Alternative Voting Methods

Denver League of Women Voters
April 1, 2019



Alternative Voting Methods Are . . .

- A mathematical way of addressing fairness math does not have emotional involvements 2+2=4 no matter how you *feel* about it
- A qualitative way of attempting to understand WHO voters really want and/or would accept as a winner
- A way of eliminating tactical voting
- A way of eliminating the "spoiler affect"
- A powerful way to give third parties opportunities to rise to the top



Why Look At Alternative Methods

- Currently, plurality voting is the most common voting method used in the United States.
- Plurality voting is simple and effective when there are only two candidates. When there are more than two candidates, plurality voting limits the voice of the voter.
- Plurality voting encourages tactical voting voting for the "lesser of two evils" rather than picking their favorite candidate.
- Plurality voting is weak in avoiding the "spoiler affect", splitting votes between candidates of similar ideology, or drawing votes away from a major candidate.



Evaluating Alternative Voting Methods

- Some evaluation criteria for voting methods include:
 - Favorite-Safe You vote for your favorite candidate.
 - Clone-Safe In a race with three or more candidates, there is no vote-splitting among candidates that are close in ideology. You can vote for both.
 - Monotonic Voting for a candidate helps the candidate and not voting for a candidate does not help the candidate. Avoids the situation where a voter is more satisfied not voting than voting honestly.
- Alternative voting methods may improve the election experience, encourage positive campaigning, and may allow third-parties to gain on the two-party dominance.

Source: LWV Boulder County, "Voting Methods in Colorado and Beyond", 5th Edition June 2018



Condorcet Winner and Condorcet Loser

- Many voting methods are evaluated on whether or not they produce a Condorcet winner.
 - A Condorcet winner is a candidate that would win against all other candidates
 if that candidate ran against each of the others in individual races.
- More important than the Condorcet winner is the Condorcet loser.
 - A Condorcet loser is a candidate that would lose against all other candidates if that candidate ran against each of the others in individual races.
- Not all voting methods produce a Condorcet winner or Condorcet loser



Plurality Voting is What We Have

- Plurality Voting is the most widely used method of voting in the United States. The primary advantage is simplicity.
- In single-seat elections, the voter votes for one candidate. In multi-seat elections, the voter votes for as many candidates as there are seats to be filled.
- The candidate(s) with the most votes wins, regardless of whether that candidate(s) is(are) favored by a majority or not.
- Plurality voting is also called "Winner Take All" or "First Past the Post".
- Plurality voting is favorite-safe and monotonic, but not clone-safe.
 Evaluation criteria does not include a Condorcet winner or Condorcet loser.



Two Round Run-Off Voting Method

- The Two Round Run-Off voting method is used when there are more than two candidates and there is a requirement that the winning candidate have more than 50% of support from voters.
- If no candidate receives more than 50% of the votes, the top two candidates go forward with a run-off election.
- Voters "drop-off" after the first election, and do not appear for the run-off.
- This voting method is costly, both to the candidates and to the municipalities that use it because it requires funding and resources for not one election but two.
- Two Round Run-Off voting is favorite-safe, but not clone-safe or monotonic. Evaluation criteria does include Condorcet loser.



Approval and Score Voting Methods

- Approval and Score Voting Methods are Rating Voting Methods.
- In Approval Voting, voters approve candidates they like by indicating approval using a predefined range; e.g., 1 for yes and 0 for no. The candidate with the greatest approval wins.
- In Score Voting, voters score each candidate using a scale, such as 1 through 9. More than one candidate may receive the same score. The candidate with the highest score wins.
- Approval and Score voting are favorite-safe, clone-safe, and monotonic. Evaluation criteria do not include Condorcet winner or Condorcet loser.



Borda Voting-A Range Voting Method

- Borda Voting is a Range Voting Method.
- Voters rank each candidate by order of preference.
- Candidates receive points for their ranking on the voting ballot.
- In a race with three candidates, the candidate who receives a voter's first choice would get 2 points, second choice would get 1 points, and third choice would get 0 points. Points are assigned by ranking order and not by voter's choice.
- The candidate with the most points wins.
- Borda voting is not favorite-safe or clone safe. Evaluation criteria does include Condorcet loser.



Voting Methods Comparison Chart



FairVote

	Vote-for- one plurality	Two- round runoff	Ranked choice voting (single winner)	Approval voting	Range voting	Condorcet methods	Borda count
resistance to "spoilers"	low	medium	high	medium	medium	high	low
later-no-harm criterion	yes	yes	yes	no	no	no	no
resistance to strategic voting	low	high	high	low	low	high	low
majority-favorite criterion	yes	yes	yes	no	no	yes	no
mutual-majority criterion	no	no	yes	no	no	yes/no	no
prospects for U.S. adoption	high	high	high	medium	low	low	low
Condorcet-loser criterion	no	yes	yes	no	no	yes/no	yes
Condorcet-winner criterion	no	no	no	no	no	yes	no
independence of clones criterion	no	no	yes	yes/no	yes/no	yes/no	no
monotonicity criterion	yes	no	no	yes	yes	yes/no	yes

Ranked choice voting compared to alternative reforms. See www.fairvote.org/alternatives for more detail.



