

# A BC MMP model

## With “top-up” MLAs allocated regionally, calculated provincially

### Summary

This MMP model elects “top-up” MLAs in small natural regions, enhancing accountability to voters of all MLAs, fixing problems that the Scottish model would create in BC, and still with only 79 MLAs.

### Background: MMP system

1. No doubt Citizens' Assembly members are well aware of the MMP system. Briefly, British occupation authorities in postwar Germany created it in 1946. Based on decades of European experience with proportional voting, **this hybrid took characteristics of British direct elections and merged them with proportional systems** so that election results reflect the popular vote, while keeping local MPs, and keeping out extremists. It caught on throughout West Germany, and then in at least eight other jurisdictions, including New Zealand, Scotland and Wales.

2. The Law Commission of Canada recommended in April 2004 “that Canada adopt a mixed member proportional electoral system.” Quebec says they will propose MMP this year. The PEI Electoral Reform Commission also recently recommended it.

3. On election day, the voter casts **two votes**. Your **local vote (riding vote) is for your local MLA**, elected as we do today. Your **party vote is for your choice of party to govern BC**. On the party ballot, each party would publish their list of candidates for that part of BC, **nominated by an open democratic process in that region in each party**.

4. Every citizen would be **represented both by a local MLA, and by “top-up” MLAs**. In this model, these are elected **from your own region**.

### Scotland’s model re-examined

5. Because New Zealand has no provinces and uses national lists, for details most Canadian MMP fans look to Scotland’s model. However, it has problems when applied to BC. Scotland’s closed lists help make governments accountable, but **will each MLA be accountable?** Scotland’s regions of 16 MLAs are too large for many parts of BC. What about BC’s isolated northern ridings that are large enough already? Some people find the Scottish threshold (about 6 percent) too high, but with Scotland’s model, the size of the list limits the threshold.

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6. Quebec’s Mouvement pour une Democratie Nouvelle (MDN) put the **criticism of the Scottish model best**:

*“A mixed model must distribute across Quebec the compensatory proportional seats, so that the population of all the regions will have access to the same diversity of political parties, and so that the votes cast for a party in one region are added in with those cast in the other regions. Breaking up Quebec’s territory into self-contained regions will lead either to the creation of regions meaning nothing for the population, because they are too vast geographically, or to the creation of smaller territories but where smaller parties could not reach the necessary number of votes to gain a seat (effective threshold).”*

7. Voters want **accountability of all MLAs to local voters**. Although MMP means 60 percent of MLAs are still directly elected in local single-member ridings, some people fear that the other 40 percent will be “trained seals” accountable only to their parties. The “top-up” MLAs must be **accountable to voters in small, meaningful, natural regions**. This will provide **effective local representation**.

### A regional MMP model with provincial calculation

8. This submission gives an example of an MMP model that **cures Scotland’s defects**.

9. In this sample model, we divide BC into 13 small regions. Unlike Scotland, the numbers of “top-up MLAs” are first calculated at the provincial level, and allocated to the regions. Then we fill them from **regional lists of candidates**, nominated by party members in the region and **ranked by local voters**.

***Open lists offer more extended voter choice.***

10. This model follows the Law Commission's recommendation for a "flexible list": **voters will have the option of either endorsing the party "slate" or preferring a candidate within the list, or even ranking all the party's candidates. Open lists offer more extended voter choice** than closed lists, and reduce party discipline. Use of lists elsewhere has been found to help improve diversity in legislatures: more women and minorities, from groups with wider concerns, since parties are accountable for their lists.

### Thirteen BC regions

11. In this example, BC still has 79 MLAs. I am assuming that the "top-up" MLAs should be at least 40% of the total. This is a standard level for reasonably safe proportionality. It also happens to be exactly what we need to cope with the 2001 election results. Across BC, there would be a total of 47 local ridings and **32 regional "top-up" MLAs: 79.**

### Outside the GVRD: 7 regions

14. Right now there are 42 electoral districts mostly outside the GVRD, including Powell River - Sunshine Coast and West Van - Garibaldi. In this example, five are isolated northern districts. Powell River - Sunshine Coast and West Van - Garibaldi are grouped with North Van. The remaining 35 outside the GVRD, plus the two in Langley, **are grouped in seven regions** with 37 MLAs: 21 local, 16 "top-up."

15. In this example these are:

**Fraser Valley - Langley** 7: 4 local, 3 top-up (Abbotsford's 2 present ridings, 2 Langley, 2 Chilliwack, and Yale-Lillooet).

**Kelowna - Okanagan** 5: 3 local, 2 top-up (Kelowna-Mission, Kelowna-Lake Country, Okanagan - Vernon, Okanagan-Westside, and Penticton-Okanagan Valley)

**Kootenays** 3: 2 local, 1 top-up (East Kootenay, Nelson - Creston, West Kootenay - Boundary.)

12. In this example, the five northern districts would keep their local MLAs: Peace River North, Peace River South, Bulkley Valley-Stikine, North Coast and Skeena. The other 74 districts would be in regions. This stops the large and isolated Northern districts being even larger. **All people in BC still have the same ratio of population per MLA**, but in these isolated districts they have only local MLAs, while **other regions typically have three local MLAs and two regional MLAs.** Nonetheless we include the "party ballots" of the isolated districts in the provincial totals, so they're **treated equally with the rest of the province.**

***All people in BC still have the same ratio of population per MLA.***

13. In implementing a model like this, a redistribution commission would hold hearings and set new boundaries. They might follow closely the boundaries of BC's 28 Regional Districts. Because this example includes, to show how the model works, a simulation of the 2001 election results, I describe the regions following the existing 79 electoral districts.

