

# 0 Connecticut Citizen Election Audit

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## Citizen Post-Election Audit Report

Independent Observation and Analysis of the 2014 Connecticut  
Post-Election Audits

January 22, 2014

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# Executive Summary

## Introduction

**The purposes of the observations are to demonstrate citizen interest in the process, increase citizen involvement in elections, provide feedback to the Secretary of the State and the Connecticut Legislature on the audit process, and to provide the public with information necessary to determine their confidence in our elections.**

After the August 2014 Primary and the November Election, Connecticut conducted its thirteenth and fourteenth large-scale post-election audits<sup>1</sup>. These were also the Connecticut Citizen Election Audit's<sup>2</sup> thirteenth and fourteenth large-scale audit observations.

Citizen Audit volunteer observers invested 37 days observing 34 local counting sessions after the August Primary and 39 days observing 37 local counting sessions after the November Election. Observers frequently attended audits on short notice, observed multiple audits, and accommodated last minute changes to the audit schedule. **Without the service of these volunteers, Connecticut's post-election audits would take place without public observation and the insights in this report would not be possible.**

## Findings

We conclude, based on our citizen observations and our analysis of official audit reports, that the 2014 post-election audits continue to fail to inspire confidence, based on the:

- ▼ Lack of consistency, reliability, and transparency in the conduct of the audit.
- ▼ Lack of complete, accurate official forms reporting audit results.
- ▼ Weaknesses in ballot chain-of-custody and security.

The public, candidates, and the Secretary of the State should expect local election officials to be able to organize audits, produce accurate, complete audit reports.

One of our greatest concerns is the discrepancies between machine counts and hand counts reported to the Secretary of the State (SOTS) by registrars of voters. In many cases, discrepancies are not thoroughly and reasonably explained nor investigated. In some cases the explanations make no sense or contradict the data in municipalities' reports.

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<sup>1</sup> In this document we will frequently use the term "audit" when we mean "post-election audit" or "post-election audit counting session". Technically, we believe that the whole process encompassing everything from the preservation of records, random drawings, counting in municipalities, the report by the University of Connecticut, and the evaluation of that report by the Secretary of the State would be the "audit". However, for readability we will usually follow the common practice of using "audit" to refer to parts of the whole.

<sup>2</sup> Formerly, the Connecticut Citizen Election Audit Coalition, in early 2014 we reorganized as an independent organization, the Connecticut Citizen Election Audit, with many of the same volunteers continuing and expanding our work.

Based on citizen observation and reported results, we find that the organization, planning, and ad-hoc counting procedures used by many municipalities are not sufficient to count accurately and efficiently and as a result, we have no means to determine whether discrepancies should be attributed to either human error or to optical-scan voting machines.

Our observations, not the audits, surfaced a flaw in election equipment, procedures, and law that causes legitimate write-in votes not to be counted.

- ▼ AccuVote-OS scanners occasionally fail to properly deposit write-in votes to the write-in bin. In addition officials do not properly count and secure write-ins. Election and audit procedures are insufficient to catch these errors.

Comparing 2014 audits to recent reports, we note:

- ▲ A significant improvement in the random audit drawing integrity in November 2014 vs. the November 2013 audit. (As reported separately on 1/21/2015)
- ▲ Several small, yet significant improvements in and corrections to the Official Audit Procedures made by the SOTS Office at the request of the Citizen Audit. These changes resulted in a noticeable difference in causing accurately completed Official Report Forms.
- ▲ For the first time since 2008, the Secretary of the State publically (and personally) chose the races to be audited, as Citizen Audit has often recommended. Prior to 2014, race drawings had been held outside of public view.
- ▼ The Secretary of the State's Office continues to accept reports from registrars of voters with obviously incorrect data, missing critical data, and indicating audits fell short of requirements. The public, candidates, and the Secretary of the State should expect officials to be able to organize audits which produce accurate, complete results.
- ▼ Little difference, positive or negative, in the issues and level of concerns affecting confidence in elections identified in previous reports.

We applaud the Secretary of the State and her Office for the improvements. We encourage them to continue making improvements within their purview, including more detailed, accurate procedures, rejecting incomplete municipal audit reports, and timely official (UConn) audit reports.

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## Recommendations

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We continue to support our long-standing recommendations for improving the audits and the audit law (See Appendix B).

With this report we add recommendations to improve the law and procedures:

- The audit procedures should be revised to more clearly call for the counting of all votes for candidates by party and unknown, also to report and count write-in bubbles in audited races, including any write-in votes found outside of write-in envelopes.
- The law and closing procedures should be changed to require that write-in bubbles be hand counted and compared to the tape and both numbers reported in the Moderator's Return. If the counts do not match, officials should be required on election night to find missing write-in ballots in the main bin and to count any registered write-in votes on those ballots.

