BUILDING CONSENSUS

Ottawa Ward Boundary Review

BACKGROUND REPORT

1. INTRODUCTION

The City of Ottawa has commenced a ward boundary review in response to the City's growth. As a "Regional City" of Canadian significance, Ottawa has a unique opportunity to balance the interests of its numerous communities and construct a local municipal ward pattern that supports sound municipal government and provides access to its citizens.

As a single-tier city, Ottawa contains a wide diversity of communities and interests – rural and urban; suburban and inner city; French, English and multiethnic. These communities and interests need to work cooperatively for the entire City to function properly and meet its collective objectives. In the complex arena of local government, the local councillor plays a pivotal role. A strong and fair foundation for local government is central to the success of City of Ottawa. This foundation starts with the ward structure.

Since becoming a regional city in 2000, this is Ottawa's second attempt to revise its ward structure and create new ward boundaries to reflect its growth and development policies. The first attempt was not successful. However several important lessons were learned. This report builds on those lessons, provides basic background information for the Review and sets out those key principles that must be respected in designing future ward boundaries.

Ottawa and its surrounding area have had a long history of strong municipal government. In the past generation there have been numerous changes. Ottawa has moved from a county / city structure through a regional form of government and in 2000 became a single tier, regional city covering a vast area. These changes have not been smooth. There have been and will continue to be growing pains. However, there is a strong will to make the "City" work. Yes, there are changes to be made, new understandings to develop and political accommodations to be forged amongst Ottawa's numerous communities. Adjusting the ward boundaries to fit the changing face of the City is but one of these changes.

When the current municipal government structure was established in 2000, the Province of Ontario created a council of twenty-two, based on 21 wards and a mayor elected at large. That forged the starting position for municipal government in the new City of Ottawa. It was not perfect but it was the start and created a certain balance amongst Ottawa's communities. The City has changed and continues to change. The local government structure, as reflected in its wards, must keep pace. Ward boundaries are dynamic and should not be considered permanent fixtures.

The genesis of the need to change Ottawa's ward structure comes from two primary factors; first is the fast and continued growth in the suburbs, primarily outside the Greenbelt; and second, the need to make specific adjustments to the original ward boundaries that has become apparent from the day-to-day experience of municipal governance since the original wards were set in place.

Growth is a complex phenomenon. Often it is thought of only as more people. However, it spans the ranges of demography, electors, access to government and the myriad of issues that councillors and the mayor must face both at the City-wide level and daily, detailed items that arise in the wards.

In considering the key principles for establishing new ward boundaries, this report reviews several specific areas to provide general direction for both developing options and selecting ward boundaries. The topics discussed are:

- The mandate of the Ottawa Ward Boundary Review;
- The public involvement process used;
- The key parameters that must be considered; and,
- A series of guiding principles.

These four general points lead to a series of conclusions that form the basis for proposing ward boundary options.

2. MANDATE

The mandate for the current Ottawa Ward Boundary Review is summed up in the subscript to its name – Building Consensus. The general approach seeks to build consensus on new ward boundaries for the City of Ottawa through wide-spread involvement of the public, community groups, councillors, the mayor and various other stakeholders.

In designing the mandate for the current Ottawa Ward Boundary Review, lessons from the previous review were considered by staff and set out in a report of August 8, 2004 to the Corporate Services and Economic Development Committee¹. This report considered the Ontario Municipal Board (OMB) decision arising from the hearing on the 2001 - 2003 review of ward boundaries and set forth key issues that must be respected in any future ward review. In very brief summary, these items were:

- Consideration of effective representation, as outlined by the Supreme Court of Canada;
- A public involvement process that allows for the public to have meaningful input on the specific proposal(s) that are being considered;
- The review should not be constrained by specific objectives established at the outset; and
- The review should be comprehensive in nature.

Council considered these points and launched the current Ottawa Ward Boundary Review project. The need to consider effective representation is a central goal to the mandate of the Review. Council opted for a comprehensive review; that is, a review that considers the boundaries of all wards. There are no constraints on the design of wards imposed by Council on the consultants undertaking the review. If needed more wards can be recommended. Council also opted for an inclusive public involvement process. In conducting the Ottawa Ward Boundary Review (2004 - 2005) City Council has respected the OMB decision on the first ward boundary review and allowed the consultants to undertake a comprehensive, unrestrained review that provides for considerable public involvement and respects the principles of effective representation.