**Kamloops-Cariboo-Shuswap** 6: (3 local, 3 top-up) (2 Kamloops, Cariboo North & South, Shuswap, and Columbia River-Revelstoke )

**Prince George** 3: 2 local, 1 top-up

**Capital Region** 7: 4 local, 3 top-up (including Saanich North and South, Esquimalt - Metchosin, and Malahat - Juan de Fuca)

**Nanaimo--North Island** 6: 3 local, 3 top-up (Nanaimo, Nanaimo - Parksville, Cowichan - Ladysmith, Alberni - Qualicum, Comox Valley, North Island)

### Inside the GVRD: 6 regions

16. The GVRD (plus Powell River-Sunshine Coast and Mission, and including West Vancouver-Garibaldi, but not including Langley) now has 37 MLAs. These might be 21 local, 16 "top-up," **grouped into six regions** as follows:

**Vancouver** 10: 5 local, 5 top-up

**Richmond-Delta** 5: 3 local, 2 top-up (3 Richmond, 2 Delta)

**Burnaby-New Westminster** 5: 3 local, 2 top-up (including Burquitlam)

**Tri-Cities - Maple Ridge** 5: 3 local, 2 top-up (Port Moody - Westwood, Coquitlam - Maillardville, Port Coquitlam - Burke Mountain, Maple Ridge - Pitt Meadows, & Maple Ridge - Mission)

**Surrey** 7: 4 local, 3 top-up

**North Shore-Sunshine Coast** 5: 3 local, 2 top-up: North Van (2), West Van (2) incl. West Van - Gairbaldi, and Powell River - Sunshine Coast.

### ***By the numbers.***

#### **Number of MLAs from:**

Five-MLA regions (three local MLAs, two regional MLAs): .....	<b>25, from five regions.</b>
Seven-MLA regions (four local MLAs, three regional MLAs): .....	<b>21, from three regions.</b>
Three-MLA regions (two local MLAs, one regional MLA): .....	<b>6, from two regions.</b>
Six-MLA regions (three local MLAs, three regional MLAs): .....	<b>12, from two regions.</b>
Ten-MLA region (five local MLAs, five regional MLAs): .....	<b>10, from one region.</b>
Isolated single ridings: .....	<b>5, from five ridings.</b>

## **How does it work? A simulation of BC's 2001 election results**

17. In this simulation, of 1,591,306 votes cast in 2001, only 1.98 percent are "wasted:" the 31,399 votes for candidates other than five parties.

***... of 1,591,306 votes cast in 2001, only 1.98 percent are "wasted"***

***More voters would have voted who saw no point wasting their votes. More voters would have felt free to vote for their first choice, not against their last choice.***

18. For this simulation I **assume a threshold of 3%**. Many people want a threshold of 4% or 5%. I like 4%, but on the 2001 votes, this would exclude the Unity Party (UP) and the Marijuana Party (MP). The model works either way. I used the lower threshold to show how the model works even with five parties.

19. With a 4% threshold, **would PR have empowered Unity supporters enough to bring them up from 3.23% to 4%? Likely, yes.**

20. This simulation **assumes voters voted as they did in 2001**. Of course, unlike in 2001, more voters would have voted who saw no point wasting their votes. Also, more voters would have felt free to vote for their first choice, not against their last choice.

21. Start with a provincial calculation. The Liberals are entitled to 46.43 MLAs, the NDP to 17.38, the Greens (GP) to 9.99, the UP to 2.60 and the MP to 2.59. Using the "largest remainders" rule, **Liberal voters get 46 MLAs, NDP voters 17, GP voters 10, UP voters 3, and MP voters 3.**

22. With 47 local ridings instead of 79, I will assume that the NDP won one in Vancouver and the Liberals the other 46. Usually the Liberals would have some Regional MLAs, but in this simulation the 916,888 Liberal voters got just what their votes deserved: 46 Liberal MLAs, one for each 19,932 voters. Therefore, the Liberals qualify for no regional MLAs. Since the 343,156 NDP voters are entitled to 17 NDP MLAs, one for each 20,186 votes, they get another 16 regional MLAs. As stated, the 197,231 GP voters are entitled to 10 GP MLAs, one for each 19,723 voters; the UP to 3 MLAs, and the MP to 3.

## **Seat allocation across regions**

23. This model looks a bit like the regional model used in Scotland, but in Scotland's model such small regions would give a bonus to large parties. This model is actually more like the regional model used in four German states. For the actual calculations and an explanation, see the Appendix.

*... but who would our MLA be?*

## Local Results:

24. Each region has the following MLAs:

**Vancouver** 4 local Liberals, 3 NDP (1 local, 2 regional), 2 regional Green, 1 regional MP. (Note: MP leader Marc Emery got 4% in Burrard.)

**Richmond-Delta** 3 local Liberals, 1 regional NDP, 1 regional Green.

**Surrey** 4 local Liberals, 1 regional NDP, 1 regional Green, 1 regional UP. (Note: UP's Lewis Robinson and Heather Stilwell each got 7% in Green Timbers and Panorama Ridge.)

**Burnaby - New Westminster** 3 local Liberals, 1 regional NDP, 1 regional Green.

**Tri-Cities - Maple Ridge** 3 local Liberals, 1 regional NDP, 1 regional UP. (Note: UP leader Chris Delaney got over 10% in Port Coquitlam - Burke Mountain.)

**North Shore - Sunshine Coast** 3 local Liberals, 1 regional Green, 1 regional NDP.

**Fraser Valley - Langley** 4 local Liberals, 1 regional NDP, 1 regional Green, 1 regional MP. (Note: MP's Norm Siefken got 6% in Chilliwack - Sumas)

**Kelowna - Okanagan** 3 local Liberals, 1 regional NDP, 1 regional UP. (Note: UP's Doug MacDonald got 13% in Okanagan-Vernon)

**Kamloops - Cariboo - Shuswap** 3 local Libs, 1 regional NDP, 1 regional Green, 1 regional MP. (Note: MP's Vern Falk got 5% in Kamloops - North Thompson)

**Kootenays** 2 local Liberals, 1 regional NDP

**Prince George** 2 local Liberals, 1 regional NDP

**Capital Region** 4 local Liberals, 2 regional NDP, 1 regional Green

**Nanaimo-North Island** 3 local Liberals, 2 regional NDP, 1 regional Green

**Northern BC:** 5 local Liberals

## Accountable regional MLAs

25. **Voters have more power.** In a typical region in this model they **have five MLAs: three local, two regional.** But this sample model uses "**natural regions**" rather than always picking five. One region has 10 MLAs. Others have only three. This **flexibility makes the model more responsive to local conditions**, and creates a more flexible pattern to allocate seats from small parties.

