

Testimony for Colorado Secretary of State’s May 24, 2022 Rulemaking Hearing focused on revisions to implement House Bill 21-2071 “Ranked Choice Voting in Nonpartisan Elections” and affecting Rule 26 “Ranked Voting Method”

submitted by Celeste Landry, Boulder, CO -- 5/11/22

Table of Contents

Revision Terminology – Proposed, Suggested, Current.....	1
Spelling Inconsistencies	1
Contest versus Election.....	1
Clarification of Types of Ranked Voting.....	2
Ranked Voting Definitions and Voting System Requirements.....	2
Adjudication of Voter Intent.....	6
Rethinking Audits of Ranked Voting Contests	6

Revision Terminology – Proposed, Suggested, Current

The term “Draft” below refers to the Preliminary Draft of Proposed Rules that was disseminated to the public on April 15, 2022. **Yellow** highlighted text shows suggested changes to the Draft.

- “Proposed” refers to the Draft’s proposed text or numbering
- “Suggested” refers to my suggested text or numbering
- “Current” or “currently” refers to the current text or numbering

Spelling Inconsistencies

Please note spelling inconsistencies for the following term in the Preliminary Draft of Proposed Rules:

- Draft, page 2: proposed 1.1.36 “Instant run-off election”
- Draft, page 4: proposed 1.1.64 “instant-run-off election”
- Draft, page 33: proposed 21.11 “INSTANT RUNOFF VOTING” (also see instances on page 34)
- Draft, page 37: proposed 26.9.4(c) “instant-runoff-voting contests”

In suggestions below, I have consistently used “instant runoff” to match 1-7-1003, C.R.S.

Contest versus Election

An election may consist of several types of contests. For instance, a municipal election may have a single-winner mayoral contest, a multi-winner councilmember contest and a yes/no ballot measure contest. In the suggestions below, I have sometimes, for specificity, changed “election to “contest.” A more exhaustive search of places where “contest” should replace “election” may be in order.

Clarification of Types of Ranked Voting

In Colorado the types of ranked voting allowed by statute [1-7-1003, C.R.S.] are “instant runoff voting” (IRV) and “single transferable vote” (STV). Advocates of IRV and STV often use the umbrella term “ranked choice voting” (RCV). Without clarification, “ranked voting” or RCV can lead to a tremendous amount of confusion! (See this article: [What Is RCV Anyway?](#))

Some forms of RCV are preferable to others. In particular, STV is vastly preferable to the more-widely-used, non-democratic form of RCV that Utah recently adopted for multi-winner contests (also known as preferential block voting). Fortunately, every jurisdiction besides Utah that is considering ranked voting for multi-winner contests is apparently only considering STV. Nevertheless, Colorado needs to be vigilant and clear in its election rules.

To ensure that everyone uses the same meaning of IRV and STV, the definitions in 26.1 should reference 1-7-1003, C.R.S. Because Rule 26.1 is being re-codified outside of Rule 26 and because of the confusion noted above, the following clarifying text is suggested for the Draft language:

- Draft, page 2: proposed 1.1.36 “Instant runoff **contest**” means a type of ranked voting **contest as set forth in 1-7-1003, C.R.S.**, where only one candidate will be elected to the office.
- Draft, page 4: proposed 1.1.49 “Single transferable vote **contest**” means a type of ranked voting **contest as set forth in 1-7-1003, C.R.S.**, where more than one candidate will be elected to the same office.

