



Redistributing parliamentary boundaries: some international comparisons

Standard Note: SN/PC/05629

Last updated: 28 July 2010

Author: John Woodhouse and Isobel White

Section Home Affairs

The [Coalition Programme](#) of May 2010 included a commitment to bring forward a Referendum Bill which would include provision “for the creation of fewer and more equal sized constituencies”. The *Parliamentary Voting system and Constituencies Bill 2010-11* was introduced on 22 July 2010. For a brief summary of the Bill’s provisions and background see Library standard note SN/PC/5570, [Reducing the size of the House of Commons](#).

This note describes how constituency boundaries are redrawn in a number of other countries: Canada, Australia, the USA and France. Much of the material in the note is taken from a key text on the subject, *Redistributing in comparative perspective* edited by Lisa Handley and Bernard Grofman.

Contents

1	Frequency of general redistributions	2
2	Australia	2
3	Canada	3
4	USA	5
5	France	7
6	Further reading	8

This information is provided to Members of Parliament in support of their parliamentary duties and is not intended to address the specific circumstances of any particular individual. It should not be relied upon as being up to date; the law or policies may have changed since it was last updated; and it should not be relied upon as legal or professional advice or as a substitute for it. A suitably qualified professional should be consulted if specific advice or information is required.

This information is provided subject to [our general terms and conditions](#) which are available online or may be provided on request in hard copy. Authors are available to discuss the content of this briefing with Members and their staff, but not with the general public.

1 Frequency of general redistributions

In a 2006 report to the Committee on Standards in Public Life, David Butler and Iain McLean noted that in “comparable countries with single member constituencies, ten years has been the maximum allowable period between redistributions”. They continue:

The United States Constitution requires reapportionment of the House of Representatives among the States to occur every ten years as soon as the figures from the census become available (US Const. Art. I.2.3). In Canada and in New Zealand redistricting normally occurs every five years, after a quinquennial census. In Australia boundaries are normally reviewed every seven years. In Germany boundaries are reviewed in the first year of each four-year Bundestag. In France there is no fixed period.¹

The sections below sketch the redistribution processes of Australia, Canada, the USA and France; further detail is available in the sources for further reading.

2 Australia²

Members of the Australian House of Representatives are elected from single-member electoral districts referred to as electorates. Substantial variations in the populations of electorates are rectified by redistribution. This is triggered when:

- changes in the distribution of population (ascertained during the thirtieth month from the first day of sitting in the House of Representatives) require a change to the number of members in a State
- more than one third of the districts within a State deviate from the average divisional enrolment for the State by more than 10%, and have done so for more than two consecutive months; or
- within 30 days of the expiration of a period of seven years since the previous redistribution, except that should the seven years expire during the last year of the life of a House of Representatives the distribution is to commence within 30 days of the first meeting of the next House of Representatives.³

Once it has been decided that a redistribution must occur within a State, an independent, nonpartisan Redistribution Committee is appointed to draw the electorate boundaries. The Committee is also responsible for approving the final plan.

The number of House of Representative seats entitled to by each State is obtained by dividing the total population by twice the number of senators for the States: this is referred to as the quota. The number of members for each State is then determined by dividing the population of each State by the quota.

Once an allocation of the number of seats to be given to each State is made, the Redistribution Committee for each State must determine the number of electorates. In doing so, the primary consideration is population equality with “one vote, one value” implying that each electoral district should be drawn so that the population is approximately equal. Rod Medew explains further:

¹ David Butler and Iain McLean, “[The Electoral Commission and the redistribution of seats](#)”, Report to the Committee on Standards in Public Life, June 2006, p4

² This section is based on Rod Medew, “Redistribution in Australia: the importance of one vote, one value” in Handley and Grofman, *Redistricting in comparative perspective*, OUP, 2008, chapter 6

In applying the principle of “one vote, one value”, the starting point is to determine the ideal population for each electoral district for the State which is calculated by dividing the total number of electors in a particular State or Territory by the number of House of Representative seats allocated to the State. The result is allocated to the nearest integer – this figure constitutes the ideal population. Electorates can deviate at the time of the redistribution by as much as 10% from the ideal population...

In addition...another metric is used to prevent malapportionment from occurring over the life of the redistribution: no electorate can deviate by more than 3.5% in 3 years and 6 months from the time of the gazettal of the redistribution [3.5 years is the midpoint in the maximum period of time allowed between redistributions]...