26. Some MLAs may focus on their role as legislators. Still, the regions are **small enough** to keep regional candidates and MLAs **locally accountable**, not appointed by party leaders.

*... regions small enough to keep regional MLAs locally accountable*

27. Of the 32 regional MLAs, 24 are their party's only MLA from the region. Only one person fits the title "The NDP MLA for [name] Region." For the other eight regional MLAs, no doubt they would divide the region between them informally for constituency service purposes. They could name their sub-region or (to adopt Julian West's term) their "Circuit."

## Trade-offs

28. The basic trade-off with MMP is simple. For example, take Kelowna - Okanagan Region (the present ridings of Kelowna - Mission, Kelowna - Lake Country, Okanagan - Vernon, Okanagan - Westside, and Penticton - Okanagan Valley.)

*... you can go to your local MLA or one of your regional MLAs. And, the result across BC reflects the popular vote. In return, your local riding is 60% larger.*

29. Instead of five local ridings that all elected Liberals, you get three larger ridings (all Liberals) and two regional MLAs (one NDP, one Unity Party.) You have **more effective local representation**: you can go to your local MLA or one of your regional MLAs. And, the result across BC reflects the popular vote. In return, your local riding is 60% larger.

30. You'll know the election result on election night, as to the overall numbers of MLAs. The regional allocation -- which parties have regional MLAs in your region -- may not be clear until the final count.

## Alternatives and variations:

This is a sample model. Obviously you can consider alternative MMP models and variations to this model.

### 1. Self-contained regions - Scotland

Scotland has eight regions, but they're self-contained: like eight separate elections. The only advantage of this is simplicity of calculation. Also, they use the "highest average" rather than "highest remainder" calculation. As you will see, this gives a slight bonus to large parties.

Scotland's regions have 16 Members of the Scottish Parliament. For a party to gain a BC seat with only six percent of the vote, BC's regions must be at least 16 MLAs.

The Law Commission's demonstration model used this method, but with huge self-contained regions of 36 or so MPs, for low thresholds.

***Here's a second model for BC,  
on the Scottish model.***

In our second model, Vancouver Island has 13 MLAs, and the other three **self-contained regions have 22 MLAs each**. This cuts the "effective threshold" to just above four percent. Scotland's model has no province-wide threshold. Each self-contained region has its own separate threshold.

In the main model, across BC were 47 local ridings and 32 regional "top-up" MLAs: 79. This time, to give each separate region at least 40 percent "top-up" MLAs, we get 46 local MLAs and 33 regional MLAs.

**Vancouver - Richmond - Burnaby - North Shore-Sunshine Coast:** 13 local, 9 top-up (Vancouver's 10 ridings, Richmond's 3, Burnaby's 4 including Burquitlam, North Van's 2, West Van's 2 including West Van - Garibaldi, and Powell River - Sunshine Coast.)

**Delta - Surrey - New Westminster - Tri-Cities - Maple Ridge - Langley - Fraser Valley:** 13 local, 9 top-up. (Delta's 2, Surrey's 7, New Westminster, Port Moody - Westwood, Coquitlam - Maillardville, Port Coquitlam - Burke Mountain, Maple Ridge - Pitt Meadows, Maple Ridge - Mission, Langley's 2, Abbotsford's 2, Chilliwack's 2, and Yale-Lillooet)

**Vancouver Island:** 7 local, 6 top-up.

**Interior & North:** 13 local, 9 top-up (Kelowna-Mission, Kelowna - Lake Country, Okanagan - Vernon, Okanagan-Westside, Penticton - Okanagan Valley, East Kootenay, Nelson - Creston, West Kootenay - Boundary, Kamloops' 2, Cariboo North & South, Shuswap, Columbia River - Revelstoke, Prince George's 3, Peace River North, Peace River South, Bulkley Valley - Stikine, North Coast and Skeena.)

The results are:

**Vancouver - Richmond - Burnaby - North Shore-Sunshine Coast:** Liberals 14 (12 local, 2 regional) NDP 5 (1 local, 4 regional); GP 3 regional

**Delta - Surrey - New Westminster - Tri-Cities - Maple Ridge - Langley - Fraser Valley:** Liberals 15 (13 local, 2 regional), NDP 4 regional, GP 2 regional, UP 1 regional

**Vancouver Island:** Liberals 7 local, NDP 4 regional, GP 2 regional.

**Interior & North:** Liberals 14 (13 local, 1 regional), NDP 4 regional, GP 2 regional, UP 1 regional, MP 1 regional.

**Total: Liberals 50, NDP 17, GP 9, UP 2, MP 1**

***Comparing the Scottish model to the model with provincial calculation, the Liberals have gained four MLAs, the Greens have lost one, Unity has lost one and the Marijuana Party has lost two.***

You will see that the Unity Party's **concentration of votes** got it two MLAs where it had over 4% (compared with three MLAs under the provincial calculation), while the Marijuana Party with virtually the same percent provincially had enough concentrated votes for an MLA in only one region (compared with three MLAs under the provincial calculation.)

The Liberals get 50 MLAs (four more than the 46 MLAs under the provincial calculation), the NDP got their 17, and the Greens got one less than their 10 due to the effect of Scotland's "highest average" rule.

Of course, the big problem with this model is a **single list for the entire Interior and North**. And the **remote northern ridings are now 69% bigger**.

However, if you run the Scottish model on the 13 regions in this 2001 simulation, the Greens get only five MLAs: Vancouver, Victoria, North Shore where they got 19%, Burnaby (14%) and Nanaimo (14%). **Richmond-Delta's 12% is not enough for an MLA.**

If we try five larger regions, **splitting the Interior & North**, a region of 10 MLAs for the North, including Cariboo, would have no Green MLA from 2001. Scotland would give the North six local Liberal MLAs, two regional Liberal MLAs and two regional NDP MLAs. A Kelowna - Kamloops - Kootenay region with 12 MLAs would, under Scotland's model, have seven local Liberal MLAs, one regional Liberal MLA, three regional NDP MLAs, and one regional Green MLA.