Ranked Voting Definitions and Voting System Requirements

- Draft, page 4: proposed 1.1.56 “Transfer” **in the tabulation of a ranked voting contest** means assigning the vote of an eliminated candidate or the surplus vote of a winning candidate to the next-highest-ranked continuing candidate.
 - Justification – The context should be specified since “transfer” is used in other contexts in the Sec of State Rules, e.g., Rule 2.7.1.
- Draft, page 4: proposed 1.1.57 “Transfer value” means the fraction of a vote **in a single transferable vote contest that a ballot** will contribute to the next ranked continuing candidate **in that contest**. The transfer value of a vote cast for a winning candidate is limited to four decimal places, ignoring any remainder.
 - Justification – The Draft language is “transferred ballot” but referring to transferring part of the vote is more accurate than referring to transferring a (complete) ballot. The ballot may contain several ranked voting contests.
- Draft, page 4: proposed 1.1.64 “Winning candidate” **in a ranked voting contest** means a candidate who is elected after receiving **more than 50 percent of the votes on active ballots** in an instant runoff **contest**, or after reaching the winning threshold required in a single transferable vote **contest**, or because the number of continuing candidates and other winning candidates is less than or equal to the number of seats to be filled.
 - Justification – Plurality contests define winning candidates differently from ranked voting contests so the “ranked voting contest” language is needed.
 - Justification – The Draft language is “50 percent plus one vote” which is usually sufficient but which may require at least one more round of tabulation. Here is an

example: If 99 votes are cast in a contest and Candidate X gets 50 votes, Candidate Y gets 30 votes and Candidate Z gets 19 votes, we should be able to immediately declare X the winner, but 50% plus 1 vote is $49.5 + 1 = 50.5$ votes, a threshold that Candidate X has not met. We would then eliminate Candidate Z. If Z's votes all transfer to Y, then we would still not have a winner under the "50% + 1 vote" definition until we eliminate Y and finally declare X the winner as the sole continuing candidate.

- Justification – "Active ballots" is an important qualifier. Many IRV winners never receive a majority of votes cast in a contest, but they do receive the (eventual) majority of the active ballots. Examples: Eric Adams, NYC mayoral Democratic primary, 2021; Jared Golden, Maine – CD2, 2018; London Breed, San Francisco mayor, 2018. Opponents of IRV like to refer to this "non-majority of ballots cast but majority of active ballots" as a "false majority."
- Draft, page 4: proposed 1.1.65 "Winning threshold" **in a ranked voting contest** means the number of votes **which ensures a candidate is elected. The** winning threshold equals the total votes counted in the first round of tabulation, divided by the sum of one plus the number of offices to be filled, then adding one, disregarding any fractions. Winning threshold = $((\text{Total votes cast}) / (\text{Seats to be elected} + 1)) + 1$, with any fraction disregarded.
 - Justification – Moving this definition out of Rule 26 means that it would apply to all elections unless otherwise specified with the "ranked voting" language.
 - Justification – The Draft language is "number of votes sufficient for a candidate to be elected." However, fewer votes than the winning threshold may suffice to elect a candidate when some ballots for that contest become inactive.
- Draft, page 33ff: proposed 21.11 – **21.4.15 STANDARDS FOR CERTIFYING RANKED VOTING FUNCTIONALITY**
 - Justification – Renumber and move this section from the end of Rule 21 to the more logical position at the end of Rule 21.4 Voting System Standards. The renumbering as part of Rule 21.4.15 is continued in other suggested changes to Draft Rule 21 below.
 - Justification – When proposed Rule 21.11 [suggested renumbered Rule 21.4.15] is expanded to include STV as well as IRV, then this section title won't need to be updated.
- Draft, page 33: proposed 21.11.1(B) **21.4.15(a)(2) THE VOTING SYSTEM MUST GENERATE A REPORT FOR EACH RANKED VOTING CONTEST THAT LISTS THE RANK ORDER IN WHICH EACH ELECTOR RANKED THE CANDIDATES.**
 - Justification – Small jurisdictions that hand count ballots may not have the technology to create a ballot image of each cast vote record (CVR). The Draft language – "generate a ballot image report" – is unclear. Is it requiring an image of each ballot sheet? Some contests on the ballot may not be ranked voting contests.
 - Justification – "Rank order" requires more complete information than just "order." The former would include #1 Bob #2 Maria #3 SKIP #4 Maria. The latter could just be Bob, Maria. How would the unmodified "order" show overvotes, e.g., Jack and Jill both ranked #1?
 - Justification – Ideally, proposed Rule 21.11.1(B) would clearly specify that every elector's ranking order for every contest must be available in order to provide full visibility of voter support (including uncounted lower rankings) and to allow independent verification of the results.

