



THE CANVASS

STATES AND ELECTION REFORM®



canvass (n.)

Compilation of election returns and validation of the outcome that forms the basis of the official results by a political subdivision.

—*U.S. Election Assistance*

Commission:

Glossary of Key Election

Terminology

Voting Tech Standards: What Legislators Need to Know

NCSL predicts that voting technology will be a growing concern for state legislators in 2013—and that it will continue as a concern for the next several years. Why? Because most jurisdictions bought new voting equipment in the mid-2000s, and now that equipment is limping along and may need to be replaced.

Since any topic about technology is bound to be complicated, *The Canvass* is breaking it down into manageable chunks. In the [June 2012](#) issue we looked at available kinds of technology. In the [September 2012](#) issue we looked at the ability for voting systems to be audited for reliability.

In this issue, we'll look at standards for voting equipment. While not as exciting as some issues with which lawmakers wrestle, it's also not as politically thorny: it doesn't have an obvious Democrat/Republican side to it. But, like an onion, it has many layers. We've broken up the topic into a suite of four articles answering big questions (plus added a notice about a February voting technology symposium on the last page). Please read just what interests you.

[What are Voting Technology Standards?](#)

[Who Sets Voting Technology Standards?](#)

[How Else Does the National Institute of Standards and Technology Help?](#)

[Why Is There a Voting Tech Logjam in Washington?](#)

To subscribe to The Canvass, please email a request to thecanvass@ncsl.org

Inside this issue:

Voting Tech Standards	1-4
LAB: New to Canvass	1,4
From the Chair	5
Administrator's Perspective	5
Bookmark This	5
Worth Noting	6
One Big Number	6
From NCSL	6

Legislative Action Bulletins: New to *The Canvass*

NCSL has cranked up the [Election Legislation Database](#) for 2013, and so far nearly 550 bills dealing with elections administration are pending in the 41 states where legislatures are in session. Some of the key issues that are pending across the states include:

- **Voter ID:** If you were hoping this issue would fade after the November 2012 elections, you will be disappointed. Voter ID continues to be high-profile in many statehouses in 2013, with legislation proposing strict ID requirements pending in 10 states. Four of the states that already have strict photo ID laws have bills that would amend the existing requirements. States to watch include Arkansas, Missouri and North Carolina. All three saw fights over voter ID in the last biennium, but changes in the partisan composition of the legislature and/or a change in the governorship last November may make passage possible this year. (*cont on p. 4*)



1. What are Voting Technology Standards?

Just about any piece of equipment that relates to “the public good” has to meet standards of some kind. Cars must prove their crash worthiness and bridges must pass load-bearing tests. As for voting equipment, standards are likely to describe expectations for security, privacy, usability and accessibility.

Security—The core issue for many people, “security” means that voting systems should be darned near invulnerable to external manipulation. Not only should a system be secured against hackers, it also should be “auditable” so that outsiders can verify that security isn’t breached. For the last decade “auditable” has meant that a voting system has a paper-based audit trail, either a paper ballot or some kind of printout the voter can review. For the future, experts are working to incorporate audibility into new voting systems.

Privacy—Americans are right to expect their vote is a private act and no one can find out how they voted; ballot secrecy is essential to protect voters from being coerced or bribed to vote according to someone else’s desires. This requirement—that a voted ballot be secret—is surprisingly tricky, given that we also require system-wide security. These two features that are so critical to a voting system are often at odds with one another as voting moves into the digital world.

Usability—Casting a ballot should be easy for voters. It shouldn’t take a law degree to be able to vote correctly. This means that instructions must be clearly written and located on the ballot where they are needed and the steps to cast a vote must be easy to follow. [Ballot design](#) is one part of this, but usability covers the entire voting experience.

Accessibility—People with visual, physical or cognitive disabilities must have the opportunity to independently cast their votes. Paper is not “accessible” for many people, either because of vision impairment or because pen



and paper are hard to manipulate. As the population ages, the demand for adaptive systems will continue to grow. (One result of making accessibility a core standard is that voting has become easier for everyone.)

Everyone has a working knowledge of what these four words—security, privacy, usability and accessibility—mean. But for a manufacturer to be able to say its voting equipment meets those definitions, they need to know: how high is the bar, and how do we know if we’ve met these standards? So, standard-setting is an effort by experts to define these words, and thus operationalize these principles.

