



MEMORANDUM

TO: Mary Katherine Greenlaw, Mayor; and members of City Council
FROM: Kathleen Dooley, City Attorney
Timothy J. Baroody, City Manager
SUBJECT: Ranked Choice Voting - Update
DATE: March 3, 2023 (for the March 14, 2023 Council Meeting)

ISSUE

City Council asked to be informed of the Electoral Board’s discussion on the topic of ranked choice voting. The Electoral Board met on Friday, March 3, 2023 to discuss this topic, as well as other business pending before the Board.

RECOMMENDATION

The two Electoral Board members present at the meeting both expressed concerns with the implementation of ranked choice voting for the November 2023 City Council election. The third member of the Board was not able to attend, and had tendered his resignation from the Board due to personal reasons.

DISCUSSION

• **Electoral Board meeting – March 3, 2023:**

Electoral Board Chair Rene Rodriguez began the discussion of ranked choice voting by stating that the Board had consistently recommended against the adoption of ranked choice voting in the past; however, if City Council decided to say “yes” to ranked choice voting, then the Electoral Board would be in “lockstep” with the Council to coordinate the administration of the election and public education through the General Registrar. Secretary Dave McGlothlin confirmed that if the City Council wanted more input on the nuts and bolts of administration of ranked choice voting, then the Electoral Board would be called upon to play a central role.

With that introduction, Board members turned to concerns with ranked choice voting. Those concerns could fairly be summarized as relating first to the current nascent state of the development of the details of how to actually administer a ranked choice voting election in Virginia. Even in early March, with Arlington County’s June 20 primary coming up, the Department of Elections still has not issued election night instructions, public education materials, or, according to the Chair, certified vote tabulation software. The Arlington County primary will be the first actual use of ranked choice voting in a Virginia local election.

The Chair acknowledged that the Republican Party had conducted a ranked choice election for its nominee for Governor, but noted that that election included a manual ballot count. “We will

be learning as we go,” for an election where votes would be tabulated by software. The Chair felt the better course of action was to evaluate the Arlington County experience and then consider ranked choice voting. What will be the treatment of write-in candidates; will election materials be accessible to the hearing- or sight-impaired? The Chair also observed that a two-sided ballot, with the ranked choice elections on the second side, might be off-putting to voters, who are used to the privacy provided by the one-sided ballot, when they leave the ballot booth and insert their ballot in the voting machine.

The second general topic of concern had to do with Elections administration staffing. The Secretary observed that the Electoral Board was still not fully staffed and that there was only one member with previous Election Day experience. The Secretary felt that ranked choice voting would be a “heavy lift for a new Board.” This was an issue of timing, and whether the adoption of ranked choice voting for the November 2023 election would be wise, more than a vote for or against the use of ranked choice voting in future elections.

- **“Single-office” and “Multiple-office” elections on the November 2023 ballot:**

Council may also wish to consider that there are two types of Council elections on the November 2023 ballot, from the perspective of ranked choice voting elections administration. The election for Mayor is for a single office; the election for at-large is for two seats – two candidates will be elected. These two elections implicate two different ranked choice voting tabulation methods.¹

The race for Mayor would be considered “instant runoff voting,” governed by 1VAC20-100-50(A). Each ballot would count as one vote for the highest-ranked candidate on that ballot. Tabulation would proceed in rounds with each round proceeding sequentially. If two or fewer candidates remain, the candidate with the greatest number of votes is elected and tabulation is complete. If more than two active candidates remain, the active candidate with the fewest votes is defeated, votes for the defeated candidate are transferred to each ballot’s next-ranked active candidate, and a new round begins until two candidates remain (at which point the candidate with more votes wins.)

The multi-winner at-large election would involve a “single transferrable vote,” under 1VAC20-100-50(B). Under this method, a candidate must reach a pre-determined “Election Threshold”² to be declared a winner. Vote tabulation proceeds in rounds, assigning a “transfer value” to the ballots. Each ballot begins with a transfer value of one. Once a ballot contributes to the election of a candidate, it receives a new (lower) transfer value, based on the surplus votes that candidate received over and above the Election Threshold.