- Draft, page 33: proposed 21.11.1(C) 21.4.15(a)(3) THE VOTING SYSTEM MUST GENERATE A COMPREHENSIVE REPORT LISTING THE FINAL TABULATION ROUND OF RANKED VOTING RESULTS IN THE SUMMARY REPORT BY PRECINCT OR BALLOT STYLE AS REQUIRED OR PERMITTED BY SECTION 1-7.5-208(3)(A), C.R.S.
 - Justification – Does the unmodified word “results” above refer to the results of each tabulation round as it does in Draft 21.11.1(A)? If so, perhaps the reporting requirement in Section 1-7.5-208(3)(A), CRS, is excessively burdensome for Colorado’s voting system software and vendors. If the CVRs containing the rank order for each contest are available for independent verification of the election results, then perhaps Section 1-7.5-208(3)(A) could be interpreted to mean reporting only the final tabulation round at the precinct or ballot style level.
 - Note – Listing the results on the comprehensive report by ballot style is likely preferable to listing the results by precinct, but current Rule 26.5 could present an obstacle. It states: “For elections in which ranked voting is not the only voting method used, the designated election official must format the ballot in a way that will allow the county to conduct all audits and reporting required by law and rule, including reporting results of ranked voting races by precinct, and may place the ranked voting races on a separate ballot card.”
- Draft, page 33: proposed 21.11.2(A) 21.4.15(b)(1) FOR ALL TABULATED BALLOTS, THE ELECTRONIC VOTING SYSTEM MUST ACCURATELY EXPORT COMPLETE ROUND-BY-ROUND RESULTS DATA FOR USE WITH AN ELECTION NIGHT REPORTING SYSTEM IN .CSV, .JSON, AND .XML FORMATS.
 - Justification – Highlighting that the results, especially on Election Night, are only for the ballots tabulated so far seems judicious.
 - Justification – Manual-entry counties have different requirements for reporting results data.
 - Justification – Because Round 1 results must be tabulated before Round 2 results, using the Draft phrase “export results data by round simultaneously for all rounds” could be confusing.
- Draft, page 33: proposed 21.11.2(B) 21.4.15(b)(2) THE ELECTRONIC VOTING SYSTEM MUST ACCURATELY EXPORT A CAST VOTE RECORD IN .CSV, .JSON, AND .XML FORMATS.
 - Justification – Small jurisdictions that hand count ballots will use the paper ballot as the cast vote record.
- Draft, page 34: proposed 21.11.3(A) 21.4.15(c)(1) THE VOTING SYSTEM MUST PERMIT THE USER TO LAY OUT BALLOT CARDS CONTAINING BOTH PLURALITY AND RANKED VOTING CONTESTS ON THE SAME BALLOT CARD OR SEPARATE BALLOT CARDS.
 - Justification – “Ranked voting” is more general and allows for both IRV and STV in Colorado statute. When Rule 21.11 [suggested renumbered Rule 21.4.15] is expanded to include STV as well as IRV, then this language won’t need to be updated. Parts (B) and (D) in Draft Rule 21.11.3 both already refer to ranked voting.
- Draft, page 34: proposed 21.11.3(C) 21.4.15(c)(3) THE VOTING SYSTEM MUST BE ABLE TO SUPPORT RANKING AT LEAST TEN NAMED CANDIDATES AND UP TO TWO WRITE-IN CANDIDATES PER RANKED VOTING CONTEST.
 - Justification – Same justification as immediately above.

