Election Security 201: Election Technology

Elections Security: States Teaming Up
Jackson, MS - November 29-30, 2018
Aging Voting Technology
Aging Voting Technology & Security

• Election officials must find ways to extend the life of voting systems while holding these systems to the highest standards possible.

• Election administrators with limited funds need to build preventative measures that can withstand and recover from attacks.

• Ultimately, however, funding sources must be found for procuring new election technology.
Original HAVA Funding

- Most of the updated equipment purchased with HAVA grants are now reaching 10, or in some cases, 14+ years of age.
- As of September 30, 2017, states reported that less than 9 percent of funds and accrued interest remain unspent. ($50 million??)
Nebraska: Original concept = State will pay cost of equipment.

• Price of corn dropped so.... No money.
• Alternatives now are leasing or cost sharing. (Counties cannot afford it themselves......)

- Late 2017 RFP process decided on 1 statewide “preferred” vendor. (Buy-in from Clerks that any State funding available would only go to counties selecting “preferred” vendor & purchases could wait until end of 2020.)
- Initial purchase cost and 10 yr maintenance agreement = $13 million.
- After intense negotiation, legislature granted a one-time appropriation of $4.5 million for initial purchase and $500 K per year for maintenance.
- Fund distribution formula based on # of registered voters & 2016 turnout.
- 2 counties (1 large, 1 small) chose to forego State funding and use different vendor....
Election Tech Procurement & Funding: State Perspective

**Delaware:** OLD Danaher (1995). Unified system State funded. Full face ballot requirement!
- Cost = Approx. $13 million.

**Rhode Island:** 2 new systems in 2016. Community-based Task Force (2 TF types: Community/voter based & LEO/ Govt. based)
- 1 year process & a pilot project to implement e-pollbooks & new voting machines with BOD printers!
**Maryland:** Centralized system. Cost split between State/counties based on population.

- Required paper based system.
- Accessibility Review required before purchase!
- Ultimately decided on $28 million lease. (Options!!)
Voting Systems

Voting Systems are Part of the Larger *Election System*

- Consider the following systems:
  - Candidate filing/qualifying systems
  - Voter registration
  - Voting systems
  - Election night reporting
What is a Voting System?

**Total combination of equipment and components used for:**

- Ballot Definition
- Vote Cast & Capture
- Vote Tabulation
- Reporting & Displaying Results
- Maintain and Produce Audit Trail Information
Precinct Count Scanner
Central Count Scanner
Direct Recording Electronic (DRE)
Ballot Marking Device (BMD)
Hybrids
Assistive Technologies
Federal Requirements for Election Technology and Certification

EAC Voluntary Voting System Guidelines

• VVSG 1.0 adopted in 2005
  • Expires on July 5, 2017
• VVSG 1.1 adopted in 2016
  • Required starting 18 months later (July 6, 2017)
• VVSG 2.0
  • VVSG Principles and Guidelines approved by TGDC & Boards in 2018. Next step = Federal Register/Public Comment
  • Commission vote & adoption in 2019 (assuming a quorum...)
Federal Requirements for Election Technology and Certification

VVSG 1.0 & 1.1 Scope and Structure:

- 2 Volumes
- 300 + pages
- 1,400 + separate testable requirements
- EAC Commissioner vote required to change even a single requirement.
- Structure not conducive to an “evergreen” standards document.
Federal Requirements for Election Technology and Certification

VVSG 2.0 Scope and Structure:

VVSG 2.0

- 15 Principles
- 53 Guidelines

5 pages!

VVSG 2.0 Requirement & Test Assertions Document

Requirements

Test Assertions
Principles, Guidelines, Requirements - *Example:*

Principle 5

EQUIVALENT AND CONSISTENT VOTER ACCESS

- All voters can access and use the voting system regardless of their abilities, without discrimination.

Guideline 5.1

- 5.1 – Voters have a consistent experience throughout the voting process in all modes of voting.
Federal Requirements for Election Technology and Certification

Principles, Guidelines, Requirements - Example:

Requirements for 5.1

5.1-A – Interaction modes
All interaction modes including audio, tactile, enhanced visual, and non-manual must have the same capabilities as the visual interaction mode including ballot activation, voting, verification and casting.

5.1-B – Languages
The voting system must be capable of displaying, printing or storing the ballot, contest choices, review screens, vote verification records, and voting instructions in all languages the manufacturer declared the system supports in both text and audio.

Discussion
• If a manufacturer claims that a given system is capable of supporting Spanish and Chinese, then it will be tested in these languages.
• This requirement covers both visual and audio formats.
• Both written and unwritten languages are within the scope of this requirement.
New 2018 HAVA Funding

$380,000,000 in Consolidated Appropriation Act, 2018

✓ Congressional Bill Signed by President Trump - March 22, 2018
✓ Titled: ELECTION REFORM PROGRAM
✓ Under HAVA SECTION 101
✓ Funds must be expended by March 22, 2023
State-by-State Breakdown

2018 HAVA Funds

Amounts

- $600K - $3.0 million
- $3.1 - $5.1 million
- $5.2 - $7.8 million
- $7.9 - $34.6 million

Map showing the distribution of funds across states.
How are 2018 HAVA Funds being Used?

HOW STATES PLAN TO USE 2018 HAVA FUNDS

Cybersecurity: 36.3% ($134,542,480)
Voting Equipment: 27.8% ($103,366,294)
Reserve: 14.6% ($54,301,840)
Voter Registration: 13.7% ($52,499,594)
Election Audits: 5.6% ($20,573,476)
Communication: 2% ($7,332,722)
## State-by-State Breakdown

### How States Plan to Use 2018 HAVA Funds

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<thead>
<tr>
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Questions?

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