

TAXPAYER-FUNDED AUTOMATIC ELECTION RECOUNTS:
A SOLUTION LOOKING FOR A PROBLEM



2017-2018 Civil Grand Jury of Santa Clara County

June 19, 2018

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GLOSSARY

ASA	<u>A</u> merican <u>S</u> tatistical <u>A</u> ssociation
Ballot	The sheet(s) of paper (optically scanned in Santa Clara County) upon which a voter indicates their choices
BOS	Santa Clara County <u>B</u> oard <u>o</u> f <u>S</u> upervisors
CACE	Santa Clara County <u>C</u> itizen <u>A</u> dvisory <u>C</u> ommission on <u>E</u> lections
Canvass	The public processing and tallying of all ballots received
Contest	A specific race within an election
Certification	California election law mandates that a county has 30 days in which to send the certified results to the Secretary of State
DRE	<u>D</u> irect- <u>r</u> ecording <u>e</u> lectronic a type of voting machine used by Santa Clara County
Election	For purposes of this report, election refers to an election on a specific date, such as the November 2016 General Election
ELEC/SCEC	State of <u>C</u> alifornia <u>E</u> lection <u>C</u> ode
Initial count	A synonym for original count. This term is used by some authors to distinguish the original tally from the recount results
NCSL	<u>N</u> ational <u>C</u> ouncil of <u>S</u> tate <u>L</u> egislatures
Original count	The initial certified count of ballots conducted for an election
Outcome	The winner(s) of each contest in an election
Over vote	A ballot that contains more votes than the maximum allowed for a contest
PEMT	<u>P</u> ost- <u>e</u> lection <u>m</u> anual <u>t</u> allies
Recount	A post-election re-tally of ballots
Requestor	The entity requesting a recount. For example, a voter or campaign committee
Requestor-paid	A recount of a contest that is paid for by the requestor
Results	The raw data associated with an election including but not limited to numbers of votes and ballots cast
RLA	<u>R</u> isk- <u>l</u> imiting <u>a</u> udit
ROV	Santa Clara County <u>R</u> egistrar <u>o</u> f <u>V</u> oters
SOS	California <u>S</u> ecretary <u>o</u> f <u>S</u> tate
SSRN	<u>S</u> ocial <u>S</u> cience <u>R</u> esearch <u>N</u> etwork
Tabulation error	The discrepancy (absolute difference) between the original vote count and the recount
Under vote	A ballot that contains fewer votes than the maximum allowed for a contest
USEAC	<u>U</u> nited <u>S</u> tates <u>E</u> lection <u>A</u> ssistance <u>C</u> ommission
VVPAT	<u>V</u> oter <u>v</u> erifiable <u>p</u> aper <u>a</u> udit <u>t</u> rail

SUMMARY

In a democracy it is crucial for citizens to have faith in the election process. We must have confidence that when we vote, all ballots are examined, and only valid ballots are counted. Citizens must have convincing evidence that an election has been fair and that there has been no malicious tampering with the tabulation machinery or ballots, that the tabulation machines are functioning properly, that all valid votes are counted correctly and that invalid ballots are carefully examined before being discarded.

Individuals who choose to run for public office should not be denied the possibility of being elected simply because they are unable to afford to pay for a post-election recount when they have a question about the actual winner, such as when a contest is extremely close. The Santa Clara Board of Supervisors (BOS) is to be commended for ensuring that anyone running for local office (wholly within Santa Clara County) or the sponsor of any local ballot measure be afforded a recount regardless of the ability to pay for one. The automatic recount is triggered when the margin of votes between the winning candidate/measure and a losing candidate/measure is extremely close.

The Grand Jury fully supports the notion that every candidate and the electorate should be justifiably confident that the winner of a contest, as certified by the Registrar of Voters (ROV), has been correctly elected. The Grand Jury, however, does take issue with the policy of taxpayer-funded automatic recounts. The Grand Jury finds no evidence that such a policy is necessary to ensure the integrity of a contest or to ensure the candidates' and public's confidence in the outcome of a contest.

The Grand Jury also finds that there are more cost-effective and accurate mechanisms, than full recounts, for ensuring confidence in the accuracy of an election and/or an individual contest.

Notably, AB 2125 was introduced in the Assembly on February 8, 2018. If passed, as currently written, AB 2125 will replace the long-standing 1% random selection of precincts audit mechanism with ballot-level comparison risk-limiting audits (RLA).

BACKGROUND

On February 9, 2016, the County proposed a pilot taxpayer-funded full automatic recount for any contest wholly within Santa Clara County (which excluded state and federal contests) when the top two results are close. The BOS reasoned that candidates should not have to bear the cost of close election recounts, which at the time, they defined as within 0.5% (one-half of 1 percent) or 25 votes of each other.

On May 24, 2016, the County approved a pilot taxpayer-funded full automatic recount for the June 7, 2016, primary election.¹ This policy applied to contests wholly within the County, excluding statewide and national contests.

The June 2016 primary election ballots in the County included 44 contests. Of those contests, 17 were wholly within the county and so eligible for pilot taxpayer-funded recounts should any meet the criteria. Of those 17, only one contest had a margin of victory within the 0.5% threshold for triggering an automatic recount. The subsequent recount did not change the outcome (winner) of that contest. The ROV said the recount cost \$93,333 (\$4.59 per ballot) and required a full manual recount of 20,334 ballots.

On September 13, 2016, the County authorized extending the automatic recount pilot to the Nov. 8, 2016 general election, except that the recount be performed **before** the ROV certifies the results.²

In the November 2016 general election, 10 contests out of 93 wholly within the County met the automatic recount criteria. None of the outcomes (winners) were changed by any of the recounts.

The cost to County taxpayers for the November 2016 recounts was \$3,288,962 (\$9.19 per ballot) based on the ROV reported cost, or \$1,809,188 (\$5.06 per ballot) based on the County's auditor figure. The costs differ because the BOS audit excluded some costs, such as certain overhead, labor and materials.

Those 10 contests required a full manual recount of 357,886 ballots. Because of the unexpectedly large number of ballots that had to be recounted, the ROV was unable to complete any of the recounts before the end of the certification period, which was December 8, 2016. The 10 recounts were completed after certification, between December 19, 2016 and January 5, 2017.

¹ (BOS, 2016d, pp. 6-7)

² (BOS, 2016c, pp. 3-4)

DISCUSSION

What are election recounts?

An election recount is a re-tally of votes cast in a contest or specific contests. Depending on state election laws, a recount may be requested and paid for by any interested party. Recounts are typically requested and paid for by a losing candidate or entity such as a candidate's campaign committee. However, recounts may be mandated by law, as for example when the winning margin is very close or there is reason to believe the original count is not accurate.

A recount is a full re-tally, typically conducted manually, that is presumed to be more accurate than an original machine tabulation. Recounts differ from audits in that an audit is a re-tally of a sample of ballots used to statistically verify the accuracy of an election's results (see the section below on audits). It should be noted that certain audits such as RLAs can result in a full re-tally.

However, even a manual recount has uncertainty. Academic studies provide evidence that manual recounts have tabulation errors almost twice that of optical-scan machine recounts. The primary benefit of manual recounts is not in improving the accuracy of the count. Instead, it is to detect malfunctioning machines and other irregularities.

A secondary justification is that a manual recount enables an examination of voter intent on optical mark sense ballot cards, instead of a machine making that decision. Although very rare, different teams of evaluators may make different decisions on voter intent. Even machines don't always produce repeatable results due to errors from a variety of sources including unintentional programming errors or mishandling of ballots.

What are automatic recounts?

