

# The Preferential Ridings Proportional, PRP, Electoral System

## SUMMARY

This brief on the new electoral system, Preferential Ridings Proportional, PRP, was developed over the past ten years in response to what people said they wanted in an electoral system. It is very similar to the principles in Standing Order 781(16) of the Special Committee on Electoral Reform. My quest continues, sharing PRP in search of ideas to improve PRP or to find a better system.

*Why the concern?*

*Video worth seeing - 5 minutes – “Do you want your vote to count?”* <https://goo.gl/NLIVbg>

1 The Preferential Ridings Proportional (PRP) system proposed here would make Canada into a more inclusive and representative democracy. PRP would allow every vote or almost every vote cast in an election to have some impact on the resultant legislative body.

2 PRP is a hybrid system that incorporates elements from Canada’s present riding-based system, and includes both preferential voting, and proportional representation.

3 The PRP system reorganizes the country, province or territory into ridings roughly twice the size of our current ridings, each electing a single representative using preferential voting.

4 The other half of the representatives will be elected to Proportional Seats in their electoral area, to give representation to so far unrepresented votes cast in their riding.

5 The allocation of proportional seats will reflect relative popularity of the Parties in geographically coherent “Electoral Areas.” The proportional representatives will be usually the most successful unelected candidates from their Political Party within the electoral area.

6 The effect of the allocation of proportional representatives will be a parliamentary distribution of seats that fairly represents the distribution of political opinion among voters.

If this PRP system helps make inclusive and truly representative democracy happen in Canada, I will have many to thank for their help with my ten years quest that began while serving on an Elections Canada committee giving feedback on proposals to increase voter turnout in 2005. Initially I was shocked when one RO said, “*What are we looking at this stuff for? Why aren’t we looking at the voting system?*” I thought, “*What could be wrong with the candidate having the most votes winning the seat?*” It was a political question that Elections Canada couldn’t discuss. Evenings is when I learned why Canadians should be looking at and improving our electoral system.

Fair Vote Canada was formally organized and has been working on the problem since 2000. Lead Now has also played a meaningful role in this proposed change. Government, collaborating with Opposition formed an inclusive committee representative of the popular vote. Way to go! I hope that you find this presentation acceptable. If you have any questions or concerns, please don’t hesitate to contact me.

Thank you,

Dave Brekke, very concerned former Federal Returning Officer (RO) for Yukon

# The Preferential Ridings Proportional, PRP, Electoral System

Come see the new combination electoral system that results in more truly representative democracy. Help give it the

A I R test: Accept it – Improve it – Replace it

Presently this system has no history of usage. Should Canada try it?

At this time, I think so!

## Whitehorse Fireweed Market, WFM, Mock Election, 2013

*The first edit of the report on the 2013 Whitehorse Market Garden Mock Election was made on June 17, 2016. It was made on the recent suggestion of Manuela Haemmerli, Political Science student from the University of Ottawa who saw great value in this report if its presentation was improved. The results of this mock election shows the total process of how the Preferential Ridings Proportional (PRP) system works. The comparisons to election results of other federal, provincial and territorial elections could deal only with the proportional aspect of PRP, as only an “X” vote was used, not preferential voting as was used in this mock election.*

### Why the Mock Election?

The Fireweed Market mock election was created for Fair Vote Yukon by Mike Simon to raise people’s awareness of the ineffectiveness of Canada’s present First Past the Post (FPTP) electoral system and also raise interest to investigate some other more effective electoral systems. For operational simplicity, Mike designed a single ballot to give some comparative results on Canada’s present First Past the Post (FPTP) system, the Mixed Member Proportional (MMP) system proposed by the Law Commission of Canada and the province of Ontario, and the Preferential Ridings Proportional (PRP) system that was developed in Canada’s Yukon with the input and feedback of many interested people, mostly from Yukon. The PRP system combines aspects of FPTP, MMP and the Single Transferable Vote (STV) system proposed in the province of British Columbia. This report compares Canada’s present FPTP system to the new combination PRP.

As you may know, winning candidates in elections are determined by both how the votes are marked on the ballots and how the votes are counted. Voters in this election had a choice of how they marked their ballot. They could choose from the simplest to the more complex:

- a) FPTP: mark only their favorite candidate with an “X”,
- b) PRP: mark the top three candidates preferentially as they want, (1<sup>st</sup> choice, 2<sup>nd</sup> choice, 3<sup>rd</sup> choice). Their 1<sup>st</sup> choice automatically becomes their Party choice for proportional seats.

