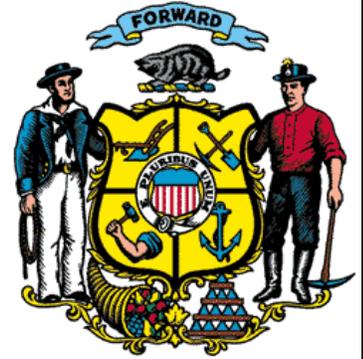




State of Wisconsin Government Accountability Board



2008-2012 Voting Equipment Audit Report

October 2013



**Wisconsin Government Accountability
Board**

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Table of Contents

Executive Summary	1
Introduction to the Audit Report	2
Overview of Voting Equipment Audit Procedures	4
Voting Equipment Descriptions	9
Audit Results	
<hr/>	
2008 Audit Results Summary	11
2010 Audit Results Summary	13
2012 Audit Results Summary	15
Voting Equipment Error Data	17
Voting Equipment Audit Report Conclusion	18
Appendix A	
2008 Equipment Audit Table	
2010 Equipment Audit Table	
2012 Equipment Audit Table	
Appendix B	
Audit Program Cost Summary	24

Executive Summary

The most effective response to any threat aimed at our electoral process is to honor the democratic principles of freedom on which this country is founded by preparing for the conduct of a transparent and fair election. The Post-Election Voting Equipment Audits and the effective monitoring of Wisconsin's aging voting equipment are an essential step in this direction and provide an essential benefit in maintaining public confidence in the integrity of our election process.

The State of Wisconsin specifically distinguishes the post-election audit requirement as separate from the required pre-election tests of electronic voting systems. The pre-election test of electronic voting system, defined by §5.84, Wisconsin Statutes, uses a pre-determined set of ballots to ensure that the voting system is properly programmed prior to Election Day. The post-election audit, on the other hand, is designed to assess how the electronic voting system performed on Election Day using the actual votes cast by electors.

Since 2006 the Board has conducted voting equipment audits on Wisconsin's voting equipment. The Board continued to conduct voting equipment audits in the midst of several high turnout elections, during the historic recall efforts of 2010, and following the high turnout 2012 election. As the report that follows indicates, the voting equipment in Wisconsin, some of which is nearly 20 years old, continues to accurately record the choices of Wisconsin voters.

Ultimately, the spectrum of election-related processes culminates in providing our citizens with the opportunity to fully participate in an open and fair election. This honorable feat could not be accomplished without the dedicated efforts of county and municipal election officials and thousands of hardworking poll workers throughout the State of Wisconsin. The Government Accountability Board would also like to extend its gratitude to the county and municipal clerks who provided information for this report and the Board staff who contributed to this report.



Kevin J. Kennedy
Director and General Counsel
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Introduction

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 Government Accountability Board (G.A.B.) 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 board shall take remedial action and order remedial action to be taken by affected counties and municipalities to ensure compliance with the standards.¹ Each county and municipality shall comply with any order received under this subsection. This law was passed in 2005 and became effective January 1, 2006. Following the November 2006 general election, the first post-election audit was conducted in the State of Wisconsin. Wisconsin has required a complete voter-verified paper records for all electronic voting systems that enables a manual count or recount of each vote cast by the elector since April 2004. §5.91(18), Wisconsin Statutes.

The State of Wisconsin specifically distinguishes the post-election audit requirement as separate from the required pre-election tests of electronic voting systems. The pre-election test of electronic voting system, defined by §5.84, Wisconsin Statutes, uses a pre-determined set of ballots to ensure that the voting system is properly programmed prior to Election Day. The post-election audit, on the other hand, is designed to assess how the electronic voting system performed on Election Day using the actual votes cast by electors.

The Wisconsin Government Accountability Board is proud of the established detailed procedures established for meeting the post-election audit requirement. Post-Election Audits fulfill many goals including:

- creating an appropriate level of public confidence in the results of an election;
- deterring fraud against the voting system;
- detecting and providing information about large-scale, systemic errors;
- providing feedback that will allow jurisdictions to improve voting technology and election administration in future years;
- providing additional incentives and benchmarks for elections staff to reach higher standards of accuracy; and

¹ The current federal standard is 1 in 500,000 ballots. Accordingly, auditing teams must reconcile the Voter Verified Paper Record with ballots or records tabulated and recorded by equipment and eliminate any potential non-tabulation related sources of error including printer malfunctions, voter generated ballot marking errors, poll worker errors, or chief inspector errors.

- confirming, to a high level of confidence, that a complete manual recount would not change the outcome of the race.

The G.A.B. takes several important steps by establishing procedures that will maintain the effectiveness of the audit process. These steps include:

- Use of a completely transparent and random selection process for choosing reporting units to be audited;
- Conducting audits at both the local and state levels;
- Ensuring a minimum number of reporting units for each model of equipment is represented in the audited reporting units;
- Use of counting methods that include overvotes, undervotes, blank ballots, and spoiled ballots;
- Auditing of all ballots tabulated on Election Day including absentee ballots.

Since 2006, the G.A.B. has conducted audits on voting equipment within the state. With the 2006 report, the audit verified that the machine tallying functions on all electronic voting equipment models tabulated correctly. The report also indicated that there were no identifiable bugs, errors, or failures of the direct recording electronic (DRE) equipment used in the 2006 general election.

In 2008, Board staff reformed the audit program given the unsustainably high costs both in terms of personnel and financial expenses. The Board staff began asking municipal clerks to conduct audits at the municipal and county level, and mail audit materials to the Board offices for staff to complete, instead of staff completing the audits onsite. In 2010, the Board continued requiring municipalities to conduct audits at the municipal level with assistance from G.A.B. staff. Municipal and County officials have performed the majority of voting equipment audits following the canvass process. In spite of the considerable demands on their time, most of Wisconsin's clerks have been able to perform voting equipment audits, providing staff with considerable evidence of the accuracy of the voting equipment used within the state.

The results that follow are for the 2008, 2010, and 2012 audits. As in 2006, municipal and county clerks and Board staff were able to conclude that the audited voting equipment in the State of Wisconsin is tabulating correctly. For each of the races audited, staff determined that a full recount would not have changed the outcome of the election and was therefore not necessary. However, the audits did reveal other matters for future consideration by the Legislature, the Board, the County and Municipal Clerks, as well as concerned citizens. The voting equipment used within the state, while accurate, is aging and beginning to show signs of wear that many municipalities will need to address. The audit also underscored the necessity of educating voters on the voting process as well as the need to have technology in place that makes the voting experience easily understandable and accessible by all voters.