2. Who Sets Voting Technology Standards?

For cars, we know that standards are set by the National Highway Traffic Safety Administration and for bridges the standards are set by the Federal Highway Administration. Who sets standards for voting equipment is less certain.

“The most important thing for people to remember is that it’s up to each state to set its own laws and policies,” says Stan Ward, a legislative staffer from Maryland who has steeped himself in the minutiae of voting technology.

“Federal certification is totally voluntary. States can adopt the federal standards, or they may want to have their own standards.” Ward notes that in Maryland, statute dictates a hybrid approach to standards, with “very specific standards for a particular kind of technology (optical scan), and federal standards around accessibility.”

To see who uses federal certification, read [this report](#) from the U.S. Election Assistance Commission.

Even though states can opt to go their own way, it’s worth noting that lots of brainpower has gone into federal standards—or “voluntary voting system guidelines,” as they’re called.

Who writes these? There are several cooks in the kitchen. We’ll start at the top of the chain, and work down.

Congress: Back in 2002, Congress passed the Help America Vote Act (HAVA), which required the establishment of the [U. S. Election Assistance Commission](#) (EAC), with several mandates. One was to develop [Voluntary Voting Systems Guidelines](#) (VVSG). *(cont. on p. 3)*



The U.S. Election Assistance Commission: The EAC has several roles in supporting states in election administration. It is a clearinghouse for best practices for election officials, the distributor of HAVA money for the purchase of voting equipment and other systems upgrades, and it is responsible for the VVSG. But the EAC is not set up to write technical guidelines, so it relies on an advisory committee, the [Technical Guidelines Development Committee](#) (TGDC).

Technical Guidelines Development Committee: This federally mandated advisory group of volunteer stakeholders (vendors, academics, advocates, election officials and the like) guides the development of the federal guidelines, reviews proposed guidelines and recommends them for adoption to the EAC. But the TGDC doesn't create the detailed guidelines; the [National Institute of Standards and Technology](#) (NIST) has that task.

National Institute of Standards and Technology: This unit within the Department of Commerce has scientists, programmers and other specialists who draft the VVSG. Since 1901, NIST and its predecessor, the National Bureau of Standards, has helped industry generally by focusing on "measurement science" in a variety of arenas, so it was a reasonable choice to provide technical expertise on voting equipment.

A NIST team of fewer than a dozen techies completed a Herculean task in 2005, drafting standards (as required by federal law) that were approved by the TGDC and then by the EAC. These standards, known as VVSG 1.0, are the most recent ones yet adopted. That's seven years with no new standards—seven years in which smart phones have taken many leaps forward, tablets were invented and Wi-Fi is seemingly everywhere. Seven years in which "cryptology," "cyber security" and "web-based viruses" have become common phrases.

Why no new standards during these years? It's not because NIST hasn't tried. "Technology has changed a lot since HAVA," says Barbara Guttman, a computer scientist with NIST. "We'd like to look at the next generation, and have standards in place for it now." NIST has drafted a 2.0 version of the guidelines, and sent it up the chain of reviewers in 2007. It was not adopted, and issues still remain to be worked out.

([VVSG 2.0](#) is still very much alive in draft form.) The EAC asked NIST to take some of the key aspects of the 2.0 guidelines and incorporate them into a revision of the existing guidelines. The revision—not a replacement—is called the [1.1 version](#), an incremental change from 1.0.

This month, January 2013, public comments on VVSG 1.1 are due. Regardless of the outcome of those comments and any discussions the TGDC may have, VVSG 1.1 can't get adopted by the TGDC because it's at a standstill ... because the EAC is at a standstill (see below, [Logjam in Washington](#)). Yet the NIST team continues its work on standards, trying to be ready for whatever is coming next, technologically speaking. Until new standards are drafted and adopted, manufacturers must have new generation of voting machines certified under the old standards, a deterrent to development.