¹ 1VAC20-100-50, attached.

² The Election Threshold is calculated by dividing the total number of votes counted in the first round by the sum of one plus the number of offices to be filled, then adding one. (ET = ((Total Votes Cast)/(Available Seats+1))+1)

In a multiple-winner contest, once a ballot is actually counted for an elected person (a candidate who achieves the Election Threshold), then the “transfer value” of that ballot is calculated, by multiplying the ballot’s current transfer value by the surplus fraction for the elected person, truncated after the fourth decimal place. That transfer value is then transferred to the next highest-ranked active candidate on the ballot.

Additional rules for administering ranked choice voting in a multiple-winner contest are included at 1VAC20-100-50(B) and (C). They are a little complicated. The actual voting experience is still simple – rank the candidates. But tabulating the votes (which will be performed by computer software) and explaining the outcome is more complicated. Conducting a public education campaign that covers both the single-winner contest and a multiple-winner contest would also be complicated. The City’s preliminary estimate may need to be revised upwards.³

Arlington County’s Democratic primary is a multiple-winner contest, with six announced candidates running for two nominations. So it will be a test-run of the Commonwealth’s regulations, software, equipment, voter education, and procedures for a multiple-winner contest. But the time remaining between the June 20th primary and the November 3rd general election is compressed from a public education standpoint.

City Council could avoid this complication by designating just one of the two elections on the November 2023 ballot for ranked choice voting, but this decision could introduce its own communications challenges. This is just additional food for thought for City Council as it considers ranked choice voting.

- **Recent Mayoral and at-large elections:**

As an exercise, the City Attorney’s office reviewed election results for recent mayoral and at-large elections, as reported by the Department of Elections, to see if ranked choice voting tabulation would have been used to determine the outcome, if it had been authorized and selected for those races. Between the years 2004 and 2020, none of the mayoral races would have needed ranked choice voting tabulation to determine the outcome. The 2012 mayoral race was the only one that attracted three candidates, but even in that race, the elected candidate (Greenlaw) received more than half of the total votes cast (1460 of 2827).

Three of the reported four at-large elections, on the other hand, would have been decided by a ranked choice voting tabulation.⁴ The at-large elections in 2004, 2012, and 2020 each attracted at least three candidates. In 2004 and 2012, no single candidate received votes than the “election threshold” in the first round of ballot-counting. Ranked choice voting tabulation

³ Note: the League of Women Voters has also committed to conducting a robust public education campaign, at no expense to the City.

⁴ The Department of Elections did not post data from the 2008 at-large election.

would have gone into effect (with each ballot carrying a transfer value of “one” until it had elected one at-large candidate; and with the transfer value of that ballot allocated to the next ranked candidate.) In 2020, one candidate (Devine) received more votes than the “election threshold.” So she would have been elected to office on the first round of vote tabulation. The transfer value of each ballot that ranked Devine first would have been calculated (0.0781) and that transfer value would have been allocated to that ballot’s second ranked candidate, until a second candidate surpassed the election threshold.

ATTACHMENTS: Department of Elections Regulations for Ranked Choice Voting.
Election data, Mayoral and at-large elections, 2004-2020

Virginia Administrative Code

Chapter 100. Ranked Choice Voting

1VAC20-100-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Active ballot" means a ballot that counts toward an active candidate in the current round of counting.

"Active candidate" means a candidate or person who has not been defeated during a round-by-round vote count. In a count that lasts multiple rounds, the number of active candidates will decrease with each round.

"Duplicate ranking" means a voter has assigned one candidate multiple rankings.

"Election threshold" means the number of votes sufficient for a candidate to be elected in a multi-winner, single transferable vote contest. The election threshold equals the total votes counted for active candidates 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. $\text{Election threshold} = ((\text{Total votes cast})/(\text{Seats to be elected}+1))+1$, with any fraction disregarded.