Overview of Audit Procedures

The Government Accountability Board randomly selects a designated number of reporting units across Wisconsin to target for municipal audits, including a minimum of five (5) reporting units for each voting system used in Wisconsin. The audits are conducted in accordance with the procedures set forth below. Both the municipal and county clerk of reporting units selected for audit are 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 are randomly selected for the voting system until five reporting units per voting system have been selected. Any reporting unit selected for audit that is subject to a recount is replaced by another reporting unit selected at random by the G.A.B. For good cause, the G.A.B. Board may identify other reporting units to be audited.

In addition to the municipal audits, the G.A.B. may audit a selected number of reporting units, not to exceed one percent (1%) of the reporting units in the state. The reporting units included in the audit will be selected randomly by the G.A.B. In the event that the G.A.B. conducts municipal audits, staff will identify different reporting units than those identified for audit by the municipal clerk.

Pre-Audit Preparations

The audit shall be open to the public. 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. No audit shall commence until after the period for filing a challenge to a recount of any contest on the ballot has expired. The audit must be conducted, however, no later than two (2) weeks after the Government Accountability Board certifies the election results.

Upon notification by the Government Accountability Board that the municipality shall conduct an audit of a selected reporting unit, the municipal clerk shall make arrangements with the county clerk and the county board of canvassers to preserve and retain the election materials including voter lists, the Inspectors' Statement (GAB-104), Tally Sheets (GAB-105), reports printed or generated by the voting system, ballots and any other required materials that will be used during the audit. All materials subject to audit must be retained in a secure location by either the municipal or county clerk.

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 Government Accountability Board.

General Procedures

1. The municipality shall acknowledge receipt of their selection for the post-election voting system audit and confirm with the G.A.B the following information for each reporting unit selected:
 - a. Voting System Type
 - b. Voting Equipment Model

c. Accessible Voting Equipment Model

2. Four (4) contests shall be audited, including the top contest on the ballot (either gubernatorial or presidential). The other audited contests shall be selected randomly by the Government Accountability Board from the other state contests that appear on the ballot.
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.
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 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 and any discrepancies are recorded.
5. If any offices contain an overvote, no vote is counted for that office, and is considered an undervote.
6. Auditors should only count votes as the equipment would have counted them. Voter intent is not a factor. 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: Ballot 93, voter marked both Jane Doe and John Smith and attempted to erase the mark for John Smith. We counted it as a vote for Jane Doe, but the machine may have read this as an overvote in this contest. This may result in our tally having one more vote for Jane Doe and one less undervote in this contest.

It may be possible that the auditors' totals do not match the voting equipment results report, but as long as you can reasonably explain any difference in the totals by reference to specific ballots, this is not considered to be an error with the voting system.

Recommended Audit Procedures

Set-Up

1. Count out ballots into sets of 100.
2. Label stacks-each ballot will have a unique number (1-100, 101-200, 201-300, etc.)

Note: Two people review each ballot. Auditors should rotate the stacks between them – i.e Person A works on Stack 1-100 while Person B works on Stack 101-200, etc...then they switch. Person A and Person B will each individually go through all the ballots. Keeping the stacks in order allows the auditors to narrow down where

there are discrepancies between them instead of needing to recount all the ballots over and over again.

Each Auditor Individually

1. Tally votes in groups of 20 – the goal is to be able to narrow discrepancies between individual tallies down to the smaller groups of 20.
2. Keep separated in subgroups of 20 while tallying – it is helpful to keep the group of 100 in one stack but to alternate the directions of the subgroups of 20.
3. Add subtotals after 100 ballots are complete.
4. Add subtotals together; confirm total is 100.
5. Repeat 1-4 in sets of 100 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 20 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 electronic voting machine (EVM) total.
 - a. If the totals match, note that they match on the reporting form.
 - b. If the hand tally and voting equipment tally does not match for a contest, the auditors 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, calculate the error rate and note the actual difference in votes and the error rate on the reporting form.

Post-Audit Procedures

Each municipality conducting an audit must submit the designated reporting forms and supporting documents from the audit, including tally sheets, to the Government Accountability Board (G.A.B.) to indicate the audit was completed and describe any discrepancies that were found.

The G.A.B. staff may, at its sole discretion, request that the municipality submit all audit materials, including the source documents (ballots, poll lists, etc.) to the G.A.B. for further review. In such a case, the G.A.B. 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, the G.A.B. 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, the G.A.B. will suspend

approval of the affected voting system in Wisconsin. This suspension will be implemented immediately, pending an appeal by the vendor to the Board, which must be filed within 30 days.

Based upon the results of the audit, the Government Accountability Board may, at its sole discretion, choose to re-test the voting system per GAB Chapter 7. Such test would be a condition of continuing approval of said voting system.

Municipal Reimbursement

The Government Accountability Board will reimburse up to \$300 for the cost associated with conducting each audit to those municipalities with reporting units identified for audit.

Municipalities will be reimbursed (up to \$300) for actual costs incurred. The Government Accountability Board will not reimburse personnel costs at a rate exceeding \$10 per hour.

Voting Equipment

Accessible Equipment

Sequoia Edge

The Board approved Sequoia's AVC-Edge with VeriVote Printer DRE system, version 5.024 on March 22, 2006. This system was approved under NASED # N-1-07-22-22-002. Most municipalities who use the AVC-Edge utilize them to meet accessibility requirements and use another system, usually traditional paper or optical scan, to fulfill the majority of their voting needs.

ES&S iVotronic

The Board approved ES&S's iVotronic DRE with Real Time Audit Log, version 9.1.4.0 on April 26, 2006. This system was approved under NASED # N-2-02-22-22-005. Most municipalities that use the iVotronic utilize it to meet accessibility requirements and use another system, usually traditional paper or optical scan, to fulfill the majority of their voting needs.

AccuVote TSX

The Board first approved Deibold's AccuVote TSX DRE Touch Screen and AccuView Printer Module, version 4.6.3 on March 22, 2006. This system was approved under NASED # N-1-06-22-22-001. Most municipalities that use the AccuVote TSX utilize it to meet accessibility requirements and use another system, usually traditional paper or optical scan, to fulfill the majority of their voting needs.

Populex

Populex Digital Paper Ballot Voting System, version was approved by the State Elections Board at the May 17, 2006 meeting.

Optical Scan Tabulators

ES&S M100/ES&S M 550

System assigned NASED # N-2-02-22-22-005. This equipment was approved by the Elections Board April 26, 2006.

