Ballot Box Basics

Election Security, Ballot Safeguards, and Election Audits

Jonathan Marks
Deputy Secretary for Elections & Commissions
Statewide Uniform Registry of Electors (SURE)
Database with information of all registered voters in Pennsylvania. Used by all 67 Pennsylvania counties.

Voting Systems
As of the 2020 Presidential election, all voting systems must have a paper trail and be certified by the U.S. Election Assistance Commission and the Secretary of the Commonwealth.

Voter Services
How to vote, register to vote, verify or update voter information and learn all about elections and how to participate.

vote.pa.gov
Campaign Finance
Reports filed by candidates for statewide, legislative and judicial offices, as well as political committees registered in Pennsylvania. These reports can be filed and reviewed online.

Lobbying Disclosure
Makes public all filed registration statements and quarterly expense reports, as well as an annual report to the General Assembly outlining lobbying activities with detailed information on registered principals, lobbying firms and lobbyists.

Petition Filing
Handles nomination petitions for statewide, congressional and state-level offices.

vote.pa.gov
There are more than 8.7 million registered voters in the Commonwealth of Pennsylvania. These voters span Pennsylvania’s 67 counties.

While the counties run the elections, the Department of State supports counties in many ways, detailed on the next slide.

vote.pa.gov
Department of State supports counties, which includes:

- Election security and infrastructure
- Poll worker training resources
- Voter services
- Election guidance
- Official voter registration and voting forms
- Language access
- Election Night reporting
Governor’s Civic Engagement Award

The Governor’s Civic Engagement Award is presented by the Pennsylvania Departments of State and Education. The award celebrates the efforts of Pennsylvania high school students to educate, engage and inform their fellow students about how to get involved in the voting process.

- **85 PERCENT**
  
  Presented to schools where 85 percent of eligible students are registered to vote.

- **65 PERCENT**
  
  Presented to schools where 65 percent of eligible students are registered to vote.

- **Presented to students who participate in a voter registration at their school and serve as a poll worker during the general election.**
Learn more about elections in Pennsylvania at vote.pa.gov.
Voting System Security
Cybersecurity
Physical Security
Chain of Custody
Post-election Auditing
Reconciliation
2% Statistical Sample
Risk Limiting Audits
Voting System Security

- April 2018: the department directed all counties to select new voting systems with voter-verifiable paper records by Dec. 31, 2019.
- June 2018: the department issues new voting system security standards.
- June 2020: Every county uses a voting system with voter-verifiable paper records for the Presidential Primary.
Every new voting system in Pennsylvania meets federal security standards and the state’s own additional security standards:

- Enhanced software security standards
- Access control
- Data encryption
- Network security (closed network only)
- Audit logging
- Physical security
- Penetration testing
Voting System Security

- Counties begin ballot preparation 10 weeks prior to every primary, 12 weeks prior to every November election, and 7 weeks prior to every special election.
- Counties conduct pre-election Logic and Accuracy testing (L & A testing) prior to every primary and election.
- Counties conduct testing again after each primary and election to ensure that voting system accuracy has not been impaired intentionally or inadvertently.
- Counties conduct post-election ballot auditing to confirm that election outcomes are correct.
Voting System Security

- Physical security is critical to overall security.
- Effective cybersecurity assumes good physical security.
- Statutory and administrative physical security protocols:
  - Facility security
  - Chain of Custody
  - Access controls
  - Locks and tamper-evident seals
Chain of Custody and Ballot Safeguards

- Voting system components are locked and stored in a secure facility between elections.
- Components of voting systems may only be connected to one another on an isolated, single-purpose network.
- The precinct components of the voting system, including ballot boxes, are locked and sealed after testing.
- Voting system keys are delivered to the Judge of Elections.
- Precinct election officials are responsible for verifying that the precinct components of the voting system are in working order and haven’t been tampered with.
- Voting system custodians and deputy custodians are charged with maintaining and documenting the voting system chain of custody throughout pre-election testing, Election Day and post-election activities.
Precinct results are signed by all members of the local board of elections.

The judge of elections is charged with returning to the county board of elections the signed precinct results and all other reports required by statute.

The minority inspector of elections maintains a copy of the precinct results and other reports returned to the county.

The county board of elections reconciles the countywide results with precinct results during the official canvass of votes.

Absentee and mail-in ballots returned to the county board of elections are secured until Election Day.
Chain of Custody and Ballot Safeguards

• When you apply for an absentee or mail-in ballot, you must supply proof of identification:
  • Current and valid Pennsylvania driver's license/PennDOT photo ID card
  • If you don't have a driver’s license or PennDOT ID card, the last 4 digits of your Social Security number on your absentee or mail-in ballot form.
  • If you don’t have a PennDOT ID or the last 4 of SSN, you can provide a photocopy of one of the following IDs with your absentee or mail-in ballot application. The photocopy must show name, a photo, and an expiration date that is current:
    o U.S. Passport
    o U.S. Military ID (active duty and retired military ID may designate an expiration date that is indefinite). Military dependents' ID must contain a current expiration date.
    o Employee photo identification issued by Federal, Pennsylvania, Pennsylvania county, or Pennsylvania municipal government.
    o Photo identification issued by an accredited Pennsylvania public or private institution of higher learning.
    o Photo identification issued by a Pennsylvania care facility, including long-term care facilities, assisted living residences and personal care homes.
The pre-canvasing and canvassing of absentee and mail-in ballots is conducted transparently:

• The county board of elections provides a list of the names of the voters whose absentee or mail-in ballots are to be pre-canvased.

• One authorized representative for each candidate and one authorized representative for each political party must be permitted to remain in the room where the pre-canvas meeting occurs.

• Persons observing, attending or participating in the pre-canvas meeting MAY NOT disclose the result of any portion of the pre-canvas prior to the close of polls on Election Day.
Post-election Auditing

Pennsylvania counties currently conduct two types of post-election analyses:

1. a statistical sample required by the Election Code
2. a statewide risk-limiting audit (RLA) which will be implemented in every county by the November 2022 election.
Every county board of elections is required to conduct a statistical sample of a random sample of at least 2% of the ballots cast or 2,000 ballots, whichever number is fewer.

Since 2019, the department also piloted risk-limiting audits (RLA) at the county level and across the Commonwealth for the purpose of testing models and best practices for enhanced post-election audits.
RLAs examine a random sample of paper ballots, comparing the votes on paper to the totals reported by the vote-counting machines to ensure that the winner actually won.

RLAs can confirm that voting systems tabulated the paper ballots accurately enough that a full hand count would produce the same election outcome.
Post-election Auditing

- Counties create “ballot manifests”
- Ballot manifests are spreadsheets identifying the organization of and numbers of ballots cast in each county. All ballot types are included.
- The counties upload their manifests to the audit software, and then a random seed number is generated.
- Using the randomly-selected seed #, the audit software selects the list of ballots or ballot batches to be retrieved by each county.
- Counties retrieve the ballots, count the votes cast for the contest being audited and upload the results of that count.
- The results are tallied and analyzed to determine if any errors occurred that could change the outcome of the contest.
Learn more about elections in Pennsylvania at vote.pa.gov.