



CENTER FOR

**ELECTION INNOVATION**

**& RESEARCH**

# Election Cybersecurity, Voter Registration, and ERIC

David Becker

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# The Washington Post

*Democracy Dies in Darkness*

## PowerPost

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PowerPost • Analysis

The Cybersecurity 202: We surveyed 100 security experts. Almost all said state election systems were vulnerable.

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By [Derek Hawkins](#) May 21 at 8:16 AM [✉ Email the author](#)

**“State balloting systems are diverse and decentralized. They’re administered by some 3,000 counties, making it difficult for malicious actors to uniformly attack voting infrastructure on a vast scale,”** the expert said.

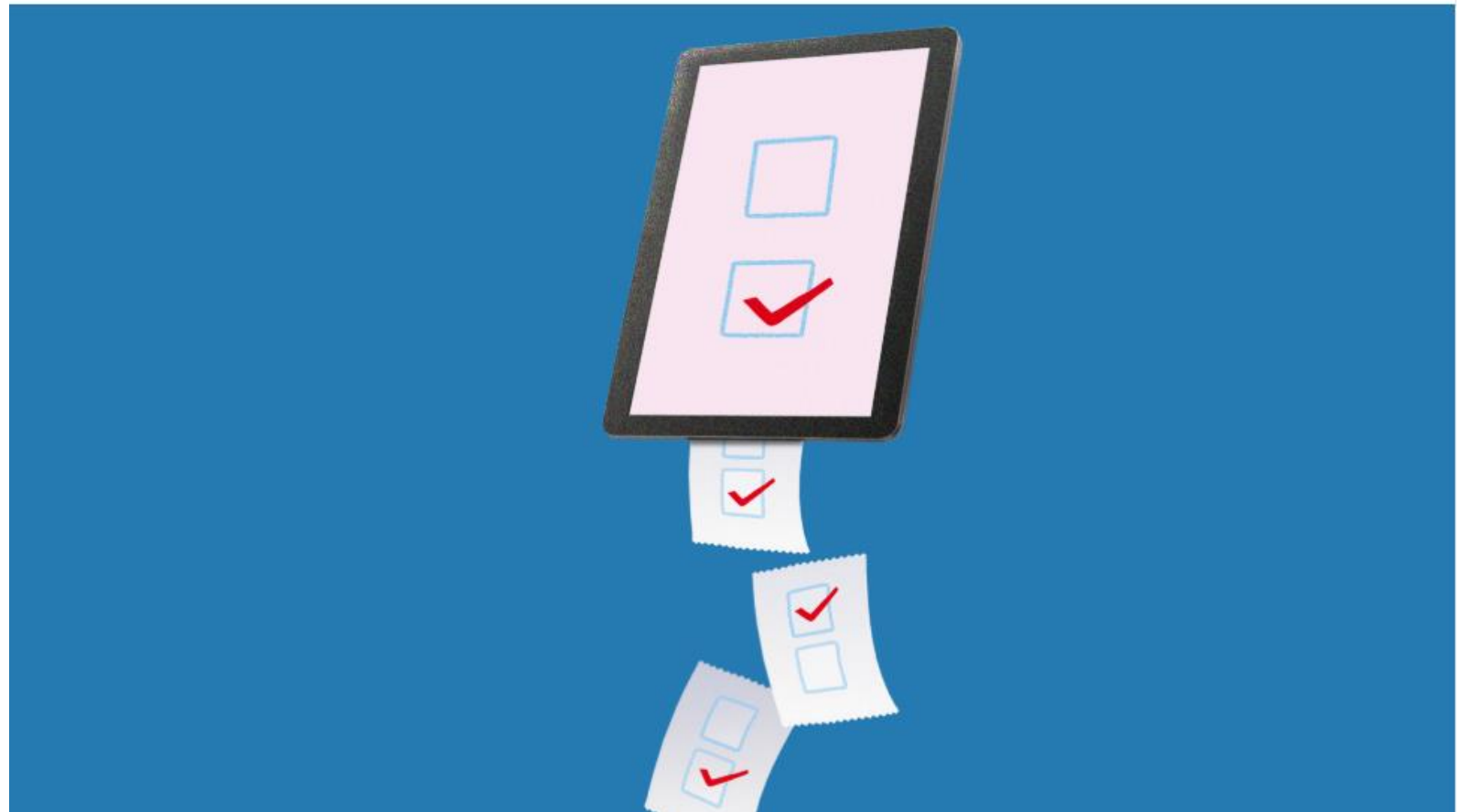
That expert was satisfied with the efforts by state and federal officials to secure the vote. “Public and private authorities are taking steps to defend against nation-state attacks. The recent omnibus spending bill provides monies to states for election security; threat data are being shared between states and federal agencies (albeit probably slowly and tentatively); and election officials are utilizing best practices, such as conducting post-election audits and not connecting voting machines to the Internet,” the expert said.