ES&S DS200

DS200 digital scanner, version 1.6.1.0, was approved by the Board on August 28, 2012.

Optech Insight

Formerly a Sequoia Product that has been acquired by Dominion Voting,, the Optech Insight optical scan ballot reader, version. APXK2.10/HPX K1.42 was assigned NASED system ID # N-1-07-22-22-002. The State Elections Board approved this equipment at the March 22, 2006 meeting.

Optech Eagle

The Optech IIP Eagle originally made by Business Records Corporation and later (as a result of merger and an antitrust decision, by both Sequoia Voting Systems and by Election Systems and Software. It is a legacy piece of equipment.

Diebold/Premier-AccuVote-OS

This was formerly a Diebold Elections System Product that has been acquired by Dominion Voting. The AccuVote-OS (model D) Optical Scan, version 1.96.6, was approved by the State along with a series of security recommendations, at the March 22, 2006 meeting. The system was assigned National Association of State Election Directors (NASED) system ID # N-1-06-22-22-001.

2008 Voting Equipment Audit Summary

In 2008 Board staff randomly selected a designated number of reporting units across Wisconsin to target for municipal audits, including a minimum of five (5) reporting units for each Direct Recording Equipment (DRE) voting system used in Wisconsin. G.A.B. staff set a goal to conduct voting equipment audits in fifty-five (55) reporting units. The audits were conducted in accordance with established procedures. Both the municipal and county clerk of reporting units selected for audit were notified of the selection. If fewer than five (5) reporting units for any voting system were selected through the random selection process, then additional reporting units were randomly selected by voting system until five reporting units per voting system were selected. Any reporting unit selected for audit that was subject to a recount was replaced by another reporting unit selected at random by the Government Accountability Board. In addition to the municipal audits, the Government Accountability Board set an arbitrary goal of auditing ten (10) additional reporting units.

The following pieces of Accessible Voting Equipment were audited:

Accessible Voting Equipment	Number Audited
Sequoia Edge	22
AccuVote-TSX	5
iVotronic	2
Populex	--

The following pieces of tabulation equipment were audited:

Tabulation Equipment	Number Audited
Sequoia Insight	5
ES&S M100	2
ES&S M150	3
Optech Eagle	12
AccuVote-OS	6
ES&S 550	3

Accessible Voting Equipment Audit Results Summary

The accessible equipment that was audited, both by Board staff and municipal or county clerks was reconciled with the hand count totals generated by the voting equipment audit teams. The audit team reports indicated that the machine tallying functions on all electronic voting

equipment models tabulated correctly. The reports also indicated that there were no identifiable bugs, errors, or failures of the direct recording electronic (DRE) equipment used in the 2008 general election.

The majority of problems noted by the audit teams were not related to vote tabulation but rather equipment operational errors. For example, problems occurred with printing paper ballots when the printer did not advance or paper was improperly inserted into the equipment.

Optical Scan Voting Equipment Audit Results Summary

The optical scan voting equipment that was audited, both by G.A.B. staff and municipal and county clerks was reconciled with the hand count totals generated by the voting equipment audit teams. The audit team reports indicated that the machine tallying functions on all electronic voting equipment models tabulated correctly and performed as expected. In the completed equipment audits, the anomalies between the vote totals generated by the equipment were able to be reconciled with totals generated by the audit teams (to a reasonable degree of certainty) when auditors attempted to reconstruct ballot scanning processes that replicated what votes that the equipment would have counted.

Each optical scan model has specifications for which type of ballot marking devices are to be used in order for voting marks to be detectable by the equipment. In instances where voters used improper marking devices (e.g. colored pens not provided at the polls), or marked ballots incorrectly (e.g. using x's instead of filling in ovals as instructed), the equipment would generally not count improper ballots. In rare instances, the equipment performed better than expected and was able to read ballots, despite voter errors. In these instances, audit teams initially discounted ballots marked improperly as not read. Teams then attempted to narrow down vote totals to a reasonable range of ballots responsible for the vote discrepancies.

Of the audited equipment, teams were able to identify ballots that were likely responsible for the discrepancy in vote totals to a reasonable degree of certainty. The difference in the totals initially developed by teams and the totals generated by the equipment were attributable to voter error and not machine inaccuracy. Questionable voter errors that teams identified as being "not readable" to a reasonable degree of certainty were generally in the range of one to three ballots. The reports indicated that there were no identifiable bugs, errors, or failures of the Optical Scan equipment used in the 2008 general election.

2008 Audit Results

Voting equipment was found to have been performing in accordance with vendor specifications. In the audited units, the audit teams were not able to detect any fraud against the voting system; identify any indication of large-scale, systemic errors; or find evidence that a complete manual recount would change the outcome of the audited races.

2010 Voting Equipment Audit Summary

In 2010 Board staff randomly selected a designated number of reporting units across Wisconsin to target for municipal audits, including a minimum of five (5) reporting units for each Direct Recording Equipment (DRE) voting system used in Wisconsin. G.A.B. staff set a goal to have municipal clerks conduct voting equipment audits in forty-five (45) reporting units. The audits were conducted in accordance with established procedures. Both the municipal and county clerk of reporting units selected for audit were notified of the selection. If fewer than five (5) reporting units for any voting system were selected through the random selection process, then additional reporting units were randomly selected by voting system until five reporting units per voting system were selected. Any reporting unit selected for audit that was subject to a recount was replaced by another reporting unit selected at random by the Government Accountability Board. In addition to the municipal audits, the Government Accountability Board set the arbitrary goal of auditing ten (8) additional reporting units.

The following pieces of Accessible Voting Equipment were audited:

Accessible Voting Equipment	Number Audited
Sequoia Edge	14
AccuVote-TSX	4
iVotronic	3
Populex	1

The following pieces of tabulation equipment were audited:

Tabulation Equipment	Number Audited
Sequoia Insight	4
ES&S M100	2
ES&S 150	5
Optech Eagle	20
AccuVote-OS	4
ES&S DS200	3

Accessible Voting Equipment Audit Results Summary

The accessible equipment that was audited by municipal or county clerks was reconciled with the hand count totals generated by the voting equipment audit teams. The audit team reports indicated that the machine tallying functions on all electronic voting equipment models tabulated correctly. The reports also indicated that there were no identifiable bugs, errors, or failures of the direct recording electronic (DRE) equipment used in the 2010 general election.

The majority of problems noted by the audit teams were not related to vote tabulation but rather equipment operational errors. For example, problems occurred with printing paper ballots when the printer did not advance or paper was improperly inserted into the equipment.

