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TITLE 410 – BOARD OF ELECTIONS

CHAPTER 20 – ELECTIONS

SUBCHAPTER 00 - N/A

PART 28 – RISK LIMITING AUDITS

28.1 Definitions

- A. “Audit Team” means a pair of two electors, not of the same political affiliation in Rhode Island, who manually examine and report markings on ballot cards.
- B. “Audit Center” means the page or pages of the Board of Elections’ website devoted to risk-limiting audits.
- C. “Auxiliary Audit Stratum” means a group of ballots for which no batch tallies are available, and which are audited by a ballot polling audit, the results of which are combined with a batch comparison audit of the ballots for which batch tallies are available.
- D. “Ballot Cards” means the individual pieces of paper that together constitute a single ballot containing all of the contests an elector is eligible to vote. For example, a ballot consisting of a single piece of paper with content printed on the front or the front and back contains one ballot card, and a ballot consisting of two pieces of paper with content printed on the front and back of the first page and the front or front and back of the second page contains two ballot cards.
- E. “Ballot Manifest” means a list that indicates how the ballot cards in an election are organized and stored.
- F. “Ballot Polling Audit” means a type of risk-limiting audit in which the audit teams examine voter markings on randomly selected ballot cards seeking strong evidence that the reported tabulation outcome is correct.
- G. “Batch” means a group of ballot cards.
- H. “Batch Comparison Audit” means a type of risk-limiting audit in which the audit teams examine and tally markings on randomly selected batches of ballot cards, then compare the totals for the batches to the voting system’s tabulation totals for the same batches.
- I. “Batch Tallies” means the vote counts, reported by batch, for each candidate or choice in the target contest(s).

- J. “Contest” means an election for an office or for a measure.
- K. “Public Observation Area” means the place where the general public can observe the audit. Any person who willfully disrupts the audit to the extent that the orderly conduct of the audit is seriously compromised may be removed from the public observation area.
- L. “Reported Tabulation Outcome” means the presumed winning and losing candidates or voting choices of a contest as reflected in the unofficial final results.
- M. “Review Board” means a pair of two electors, not of the same political affiliation in Rhode Island who, when an audit team cannot agree, manually examine and report markings on ballot cards.
- N. “Risk Limit” means the largest statistical probability that an incorrect reported tabulation outcome is not detected and corrected in a risk-limiting audit.
- O. “Risk-Limiting Audit” (herein “RLA”) means a manual tally employing a statistical method that ensures a large, predetermined minimum chance of requiring a full manual tally whenever a full manual tally would show an electoral outcome that differs from the outcome reported by the vote-tabulating system for the audited contest.
- P. “RLA tool” means the software and user interfaces used by the Board of Elections in order to conduct RLAs.
- Q. “Target Contest” means a contest selected by the Board of Elections for a risk-limiting audit.
- R. “Unofficial Final Results” means election results tabulated pursuant to R.I. Gen. Laws §§ 17-19-36 and 17-19-37.

28.2 Preparing for the Audit

- A. Risk limit. No later than 10 days before Election Day, the Board of Elections must establish and publish on the Audit Center the risk limit that will apply in RLAs for that election. The risk limit for all target contests must be no larger than 9%.
- B. Audit team. No later than five days before Election Day, the Board of Elections must appoint audit teams, and alternates, to conduct the risk-limiting audit. The chairpersons of the recognized political parties in Rhode Island may submit to the Board of Elections, no later than 10 days before Election Day, lists of electors to serve on the audit teams, and as alternates. The Board of Elections must give written notice to the chairpersons of their opportunity to nominate audit team members, and alternates.

