

## Manual Audit Requirements

The following examples illustrate a variety of manual audit requirements in several states using voter-verified paper records. Some apply generically to both DRE + VVPAT systems and optical scan systems, since both offer voter-verified paper records which can be compared to an electronic tally. Others refer specifically to DRE + VVPAT systems. In each case, the paper record verified by the voter is the one used in the manual count. None of the states listed here permit anything but the VVPR to be used for the manual audit. All but California's, Illinois' and Minnesota's provisions were passed this year; Illinois' 2005 bill updates an earlier law by increasing the percentage audit.

This document may not include all states with mandatory random manual audits. The Verified Voting Foundation continues to research this issue and will post updates to this information as new data becomes available. We welcome input and suggestions.

### ALASKA

**Manual audit requirement:** One precinct accounting for at least 5% of the ballots in that district  
Statute or legislative reference: HB94 [Ch. No. 2, FSSLA 2005]; Signed into law 06/24/05<sup>1</sup>

**Language of the audit provision:**

Sec. 15.15.430. Scope of the review of ballot counting. (a) the review of ballot counting by the director shall include ... (3) unless the ballot for the election district contains nothing but uncontested offices, a hand count of ballots from one randomly selected precinct in each election district that accounts for at least five percent of the ballots cast in that district. (b) If, following the ballot review set out in (a) of this section, the director finds there is a discrepancy of more than one percent between the results of the hand count under (a) (3) of this section and the count certified by the election board, the director shall conduct a hand count of the ballots from that district. (c) If the director finds an unexplained discrepancy in the ballot count in any precinct, the director may count the ballots from that precinct.

### CALIFORNIA

**Manual audit requirement:** At least 1% of the precincts  
Statute or legislative reference: EC 15360; Took effect 1965<sup>2</sup>

**Language of the audit provision:**

15360. During the official canvass of every election in which a voting system is used, the official conducting the election shall conduct a public manual tally of the ballots tabulated by those devices cast in 1 percent of the precincts chosen at random by the elections official. If 1 percent of the precincts should be less than one whole precinct, the tally shall be conducted in one precinct chosen at random by the elections official. In addition to the 1 percent count, the elections official shall, for each race not included in the initial group of precincts, count one additional precinct. The manual tally shall apply

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<sup>1</sup> [http://www.legis.state.ak.us/basis/get\\_bill\\_text.asp?hsid=HB0094Z&session=24](http://www.legis.state.ak.us/basis/get_bill_text.asp?hsid=HB0094Z&session=24)

<sup>2</sup> <http://www.leginfo.ca.gov/cgi-bin/waisgate?WAISdocID=43988720581+11+0+0&WAIAction=retrieve>

only to the race not previously counted. Additional precincts for the manual tally may be selected at the discretion of the elections official.

336.5: The purpose of the manual count is to “verify the accuracy of the automated count.”

See also Standards established by the Secretary of State and adopted January 2005<sup>3</sup>:

2.1.1.3 The paper record copy shall be considered the official paper audit record and shall be used for the required 1% manual recount and for any full manual recount.

## COLORADO

**Manual audit requirement:** Not less than 1% of the voting devices  
Statute or legislative reference: S.B.05-198; Signed into law 06/06/05<sup>4</sup>

**Language of the audit provision:**

1-7-514. Random audit. (1) (a) (I) Following each primary, general, coordinated, or congressional district vacancy election, the secretary of state shall publicly initiate a manual random audit to be conducted by each county and shall randomly select not less than one percent of the voting devices used in each county; except that, where a central count voting device is in use in the county, the rules promulgated by the secretary pursuant to subsection (5) of this section shall require an audit of a specified percentage of ballots counted within the county.

(II) for an election taking place in a county prior to the date the county has satisfied the requirements of section 1-5-802, the audit shall be for the purpose of comparing the manual tallies of the ballots counted by each voting device selected for each such audit with the corresponding tallies recorded directly by each such device.

(III) for an election taking place in a county on or after the date the county has satisfied the requirements of section 1-5-802, the audit shall be conducted for the purpose of comparing the **manual tallies of the voter-verified paper records** produced or employed by each voting device selected for such audit with the corresponding ballot tallies recorded directly by each such device.