Optical Scan Voting Equipment Audit Results Summary

The audited optical scan voting equipment was reconciled with the hand count totals generated by the voting equipment audit teams. The audit team reports indicated that the machine tallying functions on all electronic voting equipment models tabulated correctly and performed as expected. In the completed equipment audits, the anomalies between the vote totals generated by the equipment were able to be reconciled with totals generated by the audit teams when they attempted to reconstruct ballot scanning processes that replicated votes that the equipment would have counted.

Each optical scan model has specifications for which type of ballot marking devices are to be used in order for voting marks to be detectable by the equipment. In instances where voters used improper marking devices (e.g. colored pens not provided at the polls), or marked ballots incorrectly (e.g. using x's instead of filling in ovals as instructed), the equipment would generally not count improper ballots. However, in rare instances, the equipment performed better than expected and was able to read ballots, despite voter errors. In these instances, audit teams initially discounted ballots marked improperly as not read. Teams then attempted to narrow down vote totals to a reasonable range of ballots responsible for the vote discrepancies.

Of the audited equipment, teams were able to identify ballots that were likely responsible for the discrepancy in vote totals to a reasonable degree of certainty. The difference in the totals initially developed by teams and the totals generated by the equipment were attributable to voter error and not machine inaccuracy. In general, questionable voter errors those teams identified as being "not readable" to a reasonable degree of certainty was isolated to one or two improper ballot. The reports indicated that there were no identifiable bugs, errors, or failures of the Optical Scan equipment used in the 2010 general election.

2010 Audit Results

Voting equipment was found to have been performing in accordance with vendor specifications. In the audited units, the audit teams were not able to detect any fraud against the voting system; identify any indication of large-scale, systemic errors; or find evidence that a complete manual recount would change the outcome of the audited races.

2012 Voting Equipment Audit Summary

In 2012 Board staff randomly selected a designated number of reporting units across Wisconsin to target for municipal audits, including a minimum of five (5) reporting units for each Direct Recording Equipment (DRE) voting system used in Wisconsin. G.A.B. staff increased the number of units to be audited for 2012, setting the goal to have municipal clerks conduct voting equipment audits in one hundred and seven (107) reporting units. The audits were conducted in accordance with established procedures. Both the municipal and county clerk of reporting units selected for audit were notified of the selection. If fewer than five (5) reporting units for any voting system were selected through the random selection process, then additional reporting units were randomly selected by voting system until five reporting units per voting system were selected. Any reporting unit selected for audit that was subject to a recount was replaced by another reporting unit selected at random by the Government Accountability Board.

The following pieces of Accessible Voting Equipment were audited:

Accessible Voting Equipment	Number Audited
Sequoia Edge	52
Automark	--
AccuVote-TSX	10
iVotronic	4
Populex	1

The following pieces of tabulation equipment were audited:

Tabulation Equipment	Number Audited
Sequoia Insight	8
ES&S M100	7
Optech Eagle	37
AccuVote-OS	18
ES&S DS200	3

Accessible Voting Equipment Audit Results Summary

The accessible equipment that was audited, both by G.A.B. staff was reconciled with the hand count totals generated by the voting equipment audit teams. The audit team reports indicated that the machine tallying functions on all electronic voting equipment models tabulated correctly. The reports also indicated that there were no identifiable bugs, errors, or failures of

the direct recording electronic (DRE) equipment used in the 2006 general election. The majority of problems were generated by Voter Verified Paper Trail machine printer errors.

Optical Scan Voting Equipment Audit Results Summary

The audited optical scan equipment was reconciled with the hand count totals generated by the voting equipment audit teams. The audit team reports indicated that the machine tallying functions on all electronic voting equipment models tabulated correctly and performed as expected. In the completed equipment audits, the anomalies between the vote totals generated by the equipment were able to be reconciled with totals generated by the audit teams (to a reasonable degree of certainty) when they attempted to reconstruct ballot scanning processes that replicated votes that the equipment would have counted.

Each optical scan model has specifications for which type of ballot marking devices are to be used in order for voting marks to be detectable by the equipment. In instances where voters used improper marking devices (e.g. glue sticks on several absentee ballots or marking pens not provided at the polls), or marked ballots incorrectly (e.g. using x's or circling names rather than filling in ovals as instructed), the equipment would generally not count improper ballots. In rare instances, the equipment performed better than expected and was able to read ballots, despite voter errors. In these instances, audit teams initially discounted ballots marked improperly as not read. Teams then attempted to narrow down vote totals to a reasonable range of ballots responsible for the vote discrepancies.

Of the audited equipment, teams were able to identify ballots that were likely responsible for the discrepancy in vote totals to a reasonable degree of certainty. The difference in the totals initially developed by teams and the totals generated by the equipment were attributable to voter error and not machine inaccuracy. Questionable voter errors that teams identified as being "not readable" to a reasonable degree of certainty were in the range of one to three ballots. The reports indicated that there were no identifiable bugs, errors, or failures of the Optical Scan equipment used in the 2012 general election.

2012 Audit Results

Voting equipment was found to have been performing in accordance with vendor specifications. In the audited units, the audit teams were not able to detect any fraud against the voting system; identify any indication of large-scale, systemic errors; or find evidence that a complete manual recount would change the outcome of the audited races.

Report Conclusions and Recommendations

Ensuring the integrity of the voting system and maintaining the integrity of the vote is an essential function of the Government Accountability Board. Between 2008 and 2012 the G.A.B. has either performed or assisted in the administration of one hundred and ninety-five (195) municipal audits statewide. In the process, staff has accumulated auditable data for two hundred and sixty-seven (267) independent pieces of voting equipment within the state. These audits provide a sampling of the functioning election equipment within the state and demonstrate both successes and challenges ahead.

The Board set a higher goal in 2012 than it had in previous years, and staff was able to surpass previous goals, completing 107 audits due in large part to the dedication and hard work of municipal and county clerks. With less available staff resources and the demands of the historic Wisconsin recall efforts, the Board targeted and conducted significantly fewer audits due to lack of resources in both 2008 and 2010. Similarly, while the results were submitted and reviewed, Board staff previously had not been able to publish the findings from 2008 and 2010.

The 2008, 2010, and 2012 audit results all indicate that the voting equipment used within the state is performing as expected and according to vendor specifications. The Direct Recording Equipment tabulated without error. The problems that did arise universally came from printer errors. In several instances, poll workers had difficulty advancing the tape on the Voter Verified Paper Record (VVPR) Printers. To rectify the problem and produce the VVPR auditors were instructed to contact the vendors who were able to instruct them on how to reprint paper ballots. In all instances, the totals were able to be reconciled. One possible means of remedying this problem may be to provide clerks instruction with methods for remedying common problems with voting equipment on Election Day.