An automatic recount is a mandated re-tally of a contest that is triggered by specific criteria. A criterion might be a margin of votes between the winner of a contest and the loser of a contest that falls within either a percentage of ballots (votes) cast, or a specific number of votes. For example, the pilot recount program in the County conducted for the 2016 elections specified that any contest meeting the following criteria would trigger a taxpayer-funded recount: (1) those local contests wholly within the county and where the margin of victory between the winning candidate and the next closest candidate was either 0.5% (one-half of 1 percent) of the ballots cast and/or (2) where the margin of victory was 25 votes or less.³

³ For a more complete discussion please see Appendix 5: Further Discussion About Automatic Recounts.

What are post-election audits?

A post-election audit is intended to provide justified confidence in the accuracy of election results that the reported winner(s) actually won.

In all cases, whether audit or full recount, manipulation of ballots, tabulation machine malfunction, or other errors that might have affected the outcome of an election will be detected with a calculated degree of statistical confidence. These errors include manipulation of ballots, tabulating machine tampering or malfunction, and voter intent. However, there are some types of audits that provide no level of confidence.

As part of the election certification process, the California Elections Code Section 15360 requires an audit be conducted for “every election in which a voting system is used.”⁴ Each county must conduct a manual tally of a randomly selected sample comprising 1% of its precincts.

In the latest report on this subject from the National Council of State Legislatures (NCSL), dated October 2017, 32 states require post-election audits, including California.⁵

States generally use one of three types of audits, fixed percentage, tiered or risk-limiting.

What are fixed percentage audits?

A fixed percentage audit specifies that a percentage — typically between 1% and 5% — of randomly selected precincts, ballots, and/or voting machines be re-tallied following an election. Typically, it is a manual re-tally.

What are tiered audits?

Tiered audits are audits in which the percentage of ballots counted to verify the results varies depending upon the margin of victory. The narrower the margin, the higher the percentage of ballots that are counted for the audit.

⁴ California Elections Code (ELEC) Article 5. One Percent Manual Tally §15360. (a)

⁵ (NCSL, 2017)

What are risk-limiting audits (RLA)?⁶

An RLA counts a sample of ballots until election officials have sufficiently strong statistical evidence that there will not be any change in the original outcome. RLAs have been implemented in some states, instead of fixed sample size audits, as a way of improving the cost-effectiveness of audits and enhancing the ability of audits to detect and correct erroneous election outcomes.⁷

In 2010, AB 2023 authorized the California Secretary of State to conduct an RLA pilot program. This program allowed five or more counties to conduct an RLA of one or more contests following each election. Each RLA was to be done in parallel with the required manual audit of 1% of the precincts. In California's RLA pilot program (2011-2013), the study team concluded that the fixed-percentage audit method, using 1% was "ineffective at confirming election results and incapable of correcting erroneous election results."⁸ The final report recommends that RLAs replace the fixed-percentage audit of precincts.

RLAs, used for verifying an entire canvass, can also be used for individual contests as was done in the California RLA pilot program, "... because RLAs typically need to examine a relatively small percentage of the ballots, audits can take place during the canvass period, before an incorrect outcome is certified."⁹

In their 2015 report, the Santa Clara County Citizens Advisory Commission on Elections (CACE) recommended that counties that were participants in the California Secretary of State's (SOS) pilot RLA program should be allowed to employ risk-limiting audits in place of the state mandated 1% sample of precincts manual count.¹⁰ Note that Santa Clara County (SCC) or (County) did not participate in the pilot.

The SOS's report on the RLA pilot program did criticize the existing 1% precinct audit, which "... requires elections officials to hand tally 100% of the ballots from 1% of all precincts after each election and leads to the hand counting of tens of thousands of ballots across the state after each election. Despite the high number of ballots hand tallied for the 1% manual tally, the pilot project team's analysis showed this statutorily-mandated manual tally to be ineffective at confirming election results and incapable of correcting erroneous election results."¹¹

⁶ For a more complete discussion please see Appendix 6: Risk-limiting audits explained

⁷ (Lindeman & Stark, 2012)

⁸ (California Secretary of State, 2014b, p. 23)

⁹ (Hall, 2009, p. 1)

¹⁰ (CACE, 2015, p. 4)

¹¹ (California Secretary of State, 2014b, p. 23)

Because manual counting of ballots/votes does not yield the same or higher level of accuracy than the original machine tally, a full manual recount appears to have little value for the typical rate of mismarked ballots.

On February 8, 2018 AB 2125 was introduced in the Assembly. The proposed bill, as currently written, would replace the 1% random precinct audit with a risk-limiting ballot-level comparison audit. The RLA would be authorized beginning with the March 3, 2020 statewide primary election and required beginning with the March 8, 2022 statewide primary election.¹²

¹² Assembly Bill No. 2125. AMENDED IN ASSEMBLY MAY 29, 2018

Santa Clara County Automatic Recounts 2016

What was the County's rationale for taxpayer-funded automatic recounts?

In the San Jose mayoral election of 2014, the winner of that election won by a margin of 1.52% (a margin of 2,750 votes out of 180,930 cast).¹³ The closeness of this race as well as the introduction of the Mullen Bill AB 44, were major drivers of taxpayer-funded automatic recounts for local and countywide elections in Santa Clara County.¹⁴

The County proposed a taxpayer-funded automatic recount pilot program after the recommendation in 2015 of the CACE as well as by the passage of California AB 44, which dealt with election recounts for statewide contests. The County supported AB 44 in a unanimous vote on April 7, 2015.

The rationale for taxpayer-funded automatic recounts, as stated by the County, is that: "In almost every instance (where the margin of votes cast between the winning and losing candidate was very close [ed.]) the cost would be too great for an individual candidate to absorb and may in fact be precluded by campaign spending caps."¹⁵

Why 0.5% or 25 Votes?

The County received input from CACE, the ROV, and County Counsel before reaching a decision on the 0.5% threshold for triggering an automatic recount. The ROV reported that some U.S. states commonly used less than the 0.5% (one-half of 1 percent) threshold for triggering an automatic recount.¹⁶ As with the ROV, CACE did not recommend a percentage, however, they did cite a survey of 20 states that used margins of 0.1%, 0.2%, 0.5% or 1%.¹⁷ The County Counsel informed the BOS that Long Beach, Calif., used a margin of 0.5% for municipal elections. The Governor of California may order a state-funded manual recount for state-wide contests if the margin of votes cast between the winning candidate/measure and losing candidate/measure is less than or equal to the lesser of 1,000 votes or 0.00015 (0.015%, 15 thousandths of 1%) of the number of all votes cast for that office. These thresholds were derived from a sample size calculated for a ballot-level comparison RLA. If no errors were found the sample size would likely be between 5%-10% of the number of ballots cast in a statewide contest.¹⁸

¹³ (ROV, 2014)

¹⁴ (BOS, 2018a)

¹⁵ (BOS, 2016b, p. 2)

¹⁶ (BOS, 2016a, p. 2)

¹⁷ (CACE, 2015, pp. 2-3)

¹⁸ (Interviewee, 2018)

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In addition, the ROV analyzed the November 2014 election and found that one contest would have qualified for an automatic recount at the 0.1% (one-tenth of 1 percent) threshold. Three contests would have qualified for taxpayer-funded automatic recounts at the 0.5% threshold. And six contests would have qualified at a threshold of 1.0%.¹⁹

The County chose an automatic recount threshold of 0.5% (one-half of 1 percent) or 25 votes. “That 0.5% number is one that comes from a look at jurisdictions around the country that have adopted measures. It’s a common number. There are other numbers.”²⁰

Based on the threshold criterion alone, and not using the 25-vote margin as a trigger, an analysis of the 10 full manual recounts conducted for the Nov. 8, 2016 election indicates that had the BOS chosen to use a 0.1% (one-tenth of 1 percent) threshold for determining the eligibility of a contest for tax-payer funded automatic recounts only one contest would have qualified: Los Altos City Council with approximately 0.03% (three-hundredths of 1 percent) margin. At a threshold of 0.25% (one-quarter of 1 percent), four contests would have qualified for the automatic recount.