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## Background

After the November 2014 Federal and State primary, Connecticut conducted its thirteenth and fourteenth large-scale post-election audits. These were also the Connecticut Citizen Election Audit's thirteenth and fourteenth large-scale audit observations.

The purposes of the observations are to demonstrate citizen interest in the process, increase citizen involvement in elections, provide feedback to the Secretary of the State and the Connecticut Legislature on the audit process, and to provide the public with information necessary to determine their confidence in our elections.

By law, the Secretary of the State (SOTS) is required, in each election, to select at random 10% of Connecticut's voting districts to participate in post-election audits. In an even year election, the SOTS randomly selects three races for audit, statewide. In a primary, municipal clerks in municipalities selected for the audit select one race for audit. (In primaries and odd-year elections races are chosen randomly by Municipal Clerks)

The audit counting sessions were required to be conducted between November 19, 2014 and November 24, 2014. In the random drawing for August 68 districts in 40 municipalities were selected for audit from the list of districts not exempt from the audits due to close vote recanvasses<sup>3</sup>. In the random drawing for November 77 districts in 54 municipalities were selected for audits from the list of districts, there were no districts exempt from the audits due to close vote recanvasses. The districts performing audits were located in 40 municipalities.<sup>4</sup>

Citizen Audit volunteer observers invested 37 days observing 34 local counting sessions after the August Primary and 39 days observing 37 local counting sessions after the November Election. Observers frequently attended audits on short notice, observed multiple audits, and accommodated last minute changes to the audit schedule. **Without the service of these volunteers, Connecticut's post-election audits would take place without public observation and the insights in this report would not be possible.**

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### Citizen Observation: Challenges and Limitations

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Through past experience in observing audits, we have continuously improved our forms, training materials, and conference call training sessions for observers. Last year for the first time, we supplemented conference call training with web-based video training.

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<sup>3</sup> The Connecticut post-election audit law exempts districts with close vote recanvasses from the audit along with any districts subject to a contested election. Alternate districts are selected in the random drawing, in case towns have neglected to report recanvasses to the Secretary of the State or if subsequent election contests exempt additional districts.

<sup>4</sup> SOTS drawing press release: <http://tinyurl.com/CTEAAug2014PR>

We recognize that there may be occasional errors in our raw data derived from observations. However, when taken as a whole, the observations tell a collective story that is quite consistent and provides valuable feedback for continuing education of elections officials.

Without our volunteer observers willing to invest a day of their time, available for short-notice scheduling, and observing to the best of their ability, nobody but local election officials would know how post-election audits are conducted in Connecticut. Our observers care about democracy and ensuring that measures are in place to protect the integrity of our elections. <sup>5</sup>

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<sup>5</sup> Upon request of any Registrar of Voters participating in the audit, we would be pleased to discuss volunteer observation reports and provide feedback applicable to their municipality.



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## Purpose of Connecticut's Random, Post-Election Audits

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As stated in the Office of the Secretary of the State's Post-Election Audit Procedures<sup>6</sup>:

*The primary purpose of the hand count audit is to assess how well the optical scan voting machines functioned in an actual election and to ensure that votes cast using these machines are counted properly and accurately.*

The Principles and Best Practices for Post-Election Audits<sup>7</sup> includes the following definition and benefits:

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

*The benefits of such audits include:*

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

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<sup>6</sup> Aug 2014 Official Procedures: <http://ctelectionaudit.org/AuditProcedureManual2014.pdf>

<sup>7</sup> <http://www.electionaudits.org/principles>

## Methodology

The following activities were performed in the course of the project to organize observers, collect data, and analyze data for the report. They are in approximate time sequence:

- Just prior to the primary and election, we emailed past observers an invitation to sign-up on the web, to observe local counting sessions with the dates they were available to observe and the distance they were willing to travel to an observation. Observers were encouraged to provide at least three availability dates and volunteer to travel at least thirty-five miles, in order to have a high probability of being assigned to an observation. Observers also sign-up for a conference call training session and are emailed training materials, including access to video training.
- In August, our volunteers attended the random audit drawing held at the SOTS Office. As has been the custom, our volunteers were invited by the Secretary to do the actual drawing of districts from a raffle barrel. The SOTS Office provided us with a list of districts included in the drawing, and those exempt from the audit, based on recanvasses. Shortly after the drawing, the SOTS Office issued a press release with the list of selected districts and selected alternate districts.

