



★ VIRGINIA ★
STATE BOARD *of* ELECTIONS

BOARD MEETING

Tuesday, August 18, 2026
Washington Building
Martha Brissette Conf. Rm – B27
Richmond, VA
Video and Teleconference

Videoconference:

<https://covaconf.webex.com/covaconf/j.php?MTID=m5a2daca0f8595a96052586fe887ec6fa>

Meeting password: reWKj8Rf5e9

Teleconference:

1-517-466-2023 US Toll
1-866-692-4530 US Toll-Free
Access Code: 2439 180 0303

1:00 P.M.



**STATE BOARD OF ELECTIONS
AGENDA**

DATE: Tuesday, August 18, 2026

1100 Bank St. Richmond, VA 23219

Martha Brissette Conf. Rm – B27

TELECONFERENCE:

+1-517-466-2023 US Toll

+1-866-692-4530 US Toll Free

Access code: 2439 180 0303

VIDEO CONFERENCE:

<https://covaconf.webex.com/covaconf/j.php?MTID=m5a2daca0f8595a96052586fe887ec6fa>

Password: reWKj8Rf5e9

TIME: 1:00 P.M.

I. CALL TO ORDER

John O'Bannon, Chairman

II. APPROVAL OF MINUTES

Georgia Alvis-Long, Secretary

A. June 30, 2026

B. August 4, 2026

III. PUBLIC COMMENT

IV. COMMISSIONER'S REPORT

*Steven Koski
Commissioner*

**V. CERTIFICATION OF AUGUST 4, 2026
PRIMARY ELECTION**

*John Cronin
Election Services Manager*

VI. PARTY BALLOT ORDER DRAWING

*John Cronin
Election Services Manager*

VII. PARTY ABBREVIATION

*John Cronin
Election Services Manager*

VIII. HART VVSG 2.0 VANGUARD 1.0 CERTIFICATION

*Londo Andrews
Voting System Security Manager*

IX. RLA METHOD

- A. Selection of Method for the Statutorily Required RLA**
- B. Setting the Risk Limit**

*Claire Scott
SBE Policy Analyst*

X. AMENDMENTS TO THE RLA MANUAL

*Matthew Abell
Election Services Senior Advisor*

XI. PROHIBITED PERSONAL USE REGULATIONS

*Danny Davenport
Director of Policy*

XII. ABSENTEE PRE-PROCESSING REGULATIONS

*Danny Davenport
Director of Policy*

**XIII. SBE POLICY 2026-003 GENERAL REGISTRAR REMOVAL
PROCEDURES BY LOCAL ELECTORAL BOARDS**

*Danny Davenport
Director of Policy*

**XIV. SBE POLICY 2026-004 STATE BOARD OF ELECTIONS
REMOVAL OF GENERAL REGISTRARS AND LOCAL
ELECTORAL BOARD MEMBERS**

*Danny Davenport
Director of Policy*

XV. CLOSED SESSION

XVI. ADJOURNMENT

NOTE: <https://townhall.virginia.gov/L/ViewMeeting.cfm?MeetingID=43681>

Re. Entrance to the Washington Building

All members of the public will be required to show his/her driver's license, passport or other government issued ID to enter the Washington Building.

Re. public comment

Public comment will first be heard from those persons participating in person as per the sign-up list. Next, we will hear from the persons who requested to speak via chat on WebEx. Last, we will hear from persons who provided their name and phone number to FOIA@elections.virginia.gov.

Re. limitation on individual participation in public comment

Due to the large number of persons who may wish to speak, we encourage you to be as brief as possible, with a maximum of **THREE** minutes per person. We also ask that you be prepared to approach the podium or unmute yourself if you hear your name announced as the next participant.

Re. individual requests for additional information

Citizens seeking additional information related to matters on this agenda may submit questions to info@elections.virginia.gov

Re. How to Participate in Public Comment

If you are a member of the public and wish to participate, you must sign up in order to be recognized to speak. Please note the following:

If you are attending in person, please ensure your name is on the sign-up list at the front door.

If you are participating virtually using WebEx, sign up using the chat feature, located on the bottom right part of the WebEx application, to add your participant's name.

If you are participating virtually using a phone and cannot access WebEx's chat feature, please send an email with your name and your phone number to FOIA@elections.virginia.gov. You will need to provide your first and last name and the phone number you've used to call in.



★ VIRGINIA ★
STATE BOARD *of* ELECTIONS

Approval of Minutes

BOARD WORKING PAPERS

The State Board of Elections (“the Board”) meeting was held on Tuesday, June 30, 2026 in the Martha Brissette Conference Room of the Washington Building in Richmond, Virginia. The meeting also offered public participation through electronic communication so the remote public could view and hear the meeting. In attendance: John O’Bannon, Chairman; Rosalyn R. Dance, Vice Chair; Georgia Alvis-Long, Secretary; Dr. Chris Stolle, member; attended the meeting electronically and Dr. Sally Hudson, member represented the State Board of Elections (“the Board”). Steven Koski, Commissioner, and Ashley Coles, Deputy Commissioner represented the Department of Elections (“ELECT”), and Ajay P. Saini represented the Office of the Attorney General (“OAG”). Chairman O’Bannon called the meeting to order at 1:02 P.M.

The first item of business was the Approval of the Minutes from the May 28, 2026 Board Meeting, presented by Secretary Alvis-Long. Dr. Hudson moved *to approve the minutes from the May 28, 2026 Board Meeting*. Secretary Alvis-Long seconded the motion and the motion passed unanimously. A roll call vote was taken:

Chairman O’Bannon – Aye

Vice Chair Dance – Aye

Secretary Alvis-Long – Aye

Dr. Stolle – Aye

21 Dr. Hudson – Aye

22 Chairman O'Bannon opened the floor to public comment. There was no one
23 in person or online that wanted to address the Board.

24 The next item of business was the Commissioner's Report, presented by
25 Commissioner Koski. Commissioner Koski informed the Board that early voting is
26 currently underway for the August 4, 2026 primary election. The Commissioner
27 thanked ELECT staff, general registrars and the electoral boards for getting back
28 into election mode. ELECT has taken significant voter registration efforts because
29 of the shifted primary schedule with elections now being held on August 4th. The
30 Commissioner stated that ELECT has produced some videos and has ad campaigns
31 going on social media to raise awareness regarding the primary that is normally
32 held in June. As it relates to the shifted schedule, it is important to note that the
33 filing deadline for independent candidates for the House of Representatives is
34 August 4, 2026 at 7:00 PM. The Commissioner stated that the localities have taken
35 all the necessary steps to be ready for early voting and are now in full swing for
36 preparing for election day which includes officer of election training.
37 Commissioner Koski would encourage voters to go to the vote.virginia.gov website
38 to help aid them in their plan to vote. That website would allow voters to view the
39 voter pocket guide and candidate information. In addition, the voters can use the
40 citizens portal to check their voter registration status, to register, view their voter

information, their polling location and other information they need to participate in the voting process. Commissioner Koski stated the items on today's agenda to include Delegations of Authority, Officers of Election Training Revisions and Campaign Finance Appeals. The Commissioner also included the introduction of SBE Prohibition of Personal Use of campaign funds. The Commissioner stated there was a law passed by the General Assembly that prohibits the personal use of campaign funds. The law enumerates uses that are considered personal use that are impermissible and require regulations to be made which the Board approved and will go into effect. The Commissioner stated it has a process where advisory opinions can be requested and a complaint process which can lead to another hearing for the Board to administer. The Commissioner stated that at the next Board meeting, a new policy on removals of general registrar's and electoral board members will be presented. ELECT will be exploring ways to ensure the Board will have clarity about the underlying statutory authority about what the Board is doing in that proceeding, what is the finding the Board should make and what is the relief that is able to be granted. ELECT will continue to review modifications to the hearing process.

The next item of business was the Delegations of Authority, presented by Claire Scott, ELECT Policy Analyst. *This memo is in the Working Papers for the June 30, 2026 Meeting.* Vice Chair Dance moved *that the Board approve the*

61 *proposed delegations of authority pursuant to the Virginia Administrative Process*
62 *Act to be effective July 1, 2026, and I further move that all prior delegations of*
63 *authority be rescinded, as of July 1, 2026.* Dr. Stolle seconded the motion and the
64 motion passed unanimously. A roll call vote was taken:

65 Chairman O'Bannon – Aye

66 Vice Chair Dance – Aye

67 Secretary Alvis-Long – Aye

68 Dr. Stolle – Aye

69 Dr. Hudson – Aye

70 The next item of business was Officers of Election Training Revisions,
71 presented by John Cronin, Election Services Manager. *This memo is in the Working*
72 *Papers for the June 30, 2026 Meeting.* Secretary Alvis-Long moved *that the*
73 *Board approve the Department's training standards and updated materials for*
74 *officers of election.* Vice Chair Dance seconded the motion and the motion passed
75 unanimously. A roll call vote was taken:

76 Chairman O'Bannon – Aye

77 Vice Chair Dance – Aye

78 Secretary Alvis-Long – Aye

79 Dr. Stolle – Aye

80 Dr. Hudson – Aye

81 The next item of business was the SBE Proposed Policies, presented by
82 Danny Davenport, Director of Policy. *This memo is in the Working Papers for the*
83 *June 30, 2026 Meeting.* Vice Chair Dance moved *that the Board approve SBE*
84 *Policy 2026-002 – Prohibited Personal Use of Campaign Funds.* Dr. Hudson
85 seconded the motion and the motion passed unanimously. A roll call vote was
86 taken:

87 Chairman O'Bannon – Aye

88 Vice Chair Dance – Aye

89 Secretary Alvis-Long – Aye

90 Dr. Stolle – Aye

91 Dr. Hudson – Aye

92 The next item of business was the Campaign Finance Appeals Hearing
93 presented by Emily Mynarski, Campaign Finance Compliance and Training
94 Specialist. *These appeals are in the Working Papers for the June 30, 2026,*
95 *Meeting.* The first penalties reviewed were assessed by local “GRs”.

96 The first penalty assessed was by the Lynchburg GR for Eli Rybinni aka
97 Shawn Hunter for Lynchburg City Council-At Large (CC-26-00305). Mr. Rybinni
98 and Ms. Patricia Jones, GR addressed the Board. Ms. Mynarski informed the
99 Board that a \$200 penalty was assessed. Vice Chair Dance stated pursuant to
100 §24.2-953.6 of the code of Virginia, because the petitioner has demonstrated good

101 cause to justify relief of the assessed campaign finance penalty(s), I move *that the*
102 *State Board of Elections grant relief as requested by the petitioner.* Dr. Hudson
103 seconded the motion and the motion passed unanimously. A roll call vote was
104 taken:

105 Chairman O'Bannon – Aye

106 Vice Chair Dance – Aye

107 Secretary Alvis-Long – Aye

108 Dr. Stolle – Aye

109 Dr. Hudson – Aye

110 The next penalty assessed was by the Newport News GR for Jacobson for
111 School Board-At Large (CC-26-00025). Ms. Mynarski informed the Board that a
112 \$500 penalty was assessed. Vice Chair Dance stated pursuant to §24.2-953.6 of the
113 code of Virginia, because the petitioner has demonstrated good cause to justify
114 relief of the assessed campaign finance penalty(s), I move *that the State Board of*
115 *Elections grant partial relief in the amount of \$100.* Dr. Hudson seconded the
116 motion and the motion passed unanimously. A roll call vote was taken:

117 Chairman O'Bannon – Aye

118 Vice Chair Dance – Aye

119 Secretary Alvis-Long – Aye

120 Dr. Stolle – Aye

Dr. Hudson – Aye

The next penalties reviewed were assessed by ELECT. The first penalty was for Friends of Andy Pittman (CC-22-00769). This was a continuation from the May 28, 2026 meeting to allow Mr. Pittman an opportunity to provide documentation. Ms. Mynarski informed the Board that a \$1000 penalty was assessed. Vice Chair Dance stated pursuant to §24.2-953.6 of the code of Virginia, because the petitioner has demonstrated good cause to justify relief of the assessed campaign finance penalty(s), I move *that the State Board of Elections grant relief as requested by the petitioner*. Dr. Hudson seconded the motion and the motion passed unanimously. A roll call vote was taken:

Chairman O'Bannon – Aye

Vice Chair Dance – Aye

Secretary Alvis-Long – Aye

Dr. Stolle – Aye

Dr. Hudson – Aye

The next penalty was for Next Gen Leadership (PAC-24-00058). Ms. Mynarski informed the Board that a \$1000 penalty was assessed. Dr. Hudson stated pursuant to §24.2-953.6 of the code of Virginia, I move *that the State Board of Elections dismiss the petitioner's appeal of the assessed campaign finance penalty(s) for*

140 *failure to show good cause.* Dr. Stolle seconded the motion and the motion passed
141 unanimously. A roll call vote was taken:

142 Chairman O'Bannon – Aye

143 Vice Chair Dance – Aye

144 Secretary Alvis-Long – Aye

145 Dr. Stolle – Aye

146 Dr. Hudson – Aye

147 1:53 P.M., Vice Chair Dance stated pursuant to Virginia Code Section 2.2-

148 3711(A)(7), I move *that the Board go into closed session for the purpose of*

149 *discussing pending threatened litigation. In accordance with Section 2.2-3712(F),*

150 *Steven Koski, Commissioner of Elections, Ashley Coles, Deputy Commissioner of*

151 *Elections and Ajay Saini, Office of the Attorney General, will attend the closed*

152 *session because their presence will reasonably aid the Board in its consideration of*

153 *the subject of the meeting.* Dr. Hudson seconded the motion and the motion passed

154 unanimously. A roll call vote was taken:

155 Chairman O'Bannon – Aye

156 Vice Chair Dance – Aye

157 Secretary Alvis-Long – Aye

158 Dr. Stolle – Aye

159 Dr. Hudson – Aye

160 2:41 P.M., Dr. Hudson moved *to reconvene the meeting in open session, and*
161 *take a roll call vote certifying that to the best of each member's knowledge (i) only*
162 *such public business matters lawfully exempted from open meeting requirements*
163 *under this chapter and (ii) only such public business matters as were identified in*
164 *the motion by which the closed meeting was convened were heard or discussed by*
165 *the State Board of Elections.* Vice Chair Dance seconded the motion and the
166 motion passed unanimously. A roll call vote was taken:

167 Chairman O'Bannon – Aye

168 Vice Chair Dance – Aye

169 Secretary Alvis-Long – Aye

170 Dr. Stolle – Aye

171 Dr. Hudson – Aye

172 Vice Chair Dance moved *to adjourn the meeting.* Secretary Alvis-Long
173 seconded the motion and the motion passed unanimously. A roll call vote was
174 taken:

175 Chairman O'Bannon – Aye

176 Vice Chair Dance – Aye

177 Secretary Alvis-Long – Aye

178 Dr. Stolle – Aye

179 Dr. Hudson – Aye

180 The meeting adjourned at 2:42 P.M.

181 _____
182 Chairman

183 _____
184 Vice-Chairman

185
186 _____
187 Secretary

188
189 _____
190 Board Member

191
192 _____
193 Board Member

The State Board of Elections (“the Board”) meeting was held by electronic communication Tuesday, August 4, 2026. In attendance: John O’Bannon, Chairman; Rosalyn R. Dance, Vice Chair; Georgia Alvis-Long, Secretary; Dr. Chris Stolle and Dr. Sally Hudson, members represented the State Board of Elections (“the Board”). Chairman O’Bannon called the meeting to order at 10:00 A.M.

Chairman O’Bannon informed the Board that the only item on the agenda was oversight of the Primary Election and that there would be no opportunity for public comment. At 10:01 A.M., the Board went into recess.

Chairman O’Bannon opened the meeting from recess at 7:00 P.M. Steven Koski, Commissioner, represented the Department of Elections (“ELECT”), and Ajay P. Saini represented the Office of the Attorney General (“OAG”) is now in attendance. No business was conducted during this meeting.

Vice Chair Dance moved *to adjourn the meeting*. Dr. Stolle seconded the motion and the motion passed unanimously.

The meeting adjourned at approximately 7:00 P.M.

Chairman

State Board of Elections
Tuesday, August 4, 2026
FINAL Meeting Minutes
ELECTION DAY

Vice Chairman

Secretary

Board Member

Board Member



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STATE BOARD *of* ELECTIONS

Public Comment

BOARD WORKING PAPERS



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STATE BOARD *of* ELECTIONS

Commissioner's Report

BOARD WORKING PAPERS

Steven Koski
Commissioner



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STATE BOARD *of* ELECTIONS

Certification of August 4, 2026 Primary Election

BOARD WORKING PAPERS
John Cronin
Election Services Manager



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STATE BOARD *of* ELECTIONS

Memorandum

To: Chairman O'Bannon, Vice Chair Dance, Secretary Alvis-Long, Dr. Chris Stolle, and Dr. Sally Hudson
From: John W. Cronin, Election Services Manager
Date: August 18, 2026
Re: Certification of Election Results for the August, 4, 2026 Republican and Democratic Primary Elections

Applicable Code Section:

Va. Code § 24.2-534 – As soon as possible after receipt of the certified abstract and not later than fourteen days after the day of the election, the State Board shall open and tabulate the returns. Upon completion of the tabulation the Board shall declare the nominee in the manner and form as it does in general elections.

Background:

Two primary elections, a Republican and a Democratic, were held on August 4, 2026 for the purpose of selecting candidates to be the Virginia political parties' nominees for the November 3, 2026 election.

- Upon completion of the election, local general registrars (GRs) entered all relevant election data into the Election Night Reporting software and the Virginia Election and Registration System (VERIS).)
- In accordance with Va. Code § 24.2-532, within 10 days after the election, local Electoral Boards conducted provisional ballot meetings and canvasses to ascertain and certify election results for their localities.
- Upon completion of canvass, the GRs forwarded their locality's certified Abstracts of Votes (Abstracts) to the Department of Elections (ELECT).
- Upon receipt of the Abstracts, to ensure accuracy and completion, ELECT staff:
 - Confirmed all required Abstracts were completed and submitted.
 - Reviewed votes cast, ballots cast, and turnout comparison, using validation errors found by the Election Night Reporting software and others found by manual analysis, and asked localities to resolve and/or explain any issues identified.
 - Ran Turnout vs. Voting Credit reports and asked localities to resolve and/or explain any issues identified.
 - Compared the results listed in the Abstracts to the results entered in the Election Night Reporting software to ensure accuracy.

Suggested motion for a Board member to make:

“After reviewing the Abstracts of Votes Cast in the 2026 August Primary Elections, I move that the Board certify the statements to be correct and declare the winners of each primary to be that party’s nominee for the November 3, 2026 General Election.”

Attachments:

Abstracts of Votes for the following:

Democratic Party Primary Offices	Winners
U.S. House of Representative, 1 st District	Shannon L. Taylor
U.S. House of Representative, 2 nd District	Elaine G. Luria
U.S. House of Representative, 5 th District	Tom S. P. Perriello
U.S. House of Representative, 8 th District	Donald S. Beyer, Jr.
U.S. House of Representative, 9 th District	Joy A. Powers
Republican Party Primary Offices	
Member, United States Senate	Bert Mizusawa
U.S. House of Representative, 5 th District	John J. McGuire III
U.S. House of Representative, 7 th District	Doug A. Ollivant
U.S. House of Representative, 10 th District	Dave T. Beckwith



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STATE BOARD *of* ELECTIONS

Party Abbreviations

BOARD WORKING PAPERS

John Cronin

Election Services Manager



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STATE BOARD *of* ELECTIONS

Memorandum

To: Chairman O'Bannon, Vice-Chair Dance, Secretary Alvis-Long, Dr. Chris Stolle, and Dr. Sally Hudson
From: John Cronin, Elections Services Manager
Date: August 18, 2026
Re: Political Party Abbreviations for General and Special Elections Ballots through June 30, 2027

Background:

<u>Political Parties</u>	<u>Recognized Political Parties</u>	<u>Independent Candidates</u>
(with current abbreviations)	(With recommended abbreviations)	(with current abbreviations)
Democratic - D	Libertarian – L	Independent – I
Republican – R	Green – G	

Applicable Code Section:

Va. Code § 24.2-613 A – “The ballots shall comply with...the standards prescribed by the State Board.”

Applicable Board Ballot Standards Section:

Page 33 - Party abbreviations must be in accordance with the SBE determination made at the time of the party order drawing.

Attachments:

SBE Ballot Standards rev. 08/2022

Suggested motion for a Board member to make:

“I move that the Board approve the party abbreviations as presented by staff for general and special elections being held through June 30, 2027.”



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STATE BOARD *of* ELECTIONS

Party Ballot Order

BOARD WORKING PAPERS

John Cronin
Election Services Manager



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STATE BOARD *of* ELECTIONS

Memorandum

To: Chairman O'Bannon, Vice Chair Dance, Secretary Alvis-Long, Dr. Chris Stolle, and Dr. Sally Hudson

From: John W. Cronin, Elections Services Manager

Date: August 18, 2026

Re: Ballot Order Drawing for elections occurring August 18, 2026 through June 30, 2027

Background:

The Board will conduct two separate drawings. The first will be for “political parties” (Republican and Democratic). The second will be for “recognized parties” (Libertarian, Green). While not all of the recognized parties may have a candidate who has achieved ballot access, the purpose of the drawing at this point is to prevent as much as possible the need for the Board to meet in an emergency setting to draw the order for these parties.

Applicable Code Sections:

Va. Code § 24.2-613.B – “For elections for federal, statewide, and General Assembly offices only, each candidate who has been nominated by a political party or in a primary election shall be identified by the name of his political party. Independent candidates shall be identified by the term "Independent." For the purpose of this section, any Independent candidate may, by producing sufficient and appropriate evidence of nomination by a "recognized political party" to the State Board, have the term "Independent" on the ballot converted to that of a "recognized political party" on the ballot and be treated on the ballot in a manner consistent with the candidates nominated by political parties.”

Va. Code § 24.2-613.C – “... the State Board shall determine by lot the order of the political parties... ‘recognized political parties’ shall be treated as a class; the order of the recognized political parties within the class shall be determined by lot by the State Board...”

Applicable Dates:

All general and special elections between August 18, 2026 and June 30, 2027.

Suggested motion for a Board member to make:

“I move that the Board certify the determination by lot of the ballot order for all general and special elections being held August 18, 2026 through June 30, 2027.”

Democratic

Republican

Libertarian

Green



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STATE BOARD *of* ELECTIONS

Hart VVSG 2.0 Vanguard 1.0 Certification

BOARD WORKING PAPERS
Londo Andrews
Voting System Security Manager



★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS

Memorandum

To: Chairman O'Bannon, Vice Chair Dance, Secretary Alvis-Long, Dr. Chris Stolle and
Dr. Sally Hudson

From: Londo Andrews, Voting Systems Security Manager

Date: August 18, 2026

Re: **Hart InterCivic Inc., Voting System Certification – Verity Vanguard 1.0**

Suggested motion for Board Member to make:

I move that the Board certify the use of Hart InterCivic Inc., voting system -Verity Vanguard 1.0, in elections in the Commonwealth of Virginia, pursuant to the State Certification of Voting Systems: *Requirements and Procedures*.

Applicable Code Section:

§ 24.2- Chapter 6 – 629

Attachments:

Your Board materials include the following:

- Virginia State Certification of Voting Systems: *Requirements and Procedures*
- EAC Certificate of Conformance under VVSG 2.0 for Verity Vanguard 1.0
- Hart Verity Vanguard 1.0 voting system certification letter provided by SLI Compliance
- Richmond County, February 12, 2026, Mock Election correspondence

Background:

Following the steps prescribed in the Virginia State Certification of Voting Systems: *Requirements and Procedures*, Hart InterCivic, Inc. initiated the certification evaluation to the Department of Elections on January 8, 2026. Hart provided their Technical Data Package (TDP) and Corporate Information (required under phase 1 of the Requirements and Procedures). Both submissions were deemed complete and in sufficient detail to warrant phase 2, the Preliminary Review. During the preliminary review, the state-designated evaluation agent conducted a preliminary analysis of the TDP and other materials provided, and prepared tests assertions. Hart provided the certification fee, and the testing/evaluation was conducted on February 2nd, through July 28th, 2026, at ELECT facilities in Virginia. In addition, the system was successfully tested in a Mock Election at the ELECT facilities on February 12th, 2026.

The Hart voting system presented for certification under version Verity Vanguard 1.0 successfully completed the Virginia Voting System State Certification requirements.



United States Election Assistance Commission

Certificate of Conformance



Hart Verity Vanguard 1.0

The voting system identified on this certificate has been evaluated at an accredited voting system testing laboratory for conformance to the *Voluntary Voting System Guidelines Version 2.0 (VVSG 2.0)*. Components evaluated for this certification are detailed in the attached Scope of Certification document. This certificate applies only to the specific version and release of the product in its evaluated configuration. The evaluation has been verified by the EAC in accordance with the provisions of the *EAC Voting System Testing and Certification Program Manual* and the conclusions of the testing laboratory in the test report are consistent with the evidence adduced. This certificate is not an endorsement of the product by any agency of the U.S. Government and no warranty of the product is either expressed or implied.

Product Name: Verity Vanguard

Model or Version: 1.0

Name of VSTL: SLI Compliance

EAC Certification Number: HRT-VV-1.0

Date Issued: July 7, 2025

Brianna Schletz, Executive Director

Scope of Certification Attached



4720 INDEPENDENCE ST • WHEAT RIDGE, COLORADO 80033 • 844-754-8683 • 303-422-1566

slicompliance.com SLI Compliance, a Division of GLI®

August 5, 2026

Commissioner Steven L. Koski
Commonwealth of Virginia
Virginia Department of Elections
1100 Bank Street, 1st Floor
Richmond, VA 23219-3947

Re: Audit of the Hart InterCivic Vanguard 1.0 Voting System

Dear Commissioner Koski,

SLI Compliance is submitting this report as a summary of the auditing efforts for Hart InterCivic Vanguard 1.0 voting system.

The evaluation was conducted from February 2nd to 10th, 2026, and additional testing was completed on July 28, 2026 in the Virginia Department of Elections offices in Richmond, Virginia.

The scope of this test included:

1. Compliance with the requirements/test assertions contained in appendices D (Test Assertions) and G (Hardware Guidelines) in the latest version of the Virginia Electronic Voting System Certification Standard, which is currently accepted for testing and certification by the Virginia Department of Elections.
2. The voting system must comply with the provisions in the Code of Virginia relating to voting equipment (Article 3, Chapter 6 of Title 24.2).
3. The voting system must comply with any applicable regulations or policies issued by the SBE or ELECT.
4. The vendor must ensure that the voting system can accommodate an interactive visual and non-visual presentation of information to voters, and alternative languages when required. (See HAVA, 42 USC 15481(a)(3), (4), §203 of the Voting Rights Act (42 USC 1973aa-1a) and Virginia Code Section 24.2-626.1).

Please note, the system being certified by the Commonwealth of VA, was previously certified by the EAC at VVSG 2.0 standards.

SLI Compliance has determined that the Hart InterCivic Vanguard 1.0 voting system meets the audited acceptance criteria of the State of Virginia's Voting System Standard, March 2026 version 2.2.

The Hart InterCivic Vanguard 1.0 voting system components audited were comprised of:

Electionware Management System (EMS)	
Application	Software Version
Define Deploy Results (Client/Server)	1.0.1
Define Deploy Results (Standalone)	1.0.1
Define Deploy (Client/Server)	1.0.1
Define Deploy (Standalone)	1.0.1
Results (Client/Server)	1.0.1
Results (Standalone)	1.0.1

Precinct Tabulators	
Device	Firmware
Vault	1.0.1

Ballot Marking Devices (BMD)	
Device	Firmware
Flex	1.0.1
Adapt	1.0.1

Central Tabulators	
Device	Firmware
Capture (Client/Server)	1.0.1
Capture (Standalone)	1.0.1

Please contact SLI Compliance if you have any questions regarding our findings.

Sincerely,

Michael Santos

Michael Santos
Director, VSTL
SLI Compliance



COMMONWEALTH OF VIRGINIA
County of Richmond

Richmond County Office of Elections

101 Court Circle, Warsaw, Virginia 22572

Phone – 804-333-4772

Email – hcullison@co.richmond.va.us

DIRECTOR OF ELECTIONS
GENERAL REGISTRAR
Halle Cullison

ELECTORAL BOARD
William Clements, Chairman
Carolyn Bailey, Vice Chairman
Lori Webb, Secretary

Mock Election Certification Report

I am writing to extend my sincere appreciation for the invitation to participate in the State's certification process and the opportunity to contribute to the successful execution of the mock election, specifically focusing on the integration and functionality of Hart InterCivic's Vanguard system.

On February 12, 2026, a Mock Election was conducted as a part of the state certification process. Per the Commonwealth's voting system requirements and standards, a member of the electoral board was present, William Clements (Electoral Board Chair), along with the locality Director of Elections/General Registrar, Halle Cullison, State representative, Londo Andrews, and other Virginia Department of Elections staff. The purpose of the mock election was to evaluate the Hart InterCivic Verity Vanguard 1.0 Voting System under the requirements established in the Commonwealth's Voting System Certification Standards v3.1 (January 2026). The specific components evaluated included:

- **Verity Flex 1.01 (ADA/Ballot Marking Device)**
- **Verity Vault 1.01**
- **Verity Vanguard Election Management Software (EMS), including Define, Deploy, Results, and Capture**

Throughout the certification, I witnessed the complete simulated election process from beginning to end. This included the creation and configuration of the election within the Election Management Software, deployment of election definitions, opening of the polls, ballot issuance and casting, voter interaction with accessible voting equipment, closure of the polls, tabulation of results, auditing procedures, and final election reporting.

The testing included objective evaluations designed to verify compliance with the Commonwealth's certification standards. These evaluations included, but were not limited to, logic and accuracy testing, ballot interactions, overvote and undervote processing, security functionality, accessibility features, system controls, auditing capabilities, reporting requirements, and the review of operational and training documentation.

Based on my observations and participation during the certification process, the Hart InterCivic Verity Vanguard 1.0 Voting System functioned as designed throughout every phase of the simulated election. Each hardware and software component performed reliably and consistently, accurately processing election data while supporting all required election functions. The system successfully met the focused objective evaluations conducted under the Voting System Certification Standards v3.1 (January 2026) and demonstrated its ability to support the electoral process as defined by the Commonwealth's certification requirements.

I appreciate the opportunity to participate in this certification process. These evaluations play an important role in maintaining confidence in the integrity, accuracy, security, and reliability of Virginia's voting systems. I look forward to supporting future certification efforts and continuing to assist in promoting secure and transparent elections throughout the Commonwealth.

Respectfully submitted,

Halle Cullison, VREO, CGRV
Director of Elections and General Registrar



Voting System Certification Standard

January 2026

Version 3.1

Change History

Version	Brief Description of Change	Date	Author
1.0	Adoption by the State Board of Elections Primary changes were to improve clarity, security-related requirements, and document format; moving information that would likely change over time to appendices	09/17/2019	ELECT
2.0	Adoption by the State Board of Elections Primary changes were in alignment with feedback and addition of Appendices I & J	11/18/2019	ELECT
2.1	Adoption by the State Board of Elections Primary changes were the amount to be deposited by vendor for costs of travel, expenses and billable hours by the VSTL for the certification process and specifics regarding the location and timeline of the certification	03/07/2023	ELECT
2.2	Adoption by the State Board of Elections Primary changes were updates to Code references and language pertaining to those updates to account for amendments and additions to the Code. Updates to the submission of the Technical Data Package to change from paper to digital.	03/04/2025	ELECT
3.0	Adoption by State Board of Elections The primary change was the incorporation of EAC VVSG 2.0 standards. Updates included, increase in vendor fee, increase in certification testing criteria and clarification of methodologies used, addition of multi-factor authentication, stronger security functionality, Role Based Access Control,	09/17/2025	ELECT

	enhancements to ADA compliance requirements. Additional requirements to continue cessation of wireless communications and updates to the submission of the Technical Data Package.		
3.1	Adoption by State Board of Elections Fees for cost of travel, expenses, and billable hours of the VSTL for the certification process have been increased based upon current rates.	1/28/2026	ELECT

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Chapter 1: Introduction

1.1. Purpose of Standard

This Standard has been developed and issued as part of a continuing effort to improve the administration of elections in the Commonwealth of Virginia. It provides a formal and organized process for vendors to follow when seeking state certification for a new voting system or for improvements or modifications to a previously certified voting system in Virginia. To this end the Standard is designed to:

1. Ensure conformity with Virginia election laws relating to the acquisition and use of voting systems,
2. Evaluate and certify voting systems marketed by vendors for use in Virginia,
3. Evaluate and re-certify additional capabilities and changes in the method of operation for voting systems previously certified for use in Virginia,
4. Standardize decertification and recertification of voting systems,
5. Ensure that all voting systems operate properly and are installed and tested in compliance with State Board of Elections (SBE) procedures, and
6. Ensure accurate reports of all election results from jurisdictions that use each certified system.

1.2. Specific Requirements

1. Compliance with the requirements contained in the EAC Voluntary Voting System Guidelines (VVSG) 2.0. The voting system must comply with the provisions in the Code of Virginia relating to voting equipment (Article 3, [Chapter 6 of Title 24.2](#)).
2. The voting system must comply with any applicable regulations or policies issued by the SBE or ELECT.
3. The vendor must ensure that the voting system can accommodate an interactive visual and non-visual presentation of information to voters, and alternative languages when required. (See Help America Vote Act (HAVA) 52 USC §21081(a)(3), (4), §203 of the Voting Rights Act (52 USC §10503) and Virginia Code §24.2-626.1).

1.3. Decertification

ELECT reserves the right to reexamine any previously certified voting system for any reason at any time. Any voting system that does not pass reexamination will be decertified. A voting system that has been decertified by the SBE cannot be used for elections held in the Commonwealth of Virginia and cannot be purchased by localities to conduct elections.

In addition, the SBE reserves the right to decertify the voting systems if the vendor does not comply with the following requirements:

1. Notify ELECT of any incident, anomaly, or security-related breach experienced in an election jurisdiction, within 24 hours of vendor knowledge (See Appendix L).
2. Report to ELECT annually and within 30 calendar days of vendor knowledge, any changes to Corporate Information including:
 - a. Business entity and structure,
 - b. Parent and subsidiary companies,
 - c. Capital or equity structure,
 - d. Control; identity of any individual, entity, partnership, or organization owning a controlling interest,
 - e. Investment by any individual, entity, partnership, or organization in an amount that exceeds 5% of the vendor's net cash flow from the prior reporting year,
 - f. Location of manufacturing facilities; including names of the third-party vendor(s) employed to either fabricate, assemble or both, any component part of the voting, tabulating, or both, systems being submitted for certification, along with the location of all their facilities with manufacturing capability,
 - g. Third-party vendors,
 - h. Good Standing status, and
 - i. Credit rating.
3. Submit any modifications to a previously certified voting system to ELECT for review within 30 calendar days from modification; see Appendix H for appropriate reporting process.
4. If the operating system or any component either has reached or will reach the Last Date of Mainstream Support within 18 months, as defined in Appendix H, send an upgrade plan with target date(s) to ELECT:
 - a. ELECT must receive the upgrade plan at least 12 months before the Last Date of Mainstream Support.
 - b. The Last Date of Mainstream Support cannot include any type of Extended Support, as defined in Appendix H.
 - c. The voting system may still automatically be decertified as defined in Appendix H.
5. Update all software with the latest patching and vulnerability updates in alignment with Appendix E.

