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, work with the legislature for any suggested legislative enhancements, and carry out pilot audits in multiple counties across the Commonwealth over the coming years. The first two pilots already occurred in November 2019 in Philadelphia and Mercer counties, and these and future pilots will be tremendously helpful in shaping these 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 the outcome of the election.

B. Members

- Allegheny County Election Director David Voye
- Lancaster County Election Director Randall Wenger
- Mercer County Election Director Jeff Greenburg
- Mifflin County Election Director Zane Swanger
- Philadelphia Deputy City Commissioner Nick Custodio
- Sullivan County Election Director Hope Verelst
• Brennan Center Democracy Program Counsel Liz Howard
• Common Cause PA Executive Director Micah Sims
• Verified Voting Senior Science and Technology Policy Officer Mark Lindeman
• Kathy Boockvar - Secretary of the Commonwealth
• Jonathan Marks - Deputy Secretary for Elections and Commissions
• Mike Moser - Director, Bureau of Election Security and Technology
• Jessica Myers - Director, Office of Policy

**Department of State Advisers**

• Jessica Mathis - Director, Bureau of Election Services and Notaries
• Sindhu Ramachandran - Voting System Analyst

**III. 2019 Activities**

In 2019, the workgroup conducted 10 meetings over a period of 7 months, including two “sandbox” events in Lancaster and Philadelphia counties that allowed the workgroup members to experiment through hands-on experience with post-election audits. The workgroup used the meetings and sandbox events to assess current Pennsylvania practices, analyze existing Pennsylvania statutes relating to audits, and formulate initial recommendations. The workgroup also spearheaded pilots of risk-limiting audits held after the November 5 Municipal Election, making Pennsylvania one of the earliest states in the nation to pioneer such pilots.

The risk-limiting audit is 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. 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 first Pennsylvania audit pilots of this cutting-edge security measure occurred in November 2019 in Mercer County and Philadelphia. County election personnel, Department of State staff and election experts from the U.S. Election Assistance Commission, the University of Michigan, the Brennan Center for Justice at NYU School of Law, the Democracy Fund, VotingWorks, and Verified Voting participated in developing and implementing the pilot audit process using the new paper-based voting systems.

Experts, officials, and press around the nation applauded these pilots. Strong support included a Washington Post editorial that lauded the Commonwealth for adopting this "no-brainer" advance in election security. "Pennsylvania is only able to start testing risk-limiting audits now because it is transitioning to paper from all-electronic systems. This represents another encouraging trend," the editorial noted.
The workgroup is in the process of evaluating the results of the November 2019 audit pilots and will include its conclusions in its next report.

IV. Initial Conclusions

A. Legislative

The workgroup analyzed the Pennsylvania Election Code, 25 P.S. § 2600 et seq., and determined that certain amendments to the Election Code would aid the Department of State in ensuring that best practices in pre-certification audits are put in place across the Commonwealth. The workgroup recommends that the Department of State engage the legislature to pass legislation to accomplish the following goals:

- Repeal Section 1117-A of the Election Code, 25 P.S. § 3031.17, requiring a statistical recount of a random sample of ballots in each county, including at least two percent of the votes cast or 2,000 votes whichever is the lesser.

- Replace this Section with a new law requiring all counties and the state to implement enhanced post-election audits, conducted after every election and before the results are certified, that utilize a Department of State-approved audit method that confirms to a reasonable degree of statistical certainty that the election outcome is correct.
  - All Department-approved audit methods should be consistent with best practices in the field and may include but are not limited to risk-limiting audits.

- Require that if the outcome of an audited race cannot be confirmed by the enhanced post-election audit, a full recount of that race should be completed by hand, in accordance with Pennsylvania law.

B. Procedural

The workgroup recommends that the Department of State analyze and work toward implementation of the following goals, to the extent consistent with its statutory authority:

- The Department of State should formulate a directive requiring that beginning in November 2022, in every election where there is at least one statewide race, the state should conduct the following audit(s):
  - The race that is determined to be the top of the ticket; and
  - If there is more than one statewide race, one additional randomly-selected race.
• The Department of State should formulate a directive requiring that beginning in November 2022, in every election, the counties should conduct the following audit(s):
  o At least one countywide race randomly selected by the county board of elections. Such race may be audited concurrently with the statewide audited race(s).
  o In the event there are no countywide races on the ballot, the Department of State should formulate standards for random selection of municipal-level races that may be audited.

• If the two percent audit currently required by statute is repealed and replaced, the workgroup recommends that counties utilize the Ballot Polling audit method, which selects and audits a random sample of ballots, the size of which can be expanded or reduced as applicable.

• If the two percent statutory audit is not repealed and replaced, the workgroup recommends that counties utilize the Batch-Level comparison audit method (at minimum), which audits all of the ballots from randomly selected batches of ballots. This type of audit can be used concurrent with the current two percent requirement.

• Implementation of Audits
  o The Department of State should organize and direct statewide audits, in partnership with the counties.
  o The Department of State should develop, in partnership with the counties, all plain language guidance and procedures necessary to efficient and orderly conduct of post-election audits.
  o The Department of State should prescribe any forms necessary for conducting and reporting the results of post-election audits.
  o Each county should organize and direct its county audits and should report results to the Department of State.

V. Next Steps

While the workgroup has made significant progress and exceeded its initial goals by piloting audits in its first year, its work is ongoing. The group will continue to meet to refine and expand upon its existing recommendations and provide a follow-up report by January 1, 2021. The group will also continue to meet to shape further recommendations and best practices, which may include but are not limited to:

• Identification of costs, equipment, documentation, materials, tools, and other resources needed, and from what source(s) these expenditures should be paid;
• Identification of counties to pilot audits and ensuring sufficient support, planning, and resources to each;

• Development of training needed for election personnel;

• Identification of guidance and directives needed from the Department of State and any additional legislative recommendations; and

• Continued evaluation of and recommendations for the most efficient and effective best practices and protocols for conducting the above audits and integrating them into existing election administration and timelines in Pennsylvania.