



PENNSYLVANIA POST-ELECTION AUDIT WORKGROUP

YEAR 2 REPORT – DECEMBER 31, 2020

I. Introduction

In January 2019, the Department of State formed a Pennsylvania post-election audit workgroup to study models of post-election audits. These audits, such as risk-limiting audits, are scientifically designed and highly effective procedures conducted after an election to strengthen election security and integrity, confirm the accuracy of election outcomes, and provide confidence to voters that their votes are being counted accurately.

The workgroup's goals have been to develop recommendations and best practices, work with the legislature for any suggested legislative enhancements, and carry out pilot audits over the coming years. The first two risk limiting audit (RLA) pilots occurred in November 2019 in Philadelphia and Mercer counties. The first statewide post-election audit pilot occurred in August 2020 and overwhelmingly confirmed the outcome of both the Democratic and Republican Presidential Primary races. The Department of State and counties are currently conducting another RLA pilot of the 2020 presidential election. These and future pilots will be tremendously helpful in shaping best practices and recommendations.

The Department of State wants to thank all the members of this workgroup for their willingness and dedication to study and make recommendations to meet these important objectives while also taking into account the practices, procedures, and requirements specific to the Commonwealth's election administration infrastructure.

II. Objective and Members of Workgroup

A. Objective

- Identify and assist with the implementation of robust post-election pre-certification audits that promote public confidence in Pennsylvania elections, in conjunction with the coordinated efforts of state and local officials working to modernize and strengthen the security and integrity of the Commonwealth's election infrastructure. These audits will be designed to reinforce public confidence in election processes and procedures by confirming election outcomes.

B. Members

- Allegheny County Election Director David Voye
- Butler County Election Director Aaron Sheasley
- Cumberland County Elections Manager Megan Orris
- Lebanon County Election Director Michael Anderson
- Philadelphia Deputy City Commissioner Nick Custodio

- Sullivan County Election Director Hope Verelst
- Brennan Center Democracy Program Counsel Liz Howard
- Committee of Seventy Policy Director Patrick Christmas
- Verified Voting Senior Science and Technology Policy Officer Mark Lindeman
- Kathy Boockvar - Secretary of the Commonwealth
- Jonathan Marks - Deputy Secretary for Elections and Commissions
- Sindhu Ramachandran - Voting System Analyst
- Zane Swanger, Deputy Director, Bureau of Election Security and Technology

Department of State Advisers

- Veronica Degraffenreid, Special Advisor for Elections Modernization
- Jessica Mathis - Director, Bureau of Election Services and Notaries
- Mike Moser - Director, Bureau of Election Security and Technology
- Jessica Myers - Director, Office of Policy

III. 2020 Activities

On or before the 2020 primary election, all 67 counties successfully implemented new voting systems meeting current standards of security and accessibility, choosing from among the nine systems certified by both the Department of State and the U.S. Election Assistance Commission (EAC). Every new voting system includes voter-verifiable paper ballots, and every system has successfully completed penetration testing, access-control testing, and testing to ensure that all access points, software, and firmware are protected from tampering.

Thanks to the new voting systems and paper ballots, the Department and counties have been able to conduct enhanced post-election audit pilots to confirm the accuracy of election outcomes. Direct Recording Electronic (DRE) voting systems, which were previously in use in most counties, do not allow for such advanced election security and integrity measures.

The first Pennsylvania pilots of this cutting-edge security measure occurred in November 2019 in Mercer and Philadelphia Counties. In 2020, we followed with Pennsylvania's first statewide enhanced post-election audit pilot, which overwhelmingly confirmed the outcome of both the Democratic and Republican Presidential Primary races.

Pennsylvania is one of the first states in the nation to pioneer pilots of the risk-limiting audit (RLA), a scientifically designed procedure using statistical methods to provide a high level of confidence and statistical verification that the outcome of an election is accurate and detect possible interference. RLAs examine a random sample of paper ballots, comparing the votes on paper to the totals reported by the vote-counting machines. These types of audits can confirm that voting systems tabulated the paper ballots accurately enough that a full hand count would produce the same outcome. Robust post-election audits have been recommended by the U.S. Department of Homeland Security, the U.S. Senate Select Intelligence Committee, and many other experts, and are one part of a strong and resilient election infrastructure.

The Department and counties are currently conducting an RLA pilot of the 2020 presidential election. In late 2020, the counties created their ballot manifests, a random seed number was generated, and the audit software selected the random list of ballots to be retrieved by each county. The counties will be retrieving their ballots in January and indicating the vote cast for the Presidential contest on each ballot, after which point the system will tally and analyze the results.

County election officials, Department of State staff, and election experts from VotingWorks, the Brennan Center for Justice at NYU School of Law, and Verified Voting are providing support and assistance in developing and implementing the pilot audits. The workgroup will evaluate the statewide audit pilots and will integrate its conclusions in its recommendations.

IV. Next Steps

With the benefit of having conducted several enhanced post-election audit pilots, the workgroup will begin to meet again in early 2021 to assess the pilots, refine and expand upon its existing recommendations, and shape follow-up recommendations and best practices. These may include but are not limited to:

- Identification of recommended legislative modifications relating to post-election audits;
- Identification of costs, materials, tools, and other resources needed, and from what source(s) these expenditures should be made;
- Development of training needed for election personnel;
- Identification of guidance and directives needed from the Department of State; and
- Continued evaluation of and recommendations for the most efficient and effective practices and protocols for conducting the above audits and integrating them into existing election administration and timelines in Pennsylvania.