



Colorado
Secretary of State

Alternative Voting Stakeholder Group

December 15, 2020 Public Meeting

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Agenda

1. Purpose of Today's Meeting
2. Voting Method Recaps: Plurality, Approval & Ranked Voting Methods
3. Authorized Voting Methods in Colorado
4. Coordinated Elections
5. Technologies to Coordinate Approval Voting
6. Technologies to Coordinate Ranked Voting
7. Overview of Main Steps Necessary to Support Ranked Voting in Coordinated Elections
8. Questions and public comment



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Purpose of Today's Meeting

The threshold public policy decisions of whether and when to mandate or permit the state of Colorado or non-home rule political subdivisions to use alternative voting methods such as approval or ranked voting is vested in the General Assembly

The purpose of today's meeting is to recap the alternative and authorized voting methods, and outline the principal systems and agency actions needed to successfully implement approval or ranked voting in Coordinated Elections.



Voting Method Recap – Plurality Voting

- In a plurality voting race, voters may vote for no more candidates than offices to be filled
 - If one office holder is elected, the race is “Vote for One” or “Vote for Not More than One”
 - If two office holders are elected, the race is “Vote for Two” or “Vote for Not More than Two”
- The candidate who receives highest number of votes is nominated or elected, whether or not he or she received a majority or other specified percentage of all votes cast for the office



Voting Method Recap – Approval Voting

- In an approval voting race, voters may vote for as many or as few candidates as they want. For example, in a race with five named candidates and two eligible write-in candidates, a voter may vote for up to seven candidates
- The candidate chosen the most – i.e., the candidate who receives the most votes – is elected.
- Advocates claim that approval voting is superior to and more expressive than the plurality method. Since voters may vote for all candidates they support simultaneously, approval voting minimizes or eliminates **tactical voting** (voting for a “viable” candidate rather than voter’s favorite), **vote splitting** (less popular candidates win because candidates with similar positions split the vote), and the **spoiler effect** (reluctance to vote for minor party and independent candidates rather than front-runners)



Voting Method Recap: Ranked Voting

- Ranked voting for single-winner races is called Instant Runoff Voting (IRV)
- Ranked voting for multi-winner races is called Single Transferable Vote (STV)
- Voters rank candidates according to their preference - 1st choice, 2nd choice, 3rd choice, etc.
- IRV tabulation: Start by counting the number of 1st choice rankings received by each candidate
 - If a candidate receives an outright majority of 1st choice rankings, he or she is elected
 - If no candidate receives an outright majority of 1st choice rankings, tabulation evolves into instant runoff by:
 - Eliminating the candidate with the fewest 1st choice rankings
 - Allocating 2nd choice rankings to remaining candidates from ballots that ranked eliminated candidate as 1st choice
 - Continue process until one candidate receives a majority of ranked choices, or until all ballots are exhausted
- STV tabulation: Similar but more complex



Voting Method Recap: Ranked Voting (cont.)

- Advocates claim ranked voting is superior to the plurality method because it eliminates expensive, low-turnout runoff elections, increases the civility of campaigns, and minimizes or eliminates tactical voting, the spoiler effect, and vote splitting.



Authorized Voting Methods in Colorado

County elections

- County clerks conduct elections under the Uniform Election Code of 1992, also known as Title 1 Elections. Title 1 elections include:
 - Presidential Primary Elections
 - State Primary Elections
 - General Elections (November even-year)
 - Coordinated Elections (November odd-year)
- Current law requires use of the plurality method in all Title 1 elections



Authorized Voting Methods in Colorado (cont.)

Municipal elections

- City and town clerks conduct municipal elections under the Municipal Election Code of 1965. Colorado law currently authorizes all Colorado municipalities to conduct their elections using ranked voting
 - Home rule municipalities have had the constitutional authority to conduct their municipal elections in the manner they desire since 1913, including by approval or ranked voting. Colo. Const. XX, §6(d).
 - Statutory cities and towns generally conduct municipal elections according to the Municipal Election Code of 1965. However, in 2008, the General Assembly adopted the Voter Choice Act, explicitly permitting statutory towns and cities to conduct ranked voting elections.
 - Statutory cities and towns are not currently authorized to use approval voting in municipal elections



Authorized Voting Methods in Colorado (cont.)

Special district elections

- Designated election officials of special districts may conduct their elections in accordance with the election provisions of Title 32 of the Colorado Revised Statutes, or as independent mail ballot elections under article 13.5 of Title 1.
- The Voter Choice Act of 2008 also authorized special districts to use ranked voting
- Current law does not permit special districts to utilize the approval voting method



Authorized Voting Methods in Colorado (cont.)