NOTE: The SBE reserves the right to require recertification when new VVSG guidelines or changes to either regulations, standards, or both occur.

1.4. Recertification

See Appendix F for ELECT’s guidelines on when voting system must go through recertification.

Chapter 2: Basis for Certification

Pursuant to Va. Code §24.2-629 of the Code of Virginia, voting systems must comply with applicable state and federal requirements. The definition of “voting system” is the total combination of mechanical, electromechanical, and electronic equipment, including the software, firmware, and documentation required to program, control, and support the equipment, that is used to define ballots, cast and count votes, report or display election results, recount votes and maintain and produce any audit trail information.¹

Federal Compliance Testing demonstrates that the voting system adheres to all requirements set forth in the VVSG by the EAC. Evidence of compliance is the certification of the system by the EAC. See HAVA, 52 USC §21081. Commonwealth certification adheres to the federal EAC VVSG 2.0 standards. State certification testing will evaluate that the voting system complies with all applicable requirements of the Code of Virginia and SBE and ELECT regulations and policies.

2.1. Federal Compliance Testing

EAC certification serves as evidence of compliance. All vendors must have their equipment hardware and software proposed for Commonwealth certification certified directly by EAC. This is proven by presenting the EAC certificate of certification with the system and version the vendor is requesting to be certified by the Commonwealth. ELECT will make the final decision on compliance based on all available information. If there is evidence of a material non-compliance, ELECT will work with the vendor to resolve the issue.

The Commonwealth uses a specific request to certify process. This process includes submitting to ELECT a Microsoft Excel submission file (template provided by ELECT) and completed by the vendor. The submission file lists all required documents a vendor must submit with a request to certify. The submission file also provides a naming convention, document formatting requirements, and contents to be contained in each document. If the documents received do not follow the requirements in the submission file, the request will

¹ This standard does not address ballot on demand systems. For more information please see Virginia Ballot on Demand Systems Certification Standards, August 2022.

be sent back to the vendor for correction. The following documents shall be provided to ELECT:

1. A full copy of the Technical Data Package (TDP) submitted for EAC Federal compliance testing.
2. A copy of the Test Plan and Test Report used by the Voting System Test Laboratories (VSTL) in performing EAC certification testing or results of testing conducted by a federally certified VSTL to the applicable VVSG.
3. A release for provision to the VSTL allowing responses to requests for information from the Commonwealth of Virginia.
4. A release for provision to other states that decertified the system or prior versions of the system to respond to requests for information from the Commonwealth of Virginia.
5. Any additional information ELECT believes is necessary to determine compliance with the applicable VVSG or Commonwealth of Virginia Voting System Certification Standards.

2.1.1. Voting System Hardware, Firmware, Infrastructure or Component Elements

All equipment used in a voting system shall be examined to determine its suitability for election use according to the appropriate procedures contained in this document. Equipment to be tested shall be identical in form and function with production units. Engineering or development prototypes are not acceptable. See Appendix G for hardware guidelines.

Any modification to existing hardware, firmware, infrastructure, or other components will invalidate the prior certification by the SBE unless ELECT can review and provide an assurance to the SBE that the change does not affect the accuracy, reliability, security, usability, or accessibility of the system. See Appendix J for the De Minimis Change Guideline that is applicable for hardware.

2.1.2. Voting System Software Elements

Voting system software shall be examined and tested to ensure that it adheres to the performance standards specified in the 2.0 version of the VVSG by the EAC (See Section 2.1).

Any modification to existing software will invalidate the prior certification by the SBE, unless ELECT can review and provide an assurance to the SBE that the change does not affect the accuracy, reliability, security, usability, or accessibility of the system. See Appendix J for the De Minimis Change Guideline that is applicable for software.

2.2. State Certification Testing

State certification testing will evaluate the design and performance of a voting system seeking certification to ensure that it complies with all applicable requirements in the Code of Virginia and SBE and ELECT regulations and policies. ELECT will examine the essential system functions, operational procedures, user guides, documents, and reviews from product users. Hash testing will be conducted to confirm that the application software is identical to the certified versions of federal compliance testing.

ELECT will evaluate the user experience with the current and prior versions of the voting system and certification reports from other states. In addition, the security and reliability analysis of the product model will be reviewed to determine the usability of the voting system for Virginia Elections. Although, successful EAC VVSG 2.0 certification must be accomplished before a system will be reviewed for certification by Virginia. ELECT's certification test plan and test assertions will require a vendor to test, demonstrate, or replicate, as part of Virginia's certification process, some test assertions or requirements already completed through the EAC VVSG 2.0 certification.

State Certification Testing will examine all system operations and procedures, including but not limited to:

1. Define ballot formats for primary elections, general elections, and special elections including all voting options defined by the Code of Virginia.
2. Install applications and election-specific programs and data in the ballot counting device.
3. Count ballots.
4. Prepare to perform and conduct the Logic and Accuracy tests.
5. Obtain voting data and audit data reports.
6. Support recount or election audits.
7. Compliance with physical and language accessibility requirements.
8. Display an appropriate message on the review screen if a voter does not follow the ballot instruction; allow the voter to override the warning messages for overvote, undervote, blank ballot, or invalid Write-in to cast voter's ballot.
9. Create a Cast Vote Record (CVR) for each vote for all elections.
10. Integrate CVRs in a readable format.
11. Does not have a built-in function for wireless connections or communications.
12. Compliance with encryption requirement(s) as stated in Appendix D.
13. Compliance with password protection requirements as stated in Appendix D.
14. Hardening the voting system using the vendor's procedures and specifications.
15. Compliance with the requirements for Write-in image and format.

Chapter 3: Review and Approval Process

3.1. Summary of Process

The State certification is limited to final products that have been used in a full production environment and are available for immediate installation. The certification review process goes through six phases. At the end of each phase, ELECT evaluates the results to determine the certification status.

Six Phases of the Certification Review Process:

1. Certification Request from Vendor
2. Preliminary Review
3. Technical Data Package (TDP) to Voting System Test Laboratory (VSTL)
4. Certification Test Report from VSTL
5. On-Site Testing in Mock Election
6. Approval by the SBE.

3.2. Certification Review Process

Phase 1: Certification Request from Vendor

A vendor requests certification for a specific voting system, software, firmware, hardware, or for a modification to an existing certified voting system. This request should include the following information:

1. Voting System Certification Application Form, and certification request Excel submission file, signed by a company officer. (See Appendix I).
NOTE: This should clearly identify the specific voting system to be evaluated for certification, specifically:
 - a. Each voting system or version of a voting system requires a separate request for certification.
 - b. Each component of the hardware, firmware, software, and other components must be identified by version number.
2. Copies of documents substantiating completion of federal compliance testing, including whether the proposed voting system has been certified under the latest version of the VVSG currently accepted for certification by the EAC or tested by a federally certified VSTL. (See Section 2.1).
3. Whether the proposed voting system has ever been denied certification or had certification withdrawn in any state or by the EAC.
4. Eight copies of a brief overview description of the voting system.

- a. Typical marketing brochures are usually sufficient for the description.
5. A list of all states where the proposed voting system version is currently used.
6. A list of the general pricing for procurement of the proposed voting system.
7. The vendor will provide a check in the amount of \$50,000.00 to cover the costs for the travel, expenses, and billable hours of the VSTL for the certification process. Refunds will be provided to the vendor if the VSTL invoices total less than the check amount and the refund amount is over \$100.00. Testing takes place at ELECT, Washington Building, 1100 Bank Street, Richmond, VA 23219. The VSTL technician will travel to Richmond. Certification will exceed one week, beginning on Monday of the first week and ending on Wednesday of the following week, i.e. an 8-day testing period. The 8-day cycle is exclusive of the one-day mock election, which generally happens the day after completion of the VSTL certification testing. Voting system equipment for certification will be shipped to ELECT before certification begins and shipped back after it is complete.
 - a. Checks in the amount of \$50,000.00 must be received by ELECT before the certification can begin.
 - i. Checks or money orders should be made payable to “Treasurer of Virginia” and mailed to: Voting Technology / ELECT, 1100 Bank Street, 1st Floor, Richmond, VA 23219.
 - b. The complexity of EAC VVSG 2.0 necessitates additional requirements to be reviewed by Virginia. The certification testing time on site must increase to meet the new additional requirements. Under the new Virginia Voting System Certification Standard 3.0, testing times will be on average 7 to 8 days on site.
8. TDP must clearly identify all items as required in the certification request (Excel submission file):
 - a. If the TDP is incomplete or the items in the package are not clearly identified, the entire package could be returned to the vendor.
 - b. Upon the receipt of a completed and correctly submitted TDP from the vendor, the evaluation of the voting system will be scheduled.
9. Corporate Information must clearly identify all items:
 - a. If the Corporate Information is incomplete or the items in the package are not clearly identified, the entire package could be returned to the vendor. The evaluation process will be scheduled after the corrected package is received.

NOTE: The certification request package containing the items above should be sent to the location indicated by ELECT.

Technical Data Package

1. The TDP must be fully digital, Optical Character Recognition (OCR) compliant, and contain the following items:
 - a. *Change Log*: The TDP must contain a document that clearly defines the changes from the last voting system certified in Virginia to the system being submitted for certification.
 - b. *Hardware Schematic Diagrams*: Schematic diagrams of all hardware.
 - c. *Hardware Theory of Operations*: Documentation describing the theory of operation of hardware, not limited to power cords and backup battery.
 - d. *Software System Design*: Documentation describing logical design of the software.
 - i. The documentation should clearly indicate various modules of the software, such as:
 - ii. The list of functions,
 - iii. System flowchart,
 - iv. The interrelationships among modules, and
 - v. The list of data formats that the voting system can import and export.
 - vi. Clearly specify the operating system and version with:
 1. The Last Date of Mainstream Support, as defined in Appendix H, and
 2. The latest operating system version, security patches available, SHA256 hash value, and modification
 - e. *Software Deviations*: Include any exception(s) to the Security Content Automation Protocol (SCAP) checklist; document the reason why there is an exception and the mitigating controls and tools in place to secure the system.
 - f. *Software Source Code*: A source code evaluation conducted in accordance with applicable Software Design and Coding Standards.
 - g. *Definition of Marked Oval/Target*: Define the system thresholds used to declare a readable mark in an oval or target to be read by the scanner.
 - h. *Independent Third-Party Application Penetration Analysis Report*: An accredited application penetration test conducted within the past 6 months that analyzed the system being presented for certification, for potential vulnerabilities according to current industry standards. Potential vulnerabilities may result from poor or improper system configuration, known or unknown hardware or software flaws, or operational weaknesses in process or technical countermeasures. The test must involve active exploitation of security vulnerabilities of the voting system and whether the vulnerabilities can be mitigated through compensating controls. Pursuant to Virginia Code § 24.2-625.1, the Penetration Analysis Report is confidential and excluded from inspection and copying under the Virginia Freedom

of Information Act. If a penetration test has been conducted in another state within 6 months on the same version of the voting system, that may be submitted to fulfill this requirement.

- i. *Customer Maintenance, Repair & Troubleshooting Manual*: Documentation normally supplied to the customer for use by the person(s) who will provide maintenance, repair, and troubleshooting of the system.
- j. *Operations Manual*: Documentation normally supplied to the customer for use by the person(s) who will operate the system. At a minimum, the manual should include maximum volume and speed of the scanner, maximum capacity of container bin, ballot box, storage units, electronic storage device, and instructions for proper and safe operation of the system to prevent injury or damage to any individual or the hardware, including fire and electrical hazards.
- k. *User Guide and Documents*: The vendor should provide the following:
 - i. Quick reference guide with detailed instructions for a precinct election officer to set up, use, and shut down the voting system,
 - ii. ADA compliant training material that:
 - 1. May be in written or video form, and
 - 2. Must be in a format suitable for use at a polling place as a simple “how-to” guide.
 - iii. Clear model of voting system architecture with the following documentation:
 - 1. End-User Documentation,
 - 2. System-Level and Administrator-Level Documentation, and
 - 3. Developer Documentation.
 - iv. Failsafe voting system data recovery procedures
 - 1. For example: Recovery procedures for retrieving duplicated (contingency recovery) information from a different location within the device (or another device if recovery is required prior to any ballots being voted on the device and if networked capability is allowed and certified) if access to the primary storage area is not possible for some unforeseen reason,
 - v. A list of customers who are using or have previously used the voting system
 - 1. Include a description of all known incidents or anomalies involving the functioning of the voting system, including how those incidents or anomalies were resolved with customer and date noted, and
 - vi. If the operating system or any component (hardware, software, or both) has reached or will reach the Last Date of Mainstream Support within 18 months, as defined in Appendix H, send an upgrade plan with target date(s) to ELECT; the

Last Date of Mainstream Support cannot include any type of Extended Support, as defined in Appendix H.

- I. *Recommended Security Practices*: CIS Security Best Practices, not limited to:
 - i. System Security Architecture,
 - ii. System Event Logging,
 - iii. System Security Specification,
 - iv. Security Content Automation Protocol (SCAP),
 - v. Cryptography,
 - vi. Equipment and Data Security,
 - vii. Network and Data Transmission Security ,
 - viii. Access control,
 - ix. Authentication procedure,
 - x. Software, and
 - xi. Physical Security.
- m. *Standard Contract, Product Support, and Service Level Agreement (SLA)*: Customer and Technical Support hours and contact information. SLA should specify the escalation timeline and procedures with contact information. Vendor's capacity to provide, not limited to:
 - i. On-Site Support and Technical Support within SLA on:
 - 1. Election Day (defined as the start of the in-person absentee voting period up to and including Election Day), and
 - 2. Within 60 days before Election Day,
 - ii. Resolution of outstanding issues, repair, maintenance, and service requests within 30 days.
- n. *Maintenance Services, Pricing, and Financing Options*: A list of maintenance services with price. Terms for replacing a component or voting equipment. Available financing options for purchase or lease,
- o. *Warranty*: The vendor will provide a list of warranty specifications to include the following:
 - i. The period and extent of the warranty,
 - ii. Repair or Replacement,
 - 1. The circumstances under which equipment is replaced rather than repaired,
 - 2. The method by which a user requests such replacement,
 - iii. Warranty coverage and costs, and
 - iv. Technical documentation of all hardware and software that is used to certify that the individual component will perform in the manner and for the specified time.

- p. *Software License Agreement:* Vendor must provide a consolidated source with details of the software license agreements of all procured software and programs used in the creation, development and continued support of the associated release and version being certified.
- q. *Test Data and Software:* Vendor's internal quality assurance procedure, internal or external test data and reports, ballot decks, and software that can be used to demonstrate the various functions of the voting system. Vendor should also verify that the versions of the applications submitted are identical to the versions that have undergone federal compliance testing, for example hash testing tools
- r. *Non-Disclosure Agreement or Oath between the Vendor and VSTL.*
 - i. Please review the Excel submission file for more information on the naming conventions, content and formatting to be used in the TDP documents.

NOTE: If the voting system is certified, ELECT will retain the TDP so long as the voting system is marketed or used in Virginia.

Corporate Information

Corporate Information must contain the following items:

1. History and description of the business including year established, products and services offered, areas served, branch offices, subsidiary and parent companies, capital and equity structure, identity of any individual, entity, partnership, or organization owning a controlling interest, and the identity of any investor whose investments have an aggregate value exceeding 5% of the vendor's net cash flow in any reporting year,
2. Management and staff organization, number of full-time and part-time employees by category, and resumes of key employees who will assist Virginia localities in acquiring the system if it is authorized for use,
3. Certified financial statements for current and past three (3) fiscal years
 - a. If vendor is not the manufacturer of the voting system, then submit the certified financial statements of the manufacturer for the past three (3) fiscal years,
4. Bank Comfort Letter from vendor's primary financial institution
 - a. If the vendor uses more than one financial institution, multiple Comfort Letters must be submitted,
5. Certificate of Good Standing issued within 2 months of request for certification,
6. Credit rating issued within 2 months of request for certification,
7. If publicly traded, indexes rating of business debt,
8. Gross sales in voting products and services for the past three (3) fiscal years and the percent of vendor's total sales,

9. The location of all facilities with manufacturing capability; including names and locations of third-party vendor(s) employed or contracted to fabricate, assemble, or both any component part of the voting system, tabulating system, or both being submitted for certification. The location and servicing capability of each facility that will be used to service the voting system, tabulating system, or both for certification and the service limitation of the facility,
10. Quality assurance process used in manufacturing and servicing the voting system, and
11. Configuration management process used with the voting system.

NOTE: If the voting system is certified, ELECT will retain the Corporate Information for as long as the voting system is marketed or used in Virginia. ELECT will sign a confidentially statement for corporate information only.

Proprietary Information

Prior to or upon submission of its certification request, vendor shall identify any information in its request and accompanying materials that it believes should be treated as confidential and proprietary. Further, vendor must state the reasons such information should be treated as confidential and proprietary.

“Identify” means the information must be clearly marked with a justification as to why the information should be treated as confidential and proprietary information. A vendor shall not designate as proprietary information (a) the entire certification request or (b) any portion of the certification request that does not contain trade secrets or proprietary information.

Pursuant to §2.2-3705.6(3), proprietary information is exempt from record requests under the Virginia Freedom of Information Act (VFOIA). Records required to be released that contain both proprietary and non-proprietary information will be redacted before disclosure. ELECT cannot guarantee the extent to which any material provided will be exempt from disclosure in litigation or otherwise. ELECT, however, agrees to provide vendor with five (5) days’ notice prior to disclosing such material to third parties so that vendor can seek relief from a court prior to disclosure of such materials by ELECT.

Phase 2: Preliminary Review

The Voting Systems Security Manager, or designee, will review the TDP, Corporate Information, and other materials provided, and notify vendor of any deficiencies. Certification

of the voting system will not proceed beyond this phase until the TDP and Corporate Information are complete.

The Voting System Security Manager, or designee, will conduct a preliminary analysis of the Technical Data Package with VSTL. The Voting System Security Manager, or designee, will also review the Corporate Information and other materials to prepare an Evaluation Proposal, which includes:

1. Components of the voting system to be certified,
2. Financial stability and sustainability of the vendor to maintain product support and contractual agreement for the voting system,
3. Preliminary analysis of TDP.

Phase 3: Technical Data Package to Voting System Test Laboratory (VSTL)

In addition, vendor should submit the TDP to the Voting Systems Security Manager, who shall provide the TDP to the VSTL following review.

Phase 4: Certification Test Report from VSTL

VSTL works directly with the vendor and ELECT to complete all test assertions and test cases. The Certification Test Report will be sent to ELECT upon completion.

Phase 5: On-Site Testing in Mock Election

Vendor will coordinate with the local jurisdiction to test the voting system at a minimum of one polling place. With the vendor and a representative from ELECT present, at least one member of the electoral board and the General Registrar from the local jurisdiction will oversee the test of the system in a mock election. ELECT has the discretion to perform a mock election, using the same process, on-site at the ELECT main building in Richmond, Virginia; instead of a polling place; a general registrar and electoral board member must still be present.

Phase 6: Approval by the SBE

Based on the report from the VSTL, results from the mock election testing, and other information in their possession, the SBE makes the final determination of whether the voting system will be certified for use in Virginia. The decision will be sent to the vendor.

3.3 Incomplete Certification Process

If the certification process is terminated, the vendor will forfeit all fees received by ELECT. Any certification process terminated under this provision must be re-initiated from Phase

1. The vendor is responsible for paying all outstanding balances due to ELECT before ELECT accepts subsequent requests from the vendor.

ELECT reserves the right to terminate the certification process when:

1. Vendor does not respond to a request from ELECT within 90 days,
2. ELECT issues any concerns regarding the certification,
3. The Vendor withdraws from the process,
4. The system fails the VSTL certification test,
5. The test lab cannot conduct the certification testing with the equipment on-hand, or
6. Failure of any step in the test assertions process during the certification week.

3.4 Catalog of Requirements

Requirements (objectives) in this standard have been updated to reflect cybersecurity reviews and updates from both Federal and State regulations to mitigate risks to election systems. Requirements are organized to provide standardization and to align to Commonwealth of Virginia Security Standards (SEC 530-01.1 Controls and Objectives, (SEC-530)), EAC VVSG 2.0, and NIST 800-171A Rev. 2.

The requirements are organized into a well-defined structure and placed into categories named “control families”. There are twelve (12) families, each having a Control Family name and corresponding two-letter acronym. Each control family contains security controls or required functionality for the voting system.

Assessment Criteria and Methodology

State certification testing will evaluate the design and performance of a vendor’s voting system to ensure it complies with all applicable requirements in the Code of Virginia and SBE regulations and policies. ELECT will examine the essential system functions, operational procedures, user guides, documents, and reviews from product users. Hash testing will be conducted to confirm the application software is identical to the certified versions of federal compliance testing.

ELECT may evaluate the user experience with the current and prior versions of the voting system and certification reports from other states. In addition, the security and reliability analysis of the product model will be reviewed to determine the usability of the voting system for Virginia elections. ELECT will also evaluate the testing results from the EAC VSTL that will be submitted as part of the Technical Data Package (TDP).

Assessment objectives identify the specific items being assessed and can include specifications, mechanisms, activities, and organization.

1. Specifications are document-based artifacts (e.g. network diagrams, security plans, requirements, administrator user guides, operator guides, and architectural designs) associated with any proposed voting system
2. Mechanisms are specific to hardware, software, and firmware safeguards employed within a system
3. Activities are protection-related actions supporting a system that involves people (e.g. anti-virus updates, anti-malware updates, BIOS configuration, and access control mechanisms for the addition of users by an administrator).

Criteria

Assessment objectives are based on existing criteria in EAC VVSG 2.0, Code of Virginia, Administrative Code of Virginia, and HAVA, 52 USC §21081. The criteria are authoritative and provide the basis for the Virginia Voting System Certification Standard 3.0.

Methodology

To verify and validate a Vendor is meeting the Virginia Voting System Certification Standard 3.0 criteria, evidence must be provided demonstrating a vendor has fulfilled the objectives. Demonstrative evidence may be provided through the following:

Interview

Interviews of vendor staff may provide information to help the ELECT auditor gain insight into security objectives implementation.

Demonstration

Demonstrations, akin to testing, include review, inspection, observation, study, or analysis of objectives. The items used to demonstrate objectives include documents, mechanisms, or activities.

Common types of documents used as evidence may include but are not limited to:

- a. Written policies, processes, and procedures,
- b. Training materials,
- c. Planning documents, and
- d. System, network, and data flow diagrams.

This list of documents is not exhaustive or prescriptive.

Testing

Testing is an important part of the assessment process as it demonstrates what functionality and processes have or have not been built, integrated, or completed. Not all security objectives utilize testing to allow an entity to determine whether the requirement has been met.

Applying methodologies to criteria: Assessment

Each requirement in the Catalog of Requirements is determined to have been Met or Not Met through the application of one of the listed methodologies:

Test: all applicable objectives for the requirement must be tested leveraging technical methods to analyze expected outcomes.

Demonstration (DEMO): a demonstration of requirement implementation must be conducted by the VSSM & VSTL Representative in conjunction with the Vendor demonstrating conformity to the respective requirement.

Documentation (DOC): an examination of documentation in lieu of a demonstration or test will be specified in the Catalog of Requirements.

ELECT may require any test assertion that has a methodology marked as “Demo” or “Doc” to instead be completed as a test for verification of compliance.

Assessment Findings

The Assessment Findings for each requirement results in one of two possible findings: MET or NOT MET.

MET: All applicable objectives for the requirement are satisfied based on evidence. All evidence must be in final form. Unacceptable forms of evidence include working papers, draft documentation, and unofficial or unapproved policies. Each test assertion or objective must be explicitly complied with based on the objective IDs and written descriptions. Vendors should pay close attention to the certification objectives and ensure their systems meet the requirements as stated. If the vendor has questions, they should contact ELECT.

NOT MET: One or more objectives of the requirements are not satisfied. For each requirement marked NOT MET, it is best practice to record statements that explain why and document the appropriate evidence showing that the vendor voting system does not conform fully to all the requirements. When any requirement, objective, or test assertion fails and is not met after the objective is tested for compliance, ELECT may stop the certification process at the point of failure. The vendor remains responsible for all payments and fees to the VSTL and ELECT.

Requirements Descriptions

This section provides detailed information and guidance for assessing requirements as described in this Standard.

Each security or functional control is identified by i) a Control Family name, ii) Control ID/Family ID number (1 -12), iii) Control Acronym, and iv) an Objective ID beginning with a two-letter identifier.

For example, AA-1.1-C.24 is a control in the ADA and Accessibility (AA) Control family. Each Objective ID is followed by an Objective and Evaluation Assertion (function or process the system must be able to do or the test assertion), the authority for the requirement (Code of Virginia, Virginia Administrative Code, VVSG 2.0), and the Methodology used to verify the Objective and Evaluation Assertion (test, demo, doc). The table below provides a snapshot of this structure.

Control Acronym	Control ID	Objective ID	Objective and Evaluation Assertion	Virginia Functional Need/ VVSG 2.0 Requirement	Virginia Requirement Description	Methodology: Test Demo Doc
AA	1	AA-1.1-C.24	Must be able to alter instructions on the voting system's electronically displayed ballots and audio ballots for ADA/BMD machines.	§ 24.2-629 (B)(1). State Board approval process of electronic voting systems.	It shall provide clear instructions for voters on how to mark or select their choice and cast that vote.	Test

Technical Standard Terms used in the Objective

There are several technical standard terms defined in Appendix A: Glossary. This appendix includes other definitions that may be useful for understanding the standard.

Appendices

Appendix A – Glossary

The following terms are defined in the United States Election Assistance Commission (EAC), the Code of Virginia, and Virginia General Registrars and Electoral Boards (GREB) Handbook.

ADA – Americans with Disability Act (ADA) of 1990 broadly protects the rights of individuals with disabilities in employment, access to state and local government services, places of public accommodation, transportation, and other important areas of American life. The ADA also requires newly designed and constructed or altered state and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.

Anomaly – Any event related to the security or functioning of the voting system that is out of the ordinary regardless of whether it is exceptional or not; a deviation from the norm.

Cast Vote Record (CVR) – Permanent record of all votes produced by a single voter.

Center for Internet Security (CIS) – A group of benchmarks for best practices created by industry that are globally recognized and continually updated to improve cyber defense.

De Minimis or Engineering Change Order (ECO) Change – A minimum change to a certified voting system’s hardware, software, TDP, or data. The nature of changes will not materially alter the system’s reliability, functionality, capability, or operation. Under no circumstance shall a change be considered a De Minimis Change if it has reasonable and identifiable potential to impact the system’s performance and compliance with the applicable Voting Standard. Reference: EAC Testing & Certification Program Manual version 2.0 and Notices of Clarification.

Department of Elections (ELECT) – ELECT conducts the SBE's administrative and programmatic operations and discharges the board's duties consistent with delegated authority.

Election Assistance Commission (EAC) – The Help America Vote Act (HAVA) directs the U.S. Election Assistance Commission (EAC) to provide for the testing, certification, decertification, and recertification of voting system hardware and software by accredited laboratories. HAVA also introduces different terminology for these functions. Under the EAC process, test labs are “accredited” and voting systems are “certified.” The term “standards” has been replaced with

the term “*Guidelines*.” As prescribed by HAVA, the EAC process was initially based on the 2002 Voting Systems Standards and will transition to the latest standards issued.

Help America Vote Act of 2002 (HAVA) – The Help America Vote Act (HAVA) of 2002 made reforms to America’s voting process by establishing minimum standards for states regarding election administration. Title III of HAVA contains standards regarding voting systems, provisional voting and voting information, computerized statewide voter registration list, and requirements for first-time voters who register by mail. HAVA standards are critical to the operation of an election.

Incident – Any event related to the security or functioning of the voting system that caused or may have caused an interruption to the Check-in or Reporting process.

Logic and Accuracy Testing – Logic and accuracy testing is an integral part of preparing for an election. Each machine (not a sampling of machines) that will be used in an election must be tested prior to that election to ensure it is programmed correctly and is functioning properly. The logic and accuracy test will also uncover any ballot printing or coding issues that may affect accurate and complete tabulation. Each machine should be tested with a sufficient number of ballots or votes to substantiate that each machine recorded the correct number of votes for each candidate. An electoral board member, a general registrar, or a designated representative must be present during this process and must certify the results from each machine. Form ELECT-633 must be submitted electronically to the Department of Elections after logic and accuracy testing is complete.

State Board of Elections (SBE) –For purposes of these standards, the State Board of Elections is imbued with the powers and duties provided in Title 24.2 of the Code of Virginia. Specifically regarding voting equipment and systems, the board is authorized to approve electronic voting systems that meet the requirements of Chapter 6, Article 3 of the Code of Virginia.

Voting System – The total combination of mechanical, electromechanical, and electronic equipment, including the software, firmware, and documentation required to program, control, and support the equipment, that is used to define ballots, cast and count votes, report or display election results, recount votes and maintain and produce any audit trail information.

Voting System Security Manager (VSSM) – The ELECT designated evaluation agent, responsible for oversight of voting systems and electronic pollbooks certification and security.

Voting System Test Laboratory (VSTL) – Test labs that are accredited to perform conformance testing of voting systems. VSTLs use the SBE approved voting system certification standard to guide the development of test plans, the testing of systems, and the preparation of test reports and recommendations for granting state certification.

Appendix B – Contacts

The certification request package should be sent to:

Virginia Department of Elections
ATTN: Voting System Certification
1100 Bank Street, 1st Floor
Richmond, Virginia 23219-3497

All other inquiries should be sent to: info@elections.virginia.gov.

Appendix C – Local Validation of Certification on Purchase

It is the responsibility of both the vendor and the local jurisdiction to ensure that a voting system supplied or purchased for use in Virginia has been certified by the SBE. The vendor is required to submit any modifications to a previously certified voting system to ELECT for review.

If any question arises involving the certification of a voting system in use in Virginia, ELECT shall verify the voting system in use is identical to the voting system that was submitted for certification. Any unauthorized modifications to a certified system may result in decertification by the SBE or bar the vendor from receiving future certification of voting systems in Virginia.

Acceptance Test

To ensure the voting system purchased for a local election office operates as required and meets all needed functionality, the local jurisdiction, assisted by state officials or consultants, will conduct an Acceptance Test.

The local jurisdiction verifies the purchased or leased system delivered is identical to the certified system and the installed equipment and software are fully functional and compliant with the administrative and statutory requirements of the jurisdiction. The local jurisdiction may perform a hash testing of application software and will send a letter to ELECT as required by the procurement process confirming the versions of software and model(s) of equipment received are identical to the certified system.

As part of the acceptance test the vendor will replicate its designed functionality as presented and tested during certification, including:

1. Process simulated ballots for each precinct or polling place in the jurisdiction,
2. Display an appropriate message on the review screen if a voter does not follow the ballot instruction
 - a. Able to override the warning messages for overvote, undervote, or blank ballot to cast the ballot,
3. Handle Write-in votes,
4. Create a Cast Vote Record (CVR) per each vote,
5. Produce an input to or generate a final report of the election, and interim reports as required,
6. Generate system status and error messages,
7. Comply with and enable voter and operator compliance with all applicable, procedural, regulatory, and statutory requirements,
8. Produce an audit log.

Appendix D – Test Assertions

State Certification Audits must include examination of all system operations and procedures, including but not limited to the following Controls:

Control ID	Control Family Name	Control Acronym
1.	ADA and Accessibility	AA
2.	Audit	AU
3.	Ballot Interaction	BI
4.	COTS Analysis	CA
5.	Logic and Accuracy	LA
6.	Operations Manual	OM
7.	Ranked Choice Voting (RCV)	RA
8.	Recount	RC
9.	Reporting	RE
10.	RLA (Risk Limiting Audit)	RL
11.	System Integrity	SI
12.	Voter Privacy	VP

The following test assertions will be executed by the ELECT designated VSTL.

