

**House State Government Committee
Public Hearing on Elections
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Bureau of Commissions, Elections and Legislation**

Thank you, Chairman Metcalfe, Minority Chair Bradford, and members of the House State Government Committee for allowing the Department of State (Department) to submit testimony at today's hearing. We are pleased to provide the following overview of preparations for the November election, ongoing efforts to maintain and improve the security of elections, the state process and timelines for voting system replacement, efforts to maintain the accuracy and integrity of voter lists in Pennsylvania, and the department's plan to transition from the Statewide Uniform Registry of Electors (SURE) to a modern and proven statewide voter registration database.

I. Preparing for a Safe and Secure Election

As of today, we are just three weeks and one day away from the November 6 midterm elections. Pennsylvania's 67 counties are currently finalizing their lists of registered voters for the November election, training tens of thousands of poll workers, preparing and testing voting equipment, delivering absentee ballots to more than one hundred thousand absentee voters, and educating voters about their voting districts and polling place locations.

Between September 1 and last Tuesday's close of registration, more than 389,931 thousand individuals either registered to vote or updated their voter registration. Of those, 223,664 thousand (or 57%) used Online Voter Registration. So far, 115,484 thousand voters have requested an absentee ballot.

Secure, resilient, accurate and accessible elections are of great importance to all of us who administer them. As public servants charged with protecting this most fundamental right, we are always attentive to our responsibility to ensure that right can be exercised freely, securely and with full confidence in the integrity of both the processes and the machinery of elections.

To ensure that voters have confidence in the security and integrity of the upcoming November election the department has significantly bolstered its security measures. The Commonwealth increased the layered set of protections in place to secure our databases and election networks, including utilization of encryption and many other advanced technologies. Additionally, the Commonwealth's networks are continuously monitored and vulnerability assessments performed, with vigilant review of any alerts and actions taken as needed.

We strengthened our collaboration with county, state and federal partners to enhance security protocols and improve data sharing. Since last year, we partnered with the County Commissioners Association of Pennsylvania (CCAP) to form an election security workgroup of CCAP representatives, county election directors, department staff, and county and state IT directors to discuss security issues, share training resources, and conduct security self-assessments to assess each participating county's security posture.

In 2018, the Administration formed an Executive Interagency Workgroup to further fortify our election security, banding together experts from the Department of State, Homeland Security, Emergency Management Agency, Information Technology, State Police, National Guard, Inspector General, and the Department of Military and Veterans Affairs. This team of key agencies collaborate on increasing security resources, training, support, information, and preparation.

The cyber defense team of the PA National Guard will be the first from any state to participate in a new DHS training program. The program, now in the pilot phase, trains third parties to conduct Risk and Vulnerability Assessments (RVA) to DHS standards.

We expanded the training and resources we provide to the counties free of charge. For example, we collaborated with our state and federal partners to provide trainings, mock election exercises, and other resources to PA counties at no cost to them, including in-depth tabletop exercises to train election, information technology, emergency management, and security personnel in incident response, by simulating scenarios that could impact voting operations. Additionally, the Commonwealth, in partnership with CCAP, will provide anti-phishing and security training and tools to all 67 counties at no cost to them.

Through enhancing the department's cybersecure measures, creating the workgroup of eight state agencies, expanding our collaboration with national and federal partners and offering new free trainings to county election officials, the Pennsylvania Department of State is taking significant steps to protect our elections and ensure voters can have confidence in the accuracy of the results.

II. Election Security and Voting System Replacement

The commitment of federal, state and county officials to maintain the security of our election infrastructure can give voters confidence when casting their ballot in the upcoming election. However, the time is fast approaching for Pennsylvania to join other states that recently upgraded their voting equipment.

By virtually everyone's standards, our current voting systems are approaching the end of their usable life, and they are built on operating systems that are no longer supported or soon will not be supported by the manufacturers.

Over the last year, experts and elected officials from across the country and world, including the President of the United States, U.S. Senate Intelligence Committee, and the U.S. Department of Homeland Security, issued strong warnings about the risks and vulnerabilities we face from both cyber threats and aging voting systems.¹

¹ See, e.g., President Trump's Executive Order on *Imposing Certain Sanctions in the Event of Foreign Interference in a United States Election*, <https://www.whitehouse.gov/presidential-actions/executive-order-imposing-certain-sanctions-event-foreign-interference-united-states-election/> (declaring a national emergency to deal with this threat)(September 12, 2018); U.S. Senate Intelligence Committee Report, Summary of Initial Findings and Recommendations (May 2018), <https://www.burr.senate.gov/imo/media/doc/RussRptInstlmt1-%20ElecSec%20Findings,Recs2.pdf>.

