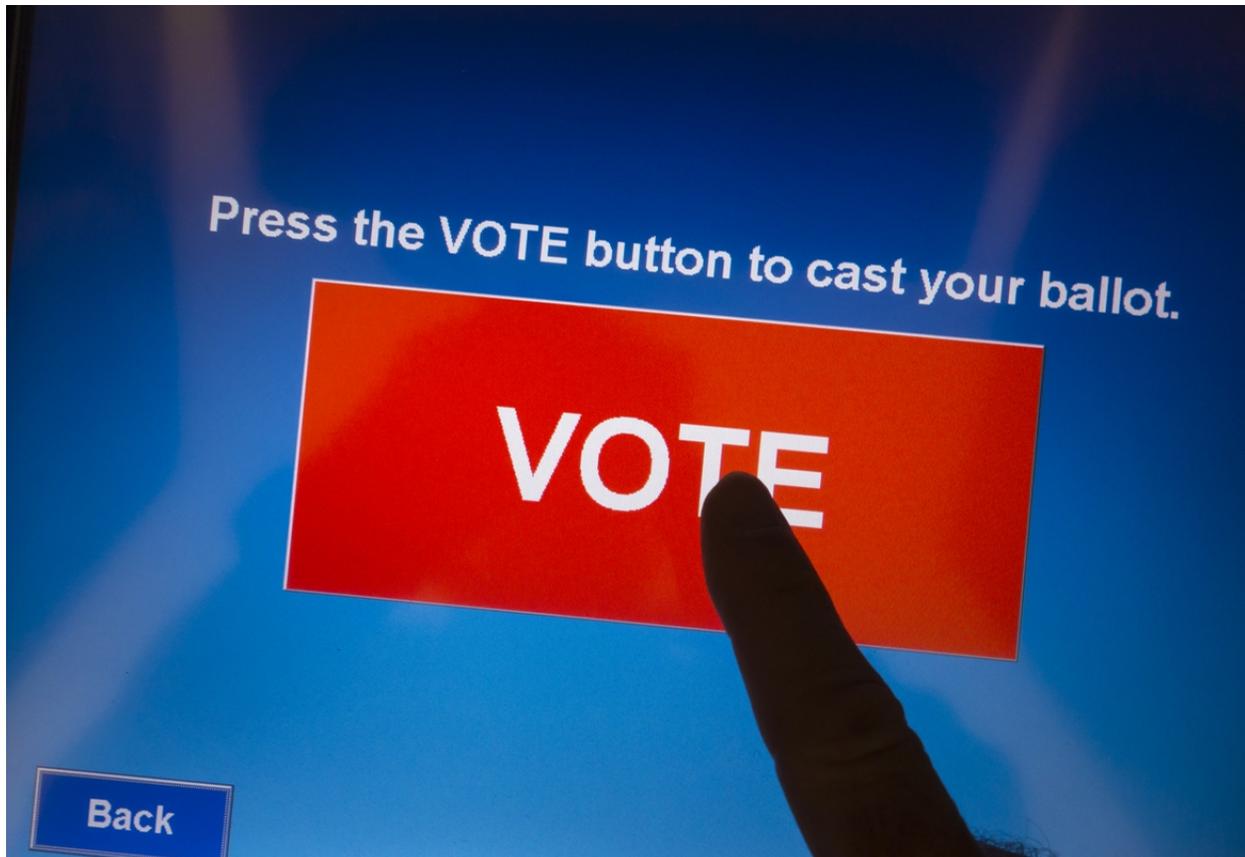# Elections Need a Tech Reboot

Daniel Castro | April 1, 2015



In 2002 Congress passed the Help America Vote Act, a federal law that provided states more than $3 billion to modernize their elections, including upgrading their punch card and lever-style voting machines to electronic or optical scan voting machines and replacing antiquated voter registration lists with computerized statewide systems. Unfortunately these systems are now more than a decade old and reaching the end of their useful life. However, most states have not budgeted for replacements. The challenge is so grave that the Presidential Commission on Election Administration labeled this situation an " impending crisis."

Even if states had funds available to buy replacements, the voting systems currently on the market do not meet the needs of most election officials. Part of the problem is that the market for voting technology is fundamentally broken, and voting technology vendors have had little incentive to innovate. Without a steady stream of new purchases, vendors get little return on investing in research and development. Moreover, a slow-moving federal technology standards process has locked some states into outdated requirements, further discouraging vendors from releasing better systems.

Frustrated state and local election officials are now turning to home-grown solutions. In Travis County, Texas, officials are hard at work designing an electronic voting system

with "end-to-end verifiability," meaning voters can verify both that their ballot was received correctly and that all ballots have been tallied correctly, all while preserving voter privacy. And in Los Angeles County, the Board of Supervisors just green-lighted a $15 million project to design its own voting system, spurred on, in part, by legislation Gov. Jerry Brown signed in 2013 allowing California counties to create voting systems without approval from the federal government.

These efforts are worthwhile, but the rest of the country should not rest on its haunches while a handful of counties design the voting technology of the future. A more useful approach would be for state and local election officials to come together to design voting technology that can be used by any jurisdiction. For example, a consortium could develop an open source software solution that runs on off-the-shelf hardware provided by local vendors. The solution need not be limited to the systems used to mark ballots, but could also encompass other election technology, such as back-end systems to tabulate ballots and electronic poll books used to look up voter information.

In addition, states need to learn to better share election data. For example, many states do not participate in interstate programs to share voter registration data, such as the Electronic Registration Information Center, originally set up by the Pew Charitable Trusts, but now run by a group of 11 states. Sharing data — such as who has moved, who has died and who is registered in more than one location — can produce more accurate voter rolls, which in turn can help election officials save money, protect against voter fraud and reduce waiting times at the polls.

There are many other opportunities for election officials to leverage data to improve elections. For example, officials should publish all election and ballot information in a standardized, machine-readable format to allow civic hackers the opportunity to build voter education tools. In addition, election officials should start collecting basic data about election operations, such as average wait times throughout the day and interactions with voting technology, to help better allocate resources. If election officials develop standardized data formats, then this information can be aggregated and used to model voter behavior to help determine how many provisional ballots are needed and why absentee ballots are rejected. Better election data can also help policymakers identify long-term problems and solutions.

Democracy depends on well-run elections, but elections in the United States have not kept pace with the opportunities afforded by technology. As states face this looming problem, the solution is not only to fix what is broken, but also to build something better. In the past, this might have meant election officials had to chart their own course and go it alone, but now it means working together across state and county boundaries to develop flexible and scalable solutions.

http://www.govtech.com/local/Elections-Need-a-Tech-Reboot.html