Control Acronym	Control ID	Objective ID	Objective and Evaluation Assertion	Virginia Code/ VMSG 2.0 Requirement (Functional Need)	Virginia Requirement Description	Methodology: Test, Demo, Doc
AA	1	AA-1.1-A.1	The voting system must provide the option for synchronized audio output to convey the same information that is displayed visually to the voter.	5.2-D (VMSG 2.0)		Test
AA	1	AA-1.1-A.2	Sound and visual cues must be coordinated so that:	5.2-E (VMSG 2.0)		Demo
AA	1	AA-1.1-A.3	sound cues are accompanied by visual cues unless the system is set to audio-only; and	5.2-E.1 (VMSG 2.0)		Demo

AA	1	AA-1.1-A.4	visual cues are accompanied by sound cues unless the system is set to visual-only.	5.2-E.2 (VMSG 2.0)		Demo
AA	1	AA-1.1-A.5	During the voting session, the voting system must make it possible for the voter to independently enable or disable either the audio or the visual output and be notified of the change, resulting in a visual-only or audio-only presentation.	6.1-C (VMSG 2.0)		Test
AA	1	AA-1.1-A.6	Reset to default settings: If the adjustable settings of the voter interface have been changed by the voter or election worker during the voting session, the system must automatically reset to the default setting when the voter finishes voting, verifying, and casting.	7.1-A (VMSG 2.0)		Test
AA	1	AA-1.1-A.7	Display and interaction options: The voting system must provide at least the following display format and interaction mode options to enable voters to mark their ballot to vote, and verify and cast their ballot, supporting the full functionality in each mode:	7.2-A (VMSG 2.0)		Test
AA	1	AA-1.1-A.8	Visual format;	7.2-A.1 (VMSG 2.0)		Test
AA	1	AA-1.1-A.9	Enhanced visual format;	7.2-A.2 (VMSG 2.0)		Test
AA	1	AA-1.1-B.10	Audio format;	7.2-A.3 (VMSG 2.0)		Test
AA	1	AA-1.1-B.11	Touch mode; and	7.2-A.4 (VMSG 2.0)		Test

AA	1	AA-1.1-B.12	Limited dexterity mode.	7.2-A.5 (VMSG 2.0)		Test
AA	1	AA-1.1-B.13	Voter display screen has a fixed header or footer that does not disappear, so voters always have access to navigation elements, the name of the current contest, and the voting rules for the contest;	7.2-D.2.a (VMSG 2.0)		Test
AA	1	AA-1.1-B.14	The voting system must be supplied with a means to sanitize headphones or handsets and instructions for election workers on the procedure to ensure that a sanitized headphone or handset is available to each voter.	8.1-H (VMSG 2.0)		Test
AA	1	AA-1.1-B.15	voters with low vision, [can] use the enhanced visual features with and without audio; and	8.3-A.1.c (VMSG 2.0)		Demo
AA	1	AA-1.1-B.16	voters with limited dexterity, [can] use the visual interface with low and no dexterity controls.	8.3-A.1.d (VMSG 2.0)		Demo
AA	1	AA-1.1-B.17	The voting system must provide written and audio instruction for electronically displayed ballots on ADA/BMD machines.	Voting equipment must display an appropriate message if a voter does not follow the ballot instruction. Allow the voter to override the warning message to cast his/her ballot.		Test

AA	1	AA-1.1-B.18	The voting system must allow the voter to return to a contest or question to make corrections for electronically displayed ballots. The voting system must allow an audio voter to return to a contest or question to make corrections.	Voting equipment must display an appropriate message if a voter does not follow the ballot instruction. Allow the voter to override the warning message to cast his/her ballot.		Test
AA	1	AA-1.1-B.19	The voting system must provide feedback to the voter for incomplete/ incorrect votes. i.e. overvotes, undervotes, blank ballot.	Voting equipment must display an appropriate message if a voter does not follow the ballot instruction. Allow the voter to override the warning message to cast his/her ballot.		Test
AA	1	AA-1.1-C.20	The voting system must allow the voter to override warning messages for incomplete/ incorrect votes. i.e. overvotes, undervotes, blank ballot.	Voting equipment must display an appropriate message if a voter does not follow the ballot instruction. Allow the voter to override the warning message to cast his/her ballot.		Test
AA	1	AA-1.1-C.21	The voting system must support audio ballots.	§ 24.2-626.1. Acquisition and use of accessible voting devices.	1. Provide for at least one voting system equipped for individuals with disabilities at each polling place, including non-visual accessibility for the blind and visually impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters. 2. Provide alternative	Test

					language accessibility when required by § 203 of the Voting Rights Act of 1965 (52 U.S.C. § 10503).	
AA	1	AA-1.1-C.22	Using the voting system, an individual voting by audio ballot does not require assistance by marking the ballot.	§ 24.2-626.1. Acquisition and use of accessible voting devices.	1. Provide for at least one voting system equipped for individuals with disabilities at each polling place, including non visual accessibility for the blind and visually impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters. 2. Provide alternative language accessibility when required by § 203 of the Voting Rights Act of 1965 (52 U.S.C. § 10503).	Test
AA	1	AA-1.1-C.23	The voting system must support multiple languages; including, English, Spanish, Vietnamese and allow future additions and support of other languages.	§ 24.2-626.1. Acquisition and use of accessible voting devices. Provide alternative language accessibility when required by § 203 of the Voting Rights Act of 1965 (52 U.S.C. § 10503).	1. Provide for at least one voting system equipped for individuals with disabilities at each polling place, including non visual accessibility for the blind and visually impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters. 2. Provide alternative language accessibility when required by § 203	Test

					of the Voting Rights Act of 1965 (52 U.S.C. § 10503).	
AA	1	AA-1.1-C.24	Must be able to alter instructions on the voting system's electronically displayed ballots and audio ballots for ADA/BMD machines.	§ 24.2-629 (B)(1). State Board approval process of electronic voting systems.	It shall provide clear instructions for voters on how to mark or select their choice and cast that vote.	Test
AU	2	AU-2.2-A.1	The voting system must be capable of logging events that occur in a voting system.	15.1-A (VMSG 2.0)		Test
AU	2	AU-2.2-A.2	The voting system must be capable of exporting logs.	15.1-B (VMSG 2.0)		Test
AU	2	AU-2.2-A.3	At minimum, the voting system must log the events included in Table 15-1.	15.1-D (VMSG 2.0)		Demo
AU	2	AU-2.2-A.4	Includes but is not limited to: • The source and disposition of system interrupts resulting in entry into exception handling routines. • Messages generated by exception handlers. • The identification code and number of occurrences for each hardware and software error or failure. • Notification of physical violations of security. • Other exception events such as power failures, failure of critical hardware components, data transmission errors, or other types of operating anomalies. • All faults and the recovery actions taken. Device generated error and exception messages such as ordinary timer system	15.1-D.1.a (VMSG 2.0)		Demo

			interrupts and normal I/O system interrupts do not need to be logged.			
AU	2	AU-2.2-A.5	Includes but is not limited to: • Login/logoff events (both successful and failed attempts) • Account lockout events • Password changes	15.1-D.2.a (VMSG 2.0)		Demo
AU	2	AU-2.2-A.6	At a minimum, critical cryptographic settings include key addition, key removal, and re-keying.	15.1-D.4.e (VMSG 2.0)		Doc
AU	2	AU-2.2-A.7	The software installation procedures must specify the creation of a software installation record that includes at a minimum:	3.1.4-I (VMSG 2.0)		Test
AU	2	AU-2.2-A.8	a unique identifier (such as a serial number) for the record;	3.1.4-I.1 (VMSG 2.0)		Demo
AU	2	AU-2.2-A.9	a list of unique identifiers of storage media associated with the record;	3.1.4-I.2 (VMSG 2.0)		Demo
AU	2	AU-2.2-B.10	the time, date, and location of the software installation;	3.1.4-I.3 (VMSG 2.0)		Demo
AU	2	AU-2.2-B.11	names, affiliations, and signatures of all people present;	3.1.4-I.4 (VMSG 2.0)		Demo
AU	2	AU-2.2-B.12	copies of the procedures used to install the software on the programmed devices of the voting system;	3.1.4-I.5 (VMSG 2.0)		Demo
AU	2	AU-2.2-B.13	the certification number of the voting system;	3.1.4-I.6 (VMSG 2.0)		Test
AU	2	AU-2.2-B.14	list of the software installed as well as associated digital signatures and mechanisms for installation and verification on programmed devices of the voting system; and	3.1.4-I.7 (VMSG 2.0)		Demo

AU	2	AU-2.2-B.15	a unique identifier (such as a serial number) of the vote-capture device or election management system (EMS) by which the software is installed.	3.1.4-I.8 (VMSG 2.0)		Demo
AU	2	AU-2.2-B.16	The voting system's audit, casting, tabulation, and vote-capture functions dealing with CVRs must have the capability of importing or exporting CVRs according to CDF specification(s).	4.1-C (VMSG 2.0)		Demo
AU	2	AU-2.2-B.17	All voting systems must provide a voter verifiable audit trail, a permanent paper record of each vote.	§ 24.2-629 (B)(3). State Board approval process of electronic voting systems.	It shall be capable of processing ballots for all parties holding a primary election on the same day, but programmable in such a way that an individual ballot cast by a voter is limited to the party primary election in which the voter chooses to participate.	Test
BI	3	BI-3.3-A.1	The voting system records how many ballots are cast as overvotes, undervotes, Write-ins, and blank ballots for each contest and question.	§ 24.2-657. Determination of vote on voting systems. See Ballot Interaction, Objective ID BI-3.3-A.2	See Ballot Interaction, Objective ID BI-3.3-A.2	Test
BI	3	BI-3.3-A.2	Public and private ballot counters increment for each accepted ballot. The ballot counters do not increment for ballots rejected by the system.	§ 24.2-657. Determination of vote on voting systems. In the presence of all persons who may be present lawfully at the time, giving full view of the voting systems or	If, on any ballot scanner, the number of persons voting in the election, or the number of votes cast for any office or on any question, totals more than the number of names on the poll books of	Test

				printed return sheets, the officers of election shall determine and announce the results as shown by the counters or printed return sheets, including the votes recorded for each office on the Write-in ballots, and shall also announce the vote on every question. The vote as registered shall be entered on the statement of results. When completed, the statement shall be compared with the number on the counters on the equipment or on the printed return sheets.	persons voting on the machines, then the figures recorded by the machines shall be accepted as correct. A statement to that effect shall be entered by the officers of election in the space provided on the statement of results	
BI	3	BI-3.3-A.3	The voting system must alert the voter when the ballot submitted has an overvote or undervote, or the ballot is blank.	§ 24.2-629 (B)(14). State Board approval process of electronic voting systems.	Ballot scanner machines shall report, if possible, the number of ballots on which a voter under voted or over voted.	Test
BI	3	BI-3.3-A.4	The voting system must allow the voter to submit a ballot with an overvote or undervote, or a blank ballot.	§ 24.2-629 (B)(14). State Board approval process of electronic voting systems.	Ballot scanner machines shall report, if possible, the number of ballots on which a voter under voted or over voted.	Test
BI	3	BI-3.3-A.5	The voting system must count ballots cast with an undervote, overvote, or blank ballot. The system	§ 24.2-629 (B)(14). State Board approval process	Ballot scanner machines shall report, if possible, the number of ballots	Test

			must be capable of producing a human-readable report on the number of ballots on which a voter under voted, and the number of ballots on which a voter over voted.	of electronic voting systems.	on which a voter under voted or over voted.	
BI	3	BI-3.3-A.6	All Write-ins are properly handled including segregation of Write-ins physically with a diverter or logically with electronic Write-in Report.	§ 24.2-629 (B)(14). State Board approval process of electronic voting systems.	Ballot scanner machines shall report, if possible, the number of ballots on which a voter under voted or over voted.	Test
BI	3	BI-3.3-A.7	The voting system must make a copy of the voter's Write-in vote; the copy must be as legible as the original.	The voting system must comply with the requirements for Write-in image and format.		Test
BI	3	BI-3.3-A.8	For a Virginia Primary Election, the voting system must define the primary ballot as follows:	Define ballot formats for a primary election, a general election, and special election including all voting options defined by the Code of Virginia.		Test
BI	3	BI-3.3-A.9	a. Open Primary	See Ballot Interaction, Objective ID BI-3.3-A.8		Test
BI	3	BI-3.3-B.10	b. Two Parties	See Ballot Interaction, Objective ID BI-3.3-A.8		Test
BI	3	BI-3.3-B.11	c. No Write-in candidates	See Ballot Interaction, Objective ID BI-3.3-A.8		Test
BI	3	BI-3.3-B.12	d. Support split precincts	See Ballot Interaction, Objective ID BI-3.3-A.8		Test

BI	3	BI-3.3-B.13	e. Voting for N of M contests	See Ballot Interaction, Objective ID BI-3.3-A.8		Test
BI	3	BI-3.3-B.14	f. Support of all contests	See Ballot Interaction, Objective ID BI-3.3-A.8		Test
BI	3	BI-3.3-B.15	g. Support for all candidates	See Ballot Interaction, Objective ID BI-3.3-A.8		Test
BI	3	BI-3.3-B.16	h. Multi-language support (English, Spanish, Vietnamese)	See Ballot Interaction, Objective ID BI-3.3-A.8		Test
BI	3	BI-3.3-B.17	i. Referendum/Question contests	See Ballot Interaction, Objective ID BI-3.3-A.8		Test
BI	3	BI-3.3-B.18	For a Virginia General Election, the voting system must define the general ballot as follows:	Define ballot formats for a primary election, a general election, and special election including all voting options defined by the Code of Virginia.		Test
BI	3	BI-3.3-B.19	1. Partisan contests	See Ballot Interaction, Objective ID BI-3.3-B.18		Test
BI	3	BI-3.3-C.20	2. Non-partisan contests	See Ballot Interaction, Objective ID BI-3.3-B.18		Test
BI	3	BI-3.3-C.21	3. Write-in candidates	See Ballot Interaction, Objective ID BI-3.3-B.18		Test
BI	3	BI-3.3-C.22	4. Support for split precincts	See Ballot Interaction, Objective ID BI-3.3-B.18		Test

BI	3	BI-3.3-C.23	5. Voting for N of M contests	See Ballot Interaction, Objective ID BI-3.3-B.18		Test
BI	3	BI-3.3-C.24	6. Support of all contests	See Ballot Interaction, Objective ID BI-3.3-B.18		Test
BI	3	BI-3.3-C.25	7. Support for all candidates	See Ballot Interaction, Objective ID BI-3.3-B.18		Test
BI	3	BI-3.3-C.26	8. Multi-language support (English, Spanish, Vietnamese)	See Ballot Interaction, Objective ID BI-3.3-B.18		Test
BI	3	BI-3.3-C.27	9. Referendum/Question contests	See Ballot Interaction, Objective ID BI-3.3-B.18		Test
BI	3	BI-3.3-C.28	Voting systems must be able to read and store printed paper ballots.	§24.2-629(B)(13). State Board approval process of electronic voting systems.	It shall retain each printed ballot cast.	Test
BI	3	BI-3.3-C.29	All Write-ins can be segregated physically with a diverter or logically separated with an electronic Write-in Report.	§ 24.2-629 (B)(12). State Board approval process of electronic voting systems.	It shall be programmable to allow ballots to be separated when necessary.	Test
BI	3	BI-3.3-D.30	Voting systems that centrally process ballots must <u>physically separate Write-ins from other ballots</u> or logically separate ballots with Write-in votes electronically.	§ 24.2-629 (B)(12). State Board approval process of electronic voting systems.	It shall be programmable to allow ballots to be separated when necessary.	Test

BI	3	BI-3.3-D.31	The voting system must support multiple ballot styles on a single tabulator in a primary election.	§ 24.2-629 (B)(3). State Board approval process of electronic voting systems.	It shall be capable of processing ballots for all parties holding a primary election on the same day, but programmable in such a way that an individual ballot cast by a voter is limited to the party primary election in which the voter chooses to participate.	Test
BI	3	BI-3.3-D.32	The voting system can present an accurate ballot based on a voter's geopolitical subdivision based on the districts, regions, cities or other boundaries defined by the Commonwealth of Virginia.	§ 24.2-629 (B)(5). State Board approval process of electronic voting systems.	It shall enable the voter to cast votes for as many persons for an office as lawfully permitted, but no more.	Test
BI	3	BI-3.3-D.33	Each tabulator has a lifetime counter/ "protective counter" that cannot be reset without reloading the firmware.	§ 24.2-629 (B)(9). State Board approval process of electronic voting systems.	It shall be provided with a "protective counter," whereby any operation of the machine before or after the election will be detected.	Test
BI	3	BI-3.3-D.34	The "protective counter" increments correctly for each ballot accepted by the tabulator.	§ 24.2-629 (B)(9). State Board approval process of electronic voting systems.	It shall be provided with a "protective counter," whereby any operation of the machine before or after the election will be detected.	Test
BI	3	BI-3.3-D.35	The "protective counter" does not increment for ballots not accepted by the tabulator.	§ 24.2-629 (B)(9). State Board approval process of electronic voting systems.	It shall be provided with a "protective counter," whereby any operation of the machine before or after the election will be detected.	Test

BI	3	BI-3.3-D.36	Each tabulator has a “public counter” which tracks the number of ballots processed and accepted for an election.	§ 24.2-629 (B)(10). State Board approval process of electronic voting systems.	It shall be provided with a counter that at all times during an election shall show how many persons have voted.	Test
BI	3	BI-3.3-D.37	The “public counter” increments correctly for each ballot accepted by the tabulator.	§ 24.2-629 (B)(10). State Board approval process of electronic voting systems.	It shall be provided with a counter that at all times during an election shall show how many persons have voted.	Test
BI	3	BI-3.3-D.38	The “public counter” does not increment for ballots not accepted by the tabulator.	§ 24.2-629 (B)(10). State Board approval process of electronic voting systems.	It shall be provided with a counter that at all times during an election shall show how many persons have voted.	Test
CA	4	CA-4.4-A.1	The malware protection mechanisms for COTS devices providing EMS functionality must be updatable.	15.3-B (VMSG 2.0)		Demo
CA	4	CA-4.4-A.2	The voting system documentation must include the process and procedures for updating malware protection mechanisms.	15.3-C (VMSG 2.0)		Demo
CA	4	CA-4.4-A.3	COTS workstations and servers providing EMS functionality must immediately notify an election official when malware is detected.	15.3-D (VMSG 2.0)		Demo
CA	4	CA-4.4-A.4	The voting system must log instances of detecting malware.	15.3-E (VMSG 2.0)		Demo
CA	4	CA-4.4-A.5	COTS workstations and servers providing EMS functionality must provide a notification upon the removal or remediation of malware.	15.3-F (VMSG 2.0)		Demo

CA	4	CA-4.4-A.6	The voting system must log malware remediation activities.	15.3-G (VMSG 2.0)		Demo
LA	5	LA-5.5-A.1	The voting system can be programmed for a primary, general, or special election.	The voting system must be able to perform the Logic and Accuracy Tests.		Test
LA	5	LA-5.5-A.2	The voting system can process a known test deck containing valid marks, non-valid marks, undervotes, overvotes, and Write-in votes.	The voting system must be able to perform the Logic and Accuracy Tests.		Test
LA	5	LA-5.5-A.3	The voting system can report accurate results from the known test deck.	The voting system must be able to perform the Logic and Accuracy Tests.		Test
LA	5	LA-5.5-A.4	The voting system provides a verifiable means that all test data are removed after the completion of the Logic and Accuracy Test from the voting system.	The voting system must be able to perform the Logic and Accuracy Tests.		Test
LA	5	LA-5.5-A.5	Test ballots can be produced by a Ballot Marking Device (BMD) and can be used in the known test deck.	The voting system must be able to perform the Logic and Accuracy Tests.		Test
OM	6	OM-6.6-A.1	The voting system's documentation must include the hardware and software information for the critical components defined in the 14.3-B and at minimum list the following information for each component:	14.3-C (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-A.2	component name;	14.3-C.1 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-A.3	manufacturer;	14.3-C.2 (VMSG 2.0)		Doc/Demo

OM	6	OM-6.6-A.4	model or version; and	14.3-C.3 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-A.5	applicable platform for software (e.g., Windows or Linux).	14.3-C.4 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-A.6	The voting system documentation must include the network architecture of any internal network used by any portion of the voting system.	15.4-A (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-A.7	The voting system documentation must list security configurations and be accompanied by network security best practices.	15.4-B (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-A.8	The voting system documentation must include information about how wireless is disabled within the voting system.	15.4-C (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-A.9	System overview documentation must include high-level functional diagrams of the voting system that include all its components. The diagrams must portray how the various components relate and interact.	3.1.1-B (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-B.10	System overview documentation must include written descriptions and diagrams that present the following, as applicable:	3.1.1-C (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-B.11	a description of the functional components (or subsystems) as defined by the manufacturer (for example, environment, election management and control, vote recording, vote conversion, reporting, and their logical relationships);	3.1.1-C.1 (VMSG 2.0)		Doc/Demo

OM	6	OM-6.6-B.12	a description of the operational environment of the system that provides an overview of the hardware, firmware, software, and communications structure;	3.1.1-C.2 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-B.13	a concept of operations that explains each system function and how the function is achieved in the design;	3.1.1-C.3 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-B.14	descriptions of the functional and physical interfaces between components;	3.1.1-C.4 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-B.15	identification of all COTS products (both hardware and software) included in the system or used as part of the system's operation, identifying the name, manufacturer, and version used for each such component;	3.1.1-C.5 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-B.16	benchmark directory listings for all software, firmware, and associated documentation included in the manufacturer's release in the order in which each piece of software or firmware would normally be installed upon system setup and installation.	3.1.1-C.9 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-B.17	System overview documentation must include full identification of all software and firmware items, indicating items that were:	3.1.1-D (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-B.18	written in-house including subcontracted;	3.1.1-D.1 (VMSG 2.0)		Doc/Demo

OM	6	OM-6.6-B.19	procured as COTS, unmodified; and	3.1.1-D.2 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-C.20	procured as COTS and modified, including descriptions of the modifications to the software or firmware and to the default configuration options.	3.1.1-D.3 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-C.21	Software installation documentation must include the following information for each piece of software to be installed or used to install software on programmed devices of the voting system:	3.1.4-B (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-C.22	software product name;	3.1.4-B.1 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-C.23	software version number	3.1.4-B.2 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-C.24	software manufacturer name;	3.1.4-B.3 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-C.25	software manufacturer contact information;	3.1.4-B.4 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-C.26	type of software (application logic, border logic, third party logic, COTS software, or installation software);	3.1.4-B.5 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-C.27	list of software documentation; and	3.1.4-B.6 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-C.28	component identifiers (such as filenames) of the software, and type of software component (executable code, source code, or data).	3.1.4-B.7 (VMSG 2.0)		Doc/Demo

OM	6	OM-6.6-C.29	Manufacturers must provide a specific system operations document for use by all personnel who support pre-election and election preparation, polling place activities, and central counting activities, as applicable, regarding all system functions and operations. It must:	3.1.5-A (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-D.30	provide a detailed description of procedures required to initiate, control, and verify proper system operation;	3.1.5-A.1 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-D.31	provide procedures that clearly enable the operator to assess the correct flow of system functions (as evidenced by system-generated status and information messages);	3.1.5-A.2 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-D.32	provide procedures that clearly enable the administrator to intervene in system operations to recover from an abnormal system state;	3.1.5-A.3 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-D.33	define and illustrate the procedures and system prompts for situations where operator intervention is required to load, initialize, and start the system;	3.1.5-A.4 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-D.34	define and illustrate procedures to enable and control the external interface to the system operating environment if supporting hardware and software are involved. (This information is provided for the interaction of the system with other data	3.1.5-A.5 (VMSG 2.0)		Doc/Demo

			processing systems or data interchange protocols.);			
OM	6	OM-6.6-D.35	provide administrative procedures and off-line operator duties (if any) if they relate to the initiation or termination of system operations, to the assessment of system status, or to the development of an audit trail;	3.1.5-A.6 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-D.36	support successful election definition and software installation and control by central election officials;	3.1.5-A.7 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-D.37	provide a schedule and steps for the software and ballot installation, including a table outlining the key dates relative to the start of voting, events, and deliverables; and	3.1.5-A.8 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-D.38	specify diagnostic tests that may be employed to identify problems in the system, verify the correction of problems, and isolate and diagnose faults from various system states.	3.1.5-A.9 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-D.39	The operations document must identify all facilities, furnishings, fixtures, and utilities that will be required for equipment operations, including a statement of all requirements and restrictions regarding:	3.1.5-G (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-E.40	environmental protection;	3.1.5-G.1 (VMSG 2.0)		Doc/Demo

OM	6	OM-6.6-E.41	electrical service;	3.1.5-G.2 (VSG 2.0)		Doc/Demo
OM	6	OM-6.6-E.42	recommended auxiliary power;	3.1.5-G.3 (VSG 2.0)		Doc/Demo
OM	6	OM-6.6-E.43	telecommunications service; and	3.1.5-G.4 (VSG 2.0)		Doc/Demo
OM	6	OM-6.6-E.44	any other facility or resource required for the proper installation and operation of the system.	3.1.5-G.5 (VSG 2.0)		Doc/Demo
OM	6	OM-6.6-E.45	the number and skill levels of personnel required for each task;	3.1.6-F.2 (VSG 2.0)		Doc/Demo
OM	6	OM-6.6-E.46	the parts, supplies, special maintenance equipment, software tools, or other resources needed for maintenance; and	3.1.6-F.3 (VSG 2.0)		Doc/Demo
OM	6	OM-6.6-E.47	any maintenance tasks that must be coordinated with the manufacturer or a third party (such as coordination that may be needed for COTS used in the system).	3.1.6-F.4 (VSG 2.0)		Doc/Demo
OM	6	OM-6.6-E.48	Maintenance documentation must identify specific procedures to be used in diagnosing and correcting problems in the system hardware, firmware, and software. Descriptions must include:	3.1.6-G (VSG 2.0)		Doc/Demo
OM	6	OM-6.6-E.49	steps to replace failed or deficient equipment;	3.1.6-G.1 (VSG 2.0)		Doc/Demo
OM	6	OM-6.6-F.50	steps to correct deficiencies or faulty operations in software or firmware;	3.1.6-G.2 (VSG 2.0)		Doc/Demo
OM	6	OM-6.6-F.51	modifications that are necessary to coordinate any modified or upgraded	3.1.6-G.3 (VSG 2.0)		Doc/Demo

			software or firmware with other modules;			
OM	6	OM-6.6-F.52	number and skill levels of personnel needed to accomplish each procedure;	3.1.6-G.4 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-F.53	special maintenance equipment, parts, supplies, or other resources needed to accomplish each procedure; and	3.1.6-G.5 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-F.54	any coordination required with the manufacturer, or other party, for COTS.	3.1.6-G.6 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-F.55	Maintenance documentation must identify and describe any special purpose test or maintenance equipment recommended for fault isolation and diagnostic purposes.	3.1.6-H (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-F.56	Maintenance documentation must include detailed documentation of parts and materials needed to operate and maintain the system.	3.1.6-I (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-F.57	Maintenance documentation must include a complete list of approved parts and materials needed to operate and maintain the system. This list must contain sufficient descriptive information to identify all parts by:	3.1.6-J (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-F.58	type,	3.1.6-J.1 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-F.59	size,	3.1.6-J.2 (VMSG 2.0)		Doc/Demo

OM	6	OM-6.6-G.60	value or range,	3.1.6-J.3 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-G.61	manufacturer's designation,	3.1.6-J.4 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-G.62	individual quantities needed, and	3.1.6-J.5 (VMSG 2.0)		Doc/Demo
OM	6	OM-6.6-G.63	sources from which they may be obtained.	3.1.6-J.6 (VMSG 2.0)		Doc/Demo
RA	7	RA-7.7-A.1	Allow for the selection of at least three (3) rankings in a ranked choice voting (RCV) race.	1VAC20-100-10. Definitions (Ranked Choice Voting). "Ranked choice undervote" means a voter has left a ranking unassigned. 1VAC20-100-10. Definitions (Ranked Choice Voting). "Ranked choice voting" means a method of casting and tabulating votes in which ... voters rank candidates in order of preference 1VAC20-100-50(A). Ranked choice voting tabulation. For all elections for an office conducted by ranked choice voting, only first-choice rankings shall be counted in the first-choice ranking tabulation round.	1VAC20-100-70(B). Election Results (Ranked Choice Voting). A record of votes cast at all rankings, as tabulated in the first-choice ranking tabulation round, shall be created and retained for public inspection and copying. 1VAC20-100-65. Write-Ins (Ranked Choice Voting). 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. 1VAC20-100-10. Definitions (Ranked Choice Voting).	Test

					"Ranked choice overvote" means a voter assigned more than one candidate the same ranking.	
RA	7	RA-7.7-A.2	Tabulate and report on tapes the first-choice rankings, undervotes, overvotes, and write-in votes.	See RCV, Objective ID RA-7.7-A.1 (RCV)	See RCV, Objective ID RA-7.7-A.1 (RCV)	Test
RA	7	RA-7.7-A.3	Create a cast vote record (CVR) of all rankings, undervotes, overvotes, and write-ins.	See RCV, Objective ID RA-7.7-A.1 (RCV)	See RCV, Objective ID RA-7.7-A.1 (RCV)	Test
RA	7	RA-7.7-A.4	Allow for write-ins to be assigned rankings for tabulation in rank choice voting.	See RCV, Objective ID RA-7.7-A.1 (RCV)	See RCV, Objective ID RA-7.7-A.1 (RCV)	Test
RC	8	RC-8.8-A.1	The voting system can be programmed to recount a single contest.	§ 24.2-802.2. Procedure for recount. For ballot scanner machines, the recount officials shall rerun all the machine-readable ballots through a scanner programmed to count only the votes for the parties or issue in question in the recount and to set aside all ballots containing write-in votes, overvotes, and undervotes. The ballots that are set aside, any ballots not accepted by the scanner, and any ballots for which a scanner could not be programmed to meet	If the total number of machine-readable ballots reported as counted by the scanner plus the total number of ballots set aside by the scanner do not equal the total number of ballots rerun through the scanner, then all ballots cast on ballot scanner machines for that precinct shall be set aside to be counted by hand using the standards promulgated by the State Board pursuant to §24.2-802. Prior to running the machine-readable ballots through the ballot scanner machine, the recount officials shall ensure that logic and accuracy tests have been successfully performed on each	Test

				the programming requirements of this subdivision, shall be hand counted using the standards promulgated by the State Board pursuant to §24.2-802.	scanner after the scanner has been programmed. The result calculated for ballots accepted by the ballot scanner machine during the recount shall be considered correct for those machine-readable ballots unless the court finds sufficient cause to rule otherwise.	
RC	8	RC-8.8-A.2	II –Voting systems must be able to display on tape only the count and totals for contest that is to be recounted	§ 24.2-802.2. Procedure for recount.	See Recount, Objective ID RC-8.8-A.1 and Objective ID RCV, RA-7.7-A.1 (RCV)	Test
RE	9	RE-9.9-A.1	All reports must include the date and time of the report's generation, including hours, minutes, and seconds.	1.1.9-M (VMSG 2.0)		Test
RE	9	RE-9.9-A.2	Each test provided in a manufacturer-submitted report of internal testing performed (technical data package (TDP)) must, at least, include the following information:	1.3-A (VMSG 2.0)		Doc
RE	9	RE-9.9-A.3	requirement(s) under test;	1.3-A.1 (VMSG 2.0)		Doc
RE	9	RE-9.9-A.4	items under test to exercise a given requirement;	1.3-A.2 (VMSG 2.0)		Doc
RE	9	RE-9.9-A.5	pass-fail criteria necessary to determine whether requirement has passed the test of conformity to the requirement;	1.3-A.3 (VMSG 2.0)		Doc
RE	9	RE-9.9-A.6	evidence (observations, data) expected to provide justification for satisfying or failing a given pass-fail condition;	1.3-A.4 (VMSG 2.0)		Doc

RE	9	RE-9.9-A.7	test procedures necessary to provide, observe, record, analyze, and interpret this evidence relative to pass-fail criteria;	1.3-A.5 (VMSG 2.0)		Doc
RE	9	RE-9.9-A.8	where applicable, descriptions of the causes of variation, ambiguity, noise, or observed errors in observed and recorded evidence during tested procedures;	1.3-A.6 (VMSG 2.0)		Doc
RE	9	RE-9.9-A.9	where applicable, descriptions of any necessary techniques, procedures, or processes applied to normalize or clean data prior to subjecting it to data analysis and interpretation relative to pass-fail criteria;	1.3-A.7 (VMSG 2.0)		Doc
RE	9	RE-9.9-B.10	report of actual tests performed and their results; and	1.3-A.8 (VMSG 2.0)		Test
RE	9	RE-9.9-B.11	description and justification if a given test cannot be fully performed or exercised due to internal resource constraints, including description of alternative means of verification.	1.3-A.9 (VMSG 2.0)		Doc
RE	9	RE-9.9-B.12	The voting system can support the ability to print multiple results tapes. The voting system allows for the tapes to be printed in any format and position. Including list below:	§ 24.2-658. Machines with printed return sheets The voting system can support the ability to print multiple results tapes. The voting system allows for the tapes to be printed in at least the formats and positions listed	If machines that print returns are used, the printed inspection sheet and two copies of the printed return sheet containing the results of the election for each machine.	Test

RE	9	RE-9.9-B.13	a. Total precinct ballots cast: (how many ballots were fed through the machine). Can be printed in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-B.14	b. Contest: Contest of ballots cast (all ballots fed into machine that had that contest on it, including overvotes and undervotes). Can be printed in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-B.15	c. Contest: Write-in total. Can print in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-B.16	d. Contest: Votes cast for each candidate. Can print in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-B.17	e. Contest: Overvote totals. Can print in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-B.18	f. Multi-seat contest: Ballots cast. Can print in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-B.19	g. Multi-seat contest: Votes cast for each candidate. Can print in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-C.20	h. Multi-seat contest: Write-ins. Can print Write-ins, in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-C.21	i. Multi-seat contest: Overvotes. Can print in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test

RE	9	RE-9.9-C.22	j. Multi-seat contest: Undervotes. Can print in any format or order required on tape. For example, a "vote for 3" for which a ballot has only voted for one candidate would have 2 undervotes displayed on the tape. This way it adds up to the total ballots cast for the contest x the amount of seats to be held (in this case 1 vote+2undervotes= 1 ballots cast x 3 seats to be filled)	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-C.23	k. Ranked Choice Votes: Ballots cast. Can print in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-C.24	l. Ranked Choice Votes (RCV): First round votes Cast. Can print first round votes cast in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-C.25	m. Ranked Choice Votes: Write-ins. Can print in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-C.26	n. Ranked Choice Votes: First round overvotes. Can print in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-C.27	o. Ranked Choice Votes (RCV): First round undervotes (if first round is skipped, it is counted as one undervote). Can be printed in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-C.28	p. Ranked Choice Votes (RCV): Write-in image. Can print in any format or order required on tape.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test

RE	9	RE-9.9-C.29	q. RLA: Vote totals by contest by batch or report that does the same. Can print in any format or order required on tape and in a report.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-D.30	r. RLA: Ability to batch on tabulator and print batch information in any format or order as required on tape and in a report.	See Reporting, Objective ID RE-9.9-B.12	See Reporting, Objective ID RE-9.9-B.12	Test
RE	9	RE-9.9-D.31	The voting system can export the CVR to a portable transport media. The voting system must produce a CVR in human-readable format.	The CVR must integrate in a readable format.		Test
RE	9	RE-9.9-D.32	The tabulation component of the voting system must have a public counter. Upon opening of the polls, the tabulator must print a zero-proof report and the voting system must provide a means by which the report and the counter can be reconciled.	§ 24.2-637. Furniture and equipment to be at polling places.	Before the time to open the polls, each electoral board shall ensure that the general registrar has the voting and counting equipment and all necessary furniture and materials at the polling places, with counters on the voting or counting devices set at zero (000).	Test
RE	9	RE-9.9-D.33	The voting system must produce a CVR in human-readable format.	The voting system must create a Cast Vote Record (CVR) defined as, a Permanent record of all votes produced by a single voter whether in electronic, paper or other form, for each ballot for all elections.		Test
RL	10	RL-10.10-A.1	The voting system must be capable of producing a CVR for purposes of conducting	§ 24.2-671.2. Risk-limiting Audits C. The Department shall provide that the	for which certification by the State Board is required under § 24.2-680; and	Test

			a post-election risk-limiting audit.	following risk-limiting audits be conducted: 1. In the year of a general election for members of the United States House of Representatives, a risk-limiting audit of at least one randomly selected contested race for such office; 2. In the year of a general election for members of the General Assembly, a risk-limiting audit of at least one randomly selected contested race for such office; 3. In any year in which there is not a general election for a statewide office, a risk-limiting audit of at least one randomly selected contested race for a local office, including constitutional offices,	4. In any year, any other risk-limiting audit of a contested race that is necessary to ensure that each locality participates in a risk-limiting audit of an office within its jurisdiction at least once every five years or that the State Board finds appropriate. Such audits must be approved by at least a two-thirds majority vote of all members of the Board. D. A local electoral board may request that the State Board approve the conduct of a risk-limiting audit for a contested race within the local electoral board's jurisdiction. The state board shall promulgate regulations for submitting such requests. The State Board shall grant an extension of the local electoral board's certification deadline under § 24.2-671 as necessary to accommodate the conduct of a risk-limiting audit conducted pursuant to this subsection. The Department may count a risk limit voting audit conducted pursuant to this subsection toward the	
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					requirement in subdivision C 4.	
SI	11	SI- 11.11- A.1	The voting system must prevent:	11.1-C (VMSG 2.0)		Demo
SI	11	SI- 11.11- A.2	the logging capability from being disabled;	11.1-C.1 (VMSG 2.0)		Test
SI	11	SI- 11.11- A.3	the log entries from being modified in an undetectable manner; and	11.1-C.2 (VMSG 2.0)		Demo
SI	11	SI- 11.11- A.4	The deletion of logs; with the exception of log rotation.	11.1-C.3 (VMSG 2.0)		Demo
SI	11	SI- 11.11- A.5	The voting system access control mechanisms must distinguish at least the following voting stages from Table 11-1:	11.2.1-C (VMSG 2.0)		Demo
SI	11	SI- 11.11- A.6	Pre-voting - Loading, and configuring device software, maintenance, loading election-specific files, preparing for election day usage	11.2.1-C.1 (VMSG 2.0)		Demo
SI	11	SI- 11.11- A.7	Activated - Activating the ballot, printing, casting, spoiling the ballot	11.2.1-C.2 (VMSG 2.0)		Demo
SI	11	SI- 11.11- A.8	Suspended - Occurring when an election official suspends voting	11.2.1-C.3 (VMSG 2.0)		Demo
SI	11	SI- 11.11- A.9	Post-voting - Closing polls, tabulating votes, printing records	11.2.1-C.4 (VMSG 2.0)		Demo
SI	11	SI- 11.11- B.10	The voting system must allow only an administrator to configure the permissions and functionality for each identity, group or role, or process to include account and group or role creation, modification, disablement, and deletion.	11.2.1-D (VMSG 2.0)		Demo