These experts, including professionals in national security, intelligence, computer science, elections, and more, urge states to act as quickly as possible, to replace older voting machines with voting systems that produce a paper record that voters can verify, and which enable robust post-election audits.

For example, in the last several months, the U.S. Department of Homeland Security Secretary has urged states and counties to implement new voting systems.

“I am calling on every state in the Union to ensure that by the 2020 election, they have redundant, auditable election systems. The best way to do that is with a physical paper trail and effective audits so that Americans everywhere can be confident that—no matter what—their vote is counted and it is counted correctly.” [U.S. Homeland Security Secretary Kirstjen Nielsen, 9/5//18]

The STEM sector and other professional fields also strongly urge these actions. This month, the National Academies of Sciences, Engineering, and Medicine issued a report, “Securing the Vote: Protecting American Democracy.” The report assesses current technology and standards for voting, and recommends steps that federal, state, and local governments, election administrators, and vendors of voting technology should take to improve the security of election infrastructure, including that all elections should be conducted with paper ballots by 2020, and states should mandate risk-limiting audits within a decade.² Additionally, multiple courts issued decisions in recent weeks indicating that states and counties that fail to heed these changed standards for security and continue to employ paperless Direct Recording Electronic voting machines (DREs) may violate voters’ federal constitutional rights.³ Pennsylvania is one of only a handful of states remaining that use all or primarily paperless voting systems.

The list of experts calling on states to replace older voting equipment with newer equipment that employs a voter-verifiable paper record is almost endless and it represents the entire spectrum of national security, law enforcement, election officials, academia and good government advocacy groups. It includes Grover Norquist of Americans for Tax Reform, former Secretary of

² <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=25120>; See also National Election Defense Coalition Letter to Elections Officials, <https://www.electiondefense.org/letter-to-elections-officials> (including support from FreedomWorks and Americans for Tax Reform, among many other bi-partisan and non-partisan organizations and officials).

³ See, e.g., *Stein v. Cortés*, U.S. District Court, E.D. Pa., 2:16-cv-6287 (Decision 09/07/18 at 40-1) (Denying the Department’s Motion to Dismiss some of the plaintiffs’ constitutional claims, allowing claims to go forward alleging that the use of the paperless DREs may violate plaintiffs’ First Amendment, Due process, and Equal protection claims based on the risk of casting an ineffective vote and based on the unequal use of DRES in some counties but not others, and indicating that defendants will have to “justify” continuing to use paperless DREs); *Curling v. Kemp*, U.S. District Court, N.D. Georgia, 1:17-cv-02989, (Decision 09/17/18)(Giving substantial weight to the fact that “National security experts and cybersecurity experts at the highest levels of our nation’s government and institutions have weighed in on the specific issue of DRE systems in upcoming elections and found them to be highly vulnerable to interference, particularly in the absence of any paper ballot audit trail;” and finding that Plaintiffs are substantially likely to succeed on the merits of one or more of their constitutional claims, that the DRE voting system deprives them or puts them at imminent risk of deprivation of their fundamental right to cast an effective vote (i.e., a vote that is accurately counted), and when they vote by DRE, their vote is in jeopardy of being counted less accurately and thus given less weight than a paper ballot.)

Homeland Security Michael Chertoff, former director of National Security, General Michael Hayden, and Trey Grayson, former Secretary of State in Kentucky.

Even the Advisory Committee on Voting Technology, commissioned pursuant to Senate Resolution 394 of 2016, recommended in its December 2017 report to the General Assembly that funding be provided to assist counties in the purchase or lease of new equipment that complies with the requirements **for a voter-verifiable paper record** and adequate security measures.

It is in this context that the Department must exercise its statutory duty to determine whether a voting system has adequate security measures and demonstrable accuracy, such that the Commonwealth's voters can remain confident that their vote is secure and will be accurately counted. Due to the age of our voting systems, the changing nature of the threats we face, and the virtually unanimous sentiment that voting systems must be fully auditable and capable of recovering quickly from error or attack, we determined that our current voting systems need to be responsibly upgraded. Toward this end, the Department effectuated a conscientious and feasible plan to ensure that Pennsylvania voters are using the most secure, auditable, accessible, and resilient voting machines available, meeting current security standards. To do this responsibly, the Department spoke with many states and counties about timelines under which this transition could occur, and determined that, while we could not expect counties to achieve this goal in 2018, 2019 or early 2020 would provide at least as much time as many other jurisdictions had to make the transition.

