographic area and another to serve a small population living in a comparatively compact area. In the present Barrie configuration, however, the ward with the smallest population (Ward 4) is also the smallest in land area. For the present Wards 7, 9 and 10, the opposite is the case with large populations spread over large areas. By 2022, the pattern is even more exaggerated. This relationship makes providing effective representation more difficult to achieve.

3.1.7 Overall Evaluation

This evaluation suggests that the existing ward boundary configuration does not meet the expectations for three of the six principles, as illustrated in Figure 7. Arguably these are the three principles most open to adaptation in the design of a ward system since the others must build on essentially permanent features of the municipal environment. In other words, it would be improbable that a review aiming to meet the principles set out for this Ward Boundary Review would recommend a structure using the existing ward boundaries.

Figure 7
Existing Ward Boundary Configuration Evaluation Summary

Principle	Evaluation	Comment
Representation by Population	No	Only two wards are optimal, two wards below range of variation.
Population & Electoral Trends	No	Two wards are optimal in 2018; two outside range below, two outside range above, one at limit Only one ward is optimal in 2022; three outside range below, three outside range above.
Means of Communication & Accessibility	Yes	Hwy 400, GO railway line, Bayfield, Dunlop used as dividers; only one unfavourable line (between Wards 6 and 7).
Geographical & Topographical Features	Yes	Major natural features respected in ward boundaries.
Community or Diversity of Interests	Mixed	Ward 1-2 boundary divides similar neighbourhoods; also Ward 4-5 boundary. Others are favourable. Ward 2 increasingly less coherent with intensification.
Effective Representation	No	Population imbalances dilute votes of many electors. Ward 8 includes non-adjointing communities. Ward 4: small population, small area. Wards 7-9-10 large populations, large areas.

3.2 Barrie's Existing and Forecast Population Structure under Current Ward System

Visually and numerically, the configuration of the existing ward structure reveals a kind of symmetry in Barrie's political structure and population distribution in 2013. The most significant barrier between communities in Barrie is Highway 400, a limited access highway that serves as a portion of the boundary for eight of the ten present wards. Five wards are located in an arc running north and west of Highway 400 (present Wards 3 to 7) and the five other wards are located south or east of Highway 400. In 2013, the population of the two groupings is reasonably balanced (i.e. 67,190 vs. 70,440), as shown in Figure 10. However, by 2018, the second grouping is projected to be significantly larger than the first (i.e. 71,085 vs. 78,730) and by 2022 the difference in population is expected to widen further (i.e. 76,305 and 90,995).

There is also a five-ward symmetry in relation to the population clusters in the north (Wards 1-5) and the south (Wards 6-10), as shown in Figure 8. This reflects a grouping (with the exception of the historic Allandale community at the north end of Ward 8) comprised largely of older, more mature neighbourhoods located roughly to the north of Kempenfelt Bay and comparatively newer (or yet to be constructed) communities in south Barrie. Like the previous groupings delineated by Highway 400, the population of the two north-south groups grows markedly less balanced over the next decade as the gap grows from about 2,000 more people in the south in 2014 (67,835 vs. 69,795) to approximately 22,000 more (67,485 vs. 99,815) in the south by 2022.

Figure 8**Population by Ward Grouping under Existing Structure, 2014, 2018 and 2022**

Ward Groupings	2014 Estimate	2018 Forecast	2022 Forecast
Highway 400 Division			
Existing Wards 3-7	67,190	71,085	76,305
Existing Wards 1-2, 8-10	70,440	78,730	90,995
North-South Division			
Existing Wards 1-5	67,835	67,780	67,485
Existing Wards 6-10	69,795	82,035	99,815

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

These two groupings, combined with the fixed transportation and natural features of Barrie noted above, have prompted the Consultant Team to develop two alternative designs that respect these parameters in different ways. A third alternative was developed that is more unconventional in design. These are presented in the following Chapter.

4. ALTERNATIVES

4. ALTERNATIVES

Four preliminary alternative ward boundary configurations were developed and presented at a series of public consultation sessions. Based on public feedback and further refinement, three potential ward boundary configurations (options) were developed and are presented herein.

The goal of this review is to design a system of representation that seeks relative parity in the population of the wards, with some degree of variation acceptable in the light of population densities and demographic realities across the City. However, the design of suitable ward alternatives is not dependent just on relative parity since it involves applying all six principles established for this review. The challenge is that sometimes a structure that best serves one principle cannot fulfill another with similar success. Therefore, ward design alternatives need to be assessed in terms of meeting as many of the six principles as possible and in terms of which principles are best realized. In the following evaluation, the three Options can be compared to one another in this manner.

