



Wisconsin Elections Commission

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2024 Post-Election Voting Equipment Audit Procedures

Wis. Stat. §7.08(6) is the state embodiment of §301(a)(5) of the Help America Vote Act (HAVA). Wis. Stat. §7.08(6), requires the Wisconsin Elections Commission (WEC) to audit each voting system that is used in this state following each General Election:

(6) Enforcement of federal voting system standards. Following each general election, audit the performance of each voting system used in this state to determine the error rate of the system in counting ballots that are validly cast by electors. If the error rate exceeds the rate permitted under standards of the federal election commission in effect on October 29, 2002, the commission shall take remedial action and order remedial action to be taken by affected counties and municipalities to ensure compliance with the standards. Each county and municipality shall comply with any order received under this subsection.

Required Pre-Election Testing vs. Required Post-Election Audit

The pre-election test of an electronic voting system per Wis. Stat. §5.84 uses a pre-determined set of ballots to ensure that the voting system is properly programmed *prior* to Election Day. The post-election voting system audit is designed to assess the performance of each electronic voting system on Election Day by reviewing the actual ballots that electors cast. It is important to note that the post-election voting equipment audit is not an election results confirmation audit. The purpose of this audit is to ensure that the votes tabulated by the equipment are counted accurately and correctly.

Definitions

Audit – post-election voting system audit conducted pursuant to Wis. Stat. §7.08(6).

Blank Ballot – a ballot on which an elector does not vote for any contest.

Voting Equipment Error – a voting equipment error for the purposes of the 2024 voting equipment audit as any and all of the following, if resulting in discrepancies between hand tally and equipment vote totals:

- a. extraneous perforations, smudges, and folds,
- b. marking pen bleed through,
- c. dirty scan head,
- d. votes attributed to the wrong candidate by the tabulator,
- e. votes not counted due to a certain color of ink being used,
- f. foreign bodies such as ink flakes and dust on the ballot,
- g. programming issues that were not present at the time of public testing, or
- h. anything not mentioned herein which would cause an otherwise empty oval to register as a vote.

Wisconsin Elections Commissioners

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Human Error -- any errors attributable to human actions, such as election administration issues on Election day or with auditors during ballot review, that will not be suggested for inclusion of the final equipment error rate calculation as they are not attributable to the equipment itself.

Overvote – when an elector votes for more than the number of candidates to which he or she is entitled to vote in that contest. An overvote may also be counted by the equipment as an undervote, depending on the voting system used. Undervotes and overvotes should be tallied in the “Overvote/Undervote” section of the tally sheet.

Reporting Unit –the ward, combination of wards, or other districts by which votes are tallied.

Tally – a visual method of counting large amounts of individual data whereby individual hash marks are made to indicate one item has been counted. A tally is completed by hand and takes the form of four vertical (up and down) lines with a fifth running diagonally through the other four. This indicates that 5 individual items have been counted and allows for auditors to quickly and accurately add up total votes.

Total Voters – the total number of voters who appeared to vote at the polling place and whose valid absentee ballots were cast at the polling place. This total should correspond with the highest voter number/last voter number issued on the poll list.

Undervote – when an elector does not vote or votes for less than the number of candidates or offices to which he or she is entitled to vote in that contest. An overvote may also be counted by the equipment as an undervote, depending on the voting system used. Undervotes and overvotes should be tallied in the same section.

Votes Cast – the number of actual votes cast for a contest. For any particular contest, this number may be less than the total number of voters.

Voting Device – an apparatus other than a voting machine which the elector uses to record his or her votes on a ballot. Wis. Stat. §5.02(24g).

Voting Machine – a machine which serves in lieu of a voting booth and which mechanically or electronically records the votes cast by electors, who depress levers or buttons located next to the choices listed on the ballot to cast their votes. Wis. Stat. §5.02(24r).

Voting System – the total combination of mechanical, electromechanical, or electronic equipment, including the software, hardware, and documentation required to program, control, and support the equipment that is used to define ballots, to cast and count votes, to report or display election results, and to maintain and produce any audit trail information. Wis. Stat. §5.02(24w)(a).

Reporting Unit Selection

Wisconsin Elections Commission staff will randomly select three hundred 375 reporting units from across Wisconsin which will be subject to a voting system audit. These will include a minimum of five (5) reporting units for each voting system used in Wisconsin. In addition, one reporting unit from each of Wisconsin’s 72 counties will be selected. Each municipality selected, depending on population, will be required to audit no more than eight reporting units for the purposes of the 2024 voting equipment audit. The audits will be conducted in accordance with the procedures below.

Both the municipal and county clerk of the reporting units selected for audit will be notified of the selection. 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.

