

July 22, 2026

RANKED CHOICE VOTING CONSIDERATIONS FOR ANNAPOLIS

The following recommendations are provided to help advise and guide the Mayor, Council, Board of Supervisors, and City Staff in how ranked choice voting can be implemented for the City of Annapolis.

Overview of Ranked Choice Voting

Ranked choice voting (RCV), also known as instant runoff voting, is a method of voting that allows voters to rank candidates in order of preference (1st choice, 2nd choice, 3rd choice, etc). A candidate must reach the threshold for the number of seats being elected. **It is a flexible voting method for single- and multi-winner elections.**

The “Election Thresholds” table highlights the percentage of votes needed to win a seat in proportion to the number of seats elected. The rows highlighted in gold show the relevant winning thresholds for Rockville, corresponding to the Mayor and Council structure.

Over 50 jurisdictions across the United States have adopted RCV, including Takoma Park (MD), Alexandria (VA), New York City (NY), Portland (Oregon and Maine), and Minneapolis (MN). In addition, there are multiple municipalities in Maryland exploring RCV, including Annapolis, Frederick, Greenbelt, and Hyattsville.

Election Equipment & Technology Considerations

Capabilities - State voting equipment is RCV-capable. Maryland voting systems (at the county level) are uniform and use Election Systems & Software (ES&S) voting equipment. ES&S equipment supports single-winner and multi-winner (e.g. proportional) RCV.

Ballot Design - ES&S supports grid or column ballot designs for RCV contests. Formats can accommodate rankings up to 21 (portrait ballot) or 23 (landscape ballot) and include non-RCV contests. The Center for Civic Design (CCD) has best practices for designing ballots and voter education¹. CCD recommends a single column grid style for contests with more than 5 ranking options (see Figure 1).

Tabulation - ES&S is compatible with RCVRC’s free tabulation tool, RCTab. RCTab is federally tested open-source software designed to process cast vote record (CVR) files produced by ES&S software to tabulate results. RCTab’s narrow scope, tabulating the RCV round-by-round count, is distinct from end-to-end voting systems which fill a much larger variety of roles.

Election Thresholds	
Seats to Elect	Percent to Win
1 Seat	50% + 1
2 Seats	33.3% + 1
3 Seats	25% + 1
4 Seats	20% + 1
5 Seats	16.7% + 1
6 Seats	14.3% + 1

¹ Center for Civic Design, *Design Principles for Ranked Choice Voting*, <https://civicdesign.org/projects/rcv>

RCV Ballot Style

Grid — up to N ranks

It is possible to rank more than 5 candidates, but the challenge is that they take up more space. To create a well designed ballot with more than 5 ranks, you will only be able to fit 1 column of contests.

You will only use as many ranks as candidates, so rank-10 will have wide variation in different contests!



Official Ballot
Franklin County, California General Election Tuesday, November 6, 2012

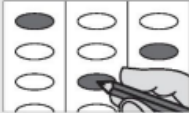
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Instructions for Ranked Choice Voting

Making selections
Rank candidates in the order of your choice.
You may rank as many or as few candidates as you wish.

Fill in the oval...

- In the 1st column for your first 1st choice.
- In the 2nd column for your 2nd choice.
- In the 3rd column for your 3rd choice, and so on



Fill in the oval completely.



No more than 1 oval in a column.



No more than 1 oval for a candidate.

Mayor

Rank up to 10 candidates.
Mark no more than 1 oval in each column.

	First choice 1st	Second choice 2nd	Third choice 3rd	Fourth choice 4th	Fifth choice 5th	Sixth choice 6th	Seventh choice 7th	Eighth choice 8th	Ninth choice 9th	Tenth choice 10th
Frederick Sharp Orange Party	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Luis Garcia Orange Party	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Charles Layne Yellow Party	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Andrew Kowalski Yellow Party	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Alex Wallace Purple Party	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Eric Savoy Purple Party	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Barbara Williams Tan Party	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Lillian Cohen Lime Party	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Ann Windsock Independent	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Markos Miller Silver Party	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Elizabeth Harp Silver Party	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Figure 1 - RCV Ballot Style for more than 5 ranking options. Center for Civic Design.

