Elections Technology: Nine Things Legislators May Want to Know

“What makes you lose sleep?” That’s what NCSL staff asked members of the National Association of State Election Directors back in September 2012. The answer wasn’t voter ID, or early voting, or turnout, as we expected. Instead, it was this: “Our equipment is aging, and we aren’t sure we’ll have workable equipment for our citizens to vote on beyond 2016.”

That was NCSL’s wake-up call to get busy and learn how elections and technology work together. We’ve spent much of the last two years focusing on that through the Elections Technology Project, funded by the MacArthur Foundation. One thing we learned is that virtually all election policy choices have a technology component. Just two examples: vote centers and all-mail elections. While both can be debated based on such values as their effect on voters, election officials and budgets, neither can be decided without considering technology. Vote centers rely on e-poll books, and all-mail elections depend on optical scan equipment to handle volumes of paper ballots.

Below are nine more takeaways we’ve learned recently and that legislators might like to know too.

1. Voting equipment is aging and will soon need to be replaced.

Most of the equipment in use around the nation was bought with federal money made available through the Help America Vote Act of 2002 (HAVA). That was before smartphones were invented, and even iPods were new technology. And, a significant portion of the country uses equipment that was bought well before that.

With aging equipment, jurisdictions are spending more money on maintenance. Cannibalizing some machines to keep others going is commonplace. At some point, equipment will need to be replaced.

2. If the feds won’t pay for new equipment, who will?

HAVA funds are mostly gone now, and there is no sign of additional federal money as far as the eye can see. Who will pay for new equipment, since the feds will not? The choices are few: local jurisdictions, the state, or a combination. In most states, the costs are borne by counties, and in a few, such as Georgia, the state takes the lead. In others, a variety of state-level funding mechanisms exist to ease the burden on local jurisdictions.

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(Elections Technology, cont. from page 1)

3. A map of today’s voting equipment looks like a crazy quilt.

Each state, and sometimes each jurisdiction, makes its own decision on what election equipment to use. While a few small jurisdictions count all ballots by hand, in general the options for new equipment continue to be variations on either “paper or electronic.” In other words, paper ballots that are counted through optical scan equipment or direct-recording electronic equipment (DREs) that may look a bit like an ATM. While those who use DREs love them, most recent equipment choices have tended toward the paper and optical scan side.

Map courtesy of verifiedvoting.org.
DRE: direct-recording electronic equipment; VVPAT: verified voting paper audit trail.

4. Legislatures decide on the framework for voting equipment by setting certification requirements.

States, not the feds, set requirements for voting equipment. State statute or administrative code often rely on federal voluntary guidelines, but it doesn’t have to be that way—and many states modify the federal guidelines to meet their own needs.

The current federal voluntary guidelines were just updated in March by the U.S. Election Assistance Commission (EAC)—but that update meant adopting guidelines that were written in 2007 and have sat on the shelf since then. Work goes on at the EAC to create more flexible and forward-leaning guidelines.

One key goal is to have standards that are technology-neutral and thus can be used to test either optical scan equipment, DREs or new equipment that hasn’t been invented yet.

5. Technology is about more than just voting equipment; it’s crucial for all other election functions too.

When HAVA was enacted, it focused on the equipment on which a vote was cast and counted—the actual voting system. Now, technology for peripherals is just as important. Here are two that legislators are paying attention to now:

- **E-poll books (EPBs)** replace paper poll books by housing voter records on a laptop or tablet. EPBs are intended to make voter check-in go more quickly and may provide a chance to update voter registration records on the spot and reduce human error in handing out the right ballot. Election officials may be able to retrieve data that will improve operations for the next election too. Statutorily, EPBs tend to be permitted but not required. Recently a couple of states have begun putting certification standards for EPBs in statute. Wyoming and Idaho enacted legislation this year to permit their use.

- **Ballot-marking devices** can be as simple as a pencil or as up-to-date as an iPad. The newer devices allow a voter to make selections on a screen and then send the result to a printer, where a paper ballot is printed and reviewed by the voter before it is cast. These new methods reduce the likelihood of questions about voter intent because the device will properly mark the ballot (unlike a few voters). Denver piloted such a system in its May municipal election.

6. “Technology” used to mean hardware; now it means software too.

Technology isn’t just for objects we can hold and touch anymore and instead is often about behind-the-scenes programming. Examples: online voter registration, electronic transmission of voter registration applications from motor vehicle agencies to election officials, and statewide voter registration databases. HAVA mandated and helped pay for the statewide databases, and now, a dozen years later, many states are facing upgrading or replacing these systems.

7. If the topic is elections technology, the question is: Is it secure?

Whenever election-related technology is under discussion, legislators can ask, “Is it secure?” Ask about physical security (examples: cameras at the warehouses that store the equipment and, seals on equipment), procedural security (examples: chain-of-custody procedures for voted ballots and “reconciliation,” the process at the end of Election Day that ensures no votes were lost) and electronic tampering, which we all think of as hacking.

