

# Defending Our Democracy

Cybersecurity, Elections & the Vermont Secretary of State's Office



Secretary of State Jim Condos

## Defending Our Democracy

### Cybersecurity is like a race without a finish line!

- We started focusing on cybersecurity in 2013
  - Not just for elections – across all of our IT solutions
  - Both Physical and Cyber
- 2016 - DHS notified Secretaries that 21 states had been attacked
  - 1 state breached – 20 defended
- Vermont was ahead of the game
- 2018 – Congress provided \$3 million to VT for election improvements
  - Need for on-going sustainable funding



## Defending Our Democracy

### A Robust Suite of Defenses\*

- [REDACTED]
- [REDACTED]
- [REDACTED]

\* If we were to tell you everything, we might as well email this presentation to the Kremlin!



# Defending Our Democracy

## A Robust Suite of Defenses

- New election management systems (VEMS) in 2015
- New systems come with added security, and we built cybersecurity requirements directly into our RFP
- We monitor these systems daily



# Defending Our Democracy

## A Robust Suite of Defenses

- How we keep the bad actors out of our system:
  - Web application firewalls (WAFs) in front of all 'doors'
  - Weekly DHS cyber hygiene scans
  - Albert Monitor
  - Annual penetration testing / security assessments
  - Two-factor authentication for every individual with VEMS access
  - Town Clerk WebX Cyber Training



# Defending Our Democracy

## A Robust Suite of Defenses

- How we've built in resiliency:
  - Automatic Voter Registration – more accurate, better efficiency
  - Daily backup of our voter registration database
  - Same day voter registration – no voter turned away!
  - Internal threat mitigation measures in place, to limit the amount of damage a bad actor can do in a worst case scenario



# Defending Our Democracy

## Protecting the Integrity of Every Vote Cast

- VT uses optical scanners that read a voter marked paper ballot
  - 54% of towns use vote tabulators, representing approx. 80% of vote
- Tabulators are not connected to the internet or to each other by either wi-fi, hardwire or remote access
- Strict chain of custody for tabulator memory cards and equipment
- Routine testing and clearing before use
- Annual maintenance of vote tabulators



# Defending Our Democracy

## The Best Solution is the Simplest

- A voter marked paper ballot is used for every vote cast:
  - Paper ballots are sealed and stored securely for 22 months.
- Randomized post-election audit after every General Election since 2006
  - Approximately 5% of Vote Tabulator Towns
    - 100% of Ballots Cast
    - 100% of Races on Ballot

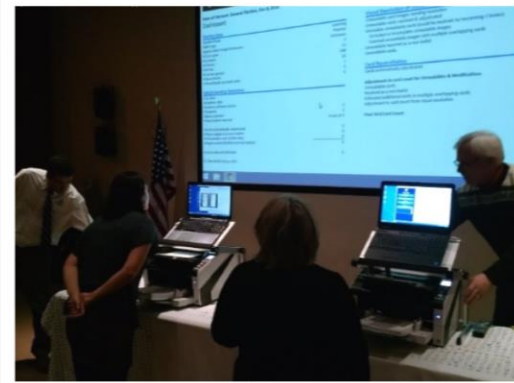
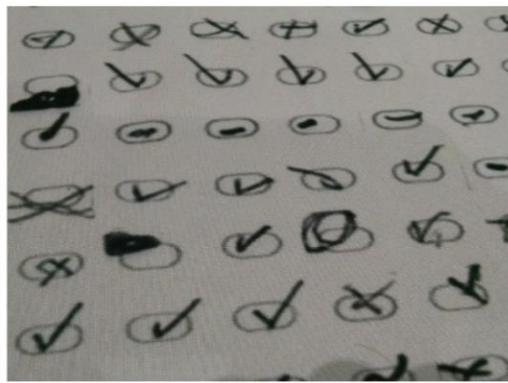
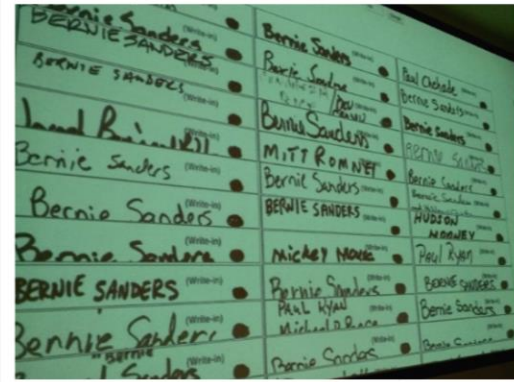
**No major discrepancy has ever been found between audit results and official results**





# Vermont Secretary of State's Office

## 2016 Post-Election Audit



Secretary of State Jim Condos

# Defending Our Democracy

## Fighting Disinformation Campaigns & Misinformation

- Working constantly to educate voters to look to trusted sources (us)
- Improving relationships with social media companies like Facebook and Twitter through NASS
- Portals to report social media dis/misinformation for quick action
- If you see something, say something!



# Defending Our Democracy

## Working With Our State and Federal Partners

- VT SoS IT Director collaborates regularly with:
  - Nick Andersen (VT CISO)
  - Ted Gangsei (DHS VT Intelligence Officer)
- Member of EI-ISAC and MS-ISAC
  - Member of the EI-ISAC Governing Coordinating Council
- Notifies EI-ISAC & DHS CISA of any malicious attacks against elections
- Strong collaboration with DHS CISA Director (DC), CISA Senior Advisor, CISA Region 1 (Boston) Director, VT State Police Homeland Security Advisor
- Election day threat dashboard



**THANK YOU!**

**Please call or visit our office with any questions!**

**James C. Condos  
Vermont Secretary of State  
128 State Street  
Montpelier, VT 05633-1101**

**[www.sec.state.vt.us](http://www.sec.state.vt.us)**

**[www.facebook.com/SecretaryOfStateJimCondos](https://www.facebook.com/SecretaryOfStateJimCondos)**

**[www.twitter.com/VermontSOS](https://www.twitter.com/VermontSOS)**

**802-828-2363**



Secretary of State Jim Condos