Three contests qualified for automatic recounts because they met the 25-vote margin threshold alone²¹ : City of Los Altos City Council (6), City of Monte Sereno City Council (12), and Town of Los Altos Hills City Council (19).

Recount Eligibility at Different Thresholds²²

	Contest	Margin	0.5%	0.25%	0.1%
1	Monte Sereno City Council	0.5452%			
2	Gilroy City Council	0.4876%	✓		
3	Palo Alto Unified School District	0.4875%	✓		
4	San Jose Unified School District, Y	0.4163%	✓		
5	Cupertino Union School District	0.3715%	✓		
6	Los Altos Hills City Council	0.3653%	✓		
7	San Jose City Council, District 8	0.2431%	✓	✓	
8	Gilroy Unified School District	0.2238%	✓	✓	
9	City of Santa Clara, Chief of Police	0.2065%	✓	✓	
10	Los Altos City Council	0.0332%	✓	✓	✓

Table 1 Recount Eligibility at Different Thresholds

¹⁹ (CACE, 2015, p. 3)

²⁰ (BOS, 2016a, p. 4)

²¹ (ROV, 2017, p. 55)

²² Based on certified results

June 2016 primary election automatic recount²³

Of the 19 contests wholly within the county of Santa Clara, there was a single taxpayer-funded automatic recount triggered for the June 2016 primary election. The automatic recount tally changed the results by 0.12% (twelve-hundredths of 1 percent) from the original numbers, however, there was no change in the winner of the contest.

Taxpayers' costs for the June 2016 general election recount

The cost of the June 2016 primary election including overhead expenses was \$93,333. The ROV staff manually recounted 20,334 cast ballots, at a cost of \$4.59 per ballot.²⁴

On July 12, 2016, after the election results were certified, the losing candidate of the automatic recount contest filed for a voter-requested recount. The ROV began the recount of specific materials as asked for by the requestor. This was not a full manual recount. The ROV billed the requestor \$14,316.70.²⁵

In addition to the costs incurred by the taxpayers for the automatic recount of this contest, the losing candidate subsequently sued the County and the matter went to trial. The cost to the County was \$137,919 paid to consultants and expert witnesses by the ROV. Although the ROV did not track staff hours for those who worked on the lawsuit, the office of the ROV has informed the Grand Jury that "it would be an extremely large number of hours."²⁶ Even though the losing candidate was provided with a taxpayer-funded automatic recount, they chose to sue the County.

November 2016 general election recounts

In its September 13, 2016, regular meeting, the BOS directed that the automatic recount pilot be extended to the November 8, 2016, general election.²⁷ The BOS also directed that the recounts be completed prior to certification.²⁸ In the original pilot of June 2016, the one recount was conducted after certification of the election. In its report to the BOS following the June 2016 primary recount, the ROV cautioned that a recount of a larger contest could have boosted costs by 10 times that of the single recount conducted.²⁹ The BOS subsequently directed that any City of San Jose citywide or Santa Clara County countywide contests could be recounted using machines rather than manually. Reusing the same machines that were

²³ For a more detailed analysis please see Appendix 1

²⁴ (BOS, 2016f, p. 6)

²⁵ (ROV, 2018)

²⁶ (ROV, 2018)

²⁷ (BOS, 2016c, p. 1)

²⁸ (BOS, 2016c, p. 2)

²⁹ (BOS, 2016f, p. 6)

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used for the original tally negates the value of the recount by eliminating a cross-check of the original tally to detect malicious tampering, machine malfunction and voter intent.

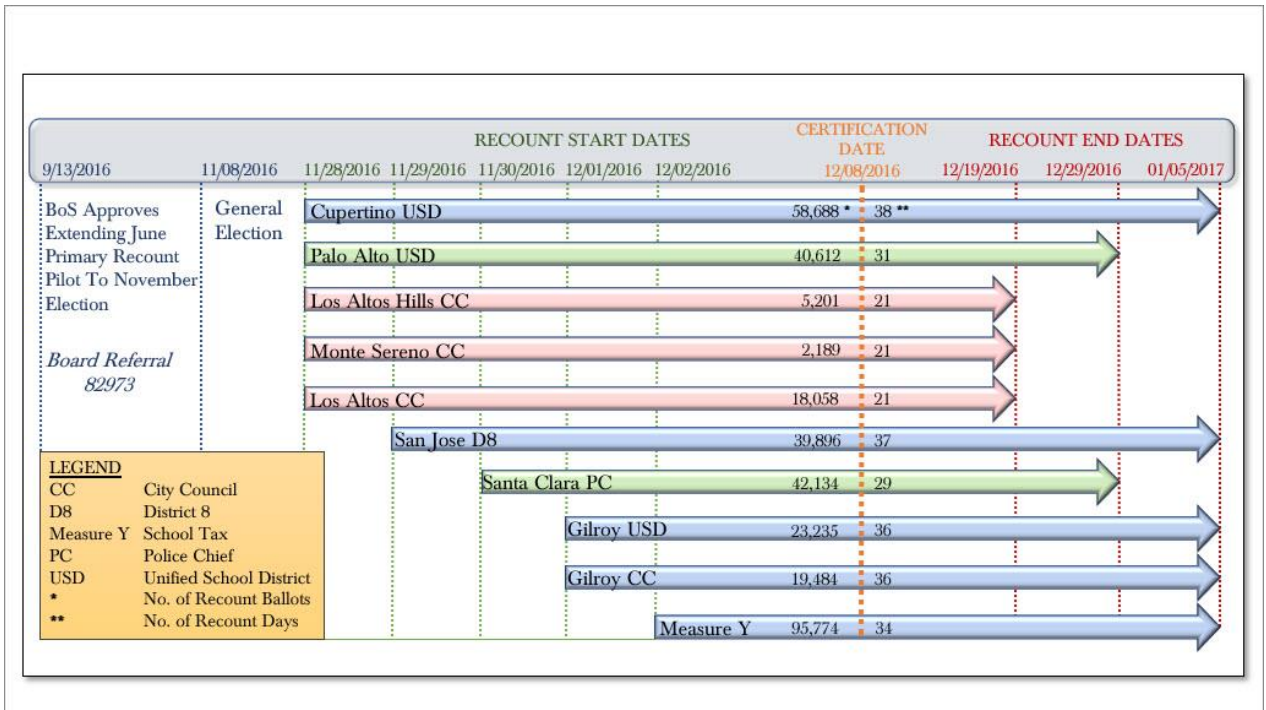


Figure 1 November 2016 Recount Timeline

Due to many factors including: (1) many ROV staff being involved in completing the State-mandated 1% precinct audit; (2) insufficient staffing to be able to conduct the recounts in parallel with the audit due to the unexpectedly large number of ballots that needed to be recounted; and (3) insufficient physical space to conduct both the audit and the recounts in parallel, the ROV was unable to complete any of the 10 recounts prior to the certification deadline of Dec. 8, 2016.

The timeline shows that it took the ROV an average of 30 days to conduct each of the 10 recounts. The shortest time spent was 21 days and the longest was 38 days. There is no indication that the BOS took this information into account when they made the automatic recounts permanent in February 2018.³⁰

One consequence of disregarding the time required to conduct a full manual recount of a contest is that the ROV cannot complete any recount prior to certification. The ROV has only 30 days to complete the canvass, conduct the state mandated 1% sample of precincts audit and certify the election. In 2016, it took 20 days (Nov. 8 - 27) to complete the required tasks before they began the recounts. The ROV had only about eight days to complete the 10

³⁰ (BOS, 2018b, pp. 7-8)

recounts before certification. Given the time it takes to certify an election, it is unlikely that the ROV would have 21 days to conduct a full manual recount. The requirement to complete the recount prior to certification means that if there are multiple recounts, they would have to be done in parallel with each other and in parallel with the certification process. So not only will additional staff be required but also additional space and possibly additional tabulation machines if some of the recounts are done by machine.

