Election Reform in a High-Tech World — Safeguarding the Ballot

Everyone in a democracy understands the importance of handling ballots properly. Procedures for handling and securing paper ballots have been developed over centuries.

Electronic voting machines use high-tech "electronic ballots," which are nothing more than electrical charges inside a computer. There are no procedures for properly handling and securing electronic ballots. The use of electronic ballots has been compromising our elections with lost votes and unsolvable controversies and must be prohibited by federal law.

Because of the nature of computer data, electronic ballots can **never** be properly safeguarded like paper ballots can. The following table lists the safeguards in place for protecting votes on paper ballots and explains why each one is impossible to implement for electronic ballots.

Essential Safeguard	Why It Can't Be Adapted to Electronic Ballots
Every eligible voter receives the appropriate ballot.	Software controls the ballot choices presented to each voter. Software flaws can display one or more ballots incorrectly, so election directors cannot even ensure that every eligible voter receives the right ballot.
The voter can make the selections they want.	Many voters, especially the elderly and those without computer experience, are confused or intimidated by computer voting and are unable to even select their intended candidates on the screen. This problem extends to all voters on malfunctioning machines, such as those that flip votes on the screen or fail to display all the races.
The voter can review the ballot and correct errors.	Voters cannot review electronic ballots, because no one can read the internal data inside a computer. So, if a voter's ballot is incorrect in the internal data, the voter does not have a chance to correct it. Reviewing a screen representation or a paper printout does not suffice, since the voter cannot review the internal ballot that will be counted.
The ballot is protected from tampering.	Computer data is volatile and cannot be protected from tampering or data corruption. Electronic ballots can be altered by proximity to a magnet, power fluctuations or outages, viruses, Trojan Horses, programming "bugs," commands from a remote computer or a keyboard, and during transmission between devices. In each case, it is impossible to detect that ballots have been altered.
The voters' selections are correctly tallied.	Election directors cannot observe how vote data is processed inside a computer, so they cannot ensure that the electronic ballots have been tallied correctly. Paper ballots allow results to be meaningfully audited. Electronic ballots do not.

Electronic ballots cannot be safeguarded and must be prohibited. Federal law must require:

♦ Use only paper ballots that are marked by the voter's hand or an accessible non-tabulating ballot-marking device and counted either by hand or by an optical scanner.

♦ Audit a statistically significant portion of all optically scanned ballots to ensure that the equipment correctly tallied the voters' selections.

While Congressman Rush Holt's bill ("Voter Confidence and Increased Accessibility Act" HR 811) requires many safeguards for high-tech voting, an amendment must now be added to prohibit the use of electronic ballots, since safeguarding electronic ballots is impossible.

Election Reform in a High-Tech World — Solving Practical Problems

HR 811 requires a durable, voter-verified paper record of every vote cast. But on electronic ballot systems, the unverified electronic ballot, rather than the verified paper record, is counted.

> An amendment prohibiting electronic ballots would require that the paper records be counted to create tallies rather than being set aside to be counted **only** in audits or recounts.

HR 811 requires accessible, private voting for all voters, including those with disabilities and alternate language needs.

> An amendment prohibiting electronic ballots would not reduce accessibility or make it more difficult to attain. Electronic ballot systems could be converted to paper ballot markers, providing the same accessible experience for voters, while generating paper ballots that can be properly handled and secured. Many leaders in the disabilities community are now calling for accessible **and** secure paper ballot systems.

HR 811 requires voting systems to meet standards that no existing electronic ballot system currently meets; such systems are yet to be invented. However, paper ballot systems that DO meet HR 811's high standards are already in use.

> An amendment prohibiting electronic ballots would prevent a fresh round of expensive technology development, rushed to market with little time for proper testing.

HR 811 requires emergency paper ballots for occasions when machines break down, but machine breakdowns are not the only way that electronic ballot systems disenfranchise voters.

> An amendment prohibiting electronic ballots would also prevent the many other ways in which electronic ballot systems disenfranchise voters and bring chaos to polling places:

> ♦ **They cause long lines,** forcing many legally registered voters to leave without being able to cast a vote. This happens when too few machines are provided or the machines are delivered late, fail to start up, or break down. When voters make their selections on paper ballots, voting doesn't depend on the availability of a machine.

> ♦ **They disrupt the electoral process,** as they did in the still-contested Jennings/Buchanan Congressional election in Sarasota, Florida, as well as in many less publicized races across the country. If paper ballots had been used, there would be no more speculation about the 18,000 missing votes. The ballots would be available for inspection.

> ♦ **They change voters' selections from one candidate to another,** with no way for the voter to know if the right candidate was recorded inside the computer's memory.

> ♦ **They disenfranchise minorities,** as shown by the plunge in undervote rates of Native Americans and Hispanics in New Mexico when the state banned DREs and converted to paper ballots counted with optical scan technology.

> ♦ **They make ethnic profiling possible** when voters are asked to choose between English and an alternate language, since the machines handle votes differently based on the language chosen.

> ♦ **They befuddle and intimidate ordinary citizens,** who could easily understand and effectively monitor the use of paper ballots. Electronic ballots shut out voters, poll workers, observers, and even election administrators from understanding the recording and counting of votes.