***Smaller self-contained regions  
favour larger parties.***

So as a **result of splitting the Interior & North**, the Unity Party loses another MLA and has only one, while the Marijuana Party loses its only MLA and the Greens lose an MLA. The NDP gains one MLA by the split, and the Liberals gain two MLAs. Smaller self-contained regions favour larger parties. And even this region is too large for those who want MLAs accountable to the Kootenays, or to the Okanagan, or to the Kamloops area.

Another problem with the Scottish model doesn't show up in this simulation. What if one party gets 45% of the vote in a 22-MLA region, wins all 13 local seats, but deserves only 10 of the 22 MLAs? The other 9 "top-up" MLAs **aren't enough for proportionality**, but **the other regions aren't adjusted to correct this**, because each region is self-contained.

## 2. Thresholds

With the provincial calculation model, the threshold issue can't be finessed by using self-contained region size as a proxy for it, as Scotland does. A threshold should be high enough for the Legislature to be healthy, workable and not unduly subject to extremists or mini-parties with only one or two men (and it's usually men) elected.

This simulation assumed 3%, although my own preference is 4%. Should a party with only three per cent of the vote qualify for seats?

***Should a party with only three per cent of the vote qualify for seats?***

On the other hand, every vote should count equally, as far as possible. High thresholds keep newer views out of the Legislature. Lower thresholds favour free expression of minority opinion. Voters should decide for themselves how many parties they want. If challenged in court under the Charter of Rights, the threshold must be shown to be a reasonable limit.

**Perhaps the threshold should be 2%, 3%, 4% or 5%.**

## 3. Independents on regional lists

Independents can still run for local MLA. Your party ballot is for the party you want to govern BC, so **most MMP models don't let independents run for the top-up regional seats** on the party ballot.

However, **Scotland lets independents run for regional seats too**, but they need at least 6 percent of the vote across a 16-MP region. This is not easy for an ordinary person. In Scotland's last election, an incumbent MP who left her party won re-election as an independent Regional MP. In Scotland, they now have four independent Members of the Scottish Parliament out of 129: two local, two regional.

By contrast, the Republic of Ireland's Parliament has 16 independents (including a one-man party) out of 166 members (only 13 percent women.) STV elects more independents and cuts party discipline farther than any other system. You have to decide: how easy do you want to make it for independents to be elected; the **tradeoff between effective local representation and responsible government**.

***... how easy do you want to make it  
for independents to be elected;  
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and responsible government.***

In BC, instead of the province-wide threshold of, say, 4%, **an independent would have to win enough votes to get a regional seat as though the region were self-contained**. In a region with five MLAs, 17% of the vote would likely be enough.

## **More variations and alternatives**

### **4. Best runners-up**

If you don't like party lists, even when they're locally nominated in natural regions, and even with "open lists," you may prefer the "best runner-up" model. It works just like this MMP model, but with the "top-up" MLAs being the party's "**best runners up**" for single seats in the region, not from regional lists. This is used in the German state of Baden-Wurttemberg.

With no lists, there may be less chance for party members to decide to promote women candidates. Still, 28% of the best runners-up in this simulation were women, taking the runner-up as the candidate with the highest percent. Baden-Wurttemberg actually defines it as the one with the highest vote total, perhaps to give an incentive to high turnouts.

### **5. Open lists and ranking methods**

The Law Commission said voters should be able to pick a candidate within the list. The only MMP jurisdiction with **open lists** is the German state of Bavaria. New Zealand looked at Bavaria, but hasn't copied it. Most MMP jurisdictions use **closed lists**, since electing a local MP gives a personal choice.

*... the Bavarian model ensures all MLAs have faced the voters.*

In Bavaria, all party votes are cast by ticking in a candidate box under the preferred party. The party's nomination process ranks candidates in their preferred order. A voter with no list candidate preference would likely tick the one at the top of their favoured party's list. Choices of those who do have candidate preferences often have little influence on the rankings. This may be just as well, if party members had voted to put women or minority group candidates at the top of the list. It's the party's responsibility to ensure there is balance in the party's list.

Still, **the Bavarian model ensures all MLAs have faced the voters.**

If you fear it's too hard for voters to change the ranking, you might go even further than Bavaria. There are **many permutations to "open lists"** in countries with pure list systems, giving more weight to voters who rank the whole list.

For example, Belgium now gives double weight to rankings done by individuals. If you just vote the party slate, that gets only half as much weight for the purpose of deciding how the list candidates are ranked.

### **6. Region size: larger or smaller regions**

Perhaps Burnaby - Tri-Cities - Maple Ridge should be a single region. In larger regions, where two MLAs from the party's regional list are elected, there's a better chance at least one will be a woman. On the other hand, perhaps Surrey and Langley should be combined as two regions. Perhaps Vancouver Island should be three regions.

### **7. Preferential ballot for local MLAs**

Some people propose that, within MMP, local MLAs be elected by a preferential ballot so that the local MLA has a "true majority." This might do no harm, unless it caused a sweep of all the local seats with less than 60% of first choices, but it's not necessary. It would add complexity illogically: the "true majority" would be a false majority based on negative voting.

### **8. Aboriginal seats**

New Zealand has seven MPs elected by those Maoris who choose to vote on the separate aboriginal voters list, from seven Maori electoral districts, a parallel set of local districts located across the whole country, with their "party votes" part of the national total. This sample model doesn't include this option.

*... the three northwest ridings could be a region with two local MLAs and one regional MLA.*

### **9. No isolated ridings**

If you prefer all of BC be part of regions with "top-up" MLAs, you could include the five northern ridings in regions. Perhaps the three northwest ridings could be a region with two local MLAs and one regional MLA; Prince George - Peace River could have three local MLAs and two regional MLAs, and would include the two Peace River ridings. Of course the local ridings would be larger than they are today.

## **More variations and alternatives**

### **10. Running in more than one race**

It's normal in MMP systems that candidates run for local MLA and stand on the regional list as well. The list is no guarantee of election: if the party wins enough local seats in the region, it won't be entitled to any regional MLAs. So there are no second-class MLAs: they can all run locally and regionally if their party members want them to.

But what about leaders of small parties that don't know where their strongest regions will be? Should they be able to stand at the top of more than one regional list? Some countries allow the party's top three or five candidates to do this.

