

## Manual Audit Requirements

The following examples illustrate a variety of manual audit requirements in several states using voter-verified paper records (VVPR), as well as two provisions from states that do not (yet) require VVPR<sup>1</sup>. Some apply generically to both direct recording electronic (DRE) systems equipped with voter-verified paper audit trails (VVPAT) 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 (e.g. Washington). In every case (except KY and PA—see note 1 below), the paper record verified by the voter is the one used in the manual count. The quantity of ballots to audit is most often stated as the ballots in some percentage of the total precincts, although some provisions audit by other units (by machine, ballot batches, etc.).

Most provisions were passed in 2005. California, Illinois, Kentucky, Missouri and Pennsylvania passed their laws prior to 2005. Illinois' 2005 bill updates an earlier law by increasing the percentage audit. Minnesota passed an increase in their percentage in 2006; Florida and Oregon passed laws in 2007. The most recent provision to pass is Tennessee's, signed into law on 06/05/2008.

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.

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### 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>2</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.

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<sup>1</sup> Neither Kentucky nor Pennsylvania currently has a VVPR requirement. It is not clear whether --or how-- these states are carrying out the statutorily required audit. In both states, paperless DRE systems predominate. Both states' laws were written several decades ago, before DREs were in widespread use.

<sup>2</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)

## ARIZONA

**Manual audit requirement:** Greater of 2% of precincts in county or two precincts  
Statute or legislative reference: SB1557; Passed 06/20/06<sup>3</sup>

**Language of the audit provision:**

Sec. 5. Section 16-602. C. For each countywide primary, general and presidential preference election, the county officer in charge of the election shall conduct a **hand count at the central counting center of at least two per cent of the precincts in that county, or two precincts, whichever is greater**. ... The precincts shall be selected by lot without the use of a computer.... The selection of the precincts shall not begin until all ballots voted in the precinct polling places have been delivered to the central counting center. The unofficial vote totals from all precincts shall be made public before selecting the precincts to be hand counted. ... Provisional ballots, conditional provisional ballots and write-in votes shall not be included in the hand counts and the early ballots shall be grouped separately by the officer in charge of elections for purposes of a separate manual audit pursuant to subsection G. The races to be counted shall include at least four contested races, and shall include one federal race, one statewide candidate race, one ballot measure and one legislative race on those ballots. ... In elections in which there are candidates for president, the presidential race shall be added to the four categories of hand counted races... *[Trigger provisions up to full hand count ensue. If full hand count is done, escrowed software is examined by a special evaluator with computer expertise who is unaffiliated with any voting system vendor.]*

## CALIFORNIA

**Manual audit requirement:** At least 1% of the precincts  
Statute or legislative reference: EC 15360; Took effect 1965<sup>4</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 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>5</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.

<sup>3</sup> <http://www.azleg.gov/FormatDocument.asp?inDoc=/legtext/47leg/2r/bills/sb1557o.asp>

<sup>4</sup> <http://www.leginfo.ca.gov/cgi-bin/waisgate?WAISdocID=43988720581+11+0+0&WAISaction=retrieve>

<sup>5</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)

## 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>6</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:** 10% of voting districts.

Statute or legislative reference: Public Act No. 07-194<sup>7</sup>

**Language of the audit provision:**

Section 1. (NEW) (*Effective from passage*) (a) Not earlier than the fifteenth day after any election or primary and not later than two business days before the canvass of votes by the Secretary of the State, Treasurer and Comptroller, for any federal or state election or primary, or by the town clerk for any municipal election or primary, the registrars of voters shall conduct a manual audit of the votes recorded in not less than ten per cent of the voting districts in the state, district or municipality, whichever is applicable. Such manual audit shall be noticed in advance and be open to public observation. Any election official who participates in the administration and conduct of an audit pursuant to this section shall be compensated by the municipality at the standard rate of pay established by such municipality for elections or primaries, as the case may be.