### A brief description of these systems:

**FPTP:** Canada’s present First Past the Post (FPTP) is an electoral system in which the governing body of the country or jurisdiction is elected by dividing the country or jurisdiction into ridings

(electoral districts), each riding electing one Member to represent all of the constituents in the electoral district. PRP is known for its simplicity. Ridings are grouped by Province, and each of the three territories is a single riding. The candidate who has the most votes, ballots marked with an "X" in the election, wins the riding seat. The political party winning the most seats has the first option to form a Government. Under the FPTP system, the winning party often becomes a majority government with 100% power in governing, even though it often has less than 40% of the popular vote. When this happens, Opposition, even though having been elected by more than half the votes, does not have enough voting power in the House to amend a bill or stop Government passing a bill, even when Opposition Members unanimously agree. Opposition members' only tool to have an effect on Government bills, is to effectively guilt Government into changing a bill. This results in dysfunctional democracy; not inclusive, collaborative, community building democracy which could happen with an electoral system that resulted in more truly representative democracy.

**PRP:** The combination Preferential Ridings Proportional system focuses on community building by giving effectiveness to the votes of many more voters. PRP does this by having only half as many ridings that are approximately twice as large as the FPTP ridings in each electoral area. That produces the same number of proportional seats for the electoral area, resulting in the same number of seats as FPTP. The maximum number of seats in an electoral area is 10, the least 4.

The Proportional seats give value to almost all 1<sup>st</sup> choice votes that were not cast for the winners of their ridings. When 2<sup>nd</sup> and 3<sup>rd</sup> choice votes are considered, elections under the PRP system could result in all voters having an effect on the election and being able to point to a Member of the House that their vote helped to elect.

The preferential voting is to meet the interested people's call for the elected riding Member to be the candidate wanted or accepted by more than half of the voters. It also avoids split votes. Preferential riding Members are focused more on wishes of constituents in their own riding. Proportional Members are to deal with the wishes of all constituents in their electoral area, not just their riding.

Each proportional seat will be won by the Party that has enough unrepresented 1<sup>st</sup> choice votes in their electoral area to win the seat. Two major goals of PRP are to increase the number of effective voters and encourage an engaging connection between elected Members and their electors.

## How the WFM Mock Election worked:

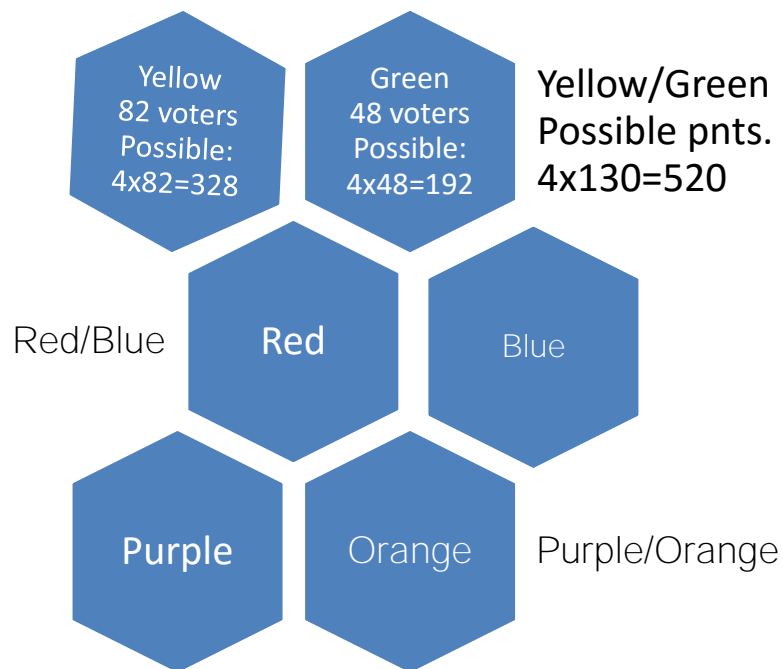
To begin, we set up the polling site with ballots prepared for each of the six ridings named by colors. There were five political Parties: Garage, Garden, Kitchen, Patio and Playground. Each party had one candidate, named after a tool or product of their Party in each of the six First Past the Post ridings. Independent candidates were not entered in this election because they do not benefit from same party candidates' efforts. However, Independents could run in all three systems. 2<sup>nd</sup> and 3<sup>rd</sup> choice votes would give independents good opportunities to win riding seats in PRP, but they would not have the opportunity that Party candidates have for proportional seats.

When our polling station was set up, we put up our election signs and our voter finders went into the market to do their work. Nicole Edwards and Roxx Hunter volunteered their musical talent at the voting station, while volunteers with sign boards and Graham Rudge, a clown on stilts went into the market to draw in voters.

