



Vora, Poorvi <poorvi@email.gwu.edu>

HB 1278

Poorvi Vora <poorvi@gwu.edu>

Sun, Mar 4, 2018 at 11:20 PM

Reply-To: poorvi@gwu.edu

To: "Kaiser, Anne Delegate" <anne.kaiser@house.state.md.us>, "Washington, Alonzo Delegate" <alonzo.washington@house.state.md.us>, samuel.rosenberg@house.state.md.us

Dear Chair Kaiser, Delegate Washington and Delegate Rosenberg,

Congratulations on a fine slate of bills in response to the serious threat faced by Maryland's voting systems.

Delegate Washington had shown an interest in my suggestions on improvements to HB 1278, "Election Law – Postelection Tabulation Audit". My written testimony, attached, contains details on these suggestions. I've summarized them below.

Based on Chair Kaiser's introduction to the bill last week---stating that the motivation for the bill is to get a better understanding of Maryland's audit needs before incorporating stronger audit requirements---I have added an additional point not in my written testimony. This point addresses how Maryland may design its "exploratory" audit to maximize its findings and feed into stronger audit legislation next year.

If there is a subcommittee meeting at which it will be helpful for me to be present to discuss these aspects and finesse or explain the points, I would be happy to attend, my schedule permitting. Please let me know. I am very happy to see that some of our suggestions have made it into your bills.

The main points for improvements to HB 1278 are as follow:

1. The audit should be before certification.
2. There isn't sufficient randomness in the choice of precincts audited. Randomness is the key element giving teeth to an audit.
 - Preferably, all precincts should be chosen at random.
 - If the administrators are concerned that this might lead to too many votes being counted, you could limit the maximum number of votes to be counted to 2% as well, requiring, for example: "a manual audit of at least 2% of the precincts statewide or 2% of the votes cast, whichever is smaller"; "all precincts will be chosen at random in a public ceremony"; "at least one precinct will be chosen per county".
3. The Bill should be more specific that it is the voter-verified votes that will be counted, and not stand-ins for these votes. Thus:
 - The original votes should be counted for absentee ballots cast (and not the ones hand-duplicated by the boards, these are not voter-verified)
 - The original textual votes should be counted for Express Vote or other electronically-marked ballots (and not the bar codes, which are not voter-verified)
4. The audit report should include information on the measured risk for each contest audited. The risk is the probability that, if the outcome is incorrect, the audit does not detect this. A lower risk is better. The legislation does not require a risk-limited audit. That is, it does not require that the risk be below a certain fixed value. It should require, however, at the very least, that the audit report state the value of the risk. This gives the citizens and the Legislature to understand the quality of the audit given the current parameters of percentage of votes/precincts audited.
 - Additionally, the report should contain information on the precincts chosen, how they were chosen, why they were chosen in this manner, how the votes were counted (was there a pair of people looking at each ballot?),

how was it made possible for the public to view the audit (the public would need to have access to see each ballot and count for themselves, else they don't know if the count was correct), how were votes and voters reconciled (separately for each precinct, as this is a precinct-based audit). In the report, over votes should be distinguished from no votes.

5. The legislation should state a value for an unacceptably high measured risk level, beyond which the audit should be expanded, at least to some degree.

6. A committee of election audit experts and election officials should be set up to help design and carry out the audit; the intention being to maximize our understanding of Maryland's audit needs for future election audits and to maximize the audit's capacity to determine problems. If the State wishes, I will help Maryland constitute such a committee. It is in the State's interests to do this as well as possible the first time around.

Thanks a lot for your great interest in this problem. I look forward to hearing from you and to help you in any way I can.

Poorvi L. Vora
Professor of Computer Science
The George Washington University



HB-Written-1278.pdf

121K