...the normal length of the redistribution process is approximately six months, consequently the projection figures are calculated for a date six months after the commencement of the redistribution.⁴

Although the redistribution process relies heavily on the principle of population equality, several other criteria are taken into account when the Redistribution Committee is drawing the boundaries of electorates. These include: communities of interest (such as economic, social and regional interests); means of communication and travel; physical features; and the boundaries of existing divisions in the State.

Some commentators have argued that the population deviation percentage, used to measure inequality, “is not the best as it focuses on extremes, which may or may not be typical”⁵, that there are more sophisticated measures that could be used,⁶ and that equality is “difficult to achieve”.⁷

Moreover, although the primary criterion governing redistribution is the mathematical requirement of equal population, the High Court of Australia has held that:

The Constitution contains no express requirement that the number of electors in electoral divisions for federal and State elections should be numerically equal or numerically equal as far as it is practicable, nor do the terms of the Constitution or its structure or the history of elections at the time of the federation provide any foundation for such a conclusion.⁸

3 Canada⁹

Under the Canadian constitution, parliament is required to redistribute its electoral constituencies after each decennial census. As the country has a federal structure, the first stage of the redistribution process requires an allocation of the Commons’ seats among the provinces and northern territories. The second stage involves the actual design of the seats themselves within each of the provinces.

Regarding the allocation of Commons’ seats among the provinces at the beginning of each decennial redistribution, the allocation does not, and has never, conformed strictly to the

³ Ibid, p97-8

⁴ Ibid, p101

⁵ The quotation is from Neal Blewitt. Cited by Medew, Ibid p101

⁶ Ibid, p101

⁷ Ibid, p105

⁸ Ibid, p102

⁹ This section is based on John C. Courtney, “From gerrymanders to independence: district boundary readjustments in Canada”, in Handley and Grofman, *Redistricting in comparative perspective*, chapter 1

provinces' respective share of the total population. The two essential principles governing the allocation are the:

- “senatorial floor” clause - no province will ever have fewer MPs than it has members of the appointed upper house and
- The “grandfather clause” - every province will have the same number of Commons' seats that it had in 1976 or in the 33rd parliament (1984-8), whichever is fewer¹⁰

The result is “massive variations” in the average constituency size of the ten provinces.

Manitoba's success (in 1954) in establishing a process by which district boundaries would be regularly redesigned by a non-partisan body was soon adopted by the federal parliament. Eventually the remaining provinces and the three territories adopted variants of the Manitoba or federal schemes.

The elements of the federal exercise are set out in Ottawa's *Electoral Boundaries Readjustment Act 1964* and include:

A requirement that no constituency's population could vary by more than 25% above or below the provincial electoral quota unless there were “exceptional circumstances” justifying the construction of seats with populations that exceeded or fell below the limits. The provincial quotas were to be determined by dividing a province's population by its number of seats

A stipulation that the population of each electoral district was to correspond “as nearly as may be” to the province's electoral quota. Nonetheless, the commissions were to consider the following in determining district boundaries: i) the community of interest or community of identity in or the historical pattern of an electoral district and ii) a manageable geographic size for districts in sparsely populated, rural, or northern regions of a province.¹¹

The redistricting procedures at the provincial level vary from province to province but, generally speaking, approximate the federal legislation. However they do differ from one another in some respects. For example, redistributions in some jurisdictions follow every second provincial election; in others, they are triggered automatically by the decennial census. The +/- 25% rule is, for the most part, standard. However Nova Scotia has no set limits (although effectively established by the commission in the 1990s as +/- 33% for that decade) and Saskatchewan has a limit of +/- 5% of the provincial quota. Vast and relatively underpopulated northern seats are invariably allowed more generous population ranges. In Saskatchewan, for example, one of the two statutorily defined northern seats has a population that is 50% below the provincial quota.