The overwhelming majority of problems encountered during the audit process involved the audit of the optical scan equipment and were generally attributable to human error, both during the ballot marking process and during the auditing process. Voter errors were numerous and commonly a result of voters having difficulty filling out ballots properly. Common examples of voter errors include:

- Using improper devices to mark ballots (e.g. glue sticks, colored pens)
- Not marking ballots as specified in the directions (using x marks to fill-in ovals)

Some clerks also had difficulty in completing the audit. In order to assist clerks in conducting the audits, Board staff identified several areas where the process can be improved, including:

- Reformulating the audit instructions and tally sheets
- Providing webinar based training on how to conduct an audit properly

As a result, Board staff is working to clarify instructions and adjust the agency's forms. In the future, staff will also work to utilize our training program and provide webinars on conducting audits.

Voting Equipment audit data will continue to be used to identify areas for improvement and to maintain the Boards record of voting equipment used within the state. Board staff will also

continue to develop the audit program to incorporate methods for improving the audit process. Available research will be used to provide additional standards for comparing the voting equipment operating within our state to its performance elsewhere.

Appendix A

Table 1. Table of 2008 Municipalities Audited

	County	Municipality	Reporting Unit	Tabulator	Accesible
1	Barron	Maple Plain	Ward 1	Optech Insight	Edge II
2	Barron	Almena	Ward 1	Optech Insight	Edge II
3	Burnett	Trade Lake	Wards 1 & 2	Paper	Edge II
4	Calumet	Sherwood	Wards 1 - 8	Accuvote-OS	TSX
5	Chippewa	Lake Holcombe	Wards 1 & 2	Accuvote-OS	Edge II
6	Clark	Unity	Ward 1	ES&S 150	iVotronic
7	Clark	Withee	Ward 1	ES&S 150	iVotronic
8	Columbia	Wyocena	Ward 1	M 100	AutoMARK
9	Dunn	Dunn	Wards 1 - 3	Optech Insight	Edge II
10	Dunn	Grant	Ward 1	Optech Insight	Edge II
11	Dunn	Tiffany	Wards 1 - 3	Optech Insight	Edge II
12	Forest	Blackwell	Ward 1	Paper	Edge II
13	Forest	Popple River	Ward 1	Paper	Edge II
14	Grant	Cassville	Wards 1 & 2	Paper	Edge II
15	Jefferson	Fort Atkinson	Wards 7 - 9	Optech Eagle	AutoMARK
16	Lafayette	South Wayne	Ward 1	Paper	Edge II
17	Lincoln	Merrill	Ward 2	ES&S 150	AutoMARK
18	Manitowoc	Whitelaw	Ward 1	M 100	AutoMARK
19	Marinette	Peshtigo	Wards 1 - 8	Edge II	Edge II
20	Marinette	Beecher	Wards 1 - 3	Paper	Edge II
21	Milwaukee	Milwaukee	Ward 96	Optech Eagle	AutoMARK
22	Milwaukee	Milwaukee	Ward 92	Optech Eagle	AutoMARK
23	Milwaukee	Milwaukee	Ward 311	Optech Eagle	AutoMARK
24	Milwaukee	Milwaukee	Ward 95	Optech Eagle	AutoMARK
25	Milwaukee	Greenfield	Ward 2	Optech Eagle	AutoMARK
26	Milwaukee	Milwaukee	Ward 314	Optech Eagle	AutoMARK
27	Milwaukee	Oak Creek	Wards 7 - 9	Optech Eagle	Edge II
28	Milwaukee	Wauwatosa	Ward 3	Optech Eagle	Edge II
29	Pierce	Prescott	Wards 1 - 4	Optech Eagle	Edge II
30	Racine	Caledonia	Wards 13 - 15	Optech Eagle	Edge II
31	Racine	Racine	Ward 32	Optech Eagle	Edge II
32	Richland	Richland Center	Ward 7	Paper	Edge II
33	Sauk	Delton	Wards 1 - 4	Accuvote-OS	TSX
34	Sawyer	Exeland	Ward 1	Paper	Edge II
35	Washington	Jackson	Wards 1 - 12	Accuvote-OS	TSX
36	Washington	West Bend	Wards 1 - 9	Accuvote-OS	TSX
37	Washington	West Bend	Wards 4, 11, 22 & 29	Accuvote-OS	TSX
38	Waukesha	Brookfield	Wards 5 & 7	Optech Eagle	Edge II
39	Waukesha	Oconomowoc	Wards 4 - 6, 14 & 22	Optech Eagle	Edge II
40	Wood	Auburndale	Ward 1	ES&S 550	AutoMARK
41	Wood	Vesper	Ward 1	ES&S 550	AutoMARK
42	Wood	Sherry	Ward 1	ES&S 550	AutoMARK

