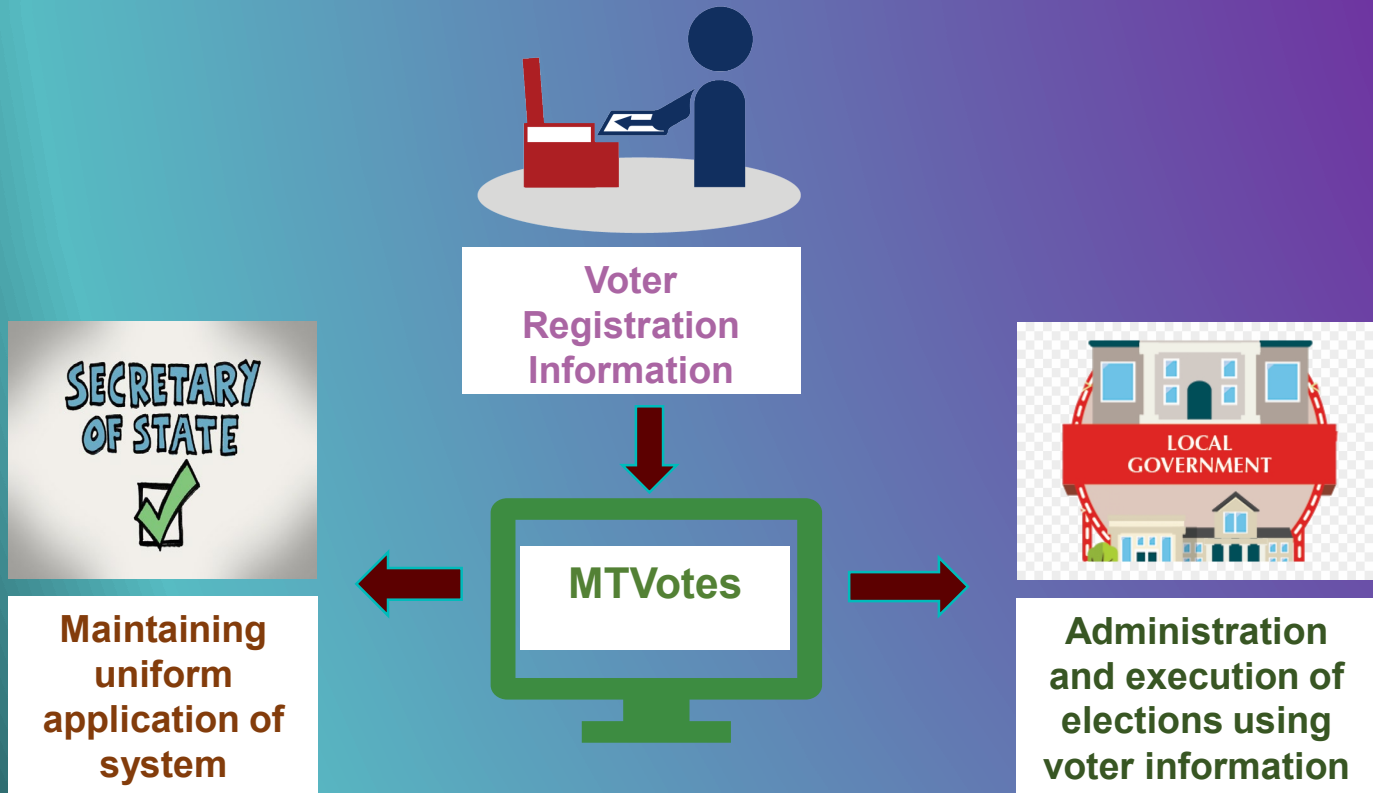# Security and Maintenance of Montana Election Systems

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Secure and Accurate Elections are Key to Democracy

Montana Elections are Decentralized

Voter Registration Information

SECRETARY OF STATE ✓

Maintaining uniform application of system

MTVotes

LOCAL GOVERNMENT

Administration and execution of elections using voter information

$6.1 million expended using federal grant money

Election Services Division budget $1.1 million

Election Day Process

Voter Registration
- Online Web Portal for Registration
- MTVotes system contains voter registration information

Submitting a Ballot
- Printers that create certified ballots
- Registered voters who are overseas submit online ballots through a secured process
- Disabled voters user special machines to vote and print their ballots at polling places

Tabulating Votes
- Tabulators that read ballots, count votes, and print audit trails
- Vendor supplied USB flash drives gather results from tabulators
- Air Gap (computer disconnected from the internet) to aggregate USB flash drive results from multiple tabulators

Reporting Results
- USB flash drive to pull results from unconnected computer and move them to internet-connected computer
- Internet-connected computer that staff use to access eSERS and upload results from a tabulator or aggregate computer

Multiple Risks Exist in Elections

Election Security

- Evaluating Physical Security
- Managing Election Security Risks and Resources

Election Integrity

- Data Accuracy
- Timely Updates

Reviewed...