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<sup>6</sup>[http://www.leg.state.co.us/clics2005a/csl.nsf/fsbillcont3/902196947278857887256F4D0069B29F?open&file=198\\_enr.pdf](http://www.leg.state.co.us/clics2005a/csl.nsf/fsbillcont3/902196947278857887256F4D0069B29F?open&file=198_enr.pdf)

<sup>7</sup><http://www.cga.ct.gov/2007/ACT/Pa/pdf/2007PA-00194-R00SB-01311-PA.pdf>

## DISTRICT OF COLUMBIA

**Manual audit requirement:** At least 5% of the precincts where precinct-level vote tabulators are used, and at least 5% of the voter-verifiable records that are tabulated centrally.

Statute or Legislative Reference: B18-0345, effective November 30, 2009<sup>8</sup>

**Language of the audit provision:**

“(b) After each primary, general, and special election, the Board shall conduct a public manual audit of the voter-verifiable records tabulated by the Board.

“(c)(1) The Board shall manually audit:

(A) At least 5% of the precincts with precinct-level vote-tabulation machines during the election; and

(B) At least 5% of the voter-verifiable records that are tabulated centrally, including absentee ballots and special ballots.

## FLORIDA<sup>9</sup>

**Manual audit requirement:** 1%

Statute or legislative reference: H.B.1740; ratified 05/21/07 (Act 200)<sup>10</sup>

**Language of the audit provision:**

§101.591 101.591 Voting system audit.—

(1) Immediately following the certification of each election, the county canvassing board or the local board responsible for certifying the election shall conduct a manual audit of the voting systems used in **randomly selected precincts**.

(2) The audit shall consist of a **public manual tally** of the votes cast in **one randomly selected race** that appears on the ballot. The tally sheet shall include election-day, absentee, early voting, provisional, and overseas ballots, in **at least 1 percent but no more than 2 percent of the precincts** chosen at random by the county canvassing board or the local board responsible for certifying the election. If 1 percent of the precincts is less than one entire precinct, the audit shall be conducted using at least one precinct chosen at random by the county canvassing board or the local board responsible for certifying the election. Such precincts shall be selected at a publicly-noticed canvassing board meeting. [...]

(4) The **audit must be completed** and the results made public no later than 11:59 p.m. on the 7th day **following certification** of the election by the county canvassing board or the local board responsible for certifying the election.

(5) Within 15 days after completion of the audit, the county canvassing board or the board responsible for certifying the election shall provide a report with the results of the audit to the Department of State in a standard format as prescribed by the department. The report shall contain, but is not limited to, the following items:

(a) The overall accuracy of audit.

(b) A description of any problems or discrepancies encountered.

(c) The likely cause of such problems or discrepancies.

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<sup>8</sup><http://www.dccouncil.washington.dc.us/images/00001/20091120113116.pdf>

<sup>9</sup> Note that Florida’s audit is not required to take place until after certification of the election, not before.

<sup>10</sup> Amends s.101.591, Florida Statutes; [http://election.dos.state.fl.us/laws/07laws/ch\\_2007-030.pdf](http://election.dos.state.fl.us/laws/07laws/ch_2007-030.pdf)

(d) Recommended corrective action with respect to avoiding or mitigating such circumstances in future elections.

## HAWAII

**Manual audit requirement:** 10%

Statute or legislative reference: H.B.537; ratified 07/06/05 (Ch. 2007-30)<sup>11</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."

## ILLINOIS

**Manual audit requirement:** 5% (manual audit applies only to voter-verifiable paper audit trail records produced by direct-recording electronic voting machines; optical scan ballots are audited by machine)

Statute or legislative reference: H.B.1968; passed 05/25/05<sup>12</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.

## KENTUCKY

<sup>11</sup> [http://www.capitol.hawaii.gov/sessioncurrent/bills/hb1740\\_sd2\\_.htm](http://www.capitol.hawaii.gov/sessioncurrent/bills/hb1740_sd2_.htm)

<sup>12</sup> <http://www.ilga.gov/legislation/94/HB/09400HB1968sam001.htm>

**Manual audit requirement:** 3% - 5%

Statute or legislative reference: Ky. Acts ch. 470, sec. 19; ch. 44, sec.5; ch. 360, sec.5; effective July 15, 1986<sup>13</sup>

**Language of the audit provision:**

117.383 Rules and regulations.

The State Board of Elections shall prescribe rules and regulations which shall include but not be limited to the following:

...(8) As part of the official canvass, provide for a manual recount of randomly selected precincts representing three percent (3%) to five percent (5%) of the total ballots cast in each election; ...