***The list is no guarantee of election: if the party wins enough local seats in the region, it won't be entitled to any regional MLAs.***

### **11. France's parity law**

France is the first country in the world to stipulate by its "parity law" that for the majority of elections there must be as many women candidates as men.

Since 2000, for elections in France using a list system (municipal elections for at least 3,500 inhabitants, regional and European elections, and elections to the Senate), 50% of the list candidates must be women. For European elections and elections to the Senate, the lists must be "zippered," that is, observe alternating parity. For regional and municipal elections, parity requires each list to be divided, from top to bottom, into blocks of six candidates, of whom three must be women. (The "lumpy zipper.")

No MMP jurisdiction does this yet. Perhaps you could have each party nominate twice as many regional candidates as the number of regional MLAs to be elected: half men, half women. Then if three men won the three local seats, the top women from the regional party lists would be the two regional MLAs. If men won two of the three local seats, the first regional MLA would be the top woman on her party's list. And so on.

### **12. A larger Legislative Assembly**

If you don't like the size of the larger local electoral districts, you might prefer an expanded legislature. To keep the present districts might need another 53 MLAs. Or you might expand the legislature by 26 MLAs to 105, and have 63 single seats from districts only 25% larger than today's. For example, Kelowna - Okanagan would then have four local MLAs and three regional MLAs. Is this worth the cost?

### **13. "Top-ups" percent; "overhangs"**

In Germany half the MPs are from party lists, half from single-seat ridings. In New Zealand it's 44% "top-up." In Scotland it's 43%. The Law Commission said it might be as low as 33% but noted this often wouldn't be enough for full proportionality. We've used 40%, often said to be the minimum required.

What happens if 40% isn't enough? In Germany and New Zealand, if a party wins more riding seats than it deserves from its share of the party votes, so that it doesn't receive any list seats, it keeps the extra seats (called "overhangs") and the size of Parliament increases by that number of seats until the next general election. In Scotland, however, the House size is fixed: the other parties lose out.

### **14. Single-ballot model**

Germany used a single ballot in 1949. When you voted for your party, that was a vote for your party's local candidate. By 1953 they changed to the two-ballot model, making local MPs more accountable. However, the single-ballot model is still a possibility.

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**Author's note:** *Wilfred Day is a member of the National Council of Fair Vote Canada, but makes this submission as an individual. A lawyer in Port Hope, Ontario for 33 years, he was elected as a school trustee from 1982 to 1994, and sits on the Ontario Bar Association's Council. Over the years since 1961 he has worked with many BC residents in a political party and in the Canadian School Boards Association. He has visited BC several times, and his son recently lived in BC for three years.*



## Appendix: Regional Calculations

1. While this model looks like the regional model used in Scotland and Wales, it's more like the regional model used in four German states. The states of Bavaria, Baden-Wurttemberg, Rheinland-Pfalz, and the city-state of Berlin all use various regional MMP models.

2. We find each party's entitlement in each region by calculating the party's regional vote as a percent of the regional five-party vote, times the number of MLAs in the region. That's the party's number of "quotas." The Excel **spreadsheet with the regional quota calculations** is attached. Note: only parties over 3% are included.

3. For example, see Kelowna - Okanagan, with five MLAs. Those voters deserve 3.2 Liberal MLAs, 0.7 NDP MLAs, 0.5 GP, 0.4 UP, and 0.2 MP, which totals five. **At the end of the count we will have whole live MLAs. At the start, however, we have "quotas."**

4. We have 32 regional seats: NDP 16, GP 10, UP 3 and MP 3. We allocate them to 13 regions: Vancouver 5, Richmond - Delta 2, Surrey 3, Burnaby - New Westminster 2, Tri-Cities - Maple Ridge 2, North Shore - Sunshine Coast 2, Fraser Valley - Langley 3, Kelowna - Okanagan 2, Kamloops - Cariboo - Shuswap 3, Kootenays 1, Prince George 1, Capital Region 3, Nanaimo - North Island 3.

5. Some regions are easy. Take the Capital Region with three regional MLAs. The NDP voters earned 1.94, GP voters earned 1.40, and no one else was on the radar. Anyone would give the NDP two, GP one.

6. So, we allocate these 32 seats to regions. As the first stage, we **take the regions where the party has a full quota**, earning them an MLA. This accounts for 9 of the 32 seats. We then adjust the remaining 23 seats into regions **starting where parties have the highest "part quotas,"** keeping on until each region's seats are fully allocated.

7. A **regional independent** would remove that seat from the provincial calculation and regional allocation, as though that region had one less regional MLA.

8. By the spreadsheet, the NDP has 2.79 quotas in Vancouver. But they won a local seat already. We subtract any local seat won to get the number of "top-up" MLAs which each party earned. For the NDP in Vancouver, that's 1.79. So their highest quota is in the Capital Region: 1.94.

9. **Here's the first stage of the table.**

Capital 1.94	NDP
Vancouver 1.79	NDP
Nanaimo 1.57	NDP
Vancouver 1.49	GP
Surrey 1.48	NDP
Capital 1.40	GP
Burnaby 1.37	NDP
Kamloops 1.32	NDP
Tri-Cities 1.20	NDP

10. As the **second stage**, we allocate the other 23 regional seats: NDP 9, GP 8, UP 3 and MP 3. Note that the NDP still deserves another 0.94 quota in the Capital Region, and so on for the remaining part quotas.

11. We start with the top NDP seat, then top GP, top UP, top MP. We end bottom MP, bottom UP, bottom GP, bottom NDP. We list the other 15 in alternating order: one NDP in every 2.75, one GP in every 2.86, one UP in every 9, and one MP in every 8 (22/8 NDP, 20/7 GP, 18/2 UP, 16/2 MP).