SI	11	SI-11.11-B.11	The voting system must allow only an administrator to create or modify permissions assigned to specific groups or roles.	11.2.1-E (VMSG 2.0)		Test
SI	11	SI-11.11-B.12	The voting system must allow only an administrator to create or assign the groups or roles.	11.2.1-F (VMSG 2.0)		Test
SI	11	SI-11.11-B.13	Voting systems that implement role-based access control must support the recommendations for Core Role Based Access Control (RBAC) in the ANSI INCITS 359-2004 American National Standard for Information Technology – Role Based Access Control [ANSI04] document.	11.2.2-A (VMSG 2.0)		Demo
SI	11	SI-11.11-B.14	At minimum, voting systems that implement RBAC must define groups or roles with the role descriptions within Table 11-2.	11.2.2-B (VMSG 2.0)		Demo
SI	11	SI-11.11-B.15	At minimum, the voting system must use the groups or roles from Table 11-2 – Minimum voting system groups or roles for RBAC and the voting stages from Table 11-1 – Voting stage descriptions, to assign the minimum permissions in Table 11-3.	11.2.2-C (VMSG 2.0)		Demo
SI	11	SI-11.11-B.16	Administrator (Table 11-3)	11.2.2-C.1 (VMSG 2.0)		Demo
SI	11	SI-11.11-B.17	System - EMS; Pre-Voting - Full Access; Activated - Full Access; Suspended - Full Access; Post-Voting - Full Access	11.2.2-C.1.a (VMSG 2.0)		Demo

SI	11	SI-11.11-B.18	System - Electronic BMD; Pre-Voting - Full Access; Activated - Full Access; Suspended - Full Access; Post-Voting - Full Access	11.2.2-C.1.b (VVSG 2.0)		Demo
SI	11	SI-11.11-B.19	System - Voter-Facing Scanner; Pre-Voting - Full Access; Activated - Full Access; Suspended - Full Access; Post-Voting - Full Access	11.2.2-C.1.c (VVSG 2.0)		Demo
SI	11	SI-11.11-C.20	At a minimum, the voting system, to include scanners, tabulators, EMS must be capable of using multi-factor authentication to verify a user has authorized access to perform critical operations, including:	11.3.1-B (VVSG 2.0)		Test
SI	11	SI-11.11-C.21	runtime software updates to the certified voting system;	11.3.1-B.1 (VVSG 2.0)		Test
SI	11	SI-11.11-C.22	aggregation and tabulation;	11.3.1-B.2 (VVSG 2.0)		Test
SI	11	SI-11.11-C.23	enabling network functions;	11.3.1-B.3 (VVSG 2.0)		Test
SI	11	SI-11.11-C.24	changing device states, including opening and closing the polls;	11.3.1-B.4 (VVSG 2.0)		Test
SI	11	SI-11.11-C.25	deleting or modifying the CVRs and ballot images; and	11.3.1-B.5 (VVSG 2.0)		Test
SI	11	SI-11.11-C.26	modifying authentication mechanisms.	11.3.1-B.6 (VVSG 2.0)		Test
SI	11	SI-11.11-C.27	The voting system must authenticate the administrator with a multi-factor authentication mechanism.	11.3.1-C (VVSG 2.0)		Test

SI	11	SI-11.11-C.28	The voting system must, at minimum, meet the password complexity requirements within the latest version of NIST SP 800-63B Digital Identity Guidelines standards.	11.3.2-B (VMSG 2.0)		Test
SI	11	SI-11.11-C.29	The voting system must store authentication data in a way that ensures confidentiality and integrity are preserved.	11.3.2-C (VMSG 2.0)		Doc
SI	11	SI-11.11-D.30	The voting system must compare all passwords against a manufacturer-specified list of well-known weak passwords and disallow the use of these weak passwords.	11.3.2-D (VMSG 2.0)		Test
SI	11	SI-11.11-D.31	Any unauthorized physical access to voting systems must leave physical evidence that an unauthorized event has taken place.	12.1-A (VMSG 2.0)		Test
SI	11	SI-11.11-D.32	The voting system must allow only authenticated system administrators to access and modify voting device configuration files.	13.1.1-A (VMSG 2.0)		Test
SI	11	SI-11.11-D.33	If a voting system has network functionality, the voting system application must visually show an indicator within the management interface to confirm that wireless networking functionality is disabled.	14.2-D (VMSG 2.0)		Test
SI	11	SI-11.11-D.34	The voting system software must import only library components that are necessary.	14.2-I (VMSG 2.0)		Doc

SI	11	SI-11.11-D.35	The voting system documentation must include the plan for how to address vulnerabilities found in the voting system and at minimum include the following:	14.2-J (VMSG 2.0)		Doc
SI	11	SI-11.11-D.36	how the voting system design process identifies and addresses well-known vulnerabilities;	14.2-J.1 (VMSG 2.0)		Doc
SI	11	SI-11.11-D.37	disclosure of all known vulnerabilities within the system,	14.2-J.2 (VMSG 2.0)		Doc
SI	11	SI-11.11-D.38	a patch management plan; and	14.2-J.3 (VMSG 2.0)		Doc
SI	11	SI-11.11-D.39	the method to receive and send reports of vulnerabilities.	14.2-J.4 (VMSG 2.0)		Doc
SI	11	SI-11.11-E.40	The underlying voting system platform must be free of well-known vulnerabilities as identified in the vulnerability management plan.	14.2-K (VMSG 2.0)		Doc
SI	11	SI-11.11-E.41	The voting system must protect the integrity and authenticity of the allowlist configuration files.	14.3.2-D (VMSG 2.0)		Doc
SI	11	SI-11.11-E.42	The voting system's documentation must contain a supply chain risk management strategy that at minimum includes the following:	14.3-A (VMSG 2.0)		Doc
SI	11	SI-11.11-E.43	a reference to the template or standard used, if any, to develop the supply chain risk management strategy;	14.3-A.1 (VMSG 2.0)		Doc
SI	11	SI-11.11-E.44	the assurance requirements to mitigate supply chain risks;	14.3-A.2 (VMSG 2.0)		Doc

SI	11	SI-11.11-E.45	the contract language that requires suppliers and partners to provide the appropriate information to meet the assurance requirements of the supply chain risk management strategy;	14.3-A.3 (VMSG 2.0)		Doc
SI	11	SI-11.11-E.46	the plan for reviewing and auditing suppliers and partners; and	14.3-A.4 (VMSG 2.0)		Doc
SI	11	SI-11.11-E.47	the response and recovery plan for a supply chain risk incident.	14.3-A.5 (VMSG 2.0)		Doc
SI	11	SI-11.11-E.48	The voting system's documentation must include a list of critical components and suppliers defined by a criticality analysis and supplier impact analysis	14.3-B (VMSG 2.0)		Doc
SI	11	SI-11.11-E.49	The voting system must authenticate administrators before an operating system update is performed.	14.4-A (VMSG 2.0)		Test
SI	11	SI-11.11-F.50	The voting system must authenticate administrators before a software update to the voting system application and related software.	14.4-B (VMSG 2.0)		Test
SI	11	SI-11.11-F.51	The voting system must authenticate administrators before a firmware or driver update.	14.4-C (VMSG 2.0)		Test
SI	11	SI-11.11-F.52	The voting system must be capable of updating rules and policies for network appliances.	15.4-D (VMSG 2.0)		Test
SI	11	SI-11.11-F.53	Application logic must contain no unstructured control constructs.	2.3.1-A (VMSG 2.0)		Doc
SI	11	SI-11.11-F.54	Arbitrary branches (also known as go to's) must not be used.	2.3.1-B (VMSG 2.0)		Doc

SI	11	SI-11.11-F.55	Exceptions must only be used for abnormal conditions. Exceptions must not be used to redirect the flow of control in normal ("non-exceptional") conditions.	2.3.1-C (VMSG 2.0)		Doc
SI	11	SI-11.11-F.56	Unstructured exception handling (for example, On Error GoTo, setjmp/longjmp, or explicit tests for error conditions after every executable statement) is prohibited.	2.3.1-D (VMSG 2.0)		Doc
SI	11	SI-11.11-F.57	Voting system software must not contain hard-coded, including the use of:	2.3-D (VMSG 2.0)		Doc
SI	11	SI-11.11-F.58	passwords, or	2.3-D.1 (VMSG 2.0)		Doc
SI	11	SI-11.11-F.59	cryptographic keys.	2.3-D.2 (VMSG 2.0)		Doc
SI	11	SI-11.11-G.60	The voting system application must defend against SQL injection.	2.5.4-N (VMSG 2.0)		Doc
SI	11	SI-11.11-G.61	Any structured statement or command being prepared using dynamic data (including user input) to be sent to a database or other process must parameterize the data inputs and apply strict type casting and content filters on the data (such as prepared statements).	2.5.4-O (VMSG 2.0)		Doc
SI	11	SI-11.11-G.62	When recovering from non-catastrophic failure of a device or from any error or malfunction that is within the operator's ability to correct, the system must restore the device to the last known good state existing	2.6-C (VMSG 2.0)		Test

			immediately before the error or failure, without loss or corruption of voting data previously stored in the device.			
SI	11	SI-11.11-G.63	The E2E cryptographic protocol used by the cryptographic E2E verifiable voting system must be evaluated and approved through a public process established by the EAC.	9.1.6-A (VMSG 2.0)		Doc
SI	11	SI-11.11-G.64	A cryptographic E2E verifiable voting system must undergo an independent evaluation to verify it correctly and securely implements approved E2E cryptographic protocol.	9.1.6-B (VMSG 2.0)		Doc
SI	11	SI-11.11-G.65	G- Hardware Memory Devices Memory devices or USB drives provided with the voting system and/or supplied to localities must follow these standards:	G- Hardware Guidelines		Test
SI	11	SI-11.11-G.66	1. Must be pre-formatted and blank per the DoD 5220.22-M wiping standard to prevent any preloaded software from being inadvertently installed on the system. Also, the system must use DoD 5220.22-M wiping standards to create blank systems	G- Hardware Guidelines		Test
SI	11	SI-11.11-G.67	2. Must be cryptographic and FIPS 140-2 v2 compliant	G- Hardware Guidelines		Test
SI	11	SI-11.11-G.68	3. Must use SHA 256 hashing algorithm or higher	G- Hardware Guidelines		Test

SI	11	SI-11.11-G.69	4. Must comply with applicable Commonwealth information security standards	G- Hardware Guidelines		Test
SI	11	SI-11.11-H.70	5. Must comply with applicable policies, guidelines, and directives as adopted and modified by the SBE from time to time	G- Hardware Guidelines		Test
SI	11	SI-11.11-H.71	E - Software Patching Guidelines All vendors must comply with the policies, guidelines, and directives regarding software patching of voting systems as adopted and modified by the EAC and the SBE from time to time	All vendors must comply with the policies, guidelines, and directives regarding software patching of voting systems as adopted and modified by the EAC and the SBE from time to time		Test
SI	11	SI-11.11-H.72	Only those with administrative rights can alter the instruction to voters.	The voting system must allow instruction to voters to be modified through administrative rights.		Test
SI	11	SI-11.11-H.73	The tabulation component of the voting system must have the ability to be physically locked and require a key.	§ 24.2-634. Locking and securing after preparation.	When voting equipment has been properly prepared for an election, it shall be locked against voting and sealed, or if a voting or counting machine cannot be sealed with a numbered seal, it shall be locked with a key. The equipment keys and any electronic activation devices shall be retained in the custody of the general registrar and delivered to the officers of election as provided in §	Test

					24.2-639. After the voting equipment has been delivered to the polling places, the general registrar shall provide ample protection against tampering with or damage to the equipment.	
SI	11	SI-11.11-H.74	The voting system can be verified to comply with the SCAP checklist and all manufacturer procedures and specifications.	The voting system must be hardened using the voting system provider's procedures and specifications.		Test
SI	11	SI-11.11-H.75	The Security Content Automation Protocol (SCAP) for the voting system must be provided.	The voting system must be hardened using the voting system provider's procedures and specifications.		Test
SI	11	SI-11.11-H.76	The voting system must require a minimum 8-character password.	The voting system must comply with the latest password protection standards.		Test
SI	11	SI-11.11-H.77	The voting system will not transfer information between or among voting machines wirelessly. Here, wirelessly means "via electromagnetic waves without the use of electrical conductors."	§ 24.2-625.2. Wireless communications at polling places.	There shall be no wireless communications on election day, while the polls are open, between or among voting machines within the polling place or between any voting machine within the polling place and any equipment outside the polling place. For purposes of this section, the term wireless communication shall	Test

					mean the ability to transfer information via electromagnetic waves without the use of electrical conductors.	
SI	11	SI-11.11-H.78	The voting system will be unable to communicate wirelessly between devices inside and outside the polling place. Here, wirelessly means “via electromagnetic waves without the use of electrical conductors.”	§ 24.2-625.2. Wireless communications at polling places. The voting system cannot have built-in wireless communications capabilities. The system must not have software or firmware that allows wireless capability. Software or firmware that disables wireless capability does not meet the criteria.	There shall be no wireless communications on election day, while the polls are open, between or among voting machines within the polling place or between any voting machine within the polling place and any equipment outside the polling place. For purposes of this section, the term wireless communication shall mean the ability to transfer information via electromagnetic waves without the use of electrical conductors.	Test
SI	11	SI-11.11-H.79	No component of the voting system, scanner or tabulator can have wireless communications hardware, to include, wireless network cards, Bluetooth, infrared, etc.	The voting system cannot have the built-in wireless communications abilities.	The voting system cannot have built-in wireless communications capabilities. The system must not have software or firmware that allows wireless capability. Software or firmware that disables wireless capability does not meet the criteria.	Test
SI	11	SI-11.11-I.80	All modules are cryptographic and are FIPS 140-2 v2 compliant.	The voting system must comply with the latest encryption standard.		Test

SI	11	SI-11.11-I.81	All stored images are digitally signed.	The voting system must comply with the latest encryption standard.		Test
SI	11	SI-11.11-I.82	All digital hashes use SHA256 hashing algorithm or higher.	The voting system must comply with the latest encryption standard.		Test
SI	11	SI-11.11-I.83	Hash testing performed on voting system to ensure software is the same as EAC certified software version presented for certification	The voting system must comply with the latest encryption standard.		Test
VP	12	VP-12.12-A.1	System use of voter information The voting system must be incapable of accepting, processing, storing, and reporting identifying information about a specific voter.	10.1-A (VMSG 2.0)		Demo
VP	12	VP-12.12-A.2	Identifiers used for audits. Identifiers used for tying a cast vote record (CVR) and ballot images to physical paper ballots must be distinct from identifiers used for indirect associations.	10.2.2-A (VMSG 2.0)		Test
VP	12	VP-12.12-A.3	The voting system must not log any information:	15.1-C (VMSG 2.0)		Demo
VP	12	VP-12.12-A.4	identifying a specific voter, and	15.1-C.1 (VMSG 2.0)		Demo
VP	12	VP-12.12-A.5	connecting a voter to a specific ballot.	15.1-C.2 (VMSG 2.0)		Demo
VP	12	VP-12.12-A.6	The voter cannot be identified in any manner on a ballot.	§ 24.2-629 (B)(11). State Board approval process of electronic voting systems.	It shall ensure voting in absolute secrecy. Ballot scanner machines shall provide for the secrecy of the ballot and a method	Test

					to conceal the voted ballot.	
VP	12	VP-12.12-A.7	The voting system audit records contain no information on a specific voter.	§ 24.2-629 (B)(11). State Board approval process of electronic voting systems.	It shall ensure voting in absolute secrecy. Ballot scanner machines shall provide for the secrecy of the ballot and a method to conceal the voted ballot.	Test
VP	12	VP-12.12-A.8	The voting system must provide a “privacy sleeve.”	§ 24.2-629 (B)(11). State Board approval process of electronic voting systems.	It shall ensure voting in absolute secrecy. Ballot scanner machines shall provide for the secrecy of the ballot and a method to conceal the voted ballot.	Test

Appendix E – Software Patching Guidelines

All vendors must comply with the policies, guidelines, and directives regarding software patching of voting systems as adopted and modified by the EAC and the SBE from time to time.

Appendix F – Recertification Guidelines

All vendors must comply with the policies, guidelines, and directives regarding recertification of voting systems as adopted and modified by the SBE from time to time.

If there is evidence of a material non-compliance, ELECT will work with the vendor to resolve the issue, and ultimately the SBE reserves the right to decertify the voting system.

A voting system that has been decertified by the SBE cannot be used for elections held in the Commonwealth of Virginia and cannot be purchased by localities to conduct elections.

Appendix G – Hardware Guidelines

Memory devices or USB drives provided with the voting system supplied to localities must follow these standards:

1. Must be pre-formatted and blank per the DoD 5220.22-M wiping standard to prevent any preloaded software from being inadvertently installed on the systems.
2. The system must use DoD 5220.22-M wiping standards to create blank systems.
3. Must be cryptographic and FIPS 140-2 v2 compliant.
4. Must use SHA256 hashing algorithm or higher.
5. Must comply with applicable Commonwealth information security standards.
6. Must comply with applicable policies, guidelines, and directives as adopted and modified by the SBE from time to time.

Appendix H – Voting System Modifications & Product End of Life Planning

Voting System Modifications

The process of reporting modifications will be determined by the Department of Elections based upon policies, guidelines, and directives as adopted and modified by the SBE from time to time.

Product End of Life Planning

“End of life” (EOL) is a term used with respect to product (hardware/software/component) supplied to customers, indicating that the product is in the end of its useful life (from the vendor’s point of view), and a vendor stops sustaining it. (i.e. vendor limits or ends support or production for the product)

Product support during EOL varies by product. Depending on the vendor, EOL may differ from end of service life, which has the added distinction that a vendor of systems or software will no longer provide maintenance, troubleshooting or other support. For example, Extended Support is the period following end of Mainstream Support.

The definitions of Last Date of Mainstream Support and Extended Support, as applicable to decertification/recertification and associated policies and procedures, will be determined by the ELECT based upon policies, guidelines, and directives as adopted and modified by the SBE from time to time. As of initial adoption of this standard by the SBE, the definitions are as follows:

Mainstream Support: The first phase of the product lifecycle; when support is complimentary

Extended Support: The phase following Mainstream Support, in which support is no longer complimentary

Last Date of Mainstream Support: The last day of Mainstream Support

Policies and procedures applicable to decertification/recertification of voting systems which contain software or hardware components that have or will reach the Last Date of Mainstream Support within 18 months, will be determined by the ELECT based upon policies, guidelines, and directives as adopted and modified by the SBE from time to time.

A voting system could still be decertified even if an upgrade plan is submitted. This could happen for a variety of reasons, such as a vendor not showing progress in meeting their upgrade plan.



★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS

Vendor Notification of “End of Life”

We have certified equipment with the SBE and have determined that the following (hardware/software/components) in our certified system will, within 18 months, be at “End of Life” status. Complete this form (for the areas applicable), attach the upgrade plan and send to:

Secretary of SBE, 1100 Bank Street, 1st Floor, Richmond, VA 23219

“End of life” (EOL) is a term used with respect to product (hardware/software/component) supplied to customers, indicating that the product is in the end of its useful life (from the vendor’s point of view), and a vendor stops sustaining it; i.e. vendor limits or ends support or production for the product.

Mainstream Support: The first phase of the product lifecycle; when support is complimentary

Extended Support: The phase following Mainstream Support, in which support is no longer complimentary

Last Date of Mainstream Support: The last day of Mainstream Support

Vendor _____ Date: _____

Certified Voting Systems Impacted: _____

Certified Version(s) Software: _____ Firmware: _____

Certified Product: _____

Certified EPB System Impacted: _____

Certified Version(s): _____

DATE(S) FOR “END OF LIFE”:

	Operating System
	(description) _____ Software
	(Modules or Packages) (description) _____
	Product(s) (components)
	(description) _____

Vendor must submit an upgrade plan to the SBE 12 months in advance of “End of Life”. The plan should include timeline(s), list of impacted localities, estimated cost for localities (if any), and VSTL report(s) showing the upgrade(s) will ensure all systems operate properly with the new upgrade(s) and/or replacements(s).*

*A voting system could still be decertified even if an upgrade plan is submitted. This could happen for a variety of reasons, such as a vendor is not showing progress in meeting their upgrade plan.

ELECT Personnel Received and Reviewed by _____ Date: _____

EOL Upgrade Plan ☐ Approved ☐ REJECTED SBE Meeting: _____

Appendix I – Voting System Certification Application Form

Certification	☐	Recertification	☐
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The company officer or designee responsible for the voting system should complete this form. With this signature, the company officer agrees to a release for the VSTL, as well as other states that may have decertified the voting system, to respond to questions by ELECT. This application must be signed by a company officer and be enclosed with the Voting System Certification Request Package.

☐ Check if you prefer to have the VSTL testing performed at another site to be specified which may require additional cost for the testing.

Name of Company: _____

Name and Title of Corporate Officer: _____

Contact Phone Number: _____

Email Address: _____

Primary Address of Company: _____

City, State, Zip Code: _____

Name of voting system to be certified: _____

Version Number/Name of Voting System to be certified: _____

I reviewed and confirmed that the voting system meets the requirements of the Virginia Voting System Certification Standard. My company will comply with additional requests in a timely manner to complete this certification.

Signature of Corporate Officer: _____

Date: _____

Appendix J – De Minimis Change Guideline

The SBE has adopted the EAC’s De Minimis Change Guideline and applicable EAC Notice of Clarification of De Minimis Change Guidelines to manage minimal hardware, software, or both changes to a certified voting system in a consistent and efficient manner. Software De Minimis Changes should have the following general characteristics:

1. Update a discrete component of the system and do not impact overall system functionality
2. Do not modify the counting or tally logic of a component or the system (formatting changes to reports are allowable)
3. Do not affect the accuracy of the component or system
4. Do not negatively impact the functionality, performance, accessibility, usability, safety, or security of a component or system
5. Do not alter the overall configuration of the certified system (e.g. adding ballot marking device functionality to a previously certified DRE component)
6. Can be reviewed and/or tested by VSTL personnel in a short amount of time (approximately less than 100 hours).

A vendor must submit the VSTL’s endorsed package to ELECT for approval along with a copy of the EAC determination. A proposed De Minimis Change may not be implemented to the certified voting system until the change has been approved in writing by ELECT.

VSTL Endorsed Changes

The vendor will forward to ELECT any change that has been endorsed as De Minimis Change by VSTL. The VSTL’s endorsed package must include:

1. The vendor’s initial description of the De Minimis Change, a narrative of facts giving rise to, or necessitating, the change, and the determination that the change will not alter the system’s reliability, functionality, or operation.
2. The written determination of the VSTL’s endorsement of the De Minimis Change. The endorsement document must explain why the VSTL, in its engineering judgment, determined that the proposed De Minimis Change meets the definition in this section and otherwise does not require additional testing and recertification.

VSTL Review

The vendor must submit the proposed De Minimis Change to a VSTL with complete disclosures, including:

1. Detailed description of the change
2. Description of the facts giving rise to or necessitating the change

3. The basis for its determination that the change will not alter the system's reliability, functionality, or operation
4. Upon request of the VSTL, the voting system model at issue or any relevant technical information needed to make the determination
5. Document any potential impact to election officials currently using the system and any required notifications to those officials
6. Description of how this change will impact any relevant system documentation
7. Any other information the VSTL needs to make a determination.

The VSTL will review the proposed De Minimis Change and make an independent determination as to whether the change meets the definition of De Minimis Change or requires the voting system to undergo additional testing as a system modification. If the VSTL determines that a De Minimis Change is appropriate, it shall endorse the proposed change as a De Minimis Change. If the VSTL determines that modification testing and certification should be performed, it shall reclassify the proposed change as a modification. Endorsed De Minimis Change shall be forwarded to ELECT for final approval. Rejected changes shall be returned to the vendor for resubmission as system modifications.

ELECT's Action

ELECT will review the proposed De Minimis Change endorsed by a VSTL. ELECT has sole authority to determine whether any VSTL endorsed change constitutes a De Minimis Change under this section.

ELECT's Approval: ELECT shall provide a written notice to the vendor that ELECT accepted the change as a De Minimis Change. ELECT will maintain the copies of approved De Minimis Change and track such changes.

ELECT's Denial: ELECT will inform the vendor in writing that the proposed change cannot be approved as De Minimis Change. The proposed change will be considered a modification and requires testing and recertification consistent with this Certification Standard.

De Minimis Change is not applicable to the voting system currently undergoing the State Certification testing; it is merely a change to an uncertified system and may require an application update.



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DEPARTMENT *of* ELECTIONS

Virginia State Board of Elections | Request for De Minimis Change

In accordance with the State Certification of Voting System and Electronic Pollbook Requirements and Procedures, SBE has adopted guidelines to manage hardware and software related changes to certified Voting System and Electronic Pollbook System. To request a De Minimis Change, the procedure begins with a letter from the vendor to the Secretary of the State Board of Elections and the VSTL endorsed package for the De Minimis Change. This letter begins the process to evaluate whether the De Minimis Change will be approved for use on Voting Systems or Electronic Pollbooks certified in Virginia.

De Minimis Changes should have the following characteristics:

1. Update a discrete component of the system and do not impact overall system functionality.
2. Do not affect the accuracy of the component or system.
3. Do not negatively impact the functionality, performance, accessibility, usability, safety, or security of a component or system.
4. Do not alter the overall configuration of the certified system.
5. Can be reviewed and tested by VSTL personnel in a short amount of time (approx. less than 100 hours).

Vendor description of the De Minimis Change: _____

Description of the facts giving rise to or necessitating the change: _____

Document any potential impact to election official currently using the system and any required notifications to those officials. _____

☐ VSTL endorsed package included.

Signature of Company Officer: _____ Date: _____

ELECT's Action: Received by: _____ Date: _____

Reviewed by: _____ Date: _____

☐

APPROVED

☐

REJECTED

Vendor Notified of Status by: (initials) _____ Date: _____

Appendix K – Cast Vote Record Clarification

1. A permanent record of all votes produced by a single voter
2. Electronic CVRs are called ballot images
3. CVR is evidence that a ballot was available for review by the voter
4. CVR should have an identifier that can be linked to an identifier on the corresponding paper ballot provided; the scanner creating the CVR can impress an identifier on the ballot as it is scanned
5. CVR and system should include indications of what actions the scanner took if the scanner does contest-rule post-processing of the ballot selections
6. CVR or system has indications of marginal marks, mark quality and density (if scanner is capable).
7. A CVR can include signed and hashed references to an associated image of the ballot or images of write-ins made by the voter on a paper ballot

Appendix L - Annual Voting System Vendor Certification

Certified Voting System/Version:	Vendor:
Mailing Address:	Contact Person: Title: Telephone: Email:
For the period beginning _____ and ending _____ Must be submitted annually <u>no later than January 31.</u>	

Pursuant to the Virginia Department of Elections (ELECT) Voting System Certification Standard, Section 1.3. Decertification, Vendors are required to provide an annual submission of items that will allow ELECT to ensure they have accurate information on changes, incidents, upgrades, and corporate information.

*I certify the following:

- Vendor has notified ELECT of all incidents, anomalies or security-related breaches experienced in an election jurisdiction, if any (if not, Vendor has attached all necessary supporting documentation to this Certification regarding such incident/anomaly/security-related breach).
- Vendor has notified ELECT of all changes to Corporate Information, if any (if not, Vendor has attached all necessary supporting documentation to this Certification regarding any changes to Corporate Information).
- Vendor has provided ELECT with modifications to the certified voting system, if any (if not, Vendor has attached necessary documentation to this Certification regarding modifications and is actively pursuing compliance with the Standard, Section 1.3, and Appendix H).
- Vendor has provided ELECT with an upgrade plan for all operating systems or components that have reached or will reach the Last Date of Mainstream Support within 18 months, if any (if not, Vendor has attached necessary documentation to this Certification regarding such systems or components and is actively pursuing compliance with the Standard, Section 1.3, and Appendix H).
- Vendor has updated all software for the certified voting system with the latest patching and vulnerability updates (if not, Vendor has attached necessary supporting documentation to this Certification regarding necessary updates and is actively pursuing compliance with the Standard, Section 1.3, and Appendix E).

Name:	Title:
Signature:	Date:
Note: Please ensure all necessary supporting documentation is attached.	

Rev. 09/01/2025



★ VIRGINIA ★
STATE BOARD *of* ELECTIONS

RLA Method

- A. Selection of Method for the Statutorily
Required RLA
 - B. Setting the Risk Limit
-

BOARD WORKING PAPERS
Claire Scott
ELECT Policy Analyst



★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS

Memorandum

To: Chairman O'Bannon, Vice-Chair Dance, Secretary Alvis-Long, Dr. Chris Stolle, and Dr. Sally Hudson

From: Claire Scott, ELECT Policy Analyst

Date: August 18, 2026

Re: Selecting the Procedural Method for the November 2026 Risk-limiting Audit

Proposed Motions

OPTION A: "I move that the State Board of Elections utilize the ballot-polling method to conduct a risk-limiting audit for a randomly selected U.S. House of Representatives race after the November 2026 General Election."

OPTION B: "I move that the State Board of Elections utilize the batch-comparison method to conduct a risk-limiting audit for a randomly selected U.S. House of Representatives race after the November 2026 General Election."

Overview

Pursuant to §24.2-671.2 (B)(5) of the Code of Virginia and the procedures outlined in the 2026 Risk-Limiting Audit Manual, the State Board of Elections (SBE) must choose the method for conducting the statutorily required risk-limiting audit (RLA) of the 2026 General Election.

Applicable Code Sections

§24.2-671.2 Risk-limiting audits

Background

A risk-limiting audit (RLA) is a type of post-election, precertification audit that utilizes statistical methods and a hand count of paper ballots to check that the voting equipment accurately reported the correct outcome of an election. RLAs provide evidence that the declared winner of a contest received the most votes. Pursuant to §24.2-671.2 (C)(1), immediately following the 2026 General Election, an RLA will be conducted for a randomly selected race for the U.S. House of Representatives.

Methodologies

In Virginia, the Commonwealth utilizes two methods to conduct RLAs: the ballot-polling and batch comparison methods. While ballot polling and batch comparison audits differ in their sampling methodology, both methods achieve the same intended purpose: to confirm that the voting machines accurately reported the correct outcome of a contest. Both methods utilize a hand count of paper ballots.

BALLOT POLLING is an audit method that samples a statistically significant number of randomly selected ballots to test the accuracy of the voting system's counts in the election. The Commonwealth has used this method since RLAs were first required by statute. Outside of the initial RLA pilots, ELECT has utilized the ballot polling method for several contests in races ranging from statewide contests, such as President and U.S. Senate, to members of the General Assembly, including members of both the House of Delegates and State Senate.

BATCH COMPARISON is an audit method where batches of ballots (e.g., all ballots cast in a precinct) are randomly selected, counted, and compared to test the accuracy of the voting system's count in the election. Outside of the RLA pilots, ELECT has overseen five batch comparison audits that include contests for House of



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DEPARTMENT *of* ELECTIONS

Memorandum

To: Chairman O'Bannon, Vice-Chair Dance, Secretary Alvis-Long, Dr. Chris Stolle, and Dr. Sally Hudson

From: Claire Scott, ELECT Policy Analyst

Date: August 18, 2026

Re: Setting the Risk Limit for the November 2026 Risk-Limiting Audits

Proposed Motion

"I move that the State Board of Elections set the risk limit to 10% for the statutorily required November 2026 RLAs and for any possible approved RLAs requested by a local electoral board."

Applicable Code Sections

§24.2-671.2 Risk-limiting audits

Overview

Pursuant to §24.2-671.2 (F) of the Code of Virginia and the procedures outlined in the 2026 Risk-Limiting Audit Manual, the State Board of Elections (SBE) must set the risk limit for the statutorily required risk-limiting audit (RLA) of the 2026 General Election and any possible approved RLAs requested by a local electoral board.

Background

A risk-limiting audit (RLA) is a type of post-election, precertification audit that utilizes statistical methods and a hand count of paper ballots to check that the voting equipment accurately reported the correct outcome of an election. RLAs provide evidence that the declared winner of a contest received the most votes.

Risk Limit

A risk limit is the largest probability that the risk-limiting audit will fail to correct an election outcome that differs from the outcome that would be found by a full manual tabulation of the votes on all ballots cast in the contested race. For example, a 10% risk limit means that there is a 90% chance that the audit will correct an incorrect outcome. The risk limit also affects the number of ballots audited in an RLA; a smaller risk limit increases the number of ballots, while a larger risk limit decreases that number. To date, all RLAs conducted in the Commonwealth have utilized a 10% risk limit set by the SBE.

Recommendation

ELECT staff recommends setting the risk limit to 10% for the November 2026 statutorily required RLA and for any possible approved RLAs requested by a local electoral board.

Delegates (primary and general), State Senate, Sheriff, and U.S. House of Representatives.

Recommendation

ELECT recommends that the SBE vote on the method for conducting the statutorily required RLA.



★ VIRGINIA ★
STATE BOARD *of* ELECTIONS

Amendments to RLA Manual

BOARD WORKING PAPERS
Matthew Abell
Elections Services Senior Advisor



★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS

Memorandum

To: Chairman O'Bannon, Vice-Chair Dance, Secretary Alvis-Long, Dr. Chris Stolle, and Dr. Sally Hudson

From: Matthew Abell, Election Services Senior Advisor

Date: August 18, 2026

Re: Proposed Amendments to the Risk-limiting Audit Manual

Proposed Motion

"I move that the State Board of Elections approve the amendments to the RLA Manual as presented."

Applicable Code Sections

§24.2-671.2 Risk-limiting audit

§24.2-673.1 Ranked choice voting

Background

Pursuant to §24.2-671.2(B) of the Code of Virginia, local Electoral Boards and general registrars are required to conduct risk-limiting audits (RLAs) in accordance with procedures prescribed by the State Board of Elections (SBE) and under the supervision of the Department (ELECT). The RLA Manual ("the Manual") sets out these procedures; any updates, revisions, or clarifications must be approved by the SBE.

Summary of Revisions

The Manual is updated annually to reflect legislative changes, as necessary, as well as procedural improvements recommended by ELECT staff, the SBE, and local election officials. These changes include:

- Inclusion of ranked choice voting (RCV) races for RLAs, limited to the first round of selections.
- Clarification regarding the required number of votes to select the RLA method, risk limit, and approve RLAs applied for pursuant to §24.2-671.2(D).
- Instructions on how to audit duplicated ballots.
- Minor edits to provide further clarification.

Recommendation

ELECT staff recommend the SBE approve the amendments to the Manual as presented.

Attachment

Proposed 2026 RLA Manual



★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS

Risk Limiting Audit Manual

VIRGINIA DEPARTMENT OF ELECTION

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1. Risk-limiting Audit

REQUIRED FORMS SBE-671.2(D) Form Request for Risk-Limiting Audit Request to Inspect Sealed Election Materials for a Post-Election Audit	ADDITIONAL RESOURCES Virginia's Guide to Handcounting Ballots Chain of Custody Template RLA on FormsWarehouse
REFERENCE RLA Scale Method Video RLA K Cut Method Video Random Seed Number Generation Video RLA Reports	REGULATIONS 1VAC20-60-50. Overfull optical scan ballot container. 1VAC20-60-80. Request for a risk-limiting audit for a contested race within a jurisdiction.