"Highest-ranked active candidate" means the active candidate assigned to a higher ranking than any other active candidates.

"Inactive ballot " means a ballot that can no longer be counted due to the ballot having no active candidates in the round.

"Instant runoff voting" means no more than one seat in the office must be filled by the election.

"Ranked choice overvote" means a voter assigned more than one candidate the same ranking.

"Ranked choice voting" means a method of casting and tabulating votes in which (i) voters rank candidates in order of preference, (ii) tabulation proceeds in rounds such that in each round either a candidate or candidates are elected or the last-place candidate is defeated, (iii) votes for voters' next-ranked candidates are transferred from elected or defeated candidates, and (iv) tabulation ends when the number of candidates elected equals the number of offices to be filled. Ranked choice voting is known as "instant runoff voting" when electing a single office and "single transferable vote" when electing multiple offices.

"Ranking" means the ordinal number assigned on a ballot to a candidate to express the voter's preference for that candidate. Ranking number one is the highest ranking, ranking number two is the next-highest ranking, and so on, consecutively, up to the number of candidates indicated on the ballot.

"Round" means a stage of the vote tabulation in which a person may be elected or the last ranked person is defeated.

"Single transferable vote" means more than one seat in the office must be filled by the election.

"Skipped ranking" means a voter has left a ranking unassigned but ranks a candidate at a subsequent ranking.

"Surplus fraction" is a number equal to the quotient of the difference between an elected candidate's vote total and the election threshold, divided by the candidate's vote total, (or $(V-T)/V$, in which "V" is the elected candidate's vote total and "T" is the election threshold), truncated after four decimal places.

"Surplus vote" means the number of votes a candidate receives beyond the election threshold set for a transferable vote race.

"Transfer value" means the proportion of a vote that a ballot will contribute to its highest-ranked active candidate. Each ballot begins with a transfer value of one. If a ballot contributes to the election of a candidate under [1VAC20-100-50 B](#), it receives a new transfer value.

Statutory Authority

§ [24.2-673.1](#) of the Code of Virginia.

Historical Notes

Derived from Virginia Register [Volume 38, Issue 9](#), eff. December 3, 2021.

1VAC20-100-20. Administration.

The Department of Elections shall publish on the department website, <https://www.elections.virginia.gov>, instructions on the administration of ranked choice voting elections.

Statutory Authority

§ [24.2-673.1](#) of the Code of Virginia.

Historical Notes

Derived from Virginia Register [Volume 38, Issue 9](#), eff. December 3, 2021.

1VAC20-100-30. Ranked choice voting.

As prescribed by § [24.2-673.1](#) of the Code of Virginia, a county board of supervisors or city council may elect by majority to conduct an election for its members by ranked choice voting. The adoption for ranked choice voting shall only be valid for the election specified in the ordinance adopted by the governing body.

1. Adoption to conduct an election by ranked choice voting must be enacted no later than 90 days prior to the date of the specified election.
2. Any locality that adopts to conduct an election by ranked choice voting must electronically transfer the signed ordinance to the Department of Elections promptly.
3. No ranked choice voting may be conducted for a primary with fewer than three candidates.
4. Notwithstanding § [24.2-613 E](#) of the Code of Virginia, all ballot forms for an election conducted by ranked choice voting shall comply with the standards prescribed by the State Board of Elections.

Statutory Authority

§ [24.2-673.1](#) of the Code of Virginia.

Historical Notes

Derived from Virginia Register [Volume 38, Issue 9](#), eff. December 3, 2021.

1VAC20-100-40. Ballot treatment.

As prescribed by § [24.2-673.1](#) of the Code of Virginia, ballots shall be tabulated in the following manner:

1. Ranked choice overvote.

a. A ballot with a ranked choice overvote shall be counted in the initial round if voter intent can be determined. The ballot shall not be counted in any round in which the ballot has a ranked choice overvote.

b. A ballot with a duplicate ranking shall be counted unless the voter's choice was defeated in a previous round.

