Q: What is “the single most important development in election technology in recent years?”
A: Post-election audits, and especially risk-limiting audits. Or so says Joseph Lorenzo Hall, a senior staff technologist at The Center for Democracy & Technology.

Q: What is a Post-Election Audit?
A: A post-election audit, or PEA, checks that the equipment and procedures used to count votes worked properly, that the votes were counted as cast, and that the election yielded the correct result. “In the ideal case, it can be like doing a recount without having to do a recount,” says Hall.

As an example, California’s post-election audits require election officials to examine all the ballots in one percent of a jurisdiction’s precincts. The precincts’ results are tallied by hand, and those results are compared to the results reported on election night. (For more on PEAs, see sidebar on page 4.)

Q: Why do we need post-election audits?
A: Occasionally, an audit turns up a programming error or equipment malfunction. And it’s far better to know about a problem than it is to not know about it.

Q: Who favors using PEAs?
A: Joe Mansky, for one. He’s the elections manager for Ramsey County, Minn., and the designer of Minnesota’s PEA law, enacted in 2006. “Here in Minnesota, we are in favor of both accuracy and transparency,” he said.

Many voting advocacy groups also encourage the use of PEAs; one of these is Verified Voting.org. Its new report, Counting Votes 2012: A State by State Look at Voting Technology Preparedness, asks a variety of questions that lead to a ranking of states’ readiness. (cont. on p. 2)
Post-Election Audits: The FAQs

One is this: *Has the state instituted a post-election audit that can determine whether the electronically reported outcomes are correct?* The right answer for Verified Voting is ‘yes.’ The report says: “Mandatory comparison of a random sample of the paper ballots to electronic totals is one of the best ways to ensure that the reported outcomes are correct.”

**Q: Who doesn’t like post-election audits?**

A: Election officials may not be fans. Some may say that their budgets have been slashed in recent years, and there’s no room for an extra responsibility. Kathy Scheele, the past president of the National Association of State Election Directors and current director of elections for Vermont, has several years of experience with PEAs. She says “the toughest thing is that we have to recruit volunteers to be the counters … and in the end all the audits do is show that the tabulators are damned accurate.”

**Q: Who runs post-election audits, and who pays for them?**

A: Usually it is state legislatures that require PEAs and local election administrators who run them and pay for them. If they need help on “how to,” state election offices can and do provide support. Costs include labor and program design. In the longer term, some states may find cost savings if audits make expensive recounts less common.

The U.S. Election Assistance Commission has provided grants to states to begin post-election audits, although that funding opportunity is now closed. States with remaining Help America Vote Act funds may be able to use these to initiate a post-election audit requirement.

**Q: Are all post-election audits basically the same?**

A: No. The classic audit looks at a fixed percentage of precincts, or less commonly, a fixed percentage of vote-tallying machines. California’s 1 percent fixed requirement can be cumbersome for large jurisdictions. Orange County will receive 650,000 ballots in the upcoming presidential election. That means 1.8 million pieces of legal-sized paper are generated, so 18,000 pieces of paper must be recounted by hand.

These traditional PEAs are relatively unsophisticated; even in a landslide election, they will count the same number of ballots as they would in a nail-biter election. In recent years, researchers have developed statistically-based audit techniques that cut down on the number of ballots to be audited, while also providing statistical confidence that the election result is correct.

One of the newer techniques is called a “risk-limiting audit” (RLA). In contrast to traditional PEAs, the number of ballots counted in an RLA varies depending on the margin of the election. If the margin of victory is large, officials don’t need to count as many ballots by hand to confirm who won and to catch any errors or fraud. Of course, in a tight race, more ballots would need to be reviewed to provide the same level of statistical assurance, because it would take only a small number of incorrectly counted ballots to change the outcome.