1.1 Overview

Va. Code § 24.2-671.2 requires that electoral boards (EB) and general registrars (GR) perform risk-limiting audits (RLAs) under the supervision of the Department of Elections (ELECT) using procedures prescribed by the State Board of Elections (SBE) outlined in this document. This document describes the SBE procedures and includes guidance on the following:

- Methods for conducting the RLA.
- Randomly selecting contested races and determining the risk limit.
- Preparing for an RLA, including guidelines for organizing ballots, selecting venues, and securing appropriate materials by EBs and GRs.
- Ballot custody, accounting, security, and written record retention procedures that ensure a complete and accurate collection of cast ballots from which samples are drawn.
- Hand counting of the audited ballots.
- Ensuring transparency and understanding of the process by participants and the public, including guidelines for direct observation by members of the public, representatives of the candidates involved in the RLA, and representatives of the political parties.

1.1.1 Definition of an RLA

An RLA is a type of post-election audit that utilizes statistical methods and a manual review of paper ballots to confirm that the electronic voting system accurately reported the correct outcome of an election. RLAs analyze a random sample of hand-counted ballots to confirm election results. If the margin of an election is wide, fewer votes are audited; if the margin is narrow, more ballots are audited until a large enough sample is reviewed to confirm the results of the contest.¹

1.1.2 History of RLAs in Virginia

RLAs provide strong statistical evidence that the declared winner of a contest received the most

¹ See [National Conference of State Legislatures, Risk-Limiting Audits](#)

votes. In 2017, the Virginia General Assembly passed legislation that amended the Code of Virginia to include RLAs of ballot scanner machines in use in the Commonwealth, and the changes went into effect on July 1, 2018. Following enactment, pilot RLAs were conducted throughout the Commonwealth, with the first statewide RLA occurring in 2022. A detailed account of all statutorily required RLAs may be found in reports located on ELECT’s website. Every locality in the Commonwealth participated in a ballot-polling RLA of the 2024 U.S. Senate race, which is explained in greater detail in the 2024 November RLA Report.²

2. RLA Basics

2.1 Methods

Pursuant to Va. Code § 24.2-671.2(B), the SBE is required to set the processes and procedures for each RLA performed.³ While there are three methods available for conducting a RLA, the SBE has approved two RLA methods for use in the Commonwealth of Virginia: *ballot-polling* and *batch-comparison methods*. Ballot-polling audits manually review a randomly selected, sufficiently large sample of ballots to determine if the overall outcome of an election contest was correctly reported. Batch-comparison audits manually review randomly selected physical batches of ballots, such as those cast in one precinct, and compare those results with corresponding machine counts.⁴ Although the ballot polling and batch comparison methods differ in their sampling approaches, both methods aim to confirm that voting systems accurately report the outcome of an election. The SBE will vote on the method for statutorily required RLAs by no later than the September preceding each November General Election. For setting the risk limit of RLAs pursuant to Va. Code § 24.2-671.2 (C)(1), (2), and (3), the vote is by a simple majority. For establishing an RLA and setting the risk limit pursuant to Va. Code § 24.2-671.2(C)(4), the vote is by a two-thirds majority.

2.2 RLA Selection and Notification Process

Pursuant to Va. Code § 24.2-671.2, RLAs must be conducted **before** a race has been certified.⁵ ELECT must ensure that an RLA is conducted for at least one randomly selected contest each year. The Code of Virginia prescribes the contests eligible for selection for an RLA depending on the election cycle, as outlined in Va. Code § 24.2-671.2(C) and illustrated below.⁶

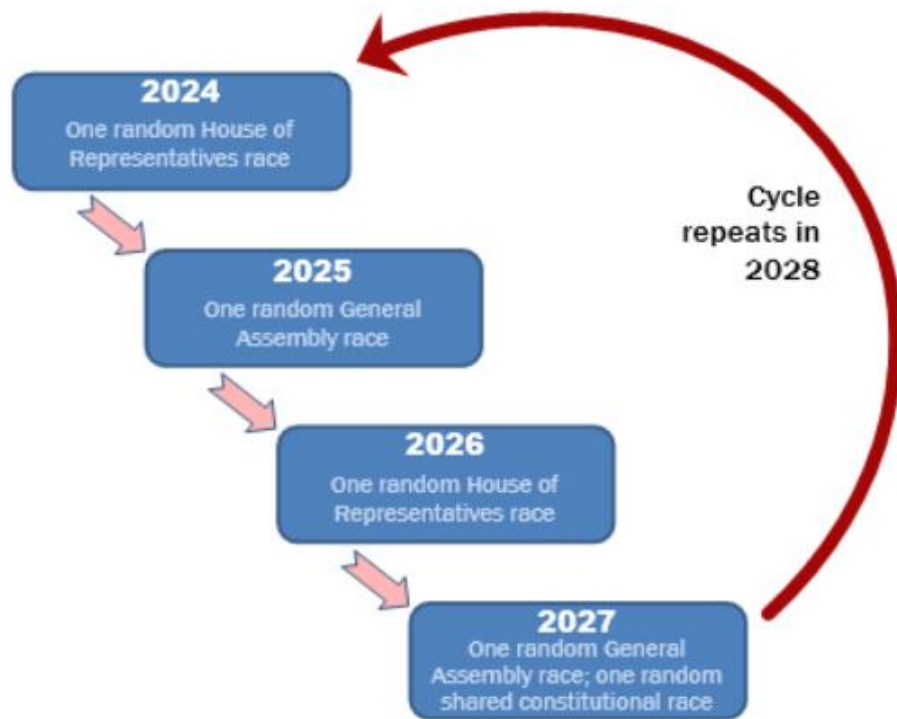
² See [ELECT, Risk-Limiting Audits](#).

³ See Va. Code [§ 24.2-671.2\(B\)](#).

⁴ *Id.*

⁵ See Va. Code [§ 24.2-671.2](#).

⁶ *Id.*



The SBE may also choose to audit a race in:

1. any other year that ensures that each locality participates in an RLA of an office within its jurisdiction at least once every five years or
2. a jurisdiction that the SBE finds appropriate.⁷

The SBE defines participation in an RLA as the uploading of a ballot manifest to Arlo, as uploading a ballot manifest makes the locality available for selection by Arlo to audit ballots.

Additionally, Va. Code § 24.2-671.2(D) allows local EBs to *request* an RLA of a contested race within the EB’s jurisdiction. Using *SBE-671.2(D) Form: Request for Risk Limiting Audit*, a locality may submit its request to the SBE for approval.⁸ Examples of election races wholly contained within a locality’s jurisdiction *may* include but are not limited to: mayoral, school board, city council, clerk of court, treasurer, or sheriff. Localities that are partially included in a House of Delegates, Senate of Virginia, or U.S. House of Representatives District are not able to request an audit of only the ballots that included those races. Section 2.2.3 of this manual details how to apply for an RLA.

2.2.1 Selecting a Contest for Statutorily Mandated RLAs

For those contests eligible for an RLA as designated by the year in Va. Code § 24.2-671.2(C), the

⁷ See Va. Code [§ 24.2-671.2\(C\)\(4\)](#).

⁸ See [ELECT, SBE-671.2\(D\) Form](#)

SBE will only consider races with margins greater than 1%.⁹ All contests that meet that threshold will be placed in the selection pool and will be drawn at the SBE meeting held on the third Monday in November. There is no statutory requirement to audit a primary election.

For those contests eligible for an RLA in a given year under Va. Code § 24.2-671.2(C), the SBE Chair or designated representative will randomly draw at least one race(s) to audit from this pool. Before the random selection takes place, a member of ELECT staff will explain the selection method. Examples of random selection methods may include drawing a contest from a bowl or rolling dice to determine the audited contest and will be chosen at the discretion of the Commissioner. The selection will be held and recorded during a public meeting to ensure that the chosen race is completely random and observable by the public.

2.2.2 SBE Requested RLAs

Under Va. Code § 24.2-671.2(C)(4), the SBE has the right to require an RLA of:

1. any race to ensure that each locality participates in an RLA at least once every five years or
2. that the SBE otherwise deems appropriate.¹⁰

If the SBE decides to audit a race pursuant to Va. Code § 24.2-671.2(C)(4), the SBE must approve such audit by a two-thirds majority vote. An SBE meeting will be held at least two months prior to the June primary, and no later than the September prior to the November General Election. This allows localities to plan for the audit before the start of early voting. No race may be audited that has a margin of less than 1%. The SBE will ask ELECT to add this item to the Board agenda prior to the SBE meeting where the vote will take place. If a locality requests an RLA, the SBE may approve the audit by simple majority vote.

2.2.3 Applying for an RLA of a Local Contest

In consultation with their local GR, a local EB may request SBE approval for an RLA of a contested local race wholly contained within its jurisdiction. The SBE has promulgated both a regulation to guide EBs in selecting a race for an RLA as well as the *SBE-671.2(D) Form* that localities must use to request a race for an RLA.¹¹ EBs may choose between utilizing the *ballot-polling* or *batch-comparison* method of conducting an RLA.

An EB must cast a majority vote at a public canvass meeting to request an RLA for a particular contested local race that is wholly contained within the EB's jurisdiction.¹² Further, an EB must sign and complete the current *SBE-671.2(D) Form* and identify the local race(s) subject to the requested RLA. All board members should sign and date the form. Once completed, the secretary of the EB must send the form to ELECT via the locality's Elections and Registration Specialist. These forms must be submitted to ELECT no later than the close of business the day

⁹ See Va. Admin. Code, [1VAC20-60-80](#).

¹⁰ See Va. Code [§ 24.2-641.2\(C\)\(4\)](#).

¹¹ See generally Va. Admin. Code, [1VAC20-60-80](#).

¹² *Id.*

prior to the publicly noticed RLA SBE meeting (the date will vary depending on the election cycle).

The SBE will grant an RLA request if the form is properly completed, all statutory requirements are met, and the request is submitted on time. Finally, the regulation specifies that, as needed, the SBE will grant a two-week extension to an EB's local certification deadline under Va. Code § 24.2-671 to accommodate completion of the RLA.¹³

Pursuant to Va. Code § 24.2-673.1, an EB can request an RLA of an election that uses ranked choice voting (RCV), but elections that use RCV are not eligible for random selection to comply with the provisions of subsection C of § 24.2-671.2.¹⁴ RCV RLAs will be limited to the first choice rankings reported by voting systems. If the SBE approves a locality's request for an RLA of an RCV election, the procedures for both ballot polling and batch comparison will apply.

2.2.3.1 Key Factors When Considering Applying for an RLA of Local Contest

There is a lot to consider when applying for an RLA, particularly of a race wholly contained within an electoral board's jurisdiction. The electoral board must choose the sampling method, time, staffing needs, costs, and more. Review the sections below to learn more about the considerations that go into conducting a risk-limiting audit.

2.2.3.1.1 METHOD CHOICE

The SBE gives EBs the option to choose between the use of two RLA methods for applications submitted pursuant to Va. Code § 24.2-671.2(D): ballot-polling and batch-comparison.

Ballot-polling samples a statistically significant number of ballots to test that a reported outcome for an election was correct. Typically, ballot-polling requires pulling fewer ballots than batch-comparison sampling.

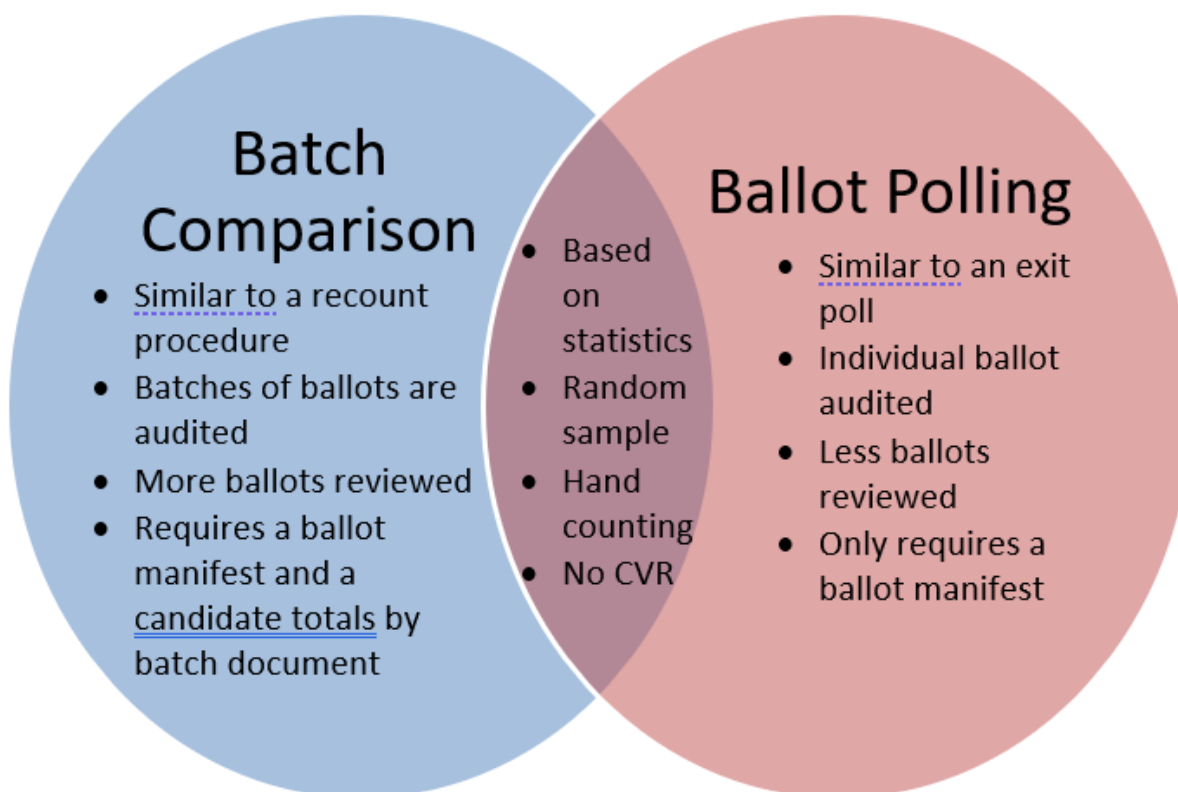
Ballot-polling has been used by the Commonwealth since RLAs were first mandated by statute. In the case of ballot-polling RLAs, a statistically significant number of ballots are randomly sampled to test the general accuracy of the voting system's counts in the election. Conducting a ballot-polling audit requires use of a ballot manifest. A "candidate totals by batch" document is not necessary to conduct an audit using ballot polling, unlike when using batch-comparison sampling.

Batch-comparison samples randomly selected batches of ballots (e.g., all ballots cast in a precinct), which are then counted and compared to test the general accuracy of the voting system's count in the election. This method tends to require pulling more ballots than ballot-polling and may require more staff and time to complete the audit. Conducting a batch-comparison audit requires the use of both a ballot manifest and a "candidate totals by batch"

¹³ See Va. Code [§ 24.2-671](#).

¹⁴ See Va. Code [§ 24.2-673.1](#).

document.



Tip

You can use the Arlo Planner Tool to create an *estimate* of the number of ballots or batches that may be required to conduct an RLA for your race. The Arlo Planner Tool can be found here: [Arlo Planner Tool, by VotingWorks](#). This tool is available to the public and does not require a login to access.

2.2.3.1.1.1 An Example of Sample Sizes for Both Methods

In 2024, a batch comparison method RLA was performed for the U.S. Congressional District 1 race. Below, ELECT shows the number of batches and ballots that were pulled in that RLA as well as the estimated number of ballots that would have been pulled for a ballot polling RLA of the same race, using the same risk limit. This race had 478,906 ballots cast with a margin of 9.78% between the candidate with the most votes and the candidate with the second most votes.

Batch-comparison District 1	Ballot-Polling Estimate for District 1
19 batches with 137,627 ballots total	868 ballots



Note about Performing Both a Ballot-polling RLA and a Batch-comparison RLA

If your locality must perform both a ballot-polling RLA and a batch-comparison RLA, can you use the same ballot manifest for both? Yes, the ballot manifest for one may be used for the other. *However*, in this event, the batches listed in the ballot manifest ***must*** be the same as your precincts. For example, if 100 ballots were cast in Precinct 1, then Batch 1 would have 100 ballots. The candidate by batch file must match with the ballot manifest for a batch-comparison method RLA. For example, if Central Library Precinct had 100 ballots cast, then the Central Library Precinct should have a total of 100 ballots in both the ballot manifest and the candidates by total file. This is discussed in greater detail in 5.2.2 Creating a Candidate Total by Batch File. You may also choose to create two separate ballot manifests for greater ease in locating ballots.



Reminder

ELECT reminds localities that should an EB choose to apply for an RLA the batches or ballots used to conduct the RLA will be randomly chosen by Arlo, no matter which RLA method, and will not be chosen by the applying EB.

2.2.3.1.2 TIME

Pursuant to Va. Code § 24.2-671.2, ELECT is required to ensure that RLAs of certain contests are conducted each year. The SBE will select those contests, approve applications from localities requesting an RLA, and any other RLAs ordered by the SBE during a meeting held on the third Monday in November. This creates a very tight timeline for conducting RLAs, which must be completed before certification and despite the Thanksgiving holiday. This means localities will have either 6 or 11 business days to complete the RLA process after a general election, i.e., 11 days in 2026, 11 days in 2027, 6 days in 2028, 6 days in 2029, and 6 days in 2030.

This timeline may be further compounded during a November General Election by choosing a *different* method than the SBE for an RLA of a local contest. For example, the SBE may choose to conduct an RLA using the ballot-polling method in a jurisdiction. If an EB chooses to utilize a batch-comparison method for a local race, then the EB would be running two different types of RLAs at the same time, which may take additional time to complete.

If an EB applies for an RLA of a primary, the timeline is even more compressed. For a June primary, an EB will have 3-4 business days from the time of approval of the RLA to the date for the SBE to declare a nominee. This timeline may also include the 4th of July, depending on the year. Given these time constraints, an RLA of a primary, while not prohibited by statute, is not recommended.



Reminder

As RLAs are a required step during the post-election period and will be performed after every general election, EB members should expect to be available for the purposes of an RLA after the canvass has been completed and before the SBE certifies a general election.



FAQ: Does applying for a RLA of a local race allow a locality to opt out of other RLAs to meet their statutory requirements?

If a locality opts for an RLA of a race wholly contained within its jurisdiction, it is not exempted from the required yearly, randomly selected RLA or any contest that the SBE may randomly request to be audited.

2.2.3.1.3 STAFFING

As part of the RLA, EBs must recruit audit review boards (see section 3.4 for more information about audit review boards). An audit review board is a two-person team assigned to review ballots and record a hand tally of the results. The required number of audit review boards is based on the number of batches that are needed for an RLA. However, when a single batch contains a large number of ballots, additional audit review boards may be assigned to the batch to tally the ballots more effectively and efficiently. For example, a batch-comparison method RLAs must have batches that are the size of your precincts, as you must report the total number of ballots cast for a candidate in the candidate totals by batch file and the total number of ballots cast for a candidate is reported at the precinct level. Your locality may have only a few batches, but those batches may be large based on the number of ballots cast in a precinct.

Thus, more audit review boards may be needed to tally those ballots effectively and efficiently.

- In ELECT's and localities' experience, on average, an audit review board can pull 20-25 ballots per hour utilizing the ballot-polling method. If many ballot containers must be retrieved, this average decreases to about 15-20 ballots per hour. It may take longer to locate a specific ballot within a stack of ballots utilizing the ballot-polling method, which accounts for the additional time.
- In ELECT's and localities' experience, on average, an audit review board utilizing the batch-comparison method could audit approximately 220 ballots per hour. Batch-comparison audit review boards can work more quickly because they are not searching for specific, random ballots but instead work through all ballots in a "batch." That aside, the review board or boards have substantially more ballots to review. This may be further complicated when the Central Absentee Precinct (CAP) is chosen for audit, as not every ballot will contain the chosen race or if an audit review board must sort out ballots that do not contain the audited race.

2.2.3.1.4 COST

If more ballots or batches are sampled, more people will need to be compensated to complete

the RLA process on time. While Va. Code § 24.2-671.2 does not discuss the compensation of audit review board members, ELECT recommends that audit review board members be compensated similarly to officers of election.

2.3 SBE Administrative Tasks

In addition to the SBE's role in selecting and approving races for audit, the SBE plays a role in setting the risk limit, choosing the method of conducting the RLA, and generating the random seed number, which is a 20-digit number that acts as a starting point for a computer-generated random sequence of numbers to assign to each ballot or batch. These tasks are outlined below and performed at one of two SBE meetings held prior to the RLA.

2.3.1 Setting the Risk Limit

A risk limit is the maximum chance that the RLA will fail to correct an incorrectly reported outcome. For example, a 10% risk limit means that there is a 90% chance that the RLA will correct an incorrect outcome. To date, every RLA in Virginia has used a 10% risk limit. A 5% risk limit has been used in other states, e.g. Georgia, but has not yet been tested in Virginia. The lower the risk limit, the more batches or ballots that are likely to be pulled.

The SBE will set the risk limit of any RLA and will announce the risk limit of each RLA at a public meeting held prior to the RLA. The approval of the risk limit will take place at an SBE meeting held no later than the September prior to the November General Election.

2.3.2 Generating the Random Seed Number

For each audited race, the RLA software uses a 20-digit random seed number to select ballots for retrieval. A random seed number specifies the starting point of a computer-generated random sequence of numbers. The 20-digit random seed number is created during an SBE meeting and is observable by the public.

To create this random number, the SBE Chair or designated representative(s) rolls twenty, ten-sided dice (numbered zero through nine), one time each. As each die is rolled, the resulting number is recorded on a whiteboard. Any person may be designated by the SBE Chair to roll the dice. Further, multiple people may roll the die.

If there are applications approved by the SBE from EBs pursuant to Va. Code § 24.2- 671.2(D), a new, additional 20-digit seed number will be generated via the process explained above.

The 20-digit number generated by this activity will be inputted into the RLA software by the *RLA Administrator* on ELECT's staff. Once this number is inputted, the auditing software will randomly select and generate a list of ballots to be retrieved based on the sample size. For an illustrated example of this process, please review the *Random Seed Number Generation* video on ELECT's YouTube channel.

3. RLA Preparation

3.1 Overview

Due to the compressed timeline for RLAs, localities can take actions before Election Day to set themselves up for a successful RLA should they be chosen to audit a race, including

- Determining RLA location;
- Scheduling the public meeting;
- Recruiting Audit Review Boards;
- Reviewing ballot accounting and storage practices; and,
- Logging ballot manifest quantities produced from early voting and pre-processing.

The Appendix provides a generic timeline for a November RLA.

3.2 Determining the Location of the RLA

A locality must consider a space for the RLA that can accommodate the public and that is ADA-compliant. The facility where an RLA takes place must also have an internet connection to download and print retrieval lists, placeholder pages, RLA board credentials, and labels.

If only a few ballots are required for an RLA, it may be possible to conduct the RLA at the courthouse. If more space is needed or if no workspace is available, the RLA may take place in another suitable location, such as: the GR's office, a library, a firehouse, a school, etc. Localities should reach out to their Clerk of Court to discuss the potential for an RLA well ahead of the general election to ensure the availability of the election material required for audit and answer any questions or concerns the Clerk may have about the process. If selected for an RLA, it is important to work with local Clerks of Court to consult on the physical space of the RLA.

3.3 Scheduling the Public Meeting

Pursuant to Va. Code § 2.2-3707 and § 24.2-671.2(G), an RLA must be conducted as a public meeting. The EB and the GR shall conduct an RLA within their jurisdiction. Once the EB has selected a location for the RLA, it must provide the location to ELECT; ELECT will select the date and time for the RLA to begin. ELECT will publish the list of contested races along with the date, time, and location of the RLA as soon as practicable.



Reminder

An RLA round cannot be completed and results known until all localities have submitted their results to Arlo. Therefore, it is imperative that localities start at the time set by ELECT to avoid delays, especially if additional rounds are necessary.

Local party chairpersons involved in the race being audited must also be notified of the date and time of the RLA by the GR. Candidates should also be notified when the local EB has

requested an RLA of that race and the request was approved by the SBE.

Parties and candidates are entitled to send authorized representatives to observe the RLA. Authorized representatives should be provided the same level of observance as they would during the Canvass.¹⁶ Local EBs should set up the location of the RLA to allow the public and authorized representatives the opportunity to observe the RLA.

Additionally, at least one member of the EB representing each political party must participate in and be present for the duration of the RLA.¹⁷ If the EB is unable to have one Republican or one Democrat present for the duration of the RLA, the local EB should seek the appointment of a temporary EB member of the missing political party, pursuant to Va. Code § 24.2-106.¹⁸ For example, if there is only one Democrat on the EB and that person will be unavailable for the RLA, then the EB should notify ELECT and petition the court for the appointment of a temporary EB member to represent the Democrat party during the duration of the RLA.

In addition to EB members and the GR, meeting attendees may include:

- Clerk of Court
- Audit Board members;
- General public;
- Representatives from political parties;
- Candidates;
- Campaign staff; *and*,
- Local party chairs.

Localities should plan for at least one full day to conduct the RLA. For RLAs required by the Code of Virginia, ELECT will set the time and date of the RLA; the public meeting set by the EB to perform the RLA must match the time and date of the RLA unless good cause can be shown as to why that is not possible. Since the sample is random, there is no way to predetermine the number of ballots a locality must retrieve.

For RLAs requested by a local EB, a date and time may be suggested by the local EB to ELECT. The suggestion must be communicated at the same time as submittal of the request for RLA. ELECT will work with the local EB to determine if the date and time suggested are acceptable to ensure that the RLA is performed within the specified timeframe set by the Code of Virginia.

3.4 Recruiting RLA Audit Review Boards

¹⁶ See Va. Code [§ 24.2-671](#). See also ELECT, [GREB Chapter 14](#). See also ELECT, [Do's and Don'ts for Campaigners and Authorized Representatives](#).

¹⁷ See Va. Code [§ 24.2-641.2](#).

¹⁸ See Va. Code [§ 24.2-106](#). See also Va. Code [§ 24.2-671.2\(G\)](#) (requiring at least one EB member from each party be present for the RLA).

An *Audit Review Board* is a two-person team that retrieves specified ballots, records the results of the ballot, and inputs the results into the ballot software. GRs and/or the EB determine the audit board(s). Audit board members can be: staff, officers of election, EB members, GRs, or representatives from each party and/or candidates. ELECT recommends that the audit board consist of one Democrat and one Republican to ensure balanced representation. However, audit boards do not have to declare a party affiliation.

The number of *Audit Review Boards* required is based on the number of ballot storage containers that must be opened, not on the number of ballots to be retrieved. The average numbers for both the ballot-polling and the batch-comparison method are provided below.

- Ballot-polling: based on previous RLAs in Virginia, on average, an audit board can pull 20-25 ballots per hour. If many ballot containers must be retrieved, this average decreases to about 15-20 ballots per hour.
- Batch-comparison: based on previous RLAs in Virginia, on average, an audit board could audit about 220 ballots per hour.

When utilizing the ballot-polling method, it can take audit boards longer to locate the appropriate ballot in a stack of ballots. However, fewer ballots will need to be audited overall.

When using the batch-comparison method, every ballot in a stack is counted in a precinct. While this may be quicker than locating random ballots, more ballots need to be reviewed using the batch-comparison method.

3.5 Reviewing Ballot Accounting and Storage Practices

When preparing for an RLA, it is a good time to review ballot accounting practices, which include ballot tracking, ballot reconciliation, and chain of custody forms and procedures. Ballot accounting provides the number of ballots in an envelope, box, or container. Ballot manifests are explained in greater detail for *ballot-polling* in section 4.3 Creating a Ballot Manifest and for *batch-comparison* in section 5.2.1 Creating a Ballot Manifest. It is imperative that the ballots remain organized and clearly marked within the contents of the box. Having a strategic plan for organizing ballots can save a lot of time when conducting an RLA.



1VAC20-60-50. Overfull optical scan ballot container.

If an optical scan reader is in danger of malfunctioning due to too many ballots, then it may be opened with the appropriate safeguards listed in 1VAC20-60-50. Whether an optical scan reader has become too full is based on the judgment of the GR or EB of the locality. If an optical scan reader is emptied for this reason, a new batch may be created for a ballot manifest.

ELECT has designed a sample chain of custody form to document the control, transfer, and

disposition of ballots during an RLA. Localities may choose to utilize this form or design their own to suit their specific needs. This sample form can be found in FormsWarehouse under the RLA section.

3.6 Suggested Supplies

While not required, the following is a list of helpful supplies for a successful RLA:

- Table and chairs for each audit board;
- Bright colored paper;
- Bright-colored removable labels;
- Weight Scale;
- Tally sheets;
- Pens;
- Rubber fingers;
- Device to open containers;
- Materials to reseal containers, if necessary;
- Device with Wi-Fi/cellular to enter ballot tallies (laptop, smartphone, etc.); *and*,
- Printer (for printing RLA materials if unable to print materials prior to beginning the RLA).

4. The Ballot-Polling Method of the Risk-Limiting Audit

4.1 Overview

Once a locality is selected for an RLA or the EB has requested an RLA, it must do the following:

- Notify the public and participants identified in section 3.2 and 3.4 of this manual;
- Submit an ELECT 659-Request to Inspect Sealed Election Material form;
- Create and upload the ballot manifest; *and*,
- Gather supplies.

For the purpose of this manual, a batch is a documented set of ballots created by a voting system, an officer of election, or other election official.

4.2 Submitting a Request to Inspect Sealed Election Materials for a Post-Election Audit

Pursuant to Va. Code § 24.2-659, a locality must receive permission from the ELECT to unseal ballots cast on Election Day for a post-election audit. Localities are required to submit a Request to Inspect Sealed Election Materials for a Post-Election Audit to obtain permission. The form is submitted to ELECT for signature authorization and then presented to the Clerk of the Circuit Court to access ballots from the election. This form may be found in FormsWarehouse under the RLA section.

In the case of a statewide RLA or an RLA that includes multiple localities, ELECT may issue a general letter instead of a Request to Inspect Sealed Election Materials for a Post-Election Audit at the discretion of ELECT staff.

4.3 Creating a Ballot Manifest

A *ballot manifest* is a two-column Excel spreadsheet created by localities that includes a list of the “Batch Name” (Column A) and the “Number of Ballots” (Column B).

	A	B
1	Batch Name	Number of Ballots
2	Precinct 1	301
3	Precinct 2	302

The ballot manifest creates an inventory of every ballot cast in a locality. Depending on the size of the locality, a ballot manifest should take one hour or less to complete. As a best practice, localities are encouraged to build their ballot manifest as they go. To select random ballots or batches, *all* participating localities must upload a ballot manifest before the audit can begin.



Note about Performing Both a Ballot-polling RLA and a Batch-comparison RLA

In the event that your locality has to perform *both* a ballot-polling RLA and a batch-comparison RLA, pay attention to the design of your ballot manifest for each method. While the ballot manifest for one may be used for the other, the batches listed in the ballot manifest ***must*** be the same as your precincts. For example, if 100 ballots were cast in Precinct 1, then Batch 1 would have 100 ballots. This is not only for consistency but also so that the candidate by batch file matches with the ballot manifest for a batch-comparison method RLA, discussed in 5.2.2 Creating a Candidate Total by Batch File. You may also choose to create two separate ballot manifests for each separate method for greater ease in locating ballots.

Batch information can be found on Ballot Record Reports or on Label #3. ELECT encourages localities to have discussions with their Clerk of Court prior to the election. During these conversations, localities should work with their Clerk of Court to discuss storage limitations, the location of the RLA, and chain of custody concerns.¹⁹

The number of ballots in each batch should be verified independently of the tabulator. The information to create a ballot manifest may be found in the following places:

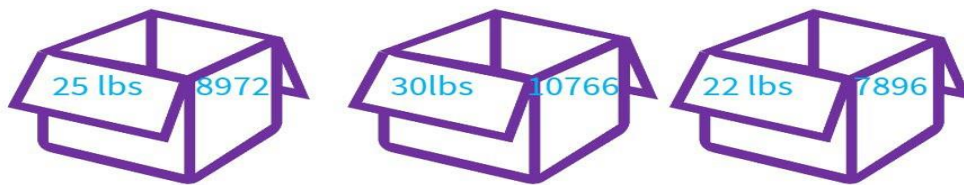
- Ballot Record Reports from precincts
- Inventory the ballot boxes at the Clerk of Court. Label #3 should contain the information needed.

- Electronic Pollbook Data
 - **Reminder:** Check Incident Reports or Officer of Election notes for occurrences of failing to check-in voters. This will allow the EPB number to be increased to the correct number.)

¹⁹ See [Democracy Fund, Knowing It's Right, Part Three, Planning and Conducting a Risk-Limiting Audit Pilot, Jennifer Morrell, June 2020.](#)

- VERIS data from the Final Absentee Report
- Calculating the Number of Ballots in a container by weight.
 - If the number of ballots in a specific container is unknown, a locality can perform a simple equation to approximate the number of ballots in each box. To do this, each container box must be weighed. The weight of each box is added together. The total of this sum is then divided by the total number of ballots cast. The result of this equation is then multiplied by the weight of the corresponding box to get the number of ballots (see graphic).

Calculating Ballots by Weight



Total Weight = 77lbs

Total ballots from vote history/credit = 27,634

$27634 / 77 = 358.88$

Box 1 = 25lb * 358.88 = 8972

Box 2 = 30lb * 358.88 = 10766

Box 3 = 22lb * 358.88 = 7895

Helpful Tips and Reminders:

- All types of ballots are included (in-person, mail-in, provisional, etc.) in the manifest.
- Localities may label the “Batch Name” in any way that helps keep them organized (example: Precinct 101, Box 26, Container 8, etc.). Batch names are unique to each locality.
- Boxes/Containers/Envelopes that contain large amounts of ballots may be grouped into smaller units to ease the physical challenges of conducting the RLA, if it is reflected in the batch name (example of “batch names”: Precinct 101 Unit 1; Box 26 Unit 2; Container 8 Unit 3, etc.).



	A	B
1	Batch Name	Number of Ballots
2	Precinct 1, Batch 1	200
3	Precinct 1, Batch 2	200
4	Precinct 1, Batch 3	71
5		

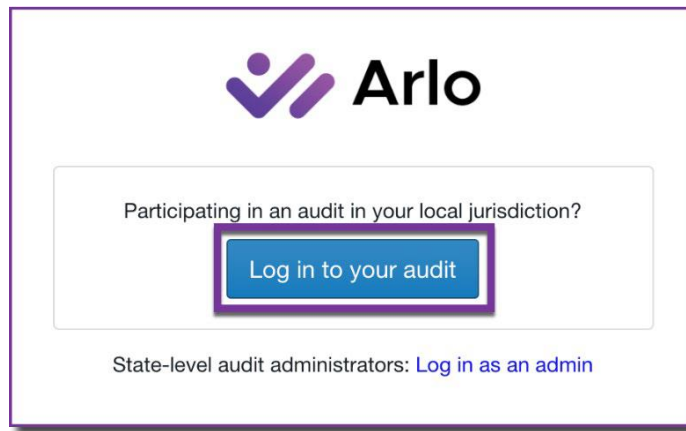
- Keep the spreadsheet simple; avoid color coding and bold, so the ballot auditing software can read it.
- Run a quick equation in Excel to check that all ballots have been accounted for in a locality. After performing this check, make sure to **delete** this sum before uploading the manifest into the RLA software.
- Build a ballot manifest as the ballots are being stored after an election in preparation for future RLAs.
- ELECT staff is available to troubleshoot specific challenges and provide support.