<https://civicedesign.org/wp-content/uploads/2022/10/CCD-RCV-Best-Practices-Ballot-Design-2022-1.pdf>

Procedure & Training Considerations

Procedures - Election procedures will need to be updated to incorporate RCV. Considerations include:

- How hand counts/manual tallies are performed
- Auditing procedures
- Adjudicating votes for write-ins
- Generating round-by-round results and publishing information

Training - Existing election judge training can be updated to include RCV information. It should align with updated voter education material to demonstrate how voters mark ballots and provide a basic explanation of how ballots are counted.

Voter Education Considerations

Existing Material - The City provides online and printed material to voters. RCV can be incorporated into the existing material with sample ballots, marking instructions, and graphics demonstrating how ballots are counted.

New Material - Many RCV jurisdictions have used helpful videos and online sample RCV contests (e.g. rank your favorite flavor ice cream) to show how RCV works. We also recommend conducting in-person information sessions and voting demonstrations for the public.

Election Reform & Implementation Resources

RCV Maryland - rcvmd.org

State coalition and grassroots organization supporting RCV elections at the local, county, and state level.

Ranked Choice Voting Resource Center - <https://www.rcvresources.org/>

Election administration resources for implementation, voting systems, and tabulation.

FairVote - fairvote.org

National research and advocacy organization on voting system reforms.

Center for Civic Design - civicdesign.org

Resources for effective ballot design, civic engagement, and best practices.

Supplemental Material

Election Administration Fact Sheets (from Ranked Choice Voting Resource Center)

Find all Fact Sheet online <https://www.rcvresources.org/rcv-fact-sheets>

The following fact sheets are included in this PDF:

- Proportional RCV
- RCV in a Box
- Ballot Design
- RCV Tabulation & Results
- What is RCTab

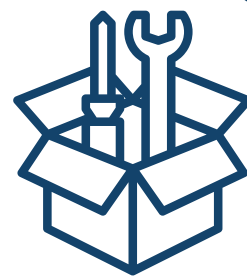
Voter Education Resources (from FairVote)

https://drive.google.com/drive/folders/10h99s_w0i2SYv4JjQM2gYiJo-sqVzqWr

Ranked Choice Voting in a Box

What is RCV in a Box?

When election officials are tasked with implementing ranked choice voting (RCV) for the first time, there are many frequently asked questions and resource requests. The Ranked Choice Voting Resource Center created the RCV in a Box to serve as a one-stop shop to help election administrators get implementation best practices, reports, and real-world examples all in one place. The resources here are designed to provide the tools necessary to begin implementation and give election officials the flexibility they need to make RCV work for them.



What resources are included?

RCV in a Box includes a wide variety of resources for election administrators. Information is broken down into key topics that identify the name of the resource, the author, and a brief note summarizing the resource. The topics include:

- Voter Education;
- Designing RCV Ballots;
- Counting RCV Ballots;
- Voting Equipment Information;
- Results Reporting;
- Audits & Recounts; and
- Webinars & Other Miscellaneous Resources.



Scan this QR code to visit the RCV in a Box webpage.

Additionally, we provide multiple real-world RCV examples so that election administrators can see how their peers have handled topics like voter education and results reporting.



What if I can't find a resource that I need?

While we tried to include as much as possible, we recognize that there are some unique requirements in each jurisdiction. Don't hesitate to reach out to us at info@rcvresources.org, and we can work together to find the right solution.

RCV Ballot Design

Designing the ballot is one of the most important tasks in running an election. Voters of all education levels must be able to understand how to use the ballot with minimal confusion in order to be sure their vote is correctly communicated through their ballot. The ballot layout must be easy to understand and guide voters through the sometimes-complicated process of voting with little difficulty. Essentially, the ballot must be designed for maximum usability by the voter.