Shannon Vavra Apr 22

SAVE

## 14 states can't guarantee accurate election results



Multiple states lack the ability to guarantee the accuracy of election outcomes in the event of a suspected breach.

**The big picture:** Five states — Louisiana, Georgia, South Carolina, New Jersey and Delaware — have no paper trails of votes. The other nine are in better shape, but still do not have all their counties' machines spitting out a paper record.

**The backstory:** This is due to the direct recording electronic machines (DREs) these states use in some counties, which don't cough up a paper copy of cast ballots.

**Why it matters:** Russia is likely hacking again this year, according to intelligence directors. And a hacker who wanted to insert doubt in the outcome of an election would just have to target the counties and states that lack 100% verification capabilities.

**What the 9 states are doing:**

4. **In Florida,** Gov. Rick Scott's recommendations for the 2018-2019 budget includes about \$2.5 million to bolster cybersecurity at the Division of Elections as well as adding five cyber security roles to the team. Gov. Scott's proposal also recommends \$2 million from the Help America Vote Act (HAVA) in cyber security funds be granted to counties.

## The Moscow Midterms

How Russia could steal our next election.

By Clare Malone

Filed under Hacking

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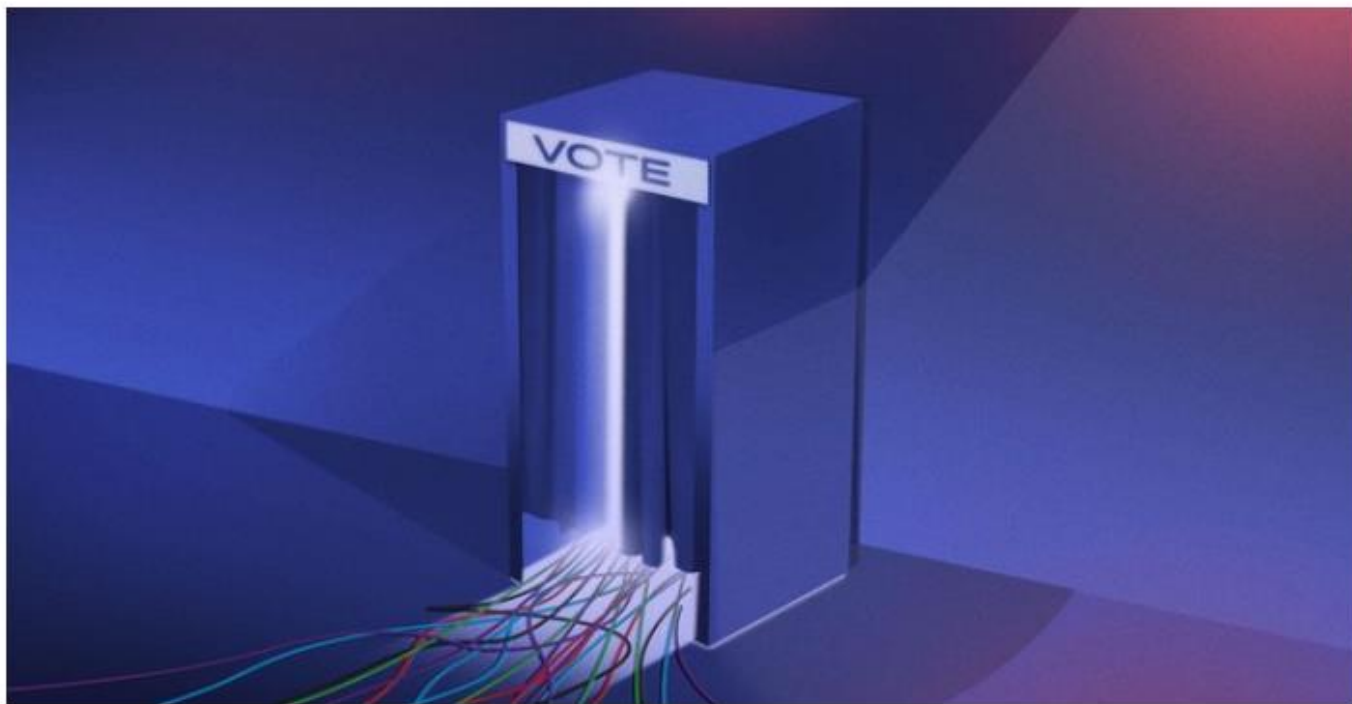
## What We Know And Don't Know About Election Hacking

