

Steven Ward

From: Steven Ward
Sent: Wednesday, August 05, 2015 1:45 PM
To: Steven Ward
Subject: PERC preparation for pilots

From: [harvie](#) [REDACTED] [harvie](#) [REDACTED]
Sent: Wednesday, August 05, 2015 9:50 AM
To: Dwight Shellman
Cc: [harvie](#) [REDACTED]
Subject: PERC preparation for pilots

Dwight - another email for PERC

Thanks. Apparently the plan for November in Denver is substantially different than what they did in May. At least UOCAVA and in-person voting will both be using a different configuration or different product.

The "Remote Voting Server" is either one of the poorest choices for a component name or a stalking horse for things to come. The test lab report for Dominion is vague about the configuration that was tested. It lists components such as including "ethernet network hardware." It is important to learn these details.

What follows are numbered suggestions for review of pilot voting systems:

1) Like the mail ballot plan and the new idea of watcher accommodation plan we need a voting system configuration plan that the public and the PERC can refer to that specifies the physical and logical configuration of voting system components and how they are to be connected and used with a flow diagram and a link to relevant documentation -all of which to be placed online. For example when and where are secrecy sleeves used and when and how are ballots transported and if precinct scanners are used what configuration for rejection will be used and when and where will write-in adjudication be done.

2) The PERC is empowered to create conditions for use but it probably isn't technically qualified to create most of them.

But one such condition that PERC is qualified to issue is a requirement to publish online every vendor instruction manual and configuration guide (possibly with exceptions or minimal redaction related to security) and more importantly every report that can be created by and also county documents related to the voting system. Such publication should occur at least a month before any advice is delivered by PERC to the SOS. If so the public can sift through details where the committee cannot or will not for lack of time. The above plans approved by the SOS likewise should be put online by the SOS.

Ideally documents (logs, configurations, reports etc) will be published when created or issued or used. Only when this is overly taxing should the publication be delayed but in any case published well before evaluations are formulated. Such documents ought to include scans of hand written documents, scratch pads and other tangible evidence of process (without PII). To avoid interference SOS observers can be tasked with the role of publication.

3) PERC and SOS should require the preparation of ballot scans and cast vote records for possible release under CORA for the time they legally become available. This means privacy redaction at state paid and published

cost and publication of a description of how and how often the redaction was done. That process ought to be completed by the first available CORA release date.

4) Use of video documentation by SOS observers should be seriously considered. At least enough to document the full flow of election materials without impinging on voter privacy. Like the "top to bottom review" of California this pilot and its documentation may be used by other states perhaps for years.

5) PERC has overlooked that some counties will (I assume) use precinct (VSPC) tabulation and hence voters using paper ballots will directly experience the voting system (rejection due to overvote etc) and deserve to comment on their experience. The current plan is to skip the survey for in person paper voters - but these may be the very people who are most skeptical about the tablet or DRE voting too and their opinion may be relevant to the evaluation.

6) There is an important need for a super -LAT that will allow members of the public and other officials to vote ballots in potentially problematic ways that may not have been tested in the Labs. This does not have to be part of the legal LAT but it must seek to determine accuracy and efficiency in difficult circumstances and be well documented. Each marginal marked ballot should be inserted 10+ times in the same tabulator to check reliability of vote mark interpretation... And the same problematic ballots inserted in other tabulators each 10+ times to check consistency across machines. If all ballots in this test are inserted 10 times the results should be divisible by 10.

7) In any pilot tabulation by central count scanners and particularly for any recount the following method should be used to reconfirm the accuracy of the count for only one selected contest:

Hand sort the ballots by contest choice while checking for damaged ballot and tabulate in separately reportable batches. (Presumably all UVS pilots can report by batch). No batch should have votes for more than one choice in it. Under votes go in separate batches as do over votes.

Then any discrepancies between hand sort and machine interpretation will be revealed. This is far more precise than a RLA and very much suited to a pilot evaluation and any recount. It could be one of the conditions for use by all vendors and will eliminate any latent questions about the precision of machine interpretations of voter marks. Some of the systems have user controllable parameters for achieving precision. This method can be used during LAT to confirm the best parameters are set. This method could of course be used for the super-LAT proposed earlier.

8) Another suggestion for a condition for use is to require contest targets to be located to the extent possible at the same physical location on the form for all ballot styles. This will aid in all instances of hand sorting and auditing including during LAT. If multiple pages (e.g. 2 sides) are used and local districts are coordinating the precinct based county/state contests should to the extent possible be on a separate page (separate side) from the contests that ignore precincts. The side for local districts that ignores precincts may not need a precinct designation. This is for the same reason as well as for privacy protection of CORA produced images. Such conditions cost nothing to implement.

Those are all suggestions to be forwarded to PERC and the appropriate personnel at DSOS if you please and also I hope they will be brought up at the appropriate time.

Harvie Branscomb