School district elections:

- School districts cannot conduct their own elections, and instead must coordinate with county clerks in November of odd-number years
- Current law requires school districts to use the plurality voting method



Coordinated Elections

- As noted above, municipalities and special districts may conduct their own elections
- Municipalities and special districts may also coordinate their elections with the clerks and recorders of the counties in which they are located
- In coordinated elections, participating jurisdictions certify races and measures to the appropriate county clerk and recorder, who include that ballot content with state and county content on the county's ballot
- If municipalities and special districts want to coordinate ranked voting races with the county clerk, the county clerk must have the infrastructure to support the tabulation, reporting and auditing of those contests



Technology to coordinate approval voting

Most existing systems will require little if any development to accommodate the coordination of approval voting races.

- Voting systems: Colorado's two certified voting systems are capable of tabulating and reporting results in approval voting races
- Risk-limiting audits: The Secretary of State's open-source RLA software will require some additional development to administer risk-limiting audits of approval voting races
- Other dependent systems: The Secretary of State's Election Night Reporting and electronic ballot delivery systems can accommodate approval voting



Technology to coordinate ranked voting

Substantial development of existing systems and technologies will be needed for county clerks to coordinate ranked voting contests:

- Voting systems:
 - Dominion: Dominion Voting's Democracy Suite® system is used in 62 Colorado counties, and has been used to layout and tabulate ballots with IRV races in Santa Fe and San Francisco. However, the Secretary of State has not tested or certified that functionality for use in Colorado, voting systems specifications & requirements have not yet been promulgated by any federal or state agency, and Dominion has not licensed Colorado counties to use the ranked voting capabilities of the system.
 - Clear Ballot: Clear Ballot's ClearVote® system currently is not capable of laying out or tabulating ballots with ranked voting races. Clear Ballot Group is working with RCV Resource Center's open-source Universal RCV Tabulator to add non-native ranked voting tabulation capability. Clear Ballot currently expects to complete this development in the latter part of 2021 or the first half of 2022, and to submit the modified system for certification in Colorado.



Technology to coordinate ranked voting (cont)

- Central tabulation system: If more than one county shares a ranked voting contest, a central authority must tabulate the race because eliminations in one county affect eliminations in all counties that share the contest. This system would need to be created from scratch – no such system exists today.
- Risk-limiting audits:
 - The Secretary of State's RLA software will require substantial development to incorporate the peer-reviewed, published algorithms for risk-limiting audits of IRV races. (Conducting RLAs of multi-winner STV races is not possible, according to the inventor of risk-limiting audits, UC Berkeley's Philip Stark).
 - In addition, it is almost certain the RLA software will require ground-up redevelopment, to accommodate CVR files with a schema format (such as .JSON or .XML), because the current tabular .CSV format can only provide the machine count for the first round of IRV tabulation.
- Other dependent systems: The Secretary of State's Election Night Reporting and electronic ballot delivery systems will require some or substantial additional development to support ranked voting in Coordinated Elections.



Overview of main steps necessary to support ranked voting in Coordinated Elections

- General Assembly enacts legislation requiring counties to coordinate with political subdivisions referring ranked voting contests
- Secretary of State adopts rules establishing voting systems requirements and specifications for ranked voting under existing statutory authority, including sections 1-5-616 and 1-7-1004, C.R.S.
- Voting system vendors apply for certification of ranked voting functionalities, to be tested against requirements and specifications adopted by Secretary of State



Overview of main steps necessary to support ranked voting in Coordinated Elections (continued)

- If successfully tested, Secretary of State certifies voting systems' ranked voting functionalities for use in Colorado
- To extent applicable, voting system providers license county users to utilize ranked voting functionalities of their systems
 - Dominion has offered a statewide annual license for \$70,000, enabling all Dominion counties to use ranked voting capabilities during license period
 - Statewide license will be in addition to and not inclusive of amounts counties pay for ballot layout and programming services, should they engage vendors for those services



Overview of main steps necessary to support ranked voting in Coordinated Elections (continued)

- Secretary of State amends Election Rules 21.4.12 and 21.4.13, to specify format of CVR and ENR exports as necessary to include all rounds of ranked voting tabulation
- Secretary of State follows state procurement procedures to modify existing systems to accommodate ranked voting, including:
 - Election Night Reporting system
 - RLA software
 - Electronic ballot delivery system



Steps necessary to support ranked voting in Coordinated Elections (continued)

- Secretary of State works with voting system vendors to provide onsite or regional trainings to county clerks and staff on ranked voting elections
- Secretary of State works with county clerks to conduct voter outreach and education regarding ranked voting, with special focus on persons with disabilities
- More?



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Questions and public comment

Members of the public may submit written comments regarding any matter addressed in today's meeting by emailing Katherine.Huston@sos.state.co.us by 5 pm MT on Tuesday, December 22nd.

All written comments received will be posted with other materials for today's meeting on the Alternative Voting Stakeholder Group page of the Secretary of State's website