

Commentary on CO SOS draft rules of Jan. 16 by Harvie Branscomb

Issues that merit either edit or supplement of proposed regulations:

1) Data that feeds into and comes out of audit must be made public and the whole audit process must be held in public. Audit of processes that depend on people/ software (officials, CVRs, RLATool) that are not visible to public or are effectively being audited will never be convincing. Reports of investigations that happen away from public oversight are unconvincing. All elements of the audit should be possible to verify external to the SOS or county offices by sufficient observation and access to data.

2) Mandatory machine recounts can eventually be eliminated only after EVERY contest is subject to RLA and RLA enforces applicable escalation to a full hand count. At present the SOS reportedly has little intention of subjecting any county to a "full hand count." RLAs by definition are allowed to lead to a full hand count and *required* to do so if sampling does not give adequately strong evidence that the reported outcome is correct.

Process for such "full hand counts" including when they begin must be defined in rule. All "audited" contests, not just target contests must lead to a full hand count when there is a sufficiently narrow margin. Otherwise non-target contests are simply NOT audited. Likewise target contests must be subject to full hand count or this is not a RLA.

Decisions for selection of target contests must incorporate minimal victory margin at first priority for same-scope districts (e.g. countywide) to be sure the audit sample is adequate for non-target contests. Non-countywide districts must become target contests whenever the sample derived from countywide minimum victory margin contests will be insufficient to meet the risk limit for the non-countywide contest. Non-target district votes must be captured, corrected by audit boards and discrepancies must lead to additional sampling as with target contests in order to be considered "audited."

3) The SOS discretion to select target contests should be cautiously limited and seen as necessary only in the startup period of the audit. A formula should be placed in rule to guide/enforce selection of target contests (multiple contests if not all contests). As a first step, all federal contests should be target contests. SOS may add state and local contests to the list of target contests.

4) Scanning must be considered part of tabulation, not independent of it. Readjudication doesn't access the ground truth of a voter-marked, voter-verified paper ballot. Re-adjudication of same scans is not a recount. This is similar to the issue encountered in Maryland auditing where Clear Ballot tabulated from ES&S ballot scans and some in Maryland called that an "audit." Scanned images (pictures) differ from original paper ballots for a variety of reasons, including: low resolution, defective or dirty scanner sensors, deliberate color dropout and printing of ballots in a dropped out color, missing or duplicated scan files, etc.

5) "Passage of RLA" for one contest does not authenticate scans for any other contest and must not be used to justify any reuse of ballot images/pictures for recount. This is a violation of a founding principle of the RLA.

6) The SOS anticipates a mechanism for counties to investigate discrepancies during audit-CVR (aCVR) capture. This must not be allowed to violate the blind capture principle.

Issues that relate to best practices in support of proposed regulations:

7) By far the most powerful process to obtain both efficient sampling and necessary anonymity to support the first point is to sort ballots by groups of styles or individual styles (in envelopes or outside them). Boulder sorted and batched by presumed style in 2017 using its Bell and Howell envelope scanner sorter. Counties have demonstrated willingness and ability to number (by hand in most cases) the ballots prior to audit. We would expect them to be willing to hand sort or machine sort ballots (as applicable) if they are aware of the benefits.

All counties can and ought to sort by political party for the primary. That sorting is almost required for Unaffiliated packets returned in the primary. Discovery and reporting by actual returned party-style is legally required. This is one step more difficult than simply sorting by presumed style as indicated by the SCORE record of what ballot style was sent. The county officials are beginning to recognize the benefits of sorting with little or no help from SOS staff. SOS staff are saying there is resistance to sorting among counties - so rules will be written in an attempt to avoid it. That means that the audit has to depend inappropriately on CVRs--which are the subject of audit. That is a substantial flaw in the audit.

8) The ballot manifest should not be originated from CVRs being audited. The ballot manifest defines the world of ballots from which the outcome is computed and from which the sample is drawn. CVRs might be used to populate additional fields in the ballot manifest once independent sources (e.g. from SCORE) are used to verify that CVR data is credible with respect to style and scanner number and batch number.

9) In order to minimize anonymity issues and simplify sorting and batching by style, it would help to limit the number of styles, at minimum by using these three techniques (some of which may require regulatory statutory changes):

9a) Be sure that redistricting splits congressional districts only in counties with large numbers of electors in each district and automatic sorting equipment. Eagle and Park counties should not be allowed to contain multiple CDs. House and Senate Districts should match county lines whenever possible. Multi HD counties should all be large and should all have envelope sorters. Most legislative districts already comply.

9b) Coordination of non-countywide districts should be limited to remove any introduced loss of voter privacy/ ballot anonymity. If the number of styles can be reduced and CORA 205.5 complied with by not coordinating some SD, School or Muni districts, coordination should be avoided so there is no impact on public access to the audit.

9c) If some Special District, School District or Municipal Districts are coordinated but anonymity can be preserved by placing them on a separate, independently tabulated card this should be allowed and encouraged. (This will probably require a change to statutory form of ballot to put the page break in an

appropriate place to achieve anonymity.) This will also reduce the number of styles.

9c - continued) Rules that require keeping first and second cards together or creation of dummy first card when first card missing must be removed so that style and CVR of each card can be made independent and easy to process. Dominion's technology supports this. The cost of additional cards can be borne by coordinated districts that when added to the single card, introduce voter privacy issues by creating additional rare styles. The tabulation system should not attempt to report "ballots cast." The eligibility system should. The tabulation system reports the number of cards cast (# of first cards, # of second cards, etc.)

9 continued) To the extent paper ballots or portions of CVR files remain non-anonymous and therefore risk voter privacy, the specific items at risk can be excluded from the audit by treating each as inaccessible and also forced to be interpreted as adverse to the presumed outcome (reported tabulation outcome) such that additional ballots are likely to be sampled. Of course, the presumption of adversity does not create a real discrepancy that is to be recorded into official election results.