## CONNECTICUT

**Manual audit requirement:** 2 machines per assembly district  
Statute or legislative reference: S.B.55; Public Act 05-188; signed into law 07/01/05<sup>5</sup>

**Language of the audit provision:**

(5) Not later than five business days after each election in which a direct recording electronic voting machine is used, the registrars of voters or their designees, representing at least two political parties, **shall conduct a manual audit of the votes recorded on at least two direct recording electronic voting machines used in each assembly district.**

... The machines audited under this subdivision shall be selected in a random drawing that is announced in advance to the public and is open to the public. All direct recording electronic voting machines used within an assembly district shall have an equal chance of

<sup>3</sup> [http://www.ss.ca.gov/elections/ks\\_dre\\_papers/avvpat\\_standards\\_1\\_21\\_05.pdf](http://www.ss.ca.gov/elections/ks_dre_papers/avvpat_standards_1_21_05.pdf)

<sup>4</sup> [http://www.leg.state.co.us/clics2005a/csl.nsf/fsbillcont3/902196947278857887256F4D0069B29F?open&file=198\\_e nr.pdf](http://www.leg.state.co.us/clics2005a/csl.nsf/fsbillcont3/902196947278857887256F4D0069B29F?open&file=198_e nr.pdf)

<sup>5</sup> <http://www.cga.ct.gov/2005/act/Pa/2005PA-00188-R00SB-00055-PA.htm>

being selected for the audit... **The manual audit shall consist of a manual tabulation of the contemporaneously produced, individual, permanent, voter-verified, paper records** produced by each voting machine subject to the audit and a comparison of such count, with respect to all candidates and any questions or proposals appearing on the ballot, with the electronic vote tabulation reported for such voting machine on the day of the election or primary... Such manual audit shall be noticed in advance and be open to public observation. A reconciliation sheet, on a form prescribed by the Secretary of the State, that reports and compares the manual and electronic vote tabulations of each candidate and question or proposal on each such voting machine, along with any discrepancies, shall be prepared by the audit officials, signed and forthwith filed with the town clerk of the municipality and the Secretary of the State. If any contemporaneously produced, individual, permanent, voter-verified, paper record is found to have been damaged, the same procedures described in subdivision (3) of this section for substituting such record with the voting machine generated, individual, permanent, paper record produced by the voting machine bearing the identical machine generated unique identifier as the damaged record shall apply and be utilized by the audit officials to complete the reconciliation. The reconciliation sheet shall be open to public inspection and may be used as prima facie evidence of a discrepancy in any contest ... If the audit officials are unable to reconcile the manual count with the electronic vote tabulation and discrepancies, the Secretary of the State shall conduct such further investigation of the voting machine malfunction as may be necessary for the purpose of reviewing whether or not to decertify the voting machine or machines and may order a recanvass...

## HAWAII

**Manual audit requirement:** 10%

Statute or legislative reference: H.B.1740; ratified 07/06/05 (Act 200)<sup>6</sup>

**Language of the audit provision:**

§16-42 Electronic voting requirements. ...

No electronic voting system shall be used in any election unless it generates a paper ballot that may be inspected and corrected by the voter before the vote is cast, and unless every paper ballot is retained as the definitive record of the vote cast...

(b) The chief election officer may rely on electronic tallies created directly by electronic voting systems, in lieu of counting the paper ballots by hand or with a mechanical tabulation system if: ....

... (3) The chief election officer conducts a post-election, pre-certification audit of a random sample **of not less than ten per cent of the precincts employing the electronic voting system, to verify that the electronic tallies generated by the system in those precincts equal hand tallies of the paper ballots generated by the system in those precincts;** and

(4) If discrepancies appear in the pre-certification audits in paragraph (3), the chief election officer, pursuant to administrative rules, shall immediately conduct an expanded audit to determine the extent of misreporting in the system."

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<sup>6</sup> [http://www.capitol.hawaii.gov/sessioncurrent/bills/hb1740\\_sd2\\_.htm](http://www.capitol.hawaii.gov/sessioncurrent/bills/hb1740_sd2_.htm)

## ILLINOIS

**Manual audit requirement:** 5%

Statute or legislative reference: H.B.1968; passed 05/25/05<sup>7</sup>

**Language of the audit provision:**

...the election authority shall test the voting devices and equipment in 5% of the precincts within the election jurisdiction.

The test shall be conducted **by counting the votes marked on the permanent paper record of each ballot cast in the tested precinct printed by the voting system at the time that each ballot was cast** and comparing the results of this count with the results shown by the certificate of results prepared by the Direct Recording Electronic Voting System in the test precinct.

