



 Everything Cleveland

THE PLAIN DEALER

Paper ballots aren't foolproof

Friday, February 29, 2008

Paul S. Herrnson

Cuyahoga County is making a very poor trade for the upcoming primary. The switch from touch screen voting machines to centrally counted paper ballot/optical scan risks greater voter mistakes and adds new security threats. This is no way to boost voter confidence or protect against election fraud.

Over the past five years, I've led a research team from the Universities of Maryland, Rochester and Michigan, and we've conducted the most extensive comparisons to date of electronic voting systems. Our testing focused on "usability."

While the security of touch screen and other e-voting systems has been the focus of nearly all public discussion, recent history is clear: The election problem most likely to tilt a close race involves the inability of voters to cast their ballots the way they intended. That's why voters will need to be extra careful in casting their ballots next week.

In tests of six separate voting systems - including the past and future systems to be used by Cuyahoga County voters - our research team found voter error rates ranging from 3 percent to 15 percent. While a 97 is a terrific exam grade, a 3 percent error rate is more than enough to decide a close election.

Voters tended to make significantly more mistakes when the ballot design was complicated - not too surprising given the experiences in Florida's 2000 election.

Overall, the 1,500 users we tested liked e-voting and had confidence in it, and that's true for all the systems. But the touch screens - the machines being scrapped for next week's primary - surpassed the others in accuracy and registered the highest in user confidence and approval.

In general, paper/optical scan systems gave users greater difficulty casting their ballot as intended. That was under the best of circumstances. Cuyahoga County's primary could be more problematic: The version of the system it has selected won't provide voters the opportunity to use a scanner that checks for errors before handing in their ballot. Colorado decertified the system for that reason.

So, Cuyahoga County voters need to be extra careful next Tuesday when filling in those small circles on the paper form.

Watch out for stray marks. Erase fully or, better yet, ask for a fresh form. Make sure not to vote for too many candidates for a single race. Make sure you've voted for every race you intended to. You have to be responsible for checking your forms thoroughly before putting

them into a collection box.

Once you've turned in the form, it will be sent from your precinct to a centrally located counting machine for scanning. This procedure will leave a paper trail that can be audited in a contested election, but it can also add an unexpected crimp in security.

There is a rich history of wholesale vote tampering with paper ballots in the United States, including stolen and substituted ballot boxes containing thousands of votes. Any voting system involving paper carries its own security risks.

Worse, paper ballot fraud requires little computer sophistication. With paper, it takes only sticky fingers and an unguarded moment to commit undetectable mischief - no advanced technological knowledge needed.

Officials who approved the new voting system had justified concerns. Computer experts raise the possibility that some e-voting systems, including the Diebold touch screens, could be hacked. That is a potential problem that cannot be ignored.

But the switch to paper is unlikely either to provide genuine voting security or to fortify voter confidence.

Officials in Ohio and other states need to make sure they know what they're getting into. If anything, hasty changes in voting technology put voter confidence and election integrity at added risk.

Herrnson, a University of Maryland political scientist, directs the Center for American Politics and Citizenship. He co-authored a new book on a five-year study of e-voting usability published by Brookings Press: "Voting Technology: The Not-So-Simple Act of Casting a Ballot."

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