## What Is RCV Anyway?

Celeste Landry | Published on 4/1/2021

# Celeste Landry of the LWVBC Voting Methods Team (with appreciation for article review by helpful team members)

The term *ranked-choice voting* (RCV) is so bandied about these days that it tends to take up all the oxygen in any discussion on better voting methods. The RCV label was created in 2002 by the city of San Francisco and is the preferred "voter-centric" term used by RCV for Colorado and the national FairVote organization. People who want to promote evolution beyond our flawed plurality voting method are often excited to jump on the RCV bandwagon.

However, most people, including many RCV advocates, are unaware that RCV is actually an umbrella term, and RCV in fact exists in multiple forms. Many people refer to any alternative voting method as RCV—even voting methods such as <a href="mailto:approval">approval</a> voting and <a href="mailto:STAR voting">STAR voting</a>, that don't rank candidates! To further complicate matters, RCV for Colorado and FairVote don't fully agree on what belongs under the RCV umbrella.

### Why should we learn about different voting methods?

If you are in the market for a new house or car, you don't usually buy the first house you visit or the first car you test drive; rather, you shop around. Similarly, our Voting Methods Team would like for activists to consider different voting methods before advocating a particular method for a particular situation.

Plurality voting is the simplest and most familiar of voting methods. Also known as "first-past-the-post" voting, it works well if a ballot lists only two candidates for a given position.

If our goal is better representative democracy, however, we should strive to adopt voting methods that encourage more candidates to run and at the same time reduce the so-called <u>spoiler effect</u>, by which a less-popular candidate wins when the spoiler candidate draws sufficient votes away from a popular but similar candidate.

#### How are ranked-voting methods similar and different?

A voting method has two components:

- 1) Ballot format, with directions to voters for casting a valid ballot
- 2) Tabulation method, of particular interest to election administrators and candidates

Ballot formats for a variety of ranked-voting methods contain the same basic directions: "Rank candidates in order of preference, giving different rankings to different candidates." For the modern matrix ballot format (see example below), directions often amount to "Fill in at most one bubble per column and one bubble per row." Voters should always fill in at least a first choice.

	Column 1  Mayor 1 to be elected		Column 2  Mayor 1 to be elected		Column 3  Mayor 1 to be elected	
	First Choice Fill in one oval	2	Second Choice Fill in one oval This must be different from your first choice.	3	Third Choice Fill in one oval This must be different from your first and second choices.	
0	Honeycrisp Apple Party	0	Honeycrisp Apple Party	0	Honeycrisp Apple Party	
0	McIntosh Apple Party	0	McIntosh Apple Party	0	McIntosh Apple Party	
0	Regent Apple Party	0	Regent Apple Party	0	Regent Apple Party	
0	SnowSweet Apple Party	0	SnowSweet Apple Party	0	SnowSweet Apple Party	
0	Fireside Apple Party	0	Fireside Apple Party	0	Fireside Apple Party	
0	Haralson Apple Party	0	Haralson Apple Party	0	Haralson Apple Party	
0	write-in, if any	0	write-in, if any	0	write-in, if any	

Sample ranked-voting ballot

The tabulation method is what differentiates the various RCV and non-RCV ranked-voting methods.

First, consider what the tabulation methods for the RCV forms have in common: They allow for rounds of counting in which the candidate with the fewest votes is eliminated and votes for that candidate are transferred to the next-highest-ranked candidate on the ballot.

Now, consider how the tabulation methods differ. The table below lists 7 different RCV tabulation methods with more precise names and notes about usage. (Note that yet another RCV method, the "vote for W" multi-winner method, is not included here.

According to researcher David Cary, a bill to use "vote for W" was introduced in the New Hampshire legislature but was not passed.)

