Election Night Hand Counts: Realities and Risks

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It's been said that elections are a combination of people, processes, and technology. Human oversight of election processes is integral to ensuring that voting technology works correctly and that votes are counted as cast. "Hand to eye" examination of ballots in audits and recounts are quality control checks that carefully and transparently assess that voting technology got the election outcome right—or correct the outcome if it did not—and give voters justified confidence in election outcomes. But that best practice does not translate to humans hand counting millions of votes on election night. **This paper examines the risks of full election night hand counts, explains when hand counts should be used, and emphasizes why common-sense best practices that employ voting machines and post-election audits make our election outcomes verifiable and resilient.**

Claims that election night hand counts are the *only* way to confirm election outcomes are being used as a tool to spread disinformation about vote counting systems. If adopted, election night hand counts would lead to even more distrust in election outcomes when election results become delayed. Misguided proposals are multiplying in legislatures and throughout local jurisdictions nationwide to eliminate all vote counting machines and move to hand counting all paper ballots. In 2023, at least eight states introduced legislation banning the use of vote counting machines to count ballots.[1] One proposal in Arizona would have effectively banned vote counting machines by requiring equipment to be configured in ways that do not currently exist.[2]

Eliminating vote counting machines for election night hand counts impacts everything from understaffed and underfunded election budgets, the speed of election result reporting, and the reliability of outcomes. **While hand counts are necessary for checking election outcomes in audits and recounts, widespread expansion of hand counting would impair election administration and undermine public confidence in U.S. elections.**

1 *See* Voting Rights Lab, Bill Search: 2023 Interference with Election Administration, https://tracker.votingrightslab.org/pending/search?number=3587451327810339 (last accessed Aug. 23, 2023). [Return to Main Document]

2 *See* S.B. 1074, 56th Leg., (Ariz. 2023), https://apps.azleg.gov/BillStatus/BillOverview/78670. [Return to Main Document]

Defining "election night hand counts" and "hand marked" paper ballots

We refer here to these calls for broad hand counts as *election night hand counts*, meaning that humans will hand count all ballots cast to get initial election results, although these counts might go on for days following the election. *Election night hand counts* differ from hand counts used in post-election audits and recounts.

Calls to eliminate vote counting machines also often refer to *hand marked* paper ballots. *Hand counting*, however, should not be conflated with *hand marking,* the process in which a voter marks a paper ballot that can be verified directly before being cast. For many voters, hand marking their ballots provides the best way to confirm that their ballots reflect their intent because paper ballots are designed to provide a "human-readable recording of a voter's choices."[3]

Accuracy of machine counts can be checked

Calls to replace vote counting machines with election night hand counts disregard the safeguards election officials can use[4] to ensure the security and accuracy of voting technology. For most jurisdictions in the U.S., machine counts of paper ballots remain the best method for election night counting. Vote counting machines provide initial, unofficial results quickly because they are designed to count votes in large quantities and at high speeds; humans are not.

The unofficial results from vote counting machines should be checked for accuracy before becoming final and official by conducting a **post-election audit.** Robust post-election audits of paper ballots provide solid evidence for the initial election outcome when it is correct—and an opportunity to correct the outcome when it is not—making them the best safeguard for assuring security and accuracy. Typically, an audit randomly selects an appropriate quantity of the voted paper ballots, examines those ballots by hand, and compares the audit results with the machine results.[5]

Most audits today involve hand counting *batches* of paper ballots that were originally counted together. (For instance, a batch could comprise all the ballots cast on one scanner on Election Day.) These types of hand counts are less prone to error than election night hand counts because there are many fewer votes to count, and the ballots can carefully be examined under significantly less time pressure. A well conducted audit is transparent to the public and includes a process for identifying discrepancies and reporting how the discrepancies were resolved.[6]

Proponents of election night hand counts often assume that it is an accurate practice, but studies show vote counting machines count votes more accurately than humans do.[7] In a study comparing the absolute difference between the election night hand count and that of the statewide recount for two Wisconsin elections from 2011 and 2016, researchers found "vote counts originally conducted by computerized scanners were, on average, more accurate than votes that were originally tallied by hand."[8]

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3 National Academies of Sciences, Engineering, and Medicine, *Securing the Vote: Protecting American Democracy* 9, 106 (2018), https://doi.org/10.17226/25120. [Return To Document]

4 *See generally* U.S. Election Assistance Commission, *Voting System Security Measures* (2022), https://www.eac.gov/sites/default/files/electionofficials/security/Voting_System_Security_Measures_508_EAC.pdf. [Return to Document]