California is piloting RLAs under a 2011 law. “It is early adopters who will want to use risk-limiting audits, because there are growing pains for sure,” says Neal Kelley, registrar of voters for Orange County, Calif. His office will produce election materials in five languages and 400 ballot styles for the upcoming election, and that makes programming a risk-limiting audit challenging. And yet, he’s enthusiastic about the pilot program. “You could save a tremendous amount of money because of the labor saved. The 1 percent requirement is a huge drain.” He expects Orange County to save tens of thousands of dollars.

**Q: What states require post-election audits?**

A: Twenty-five states plus the District of Columbia require or authorize PEAs, according to Verified Voting.org. Vermont’s law permits the secretary of state to call for post-election audits; in other states the PEA is a requirement.

**Q: Do post-election audits require any special kind of equipment?**

A: Yes; they require a paper trail that can be, well, audited. The paper trail might be the ballot itself, or, for electronic voting equipment, it might be a printout (a “voter verified paper audit trail”) of each voter’s ballot choices. For jurisdictions that use electronic machines without a paper trail, the tallies from internal and external drives can be compared and process auditing can be beefed up.
Post-Election Audits: The FAQs

Q: What are the downsides to using post-election audits?

A: They are hard to explain in an elevator speech. More importantly, “for really large and really close elections, they can be hard to do,” says Hall.

Q: When it comes to post-election audits, what decisions are in the hands of state legislators?

- To make audits required or voluntary.
- To use a traditional, fixed-percentage audit approach, or try the new risk-limiting audits.
- To require that the PEA cover just the top race, or all the races on a ballot. The more races, the higher the cost.
- To audit just those ballots that are cast in polling places, or to include all kinds of ballots, since absentee voting is becoming ever more common.
- To require that electronic voting equipment produce a “paper trail.” This may be a costly item, involving replacing or retrofitting existing equipment. In New Jersey the electronic voting equipment does not provide a paper trail. “We have complete confidence in our voting machines,” says Robert Giles, director of the New Jersey Division of Elections. “The machines are well-tested, we have continuous training with our counties, and we have clear chain-of-custody and seal-use protocols for the equipment.” (A law is already on the books in New Jersey requiring PEAs, but it does not kick in unless the state converts to a paper-based system.)
- To do a post-election audit before the vote count is finalized—which leaves time to correct errors—or to wait until after the canvass is complete. In the latter case the PEA is an exercise in learning for the next go-round. Charles Stewart III, MIT political scientist, supports after-the-fact audits so that they aren’t seen as “gotcha exercises.”
- To include a “process” or “procedural” audit requirement for their states, in addition to an audit of the vote count.

Final Thoughts

In the current political climate, any change in election policy will be viewed through a fraud-prevention lens. Audits can’t catch impersonators or find missing ballots, but they can “help to pinpoint areas where there could be errors; they help to potentially protect against fraud because you’re looking for anomalies,” says Orange County’s Kellley.

Policymakers must decide what costs are reasonable to ensure that an election reflects the results of the ballots that were cast.

Books, Websites and Reports about Post-Election Audits

Audit Principles, from ElectionAudit.org

Confirming Elections: Creating Confidence and Integrity Through Election Auditing, 2012, by R. Michael Alvarez, Lonna Rae Atkeson and Thad Hall


Evaluating Elections: A Handbook of Methods and Standards, due out in October 2012, by R. Michael Alvarez, Lonna Rae Atkeson and Thad Hall

Evidence-Based Elections, 2012, by P.B. Stark and D.A. Wagner

Post-Election Audits: Restoring Trust in Elections, 2007, by Lawrence Norden, Aaron Burstein, Joseph Lorenzo Hall and Margaret Chen

Principles and Best Practices for Post-Election Audits, 2008, from Election Audits.org

Review of Post-Election Audits and Voting Equipment, 2010, from Virginia’s Joint Legislative, Audit and Review Commission

Saving Throw: Securing Democracy with Stats, Spreadsheets and 10-sided Dice, 2012, from Ars Technica

Statistical Analysis of the Post-Election Audit Data, 2011 November Election, 2012, from The University of Connecticut Center for Voting Technology Research
From NCSL’s Archives: Voter Registration and Voter ID

If you weren’t able to attend NCSL’s Legislative Summit in Chicago last month, it’s not too late to learn from two elections-related sessions.