4.4 Uploading a Ballot Manifest

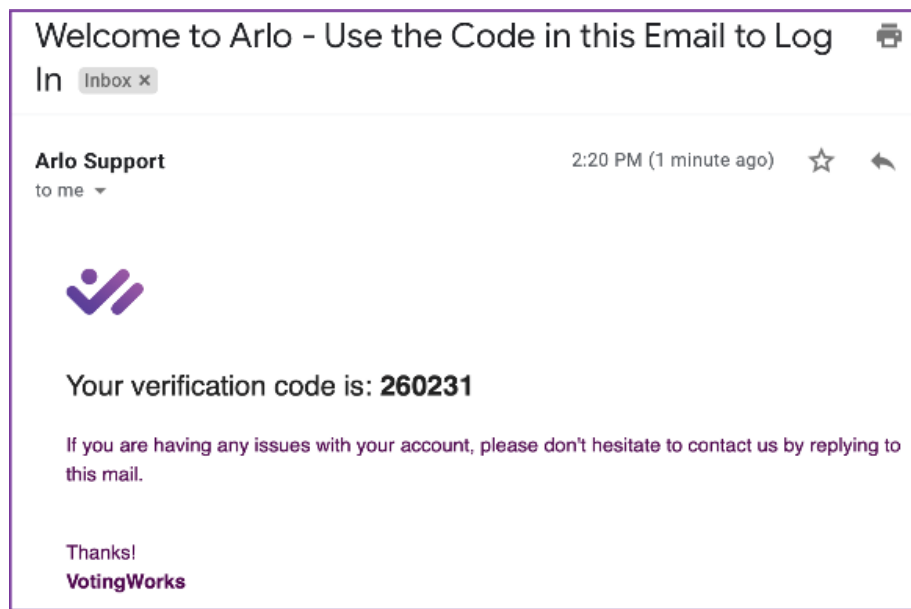
Once the ballot manifest is created, it is saved as a **.csv file** (CSV UTF-8, CSV (Macintosh), and CSV (MS-DOS) are all acceptable) and uploaded into the auditing software. The RLA software lets participants know if a mistake has been made when creating or uploading the manifest by generating an error message. Mistakes may include empty rows, incorrect file formats (the manifest must be saved as a .csv file), or ballot totals in any rows or columns. All ballot manifests must be submitted by all participating localities to start the RLA.

Once the software receives all the ballot manifests, it will compile them into one large ballot list. This master list will be used to select random ballots across participating localities. Ballot manifests must be uploaded no later than the Thursday after the SBE's random draw. Once all ballot manifests are uploaded, the RLA can begin. Detailed instructions on how to upload a ballot manifest into the current auditing software are listed below:

1. Using Google Chrome or Safari as your browser, go to this link:
<https://arlo.voting.works>
2. Click Log in to your audit.



3. Enter your email address. Check your email for a new email with the subject.
4. "Welcome to Arlo - Use the Code in this Email to Log In" - enter the verification code.



5. Click on the button with the locality name.



6. Click the Browse button and navigate to the ballot manifest .csv file that was created. Once selected, click Upload File.



The audit has not started.

Ballot manifest not uploaded.

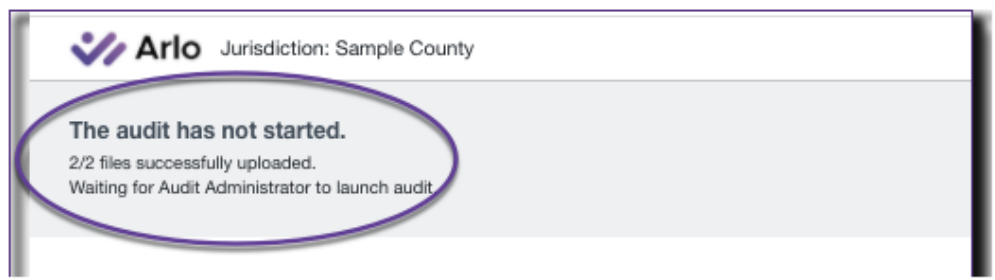
Audit Source Data

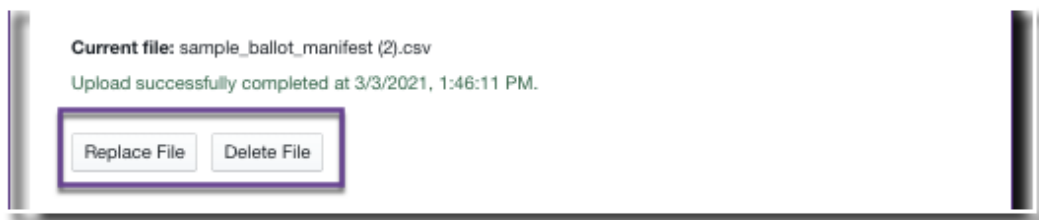
Ballot Manifest

Click "Browse" to choose the appropriate Ballot Manifest file from your computer. This file should be a comma-separated list of all the ballot boxes/containers used to store ballots for this particular election, plus a count of how many ballot cards (individual pieces of paper) are stored in each container.

(Click here to view a sample file in the correct format.)

7. When the upload is successful, a message will appear at the top of the screen that says, "files successfully uploaded." If a mistake is found after a ballot manifest has been uploaded, participants have the option to log back in and use the **Replace File** button to update the file or delete the file by clicking the **Delete File** button.





8. Once the steps for uploading your ballot manifest have been completed, log out before exiting the screen.

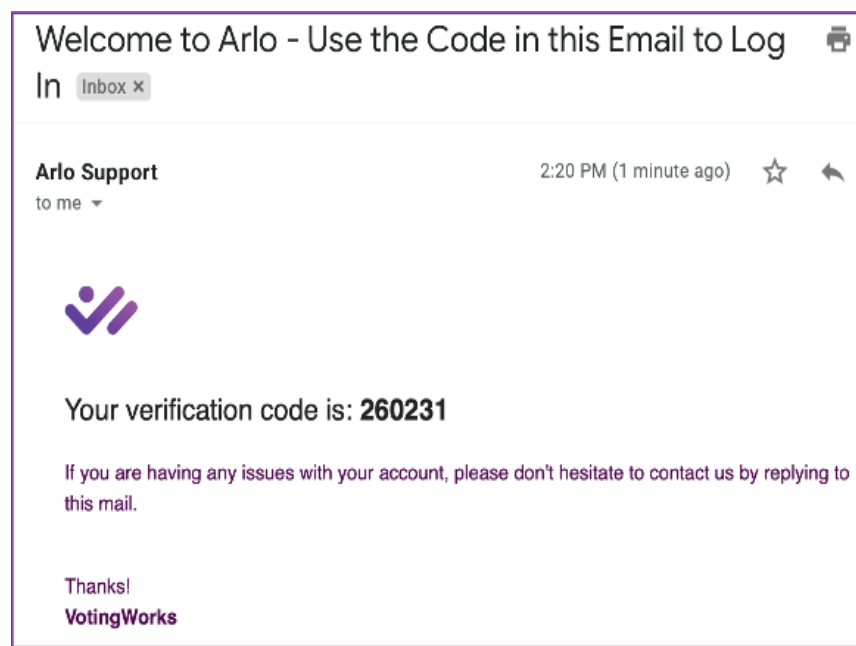
4.5 The Public Meeting

4.5.1 Ballot Retrieval Process

4.5.1.1 Log In to RLA Software

Once the list of ballots to be audited has been generated by the RLA software, participants will log into the RLA software to review the list of ballots they must retrieve to complete the RLA.

1. Using Google Chrome or Safari as your browser, go to this link: <https://arlo.voting.works>
2. Click Log in to your RLA.
3. Enter email address.
4. Check your email for a new email with the subject "Welcome to Arlo - Use the Code in this Email to Log In" - enter the verification code.



5. Click on the button with the locality name.

Sample County

4.5.1.2 Audit Boards

The RLA software will ask how many audit boards will be participating in the RLA.

The screenshot shows the Arlo software interface. At the top, there's a header with the Arlo logo and a 'Log out' button. Below the header, a message states 'Round 1 of the audit is in progress.' and 'Audit boards not set up.' The main section is titled 'Round 1 Audit Board Setup'. Under the heading 'Number of Audit Boards', there is a paragraph explaining that the user should select the appropriate number of audit boards based on personnel available and the number of ballots assigned. Below this, there is a text input field with the number '1' and a spinner icon, which is circled in red. A 'Save & Next' button is located at the bottom left of the form.

4.5.1.3 Download and Print

The RLA software will sort ballot retrieval lists, placeholder sheets, ballot labels, and audit board credentials for every audit board. Print each item for each audit board.

TEST RLA ELECTION - April 8, 2021

Round 1 of the audit is in progress.

1 of 1 audit boards complete.

Waiting for all jurisdictions to complete Round 1.

Round 1 Data Entry

0 ballots to audit in Round 1

	Download Aggregated Ballot Retrieval List
	Download Placeholder Sheets
	Download Ballot Labels
	Download Audit Board Credentials

Audit Board Progress

0 of 0 ballots audited



Audit Board #1: no ballots to audit

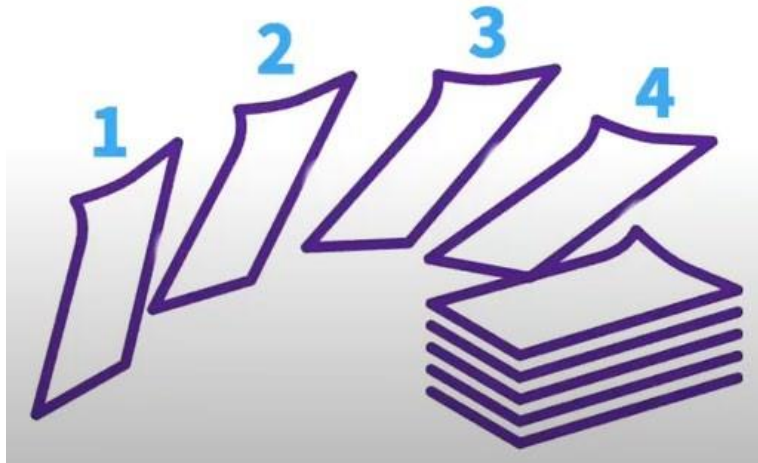
- **Ballot Retrieval List:** A ballot retrieval list is a list of ballots to be retrieved by a locality. The “Batch Name” will be the naming convention used in the ballot manifest. Since the selection is random, precincts may have multiple ballots to be retrieved, and some precincts may have none.

	A	B
1	Batch Name	Ballot Number
2	Precinct 1	90
3	Precinct 2	2
4	Precinct 2	197
5	Precinct 4	27
6	Precinct 5	313
7	Precinct 5	578
8	Precinct 5	587

- The ballot number reflects the numerical order of a specific ballot. To audit ballot number 90 in Precinct 1, for example, a member of the audit board must count from the top, each stored ballot until they reach the 90th ballot in the batch.
- **Placeholder sheets:** Placeholder sheets are individual sheets that contain each batch name and number (ex. Precinct 1, Ballot Number 90). They come in the form of a PDF and are printed on brightly colored paper. These sheets will be used to mark the place of the ballot that is being retrieved in the stack of ballots.
- **Ballot Labels:** Ballot Labels should be placed on ballots when retrieved. A bright-colored, removable label is recommended but not required.
- **Audit Board Credentials for Data:** The RLA software will create a username and password for the audit board members. The link at the bottom of the audit board credentials or QR code will direct audit board members to the site to enter the ballot totals.

4.5.2 Retrieving and Tallying Ballots

1. Review the list of ballots and retrieve the necessary containers.
2. Perform any change of custody that may be required by the Clerk of Court. The chain of custody needs to be documented. ELECT has a sample form that may be used to document the chain of custody, or a locality may design its own form.
3. Remove ballots from the box and place them in a neat stack.
4. Review the *Ballot Retrieval List* to determine which ballot to select.
5. Starting at the top of the stack, count ballots until the desired ballot is reached.



6. Once the ballot needed to be retrieved is reached, pull it out of the stack and insert the placeholder sheet in the stack to mark its position. Place the removable label on the ballot. The placeholder sheets and ballot labels are generated by the RLA software.
7. Once all ballots have been pulled from the containers, the audit board will use the procedures established by the SBE for conducting hand counts of ballots.²⁰ These procedures are outlined in FormsWarehouse under Election Management, Election Day Instructions and Forms, and Virginia's Guide to Hand-Counting Ballots. Include the batch name, ballot number, and the vote on the tally sheet. ELECT has sample tally sheets available for use during an RLA, but a locality may choose to create its own.

 A sample 'Audit Board Tally Sheet' form. It features a header 'Audit Board Tally Sheet' and a table with columns for 'Batch', 'Ballot No.', 'YES', 'NO', and 'TOTAL'. The 'Batch' column contains 'Batch 1' and 'Batch 2'. The 'Ballot No.' column contains '1' and '2'. The 'YES' and 'NO' columns have checkboxes. The 'TOTAL' column has a box for the sum. The form is shown within a larger frame.

Audit Board Tally Sheet				
	Batch 1	Batch 2		TOTAL
YES				
NO	X			

²⁰ See [ELECT, Commonwealth of Virginia, Hand Counting Guide](#).

**What happens if an audit review board cannot agree on how to process a ballot?**

When an audit review board cannot ascertain or agree to the voter's intent on the RLA contest, the audit review team should alert the EB for further review. The ballot should be set aside until the EB is able to review the ballot. The EB will review the ballot pursuant to Virginia's Guide to Hand-counting Ballots and make a final decision regarding the voter's intent.

**How should a duplicate ballot be audited?**

When an audit review board audits a duplicated ballot, the audit review board should review the original, damaged ballot for the purpose of the RLA and reporting in Arlo, as that was the ballot submitted by the voter. The duplicated ballot may be reviewed alongside the original, damaged ballot, but the original ballot's votes are what is put into Arlo.

8. Localities may return ballot(s) to the appropriate container(s) or keep all the ballots from the RLA in a designated envelope/container.
9. The containers should be resealed and returned to the Clerk of the Circuit Courts following the Chain of Custody procedures.

4.5.2.1 Alternative Methods to "Counting Down the Stack"

If a locality has a batch that is too large to locate a single ballot efficiently by counting down the stack of ballots, the locality may perform the **K-Cut Method** to locate the ballot or utilize a **Commercial Scale**. The methods are explained in more detail below:

K-Cut Method

To make a k-cut of a given stack of ballots:

- Cut the stack into two parts at *random*, designating a "top" part and a "bottom" part.
- Switch the order of the parts by moving the "bottom" part to the top and the "top" part to the bottom.
- The two parts are placed together.
- Cut the stack at least five times.
- The ballot at the top of the new stack is selected.²¹

A locality must perform a k-cut five times before selecting the top ballot. A random number must be used to dictate the percentage of the cut. One way to randomize the percentage of the cut is to utilize a random number generator set to 1-100.²² The number generated then becomes the percentage of the cut (*example* 23=23% of the stack is moved to the bottom). After performing the cut five times the top ballot becomes the retrieved ballot. The k-cut method is repeated for each random ballot that must be extracted from the stack of ballots.

²¹ See [k-Cut: A Simple Approximately-Uniform Method for Sampling Ballots in Post-Election Audits, Mayuri Sridhar and Ronald L. Rivest, Massachusetts Institute of Technology](#)

²² See [Sample Random Number Generator](#)

The Department's k-cut method demonstration video is available on FormsWarehouse.²³

Commercial Scale

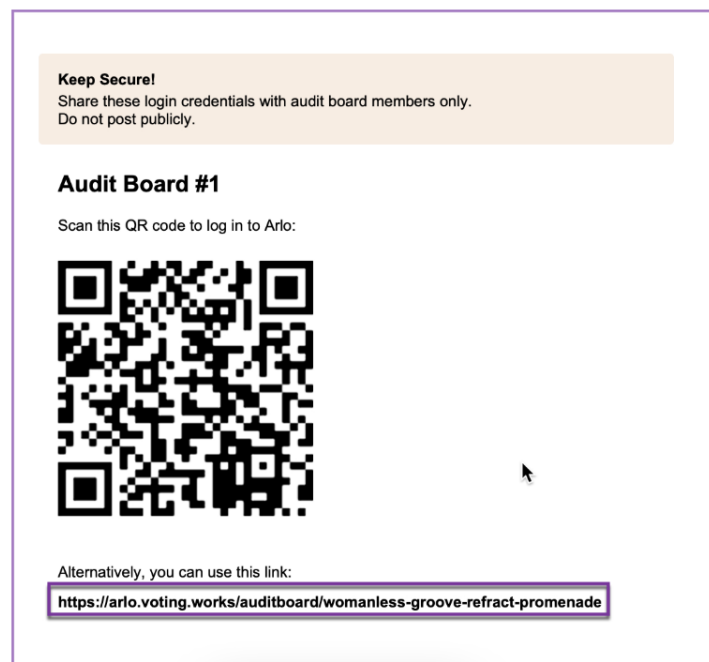
Localities may utilize a commercial scale to locate a ballot. Using a ballot scale is highly accurate, saves time, and places less stress on a locality's audit board. By calculating the average weight of the ballots, a scale can easily identify the corresponding ballot in a ballot retrieval list.²⁴ The Department's scale method demonstration video is available on FormsWarehouse > Risk Limiting Audit.

Helpful Tips and Reminders:

- ELECT has a scale that can be loaned to a locality. Localities may send an email to their Elections and Registration Specialist to request the use of the scale.
- ELECT has sample Chain of Custody forms and Tally Sheets available for use in FormsWarehouse.

4.6 Ballot Entry into the RLA Software

The link and/or QR code found at the bottom of the audit board credentials will take audit board members to the data entry portal to input the results of the RLA. A device with a Wi-Fi connection is needed to record the paper tally sheet. This may include a laptop or a smartphone. If using a smartphone, scan the QR code or type in the URL into the web browser.



²³ See FormsWarehouse, [Virginia Dept. of Elections: Risk Limiting Audit](#).

²⁴ See [Weight, Weight, Don't Tell Me: Using Scales to Select Ballots for Auditing](#), Cynthia Sturton, Eric Recorla, and David Wanger, University California Berkeley

1. The audit board members will be prompted to sign in. The audit board will see the list of ballots. Audit board members will “key in” results from the list of ballots. If a locality has 22 ballots to retrieve, there will be 22 separate fields to record each ballot. ELECT recommends that both audit board members participate, with one audit board member reading the results and one audit board member entering the results. Audit board members must **both** agree on the results of each ballot.
2. Click the **Audit First Ballot** or **Audit Ballot** button to begin.

The screenshot shows the Arlo Audit Board interface for Audit Board #1, Bob, Jane. At the top, it says "0 of 17 ballots have been audited." and "Audited: 0 Not Audited: 17". A green button labeled "Audit First Ballot" is highlighted with a red box. Below this is a table titled "Ballots for Audit Board #1" with columns: Batch, Ballot Number, Status, and Actions. The table lists five ballots, all with a status of "Not Audited". The "Audit Ballot" button in the first row is highlighted with a red box. To the right of the table are instructions for auditing.

Batch	Ballot Number	Status	Actions
ABM-3	1	Not Audited	Audit Ballot
ABM-3	12	Not Audited	Audit Ballot
ABM-3	17	Not Audited	Audit Ballot
ABM-4	10	Not Audited	Audit Ballot
ABM-6	5	Not Audited	Audit Ballot

Instructions

1. Locate and retrieve the list of ballots to audit from storage.
2. Audit each ballot by indicating the votes you see marked.
3. Once all ballots are audited, click Submit Audited Ballots. Once results are submitted, no further edits can be made.

3. Go through the ballots in order.
4. There is a Ballot Card Data Entry screen for each ballot. Under Audit Board Selections the batch name and ballot number of the ballot being audited is listed. If the ballot has not been retrieved, use the “Ballot Not Found” button. Use the “All Ballots” button to return to the full list of ballots selected for audit. Select the candidate marked on the ballot; both audit board members need to agree with the results. Click Review. Verify accuracy before clicking the **Submit & Next Ballot** button.

Arlo Audit Board #1: **Bob, Jane** [Log out](#)

◀ All Ballots **Audit Ballot Selections**

Batch **ABM-3** Ballot Number **1** **Ballot Not Found**

Ballot Contests

Colors

White

Pink

Blue

Green

Yellow

Orange

Blank Vote

Not on Ballot

Invalid Write-In

Add Note

Back Submit Selections

Instructions

1. Confirm that you are looking at the correct ballot for the batch and position. If the ballot was not located, select **Ballot Not Found** at the top of the screen.
2. For each contest, select all the candidate/choices which you see marked on the paper ballot. Select **Blank Vote** if the voter did not make any selections. Select **Not on Ballot** if the contest does not appear on the ballot. Select **Invalid Write-In** for a write-in adjudicated as invalid.
3. Once all votes are recorded, **Submit Selections** and proceed to the next ballot until all ballots have been audited.

5. Select the candidate(s) marked on the ballot. Both audit board members should agree. Then select Submit Selections.

Overvote - select each candidate marked by the voter

Contest not voted - select the Blank Vote button

Contest not on ballot - select Not on Ballot button

Invalid Write-In - select Invalid Write-In (if a contest has valid write-in candidates, a Write-In button will be listed with contest choices)

After each ballot, the audit review board will be prompted to confirm the ballot selections. After confirmation, go to the next ballot.

6. When all ballots have been inputted, audit boards should return to the audit overview screen to verify every ballot has been entered into the audit software. Once everything has been verified, click the **"Auditing Complete-Submit Results"** button.


Audit Board #1: Bob, Jane
Log out

17 of 17 ballots have been audited.
Audited: 17 Not Audited: 0

Submit Audited Ballots

Ballots for Audit Board #1

Batch	Ballot Number	Status	Actions
ABM-3	1	✓ Audited	Re-Audit
ABM-3	12	✓ Audited	Re-Audit
ABM-3	17	✓ Audited	Re-Audit
ABM-4	10	✓ Audited	Re-Audit
ED_14	4	✓ Audited	Re-Audit
ED_17	2	✓ Audited	Re-Audit

Instructions

1. Locate and retrieve the list of ballots to audit from storage.
2. Audit each ballot by indicating the votes you see marked.
3. Once all ballots are audited, click Submit Audited Ballots. Once results are submitted, no further edits can be made.

Submit Audited Ballots

- Audit board members will sign off. Names must be keyed in exactly as the audit board member signed in. For example, if the caps lock was on when the audit board member signed in, then the caps lock must be on when the audit board member signs out.


Audit Board #1

Audit Board #1: Board Member Sign-off

Thank you for completing the ballots assigned to your Audit Board. Please sign your name below to confirm that all ballots were audited to the best of your ability and in accordance with the appropriate state statutes and guidelines.

If another round of auditing is needed, you will be notified by election officials.

Audit Board Member: RACHEL LAWLESS

Full Name

Audit Board Member: rachel lawless

Full Name

Sign Off

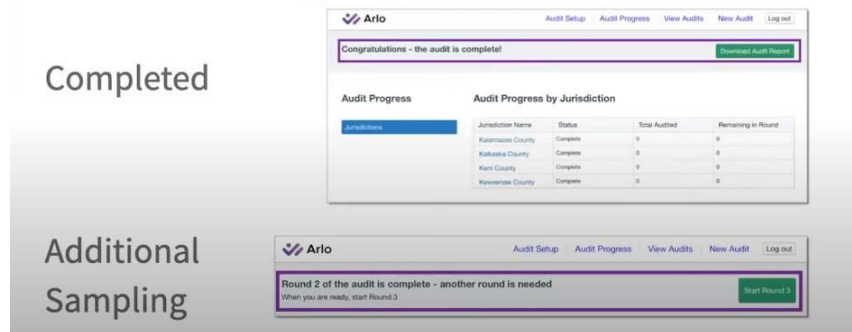
4.7 Completion of the Ballot-Polling RLA

When all audit boards have completed their ballot entry and the risk limit has been met, the

Audit Progress screen will display the message “Congratulations - the audit is complete!”

If the risk limit was not met after all the ballots have been audited for the contest, the audit software will initiate another round of sampling. A new ballot retrieval list, placeholders, labels, and audit board credentials will be generated for an additional round of ballot retrieval. If more than one locality is auditing for the same office, both localities must complete before the software will determine the need for the second round and subsequently generate the new retrieval list(s)

Audit Completion



Pursuant to § 24.2-671.2 (I), if an RLA of a contested race escalates to a full hand count, the results of the hand count shall be used to certify the election in lieu of the tabulation of the unofficial results obtained prior to the conduct of the RLA.²⁵ After a certain number of rounds of RLA and the risk limit has yet to be met, Arlo will indicate that a full hand count is required if it finds the sample size needed is the same as the actual amount of ballots.

²⁵ See Va. Code [§ 24.2-671.2](#).

5. The Batch-comparison Method of the Risk-Limiting Audit

Once a locality has been approved for a batch-comparison RLA, it must do the following:

- Notify the public and participants identified in section 3.2 and 3.4 of this manual;
- Submit a Request to Inspect Sealed Election Materials for a Post-Election Audit form;
- Create and upload the ballot manifest as described in section 5.2.1;
- Create and upload the candidate totals by batch file as described in 5.2.2; and,
- Gather Supplies for the RLA

5.1 Submitting a Request to Inspect Sealed Election Materials for a Post-Election Audit

Pursuant to Va. Code § 24.2-659, a locality must receive permission from the ELECT to unseal ballots cast on Election Day for a post-election audit. Localities are required to submit a [Request to Inspect Sealed Election Materials for a Post-Election Audit](#) form to obtain permission. Once submitted, the form is sent to ELECT for signature authorization and then presented to the Clerk of the Circuit Court to access ballots from the election. This form may be found in FormsWarehouse under the RLA section.

In the case of a statewide RLA or an RLA that includes multiple localities, a general letter may be issued instead of a Request to Inspect Sealed Election Materials for a Post-Election Audit at the discretion of ELECT staff.

5.2 Create the RLA Documents

For a batch-comparison RLA, Arlo requires two documents, a *Ballot Manifest* and a *Candidate Totals by Batch* file. Both documents are discussed below. For the purpose of this manual, a batch is a documented set of ballots created by a voting system, an officer of election, or other election official. In Virginia, a batch is the equivalent of a precinct when utilizing the batch-comparison RLA Method.

5.2.1 Creating a Ballot Manifest

The ballot manifest is an inventory of every ballot cast in a locality for a particular race. A ballot manifest is a two-column Excel spreadsheet created by localities that includes a list of the “Batch Name” (Column A) and the “Number of Ballots” (Column B). Unlike in a ballot-polling ballot manifest, the batches listed in the ballot manifest for a batch comparison audit must be the size of your precincts. For example, if precinct 1 had 100 ballots cast, then precinct 1 would be entered under Column A and 100 would be entered under Column B (*see below*).

	A	B
1	Batch Name	Number of Ballots
2	Precinct 1	301
3	Precinct 2	302



Note about Performing Both a Ballot-polling RLA and a Batch-comparison RLA

In the event that your locality has to perform both a ballot-polling RLA and a batch-comparison RLA, the ballot manifest for one may be used for the other. However, in this event, the batches listed in the ballot manifest ***must*** be the same as your precincts. For example, if 100 ballots were cast in Precinct 1, then Batch 1 would have 100 ballots. This is not only for consistency but also so that the candidate by batch file matches with the ballot manifest for a batch-comparison method RLA, discussed in 5.2.2 Creating a Candidate Totals by Batch File. You may also choose to create two separate ballot manifests for each separate method for greater ease in locating ballots.

5.2.2 Creating a Candidate Totals by Batch File

Unlike a ballot-polling method RLA, a batch-comparison RLA needs the number of ballots cast for each candidate from each batch. Due to various voting systems' capabilities and for the purposes of uniformity across the Commonwealth, the size of a batch must be the size of a precinct, as that is the only way to get the total number of ballots cast for any candidate. The total number of ballots cast for any candidate must, then, be placed into a spreadsheet called the *Candidate Totals by Batch File*, which outlines each batch of ballots and how many ballots were cast for each candidate in a particular batch.

To create a *Candidate Totals by Batch File*, open a spreadsheet program to create a simple spreadsheet.

- Column A labeled “Batch Name” is for your batch name. The batch names in column A must match the batch names in your ballot manifest.
- Additional columns should be labeled with the names of the candidates. You should use the names on the ballot. Write-ins may be lumped together unless they have reached the threshold for a write-in certification.

	A	B	C	D
1	Batch Name	John Doe	Jane Smith	Write-in
2	Precinct 1	100	200	1
3	Precinct 2	200	100	2

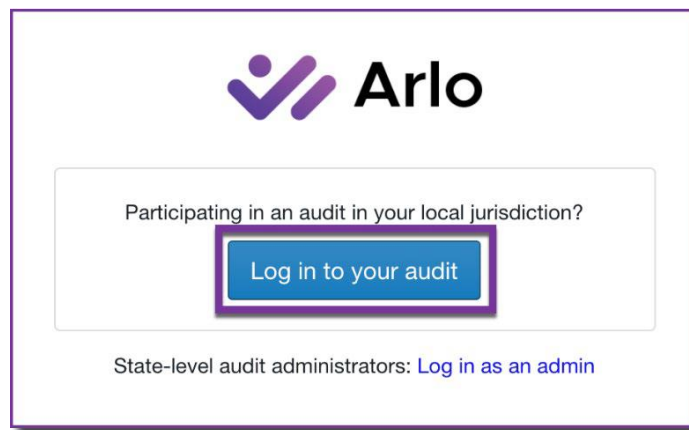
Enter the data for your locality from your statements of results. When you're finished, review the spreadsheet to ensure the total number of batches matches the number of batches in your ballot manifest and that the candidate totals are correct. Then, save the file as a .csv file. More information can be found regarding the construction of candidate totals by batch files in the Learning Management System (LMS) RLA course.

5.3 Uploading the Ballot Manifest and Candidate Totals by Batch files

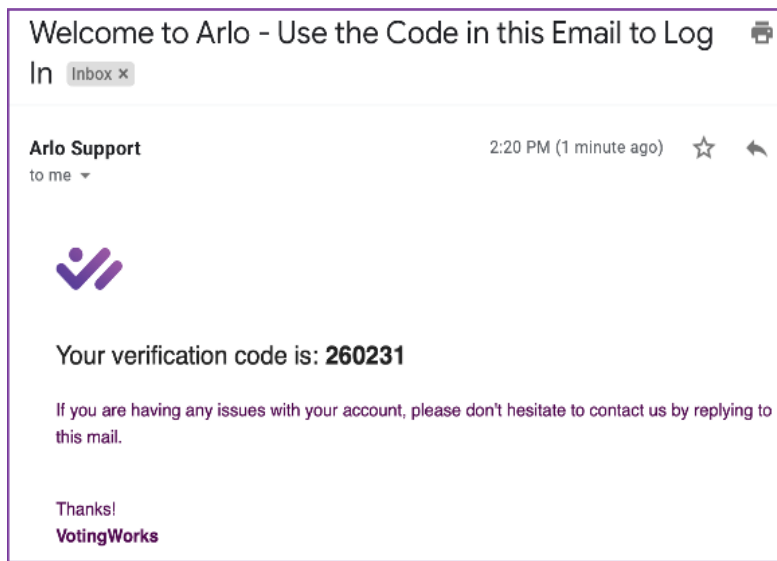
Once the ballot manifest and the candidate totals by batch files are created, participants will

save the ballot manifest and candidate totals by batch files as **.csv files** (CSV UTF-8, CSV (Macintosh), or CSV (MS-DOS) are all acceptable) and upload the spreadsheets into the auditing software. The RLA software will let participants know if a mistake has been made when creating or uploading the files by generating an error message. Mistakes can include empty rows, incorrect file formats (the manifest must be saved as a .csv file), or ballot totals in any rows or columns. The ballot manifest and the candidate total by batch files must be uploaded no later than the Thursday after the SBE's random draw. Once the files are uploaded, the RLA can begin. Detailed instructions on how to upload a ballot manifest and the candidate totals by batch into the current auditing software are listed below:

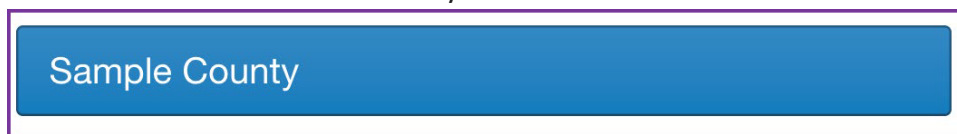
1. Using Google Chrome or Safari as your browser, go to this link:
<https://arlo.voting.works>
2. Click Log in to your audit.



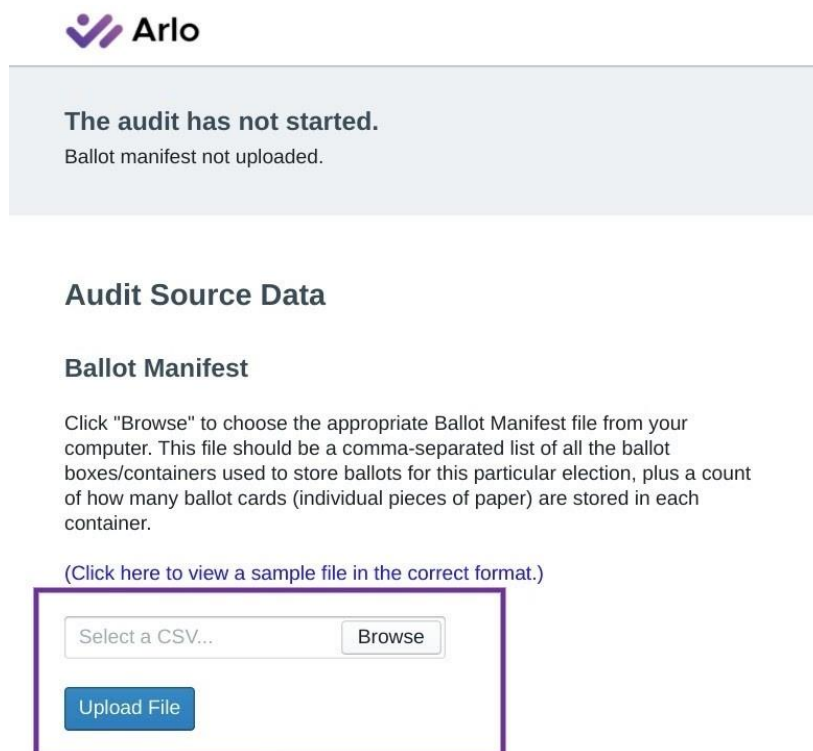
3. Enter email address.
4. Check your email for a new email with the subject "Welcome to Arlo - Use the Code in this Email to Log In" - enter the verification code.