12. On the left, we lay out which party's turn it is to get the next MLA. Then on the right, from the spreadsheet, we fill it in:

	Priority for allocations				MP	Allocations, with quotas
	NDP	GP	UP	GP		
1	1					Capital 0.94 full
2		2				North Shore 0.98
3			3			Surrey 0.39
4	3.75					Fraser Valley 0.91
5				4		Fraser Valley 0.29
6		4.86				Nanaimo 0.85
7	6.5					Kootenays 0.87 full
8		7.71				Burnaby 0.7023 full
9	9.25					Vancouver 0.79
10		10.57				Surrey 0.721 full
11	12					Kelowna 0.7383
12			12			Kelowna 0.37 full
13				12		Vancouver 0.27
14		13.43				Richmond 0.62
15	14.75					North Shore 0.7379 full
16		16.29				Fraser Valley 0.53 full
17	17.5					Richmond 0.68 full
18		19.14				Kamloops 0.52
19				20		Kamloops 0.24 full
20	20.25					Nanaimo 0.57 full
21			21			Tri-Cities 0.25 full
22		22				Vancouver 0.49 full
23	23					Prince George 0.53 full

13. Finally, when we know which parties have seats in which region, we **go to the regional open list results as to the candidates elected.**

## Unity, Green and Marijuana parties

14. The Greens got no MLA in Tri-Cities and Kelowna although they had more votes in both regions than the UP, which got MLAs in both. That's because Green Party voters earned 10 MLAs across BC, to be allocated in 13 regions, so this was bound to happen somewhere: the Greens got less than 0.5 quota in both regions. Note that the Green Party got two regional MLAs in Vancouver where their quota was 1.49: this adjusts for the four regions where their quota was even less than 0.49 and they got no MLA.

15. Some of the MP's best results happened to be in three isolated northern seats: Peace River North (almost 9%), Skeena (6%), and North Coast (almost 6%). Although those seats are not in regions, those votes contributed to the provincial total and are reflected in the MP's three MLAs from the Kamloops region, Vancouver and Fraser Valley-Langley.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Electoral Districts: 2001 votes	MP	GP	LIB	NDP	UP	Total	MP%	GP %	LIB %	NDP %	UP%	MP quota	GP quota	LIBquota	NDPquota	UP quota
2	Abbotsford-Clayburn	706	—	12,584	2,096	1,751	17137	4.1197		73.432	12.231	10.218					
3	Abbotsford-MountLehman	451	1,299	12,660	2,431	1,576	18417	2.4488	7.0533	68.741	13.2	8.5573					
4	Alberni-Qualicum	1,081	2,999	13,109	7,395	—	24584	4.3972	12.199	53.323	30.081						
5	Bulkley Valley-Stikine	507	856	7,414	2,823	1,190	12790	3.964	6.6927	57.967	22.072	9.3041					
6	Burnaby-Edmonds	456	2,599	9,607	4,924	1,111	18697	2.4389	13.901	51.383	26.336	5.9421					
7	Burnaby North	466	2,824	11,062	5,992	—	20344	2.2906	13.881	54.375	29.453						
8	Burnaby-Willingdon	362	2,879	10,207	4,608	—	18056	2.0049	15.945	56.53	25.521						
9	Burquitlam	530	2,668	11,131	4,678	749	19756	2.6827	13.505	56.342	23.679	3.7913					
10	Cariboo North	509	712	10,044	2,732	420	14417	3.5306	4.9386	69.668	18.95	2.9132					
11	Cariboo South	739	—	10,259	4,259	598	15855	4.661		64.705	26.862	3.7717					
12	Chilliwack-Kent	968	1,511	13,814	2,155	—	18448	5.2472	8.1906	74.881	11.681						
13	Chilliwack-Sumas	1,130	—	14,137	2,434	—	17701	6.3838		79.866	13.751						
14	Columbia River-Revelstoke	642	978	7,804	4,551	490	14465	4.4383	6.7611	53.951	31.462	3.3875					
15	Comox Valley	873	5,170	15,569	5,356	677	27645	3.1579	18.701	56.318	19.374	2.4489					
16	Coquitlam-Maillardville	584	2,522	11,549	4,442	862	19959	2.926	12.636	57.864	22.256	4.3189					
17	Cowichan-Ladysmith	597	3,250	12,707	7,783	—	24337	2.4531	13.354	52.213	31.98						
18	Delta North	543	2,504	11,919	3,734	987	19687	2.7582	12.719	60.542	18.967	5.0135					
19	Delta South	507	3,650	14,596	2,053	760	21566	2.3509	16.925	67.681	9.5196	3.5241					
20	East Kootenay	718	1,287	10,206	3,638	651	16500	4.3515	7.8	61.855	22.048	3.9455					
21	Esquimalt-Metchosin	534	3,685	9,544	6,258	268	20289	2.632	18.163	47.04	30.844	1.3209					
22	Fort Langley-Aldergrove	674	2,766	16,527	2,619	1,275	23861	2.8247	11.592	69.264	10.976	5.3434					
23	Kamloops	707	2,180	12,258	4,592	430	20167	3.5057	10.81	60.782	22.77	2.1322					
24	Kamloops-North Thompson	1,025	3,122	12,676	4,181	836	21840	4.6932	14.295	58.04	19.144	3.8278					
25	Kelowna-Lake Country	734	2,606	14,093	3,102	1,496	22031	3.3317	11.829	63.969	14.08	6.7904					
26	Kelowna-Mission	787	2,588	15,351	3,066	1,674	23466	3.3538	11.029	65.418	13.066	7.1337					
27	Langley	723	2,847	14,564	2,720	1,605	22459	3.2192	12.676	64.847	12.111	7.1464					
28	Malahat-Juan de Fuca	547	3,275	9,676	3,687	323	17508	3.1243	18.706	55.266	21.059	1.8449					
29	Maple Ridge-Mission	908	2,910	12,920	4,710	1,037	22485	4.0382	12.942	57.461	20.947	4.612					
30	Maple Ridge-Pitt Meadows	716	3,069	12,235	5,764	1,220	23004	3.1125	13.341	53.186	25.057	5.3034					
31	Nanaimo	889	3,810	9,748	6,602	588	21637	4.1087	17.609	45.052	30.513	2.7176					
32	Nanaimo-Parksville	634	3,192	17,356	5,852	693	27727	2.2866	11.512	62.596	21.106	2.4994					
33	Nelson-Creston	570	4,723	8,558	6,981	1,108	21940	2.598	21.527	39.006	31.819	5.0501					
34	New Westminster	859	2,982	11,059	6,971	604	22475	3.822	13.268	49.206	31.017	2.6874					
35	North Coast	623	560	4,915	4,084	152	10334	6.0286	5.419	47.561	39.52	1.4709					
36	North Island	1,099	2,871	13,781	6,375	—	24126	4.5553	11.9	57.121	26.424						
37	North Vancouver-Lonsdale	612	3,823	11,362	3,016	—	18813	3.2531	20.321	60.394	16.031						