In the regular meeting of the BOS on February 27, 2018, funding for four additional staff to cover possible recounts was approved.³¹ The ROV has also revised its storage techniques to make access to ballots faster. However, it is not possible to know ahead of time how many contests will be eligible for automatic recounts. Nor is it possible to know the number of ballots that will need to be recounted. If there are no recounts, then money has been wasted on extra staff, space and equipment.

Taxpayers' costs for the November 2016 general election recounts

The ROV reported that the costs of the 10 recounts in the November 8, 2016, general election were \$3,288,962, with \$2,342,546 for direct and indirect labor; \$874,066 for materials and overhead; and \$72,351 County Employees' Management Association (CEMA) agreements costs.³²

The County's Management Audit Division contractor, Harvey M. Rose Associates, reported the costs at \$1,809,188. "Management Audit Division's estimate attempted to isolate only direct costs of the accelerated canvass and recounts, specifically, those costs, such as overtime and extra help expenditures that are likely to rise and fall as the number and size of the recounts changes."³³

All the recounts were done manually and involved the counting of 357,886 ballots.³⁴ The ROV-reported cost comes to \$9.19 per ballot, and the Auditor's cost figure is \$5.06 per ballot.

Recent changes to the County recount policy

The County adopted a resolution on February 27, 2018, to add the taxpayer-funded automatic recount policy to the BOS policy manual (Section 3.63). The new margin the County defined as close for triggering a taxpayer-funded recount was reduced to 0.25% (one quarter of 1 percent) of the ballots cast. The number of votes triggering an automatic recount was left at 25 votes.³⁵ However, the BOS still has not cited any empirical evidence for the threshold chosen. The BOS rationale for selecting a 0.25% threshold is that there will be fewer contests

³¹ (BOS, 2018b)

³² (BOS, 2017)

³³ (BOS, 2017, p. 6)

³⁴ Numbers were provided to the Grand Jury by the ROV in January and February 2018 and may be different than the figures available through the ROV website, which may be subsequently revised.

³⁵ (BOS, 2017, p. 3)

eligible for taxpayer-funded recounts, which compromises the logic in having automatic recounts, where the threshold is not based on statistical evidence. Why not adopt 0.1% (one-tenth of 1%) as the definition of close, as some jurisdictions surveyed have done? Without a statistically based definition of close, any choice is equally valid.

In a December 2017 memo from a Supervisor to the BOS (ID No. 89314), the board member makes an argument in support of continuing the taxpayer-funded recount program. The justification is that although no outcome (winner) changed for any of the 11 recounts in 2016, "... the recount resulted in a tighter margin of victory between deciding selections" ³⁶ The Supervisor's argument ignores the fact that in five of the 10 November 2016 recounts, the margin between the winning and losing candidates increased over the original tally. In one contest there was no change and in only four of the 10 contests was the margin of votes less than the original tally.

The County, in making the taxpayer-funded automatic recounts permanent, has ignored the fact that there have been significant costs to the taxpayers without a single instance that a recount changed an election outcome. The County has the evidence from their own pilot program of 2016 (11 recounts) and the available historical election data from the past 15 years, which does not support such a permanent policy.

³⁶ (BOS, 2017, p. 3)

Conclusions

- The BOS, on May 24, 2016, directed the ROV to conduct, on a trial basis, a one-time taxpayer-funded automatic recount pilot for the June 7, 2016, primary election.³⁷
- The pilot recount trigger was a margin of 0.5% (one-half of 1 percent) or less of the ballots cast or a 25-vote difference between the winner and loser in any contest.³⁸
- The BOS chose to conduct automatic recounts rather than a risk-limiting audit (RLA) citing an ROV comment that RLAs are for audits of an election and recounts are for individual contests.³⁹
- The BOS directed that recounts for the June 2016 primary election be manual recounts.⁴⁰
- Of the 19 contests wholly within the county of Santa Clara, there was a single taxpayer-funded automatic recount triggered for the June 2016 primary election. This recount was conducted at a cost of \$93,333.19.⁴¹ The automatic recount result changed the results by 0.12% (twelve-hundredths of 1 percent) from the original numbers, however, there was no change in the winner of the contest.
- On Sept. 13, 2016, the BOS extended the recount pilot to include the Nov. 8, 2016, general election.⁴²
- On Sept. 13, 2016, the BOS directed that the pilot automatic recount be conducted manually except in contests for citywide offices in San Jose or countywide offices in Santa Clara County. Those recounts could be conducted by machine.⁴³
- On Sept. 13, 2016, the BOS directed that any automatic recount for the November general election be performed prior to certification (Dec. 8, 2016).⁴⁴
- The ROV was unable to complete any of the 10 automatic recounts for the November election before the results were certified.⁴⁵ The BOS was informed by the ROV on or about Dec. 8, 2016, that it was necessary to continue the automatic recount past the 28-day certification period (Nov. 10 - Dec. 8) for the November 2016 general election because the ROV was unable to complete any of the recounts prior to certification.⁴⁶
- In November 2016, the Santa Clara County ROV conducted automatic recounts of 10 contests out of an eligible 93. According to the accounting calculations reported by the ROV the recounts cost the county \$3,288,962 (\$2,342,546 for direct and indirect labor; \$874,066 for materials and overhead; \$72,351 County Employees' Management Association (CEMA)

³⁷ (BOS, 2016e, p. 55)

³⁸ (BOS, 2016d, p. 7)

³⁹ (ROV, 2016)

⁴⁰ (BOS, 2016b, p. 3)

⁴¹ (BOS, 2016f, pp. 2, 5)

⁴² (BOS, 2016c)

⁴³ (BOS, 2016c, p. 2)

⁴⁴ (BOS, 2016b, p. 2)

⁴⁵ (ROV, 2017, p. 55)

⁴⁶ (O. o. S. ROV, 2017)

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agreements costs). The Audit Division of the BOS reported the total cost to be \$1,809,188⁴⁷ by excluding certain costs. The former cost comes to \$9.19 per ballot; the latter to \$5.06 per ballot.

- None of the taxpayer-funded automatic recounts conducted for the November general election resulted in a change of winner.⁴⁸
- In the November 2016 general election automatic recounts, the recount vote tallies differed from the original results by an average of 0.06%.
- There has not been a full manual recount in Santa Clara County in at least 15 years.⁴⁹

⁴⁷ (BOS, 2017, pp. 2, 3)

⁴⁸ (ROV, 2017, p. 55)

⁴⁹ (BOS, 2016f, p. 2)

FINDINGS AND RECOMMENDATIONS

Finding 1

There were no tangible benefits from the 2016 recounts because no outcomes were changed. The potential intangible benefits, comfort in not finding evidence of errors, can be far more cost-effectively accomplished by well-known other means.

Recommendation 1a

The County should eliminate its automatic recounts policy and remove Section 3.63 from its policy manual before the November 2018 election.

Recommendation 1b

If the County rejects Recommendation 1a, then the County should explore whether it can adopt a form of risk-limiting audit for each automatic recount and approve the lease of state certified equipment, physical space, as well as hiring and training of additional staff necessary to complete any recounts prior to certification.

Recommendation 1c

Pending passage of AB 2125, the County should request authorization from the SOS to adopt a risk-limiting audit in place of the state mandated 1% sample of precincts audit, beginning with the March 3, 2020 statewide primary election.