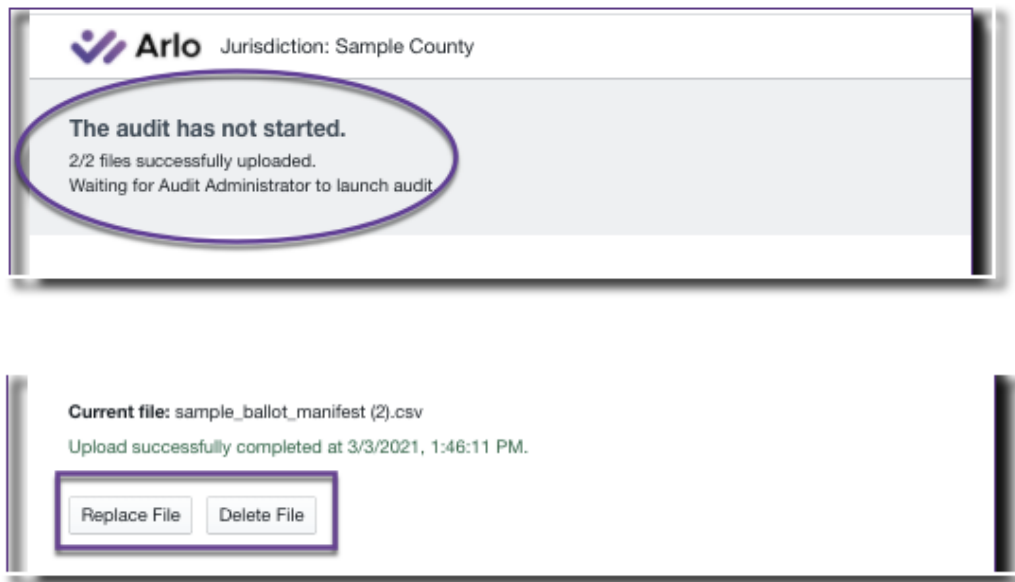
- Click on the button with the locality name.



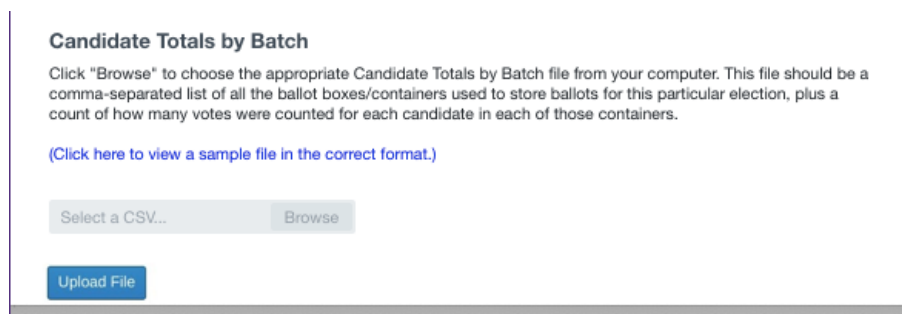
- Click the Browse button and navigate to the ballot manifest .csv file that was created. Once selected, click Upload File.



- When the upload is successful, a message will appear at the top of the screen that says, "Ballot manifest uploaded." If a mistake is found after a ballot manifest has been uploaded, participants have the option to log back in and use the **Replace File** button to update the file.



- Next, a prompt will appear below the Ballot Manifest section to upload the Candidate Totals by Batch. click the Browse button to navigate to the candidate totals by batch .csv file. Once selected, click the Upload File button. Remember, the batch names in the Candidate Totals by Batch file must match the batch names in the ballot manifest and the totals listed in the Candidate Totals by Batch match your statements of results.



5.4 Retrieving and Tallying

After the audit begins, the locality will receive a batch retrieval list. To retrieve batches, refer to your batch retrieval list to determine what batches are needed.



Best Practice

Unlike in the ballot polling method, Arlo does not assign the audit review boards to specific batches on the batch retrieval list. ELECT recommends assigning more experienced officers of election or staff to audit review boards who will review the larger batches on the batch retrieval list, such as the CAP.

- Retrieve the correct container(s) using the required chain of custody verification steps.
- Pull the entire batch of ballots out of the storage container and organize it into a neat stack of ballots. If the container contains more than 1000 ballots, ballots should be removed from the container and sorted into manageable stacks, leaving the rest of the ballots in the container until the previous stack is tallied.²⁶



Batch Comparison FAQ: What if a ballot does not have the race on it?

These ballots are not to be counted as part of a batch comparison RLA. Arlo and the RLA are only focused on the race being audited. Therefore, only ballots with the race on them should be audited as part of the batch comparison RLA and entered in Arlo.

This typically occurs when the batch selected is the CAP or an early voting AB batch and the locality performing the batch comparison RLA has more than one district race, for example, 2 or more Congressional Districts, House of Delegates Districts, or Virginia Senate Districts.

When auditing a batch, it is recommended that the audit review boards first sort out the ballots that do not have the audited race. For example, if a locality is auditing the race for HOD District A but also had a race for HOD District B during the same election, the audit review board should first sort out the HOD District B ballots from the ballot container since those ballots do not have the HOD District A race on them. Once separated, the audit review board should begin counting the ballots by either method described below.

The ballots that do not have the audited race should be set aside within view of the audit review board, such as in a separate stack on the table or placed back into the box after they have been separated from the ballots that do have the audited race on them. Once the audit review board has completed their tally of the ballots with the race on them, the audit review board should place all ballots back into the container(s) they came in to ensure a proper chain of custody for all ballots in the batch.

These actions should only be done for a batch comparison RLA. Instructions on how to handle ballots that do not have the audited race on them during a ballot polling RLA are described in the ballot polling portion of this manual, specifically Section 4.6.

²⁶ See [VotingWorks, Batch Retrieval & Tally](#)

5.4.1 Methods for Retrieving Ballots

There are two methods for retrieving and tallying during a batch-comparison RLA. For larger batches, multiple audit review boards may be assigned. Audit review boards should be encouraged to prioritize accuracy over speed; it is better to have the correct count the first time, and it takes more time than to have to redo the count.

The Sort-and-Stack Method²⁷

- a. For each ballot: one audit board member picks up a single ballot from the stack and reads the vote for the contest being audited aloud, then hands the ballot to the second audit board member.
 - i. The second audit board member verifies that the vote that is on the ballot is indeed what the first audit board member read, then places the ballot in the “stack” that corresponds to the vote.
 - ii. The first audit board member should watch to make sure the ballot is placed in the correct stack.
 - iii. A stack should be created for each contest choice (including write-in), overvoted/blank/undervoted ballots, duplicated ballots, and ballots where the audit board cannot agree on the voter’s intent.
- b. Count the ballots in each stack by having one member of the audit board verbally count the ballot while handing it to the other member for verification.
 - i. Count the ballots in groups of 10, stacking the groups at right angles to each other, so you can easily count the complete groups when you are done. For instance, if you have seven groups of 10 ballots each plus an extra 3 ballots, the total tally would be 73.
 - ii. Record the total tally for each candidate on the Audit Board Batch Tally Sheet.

The Hashmarking Method²⁸

- a. Prepare a Tally Sheet
 - i. For this method, a tally sheet should be prepared. The tally sheet should:
 1. Be organized in the same order as the ballot.
 2. List each contest and associated choices (including write-ins when applicable) to be audited.
 3. Include a space for overvotes and blank/undervotes for each contest.
 4. Have space for tally marks after each choice.
- b. Tally the Votes: One audit board member reads the choice for the first contest being audited to the second audit board member who makes a tally mark on the tally sheet. Repeat for all contests being audited. Ideally, a third audit board member should observe the ballot marks and tally sheet tallies.

²⁷ *Id*

²⁸ *Id.*

- i. Completing this process in groups of 20, 50, 100, or some other set number allows for verification checks throughout the process. Once the set number is completed, add up the tally marks to ensure the same number was tallied for each contest.
- c. Complete Audit Board Batch Tally Sheet: When all ballots are tallied, total the tally marks and complete the Audit Board Batch Tally Sheet.



What happens if an audit review board cannot agree on how to process a ballot?

When an audit review board cannot ascertain or agree to the voter's intent on the RLA contest, the audit review team should alert the EB for further review. The ballot should be set aside until the EB is able to review the ballot. The EB will review the ballot pursuant to Virginia's Guide to Hand-counting Ballots and make a final decision regarding the voter's intent.



How should a duplicate ballot be audited?

When an audit review board audits a duplicated ballot, the audit review board should review the original, damaged ballot for the purpose of the RLA and reporting in Arlo, as that was the ballot submitted by the voter. The duplicated ballot may be reviewed alongside the original, damaged ballot, but the original ballot's votes are what is put into Arlo.

5.5 Batch Tally Entry into Arlo

All tallies from the batches selected must be uploaded into Arlo; the audit will remain open until all tallies have been uploaded. Tallies can be entered by audit boards, a specified member of the staff, an EB member, or the GR.

To create tally entry accounts for audit boards or for a specified individual, select Set Up Tally Entry Accounts on the Set Up Tally Entry Accounts screen. If only one designated participant will be entering tallies, select *Skip*.²⁹

²⁹ See [VotingWorks, Batch Tally Entry into Arlo, Voting Works](#)

Arlo

jonah+ja.losangeles@...

Test County — General Election
Round 1
0/4 batches audited

1 Prepare Batches

2 Set Up Tally Entry Accounts

3 Enter Tallies

1

Retrieve Batches from Storage

Download Batch Retrieval List

For each batch in the retrieval list:

- Find the container in storage
- Perform the required chain of custody verification steps
- Take the batch of ballots out of the container and stack them

2

Print Batch Tally Sheets

Download Batch Tally Sheets

There will be one tally sheet for each batch. Use these tally sheets when recording the audited votes in each batch.

Continue >

Arlo

jonah+ja.losangeles@...

Test County — General Election
Round 1
0/4 batches audited

✓ Prepare Batches

2 Set Up Tally Entry Accounts

3 Enter Tallies

Do you want to set up additional tally entry accounts?

If you want to have multiple people entering tallies at the same time, set up tally entry accounts for them. Otherwise, use your account to enter the tally for each batch you audit.

Set Up Tally Entry Accounts
Skip

< Back

Continue >

A designated participant should provide the audit boards or the specified individual with the login link displayed on the screen (each link is unique). Then, the audit board or specified individual should Log In by entering their name(s) and party affiliation, if provided. A login code will be provided. The participants enter that code to authenticate the Tally Entry User(s) by selecting Enter Login Code, entering the code, and selecting Confirm to complete the login

process.³⁰

The screenshot shows the Arlo web application interface. At the top, it says "Sample County - Batch inventory test" and "Round 1". On the right, it says "0/4 batches audited". Below this is a progress bar with three steps: "1 Prepare Batches", "2 Set Up Tally Entry Accounts", and "3 Enter Tallies". The "Set Up Tally Entry Accounts" step is currently active. It contains two main sections: "Share Tally Entry Login Link" and "Confirm Tally Entry Accounts". The "Share Tally Entry Login Link" section shows a URL "https://arlo.voting-works/tallyentry/nyshw-childcare-rutlin" and buttons for "Copy Link" and "Download Protocol". The "Confirm Tally Entry Accounts" section lists "Hank Aaron" and "Bob Jane". "Hank Aaron" has a "3" next to it and a button "Enter Login Code" with a red "X" icon. "Bob Jane" has a "✓ Logged In" status. A modal window titled "Confirm Login: Hank, Aaron" is open, showing "Enter the login code shown on their screen:" and a numeric keypad with "3", "4", and "0" entered. The modal also has "Cancel" and "Done" buttons. At the bottom of the main interface are "Back" and "Continue" buttons.

Jurisdiction Manager

The screenshot shows the Jurisdiction Manager interface. It contains two main screens. The first screen is titled "Sample County - Batch inventory test" and "Tally Entry Login". It has two rows of input fields for "Name" and "Party Affiliation (if required)". The first row has "Hank" in the Name field. The second row has "Aaron" in the Name field. Below these fields is a "Log In" button. The second screen is titled "Sample County - Batch inventory test" and "Login Code". It shows a large "3" next to a "3" in a purple circle, followed by "4" and "0" in blue. Below this, it says "Tell your login code to the person running your audit..."

Tally Entry User

To enter the candidate totals for a batch, select the batch from the list on the left-hand side of the Enter Tallies screen or use the search batches function, and, then, click Edit Tallies, enter the vote totals from the Batch Tally Sheet, and select Save Results.³¹ Once all batches have been entered and reviewed, a designated participant can select Finalize Tallies.²⁷

³⁰ *Id.*

³¹ *Id.*

Arlo

Test County — General Election | Round 1 | 0/4 batches audited

Prepare Batches | Set Up Tally Entry Accounts | **3 Enter Tallies**

Search batches...

Tabulator A - Batch 1

Tabulator A - Batch 2

Tabulator A - Batch 3

Tabulator A - Batch 4

Tabulator A - Batch 1

Vote Totals

Choice	Votes
Alice Adams	12
Bob Bates	8
Carol Copeland	

Edit Tallies

< Back

Finalize Tallies

If multiple Audit Board Batch Tally Sheets were used to tally a batch, select the drop-down next to Edit Tallies and select Use Multiple Tally Sheets to enter more than one tally sheet. The individual who enters the tally sheet should edit the name at the top to identify who completed the entry of the Batch Tally Sheet; this helps keep a chain of custody for the data entered. Next, enter the votes, and select Save Sheet (the Edit Tallies button changes to Save Sheet after selection).³² Select Sheet 2 to add another Batch Tally Sheet, and Select +Add Sheet to add another Tally Sheet as needed.³³ The Vote Totals tab is the sum of votes for all sheets entered.³⁴

³² *Id.*

³³ *Id.*

³⁴ *Id.*

Arlo

Test County — General Election Round 1 0/4 batches audited

Prepare Batches Set Up Tally Entry Accounts Enter Tallies

Search batches...

Tabulator A - Batch 1

Tabulator A - Batch 2

Tabulator A - Batch 3

Tabulator A - Batch 4

Vote Totals Audit Board 1 Sheet 2 Add Sheet

Choice	Votes
Alice Adams	12
Bob Bates	8
Carol Copeland	

Edit Tallies Use Multiple Tally Sheets

Back Finalize Tallies

5.6 Completion of a Batch-comparison RLA

When all audit boards have completed their tally entry and the risk limit has been met, the *Audit Progress* screen will display the message “Congratulations - the audit is complete!”

If the risk limit was not met after all the batches have been audited for the contest, the audit software will initiate another round of sampling. A new batch retrieval list, placeholders, labels, and audit board credentials will be generated for an additional round of batch retrieval.

Arlo

Sample County — Batch inventory test Round 1 0/4 batches audited

Prepare Batches Set Up Tally Entry Accounts Enter Tallies

Share Tally Entry Login Link

https://arlo.voting-works.com/tallyentry/nyhow-childcare-nuttin

Copy Link Download Printout

Confirm Tally Entry Accounts

Hank Aaron Enter Login Code

Bob Jane Logged In

Confirm Login: Hank, Aaron

Enter the login code shown on their screen:

3 4 0

Cancel Confirm

Back Continue

Jurisdiction Manager

Pursuant to Va. Code § 24.2-671.2(I), if an RLA of a contested race escalates to a full hand

count, the results of the hand count shall be used to certify the election in lieu of the tabulation of the unofficial results obtained prior to the conduct of the RLA.³⁵ After a certain number of rounds of RLA and the risk limit has yet to be met, Arlo will indicate that a full hand count is required if it finds the sample size needed is the same as the actual amount of ballots.

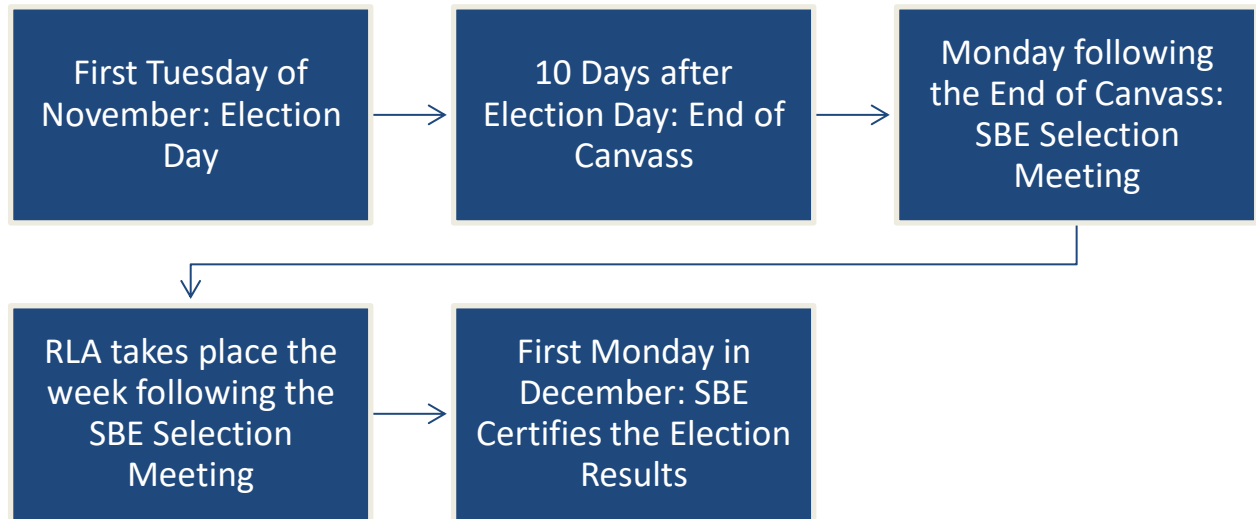
6. Results

At the conclusion of the RLA, ELECT will submit a report to the SBE on the findings of the RLA. If your locality is participating in an RLA and would like to provide feedback to be included in the report, contact your RLA Administrator from ELECT with your findings. The report will include the results of the RLA as well as an analysis of any discrepancies detected. ELECT has also created a sample press release template that localities may utilize, which can be found in the RLA section in FormsWarehouse.

³⁵ See Va. Code [§ 24.2-671.2](#).

7. APPENDIX

7.1 General Timeline for a Risk-Limiting Audit after a General Election





★ VIRGINIA ★
STATE BOARD *of* ELECTIONS

Prohibited Personal Use Regulations

BOARD WORKING PAPERS
Danny Davenport
Director of Policy



★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS

Memorandum

To: Chairman O'Bannon, Vice-Chair Dance, Secretary Alvis-Long, Dr. Chris Stolle, and Dr. Sally Hudson
From: Daniel Davenport, Director of Policy
Date: August 18, 2026
Re: Regulation of the Personal Use of Campaign Funds

Proposed Motion:

I move that the State Board of Elections approve the proposed changes to Board regulations 1VAC20-90-10, 1VAC20-90-50 and 1VAC20-90-60.

Relevant Authorities:

- Va. Code §§ 24.2-948.6 - 24.2-948.9

Background:

The 2025 Session of the Virginia General Assembly passed into law Chapters 535 and 537 of the 2025 Acts of Assembly. Those chapters established Virginia Code §§ 24.2-948.6 through 24.2-948.9, regarding the personal use of campaign funds.

At the September 17, 2025, meeting of the State Board of Elections, the Board promulgated emergency regulations 1VAC20-90-50 and 1VAC20-90-60 as required by Chapters 535 and 537 of the 2026 Acts of Assembly. These regulations were promulgated pursuant to the agency's emergency authority under Virginia Code 2.2-4011, due to the short timeframe that the General Assembly gave the SBE to prepare and post these regulations. Now, these regulations are entering the proposed stage of Virginia's regulatory process and will be considered once more by the SBE after the sixty-day public comment period has expired.

Since the time these regulations were first promulgated, ELECT has received inquiries from candidates and office holders raising new questions that can best be addressed in the text of these regulations. As a result, ELECT has made the following proposed changes to these regulations:

- Added examples to illustrate allowable uses of campaign funds.
- Provided definitions for clarity.
- Provided standards for situations where there is overlap between allowable uses of funds and prohibited personal uses of funds.
- Reorganized the regulation to better parallel the provisions of Virginia Code §§ 24.2-948.6 through 24.2-948.9.

ELECT Recommendation:

ELECT staff recommends that the State Board of Elections adopt the proposed updates to 1VAC20-70-90.

1VAC20-90-10. Definitions.

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

“Board” means the State Board of Elections

“Candidate” means the same as that term is defined in § 24.2-101 of the Code of Virginia.

“Contribution” means the same as that term is defined in § 24.2-945.1 of the Code of Virginia.

“Department” means the Department of Elections

“Election” means the same as that term is defined in § 24.2-101 of the Code of Virginia.

“Expenditure” means the same as that term is defined in § 24.2-945.1 of the Code of Virginia.

“Personal use” means any use of funds in a campaign account of a present or former candidate to fulfill a commitment, obligation, or expense of any person that would exist irrespective of the candidate’s campaign or duties as an officeholder.

1VAC20-90-50. Personal use of campaign funds.

A. Definitions. The following words and terms when used in this section shall have the following meanings unless the context clearly indicates otherwise.

"Donated funds " when used in this section means all funds including gifts, loans, advances, credits, deposits of money, goods, contributions, or services that are donated for the purpose of supporting the activities of an officeholder. Donated funds does not mean funds appropriated by Congress, the General Assembly, or another similar public appropriating body, or personal funds of the officeholder donated to an account containing only those personal funds. "Member of the family" means the spouse of the candidate or officeholder, any child, stepchild, parent, grandparent, sibling, half-sibling, or stepsibling of the candidate, officeholder, or their spouse; the spouse of any child, step-child, parent, grandparent, sibling, half-sibling, or step-sibling of the candidate, officeholder, or their spouse; or any person who shares a residence with the candidate or officeholder.

"Officeholder" is a person who holds an office of the Commonwealth or one of its governmental units by virtue of an election.

“Usual and normal charge” means the hourly charge for the same or similar goods or services at a commercially reasonable rate prevailing at the time the services were rendered.

B. Personal use. The personal use of campaign funds is prohibited. Personal use includes, but is not limited to, the use of funds in a campaign account for:

1. A home, mortgage, rent, or utility payment:

a. For any part of any personal residence of the candidate, officeholder, or members of their family; or

b. For real or personal property that is owned by the candidate, officeholder, or a member of their family and used for campaign or officeholder purposes, to the extent the payments exceed the usual and normal charge of the property usage.

2. A clothing purchase, except for clothing of de minimis value, that is used for campaign or officeholder purposes, such as tee shirts and caps imprinted with a campaign slogan;

3. A non-campaign-related automobile expense;

4. A country club membership, including dues, fees, or other payments to a country club, unless the payments are made in connection with a specific fundraising event that takes place on the country club’s premises;

5. A vacation or other trip not for campaign or officeholder purposes;

6. Household food items or supplies;

7. A tuition payment, other than those associated with the training of campaign or officeholder staff;

8. Admission to a sporting event, a concert, a theater, or any other form of entertainment, unless the expense is part of a specific campaign or officeholder activity;

9. Dues, fees, and other payments to a health club, recreational facility, or other nonpolitical organization, unless the expense is part of a specific campaign or officeholder activity that takes place on the organization's premises;

10. Salary payments to a candidate or officeholder’s family member, unless the family member is providing bona fide services to the campaign and receives

compensation that is no greater than the usual and normal value of the services provided;

11. Funeral, cremation, or burial expenses except those incurred for a candidate, officeholder, or an employee or volunteer of an authorized committee or officeholder, whose death arises out of, or in the course of, a specific campaign or officeholder activity; or

12. Compensation paid to the candidate or officeholder, unless otherwise permitted by law.

C. Case-by-case determinations.

1. Upon submission of a complaint, the Board will determine on a case-by-case basis whether the following constitute personal uses of campaign funds:

- a. Legal expenses;
- b. Meal expenses;
- c. Travel expenses;
- d. Vehicle expenses;
- e. Care for dependents and family members; and
- f. Any other uses not covered by this section.

Pursuant to § 24.2-948.4 of the Code of Virginia, any person who is subject to the provisions of § 24.2-948.6 of the Code of Virginia may submit a complete written request for an advisory opinion concerning the application of that section to a specific transaction or activity. An advisory opinion may be relied upon by (i) any person involved in the specific transaction or activity subject to the advisory opinion; and (ii) any person involved in a transaction or activity that is indistinguishable in all its material aspects from the transaction or activity subject to the advisory opinion.

2. The following examples are not considered personal use when campaign funds are spent because of a commitment, obligation, or expense that would not exist but for the candidate's campaign or duties as an officeholder:

- a. Legal expenses and fees incurred by the candidate, officeholder, or their staff:

- i. in connection with an investigation, lawsuit, or other legal proceeding;
- ii. to obtain legal advice or counsel; or
- iii. to obtain access to the ballot for an election.

b. Meal expenses for food and beverages for attendees at legislative campaign events, including town halls, fundraisers, and meetings with constituent groups.

c. Travel expenses for:

- i. Tickets for a bus, train, or plane;
- ii. Hotel stays, including overnight stays on the evening before an event or on the evening that an event ends; or
- iii. Bona fide care for dependents and for family members while travelling.

If a committee uses campaign funds to pay reasonable expenses associated with travel that involves both personal activities and campaign or officeholder-related activities, the incidental expenses that result from personal activities are personal use, unless the person benefiting from this use reimburses the campaign account within 30 days for the amount of the incremental expenses.

d. Vehicle Expenses, including:

- i. Rental car expenses.
- ii. Gasoline purchased for travel or pursuant to a rental car agreement.

If a campaign uses campaign funds to pay expenses associated with a vehicle that is used for both personal activities beyond a de minimis amount and campaign or officeholder related activities, the portion of the vehicle expenses associated with the personal activities is personal use, unless the person(s) using the vehicle for personal activities reimburse(s) the campaign account within 30 days for the expenses associated with the personal activities. Campaign funds may not be used to pay for or reimburse vehicle expenses otherwise provided for under Virginia Law.

e. The usual and normal cost of bona fide care for dependents or family members incurred as a direct result of the candidate or officeholder seeking, holding, or maintaining public office.

f. Gifts of a nominal value made on a special occasion such as a holiday, graduation, marriage, retirement, or death, unless made to a member of the candidate's family, including:

i. Items valued at \$9.99 or less before tax;

ii. Greeting Cards;

iii. Baseball caps; or

iii. T-shirts.

g. Notwithstanding the provisions of subsection C(2)(e) of this section, the following are never gifts of nominal value:

i. Cash or cash equivalents, such as gift cards; or

ii. Food or beverages in a one-on-one setting.

D. Non-personal uses. The following uses of donated funds are not considered personal use:

1. Charitable donations to an organization described in 170(c) of the United States Code, unless the candidate receives compensation from the organization before the organization has expended the entire amount donated for purposes unrelated to the candidate's personal benefit;

2. Transfers of campaign assets, so long as the transfer is for fair usual and normal value. Any depreciation before the transfer must be allocated between the committee and the purchaser based on the useful life of the asset.

3. The use of campaign funds for a political or officially connected expense to the extent the expense is an expenditure that is provided for under Virginia law or an ordinary and necessary expense incurred in connection with the duties of an officeholder. Any use of funds that would be personal under subsection B of this section will not be considered a qualified expenditure or an ordinary and necessary expense incurred in connection with the duties of a state or local officeholder.

E. Permissible non-campaign use of funds. In addition to defraying expenses in connection with a campaign for an office of the Commonwealth, funds in a campaign account:

1. May be used to defray any ordinary and necessary expenses incurred in connection with the recipient's duties as an officeholder or candidate, if applicable, including:

a. The costs of travel by the recipient officeholder and an accompanying spouse to participate in a function directly connected to bona fide official responsibilities, such as a fact-finding meeting or an event at which the officeholder's services are provided through a speech or appearance in an official capacity; or

b. The costs of winding down the office of a former officeholder for a period of six months after the officeholder leaves office;

2. May be disposed of or used in accordance with §§ 24.2-948.4 and 24.2-948.6 of the Code of Virginia.

3. May be used for any other lawful purpose except for personal use, as described under either subsection B or C of this section.

Nothing in this subsection modifies or supersedes other federal statutory restrictions or relevant state laws that may apply to the use of campaign or donated funds by candidates or officeholders.

F. Third-party payments. If the use of funds for a particular expense would be a personal use under this section, payment of that expense by any person other than the candidate or the campaign committee shall be a contribution to the candidate unless the payment would have been made irrespective of the candidate's candidacy. Examples of payments considered to be irrespective of candidacy include situations where:

1. The payment is made from funds that are the candidate's personal funds, including an account jointly held by the candidate and a member of the candidate's family; or

2. Payments for that expense were made by the person making the payment before the candidate became a candidate or would be made irrespective of the candidate's candidacy. Payments that are compensation shall be considered contributions unless:

a. The compensation results from bona fide employment that is genuinely independent of the candidacy;

b. The compensation is exclusively in consideration of services provided by the employee as part of the employee's employment;

c. The compensation does not exceed the amount of compensation that would be paid to any other similarly qualified person for the same work over the same period.

G. Candidate and officeholder security. The use of campaign funds to pay for the reasonable costs of security measures for a candidate, officeholder, member of their family, and employees of the candidate's campaign or the officeholder's office is not personal use so long as the security measures address ongoing dangers or threats that would not exist irrespective of the individual's status or duties as a candidate or officeholder.

1. Disbursements for security measures must be for the usual and normal charge for the goods or services. Usual and normal charge means, in the case of goods, the price of those goods in the market in which they are ordinarily purchased, and, in the case of services, the hourly or piecework charge for the services at a commercially reasonable rate prevailing at the time the services were rendered.

2. Examples of security measures include:

- a. Nonstructural security devices, such as security hardware, locks, alarm systems, motion detectors, and security camera systems;
- b. Structural security devices, such as wiring, lighting, gates, doors, and fencing, so long as the devices are intended solely to provide security and not to improve the property or increase its value;
- c. Security personnel and services that are bona fide, legitimate, and professional;
- d. Cybersecurity software, devices, and services.

H. Expenses beyond the usual and normal charge for a good or service are considered personal use, unless otherwise stated in this section or § 24.2-948.6 of the Code of Virginia, or determined otherwise by the Board. If a campaign uses campaign funds to pay expenses beyond the usual and normal charge for a good or service that is otherwise not personal use, the portion of the expenses beyond the usual and normal charge are personal use, unless the person(s) using campaign funds reimburse(s) the campaign account within thirty days for the personal use.

I. Recordkeeping.

1. For the use of campaign funds described in subsections B and C of this section that involve both personal use and either campaign or officeholder use, a

contemporaneous log or other record must be kept to document the dates and expenses related to the personal use of the campaign funds. The log must be updated whenever campaign funds are used for personal expenses, as described in subsections B and C of this section, rather than for campaign or officeholder expenses. The log or other record must also be maintained and preserved in accordance with the requirements of § 24.2-947.3 of the Code of Virginia.

2. Committee treasurers are responsible for keeping detailed and accurate accounts of all contributions turned over to and expenditures made by the officeholder, candidate, or their treasurer on behalf of the officeholder, candidate, or their campaign committee, or reported to any candidate, officeholder, or their treasurer pursuant to this article. Such account shall set forth the following:

- a. The date of the contribution or expenditure;
- b. Its amount or value;
- c. The name and address of the person or committee making the contribution or to whom the expenditure was made; and
- d. The object or purpose of the contribution or expenditure.
- e. Such records are subject to the retention requirements described in subsection E of § 24.2-947.3 of the Code of Virginia.

3. For any expenditure greater than \$500, the committee treasurer shall be responsible for retaining all:

- a. Bank statements;
- b. Checks or copies of checks;
- c. Campaign depository and bills;
- d. Invoices;
- e. Receipts; and
- f. Any other such record of the expenditure.
- g. Such records are subject to the retention requirements described in subsection F of § 24.2-947.3 of the Code of Virginia.

J. Exemption. Candidates for federal office and federal officeholders subject to 52 USC § 30114 are exempted from this section.

K. Violations.

1. A person may file a complaint for violations of § 24.2-948.6 of the Code of Virginia and this section if the person:

- a. Contributes to a candidate or campaign committee that has allegedly committed the violation; or
- b. Is qualified to vote in the election for the office that the officeholder holds or for which the candidate is running.

2. A complaint must be filed with the Department on a form prescribed by the Department in accordance with the requirements of § 24.2-948.7 of the Code of Virginia.

3. The Department must provide a copy of a submitted complaint to the respondent within 24 hours of receipt.

4. The Department must review complaints and transmit those it deems credible, complete, and from a qualified complainant to the Board within ten days of receipt. The Department must provide written notice to the complainant and respondent of the Department's determination of complaint disposition.

5. For complaints transmitted by the Department, or pursuant to an inquiry initiated upon its own motion, the Board will conduct a preliminary investigation and, if necessary, a public hearing in accordance with the requirements of § 24.2-948.7 of the Code of Virginia and procedures developed by the Board.

6. The Department's complaint form and Board's procedures shall be posted on the Department's website.

1VAC20-90-60. Advisory opinions for use of campaign funds

A. Requests for advisory opinions.

1. Any person subject to the provisions of § 24.2-948.6 of the Code of Virginia may request in writing an advisory opinion concerning the application of that section or any regulation prescribed by the Board related to the provisions of that section.

2. The written advisory opinion request shall set forth a specific transaction or activity that the requester plans to undertake or is presently undertaking and intends to undertake in the future. Requests presenting a general question of interpretation, or posing a hypothetical situation, or regarding the activities of third parties, do not qualify as advisory opinion requests.

3. Advisory opinion requests shall include a complete description of all facts relevant to the specific transaction or activity with respect to which the request is made.

4. The Department shall review requests for advisory opinions submitted under this section. If the Department determines that a request for an advisory opinion is incomplete or otherwise not qualified under this section, it shall, within 10 business days of receipt of the request, notify the requester and specify the deficiencies in the request.

5. Advisory opinion requests should be addressed to and filed with the Department. The Department shall provide qualified advisory opinion requests to the Board.

6. Upon receipt and review by the Department, each request which qualifies as an advisory opinion request (AOR) under this section shall be assigned an AOR number for reference purposes.

B. Public availability of requests.

1. The Department shall make advisory opinion requests, which qualify under this section, public promptly upon receipt and review.

2. A copy of the original request and any supplements thereto shall be made available for public inspection on the department website.

C. Written comments on request.

1. Any interested party may submit written comments concerning advisory opinion requests made public at the Department.

2. The written comments shall be submitted within 10 calendar days following the date the request is made public by the Department.

3. Any interested party who wishes to submit public comment may request additional time for submission of written comments within 10 calendar days following the date the request is made public. The Department or Board may grant such request.

3. Comments on advisory opinion requests should refer to the AOR number of the request.

4. Written comments and requests for additional time to comment shall be filed with the Department.

5. Before it issues an advisory opinion, the Board shall accept and consider all written comments submitted by interested parties within the ten calendar day comment period or any extension thereof.

D. Issuance of advisory opinions.

1. Within 60 calendar days after the Department receives a complete advisory opinion request pursuant to § 24.2-948.8 of the Code of Virginia, the Board shall issue to the requester a written advisory opinion or shall issue a written response stating that the Board was unable to approve an advisory opinion by the required affirmative vote of 4 members.

2. The 60-calendar-day period for the Board to issue an advisory opinion is reduced to 20 calendar days, provided the request:

a. Is submitted by any candidate, including any authorized committee of the candidate (or agent of either), within the 60 calendar days preceding the date of any election in which the candidate is seeking nomination or election; and

b. Presents a specific transaction or activity related to the impending election that may invoke the 20-day period if the connection is explained in the request.