5 *See e.g.*, Verified Voting, *Post-Election Audits*, https://verifiedvoting.org/audits/ (last accessed Aug. 23, 2023). [Return to Document]

6 *See generally Principles and Best Practices for Post-Election Tabulation Audits* (Garland et al. eds., 2018), https://verifiedvoting.org/publication/principles-and-best-practices-for-post-election-tabulation-audits/. [Return to Document]

7 *See generally* Stephen Ansolabehere, Barry C. Burden, Kenneth R. Mayer & Charles Stewart III, *Learning from Recounts,* 17:2 E.L.J. 100 \ (2018), https://dspace.mit.edu/bitstream/handle/1721.1/134277/elj.2017.0440.pdf. [Return to Document]

8 *Id.*, at 115. At least 0.21% of ballots in 2011 and 0.59% in 2016 were miscounted at the precinct level (in Wisconsin, this is known as the "ward" or "reporting unit" level). When projected to the individual ballot level, even larger proportions of ballots may have been miscounted. Researchers estimate an error rate for all ballots of about 0.26% in 2011 and 0.86% in 2016, with some errors canceling each other out. [Return to Document]

Recent pilots aimed at testing the feasibility of election night hand counts have also shown high error rates. In Nye County, Nevada, the local county clerk who had pushed for hand counts acknowledged major discrepancies in the 2022 midterm vote totals produced by hand counts and those produced by vote counting machines. Just one day into the count, they found a discrepancy of nearly 25%, chalking the errors up to mistakes by volunteer counters.[9]

In Shasta County, California, the county clerk and registrar of voters noted the importance of auditing machine counts rather than conducting the entire counting process by hand: "A selective manual tally—that is, hand counting some ballots to prove that machine counts are precise, accurate, and indicate the correct winner—is generally recognized as a best practice. Indeed, such a manual tally of some, randomly selected ballots is already part of the comprehensive audits required by California law. However, in a county the size and complexity of Shasta, hand counting every ballot—particularly without verification by another method, normally a machine count—is not a best practice. Full manual tallies are expensive, complex, and prone to significant errors."[10]

Machine counts are faster & more cost-effective

Election results must be tabulated and reported in a timely manner. Election offices must meet all certification deadlines required by law, and delays in reporting election results have been shown to sow distrust in election outcomes.[11] Hand counting becomes particularly slow when humans must examine complex ballots with dozens of contests spanning multiple pages. The U.S. has the longest ballots of any democracy in the world, with voters deciding on candidates at all levels of government (local, state, and federal) and the number of contests on the ballot varying by jurisdiction. Aside from the narrow task of counting all the ballots, aggregating all the vote counts is a massive data entry challenge prone to further error, spanning dozens or even hundreds of disparate contests.

Elections offices are understaffed and underfunded, and while hiring more election workers to conduct hand counts would make the process faster, it comes at a cost. In Shasta County, California, home to more than 112,000 registered voters,[12] the board of supervisors ignored pleas from election administrators and canceled the county's contract with its current voting machine vendor, directing the elections department to develop a plan for hand counting ballots.[13] The county clerk and registrar of voters released preliminary staffing and budgetary estimates for the implementation of hand counting all ballots after polls close on Election Day, estimating the need for approximately 1,200 additional workers in order to meet the 30-day post-election certification deadline, and at least $1,651,209 to cover labor costs because California state law prohibits the use of volunteers and requires these workers to be paid county staff.[14] Threatened with a similar proposal to eliminate their voting machines, Kern County, California—even larger than Shasta—estimated costs for a hand count of last year's midterm election (103,857 hours, 920 temporary staff) at nearly $1.9 million.[15]

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9 Brett Forrest, *Nye County clerk tempers hand count expectations, calls it a 'test'*, news3lv.com (Nov. 12, 2022), https://news3lv.com/news/local/nye-county-clerk-tempers-hand-count-expectations-calls-it-a-test. [Return to Document]

10 Cathy Darling Allen, Shasta County Clerk/Registrar of Voters, *Analysis of Manual Tally Options for Shasta County* 7 (2023), https://elections.shastacounty.gov/wp-content/uploads/2023/05/Shasta-Manual-Tally-Analysis-2023.pdf. [Return to Document]

11 Lawrence Norden & Derek Tisler, *Why Does It Take So Long to Count Mail Ballots in Key States? Blame Legislatures* (Nov. 7, 2022), https://www.brennancenter.org/our-work/analysis-opinion/why-does-it-take-so-long-count-mail-ballots-key-states-blame-legislatures [Return to Document]

12 Shasta County Elections, *Voter Registration Statistics*, https://elections.shastacounty.gov/resources/voter-registration-information/voter-registration-statistics/ (last updated Oct. 17, 2023). [Return to Document]

