Summary – This is a proposal outlining a specific model that would help make our electoral system fairer (especially from the perspective of currently disadvantaged parties) while retaining the essence of our current system. It could be a very useful compromise.

Dear Honourable Members of Parliament,

I have an idea about electoral reform to share with you - I hope you will very seriously consider adopting it as a realistic compromise, as I know it will not be easy to reach a consensus.

I believe that the one major concern that Canadians have about our current electoral system is that a smaller party may not get as many seats as it would seem to deserve based on its share of the popular vote.

Under our current system, a party could win 30% of the national popular vote but finish second in every single riding and find itself with zero seats! As unlikely as it may seem, it is theoretically possible. It seems appropriate to adjust our electoral laws to make sure that this will not happen. It is also very desirable to make some changes so that the smaller parties on our national political scene might cease to feel that they are being shortchanged or disadvantaged by the system.

I and most people I have talked to would say that if a party wins, say, 12% of the popular vote but winds up with only 2% of the seats, that would feel like too big a discrepancy, but it might be acceptable for a party's share of the seats to be a little lower than its share of the popular vote.

With that in mind, I believe this issue can be addressed without restructuring the ridings or changing the way the votes are counted.

I propose that we continue to elect one MP per riding, in the same way we do now (the candidate that gets the most votes wins), but that we adopt an additional rule -

Each party shall be guaranteed a percentage of seats in the Commons that is not less than five percentage points lower than the party's share of the national popular vote in the general election.

If the number of seats won by the party in geographical ridings is insufficient to satisfy this rule, then the party shall be awarded additional seats to make up the difference. [it would be given just enough seats to elevate its seat share to within 5 percentage points of its popular vote share]

There would be no restrictions on the extent to which a party's share of the seats in the Commons could exceed its share of the popular vote. (That means the party's popular vote share would determine the minimum percentage of seats but not the maximum – it would still be advantageous for the party to try and win as many ridings as possible.)

Example – Suppose a party wins 25% of the popular vote. It would be guaranteed at least 20% of the seats in the House of Commons. If, after the geographical riding results come in, the party already has 20% (or 23%, or 26%, or 40%) of the seats, then it would not be awarded any additional seats, but it would not lose any seats either. Only if its seat share is less than 20% would it get additional seats.

That means there would be no guarantee that a party would receive any extra seats once the geographical riding results were tabulated. Therefore, all prospective MPs, no matter their rank or profile, would continue to run in geographical seats – unlike in some other countries, where some politicians forgo running for a geographical seat in favour of being on a 'party list' for a non-geographical seat.

Under my proposal, when a party receives additional seats, the total number of seats in the House of Commons would increase accordingly. That way, parties that have won more than their 'fair share' of seats (compared to their popular vote percentage) would not lose any of their elected MPs, but might find their share of the seats diluted somewhat.

Let's see what would happen if we were to apply this method to some actual election results.
Illustration 1 - The 1997 Federal Election
In the 1997 federal election, there were 301 ridings and the results were

Party	Liberal	Reform	BQ	NDP	PC
Number of seats	155	60	44	21	20
Seat %	51.50	19.93	14.62	6.98	6.64
Popular vote %	38.46	19.35	10.67	11.05	18.84

Applying the rule that a party's seat percentage should not be more than 5 percentage points lower than its share of the popular vote, the only party whose seat percentage is far too low is the PC Party. It ought to have at least 13.84% of the seats. If we let x be the number of additional seats that the PC Party would need in order to achieve that percentage, we come up with the equation

$(20+x)/(301+x) = 13.84/100$

Solving this equation yields x = 25.12…
So if we award 26 additional seats to the PC Party, expanding the Commons 23to 327 seats, while leaving the other parties' seat counts unchanged, we can recalculate the seat percentages -

Party	Liberal	Reform	BQ	NDP	PC
Number of seats	155	60	44	21	46
Seat %	47.40	18.35	13.46	6.42	14.07
Popular vote %	38.46	19.35	10.67	11.05	18.84

The PC Party's seat percentage is now within about 5 percentage points of

its popular vote share.

Under this new configuration, the NDP's seat percentage is still within 5 percentage points of its popular vote share – if it had fallen below that, we would have had to apply the procedure again to award some additional seats to the NDP.

Notice that because of the awarding of additional seats to the PC Party, this has now become a minority Parliament, with the Liberal government only having 47.4% of the seats. Thus, the method I have suggested can reduce a first-past-the-post majority government to a minority one. It does not penalize parties that win more ridings than their share of the popular vote would suggest (they get to keep all the seats won, and will not suffer any deductions), but the awarding of additional seats to a party that has too few seats compared to its popular vote share can (appopriately) diminish the governing party's share of the seats in Parliament.

[One question remains – in the example above, who would the 26 additional PC Party MPs be? I leave it up to you to decide – the additional MPs could simply be selected by the party leader; they could be the 26 losing candidates who received the most votes; the party members could be invited to put their names forward, with a vote by the party membership producing the 'top 26' who would then enter Parliament; or there could even be a by-election in which the party would submit a list of more than 26 candidates, and Canadians would choose which 26 candidates would get to become MPs. The 26 additional MPs would be 'at-large MPs', not representing any particular riding, although the party could assign them to take care of a specific geographical region.]