2. Skipped ranking.

a. In the event of a ballot with a skipped ranking, the next valid ranking shall be counted.

b. In the event the ballot reaches two consecutive skipped rankings, the ballot will be considered an inactive ballot.

3. Tie breaking.

a. In the event two persons have an equal number of votes for a seat and a higher number than any other person in the last round of an election conducted by ranked choice voting, the candidate or person to be elected shall be determined by lot as prescribed by § [24.2-674](#) of the Code of Virginia.

b. In the event two or more persons have an equal number of votes for a seat and the fewest number of votes in a round of an election conducted by ranked choice voting, tabulation cannot be continued until one of the persons is defeated. The person to continue as an active candidate shall be determined by lot as prescribed by § [24.2-674](#) of the Code of Virginia.

Statutory Authority

§ [24.2-673.1](#) of the Code of Virginia.

Historical Notes

Derived from Virginia Register [Volume 38, Issue 9](#), eff. December 3, 2021.

1VAC20-100-50. Ranked choice voting tabulation.

A. Instant runoff voting. For any election for one office conducted by ranked choice voting, each ballot shall count as one vote for the highest-ranked active candidate on that ballot. Tabulation shall proceed in rounds with each round proceeding sequentially as follows:

1. If two or fewer active candidates remain, the candidate with the greatest number of votes is elected and tabulation is complete.

2. If more than two active candidates remain, the active candidate with the fewest votes is defeated, votes for the defeated candidate are transferred to each ballot's next-ranked active candidate, and a new round begins with subdivision 1 of this subsection.

B. Single transferable vote. For any election for more than one office conducted by ranked choice voting, each ballot shall count, at its current transfer value, for the highest-ranked active candidate on that ballot. Tabulation

shall proceed in rounds. Each round proceeds sequentially, until tabulation is complete, as follows:

1. If the sum of the number of elected persons and the number of active candidates is less than or equal to the number of office seats to be filled, then all active candidates are designated as elected, and tabulation is complete. Otherwise, the tabulation proceeds pursuant to subdivision 2 of this subsection.
2. If any active candidate has a number of votes greater than or equal to the election threshold for the contest, that person shall be designated as elected. Each ballot counting for an elected person is assigned a new transfer value by multiplying the ballot's current transfer value by the surplus fraction for the elected person, truncated after the fourth decimal place. The transfer value of each ballot cast for an elected candidate must be transferred to the highest-ranked active candidate on that ballot. Each person elected under this subdivision is deemed to have a number of votes equal to the election threshold for the contest in all future rounds and a new round begins pursuant to subdivision 1 of this subsection.

If no candidate or person is elected pursuant to subdivision 2 of this subsection, the candidate with the fewest votes is defeated and votes for the defeated candidates shall be transferred at their current transfer value to each ballot's next-ranked active candidate and a new round begins pursuant to subdivision 1 of this subsection.

C. Surplus transfer. If in a round of counting conducted under subsection B of this section, two or more active candidates have a number of surplus votes greater than the election threshold for the contest, the surpluses shall be distributed in rounds in which the largest surplus is distributed first, with any ties resolved by lot as required by § [24.2-674](#) of the Code of Virginia.

Statutory Authority

§ [24.2-673.1](#) of the Code of Virginia.

Historical Notes

Derived from Virginia Register [Volume 38, Issue 9](#), eff. December 3, 2021.

1VAC20-100-60. Unreadable ballots.

In the event the general registrar receives a ballot that cannot be read by the ballot scanner machine, the general registrar or election official shall transcribe the voter's intent to a machine readable ballot.

Statutory Authority

§ [24.2-673.1](#) of the Code of Virginia.

Historical Notes

Derived from Virginia Register [Volume 38, Issue 9](#), eff. December 3, 2021.

1VAC20-100-65. Write-Ins.

Pursuant to § [24.2-644](#) C of the Code of Virginia, at all elections conducted by ranked choice voting except primary elections, any voter may vote for any person other than the listed candidates for the office by writing or hand printing the person's name on the official ballot.