When voters came to the voting station, they were briefed on the awareness-raising purpose of the event, given a ballot with options on how they may vote, reviewed brief descriptions of ways they may vote, and were encouraged to vote with their choice of voting: present FPTP: single candidate, ("X" vote); PRP (preferential candidate, ("1,2,3" vote) - 1<sup>st</sup> choice is also the voter's party vote for proportional seat(s).

The following chart shows that this Whitehorse Fireweed Market Electoral Area is composed of 6 ridings (named by colors) for the present First Past the Post electoral system. To have proportional seats without adding seats, the new Preferential Ridings Proportional system pairs those 6 ridings to have only 3 paired riding seats. By pairing, we have 3 paired riding seats, plus 3 seats that are freed up to become proportional seats to give value to 1<sup>st</sup> choice votes of candidates in Parties that did not win their riding seat. Having few or no more politicians was an aspect of the electoral system strongly wanted by almost all people asked.

## Fire Weed Market Electoral Area



The results of the mock election for the Fireweed Market Electoral Area are summarized below followed by a detailed description of how the new PRP system works.

*Tables 1-5: Mock Election Results*

Comparison of Mock Election results – using present FPTP & new PRP systems.

Elected with Present FPTP	Effective Votes 33%	Elected with New PRP	Effective Votes 89%
Sally Swing Playground Party		Sally Swing Playground Party	Preferential
Dorothy Deck Patio Party	3 Parties represented:	Clair Compost Garden Party	5 Parties represented
Clair Compost Garden Party	Patio won 1 Garden 2	Sally Swede Garage Party	Preferential
Mark Monkey-Bar Playground Party (Coin toss)	Playground 3	Bill Beans Garden Party	Proportional
Bill Beans Garden Party		Bill Barbeque Patio Party	Proportional
Willy Waterslide Playground Party		Caron Cutlery Kitchen Party	Proportional

As you may know, with the present FPTP system, the only votes that are effective are votes cast for each riding’s winning candidate. Only 33% of the votes had an effect on this election. The Patio Party won 1 seat, Garden Party 2 seats, and Playground 3 seats out of the 6 ridings in this Fireweed Market Electoral Area.

With the PRP system, there were 3 paired riding seats (preferential), and also 3 proportional seats. Each preferential riding seat was won by the paired candidates with the highest PRP preferential score in the paired ridings. Each pair of candidate’s score was found by totaling the number of times each candidate was chosen ahead of another candidate. With 3 pairs of candidates, a 1<sup>st</sup> choice vote was worth 4 points, a 2<sup>nd</sup> choice 3, and a 3<sup>rd</sup> choice 2. For their number of points

received out of possible points, each pair of candidate’s score is totaled and compared to the maximum possible score, a 1<sup>st</sup> choice on all ballots (520).

With 6 seats in the electoral area, each of the 3 preferential riding seats represented 1/6 or 16 2/3 % for a total of 1/2 or 50% of all votes cast in the electoral area.

The 3 proportional seats gave the other 50% value to the so far unrepresented 1<sup>st</sup> choice votes cast, so almost all 1<sup>st</sup> choice votes counted in a meaningful way. Each Party’s proportional seat was won in the election by the highest scoring pair of candidate(s) not having won their riding seat, and this made 89% of 1<sup>st</sup> choice votes effective.

With the present FPTP system, some of the votes for only 3 Parties were represented in the House, the votes for the winners of the riding seats. Only 33% of the voters could point to a candidate that their vote helped to elect. With the new PRP system 5 Parties were represented in the House, and 89% of voters had their 1<sup>st</sup> choice votes represented.

***Table2: Yellow and Green ridings to be paired***

The results of the mock election in the Yellow and Green Riding produced the following tables:

Candidate Name (Party)	First	Second	Third
Claudia Carrousel (Playground)	14	13	23
Susan Strainer (Kitchen)	15	22	15
Clair Compost (Garden)	30	18	19
Walter Wrench (Garage)	8	16	12
Clemens Cooler (Patio)	15	12	12
<b>Total votes in Yellow riding</b>	<b>82</b>		
Mark Monkey-Bar (Playground)	13	9	11
Kelly Knife (Kitchen)	8	6	8
Curt Carrot (Garden)	13	12	9
Bernie Bench (Garage)	3	12	9
Harvey Hammock (Patio)	11	8	10
<b>Total votes in Green riding</b>	<b>48</b>		

In this pair of ridings, there were a total of 130 votes cast.