In November, our volunteers attended the random audit drawing held at the Gilead Elementary School in Hebron. The Secretary invited the second grade students to do the actual drawing of districts from a raffle barrel. The SOTS Office provided us with a list of districts included in the drawing, and those districts exempt from the audit, based on recanvasses. Shortly after the drawing, the SOTS Office issued a press release with the list of selected districts and selected alternate districts.

For the first time, the Secretary of the State chose the races for auditing in public, herself. Previously, despite informal requests, since 2008, the race selections have prior to 2014, been held outside of public view. This year, the Citizen Audit formally requested that they be held openly and transparently. We applaud the SOTS and the Office for the change.

- Municipalities and districts in the drawing were recorded in our Audit Database. Emails were sent, calls made, and voice mails left with registrars of voters for the selected municipalities.
- Observers participated in conference call trainings in the days prior to the start date for the local audit counting sessions, which begin fifteen (15) days after the election.
- Starting shortly after the drawing and extending through the audit period, as the audit dates are obtained from local officials, observers are matched and tentatively scheduled for upcoming local audit counting sessions. Some audit dates are forwarded to us from the SOTS Office as that office is informed of dates by local officials. Often schedule changes are made when observers are unable to observe a tentatively scheduled audit. Some observers sign-up for additional dates. Others volunteer to observe additional audits.
- The list of municipalities and districts were updated as we learned of selected districts that are exempt and districts from the alternate lists are assigned.

- Observers attend audits, completing paper Observation Report Forms, and, where possible, collecting draft or final copies of the official SOTS Audit Report Forms. Copies of some Audit Report Forms are mailed or scanned by observers for early data entry. Most Observation Report Forms are submitted online using the SurveyMonkey tool, while some paper forms are mailed or emailed for data entry by the Citizen Audit.
- We review Observation Reports, consolidate multiple reports from the same Municipality, create statistical data, and analyze the data.
- The SOTS Office provided copies of received official Audit Report Forms to us on October 3, 2014. And again on December 11, 2014.
- We completed data entry of all Audit Report Forms based on the official data. Municipal reports were not provided by the SOTS Office for four districts from August and one from November.. For those districts we used copies of reports collected by observers at audit observations.
- Data and observation reports were analyzed, compared with past results, and this report was created.

# Analysis

## Summary

We conclude, based on our citizen observations and our analysis of official audit reports, that the 2014 post-election audits continue to fail to inspire confidence, based on the:

- ▼ Lack of consistency, reliability, and transparency in the conduct of the audit.
- ▼ Lack of complete, accurate official forms reporting audit results.
- ▼ Weaknesses in ballot chain-of-custody and security.

The public, candidates, and the Secretary of the State should expect local election officials to be able to organize audits, produce accurate, complete audit reports.

Our observations, not the audits, surfaced a flaw in election equipment, procedures, and law that causes legitimate write-in votes not to be counted.

- ▼ AccuVote-OS scanners occasionally fail to properly deposit write-in votes to the write-in bin. In addition officials do not properly count and secure write-ins. Election closing procedures are insufficient to cause the write-in votes on those ballots to be counted. Audit procedures are insufficient to catch these errors.

Our observations and concerns remain similar to those reported in previous reports. Comparing 2014 audits to recent reports, we note:

- ▲ A significant improvement in the random audit drawing integrity in November 2014 vs. the November 2013 audit. (The details of our audit of the drawings in 2014 and 2013 are covered in separate reports available at <http://CTElectionAudit.org>)
- ▲ Several small, yet significant improvements in and corrections to the Official Audit Procedures were made by the SOTS Office at the request of the Citizen Audit. These changes resulted in a noticeable difference in causing accurately completed Official Report Forms.
- ▲ For the first time since 2008, the Secretary of the State publically (and personally) chose the races to be audited, as Citizen Audit has often recommended. Prior to 2014, race drawings had been held outside of public view.
- ▼ The Secretary of the State's Office continues to accept reports from registrars of voters with obviously incorrect data, missing critical data, and indicating audits fell short of requirements. The public, candidates, and the Secretary of the State should expect officials to be able to organize audits which produce accurate, complete results.
- ▼ Little difference, positive or negative, in the issues and level of concerns affecting confidence in elections identified in previous reports.

We applaud the Secretary of the State and the Office for these improvements. We encourage them to continue making improvements within their purview, including more detailed, accurate procedures, timely official (UConn) audit reports, and rejecting incomplete municipal audit reports.

One of our greatest concerns is the discrepancies between machine counts and hand counts reported to the Secretary of the State (SOTS) by Registrars of Voters. In many cases, discrepancies are not thoroughly and reasonably explained nor investigated. In some cases the explanations make no sense or contradict the data in municipalities' reports.