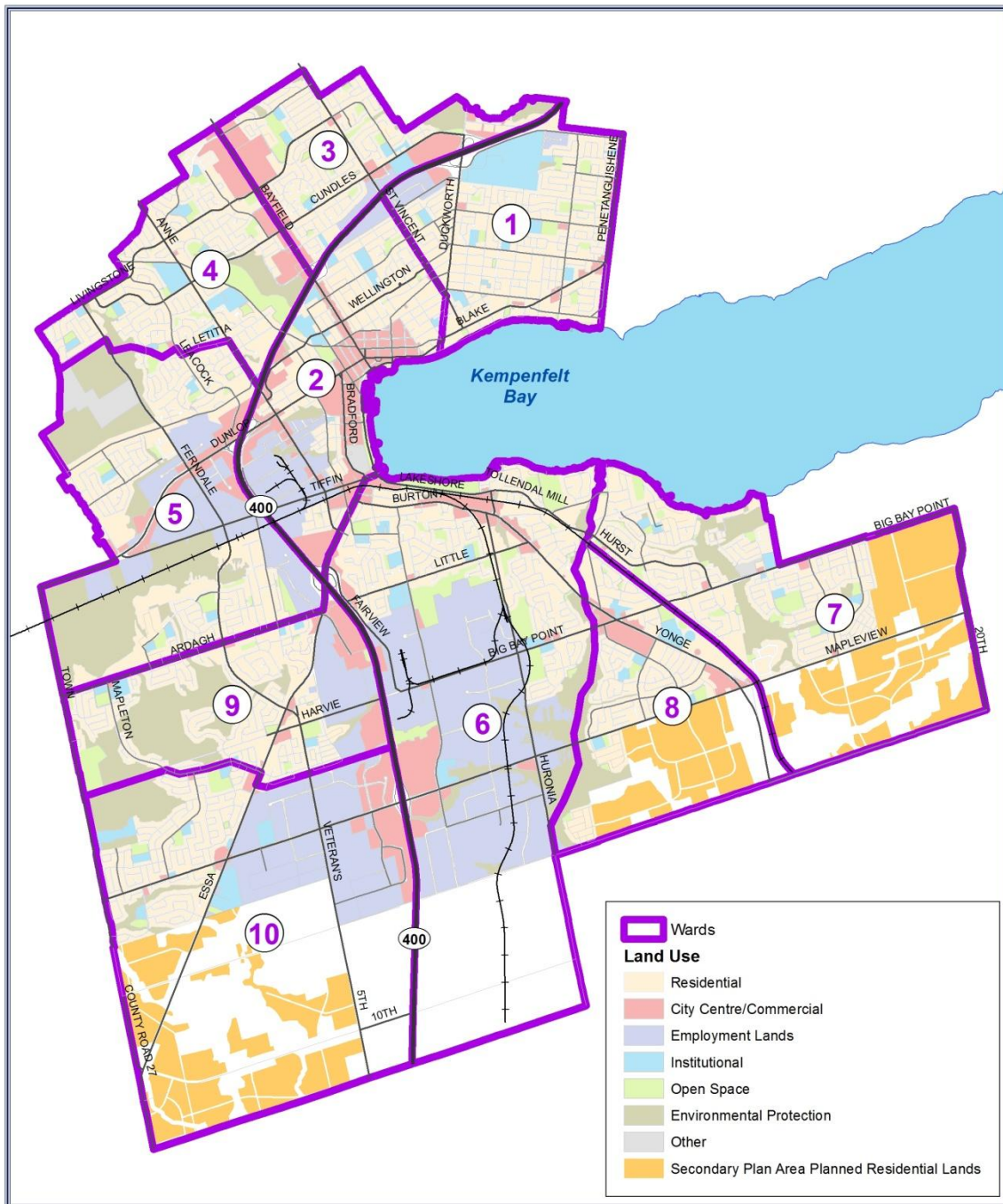
4.1 Option One

Option One, which is presented in Map 3, retains the symmetry discussed in Section 3.2 with five proposed wards north and west of Highway 400 and five located east and south of the Highway. The proposed five-ward clusters are similar to the existing design in relation to the population in northern and southern Barrie. However, Option One offers some improvements on the existing ward structure that are expected to be maintained through the 2018 election, but it develops into an unbalanced structure on the basis of the 2022 population forecast.

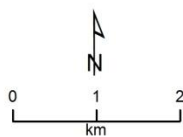
4.1.1 *Representation by Population*

Figure 9 presents the population by ward in 2013 and 2014 under Option One. As shown, three of the ten wards achieve the optimal designation (O) on the basis of the 2013 population figures and by the 2014 municipal election the same three would be deemed optimal. The population estimates for 2014 are all within the acceptable range of variation (O- or O+), although the proposed Ward 8 is just below the threshold in 2013 (by fewer than 100 people) and barely within that threshold in the 2014 estimate (by 65 people). There is a significant spread in the population distribution, reflecting that communities in the north tend to be well-established and stable and that many areas planned for development in the south have not yet been constructed.

Map 3 – Option One Ward Boundary Configuration



In association with:
Dr. Robert J. Williams



**CITY OF BARRIE
 OPTION ONE WARD STRUCTURE**

2013 Ward Boundary Review

Figure 9
Option One – Population by Ward, 2013 and 2014

Ward	2013			2014 Estimate		
Ward 1	16,715	1.22	O +	16,790	1.22	O +
Ward 2	13,650	1.00	O	13,620	0.99	O
Ward 3	12,160	0.89	O -	12,110	0.88	O -
Ward 4	16,170	1.18	O +	16,165	1.17	O +
Ward 5	14,360	1.05	O	14,450	1.05	O
Ward 6	15,385	1.12	O +	15,375	1.12	O +
Ward 7	14,020	1.02	O	14,395	1.05	O
Ward 8	10,190	0.74	OR -	10,255	0.75	O -
Ward 9	12,685	0.93	O -	12,850	0.93	O -
Ward 10	11,655	0.85	O -	11,615	0.84	O -
Total	136,985			137,630		
Optimal	13,700			13,763		

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

4.1.2 Population and Electoral Trends

The second principle directs that wards be generally in equilibrium to one another as forecast growth takes place. Generally speaking, the balance in population in the proposed wards for 2013 and 2014 is sustained through the 2018 election, as shown in Figure 10. Four wards are in the optimal category (O) and four others vary by an acceptable 15% or less (O- or O+). Forecast growth in the proposed Ward 7 takes it to the upper limit of the range and moves the proposed Ward 10 from 15% below the 2014 optimal size to match the 2018 optimal population. These results suggest that Option One is a plausible alternative for the next two elections in 2014 and 2018.

Working with a longer range population forecast (i.e. 2022), however, an imbalance develops. Only two wards are considered optimal (O) in 2022 and three of the ten are outside the 25% range of variation (OR- or OR+), one below and two above with a fifth ward right at the upper limit. Most notably, the extensive residential development anticipated in the Annexed lands significantly increases the size of an optimal ward leaving the more stable northern wards, as well as the proposed Ward 9, well below the optimal size for the 2022 election. The forecast growth in the Annexed Area also impacts the proposed southern wards (7, 8 and 10) putting them at or beyond the acceptable range of variation. These results suggest that Option One is actually not a plausible alternative for the 2022 election.

Figure 10
Option One – Forecast Population by Ward, 2018 and 2022

Ward	2018 Forecast			2022 Forecast		
	Population	Ratio	Change	Population	Ratio	Change
Ward 1	16,695	1.11	O +	16,400	0.98	O
Ward 2	13,435	0.90	O -	13,850	0.83	O -
Ward 3	11,980	0.80	O -	11,855	0.71	OR -
Ward 4	16,465	1.10	O +	16,255	0.97	O
Ward 5	14,785	0.99	O	14,655	0.88	O -
Ward 6	15,165	1.01	O	15,380	0.92	O -
Ward 7	18,570	1.24	O +	22,295	1.33	OR +
Ward 8	14,865	0.99	O	23,070	1.38	OR +
Ward 9	12,725	0.85	O -	12,650	0.76	O -
Ward 10	15,130	1.01	O	20,895	1.25	O +
Total	149,815			167,300		
Optimal	14,982			16,730		

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

4.1.3 Means of Communication and Accessibility

Significant “man-made” features consisting of transportation corridors that tend to be perceived as important demarcations between communities, are used as boundary lines in Option One. This includes Highway 400, the GO railway line and Bayfield Street which are all central features of the City’s layout. Some comparatively less significant roadways are also utilized (such as St. Vincent Street south of Highway 400, Ardagh Road and Essa Road between Kempenfelt Bay and Highway 400). The proposed Ward 4-5 boundary that follows Letitia Street and Leacock Drive and the proposed Ward 9-10 boundary that uses a portion of Mapleton Avenue west of Essa Road are defensible but less satisfactory demarcations.

4.1.4 Geographic and Topographical Features

“Natural” features are used in three areas in Option One, including:

- The entire eastern boundary of the proposed Ward 5 follows Lovers Creek green space, first between Kempenfelt Bay and the GO railway line north of Lakeshore Drive and then south through a green corridor from the GO railway line to the southern City boundary;
- In the north east, the boundary between the proposed Wards 4 and 5 is taken through Lampman Park and environmentally protected lands to Ferndale Drive; and
- A narrow strip of open space east of Essa Road (which acts as a buffer between the employment lands on Veteran’s Drive and the residential neighbourhood to the north) is used as a ward boundary between the proposed Wards 9 and 10.