## MINNESOTA

**Manual audit requirement:** ~5% (sliding scale:pop. – no fewer than 2 precincts per county)

Statute or legislative reference: MN Statutes Ch. 204C.50; became law 2004. <sup>14</sup> updated 2006<sup>15</sup>

**Language of the audit provision:**

Sec. 2. [206.89] Post election Review of Voting Systems

Subd. 1. Selection for review; notice. ... At the canvass of the state general election, the county canvassing boards must select the precincts to be reviewed. The county canvassing board of a county with fewer than 50,000 registered voters must select at least two precincts for postelection review. The county canvassing board of a county with between 50,000 and 100,000 registered voters must select at least three precincts for review. The county canvassing board of a county with over 100,000 registered voters must select at least four precincts. The precincts must be selected by lot at a public meeting. At least one precinct selected in each county must have had more than 150 votes cast at the general election.

Each county auditor must notify the secretary of state of the precincts that have been chosen for review and the time and place the postelection review for that county will be conducted, as soon as the decisions are made. The secretary of state must post this information on the office Web site.

Subd. 2. Scope and conduct of review. ...The postelection review must consist of a **manual count of the ballots used in the precincts selected** and must be performed in the manner provided by section 204C.21. The postelection review must be conducted in the manner provided for recounts under section 204C.361 to the extent practicable...

Subd. 3. Standard for voting system performance. [**Triggers wider manual audit if discrepancies found...**]

Subd. 5. Effect on voting systems. If a voting system is found to have failed to record votes accurately and in the manner provided by the Minnesota election law, the voting system must not be used at another election until it has been examined and recertified by the secretary of state. If the voting system failure is attributable to either its design or to actions of the vendor, the vendor must forfeit the vendor bond required by section 206.57 and the performance bond required by section 206.66.

<sup>13</sup> <http://moritzlaw.osu.edu/electionlaw/ebook/part5/documents/383.pdf>

<sup>14</sup> <http://www.revisor.leg.state.mn.us/stats/204C/50.html>

<sup>15</sup> <http://www.revisor.leg.state.mn.us/bin/bldbill.php?bill=H3833.2.html&session=ls84>

## MISSOURI

**Manual audit requirement:** Not less than 1 precinct per 100 precincts (at least 1%)

Statute or legislative reference: 15 CSR 30-10.110 Manual Recount;<sup>16</sup> effective March 1990.

**Language of the audit provision:**

(2) After the electronic recount provided for in 15 CSR 30-10.060(2)(G) and prior to the certification of the election results, the accuracy certification team shall **randomly select** not less than one (1) precinct for every one hundred (100) election precincts or fraction thereof, but **not less than one (1) precinct**, in order to conduct a manual recount of selected contested races and ballot issues in the selected precinct(s).

... (C) One (1) contested race or ballot issue to be manually recounted shall be randomly selected from each of the following categories, where applicable: 1. Presidential and Vice-Presidential electors, United States senate candidates and state-wide candidates; 2. State-wide ballot issues; 3. United States representative candidates and state general assembly candidates; 4. Partisan circuit and associate circuit judge candidates and all nonpartisan judicial retention candidates; and 5. In addition to the candidates and issues previously listed, the manual recount team shall select not less than three (3) contested races or ballot issues from all political subdivisions and special districts, including the county, in the selected precinct(s). When there are three (3) or fewer contested races or ballot issues within this category at a selected precinct, all shall be counted.

(4) The secretary of state, at his/her sole discretion, and upon the showing of good cause by an election authority not less than three (3) weeks prior to the date of an election, may waive the manual recount requirement for any political subdivision or special district holding an election on the election date.

## MONTANA

**Manual audit requirement:** A minimum of 5% of precincts in each county, and at least one federal office, one statewide office, one state legislative office, and one statewide referendum. Counties in which an election is eligible for a recount without a court order are exempt from the audit.

