

How Ranked Choice Voting (RCV) works in multi-seat elections

Written by

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In a multi-seat election, Ranked Choice Voting is applied in much the same way as a single-seat election—with the simple and effective addition of transferring a winning candidate's surplus votes to second-choice candidates. **To win, candidates must receive a minimum threshold of support**. Some candidates might win with first-choice support, but most depend on second and third choices as well, fostering more inclusive campaigns.

Here's how it works:

1. The threshold to win is determined by dividing the total number of voters by the number of seats, then adding 1.

2. Round 1 of counting begins, tallying first choices for all candidates.

3. If any candidate surpasses the winning threshold in Round 1, **that candidate's surplus votes (votes won beyond the necessary threshold to win), are then transferred proportionately to those voters' second choices**

. In the example graphic below, Carlos won 18 (or 40%) more votes than needed to win the election, so 40% of each vote Carlos received is transferred to those voters' second choices. In the example, of the 45 people who ranked Carlos their #1 choice, 15 ranked David their #2 choice. 40% of 15 is 6 votes, so David is therefore awarded 6 more votes.

Imagine it like this: You have \$1.00 to buy your favorite candy bar. But if that candy bar only costs 60¢, you get to put your other 40¢ towards your second favorite candy bar.

The same process applies with RCV in multi-seat elections:

If your #1 choice candidate reaches the threshold of votes needed to win, his or her surplus votes are divided proportionately according to percentage and then awarded to those voters' second choices.

4. **If no candidate reaches the threshold, the least popular candidate is defeated and those ballots are transferred to remaining candidates based on those voters' second choices.**

5. This process continues until all seats are filled.

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To Elect 3 Seats with 104 Voters

Threshold to Win:
 $104/4 + 1 = 27$ Votes

Round 1: Total 1st choices for all candidates. Carlos is elected and has 18 more votes than needed to win.

Round 2: Transfer surplus votes from Carlos: 40%* of each vote for Carlos is transferred to the second choice on each of those 45 ballots. All ballots are tallied again. David is elected.

[*Surplus share = (18/45) votes won]

	Round 1	Round 2		Round 3	
	1st Choices	transfer	total	transfer	total
Carlos	45	-18	27	0	27
David	21	(18 x 40%) +6	27	0	27
Sonja	17	(10 x 40%) +4	21	+1	22
Ayan	16	(15 x 40%) +6	22	+5	27
Lee	5	(5 x 40%) +2	7	-7	0
exhausted				1	1
Tally	104		104		104

Round 3: No other candidates have surplus votes so Lee is eliminated as the candidate with the fewest votes. Votes for Lee are transferred to the next choices on each of those ballots and ballots are tallied again. Ayan is elected.

<http://www.youtube.com/watch?v=NwYd8OXDVw0s>