Conversely, significant natural features are not divided by the proposed ward boundaries.

4.1.5 Community or Diversity of Interests

Given the heavy reliance on major arterial roadways (and the GO railway line) as ward boundaries in Option One, no significant communities or neighbourhoods are divided internally in the existing structure. Where boundaries cut across neighbourhoods of a similar age and housing stock (such as the line between the proposed Wards 4 and 5 and St. Vincent Street south of Highway 400), the principle is less clearly met.

The existing configuration of neighbourhoods across most of the City means that wards will naturally group together communities with common interests: neighbourhoods in the north and the south (especially the newest) are significantly different from one another but, with one exception, are not combined in a single ward. The exception is the proposed Ward 5 that groups together communities that lie on either side of Dunlop Street West and the Bear Creek Wetlands. This proposed ward does not have a logical “centre.” The coherence issue may also arise in the proposed Ward 2 as intensification leads to more densely populated condominium communities built in proximity to the Bay that are grouped together with older residential and commercial neighbourhoods in the downtown core and its northern fringes.

4.1.6 Effective Representation

The population distributions for 2014 and 2018 in Option One reveal some imbalances among the wards, thereby diluting the voices of residents, say, in the proposed Ward 1 in comparison to those in the proposed Ward 8. That is, in 2014 the ±16,700 residents of the proposed Ward 1 are entitled to one representative but so are the ±10,200 residents of the proposed Ward 8. This dilution persists at the extremes in 2018 but is less distorted for the other eight wards. By 2022 the dilution has reached an unacceptable level since the gap expands to the point where the proposed Ward 8 is twice as large as the proposed Ward 3. These variations are not consistent with the principle of effective representation and with the goal of providing fair representation, but the dilution only reaches an unacceptable level by 2022.

On the whole, Option One preserves and aggregates reasonable communities of interest. The single exception is the proposed Ward 5 where two residential communities are physically isolated from one another by areas of employment lands and significant natural features, both of which hamper effective representation. In addition, the proposed Ward 6 would run from Kempenfelt Bay to the new southern border with Innisfil, much like the present Ward 8, but it embraces several contiguous neighbourhoods at its north end so it is more conventional than the present Ward 8.

Finally, the relationship between population variation and area sheds some light on the capacity of an elected official to provide effective representation. Roughly speaking, larger populations can be tolerated in smaller geographic areas and smaller populations can be tolerated in larger

geographic areas. In the Option One configuration, three of the smaller wards by size (the proposed Wards 3, 8 and 9) are also among those wards below the optimal size in 2014, while larger wards by area (the proposed Wards 6 and 7, for example) are above the optimal size. In 2018, the proposed Wards 3 and 8 continue to be below the optimal size and the proposed Ward 7 reaches the upper limit of the population range. The pattern persists through 2022 since the proposed Wards 3 and 9 are still below optimal and the proposed Ward 7 is above the range of variation used in this review. This relationship makes the provision of effective representation more challenging than is desirable.

4.1.7 Overall Evaluation

This evaluation suggests that the ward structure proposed in Option One is completely or partially successful in meeting the expectations for five of the six principles. Many of the shortcomings identified in this assessment only become acute in the light of the population changes forecast between 2018 and 2022. In addition, applying the full set of principles to present day, as well as future Barrie, has required the use of some creative boundaries or community configurations (for example in the proposed boundary between Wards 4 and 5).

The “no” designation for “effective representation” in the figure below is difficult to ignore. However, it must be noted that the three “tests” used in the review to examine effective representation are approximations or surrogates for a more abstract principle and that the evaluation summarized here is deliberately stringent. A rigid reading of the principles helps to identify the strengths and weaknesses of Option One but does not preclude seeing it as a reasonable and viable alternative to the existing structure for the 2014 and 2018 municipal elections in Barrie. Few ward designs are perfect and the selection of an alternative sometimes requires accepting the limitations of one principle to gain the advantages of another. On the whole, the advantages outweigh the weaknesses identified in Option One.

Figure 11
Option One Evaluation Summary

Principle	Evaluation	Comment
Representation by Population	Yes	Only three wards are optimal, but all within the defined range of variation for 2014. One ward narrowly below range of variation in 2013.
Population & Electoral Trends	Mixed	Design plausible for 2018 but not 2022. Four wards are optimal in 2018; one at limit of range. Only two wards are optimal in 2022; three outside range, one at limit of range.
Means of Communication & Accessibility	Yes	Hwy 400, GO railway line, Bayfield used as dividers; some less traditional lines (between Wards 4 and 5, 9 and 10).
Geographical & Topographical Features	Yes	Natural features used extensively. Major natural features respected in ward boundaries.
Community or Diversity of Interests	Mixed	Ward 1-2 boundary divides similar neighbourhoods; also Ward 4-5 boundary. With the exception of the proposed Ward 5, others good. Ward 2 increasingly less coherent with intensification.
Effective Representation	No	Population imbalances dilute votes of many electors. Proposed Ward 5 includes non-adjointing communities. Area-population relationship works against effective representation.