RCV Ballot Design FAQs

- **Can RCV contests appear on the same ballot as non-RCV contests?**
 - Yes! While the specifics depend on the type of election software and ballot design laws in the jurisdiction, RCV races can appear with non-RCV races.
- **Do voters find ranked ballots confusing?**
 - Surveys in RCV jurisdictions indicate that voters understand RCV ballots. Data across various jurisdictions and demographic backgrounds shows that approximately 85-95% of voters found RCV to be "simple" to understand.
- **Do we have to get new equipment to design RCV ballots?**
 - This answer depends on the type of voting equipment within the jurisdiction. Most modern voting equipment is capable of designing ranked ballots, but some jurisdictions are still using outdated election equipment which needs to be updated, regardless of the election method.

Considerations for RCV Ballot Design

The Center for Civic Design (CCD), FairVote, and the Ranked Choice Voting Resource Center (RCVRC) have published a number of reports on designing RCV ballots. When designing an RCV ballot, administrators should follow the EAC's best practices for designing any ballot. Here are a few questions to consider when designing RCV ballots:

- Is ranking new for your voters?
- How many contests will include ranking? Where are those contests in the overall ballot order?
- What are your legal requirements for ballot design, especially requirements for the number of choices available for ranking?
- Does your voting system support RCV ballot layout?

Creating RCV Ballot Instructions

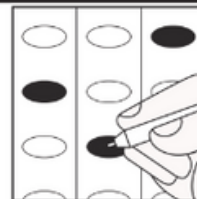
In many cases, the same general rules for writing ballot instructions apply to both plurality and ranked ballots. When preparing instructions, particularly for voters who haven't voted on a ranked ballot before, there are a few things to consider to make the process as easy as possible:

- If space allows, include images to show markings that have been filled in correctly;
- Stay concise and only write what the voters need to know; and
- Consider the placement of the instructions and how they fit with RCV and non-RCV contests.

PLEASE NOTE: A candidate's designated affiliation does not imply that the candidate is nominated or endorsed by the political party or group or that the party or group approves of or associates with that candidate, but only that the candidate is registered as affiliated with the party or group.

Instructions:

- Do not use red ink or a pencil to mark your ballot.
- Rank as many or as few candidates as you like.
- Completely fill in no more than one oval for each candidate or column.
- For your 1st choice, fill in the oval in the 1st choice column.
- For your 2nd choice, fill in the oval in the 2nd choice column.
- For your 3rd choice, fill in the oval in the 3rd choice column, and so on.
- **If you make a mistake, you can ask for a new ballot.**



What do RCV ballots look like?

City Council						
Rank up to 6 candidates. Mark no more than 1 oval in each column.	First choice	Second choice	Third choice	Fourth choice	Fifth choice	Sixth choice
	1st	2nd	3rd	4th	5th	6th
Valarie Altman Orange Party	☐	☐	☐	☐	☐	☐
George Hovis Yellow Party	☐	☐	☐	☐	☐	☐
Althea Sharp Purple Party	☐	☐	☐	☐	☐	☐
Mary Tawa Lime Party	☐	☐	☐	☐	☐	☐
Joe Li Tan Party	☐	☐	☐	☐	☐	☐
Phil Wilkie Independent	☐	☐	☐	☐	☐	☐

Grid Style Ballots

Grid style ballots are considered the best practice design, with candidates on rows and rankings on columns. This visual, all-in-one format takes up less space on the ballot. It is also the most widely used RCV ballot format.