Based on citizen observation and reported results, we find that the organization, planning, and ad-hoc counting procedures used by many municipalities are not sufficient to count accurately and efficiently and as a result, we have no means to determine whether discrepancies should be attributed to either human error or to optical-scan voting machines.

### Citizen Observation Analysis

Volunteer citizen observers make observations of local counting sessions and report their observations on the Observation Report Forms<sup>8</sup>. Analysis in this section is based on those reports. Appendix A is a table showing the percentage of 'yes' responses on all yes/no questions on those forms for this audit and the previous two August primary audits.

In several aspects it is more appropriate to compare even-year-elections with even-year-elections and primaries, odd-year-elections with odd-year-elections and primaries. Even-year-elections are statewide, involve more ballots, yet are in general, easier races to count manually, while odd-year-elections are municipal and involve fewer ballots, yet involve more challenging counts of vote-for-multiple races. Primary audits require counting only a single race, have much fewer votes, and do not involve cross-endorsements, write-ins, or vote-for-multiple contests.

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## A. Procedures Unenforceable, Current Laws Insufficient

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As noted in previous reports, discussions with representatives of the Secretary of the State's Office and the State Elections Enforcement Commission (SEEC) indicated that many, if not all, of the post-election audit procedures, including those covering chain-of-custody, are unenforceable. There is disagreement between past SEEC Directors and some members of the Legislature regarding the enforceability of regulations, but there is agreement that, currently, post-election audit procedures are not enforceable.

We note that the adherence to prescribed chain-of-custody and ballot security procedures varies widely among audited districts. Laws that govern the sealing of ballots, memory cards, and tabulators after an election are unclear. The law has not been updated to recognize that polling place voting with optical scanners involves paper ballots. Ballots are not uniformly maintained in secure facilities and access to these storage facilities is not reliably logged or recorded, even though two individuals are required to be present when these facilities are accessed. In many towns, each registrar could have individual, unsupervised access to the sealed ballots for extended periods undetected, and in many towns, several

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<sup>8</sup> The form for November 2013, slightly refined in recent observations, is available at: <http://tinyurl.com/CTEANov2013OR>

other individuals have such access. The lack of uniform security of the ballots diminishes confidence in the integrity of the ballots which are the basis for the data reported in audits.

**We emphasize that this report does not question any individual's integrity.** However, secure, credible chain-of-custody procedures should preclude the opportunity for a single individual to have any extended access to ballots unobserved.

### Observations Uncover Votes Not Counted, Insufficient Procedures and Law

Our observations, not the audits, surfaced a flaw in election equipment, procedures, and law that causes legitimate write-in votes not to be counted.

When a ballot with write-in bubbles are marked, the scanner counts the other votes on the ballot, counts the number of write-in bubbles by race, and is designed to drop the ballot into the write-in bin, separate from the main ballot bin and the auxiliary bin. After ending the election-day, the scanner prints the ballot counts, vote counts, and the number of write-in votes per race on the tape. Closing regulations require officials to hand count and report any write-in votes for registered write-in candidates on ballots in the write-in bin and seal them in a separate envelope in the sealed ballot bag<sup>9</sup>.

Election procedures assume the AccuVoteOS functions as designed. It does not.

There are flaws in Connecticut's AccuVote-OS scanners, procedures, and the law which let some of those votes go uncounted. The audits are insufficient to determine the rate that write-in votes are undercounted in this way.

- Occasionally the AccuVote-OS and associated ballot box, fail to direct write-in ballots to the write-in bin, dropping them instead into the main bin.
- When write-in ballots are counted on election night, only those in the write-in bin are counted.
- Although the scanner counts the number of write-in bubbles by race, officials are required to only count the subset of votes for registered write-in candidates.
- There is no requirement in procedures and the law that the number of write-in bubbles per race be reported and compared to the tape counts.
- The audits procedures do not require that write-in bubbles be counted, even when they are and balance with the tape counts, the audit does not distinguish between the ballots that were in the write-in bin and those that were not. Thus, audit counts of write-in bubbles balancing is not an indication that all were subject to hand-count on election night.

**Deposit in the incorrect bin is an election equipment problem, with procedures inadequate to compensate for that problem. There is a solution. The law and closing procedures should be changed such that the number of write-in bubbles per race in the hand count and on the machine tape should be reported and required to balance.**

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<sup>9</sup> Regulation Sec. 9-242a-23 [http://www.sots.ct.gov/sots/lib/sots/regulations/title\\_09/242a.pdf](http://www.sots.ct.gov/sots/lib/sots/regulations/title_09/242a.pdf)

**It is also is a failure in some polling places to follow procedures to seal write-ins in a separate envelope. And likely a failure in some polling places to count valid write-ins.**

Unfortunately, the AccuVote-OS does not provide a count of write-in ballots to balance with the number of ballots in the write-in bin, only a count race by race of the number of write-in bubbles filled-in would demonstrate that all were accounted for.