After all reporting units are selected for auditing, reporting forms, tally sheets, and audit procedure materials will be provided to clerks by WEC staff. As part of training for the audit, WEC staff will offer a pre-recorded webinar for clerks and auditors. This webinar will contain detailed information on audit procedures and reporting requirements. The webinar will not be required to conduct the audit, but it is recommended to familiarize auditors with the process, procedures, and requirements.

Pre-Audit Preparations

The audit shall be open to the public. While observing the audit process, members of the public may not interfere with the conduct of the audit. The time and location of the audit must be posted at least 48 hours prior to the audit. Audit preparations may commence as soon as notification is provided by the WEC. The audit must be completed no later than November 25, 2024, prior to the December 1, 2024 deadline for the Wisconsin Elections Commission to certify the 2024 General Election results.

Upon notification by WEC staff of a reporting unit selected for audit, the municipal clerk shall make arrangements with the county clerk and the county board of canvassers to preserve and retain all election materials. These materials include, but are not limited to voter lists, Inspectors' Statement (EL-104), Tally Sheets (EL-105), ballots, and any reports printed from or generated by the voting system. All election materials to be used as part of the audit must be retained in a secure location by either the municipal or county clerk.

In the event that a clerk will be unavailable due to prior commitments, such as a vacation, alternate arrangements **must** be made related to who will conduct the audit on the clerk's behalf, as the audit must still be performed. This could be done by local election inspectors or the county clerk's office, if they are willing. Upon agreement of the municipality and county, the county clerk or county board of canvassers may perform the audit of the selected reporting unit(s) in lieu of the municipality. In this instance, the county would be entitled to any reimbursement provided by the Wisconsin Elections Commission.

General Procedures

1. The municipality shall acknowledge receipt of its selection for the post-election voting system audit and confirm with the WEC the following information for each reporting unit selected:
 - a. Tabulator/Voting Equipment Model
 - b. Accessible Voting Equipment Model
2. Four (4) contests shall be audited, including the top contest on the ballot, the Presidential election. The other audited contests shall be selected randomly by WEC staff from the other state contests that appear on the ballot. Other contests to be considered are: United States Senator, Representative in Congress, State Senator, and Representative to the Assembly. In the event State Senator is chosen as a contest to be audited, and because not every jurisdiction in Wisconsin has a State Senate contest on the ballot, the alternate contest to be audited in those cases is County Clerk.
3. The clerk shall publicly post notice of the time and location for the voting system audit at least 48 hours prior to the scheduled audit. Clerks must notify the WEC of the time and location of the audit by sending an email to elections@wi.gov

4. A minimum of two individuals shall participate in the audit. Votes shall be tallied by hand for the contests included in the audit. For some voting systems, this will require counting the votes listed on the voter-verified paper audit trail generated by the voting system on Election Day. At least two auditors shall each determine an independent total for each selected contest. These totals shall then be compared to each other. If the auditors' totals agree, the totals are then compared to the results generated by the voting system. Any discrepancies should be recorded and explained in the minutes of the audit.
5. If any offices contain an overvote, no vote is counted for that office, and it is marked in the overvote/undervote category.
6. Auditors should count votes only as the voting equipment would have counted them. For the purposes of this audit, **voter intent is not a consideration**. If there is debate on whether the machine would have counted the vote a certain way, auditors should make their best determination on how the equipment would have counted the vote and include pertinent information in the minutes.

Example 1: A voter circled candidate name Jane Doe on an optical scan ballot where they should have filled in the oval next to the candidate name. No vote for this office should be counted as the voting equipment would not have counted a vote cast for a candidate in this manner.

Example 2: A voter wrote in a candidate name on an optical scan ballot and did not fill in the oval next to the write-in line. The voting equipment would not have identified this as a write-in vote on the results tape. So, it should not be included in the write-in totals for purposes of the audit.

7. In some cases, it may not be clear exactly how the ballot would have been counted by the voting equipment. Auditors should document in the minutes any ballots where it is unclear how the voting system would count the ballot. The auditors should include in the minutes how they counted the ballot as well as all reasonable alternatives on how the machine may have counted the ballot.

Example 1: A voter marked both Jane Doe and John Smith and attempted to erase the mark for John Smith. This can be counted as a vote for Jane Doe, but the machine may have read it as an overvote in the contest. Pay close attention and count such ballots as auditors feel the machine would have counted them. Counting this as a vote for Jane Doe may result in the tally having one more vote for Jane Doe and one less undervote in this contest.

Example 2: While considering their choices, a voter rested their pen on the edge of the oval for John Wayne. This left a small mark inside the oval. The voter then fully filled in the oval next to Jesse James' name in the same contest. Auditors may not know if the mark at the edge of the oval next to John Wayne was big enough to be counted as an overvote by the voting equipment. As a result, the manner in which this vote is tallied in the audit should be notated in the minutes.