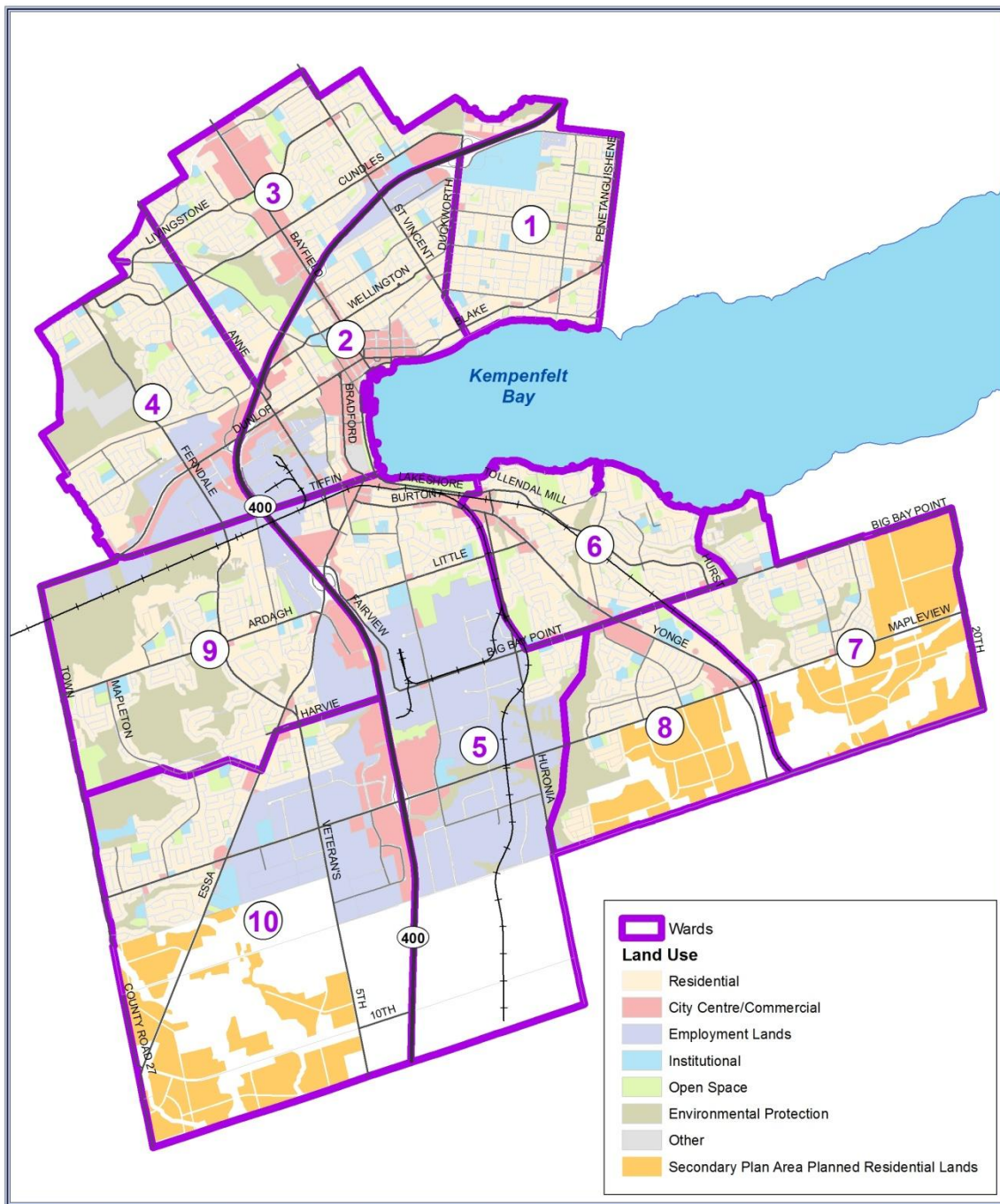
4.2 Option Two

Both the existing ward structure and Option One consist of five wards in the northern part of the City, two wards in the southwest and three wards in the southeast. Option One distribution reflects the population concentrations in the former City of Barrie (that is, the City as it existed before the annexation of lands from Innisfil). In comparison, Option Two supplants the symmetry discussed in Section 3.2 with a configuration that shifts representation towards the areas of projected population growth: it includes four wards in north Barrie, two wards in the southwest and four wards in the southeast. Option Two is presented in Map 4.

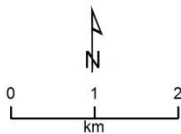
4.2.1 *Representation by Population*

As illustrated in Figure 12, only two of the ten wards are within the optimal category (O) on the basis of 2013 population figures and the 2014 population estimates. The population of one northern ward (Ward 3) would be unacceptably large (OR+) in 2014 and three southern wards (Wards 5, 7 and 8) would be unacceptably small (OR-). The remaining six are within the acceptable range of variation, although the proposed Ward 4 is just below the upper threshold

Map 4 – Option Two Ward Boundary Configuration



In association with:
Dr. Robert J. Williams



**CITY OF BARRIE
 OPTION TWO WARD STRUCTURE**

2013 Ward Boundary Review

for 2014. There is a significant spread in the population distribution, reflecting that communities in the north tend to be well-established and stable and that many communities projected for development in the south have not yet been constructed.

Figure 12
Option Two - Population by Ward, 2013 and 2014

Ward	2013			2014 Estimate		
	Population	Ratio	Category	Population	Ratio	Category
Ward 1	13,795	1.01	○	13,890	1.01	○
Ward 2	15,940	1.16	○ +	15,895	1.15	○ +
Ward 3	20,570	1.50	OR+	20,550	1.49	OR+
Ward 4	16,900	1.23	○ +	16,915	1.23	○ +
Ward 5	9,845	0.72	OR -	9,860	0.72	OR -
Ward 6	12,485	0.91	○ -	12,510	0.91	○ -
Ward 7	9,135	0.67	OR -	9,495	0.69	OR -
Ward 8	8,760	0.64	OR -	8,795	0.64	OR -
Ward 9	15,525	1.13	○ +	15,605	1.13	○ +
Ward 10	14,030	1.02	○	14,125	1.03	○
Total	136,985			137,630		
Optimal	13,700			13,763		

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

4.2.2 Population and Electoral Trends

The second principle directs that wards be generally in equilibrium to one another as growth takes place. In Option Two the proposed wards are actually better balanced for the 2018 election than in 2013 and 2014, even though two wards (Wards 3 and 5) fall outside the defined range of variation (OR+ or OR-). Two wards are in the optimal category and only one of the remaining six wards varies by more than fifteen percentage points from optimal.

The longer range population forecast reveals that significant growth is concentrated in only three of the proposed wards (7, 8 and 10); as a result, two of these wards (Wards 8 and 10) fall above the 25% range of variation threshold (OR+) by 2022. The other outlier remains the proposed Ward 5 which falls well short (OR-) of the acceptable threshold since its forecast growth is modest.

Despite these results, Option Two is a plausible alternative for the 2018 but not for the 2022 election.

Figure 13
Option Two – Forecast Population by Ward, 2018 and 2022

Ward	2018 Forecast			2022 Forecast		
Ward 1	13,836	0.92	O -	13,608	0.81	O -
Ward 2	15,678	1.05	O	16,039	0.96	O
Ward 3	20,804	1.39	OR +	20,602	1.23	O +
Ward 4	16,880	1.13	O +	16,668	0.99	O
Ward 5	9,711	0.65	OR -	9,908	0.59	OR -
Ward 6	12,559	0.84	O -	12,776	0.76	O -
Ward 7	13,530	0.90	O -	17,269	1.03	O
Ward 8	13,418	0.89	O -	21,395	1.28	OR +
Ward 9	15,784	1.05	O	15,622	0.93	O -
Ward 10	17,615	1.18	O +	23,413	1.40	OR +
Total	149,815			167,300		
Optimal	14,982			16,730		

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

4.2.3 Means of Communication and Accessibility

Most boundaries in Option Two are based on significant transportation corridors that tend to serve as demarcations between communities: Highway 400, Tiffin Street and Anne Street north of Highway 400 and portions of Big Bay Point Road and the GO and Barrie Collingwood railway lines. The proposed Ward 9-10 boundary that uses a portion of Mapleton Avenue west of Essa Road is a defensible but less satisfactory delineation.

4.2.4 Geographic and Topographical Features

“Natural” features are used in two areas in Option Two, including:

- The eastern boundary of the proposed Ward 6 follows green space between Kempenfelt Bay and Big Bay Point Road.
- The boundary between the proposed Wards 5 and 8 runs through green space and environmentally protected lands from Big Bay Point Road to Huronia Road just north of Mapleview Drive.

Significant natural features are not divided by ward boundaries.