The law, closing procedures, and the audit procedures should be changed, as follows:

- The law and closing procedures should be changed to require that the number of write-in bubbles be hand counted and compared to the tape, race by race, and those numbers reported in the Moderator's Return. If the counts do not match, officials should be required on election night to find missing write-in ballots in the main bin and to count any registered write-in votes on those ballots. (This is similar to the requirement that ballot counts should be compared to check-in list counts, with differences noted and researched)
- The audit procedures should explicitly require that write-in bubbles should be counted and compared to machine tape counts in audited races, and any write-in ballots found outside of the write-in envelope be reported.

From a volunteer who observed two audits in two municipalities in November:

*They were a handful of ballots shy still after 3 counts, and went to look in the big blue box, and sure enough found the sealed envelope of 4 write-in ballots. However, we had already seen at least 2 write-ins that should have moved with the baffle to write-in bin that are in with the other ballots and first impression of ROV's and self is that these are in wrong place and likely were not reviewed in hand counting for write-ins.*

*Write-in bubbled ballots are mixed in with rest of ballots. At least two are valid – [for a registered write-in candidate] - but moderator's return shows no votes for [that candidate]. Tape shows 12 governor write-ins detected but [officials present] say they throw them back in with other ballots if not registered write-in - which then becomes hard to verify if thrown back in with thousands of others. It looks like either tabulator did not deflect ballot, or humans ignored valid write-ins.*

*Write-ins from one district, not in separate sealed envelope, one clearly for [a registered write-in candidate]. A second district had more write-ins, also not in a separate envelope*



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## B. Procedures Are Not Being Followed, Understood

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Problems uncovered in this year's observation include: incorrectly completed forms, chain-of-custody concerns, inconsistent counting methods, and error-prone, confusing totaling processes.

The procedures are still frequently not followed, are not enforced, and, as noted previously, may not be enforceable. Additionally, the procedures still lack detailed guidance in efficient methods of counting that provide accurate and observable results. See Section C below.

Our observations indicate that some towns do a good job of using the procedures in the audit, following each step in order, and enhancing them with effective detailed counting methods. However, in other towns, there is no evidence that election officials are referencing or following the procedures. Some who attempt to follow the steps do not seem to understand them and appear to be reading the procedures for the first time at the start of the counting session. Frequently, effective counting procedures are coupled with ad-hoc, disorganized totaling procedures which cause frustration for officials, inaccuracy, and make it difficult to observe the correspondence from vote totals by teams or batches to the final totals.

### B.1 Procedures Improved Based on Citizen Audit Feedback

In past years, the Secretary of the State's Office published incrementally improved audit procedures for each election, often basing those improvements on suggestions from the Citizen Audit. This year we can report that the SOTS Office accepted several of our suggestions for improving the audit procedures and report forms. Some consistent past errors were reduced by a better description that hand counted ballot counts, means those counted in the audit, not those counted by hand on election-day and by correcting two erroneous examples of questionable ballots. Registrars expressed appreciation that the forms now included a fax number to send the forms to the SOTS Office.

### B.2 Improved Notification of Audit Counting Sessions to the Citizen Audit

Unfortunately, the only requirement in the law is that towns notify the public of an audit counting session in advance, with no deadline or notice requirement. For example, a single notice on the door of the Registrars' Office, posted fifteen minutes prior to the counting session would meet the requirements of the law. The Secretary of the State's procedures do require three business days advance notice to the Secretary's Office. In the past we have had issues with obtaining the dates and times, leaving many voice mails with registrars.

This year, we had no problems in determining the dates, times and location of audits - an improvement, especially compared to our experience prior to 2013. We attribute that improvement to our obtaining the email addresses in 2013 of registrars in municipalities selected for audit, sending the registrars emails shortly after the selection, followed by voice mails, and to their credit, almost all registrars responding promptly to those emails and voice mails.



### B.3 Official Audit Report Not Available, To Date

We appreciate the assistance of the Secretary of the State's Office in providing us with copies of the official municipal audit reports. As of this date, four (4) August and one (1) official municipal reports have not been sent to us from the Secretary's Office. For statistics on those missing reports, we used unofficial copies of those reports collected by observers at the audits.