8. The audit results should be compared to the results report from the voting equipment and the difference or variance (i.e. +2, - 1, etc) should be recorded in the third column of the reporting form. It may be possible that the auditors' totals do not match the voting equipment results report, but the auditors should be able to reasonably explain any difference in the totals by reference to specific ballots. Should there be a discrepancy that is not reasonably explained, the auditors may need to reconvene to confirm their count.

9. Note any errors encountered and separate them into those caused by tabulator error and those caused by election administration, auditor, or other human error.
10. WEC staff, in collaboration with the Commissioners, will determine the error rate based on the reporting form provided by selected municipality.

Recommended Audit Procedures

Please note that these are recommended procedures. This section contains information on two different sorting methods, as well as procedures for municipalities using DRE equipment. Municipal clerks and auditors are not limited to the sorting methods described below. If auditors or clerks are aware of a more efficient way to sort and count the ballots that will result in an accurate count, they are free to utilize those methods.

Overview – Ballot Sorting Method

1. Two people review each ballot.
2. Ballots are separated into stacks of 50 and further separated into subgroups of 25 ballots.
3. Auditors should rotate the stacks between them – e.g. Person A works on Stack 1-25 while Person B works on Stack 26-50, etc. Once each auditor completes their stack of ballots, they switch stacks so that at least 2 auditors individually review each stack of 50 ballots.
4. 50 ballot stacks should be kept in numeric order; 1-50, 51-100, and so on. Keeping the stacks in order allows the auditors to narrow down and locate any discrepancies between the two independent counts instead of requiring auditors to recount all ballots repeatedly.

Set-Up

1. Count out ballots into sets of 50.
2. Label stacks (1-50, 51-100, 101-150, etc.)

Each Auditor Individually

1. Separate ballot stacks of 50 into subgroups of 25 ballots each.
2. Tally contests from ballots that have been separated into groups of 25 – the goal is to be able to narrow discrepancies between individual tallies down to the smaller groups of 25.
 - a. Record the number of votes for each candidate on the tally sheet under the appropriate column for the group of ballots you are working on.
 - b. List the total votes for each office by counting down the column for the stack of 25 you are working on. Be sure to include any scattering or undervotes in your total. The total for each group of ballots should always be equal to the total number of ballots in the group (i.e. a group of 25 ballots should have a total of 25 votes, scattering and undervotes, and a group of 17 ballots would have 17 total votes, scattering and undervotes)
 - c. After completing the subgroup of 25, find the subtotal for that subgroup.
3. Keep separated in subgroups of 25 while tallying – it is helpful to keep the group of 50 in one stack but to alternate the directions of the subgroups of 25 ballots.
4. Add subtotals for each subgroup of 25 ballots after stack of 50 ballots has been tallied by adding together the subtotal of each 25-ballot subgroup.
5. On the Reporting form, totals from the voting equipment results tape in the ‘Equipment’ column, the hand tally totals in the “Audit” column and noting any difference between those totals in the ‘Difference’ column.
6. Note any errors encountered and separate them into those caused by tabulator error and those caused by election administration, auditor, or other human error.
7. Repeat 1-4 in sets of 50 until all ballots are counted.

Auditors Jointly

1. Compare individual tallies for each contest audited.
 - a. Circle any discrepancies between the two tallies.
 - b. If tallies do not match, recount the sub-group of 25 to determine which tally is correct. You should use a new tally sheet labeled “Recount [insert Stack Number/Subgroup]”.
2. After any discrepancies are reconciled, add the stack totals together to determine the total vote in each contest audited.
3. Compare to the electronic tabulator total.
 - a. If the totals match, note that they match on the reporting form.
 - b. If the hand tally and voting equipment tally do not match for a contest, the auditors should review the minutes for ballots that were ambiguously marked that could explain the discrepancy. If the discrepancy can be reasonably explained by specific reference to these ballots, record that explanation on the reporting form.
 - c. If the minutes do not provide a reasonable explanation for the discrepancy, note the actual difference in votes on the reporting form and give as detailed explanation as available information allows.

Overview – Candidate/Office Sorting Method

1. Two people review each ballot
2. Ballots are sorted based on the specific contest and candidate being audited
3. Auditors should rotate the stacks between them – e.g. Person A works on Candidate A stack while Person B works on Candidate B stack, etc. Once each auditor completes their stack of ballots, they switch stacks so that at least 2 auditors individually review each candidate’s stack of ballots.
4. It is recommended that stacks sorted by candidate still be further sorted into sub-groups of a pre-determined number of ballots.
5. Ballots should be kept separated by candidate until the tally for each candidate is complete.