Mayor		
1 First Choice Fill in one oval	2 Second Choice Fill in one oval	3 Third Choice Fill in one oval
☐ Frederick Sharp Orange Party	☐ Frederick Sharp Orange Party	☐ Frederick Sharp Orange Party
☐ Luis Garcia Orange Party	☐ Luis Garcia Orange Party	☐ Luis Garcia Orange Party
☐ Charles Layne Yellow Party	☐ Charles Layne Yellow Party	☐ Charles Layne Yellow Party
☐ Andrew Kowalski Yellow Party	☐ Andrew Kowalski Yellow Party	☐ Andrew Kowalski Yellow Party
☐ Alex Wallace Purple Party	☐ Alex Wallace Purple Party	☐ Alex Wallace Purple Party
☐ Eric Savoy Purple Party	☐ Eric Savoy Purple Party	☐ Eric Savoy Purple Party
☐ Barbara Williams Tan Party	☐ Barbara Williams Tan Party	☐ Barbara Williams Tan Party
☐ Lillian Cohen Lime Party	☐ Lillian Cohen Lime Party	☐ Lillian Cohen Lime Party
☐ Ann Windsock Independent	☐ Ann Windsock Independent	☐ Ann Windsock Independent
☐ Markos Miller Silver Party	☐ Markos Miller Silver Party	☐ Markos Miller Silver Party

Column-Style Ballots

Column-style ballots, which separate first, second, and third choices into their own individual columns with each candidate's name repeated. While they are an alternative to grid-style ballots, they do take up more space and may be face ranking limits due to size constraints.

RCV Tabulation & Results Reporting

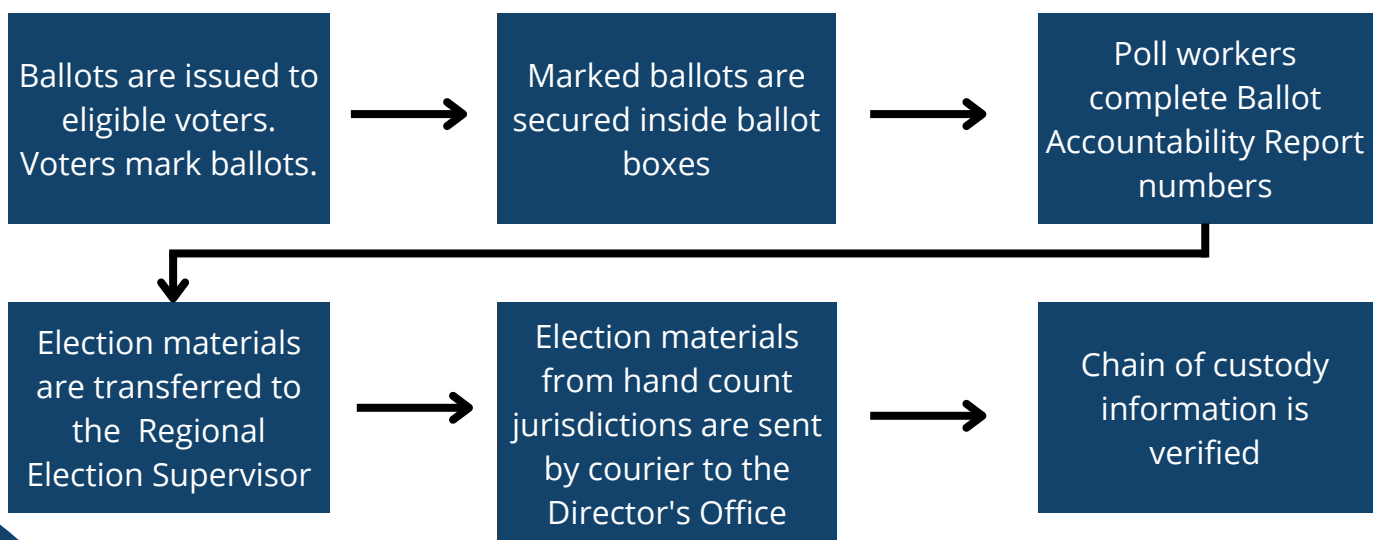


What is RCV tabulation?

RCV tabulation starts by counting all first choices. When electing a single candidate, if a candidate receives more than half of the first choices, that candidate wins, just like in any other election. However, if there is no majority winner after counting the first choices, the race is decided by an instant runoff. The candidate with the fewest first-choice votes is eliminated, and voters who ranked that candidate as their first choice will have their votes count for their next choice. This process continues until someone emerges with a majority.