It is hoped to have the new wards in place for the 2006 municipal election. To achieve this, the Review, including a time for an appeal, and the accompanying bylaws must be completed and by the end of 2005. This date is a requirement of Provincial election legislation. The ward boundaries used for municipal elections are those that are in place on January 1st of the year of a municipal election. As the next municipal election is in November, 2006, any new ward boundary structure must be in place, by bylaw, on December 31, 2005.

The Ottawa Ward Boundary Review looks at the period 2004 to 2015. By choosing a 10 year time horizon and aiming for a new ward structure for the 2006 municipal election, Council has indicated that this ward structure should last for at least four elections². While there have been suggestions that the new ward boundaries should last longer, a four election time frame is guite long. How long ward boundaries last is a function of change. While it may be that the ward

¹ City of Ottawa Ward Boundary Review (2004 – 2006) Reference Number ACS2004-CRS-SEC-0037. This report contains the detailed Terms of Reference for the Ottawa Ward Boundary Review (2004 – 2006) ² These would be the municipal elections of 2006, 2009, 2012 and 2015.

boundaries that arise from this Review last longer, the current 10 year, 4 election, cycle is appropriate.

3. PUBLIC INVOLVEMENT PROCESS

The mandate for the Ottawa Ward Boundary Review provides for an inclusive public involvement process. In order to build consensus on future wards in the City of Ottawa, a multi-faceted public involvement process was designed to encourage and allow for maximum participation. A detailed discussion of both the public involvement process and results is the subject of a separate report. At this juncture only a brief overview is provided.

The public involvement process is composed of two rounds. The first is to seek input and ideas. The second is to review specific options. Public involvement is defined widely and is not confined to public meetings. In the first round (input and ideas) meetings were held with; all councillors and the mayor; some community groups; and, other stakeholders. Also, there were 6 public meetings across the City of Ottawa for the general public.

Residents did not have to attend meetings to be informed and express their opinions. All information material is posted on the City of Ottawa's web site and is available at libraries and Client Service Centres. Also, residents could respond on-line, by e-mail and by fax or phone. All information was provided in both official languages and all public meetings were provided with the capability for residents to ask questions and/or provide input in either English or French.

There was a great deal of interest in the Ottawa Ward Boundary Review. Numerous ideas both of a general nature and suggestions for specific changes to ward boundaries came forward from all involved. For a detailed report on the first round please see: "Report on Public Involvement – Round One".

4. KEY PARAMETERS

The public involvement process and background research into ward boundary definition have indicated a series of "key parameters" or factors that must be taken into consideration when designing a ward structure for municipal government elected representation. The eight key parameters that are considered fundamental to the Ottawa Ward Boundary Review are:

- Communities of interest;
- Effective representation;
- Ottawa's development policies;
- Population;
- Physical boundaries;
- Ward history and election experience;
- Role of councillors; and,
- Growth issues.

These key parameters are not mutually exclusive. They overlap and combine. Sometimes they conflict. The task is where to begin and how to create an appropriate balance amongst them in order to come up with a series of options for ward boundaries in the City of Ottawa.

To start, each parameter is discussed in turn and some of the major elements examined.

Communities of Interest

Communities of interest are a critical consideration in a representative political system like municipal government. Much has been written on this topic, but it all points to the importance of adequate access to government by citizens within their communities of interest. While much used, the term "community of interest" is very complex and confusing. There are large communities of interest, like urban and rural, and small ones, like neighbourhoods and villages. Also, large communities can be divided as can smaller ones. Within urban communities there are suburban and inner city communities. Within rural communities there are village, farm and country estate communities.

The communities noted above are based on what are called spatial communities - communities that can be identified primarily by where the residents live. There are also communities of "common bond" such as the French, English or other language communities of Ottawa. In addition, there are "interest-based communities" such as sports teams, religious groups, children attending a school

or professional groups. These latter communities of interest are not grounded in specific locations.

All forms of communities are important. They mix and overlap. There is no singular definition of a community of interest that combines all the various types and can be tied to a specific place. The concept of "community of interest" must be used in relationship with the task at hand. In this case the task is to define ward boundaries. Wards are physical places and are designed to be used for several elections. Hence, the community of interest needs to be based on where people live and the issues that occur in the area where they live.

In Ottawa there are two major communities based on a spatial definition of community. These are urban and rural. Within these two major communities there are various subsets of communities. In the urban area there is a growing suburban community, a relatively stable urban community and an inner city community. Within the rural area there are villages, farming areas and groups of rural homes.