Recommendation 1d

Upon implementation of a risk-limiting audit, the automatic recount policy should be ended if it has not been canceled previously.

Finding 2

The June 2016 pilot did not provide an adequate basis for the County to extend the recount pilot to the November 2016 General Election. The recount was conducted after certification when there was adequate staff, time and physical space. By being forced to complete any full manual recounts prior to certification, there was insufficient time, staff and physical space to complete any of the manual recounts.

Recommendation 2

None

Finding 3

The Registrar of Voters should be commended for its extraordinary efforts with the November 2016 recounts. Because of the unprecedented magnitude of the recounts, managers and staff worked excessive overtime hours – nights, weekends and holidays.

Recommendation 3

None

Finding 4a

The County's use of a 0.5% (one-half of 1 percent) or 25-vote threshold should have been based on empirical evidence or statistical analysis of prior election results.

Finding 4b

The County's use of a 0.25% (one-quarter of 1 percent) threshold should have been based on empirical evidence from the 2016 elections.

Recommendation 4

If the County rejects Recommendation 1a, then the County should, by June 30, 2019, complete an analysis of thresholds, both percentage and vote count, so that the selection of triggers is based on statistically defensible evidence.

APPENDICES

Appendix 1. The June 2016 Taxpayer-Funded Recount

The Recount Results⁵⁰

As shown in Table 2, although the number of votes changed for each of the candidates, the outcome (winner) was left unchanged.

San Jose City Council District 4	Manh Nguyen (votes)	Lan Diep (votes)	Difference (votes)	Percent Difference (Votes) ⁵¹	Ballots	Percent Difference (Ballots)
Original	8,687	8,723	36	0.2068%	19,883	0.1811%
Recount	8,685	8,697	12	0.0690%	20,116	0.0597%
Original-Recount (Difference)	2	26	24	0.1377%	233	0.1214%

Table 2 June, 2016 Primary Election Recount Results

Analysis

The difference in votes between the original tally and the recount for candidate Nguyen was two votes. The difference in votes between the original tally and the recount for candidate Diep was 26 votes. The difference in votes between the two candidates for the original tally was 36 and for the recount 12. Although the vote counts changed by 24 votes between the initial tally and the recount, a change of 0.1377%, there was no change in the winner of the election.

Another way of looking at these contests is in ballots counted. There were 233 more ballots counted during the recount than during the initial tally. That amounts to a difference of 0.12%. The difference in numbers of ballots counted between the initial tally and the recount is primarily due to the use of a multi-card ballot. In this election, the San Jose District 4 contest appeared on the second card of the ballot. For purposes of counting the number of ballots cast, the ROV uses the first card of the ballot. It is not unusual for a voter to complete the first card of a ballot but leave the others blank. The ROV does not count blank ballots. The ROV calculates the number of ballots cast during a recount by adding up the votes for each candidate and the number of under votes and over votes. In the District 4 contest, Nguyen

⁵⁰ The numbers in this table reflect the revised numbers provided to the Grand Jury by the ROV in February 2018 and differ from those in the ROV report (BOS 82471) for the June 2016 primary. The differences are in ballots cast not vote counts (explained below).

⁵¹ The percent difference is the difference in votes divided by the total number of votes cast.

received 8,687 votes, Diep received 8,723 votes; there were 2,424 under votes and 49 over votes for a total of 20,116.

The ROV currently uses mark-sense technology (OPTECH) to optically scan paper ballots. In a study using a very similar OPTECH device, the average tabulation error (absolute difference between the initial count, utilizing OPTECH tabulation, and the recount) was 0.55% (approximately one-half of 1 percent).⁵² The same study found that the average tabulation error for manually counted ballots was 0.87% (approximately nine-tenths of 1 percent).⁵³

What are some takeaways from this recount?

The change in percentage of votes and the change in number of ballots counted between the initial tally and the recount numbers are well below the 0.5% (one-half of 1 percent) recount threshold. Both numbers are also well below published tabulation errors for machine and manual tallies.⁵⁴ As mentioned above, manual counting has been found to be less accurate than machine tabulation in professional studies.⁵⁵ Given the closeness of both results and the fact that the outcome was left unchanged, what can be said about the value of this recount without any evidence-based statistical analysis?

⁵² (Ansolabehere & Reeves, 2004, p. 5)

⁵³ (Ansolabehere & Reeves, 2004, p. 6)

⁵⁴ See the analysis for the November 2016 election below.

⁵⁵ (Goggin, Byrne, & Gilbert, 2012)

Appendix 2. November 2016 Taxpayer-Funded Recounts

In the context of this analysis, “results” is used to indicate the numbers of votes or ballots. The term “outcome” is used to refer to the winner of the contest. The term “ballot(s)” is used to refer to the physical ballots and voting records counted during either an initial tally or a recount. A ballot may be comprised of multiple physical pages and there may be multiple contests on each page. A ballot may be a paper record completed at a polling place or mailed-in or completed and delivered to a polling place on election day. A ballot may also come from a DRE (Direct-recording electronic) voting machine with a VVPAT (voter verifiable paper audit trail). The term original and initial are used interchangeably and refer to the election.

Analysis

In reviewing the data from the Nov. 8, 2016, general election, some important facts are worth noting. The largest difference between the vote counts in the original tally and the recount tally of the 10 contests, as a percentage of ballots cast⁵⁶ was 0.55%. That occurred in the Monte Sereno City Council contest. In the original tally the leading candidate won by a margin of 12 votes. In the recount of that contest the same candidate won by 6 votes. That was the largest percentage change in a result, between the initial count and the recount, of any of the 10 contests recounted.

The smallest change in the margin of a contest between the original tally and the recount of that contest was San Jose Unified School District, Measure Y. For that contest the margin of yes votes was calculated against the percentage of yes votes necessary for passage. In this case the measure needed 66.7% yes votes for passage. This contest qualified for a taxpayer-funded recount because the vote margin in the original count was only 0.42%.⁵⁷ That margin is within the 0.5% margin for triggering a recount.

The comparison between the differences in the original results and the recount results is done as percentages because it would make little sense to compare the absolute numbers between contests, the number of ballots cast varying by a wide range. For example, there were 108,757 ballots cast in the San Jose Unified School District Measure Y contest and 2,201 ballots cast in the Monte Sereno City Council contest.

The average change in numbers of ballots between the original tally and the recount for the 10 contests is 0.0556%. The range between the highest percentage change in result and the smallest is 0.2711%.

⁵⁶ Note that this analysis uses absolute vote difference (margin) between original tally and recount in terms of ballots cast. This is the same calculation that was used to determine whether the contest qualified for a taxpayer-funded recount.

