

# ELECTION INTEGRITY COMMISSION

Pima County, Arizona

**TO:** Honorable Chair and Members  
Pima County Board of Supervisors

**FROM:** Tom Ryan, Chair  
Election Integrity Commission



**DATE:** April 17, 2015

**RE: Recommendation to Use Ballot Images to Enhance Early Ballot Audit**

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The Pima County Election Integrity Commission (EIC) recommends that the Board direct the County Elections Department to conduct a **Pilot Study** on the use of ballot images to enhance the integrity of the post-election hand count for early ballots. Ballot images will be available in future elections with the recently purchased central count tabulation equipment. This will make it possible to hand count early ballots from selected precincts in the same manner as the hand count of precinct-cast ballots. Ideally, the pilot study would be conducted as part of a relatively uncomplicated election such as the 2016 Presidential Preference Election in which there is a small number of races and ballot styles.

## **Why? The Current Early Ballot Audit is Insufficient.**

The existing procedure for hand count of early (mailed) ballots differs significantly from that of precinct-cast ballots. For precinct-cast ballots, the audit is “end-to-end,” meaning that the hand count tally for the audited races can be compared to figures that appear in the final canvass, or Statement of Votes Cast. In contrast, the hand count of early ballots, which make up more than 70% of the ballots, is done on batches of mixed-precinct ballots and produces tallies that do not appear in any official election results. The result is that the existing early ballot audit only confirms that ballot batches are correctly scanned, but all subsequent data processing, including accumulation of batch totals, sorting and reporting of results, is ignored and remains unaudited. This is a significant shortcoming. The pilot study will evaluate a procedure that would make the early ballot audit equivalent to the precinct-cast ballot audit.

## **How? Our New Tabulation Equipment Provides the Technology to Improve Our Election Audits.**

The recently purchased ES&S central count tabulation system includes the capability to create digital images of each and every paper ballot. Once all the ballots are scanned, the database of ballot images can be sorted, by software, into precincts or voting areas. The ballot images associated with selected precincts can then be printed. These printed images can then serve as proxies for the actual paper ballots and can be hand counted in the same manner currently used for the precinct-cast ballots. In order to conduct the same type of audit with actual paper ballots, the ballots would have to be physically sorted by precinct, a labor-intensive job that election officials have been unwilling to do. The ballot images make it possible to avoid physical sorting.

### **What? A Pilot Study to Evaluate the Use of Digital Images of Ballots in Election Auditing**

The Commission recommends the implementation of a pilot study that will use digital images of ballots as input to the hand count of early ballots. For the study, this would be done in addition to the existing procedures specified in A.R.S. §16-602. The study will produce a report that will contain recommendations as to the efficacy of the approach. Our hope is that the use of ballot images can eventually replace the current early ballot batch method that requires interruption of the central count process to select random audit batches. It may even be possible that all of the auditing could be done with ballot images.

### **Cost? Minimal**

The cost for the pilot study is only the cost of printing the ballot images for a few precincts. The paid hand counters will require some additional time for the study, but since they receive a flat daily rate of pay, there will be no additional cost to the County for their labor. We also recommend conducting the pilot study during a relatively simple election, such as the Presidential Preference Election, in which there is a small number of races and a small number of ballot styles. This will keep the auditing time to a minimum.

### **Better Audits and Less Handling of Paper Ballots**

If the study is successful, the Commission will recommend a change in state law that would explicitly allow the use of ballot images in election hand counts *as an option* to the current methods specified in statute. Any county with the enabling technology could take advantage of the option to use digital images for auditing. We do not believe that there are any legal barriers to this pilot study. It is simply an enhancement of the existing audit process, and Pima County already goes beyond the legal requirements and enhances the audit by adding additional precincts to the hand count. Eventually, the use of ballot images for auditing will reduce or eliminate ballot handling and chain of custody concerns associated with the hand count audit.

### **Summary**

The proposed use of ballot images for auditing has three potential benefits:

- The early ballot audit will be end-to-end, consistent with the audit of precinct-cast ballots.
- The selection of random early ballot batches, which occurs as early ballots are scanned, could eventually be eliminated.
- Conducting hand counts with printed images would eliminate additional handling of paper ballots currently required to support audits.

A pilot study is needed to validate the efficacy of the proposed auditing process, and identify any potential roadblocks. The EIC sincerely hopes that the Board will accept this recommendation.