These subsets are further divided into neighbourhoods. Urban Ottawa is composed of numerous urban, suburban and inner city neighbourhoods. Many of these have developed their own strong identity. In rural areas the term neighbourhoods is not used as frequently, although rural villages and farm areas have their own identifiable communities.

From the perspective of municipal governance, the question is how to develop a ward structure that both represents the main, larger communities and at the same time does not divide local neighbourhoods and villages. This is not an easy task. It involves consideration of both people and the communities where they live.

Effective Representation

In the Canadian political context, the approach to representation is based on the idea of effective representation for various major communities of interest within the practical confines of a resident's ability to access their elected representative. To set out electoral ridings at the federal or provincial level or wards at the municipal level, the Canadian practice, reinforced by court decisions, is to use effective representation and not strict voter parity, often referred to as representation by population. To achieve effective representation a wide mix of factors must be considered. These include; geography, community history, minority representation, communities of interest, physical and natural boundaries, population size, area to be represented and good government. As can be appreciated, these numerous factors need to be balanced.

Effective representation for municipal governance purposes starts with an assessment of the major spatial communities of interest. In Ottawa's case four such major areas have been identified. These are:

- 1. The inner city;
- 2. Stable urban communities inside the Greenbelt;
- 3. The faster growing suburban areas outside the Greenbelt; and,
- 4. Rural areas.

To achieve effective representation, these four major areas should be considered individually. Also, within these areas, as much as possible, smaller individual communities (neighbourhoods and villages) should not be divided.

While effective representation is a complex idea, certain criteria are known to influence it. Perhaps the most common is size, both in terms of area and population. Also, keeping similar types of major communities together and not mixing rural, suburban and urban communities are important considerations. Access to the ward councillor is vital in effective representation, as is the councillor's likelihood of understanding local communities as much as they may appear to at first glance. Physical boundaries must be considered in direct reference to a particular ward and not as a general concept for delineating wards.

In the Ottawa context, certain barriers to effective representation are emerging. A critical one, and the one that has prompted this ward boundary review, is sheer population size. Three wards – Kanata, Bell-South Nepean and Gloucester-Southgate – are forecasted to grow to over 100,000 within the time frame of the Ottawa Ward Boundary Review. In the same wards there are small rural communities that are dwarfed by growing suburban areas. In some rural wards the projected suburban growth will fundamentally alter the rural / suburban balance of the ward to decidedly suburban. This is either prevalent now or projected within 10 years in the wards of Goulbourn and Cumberland. In both cases by 2015 the suburban population will represent over two thirds of the wards' population. A third concern are the changing issues in the centre of Ottawa. As more city-wide concerns (homelessness, transportation, institutional and cultural uses, drug use, and intensification) are concentrated in the core area, local residents find that their local concerns can get drowned out by these larger issues.

In all these cases effective representation is or can be compromised. In the fast growing suburban wards sheer size and councillor workload reduce effective representation, as access to the political system is diminished. Also, in these suburban wards the remnant rural communities indicate that they feel unrepresented, as urban growth issues dominate the local agenda. Growing

suburban communities within historically rural areas threaten to split communities and lead to the dominance by the suburban community. City-wide issues that accumulate in the inner-city wards can reduce the effectiveness of local communities.

The situations described above are issues of effective representation, as viewed from all parts of the City of Ottawa. Designing a future ward structure must consider and balance all these community and city-wide needs.

Ottawa Development Policies

In May, 2003 the City of Ottawa approved a new Official Plan. While certain areas of the Official Plan are under appeal, the general directions of the plan and its major policies have been established³. There are several key land use decisions and development policies that are important from the perspective of the Ottawa Ward Boundary Review.

Probably the most significant is the designation of what is referred to as the Urban Area Boundary. Figure 1 shows the Urban Area Boundary. This represents a line on the Official Plan land use map that indicates the limits of urban / suburban growth⁴. The major, operative policy with respect to the Urban Area Boundary for the purpose of the Ottawa Ward Boundary Review is:

"Sufficient land will be provided in the urban area to meet the city's 20-year requirement for housing, employment and other purposes." (Section 2.2.1.2 Pg. 17 – Ottawa Official Plan; May, 2003)

This line is intended to be the outer limit of urban / suburban growth for a 20 year period. While Official Plans are always open to amendment, an important support for the Urban Area Boundary concept comes from proposed changes to the Ontario Planning Act. Once these changes are adopted, only the municipality will be able to extend an Official Plan's urban settlement area - the Urban Area Boundary in Ottawa's case. This removes the ability of land developers to use the appeal process to possibly force municipalities to extend their official plan's settlement area prematurely. It will make the Urban Area Boundary a long-term designation. From the perspective of designing a ward structure, the Urban Area Boundary creates an effective and long-term separator between the rural and suburban communities.

