The following are comments submitted by David Cary to the San Francisco Voting System Task Force in support of the report "Recommendations on Voting Systems for the City and County of San Francisco". These comments are based on the Draft 7 version of that report.

- 1. As part of recommendation #3 (p. 8 and p. 19) for auditing:
- 1.1. Implement manual count procedures that are consistent with the CA SoS IRV Guidelines (http://www.sos.ca.gov/voting-systems/oversight/directives/irv-guidelines.pdf).

Specifically, for precinct-level manual counts:

- a. Candidates should be eliminated based on the full contest tally that is being audited (Guidelines 10.(a)(2)).
- b. Candidate elimination order should match the elimination order used for the full contest tally being audited.
- c. The current practice of using precinct-level vote totals to determine which candidates to eliminate should be discontinued.
- d. Precinct-level vote-totals should be compared to the corresponding comprehensive report which is a summable decomposition by precinct of the contest tally (Guidelines 8.(b)).
- e. The comprehensive report should be produced and made publicly available, including on the DoE website, before any precincts are randomly chosen for manual audits.
- f. The audit should include verification that:
 - i. The vote totals in the comprehensive report are internally consistent for each precinct.
 - ii. The comprehensive report is a summable decomposition of the summary report. (Verify that adding up corresponding vote totals from the comprehensive report across all precincts is equal to the corresponding vote total in the summary report.)

For easy reference, Section 10 of the guidelines is guoted here:

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10. One-Percent Manual Tally.

In each selected precinct, the manual one-percent tally shall be conducted as a stand-alone instant runoff voting election for that precinct, as follows.

- (a) The elections official shall follow the ballot-counting procedures described in California Elections Code sections 15320 and 15321 with the following differences:
- (1) After each round of manual counting of the randomly selected 1% of precincts, the number of votes counted towards each candidate, the number of exhausted ballots, the number of overvotes, and the number of undervotes shall be verified by comparison to the comprehensive report.
- (2) After each round, the candidates to be eliminated shall be determined by the candidate totals in the comprehensive report for the entire election, rather than the totals for each precinct.
- (b) The one-percent manual tally shall follow the procedures set forth in the California Elections Code and/or any regulations promulgated by the Secretary of State -----End Ouote-----

- 1.2. If the VSTF is not recommending a near-term change to using vote totals by candidate, by preference level and generated at the precinct at the close of polls or aggregated by precinct during the canvass, those numbers should also be checked as part of the manual count. While their use as control totals is insufficient, their use should not be discontinued until an adequate replacement is implemented.
- 1.3. Question: Is EML an appropriate vehicle for the comprehensive report and summary report mentioned in the SoS IRV Guidelines?
- 2. As follow-up to discussion at the Nov. 3 meeting, I am also submitting a draft paper I wrote on defining and estimating margin of victory in RCV elections. This is perhaps most applicable to the task force's consideration of risk-limiting audits and is offered mostly as background material to stimulate some thought and discussion about what are achievable goals with RCV elections. Any feedback is valued.
- 3. The task force should recommend as a near-term priority, that the DoE publish preliminary election results, particularly for RCV contests, in a more timely manner. This is a matter of election transparency.

Currently the DoE waits until the Friday after an election (three days after polls close) to publish any RCV vote totals beyond the first round.

The DoE should be publishing preliminary results, that include full RCV tallies, as frequently as it does for other contests. At a minimum, the partial results should be published several times on election night and daily for the following week.

My understanding is that there are no technical, cost, or policy constraints that preclude the DoE from supporting this basic level of transparency.

- 4. Auditing recommendation #6 (p. 8 and p. 19) should be combined with recommendations #4 and #5, removing any special status of "academic organizations". Recommendation #6 lists some of the concerns about sharing sensitive election information. Those concerns and appropriate measures to deal with them are equally applicable to academic and non-academic researchers. Those types of concerns are the relevant criteria. The recommendations should reflect that.
- 5. Auditing recommendation #1 exempts records that would violate certain anonymity and privacy boundaries. An exemption is appropriate but should not be an all or nothing choice. There should be a requirement to publish documents with protected information redacted, if that redaction can supply the needed protection.

For example, a precinct generated document might describe an election day irregularity and also include protected information. That document should not be suppressed in its entirety. There would be important information of legitimate public interest that should be disclosed. That can be done while still protecting other information.