

Evaluating Voting Methods

1. Comparison Tables

People can and do debate what are the most important criteria for evaluating voting methods. Several tables are available with various analyses of how well each voting method works for each criterion.

We included three in the 2017 *LWVBC Voting Methods Report*.

*See page 18 for our table.

*See page 19 for a FairVote table.

*See page 20 for a Center for Range Voting table.

If we were to update our table today, we would include “auditable under a risk-limiting audit (RLA)” since Colorado now conducts RLAs for coordinated elections. The LWVCO Voting Methods Position does refer to “post-election analysis” and “transparency.”

Remember that these tables address single winner voting methods. They do not include criteria such as “promote proportional representation” which is relevant for multi-member bodies, although the LWVCO Voting Methods Position also mentions proportional representation.

The list of various alternative voting methods is a moving target. New ones are being created from scratch or tweaked from old voting methods every year. For example, in 2018 Lane County, Oregon, voters had a ballot measure on STAR voting, a brand-new voting method. The tables referenced above address only the best-known methods.

2. Weighting Criteria

The most important factors to consider when proposing adoption of a particular voting method may be:

- 1) What criteria are most important to the electorate?
- 2) What criteria enable and facilitate election administrators to conduct elections?

See below for some examples of these two considerations in real life.

When considering criteria for evaluating voting methods, *different people or communities may assign different weights to the criteria* depending on their personal philosophy so that even if two people fill in a table’s fields identically, one person might determine that Voting Method V is better and another might determine that Voting Method M is better.

Example: The LWVBC Voting Methods Team has concerns about emphasizing the majority criterion. One of the concerns has to do with the definition of majority and is noted below in the Denver section. Another concern is the paradox that, except for the case when a candidate receives more votes than all the other candidates combined, requiring a majority vote does not ensure that the candidate preferred by the most voters wins.

If the electorate only knows about one alternative voting method, then people do not have the opportunity to engage in a meaningful discussion of better voting methods. The League supports Making Democracy Work® for All and “encourages informed and active participation” in democracy. As

part of the League’s voter education efforts, the Voting Methods Team believes we should educate voters not only on ballot content, but also on ballot structure and election type.

3. Context

Voting methods do not exist in a vacuum. As we consider adopting better voting methods, we should also consider the context. Consider the examples below:

- **Executive Position or a Multi-Member Body** - When advocating for changes in elections for council or legislative bodies, we may want to propose changing from ward elections to multi-winner at-large elections. The latter reduces or eliminates gerrymandering and, depending on the voting method adopted, can increase proportional representation. When elected bodies are not proportionally representative, many voters may feel disenfranchised and the dominant group on the elected body has fewer checks on its power.
- **Risk-Limiting Audits (RLAs)** – Colorado is a leader in risk-limiting audits. Other states are adopting RLAs to improve the electorate’s confidence in the accuracy of election results. See the RLA section below for a discussion on conducting RLAs work with specific voting methods.
- **Changing the Number of Votes an Elector May Cast** – If the 2017 US Fair Representation Act were in effect, Colorado voters would vote in a multi-winner congressional district. Their vote would only go toward one candidate as it does now in our single-winner plurality contests, and the electorate would likely see the change as an improvement. On the other hand, if the same voting method were adopted for Boulder City Council’s current vote-for-5-candidates election, the electorate might balk at their vote only going toward one candidate.
- **Transparent, Understandable Process** – The electorate wants to be represented via a process that it perceives as fair and honest. Some modern voting methods require extensive computer processing in the tabulation process. When voting data appear to go into a black box and come out with a result, voters and election administrators may be reluctant to adopt and trust the voting method.

4. Risk-Limiting Audits (RLA)

Some voting methods work better with RLA than others. Of the common single-winner voting methods, plurality and approval voting use straightforward statistics to conduct an RLA. Instant-runoff voting (IRV) and score voting require further development of RLA tools, with security experts considering the use of Bayesian statistics rather than frequentist statistics for IRV.

Of the multi-winner methods, plurality block voting, cumulative voting, and approval block voting use straightforward statistics to conduct an RLA. Single transferable vote and other versions of multi-winner approval voting require further development, including Bayesian statistics for some of the methods.

In the Secretary of State’s Election Rule 26, the election officials are currently directed to “verify the accuracy of the voting system’s tabulation of the ranked voting contest by hand counting the votes in at least one precinct, or in one percent of all precincts in which the ranked voting contest appeared on the

ballot, whichever is greater” unless a winner was declared in the first round. Colorado is not currently set up to conduct RLAs of ranked voting elections.

5. Conclusion

The LWVBC Voting Methods Team continues to rely on the LWVCO Voting Methods Position as a guide for our work on voting methods. We are reluctant, however, to offer a single comparison table to evaluate voting methods. Rather, we believe that situations should be considered on a case-by-case basis within their context. We have given five examples below to illustrate.

5 Examples - Specific Elections and the Voting Methods in Use and under Consideration

2017 House Resolution 3057 – The Fair Representation Act

This act would create multi-member congressional districts within each state when possible and would use single transferable vote to elect members of Congress. HR3057 or a successor version is worthy of LWV support.