4.2.5 Community or Diversity of Interests

Given the heavy reliance on major arterial roadways (as well as railway lines) as ward boundaries in Option Two, no significant communities or neighbourhoods are divided internally in the existing structure. Where boundaries cut across neighbourhoods of a similar age and

housing stock (such as the line between the proposed Wards 1 and 2 and the proposed Wards 3 and 4), the principle is less clearly met.

The existing configuration of neighbourhoods across most of the City means that wards will naturally group together communities with common interests: neighbourhoods in the north and the south (especially the newest) are significantly different from one another but, with one exception, are not combined in a single ward. The exception is the proposed Ward 5 that groups together the Allandale and Allandale Heights communities with the Lennox Park neighbourhood and significant employment lands. The coherence issue may also arise in the proposed Ward 2 as intensification leads to more densely populated condominium communities built in proximity to Kempenfelt Bay that are grouped together with older residential and commercial neighbourhoods in the downtown core and its northern fringes.

4.2.6 Effective Representation

The population distributions in Option Two reveal significant imbalances among the wards, thereby diluting the voices of residents, say, in the proposed Ward 3 in comparison to those in the proposed Ward 5. The latter is not expected to achieve a population of 10,000 throughout the review period while other wards include more than 20,000 people. These variations are not consistent with the principle of effective representation and with the goal of providing fair representation.

On the whole, Option Two preserves and aggregates reasonable communities of interest. The proposed Ward 5 is not compact in shape and is less coherent than is desirable, since it includes a substantial portion of the employment and commercial lands in south Barrie with existing residential neighbourhoods.

Finally, the relationship between population variation and area sheds some light on the capacity of an elected official to provide effective representation. The four northern wards are at or above the optimal population but, compared to wards in the south, are compact and more densely populated. Effective representation is well served in this part of the configuration. The working premise is also epitomized in the initial phase in the proposed Wards 5, 7 and 10 since these large areas lie well below the designated optimal size for wards in Barrie. However, the balance is altered as the sizeable proposed Ward 10 experiences significant population growth.

This complex relationship between area and population makes the provision of effective representation more challenging than is desirable.

4.2.7 Overall Evaluation

This evaluation suggests that the ward structure proposed in Option Two is completely or partially successful in meeting the expectations for three of the six principles, as shown in Figure 14. The population distribution for Option Two is unsatisfactory in relation to the most immediate election (in 2014) but improves slightly on the basis of the population forecast for 2018. From this perspective, ironically, Option Two would appear to be a step backwards from the existing arrangement. However, the shortcomings identified in this assessment arise in the attempt to design wards that accommodate the projected population changes in south Barrie between 2018 and 2022.

The “no” designation for “effective representation” in the figure below is difficult to ignore but the three “tests” used in the review to examine effective representation are approximations or surrogates for a more abstract principle and that the evaluation summarized here is deliberately stringent. A rigid application of the principles helps to identify the strengths and weaknesses of Option Two. A careful examination of the Option Two map and the map of the existing wards would suggest that, with one exception, the wards themselves are not dramatically different and would not entail a serious disruption to what is familiar.

The crucial differences – leading to the unsatisfactory population distribution – arises from combining three wards in the northwest into two wards and the redivision of wards in the southeast from three to four. The basic arithmetic of these modifications before population changes take effect means that Option Two population figures cannot be viewed as a reasonable and viable alternative to the existing structure for the 2014 municipal elections. Even by 2018, the southern wards continue to be on the lower side of the optimal point, but by 2022 the situation changes dramatically.

On the whole, the weaknesses identified in Option Two outweigh the advantages in the short term but arise from the attempt to provide effective representation to the new communities planned in south Barrie.

Figure 14
Option Two Evaluation Summary

Principle	Evaluation	Comment
Representation by Population	No	Four wards outside the defined range of variation in 2014. Two wards at optimal size.
Population & Electoral Trends	No	Population distribution uneven for 2018 and 2022. Two wards are optimal in 2018; three in 2022. Two wards outside range in 2022; three in 2022, another close to limit of range.
Means of Communication & Accessibility	Yes	Hwy 400, GO railway line and BCRY, Tiffin Street used as dividers; some less traditional lines (between Wards 5 and 6, 9 and 10).
Geographical & Topographical Features	Yes	Major natural features respected in ward boundaries.
Community or Diversity of Interests	Mixed	Ward 1-2 boundary divides similar neighbourhoods; also Ward 3-4 boundary. With the exception of the proposed Ward 5, others good. Ward 2 increasingly less coherent with intensification.
Effective Representation	No	Population imbalances dilute votes of many electors. Proposed Ward 5 more linear than compact. Area-population relationship works against effective representation in the south.

4.3 Option Three

As noted at earlier, the most significant ward boundary feature in Barrie is Highway 400, a limited access corridor that serves as a portion of the boundary for eight of the ten present wards. During consultations with stakeholders and the public, the Consultant Team concluded that complete reliance on Highway 400 creates some constraints in meeting the principles set for the review. Option Three was developed to determine whether breaking away from the present convention might offer another viable alternative to the existing ward structure. Option Three is presented in Map 5.

4.3.1 Representation by Population

Under Option Three, on the basis of 2013 population figures and the 2014 population estimate, only one of the ten wards falls within the optimal category (○) and one ward lies below the range of variation (OR-), as shown in Figure 15. The remainder of the population estimates for 2014 are all within the acceptable range of variation, although the proposed Ward 4 is at the upper limit. There is a significant spread in the population distribution, reflecting the fact that communities in the north tend to be well-established and stable and the fact that many communities projected for development in the south have not yet been constructed

Figure 15
Option Three - Population by Ward, 2013 and 2014

Ward	2013			2014 Estimate		
Ward 1	13,855	1.01	○	13,950	1.01	○
Ward 2	16,655	1.21	○ +	16,615	1.21	○ +
Ward 3	14,455	1.06	○ +	14,455	1.05	○
Ward 4	17,145	1.25	○ +	17,155	1.25	○ +
Ward 5	16,595	1.21	○ +	16,610	1.21	○ +
Ward 6	11,205	0.82	○ -	11,555	0.84	○ -
Ward 7	9,210	0.67	OR -	9,225	0.67	OR -
Ward 8	11,205	0.82	○ -	11,360	0.83	○ -
Ward 9	15,020	1.10	○ +	15,105	1.10	○ +
Ward 10	11,635	0.85	○ -	11,595	0.84	○ -
Total	136,985			137,630		
Optimal	13,700			13,763		