Forms of RCV							
Key: SW= single winner, MW = multiple winners							
Voting Method	SW or MW?	How It Works [For SW, the instant runoff is triggered if no majority is achieved in round 1]	Where It's Used				
Instant-runoff voting (IRV) video [What most people think of when they think of RCV]	SW	The lowest vote-getter is eliminated, and each vote for that candidate is transferred to the next-highest-ranked, non-eliminated candidate on the ballot.	San Francisco, Santa Fe, Maine, New York City and a dozen other places (Boulder starting in 2023)				
Top-two IRV or contingent vote [The supplementary vote limits voters to only 2 rankings video]	SW	All but the top 2 vote-getters are eliminated in the first round. Votes for eliminated candidates are transferred to the highest ranked of the 2 remaining candidates on each ballot.	North Carolina 2010; London, UK				
Top-four plurality primary with an IRV general election (top-5 primary) video	SW	All candidates run against each other in a plurality primary election. The top 4 candidates proceed to an IRV general election. Unlike other IRV versions, this version does not eliminate a second election.	Alaska starting in 2022. Political parties are challenging the method because no party is guaranteed to appear on the general election ballot				
Single transferable vote (STV)  video [a proportional voting method]	MW	Candidates who receive the threshold of votes are elected. Any surplus votes are transferred to the next highest ranked of the non-eliminated, non-elected candidates. Lowest votegetters are eliminated sequentially until all seats are filled.	Cambridge, MA; Arden, DE Board of Assessors; Eastpointe, MI city council; some members of two boards in Minneapolis (Boulder 1917-1947)				
15% threshold proportional allocation video	MW	Using an IRV tabulation, the lowest vote-getter is eliminated in each round until all remaining candidates have at least 15% support, whereupon candidate delegates are proportionally allocated.	2020 Alaska, Hawaii, Kansas and Wyoming Democratic presidential primaries to allocate delegates to the national convention				
Preferential block voting video [NOT a proportional form; voters do not have an equal voice in these elections]	MW	The first seat is filled using an IRV tabulation. Then all ballots are tabulated again using IRV but ignoring the winning candidate. The process is repeated until all seats are filled.	Payson, UT; Vineyard, UT; A pilot project allows any Utah municipality to use preferential block voting through the end of 2025				
Bottoms-up RCV	MW	Conduct IRV tabulation rounds but stop when the number of non-	Allowed under Utah HB 75 for municipal primaries to select general election candidates equal				

eliminated candidates equals the	to 2 times the number of seats to
target number.	fill

Unfortunately, the media and activists often conflate single-winner and multi-winner versions of RCV—claiming, for instance, that RCV leads to proportional representation when that statement is true for only some of the multi-winner forms of RCV.

RCV for Colorado advocates for two methods: single-winner IRV and multi-winner STV. It emphatically rejects preferential block voting, in contrast to FairVote which embraces preferential block voting as an RCV method.

Now we'll consider some non-RCV ranked-voting methods. The first three methods listed have all mistakenly been called RCV in Colorado in the past year!

Forms of Non-RCV Ranked Voting							
(includes only single-winner voting methods)							
Voting Method	How It Works	Where It's Used					
Borda count video [used on SurveyMonkey's Ranking ballot]	Assigns the largest point value to a voter's 1 <sup>st</sup> choice, 2 <sup>nd</sup> largest to the voter's 2 <sup>nd</sup> choice, and so on. The candidate with the largest point total wins.	In various organizations and institutions and some overseas political elections					
Bucklin voting video [aka Grand Junction system]	If no candidate gets a majority of 1st- choice rankings, then 2nd-choice rankings are added to the total. If still no candidate gets a majority, then 3rd- choice rankings are added in.	In more than 60 US cities in the early 20th century, including Denver, Grand Junction, Fort Collins, Colorado Springs, San Francisco, Cleveland, Newark, and St Petersburg					
Count the rankings [arguably more a presentation of raw data than a tabulation method]	Voters must rank all candidates. Count and report the number of 1 <sup>st</sup> choices, the number of 2 <sup>nd</sup> choices, and so on for each candidate.	In organizations using Microsoft 365's Ranking form					
Coombs' Rule video [The video contrasts IRV and Coombs' Rule.]	If no candidate gets a majority on the 1 <sup>st</sup> round, then the candidate with the most last-place votes is eliminated. The process is repeated until a candidate emerges with a majority of votes on non-exhausted ballots.	A variant is used on the "Survivor" reality TV program					

#### Now what?

So, how do you now approach conversations about voting methods? To cover all bases, consider following the example of the Colorado Secretary of State—don't use the term *RCV*, but rather the super-umbrella term *ranked voting*. And, if someone mentions RCV or ranked voting, here's a good first question to ensure that everyone is on the

same page: "Which form of RCV or ranked voting are you talking about?"

Who knew there were so many forms of ranked voting? Well, now YOU know.