

**Written Testimony of Liz Howard  
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**House State Government Committee Election Oversight Hearing: Election Audits  
Thursday, February 11, 2021**

Chairman Grove, Chairwoman Davidson, and Members of the House State Government Committee, thank you for the opportunity to testify about robust post-election audits. The Brennan Center for Justice – a nonpartisan law and policy institute that focuses on democracy and justice – has studied America’s election infrastructure and promoted common-sense policies to protect and secure our voting machines for over a decade. Based on the results of our extensive studies and work to ensure our nation’s election systems are more secure and resilient, risk-limiting audits are a critical component of building a more resilient election infrastructure.

Given the importance of post-election audits in strengthening our nation’s election infrastructure, this committee’s efforts play an important role in augmenting voter confidence and election security. And the legislature has a responsibility to ensure that local election officials have the resources and support necessary to successfully administer safe and secure elections pursuant to federal and state laws.

I am a former election official, and in my current role, I focus almost exclusively on election security and frequently partner with state and local election officials across the country to assist with the implementation of important election security measures, including risk-limiting audits. I serve on several boards focused on strengthening election security measures, including Pennsylvania’s Audit Working Group and Arizona’s Vote Count Verification Committee. I have also co-authored multiple reports on election security and remedial measures and policies that will better enable our election infrastructure, including our voting machines, to withstand attack. And I am honored to be here today.

Local Pennsylvania election officials from across the commonwealth administered a safe and secure election last November amidst record-breaking turnout and a global pandemic.<sup>1</sup> This was

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<sup>1</sup> Rachel Martin and Chris Krebs, “Fired Official Says Correcting Trump’s Fraud Claims The ‘Right Thing To Do,’” in *2020 Election: Secure Your Vote*, NPR, podcast, Dec. 1, 2020, <https://www.npr.org/transcripts/940133163> (According to Chris Krebs, “This was a secure election. That is a success story. That is something that everyone in the administration should be proud of...Congress needs to take a victory lap on that because they appropriated grants to states over the last three years to help states like Georgia and Pennsylvania put in these systems with paper ballots.”); Rev, Transcripts, “Fired Election Official Chris Krebs Senate Testimony on 2020 Election Security Transcript,” Dec. 16, 2020,

largely due to the coordinated efforts of federal, state, and local officials who worked together to ensure that Pennsylvania was well prepared for the most challenging election in recent history. And continued collaboration between the legislature and local and state election officials will be required to ensure that Pennsylvania election officials can successfully administer safe and secure elections in the future.

I hope to provide the following in my testimony today:

- (1) Background on Pennsylvania’s audit law and current risk-limiting audit pilots
- (2) Overview of risk-limiting audits
- (3) Recommendations for legislative consideration

## **I. Pennsylvania post-election audit background**

As of April 2020, two of the most important election security measures, paper ballots and post-election audits, were in place statewide. The current statutory audit requirement<sup>2</sup> established Pennsylvania as a leader in election security when originally enacted in 1980.<sup>3</sup> However, there have been important improvements in election security over the past four decades and the current law, enacted before the statewide use of paper ballots, contains two substantive deficiencies that limit the efficacy of the current post-election audit: (1) the omission of uniform audit procedures and (2) the type of postelection audit (a “traditional” postelection audit) required.<sup>4</sup>

Moreover, and likely related to these deficiencies, former Acting Secretary of State Torres entered into a settlement agreement with Jill Stein et al. in *Stein v. Cortés*, which requires the Secretary to order pilots of robust post-election audits in 2021 and implement uniform robust post-election procedures by November 2022.<sup>5</sup>

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<https://www.rev.com/blog/transcripts/fired-election-official-chris-krebs-senate-testimony-on-2020-election-security-transcript> (“Again, it’s those layered security controls that are in place before, during, and after an election. The thing that I always like to point back to is that increase of paper ballots across the country and the ability to then conduct post-election audits...The outcomes were consistent...2% audit in Pennsylvania. Those are the sorts of things that give you confidence in the process; when you can go and recount the ballots over and over and over.”); KDKA-TV News Staff, “Pennsylvania Breaks Voter Turnout Record In 2020 Election,” *CBS Pittsburgh*, Nov. 17, 2020, <https://pittsburgh.cbslocal.com/2020/11/17/pennsylvania-2020-election-voter-turnout/>.

