

2025



November 2025 Risk-Limiting Audit Report

January 14, 2026

VIRGINIA DEPARTMENT OF ELECTIONS

EXECUTIVE SUMMARY

Pursuant to §24.2-671.2 of the Code of Virginia, the Virginia Department of Elections is required to coordinate a pre-certification, post-election risk-limiting audit of ballot scanner machines in the Commonwealth.¹ The 2025 November General Election Risk-Limiting Audits (RLA) took place in the weeks following the general election for the Virginia House of Delegates. During the week of November 17, 2025, localities completed a ballot polling RLA for the Virginia House of Delegates, 92nd District (HOD92), under the supervision of the Virginia Department of Elections (ELECT). The results of the audit met the risk limit of 10% set by the State Board of Elections (SBE) in the first round, indicating with over 99.99% confidence that ballot scanner machines accurately reported the election results.

In addition to facilitating the audit each year, §24.2-671.2 requires ELECT to submit a report to the State Board of Elections (SBE) that details the results of the audit and provides an analysis of any detected discrepancies.² The following report gives a comprehensive overview of the risk-limiting audits conducted in the Commonwealth during the 2025 General Election cycle.

WHAT IS A RISK-LIMITING AUDIT?

A risk-limiting audit (RLA) is an audit conducted after an election and before the certification of the election results that provides strong statistical evidence that the declared winner of a contest actually received the most votes. By reviewing a statistically significant sample of ballots,³ RLAs provide a more cost-effective and efficient alternative to other forms of post-election audits by reducing the total number of reviewed paper ballots needed to confirm election results. The Commonwealth has been conducting RLAs since 2018.

RLA METHODS USED IN VIRGINIA

The SBE has approved two types of RLA methods: ballot polling and batch comparison for use in the Commonwealth. 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 reported the correct outcome.

A *ballot polling* RLA is similar to an exit poll. In this case, ballots are randomly selected, tabulated, and compared to the reported result. A *batch comparison* RLA is similar to a traditional audit. Batches of ballots are randomly selected, counted, and compared to the reported results. Both provide strong statistical evidence that the declared winner won their election.

HOW IT WORKS IN VIRGINIA

ELECT uses an RLA software called Arlo, a ballot auditing tool created by VotingWorks, to help facilitate the RLA.⁴ The auditing tool randomizes the ballots sampled and performs all statistical calculations for the audit. To conduct an RLA, a voting system must be in place that uses paper ballots.

¹ Code of Virginia [§24.2-671.2\(C\)](#).

² Code of Virginia [§24.2-671.2\(H\)](#).

³ Code of Virginia [§24.2-671.2\(A\)](#).

⁴ VotingWorks, [Risk-Limiting Audits with Arlo](#).

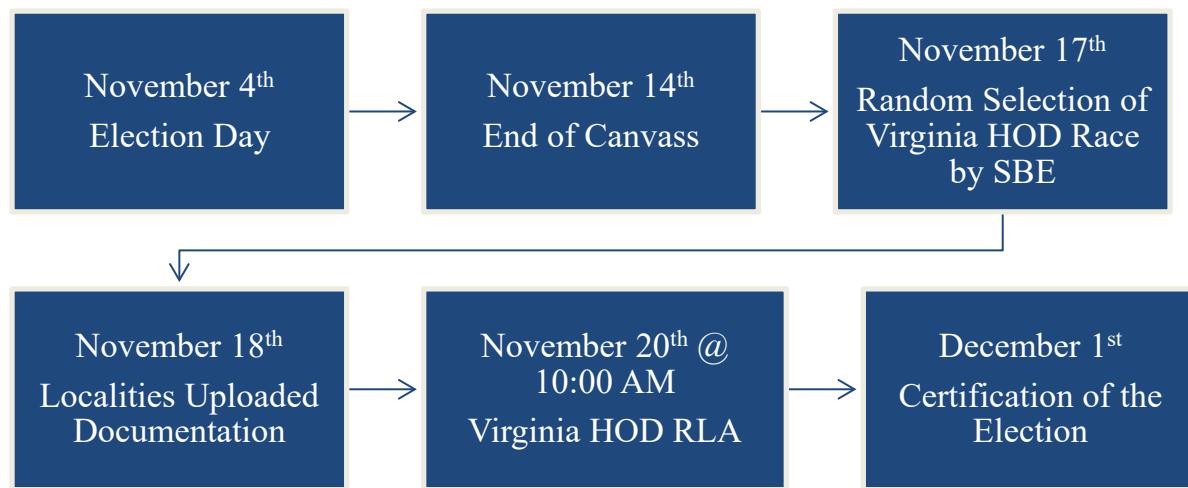
No matter what the methodology, RLAs analyze a random sample of hand-counted ballots and compare those results to the results reported. A risk limit is set as a threshold of error and is the largest probability that the risk-limiting audit will fail to correct an election outcome that differs from the outcome that would be found by a full manual tabulation of the votes on all ballots cast in the contested race.⁵ For example, a 10% risk limit means that there is a 90% chance that the audit will correct an incorrect outcome.