Appendix A
Table 2. Table of 2010 Municipalities Audited

	County	Muni Type	Municipality	Reporting Unit	Voting System Description	
					Vendor	Model Name/Number
1	BROWN	VILLAGE	ASHWAUBENON	WARDS 11 & 12	Optech	Eagle III-P
2	ADAMS	TOWN	BIG FLATS	WARD 1	Sequoia	Edge
					Sequoia	Edge
3	WAUKESHA	TOWN	BROOKFIELD	WARDS 1, 3 & 4	(Left blank)	Eagle
4	WAUKESHA	CITY	BROOKFIELD	WARD 15	(Left blank)	Eagle (see Notes)
5	OUTAGAMIE	TOWN	CENTER	WARDS 1-5	Command Central	Insight
					Command Central	Edge
6	WAUKESHA	TOWN	DELAFIELD	WARDS 9, 10 & 11	(Left blank)	Eagle (see Notes)
					(Left blank)	Edge (see Notes)
7	CLARK	TOWN	DEWHURST	WARD 1	ES&S	M150
					ES&S	iVotronic
8	FLORENCE	TOWN	FERN	WARD 1	(Left blank)	Populex
9	DANE	CITY	FITCHBURG	WARDS 1-3	Optech	Eagle III-PE
10	FOND DU LAC	CITY	FOND DU LAC	WARD 4	Optech	Eagle III
					Sequoia	Edge
11	BUFFALO	CITY	FOUNTAIN CITY	WARDS 1 & 2	Sequoia	Edge
12	CLARK	TOWN	FREMONT	WARDS 1 & 2	ES&S	M150
					ES&S	iVotronic
13	PIERCE	TOWN	GILMAN	WARD 1	Command Central	Sequoia Edge
					Command Central	Sequoia Edge
14	TAYLOR	VILLAGE	GILMAN	WARD 1	Central Count - ES&S	M150
15	OUTAGAMIE	TOWN	GRAND CHUTE	WARDS 2-5	Command Central	Insight
					Command Central	Edge
16	PORTAGE	TOWN	GRANT	WARD 3	Business Records Corp.	Optech Eagle III-PE
17	BROWN	CITY	GREEN BAY	WARD 46	(Left blank)	Optech Eagle III-P
18	MILWAUKEE	VILLAGE	GREENDALE	WARDS 3 & 4	Sequoia	Insight
19	LA CROSSE	TOWN	HAMILTON	WARDS 1 -3	ES&S	Optech Eagle III-P
20	ROCK	CITY	JANESVILLE	WARD 14	ES&S	Optech Eagle III-P
21	DODGE	TOWN	LEROY	WARDS 1 & 2	Dominion	Accu-Vote OS
					Dominion	Accu-Vote TSX
22	TAYLOR	TOWN	MAPLEHURST	WARDS 1 & 2	ES&S	M150
					ES&S	iVotronic
23	SHAWANO	CITY	MARION	WARDS 4-6	Command Central	Edge
					Command Central	Insight
24	FOND DU LAC	TOWN	MARSHFIELD	WARDS 1 & 2	ES&S	Optech Eagle
25	WINNEBAGO	TOWN	MENASHA	WARDS 9, 11 & 12	Dominion	Accu-Vote TSX
					Dominion	Accu-Vote OS
26	MILWAUKEE	CITY	MILWAUKEE	WARD 188	ES&S	Optech Eagle 111 PE
27	MILWAUKEE	CITY	MILWAUKEE	WARD 253	ES&S	Optech Eagle 111 PE
28	MILWAUKEE	CITY	MILWAUKEE	WARD 38	ES&S	Optech Eagle 111 PE
29	LANGLADE	TOWN	NORWOOD	WARDS 1 & 2	Sequoia	Edge
30	WAUKESHA	CITY	OCONOMOWOC	WARDS 1-3 & 21	Optech	Eagle
31	TREMPEALEAU	TOWN	PIGEON	WARDS 1 & 2	Sequoia	Edge
32	MARATHON	TOWN	PLOVER	WARD 1	ES&S	M100
33	PORTAGE	VILLAGE	PLOVER	WARD 10	ES&S	DS200
34	BROWN	VILLAGE	PULASKI	WARDS 1-3 & 6	Optech	Eagle
35	RACINE	CITY	RACINE	WARD 14	Optech	Eagle
36	WOOD	TOWN	SARATOGA	WARDS 1-3	ES&S	DS200
37	CLARK	TOWN	SEIF	WARD 1	ES&S	M150
38	PORTAGE	TOWN	SHARON	WARDS 1-3	ES&S	Optech Eagle
39	DUNN	TOWN	SHERMAN	WARD 1	Sequoia	Edge
					Optech	Eagle
40	LINCOLN	TOWN	SKANAWAN	WARD 1		DS200
41	TREMPEALEAU	VILLAGE	STRUM	WARDS 1 & 2	Sequoia	Edge
42	DODGE	TOWN	THERESA	WARDS 1 & 2	Dominion	Accuvote OS
					Dominion	Accuvote TSX
43	MANITOWOC	CITY	TWO RIVERS	WARDS 8 & 9	ES&S	Optech Eagle IIIP
44	MARATHON	TOWN	WIEN	WARD 1	ES&S	M100
45	WINNEBAGO	VILLAGE	WINNECONNE	WARDS 1-4	Dominion	Accuvote OS
					Dominion	Accuvote TS

