Internet Voting—Not Ready for Prime Time?

We transmit money, legal documents, medical reports and other sensitive information via the Internet. Shouldn’t we be able to vote over the Internet, too?

“No,” say some observers.

“Right now, there is no way to meaningfully secure an election by Internet voting, and we’d be inviting serious potential for fraud on a scale that’s never been experienced in election administration before,” says Doug Kellner, co-chair of New York’s State Board of Elections. “Until methods can be designed to secure the election so that you know that every vote is being counted the way the voter cast it, I am opposed to Internet voting.”

“Yes,” say others—including a group of seventeen computer scientists who signed on to a National Defense Committee statement in January, supporting more research on Internet voting specifically for military voters. “The only foreseeable option to allow military members to achieve first class voter status is through remote electronic voting that provides for electronic delivery of military members’ voted ballots,” says the statement.

Still others might say “it depends on what you mean by ‘Internet voting.’” That term can be shorthand for at least three options, and we’ll look at each of them separately—and whether experts give them a green, yellow or red light (at least for now).

Why Consider Internet Voting At All

While many voters—especially young voters—may take it as a given that voting in their pajamas on their laptops would be convenient, convenience for the average voter is not what’s driving interest in Internet voting. Instead, the driver is the desire—indeed, the responsibility—to make it possible for military service members to cast a ballot.

Just like anyone else, these voters can contact their local election official and request an absentee ballot. But mailing the ballot and receiving it back in time to be counted can be impossible. Besides, it’s asking a lot for a service member to remember to request a ballot seven weeks before an election. Only political junkies are thinking about their vote that early.

Prior to 2009, successful return rates for military voters’ ballots were abysmal—in 2008, 49.8 percent of these ballots were not received on time, according to a 2011 (cont. on page 2)
U.S. Election Assistance Commission report. In 2009, the federal Military and Overseas Voter Empowerment (MOVE) Act was passed mandating that ballots be ready 45 days before an election specifically to provide time for the ballots to be delivered to Afghanistan, Antarctica or wherever they are needed—and returned in time to be counted.

In the 2010 election, “only” 36.6 percent of these ballots were not received in time. For more on voting rights for the military, see the Pew Center on the States’ report, Democracy from Afar: States Show Progress on Military and Overseas Voting, or the Congressional Research Service’s report, The Uniformed and Overseas Citizens Absentee Voting Act: Overview and Issues.

Is 36.6 percent good enough? Of course not. Below are three fixes that lawmakers can pursue.

Sending blank, unvoted ballots to voters

The Internet is helping. Servicemembers and others can now request a ballot via email, and a blank ballot can be sent back as an email attachment. “This is being done now on a regular basis,” says Brian Hancock, director for Voting System Testing and Certification at the U.S. Election Assistance Commission. “I see this as a natural progression from sending absentee ballots through the U.S. Postal Service.” Indeed, the MOVE Act requires electronic delivery of unvoted ballots, so this is now a question of whether this option has been fully implemented.

The Federal Voting Assistance Program (FVAP), an agency within the Department of Defense, would like to see states create other methods as well for electronically transmitting a ballot. For instance, states can develop methods to allow voters to go to an election website, and after inputting an identification code, download their ballot.

And yet, for our military personnel on the front line, transmitting a blank ballot electronically is only half the battle. Printing out the ballot, marking it with a pen, and getting it mailed back can still be tough.

Permitting voters to return ballots via email

In some cases and places, the Internet can help with returning a voted ballot to the States via an attachment to an email.

To do this, the voter receives a blank ballot electronically and then prints it and votes it by hand. Then he or she scans it and sends it back to the local election official as an email attachment. (Sending ballots back by fax is another option.)

A variation on this theme solves an inherent problem: is there a printer and scanner nearby? In many locations, the answer may be negative, so in 2010 FVAP called for proposals for the creation of “online ballot marking wizards.” These programs permit a voter to fill in the blanks on a ballot on the computer screen, and then save the result as a pdf. Bingo! From the voter’s perspective, the whole transaction has been managed on a computer. (FVAP’s request for proposals included just marking of the ballots—not tallying.)

Connecticut Senator Gayle Slossberg has introduced legislation this year to permit the electronic return of voted ballots. “The ability for our soldiers to cast their vote far outweighs the minuscule security risk,” she says. “You have to look into every security concern and ask, is this a risk you can mitigate or manage?” She noted, too, that 28 other states permit the electronic return of voted ballots, and that their experiences have been positive overall.