Running the round-by-round count means election administrators need to have the candidate ranking order on each ballot to know 1) who has the fewest votes in the election and 2) who is ranked next on each of those ballots. This means two things for producing ranked choice voting results: all ballot data, known as cast vote records (CVRs), must be available, and it must be centralized. A simplified chain of custody from Alaska is included below to show how ballot data can be sent to one location for counting. Once centralized, the data can be run through RCV counting software to produce round-by-round results – which only takes seconds or minutes – and determine which candidates emerge with the most votes.

Simplified Chain of Custody from Alaska



Tabulation Options for RCV

Machine Counting

- The fastest way to count any election, including RCV elections.
- Procedures can vary greatly based on the capabilities of the voting machines, the laws in the jurisdiction, and how many different polling locations are involved in the election.
- Local election officials maintain custody of the physical ballots.
- Regardless of the type of election, ballot data needs to be centralized. A poll worker exports the data to a memory card or flash drive which is then physically transported to a central location for tabulation by a computer application.
- In an RCV election, the aggregated CVR data is run through tabulation software which produces the round-by-round results.

Hand Counting

- While more sophisticated and time consuming than the counting for a simple plurality election, it is still easily done by hand
- Election workers sort ballots by what candidate is ranked first on those ballots, then further sort those by second, third, and later rankings.
- St. Paul, Minnesota's and Takoma Park, Maryland's hand count procedures are a good example of best practices for hand counting ranked choice voting elections.
- Ireland and Northern Ireland hand count their nationwide single- and multi-winner RCV elections, and Australia hand counts their single-winner RCV elections.

How long will it take to get results?

- Counting all the votes in a RCV election takes just as much time as a non-RCV election.
- Depending on the competitiveness of the race, some RCV winners will be known on election night, while others may not be known until all ballots are counted.
- The major bottleneck in reporting RCV results, as with reporting any election result, is scanning in all ballots cast in an election. Most election administrators do not finish counting all ballots, regardless of whether RCV is used, until days after Election Day itself. As ballots come in, the round-by-round count in RCV can be run on early results. Some RCV election administrators choose to wait until all ballots are scanned in before running the round-by-round count, while others produce round-by-round results starting on election night.
- Thanks to RCV counting software, the actual tabulation is instantaneous. This is true whether a jurisdiction opts to release routine unofficial results or wait until they have all of the ballots.

What resources are available?

- RCTab is free, open-source software for tabulating ranked-choice voting elections. This tabulator can take in data from any voting machine capable of exporting a CVR and can tabulate a single-winner ranked-choice voting election according to the rules used in any current RCV city in the United States.
- RCVis.com is a free, online program that creates graphics to display RCV election results.

What is RCTab?

Most voting system vendors do not include RCV round-by-round software in their equipment. RCTab is federally tested open-source software that can fill this gap by tallying RCV election results using cast vote records (CVRs) from most voting system vendors. RCTab is the most comprehensive RCV tabulation module to be tested under the Voluntary Voting System Guidelines (VVSG) and the first open-source software to meet VVSG standards.



What can RCTab do?

- Produce RCV official results
 - RCTab can generate results for single-winner or proportional RCV races.
 - Uses data from voting systems used by 98% of registered voters to produce RCV officials.
 - RCTab is fully configurable to meet the rules of most jurisdictions in the US. Some examples include:
 - Number of rankable candidates;
 - Setting vote thresholds; and
 - Handling overvotes and skipped rankings.
- Serve as a testing tool.
- Verify RCV results generated by other voting systems.



RCTab
TABULATION SOFTWARE

Where is RCTab used?

- RCV elections in Maine
- Single-winner and proportional RCV contests in Portland, OR
- Single-winner RCV elections in New York
- Local RCV elections in Utah
- Local RCV elections in Virginia (Arlington)
- 2020 Democratic Presidential Preference Primaries in Alaska, Kansas, and Wyoming.
- Verification tool for ES&S's RCV tabulation software used by Benton County, Oregon.
- RCTab has been accepted by a federal voting system standards working group as a well-documented, precise implementation of the RCV rules used in U.S. RCV elections.