8. Internet voting is not secure yet (say most experts).

The scientists at the National Institute of Standards and Technology are on record saying that Internet voting cannot be done in a secure fashion yet. Ditto for the folks at Verified Voting.org. Even the paper, Online Voting: Rewards and Risks, from the Brent Scowcroft Center on International Security, says “But for online voting in all its forms to take off, security will need to be vastly improved.”

It is harder to create a secure system for voting online than for banking online—a common comparison—for a couple of reasons. First, banking transactions must be traceable back to the person. Election integrity, on the other hand, means ballots are
separated from the voter’s information precisely so they cannot be traced back to the voter. That makes it hard to detect fraudulent activity. And in banking, there’s a built-in acceptable loss; not so with voting—every vote must count.

While retail election fraud has existed since before the days of Tammany Hall, any connectivity in a voting system can introduce an avenue for wholesale mischief.

9. And yet, pressure is building to try I-voting.

A desire to reduce costs is just one pressure moving us toward more reliance on the Internet in elections—but equally important is that voters see virtually all their other life transactions moving to the Internet, and they wonder why they can’t vote on their phone (see number 8).

Beyond cost issues, the needs of military and overseas voters may drive legislators to push innovators to figure out how to do Internet-assisted voting securely. People with disabilities and even first responders also may be in situations where casting a vote electronically may seem like the only option.

In 31 states, some voters—mostly those living overseas—can return their ballots electronically, usually as a PDF attached to an email. Legislators have to weigh the security of email attachments against the possible disenfranchisement of those who would not be able to vote otherwise.

Ten Things to Know About Selecting a Voting System

While NCSL was finalizing its list of “things to know,” Merle King, executive director of the Center for Election Systems at Kennesaw State University, Ga., was working on another brand-new list with a similar goal. His list focuses on what to look for when choosing a voting system. Interestingly, there are no points of disagreement between our list and his and no overlap.

1. A voting system is the core technology that drives and integrates the system—and it is the part the voter touches.

2. Know who does what and why. Without clearly defined roles and responsibilities, problems will occur.

3. The true cost of ownership is the cost to purchase, operate and maintain a voting system over its life span. It is more than you think.

4. The request for proposal (RFP) is your first, last and best chance to get the system requirements right. Systems are never better than the RFPs used to define the requirements.

5. Changing a voting system is like changing tires on the bus … without stopping. A transition plan may allow the seamless migration from the old system to the new system, with minimum disruption.

6. Training and education may cost more than the purchase price of the system when you factor in voter education, poll workers, election officials, etc.

7. How long will new systems last? What shortens their lives? What needs to be done before purchase to ensure long life?

8. All modern voting systems are “multimodal,” meaning they will have to function for vote-by-mail ballots, in-person voting, online ballot return, etc. That means flexibility in the architecture is required to avoid retrofitting later.

9. Either you manage vendors or they manage you. Pick.

10. Know the “known unknowns,” such as security, accessibility, auditability, usability, voter convenience, transparency of process and testing and certification requirements.

Legislative Action Bulletin

- 23 states plus D.C. are in session / 12 states are projected to adjourn by June 17
- 2,246 election-related bills have been introduced
- 110 enactments / 9 vetoes

Six of the nine vetoes so far this year for election-related legislation come from Virginia. This may reflect that a Democrat, Terry McAuliffe, is in the governor’s mansion and both legislative chambers are held by Republicans.

HB 1473 would have allowed local election officials (called “general registrars” in Virginia) to hail from neighboring jurisdictions.

SB 1066 and HB 1296 dealt with filling vacancies. The governor’s statement says the veto stems from a conflict with existing statutes.

SB 1350 would have allowed the state to remove voters from registration rolls when the local registrar receives notice that the voter has moved from the Commonwealth. The governor says the bill was in conflict with the National Voter Registration Act of 1993.

HB 1315 would have required that information about citizenship status and more be transmitted from jury commissioners to local registrars, to be used for voter list maintenance.

HB 1318 would have required voters applying to receive an absentee ballot to submit a copy of accepted identification.

(Editor’s note: Florida joined the group when Governor Rick Scott signed Senate Bill 228 into law on May 15. This action is not included on the above graphic.)
From the Chair

Representative Su Ryden serves as the chair of the Colorado House State, Veterans and Military Affairs Committee, which has jurisdiction over elections. She represents House District 36, which encompasses east Aurora and several neighborhoods in unincorporated Arapahoe County. The Canvass spoke with her on May 14.

- Fairness and easy and equal access to voting is my top priority. I want to ensure that everyone eligible is able to vote.
- Mail ballots have been a huge success, but they have not worked as well for rural counties. There have been issues with timely delivery, particularly in the third of the state where the closest general mail facility is in Albuquerque. We’ve instituted 24-hour secure drop boxes, and they have been used especially in rural areas.
- I have been working on legislation for prepaid postage on ballot return envelopes. For me it’s a poll tax issue. People have to drive or get transportation to get to the vote centers. It’s creating disparities and is costing people money to vote.
- People don’t go down to their local polling place to vote any more. Young people are coming up who are not sure how to vote. In a way we’ve given people so many choices, we may have confused them. We need better education to get down to the basics and not assume everyone knows how to vote. There is a learning curve with a system like this.
- The issues for rural folks are different than the issues for urban folks. Denver has something like half a million voters, while other jurisdictions have just 300.