Also, what we don't know we don't know.

NEWS DESK

## AMERICA CONTINUES TO IGNORE THE RISKS OF ELECTION HACKING

By Sue Halpern April 18, 2018



*Even without foreign interference, recent elections have been marred by problems that have prevented people from voting, caused long lines at polling places, and prompted some voters to give up and walk away.*

# The Washington Post

*Democracy Dies in Darkness*

Opinions · Opinion

## America is still unprepared for a Russian attack on our elections





# SECURING THE VOTER FILE

- Prevention

- Detection

- Mitigation

# Prevention

- White-listing IP addresses
- Limiting authorized users
- Two-factor authentication
- Penetration testing
- Appropriate requirements for individual voter identity authentication

# Detection

- Monitoring capacity variations
- Monitoring/limiting activity from specific IP addresses
  - Volume
  - Location
- Monitoring types of voter registration activity
  - Address changes
  - Cancellations
  - Changes to/from mail voting
  - Party changes

# Detection

- Monitoring/limiting address changes to a particular physical address
- Monitoring speed of transactions – automation
- Coordination/communication with other agencies
  - GCC
  - MS-ISAC, EI-ISAC
  - State agencies
  - National Guard
  - ALBERT
- Logging and state coordination of voter complaints
  - Early warning system

# Mitigation

- Regular backups
  - Daily, if possible
  - Stored securely, unconnected to internet
  - If information held only by locals, regular backups of that data too
  - Regular testing, to ensure rapid response
- Testing of E-pollbooks
- Availability of paper voter registers
- Provisional ballots
  - New calculations about how many are necessary

With proper Prevention, Detection, and Mitigation protocols, coordinated between the State and Counties, it's highly likely that any attempt to alter voter records would be detected, but worst case scenario, there could be delays/frustration/confusion for voters if large numbers of provisional ballots are required.

## Communications plan

- Explain delay and prepare voters for need to take more time
- Need for provisional ballots which will be counted
- Change expectations re: speed of election results

# The New York Times

U.S.

## *Culling Voter Rolls: Battling Over Who Even Gets to Go to the Polls*

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By MICHAEL WINES NOV. 25, 2017





# QUESTION PRESENTED

The question presented is: Does 52 U.S.C. § 20507 permit Ohio's list- maintenance process, which uses a registered voter's voter inactivity as a reason to send a confirmation notice to that voter under the NVRA and HAVA?