- Draft, page 34: proposed 21.11.4 21.4.15(d) INSTANT RUNOFF VOTING TABULATION REQUIREMENTS
 - Justification – The tabulation described in this Draft section only applies to IRV so specificity in the section title is appropriate.
- Draft, page 34: proposed 21.11.4(D) 21.4.15(d)(4) IF THE COMBINED VOTES OF TWO OR MORE CANDIDATES WITH THE LOWEST VOTE TOTALS IN THE CURRENT ROUND ARE LESS THAN THE NUMBER OF VOTES FOR THE CONTINUING CANDIDATE WITH THE NEXT-HIGHEST NUMBER OF VOTES, THEN THE VOTING SYSTEM MUST ELIMINATE THE GROUP OF LOWEST-VOTE CANDIDATES SIMULTANEOUSLY.
 - Justification – Removing “both” is appropriate since three or more candidates may be eliminated at once. Suggested language clarifies which candidates should be compared to the next-highest continuing candidate and clarifies which candidates will be eliminated. Since we can have higher and lower rankings, specifying “next-highest number of votes” also seems to be an improvement.
- Draft, pages 34-35: proposed 21.11.4(E) 21.4.15(d)(5) IN ANY ROUND, IF TWO OR MORE CANDIDATES TIE FOR THE LOWEST NUMBER OF VOTES, AND THE VOTING SYSTEM CANNOT ELIMINATE THE CANDIDATES ACCORDING TO THE CRITERION IN SUBSECTION (D) SUBSECTION (4), THEN THE VOTING SYSTEM MUST ELIMINATE THE CANDIDATE CHOSEN BY LOT IN ACCORDANCE WITH RULE 26.5.5.
 - Justification – Stopping the tabulation process for a human to pick a candidate by lot is not desirable. See proposed Rule 26.5.5 [currently Rule 26.6.5] for more commentary.
- Draft, page 36: proposed 26.5.4 IF THE COMBINED VOTES OF TWO OR MORE CANDIDATES WITH THE LOWEST VOTE TOTALS IN THE CURRENT ROUND ARE LESS THAN THE NUMBER OF VOTES FOR THE CONTINUING CANDIDATE WITH THE NEXT-HIGHEST NUMBER OF VOTES, THEN THE CANDIDATES IN THE LOWEST-VOTE GROUP ARE ELIMINATED.
 - Justification – Same justification as for the proposed Rule 21.11.4(D) [suggested renumbered Rule 21.4.15(d)(4)] above.
- Draft, page 36: proposed 26.5.5 In any round, if two or more candidates tie for the lowest number of votes, the eliminated candidate is the one predetermined by lot, unless the candidates may be eliminated simultaneously under RULE 26.5.4.
 - Justification – If three candidates tie for the lowest number of votes, only one should be eliminated per round, unless Rule 26.5.4 applies.
 - Justification – The ties should be broken prior to tabulation via a system such as a single randomized sequence of all the candidates, with the order of elimination made very clear. Unlike plurality where the winner may be chosen by lot, in a ranked voting contest the person chosen by lot would be eliminated, not continuing to the next round.
- Draft, page 37: proposed 26.9.4(c) For each ranked voting contest, the audit board must hand count the ballots cast, following the counting method set forth in RULE 26.5 for instant runoff voting contests, and in RULE 26.6 for single transferable vote contests.
 - Justification – The Draft’s use of ‘single transferable voting’ is not used anywhere else in Rule 26 or Rule 1.
 - Note – A more drastic suggested change to proposed Rule 26.9.4(c) is at the end of the Rethinking Audits of Ranked Voting Contests section below.

