



CENTER FOR

ELECTION

INNOVATION

& RESEARCH

# Voter Registration Database Security

David Becker

Executive Director, CEIR



**Henry Winkler**  @hwinkler4real · Jun 5

My name was left off the polling registry today on Los Angeles



1.1K



3.2K

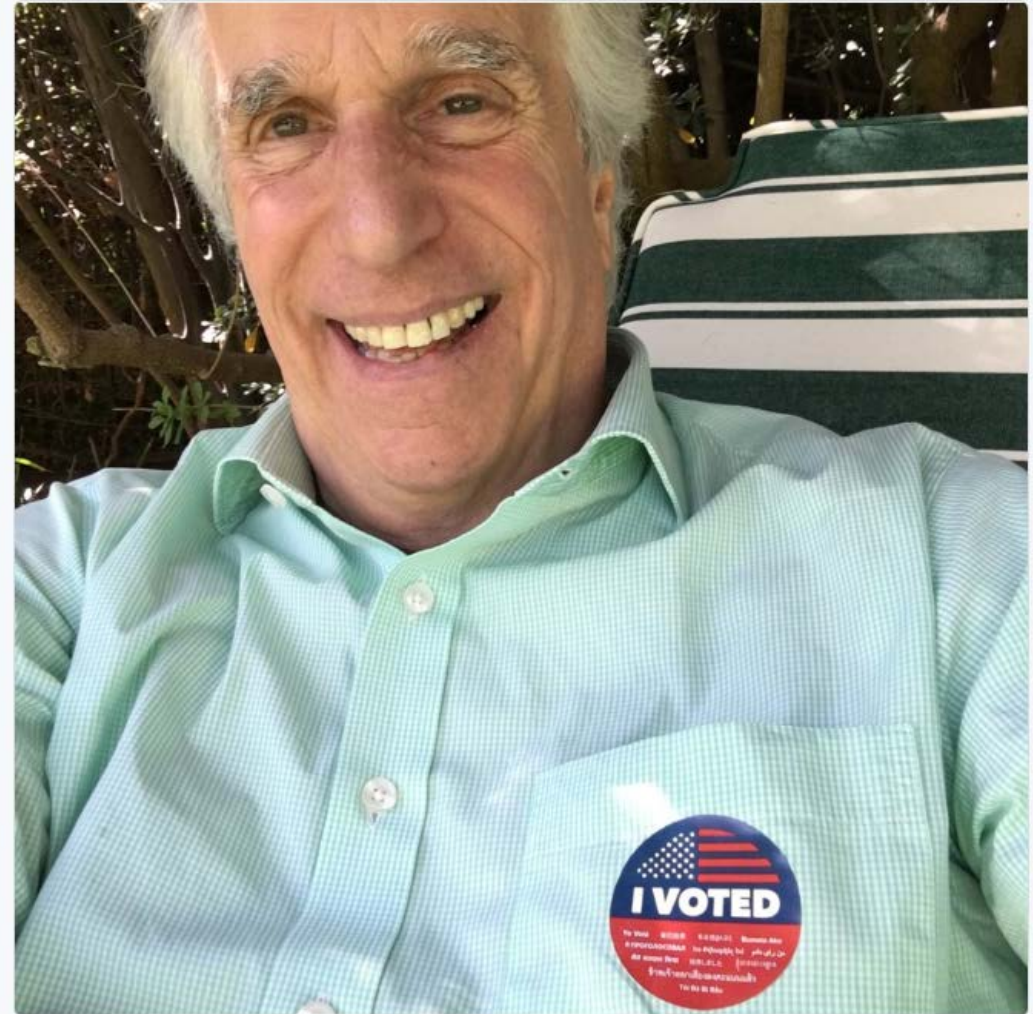


7.8K



**Henry Winkler**  @hwinkler4real · Jun 5

Your turn !!!