# CONTEXT

- NVRA written in 1993, when the only process available relied upon paper and postal mail.
- Almost impossible at that time to get reliable evidence on whether a voter had moved or died, because data was of low quality and it was very difficult to reliably match it
- Understandable why a state might adopt a process like this in 1994?

JUSTICE BREYER: What are -- what are they supposed to do? That is, every year a certain number of people die and every year a certain number move to California. All right. We don't want them on the voter roll. That used to be a big problem, voting dead people. Okay? What should the state do?

MR. SMITH: Well, the dead -- the dead people aren't a problem, Your Honor. There are authoritative lists at both states and the federal government level.

JUSTICE BREYER: They went and died in Hawaii, I don't know, they went and died in Alaska. They went and died in Tasmania. Is -- is Rhode Island supposed to look at the Tasmanian voting records or hospital records or what are -- what -- it's a serious question. I don't think there's no answer to it.

CHIEF JUSTICE ROBERTS: Well, what about people -- Justice Breyer's question also included people who moved. What about them?

MR. SMITH: People who move, there are a variety of ways that you -- you find them. If they move within the state, the first thing that happens is the Bureau of Motor Vehicles has a change-of-address process, and under the NVRA and under Ohio process, if you change your driver's license address, your -- your registration is automatically updated. You're registered. If you move from Cincinnati to Cleveland, you are fine.

MR. SMITH: Well, when people move to a different place in Ohio, they're required to do -- to notify them within 10 days. That's the law. Whether people do that, I don't know. But then you have the NCOA process. When people move to another county or state, the odds are they posted a forwarding address with the post office. That address then, on an annual basis, gets -- gets -- those addresses get compared to the -- the statewide database, and those people get taken care of long before the Supplemental Process.

JUSTICE KENNEDY: But are there -- are there statistics or -- is that just a commonsense argument, or are there statistics that show that?

MR. SMITH: Show what, Your Honor?

JUSTICE KENNEDY: That when you - that when you move, you always notify -- notify the post office?

MR. SMITH: No, Your Honor. It is just common experience.

JUSTICE BREYER: Look, the reason I'm asking these questions is because **I don't believe Congress would have passed a statute that would prevent a state from purging a voting roll of people who have died or have moved out of the state.** So I'm trying to reconcile the two. And, therefore, I ask you **what the state's supposed to do for that latter objective.**



**ERIC**



ERIC data as of 1/12/18

In-State Moves

**6,272,300**

ERIC data as of 1/12/18

Cross-State Moves

**1,826,974**

ERIC data as of 1/12/18

Total Deceased Voters Identified

206,373

Total % Successfully Removed

98%

ERIC data as of 9/29/17

Total Eligible but Unregistered Voters Contacted

~30 million

Total Active Voters Still on Rolls Today

Over 5 million

Total % Still Registered

~20%

ERIC data as of 9/29/17

Over 2 million new voters  
were registered in 2016 due  
at least in part to ERIC

# FAQs about ERIC

- Uploads of state data must occur every 60 days – voter files and DMV
- Contact with eligible but unregistered citizens
  - Once every two years, by 15 days before voter registration deadline before the next federal general election
  - Usually done by the state, to ensure standardization
- Contact with voters who moved, consistent with NVRA
  - Within 90 days of receiving information, to encourage a response
  - In-state movers can often just be automatically updated, with notice
  - Mailings consistent with NVRA
    - Old address, returnable mail
    - New address, forwardable mail
  - Some state-initiated, some delegate to counties, but standardization important



# FAQs about ERIC

- Data must be protected from public disclosure
  - Contains motor vehicles data, protected by federal DPPA
  - Data from voter files can be shared consistent with state law
  - Aggregate data can be shared
- Important to coordinate with state prior to first upload
  - Data compatibility issues
  - Need to filter out DMV records of those ineligible to vote
  - Best to exclude vehicle registration data, only include licensing data
  - Ensure common understanding of expectations
    - Dates of uploads/reports
    - Deadlines for outreach
    - Data reporting from counties to state



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