Another community separator that is enshrined in the current Official Plan and that has been a hallmark of planning in Ottawa for many years is the Greenbelt⁵.

³ The majority of the appeals relate to specific properties, many of which lie just outside the Urban Area Boundary.

⁴ The Official Plan land use map referred to here is Schedule "A" to the Ottawa Official Plan; May, 2003.

⁵ Figure 1 also shows the Greenbelt.

This collection of recreational, open space, environmentally sensitive and institutional lands effectively separates the city from its suburbs. With the addition of an outer development edge through the Urban Area Boundary, the three main communities – urban, suburban and rural – are now fairly clearly delineated on the Ottawa landscape and can be used in considering ward boundaries.

Ottawa's Official Plan and provincial planning policies call for intensification of development in urban areas. This, coupled with the Urban Area Boundary, will lead over time to most of Ottawa's development occurring within the urban and suburban areas. These policies prevent urban sprawl and are appropriate planning policies. They do, however, prevent rural areas from expanding their populations to any great extent and place rural communities at a disadvantage, if ward boundaries are based solely on population. This is a factor to remember when wards are designed.

The Official Plan contains policies for rural areas. The major ones limit development⁶. Residential development in the rural community continues in its village areas. This supports the historical pattern of rural uses as being a mixture of village living, farming and resource uses. However, the Official Plan also allows for "country estates" in areas designated as "General Rural Area"⁷. This type of development adds a new dynamic to the rural community. It is a low density type of development and, in modest amounts, does fit into the rural area. However, their continued expansion will see the addition of another set of local community issues that are bound to land on the councillor's plate.

Ottawa's policies through its recently adopted Official Plan provide a building block for designing wards. The policies and accompanying land use designations allow the main communities discussed above – inner urban, urban, suburban and rural to be spatially identified. The policies also afford a long-term framework to assist in ward identification.

Population

Population is one of the most evocative and complex components of considering democratic representative forms of government. This is especially true at the municipal level. Concepts of voter parity (rep-by-pop) and effective representation often clash. Still, the number of people represented by one councillor in regards to another is an important consideration. In addition to existing population numbers, future growth must also be considered. The goal of the Ottawa Ward Boundary Review is to achieve effective representation over a

 $^{^{6}}$ See Section 3.7, specifically the policies of Section 3.7.1 which directs rural residential growth to village areas within the rural area of the City of Ottawa. (Pg. 96, City of Ottawa Official Plan; May, 2003)

[/] See Section 3.7.2, Pg.97, of the City of Ottawa Official Plan; May, 2003.

ten year period and hopefully longer. Unlike at the federal and provincial level, there is no automatic 10 year review of wards for municipal governments.

To properly consider population in designing ward boundaries several items must be assessed simultaneously. These are:

- Aggregate population;
- Electors;
- Growth; and,
- Location of growth.

Population projections are an inexact science. There are many variables to weigh and assumptions to make. The longer the time frame of the projection, the more likelihood that adjustments, or calibrations in the language of forecasters, will be required. The City of Ottawa undertook very detailed population projections when it was preparing its Official Plan. It had access to the recently completed 2001 Census figures and applied assumptions current at the time to project population to 2021.

In preparation for the Ottawa Ward Boundary Review, the Official Plan population projections were reviewed based on actual population changes that had occurred in each ward from 2001 to mid-2004. Some economic trends had changed and a somewhat slower growth rate was becoming visible in certain wards. The projection based on actual 2004 data is the one employed by the Ottawa Ward Boundary Review. It is the most well-considered and accurate projection available at this time. In depicting population numbers two dates are shown. The first date is 2004. This represents the actual population at mid-year in 2004. The other date is 2015. This is the design date for the Ottawa Ward Boundary Review. Figures are available for the election years between these dates (2006, 2009 and 2012), if required, but are not presented in this report. It is the design year of 2015 that the report focuses on.

To start, Table 1 depicts the aggregate population projections by ward and provides a comparison between the Official Plan projection and the trend projection.

The figures portrayed in Table 1 point to several important facts. In general the Official Plan projections are higher. However, this overall observation masks some important variations. Over half of the wards (12) are the same in both projections and one ward (Rideau-Vanier) is higher in the trend projection. Two wards (Kanata and Gloucester-Southgate) contain very large differences between the two projections.