Read the full interview with Representative Ryden.

The Election Administrator’s Perspective

Luanne Cutler is the registrar of voters for Washoe County in western Nevada. It’s the second largest county in the state with a population of 410,000 and home to the city of Reno. The Canvass spoke with her on May 14.

- I never set out to be an election official, but I’ve developed a passion for what we do. So much of it is behind-the-scenes work that the general public is not aware of. We invite people to see all our processes so that they develop a deeper understanding of what it takes to make sure they can cast their vote.
- I have wanted vote centers for years so people don’t have the issue of where they have to go to vote—they can vote anywhere. That works well for early voting. We know how much people love early voting here. More than half of our voters vote early in person, not absentee. Why not leave early voting set up through Election Day as vote centers? That would be my fantasy.
- We are concerned about the age of the equipment and technology we are using now. It does work, and we test it to ensure that it does. Nevada used EASE (Effective Absentee System for Elections), an online ballot delivery system, for military and overseas voters last year, and it worked well. I would like to see the state allow a similar system across the board if we can secure it.
- We only have 17 counties in Nevada, and the differences in needs are so drastic. I wish laws could be written in ways that would be flexible enough to ensure everyone complies. To mandate something is not necessarily practical.

Read the full interview with Registrar Cutler.
Worth Noting

• NCSL’s elections team gets lots of questions about campaign finance, and more specifically, about contribution limits, public financing and disclosure requirements. When we get stumped, our go-to resource is the National Institute on Money in State Politics, aka followthemoney.org.

• The U.S. Election Assistance Commission (EAC) has released its 2014 Statutory Overview Report. The report is a guide for information on states’ definitions, laws, processes and procedures relating to the administration of elections and helps explain the data collected through the Election Administration and Voting Survey (EAVS).

• NCSL’s Katy Owens Hubler highlighted Denver as a leader in what’s next voting technology in a recent blog post. Denver demonstrated its fully integrated voting system developed with local vendor, Dominion Voting, in front of heavy hitters in the election world including Colorado Secretary of State Wayne Williams, California Secretary of State Alex Padilla (check out his Twitter feed) and U.S. Election Assistance Commissioners Christy McCormick and Tom Hicks.

• “In most fields security is a trade-off, but in elections you have to get it right the first time”—U.S. EAC Commissioner Christy McCormick, while at NCSL as part of her visit to Denver on May 5.

• One more EAC-related item: electionLineWeekly has a great interview with all three new commissioners about their goals for the EAC.

• Over 100 people participated in NCSL’s free webinar, Linking Driving Records to Voting Records, on May 1, with Delaware state officials and representatives from The Pew Charitable Trusts. If you missed it, fear not—it can be viewed in its entirety at NCSL’s website.

• It might be too late to ski but it’s not too late to register for the International Association of Clerks, Recorders, Election Officials, and Treasurers (IACREOT) annual conference in Vail, Colo. from June 27-July 2. NCSL’s Wendy Underhill joins the most impressive list of election geeks ever gathered at 8,150 feet above sea level.

• Be sure to add one more subscription to your list: Project Vote’s weekly Election Legislation eDigest for news about federal and state legislation on election issues.

• It’s that time of year again—mark your calendars for NCSL’s Annual Legislative Summit, Aug. 3-6, in Seattle, Wash. We’ve got a sensational lineup of sessions planned including “Oregon’s Automatic Voter Registration (and Other Registration Initiatives),” “Increasing Independents: Looking at the Rise of Unaffiliated Voters” and “Internet Voting: Do Security Concerns Preclude Voting Over the Web?”

• “The idea that voters would vote twice when it’s hard to get voters to vote once is ridiculous”—Vermont State Senator Anthony Pollina, as quoted in the Burlington Free Press in response to opposition to his same-day voter registration bill.

• If there is one thing we at NCSL can all agree on, it’s that the voter experience can always be enhanced by tasty baked goods. Thankfully, Rhode Island is taking the lead in sugary treats as the state legislature there recently passed a bill to permit Election Day bake sales outside of polling places.

Now’s your last chance to register for NCSL’s Policy and Elections Technology: A Legislative Perspective conference, happening June 3-5 in Santa Fe, N.M. Join over 50 legislators in learning about upcoming challenges in elections and experiencing the art of beautiful Santa Fe. We hope to see you there.

Dan Diorio recently joined NCSL’s elections team as a policy specialist. Dan is new to the Rocky Mountains having recently moved from Washington, D.C. He’s enjoying the drier air and spends his spare time renovating his house or resisting the urge to add another guitar to his collection. Please welcome Dan!

Thanks for reading, and please stay in touch.

—Wendy Underhill and Dan Diorio

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