

The Honorable Kent Williams
Tennessee House of Representatives, District 4
Speaker of the House
19 Legislative Plaza
Nashville, TN 37243

June 15, 2009

Dear Speaker Williams,

We are gravely concerned about proposals to replace Tennessee's recently enacted law for hand-counted audits of computer vote tallies with machine re-tabulation, and to do manual counts only when machine tallies differ. These proposals should be discarded and the original requirement upheld.

The practice of hand-counting a random sample of ballots and comparing the results to original electronic tallies is nearly as old as machine vote counting itself. As of June 2009, a majority of the States, including Tennessee, have either conducted hand-counted audits of electronic vote tallies in recent elections, or have enacted statutes that will require them to begin doing so in 2010.¹ Some of those provisions are several decades old, set in place when electronic tabulation of votes was initiated.

There is a sound technical basis for verifying electronic vote tallies by manually counting a sample of precincts or vote subtotals. As computer scientists and election experts, we know very well that there is no reliable way to ensure that a security-critical computer system, such as a vote scanner, is free of malicious software that can change votes -- or is even bug-free, for that matter.

It has been shown time and time again that there is a clever way to defeat every defense that has been invented. Furthermore, basic errors and gross security holes have been exposed in every existing voting device examined by computer security professionals to date. Errors are routinely detected in elections -- and many smaller errors are probably missed. In 2008, hand-counted tabulation audits have discovered errors that led to incorrect vote totals.² Computers can greatly increase the convenience and accuracy of elections -- but only if we double-check the results independently of the hardware or software by hand counting a randomly selected sample of the ballots.

By contrast, a re-tabulation of ballots by another computer device is subject to the same errors and, especially, potential corruption of software as the devices that performed the initial count. If the devices used to re-tabulate come from the same manufacturer; contain all or some of the same hardware, software, or ballot definition files; or have been maintained by the same personnel at the same sites prior to the election, then that re-tabulation is of no value in verifying the election.

The cost of audits is minimal: election officials in Minnesota recently reported a cost of 9 cents per audited vote in the 2008 post-election audit, a figure consistent with reports from other States. Election officials who have been reluctant to conduct audits have remarked after completing them that they are not an excessive burden and help reinforce voter confidence.³

1 Summary of State Manual Audit Provisions, Verified Voting Foundation, May 2009. <http://verifiedvoting.org/audits>

2 Mary Pat Flaherty, *Ohio Voting Machines Contained Programming Error that Dropped Votes*, The Trail: A Daily Diary of Campaign 2008 [Washington Post Blog, Aug. 21, 2008](http://washingtonpost.com/44/2008/08/21/ohio_voting_machines_contained.html), http://voices.washingtonpost.com/44/2008/08/21/ohio_voting_machines_contained.html

Thaddeus Greenon, *Registrar of Voters Considers Dumping Equipment*, EUREKA TIMES-STANDARD, Dec. 22, 2008, at 1.
3 "Eyes on the Vote Count: Non-partisan Observer Reports of Minnesota's 2008 Post-Election Audit and Recount." Citizens for Election Integrity MN, May 2009, p. 34. http://ceimn.org/files/ceimn.MN_audit_recount.report.May_26.2009.pdf; Sean Greene, "State-Mandated Audit a Success, Officials and Advocates Say," Electionline Weekly, December 14, 2006. Retrieved from http://www.ceimn.org/news/minnesota_performs_first_post_election_review_0

The 2008 report of the Tennessee Advisory Commission on Intergovernmental Relations (TACIR) said “machine counters can be programmed, maliciously or negligently, to miscount,” and recommended comparison of hand-count and machine vote totals⁴. Nothing has changed since the publication of the TACIR report to make hand-counted audits any less necessary than they were when the Assembly passed the Tennessee Voter Confidence Act.

We respectfully urge you to preserve the important work you have done to reinforce voter confidence and electoral integrity in Tennessee, and leave in place Tennessee's manual count provision.

Sincerely,

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⁴ “Trust But Verify: Increasing Voter Confidence in Election Results.” Report of the Tennessee Advisory Commission on Intergovernmental Relations, January 2008, p. 69. http://www.tennessee.gov/tacir/PDF_FILES/Other_Issues/trustbutverify_phase1.pdf