

April 23, 2018

Dear State Election Officer:

On March 23rd, Congress allocated \$380 million to states to upgrade election security. This is a positive development. In the age of unprecedented hacking risks, researchers have found that electronic voting infrastructure — including voting machines and registration databases — have [serious vulnerabilities](#). While there's no evidence that vote totals were hacked in 2016, there's strong evidence that hackers have been testing the waters.

While federal funding can help states address these issues, simply upgrading or replacing election infrastructure is not sufficient. It is essential that states work with the Department of Homeland Security or other trusted providers to scan their systems for cyber vulnerabilities, and follow best practices identified by computer scientists, national security leaders, and bipartisan experts in elections administration to mitigate hacking risks. On March 20, the Senate Select Committee on Intelligence released its long-awaited [recommendations](#) on election security and concluded that requiring paper ballots, banning wireless components and implementing statistically sound audits of election results are essential safeguards. Last year, a group of 100 leading computer scientists and other election administration experts voiced the same [conclusion](#). Through years of researching voting equipment security in real election administration environments, the National Institute of Standards and Technology (NIST) has come to similar conclusions about what it will take to defend elections.

As you begin to make use of the new federal funding, we strongly urge you to follow best practices identified by these and other leading experts for election security:

- (1) Replace paperless voting machines with systems that count a paper ballot — a physical record of the vote that is out of reach from cyberattacks.
- (2) Conduct robust post-election audits in federal elections. Congress explicitly requested that states “implement a post-election audit system that provides a high-level of confidence in the accuracy of the final vote tally” as part of its report language accompanying the Omnibus. Well-designed audits involve election officials checking only a small random sample of the voters’ choices on paper ballots so that they can quickly and affordably provide high assurance that the election outcome was accurate.
- (3) Upgrade systems to ensure that states’ election websites, statewide registration systems, and election night reporting systems are defended against threats of intrusion and manipulation.
- (4) Prohibit wireless connectivity in voting machines to limit vulnerabilities to hacking risks.
- (5) Train and educate election officials at all levels on how they need to incorporate security into their elections practices.

We, the undersigned, believe that these represent sensible and cost-effective solutions to the rising challenges of election security. We urge you to take steps to safeguard elections using these proven best practices.

Sincerely,

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