<sup>2</sup> 25 Pa. Stat. § 3031.17

<sup>3</sup> H.B. 382, 1980 Gen. Assemb., Reg. Sess., 1980 Pa. Laws 600, 621.

<sup>4</sup> National Conference of State Legislatures, “Post-Election Audits,” Oct. 25, 2020, <https://www.ncsl.org/research/elections-and-campaigns/post-election-audits635926066.aspx> (“Traditional post-election audits are usually conducted manually by hand counting a portion of the paper records and comparing them to the electronic results produced by an electronic voting machine. . . [They typically] look at a fixed percentage of voting districts or voting machines and compare the paper record to the results produced by the voting system. Even in a landslide election, they will count the same number of ballots as they would in a nail-biter election.”).

<sup>5</sup> *Stein v. Cortés*, No. 16-CV-06287, ECF No. 108 (E.D. Pa. Nov. 28, 2018), <https://ecbawm.com/wp-content/uploads/2018/11/Stein-v.-Cortes-Agreement-Signature-Pages-11-28-2018.pdf> (requiring the audit procedures to

The Department of State has moved ahead of schedule and multiple local election officials, some of whom had just transitioned to paper ballots, offered to conduct risk-limiting audit pilots in 2019.<sup>6</sup> Thanks to these pilots, the Audit Working Group members, many of whom attended and participated in the pilots,<sup>7</sup> learned important lessons about risk-limiting audits (RLAs) and how they could work best in Pennsylvania, including best practices for ballot storage and retrieval. These RLA pilots have continued, including a statewide pilot after the presidential primary,<sup>8</sup> and a nearly-statewide RLA pilot that was just completed a few weeks ago.<sup>9</sup> I had the opportunity to work directly with several local election officials in the most recent pilot, and the majority of the feedback I received was related to the administrative ease of the process.

## II. What Is a Risk-Limiting Audit?

In straightforward terms, a risk-limiting audit is an easy and efficient method for verifying the accuracy of unofficial election outcomes (i.e., winners and losers).<sup>10</sup> Through hand counting a statistically meaningful sample of paper ballots cast in an election, an RLA can provide confidence that the election outcome was correct.<sup>11</sup> These robust post-election audits help “ensure that . . . the hardware, software, and procedures used to tally votes found the real winners.”<sup>12</sup>

The National Academies of Sciences, Engineering, and Medicine, election officials, statisticians, and cybersecurity experts have all endorsed these types of audits.<sup>13</sup> RLAs are efficient in that

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include an escalation procedure: “If the initial audit fails to rule out a possible outcome-altering error with the requisite level of confidence, additional measures must be undertaken to ensure that there are no outcome-altering errors in the vote.”)

<sup>6</sup> Pilot programs allow states to establish solid procedures for performing the RLA by allowing election officials to familiarize themselves with the various methods for conducting it and the technology requirements that assist in completing the audit. See Jennifer Morrell, *Knowing It's Right, Part One: A Practical Guide to Risk-Limiting Audits*, Democracy Fund, 2019, [https://democracyfund.org/wp-content/uploads/2020/06/2019\\_DF\\_KnowingItsRight\\_Part1.pdf](https://democracyfund.org/wp-content/uploads/2020/06/2019_DF_KnowingItsRight_Part1.pdf).

<sup>7</sup> Emily Previti, “Pa. starts testing new election auditing procedures,” *WITF*, Nov. 20, 2019, <https://www.witf.org/2019/11/20/pa-starts-testing-new-election-auditing-procedures/>.

<sup>8</sup> PA Media, “Pennsylvania’s First Enhanced Statewide Election Audit Confirms Presidential Primary Outcome,” Aug. 26, 2020, <https://www.media.pa.gov/pages/State-details.aspx?newsid=395>.

<sup>9</sup> PA Media, “Risk-Limiting Audit Pilot of November 2020 Presidential Election Finds Strong Evidence of Accurate Count,” Feb. 5, 2020, <https://www.media.pa.gov/pages/State-details.aspx?newsid=453>.

<sup>10</sup> Christopher Deluzio, *A Smart and Effective Way to Safeguard Elections*, Brennan Center for Justice, Jul. 25, 2018, <https://www.brennancenter.org/our-work/analysis-opinion/smart-and-effective-way-safeguard-elections>.

<sup>11</sup> Deluzio, *A Smart and Effective Way*.