Statute or legislative reference: 2009 Acts, Senate Bill 155, signed into law March 25, 2009.<sup>17</sup>

**Language of the audit provision:**

**Section 6. Conduct of random sample audit** (1) The random-sample audit must be completed at least 1 day before the official canvass by the county board of canvassers.

(2) The county audit committee shall manually count the votes for the random sample audit as follows:

(a) One member shall read the ballot while the remaining members shall each record on an official tally sheet the number of valid votes cast for each of the selected offices and ballot issue.

(b) (i) After the vote is complete, the tally sheets of the members recording the votes must be compared.

(ii) If the tallies match, the county audit committee shall compare the manual

<sup>16</sup> <http://www.sos.mo.gov/adrules/csr/current/15csr/15c30-10.pdf>

count for the selected offices and the ballot issue to the vote-counting machine count for the selected offices and the ballot issue.

(iii) If the tallies do not match, the count must be conducted again as provided in this subsection (2) until the tallies match.

(c) (i) If the manual count and the vote-counting machine totals match, the county audit committee shall certify the results to the county election administrator and the secretary of state.

(ii) If the manual count and the vote-counting machine totals do not match, the county audit committee shall follow the procedures established in [section 7].

(3) The audit process must be public.

## NEVADA

**Manual audit requirement:** 2%-3%, depending on county population.

Statute or legislative reference: Nevada Administrative Code, Ch. 293.255. Effective 07-14-06.

Audit provision mandated by Secretary of State under authority granted by Nevada Code 293.124 and 293.247.

**Language of the audit provision:**

1. After each election, a county clerk shall conduct a postelection certification audit of VVPATs randomly selected pursuant to subsection 3 or 4, as applicable, to ensure that the paper record produced by a VVPAT accurately records all votes cast by voters on a mechanical recording device. 2. A county clerk must conduct a postelection certification audit of a VVPAT by comparing each vote cast for each candidate and on each measure which was electronically recorded on the mechanical recording device to each vote cast for each candidate and on each measure which was recorded on the attached VVPAT. Such comparison may be conducted manually or by a mechanical device determined by the Secretary of State to be capable of accurately reading the votes cast and printed and otherwise qualified for use in the State pursuant to applicable state and federal law. 3.

The county clerk of a county whose population is 100,000 or more must randomly select a number of mechanical recording devices equal to 2 percent of the number of mechanical recording devices with attached VVPATs used in the election, or not less than 20 mechanical recording devices, whichever is greater, for the postelection certification audit.

4. The county clerk of a county whose population is less than 100,000 must randomly select a number of mechanical recording devices equal to 3 percent of the number of mechanical recording devices with attached VVPATs used in the election, or not less than four mechanical recording devices, whichever is greater, for the postelection certification audit.

5. The county clerk shall transmit the results of the audit to the Secretary of State within 7 working days after the date of the election.

6. Any member of the public who observes the postelection certification audit shall not interfere with the conduct of the audit.

## NEW JERSEY

**Manual audit requirement:** At least 2% of election districts or more, depending on votes cast and closeness of contest (statistical audit).

Statute or legislative reference: S 507; signed into law 01/14/2008<sup>17</sup>.

**Language of the audit provision:**

a. The Attorney General shall appoint ...an independent, professional audit team. It shall oversee... random **hand-to-eye counts of the voter-verifiable paper records** that are to be conducted by appropriate county election officials. Audits shall be conducted for each election held for federal or State office... and for county and municipal offices selected by the Attorney General. In each county, the audit shall be conducted in at least two percent of the election districts in which each audited election appears on the ballot [exempting local elections held in fewer than 100 election districts]. Election districts that are randomly selected for auditing for either the Congressional or State legislative elections in alternating years may be used to audit any other election that appears on the ballot in such districts. Ballot batches, as provided for in subsection c. of this section, shall also be audited...

b. The membership and composition of the audit team shall be at the discretion of the Attorney General but shall be not less than four, and at least one member shall have verifiable expertise in the field of statistics and another member shall have verifiable expertise in the field of auditing. [*Excludes persons serving in political campaigns for that election, employees of Attorney General, and voting system officers or employees.*]

c. The independent audit team shall oversee, supervise, and require county election officials to conduct an audit of the results of an election in accordance with the following procedures.