The electronic return of voted ballots has created a security debate. “Email is about the least secure method of ballot delivery,” says the EAC’s Hancock, noting that email accounts of both Presidents George H. W. Bush and George W. Bush have recently been hacked.

Among the risks to consider is the secrecy of the ballot. The ballot can’t be secret because someone has to receive it and print it, and they will see how the voter voted. A voter who returns a voted ballot electronically also must sign an affidavit saying something akin to this: "I understand that by faxing or emailing my voted ballot I am voluntarily waiving my right to a secret ballot." The secrecy of the ballot is no small thing to give up—it is how we protect voters from coercion and prevent voters from selling their votes. But, for overseas voters for whom it might be all but impossible to vote any other way, giving up secrecy in exchange for timeliness may be acceptable.

From an administrative perspective, electronically transmitted ballots are manageable when they come in ones or twos, or even 10s or 20s. But if they become common, local election officials will have to adjust their systems to get them processed quickly because each must be handled individually.

For instance, as a response to Hurricane Sandy, New Jersey officials did their best to help all displaced citizens to vote. This included expanding the state’s existing electronic-transmittal option from just overseas voters to all voters. It was a timely and appropriate action—but it was challenging in practice.

(cont. on page 3)
Directly voting over the Internet

Actually casting a vote over the Internet (as opposed to sending a ballot as an email attachment) is a whole different level of security risk, say most computer scientists.

“The technology is not ready to do voting over the Internet securely,” says J. Alex Halderman, the computer scientist from the University of Michigan who led a team that hacked a 2010 pilot Internet voting project in the District of Columbia.

“Not only is online voting not secure now, it may be some years to come before security catches up with voters’ desires, say many experts. In general, experts say that Internet voting could be vulnerable to mass hacking, whereas returning ballots by fax or as an email attachment is only vulnerable one vote at a time. They also say that Internet voting is more complicated than online banking … and if you’d like to know more about these concerns, check these resources (or contact us).

- The National Institute of Standards and Technology.
- Verified Voting, an advocacy group dedicated to ensuring that all votes can be counted and accounted for; spokesperson Susan Greenhalgh notes that the U.S. has no standards for Internet voting and therefore no way to certify that Internet voting systems are un-hackable.
- A legal analysis of Internet voting written by law professor Candice Hoke, from Cleveland State University. She concludes that, given the current capacity for undetectable fraud in voted ballots transmitted over the Internet, Internet voting methodologies violate the 14th amendment Equal Protection Clause.

That’s a lot of negativity toward online voting.

There is another side, expressed in January by the 17 computer scientists who signed the National Defense Committee statement. It reads in part, “It is time to devote the deserved resources to scientific research that can solve the military voter problem.” It lays out these research goals:

1. There would be no delay between marking the ballot and casting the ballot.
2. The voting system would provide error checking to the voter.
3. Voters could obtain one or more replacement ballots without delay.
4. Voters could verify that their ballot was cast when it was cast.
5. Where state law allows, the voter could register and vote on election day.

Worthy goals indeed—for someday. And when is that day? “Internet voting for military personnel is possible by 2016, if properly funded,” says Bob Carey, executive director of the National Defense Committee.

In the meantime, experiments and pilot projects keep on coming. Estonia votes online, a handful of localities in Alberta are piloting online voting, Arizona Democrats tried it in their 2000 primary, and corporations frequently use online systems for shareholder votes.

Many states are interested, too. West Virginia ran a widely-publicized pilot program for online voting in 2010. Since then, Colorado and Alabama have passed legislation to develop pilot programs as well. For this year’s legislation regarding online voting, see the Legislative Action Bulletin in this issue.

If you want to see more about the pros of true Internet voting, review the YouTube wrap-up of the Overseas Vote Foundation’s 2013 Summit. To hear more about the cons, see Why You Can’t Vote Online from the MIT Technology Review.

Final Thoughts

“While serious and valid security concerns remain regarding Internet voting today, I believe future voting technologies will use the Internet in some fashion,” says the EAC’s Hancock. “I’m not sure how the architecture will look or the security protocols that will be devised, but young voters and future voters not yet of voting age will demand that election officials find a better way to conduct the election process.”

Indeed; Internet voting seems to be a question of “when,” not “if.” Imagine the year 2030—how are people going to vote then? But for now, 2013, policy makers must keep in mind the needs of far-flung voters AND the need for a secure voting system.