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

4.3.2 Population and Electoral Trends

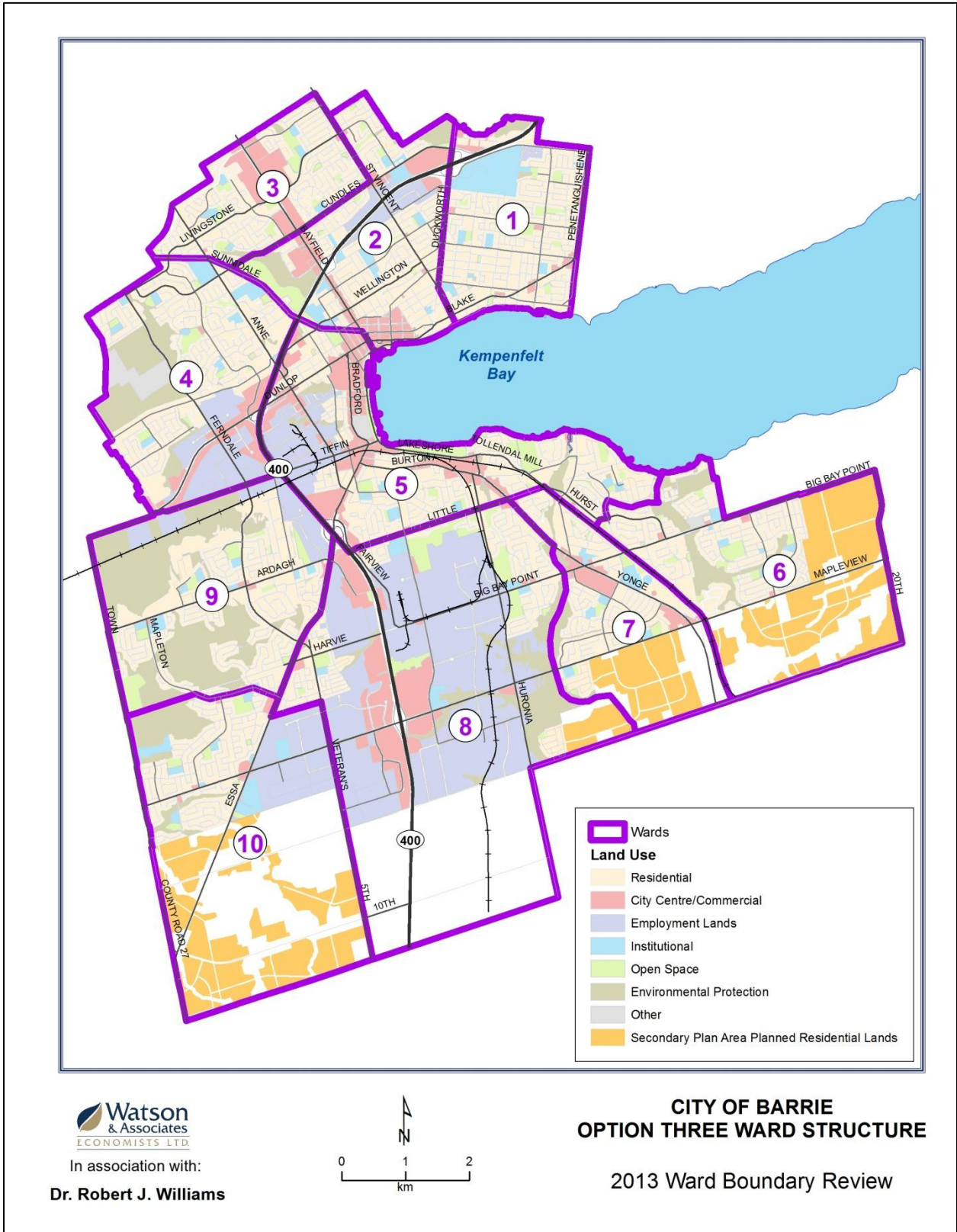
The second principle directs that wards be generally in equilibrium to one another as growth takes place. As shown in Figure 16, under Option Three all wards lie within the range of variation calculated for 2018 and 2022 (although the proposed Ward 8 lies just above the bottom of the range in 2018 and the proposed Ward 10 is just slightly below the upper limit in 2022). Three wards are designated as optimal in each year (○). The ward populations are well balanced in both the 2018 and 2022 population forecasts.

Figure 16
Option Three – Forecast Population by Ward, 2018 and 2022

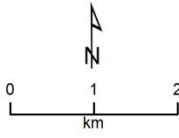
Ward	2018 Forecast			2022 Forecast		
Ward 1	13,895	0.93	○ -	13,665	0.82	○ -
Ward 2	16,410	1.10	○ +	16,425	0.98	○
Ward 3	14,785	0.99	○	14,590	0.87	○ -
Ward 4	17,120	1.14	○ +	16,985	1.02	○
Ward 5	16,445	1.10	○ +	16,760	1.00	○
Ward 6	15,710	1.06	○ +	19,410	1.16	○ +
Ward 7	13,860	0.92	○ -	19,920	1.19	○ +
Ward 8	11,180	0.75	○ -	13,530	0.81	○ -
Ward 9	15,285	1.02	○	15,125	0.90	○ -
Ward 10	15,125	1.01	○	20,890	1.25	○ +
Total	149,815			167,300		
Optimal	14,982			16,730		

Source: Watson & Associates Economists Ltd. and Dr. Robert J. Williams

Map 5 – Option Three



In association with:
Dr. Robert J. Williams



**CITY OF BARRIE
 OPTION THREE WARD STRUCTURE**

2013 Ward Boundary Review

It should be noted that the population figures for the proposed Wards 4 and 5 move from placing them high in the range in 2013 (see Figure 15) to optimal in 2022, while the proposed Wards 7 and 10 follow the opposite trajectory from well below optimal size to high in the range of variation. These patterns underpin the challenge of designing balanced ward populations over the 2014 to 2022 elections.

4.3.3 Means of Communication and Accessibility

Under Option Three, most boundaries are based on significant transportation corridors that tend to serve as demarcations between communities. Portions of the GO railway line, Highway 400, Bayfield Street and Essa Road are familiar components of Barrie's ward map and other important arteries are added to the mix (such as Duckworth Street, Cundles Road, Sunnidale Road, Tiffin Street and Veteran's Drive). In contrast to the other alternatives, Option Three does not use Highway 400 in its entirety. The proposed Ward 9-10 boundary that uses a portion of Mapleton Avenue west of Essa Road is a defensible but less satisfactory demarcation.

4.3.4 Geographic and Topographical Features

"Natural" features serve as ward boundaries in Option Three in two locations in the southeast, as follows:

- The boundary between the proposed Wards 5 and 6 follows green space between Kempenfelt Bay and the GO railway line east of Big Bay Point Road, an admittedly irregular line that nonetheless separates distinct neighbourhoods in the area;
- A portion of the boundary between the proposed Wards 7 and 8 runs through a green corridor from Yonge Street above Little Avenue to the southern City boundary; and
- The narrow strip of space east of Essa Road (which serves as a buffer between the employment lands on Veteran's Drive and the residential neighbourhood to the north) is used for a small component of the ward boundary between the proposed Wards 9 and 10.

Significant natural features are not divided by ward boundaries.

4.3.5 Community or Diversity of Interests

The two operative questions pertaining to this principle are: "what is divided?" and "what is combined?" The innovation in Option Three comes from designing two wards that are unconventional since the neighbourhoods that they include are situated across Highway 400, albeit for different reasons.

