

June 24, 2005

The Honorable Bruce McPherson  
California Secretary of State  
1500 11<sup>th</sup> Street  
Sacramento, CA 95814

**Re: Request for Public Comment on Voting System Audit Trail Standards**

Dear Secretary McPherson:

We write in response to your recent request for public comment on pending legislation that would impact the procedures used in California to verify the accuracy of computerized vote counts.

Two bills are currently moving in the California Legislature which would mandate that the voter-verified paper audit trails produced from direct recording electronic (DRE, or "touchscreen") voting machines be used to perform the one percent manual count required under California law. These bills are Senate Bill 370, authored by State Senator Debra Bowen, and Assembly Bill 1636, authored by Assembly Member Tom Umberg.

California's manual count law was enacted in 1965, shortly after software first started being used in punch card voting to tabulate ballots. Election Code Section 15360 requires that:

"During the official canvass of every election in which a voting system is used, the official conducting the election shall conduct a public manual tally of the ballots tabulated by those devices cast in 1 percent of the precincts chosen at random by the elections official. If 1 percent of the precincts should be less than one whole precinct, the tally shall be conducted in one precinct chosen at random by the elections official."

Election Code Section 336.5 provides the following definition for the manual count:

"One percent manual tally" is the public process of manually tallying votes in 1 percent of the precincts, selected at random by the elections official, and in one precinct for each race not included in the randomly selected precincts. This procedure is conducted during the official canvass to verify the accuracy of the automated count.

It is expressly stated in California statute that the purpose of the manual count is to **verify the accuracy of the automated count**. The one percent manual count is the one and only procedure performed in California's voting process that gives the public any assurance that the software used to count votes has not been compromised.

The manual count provides the *only* window into the vote counting process and provides members of the public with the opportunity to observe with their own eyes that the software used to count ballots is accurate and reliable.

In a paper-based voting system, such as an optical scan system, voters mark a paper ballot that is then optically scanned and “read” by the voting equipment vendor’s software. Vendor software is then used to compile all the ballots and tabulate the results. In California’s optical scan counties, the manual count law is satisfied by registrars selecting a subset of the paper ballots at random, which are then counted by hand in a public and open process, and the hand-counted results are checked against those generated using the vote tabulation software.

This law has served California voters well for most of the past four decades by ensuring that software glitches, human error, or attempted vote fraud do not result in erroneous vote totals. The manual count law provides a form of transparency in our voting process which is crucial given that the software used to count ballots is proprietary and not open to public inspection.

However, over the past five years, the manual count law has been undermined with the introduction of paperless, electronic voting machines. Counties using electronic voting machines do not have an independent audit trail they can use to verify the accuracy of their software vote counts. Instead, and in violation of the manual count law, these jurisdictions have printed out images of electronic ballots after voters have voted and polls have closed. If an electronic ballot was not properly recorded or stored in the first place, these printouts will not detect this error, since they originate from the same data source to which they are being compared. This procedure also means that election officials are wholly relying on their vendor’s proprietary software to record and count votes.

Fortunately, California’s legislature unanimously passed a bill last year, SB 1438, to require that all electronic voting machines produce a voter-verified paper audit trail of every electronic ballot cast. The purpose for this paper record is two-fold: to give an individual voter confidence that his or her own ballot was properly recorded; and to give election officials a *meaningful* audit trail they can use to publicly verify the accuracy of software vote counts and satisfy the manual count law.

SB 370 and AB 1636 would clarify in California statute that the voter-verified paper audit trail is the record to be used to perform the one percent manual count. We strongly urge you to support these two bills. The voter-verified paper audit trail must be used to perform the one percent manual tally. Otherwise, the voter verified paper audit trail is practically meaningless, and the one percent manual tally is totally meaningless. *If the paper audit trail that the voter verified is not used to verify the overall election results, then it will be possible for the paper record to reflect one set of votes while the electronic record reflects a different set of votes without ever being detected.*

Objections have been raised to this and similar proposed legislation, based partly on fears that accessibility concerns will be ignored. In fact, security and accessibility concerns are not and should not be construed as conflicting interests.