To date, all RLAs conducted in the Commonwealth have utilized a 10% risk limit set by the SBE. The sampled ballots must, then, be hand counted, tallied, and entered into the auditing tool. The auditing tool, then, performs the calculations necessary to determine if the pre-determined risk limit has been met. Typically, if the margin of an election is wide, fewer ballots are needed to confirm the contest results; if the margin is narrow, more ballots will be audited. If the risk limit is not met, then a second round of the RLA will need to occur and may result in a full hand count of all ballots.

2025 RLA OF A HOUSE OF DELEGATES RACE

Pursuant to §24.2-671.2(C)(2), an RLA must be conducted for at least one randomly selected General Assembly race after a general election for members of the General Assembly.⁶ On November 4, 2025, a general election was held for all 100 seats in the House of Delegates for the General Assembly. In September of 2025, the SBE, pursuant to §24.2-671.2(B)(5) and the SBE-approved RLA Manual, chose to use the ballot polling method for the 2025 RLA of a randomly selected House of Delegates race; the SBE chose not to include any other races for an RLA.⁷ During the same meeting, the SBE set the risk limit to 10%.⁸

RLA TIMELINE



⁵ Code of Virginia [§24.2-671.2\(A\)](#).

⁶ Code of Virginia [§24.2-671.2\(C\)\(4\)](#).

⁷ Code of Virginia [§24.2-671.2\(B\)\(5\)](#). See SBE September 17, 2025 [Meeting Minutes and Agenda](#).

⁸ See SBE September 17, 2025, [Meeting Minutes and Agenda](#).

In 2024, the Virginia General Assembly passed the Acts of Assembly Chapter 738, extending the canvass period from seven days to ten days after a general election.⁹ Due to the extension of the canvass period from seven to ten days following a general election, the timeline for the RLA was shortened. The following is an overview of the timeline of the process after Election Day on November 4, 2025:

- The SBE met on Monday, November 17th, following the end of the canvass on Friday, November 14th, to randomly select a contest for the Virginia House of Delegates to audit and draw the random seed numbers for sampling. The House of Delegates 92nd District was randomly selected. No localities applied for an RLA, pursuant to §24.2-671.2(D).¹⁰
- On Tuesday, November 18th, ELECT staff held a meeting to allow for last-minute questions for localities; localities were also required to upload their RLA documents into Arlo.
- On Thursday, November 20th, Chesapeake City and Norfolk City of HOD92 were required to retrieve certain ballots, chosen at random by Arlo.
- The results of the RLA were announced on Monday, December 1st when the SBE certified the results of the 2025 November General Election.

WHAT WAS THE RESULT OF THE RLA?

The HOD 92 race underwent an RLA utilizing the ballot polling method on November 20, 2025. The HOD 92 race had a margin of victory of 60.97% with a total of 24,339 ballots cast in the race. The RLA had a sample size of 114 ballots. With both localities having multiple HOD districts, which increased the overall total ballots reviewed, the chosen localities worked efficiently through the selected ballots in two and a half hours; both localities were experienced with the RLA and the ballot polling method and had prepared their staff well to make the RLA a success. The audit confirmed with over 99.99% confidence that the machines are accurately reporting election results and met the risk limit in the first round of the RLA, confirming the outcome of the race. Further, neither during the RLA nor through the post-RLA review were any discrepancies detected. With operational and training improvements, the 2025 RLA for HOD 92 was accomplished effectively and efficiently.

LESSONS LEARNED

The ELECT RLA team met regularly months in advance of the RLA to prepare. These meetings allowed the team to have a plan for all aspects of the RLA, from field communications to monitoring on the day of the RLA. These meetings and preparations contributed to the success of the RLA. ELECT will continue to use these meetings to ensure the success of future RLAs. The ELECT RLA team held a feedback session with representatives from the Norfolk and Chesapeake General Registrar offices. The feedback included:

⁹ See 2024 Acts of Assembly [Chapter 738](#).

¹⁰ Code of Virginia [§24.2-671.2\(D\)](#).