(1) Any procedure ... shall be implemented to **ensure with at least 99% statistical power that** for each ...statewide election held in the State, **a 100% manual recount of the voter-verifiable paper records would not alter the electoral outcome** reported by the audit ... [90% statistical power for non-statewide elections]. Such procedures ... shall be based upon scientifically reasonable assumptions, with respect to each audited election, including but not limited to: the possibility that within any election district up to 20% of the total votes cast may have been counted for a candidate or ballot position other than the one intended by the voters; and that the number of votes cast per election district will vary. Such procedures ... shall be published prior to [ ] election, and the public [may] comment thereon.

(2) Any procedure designed, adopted, and implemented by the audit team for each county and municipal election held in fewer than 100 election districts, but more than a single election district, shall be conducted in at least two election districts.

(3) Within a reasonable period of time after the final vote count after an election, the Attorney General (and audit team) shall determine and then announce publicly the election districts in the State in which audits shall be conducted, and within 24 hours of that announcement, the audit shall be commenced.

(4) With respect to votes cast at the election district on the date of an election other than by emergency or provisional ballot, the independent audit team shall oversee and supervise a hand-to-eye count of the voter-verifiable paper records and compare those records with the count of such votes announced by the county boards of elections. ....

*Additional provisions:* Centrally counted ballots (e.g. absentees) are audited by batch. Selection process is done on a random basis by lot at a public meeting. Audit must be completed and results published before county may certify election. A.G. (with recommendation of audit board) may add more districts or audit units; criteria for triggering

<sup>17</sup> [http://www.njleg.state.nj.us/2006/Bills/S1000/507\\_R1.PDF](http://www.njleg.state.nj.us/2006/Bills/S1000/507_R1.PDF)

further audits to be published for public comment prior to election. If VVPR are compromised, investigation is triggered. Results of audit may be substituted for portion of recount where overlap would exist.

## NEW MEXICO

**Manual audit requirement:** For an audited race, a number of precincts to be audited is prescribed by a table that assigns a number of precincts based on the margin of victory. The sample must be designed to ensure a ninety percent probability of detecting faulty tabulators if such tabulators would change the outcome of an audited race.

Statute or legislative reference: S.B.72, signed into law April 7, 2009.<sup>18</sup>

**Language of the audit provision:**

[excerpt] POST-ELECTION DUTIES--VOTING SYSTEM CHECK.--

A. At least ninety days prior to each general election, the secretary of state shall contract with an auditor qualified by the state auditor to audit state agencies to oversee a check on the accuracy of precinct electronic vote tabulators, alternate voting location electronic vote tabulators and absent voter precinct electronic vote tabulators. The voting system check shall be conducted for all federal offices, for governor and for the statewide elective office, other than the office of the governor, for which the winning candidate won by the smallest percentage margin of all candidates for statewide office in New Mexico.

B. For each selected office, the auditor shall publicly select a random sample of precincts from a pool of all precincts in the state no later than twelve days after the election. The random sample shall be chosen in a process that will ensure, with at least ninety percent probability for the selected offices, that faulty tabulators would be detected if they would change the outcome of the election for a selected office.

## NEW YORK

**Manual audit requirement:** 3%

Statute or legislative reference: S05877, signed into law 07/12/05; Chap. 181<sup>19</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.

<sup>18</sup><http://www.nmlegis.gov/Sessions/09%20Regular/final/SB0072.pdf>

<sup>19</sup> <http://assembly.state.ny.us/leg/?bn=S05877&sh=t>

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 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: Session Law 2006-192 HB 1024 ratified July 27, 2006<sup>20</sup>

**Language of the audit provision:**

**Section 7.(a)** G.S. 163-182.1(b) and **Section 7.(b)** G.S. 163-182.2(b): ... "For any voting system in which ballots are counted other than on paper by hand and eye, rules shall provide for 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 State Board shall approve in an open meeting the procedure for randomly selecting the sample precincts for each election. The random selection of precincts for any county shall be done publicly after the initial count of election returns is publicly released or 24 hours after the polls close on election day, whichever is earlier..."