In the case of the proposed Ward 2, the downtown core itself is divided along Sunnidale Road and Bayfield Street but residential neighbourhoods on either side of Highway 400 are grouped together. This combination of neighbourhoods is not as improbable as it might appear since, for example, the Simcoe County District School Board operates two secondary schools that draw students from both sides of the highway. In addition, the Simcoe County District School Board (up until 2010) and the Simcoe Muskoka Catholic District School Board have elected trustees in divisions that cross Highway 400 in this area.

The large area of the City included in the proposed Ward 8 does not contain residential neighbourhoods adjacent to the highway. Indeed the residential section of the ward is modest compared to the rather extensive swath of employment lands. By combining most of the non-residential areas on either side of Highway 400 in a single ward, other proposed wards can be designed to better capture the residential growth projected in this part of the City in more compact wards.

Seven of the ten wards are conventional collections of Barrie's neighbourhoods and communities, much like the arrangements made in the other two Options included in this report. The proposed Ward 5 is also unconventional since it joins Allandale and a large section of the south shore of Kempenfelt Bay to part of the downtown core. Dividing the downtown core also has implications for the BIA.

4.3.6 Effective Representation

The population distributions for 2014 and 2018 in Option Three reveal imbalances among the wards, thereby diluting the voices of residents, say, in the proposed Ward 4 in comparison to those in the proposed Ward 7. That is, in 2014 the ±17,150 residents of the proposed Ward 4 are entitled to one representative but so are the ±9,200 residents of the proposed Ward 7. The population forecast for 2018 is, on the whole, well balanced and acceptable. By 2022 the dilution has again reached an undesirable level since the disparity between the proposed Ward 10 and the proposed Ward 8 is close to 7,300 people. These variations are not consistent with the principle of effective representation and with the goal of providing fair representation, but the dilution only reaches an unacceptable level in the 2022 population projections.

On the whole, Option Three preserves and aggregates reasonable communities of interest. The exceptions arise in relation to the downtown core itself which is placed in two wards, with one portion combined with neighbourhoods north of Cundles Road and east of St. Vincent Street and the other part is aligned with Allandale and communities on the south shore of Kempenfelt Bay. While the bulk of the downtown core is presently located in a single ward, the practice of assigning a municipality's downtown to more than one ward occurs frequently in Ontario. The proposed Ward 8 is not compact in shape but includes a substantial portion of the employment and commercial lands in south Barrie, an area previously split by Highway 400.

Finally, the relationship between population variation and area sheds some light on the capacity of an elected official to provide effective representation. Roughly speaking, larger populations can be tolerated in smaller geographic areas and smaller populations can be tolerated in larger geographic areas. In the Option Three configuration, the relationship is not terribly consistent. Three of the larger wards by size (the proposed Wards 6, 8 and 10) are among those wards below or at the optimal size through 2018, although two of them are projected to experience significant enough growth in the 2018 – 2022 period which undermines this pattern. Smaller wards by area (the proposed Wards 1 and 3, for example) are at or below the optimal size throughout the whole period. The most compact southern ward (the proposed Ward 7) also boasts a below optimal population until 2018, but is projected to become the second largest ward by population according to the 2018 figures.

This complex relationship makes the provision of effective representation more challenging than is desirable.

4.3.7 Overall Evaluation

This evaluation suggests that the ward structure proposed in Option Three is completely or partially successful in meeting the expectations for four of the six principles, as shown in Figure 17. However, assigning “no” to the “representation by population” principle is based on a single one of the ten wards falling below the defined range of variation. On the whole, the Option Three wards work well in meeting the population parameters for future growth. Many of the shortcomings identified in this assessment arise from the unconventional design in relation to the use of Highway 400.

The “no” designation for “effective representation” in the figure below is again difficult to ignore. However, it must be remembered that the three “tests” used in the review to examine effective representation are approximations or surrogates for a more abstract principle and that the evaluation summarized here is deliberately stringent. A rigid reading of the principles helps to identify the strengths and weaknesses of Option Three but does not preclude seeing it as a defensible alternative to the existing structure for the 2014 and even as far as the 2022 municipal elections in Barrie.

Figure 17
Option Three Evaluation Summary

Principle	Evaluation	Comment
Representation by Population	No	Only one ward is optimal, but one ward below range in 2013 and 2014. All others within the defined range of variation with one at top extremity in 2014.
Population & Electoral Trends	Yes	Three wards are optimal in 2018 and 2022; one at lower limit of range in 2018 and one at the top in 2022.
Means of Communication & Accessibility	Yes	Many familiar transportation corridors retained with new components added. Hwy 400 not used in its entirety; some less traditional lines incorporated into design.
Geographical & Topographical Features	Yes	Natural features used effectively. Major natural features respected in ward boundaries.
Community or Diversity of Interests	Mixed	Seven of the wards contain conventional groupings of neighbourhoods. Proposed Wards 2 and 8 include adjoining areas across Highway 400; Ward 5 a novel combination of Bayshore neighbourhoods. Downtown core divided.
Effective Representation	No	Population imbalances dilute votes of many electors. Downtown communities divided. Area-population relationship works against effective representation.

5. CONCLUSIONS AND RECOMMENDATIONS

5. CONCLUSIONS AND RECOMMENDATIONS

The 2013 Ward Boundary Review was initiated to address the suitability of the existing ward structure in Barrie in the light of strong historical and forecast population growth and the annexation of lands from the Town of Innisfil to the City of Barrie in 2009.

This report has evaluated the existing ward structure in terms of the principles established for the 2013 Barrie Ward Boundary Review (see section 1.5 and Appendix A). This evaluation suggests strongly that the existing ward boundary configuration does not meet the expectations for three of the six principles. The present ward design was a valid one for the Barrie of 2002. However, given the Barrie of 2013 and that which is expected to emerge between 2014 and 2022, the existing ward structure is no longer workable and this review has concluded that the City would be better served by an alternative configuration.

The strong population growth, largely focused in South Barrie, combined with a range of physical constraints, has made the design of new ward alternatives a challenge. Despite this, three Options have been developed which are all considered viable alternatives. As has been noted within the report, however, few ward designs are perfect and the selection of an alternative sometimes requires accepting the limitations in relation to one principle to gain the advantages of another. Strengths and weakness common to all three Options, based on the guiding principles, are presented in Figure 18.

Figure 18

All Options	
Strengths	<ul style="list-style-type: none"> • majority of wards fall within the defined range of population variation for 2013, 2014, 2018 and 2022; • majority of wards are designed with suitable natural or “man-made” features as boundaries; • significant natural features are not divided by ward boundaries.
Weaknesses	<ul style="list-style-type: none"> • because of Barrie’s geography and population distribution, all designs must incorporate both relatively densely populated, established neighbourhoods with sparsely populated areas, creating an intrinsic dilution of votes and a poor fit between area and population; • the size and configuration of employment lands in south Barrie hampers the delivery of effective representation.

The adoption of one of these Options for the 2014 municipal election necessitates affirming which principles are the most pertinent (and which less feasible) and which Option comes closest to delivering on those principles. Beyond acknowledging the general common strengths and weaknesses of all three Options identified above, the following highlights their respective strengths and weaknesses and the implications of selecting one over the others.