⁵⁷ 67.12% - 66.7%

TAXPAYER-FUNDED AUTOMATIC ELECTION RECOUNTS

Margins and Absolute Differences By Contest

	Contest	Original Margin In Votes Cast	Original Vote Margin /Ballots Cast	Original Count Of Ballots Cast	Recount Margin In Votes Cast	Absolute Difference Between Original & Recount	Percentage Difference Between Original & Recount
1	San Jose Unified School District	67.12	0.0700%	95,774	67.19	0.07%	0.0000%
2	Los Altos City Council	6	0.0333%	18,028	6	0	0.0001%
3	Palo Alto Unified School District	198	0.4874%	40,622	201	3	0.0075%
4	Cupertino Union School District	218	0.3699%	58,942	222	4	0.0084%
5	City of Santa Clara, Chief of Police	105	0.2487%	42,226	110	5	0.0124%
6	Gilroy City Council	95	0.4871%	19,503	100	5	0.0261%
7	San Jose City Council, District 8	97	0.2424%	40,014	74	23	0.0569%
8	Gilroy Unified School District	52	0.2236%	23,259	34	18	0.0772%
9	Los Altos Hills City Council	19	0.3651%	5,204	14	5	0.0959%
10	Monte Sereno City Council	12	0.5452%	2,201	6	6	0.2711%

Table 3 Margins and Absolute Differences By Contest

This analysis uses the absolute difference in the calculations rather than net change. Net change indicates how many votes a candidate gained or lost (plus or minus) between the original count and the recount. The absolute numbers are the same as the net values. In the absolute numbers, the plus or minus sign has been removed. Whether or not a candidate's votes increased or decreased is not critical when determining what the differences are between the counts. In fact, using the gain/loss numbers can be misleading. For example, if one candidate receives five more votes in the recount than they did in the original tally and the other candidate receives five fewer votes in the recount than they received in the initial tally, the numbers cancel each other out. Measuring the absolute difference between the original tally and the recount can enable an evaluation of the accuracy of the initial tally, the tabulation error.⁵⁸

It should be noted that given the certified results, the Monte Sereno City Council contest would not have qualified for an automatic recount, using the certified result to calculate the percentage margin, because the margin of votes divided by ballots cast (0.5452%) was more than the threshold of 0.50% (one-half of 1 percent) if the basis for the recount was a percent difference threshold. However, that contest would have qualified under the 25-vote or fewer threshold. The difference in count between the original count and the certified results is a good reason to delay recounts until after certification.

⁵⁸ (Ansolabehere, Burden, Mayer, & Stewart III, 2017)

TAXPAYER-FUNDED AUTOMATIC ELECTION RECOUNTS

For the San Jose Unified School District Measure Y the percentage difference between the original and recount margins is used. This is to show the margins with respect to each other and with respect to the passing margin of 66.7%.

The average percentage difference between the number of ballots cast/counted during the original count and the recounts is 0.0556%.

Final Results of The November 8, 2016 Election

Contest	Candidate A	Candidate B	Absolute Vote Difference	Number of Ballots Counted	N of Ballots Counted Using an RLA ⁵⁹	Vote Difference as % of Total Ballots Cast
Los Altos City Council	6,355	6,349	6	18,058	18,058	0.0332%
City of Santa Clara, Chief of Police	17,618	17,531	87	42,134	7,760	0.2065%
Gilroy Unified School District	8,439	8,387	52	23,235	6,915	0.2238%
San Jose City Council, District 8	17,258	17,161	97	39,896	3,462	0.2431%
Los Altos Hills City Council	1,821	1,802	19	5,201	2,154	0.3653%
Cupertino Union School District	19,320	19,102	218	58,688	2,119	0.3715%
San Jose Unified School District,	64,280	31,494	399	95,774	40	0.4163%
Palo Alto Unified School District	13,556	13,358	198	40,612	1,502	0.4875%
Gilroy City Council	5,471	5,376	95	19,484	1,502	0.4876%
Monte Sereno City Council	767	755	12	2,189	1,336	0.5482%

Table 4 Final Results Of The November 8, 2016 Election Recounts

What are some takeaways from this analysis?

Simply conducting a full manual recount of a contest does not ipso facto mean that the recount is more accurate than the original count. It depends on the methods used in conducting a recount.

Because there is inherent error in any count, and studies have shown that a hand count is generally less accurate than a machine tabulation, a manual recount cannot be considered any more accurate than the original machine tally.

A full manual recount does not provide a cost-effective means of providing a high level of confidence that the original outcomes were either correct or not correct. Simply because the results of the original count and recount are close and did not change does not necessarily

⁵⁹ These are the approximate number of ballots that would be counted, if no discrepancies are found, in an RLA at a 5% risk limit.

mean that the outcome of the contest is correct. Only a statistically valid method of addressing possible errors in the original count and the recount can provide the necessary confidence in the outcome of a contest.

In the above analysis the approximate number of ballots that would need to be counted using an RLA with a risk limit of 5% was calculated for each contest. Although this is only an approximation, the numbers of ballots that would have needed to be counted is far less than a full manual recount. The exception is the Los Altos City Council race where the margin of victory was so close that a full manual recount would have been needed.

Appendix 3. Pertinent California Election Code Information

California Elections Code (ELEC) sections §15600 through §15649 govern statewide election recounts. There is no provision in California law for automatic countywide or local election recounts. That is, a county elections official may order a recount (under ELEC §15610) if both of the following apply:

“(a) The elections official has reasonable cause to believe the ballots in the precinct have been miscounted.”

“(b) The elections official has examined, under oath, the precinct board members or, in the case of ballots counted by a central counting system, the counting board members, and they are unable to explain the returns of their respective precincts.”

There is provision in ELEC for voter-requested recounts. It must be requested within five days following the completion of the canvass. Elections official can charge the voter requesting the recount for the costs of that recount.

ELEC §15627(a) specifies that if the vote was “cast or tabulated by a voting system,” then the entity making the request for a recount has the right to request that the recount be accomplished either manually or by the same system that was in the original vote. Furthermore, §15627(a) mandates:

“Only one method of recount may be used for all ballots cast or tabulated by the same type of voting system.”

Under certain specified conditions, the governor may order a state-funded manual recount for a contest involving a statewide office or state ballot initiative, at various vote margins.

Appendix 4. Legal authority for the Santa Clara County automatic recount pilots

Recounts are governed under: California Elections Code - ELEC

DIVISION 15. SEMIFINAL OFFICIAL CANVASS, OFFICIAL CANVASS, RECOUNT, AND TIE VOTE PROCEDURES [15000 - 15702]

The state of California does not have a taxpayer-funded automatic recount provision. The California State Election Code (CSEC) does permit the County Registrar of Voters to perform a recount if they believe that an error has been made in the earlier count (CA Elections Code Div. 15 Ch. 9 Article 2 §15610). Under that authority, Santa Clara County adopted the automatic recount. The idea is that if an error were to occur, an automatic recount would determine if in fact that error was large enough to change the outcome of a contest. The County determined that its automatic recount pilot was permitted under the CSEC so long as it was performed during the canvass prior to the required certification of election results to the secretary of state. This was determined even though state-funded recounts must be performed after certification of the election in question.

Appendix 5. Further Discussion About Automatic Recounts

Election law covering recounts varies from state to state. FairVote, a nonpartisan group that advocates for election reform, conducted a survey of state recount policies. In that survey FairVote lists 16 states plus the District of Columbia as having provisions for automatic recounts, while 34 states did not. Forty states and the District of Columbia allow for petitioning for a recount by a candidate.⁶⁰ The laws governing recounts and the statistics stated here are for statewide elections but have general applicability to local elections.

The FairVote survey found that statewide election recounts are rare. Of 4,687 elections in FairVote's survey, there were 27 recounts, 15 of which it cited as being "consequential". That is, the margin between the winning candidate and the losing candidate was 0.15% (fifteen-hundredths of 1 percent) or less. That study found that of those 27 recounts, only three resulted in a change in outcome (winner).

Of relevance to local elections is the fact that recounts for contests in which there were relatively more voters resulted in a lower percentage change in the vote margin than in contests with relatively fewer voters. For example, in contests with greater than 2 million votes cast, the margin difference was an average of 0.016% (sixteen-thousandths of 1 percent). In contests where the total votes cast were less than one million, the change in the vote margin was an average of 0.039% (thirty-nine thousandths of 1 percent).⁶¹

The FairVote report does try to extrapolate from their statewide findings to local elections, however, although it does not provide any data to support its advice, the report recommends that a 0.5% (one-half of 1 percent) margin may be appropriate for small local electorates. The report recommends that for smaller states a 0.2% (two-tenths of 1 percent) trigger is appropriate and it recommends a 0.1% (one-tenth of 1 percent) threshold for larger states.⁶²

There were 875,176 registered voters in Santa Clara County at the time of the Nov. 8, 2016, General Election.⁶³ Santa Clara County has more registered voters than 13 states. That puts Santa Clara County into the category of a smaller state and consequently a threshold of 0.2% (two-tenths of 1 percent) for triggering an automatic recount could be justified based on the FairVote study recommendation.