Set-up

1. Separate ballots into groups based on the candidate to be audited
2. Label stacks (candidate A, candidate B, etc.)

Each Auditor Individually

1. Separate ballot stacks into subgroups of a pre-determined number.
 - a. Keeping the stacks separated and in sub-groups allows the auditors to narrow down and locate any discrepancies between the two independent counts instead of requiring auditors to recount all ballots repeatedly.
2. Tally contests from ballots that have been separated into candidate groups.
 - a. Record the number of votes for each candidate on the tally sheet under the appropriate column for the group of ballots you are working on.
 - b. List the total votes for each office by counting down the column for the stack you are working on. Be sure to include any scattering, overvotes, or undervotes in your total. The total for each group of ballots should always be equal to the total number of ballots in the group (i.e. a group of 25 ballots should have a total of 25 votes, scattering, overvotes, and undervotes, and a group of 17 ballots would have 17 total votes, scattering and undervotes)
3. Add subtotals after each stack of ballots is complete and note that number in the appropriate column of the tally section.

4. On the Reporting form, totals from the voting equipment results tape in the 'Equipment' column, the hand tally totals in the "Audit" column and noting any difference between those totals in the 'Difference' column.
5. Note any errors encountered and separate them into those caused by tabulator error and those caused by election administration, auditor, or other human error.
6. Repeat 1-4 as necessary until all ballots are counted.

Overview – Direct Record Electronic (DRE) Equipment

1. Two people review each "ballot."
2. Ballots should be individualized or separated on the VVPAT ballot roll.
 - a. This can be done with a pen and a ruler
 - b. Ballots can be marked one by one or in groups of a pre-determined number
 - i. Auditors can mark single ballots or groups of 5, 10, 20, etc.
 - c. Tearing the VVPAT roll into single ballots is not recommended
3. Auditors should work through the VVPAT ballot roll individually

Set-up

1. If there are multiple VVPAT ballot rolls, they should be numbered as a way to maintain correct order of auditing.
2. Ballots on each roll should be marked and separated into single ballots or individualized groups as explained above.
3. Ballot paper rolls should be kept apart to ensure there is no confusion as to which has been counted.

Each Auditor Individually

1. Tally contests from ballots that have been separated into candidate groups.
 - a. Record the number of votes for each candidate on the tally sheet under the appropriate column for the group or roll of ballots you are working on.
 - b. List the total votes for each office by counting down the column for the group or ballot roll you are working on. Be sure to include any scattering, overvotes, or undervotes in your total. The total for each group of ballots should always be equal to the total number of ballots in the group (i.e. a group of 20 ballots should have a total of 20 votes, scattering, overvotes, and undervotes, and a group of 17 ballots would have 17 total votes, scattering, and undervotes)
2. Add subtotals after each roll of ballots is complete and note that number in the appropriate column of the tally section.
3. Complete the 'Sub-totals' and 'Stack totals' section of the tally sheet by listing the hand-count subtotals in the respective columns.
4. On the Reporting form, totals from the voting equipment results tape in the 'Equipment' column, the hand tally totals in the "Audit" column and noting any difference between those totals in the 'Difference' column.
5. Note any errors encountered and separate them into those caused by tabulator error and those caused by election administration, auditor, or other human error.
6. Repeat 1-4 as necessary until all ballots are counted.

Post-Audit Procedures

Each municipality conducting an audit must submit the designated reporting forms and supporting documents from the audit, including tally sheets, to WEC staff to indicate the audit was completed and explain any discrepancies that were found. Clerks should email these findings to elections@wi.gov

WEC staff may, at its sole discretion, request that the municipality submit all audit materials, including the source documents (ballots, poll lists, etc.) to the WEC for further review. In such a case, the WEC will reimburse the municipality for the associated postage/shipping costs.

In the event that a discrepancy between the machine tally and the paper record tally cannot be reasonably explained, WEC will request that the voting equipment manufacturer investigate and explain the reasons for any differences between the machine tally and the paper record tally. Should the vendor fail to provide a sufficient written explanation, including recommendations for preventing future occurrences, within 30 days of notification, WEC may suspend approval of the affected voting system in Wisconsin. This suspension will be implemented immediately, pending an appeal by the vendor to the Commission, which must be filed within 30 days.

Based upon the results of the audit, the Wisconsin Elections Commission may, at its sole discretion, choose to re-test the voting system per WEC Admin Code, chapter 7. Such testing would be a condition of continuing approval of said voting system.

Municipal Reimbursement

The Wisconsin Elections Commission will reimburse municipalities at a base rate of \$50 for materials collection and audit set up. Municipalities will then be reimbursed \$.35 per individual ballot audited. Each municipality seeking reimbursement shall submit an itemized request that includes the names of the auditors, the total number of ballots audited, the total sum requested for reimbursement, and information on where the WEC can transmit any approved reimbursement amount. In the event that the county conducted an audit on behalf of a municipality, the county is entitled to reimbursement as outlined above.