Selecting Option One would retain a variation of the “symmetry” currently embedded in Barrie’s ward structure. The Option successfully meets the “Representation by Population” criterion in 2014 and the “Population and Electoral Trends” criterion in 2018, although it would likely need to be reviewed again prior to 2022. On the other hand, selecting Option One would require placing less emphasis on the “Community or Diversity of Interests” criterion in the case of one ward.

Selecting Option Two would be a step towards an electoral structure that serves Barrie’s future, since it shifts representation towards the areas of forecast population growth. Adopting this Option means overlooking a less favourable population distribution in 2014 in order to achieve a better (but not flawless) distribution in 2018.

Selecting Option Three would break with the recent custom of using Highway 400 as a delineated boundary in its entirety as a component of the ward structure. Option Three successfully meets the “Representation by Population” criterion in 2014 and the “Population and Electoral Trends” criterion in both 2018 and 2022. On the other hand, selecting Option Three would require placing less emphasis on the “Community or Diversity of Interests” criterion in the case of the City’s downtown and the acceptance of some less traditional boundary lines.

Each of these Options can be defended since each design has many more strengths than weaknesses and because the implications of selecting one of these Options have been examined in terms of the guiding principles for this review.

APPENDIX A

2013 CITY OF BARRIE
WARD BOUNDARY REVIEW PRINCIPLES

2013 CITY OF BARRIE WARD BOUNDARY REVIEW

Objectives

To conduct a comprehensive review of Barrie's ward boundaries to develop an effective and equitable system of representation with reference to overall projected growth within the municipality. The revised ward structure is to be in place for the 2014 municipal election.

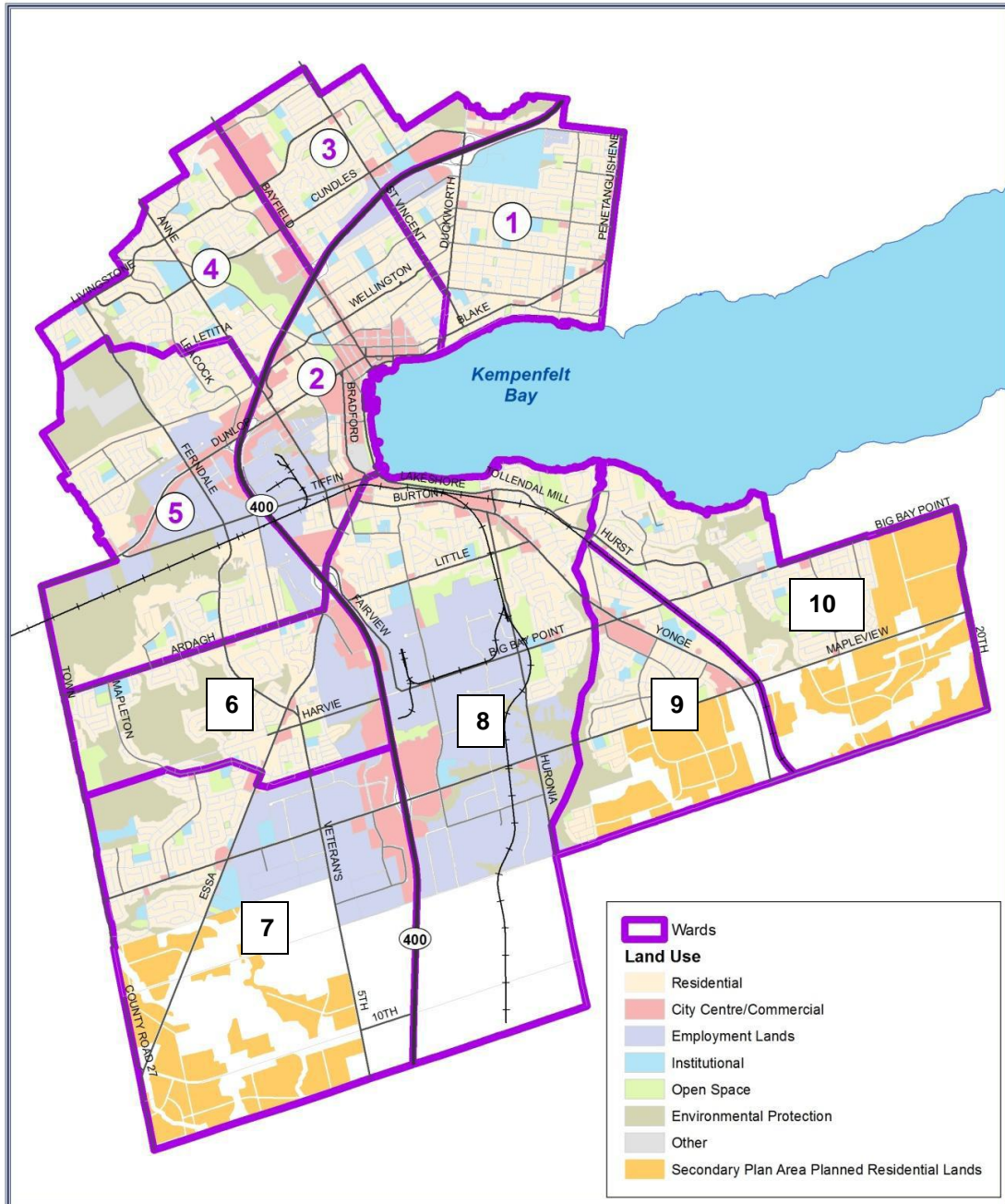
Principles

The 2013 Ward Boundary Review in Barrie will have regard for the following principles:

- Representation by Population: Considering representation by population or every Councillor generally representing an equal number of constituents within his or her respective ward. Given the geography and varying population densities and characteristics of the City, a degree of variation will be acceptable;
- Population and Electoral Trends: Accommodating for and balancing future increases or decreases in population growth/decline to maintain a general equilibrium in the representation by population standard, until the year 2018 (at minimum);
- Means of Communication and Accessibility: Arranging ward boundaries by primary and secondary road patterns, railway and public transit accesses, telephone exchanges, postal codes and servicing capabilities to help foster an identity and neighbourhood groupings;
- Geographic and Topographical Features: Utilizing geographical and topographical features to provide for ward boundaries and compact and contiguous areas (similar to the use of man-made features);
- Community or Diversity of Interests: Recognizing settlement patterns, traditional neighbourhoods and community groupings (social, historical, economic, religious and political diversities) while, at the same time, not fragmenting a community; and
- Effective Representation: Considering an overriding principle of effective representation as described by the Supreme Court of Canada in its decision on the *Carter* case.

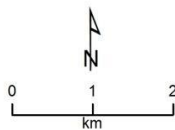
APPENDIX “B”

RECOMMENDED OPTION



In association with:

Dr. Robert J. Williams



CITY OF BARRIE
OPTION ONE WARD STRUCTURE

2013 Ward Boundary Review