### B.4 Missing, Incorrectly Completed Forms and Incomplete Audit Counting

**Audit Report**

Town Name: \_\_\_\_\_ Voting District (and polling place name): \_\_\_\_\_

District Numbers:(Cong \_\_\_\_\_) (State Senate \_\_\_\_\_) (Assembly \_\_\_\_\_)

Ballot Carrying Case Seal Number: \_\_\_\_\_ Audit Date: \_\_\_\_\_

Total of tabulator-counted ballots - hand counted at the audit:

Totals ballots counted by tabulator as shown on tabulator tape produced on election night:

Ballot Carrying Case Seal Number (When Rescaled After Audit): \_\_\_\_\_

A	B	C	D	E	F
Office	Candidate	Machine Totals (Tape)	Undisputed Vote Totals	Questionable Vote Totals	Overall Hand Count Totals (D + E)

Explanation of Differences: \_\_\_\_\_

*Submit completed forms within 48 hours by fax to 1-866-392-4023*

Registrar of Voters: \_\_\_\_\_ (Signed) \_\_\_\_\_ (Printed)

Registrar of Voters: \_\_\_\_\_ (Signed) \_\_\_\_\_ (Printed)

### Official Audit Report Form - Figure 1

Reviewing the official district reports submitted to the Secretary of the State, we note that several report forms were not accurately completed, making it difficult to create comprehensive statistics or to depend on the audits as a vehicle for assessing the voting machines' accuracy and correct programming, as resented in Table 1 on the following page.

	2014 Election	2012 Election	2014 Primary	2012 Primary
The number of ballots counted by hand or machine was not filled in or was filled in incorrectly.	2	10	2	9
Some columns were not completed and/or incorrectly completed	6	4	20	5
Minor arithmetic/transcription errors	6	1	0	1
Reports with negative counts of questionable ballots	0	2	0	1
Less races or candidates counted than required by law	4	0	0	0
Missing reports from SOTS	1	4	2	6
Differences attributed to questionables, but none reported in Col. E	0	3	0	0
Cross-endorsed candidates not counted as such	12	1	0 <sup>10</sup>	0
Differences attributed to questionables, but not enough reported	0	0	0	0
Total Incorrect or Missing Reports	25 <sup>11</sup>	22	24	21
Districts Selected	77	75	68	73
Rate of Incomplete Reports	32%	29%	35%	29%

Errors in Official Report Forms - Table 1

Incomplete data should be taken seriously. The Secretary of the State should not accept incomplete forms, should insist that they be filled out correctly, that enough races are counted, and, where necessary, perform investigations, including counting ballots or votes again. These investigations should be announced publicly in advance for public observation. Every significant difference<sup>1</sup> is an opportunity for an election error or malfeasance to remain undetected.

We note a dramatic improvement in the number of districts missing ballot counts. We attribute this to our suggestion, adopted by the SOTS Office to clarify the description of the field on the form for the number of ballots counted by hand in the audit.

We note a dramatic increase in the number of municipalities not counting votes by party and unknown. This requirement should be articulated more clearly in the official audit procedures.

Images of the actual official Audit Report Forms obtained from the Secretary of the State's Office, along with our data compiled from those reports can be viewed at: <http://www.CTElectionAudit.org>

<sup>10</sup> Applicable to elections not primaries.

<sup>11</sup> Some reports had more than one error, counted only once here.

## B.5 “Human Error” Should Not Be Accepted as an Explanation of Differences

	2014 Election	2012 Election	2014 Primary	2012 Primary
Reports attributing differences in counts to “Human Error”	16	19	0	1
Rate of Human Error Excuse	21%	25%	0%	1%

**Official Forms Listing “Human Error” as Cause of Differences - Table 2**

Many officials attribute differences in counts to “Human Error”. Accepting that as the reason or excuse completely negates the purpose of the audit. Without accurate reliable counting in the audit it is not possible to attribute errors to either machine or humans. Even when hand counts are inaccurate that does not imply that machine counts actually were accurate.

Submitting by registrars and accepting by the SOTS Office of reports with “Human Error” as an explanation is also contradictory to the published procedures, which state:

*Small differences of one or two unexplained votes can often occur, but such differences should be verified by at least two counts. It is your responsibility to be thorough and comfortable that your counts of the ballots are accurate. If you are not confident in your counts then you should continue counting and recounting until you are satisfied that your hand count result is accurate.*

*If the results of the audit reveal any unexplained deviations or errors, The University of Connecticut (UConn VoTeR Center), at the request of the Registrars of Voters or Secretary of the State, shall examine the machines that apparently produced incorrect results to determine if such errors were caused by the optical scan voting machine.*

Differences excused by “Human Error” should not be accepted by the SOTS Office nor by the University of Connecticut in their reporting of scanner accuracy.

## B.6 Multiple Chain-of-Custody Concerns

In several observations<sup>12</sup>, observers expressed concerns with the chain-of-custody and ballot security.