Tables 1 and 2 present projections based on both the 2004 trend and the Official Plan projections. While they are different, they show the same pattern. As noted

above, the 2015 trend projection is used in this ward review study. This is the most current projection. However, one proviso must be added. In considering ward options the variability in the suburban growth projections must be borne in mind.

Another factor to consider in addition to absolute population is the number of electors per ward. This is important, as different communities have different family sizes and composition which can make comparisons based only on aggregate population numbers yield a less than complete picture. There are no direct data projections on the number of electors. As a surrogate, a data set indicating the number of residents 18 years of age and older is used⁸. Table 3 presents information on residents 18 years of age and older by wards for 2004 and 2015. It also notes the percentage of the total population 18 and over.

Table 3 reveals both well known and new information. It is generally understood that suburban areas have more children than the central city. For 2004 this is certainly the case in Ottawa. The mainly suburban wards (Bell-South Nepean, Kanata and Gloucester-Southgate) have low percentages of population 18 and over – in the 73% range. Or conversely, they have the most residents of non-voting age. Also, as expected, the three inner city wards (Rideau-Vanier, Somerset and Capital) have the highest percentages of population over 18 - 85% - 91%. These wards have the fewest children. These trends continue and intensify to 2015.

Less obvious is the data for the rural wards. Generally, rural areas have older populations. Rideau and West Carleton wards conform somewhat to this pattern. However, understanding why Goulbourn ward has the lowest percentage of people 18 and over in 2004 (72.60%) requires determining where in the ward the population is located and the suburbanizing trends in this ward. This also applies to the other "rural wards" that show high percentages of children. This phenomenon is considered later in this section.

⁸ This data set will yield numbers that are slightly higher than the number of electors. This is because population data includes all residents, while only Canadian citizens are allowed to vote in municipal elections.

TABLE 1

POPULATION PROJECTIONS TO 2015 OFFICIAL PLAN AND TREND PROJECTION BY WARD

WARD	2004	2015	2015	DIFFERENCE
	POP'N	TREND	OP	TREND to OP
1 – Orléans	47,800	51,000	51,000	0
2 - Innes	38,825	43,400	47,400	4,000
3 - Bell-South Nepean	66,175	104,900	106,600	1,700
4 – Kanata	68,450	95,500	114,800	19,300
5 - West Carleton	18,950	24,600	24,600	19,500
6 – Goulbourn	28,100	40,900	47,200	6,300
7 – Bay	46,675	45,400	50,000	4,600
8 – Baseline	42,225	43,700	43,700	4,000 0
9 - Knoxdale-Merivale	39,400	40,800	40,800	0
10- Gloucester-Southgate	57,375	74,000	102,000	28,800
11- Beacon Hill-Cyrville	35,100	36,600	36,600	20,000
12- Rideau-Vanier	45,550	50,500	49,300	-1,200
13- Rideau-Rockcliffe	40,300	49,900	49,900	0
14– Somerset	38,800	48,900	48,900	Ő
15– Kitchissippi	38,600	41,700	41,700	ů 0
16– River	49,075	54,800	54,800	Ő
17– Capital	35,500	38.300	38,300	ů 0
18 - Alta Vista	46,025	47,400	47,400	0 0
19– Cumberland	29,525	43,000	44,200	1,200
20– Osgoode	20,500	26,100	26,100	0
21– Rideau	13,725	15,600	17,400	1,800
TOTALS	845,875	1,017,100	1,083,000	65,900

Table 2 notes some basic statistics if there is no change to the ward boundaries and the status quo prevails.

TABLE 2

FACTOR	2004	2015 TREND	2015 OP
Average Ward Population	40,280	48,429	51,571
Median Ward Population	39,400	43,500	47,400
Range in Ward Population	13,725 – 68,450	15,600 – 104,900	17,400 – 114,800

BASIC WARD STATISTICS

When the number of electors is compared to aggregate population numbers, two important factors arise. First the overall range decreases. For 2004 the range drops from 13,725 to 68,450 for population to 10,500 to 50,000 for electors. In 2015 the range narrows further from 15,600 to 104,900 (population) to 12,400 to 79,700 (electors). The top end diminishes much more dramatically than the bottom end of the ranges. Similarly, averages and medians decline. This is why aggregate population numbers need to be tempered with a consideration of electors.