13 *See* David Benda, *Shasta, where Trump won big in 2020, to become first California county to drop Dominion*, Redding Record Searc light (Jan. 24, 2023), https://www.redding.com/story/news/local/2023/01/25/shasta-become-first-california-county-drop-dominion-voting-machines/69836287007/; *see also* Mason Carroll, *What's next for hand-counting ballots in Shasta County?*, KRCR (Apr. 3, 2023), https://krcrtv.com/news/local/whats-next-for-hand-counting-ballots-in-shasta-county. [Return to Document]

14 Darling Allen, *supra* note 10, at 4–6. [Return to Document]

15 *Our View: Hand-counting votes expensive, time-consuming and unreliable*, The Bakersfield Californian (Sept. 17, 2023), https://www bakersfield.com/opinion/our-view/our-view-hand-counting-votes-expensive-time-consuming-and-unreliable/article_ccdecbc4-534411ee-93fb-f7322e711c54.html [Return to Document]

When hand counts should be used

Calls for full hand counts should be undertaken for specific reasons, not out of generalized fear of voting machines. Any jurisdiction that already effectively **hand counts ballots** without placing onerous demands on election workers should keep doing it. Hand counting ballots is a common practice[16] in smaller jurisdictions in the United States—0.17% of registered voters currently live in jurisdictions where ballots are counted by hand. Many of these 613 jurisdictions are single-precinct jurisdictions or towns in states like Idaho, Maine, New Hampshire, Vermont, and Wisconsin for which hand counting a relatively small number of ballots is feasible.[17]

In some cases, a full hand **recount** is needed to determine a close outcome. Recounts are generally either required by law or requested by candidates and involve examining votes cast in a single race.[18] For example, in Minnesota's recount of the 2008 U.S. Senate contest between Norm Coleman and Al Franken, a bipartisan state review panel conducted a review of disputed ballots, including those that were initially rejected but ultimately deemed eligible for counting. While litigation dragged into the following year, the recount was meticulously and transparently conducted, giving Franken a 312-vote margin—about 0.01%—in the final returns.[19]

Occasionally, a voting system error occurs that is best resolved through a hand count. For example, in DeKalb County, Georgia in the 2022 primary, a procedural error made it impossible for the scanners to correctly count votes in a county commissioner race. The roughly 16,000 ballots were counted by hand, correcting the initially reported outcome.[20] Such cases are rare but not unprecedented. Never yet has such an error extended beyond one county.

To read more about hand counted paper ballots and methods commonly used for hand counting, visit **verifiedvoting.org/election-system/hand-counted-paper-ballots/.**

Public confidence in U.S. elections is paramount

There is a specific time and place for hand counts, but high-volume election night hand counts are costly, slow, and inaccurate. Resources and energy should instead be devoted to enhancing existing safeguards, not discarding vote counting machines for counting ballots. Safeguards include implementing robust post-election audits to check the machine's accuracy *and* giving election officials the resources they need to safely and effectively do their jobs. With these and other best practices in place,[21] election officials can give the public accurate, timely results with high assurance that votes were counted as cast.

16 *Hand Counted Paper Ballots*, Verified Voting, https://verifiedvoting.org/election-system/hand-counted-paper-ballots/ (last accessed Oct. 17, 2023). [Return to Document]

17 *See* The Verifier — Election Day Equipment — 2024, Verified Voting, https://verifiedvoting.org/verifier/ (last accessed Oct. 17, 2023) [Return to Document]

18 *See e.g.*, Mark Halvorson et al., *Recount Principles and Best Practices* 3 (2014), https://ceimn.org/best-practices/recount-principles-and-best-practices. [Return to Document]

19 Minnesota Secretary of State, Minnesota's Historic 2008 Election 5 (2009), https://www.sos.state.mn.us/media/3078/minnesotas-historic-2008-election.pdf. [Return to Document]

20 *See* Dan Whisenhunt, *Hand count in District 2 DeKalb Commission race changes runoff picture*, Decaturish (June 1, 2022), https://decaturish.com/2022/06/breaking-hand-count-in-district-2-dekalb-commission-race-changes-runoff-picture/; *see also* Georgia Secretary of State, *Georgia Election System Ensures Accuracy of DeKalb Results* (June 3, 2022, https://sos.ga.gov/news/georgia-election-system-ensures-accuracy-dekalb-results-0. [Return to Document]

21 *See generally* National Academies of Sciences, Engineering, and Medicine, *Securing the Vote: Protecting American Democracy* (2018), https://doi.org/10.17226/25120. [Return to Document]