The first, Voter Registration: Keeping the Rolls Accurate, was conceived after reading the report, Inaccurate, Costly and Inefficient produced this year by the Pew Center on the States. The study revealed that as many as 24 million voter registrations across the nation are inaccurate, and up to 51 million eligible citizens are not registered to vote. NCSL brought together David Becker (director of Pew’s Election Initiatives), Tammy Patrick (Federal Compliance Officer for Maricopa County Elections, Ariz.,) and Delegate Jon Cardin of Maryland to discuss innovative ideas to reduce inaccuracies, costs and inefficiencies.

Tune in to five-minute video interviews with Tammy Patrick, who focused on online voter registration as a way to dramatically improve the voter rolls, and with David Becker, who describes an interstate data sharing agreement that will help states keep their rolls clean.

During Voter ID: What’s Next? attendees heard from advocates and legislators on both sides of this contentious issue. The legislators, (left) Senator Brenda J. Council, Neb., and (right) Representative Patricia Harless, Texas, each spoke of success in their states.


The full session can be viewed here.

Election Issues on the November Ballot

NCSL is keeping its eye on three statewide ballot measures related to elections administration this November. First, Minnesota voters will consider a constitutional amendment that would require photo ID in order to vote. The legislature referred it to the ballot after an earlier version was vetoed by Governor Mark Dayton. Second, Arizona has a citizen initiative on the ballot that would institute a top-two primary, similar to the primary type that California and Washington use. And third, in South Carolina, voters will decide on the legislature’s proposal to amend the constitution to jointly elect the governor and lieutenant governor. Two of these measures had to make it through the state courts to find their way to the ballot—the Minnesota measure because opponents found the ballot language misleading, and the Arizona initiative because it initially failed to qualify for a lack of valid petition signatures. You can learn about all of these ballot measures and more via NCSL’s Ballot Measures Database.

One Big Number: 79. That is the percent of all the eligible citizens in this country who were registered to vote in 2010. The brand new interactive map from the Pew Center on the States provides this number, plus many, many other numbers related to voter participation, presented in a way that will make sense to John and Jane Q. Public.

Better yet, this isn’t just a static visualization of well-vetted data. It is a tool that users can manipulate. Give yourself time to play with the tabs, the pop-ups and the data tables to get the most out of this virtual gadget.
From the Chair

Representative Mary Helen Garcia (D), the chair of New Mexico’s House Committee on Voters and Elections, says that campaigning “is in my DNA,” having grown up in a political family. While NCSL asked her on August 29, 2012, about elections issues in the Land of Enchantment, it’s worth noting that her work at the Roundhouse (New Mexico’s capitol) has largely been about education. No surprise there—she’s a retired educator.

Excerpts:

- A lot of people have a difficult time with some of the cultural things we need to be so careful with here in New Mexico. People harp about photo voter ID, but in New Mexico we cannot have it because, for many Native Americans, it is a part of their culture that they do not take pictures. Many other states have Native American populations as well, but I don’t hear this being talked about as an issue.
- We’re trying to do more voter registration with women and with the younger generation, perhaps the children of immigrants who were born here. This younger generation just doesn’t seem to be as involved, although people who have just gotten their citizenship are very involved.

Read the full interview here for more on voter ID, other election issues and comments on local election officials.

The Election Administrator’s Perspective

While Bill Bullard, Jr., is only in his second year as the county clerk and recorder of deeds in Oakland County, Mich., he brings to his office a rich and distinguished public service career, including 20 years as a state legislator. Oakland is Michigan’s second largest county, with 1.2 million voters and a mix of urban and rural areas. On August 23, 2012, NCSL asked for his perspective on key election issues.