Statutory Authority

§ [24.2-673.1](#) of the Code of Virginia.

Historical Notes

Derived from Virginia Register [Volume 38, Issue 9](#), eff. December 3, 2021.

1VAC20-100-70. Election results.

Results for all rounds must be publicly posted on the Department of Elections website at <https://www.elections.virginia.gov>.

Statutory Authority

§ [24.2-673.1](#) of the Code of Virginia.

Historical Notes

Derived from Virginia Register [Volume 38, Issue 9](#), eff. December 3, 2021.

1VAC20-100-80. Outreach.

For the purposes of this section, "educational information" means nonpartisan information that in plain language informs the public on the adoption of ranked choice voting for an election, a description of ranked choice voting, an unmarked official sample ranked choice voting ballot, and instructions on how to read and mark the ballot.

1. The Department of Elections shall be required to post educational information about ranked choice voting on its website at <https://www.elections.virginia.gov> for the public.
2. Any county board of supervisors or city council that adopts to conduct an election by ranked choice voting shall develop and distribute educational information about ranked choice voting no later than 60 days before the specified election.
 - a. Educational information must be disseminated to the public through circulation in the local newspaper, posted on the locality's website, or mailed to active and inactive voters eligible to vote in the specified election.
 - b. Educational information must be posted in the office of the general registrar no later than 60 days before the specific election and made available for distribution if requested by the public.
 - c. Educational information about ranked choice voting shall be posted in each satellite office and polling place operating for the election.

Statutory Authority

§ [24.2-673.1](#) of the Code of Virginia.

Historical Notes

Derived from Virginia Register [Volume 38, Issue 9](#), eff. December 3, 2021.

Website addresses provided in the Virginia Administrative Code to documents incorporated by reference are for the reader's convenience only, may not necessarily be active or current, and should not be relied upon. To ensure the information incorporated by reference is accurate, the reader is encouraged to use the source document described in the regulation.

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Year	Candidates	Vote Count	%	"Election Threshold"
2004	Tomzak	1768	53%	1681.5
	Beck	1593	47%	
	Total votes cast	3361		
2008	Tomzak	1915	63%	1510.5
	Girvan	1089	36%	
	All Others	15	0%	
	Total votes cast	3019		
2012	Greenlaw	1460	52%	1417
	Howe	973	34%	
	Paxson	394	14%	
	All Others	5	0%	
	Total votes cast	2832		
2016	Greenlaw	1491	64%	1161.5
	Dynes	826	36%	
	All others	4	0%	
2020	Greenlaw	1658	58%	1433
	Little	1191	42%	
	All others	15	1%	
		2864		

Source of all data: Virginia Depart
website.

ment of Elections

Year	Candidates	Vote Count	%	Election Threshold	RCV Tabulation?
2004	Debby Girvan	1756	27.6	2120.333333	Yes - would have been triggered
	Kerry Devine John	1702	26.8		
	Joe Henderson	1575	24.8		
	W. Scott Howson	1325	20.8		
	Total Votes Cast	6358			
2012	Matt Kelly	1489		1542	Yes - would have been triggered
	Kerry Devine	1402			
	Roy McAfee	910			
	Paul Quinn	804			
	All others	18			
	Total votes cast	4623			
2016	Kerry Devine	1588		1071.666667	No - election threshold surpassed by two candidates
	Matt Kelly	1481			
	All others	143			
	Total votes cast	3212			
2020	Kerry Devine	1766		1628.666667	Devine's votes exceeded threshold. Proceed to round 2 for the second seat.
	Matt Kelly	1579			
	Jon Gerlach	1508			
	All others	30			
	Total votes cast	4883			

Round 2 - Devine ballots receive transfer value of 0.0781, allocated to that ballot's 2nd choice. Does a candidate meet the election threshold after transfer? If so, that person is deemed elected. If not, the candidate with the fewest votes is defeated, and votes for the defeated candidate are transferred to their ballots' next choice. Repeat until a second candidate surpasses election threshold.