Part 6 – Determining Electoral District Populations
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A. Calculating the Provincial Electoral Quotient

Throughout this report, we will refer frequently to the “provincial electoral quotient” or, in the words of the legislation governing us, “a common statistical Provincial electoral quota”.\(^4\) It is calculated by dividing the provincial population by the number of electoral districts. Every electoral district should be as close as possible to the provincial electoral quotient, except to the extent necessary to deviate from that quotient in order to ensure effective representation.

Calculating the provincial electoral quotient is a simple arithmetic exercise. However, we also must decide what data pool to use in determining the provincial population. Should it be the total provincial population as determined, for example, by the federal census, or should it be the total number of British Columbians entitled to vote in a provincial election, or perhaps the smaller number who actually do vote?

The *Electoral Boundaries Commission Act* does not state explicitly whether the commission should rely on elector data or population data. The 1999 Wood Commission (the first commission governed by the current *Electoral

\(^4\) *Electoral Boundaries Commission Act*.\)
Boundaries Commission Act) relied on census data, without any indication in its reports that it had considered using voter data.46

We reviewed the electoral boundaries legislation across Canada, and found that of the 14 jurisdictions (10 provinces, three territories and the federal government):

- Seven require the electoral boundaries commission to rely on census data – Canada, Alberta, Saskatchewan, Manitoba, Ontario (by adoption of federal boundaries), New Brunswick, and Newfoundland and Labrador.
- Three require the electoral boundaries commission to rely on registered voter data – Quebec, Prince Edward Island and Nunavut.
- Two are silent – British Columbia and Nova Scotia.
- Two require the electoral boundaries commission to take into account census and elector data – Yukon and Northwest Territories.

1. Census data

Using census data would have several advantages:

- **It is current:** The most recent federal census took place on May 16, 2006, and BC Stats provided us with the 2006 population data in March 2007. It is unquestionably the most up-to-date population data available.
- **It is authoritative:** Since the census is Canada’s only legally enforced population count, it is the most accurate population data pool available to us.
- **It is useful:** The census breaks down population into very small segments, called “census blocks.” In British Columbia, there are 52,798 census blocks (2006 census). In an urban area, one city block of single-family dwellings (or one apartment block) may constitute one census block. In rural areas, a census block will be much larger. Having access to population data at a census block level is indispensable to an electoral boundaries commission. Through the use of computer software developed by Elections Canada (known as the Commission Redistricting Tool), we are able to calculate the population of a given geographical area (of one or more census blocks) within seconds.

The only significant disadvantage to using census population data is the “undercount.” We know that some people do not complete their census forms – this shortfall is known as the undercount. From previous experience, it is estimated that the undercount amounts to approximately 4 percent. Although Statistics Canada will adjust the 2006 census figures to take into account this undercount, that adjustment is the result of extensive analysis and will not be available to us in time for this commission’s work. Even when it does become available, the adjusted census population data will not be broken down to the census block level.

2. Voter count data

We also examined the use of voter count data. In the 2005 general election, there were 2,845,284 registered voters at the close of general voting, and 1,774,269 of them actually voted. While we could use either of these voter data pools (as five other Canadian jurisdictions do), there are several disadvantages in doing so. First, these data pools give us only the number of voters, not the total population. On the one hand, section 3 of the Charter focuses on the right of Canadian citizens to vote, and our provincial Election Act limits the right to vote to Canadian citizens aged 18 or older who have resided in British Columbia for the preceding six months. In that sense, using voter count data has a certain appeal, as it would lead to electoral districts being designed with voters in mind. However, once elected, an MLA...
does not represent just the voters in his or her constituency. An MLA represents all constituents, including recent immigrants, children and itinerant or seasonal workers from other provinces. Reliance on voter count data implies that some constituents do not count, or at least should not be counted when drawing boundaries.

Second, voter count data is not available at a census block level.

Having examined the alternatives, we are satisfied that the 2006 census data pool should be our primary source for calculating the provincial electoral quotient, which is crucial in establishing electoral districts.

**B. The Changing Face of British Columbia**

The 2006 census figures show there are now 4,113,487 people in British Columbia, a 5.3 percent increase over 2001 (very close to the national average) and an increase of 10.4 percent since 1996.

The census figures also show the province is the most urbanized in the nation – over 85.4 percent of the population lived in urban areas when the census was taken – while at the same time being home to the five communities with the fastest population declines in the country – Kitimat, Prince Rupert, Quesnel, Terrace and Williams Lake.

Population growth has been uneven across the province and it has made the population disparity among electoral districts even more pronounced. For example, the number of electoral districts with a population more than 25 percent below the provincial electoral quotient has increased from six to 13 (minus 28 percent to minus 51 percent) since the last commission, and there are now four other electoral districts with a population more than 25 percent above the provincial electoral quotient (plus 28 percent to plus 53 percent).

Looking at BC Stats population projections to the year 2013 (the second election under our proposed electoral districts), B.C. can expect to see a comparable overall rate of growth, with most of that growth occurring in the Lower Mainland, the Okanagan and the east coast of Vancouver Island.

(see Appendices O to R)