Appendix A

Table 3. Table of 2012 Municipalities Audited

	County	Muni Type	Municipality	Reporting Unit	Voting System Description	
					Vendor	Model Name/Number
1	PEPIN	TOWN	ALBANY	Ward 1	Eagle Edge	Eagle
2	WINNEBAGO	TOWN	ALGOMA	WARDS 1-2, 7-10	Premier	Accuvote O.S.
3	ASHLAND	CITY	ASHLAND	WARD 10	ES&S	M100
4	SAUK	TOWN	BEAR CREEK	WARD 1	Dominion	Accuvote ES 2000
					Diebold	Accuvote TSX
5	POLK	TOWN	BEAVER	Ward 1	Sequoia	AVC Edge II
6	ROCK	CITY	BELOIT	WARD 18	Eagle	Optech Eagle III-P
7	SHAWANO	VILLAGE	BIRNAMWOOD	Ward 1	Sequoia	AVC Edge II
8	WINNEBAGO	TOWN	BLACK WOLF	Wards 1 - 3	Diebold	Accuvote-OSX ES 2000
					(Left blank)	TSX-No Model #
9	DODGE	TOWN	CALAMUS	WARDS 1-2	Diebold/Premier	Accuvote O.S.
					Diebold/Premier	Accuvote Touch Screen
10	TREMPEALEAU	TOWN	CALEDONIA	WARDS 1 - 2	(Left Blank)	Edge
					(Left blank)	Edge
11	DANE	TOWN	CHRISTIANA	WARDS 1-2	ES&S	Optech Eagle III-P
12	BARRON	TOWN	DALLAS	Ward 1	HAVA	Edge II
					(Left blank)	(Left blank)
					(Left blank)	(Left blank)
13	PORTAGE	TOWN	DEWEY	Ward 1	ES&S	DS200
14	RACINE	TOWN	DOVER	WARDS 1-8	HAVA	Eagle
					(Left Blank)	Edge
15	WALWORTH	TOWN	EAST TROY	WARD 1	Dominion	Accuvote ES 2000
16	EAU CLAIRE	CITY	EAU CLAIRE	Ward 17	Command Central	Optech Eagle III-PE
					Command Central	Sequoia AVC Edge II
17	EAU CLAIRE	CITY	EAU CLAIRE	Ward 30	Command Central	Optech Eagle III-PE
					Command Central	Sequoia AVC Edge II
18	EAU CLAIRE	CITY	EAU CLAIRE	Ward 43	Command Central	Optech Eagle III-PE
					Command Central	Sequoia AVC Edge II
19	EAU CLAIRE	CITY	EAU CLAIRE	Ward 6	Command Central	Optech Eagle III-PE
					Command Central	Sequoia AVC Edge II
20	DUNN	TOWN	EAU GALLE	WARD 1	Sequoia	Insight
					Left Blank	Edge
21	FOND DU LAC	TOWN	EDEN	Wards 1-2	Command Central	Optech Eagle
					Sequoia	Edge
22	SHAWANO	VILLAGE	ELAND	Ward 1	Left Blank	Edge
23	DODGE	TOWN	ELBA	WARD 1	Diebold/Premier	Accuvote Optical Scan
					Diebold/Premier	Accuvote Touch Screen
24	LANGLADE	TOWN	ELCHO	Wards 1-2	Sequoia	AVC Edge II
					(Left blank)	(Left blank)
25	FLORENCE	TOWN	FERN	WARD 1	Populex	(Left blank)
26	FOND DU LAC	CITY	FOND DU LAC	WARD 21	Left Blank	Eagle Optical Scan
27	FOND DU LAC	CITY	FOND DU LAC	WARD 24	Left Blank	Eagle Optical Scan
28	MILWAUKEE	CITY	FRANKLIN	Ward 19	Sequoia	Eagle
					Sequoia	AVC Edge II
29	POLK	VILLAGE	FREDERIC	Wards 1-2	Sequoia	AVC Edge 49457
30	JACKSON	TOWN	GARDEN VALLEY	WARD 1	Sequoia	AVC Edge II
31	OZAUKEE	VILLAGE	GRAFTON	WARD 11	Dominion/Diebold	TSX-No Model #
					Dominion	Accuvote OS 79811-03
32	LA CROSSE	TOWN	GREENFIELD	Wards 1 & 2	ES&S	Optech Eagle III-P
33	MILWAUKEE	CITY	GREENFIELD	WARD 9	Optical Scan Tabulating System	Optech Eagle III-P
34	VERNON	TOWN	GREENWOOD	WARD 1	49873	49873
35	WASHBURN	TOWN	GULL LAKE	Ward 1	Populex	Populex
36	ST. CROIX	VILLAGE	HAMMOND	WARDS 1-4	Global Election Systems	Accuvote ES 2000/ #79811-03
					Sequoia Voting Systems	AVC Edge II/ #09602400-1123
37	MARQUETTE	TOWN	HARRIS	WARD 1	Sequoia (Command Central)	Edge II
					Sequoia (Command Central)	Edge II
38	MARATHON	TOWN	HARRISON	Ward 1	ES&S	M100
39	CALUMET	VILLAGE	HILBERT	Wards 1 & 2	Premier	Accuvote Optical Scan #29811-04
40	ROCK	CITY	JANESVILLE	WARD 17	ES&S	Optech Eagle III-P
					ES&S	Optech Eagle III-P
				WARD 3	ES&S	Optech Eagle III-P
41	VERNON	TOWN	JEFFERSON	WARDS 1 - 4	Edge	(Left blank)
					Edge	(Left blank)
					Edge	(Left blank)
42	KENOSHA	CITY	KENOSHA	WARD 26	Diebold	Accuvote Opti-Scan
43	KENOSHA	CITY	KENOSHA	WARD 31	Diebold	Accuvote Opti-Scan
44	MONROE	TOWN	LAFAYETTE	WARDS 1 & 2	Command Central	Edge TS
45	BURNETT	TOWN	LINCOLN	WARD 1	Sequoia	Edge II

46	COLUMBIA	TOWN	LOWVILLE	WARDS 1 & 2	ES&S	M100
47	CLARK	CITY	LOYAL	WARD 1 & 2	ES&S	M100
					ES&S	iVotronic
48	DANE	CITY	MADISON	WARD 114	ES&S	Optech Eagle III-P
49	DANE	CITY	MADISON	WARD 15	ES&S	Optech Eagle III-P
50	DANE	CITY	MADISON	WARD 83	ES&S	Optech Eagle III-P
51	WAUKESHA	VILLAGE	MENOMONEE FALLS	WARD 7	Optical Scan	Optical Scan
52	DUNN	CITY	MENOMONIE	Wards 8 + 9	Sequoia	Optech Insight
					Sequoia	AVC Edge II #09602400-1123
53	LINCOLN	CITY	MERRILL	Wards 3-4	(Left blank)	DS200
54	JACKSON	VILLAGE	MERRILLAN	WARD 1	Sequoia (Command Central)	Edge #09602400-1123 (49792)
55	WAUKESHA	TOWN	MERTON	Wards, 4, 5, 6, 10	Command Central	Edge
					Command Central	Insight HPX
56	POLK	VILLAGE	MILLTOWN	Ward 1	Command Central	AVC Edge #49448
57	MILWAUKEE	CITY	MILWAUKEE	WARD 001	ES&S	Eagle Optical Scan
58	MILWAUKEE	CITY	MILWAUKEE	WARD 045	ES&S	Eagle Optical Scan
59	MILWAUKEE	CITY	MILWAUKEE	WARD 054	ES&S	Eagle Optical Scan
60	MILWAUKEE	CITY	MILWAUKEE	WARD 095	ES&S	Eagle Optical Scan
61	MILWAUKEE	CITY	MILWAUKEE	WARD 098	ES&S	Eagle Optical Scan
62	MILWAUKEE	CITY	MILWAUKEE	WARD 199	ES&S	Eagle Optical Scan
63	MILWAUKEE	CITY	MILWAUKEE	WARD 208	ES&S	Eagle Optical Scan
64	MARQUETTE	TOWN	MONTELLO	WARDS 1,2,3,4	Command Central	Sequoia Edge
					Command Central	Sequoia Edge
65	BROWN	TOWN	MORRISON	Wards 1-2	(Left blank)	Optech III-PE
66	MARATHON	CITY	MOSINEE	WARDS 1,2,6 & 7	ES&S	M100
67	GRANT	TOWN	MOUNT IDA	WARD 1	Command Central	Sequoia Edge
68	CRAWFORD	VILLAGE	MT. STERLING	WARD 1	Sequoia	Sequoia
69	WAUKESHA	CITY	NEW BERLIN	Ward 12	Command Central	Insight #504994
70	WAUPACA	CITY	NEW LONDON	WARDS 9 & 10	Command Central	Optech Eagle III-PE
					Command Central	Edge
71	FOND DU LAC	VILLAGE	NORTH FOND DU LAC	Wards 1-7	(Left blank)	Optech Eagle III-P
72	JACKSON	TOWN	NORTHFIELD	WARD 1	Command Central	AVC Edge II
73	WAUKESHA	CITY	OCONOMOWOC	Wards 4-6	Command Central	Optech Insight
					Command Central	Edge
74	WINNEBAGO	CITY	OSHKOSH	Ward 12	(Left blank)	Accuvote ES 2000
					(Left blank)	Accuvote TSX
75	COLUMBIA	VILLAGE	PARDEEVILLE	Wards 1-3	ES&S	M100
76	LANGLADE	TOWN	PARRISH	Ward 1	Sequoia	AVC Edge II
77	CLARK	TOWN	PINE VALLEY	WARD 1 & 2	ES&S	M100
					ES&S	iVotronic
78	OZAUKEE	CITY	PORT WASHINGTON	WARD 3	Dominion	Accuvote 2000
79	DODGE	TOWN	PORTLAND	WARDS 1-2	Diebold	Premier Accuvote OS
80	MARINETTE	TOWN	POUND	Wards 1, 2, & 3	Sequoia	AVC Edge II
					Sequoia	AVC Edge II
					Sequoia	AVC Edge II
81	RACINE	CITY	RACINE	WARD 19	(Left blank)	Eagle
82	RICHLAND	CITY	RICHLAND CENTER	Ward 7	Sequoia	Edge II
					Sequoia	Edge II
83	FOND DU LAC	TOWN	RIPON	Wards 1-2	Command Central	Optech Eagle
					Command Central	Sequoia Edge
84	LINCOLN	TOWN	ROCK FALLS	WARDS 1-2	(Left blank)	DS200
85	ONEIDA	TOWN	SCHOEPKE	Ward 1	Sequoia	AVC Edge II
86	SHAWANO	TOWN	SENECA	Ward 1	Sequoia	Optech Insight
					Sequoia	Edge II
87	SHAWANO	CITY	SHAWANO	Wards 1 & 2	(Left blank)	Optech Insight
					Sequoia	AVC Edge II
88	SHEBOYGAN	CITY	SHEBOYGAN FALLS	WARDS 1-2 & 9	Business Records Corp.	Optech III-PE
89	CLARK	TOWN	SHERMAN	WARD 1 & 2	ES&S	M100
90	DUNN	TOWN	SHERMAN	WARD 1	(Left blank)	Optech Insight
					Sequoia	AVC Edge