3. The 60-day and 20-day periods referred to in this section apply only when the Department has received a qualified and complete advisory opinion request under this section, and when the 60th or 20th day occurs on a Saturday, Sunday, or federal holiday, the respective period ends at the close of business day next following the weekend or holiday.

4. The Board may issue advisory opinions pertaining only to § 24.2-948.6 of the Code of Virginia or rules or regulations duly prescribed under that statute.

5. No opinion of an advisory nature may be issued by the Board, the Department, or any of its employees except in accordance with this section; however, this limitation does not preclude distribution by the Board and the Department of information consistent with Virginia law.

6. When issued by the Board, each advisory opinion or other response under this section shall be made public and be provided to the person who requested the opinion.

E. Reliance on advisory opinions.

1. An advisory opinion rendered by the Board under this section may be relied upon by:

a. Any person involved in the specific transaction or activity with respect to which the advisory opinion is rendered; and

b. Any person involved in any specific transaction or activity which is indistinguishable in all its material aspects from the transaction or activity with respect to which the advisory opinion is rendered.

2. Notwithstanding any other provision of law, any person who relies upon an advisory opinion in accordance with subsection E of this section and who acts in good faith with that advisory opinion shall not, as a result of any such act, be subject to any sanction provided under § 24.2-948.7 of the Code of Virginia.

F. Reconsideration of advisory opinions.

1. The Board may reconsider an advisory opinion previously issued if the person to whom the opinion was issued submits a written request for reconsideration within 30 calendar days of receipt of the opinion and if, upon the motion of a member of the Board who voted with the majority that originally approved the opinion, the Board adopts the motion to reconsider by an affirmative vote of four members.

2. The Board may reconsider an advisory opinion previously issued if, upon the motion of a member of the Board who voted with the majority that originally approved the opinion and within 30 calendar days after the date the Board approved the opinion, the Board adopts the motion to reconsider by the affirmative vote of 4 members.

3. In the event an advisory opinion is reconsidered pursuant to subsection F of this section, the action taken in good faith reliance on that advisory opinion by the person to whom the opinion was issued shall not result in any sanction provided by § 24.2-948.7 of the Code of Virginia. This subdivision 3 shall not be effective after the date when the person to whom the advisory opinion was issued has received actual notice of the Board's decision to reconsider that advisory opinion.

4. Adoption of a motion to reconsider vacates the advisory opinion to which it relates.

G. Substantially similar requests for advisory opinions. If a request for advisory opinion raises only issues that have been materially addressed by a previous advisory opinion or opinions, then the Board may decline the request. In such instances, the Board will provide the requestor with a notice:

1. Explaining that the issues raised have been addressed by a previous advisory opinion or opinions.

2. Including the relevant advisory opinion or opinions that address the request, either by paper copy or electronic link.

H. Federal advisory opinions. The Board and the parties may rely on past closed matters under review and advisory opinions of the Federal Election Commission (FEC) on matters related to the prohibited personal use of campaign funds under federal law as persuasive authority for any future decisions of the Board with respect to analogous state law, except with respect to FEC interpretation that personal use restrictions apply only to a candidate committee.



★ VIRGINIA ★
STATE BOARD *of* ELECTIONS

Absentee Pre-Processing Regulations

BOARD WORKING PAPERS
Danny Davenport
Director of Policy



★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS

Memorandum

To: Chairman O'Bannon, Vice-Chair Dance, Secretary Alvis-Long, Dr. Chris Stolle, and Dr. Sally Hudson

From: Daniel Davenport, Director of Policy

Date: August 18, 2026

Re: Proposed changes to 1VAC20-70-40. Alternative processing procedures for absentee ballots returned before election day.

Proposed Motion:

I move that the State Board of Elections approve the proposed changes to regulatory action 1VAC20-70-40.

Relevant Authorities:

- Va. Code § 24.2-709.1
- 1VAC20-70-40

Background:

The 2021 Special Session I of the Virginia General Assembly passed into law Chapters 471 and 552 of the 2021 Virginia Acts of Assembly (House Bill 1888 and Senate Bill 1245). Those chapters amended Va. Code § 24.2-709.1 to require mandatory pre-processing of absentee ballots beginning on the seventh day immediately preceding an election. However, Va. Code § 24.2-709.1 does not specify days or times that localities must conduct mandatory pre-processing.

To clarify mandatory pre-processing requirements under Va. Code § 24.2-709.1, the State Board of Elections approved regulatory action 1VAC20-70-40 (eff. May 6, 2022). This regulation requires:

- A mandatory pre-processing meeting on the seventh day before the election.
- An additional mandatory pre-processing meeting on either the Friday or Saturday before the election.
- Another mandatory pre-processing meeting on the Monday before the election *if the general registrar's office was unable to process all ballots in their possession at the Friday or Saturday meeting.*

The regulation is cautious, requiring multiple pre-processing meetings to ensure that all outstanding ballots are processed before Election Day. However, four years of mandatory pre-processing has shown that many localities do not need to conduct pre-processing this often. Currently, localities are obligated to schedule additional meetings to pre-process just a few outstanding ballots that could be processed on the Monday before Election Day. Election officials also incur costs holding these meetings, including the cost of staffing the meeting. Scheduling meetings takes time and effort; in the week before Election Day, general registrars have little time to spare.

Accordingly, many local election officials have approached ELECT about amending 1VAC20-70-40. The attached, recommended amendments are drafted to allow for timely and successful processing of all absentee ballots, while easing the burdens associated with conducting multiple pre-processing meetings the week before the election. The proposed regulatory action makes the following changes to 1VAC20-70-40:

- 1VAC20-70-40(2): A Friday or Saturday meeting is mandatory only if the number of returned absentee ballots awaiting processing on the seventh day before the election is either greater than or equal to ten percent of the total outstanding absentee ballots for the locality and greater than or equal to 100 ballots.
- 1VAC20-70-40(4): The Monday pre-processing meeting is mandatory if (i) a locality was required to hold a Friday or Saturday meeting and did not pre-process all ballots that were in their office's possession at the beginning of that day, or (ii) if they were under the newly proposed threshold and did not have to hold the additional Friday or Saturday meeting but still had outstanding absentee ballots
- Non-substantive language updates in the introduction paragraph and subsection 1VAC20-70-40(4).

To this end, and having evaluated the regulation text, ELECT recommends approving the proposed changes attached to this memo.

ELECT Recommendation:

ELECT staff recommends that the State Board of Elections adopt the proposed updates to 1VAC20-70-40.

1VAC20-70-40. Alternative processing procedures for absentee ballots returned before election day.

To expedite counting absentee ballots under § [24.2-709.1](#) of the Code of Virginia, each general registrar shall ensure that:

1. The general registrar staff assigned follow the instructions in this section for processing and verifying absentee ballots.
2. Each locality holds a mandatory pre-processing meeting on the seventh day immediately preceding the election. At the conclusion of that meeting, the general registrar's office will determine the number of mail absentee ballots in the locality that have been returned but not pre-processed. The locality shall hold an additional pre-processing meeting on either Friday or Saturday immediately preceding the election, if the total number of returned mail ballots awaiting pre-processing:
 - A. Is 10% or more of the total returned mail absentee ballots for the locality; and
 - B. Consists of at least 100 ballots.
 - C. At any mandatory pre-processing meeting held on Friday or Saturday immediately preceding the election, the general registrar's office shall pre-process all absentee ballots that were in their office's possession at the beginning of that day.
3. If a general registrar's office is required to hold a pre-processing meeting on Friday or Saturday immediately preceding the election and is unable to process all ballots in their possession, or if no Friday or Saturday meeting was held, then the general registrar's office shall hold a final pre-processing meeting on Monday immediately preceding the election during which all returned mail absentee ballots must be processed.
4. All absentee ballots are secured at the end of each day following principles of dual control and chain of custody.
5. The general registrar staff assigned follow carefully all the requirements of § [24.2-709.1](#) of the Code of Virginia, including the requirement that at least two officers of election, one representing each political party, be present during all hours that the expedited procedures are used.
6. Notice is given to the local political party chairs of the times and places for processing absentee ballots in sufficient time to allow for the authorized party representatives to be present. If the general registrar's office determines a Friday or Saturday pre-processing meeting is not required, notice of the decision shall also be provided, and the registrar shall document the justification for foregoing the meeting.

Statutory Authority

§ [24.2-103](#) of the Code of Virginia.

Historical Notes

Derived from Virginia Register [Volume 28, Issue 18](#), eff. April 18, 2012; amended, Virginia Register [Volume 29, Issue 23](#), eff. July 1, 2013; [Volume 38, Issue 19](#), eff. May 6, 2022.

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.

As a service to the public, the Virginia Administrative Code is provided online by the Virginia General Assembly. We are unable to answer legal questions or respond to requests for legal advice, including application of law to specific fact. To understand and protect your legal rights, you should consult an attorney.



★ VIRGINIA ★
STATE BOARD *of* ELECTIONS

SBE Policy 2026-003 General Registrar Removal Procedures by Local Electoral Boards

BOARD WORKING PAPERS

Danny Davenport
Director of Policy



★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS

Memorandum

To: Chairman O'Bannon, Vice-Chair Dance, Secretary Alvis-Long, Dr. Chris Stolle, and Dr. Sally Hudson

From: Daniel Davenport, Director of Policy

Date: August 18, 2026

Re: Proposed SBE Policies 2026-003: General Registrar Removal Procedures by Local Electoral Boards; and 2026-004: State Board of Elections removal of General Registrars and Local Electoral Board Members

Proposed Motion:

"I move that the State Board of Elections approve proposed SBE Policies 2026-003: General Registrar Removal Procedures by Local Electoral Boards; and 2026-004: State Board of Elections removal of General Registrars and Local Electoral Board Members."

Applicable Statutes:

- Va. Code § 24.2-103. Powers and duties in general; report
- Va. Code § 24.2-109. Appointment and removal of general registrar; appointment of officers of election; powers and duties in general.
- Va. Code § 24.2-234.1. Removal of members of local electoral boards and general registrars.

Background

The 2026 session of the Virginia General Assembly passed into law Chapter 1032 of the 2026 Governor's Acts of Assembly relating to elections; administration; procedures for removal of electoral board members and general registrars. This enacted bill modifies Va. Code §§ 24.2-103 and 24.2-109, with such modifications becoming effective on July 1, 2026.

If adopted, SBE Policy 2026-003 will establish standards and procedures regarding local electoral boards, when conducting hearings to remove a general registrar.

If adopted, SBE Policy 2026-004 will set standards and procedures regarding: SBE hearings to remove a GR or EB; and SBE hearings reviewing an EB's decision to remove a GR.

ELECT Recommendation

ELECT staff recommends that the State Board of Elections adopt the removal policies as presented.

State Board of Elections Policy 2026-003

A meeting of the Virginia State Board of Elections (the SBE) was held on August 18, 2026, during which the following policy was proposed by the Virginia Department of Elections (ELECT) and approved by the Board:

Local Electoral Boards Procedures for the Removal of General Registrars

PURPOSE: To establish a policy for the SBE to set standards and procedures regarding local electoral boards when conducting proceedings to remove a general registrar. The following policy establishes standards and procedures for local electoral boards to follow when conducting removal hearings pursuant to Va. Code §§ 24.2-109, 24.2-234.1, and 2.2-4000 *et seq.* However, conflicting authorities, including court orders, decisions, statutes, and regulatory actions, may supersede the effects of part or all of this policy. Where such an authority conflicts with only part of this policy, the remainder of the policy shall still apply.

REFERENCES: Va. Code §§24.2-109, 24.2-234.1, and 2.2-4000 *et seq.*

SEC. 1: POLICY ESTABLISHMENT

Subsequent to its adoption by the majority of the SBE, this policy shall be posted on the Virginia Department of Elections website.

SEC. 2: ABBREVIATIONS AND DEFINITIONS

“Secretary” means the secretary of the local electoral board.

Abbreviations

- “EB” refers to the local electoral board of a locality.
- “ELECT” refers to the Virginia Department of Elections.
- “GR” refers to the general registrar or director of elections in a locality.
- “OAG” refers to the Virginia Office of the Attorney General.
- “USPS” refers to the United States Postal Service.
- “SBE” refers to the Virginia State Board of Elections.’=

Definitions

“Secretary” means the secretary of the local electoral board.

SEC. 3: CRITERIA FOR REMOVAL OF GENERAL REGISTRARS

I. Removal by the EB

An EB may remove a GR by unanimous vote after a public hearing on related matters.

II. Removal by the circuit court

An EB may institute circuit court removal proceedings against a GR by a recorded majority vote of the EB after a public hearing on the matter.

III. Criteria for removing a GR

GRs may be removed for the following reasons:

- i. Neglect of a clear, ministerial duty of the office, misuse of the office, or incompetence in the performance of the duties of the office where such neglect, misuse, or incompetence has a material adverse effect upon the conduct of the office; or
- ii. An unambiguous indication of a future refusal or failure to carry out the duties of the office where such refusal or failure would likely have a material adverse effect upon the conduct of the office.

SEC. 4. REMOVAL BY THE ELECTORAL BOARD

I. Notice Requirements

The secretary of the EB must provide the GR with adequate notice regarding the public hearing. Notice should be provided no later than 15 days before the hearing.

The notice must contain:

- The statutory provision under which the EB is exercising its authority.
- The statutory provision or established state or local policy that the GR has allegedly violated.
- The matters of fact and law at question, including an explanation of the violation alleged in the petition, including the standards for removal from **SEC. 3 (III)**.
Criteria for removing a GR.
- The date, time, and location of the public hearing.
- This policy.

The notice must be delivered to the GR's office in-person or via USPS. Additionally, the notice may be sent via email to the GR's work or personal email address.

*II. Public Hearing**A. Rights of the GR*

A GR shall be entitled to:

- Be accompanied by and represented by counsel.
- Submit oral and documentary evidence.
- Provide a rebuttal or additional context.
- Have the proceedings completed and a decision made with dispatch.
- In the event of removal, file a notice of appeal to the SBE within three business days of the EB's decision.

A GR shall be given the opportunity to, on request and before actions are taken, submit, in writing for the record:

- Proposed findings and conclusions; and
- Statements of reasons for the proposed findings and conclusions.

B. Rights of the EB

The EB may:

- Administer oaths and affirmations;
- Receive probative evidence;
- Exclude irrelevant, immaterial, insubstantial, privileged, or repetitive evidence;
- Rule upon offers of proof;
- Oversee a verbatim recording of the evidence;
- Hold conferences for the settlement or simplification of issues by consent;
- Dispose of procedural requests; and
- Regulate and expedite the course of the hearing.

C. Preserving evidence for appeal

All evidence introduced at the hearing must be preserved and maintained in an official evidentiary record, subject to review by the SBE. To preserve and maintain evidence, the EB should:

- Give each unique document an exhibit letter from A-Z, then from AA-ZZ, then from AAA-ZZZ as needed.
- Clearly record all proceedings and testimony. **Test recording equipment before the meeting, as failure to record can materially impact appeals by the GR.**
- Retain all exhibits and testimony in an electronic format that can be transmitted to the SBE in the event of an appeal.

III. Default orders

- If the GR without good cause fails to attend or appear at a hearing, the EB may issue a default order against the GR.
- If the EB issues a default order, the EB may conduct all further proceedings necessary to complete the hearing without the defaulting GR's presence at the hearing. A default order is appealable to the SBE pursuant to § 24.2-109 and the SBE's policy regarding the removal of GRs or EB members by the SBE.
- A GR must file a notice of appeal for a default order within three business days of the default judgment.

IV. Continuance

- A scheduled hearing shall not be delayed by the inability of the GR to attend the hearing unless a request for a continuance is made in writing to the EB not less than seven days before the scheduled hearing date.
- A continuance shall not be granted unless the request is received in the required time and, in the opinion of the chair, sets forth good and sufficient cause for the continuance.
- If a continuance is granted, the secretary shall document the grant in the official record of the meeting for continuity.

V. Interpreter Services

If an interpreter is required, the EB will make appropriate arrangements to ensure an interpreter is present during the hearing. The GR shall provide the EB with reasonable notice before the hearing that an interpreter is required. Whether the timing of a request was reasonable will be determined by the SBE, if necessary.

VI. Presentation of the Background by the Secretary

The secretary of the EB shall present information to assist the EB in determining whether to remove the GR. The secretary shall provide the factual background related to the petition and any other information to allow the EB to review the merits of the petition, including:

- The name and position of the GR.

- The statutory provision(s) allegedly violated.
- The matters of fact and law at question and an explanation of the violation alleged in the petition, including the standards for removal from **SEC. 3 (III). *Criteria for removing a GR.***
- The evidence submitted supporting the petition.
- Mitigating/aggravating factors, including but not limited to:
 - History of problems regarding compliance with or performance of duties.
 - Whether or not a GR has resolved any past problems regarding compliance with or performance of duties.
 - Any other factors demonstrating either that the GR is or is not capable of fulfilling their duties pursuant to Va. Code § 24.2-114. Duties and powers of general registrar.
- If the GR without good cause fails to attend or appear at a hearing, the EB may issue a default order against the GR.

VII. GR Testimony

After presentation of the background, the EB shall invite the GR to present relevant testimony and additional supporting evidence. Each member of the EB shall have the opportunity to question the GR and any other participant in the hearing on all matters related to the petition and testimony and evidence received.

VIII. Decision

At the conclusion of the GR's testimony and EB questions, the EB shall:

- Carry out further deliberation as necessary; and
- Conduct a vote(s) deciding:
 - to remove the GR directly from their office (unanimous vote); or
 - to dismiss the petition (a majority vote).
- If the EB removes the GR, the decision is appealable to the SBE. The appeal process is discussed further in the SBE's policy regarding the removal of GRs and EB members.
- Issue a default order against the GR, if the GR fails to attend or appear without good cause.

IX. Notice of Appeal

In the event that an EB removes a GR, the GR so removed may file a notice of appeal to the SBE within three business days.

The notice of appeal should be submitted on a written or electronic form approved by the SBE for such purposes.

SEC. 5: REMOVAL BY THE CIRCUIT COURT

I. Public Hearing

At the hearing, the EB may present evidence regarding the potential grounds for removal in **SEC. 3 (III). *Criteria for removing a GR.***

The GR may present their own oral and documentary evidence.

Upon completion of the public hearing, the EB may initiate circuit court proceedings by a majority vote.

II. Removal petitions

A petition for removal shall be on a form prescribed by the SBE and shall state with reasonable accuracy and detail the grounds or reasons for removal. This form shall be signed by the persons making it under penalties of perjury.

The petition shall be filed together with either (i) three paper copies or (ii) an electronic copy.

Removal petitions submitted to the circuit court must contain the following information:

- The GR's identity, including their name, position, and the locality where they serve.
- The statutory provision(s) the GR allegedly violated.
- The matters of fact and law at question, including an explanation of the violation alleged in the petition, including the standards for removal from **SEC. 3 (III). *Criteria for removing a GR.***
- The recorded majority vote of the EB members.
- Supporting evidence showing.
 - Neglect of a clear, ministerial duty of the office, misuse of the office, or incompetence in the performance of the duties of the office where such neglect, misuse, or incompetence has a material adverse effect upon the conduct of the office;
 - OR
 - An unambiguous indication of a future refusal or failure to carry out the duties of the office where such refusal or failure would likely have a material adverse effect upon the conduct of the office.

Forms of evidence may include, but are not limited to:

- The GR's identity, including their name, position, and the locality where they serve.

- EB minutes from public meetings.
- Emails to or from GRs or EB Members.
- Signed, notarized affidavits of eyewitness testimony.
- Any information required by the circuit court for such petitions.

The petition must be provided to the GR when it is submitted to the circuit court.

- If the EB decides to submit a petition for removal to the circuit court of the locality where the GR serves, the secretary shall submit the appropriate petition to the appropriate court.
- The GR will maintain their office while the proceedings are ongoing at the circuit court.

SEC. 6: APPEALS OF EB REMOVAL OF GR

- Pursuant to Va. Code § 24.2-109, if an EB directly removes the GR from office, the GR has the right to appeal the EB's decision to the SBE.
- A GR who is so removed may file a notice of appeal to the SBE within three business days.
- Upon receipt of a properly filed appeal, the SBE shall schedule a public hearing on the matter as soon as practicable.
- A GR who is removed by a unanimous vote of the EB shall remain in office until the expiration of the deadline to file a notice of appeal or, if the notice of appeal is properly filed, until the SBE renders a final decision upholding the decision of the EB.

I. Notice Requirements

- Notice of the appeal hearing shall be sent to the GR and EB as soon as practicable once the appeal hearing has been scheduled but no later than seven business days before the hearing date. The notice will be sent via USPS and also may be sent to their email addresses if available.
- The notice shall include the date, time, and location of the public hearing.

II. Rights of the GR

- The GR may present testimony explaining why the removal decision by the EB was inappropriate. In support of their testimony, the GR may cite to evidence and testimony that has been admitted into the evidentiary record.

III. Rights of the EB

- The EB has the right to have one or more of its members present. However, only one member of the EB may provide testimony at the SBE hearing.

IV. Rights of the SBE

The SBE has the right to review evidence presented at the hearing and determine whether or not to overturn the EB's removal decision. Evidence that the SBE may review includes:

- The evidentiary record from the EB's hearing, including recordings and transcripts of any testimony.
- Testimony by the GR or the EB, as it relates to the outstanding issues of fact and law.

V. Presentation of Background by ELECT

- In presenting the appeal, ELECT shall present information to assist the SBE in determining whether to uphold the EB's removal decision.
- In presenting the appeal, ELECT shall provide the factual background related to the filing of the appeal, and any other information to allow the SBE to review the merits of the appeal, including:
 - The name of the GR and the locality they serve;
 - The provision(s) of Title 24.2 allegedly violated;
 - Violation information;
 - Date of receipt of the petition;
 - The evidence submitted supporting the petition; and
 - Mitigating/aggravating factors, including but not limited to:
 - History of issues or complaints regarding compliance or performance of duties
 - Changes in behavior or lack thereof
 - Attempts to learn statutory requirements and best practices or lack thereof

VI. GR testimony

- After presentation of the background by ELECT, the SBE shall invite the GR to present relevant testimony and additional supporting evidence.
- Each member of the SBE shall have the opportunity to question the GR, ELECT staff, and any other participant in the hearing on all matters related to the petition and testimony and evidence received.

VII. Decision

- Upon consideration of the appeal, the SBE may reverse the decision of the EB by a recorded two-thirds majority vote of all its members.

This policy is effective July 1, 2026.



★ VIRGINIA ★
STATE BOARD *of* ELECTIONS

SBE Policy 2026-004 State Board of Elections Removal of General Registrars and Local Electoral Board Members

BOARD WORKING PAPERS
Danny Davenport
Director of Policy

State Board of Elections Policy 2026-004

A meeting of the Virginia State Board of Elections (the SBE) was held on August 18, 2026, during which the following policy was proposed by the Virginia Department of Elections (ELECT) and approved by the SBE:

State Board of Elections' Procedure for the Removal of General Registrars or Local Electoral Board Members

PURPOSE: To establish a policy for the SBE to set standards and procedures regarding: SBE proceedings to remove a GR or EB; and SBE's review of a removal appeal by a GR. The following policy establishes standards and procedures pursuant to Va. Code §§ 24.2-103, 24.2-109, 24.2-234.1, and 2.2-4000 *et seq.* However, conflicting authorities, including court orders, decisions, statutes, and regulatory actions, may supersede the effects of part or all of this policy. Where such an authority conflicts with only part of this policy, the remainder of the policy shall still apply.

REFERENCES: Va. Code §§ 24.2-103, 24.2-109, 24.2-234.1, and 2.2-4000 *et seq.*

SEC. 1: POLICY ESTABLISHMENT

Subsequent to its adoption by the majority of the SBE, this policy shall be posted on the Virginia Department of Elections website.

SEC 2.: ABBREVIATIONS AND DEFINITIONS*Abbreviations*

- “EB” refers to the local electoral board of a locality.
- “EB Member” refers to a member of a local electoral board of a locality.
- “ELECT” refers to the Virginia Department of Elections.
- “GR” refers to the general registrar in a locality.
- “OAG” refers to the Virginia Office of the Attorney General.
- “SBE” refers to the Virginia State Board of Elections.
- “USPS” refers to the United States Postal Service.

Definitions

“Complainant” means an individual residing in the locality where the EB member or GR serves who is submitting a complaint against an EB member or GR.

“Respondent” means the EB member or GR who is the subject of the removal petition.

SEC. 3: CRITERIA FOR REMOVAL OF GRs AND EB MEMBERS

- Pursuant to §§ 24.2-103 and 24.2-109, an EB Member or GR may be removed or have removal proceedings instituted against them for:
 - i. Neglect of a clear, ministerial duty of the office, misuse of the office, or incompetence in the performance of the duties of the office where such neglect, misuse, or incompetence has a material adverse effect upon the conduct of the office; or
 - ii. An unambiguous indication of a future refusal or failure to carry out the duties of the office where such refusal or failure would likely have a material adverse effect upon the conduct of the office.

SEC. 4: COMPLAINT AGAINST AN EB MEMBER OR A GR

1. Complaints may be filed by a resident, the GR, or an EB member of the locality in which the Respondent serves. Complaints may also be filed by ELECT.
2. Complaints must be sent via certified mail to:

Virginia Department of Elections
1100 Bank Street, 1st Floor
Richmond, Virginia 23219

3. Complaints must contain the following information:
 - Name and address of the complainant.
 - EB Member or GR name, position, and locality in which they serve.
 - The statutory provision(s) or established state or local policy the EB Member or GR is alleged to have violated.
 - A credible allegation under 24.2-103 or 24.2-109 regarding specific actions or omissions or unambiguous indications of future refusal or failure to act.
 - Attached documentation supporting the allegation.
 - Names and contact information for any person the complainant knows to have knowledge or underlying facts relating to the allegation.
 - A sworn statement, notarized, attesting that the information contained in the complaint is accurate and true to the best of the Complainant's knowledge.
 - Any additional information requested by ELECT during its review.

4. ELECT will review complaint(s) received for completeness and prepare board documents sufficient for initial review by the SBE during a closed session of the next scheduled public meeting. After reviewing the complaint and the evidence during the closed session, the SBE must vote on whether to have a public hearing at the next scheduled public meeting, with a simple majority.
5. ELECT may request additional information from the complainant as necessary.

SEC. 5: PUBLIC HEARING

I. Notice Requirements

Should the SBE vote to hold a public hearing, ELECT will send notice to the Respondent and Complainant within five business days of the SBE's decision, but no later than 15 days before the date of either scheduled public hearings. The notice must contain:

- The statutory provision under which the SBE is exercising its authority.
- The statutory provision or established state or local policy that the GR or EB Member has allegedly violated.
- The matters of fact and law at question including an explanation of the violation alleged, including the standards for removal from **SEC. 3 (III)** of this policy.
- The submitted complaint.
- The date, time, and location of the public hearing.
- This policy.
- Contact information for ELECT staff.

If ELECT is aware of an email address for the respondent, ELECT shall also send such notification via email. Otherwise, notice will be provided to the respondent via USPS either to the respondent's residential address or to the office of the GR of the locality where the respondent serves.

II. Time of hearing

The hearing will be conducted at the next public meeting of the SBE following the notice provisions required in subsection I of this section.

III. Rights of the Complainant

A Complainant may:

- Submit oral and documentary evidence, including testimony.
- Provide a rebuttal or additional context to the Chairman of the SBE in response to a Respondent to elicit a full and fair disclosure of the facts.
- Have the proceedings completed efficiently and a decision made promptly.

IV. Rights of Respondents

- A respondent may:

- Be accompanied by and represented by counsel.
 - Submit oral and documentary evidence.
 - Provide a rebuttal or additional context to the Chairman of the SBE in response to a Complainant to elicit a full and fair disclosure of the facts.
 - Have the proceedings completed efficiently and a decision made promptly.
- A respondent shall be given the opportunity to submit in writing for the record—
 - Proposed findings and conclusions; and
 - Statements of reasons for the proposed findings and conclusions.
- If a respondent intends to conduct cross-examination of any person at the hearing, the respondent shall provide reasonable notice of such proposed cross-examination to the SBE before the hearing.

V. SBE's Role at Removal Hearings

- The SBE may—
 - Administer oaths and affirmations;
 - Receive probative evidence;
 - Exclude irrelevant, immaterial, insubstantial, privileged, or repetitive evidence;
 - Rule upon offers of proof;
 - Oversee a verbatim recording of the evidence;
 - Dispose of procedural requests and
 - Regulate and expedite the course of the hearing.

VI. Default orders

- If a respondent without good cause fails to attend or appear at a hearing, the SBE may issue a default order against the respondent.
- If the SBE issues a default order, the SBE may conduct all further proceedings necessary to complete the hearing without the defaulting respondent's presence at the hearing.

VII. Continuance

- A scheduled hearing shall not be delayed by the inability of the respondent to attend the hearing unless a request for a continuance is made in writing to the SBE not less than seven days before the scheduled hearing date.
- A continuance shall not be granted unless the request is received in the required time and, in the opinion of the Chairperson of the SBE, sets forth good and sufficient cause for the continuance.
- If a continuance is granted, ELECT staff shall notify all members of the SBE and document the grant in the official record of the meeting for continuity.

VIII. Requests for Records

- The SBE may, and on the request of a Respondent shall, at any time, request additional documents, records, or other evidence that it determines is relevant or necessary.

- Respondents and Complainants shall comply with requests by the SBE and shall timely acquire and produce all requested documents, records, and other evidence that are reasonably accessible.
- The SBE may establish a reasonable deadline and manner for the production of requested documents, records, or other evidence.

IX. Interpreter Services

- If an interpreter is requested, ELECT will make appropriate arrangements to ensure an interpreter is present during the hearing. The respondent shall provide ELECT with reasonable notice before the hearing that an interpreter is required. Whether the timing of a request was reasonable will be determined at the discretion of the SBE.

X. Presentation by ELECT

- ELECT shall present information to assist the SBE in determining whether to remove the GR or EB member.
- In presenting each appeal, ELECT shall provide the factual background related to the complaint and any other information that will help the SBE review the merits of the complaint, including:
 - The name of the respondent and their position;
 - The statutory provision(s) or established state or local policy allegedly violated;
 - Date of receipt of the complaint;
 - The evidence submitted supporting the complaint;
 - Suggested questions that should be asked of either the Complainant or Respondent that would provide additional clarity or facts; and
 - Mitigating and aggravating factors, including but not limited to:
 - History of issues or complaints regarding compliance or performance of duties
 - Changes in behavior or lack thereof
 - Attempts to improve statutory or policy compliance and reduce issues or lack thereof

XI. Respondent Testimony

After the presentation by ELECT, the SBE shall invite the Respondent to present relevant testimony and additional supporting evidence. Each member of the SBE shall have the opportunity to question the respondent, ELECT staff, and any other participant in the hearing on all matters related to the complaint, including testimony and evidence.

XII. Decision

- At the conclusion of the respondent's testimony and SBE questions, the SBE shall:
 - Carry out further deliberation as necessary;

- Consult with counsel in closed session as necessary, and
- Conduct a vote(s) deciding:
 - to file a petition for removal with the circuit court where the respondent serves, pursuant to § 24.2-234.1 (simple majority vote);
 - to remove the GR or EB member directly from their office (two-thirds vote); or
 - to dismiss the petition (simple majority).
- If the SBE decides to submit a petition for removal to the circuit court of the locality where the respondent serves, the OAG will submit the petition to the appropriate court.
 - The respondent will maintain their office while the proceedings are ongoing at the circuit court.
- If the SBE decides to directly remove the GR or EB member, the decision is final and shall be subject to judicial review only in accordance with the Administrative Process Act (§ [2.2-4000](#) et seq.).

SEC. 6. APPEALS FOR THE DIRECT REMOVAL OF A GR BY AN EB

- Pursuant to Va. Code § 24.2-109, if an EB directly removes the GR from office, the GR has the right to appeal the decision to the SBE within three business days.
- Upon receipt of a timely filed appeal, the SBE will schedule a public hearing on the matter as soon as practicable.
- A GR who is removed by the EB shall remain in office until the expiration of the deadline to file a notice of appeal or, if the notice of appeal is timely filed, unless and until the SBE renders a final decision upholding the decision of the EB.

I. Notice Requirements

- Notice of the appeal hearing shall be sent to the GR and EB as soon as practicable once the appeal hearing has been scheduled but no later than 15 business days before the hearing date. The notice will be sent via USPS and also may be sent to their email addresses if available.
- The notice shall include the date, time, and location of the public hearing.

II. Rights of the GR

The GR may present testimony explaining why the removal decision by the EB was inappropriate. In support of their testimony, the GR may cite evidence and testimony that have been admitted into the evidentiary record.

III. Rights of the EB

All EB members have the right to attend the hearing. However, only one member of the EB shall provide any initial testimony. Any member in attendance may be called upon by the SBE to answer questions presented by the SBE.

IV. Role of the SBE

The SBE will review evidence presented at the hearing and determine whether or not to overturn the EB's removal decision, including:

- The evidentiary record from the EB's hearing, including recordings and transcripts of any testimony.
- Testimony by the GR or the EB, as it relates to the outstanding issues of fact and law.

V. Presentation by ELECT

- ELECT shall present information to assist the SBE in determining whether to uphold the EB's removal decision.
- In presenting the appeal, ELECT shall provide the factual background related to the filing of the appeal, and any other information to allow the SBE to review the merits of the appeal, including:
 - o The name of the GR and the locality they serve;
 - o The statutory provision(s) or established state or local policy allegedly violated;
 - o Date of receipt of the complaint;
 - o The evidence submitted supporting the complaint;
 - o Suggested questions that should be asked of either the Complainant or Respondent that would provide additional clarity or facts; and
 - o Mitigating and aggravating factors, including but not limited to:
 - History of issues or complaints regarding compliance or performance of duties
 - Changes in behavior or lack thereof
 - Attempts to improve statutory or policy compliance and reduce issues or lack thereof
 - GR testimony
- After presentation by ELECT, the SBE shall invite the GR to present any further relevant testimony and additional supporting evidence.
- Each member of the SBE shall have the opportunity to question the GR, ELECT staff, EB Member, and any other participant in the hearing on all matters related to the appeal.

VI. Decision

Upon consideration of the appeal, the SBE may reverse the decision of the EB by a recorded two-thirds majority vote of all its members. Such a decision shall be final and not subject to appeal.

This policy is effective August 18, 2026.



★ VIRGINIA ★
STATE BOARD *of* ELECTIONS

Closed Session

BOARD WORKING PAPERS

August 18, 2026

Closed Session

1. **Into closed session:** “Pursuant to Virginia Code Section 2.2-3711(A)(7), I move that the Board go into closed session for the purpose of discussing pending threatened litigation. In accordance with Section 2.2-3712(F), Steven Koski, Commissioner of Elections, Ashley Coles, Deputy Commissioner of Elections, and Ajay Saini, Office of the Attorney General, will attend the closed session because their presence will reasonably aid the Board in its consideration of the subject of the meeting.”

 a. After the motion is seconded, the Board members must vote (must be a roll call vote).

2. **Out of closed session:** “I move to reconvene the meeting in open session, and take a roll call vote certifying that to the best of each member’s knowledge (i) only such public business matters lawfully exempted from open meeting requirements under this chapter and (ii) only such public business matters as were identified in the motion by which the closed meeting was convened were heard or discussed by the State Board of Elections”

 a. After the motion is seconded, poll the members for each vote. Each member must vote individually and not as a group.