

Exhibit: Independent Audits of Election Systems

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The information below the line has been extracted from the following web link. The contributing executive authors and national organizations specializing in election principles and practices are listed.

Source: <http://electionaudits.org/auditprinciples>

This expert information is particularly significant since it appears that the Nevada Secretary of State organizations at the State and County levels have not implemented many, if any, of the well-documented reasons, methods, policies and federal standards for performing independent audits of elections.

Since secure public elections must be considered vital to sustaining the integrity of our free society, NV audit standards should be more stringent than what is required for financial institutions, national security, and publicly traded corporations. Even NV clear policy statements to that effect seem to be missing.

This lack of independent auditing of NV elections must be a matter of great concern for government, citizens and candidates. Otherwise, we believe end-to-end integrity of Nevada elections is not feasible.

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The following election audit principles and recommendations are endorsed by the following organizations:

- Brennan Center for Justice
- Citizens Alliance for Secure Elections - Ohio
- Citizens for Election Integrity Minnesota
- Coloradoans for Voting Integrity
- Common Cause
- CTVotersCount.org
- E-Voter Education Project New York
- Florida Voters Coalition
- Georgians for Verified Voting
- Iowans for Voting Integrity
- Michigan Election Reform Alliance
- SAVEourVotes-Maryland
- Verified Voting
- Voting Integrity Task Force - Coalition for Peace Action - New Jersey
- Citizens for Election Integrity Massachusetts

Also, statistical portions, principles and best practices, are endorsed by the [American Statistical Association](#).

“Why Audit Election Results?”

No voting system is perfect. Nearly all US elections today are counted using electronic voting systems. Such voting systems have produced result-changing errors through problems with hardware, software, and procedures.⁽¹⁾ Errors can also occur in hand counting of ballots or in the compiling of results. Even serious error can go undetected if results are not audited effectively.”

“Well-designed and properly performed post-election audits can significantly mitigate the threat of error, and should be considered integral to any vote counting system. A post-election audit in this document refers to hand-counting votes on paper records and comparing those counts to the corresponding vote counts originally reported, as a check on the accuracy of election results, and resolving discrepancies using accurate hand counts of the paper records as the benchmark. Such audits are arguably the most economical component of a quality voting system, adding a very small cost⁽²⁾ for a large set of benefits.”

“The benefits of such audits include:

- Revealing when recounts are necessary to verify election outcomes
- Finding error whether accidental or intentional
- Deterring fraud
- Providing for continuous improvement in the conduct of elections
- Promoting public confidence in elections

Post-election audits differ from recounts. Post-election audits routinely check voting system performance in contests,⁽³⁾ regardless of how close margins of victory appear to be. Recounts repeat ballot counting in special circumstances, such as when preliminary results show a close margin of victory. Post-election audits that detect errors can lead to a full recount. When an audited contest is also recounted, duplicate work can be avoided....”

“Voting systems should have reliable audit records. Best effort audits should be performed even if the technology does not support optimal audits, or even if the laws do not permit optimal remedies.⁽⁴⁾ No single

model for post-election audits is best for all states. Election traditions, laws, administrative structure and voting systems vary widely. Nonetheless, there are guiding principles that apply across all states. As states develop their own audit models, the public should have the opportunity to help shape those regulations.”

“The following principles were written to guide the design of high-quality post election audits. They were developed by an ad hoc group comprising many stakeholders, including election officials, public advocates, computer scientists, statisticians, political scientists and legislators.”

“ELECTION AUDITING PRINCIPLES

1. **TRANSPARENCY:** Elections belong to the public. The public must be allowed to observe, verify, and point out procedural problems in all phases of the audit without interfering with the process.
2. **INDEPENDENCE:** The authority and regulation of post-election audits should be independent of officials who conduct the elections. The actual work of postelection audits may be best performed by the officials who conduct the elections.
3. **PAPER RECORDS:** Ideally, post-election audits use hand-to-eye counts of voter-marked, voter-verified paper ballots. Where such paper ballots are not available, other forms of voter-verifiable paper records should be used.
4. **CHAIN OF CUSTODY & BALLOT ACCOUNTING:** Robust ballot accounting and secure chain of custody of election materials and equipment are prerequisites for effective post-election audits.
5. **RISK-LIMITING AUDITS:** Post-election audits reduce the risk of confirming an incorrect outcome. Audits designed explicitly to limit such risk (risk limiting audits) have advantages over fixed-percentage or tiered audits, which often count fewer or more ballots than necessary to confirm the outcome.
6. **ADDRESSING DISCREPANCIES and CONTINUING THE AUDIT:** When discrepancies are found, additional counting and/or other investigation may be necessary to determine the election outcome or to find the cause of the discrepancies.
7. **COMPREHENSIVE:** All jurisdictions and all ballot types, including absentee, mail-in and accepted provisional ballots, should be subject to the selection process.
8. **ADDITIONAL TARGETED SAMPLES:** Including a limited number of additional targeted samples of ballots can increase audit effectiveness and public confidence. Such samples may be selected by candidates, issue committees, parties, election administrators, or

others as provided by regulation.

9. BINDING ON OFFICIAL RESULTS: Post-election audits must be completed prior to finalizing official election results and must either verify the outcome or, through a 100% recount, correct the outcome.”