The next consideration is population change, or growth, by ward between 2004 and 2015. The fastest projected growth, regardless of whether the trend or OP projections are used, is in the three suburban wards - Bell-South Nepean, Kanata and Gloucester-Southgate. This is why residents in these areas and their councillors are concerned about the diminishment of effective representation. This is equally true for aggregate population or population 18 and over.

However, Goulbourn and Cumberland also show significant growth between 2004 and 2015. They are generally considered rural wards because of their size and could be expected to have slower growth. This anomaly can be explained by where the growth areas are in these wards.

TABLE 3

POPULATION 18 YEARS OF AGE AND OLDER
BY WARD

WARD	2004	% of	2015	% of	
		Pop'n 18+		Pop'n 18+	
1 – Orléans	35,700	74.69	39,500	77.60	
2 – Innes	28,700	73.92	33,200	76.67	
3 - Bell-South Nepean	46,600	73.44	79,700	75.98	
4 – Kanata	50,000	73.05	72,200	75.60	
5 - West Carleton	14,300	75.46	19,200	78.37	
6 – Goulbourn	20,400	72.60	30,700	75.06	
7 – Bay	38,500	82.49	38,800	85.09	
8 – Baseline	34,000	80.52	36,500	83.91	
9 - Knoxdale-Merivale	31,300	79.44	33,600	82.35	
10- Gloucester-Southgate	41,900	73.03	56,000	75.57	
11- Beacon Hill-Cyrville	27,600	78.63	29,900	81.69	
12- Rideau-Vanier	40,100	88.04	46,100	90.93	
13- Rideau-Rockcliffe	32,700	81.14	42,000	84.17	
14– Somerset	34,900	91.84	46,500	95.09	
15– Kitchissippi	31,900	82.64	35,700	85.61	
16– River	39,200	79.88	45,300	82.66	
17– Capital	30,300	85.35	33,900	88.51	
18 - Alta Vista	36,600	79.52	39,100	82.49	
19– Cumberland	21,700	73.50	32,700	76.05	
20– Osgoode	15,100	73.66	20,000	76.63	
21– Rideau	10,500	76.50	12,400	79.49	
TOTALS	664,000	78.50	823,000	80.92	

The final consideration in this subsection on population relates to the specific location of growth within the ward. Fortunately, the population projections can break down expected growth to a much finer level than the ward. Population projections were constructed using some 191 traffic zones throughout the City of Ottawa, not just the 21 wards. Based on these traffic zones, a fairly accurate picture of the specific location of potential growth in each ward emerges. Most of the growth is in the three suburban wards, specifically in locations adjacent to the Urban Area Boundary.

However, in the rural wards of West Carleton, Goulbourn and Cumberland there is also significant growth from 2004 to 2015. The vast majority of growth in these three wards is attributable to locations within these wards that lie within the Urban Area Boundary. In other words, growth in these rural areas is not rural growth; it is suburban growth. This also explains the lower ratio of population to electors for these areas, especially in Goulbourn. In effect, by 2015 these three "rural wards" will have become more suburban, as their demographic profiles are starting to reveal. This is especially true for Goulbourn and Cumberland where, by 2015, over 75% of their population will be suburban and within the Urban Area Boundary.

This section has reviewed four important dynamics of population that need to be analyzed in the design of wards in the City of Ottawa – aggregate population, electors, growth and the specific location of growth. All four are important and must be considered when options for new ward boundaries are crafted.

Physical Boundaries

Physical boundaries, whether natural or man-made, play an important part in defining wards and in residents' perception of their wards. However, like population, physical features are more complex than they appear at first glance. Often rivers, canals, major highways and railway lines can form appropriate ward boundaries, but not always. For example, in the Ottawa context, the Rideau River forms an excellent boundary between Osgoode and Rideau wards. However, it ceases to be a major barrier in River or Rideau-Vanier wards. Similarly, Highway 417/174 for the most part provides an effective ward boundary. There are some wards, Beacon Hill-Cyrville and Kitchissippi, where the Highway is not that critical as a ward boundary.

Physical boundaries can be used as good secondary criteria for ward boundaries, especially where they separate distinct communities, or allow for technical adjustments to improve the conducting of elections. However, with modern transportation facilities, physical boundaries need to be weighed against several other factors in ward boundary selection. In some cases they will be a primary concern, while in other situations they will play a secondary or tertiary role. The importance of physical boundaries is a ward specific, case by case, consideration.