- Create a sandbox version of Arlo, the auditing software, so participants could practice data entry before the actual RLA is launched.
- Clearer communication on what method of RLA has been approved by the SBE.
- Start training and outreach on the RLA, earlier in the year.
- Create videos of all parts of the RLA process.

ELECT will incorporate this feedback into the administration of future RLAs.

CONCLUSION

The audit for the HOD 92 confirmed the results were accurately reported. The results reflect the hard work of election administrators and further exemplify the integrity and validity of the 2025 General Election. RLAs are an important tool in reassuring the public of the accuracy of the election results. For more information about the RLA process, please consult ELECT's RLA Manual.¹¹ Since 2018, RLAs have proven the accuracy of the voting systems used in the Commonwealth. ELECT remains a leader nationally in the administering of risk-limiting audits and intends to build on this success in the years to come to ensure safe, secure, fair, and accurate elections in the Commonwealth.

¹¹ ELECT, [2025 Risk Limiting Audit Manual](#).

i. 2025 November General Election RLA: Potential Races

House of Delegates District 1 County of Arlington (Part)	House of Delegates District 50 Counties of Charlotte, Halifax (Part), Lunenburg, Mecklenburg, and Prince Edward (Part)
House of Delegates District 2 County of Arlington (Part)	House of Delegates District 51 Counties of Bedford (Part), Campbell (Part), and Pittsylvania (Part)
House of Delegates District 6 County of Fairfax (Part)	House of Delegates District 52 County of Campbell (Part); City of Lynchburg
House of Delegates District 7 County of Fairfax (Part)	House of Delegates District 53 Counties of Amherst, Bedford (Part), and Nelson (Part)
House of Delegates District 8 County of Fairfax (Part)	House of Delegates District 56 Counties of Appomattox, Buckingham, Cumberland, Fluvanna (Part), Goochland (Part), Louisa (Part), and Prince Edward (Part)
House of Delegates District 9 County of Fairfax (Part)	House of Delegates District 57 Counties of Goochland (Part) and Henrico (Part)
House of Delegates District 10 County of Fairfax (Part)	House of Delegates District 58 County of Henrico (Part)

<p>House of Delegates District 11 County of Fairfax (Part); City of Fairfax</p>	<p>House of Delegates District 59 Counties of Hanover (Part), Henrico (Part), and Louisa (Part)</p>
<p>House of Delegates District 12 County of Fairfax (Part)</p>	<p>House of Delegates District 60 Counties of Hanover (Part) and New Kent (Part)</p>
<p>House of Delegates District 13 County of Fairfax (Part); City of Falls Church</p>	<p>House of Delegates District 61 Counties of Culpeper (Part), Fauquier (Part), and Rappahannock</p>
<p>House of Delegates District 14 County of Fairfax (Part)</p>	<p>House of Delegates District 62 Counties of Culpeper (Part), Greene, Madison, and Orange (Part)</p>
<p>House of Delegates District 15 County of Fairfax (Part)</p>	<p>House of Delegates District 63 Counties of Orange (Part) and Spotsylvania (Part)</p>
<p>House of Delegates District 16 County of Fairfax (Part)</p>	<p>House of Delegates District 64 County of Stafford (Part)</p>
<p>House of Delegates District 17 County of Fairfax (Part)</p>	<p>House of Delegates District 65 Counties of Spotsylvania (Part) and Stafford (Part); City of Fredericksburg</p>
<p>House of Delegates District 18 County of Fairfax (Part)</p>	<p>House of Delegates District 66 Counties of Caroline (Part) and Spotsylvania (Part)</p>

<p>House of Delegates District 20 County of Prince William (Part); Cities of Manassas and Manassas Park</p>	<p>House of Delegates District 67 Counties of Caroline (Part), King George, Lancaster, Northumberland, Richmond, and Westmoreland</p>
<p>House of Delegates District 21 County of Prince William (Part)</p>	<p>House of Delegates District 68 Counties of Essex, Gloucester (Part), King and Queen, King William, Mathews, and Middlesex</p>
<p>House of Delegates District 22 County of Prince William (Part)</p>	<p>House of Delegates District 69 Counties of Gloucester (Part), James City (Part), and York (Part); City of Newport News (Part)</p>
<p>House of Delegates District 23 Counties of Prince William (Part) and Stafford (Part)</p>	<p>House of Delegates District 70 City of Newport News (Part)</p>
<p>House of Delegates District 26 County of Loudoun (Part)</p>	<p>House of Delegates District 71 Counties of James City (Part) and New Kent; City of Williamsburg</p>
<p>House of Delegates District 27 County of Loudoun (Part)</p>	<p>House of Delegates District 72 Counties of Amelia, Chesterfield (Part), Nottoway, and Powhatan</p>
<p>House of Delegates District 28 County of Loudoun (Part)</p>	<p>House of Delegates District 73 County of Chesterfield (Part)</p>