Notes: “[1] For example, in Pottawattamie County, Iowa, in the June 2006 primary election for County Recorder, the original optical scan count showed challenger Oscar Duran defeating the incumbent, John Sciortino. A hand count showed that Sciortino actually had won handily; the scanners had been misprogrammed. In Napa County, California, after the March 2004 primary, the 1% manual tally discovered that the optical scanners had been miscalibrated and were failing to detect the dye-based ink commonly used in gel pens. The ensuing recount recovered almost 6700 votes (but no outcomes changed).

[2] For instance, in Minnesota after the 2006 general election, the cost of the wages for election judges (pollworkers) to count votes has been estimated at \$24,500 to \$27,000 statewide, 9 to 10 cents per hand-counted vote, and about 1.2 cents per voter in the election (<http://www.ceimn.org/files/CEIMNAuditReport2006.pdf>). While audit costs will vary depending on the scope of the audits and other considerations, they can be expected to be a **small fraction** of election administration costs.

[3] We will use “contest” to refer to any ballot item (such as an election to public office or a ballot initiative) not to a challenge to the results, as in some states.

[4] The proposal of best practices for auditing a given system does not imply an endorsement of the system.”

Ineffective Audit Policies/Practices Create Opportunities For Fraud

The blow quotes from a 90-page, NY University School of Law document are included to illustrate what the Nevada Election System must do to reduce its high risks to errors, tampering and fraud. With no apparent system-level audit trails, no comprehensive chain-of-custody records, and no use of independent, licensed auditors and licensed fraud examiners, the NV Election System is highly vulnerable to undetected tampering and criminal corruption.

From a management perspective, Nevada does not have an official “Election System Chief Technical Officer” (highly qualified professional IT employee or contractor) who sets, monitors and enforces state election security standards and practices for the Nevada Secretary of State.

In today’s world of successful cyber crimes against government (including the White House, Defense, and Intelligence Agencies), this omission should be considered a serious, material weakness in what everyone expects to be the highest level security data system in the State.

The following are brief quotes from the Brennan Center for Justice at the NY University School of Law paper for The Federal Election Commission: www.brennancenter.org
(Underline and bold emphasis in the quotes are provided by the exhibit author.)

“Post Election Audits: Restoring Trust in Elections”

“In addition to the general recommendations for all audit models made in the “Audit Best Practices” section and which we strongly reiterate here, we also make the following recommendation to strengthen the fixed-percentage model:

- *Implement Effective Procedures for Acting on Seemingly Small Discrepancies. If audits are to have a real deterrent effect, jurisdictions must adopt clear procedures for addressing audit discrepancies when they are found. As noted in “The Machinery of Democracy”, a seemingly minor discrepancy between paper and electronic records (of even just a few votes) could indicate far more serious problems. Without protocols for responding to discrepancies, the detection of fraud or error will not prevent them from occurring again. Such protocols should include a required review of system software code.”*

It has been admitted by NV election system managers that Nevada has never had access to the commercial voting machinery software code, hardware testing and/or networking processes. Only uncleared vendors and service contractors appear to have had code access, and without government technically-qualified oversight.

Without government access and capabilities to inspect, test and verify the election hardware and software before, during and after elections, claims of superior security for Nevada election systems cannot be accepted by the Legislature, candidates for office, the political parties and state citizens.

Quoted from page 19 of the report:

“ENSURING OVERALL AUDIT EFFECTIVENESS

If the audit is to be effective, jurisdictions must have certain basic policies and practices in place. Principally, jurisdictions ought to:

- ***Ensure the Physical Security of Audit Materials.** Effective auditing of voter-verifiable paper records will serve to deter attacks on voting systems and identify problems only if states have implemented solid procedures to ensure the **physical security of election materials used in a post-election audit, including the paper records of the vote, voting machines, and tally servers.***
- ***Implement Effective Procedures for Addressing Evidence of Fraud or Error.***

*If audits are to have a real deterrent effect, jurisdictions must adopt clear procedures for addressing discrepancies between the paper records and electronic tallies when they are found. **Without protocols for responding to discrepancies, the detection of fraud or error will not prevent it from successfully altering the outcome of an election.***

*Recommended responses include making corrections where warranted, disallowing results if an appropriate remedy cannot be determined, and ensuring accountability for discrepancies. Jurisdictions should document discrepancies and any actions in response to them in **publicly available discrepancy logs**.*

*When there have been no losses or additions of paper records, a **single unexplained discrepancy** between the paper records and electronic tallies is a **strong indication of a software problem of some kind**.*

*Any such discrepancy, even if it is just one vote and can have no effect on the outcome, is grounds for a **review of voting machine software code**. Such a review need not delay certification of the election, but it should be investigated. **To be effective, election officials must have the ability to audit the code, not just the votes.***

- **Audit the Entire Voting System, Not Just the Machines.** *Although this study focuses only on post-election audits of voter-verifiable paper records, jurisdictions should conduct audits of the entire voting system to catch errors or fraud in other parts of the voting system. Historically, incorrect vote totals often result from aggregation mistakes at central vote tally locations.*

Accordingly, good audit protocols will mandate that the entire system – from early and absentee ballots to aggregation at the tally server – be audited for accuracy. This should also include, at the very least, the ability of election officials to audit the code where they deem necessary.