

ELECTION INTEGRITY COMMISSION

Pima County, Arizona

TO: Honorable Chair and Members
Pima County Board of Supervisors

FROM: Tom Ryan, Chair 
Election Integrity Commission

C.H. Huckelberry
County Administrator

DATE: August 23, 2016

**RE: Delay of Database Distribution for August 30, 2016 Primary Election
and Preservation of Ballot Images**

SUMMARY:

Following the 2006 RTA election, the Superior Court ordered Pima County to provide a distribution of the "election databases" to the political parties on request after each election. Pima County has been fulfilling this obligation for each election. In the past year, however, Pima County has upgraded to a new ES&S ballot tabulation system. The new system has a different design with respect to databases and that has required rethinking how the database distribution should best be handled. This memo provides a recommendation for the form of the distribution and explains why the required distribution may not be timely for the August 30 Primary Election. We also recommend that ballot images be preserved until their legal status is established.

DESCRIPTION OF THE DISTRIBUTION:

The Election Integrity Commission (EIC) recommends that the database distribution consist of two election system products, namely the Cast Vote Record (CVR), and the Daily Statement of Votes Cast (DSOVC), both produced as quickly as possible after the official canvass is prepared for approval by the Board of Supervisors.

The CVR is essentially a large spreadsheet in which each row represents a ballot, each column represents a contest, and each entry shows how a ballot was interpreted by the official tabulation system. The SOVC is a canvass, showing tabulation results for each contest and precinct. The SOVC can be produced for each day that the central count tabulation system is counting ballots, usually starting several days before Election Day. This Daily SOVC has many of the properties of the previous distribution of backup GEMS databases, also produced daily. The combination of CVR and DSOVC will provide a rich source for sanity-checking election tabulations. The CVR must be consistent with reported outcomes and with the daily vote totals obtained from the DSOVC. The DSOVC must also be internally consistent from day to day. The CVR product is also a necessary component of risk-limiting audits, a technique that is being evaluated by the Commission together with the Elections Department.

TIMELINESS OF THE DISTRIBUTION:

For the upcoming August 30 Primary Election, the production of these distribution products may not be “timely,” that is, they may not occur within a period that would allow critical analysis within the 5-day challenge period following approval of the canvass. This could be an issue for someone deciding whether or not to challenge the election outcome and wanting the usual distribution products for analysis.

The reasons for potential delays in producing these database products are

- a) an unfortunate property of the new system in which access to the CVR requires that ballot images be transferred from the individual scanners to the election management server, a time-consuming process that will hopefully be alleviated by future software upgrades;
- b) the Election Department staff must begin working on programming the General Election as soon as possible; and,
- c) the CVR and DSOVC products have not been produced before, except for small mock elections, so there may be unforeseen hurdles.

It should be possible to produce the DSOVC more quickly than the CVR, and we request that the Elections Department investigate the possibility of distributing the DSOVC prior to the CVR.

BALLOT IMAGES, A RELATED ISSUE:

While not part of the database distribution, *per se*, the ballot images must be transferred from scanners to system server in order to access the CVR. Some EIC members have expressed reservations about the subsequent handling of these images, suggesting that they be retained for a period of time equivalent to the paper ballots and not be deleted (as they were for the recent Prop 123/124 election).

The new system creates an image of each paper ballot and the tabulation software deciphers each image. The images are thus an important intermediate product that might need to be examined if any questions should arise about the validity of election outcomes. Also, these images are currently the subject of a public records request, so the Commission recommends saving them while that request is being evaluated. Deleting them too soon could make Pima County vulnerable to legal action.

EIC RECOMMENDATION:

The EIC is recommending that the database distribution products, as described above, be produced for the August 30 Primary Election whenever it is convenient for the staff to do so. We do not want the creation of these products to interfere with standard election procedures or the preparations for the General Election, but we think it is important that we learn how to produce these distribution products in an efficient manner. The August 30th Primary Election will provide estimates of the manpower, computation, and time requirements so that we can better engineer these products for future elections. The Commission also recommends that the ballot images for the election be transferred to the server and preserved until their legal status is established, or until the corresponding paper ballots are destroyed as required by state law.