Adjudication of Voter Intent

- Draft, page 35: proposed 21.11.6(A) **21.4.15(f)(1)(A)** THE VOTING SYSTEM MUST ALLOW THE USER TO QUEUE BALLOTS WITH THE FOLLOWING CONDITIONS FOR ADJUDICATION BY ELECTION JUDGES:
 - (1) ...
 - ~~(5) ANY CONTEST IN WHICH A VOTER HAS RANKED FEWER CANDIDATES THAN THE CONTEST'S MAXIMUM PERMITTED NUMBER OF RANKINGS.~~
 - Justification – Voting machines allow voters to rank fewer candidates than the permitted number of rankings. Requiring these ballots to be subject to adjudication could be very burdensome for the adjudication teams.
 - If there are three named candidates vying for a single seat, there will presumably be 3 rankings permitted, but there is no reason for a voter to rank all 3 candidates. The third ranking is a wasted ranking.
 - In an STV contest with 10 named candidates vying for 4 seats, most voters won't rank all 10 candidates.
- Draft, page 34: proposed 21.11.4(A) **21.4.15(d)(1)** THE VOTING SYSTEM MUST RECORD ALL VALID VOTER RANKINGS. **PRIOR TO INITIAL DISTRIBUTION OF BALLOTS TO VOTERS, THE VOTING SYSTEM'S AUTHORIZED USER MUST RESOLVE AND PUBLICLY ANNOUNCE DECISIONS ON THE FOLLOWING VOTING SYSTEM CONFIGURATIONS:**
 - 21.11.4(F) – (J) renumbered as **21.4.15(d)(1)(A) – (E)**
 - Justification – To increase trust in the election process and to prepare candidates for the tabulation, any decisions on what constitutes a valid voter ranking should be made before any ballots are cast.
- Draft renumbered **Rule 26.7** [currently Rule 26.8] After determining voter intent in accordance with the Secretary of State's Voter Intent Guide, the designated election official must count improperly marked ballots in accordance with the decisions in **Rule 21.4.15(d)(1)**.
 - ~~26.8.1 An overvote invalidates the overvoted rankings and all lower rankings marked for that contest on the ballot.~~
 - ~~26.8.2 A skipped ranking and any lower ranking must be ignored.~~
 - ~~26.8.3 A candidate who receives a duplicate ranking on a single ballot is credited with the highest ranking marked by the voter. All other rankings for that candidate must be ignored.~~
 - Justification – Proposed renumbered Rules 26.7.1 – 26.7.3 [currently 26.8.1 – 26.8.3] conflict with the authorized user's decisions in proposed Rule 21.11.4(A) [suggested renumbered Rule 21.4.15(d)(1)].

Rethinking Audits of Ranked Voting Contests

- Draft renumbered Rule 26.9.1 [currently Rule 26.10.1] In a coordinated election, if all winning candidates are determined in the first round of tabulation, the county clerk must conduct a risk-limiting audit under Rule 25.2. In all other cases, the audit board must **conduct the risk-limiting audit of the voting system's first round of tabulation of the ranked voting contest with an opportunistic audit of all the rankings on the selected ballots to be audited.** ~~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.~~
 - Justification – An RLA of the first round of tabulation and an opportunistic audit of the lower rankings on the ballots would allow ranked voting contests to be integrated into the RLA process. This would be a more consistent and simpler approach than pulling all

the ranked voting contest ballots in one precinct or in 1% of the precincts. As in a plurality RLA, any discrepancy would trigger another RLA round. If the ranked voting contest is the targeted contest on the county ballot, then the RLA would only be confirming with a certain risk limit the results of the first round and cross-checking the marked lower rankings on the selected ballots. Meanwhile, the CVRs should be made available for independent groups to confirm the results.

- Justification – The current auditing rule using 1 precinct or 1% of precincts is a laborious way of checking ballots in our mail-ballot system.
- Justification – The current auditing rule provides tabulation results for such a small subset of ballots as to be nearly meaningless since you can't roll those results up to the overall results. Reporting these results would likely be misleading and lead to misinformation campaigns.
- Draft, page 37: proposed 26.9.4(c) For each ranked voting contest, the audit board must **conduct a risk-limiting audit as set forth in Rule 26.9.1** [currently Rule 26.10.1] ~~hand count the ballots cast, following the counting method set forth in RULE 26.5 for instant runoff voting contests, and in RULE 26.6 for single transferable vote contests.~~
 - Note – Several other sections of renumbered Rule 26.9 [currently Rule 26.10] would need to be evaluated and changed to align with conducting a first-round tabulation RLA of a ranked voting contest rather than a hand count.

--- end of comments ---