



★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS

Virginia Department of Elections

Presentation to Senate Finance Committee

Edgardo Cortés, Commissioner

May 21, 2015



Voting Equipment Issues

- Widely reported issues in November 2014 general election
 - In Virginia Beach, Congressman Rigell and many other voters reported having a different selection appear after making their choice
 - In Richmond, Governor McAuliffe experienced difficulty selecting his choice in the Senate race
 - Other voter complaints and calls from registrars reported an assortment of voting equipment issues around the Commonwealth
- No existing requirement for localities or vendors to report equipment issues to Department of Elections (ELECT)
- Governor McAuliffe called for an investigation into voting machine issues after the election



Post-Election Review of Issues

- Commissioner Cortés requested authorization from the State Board of Elections (SBE) to conduct the first comprehensive review of voting equipment
- SBE unanimously approved request on November 24, 2014
- ELECT contracted Pro V&V, Inc., a federally certified voting system test laboratory, to assist in conducting review
- ELECT consulted with other states and U.S. Election Assistance Commission's Testing and Certification Program staff



Post Election Review of Issues

- ELECT conducted statewide survey
 - 57 localities reported some type of equipment issue in November election
- Based on voluntary reports and interviews with ELECT staff, the auditor conducted 14 desk audits and three site visits
- Eugene Burton, ELECT's Voting Technology Coordinator, accompanied Pro V&V Laboratory Director, Jack Cobb, on each site visit



Virginia Beach and AccuVote TSX

- Equipment is at the end of life and needs to be replaced
- The glue won't hold
 - “A coating material used around the outside edge of the touch screen may slowly degrade another coating material that holds the two touch panel surfaces together”
- “The training of the personnel, the processes used, and facilities employed by Virginia Beach City in conducting of elections were all found to be in line with the industry best practices.”
- Virginia Beach will use new equipment in June primary



Henrico & Spotsylvania Counties and WinVote

- Henrico voting equipment on lockdown after special election and could not be examined
- Office procedures and training reviewed
- “The training of the personnel, and the processes employed by Henrico County in conducting of elections were all found to be in line with the industry best practices.”



Henrico & Spotsylvania Counties and WinVote

- Spotsylvania had a precinct that experienced voting machines crashing and becoming inoperative
- Local technicians believed there might be an issue with interference from cell phones
- Auditor able to view and connect to wireless network
- Auditor immediately referred security concerns to ELECT



WinVote Review

- ELECT security protocols:
 - referral to Virginia State Police (VSP) of any potential violations of election law for investigation
 - notification to Virginia Information Technologies Agency's (VITA) Commonwealth Security and Risk Management concerning a potential breach of a Commonwealth IT system
- Pro V&V concerns resulted in immediate notification and referral to VITA and VSP



Virginia State Police Inquiry

- VSP opened official inquiry into Spotsylvania Precinct 302
- Spotsylvania County registrar and electoral board were very cooperative with ELECT and VSP
- Equipment voluntarily provided to VSP High Technology Crimes Division for forensics review
- No evidence of criminal activity was found and VSP concluded inquiry on April 24, 2015



Additional WinVote Testing

- Based on Pro V&V's recommendation, ELECT pursued vulnerability and penetration testing of the WinVote system
- Coordinated with VITA to conduct the additional testing using existing state resources and trained personnel
- Penetration testing on voting equipment is not routinely conducted



VITA's Recommendation

“As a result of the findings included in this report, VITA recommends discontinuing use of the Advanced Voting System WINVote devices. The security review determined that the combination of weak security controls used by the devices would not be able to prevent a malicious third party from modifying the votes recorded by the WINVote devices. The primary contributor to these findings is a combination of weak security controls used by the devices: namely, the use of encryption protocols that are not secure, weak passwords, and insufficient system hardening.”



WinVote Decertification Process

- Issued Interim Report on Voting Equipment Performance, Usage and Certification on April 1, 2015
- ELECT briefed the SBE in closed session on April 1, 2015
- Requested SBE meet to consider decertification
- SBE voted to post ELECT and Pro V&V reports online to allow for transparent process
- Online public comment forum set up in Virginia Town Hall



SBE WinVote Decertification Meeting

- SBE met April 14, 2015 to discuss WinVote issue
 - Held closed session with WinVote localities to discuss actual VITA findings the outlined ability to wirelessly alter vote tallies on WinVotes, even with wireless capability “disabled” on device
 - Held open public comment session
- SBE voted to immediately decertify WinVote system in Virginia
- SBE voted to release VITA’s full report on ELECT website
- All related materials are available online:
<http://elections.virginia.gov/webdocs/VotingEquipReport/>



Assistance with Transition

- ELECT contracted former registrar with experience transitioning to new voting systems to provide one-on-one assistance to localities
 - Assisting with all aspects of transition including election officer training, voter education, and rewriting policies and procedures
- ELECT requested info from all certified vendors regarding transition
 - All vendors offered different financing options to WinVote localities
 - All vendors guaranteed ability to transition localities for next election



Status of WinVote Localities with June Primaries

Locality	Action Plan
Arlington	Purchasing Unisyn
Botetourt	Hand counted paper ballots with Unisyn ADA equipment
Dinwiddie	Purchasing Unisyn
Henrico	Purchasing ES&S
Powhatan	Purchasing Unisyn
Richmond	Purchasing ES&S
Roanoke	Hand counted paper ballots with Unisyn ADA equipment
Southampton	Hand counted paper ballots with borrowed DRE's for ADA compliance
Warren	Lease to purchase Unisyn
York	Optical scan with borrowed DRE's for ADA compliance



New Voting Equipment

- 4 vendors currently have next-generation digital scanning equipment certified for use in Virginia
 - Paper trail + digital records
 - Meet ADA requirements
- ELECT statewide contracts available for locality use with all 4 vendors
 - Contracts contain low price guarantee – selling below state contract price obligates vendor to the lower price for future sales
 - Facilitate local procurement
- No state or federal funds available for transition to new equipment



Lessons Learned

- Importance of leveraging VITA expertise
- Reporting of certain information by localities should be required to assist SBE and ELECT in assessing voting equipment
- SBE should consider changes to the current certification program
 - provide for periodic review of certified voting systems to ensure compliance with current law and administrative requirements
- While resource intensive, post-election reviews provide valuable information for improving the process and should be continued and included in future budgets



Additional Issues – Results Reporting

- General Assembly provided additional funding in FY15 and 16 to assist ELECT in resolving long-term election night reporting problems
- ELECT results reporting website experienced substantial failures in last 4 general elections
- ELECT has utilized additional funding provided this fiscal year to overhaul how results are deployed online
 - Contracted with content delivery company to deploy election results to local ISP servers to reduce or eliminate downtime
- ELECT continues to explore public-private partnership with Google and other technology companies for permanent solution



Additional Issues – HAVA Funds

- Approximately 60% of annual agency spending is federal funds provided under the Help America Vote Act
- Based on current projections, federal funds will be exhausted before the end of FY18
- ELECT will need a substantial increase in general funds to maintain baseline operations and support for elections in the Commonwealth
- While federal funds will be exhausted, ELECT must continue to comply with all federal mandates



Projected use of remaining HAVA Funds

- FY14 \$ 3,802,500
- FY15 \$ 5,313,313
- FY16 \$ 7,310,020
- FY17 \$ 4,789,752
- FY18 \$ 3,426,380
- FY19 \$ 0