<sup>12</sup> Elizabeth Howard, Ronald L. Rivest, and Philip B. Stark, *A Review of Robust Post-Election Audits*, Brennan Center for Justice, Nov. 7, 2019, 1, [https://www.brennancenter.org/sites/default/files/2019-11/2019\\_011\\_RLA\\_Analysis\\_FINAL\\_0.pdf](https://www.brennancenter.org/sites/default/files/2019-11/2019_011_RLA_Analysis_FINAL_0.pdf).

<sup>13</sup> See e.g., National Academies of Sciences, Engineering, and Medicine, *Securing the Vote: Protecting American Democracy*, 2018, <https://www.nap.edu/read/25120/chapter/1>; Morrell, *Knowing It's Right*; American Statistical Association, “American Statistical Association Endorses Post-Election Audits Principles,” Jan. 8, 2019, <https://www.amstat.org/asa/files/pdfs/pressreleases/2019-AuditPrinciplesRelease.pdf>; GNC Staff, “CISA partners on risk-

they often require review of a smaller number of ballots than a traditional audit. Election administrators select the smallest sample necessary to obtain an established level of confidence (the “risk limit”) in the accuracy of the outcome:

“Statistical principles determine the size of the sample — but, in plain terms, more ballots are counted in a close race, while a race with a larger margin of victory would require fewer ballots to be counted. If testing of the sample is consistent with the original reported vote total, it is almost certain that the initially declared winner actually won the race. If, on the other hand, the sample has substantial discrepancies with the original tally, the audit continues until there is ‘sufficiently strong statistical evidence that the apparent outcome is right, or until all the ballots have been manually counted.’”<sup>14</sup>

A critical component of RLAs is the escalation feature described above: A larger sample must be drawn should insufficient evidence of the accuracy of the outcome be found after analyzing the results of the first sample. And this escalation feature is therefore appropriately required for robust post-election audits implemented pursuant to the Stein Settlement.<sup>15</sup>

In contrast to RLAs, traditional postelection audits, like those typically conducted in Pennsylvania, require auditors to count a percentage of ballots fixed by statute or regulation, even when counting that many ballots is unnecessary or insufficient, depending on the margin of victory. For this reason, RLAs can alleviate some of the administrative burden election administrators face while simultaneously ensuring that enough ballots are hand counted to provide voters with confidence in the state’s postelection audits. RLAs consistently require the minimal amount of administrative burden necessary to achieve the goal: providing confidence in the accuracy of the outcome.

### **III. Recommendations for legislative consideration**

Election officials have spent almost two years studying robust post-election audits and conducting groundbreaking local and statewide RLA pilots that point the way to further increasing accuracy and confidence in our elections. The legislature also plays a critical role in these post-election audits: ensuring election officials have the support necessary to successfully complete audits that promote voter confidence. In Pennsylvania, this means that the legislature should consider replacing the current statutory requirement to conduct a traditional audit with a requirement to conduct a risk-limiting audit. And the legislature should also consider requiring local election officials to comply with procedures promulgated by the Department of State to ensure that statewide elections can be audited effectively.

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limiting audit software for election systems,” *GNC*, Nov. 22, 2019, <https://gcn.com/articles/2019/11/22/arlo-risk-limiting-audit-software.aspx>.

<sup>14</sup> Deluzio, *A Smart and Effective Way*.

<sup>15</sup> *Stein v. Cortés*, No. 16-CV-06287, ECF No. 108 (E.D. Pa. Nov. 28, 2018).

Due to the Stein Settlement, unless the current audit law is revised before the 2022 November General Election, local election officials will be forced to conduct two different audits prior to the certification of the election: one audit required pursuant to statutory law, and, separately, one audit required pursuant to the Stein Settlement. This result would simply increase administrative burden without enhancing the security and resiliency of Pennsylvania's election infrastructure.

Replacing the current audit statute with an RLA statute would minimize administrative burden on Pennsylvania's election officials while enhancing confidence in the administration of Pennsylvania elections.

## **Conclusion**

With the recent deployment of voting machines that rely on paper ballots across the commonwealth, risk-limiting audits are now possible in Pennsylvania. They are an efficient and effective election security tool supported by many current and former local Pennsylvania election officials, homeland security officials and cybersecurity experts. The ongoing RLA pilots have provided many opportunities for feedback from officials, community members and other stakeholders on how to make RLAs work best in Pennsylvania. The legislature should continue to support election officials' efforts to administer safe and secure elections by taking action to minimize unnecessary administrative tasks through replacing the current traditional post-election audit requirement with a risk-limiting audit.