- More than one member of the US House of Representatives would be elected in a multi-member district and voters could rank their candidate choices, but a person’s vote would only go toward one candidate under *single* transferable vote (STV). Ever since PL 90-196 passed in 1967, all congressional districts are single-member districts so **voters are accustomed to electing only one member of the US House of Representatives.**
- STV **promotes proportional representation.** A common critique of the House of Representatives is that it is not proportionally representative of the US electorate due to gerrymandering. HR 3057 would offer a remedy within each state with multiple representatives but would not affect small states that get only one representative.
- Implementing STV across the nation would be a **technological and logistical challenge.** Central tabulation of Maine’s recent 2nd congressional district election took more than one week.

Denver Municipal Elections

Denver is considering adopting Ranked Choice Voting (RCV) for its municipal elections. Denver currently elects the following city council members

- 11 by district or ward with only the electorate within the ward eligible to vote for the ward candidates. If no candidate gets over 50%, then the top two candidates go to a runoff.
- 2 at-large with the top two vote-getters elected

The LWV should consider supporting instant-runoff voting (IRV) [the single-winner version of RCV] for the 11 city council ward elections because the **city can save the cost of runoff elections.**

- The city may want to **consider other voting methods** before settling on IRV. For instance, approval voting could be adopted without expensive software and could also eliminate a runoff election if the majority requirement were eliminated.
- If the city chooses to adopt IRV, the League should encourage the city to **be very careful with its use of “majority.”** In high-profile 2018 IRV elections in Maine and San Francisco, the winners

did not get a majority of the votes cast, but rather a majority of the votes cast on *continuing* ballots. The League should promote transparency and accuracy in its educational and advocacy efforts.

The LWV should consider supporting single transferable vote (STV) [the multi-winner version of RCV] for the 2 at-large city council members.

- One option under consideration is to change the at-large 2-winner contest into 2 single-winner contests because IRV is easier for voters to understand and for election officials to explain and tally than STV. **The League should oppose the single-winner at-large option** because it would decrease the likelihood of electing council members who proportionally represent the city's electorate. STV promotes proportional representation. In fact, the League may want to encourage more multi-winner contests and fewer single-winner ward elections.
- The League should **advocate for a large number of rankings**. Ballots in Minneapolis limit voters to only 3 rankings for mayor even when more than a dozen candidates are on the ballot. The more seats to fill (or perhaps the larger the field of candidates), the more the League should insist on a large number of rankings. In Cambridge STV elections, the number of rankings is equal to the number of listed candidates. There were 26 possible rankings for the Cambridge's city council election in 2017, where 9 candidates were elected.
- The electorate is accustomed to voting for two council members under the current system, but under STV voters would only get a *single* transferable vote. **Would the electorate and candidates be okay with voters only getting to vote for one candidate in a two-winner contest?** Voters may think that they are voting for several candidates because they get to rank the candidates so they may not even notice. Denver may want to consider other voting methods where the electorate gets to vote for more than one candidate in a multi-winner contest. Some examples are cumulative voting and multi-winner approval voting.

Pueblo Mayor

Pueblo is likely to have a ballot measure asking voters to adopt instant-runoff voting (IRV) for its future mayoral elections. Pueblo revised its charter in the 2017 election to directly elect a mayor. In 2018 the top two vote-getters (receiving 13.24% and 12.19% of the votes) proceeded to a runoff election in 2019. The League should support Pueblo's effort to adopt a better voting method for mayor. IRV is one option and may be the preferred method for the electorate. The comments for Denver's single-winner ward elections above are also pertinent for Pueblo.

Broomfield City Council

Broomfield is considering instant-runoff voting (IRV) for its city council ward elections. Meanwhile, the Broomfield ward populations have become so skewed that district boundaries are slated to be redrawn ahead of the 10-year schedule. The confluence of these two situations presents an opportune time to consider electing city council members using a voting method that promotes proportional representation (PR).

- IRV does not promote PR so Broomfield should consider moving to at-large council seats and electing council members **using a multi-winner voting method that promotes PR**, such as single transferable vote, cumulative voting or certain types of approval voting.

- **Wards guarantee geographic representation but require redrawing boundaries which in turn may subject the city to charges of gerrymandering.** Geography is only one characteristic that the voters may value. With proportional representation, the electorate determines with their votes which characteristics are most important to have on city council and elects a council whose composition reflects those values in proportion to the electorate's values.

CU Student Government

The CU student government uses approval voting for its elections. The elections are easy to tally and the results are stated appropriately as a percentage of the valid ballots rather than as a percentage of total votes cast. (Boulder's city council plurality block elections, on the other hand, are reported using the latter method, under which it can look like a candidate got only 20% of the vote even if every single elector voted for that candidate.) CU uses approval voting appropriately in their single-winner elections, but tallies its multi-winner contests using block approval voting. (In 2018 Fargo adopted the same approval voting tallying methods for its municipal single-winner and multi-winner elections.)

- **Block approval voting does not promote proportional representation.** Block approval voting is the easiest form of multi-winner approval voting to tally and, depending on CU's election budget, may be the only version that CU can afford at this time. Block approval voting does allow for more voter expressiveness than plurality block voting.
- Given the average age of LWV members, **it may not be appropriate for the League to spearhead a campaign to adjust the way CU tallies its multi-winner voting method**, although we should provide support for such a campaign if a student-led effort requests League help.