Bookmark This: Election Administration Theories and Praxis

This new blog is written by Scott O. Konopasek, formerly an election official in three states, and currently a consultant to public entities on continuous improvement and quality management. “I find the expression ‘good enough for government work’ terribly insulting to public servants and election administrators especially,” he says.” In his new blog, you’ll get a sense of how lessons from the wider world of public administration apply specifically to elections.
**Legislative Action Bulletin, February 2013**

A quick query of NCSL’s [Elections Legislation Database](#) tells us that 1,418 election-related bills have been introduced in legislatures so far this year. It’s too early to see many enactments yet; most of these bills are still pending in their chambers of origin. The lone enactment so far is HB 53 in Massachusetts; it provides timelines related to a special election to fill the vacancy created when former U.S. Senator John Kerry resigned to become the U.S. Secretary of State.

One trend we’ve noted over the past month is a proliferation of bills dealing with Internet voting. These vary in their details, and most propose a pilot project or a feasibility study, rather than a full-blown Internet voting program. Those we’ve identified include:

- **Permit ballots to be requested and sent out online, and marked with an online ballot marking tool:** [Maryland SB279](#)/[HB224](#)
- **Internet voting pilot programs:** [Arizona SB 1387](#), [California AB 19](#), [Hawaii SB 216](#) and [SB 927](#), [Illinois HB 1094](#) and [New York SB 3252](#) and companion bill [AB 3188](#)
- **Internet voting pilot programs for UOCAVA voters:** [Connecticut SB 283](#) and [New Jersey AB 1237](#)
- **Electronic ballot return for UOCAVA voters:** [Iowa HB 124](#) and [Virginia SB 830](#) (incorporated SB 874; passed the Senate, defeated in the House subcommittee)
- **Email ballot return for UOCAVA voters:** [Connecticut SB 647](#) and [Texas HB 1129](#)
- **Feasibility studies of Internet voting:** [Mississippi SB 2186](#) (died in committee) and [Texas HB 579](#)
- **Feasibility study on online voting in the event of an emergency:** [California AB 214](#)

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**The National Institute of Standards and Technology’s [Voting Technology Symposium](#), February 26-28, should be good for those who can get to Gaithersburg, Md. For the rest of us, a live webcast will be the next-best thing. NCSL suspects that the first day will be of the greatest interest to non-scientists.**

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**NCSL Election Resources**

Do you have questions about an election policy you’re considering for your state? Are you looking for information on how other states tackle that same issue? Would looking at their statutory or legislative language help? Do you wonder what advocates and opponents say?

NCSL can help. Send your questions to elections-info@ncsl.org, or simply call 303-364-7700. Please take advantage of these other election-related resources as well:

**Website:** The elections section of NCSL’s website is robust. If you don’t see what you’re looking for, ask us; we probably have additional information at the office.

**Experts:** NCSL’s elections experts are prepared to give legislators and legislative staff the research and analysis they need. If we don’t already have the answer, we can undertake research on specific requests. We field questions on election administration, campaign finance, initiative and referendum procedures (and substance), redistricting, recall, term limits and more, all with a non-partisan 50-state perspective.

**Legislation Databases:** NCSL provides public databases that make it easy to find out what other states are doing. These contain legislation related to election administration, term limits, campaign finance reform and initiative and referendum. Feel free to ask us to run a search for you, or to give you a personal introduction to these databases.

**Testimony and Technical Assistance:** NCSL’s experts can come to your state to provide non-partisan background testimony. We can provide a 50-state perspective about proposed changes, describe examples of similar programs or changes in other states, and also connect you to other national experts on your topic. We’re open to invitations from outside the legislatures, too.
From the Chair

Representative Kathy Bernier (R) is the chair of Wisconsin’s Committee on Campaigns and Elections. She brings great professional depth to the job, since she served as a county clerk for more than a dozen years before being elected to the Wisconsin Assembly in 2010. NCSL spoke with her on January 8, 2013.

Excerpts:

• The onus (for election integrity) seems to be put entirely on election officials, rather than electors for providing proper information to register and vote on the same day.
• In the past decade or so we’ve lost some of our integrity in regard to Election Day Registration. I believe it was intended for people who have moved shortly before an election, not for everyone.

• We’re going to address recalls and the Constitutional issues associated with them, especially recalls for the lieutenant governor and governor, which should go hand in hand. We may also focus on recount procedures using electronic voting equipment and hand counts.

