

My name is Meg Holmberg. I'm a resident of Alameda County, a longtime poll worker, and a member of the East Bay Voting Rights Task Force (although I'm speaking just for myself, not as a representative of the group).

After attending the hearing in Sacramento in Monday, February 8, I want to offer the following comments on the future of voting in CA. These follow from my own experience as a poll worker, and also from what I've learned over the past four years about our elections and the problems posed by the use of technology to count our votes. Because I am neither a statistician nor a computer scientist, these comments reflect a lay person's understanding of these complex issues.

1) **STATISTICALLY-BASED AUDITS.** No matter how we count our votes, we need statistically-based audits to ensure that the candidate certified as the winner is actually the person who received the most votes. As I understand it, the "audit" now conducted in CA does not accomplish this because it designates a fixed percentage of precincts to be hand-counted. If the margin of victory in any given race is small, this pre-determined percentage of precincts may not be large enough to uncover a small error that would reverse the outcome of the election. In other words, the closer the race, the larger the number of ballots that must be recounted to ensure that the outcome is correct.

In any future hearings on the future of voting in CA, I hope that the SOS will include among its invited panelists someone with expertise on statistically-based audits.

2) **SUBMITTING COMPLETED BALLOTS VIA THE INTERNET.** The idea of submitting ballots via the Internet is getting increasing attention from advocates for military and overseas voters, and also from cash-strapped jurisdictions in other parts of the US. (It was alluded to only briefly by Bob Carey.) From what I have learned, **THERE IS NO FORM OF SECURE INTERNET VOTING** (including fax, e-mail, voting from one's home computer or from a dedicated "kiosk.") As I understand it, CA law now allows for voting by e-mail or fax in tightly prescribed situations. If the wider use of Internet voting ever begins to gain traction in CA, I would urge the Secretary of State to heed the warnings of cyber-security experts such as Dr. David Jefferson, Senior Scientist at Lawrence Livermore Labs who recently advised the Federal Communications Commission:

"The worst security nightmare would be to allow voting from voters' own PCs or smart phones, or any other unsecured terminal node on the Internet or telephone network. (This includes all web-based voting, email voting, fax voting, phone voting, etc. and any hybrids.) At the technical level I am talking about, they are all exceedingly dangerous, with email and fax being worst of all. There are so many kinds of attacks that can corrupt such an election that the mind boggles....All of these attacks are automated, and many are virtually undetectable and absolutely uncorrectable. Such attacks can be prepared secretly months in advance and lay dormant until the election. Most do not require insider knowledge or access to source code for the voting system. They can be prepared and triggered by anyone on Earth with Internet access, or any criminal syndicate controlling a botnet, or any foreign intelligence agency."

(Excerpted from <http://blog.verifiedvoting.org/2009/12/14/254>.)

3) **TRANSPARENCY PROJECTS.** I was intrigued by the description of the Humboldt Transparency Project during the public comment segment of Monday's hearing, as this sounds like an innovative, cost-effective and workable approach to ensuring the

transparency of our elections and giving citizens confidence in the outcomes. I would hope that in a future hearing someone from the Humboldt project would be an invited panelist. And, I recommend that the SOS office conduct a pilot test of a transparency project in a larger urban county.

4) THE HEARING PROCESS. Although I greatly appreciate the Secretary of State's efforts to hold a public hearing on election-related issues, I was dismayed at the lack of balance in the allocation of time to speakers. It appeared to me that representatives from vendors of voting equipment and services were given almost unlimited time to make their presentations. As a result, members of the public who wanted to comment were cut short. In the future, I would recommend that panelists be given a time limit, and that the discussion facilitator intervene to enforce it. I also urge you to include representatives from election integrity groups as invited speakers, rather than relegating them to the end-of-the-day public comment period.

Thank you!

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