**Table 3: Counting the votes**

Manually counting, the votes were first sorted and counted as Table 3a shows.

**Table 3a:**

The percentages given represent the number of times each candidate was chosen ahead of another candidate for points compared to the total number of points possible (1<sup>st</sup> choice of all voters is 82x4= 328 and 4x48= 192). The winning candidate has the highest preferential score and is the most wanted or accepted candidate

**Candidates' PRP Preferential Scores in the Yellow/Green (Y/G) Ridings**

Candidate Name (Party)	First-4	Second-3	Third-2	Total	Preferential Percent
Claudia Carrousel (Playground)	14x4=56	13x3=39	23x2=46	141/328	43.3%
Susan Strainer (Kitchen)	15x4=60	22x3=66	15x2=30	156/328	47.6%
Clair Compost (Garden)	30x4=120	18x3=54	19x2=38	212/328	64.6%
Walter Wrench (Garage)	8x4=32	16x3=48	12x2=24	104/328	31.7%
Clemens Cooler (Patio)	15x4=60	12x3=36	12x2=24	120/328	36.6%
Total votes - Yellow riding	82		Total Possible (4x82)	328	
Mark Monkey-Bar (Playground)	13x4=52	9x3=27	11x2=22	101/192	52.6%
Kelly Knife (Kitchen)	8x4=32	6x3=18	8x2=16	66/192	34.4%
Curt Carrot (Garden)	13x4=52	12x3=36	9x2=18	106/192	55.2%
Bernie Bench (Garage)	3x4=12	12x3=36	9x2=18	66/192	34.4%
Harvey Hammock (Patio)	11x4=44	8x3=24	10x2=20	88/192	45.8%
Total votes - Green riding	48		Total Possible (4x48)	192	

**Table 3b Y/P Party Candidates' Combined PRP Condorcet Scores**

	Combined PRP	Condorcet Score
Playground	242/520	46.5%
Kitchen	222/520	42.7%
Garden	318/520	61.2%
Garage	170/520	32.7%
Patio	208/520	40.0%
Total Possible 4x130	520	

Table 3b shows the combined scores and that the Garden Party won the preferential seat with the combined highest preferential score in the paired riding. The other candidates' preferential scores determined whether or not the candidates won their Party's proportional seat or helped another same Party candidate win the proportional seat in the electoral area (If their Party won a proportional seat).

Almost all participants' efforts in PRP elections would have an effect that they can see on the election results, whether or not their 1<sup>st</sup> choice candidate won a seat.

Clair Compost/Curt Carrot of the Garden Party won the preferential seat for the Yellow/Green paired riding because they had the highest 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> paired preferential score among all paired candidates, which showed she/he was most wanted or accepted by all voters. In this case, she/he also received the highest number of raw 1<sup>st</sup> choice votes, but that is not always the case. A candidate can win the highest number of 1<sup>st</sup> choice and little or no 2<sup>nd</sup> or 3<sup>rd</sup> choice votes, being least acceptable to most other voters. Results of both single riding results for FPTP and paired riding results for PRP were wanted for this comparison. If PRP was in effect, ridings would have been paired long before the election when that single candidate would have been chosen by each party.

### **Counting the preferential votes using PRP Condorcet Scores**

In the PRP counting method, as previously stated, each vote is considered as a series of "wins" against other candidates. A win for a candidate is when that candidate is chosen at a higher rank than the other candidate. So the Playground Party having a first-choice vote on a ballot gives them a win over all parties (candidates) on that ballot (4 pts.). A second choice vote on a ballot is a win over all parties (candidates) except first choice on the same ballot (3 pts.). A third choice vote on a ballot is a win over all parties



(candidates) except first and second choices (2pts.). On those ten ballots, the Kitchen Party won over all except the Playground candidate, and the Garden Party won over all except Playground and Kitchen candidates ten times. With 5 candidates, for the purposes of this report, the list below is truncated.

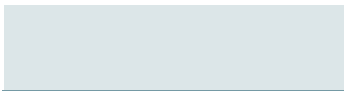
Once the ballots had been sorted and the analysis was complete, the total score of each candidate was calculated by simply totaling the number of times each candidate won against another candidate and comparing their scores to their total possible score. This resulted in a percentage of voters wanting or accepting each candidate and allowed for a scoring that scaled with every riding’s number of candidates and voter population. Computer vote counting would be very worthwhile.

The score shown here is the percentage of each candidate’s total winning points over possible winning points. The counting system is involved but relatively simple. In a PRP election with multiple Parties (candidates), the list of possible ballot permutations could be very long.