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
38	North Vancouver-Seymour	568	4,127	15,568	2,751	—	23014	2.4681	17.933	67.646	11.954						
39	Oak Bay-Gordon Head	411	4,666	14,588	5,789	—	25454	1.6147	18.331	57.311	22.743						
40	Okanagan-Vernon	917	2,214	13,868	3,529	3,213	23741	3.8625	9.3256	58.414	14.865	13.534					
41	Okanagan-Westside	1,188	—	14,181	3,176	1,364	19909	5.9672		71.229	15.953	6.8512					
42	Peace River North	810	—	6,629	1,047	568	9054	8.9463		73.216	11.564	6.2735					
43	Peace River South	444	407	6,393	767	225	8236	5.391	4.9417	77.623	9.3128	2.7319					
44	Penticton-Okanagan Valley	786	3,524	15,609	3,887	553	24359	3.2267	14.467	64.079	15.957	2.2702					
45	Port Coquitlam-Burke Mountain	446	1,841	9,963	7,198	2,297	21745	2.051	8.4663	45.817	33.102	10.563					
46	Port Moody-Westwood	1,428	—	16,500	4,178	—	22106	6.4598		74.64	18.9						
47	Powell River-Sunshine Coast	812	6,316	9,904	6,349	—	23381	3.4729	27.013	42.359	27.155						
48	Prince George-Mount Robson	744	1,429	8,033	2,655	1,110	13971	5.3253	10.228	57.498	19.004	7.945					
49	Prince George North	588	1,137	9,215	2,148	838	13926	4.2223	8.1646	66.171	15.424	6.0175					
50	Prince George-Omineca	646	1,026	10,469	3,156	1,685	16982	3.804	6.0417	61.648	18.584	9.9223					
51	Richmond Centre	357	1,615	12,061	2,206	381	16620	2.148	9.7172	72.569	13.273	2.2924					
52	Richmond East	445	1,802	12,498	2,550	599	17894	2.4869	10.07	69.845	14.251	3.3475					
53	Richmond-Steveston	561	2,257	14,508	2,564	381	20271	2.7675	11.134	71.57	12.649	1.8795					
54	Saanich North and the Islands	491	7,211	15,406	5,011	—	28119	1.7462	25.645	54.789	17.821						
55	Saanich South	462	3,823	12,699	6,838	—	23822	1.9394	16.048	53.308	28.705						
56	Shuswap	835	2,423	12,950	3,788	2,857	22853	3.6538	10.603	56.667	16.576	12.502					
57	Skeena	810	695	8,653	2,644	—	12802	6.3271	5.4288	67.591	20.653						
58	Surrey-Cloverdale	481	2,227	13,739	2,333	1,112	19892	2.4181	11.195	69.068	11.728	5.5902					
59	Surrey-Green Timbers	561	—	7,539	5,592	1,067	14759	3.8011		51.081	37.889	7.2295					
60	Surrey-Newton	348	1,673	6,750	3,949	498	13218	2.6328	12.657	51.067	29.876	3.7676					
61	Surrey-Panorama Ridge	424	1,437	9,590	3,240	1,123	15814	2.6812	9.0869	60.642	20.488	7.1013					
62	Surrey-Tynehead	385	1,876	12,252	3,159	1,234	18906	2.0364	9.9228	64.805	16.709	6.527					
63	Surrey-Whalley	544	1,652	6,693	4,536	838	14263	3.8141	11.582	46.926	31.803	5.8753					
64	Surrey-White Rock	536	3,577	18,678	3,415	983	27189	1.9714	13.156	68.697	12.56	3.6154					
65	Vancouver-Burrard	906	3,826	11,396	7,359	—	23487	3.8575	16.29	48.52	31.332						
66	Vancouver-Fairview	651	5,051	12,864	4,772	—	23338	2.7894	21.643	55.12	20.447						
67	Vancouver-Fraserview	267	1,417	10,361	5,815	369	18229	1.4647	7.7733	56.838	31.9	2.0242					
68	Vancouver-Hastings	409	2,874	7,600	8,009	—	18892	2.1649	15.213	40.229	42.394						
69	Vancouver-Kensington	516	1,795	9,162	7,478	314	19265	2.6784	9.3174	47.558	38.817	1.6299					
70	Vancouver-Kingsway	364	1,725	8,264	5,429	541	16323	2.23	10.568	50.628	33.26	3.3143					
71	Vancouver-Langara	673	2,009	11,800	2,999	—	17481	3.8499	11.492	67.502	17.156						
72	Vancouver-MountPleasant	489	2,612	5,343	7,163	166	15773	3.1002	16.56	33.874	45.413	1.0524					
73	Vancouver-PointGrey	659	5,094	13,430	4,441	257	23881	2.7595	21.331	56.237	18.596	1.0762					
74	Vancouver-Quilchena	351	3,277	16,829	2,168	—	22625	1.5514	14.484	74.382	9.5823						