John Courtney notes that the “principles on which seats are to be constructed are similar, in some respects identical, in the federal and provincial legislation or in the instructions issued to commissions”.¹² He continues:

“Community of interest” remains the term common to almost all jurisdictions. The phrase, however, is left largely undefined. That clearly leaves the door open to different commissions, even successive commissions within the same jurisdiction, to attach different meaning to the term. Only in Quebec has the electoral boundaries legislation

¹⁰ Ibid, p13

¹¹ Ibid, p16

¹² Ibid, p17

tried to lay out with some precision what the commissions are expected to take into account when considering a community's "interest" in creating districts. Quebec's legislation invokes the idea that constituencies would be composed of a "group of electoral precincts". Precincts are to contain no more than 2,500 electors and are to be designed to reflect the "socio-economic homogeneity and the natural boundaries of each locality". The "demographical, geographical and sociological considerations" that are to guide a commission's work include "population density, the relative growth rate of the population, the accessibility, area or shape of the region, the natural local boundaries and the limits of municipalities".¹³

The province of Nova Scotia commission, in its redistributions of 1992 and 2004, is the only commission (at either federal or provincial level) to have made a deliberate attempt to construct districts with targeted minority populations as the principal justification for a set of boundaries. The Black, Native and Acadian communities each has a small share of Nova Scotia's population: around 1% for the Natives and 5% for the Acadians. The Nova Scotia commission has tried to ensure a degree of "minority representation" in the 52-seat legislature by creating so-called "protected constituencies": districts created around "minority group population concentrations" – three of the four protected seats have populations well below the provincial average. So far, Acadian candidates have consistently won "their" seats in every election since they were created in 1993. Black candidates have won "theirs" in two out of the five elections since 1993.¹⁴

Courtney notes that Canada's boundary readjustment scheme has its critics. The main issue "stems from the formula for determining provincial entitlements in the House of Commons":

The sharply growing disparity in provincial populations, combined with the application every ten years of the grandfather and senatorial clauses, ensures that the voters in Canada's three fastest growing provinces can readily understand media and political attacks on the redistribution formula when they are told that their vote is "worth" much less than the vote of fellow Canadians in smaller, relatively stagnant growth provinces.¹⁵

He continues:

The three fastest growing provinces (Ontario, Alberta and British Columbia) continued to outpace the rest of the country. It is difficult to foresee how future reapportionments of Commons' seats among the provinces will not continue to provoke public and political controversy about the fairness of the current redistribution formula...Finding an acceptable answer...will test the lawmakers', and possibly the courts', ingenuity in addressing inherently difficult questions of representational fairness in a staunchly federal country.¹⁶

4 USA¹⁷

Michael McDonald notes that redistricting in the United States is "exceptional in that it is decentralized, political, and often litigated".¹⁸ He explains:

¹³ Ibid, p17-8

¹⁴ Ibid, p18-9

¹⁵ Ibid, p22

¹⁶ Ibid

¹⁷ This section is based on Michael P McDonald, "United States redistricting: a comparative look at the 50 states", in Handley and Grofman, *Redistricting in comparative perspective*, chapter 4

¹⁸ Ibid, p55

the Constitution delegates authority to conduct federal elections to the state legislatures; the Constitution is silent on the conduct of state and local elections, reserving those responsibilities to the states. Over time, national and state constitutions have been amended and reinterpreted through the legal system to place constraints on state decision-making with regard to redistricting. In addition, the patchwork of state laws regulating the redistricting process has been supplemented by federal laws and federal court decisions under specific circumstances...However the responsibility to act within the national guidelines rests primarily with the states, many of which have unique redistricting systems – systems that not only differ across states, but may diverge for congressional and state legislative redistricting even within the same state.¹⁹

State processes

State laws or constitutions determine redistricting processes which are generally characterized by two types:

- A method that follows the ordinary **legislative process** where a legislature proposes a plan for approval by a governor
- A method involving a specially appointed **commission**

The legislative method involves the legislature passing maps as it would any bill, then sending the bill to the governor for signing. If the governor vetoes the map, the legislature is allowed an override attempt by a supermajority vote. Thirty-eight states use this method for congressional redistricting and 26 states use it for state legislative redistricting.

When there is a unified state government, or when a party has a veto-proof majority, the process is usually adopted quickly. However where there is divided control of the upper and lower houses, either a compromise is reached or redistricting ends up in court. A norm observed by many state legislatures, even when there is unified party government, is to allow the respective chambers to draw their own maps. Where there is divided control of the legislature, an obvious compromise is to allow a continuation of this norm.