1. The Board shall designate appropriately affiliated electors as audit team members, and as alternates. Local election officials, members of their staff, and members of the boards of canvassers may serve as members of audit teams, and as alternates. Prior to assisting with the audit, each member of an audit team, and alternates, must swear and sign an oath that they will faithfully discharge their duties.
- C. Review board. No later than five days before Election Day, the Board of Elections must appoint a review board or review boards, including alternates. The chairpersons of the recognized political parties in Rhode Island may submit to the Board of Elections, no later than 10 days before Election Day, lists of electors to serve on the review boards. The Board of Elections must give written notice to the chairpersons of their opportunity to nominate review board members. Members of the Board of Elections may serve as members of review boards, and as alternates.
- D. Ballot manifest. The Board of Elections must maintain an accurate ballot manifest that is independent of the voting system. The ballot manifest must include an accounting of all ballot cards counted in the election, no matter what type of ballot (including mail ballots and provisional ballots).
1. The ballot manifest must uniquely identify the following for each batch of ballot cards, the tabulator used to scan the batch, the number of cards in the batch, and the storage container in which the batch is stored after tabulation. If applicable, the ballot manifest may identify the number of cards on which each target contest appears.
 2. No later than two days, excluding holidays and weekends, prior to the commencement of the audit, the Board of Elections shall publish the complete ballot manifest for all voted ballots on the Audit Center.
- E. Chain-of-custody. The Board of Elections and local boards of canvassers must secure and contain in sealed ballot containers all tabulated ballot cards in the batches. Throughout the audit, the local board of canvassers and Board of Elections must maintain and document uninterrupted chain-of-custody, on forms prescribed by the Board, for each ballot card storage container.
- F. Selection of target contest(s). No later than 10 days after Election Day, the Board of Elections must select the target contest(s). In a presidential preference primary, the Board of Elections must select at least one contest to be audited. In a general election, the Board of Elections must select at least one statewide contest. If there is no statewide contest, the Board of Elections must select at least one contest for Congress. The Board of Elections must publish a complete list of all target contests on the Audit Center immediately after making the selection. The Board of Elections must consider at least the following factors in selecting a target contest:

1. A high level of interest in a contest;
 2. Any cause for concern regarding the accuracy of the reported tabulation of a contest;
 3. The closeness of the reported tabulation outcome of a contest;
 4. The number of ballots counted in a contest;
 5. Any benefits that may result from auditing a certain contest; and
 6. The feasibility of completing the audit before any deadlines.
- G. The batch tallies for all target contests from the election management system must be published on the Audit Center before the public meeting to establish the random seed(s). In the event that the batch tallies are not available for some voted ballot cards, the Board of Elections must create a separate ballot manifest for these ballots, to be used in auditing an auxiliary audit stratum as described below; if necessary, create an updated ballot manifest including only the voted ballots for which batch tallies are available; and publish the manifest(s) on the Audit Center.

28.3 Conducting the Audit

- A. The Board of Elections must establish a random seed to be used in conjunction with a pseudo-random number generator. The Board shall publish an announcement of the time and place of this event on the Open Meetings Portal of the Secretary of State's website, as well as the website of the Board of Elections. The seed is a number consisting of at least 20 digits, and each digit will be selected in order by sequential rolls of 10-sided dice. The Board staff will randomly select members of the public who attend the meeting to take turns rolling the 10-sided dice, and designate one or more staff members to take turns rolling the 10-sided dice in the event that not enough members of the public attend the meeting. In the event that an auxiliary stratum is used, the Board must use the same procedure to establish a random seed for that stratum. The Board of Elections must publish the seed(s) on the Audit Center immediately after the seed(s) are established.
- B. Board of Elections staff must enter the risk limit for each target contest, including unofficial final results for each target contest, into the RLA tool. If an auxiliary audit stratum is used, the unofficial final results entered into the RLA tool must exclude the ballots in the auxiliary audit stratum.
- C. A Board of Elections staff member must enter the target contest or contests into the RLA tool.
- D. A Board of Elections staff member must enter the ballot manifest into the RLA tool.

- E. A Board of Elections staff member must enter batch tallies into the RLA tool.
- F. A Board of Elections staff member must enter the number of batches initially to be audited into the RLA tool.
- G. A Board of Elections staff member must enter the random seed produced in § 28.3(A) of this Part into the RLA tool.
- H. If an auxiliary audit stratum is used, the Board of Elections staff must enter the target contest(s), the ballot manifest for this stratum, the unofficial final results in each target contest among ballots in this stratum, the number of ballot cards in this stratum initially to be audited, and the random seed for this stratum into the RLA tool.
- I. The RLA tool must randomly select and identify the batches of ballot cards, and the individual ballot cards in the auxiliary audit stratum if applicable, to audit by applying a publicly disclosed algorithm to the random seed(s) in conjunction with the ballot manifest(s) and batch tallies.
- J. The Board of Elections must publish on the Audit Center the information from the ballot manifest about the initial sample of batches of ballot cards before the audit teams begin auditing.
- K. As soon as possible after the selection of the initial audit sample, the Board of Elections must retrieve the batches selected for audit from the local boards, following all prescribed chain of custody procedures. The Board must post an announcement of the time and place for the review and tallying of the audit sample by the audit teams on the Open Meetings Portal of the Secretary of State's website, as well as the website of the Board of Elections.
- L. All batches of ballot cards selected for the audit pursuant to § 28.3(l) of this Part, and (if applicable) all ballot cards that comprise the auxiliary audit stratum, must remain within view of the public observation area at all times.
- M. If an auxiliary audit stratum is used, one or more audit teams must manually count or use a digital counting scale to retrieve the ballot cards to be audited in that stratum, within view of the public observation area.
- N. Within view of the public observation area, any time a batch of ballots is open or closed, the Board staff or designees must show that the seals on the appropriate storage containers are those recorded on the applicable chain of custody forms as prescribed by the Board.
- O. Within view of the public observation area, at least two members of the Board staff or designees may divide batches of ballots into sub-batches. If an auxiliary audit stratum is used, the ballot cards to be audited in that stratum may be treated as one batch or divided into sub-batches.

