

Jerome Lovato

From: harvie@electionquality.com
Sent: Monday, March 27, 2017 6:33 AM
To: Jerome Lovato
Cc: Harvie Branscomb; Dwight Shellman
Subject: Three questions homework

Categories: CORLA

Jerome and all audit stakeholders:

Thanks again for this opportunity for a public process ahead of official rulemaking.

I think it is unwise in 2017 even as a step towards a more complete audit in 2018 to "audit" only one contest such as, if available, a statewide. Even in the first limited year of a state coordinated RLVTA. That is too little value to obtain from the work of obtaining the randomly selected ballots. I suggest let's audit to a risk limit at least all countywide contests in 2017.

It IS wise to set the initial audit sample size based on one narrow-margin significant-outcome contest in each county. The minimum margin contest that sets the sample size could also be drawn from legislative districts in 2018 or from a statewide contest of lowest margin if that drives the audit to a higher sample rate. It could be left up to local county stakeholders how many - if any - of the harder to audit non-legislative intra-county narrow-margin contests are to be audited to a risk limit as long as there is a minimum sample size achieved by the audit process. Such as 16 ballots per county.

For 2017 the contest to use to set the sample size can default to the narrowest margin contest countywide or, if none, then a pro-rated average of margins of narrowest countywide contests in adjacent counties.

If it requires extra samples, a county could locally choose a well contested and agreed-to-be-important contest to drive the audit sample to more samples than otherwise required.

Otherwise if there is no countywide contest we could decide to use a weighted average of adjacent county narrowest margins for countywide contests under the presumption the county without a countywide contest shares some contests with these other counties.

Note importantly that unless discrepancies cause escalation, once the narrowest margin contest risk limit is satisfied, the wider margin contests of same scope will also be satisfied and no further voter intent capture will be needed to reach risk limits for those contests.

What if there is a statewide contest?

Then we should audit the statewide contest by sampling in each county sufficient to reach the risk limit for the statewide contest in addition to whatever risk limits are thereby reached countywide. And in each county the narrowest margin countywide risk limit should also be reached even if additional samples are needed to reach it.

What if no ballots are sampled for a statewide contest in some small counties?

All counties should audit a minimum number of ballots - such as 16.

In 2017 the minimum set of contests to be audited can be arbitrarily limited to county wide and statewide only. These contests would be required to meet a risk limit and perhaps would chance to exceed the risk limit as ballots are sampled sufficiently to satisfy the narrowest countywide margin contest risk limit in the first session of voter intent capture.

This approach dramatically simplifies the difficulty of the state role by temporarily eliminating the need for coordination by the state of the more complex sampling decisions for multi-county contests during the 2017 introduction of the RLVTA audit.

I do however suggest that the state use the 2017 experience to prepare for coordinating multi-county risk limits needed in 2018 when state senate and house districts are intra-county contests in large counties.

This preparation can happen without impact to counties and after the 2017 audit process is complete. An accurate workload prediction for multi, intra-county contests such as in multi-county legislative districts can be made from data collected in 2017 to help us define risk limits and process for these contests to be used in audits in 2018 and beyond.

Harvie Branscomb