Read the full interview here for more on Wisconsin’s Government Accountability Board, election day registration and voter ID.

The Election Administrator’s Perspective

Maggie Toulouse Oliver was appointed in 2007 at the surprisingly young age of 30 to be the county clerk for Bernalillo County, N.M., which includes Albuquerque. Since then, she’s been elected to the post. On February 12, NCSL asked her about her early start in election administration, and what issues are burning in New Mexico now.

Excerpts:

• New Mexico benefits from studies that observe and review the election from a variety of angles—in-person observation, plus surveys of poll workers and voters. The idea is to get a 360-degree view. The benefit is that we get an independent outsider’s perspective.
• Across the nation and here in New Mexico, elections are underfunded. That feeds directly into policy.
• I am spending a lot of time in Santa Fe advocating for some election modernization legislation. We have found that some of our antiquated processes are hindering our ability to do a better job. We have a strictly paper-based registration system, and we see a lot of registrations “falling through the cracks” that way. When we get online voter registration or even the ability to electronically transmit registration applications from the Motor Vehicle Department, we’ll be able to do a lot of other things that will help us bring integrity to our voting lists.

Read the full interview here for more on entering the field of election administration, modernizing election systems and equipment in New Mexico, and what legislators need to know about elections.

One Big Number: 17

That’s the number of indicators used in The Elections Performance Index, from the Pew Center on the States. The report uses these indicators to establish a benchmark for states as they continue to improve election processes. The indicators measure such things as waiting times at polling places, availability of voting information online, rejection rates for military and overseas ballots, voter turnout and accuracy of voting technology. The Canvas will delve into the report in more detail next month. In the meantime, please spend some time playing with the data-dense interactive graphic.
Worth Noting

- February 27 is the date that the U.S. Supreme Court will hear arguments in the *Shelby County v. Holder* case, which tests Section 5 of the Voting Rights Act. That section requires certain “covered” states and jurisdictions to get pre-approval for any changes to voting procedures from the Department of Justice. Keep current on the case’s progress at the American Constitution Society’s webpage, *The Voting Rights Act*.

- More on *Shelby County v. Holder*: the Heritage Foundation is hosting a panel discussion, *The (Un)Constitutionality of Section 5 of the Voting Rights Act* on Friday, February 22.

- New York’s State Bar Association released a report in January, *Voter Participation*. Doug Chapin, of *The Election Academy*, praised the report for offering multiple suggestions for how to run elections better in the Empire State—some of which might work in other states as well.

- Ned Foley, from the Ohio State University College of Law, has recently written both *The Separation of Electoral Powers*, which suggests separating “the electoral powers of government from the three traditional powers: legislative, executive, and judicial;” and *Virtue Over Party: Samuel Randall’s Electoral Heroism and Its Continuing Importance*, which uses a historical sample to promote “nonpartisan political virtue, in pursuit of the public interest.”

- California Voter’s Foundation released a brief in January, *Modernizing California’s Voting Technology: A Look Back, A Look Ahead*. Written by president and founder Kim Alexander, it does just what it says (including looking at Los Angeles’ County’s latest efforts). It offers policy questions that all lawmakers and election officials may want to consider, such as “Are there different approaches to certification and testing, such as states collaboratively testing equipment, that would be more efficient and economical than having California go it alone?”

- In D.C., the *House Committee on Administration* has eliminated its Subcommittee on Elections as a cost saving measure. It has assigned its duties to the committee as a whole. “In today’s fiscal environment, consolidation and cost cutting are not optional. However, through greater use of technology and cost-effective solutions, I believe that we can reduce overhead while maintaining the most efficient, transparent and inclusive processes,” said committee chair, Candace Miller (R-MI).

- In other election news, a new pope will be elected soon, following the resignation of Pope Benedict XVI. The *Catholic Encyclopedia* explains the Byzantine details well.

From NCSL’s Elections Team

As you all heard in the State of the Union speech, President Obama is creating a bipartisan “Presidential Commission on Election Administration.” Readers of *The Canvass* know that election administration is the business of the states; we wrote briefly about the speech and elections in NCSL’s *The Thicket*, making that point. Now we’d like to hear from you how you feel about a bipartisan commission. Is it a good idea as a way to generate best practices for elections administration, or an infringement on states’ rights? What issues do you hope the new commission will tackle? Thanks for staying connected.

Jennie Bowser and Wendy Underhill