## MINNESOTA

**Manual audit requirement:** ~2% (80 precincts of 4076 statewide)

Statute or legislative reference: MN Statutes Ch. 204C.50; became law 2004.<sup>8</sup>

**Language of the audit provision:**

204C.50 Postelection security and certification review.

Subdivision 1. Selection for review; notice. (a) The Office of the Secretary of State shall, within three days after each state general election beginning in 2006, randomly select 80 precincts for post-election review as defined in this section. The precincts must be selected so that an equal number of precincts are selected in each congressional district of the state. Of the precincts in each congressional district, at least five must have had more than 500 votes cast, and at least two must have had fewer than 500 votes cast. The secretary of state must promptly provide notices of which precincts are chosen to the election administration officials who are responsible for the conduct of elections in those precincts.

Subd. 2. Scope and conduct of review. Each review is limited to federal and state offices and must consist of at least the following:

(a) The election officials immediately responsible for a precinct chosen for review must conduct the following review and submit the results in writing to the State Canvassing Board before it meets to canvass the election:

- (1) a hand tally of the paper ballots, of whatever kind used in that precinct, for each contested election;
- (2) a recount using the actual machine and software used on election day, if a precinct-count or central-count automated voting system was used; and
- (3) a comparison of the hand tally with the reported results for the precinct in the county canvassing board report, as well as the actual tape of any automated tabulation produced by any precinct-count or central-count optical scan equipment that may have been used to tabulate votes cast in that precinct.

<sup>7</sup> <http://www.ilga.gov/legislation/94/HB/09400HB1968sam001.htm>

<sup>8</sup> <http://www.revisor.leg.state.mn.us/stats/204C/50.html>

## NEW MEXICO

**Manual audit requirement:** 2%

Statute or legislative reference: S.B.678; signed into law 04/06/05 (Ch.270)<sup>9</sup>.

**Language of the audit provision:**

"POST-ELECTION DUTIES--RANDOM VOTING SYSTEM CHECK--RECOUNT.--

A. The secretary of state shall direct the county clerks to compare the total votes tallied in the general election for the office of president or governor from **two percent of the voting systems in the state with total votes tallied by hand from the voter verifiable and auditable paper trail from those voting systems**. The check of the voting systems shall occur within five days of the completion of the county canvass.

## NEW YORK

**Manual audit requirement:** 3%

Statute or legislative reference: S05877, signed into law 07/12/05; Chap. 181<sup>10</sup>.

**Language of the audit provision:**

S 14. The election law is amended by adding a new section 9-211 to 38 read as follows:  
S 9-211. Audit of voter verifiable audit records.

1. Within fifteen days after each general or special election, and within seven days after every primary or village election conducted by the board of elections, the board of elections or a bipartisan committee appointed by such board shall **manually audit the voter verifiable audit records from three percent of voting machines** or systems within the jurisdiction of such board. Voting machines or systems shall be selected for audit through a random, manual process.

2. The manual audit tallies for each voting machine or system shall be compared to the tallies recorded by such voting machine or system, and a report shall be made of such comparison which shall be filed in the office of the state board of elections.

3. The state board of elections shall, in accordance with subdivision four of section 3-100 of this chapter, promulgate regulations establishing a uniform statewide standard to be used by boards of elections to determine when a discrepancy between the manual audit tallies and the voting machine or system tallies shall require a further voter verifiable record audit of additional voting machines or systems or a complete manual audit of all machines or systems within the jurisdiction of a board of elections. Any board of elections shall be empowered to order that any such audit shall be conducted whenever any such discrepancy exists.

4. If a complete audit shall be conducted, the results of such audit shall be used by the canvassing board in making the statement of canvass and determinations of persons elected and propositions rejected or approved. The results of a partial voter verifiable record audit shall not be used in lieu of voting machine or system tallies.

5. Notwithstanding subdivision four of this section, if a voting machine or system is found to have failed to record votes in a manner indicating an operational failure, the board of canvassers shall use the voter verifiable audit records to determine the votes cast on such

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<sup>9</sup> <http://legis.state.nm.us/Sessions/05%20Regular/final/SB0678.pdf>

<sup>10</sup> <http://assembly.state.ny.us/leg/?bn=S05877&sh=t>

machine or system, provided such records were not also impaired by the operational failure of the voting machine or system.