- P. Board staff or designees shall deliver to each audit team batches, or sub-batches of ballot cards, for auditing. Each member of the audit team must sign a form, as prescribed by the Board, acknowledging receipt of the batch or sub-batch of ballot cards.
- Q. The audit teams must examine each card in the batch, or sub-batch, of ballot cards. The audit team must interpret voter markings on ballot cards for audit in accordance with promulgated voter intent standards consistent with the Board of Elections' Voter Intent Guide. Each member of the audit team must call out in a loud and distinct voice, clear and audible, that must be able to be heard by those in the public observation area, their interpretation of the voter's selection, including overvotes and undervotes, for each audited contest, placing each audited ballot card in the appropriate pile.
- R. The public must be able to be close enough during the examination of the ballots to be able to see the voter markings so that they can evaluate for themselves whether the voter marking agrees with the audit team's interpretations of the voter's selection.
- S. If a batch or sub-batch contains a duplicate ballot, the audit team must interpret the voter markings on the ballot card marked as "ORIGINAL."
- T. When the audit team has finished examining all ballot cards in the batch, or sub-batch, they must tally the votes for each candidate or question in the contest and record the results on a form as prescribed by the Board. Both members of the audit team must sign the form before returning the batch, or sub-batch, to Board staff.
- U. If the audit team members cannot unanimously agree on the voter's intent for the contest being audited, they must place the ballot card in an envelope provided by the Board of Elections. Any ballots that the audit team cannot unanimously agree upon must be delivered to the review board.
- V. The review board will examine any cards submitted by the audit teams. If the review board, using the Voter Intent Guide, cannot unanimously agree on the voter's intent, a note must be made in the RLA tool.
- W. Two members of the Board of Elections staff must enter the results of the audit team's tallies of the voter markings in the RLA tool. One member of the staff shall read out the tallies in a loud and distinct voice, clear and audible, that can be heard in the public observation area. The other shall repeat the tallies as the first staff member enters them into the RLA tool. The form and audit tool must be displayed so that they are clearly visible in the public observation area. If an auxiliary audit stratum is used, the staff members must enter tallies from this stratum separately from the other batch, or sub-batch, tallies, as prompted by the RLA tool.

- X. When all of the batches, and ballot cards, identified for the audit have been examined and the results have been entered, the RLA tool will be used to determine if additional batches, or ballot cards, need to be audited. If the RLA tool indicates that the risk limit for the targeted contests is not met, the Board of Elections must randomly select additional batches of ballot cards (and, if applicable, additional ballot cards from the auxiliary audit stratum) for audit using the RLA tool. The RLA will continue until the risk limit for the targeted contest is met or until a full manual tally is completed.
- Y. The Board of Elections must post the results of the RLA on the Audit Center within two business days of completion of the RLA. The results report will contain:
- a. The name of the target contest or contests;
 - b. For each contest:
 - i. The number of winners;
 - ii. The total number of ballot cards;
 - iii. The unofficial final results;
 - iv. The number of times batches were randomly selected for the audit;
 - v. The number of batches in each sample; and
 - vi. The corresponding batch identifiers (and, if applicable, the number of ballot cards sampled from the auxiliary audit stratum);
 - c. The number of ballot cards audited in each batch and the audit tally totals;
 - d. The measured risk for each audited contest; and
 - e. An explanation of any discrepancies found during the audit.