3. How Else Does NIST Help?



NIST scientists draft voluntary voting system guidelines, but they also:

- Write standards for Voting System Test Laboratory Accreditation. By meeting these standards, for-profit test labs can sell their testing expertise to equipment vendors.
- Support voting by military and overseas voters. NIST is instrumental in developing standards for the electronic delivery of blank, out-bound ballots, something that is becoming commonplace. So far, [NIST](#) says that returning ballots electronically is a security "no go," although states are piloting such options.
- Are developing a Common Data Format (CDF) for voting systems so that eventually the elements of an elections system can be made to "plug and play" and provide election officials more flexibility for new purchases. An added bonus: CDF will improve data collection and management.
- Study "human factors" in voting, to promote the usability and accessibility of voting systems. By studying how humans interact with technology, the voting experience is improved for all voters, and the number of lost votes is reduced. "Human factor" research benefits poll workers, too.



4. Why is There a Voting Tech Logjam in Washington?

Ask any election official: voting equipment has been a problem, is a problem, or will be a problem.

As for “will be a problem ...” there are several reasons, starting with how difficult it is to justify the purchase of new voting equipment when police and fire departments are also vying for the same scant resources.

What else causes a problem? The choices for new equipment are limited, and what is available looks a whole lot like the equipment that’s been sold for the last dozen years.

Why are new options limited? One reason is that vendors are few, so it’s hardly a wild, woolly marketplace with up-start companies snatching market share right and left.

Anything else? Certification for voting systems is a tricky business. Federal voluntary guidelines exist, but the last time they were adopted was in 2005. (While these guidelines are voluntary, more than two thirds of states use them in whole or in part.) Technology is changing all the time, but, for now, anything new must be certified under the existing 2005 standards.

Why haven’t new certification guidelines been adopted? Because the organization that does the adopting is the U.S. Election Assistance Commission—and the EAC can’t adopt policies of any kind without a quorum of commissioners. And the last time it had a quorum was in 2010.

Why does the U.S. EAC have no commissioners? Because none have been appointed lately. It is the President’s job to nominate commissioners based on recommendations from the majority and minority leadership in the U.S. House and U.S. Senate. (Four commissioners are required, and no more than two may belong to the same political party.) Despite the best efforts of some in Congress to get Commissioners appointed, recent nominees have not all been scheduled for Senate confirmation hearings and their nominations expired at the end of the 112th Congress. While the EAC has many fans, some on Capitol Hill favor the abolishment of the U.S. EAC altogether.

All those questions lead to one big question: how can states that need new equipment get the advantages of new technology, when new technology can’t make it to the market? They can lobby Congress to have EAC commissioners appointed—or they can adopt standards of their own.

And who decides what standards to use? That is the job of state lawmakers. *The Canvass* will look at how states go about doing this in a future issue.

Legislative Action Bulletin: New to *The Canvass* *(cont. from page one)*

- **Electronic Voter Registration:** Already pending in four states, this is an issue that we predict will pick up momentum in 2013.
- **Same Day Registration:** Six states have pending legislation that would allow voters to register and cast a ballot on Election Day, while a bill repealing the process has been introduced in Montana.
- **Pre-registration:** Six states are considering the idea of letting young people pre-register before they turn 18 and become eligible to vote.

NCSL has discontinued publication of our stand-alone newsletter the *Legislative Action Bulletin*, but we've replaced it with this regular feature in *The Canvass*. Next month we'll expand our horizons beyond voter ID and registration issues and take a look at some of the other elections administration legislation that's pending in state legislatures.



From the Chair



From the Chair: Senator Clayton Hee is the chair of the Hawaii Senate's Committee on Judiciary and Labor. He was first elected to Hawaii's house in 1982, and is sought out for "institutional memory." On January 3, NCSL asked him about Hawaii's elections.

Excerpts:

- It's a fair statement that the legislature has tried to make elections and voting easier. There have been proposals in the past for registering on the day of the election. Recently the governor publicly stated that he was very interested in the Oregon system of voting by mail. Hawaii is a state that looks at all kinds of ways to increase the participation of the voting age population.
- When Hawaii became a state in 1959, participation was in excess of 90 percent. Today it's closer to 50 percent. There's been a drop-off, and the legislature has tried to respond to that to increase participation. At the end of the day, it's up to the voters, though.

Read the full interview [here](#) for more on Hawaii's ballot shortage in the 2012 presidential election, campaign matching funds and the demographic make-up of Hawaii's legislature.