91	LAFAYETTE	VILLAGE	SOUTH WAYNE	WARD 1	Sequoia	AVC Edge II
92	DANE	TOWN	SPRINGFIELD	WARDS 1-3	ES&S	Optech Eagle III-P
93	PORTAGE	CITY	STEVENS POINT	Wards 13 - 15	ES&S	DS200
94	DANE	CITY	STOUGHTON	WARDS 3 - 4	ES&S	Optech Eagle III-P
95	RUSK	TOWN	STUBBS	WARDS 1-2	Command Central	Sequoia Edge
96	LINCOLN	CITY	TOMAHAWK	WARD 1-2	(Left blank)	DS200
97	OCONTO	TOWN	UNDERHILL	Ward 1	Command Central	Sequoia Edge II
98	DANE	TOWN	VERONA	Wards 2 - 4	(Left blank)	Optech Eagle III-PE (HPS)
99	WINNEBAGO	TOWN	VINLAND	Ward 1B	(Left blank)	Accuvote Unit
100	CLARK	TOWN	WARNER	WARD 1 & 2	ES&S	iVotronic
101	DODGE	CITY	WATERTOWN	Wards 5 - 6	Global Election Systems	Accutvote Model 79811-03
102	MARINETTE	TOWN	WAUSAUKEE	Wards 1 & 2	Sequoia	AVC Edge II
					Sequoia	AVC Edge II
103	MILWAUKEE	CITY	WAUWATOSA	WARD 1	Command Central	Sequoia Insight
104	MILWAUKEE	CITY	WEST ALLIS	Ward 9	ES&S	Optech Eagle
105	SAUK	VILLAGE	WEST BARABOO	Wards 1 & 2	(Left blank)	Accuvote
106	DODGE	TOWN	WILLIAMSTOWN	WARDS 1-3	Diebold	Premier Accuvote OS
107	WOOD	CITY	WISCONSIN RAPIDS	Wards 1 - 5	ES&S	Optech Eagle
108	CLARK	TOWN	YORK	WARD 1 & 2	ES&S	iVotronic

Appendix B

Audit Program Costs

In 2006, G.A.B. (Elections Board) staff traveled to each municipal location and conducted the audits on-site. This method was eliminated, due to the high costs of conducting on site audits. When the costs were calculated based on staff hours, availability for other agency functions, and actual financial costs, G.A.B. staff concluded that it did not have the financial or personnel resources necessary to continue conducting on site audits. The total estimated daily cost for two auditors in travel status was \$244 per day and would require each staff member to be out of the office for one week. The cost for traveling to these locations has proven to be more expensive than having the municipality send the audit materials to G.A.B. headquarters.

In 2008, the municipalities were asked conduct the audits, with G.A.B. staff conducting a limited number of audits. At that time, the cost for sending the audit materials was approximately \$25-\$75, depending on the number of ballots involved in the audit, plus the same expected cost to deliver the audit materials back to the municipality when the audit is complete (\$25-\$75). The total expected cost for the G.A.B. to return the materials was approximately \$50-\$150 per municipality.

In 2010, the Board required municipalities to conduct audits at the municipal level with guidance from G.A.B. staff. Given the time required from Board staff, which averaged one week or more, Board staff did not have the staff available to complete all of the targeted audits. Given the expertise and time necessary for auditing the Optical Scan equipment in particular, it was both time and fiscally prohibitive to hire temporary staff to fill this need.

In 2012, the Board began requiring that the audits be performed completely at the municipal level by municipal and county staff. Each municipality conducting the audit was required to submit the designated reporting forms and supporting documents from the audit, including tally sheets, to the G.A.B. to indicate the audit was completed and describe any discrepancies that were found. G.A.B. staff reviewed the data and identified whether appropriate explanation was provided that eliminated the possibility of voting equipment error.

The G.A.B. staff may, at its sole discretion, request that the municipality submit all audit materials, including the source documents (ballots, poll lists, etc.) to the G.A.B. for further review. In such a case, the G.A.B. 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, the G.A.B. will request that the voting equipment manufacturer investigate and explain the reasons for any differences between the machine tally and the paper record tally.

The Board continues to reimburse municipalities \$300 per reporting unit for costs associated with conducting the audit. Appropriate documentation detailing actual costs incurred by the party conducting the audit is required for municipalities or counties to receive this reimbursement.