Commissions

The use of commissions plays a primary role in congressional redistricting in 7 states and in state legislative redistributing in 12 states. It is used as a backup in a number of other states where the legislative process breaks down.²⁰ McDonald explains the four types of commission that are possible:

- an odd number of members with a map adopted on a majority vote
- an odd number of members with a map adopted on a majority vote and a tiebreaker selected if majority is not forthcoming
- an even number of members and an additional member selected by majority vote of the commission's members with a map adopted on a majority vote
- an even number of members with a map adopted on a supermajority vote²¹

¹⁹ Ibid

²⁰ Ibid, p56-7

²¹ Ibid, p58-9

Some states forbid commissions from drawing districts to favour a party or incumbent member. Others seek to constrain redistricting by criteria such as compactness or following existing political boundaries; however such constraints are often only enforced in the courts in extreme violations.²²

The United States is notable for its use of geographic information systems (GIS) software for drawing up and evaluating redistricting plans. In 1990, every state in the US used computers for redistricting, and almost every state used GIS software.²³

The courts

If redistricting procedures break down, the courts must provide a plan to correct for population shifts in the intervening decade since the last census. Five states explicitly require state Supreme Court review of adopted maps: Alaska (state legislative only), Colorado (state legislative only), Florida (state legislative only), Idaho, and Kansas. Other criteria found in federal and state constitutions and law can serve as the basis for a court challenge.

Political parties, incumbents and racial groups have all challenged redistricting plans in court if the process has not produced maps that they consider favourable. The rise in litigation has been accompanied by an increasing number of criteria placed upon redistricting, most recently under state law. Following redistricting in 2000, the state legislative maps of Alaska, Arizona, Idaho, and North Carolina were successfully challenged, as was the congressional map of Mississippi.²⁴

McDonald concludes his discussion by observing that:

Redistricting is often considered to be undemocratic since it provides politicians with a chance to choose voters, rather than allowing voters to choose politicians. There is evidence that those involved in redistricting engage in exactly this behaviour: competitive districts are unlikely to be created since they offer no benefits to parties, incumbents or minority groups. The 2001 redistricting cycle...resulted in the fewest competitive districts in modern American history, with only 10% of the districts considered competitive.²⁵

5 France²⁶

On 24 November 1986, a new redistricting plan came into force. This was based on the following principles:

- The apportionment of the 577 seats to the departments and territories would remain the same
- To accommodate changes in populations, seats would be reapportioned and departments redistricted following every second census
- Every district would be contiguous (except for unavoidable circumstances – islands, for example)

²² Ibid, p60

²³ Administration and Costs of Election Project website, [Use of computers and software for delimitation](#), Undated

²⁴ Ibid, p61

²⁵ Ibid, p68

²⁶ This section is based on Michel Balinski, "Redistricting in France under changing electoral rules", in Handley and Grofman, *Redistricting in comparative perspective*, chapter 12

- Except for Paris, Lyon, and Marseille, the boundaries of cantons (with the exception of those having more than 40,000 inhabitants) would be respected
- No district could have a population that differed from the department's average district population by more than 15%²⁷

The plan has resulted in districts of greatly differing numbers of inhabitants. As Balinski comments:

The district with the smallest population was the 2nd of Lozère, with 35,408 inhabitants; the district with the largest, the 4th of Hauts-de-Seine had 123,765 inhabitants – *two* votes in the 2nd of Lozère weighed as heavily as *seven* in the Hauts-de-Seine. This disparity was the result of two factors: the apportionment to departments and the districts within departments.²⁸

He claims that it “is relatively easy to conceive district plans that respect the integrity of cantonal boundaries and limit...inequalities”²⁹; that the redistricting plan “seems definitely to have favoured the Right”³⁰; and that “one-person, one-vote is very far from true”.³¹

6 Further reading

- Lisa Handley and Bernard Grofman (editors), *Redistricting in comparative perspective*, Oxford University Press, 2008
- Andrew Rehfeld, *The concept of constituency: political representation, democratic legitimacy, and institutional design*, Cambridge University Press, 2005
- David Butler and Iain McLean, “[The Electoral Commission and the redistribution of seats](#)”, *Report to the Committee on Standards in Public Life*, June 2006
- Iain McLean and David Butler (editors), *Fixing the boundaries: defining and redefining single-member electoral districts*, Dartmouth, 1996
- [Westminster Hall adjournment debate on constituency boundaries \(Islands\)](#), 15 June 2010

²⁷ Ibid, p182

²⁸ Ibid, p183

²⁹ Ibid, p183-4

³⁰ Ibid, p185

³¹ Ibid, p187