Illustration 2 - The 2015 UK Election (Data from https://en.wikipedia.org/w/index.php?title=United_Kingdom_general_election,_2015&oldid=727476285)

Total number of seats in the British House of Commons - 650

Party	Conservative	Labour	UKIP	Liberal Democrat	SNP	Green	Others
Number of seats	330	232	1	8	56	1	24
Seat %	50.77	35.69	0.15	1.23	8.62	0.15	
Popular vote %	36.9	30.4	12.6	7.9	4.7	3.8	less than 1% each

This shows a very extreme difference between popular vote and seat %, more than we have seen in any Canadian election.

Conservative, Labour and SNP's seat % all exceeded their popular vote %, so they would not receive additional seats under the model I have proposed. The Greens also would not get additional seats since 3.8 – 5 is less than zero.

Under my proposal, UKIP should have at least 7.6% of the seats and the

Liberal Democrats should have at least 2.9% of the seats.
Solve the equation
$(1+a)/(650+a) = 7.6/100$
$\Rightarrow a = 52.38$
so, if we award 53 additional seats to UKIP,
the total size of the Commons expands to 703
and UKIP gets a total of 54 seats out of 703, ie 7.68% of the total.
Next, we need to increase the Liberal Democrats' seat percentage.
$(8+b)/(703+b) = 2.9/100$
$\Rightarrow 2.9(703+b) = 100(8+b)$
$\Rightarrow b = 12.757$
so, if we now award 13 additional seats to the Liberal Democrats,
they would have 21 seats out of 716.
Now, we have 716 seats in total:
Conservative 330, Labour 232, SNP 56, UKIP 54, Liberal Democrat 21
New seat % - Conservative 46.1%, Labour 32.4%, SNP 7.8%, UKIP 7.7%,
Liberal Democat 2.9%
As you can see, the Conservative Party's seat percentage would still far
exceed their share of the popular vote. The SNP's seat percentage would fall
below its share of the popular vote, but within an acceptable margin.
This way, the Conservatives, Labour and SNP get to keep the rewards for
winning as many geographical ridings as they did, while the Liberal
Democrats and UKIP are lifted up to a seat % that is at least closer to their
share of the popular vote.
(This would now be a minority Parliament – 359 out of 716 seats would have
been needed for a majority.)

Illustration 3 - Applying the same method of calculation to the 2011 federal
election results, I found that the Liberal Party would have been awarded 11
more seats but that the Conservative government would have remained a
majority. The size of the House would have increased from 308 to 319.
You are welcome to apply my method to other historical election results and
see what you find.

  These examples show that under my proposal, a majority government
would be less likely than under the current system, but it would remain a
realistic possibility. That, I believe, is a good thing – I am not in favour of a
system that would virtually guarantee permanent minority governments,
because that could lead to a situation like what we see in Spain right now,
where neither the incumbent prime minister nor the opposition leader has
enough votes to form a stable government, yet neither side is willing to give
way and the smaller parties are unable to break the deadlock.
  I note that some countries that use proportional representation have a
minimum threshold designed to keep fringe parties out. In my proposal, I

have chosen instead to apply a consistent 5% deduction across the board, which feels like it would be fairer. At the lower end, that functions just like a 5% threshold - a party that has less than 5% of the national popular vote would have to win a geographical riding in order to be represented in Parliament. You could adopt a figure other than 5% if you prefer.

The illustrations above also show that any increase in the size of the Commons resulting from this method would likely be quite modest. This proposal would not lead to a dramatic increase in the number of MPs. My proposal does mean that the total number of seats in the Commons would vary from one election to the next, and would not be determined until after the election (the number of geographical ridings would of course be known in advance, but the number of at-large MPs would depend on the election outcome). I believe that would be acceptable to Canadians.

This proposal preserves the essence of our current system (with its emphasis on geographical representation and its potential for producing stable majority governments) while addressing the most commonly heard complaint. It recognizes and retains the advantageous characteristics of our current system, such as the link between MPs and their constituents and the simplicity of voting and vote-counting.

I believe that choosing this model would be better than adopting a model such as MMP, STV, alternative vote or ranked ballots – all of those options greatly complicate the electoral process and make it harder for the average citizen to understand what their vote would mean. It is very important that every citizen, regardless of their level of education or innate intelligence, be able to understand how the system works and what the consequences of the vote will be. I am concerned that a system with complex rules or too many rules could lead to a great deal of confusion. The system we currently have, whatever its faults, is at least simple and straightforward – whoever gets the most votes in a given riding gets to represent that riding.

Thus, my proposal offers somewhat limited but still meaningful change. It could even serve as a compromise between those who want full proportional representation and those who prefer the current system.

Thank you for your time. I hope you will give my ideas due consideration and I would be happy to hear what you think.

James Lee, citizen of Canada and resident of Ontario