<p>House of Delegates District 29 County of Loudoun (Part)</p>	<p>House of Delegates District 74 County of Chesterfield (Part); City of Colonial Heights</p>
<p>House of Delegates District 30 Counties of Fauquier (Part) and Loudoun (Part)</p>	<p>House of Delegates District 75 Counties of Chesterfield (Part) and Prince George (Part); City of Hopewell</p>
<p>House of Delegates District 31 Counties of Clarke, Frederick (Part), and Warren (Part)</p>	<p>House of Delegates District 76 County of Chesterfield (Part)</p>
<p>House of Delegates District 32 County of Frederick (Part); City of Winchester</p>	<p>House of Delegates District 77 County of Chesterfield (Part); City of Richmond (Part)</p>
<p>House of Delegates District 33 Counties of Page, Rockingham (Part), Shenandoah, and Warren (Part)</p>	<p>House of Delegates District 78 City of Richmond (Part)</p>
<p>House of Delegates District 35 Counties of Augusta (Part), Bath, Highland, and Rockingham (Part)</p>	<p>House of Delegates District 79 City of Richmond (Part)</p>
<p>House of Delegates District 36 Counties of Augusta (Part) and Rockbridge (Part); Cities of Staunton and Waynesboro</p>	<p>House of Delegates District 82 Counties of Dinwiddie (Part), Prince George (Part), and Surry; City of Petersburg</p>

<p>House of Delegates District 37 Counties of Alleghany, Botetourt, Craig, and Rockbridge (Part); Cities of Buena Vista, Covington, and Lexington</p>	<p>House of Delegates District 83 Counties of Brunswick, Dinwiddie (Part), Greensville, Isle of Wight (Part), Southampton, and Sussex; City of Emporia</p>
<p>House of Delegates District 38 City of Roanoke (Part)</p>	<p>House of Delegates District 84 County of Isle of Wight (Part); Cities of Chesapeake (Part), Franklin, and Suffolk (Part)</p>
<p>House of Delegates District 39 Counties of Franklin and Roanoke (Part)</p>	<p>House of Delegates District 86 County of York (Part); Cities of Hampton (Part) and Poquoson</p>
<p>House of Delegates District 40 County of Roanoke (Part); Cities of Roanoke (Part) and Salem</p>	<p>House of Delegates District 87 City of Hampton (Part)</p>
<p>House of Delegates District 41 Counties of Montgomery (Part) and Roanoke (Part)</p>	<p>House of Delegates District 89 Cities of Chesapeake (Part) and Suffolk (Part)</p>
<p>House of Delegates District 42 Counties of Giles, Montgomery (Part), and Pulaski (Part); Cities of Radford</p>	<p>House of Delegates District 90 City of Chesapeake (Part)</p>
<p>House of Delegates District 43 Counties of Bland, Buchanan, Dickenson (Part), Russell (Part), and Tazewell</p>	<p>House of Delegates District 92 Cities of Chesapeake (Part) and Norfolk (Part)</p>

<p>House of Delegates District 44 Counties of Russell (Part) and Washington; City of Bristol</p>	<p>House of Delegates District 94 City of Norfolk (Part)</p>
<p>House of Delegates District 45 Counties of Dickenson (Part), Lee, Scott, and Wise; City of Norton</p>	<p>House of Delegates District 96 City of Virginia Beach (Part)</p>
<p>House of Delegates District 46 Counties of Grayson, Pulaski (Part), Smyth, and Wythe</p>	<p>House of Delegates District 97 City of Virginia Beach (Part)</p>
<p>House of Delegates District 47 Counties of Carroll, Floyd, Henry (Part), and Patrick; City of Galax</p>	<p>House of Delegates District 98 City of Virginia Beach (Part)</p>
<p>House of Delegates District 48 Counties of Henry (Part) and Pittsylvania (Part); City of Martinsville</p>	<p>House of Delegates District 99 City of Virginia Beach (Part)</p>
<p>House of Delegates District 49 Counties of Halifax (Part) and Pittsylvania (Part); City of Danville</p>	<p>House of Delegates District 100 Counties of Accomack and Northampton; City of Virginia Beach (Part)</p>

ii. Arlo Results

Contest Name	Sample Size	Risk Limit Met?	P-Value	Audited Votes
HOD 92	114 Ballots	YES	0.0000166084	Bonita Grace Anthony: 29; W. Nash Bilisoly: 3; Contest not on Ballot: 82