Question	% Yes:	Nov 2014	Nov 2012	Aug 2014	Aug 2012
Do you have any concerns with the chain-of-custody?		25%	27%	23%	17%

### Municipalities Where Observers Noted Chain-of-Custody Concerns - Table 3

Single officials deliver ballots, single individuals are left with ballots, ballots are left alone with observers, or ballots found alone in unlocked rooms. In other cases seals improperly applied, are open, or not used.

A larger concern is that, in many towns, single individuals may access the ballots undetected for extended periods of time. In many towns surveyed in this audit, a single individual can access the ballot storage 63% (August) and 46% (November). In other towns, even though policies require more than one person to access ballots, there are few protections in place to prevent a single person from accessing the ballots<sup>13</sup>.

The following are selected observer comments, our editorial comments in brackets[]<sup>14</sup>:

*Registrar carried ballot bag into room by himself.*

*Ballots were in the conference room unattended when I entered and the supervisor did not arrive for 15 minutes. The supervisor left me alone in the room with the ballots one more time before the start of the audit.*

*At one point I was left alone with the ballots.*

*The cardboard box instead of a bag with seals was a concern...It suggests comfort with making their own rules that reduce costs.*

*Brought "the wrong bag" ... so they went back and brought in an opened bag--the "correct one"*

*While returning the ballots to the storage room only one of the registrars wheeled them and she ducked into the restroom (leaving ballots alone) for a few minutes.*

*Ballots bags were stored in the registrars' office in plain sight.*

<sup>12</sup> We did not observe every attribute of every audit counting session that we attended. Some questions did not apply in some audits, observers could not fully observe audits that continued beyond one day, etc.

<sup>13</sup> Numbered tamper-evident seals are a useful protection, but without extensive practices for their verification, and other strong ballot protections, they at best provide a few seconds of protection from possible compromise. For example, see: <http://www.cs.princeton.edu/~appel/voting/SealsOnVotingMachines.pdf> and <http://www.cs.princeton.edu/~appel/voting/Johnston-AnalysisOfNJSeals.pdf>

<sup>14</sup> All comments by observers and officials in this document have been edited for length, for grammar, punctuation, and to make the meanings clear.

## C. Training, and Attention to Counting Procedures Inadequate, Inconsistently Followed

### C.1 Audit Organization and Counting Procedures:

Observers expressed concerns that many of the audits were not well organized. Observers noted the following concerns, which frequently occurred within the same municipalities:

Question	% Yes:	Nov 2014	Nov 2012	Aug 2014	Aug 2012
Do you have any concerns that the auditing was not well-organized?		31%	17%	13%	18%
Do you have any concerns with the integrity of the counting and totaling process?		33%	17%	0%	6%
Do you have any concerns that the manual count was inaccurate?		42%	20%	0%	6%
Do you have any concerns that the officially reported information is inaccurate?		26%	10%	0%	6%
Do you have any concerns with the transparency/observability of the process?		14%	5%	3%	6%

#### Municipalities Where Observers Noted Procedural Concerns - Table 4

We note a significant increase in the level of concerns in November 2014 vs. November 2012, while the August 2014 numbers largely reflect the reduced number of ballots, and reduced complexity of a primary audit.

Based on observer comments it is clear that these are substantial concerns:

*They seemed to have predetermined how much time and energy they were willing to put into this and cared not that they had missed vote totals in several tape entries nor that audit manual clearly state they should recount if there are discrepancies (they ask what the threshold was - guess 4%) and then were surprised the audit manual suggests they should be recounting. They had little process and much haste, with abhorrence of minor cross endorsing parties (WF and I) which some of staff express openly while observer present*

*They read tape and wrote on the SOTS report whenever they could not figure out what counters had done or how they arrived at odd way off totals. Counters had finished an hour before the tally sheet totalers had, and left long before troubles were noticed, and as last three (ROV's and Deputy) worked another 5 man-hours to guess their way to conclusion. The whole exercise fell apart. Rather than recount any votes, or wonder how they got more votes than ballots, the counters work was accepted, not repeated, and eventually ignored or misunderstood. Tallying was horrendous with many zeroes recorded where counters had entries.*

*Team and leader confused about the process, no actual supervision. Supervisor just staring at tape and counts on form, apparently hoping numbers would change as she kept adding over and over and asking teams for numbers over and over. This all took, about an hour and a half with no actual counting occurring...Each team did their own thing, very confused as leader asks all teams for one total, but then asks for another in the middle of when they are reporting. At one point team gives number of zero but supervisor writes down 7. Over time supervisor makes small changes as she hears things from teams, and the results get closer and closer to showing teams matching the machine counts.*