Excerpts:

- We have dead people on our rolls, and people who have moved away, and we have non-citizens on our rolls. Our secretary of state has come up with a solution I support. She has put on our absentee ballot application the question, are you a citizen, yes or no? Answering that question should make people think twice—if you’re not a citizen, you should not be voting.
- I’d say that in two to four years we may have new machines. This is going to be a topic after this election. Michigan still has $35 million in HAVA funds that can be spent on equipment. I’m a conservative Republican, and I don’t believe in spending money when you don’t have to, but when we’ve got federal money set aside for a particular purpose, if we don’t spend it, eventually somebody will take it away. It would be silly to not use it.

Read the full interview here for more on voting equipment, Michigan’s decentralized election system and filing deadlines.

Bookmark This: Electionsmith.com

This blog “specializes broadly in empirical research on the electoral process in the American states. We provide expert reports on the politics and processes of direct democracy in the American states...” It primarily covers citizen initiatives and ballot measures, but also does a good job covering election and voting issues. Since ElectionSmith is the product of Dr. Daniel A. Smith, from the University of Florida, the goings-on in The Sunshine State are well-reported.
Worth Noting

- Readers of *The Canvass* probably know if they are properly registered to vote. Others may not know, and may turn to a web browser to find out. If they use the question “can I vote,” they’ll quickly find themselves at the webpage, Can I Vote? Run by the National Association of Secretaries of State, this is a super-simple page to help anyone figure out if he or she is registered to vote (and how to get registered if the answer is “no”). Choose your state, and Can I Vote? will deliver you to your state’s official source for registration details. Information on Find Your Polling Place, Know What Kind of ID To Bring, etc. is also a click away.

- In states with new voter ID requirements, election officials are pulling out all the stops to make the adjustment smooth for their citizens. Or so says this Stateline article. With details on outreach to voters, creation of IDs for voting purposes, and training for poll workers (and costs associated with these efforts) from several states, it looks at the post-legislative side of voter ID laws.

- Design matters in running great elections (and maybe in all of life, but that’s beyond *The Canvass*’s purview). Fortunately, there’s a new report to encourage voter-friendly design, Better Design, Better Elections. If this seems like fluff, then consider one point from the report: “We estimate that in the 2008 and 2010 general elections combined, as many as 400,000 people had their absentee or provisional ballot rejected because they made technical mistakes completing the forms or preparing and returning the envelope.”

- Electionline Weekly has hit the nail on the head—again. The August 23 issue leads with this story: “Gloves come off as general election approaches; State and local election officials butt heads over variety of issues.” Too often writers use the phrase, “state and local election officials,” as if that is one group. But as the article points out, “state election officials” and “local election officials” can be at odds with each other when it comes to elections.

- “People with disabilities continue to be sidelined in important ways. Fully closing the disability gap would have led to 3.0 million more voters in 2008, potentially affecting many races and subsequent public policies.” That’s the conclusion of the new report, Sidelined or Mainstreamed? Political Participation and Attitudes of People with Disabilities in the United States.

- On August 30, a federal court in the District of Columbia blocked Texas’s new voter ID law from being implemented. Texas is subject to Section 5 of the Voting Rights Act, meaning it must receive pre-clearance from the U.S. Department of Justice or a federal district court in D.C. before any changes to election law can be implemented. Both agencies have now denied pre-clearance, leaving Texas with no option other than an appeal to the U.S. Supreme Court.

From NCSL’s Elections Team

Labor Day is over, so many of you will be in campaign mode for the next couple of months. You might like to know that NCSL has a variety of resources on one aspect of campaigns: finance. This is also a time when ethics questions can come up, and if they do, take a look here. If you’re interested in citizen initiatives and ballot measures, we’ve got data on those, too. Whatever issues you may face this fall, feel free to get in touch so we can steer you to the right resources. Please keep the questions coming.

Jennie Bowser, Susan Frederick and Wendy Underhill