⁶⁰ (Ritchie & Smith, 2016, p. 11)

⁶¹ (Ritchie & Smith, 2016, p. 3)

⁶² (Ritchie & Smith, 2016, p. 14)

⁶³ (ROV, 2017, p. 8)

Appendix 6. Risk-limiting Audits Explained

Risk-limiting audits can be much more efficient, timely, and cost-effective than full recounts because an RLA enables election officials to count a sample of ballots until the auditors are convinced that there won't be any change in the original outcome. The sample of ballots counted is generally far fewer than in a full hand recount (unless the margin is extremely small or the contest outcome is in fact incorrect) and thus can be completed faster and with fewer resources. "The risk component in RLAs is the maximum risk that elections officials are willing to take that the audit will not result in a full hand recount when a full hand recount would show that the apparent outcome is wrong."⁶⁴

The basis for RLAs lies in sound statistical practice. The legislature typically decides how small a risk/chance they are willing to take, say 1% or 0.1%, that the audit will not change the outcome of an election when the original outcome is wrong. The RLA process dictates the size of the random sample that needs to be counted to reach the selected level of confidence, in light of what the audit finds as it progresses. The audit stops when the evidence that the outcome is correct is strong enough to meet the risk limit, or when a complete hand count has been conducted. The size of the sample is chosen using easily understood mathematical formulas, instead of a fixed percentage of precincts. Open source software for use by election officials to implement an RLA is readily available that requires minimal training.⁶⁵ The desired confidence level is selected by the legislature; the mathematical mechanisms are well understood within the world of professional statisticians. This helps make the audit process transparent. The American Statistical Association (ASA), an organization of U.S. professional statisticians, has endorsed RLAs as a best practice for post-election audits.⁶⁶ Colorado has had mandatory RLAs since November 2017 and Rhode Island requires RLAs as of 2018.

In 2007, the California Secretary of State issued the Top-To-Bottom Review of California's Voting Systems.⁶⁷ An outgrowth of the *Review and the Evaluation of Audit Sampling Models and Options for Strengthening California's Manual Count*⁶⁸ were two pilot programs implementing RLAs in actual elections in the state of California.

The initial pilot RLA program was conducted in 2008 and involved four elections in three counties: The first was conducted during the February 2008 primary election in Marin County; Marin, Santa Cruz and Yolo counties used RLAs in the November 2008 general elections.⁶⁹ The RLAs were conducted in parallel with the state-mandated 1% of precincts post-election audit.

⁶⁴ (Philip B Stark, 2009)

⁶⁵ (Philip B. Stark, 2012)

⁶⁶ (*American Statistical Association Statement on Risk-Limiting Post-Election Audits*, 4/17/10, 2010; Lindeman et al., 2008)

⁶⁷ (California Secretary of State, 2007)

⁶⁸ (Jefferson et al., 2007)

⁶⁹ (Hall, 2009, p. 1)

In 2010, AB 2023 became law, authorizing the California secretary of state to conduct the Post-Election Risk-Limiting Audit Pilot Program that eventually involved 11 counties. The 11 counties “... successfully completed their audits and confirmed the official election results by reviewing a relatively small number of individual ballots (e.g., a few dozen to a few hundred ballots). By contrast, the statutorily-mandated 1% manual tally conducted in the same elections provided little statistical evidence that the election outcomes were correctly tallied by the voting system, despite requiring substantially more ballots to be hand-counted and examined.”⁷⁰

There are various ways to conduct RLAs. The 2011-2013 California pilot program used batch-level comparison audits, ballot-level comparison audits, and a ballot-polling audit. A ballot-polling audit examines randomly selected ballots until auditors have achieved the statistical confidence chosen by the election official. No special ballot counting equipment is necessary.

A second type of RLA is a comparison audit. Here, outcomes are examined by comparing the original count of clusters of ballots to a hand count of the same clusters. For example, a precinct could be a cluster. In a ballot-level comparison audit, a cluster is composed of a single ballot. To implement ballot-level comparison audits, officials must have a means of comparing a manual interpretation of a ballot with the machine interpretation of that ballot. Ballot-level comparison audits require a way to match a human interpretation of a given paper ballot with how the machine interpreted that same ballot. The County does not now have this technology, but the ROV plans to release an RFP for new equipment in 2018 that appears to have the requisite functionality to enable the ROV to implement comparison RLAs. This new equipment is slated to be available for use in 2019.⁷¹

RLAs eliminate the need for automatic or other types of recounts because an RLA provides a desired level of confidence that the outcomes of contests are correct, generally with far less work than a full manual recount. Further, RLAs are far more efficient and cost-effective than full manual recounts (except in cases where the reported results are incorrect and the audit leads to a full manual recount). As is stated in the SOS report on the Pilot Program: “The adoption of laws and regulations permitting or requiring risk-limiting post-election audits will allow elections officials to use the new audit methods to confirm – or correct – official election results, which will help build public confidence in elections and may reduce the need for voter-requested manual recounts.”⁷²

⁷⁰ (California Secretary of State, 2014a, p. Exec. Summary)

⁷¹ (CACE, 2017)

⁷² (California Secretary of State, 2014a)

Appendix 7. Assessing Voter-intent

Counting Mismarked Ballots

What is a mismarked ballot?

During the original ballot count by vote tabulating machines, certain ballots are rejected by the tabulating machines because a voter, who failed to follow the printed instructions, improperly marked a ballot, or the ballot card was badly damaged. For example, a voter who did not draw the required solid black line between the end-points next to a candidate's name or ballot measure choice. Other mistakes include incomplete erasures, cross outs, hand-drawn lines, and arrows to indicate a choice.

What happens to mismarked ballots?

In the case of ballots rejected by the tabulating machine, a team of ROV workers, attempts to visually assess the voter's intent. The result is the creation of a duplicate ballot that is properly marked, using the team's determination of voter intent. If voter intent is not unanimously agreed to by the team, the vote(s) for the questionable contest(s) are not counted. The duplicate ballot is then tabulated by machine.

Once a mismarked ballot is replaced or discarded during the original count, it is not re-examined during a recount. The ROV estimates that less than *0.1%* of ballots in Santa Clara County are replaced by team-decided voter intent in the experience of current ROV staff. The number of such replacement ballots are not recorded.