"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>21</sup> ..In the event of a material discrepancy between the electronic or mechanical count and a hand-to-eye count, the hand-to-eye count shall control, except where paper ballots or records have been lost or destroyed or where there is another reasonable basis to conclude that the hand-to-eye count is not the true count. If the discrepancy between the hand-to-eye count and the mechanical or electronic count is significant, a complete hand-to-eye count shall be conducted."

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<sup>20</sup> <http://www.ncleg.net/Sessions/2005/Bills/House/HTML/H1024v7.html>

<sup>21</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.)

## OREGON

**Manual audit requirement:** Tiered 3% - 5% - 10% (based on margin).

Statute or legislative reference: HB 3270, amending ORS chapter 254, signed August 3, 2007<sup>22</sup>

**Language of the audit provision:**

Section 2: ... "At each general election, the county clerk shall conduct a hand count of ballots as described in this section and compare the tally of votes for those ballots produced by a vote tally system with the tally of votes for those ballots produced by the hand count..

[If the margin of victory is]...

- less than one percent of the total votes cast in that election in the county, the county clerk shall conduct a hand count of ballots in at least 10 percent of all precincts or of ballots in at least 10 percent of all batches of ballots collected...
- greater than or equal to one percent but less than two percent of the total votes cast in that election in the county, the county clerk shall conduct a hand count of ballots in at least 5 percent of all precincts or of ballots in at least 5 percent of all batches of ballots collected...
- greater than or equal to two percent of the total votes cast in that election in the county, the county clerk shall conduct a hand count of ballots in at least 3 percent of all precincts or of ballots in at least 3 percent of all batches of ballots collected...

Section 3: ... The **Secretary of State shall select the precincts at random**. At the general election, no fewer than 150 ballots must have been cast in at least one of the precincts selected. The county clerk shall conduct a **hand count of ballots cast in the election contest between the two candidates receiving the largest number of votes in the county, an election contest for a state office and, if possible, an election contest for a state measure.**"

## PENNSYLVANIA

**Manual audit requirement:** The lesser of 2% of votes cast, or 2000 votes.

Statute or legislative reference: S.B.223; 1937; updated 1980<sup>23</sup>

**Language of the audit provision:**

25 P. S. 3031.17. Statistical sample

...The county board of elections, as part of the computation and canvass of returns, shall conduct a **statistical recount of a random sample of ballots** after each election using manual, mechanical or electronic devices of a type different than those used for the specific election. The sample shall include at least two (2) per centum of the votes cast or two thousand (2,000) votes whichever is the lesser.

## TENNESSEE

**Manual audit requirement:** At least 3% of the ballots cast and at least 3% of the precincts, and at least the top race in a federal, state, county, or municipal election must be audited. Requirement takes effect in the November 2010 general election.

<sup>22</sup> <http://www.leg.state.or.us/07reg/measures/hb3200.dir/hb3270.en.html>

<sup>23</sup> 1937, June 3, P.L. 1333, art. XI-A, 1117-A, added 1980, July 11, P.L. 600, No. 128, 4, imd. effective

Statute or legislative reference: House Bill No. 1256, signed into law 06/05/08

**Language of the audit provision:**

§ 2- 103. (a) For each election, each county election commission shall conduct mandatory hand count audits of the voter-verified paper ballots of at least the top race in the federal, state, county or municipal election, if on the ballot, which hand count audits shall include three percent (3%) of the votes cast prior to the election for the races to be audited, and also be conducted in at least three percent (3%) of the precincts, as follows:

(1) The selection of the precincts in a county in which the county election commission shall conduct hand count audits of the voter-verified paper ballots as specified in this section shall be made public by the county election commission on an entirely random basis using a uniform distribution in which all precincts in a county have an equal chance of being selected.