Security assessments and election security posture at the counties and responsibilities managing election security

2018-2020 HAVA funding and expenditures and the use of resources

Maintenance and integrity over voter registration information

Summary

Define Security

- Evolution of IT and threats require continuous improvements to election security and accuracy. Proactive steps such as defining election security and responsibility will ensure that elections adapt and evolve as threats do.

Improve Resource Management

- SOS can also make improvements to grant management practices to ensure that resources are addressing high security risks at the state and local levels.

State-Level Maintenance

- Finally, as SOS implements a new voter registration system, implementing state-level maintenance procedures will ensure voter registration reliability and integrity.

Election Security Definitions

National and Federal Industry Best Practices

Election Assistant Commission

Department of Homeland Security

Department of Defense

Election Security Best Practices and Guidance

Election Vendor Guidance

Center for Internet Security

National Institute of Standards and Technology (NIST) is most referenced security framework

Election Physical Security

❖ Tabulators
❖ Printers
❖ Ballots
❖ USB Drives
❖ Computers

Establish Election Security Definition and Oversight

Current Montana Law Needs Scope of Election Security Definitions

- Election Security Undefined

County Risk Assessments Inconsistent

- Counties **Did Not** Consistently **Meet Standards** and **Best Practices**

Election Security Recommendation #1

§ 13-1-202
"...evaluate the security, accuracy, and accessibility of elections..."

§ 13-17-211
"...secure voting systems before, during, and after an election."

§13-17-103
"A voting system...is protected from tampering for fraudulent purpose...device meets electronic security standards..."

We recommend the Montana Legislature:

A. Clearly define the scope of election security using federal election security best practices and NIST security controls to ensure all aspects of elections are secure and;

B. Mandate the assessment of election security using defined security standards at the local and state level.

Establish Election Security Rule

SOS Rule does not Align with Statute, Best Practices, or Standards

- Current **Rule** is **Not Consistent** with **Statute**
- **Missing** Detailed **Information** and **Guidelines** based on <u>Election Security National Best Practices and Standards</u>

Election Security Recommendation #2

ARM 44.3.1713
"...must comply with <u>security measures</u> necessary to <u>secure the voting system before, during, and after an election..."</u>

ARM 44.3.1701
"...System...includes a self-contained mechanical voting machine or an electronic voting device and the individual components of each."
"...Voting machine means a mechanical apparatus on which to cast votes."

We <u>recommend</u> the <u>Secretary of State</u> <u>develop rules</u> that:
A. <u>Define voting system</u> consistent with statute.
B. Includes detailed <u>security measures</u> that align with statute, election best practices, NIST security controls, and federal recommendations.

Election Security Recommendation #4

SOS Needs Independent Security Oversight

- Oversight and coordination over all areas of security is shared between several SOS staff
- Missing single security management position

We recommend the Secretary of State <u>fill</u> the current <u>Information Security Manager Position</u>

HAVA Grant Objectives

Detailed Grant Management Program is Needed

Replacing Voter Equipment

Upgrading election computer systems

Facilitating Cybersecurity Training

Implementing Post-Election Audit

Implementing Cybersecurity Best Practices

Generally improving election security

The legislature could consider developing expectations for future spending and creating an oversight body to ensure the management and tracking of HAVA funding is meeting those expectations.

enting proper grant ... ance metrics and ... procedures ... SOS can ... sired outcomes and ... objectives

HAVA Grant Objectives

- 53 counties have not had security assessments completed
- 25 counties have not completed security awareness training

SOS applies to Election Commission Assistant for HAVA dollars

Counties apply to SOS for HAVA sub grants

SOS Needs to Implement Voter Maintenance Follow-up

Recommendation #5
- ❖ Regular Maintenance, Data Analysis, Communication, and Follow-up Schedule

Do Current Maintenance Procedures Work?

- ➢ SOS receives information and matches with voter information
- ➢ Counties review potential matches
  - *493 outstanding potential matches*

How long do updates take?

- ➢ Reviewed status changes since 2015
  - *Most changes within 30 days*
  - *14% were 90 days to 1 year*

Were ballots accepted from deceased voters?

- ➢ Matched 22,000 deceased people with voter information
- Reviewed ballots accepted since 2010
  - *2 individuals identified*
- Verified clerical and system errors and no invalid ballots where submitted

THANK YOU!

Montana Election Security and Maintenance

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