To initiate our plan, in December 2017, the Department held a voting systems vendor forum that was open to the public, county election officials, and other stakeholders, to begin exploring new voting machines options for Pennsylvania. In February 2018, the Department issued a directive requiring that all new voting systems procured by Pennsylvania counties have a voter-verifiable paper record. In April 2018, we released an Invitation for Bid (IFB) for vendors to submit proposals for these systems from which counties may choose. We also issued further direction that Pennsylvania counties must select new voting systems that meet these standards by December 31, 2019, urging the counties to implement these new voting systems as soon as feasible and no later than the 2020 Primary Election. On April 26, the Department held a voting systems vendor demonstration, allowing the public, legislators, county officials, press and all stakeholders to view and try the new voting systems under consideration.

Over the last 10 months, the Department visited dozens of counties, spoke at several county government conferences, provided counties feedback on proposals, suggested timelines for implementation, recommendations for negotiation of terms, and much more. More details on the status of county endeavors will be provided later in this testimony.

III. Certification and Standards for New Voting Systems

To ensure the highest level of security, resiliency, and accessibility for Pennsylvania voters, the Department released new voting system security and accessibility standards in Spring 2018, to meet current expert recommendations on security and accessibility. New voting equipment must not only include voter-verifiable paper records and achieve U.S. Election Assistance Commission (EAC) certification, but must also meet these comprehensive state standards.

The PA Security Standard⁴ incorporates tests to ensure confidentiality, vote anonymity, integrity, security, and auditability of the voting systems. The test specifications include but are not limited to:

- Penetration testing that evaluates the security of the voting system by trying to exploit its potential vulnerabilities.
- Access control testing to confirm that the voting system can detect and prevent unauthorized access to the system and election data.
- Evaluation of voting system audit logging capabilities to confirm that the system logs will allow auditing, as well as investigation of any apparent fraudulent or malicious activity.
- Tests that ensure every physical access point is well secured and system software and firmware is protected from tampering.

The PA Accessibility Standard aims to provide better information about the usability of voting systems for voters with disabilities. This standard entails expert review by usability and accessibility examiners and feedback from the voters and poll workers who will use the voting systems, identifying areas of concern and level of severity as follows:

- Voters with disabilities use the system, voting a reasonable length PA ballot, and providing feedback. The examiners facilitate, observe and identify best practices for use.
- Election officials/poll workers test the accessibility features, especially how they are activated during an election, and comment on the usability of system.
- The expert examiners consolidate the findings into a report, identifying summary measures needed for voters to use the voting system effectively, and poll worker and voter education requirements or guidance, if any.

Two voting systems completed state and federal certification testing. A third voting system completed federal certification, was examined by the state at the end of August, and is on schedule to finish certification this fall. A fourth system completed federal testing and will be tested by the Department this month. A fifth system has begun testing for both federal and state certification, and is expected to be ready for certification by Fall/Winter 2018. A sixth system is expected to initiate its process for federal and state certification later this year.

With the transition to voting systems with paper records, the Commonwealth will also bolster our post-election audit requirements. We are currently gathering information about different models of risk-limiting audits to identify options that are not only effective but also as straightforward as possible to implement and understand.

IV. Status of County Endeavors to Upgrade Voting Equipment

⁴ The complete Security Standard may be found here:

<https://www.dos.pa.gov/VotingElections/Documents/Voting%20Systems/Directives/Conduct%20Directive%20Att%20E%20-%20PA%20Voting%20System%20Security%20Standard%20v06122018.pdf>

Representatives from the Department traveled around the state meeting with county commissioners, election directors, and other interested personnel to answer questions, offer assistance on every step of the process, serve as a central hub to help leverage negotiating power, and provide suggested task lists and timelines. Most counties have for months - or even longer - been exploring voting systems options, examining machines, seeking public input and quotes from vendors, and assessing preferred timeframes for implementation. One county, Susquehanna County, procured new systems and is implementing those new systems in the upcoming November election. Several other counties are planning to follow soon and implement new systems in the 2019 primary. Most counties appear most likely to implement new systems in the 2019 general election, though some counties may choose to implement in the 2020 primary.