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
75	Victoria-Beacon Hill	532	5,453	9,297	9,262	290	24834	2.1422	21.958	37.437	37.296	1.1678					
76	Victoria-Hillside	663	4,142	7,878	7,796	293	20772	3.1918	19.94	37.926	37.531	1.4106					
77	West Kootenay-Boundary	840	2,004	10,784	6,915	1,139	21682	3.8742	9.2427	49.737	31.893	5.2532					
78	West Vancouver-Capilano	274	2,932	15,556	1,284	—	20046	1.3669	14.626	77.602	6.4053						
79	West Vancouver-Garibaldi	767	3,691	14,542	2,330	—	21330	3.5959	17.304	68.176	10.924						
80	Yale-Lillooet	807	1,657	9,845	2,817	—	15126	5.3352	10.955	65.087	18.624						
81	Total	51206	197231	916888	343156	51426	1559907	3.2826	12.644	58.778	21.998	3.2967	2.593279	9.9885756	46.434917	17.378808	2.6044206
82	FIFTEEN REGIONS	MP	GP	Lib	NDP	UP	Total	MP %	GP %	Lib %	NDP %	UP %	MP quota	GP quota	Lib quota	NDP quota	UP quota
83	Vancouver 10	5285	29680	107049	55633	1647	199294	2.6519	14.893	53.714	27.915	0.8264	0.2651861	1.4892571	5.3714111	2.791504	0.0826417
84	Richmond-Delta 5	2413	11828	65582	13107	3108	96038	2.5125	12.316	68.288	13.648	3.2362	0.1256274	0.6157979	3.4143776	0.6823861	0.1618109
85	Burnaby-New Westminster 5	2673	13952	53066	27173	2464	99328	2.6911	14.046	53.425	27.357	2.4807	0.1345542	0.7023196	2.6712508	1.3678419	0.1240335
86	Tri-Cities - Maple Ridge 5	4082	10342	63167	26292	5416	109299	3.7347	9.4621	57.793	24.055	4.9552	0.1867355	0.4731059	2.8896422	1.2027557	0.2477607
87	Surrey Centre 6	2798	10215	61502	23891	5743	104149	2.6865	9.8081	59.052	22.939	5.5142	0.1611921	0.5884838	3.5431161	1.376355	0.3308529
88	Langley-Cloverdale 3	1878	7840	44830	7672	3992	66212	2.8363	11.841	67.707	11.587	6.0291	0.0850903	0.3552226	2.0312028	0.3476107	0.1808736
89	North Shore-Sunshine Coast 5	3033	20889	66932	15730	0	106584	2.8456	19.599	62.797	14.758	0	0.1422821	0.9799313	3.1398709	0.7379156	0
90	Fraser Valley 5	4062	4467	63040	11933	3327	86829	4.6782	5.1446	72.602	13.743	3.8317	0.233908	0.2572297	3.6301236	0.6871552	0.1915835
91	Kelowna-Okanagan 5	4412	10932	73102	16760	8300	113506	3.887	9.6312	64.404	14.766	7.3124	0.194351	0.4815604	3.2201822	0.738287	0.3656194
92	Kamloops-Cariboo-Shuswap 6	4457	9415	65991	24103	5631	109597	4.0667	8.5906	60.212	21.992	5.1379	0.244003	0.5154338	3.6127449	1.3195434	0.3082749
93	Kootenays 3	2128	8014	29548	17534	2898	60122	3.5395	13.33	49.147	29.164	4.8202	0.1061841	0.3998869	1.474402	0.874921	0.144606
94	Prince George 3	1978	3592	27717	7959	3633	44879	4.4074	8.0037	61.759	17.734	8.0951	0.1322222	0.2401123	1.8527819	0.5320306	0.242853
95	Capital Region 6	3093	28980	69412	40954	851	143290	2.1586	20.225	48.442	28.581	0.5939	0.1295136	1.2134831	2.9064973	1.7148719	0.035634
96	Nanaimo-Cowichan 4	2667	13527	49487	23924	1604	91209	2.9241	14.831	54.257	26.23	1.7586	0.1169621	0.5932309	2.1702683	1.0491947	0.0703439
97	Alberni-North Island 3	3,053	11,040	42,459	19,126	677	76,355	3.9984	14.459	55.607	25.049	0.8866	0.1199529	0.4337633	1.6682208	0.7514636	0.0265994
98																	
99	OTHER REGIONS																
100	Prince George - Peace River	3232	3999	40739	9773	4426	62169	5.1987	6.4325	65.529	15.72	7.1193	0.2599366	0.3216233	3.2764722	0.7860027	0.3559652
101	Northwest	1940	2111	20982	9551	1342	35926	5.4	5.876	58.403	26.585	3.7355	0.1619997	0.176279	1.7521015	0.7975561	0.1120637
102	Capital Region 7	3640	32255	79088	44641	1174	160798	2.2637	20.059	49.185	27.762	0.7301	0.1584597	1.404153	3.4429284	1.9433513	0.0511076
103	Nanaimo - North Island 6	5,173	21,292	82,270	39,363	1,958	150,056	3.4474	14.189	54.826	26.232	1.3048	0.2068428	0.8513622	3.2895719	1.5739324	0.0782908
104	Surrey 7	3279	12442	75241	26224	6855	124041	2.6435	10.031	60.658	21.141	5.5264	0.1850437	0.7021388	4.2460719	1.4798978	0.3868479
105	Fraser Valley - Langley 7	5459	10080	94131	17272	6207	133149	4.0999	7.5705	70.696	12.972	4.6617	0.2869943	0.5299326	4.9487191	0.9080354	0.3263186
106	North (including Cariboo) 10	6420	6822	82024	26315	6786	128367	5.0013	5.3144	63.898	20.5	5.2864	0.5001285	0.531445	6.3898042	2.0499817	0.5286405
107	Kelowna-Kamloops-Kootenay 12	9749	27649	148338	51406	15811	252953	3.8541	10.93	58.643	20.322	6.2506	0.4624891	1.3116587	7.0371018	2.4386823	0.7500682
108	Vancouver Island 13	8813	53547	161358	84004	3132	310854	2.8351	17.226	51.908	27.024	1.0075	0.3685621	2.2393503	6.7480361	3.5130704	0.1309811
109	Interior & North 22	16169	34471	230362	77721	22597	381320	4.2403	9.0399	60.412	20.382	5.926	0.9328595	1.9887811	13.29058	4.4840606	1.3037187
110	Van-Rich-No. Shore-Burnaby 22	11495	67213	255055	98885	4868	437516	2.6273	15.362	58.296	22.601	1.1126	0.5780131	3.3797301	12.825154	4.972321	0.2447819
111	Delta-Surrey-Tri-Cities-Fraser 22	14729	42000	270113	82546	20829	430217	3.4236	9.7625	62.785	19.187	4.8415	0.7531966	2.1477533	13.812764	4.2211535	1.0651322