After completing their ballots, voters can now feed and watch their ballots’ 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> choices being entered into a computer with the ballots kept for possible recounts.

**Table 4: Counting the votes using PRP for preferential scores**

First Choice	Second Choice	Third Choice	Total
Playground Party	Kitchen Party	Garden Party	10
Playground Party	Kitchen Party	Garage Party	0
Playground Party	Kitchen Party	Patio Party	2
Playground Party	Garden Party	Kitchen Party	4
Playground Party	Garden Party	Garage Party	0
Playground Party	Garden Party	Patio Party	4
Playground Party	Garage Party	Kitchen Party	0
Playground Party	Garage Party	Garden Party	2
Playground Party	Garage Party	Patio Party	0
Playground Party	Patio Party	Kitchen Party	1
...			
Kitchen Party	Playground Party	Garden Party	3
Kitchen Party	Playground Party	Garage Party	1



**Table 5: Preferential Scores for the candidates in the Yellow/Green Paired Riding**

	Wins	Playground Party	Kitchen Party	Garden Party	Garage Party	Patio Party
<b>Against</b>						
<b>Playgrnd Party</b>		X	53	75	51	50
<b>Kitchen Party</b>		59	X	76	44	66
<b>Garden Party</b>		48	44	X	37	42
<b>Garage Party</b>		69	63	86	X	58
<b>Patio Party</b>		66	62	82	38	X
<b>Total</b>		242	222	318	170	208
<b>Total Possible</b>	520					
<b>Percentage</b>		46.5%	42.7%	61.2%	32.7%	40.0%

**Table 6: Fireweed Market Mock Election Results**

**Table 6: Summary of first-choice votes in all ridings**

After the preferential seats are assigned, the total number of first choice votes throughout the entire electoral area is counted and proportional seats are assigned based on the total popular vote won by each party. In the Fireweed mock election there were three proportional seats to assign. Each seat represents 73 votes (or 16.7%) in this example, with the first block of 73 votes per seat accounted for with the 3 directly elected preferential riding seats.

The total first choice votes for each party are summarized in Table 6:

<b>PARTY</b>	<b>Count</b>	<b>Percentage</b>
<b>Playground Party</b>	101	22.8%
<b>Kitchen Party</b>	64	14.5%
<b>Garden Party</b>	111	25.1%
<b>Garage Party</b>	82	18.5%
<b>Patio Party</b>	84	19.0%
<b>Parties' First choice vote total</b>	442	

Because the Playground, Garden and Garage party won riding seats, their votes are largely accounted for. The Patio and Kitchen parties won proportional seats to represent their votes. The Garden party won the last proportional seat, only partially supported by votes, in addition to their riding seat because the Garden Party had the most remaining unrepresented votes in the Fireweed Market Electoral Area.

*Table 7: Final results of the 2013 mock election using the Preferential Ridings Proportional - PRP system*

**Fireweed Market Mock Election Results**

Preferential Seats	Proportional Seats
Sal Swing/Sam Sa (Playground)	Bill B/ Dorothy D. (Patio)
Clair C/ Curt C (Garden)	Caron C/ Fred F. (Kitchen)
Sally S/ Caroline C. (Garage)	Bill B./ Fred F. (Garden)

In this election, the ridings were not paired until after the election, so either riding’s candidate could have won the paired-riding seat or a proportional seat. That is why both candidates’ names are stated above.

These results under PRP made possible 89% of the 1<sup>st</sup> choice votes cast to be effective, as opposed to 33% of the votes cast under our present, First-Past-The-Post system. PRP would have enabled 89% of the voting population to go from being unrepresented and excluded to being heard and included with their 1<sup>st</sup> choice votes.

If 2<sup>nd</sup> and 3<sup>rd</sup> choice votes in preferential voting were considered, often needed to be elected to a riding seat in PRP, in some elections all voters could point to an elected Member whom their vote helped to elect. The Preferential Ridings Proportional, PRP, electoral system could increase all voters’ ability to meet their basic psychological needs of belonging and empowerment in all elections. Voters could vote effectively with their hearts and minds.

*Dave Brekke, very concerned former Federal Returning Officer for Yukon*

Many thanks to the volunteers who made this mock election happen: Mike Simon, Kristina Calhoun, Graham Rudge +

For more information on the effects of this PRP system on past election results: Canada’s 2006 and 2008 results for PEI and cities across Canada with four or more ridings; plus Alberta, Yukon, Ontario, and Quebec provincial and territorial elections. [www.electoralchange.ca](http://www.electoralchange.ca)