156



202



3.7K

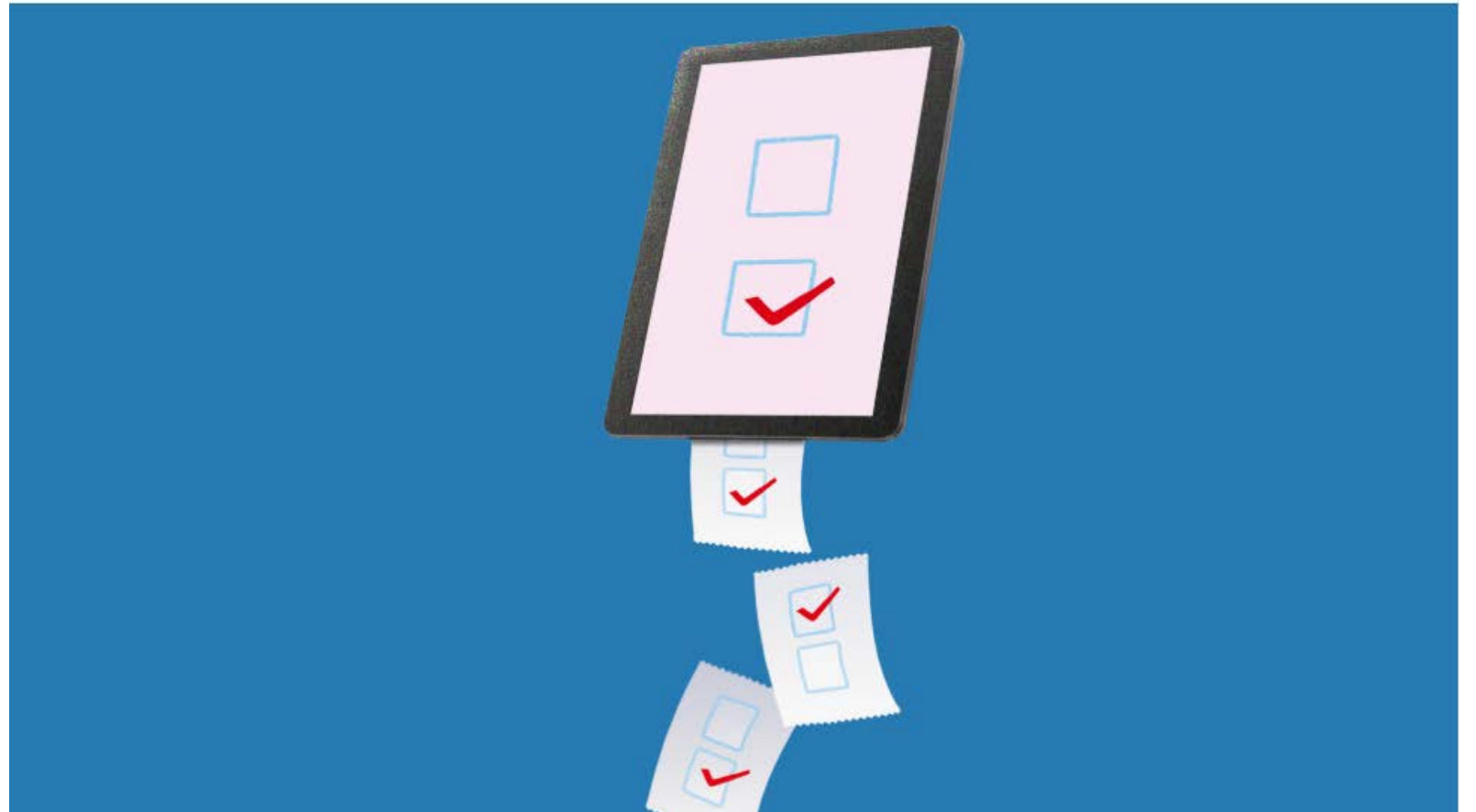




Shannon Vavra Apr 22

SAVE

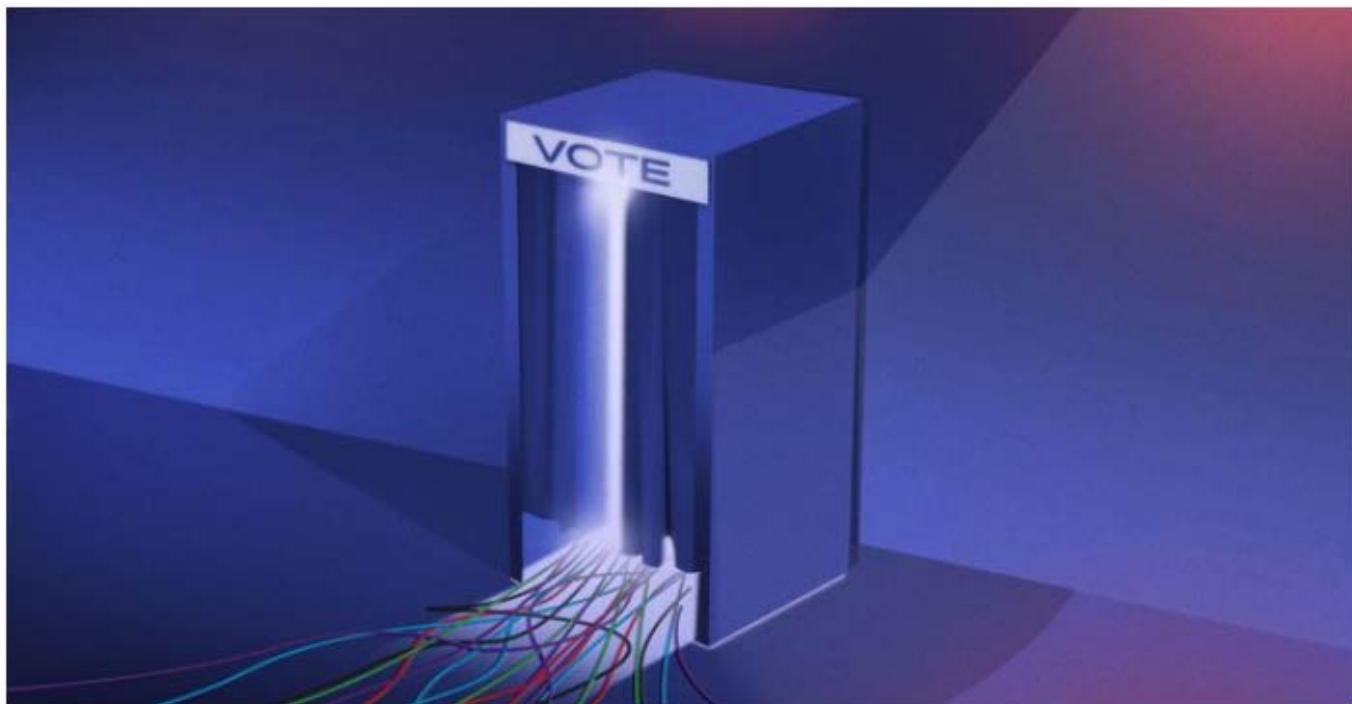
## 14 states can't guarantee accurate election results



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.*

APR. 10, 2018 AT 6:00 AM

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

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

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MAY 31, 2018, AT 10:56 AM

## State Websites Are Hackable — And That Could Compromise Election Security

By [Clare Malone](#)

## FiveThirtyEight

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## The Moscow Midterms

How Russia could steal our next election.

By [Clare Malone](#)

Filed under [Hacking](#)

Published Apr. 9, 2018

# 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 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

# Survey

- Authorized user access
- Two factor authentication
- Passwords
- Staffing
- Systems audits
- Training

# Survey

- Phishing/spear-phishing
- Tabletop exercises
- Audit/monitoring of voter registration activity
- Albert sensors
- Backups
- Paper or e-pollbooks and contingencies
- Planning re: provisional ballots

Good morning, states!

Following up from our voter registration database security meeting last February, which many of you participated in, please find [a link to a brief survey](#) on security protocols in place in each of your states:

<https://forms.office.com/Pages/ResponsePage.aspx?id=rX6FJGnQz02UhkIIPXde9gQFnpxHmGNHgignjhZwu7BUOVFVUTBLVVIUTTVDNVQ3WFkxMURaUVJaTi4u>

We've designed the survey to be brief, so we hope you each can find time to complete it in the next couple of weeks. It might be helpful to have a staff member with responsibility for the VRDB answer it. The results will be very helpful to demonstrate all the tremendous work the states have done to secure their systems, and help us in our efforts to educate the media and voters about those efforts. We plan on issuing a brief report on this later this summer.

Importantly, we will NOT release ANY state-specific information or responses, so please feel free to be candid. We will only talk about this information in the aggregate. If we want to highlight particularly good work in a state, to illustrate the efforts over the last two years, we will reach out to you for permission to discuss your state's information.

I should also note that we are indebted to Joe Hall, Maurice Turner, and other staff at the Center for Democracy and Technology, who assisted us with both the February meeting and this survey.

Thanks in advance for your responses, particularly during this busy time! Looking forward to seeing you all in Philadelphia next month!

Best,  
David



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