The Department is working closely to provide support and assistance to all the counties, including the largest county, Philadelphia, which is working hard to take the steps necessary to procure and implement new systems. Philadelphia issued a Request for Information (RFI) in June, seeking “statements of interest, capabilities, and Rough Order of Magnitude (ROM) cost estimates from all Respondents interested in, and capable of” providing new voting systems in time for the 2019 General Election.⁵ The Department will hold six regional voting system demonstrations around the state in November and December, both to assist counties and to provide public education. In addition, we are holding three legislative briefings in the coming weeks, including one here in Harrisburg later this morning.

Not surprisingly, the biggest concern expressed by most counties is funding. The Department is investigating every option for funding and financing, including grant opportunities, creative financing options, appropriations, partnerships, bonds, leases and more. We designated 100% of the funds Pennsylvania will receive in federal funding under the Omnibus Appropriations Act of 2018 to be distributed proportionately to the counties for replacement of the voting systems, which will total \$14.15 million including the state’s 5-percent match. Though a welcome down payment, this is obviously not nearly enough. The administration is advocating strongly for additional federal funding, and is committed to working with the Pennsylvania legislature for an appropriation of state funding next year. We expect this system replacement initiative to be a cost-share of federal, state, and local dollars. We are exploring options for long-term planning and saving for future system upgrade needs.

V. Election Integrity and Reform

Upholding the integrity of Pennsylvania elections is a core mission of the Department of State and one we work toward every day. Over the past few years, the department made significant improvements to the processes for maintaining the accuracy and integrity of Pennsylvania’s voter rolls, and we leveraged state resources to give counties additional, more modern tools for conducting voter list maintenance.

⁵ For the complete RFI, see <http://www.phila.gov/rfp/Documents/Election%20Systems%20RFI%20for%20Review%20and%20Posting%20FINAL.pdf>.

Our membership since 2015 in the Electronic Registration Information Center (ERIC), which uses sophisticated data-matching tools to help member states maintain accurate voter registration rolls, continues to pay off for the department and the counties. ERIC's membership now includes 24 states and the District of Columbia.

In 2017, thanks to ERIC, the Department provided counties with updated address information for 186,690 voter registration records, including nearly 57,000 records for voters who may have moved out of Pennsylvania. ERIC is a success, and as its membership continues to grow so too will its benefits to the Commonwealth grow.

Earlier this year, we engaged with the Auditor General to conduct an audit of the SURE system. This audit serves the dual purpose of providing opportunities for making short term improvements to SURE and identifying recommendations for development of a new voter registration database. Though SURE is secure and gives counties the necessary tools to maintain the accuracy and integrity of their voter records, it is costly to maintain because it is custom-built and it has been updated numerous times over the past 12 years. As a result, the department is currently planning for the replacement of SURE with a proven solution that is both cost-effective and modern.

Finally, and most importantly, the Department has enjoyed a close working relationship with county election officials and other election stakeholders. In consultation with them, we developed and implemented ideas that improve the integrity of elections.

For example, we worked in consultation with the SURE Advisory Board to make improvements to the Motor Voter process that reduce confusion and errors. We worked with the Advisory Board and other stakeholders to simplify and clarify the instructions and notifications to applicants so they understand the requirements for voter registration and their responsibilities as a voter.

In addition to voter list maintenance initiatives, the Department is also partnering with counties to support their ideas and develop proposals to address the election administration concerns they care about, such as revised absentee balloting rules and deadlines that reflect the current reality of mail delivery, and changes to rules for poll workers to address the shrinking list of eligible and available poll workers.

VI. Conclusion

Pennsylvania voters can have confidence in the integrity and accuracy of our elections. The Department of State works closely with all 67 county boards of elections, experts from the state and federal Departments of Homeland Security, Center for Internet Security (CIS), the National Guard, the PA Emergency Management Agency (PEMA), state and county IT staff, PA State Police, and many other key partners, to ensure the security of elections in Pennsylvania.

Along with the county elections personnel and the tens of thousands of poll workers, this collaboration is resulting in increased security measures, improved coordination across federal, state and local election agencies and enhanced security training to protect our elections.

The Administration is strongly committed to working with the legislature to continue the progress we made and to give counties the additional tools they need to enhance integrity, improve efficiency, save costs, and increase accessibility for the voters of this Commonwealth.

Thank you again for your time and for your own efforts to enhance election security and integrity.