

## Testimony Against HB0426

Honorable Delegates

Like last year, please enter an unfavorable report about HB0040. Unlike last year, this bill is not proposing a pilot study before implementation.

I have done federal audits for 40 years based on statistical sampling, and I find the material in the new section (B), subsection (1) beginning on page 4, line 10, to be extremely hard to understand. The bill puts a lot of faith in the State Board of Elections to design a complicated sampling process so reliable that its results could be substituted for the election results being tested.

I am deeply concerned that the process for conducting these risk-limiting audits in Section 1 could result in the results produced by the election software being replaced by the sampling results. Last year, the sampling was to be done on a pilot basis, before adoption was considered.

Section 1, subsection (b)(5) on page 5, lines 5-8 states

If a risk-limiting audit finds that the election outcome determined by the electronic count is incorrect, **the official result of the election shall be altered** to match the outcome determined by the risk-limiting audit. **Changing the results of an election based on sample results is a radical statement, in my opinion.**

Sampling results involve sampling error and confidence ranges. Usually, one would state something to the effect that we are 95 percent confident that at least x more people voted for candidate A than the results shown by the electronic software (the lower bound of the confidence interval). We could also state we are 90 percent confident that the estimated number of votes received for candidate A are between x and y, with a sample mean of n votes. If the lower bound of the interval (x) is materially larger/smaller than the actual votes cast, then we have some basis to cast doubt on the software election results. The required materiality and confidence levels desired would impact the sample size needed.

It would seem to me, that if the sample shows a big enough error to change the election results, that one would want a 100 percent recount of the ballots and moreover, it could cast doubt on all the results not tested that used the election software.

I am in favor of doing the audits to test the election results, but I believe using section 1, subsection (B)(5) to use the audit sample results instead of the count being tested, is far too risky for me to support the bill with amendments.

Please enter an unfavorable report about HB0040.

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