Physical features when used as ward boundaries are, by necessity, linear features; a river or a highway. This is because ward boundaries must have a "hard edge" so they can be defined accurately. Hence, the middle of the river or highway becomes the boundary. In Ottawa there is a major physical feature that figures large in the minds of the residents yet does not play a significant role in ward boundaries. This is the Greenbelt. This feature, which is a large physical separator and major planning tool, needs to be given some attention in the crafting of ward boundaries.

Ward History and Election Experience

Ottawa's existing ward pattern has evolved over a considerable time. Some of the ward boundaries, or portions of them, reflect older municipalities from the time of County / City municipal government or from the Region of Ottawa-Carleton. In some instances, older communities have been fused into one new ward. History creates patterns and communities which often linger, even though growth and change make them less functional.

The City of Ottawa needs to look to the future and design wards that reflect the new city and encourage all communities to work together and add value. Two elections have been held on the basis of the existing wards. This experience provides valuable information on how well the existing wards work, how their neighbourhoods function and what minor, technical boundary changes may be helpful. The first round of public involvement heard many comments on the functioning and boundaries of the existing wards⁹. This information is very important in designing ward options and fine tuning them.

Role of Councillors

No one knows the ward and its communities as well as the ward councillor. Councillors know the structure of the communities within their wards and how they function. They understand: which communities need to stay together; which ones are presently split and need to be reunited; which communities are fragile and need nurturing; which communities are strong and stable; and, the importance of various physical features. Councillors can also assess the type of issues that will face their wards over the coming decade. The public involvement process gained a great deal of information from all councillors and this is reported in the "Report on Public Involvement – Round One". This local knowledge is vital in developing ward boundary options.

Growth Issues

The growth and change of the City of Ottawa lie at the heart of this review of ward boundaries. The City has outgrown its present ward structure and a new one needs to be designed that will help in governance of the City over the next decade. In the next ten years Ottawa is forecasted to grow from its 2004 population of 845,875 to somewhere between 1,017,100 and 1,083,000 in 2015. This projected increase of between 171,222 and 237,125 people cannot be handled with the existing ward system. Under Ottawa's current governance model, new wards will need to be added.

This coming growth is complex and needs to be understood in all its dimensions – type, size and location. The sheer size is significant. About 200,000 people, of

⁹ A detailed review of the first round of the public involvement process is found in a separate report entitled "Report on Public Involvement – Round One".

which approximately 150,000 will be electors, must be accommodated within the political structure and culture in the next decade.

Based on the trend projection, Table 4 shows the location, by ward, of the expected growth.

TABLE 4

POPULATION GROWTH TO 2015 BY WARD

WARD	2004	2015	GROWTH
	POP'N	TREND	2004 to 2015
1 – Orléans	47,800	51,000	3,200
2 – Innes	38,825	43,400	4,575
3 - Bell-South Nepean	66,175	104,900	38,725
4 – Kanata	68,450	95,500	27,050
5 - West Carleton	18,950	24,600	5,650
6 – Goulbourn	28,100	40,900	12,800
7 – Bay	46,675	45,400	-1,275
8 – Baseline	42,225	43,700	1,475
9 - Knoxdale-Merivale	39,400	40,800	1,400
10- Gloucester-Southgate	57,375	74,000	16,625
11- Beacon Hill-Cyrville	35,100	36,600	1,500
12- Rideau-Vanier	45,550	50,500	4,950
13- Rideau-Rockcliffe	40,300	49,900	9,600
14– Somerset	38,800	48,900	10,100
15– Kitchissippi	38,600	41,700	3,100
16– River	49,075	54,800	5,725
17– Capital	35,500	38.300	2.800
18 - Alta Vista	46,025	47,400	1,375
19– Cumberland	29,525	43,000	13,475
20– Osgoode	20,500	26,100	5,600
21– Rideau	13,725	15,600	1,825
TOTALS	845,875	1,017,1001	71,225

Table 4 indicates that the majority of the population growth (82,400 - 48.12%) will occur in the three suburban wards. The "city wards" account for 28.89% of

the growth or 49,475 people. The five rural wards account for the remaining 22.99% of the growth, or 39,350 people.

This pattern of growth can be further refined by considering projected growth (trend line) by traffic zone. As discussed above, these traffic zones provide for a finer spatial allocation of growth within each ward. The major pattern that emerges is the concentration of growth outside the Greenbelt and within the Urban Area Boundary. This is where virtually all the growth in the three suburban wards (Wards 3, 4, and 10) is located. Also, over 80% of the growth in the three rural wards (5, 6, and 19) that contain lands within the Urban Area Boundary is located within the Urban Area Boundary. Factoring in this aspect of three of the rural wards, approximately 108,000 or 63% of all growth in the next decade will be located in the suburban band outside the Greenbelt but within the Urban Area Boundary.