## NORTH CAROLINA

**Manual audit requirement:** Not defined as a percentage of the votes. See relevant text below.  
Statute or legislative reference: S.B.223; ratified 08/16/05<sup>11</sup>

**Language of the audit provision:**

"a sample hand-to-eye count of the paper ballots or paper records of a statewide ballot item in every county. The presidential ballot item shall be the subject of the sampling in a presidential election. ...

The sample chosen by the State Board shall be of full precincts, full counts of absentee ballots, and full counts of one-stop early voting sites. The size of the sample of each category shall be chosen to produce a statistically significant result and shall be chosen after consultation with a statistician. The actual units shall be chosen at random.<sup>12</sup> ..If ...a... discrepancy between the hand-to-eye count and the mechanical or electronic count is significant, a complete hand-to-eye count shall be conducted.

## WASHINGTON

**Manual audit requirement:** 4%

Statute or legislative reference: E.S.S.B.5395; signed into law 05/03/05; Ch. 242.<sup>13</sup>

**Language of the audit provision:**

NEW SECTION. **Sec. 3.** A new section is added to chapter 29A.60 RCW to read as follows:

(1) The electronic record produced and counted by electronic voting devices is the official record of each vote for election purposes. The paper record produced under section 1 of this act must be stored and maintained for use only in the following circumstances:

- (a) In the event of a manual recount;
- (b) By order of the county canvassing board;
- (c) By order of a court of competent jurisdiction; or
- (d) **For use in the random audit of results described in section 5 of this act.**

(2) When such paper record is used in any of the circumstances listed in subsection (1) of this section, it shall be the official record of the election.

NEW SECTION. **Sec. 5.** A new section is added to chapter 29A.60 RCW to read as follows:

Prior to certification of the election as required by RCW 29A.60.190, the county auditor shall conduct an audit of results of votes cast on the direct recording electronic voting devices used in the county. This audit must be conducted by

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<sup>11</sup> <http://www.ncga.state.nc.us/Sessions/2005/Bills/Senate/PDF/S223v6.pdf>

<sup>12</sup> By comparison, a full precinct in San Diego county could be as few as one out of 1600+ precincts if that were deemed statistically significant, but adding a full count of all absentee ballots you would be auditing fully 1/3 or more of the votes in the county. I'm not sure of the percentage of absentee voters in North Carolina.)

<sup>13</sup> <http://www.leg.wa.gov/pub/billinfo/2005-06/Pdf/Bills/Session%20Law%202005/5395-S.SL.pdf>

randomly selecting by lot **up to four percent of the direct recording electronic voting devices or one direct recording electronic voting device, whichever is greater**, and, for each device, comparing the results recorded electronically with the results recorded on paper.

## WEST VIRGINIA

### Manual audit requirement: 5%

Statute or legislative reference: H.B.2950; signed into law 05/04/05<sup>14</sup>

**Language of the audit provision:** In canvassing the returns of the election, the board of canvassers shall examine all of the vote recording devices, the ballot labels, ballot cards, the automatic tabulating equipment used in the election and those voter verified paper ballots generated by direct recording electronic vote machines as required by subsection (d) of this section...

(d) During the canvass and any requested recount, at least five percent of the precincts are to be chosen at random and **the voter verified paper ballots are to be counted manually**. Whenever the vote total obtained from the manual count of the voter verified paper ballots for all votes cast in a randomly selected precinct:

- (1) Differs by more than one percent from the automated vote tabulation equipment; or
- (2) Results in a different prevailing candidate or outcome, either passage or defeat, of one or more ballot issues such precincts for any contest or ballot issue;

then the discrepancies shall immediately be disclosed to the public and **all** of the voter-verified paper ballots shall be manually counted. In every case that there is a difference between the vote totals obtained from the automated vote tabulation equipment and the corresponding vote totals obtained from the manual count of the voter-verified paper ballots, the **manual count of the voter-verified paper ballots shall be the vote of record**.

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<sup>14</sup> [http://www.legis.state.wv.us/Bill\\_Text\\_HTML/2005\\_SESSIONS/RS/BILLS/HB2950%20enr.htm](http://www.legis.state.wv.us/Bill_Text_HTML/2005_SESSIONS/RS/BILLS/HB2950%20enr.htm)