Problems with Voting Machines Disclosed

How Colleton County "Stuffed" Their Ballot Boxes

In the November 2010 election Colleton County reported 13,045 votes for statewide offices, even though only 11,656 ballots were cast¹. The discrepancy came to light only after the State Election Commission certified the results.

The Charleston *Post and Courier* reported that the ballots of 1389 voters were counted twice. The county elections director has assured the public that "the problem was a minor one" and "did not affect the results of the elections."

The possibility of double counting of precincts is a known problem. When Barbara Zia, Duncan Buell and Eleanor Hare met with Ms. Marci Andino, Executive Director of the SC State Election Commission, she explained that recounts of the vote were accomplished by summing the totals from the precincts a second time². When asked if the totals were always the same, she replied that they were not. When asked why, she responded that sometimes a precinct was left out or counted twice.

"Recounting" the Ballot

When citizens vote via a machine, any "recount" of the ballots is an illusion. Only paper absentee ballots are available for a recount, but even these are scanned a second time instead of examining them by hand. Since optical scanners do not always correctly interpret the intent of the voter, best practice requires that a recount of paper ballots be by hand examination.

In the case of votes cast on the voting machines, the ballot seen by the voter no longer exists, so a recount of the original ballots is not possible. The "recount" is performed by finding the sum of the totals from the precincts a second time.

Lancaster County Problems

Lancaster County replied to a Freedom of Information Act (FOIA) request that the usual digital files resulting from an election and requested in the FOIA do not in fact exist for the November 2 election. Totaling of votes in the November 2010 election was done manually. Apparently there was a discrepancy between the "database" at county headquarters and the "databases" in the individual machines and their controlling PEB devices. Due to the discrepancy, the automatic aggregation of votes from individual machines was not possible.

Incorrect Information at State Election Commission

On September 22, 2010, Duncan Buell presented the findings of the Ohio EVEREST (Evaluation and Validation of Election-Related Equipment, Standards & Testing) study to the SC State Election Commission. A reporter's transcript of this meeting shows Mr. John Hudgens, Chair of the SEC, saying (and Ms. Andino confirming) that the EVEREST study was conducted on an older version of the software. However, a FOIA response to Duncan Buell's request for version numbers indicates otherwise.

South Carolina is running exactly the same system tested in the EVEREST report; the software modules in EVEREST are line by line identical in version number to what South Carolina currently uses. The EVEREST experts declared that system to be irredeemable by mere policy and procedure. South Carolina relies entirely on its policy and procedure manual, a document that is not subject to FOIA requests.

<u>Audit Logs Reveal Problems with Voting Machines</u>

Other problems with our elections are being disclosed. Frank Heindel, a resident of Mount Pleasant, made several Freedom of Information (FOIA) requests, which he shared with the SC League of Women Voters. These audit logs³ indicate extensive problems, including failure of some voting machines to be operational on Election Day.

Voting Machine Expenses Continue

Although South Carolina voting machines have already been purchased, fees must be paid annually to the manufacturer in order to continue to use the machines. These fees, including firmware licenses and break/fix contracts exceeded \$800,000 last year. Also, it has been necessary to replace the batteries in the 12,000 voting machines. Battery costs for counties vary, but SC State Elections Commission paid \$69.95 each for their replacement batteries. These costs do not include the many other services, capital equipment (such as electronic poll books) and supplies required to hold elections. All equipment, including batteries, must be purchased from the manufacturer.

Our voting machines are reported to be nearing the end of their life cycle. Along with other states, South Carolina will probably soon be considering how to replace the current machines. A recent study commissioned by the state of Maryland⁴ has found that optical-scan paper-ballot systems are less expensive to use than electronic touch-screen (DRE) systems⁵, which are used in South Carolina. As in South Carolina, the Maryland machines are approaching the end of their useful life span. Using these systems becomes increasingly risky as the machines age and additional maintenance costs are to be expected. This study finds that "Maryland would save as much as \$9.5 million over eight years by switching to an optical-scan voting machine." A study in Florida⁶ also found that optical scan systems are less expensive to operate than DRE systems.

Submitted by Duncan Buell and Eleanor Hare

¹ "County Vote Totals Topped Ballots Cast," http://www.postandcourier.com/news/2010/dec/19/county-vote-totals-topped-ballots-cast/

² "SC Voting Machines: LWVSC Interviews Election Officials", *SC VOTER*, Fall 2008, http://lwvsc.org/files/lwvsc2008 4fall.pdf

³ http://www.scvotinginfo.com/

⁴ *Maryland Voting Systems Study*, December 2, 2010, http://mlis.state.md.us/2010rs/misc/2010VotingSystemsStudyReport.pdf

⁵ "Report: Scanners Cost Less Than Touch-screen Machines," http://www.gazette.net/stories/12242010/polinew172811 32537.php

⁶ "Cost Savings for the Taxpayer," Colin Lynch, May 2, 2006, http://www.cs.pitt.edu/~collin