(2) As soon as practical, following the closing of the polls, the county election commission shall:

(A) Complete the initial vote count for each and every precinct participating in the election in that county and publicly announce the unofficial results of each such initial vote count as soon as such results are available;

(B) Conduct a random drawing as specified by this section to determine which precincts will be selected and publicly announce the results of the drawing;

(C) Initiate such mandatory hand count audits of the voter-verified paper ballots of the top race and any other race, if additional races are selected for audit by the county election commission, in the precincts selected when all ballots, including provisional ballots, have been counted; and

(D) Publicly announce the results of each such mandatory hand count audit.

## TEXAS

**Manual audit requirement:** All races in the greater of three precincts or 1 % of precincts which an electronic voting system was used. The Secretary of State may waive the requirement.

Statute or legislative reference: Texas Election Code, Section 127.201<sup>24</sup>

**Language of the audit provision:**

§ 127.201. PARTIAL COUNT OF ELECTRONIC VOTING SYSTEM BALLOTS BY GENERAL CUSTODIAN. (a) To ensure the accuracy of the tabulation of electronic voting system results, the general custodian of election records shall conduct a manual count of all the races in at least one percent of the election precincts or in three precincts, whichever is greater, in which the electronic voting system was used. The custodian shall select the precincts at random and shall begin the count not later than 72

<sup>24</sup><http://tlo2.tlc.state.tx.us/statutes/docs/EL/content/htm/el.008.00.000127.00.htm#127.201.00>

hours after the polls close. The count shall be completed not later than the 21st day after election day.

## UTAH

**Manual audit requirement:** At least 1% of machines chosen randomly by the Office of the Lieutenant Governor. The audit requirement is a policy directive of the Lieutenant Governor.<sup>25</sup>

**Language of the audit provision:**

6.1. No later than noon on Election Day, each election officer shall submit to the lieutenant governor a list of AccuVote TSx and precinct-count AccuVote OS voting machine serial numbers and the Utah House of Representatives district in which each voting machine is deployed to record votes.

6.2. Using the following procedure [see [complete policy](#)], the lieutenant governor shall select at least one percent of the total number of AccuVote TSx and precinct-count AccuVote OS machines used statewide in the election to be audited...

## WASHINGTON

**Manual audit requirement:** 4%

Statute or legislative reference: E.S.S.B.5395; signed into law 05/03/05; Ch. 242.<sup>26</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 randomly selecting by lot **up to four percent of the direct recording electronic**

<sup>25</sup> <http://verifiedvoting.org/downloads/UTaudit.pdf>

<sup>26</sup> <http://www.leg.wa.gov/pub/billinfo/2005-06/Pdf/Bills/Session%20Law%202005/5395-S.SL.pdf>

**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% of precincts

Statute or legislative reference: H.B.2950; signed into law 05/04/05<sup>27</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**.

## WISCONSIN

**Manual audit requirement:** 5% of reporting units

Statute or legislative reference: Section 7.08(6), Wisconsin Statutes; effective 01/01/06; audit protocol prescribed by the state Government Accountability Board.<sup>28</sup>

**Language of the audit provision:**

The voting system audit procedures consist of two independent processes: an audit conducted by municipalities of reporting units randomly selected by the State Elections Board and an audit of reporting units conducted by the State Elections Board.

Number of Reporting Units to Audit:

Per the requirements of section 7.08(6), Wis. Stats., each type of electronic voting system in Wisconsin must be audited after the general election to ensure that each system does not

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<sup>27</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)

<sup>28</sup> <http://elections.state.wi.us/docview.asp?docid=9851&locid=47>

exceed the error rate prescribed in the federal voting system guidelines. The State Elections Board will randomly select fifty (50) reporting units across Wisconsin which will be subject to municipal audit, including a minimum of five (5) reporting units for each voting system used in Wisconsin. If fewer than five (5) reporting units for any voting system are selected through the random selection process, then additional reporting units will be randomly selected by voting system until five reporting units per voting system have been selected. If there are fewer than 5 reporting units using a voting system the State Elections Board staff will audit those reporting units if the reporting units are not selected as part of the random draw.

until five reporting units per voting system have been selected. If there are fewer than 5 reporting units using a voting system the State Elections Board staff will audit those reporting units if the reporting units are not selected as part of the random draw.