It is in *all* voters' interests to ensure that elections officials have the ability, and are required by law, to conduct a meaningful audit of election results. Without routine and public verification of software vote counts, election officials will be far less likely to detect software vote counting problems or security breaches.

Moreover, advocates of the voter-verified paper audit trail recognize the importance of providing all voters with the ability to verify their individual ballot, and are committed to continue working with vendors and regulators to ensure that the voter-verified paper audit trail is accessible to all voters. Indeed, AB 1636, if enacted, would affirm that commitment in statute.

Hundreds of millions of dollars have been and are continuing to be spent in California to equip every polling place with an accessible voting device by January 2006. The critical need for the security and auditability of all votes should not, however, be unnecessarily sacrificed in the name of improved accessibility. The Help America Vote Act requires that all voters have the opportunity to cast a secret, independent ballot; it does not, however, require that every aspect of the voting process be equally accessible to everyone. In 2003, the California Secretary of State sought and obtained a legal opinion on this matter from the United States Department of Justice, which reads, in part:

So long as a disabled person can access and participate in the *essentials* of a voting system -- such as the ability to cast a ballot in privacy with a full opportunity to review the ballot before casting it -- his opportunity to access and participate in the voting system is sufficiently "similar in kind, quality, quantity, or degree" to that enjoyed by non-disabled persons. The fact that the precise *means* by which he may access and participate in those essentials differs from those available to non-disabled persons does not deprive him of the "same opportunity" to participate in the voting system -- if it did, no voting system could ever comply with HAVA.<sup>1</sup>

A federal district court confirmed this interpretation in 2004 after the Secretary of State successfully defeated a legal challenge to his new regulations. That case, *Benavidez vs. Shelley*, was decided by federal Judge Florence-Marie Cooper, who ruled in favor of the Secretary of State. In her decision, Judge Cooper wrote:

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<sup>1</sup> This opinion was issued in October 2003 and is available online at <http://www.usdoj.gov/olc/drevotingsystems.htm>. A copy is also included with this letter.

“The interest in the Secretary of State in fulfilling his statutory duties and the public interest in accurate, verifiable vote counts outweigh the Plaintiffs’ interest in an unassisted, private vote.”<sup>2</sup>

Neither SB 370 nor AB 1636 have received a single “no” vote in the Legislature so far. Similarly, last year’s bill mandating the voter-verified paper audit trail, SB 1438, passed unanimously in the Legislature.

We realize that some county registrars are opposed to this legislation, but we should not forfeit the only form of public verification of software vote counts due to cost or time constraints. It is the responsibility of California elections officials to ensure that vote counts can be publicly audited. Administrative concerns, while valid, must come second. Elections are designed to provide the public with a meaningful opportunity to express their views on candidates and measures. If we lose public verification of election results, one can anticipate that many Californians will lose their incentive to vote altogether.

Already we see signs that confidence in California’s voting systems is eroding. A survey conducted by the California Voter Foundation last summer found that 22 percent of California’s infrequent voters and 38 percent of California’s nonvoters already don’t believe that their votes will be counted accurately<sup>3</sup>. An October 2004 Field Poll<sup>4</sup> found that more than a third of California’s voters were not confident about the integrity of electronic voting machines and one-fifth had little confidence that the Presidential election would be decided fairly.

We know elections aren’t perfect. We know software is not perfect. There have been plenty of examples of vote counting problems in recent years in California, of glitches and human error occurring. It is inevitable that there will be problems. The real challenge is to ensure our system is transparent and accountable so that when problems occur they can be detected and corrected.

We appreciate your consideration of these matters, and would welcome the opportunity to meet and discuss the manual count law and any other voting system security and accountability matters with you.

Sincerely,

Kim Alexander, President, California Voter Foundation  
Matt Zimmerman, Staff Attorney, Electronic Frontier Foundation

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<sup>2</sup> Judge Cooper’s decision is available online at [http://www.eff.org/Activism/E-voting/Benavidez/20040706-Order re TRO.pdf](http://www.eff.org/Activism/E-voting/Benavidez/20040706-Order_re_TRO.pdf).

<sup>3</sup> *California Voter Participation Survey Report*, published March 2005, page 136

<sup>4</sup> This Field Poll is available online at <http://field.com/fieldpollonline/subscribers/RLS2148.pdf>