Another 25% (41,700) of the growth will be located within the Greenbelt. This growth reflects the trends towards intensification, as reflected in the Official Plan. Of this growth, some 43% (17,850) is located in the three inner city wards (12, 14 and 17), with most of it (10,100 people), forecasted to locate in Somerset Ward.

Growth in the rural portions of the five rural wards will be low, approximately 14,000 people, or 8% of total growth. This will be located primarily in the rural villages, in accordance with the policies of the Official Plan.

The pattern of growth over the next 10 years focuses attention on the areas designated for urban growth outside the Greenbelt in the first instance and the inner city secondly. The remainder of the wards, both urban and rural, are expected to be fairly stable. The Ottawa Ward Boundary Review needs to create options to accommodate the population patterns that this report has presented.

5. GUIDING PRINCIPLES

The previous section (Key Parameters) reviewed several elements that must be taken into account in creating ward boundaries. While there are variations as to how wards can be drawn, to be successful over time, they need to respect a set of established principles that are used nationally in setting ward or riding boundaries.

The basic goal is the achievement of effective representation. All "communities" must be provided effective representation in any representative government. Effective representation is composed of a series of factors that have been discussed. In summary, items such as geography, community history, minority representation, communities of interest, physical and natural boundaries, population size, area to be represented and good government need to be

incorporated. These varied items are not straight forward and can conflict. Hence, the approach of finding the appropriate balance. In searching for this balance in a practical sense, choices amongst the general factors that make up effective representation must often be made.

In the Ottawa context these general factors can be structured in a hierarchy of three guiding principles to develop a series of options for new ward boundaries.

The first level of the hierarchy is the guiding principle to recognize major communities. In Ottawa there are three – rural, suburban and urban. These can be used as the building blocks for effective representation. They are spatial communities that have fairly well established boundaries. The Urban Area Boundary separates Ottawa's rural and suburban communities. This delineation will become more pronounced as the Official Plan's policies are implemented. In a similar vain, the Greenbelt separates the urban and suburban communities.

The second level in the hierarchy is the guiding principle of size and community of interest. The size of a ward, both its physical area and its population numbers, needs to be assessed. Also, the integrity of various local communities of interest must be respected.

It has been noted that the suburban wards are already at a population that is too large to be represented effectively. Future growth projected to 2015 exacerbates this situation and indicates that the existing suburban wards need to be reorganized. In the rural areas large physical size can be a deterrent to effective representation. This dimension needs to be accommodated in order that rural residents and their issues are properly represented.

In the urban area there are also issues of representation that are germane to population size. The inner city wards have an array of issues that impact on the entire City. While most growth will occur in suburban communities, the Official Plan's policies on intensification will cause some of the urban wards to grow as well. By 2015 some of these wards will be quite large.

The other component of the second level of the hierarchy are local communities of interest. It is not desirable to split local neighbourhoods and villages merely to achieve population parity. As much as possible, every effort should be made to insure the integrity of local communities.

Finally, at the third level of the hierarchy several other factors can be grouped. These include physical boundaries, ward history, types of issues, fine tuning of boundaries and geography.

The purpose of the hierarchy of guiding principles is to help design options and make decisions to achieve the Ottawa Ward Boundary Review's goal of effective

representation. Because of the potential for conflict among the many factors that go into establishing ward boundaries, such a hierarchy can be useful in resolving competing interests. Each level will be considered in order. At the first level is the recognition of the three major communities. At the second level are size and community of interest. The final and third level assesses the remaining factors, for example physical boundaries.

6. CONCLUSIONS

This background report has reviewed the numerous factors that are relevant to the design of ward boundaries. These factors have been applied to the current and future Ottawa situation. A three level hierarchy has been suggested to aid in the Ottawa Ward Boundary Review.

The background material, while important, is general and at times can be abstract, even theoretical. There is, of course, another complementary type of information that is critically important in deciding on future ward boundaries – the input of the residents, community groups and their elected representatives. Their perspective is contained in a companion document entitled "Report on Public Involvement – Round One" which reviews their input.

Both reports form the background context for the next step in building consensus, which is the presentation to the public for discussion of a series of options on possible new ward boundaries for the City of Ottawa.

December, 2004 Gary Davidson & Beate Bowron