Protecting Virginia’s Elections: Ongoing Cybersecurity Efforts

Edgardo Cortés
Commissioner of Elections
Virginia Quick Facts

- 133 local jurisdictions
- 5,488,964 total voters as of 6/1/17
  - 5,210,943 Active
  - 278,021 Inactive
- 68,233 UOCAVA voters
- 2,435 precincts
Virginia Election Structure

- Commissioner of Elections – chief state election official
- Department of Elections – 42 full time staff
- State Board of Elections – 3 member policy board
- 133 local general registrars/directors of election
- 133 local electoral boards – 3 members each
2016 Emergency & Contingency Planning

- Attorney General’s Office
- Democratic Party of Virginia
- Department of Emergency Management
- Department of Mines, Minerals and Energy
- Department of Transportation
- Federal Bureau of Investigation
- Office of the Secretary of Administration
- Office of Public Safety and Homeland Security
- Republican Party of Virginia
- U.S. Department of Homeland Security

- Virginia Association of Chiefs of Police
- Virginia Capitol Police
- Virginia Electoral Board Association
- Virginia Information Technologies Agency
- Virginia National Guard
- Virginia Sheriffs’ Association
- Virginia State Police & Fusion Center
- Virginia State Police Association
- Voter Registrar’s Association of Virginia
Security Efforts Overview

• The Department follows all appropriate guidelines and state requirements for maintaining system security and has invested heavily in improving the security and functionality of VERIS (statewide registration system) since 2014

• Over 200 bug fixes and modifications made to system during that time
Assisting local election officials

- Enhancing security protocols for statewide voter registration system
- Mandating cyber security awareness training for local election officials
- Updating certification processes to account for new threat assessments
Primary vulnerabilities

- Unfortunately, the biggest security risks for state election systems are local election offices and vendor systems.
- State must allow access to sensitive systems but technical capability and security practices are outside control of the state.
Primary vulnerabilities cont.

- Local governments (and even state governments) likely are not equipped to repel concerted attacks from nation-state actors
- Local resources and expertise vary greatly
Primary vulnerabilities cont.

- Voting experience and security of election infrastructure becoming drastically different based upon economic circumstances of local governments
- Aging voting systems is an example of this growing problem
DRE vs Optical Scan 2016
Primary in-precinct voting technology

Legend
Voting System Type
- Direct Recording Electronic (DRE)
- Hybrid of a DRE and an Optical Scan System
- Optical/Digital Scan
Communicating election security to voters

• Communicating election security efforts to voters is a delicate balance
  – Teaching local officials to share only high level info and not specific details
  – Providing information to local officials regarding state efforts in easily digestible and shareable form
Assistance

• Proper funding
  – Need for more HAVA money
  – Potential for DHS grant funding for election infrastructure security?
  – State and local funding options
    • Long term solutions needed
What can state legislators do?

- Engage in dialogue
- Ensure legal authority exists for state election office to enlist assistance from and share information with any other necessary state agency
What can state legislators do?

• Provide adequate funding to maintain existing systems securely and adjust to changing environment
• Stop focusing on internet voting
• Audits
What can state legislators do?

• Think ahead when writing statutory changes
  – Don’t limit ability to adjust to changes by specifying “name brands” or providing excessive technical specs in statute
Questions?

Edgardo Cortés

edgardo.cortes@elections.virginia.gov

elections.virginia.gov