TAXPAYER-FUNDED AUTOMATIC ELECTION RECOUNTS

Appendix 8. November 2016 Recount Data

Los Altos City Council	Lynette Lee Eng	Neysa Fligor	Absolute Vote Difference	Percent Difference Votes Cast	Ballots Cast/ Counted	Percent Difference Ballots Cast
Original	6355	6349	6	0.0472%	18028	0.0333%
Recount	6369	6363	6	0.0471%	18058	0.0332%
Original-Recount Difference	14	14	0	0.0001%	30	0.0001%
Palo Alto Unified School District, Governing Board	Melissa Batan Caswell	Heidi Emberling	Absolute Vote Difference	Percent Difference Votes Cast	Ballots Cast/ Counted	Percent Difference Ballots Cast
Original	13556	13358	198	0.7357%	40622	0.4874%
Recount	13580	13379	201	0.7456%	40612	0.4949%
Original-Recount Difference	24	21	3	0.0099%	10	0.0075%
Cupertino Union School District Governing Board	Phyllis Vogel	Gregory Anderson	Absolute Vote Difference	Percent Difference Votes Cast	Ballots Cast/ Counted	Percent Difference Ballots Cast
Original	19320	19102	218	0.5674%	58942	0.3699%
Recount	19267	19045	222	0.5795%	58688	0.3783%
Original-Recount Change	53	57	4	0.0121%	254	0.0084%
City of Santa Clara, Chief of Police	Michael J. Sellers	Pat Nikolai	Absolute Vote Difference	Percent Difference Votes Cast	Ballots Cast/ Counted	Percent Difference Ballots Cast
Original	17618	17513	105	0.2989%	42226	0.2487%
Recount	17625	17515	110	0.3130%	42134	0.2611%
Original-Recount Change	7	2	5	0.0142%	92	0.0124%
Gilroy City Council	Paul V. Kloecker	Tom Fischer	Absolute Vote Difference	Percent Difference Votes Cast	Ballots Cast/ Counted	Percent Difference Ballots Cast
Original	5471	5376	95	0.8758%	19503	0.4871%
Recount	5490	5390	100	0.9191%	19484	0.5132%
Original-Recount Difference	19	14	5	0.0433%	19	0.0261%

TAXPAYER-FUNDED AUTOMATIC ELECTION RECOUNTS

San Jose City Council District 8	Sylvia Arenas	Jimmy Nguyen	Absolute Vote Difference	Percent Difference Votes Cast	Ballots Cast/ Counted	Percent Difference Ballots Cast
Original	17258	17161	97	0.2818%	40014	0.2424%
Recount	17254	17180	74	0.2149%	39896	0.1855%
Original-Recount Change	4	19	23	0.0669%	118	0.0569%
Gilroy Unified School District, Governing Board	BC Doyle	Paul Nadeau	Absolute Vote Difference	Percent Difference Votes Cast	Ballots Cast/ Counted	Percent Difference Ballots Cast
Original	8439	8387	52	0.3090%	23259	0.2236%
Recount	8428	8394	34	0.2021%	23235	0.1463%
Original-Recount Difference	11	7	18	0.1069%	24	0.0772%
Los Altos Hills City Council	Roger Spreen	Garo K. Kiremidjan	Absolute Vote Difference	Percent Difference Votes Cast	Ballots Cast/ Counted	Percent Difference Ballots Cast
Original	1821	1802	19	0.5244%	5204	0.3651%
Recount	1819	1805	14	0.3863%	5201	0.2692%
Original-Recount Difference	2	3	5	0.1381%	3	0.0959%
San Jose Unified School District, Measure Y 66.7% Required To Pass	Yes	No	Percent Yes	Minus Needed To Pass	Ballots Cast/ Counted	Difference Yes Org to Recnt
Original	64280	31494	59.10%	7.5958%	108757	0.2600%
Recount	64347	31531	59.37%	7.3333%	108389	0.2600%
Original-Recount Difference	67	37	0.26%	0.2625%	368	0.0000%
Monte Sereno City Council	Curtis Rogers	Rowena Turner	Absolute Vote Difference	Percent Difference Votes Cast	Ballots Cast/ Counted	Percent Difference Ballots Cast
Original	767	755	12	0.7884%	2201	0.5452%
Recount	765	759	6	0.3937%	2189	0.2741%
Original-Recount Difference	2	4	6	0.3947%	12	0.2711%

References

- American Statistical Association Statement on Risk-Limiting Post-Election Audits, 4/17/10.* (2010).
- Ansolabehere, S., Burden, B. C., Mayer, K., R., & Stewart III, C. (2017). *Learning from Recounts* (2017-12).
- Ansolabehere, S., & Reeves, A. (2004). *Using Recounts to Measure the Accuracy of Vote Tabulations: Evidence from New Hampshire Elections 1946-2002.*
- BOS. (2016a). *Board Referral 79950.*
- BOS. (2016b). Board Referral 79950 Request for CACE Policy Recommendation On Recounts Minutes. *Board Referral.*
- Board Referral 82973 B Automatic Recounts for the November 8, 2016 General Election September 13, 2016, 82973 B C.F.R. (2016c).
- BOS. (2016d). *Minutes May 24, 2016 9:00 AM Regular Meeting.*
- BOS. (2016e). Report 81537 Consider recommendations from the Office of the County Executive relating to automatic recounts. .
- BOS. (2016f, August 11, 2016). Report 82471.
- BOS. (2017). *Board Referral 89314 Automatic Recount Policy 2017DEC5.*
- BOS (2018a). [Interview with BOS staff member(s)].
- BOS. (2018b). Summary of Proceedings February 27, 2018 9:30 AM.
- CACE. (2015). *Report 75194.*
- CACE. (2017). *Minutes Citizens' Advisory Commission on Elections Meeting 7 November 2017.*
- California Secretary of State, C. (2007). *Top-To-Bottom Review of California's Voting Systems. California Secretary of State. Aug. 2007.*
- California Secretary of State, C. (2014a). *Post-Election Risk-Limiting Audit Pilot Program 2011-2013 Appendices.* (073014).
- California Secretary of State, C. (2014b). *Post-Election Risk-Limiting Audit Pilot Program 2011-2013 Final Report to the United States Election Commission.* (073014). California Secretary of State.

- Goggin, S. N., Byrne, M. D., & Gilbert, J. E. (2012). Post-Election Auditing: Effects of Procedure and Ballot Type on Manual Counting Accuracy, Efficiency, and Auditor Satisfaction and Confidence. *Election Law Journal*, 11(1).
- Hall, J. L., Luke W. Miratrix, Philip B. Stark, Melvin Briones, Elaine Ginnold, Freddie Oakley, Martin Peaden, Gail Pellerin, Tom Stanionis, and Tricia Webber. (2009). *Implementing Risk-Limiting Post-Election Audits in California*. Paper presented at the Proceedings of the 2009 Electronic Voting Technology Workshop/Workshop on Trustworthy Elections (EVT/WOTE '09).
- Interviewee (2018).
- Jefferson, D., Ginnold, E., Midstokke, K., Alexander, K., Stark, P. B., & Lehmkuhl, A. (2007). *Evaluation of Audit Sampling Models and Options for Strengthening California's Manual Count*. California Secretary of State. July 2007.
- Lindeman, M., Halvorson, M., Smith, P., Garland, L., Addona, V., & McCrea, D. (2008). *Principles and Best Practices for Post-Election Audits*.
- Lindeman, M., & Stark, P. B. (2012). A Gentle Introduction to Risk-limiting Audits. *IEEE SECURITY AND PRIVACY*(SPECIAL ISSUE ON ELECTRONIC VOTING, 2012).
- NCSL. (2017, 2017 October 10). Post-Election Audits.
- Ritchie, R., & Smith, H. (2016). *A Survey and Analysis of Statewide Election Recounts 2000-2015*.
- ROV. (2014). Official Final Results November 4, 2014 Gubernatorial General Election.
- ROV (2016, 2015-10-27). [October 25 2016 Communication ROV to BOS on RLAs].
- ROV. (2017). *November 8, 2016 Presidential General Election Post-Election Report Rev. Oct. 2017*.
- ROV (2018). [Communication from the office of the Santa Clara County Registrar of Voters].
- ROV, O. o. S. (2017) *Interview Office of the Santa Clara County Registrar of Voters*.
- Stark, P. B. (2009). *Risk-Limiting Audits*. Paper presented at the Workshop on Post-Election Audits - American Statistical Association, Alexandria, VA.
- Stark, P. B. (2012). Tools for Comparison Risk-Limiting Audits.

TAXPAYER-FUNDED AUTOMATIC ELECTION RECOUNTS

This report was **ADOPTED** by the 2017-2018 Santa Clara County Civil Grand Jury on this
13 day of June, 2018.



Peter L. Herten
Foreperson