The Election Administrator's Perspective

An Election Administrator's Perspective: Jack Arrowsmith, county clerk in Douglas County, Colo., was asked by his predecessor, Carole Murray (now a state senator), to consider running for the office. He did; he won; he loves it. On January 15, NCSL asked him about his election-related experiences.

Excerpts:

- The problem that keeps us up at night is that the process now is so complicated it doesn't take much to blow it up. In 2010, when provisional ballots began to be used heavily, it was all we could do to get those provisional ballots out in the field. Every time the legislature adds a nuance, it puts elections at risk. Every time it becomes more complex, there's retraining, a new process, and it takes time.
- In 2006 we bought new equipment, but about half of the cost was offset by federal money through the Help America Vote Act. Unless there's something happening in the federal government that I don't know about, there's no money to help a county now.



Read the full interview [here](#) for more on mail elections, provisional ballots and early voting.

Bookmark This: [Verified Voting.org](#)

This organization keeps good tabs on one part of the election world: the rules and regulations that give voters and voting advocates a chance to verify that their vote was counted as cast. Basically, this means VVF is an advocacy group for paper ballots or voter-verified paper audit trails. It is also an excellent source of trustworthy information, and the producer of a [daily blog](#) about all kinds of election news.



Worth Noting

- At NCSL's Fall Forum last month, participants discussed voting technology. For those who couldn't make it, see these two mini-interviews with [Doug Chapin](#) and [Charles Stewart III](#) on voting technology.
- Larry Sabato, whose Crystal Ball blog usually sticks to politics, weighed in at the end of 2012 on election administration issues. He advocates for no-excuse absentee voting, restricting early voting to the final two to three weeks prior to Election Day and the opening of all polls the Saturday before election day. Read all about it [here](#).
- Long lines played a prominent role in the 2012 post-election story. Here's a [graphic](#), courtesy of the Pew Center on the States, that details who waited and who didn't.
- Online voting was given a whirl at the [Oscars](#) this year. It didn't go too well.
- While we led off this issue of *The Canvass* saying that voting technology will be a hot issue in 2013, that doesn't imply that voter ID laws *won't* be hot. On the contrary; it will continue to be a major issue. See what states are likely to have voter ID legislation introduced this year in The Thicket, posts [one](#) and [two](#), by NCSL's Karen Shanton.
- Legislators can learn much more about emerging trends in voting technology at a February symposium, [The Future of Voting Systems](#), at the National Institute of Standards and Technology's (NIST) headquarters in Gaithersburg, Md. For those of us who can't attend, the sessions will be [webcast](#). Expect to learn about jurisdictions that are exploring building their own systems, alternative standard development processes for voting systems, and alternative methods for voting systems testing and certification at the state and federal levels.



One Big Number: 1,668,666

That's the number of paper voter registration forms processed in Orange County, Calif., between 2001 and 2011. This number comes from the report, [Voter Registration Accuracy and Voter List Maintenance](#), produced by the Orange County Registrar of Voters, Neal Kelley. The report outlines changes in how voter registrations have been handled in the last dozen years—changes that have incrementally improved the speed, efficiency and accuracy of voter registration. The ability for voters to use an online form to begin the registration process is the biggest change. Many other localities have been on the same self-improvement path when it comes to voter registration, and can quickly review OC's experience for new ideas.

From NCSL's Elections Team

Elsewhere in this issue you've read some of our predictions for hot issues this coming year—voting technology and voter ID. That's only part of the list. We also expect this to be the tipping point for [online voter registration](#), with even more states moving this way. (By our count, twelve states now offer it with at least three more on deck). What's your prediction? Please [let us know](#), so we can track the issues that readers care most about.

Thanks for staying connected.

Jennie Bowser and Wendy Underhill



The Canvass, an Elections Newsletter for Legislatures © 2012
Published by the National Conference of State Legislatures
William T. Pound, Executive Director
To subscribe, contact TheCanvass@ncsl.org

In conjunction with NCSL, funding support for *The Canvass* is provided by the Pew Center on the States' Election Initiatives project.

The Canvass seeks to inform legislators and staff by sharing research, analysis and legislative best practices. Any opinions, findings or conclusions in this publication are those of NCSL and do not necessarily reflect the views of the Pew Center on the States. Links provided do not indicate NCSL endorsement of these sites.