*The [tallying] process did not lack transparency, but it was done in such a confusing manner that it was impossible for us to confirm anything*

*Explain their way to resolution. They were incapable of totaling 4 teams worksheets for each table, or for the room of counters. The tapes answer guided the last two hours work and no votes were counted twice. I was easily able to see that counting, tallies, and especially totals had everything to do with desired and expected results and little to do with observable ballots. Even in cases where slightly unusual ballots were discussed with ROV's and Deputy, the teams often simply did nothing at all with such data, and then the ROV's and Deputy ignored clues to errors in their drive to produce a tolerable close to tape report. Small chitchat confirms they have always done so, never match, and always count only once and much faster than other site. Very low quality work by very nice people.*

*Did not take tape numbers into account and copy on to forms. No comparison between audit counts and election night totals. New registrar was filling out forms incorrectly while experienced registrar supervised opening, counting, and sealing. Experienced registrar never checked forms. [Officially submitted forms all reflect those errors]*

We also note that some of the same, experienced observers, were complementary of the work in other towns:

*In my recall this was the best audit I have seen in every respect....not rushing made everything better and teams likely happier, perhaps saving time overall, since recounting was not necessary.*

*This was the best training I have ever observed. Registrar [] had a sample for each type of Questionable ballot. She began by saying "This is not a matter of Voter Intent. Get that out of your mind. This is about how the machine read the ballot." She gave an explanation of each type of questionable ballot - Q&A style, so that the counters could experience how to handle Questionables. She also used the examples to explain over-votes and over-rides.*

## C.2 Need for Dual Verification

Observers noted that audit counting procedures requiring “two eyes,” i.e., dual verification of counts, were frequently ignored. When a large number of ballots are counted by a single individual, miscounts can require tiring recounts and unnecessary investigation. When single individuals count hundreds of ballots or votes, errors are almost inevitable.

Question	% Yes:	Nov 2014	Nov 2012	Aug 2014	Aug 2012
Were the BALLOTS counted by each team such that a 2nd election official verified each count?		65%	77%	69%	77%
IF HASHMARKING USED: Did a second official observe that each vote was read accurately?		56%	45%	41%	50%
IF HASHMARKING USED: Did a second official make duplicate hashmarks OR observe that each hashmark was recorded accurately?		59%	36%	38%	50%
IF STACKING/PILES USED: Was the vote counting process such that two election officials verified each vote was stacked as marked?		58%	64%	78%	100%
IF STACKING/PILES USED: Were the stacks of ballots counted such that two election officials verified that each stack was counted accurately?		56%	54%	83%	100%

### Municipalities Where Observers Noted Dual Verification Concerns - Table 5

At least 40% of towns failed to double check counts of votes in November, while 35% failed to double check ballot counts.

### C.3 Blind Counting

Blind counting is a method of counting without pre-conceived knowledge of the expected outcome. When counting teams know the machine totals or know the differences between their counts and the machine totals, there is a natural human tendency to make the hand count match the machine count. This risks taking shortcuts and seeking cursory explanations for discrepancies which, in turn, lowers the credibility of the process and undermines confidence in the audit results.

When election officials know the election totals or the differences between manual and machine counts, there is a tendency to accept any explanation or any new count that reduces the difference without any additional verification.

Question	% Yes:	Nov 2014	Nov 2012	Aug 2014	Aug 2012
Were counters kept unaware of the election totals for the ballots or races they were counting until counting and recounting each race was finally complete?		72%	73%	57%	67%
If initial counts were off, were counters kept unaware of the exact and approximate level of difference?		40%	52%	71%	40%

**Municipalities Where Observers Noted Blind Counting Concerns - Table 6**

In November, when counts were off 60% of the time counters were informed of the exact or approximate level of difference.

From observers:

*There was no blind counting. Total number of ballots was counted first and the vote count was read from the tape before the recount began.*

*The registrar read the vote total from the moderators report and OS tapes before the counting took place.*

*Supervisor counted stacks, told counters "That pile should have 17" and said the count of ballots was off by one and "you must have counted wrong".*

*Started right out saying number of ballots in district, repeated that they should get that number*



## C.4 Confusion in Definitions of Ballots with Questionable Votes

There continues to be confusion in the definitions of “ballots with questionable votes” (marks that the machine may have misread) and those ballots that should be considered “undisputed”<sup>15</sup>:

- On the official reporting form, some towns fail to classify any ballots as having any questionable votes. Other towns classify many ballots as questionable, when clearly the machine counted the vast majority of those votes.
- There is often confusion between differences in voters’ intent that would not be recognized by the machine and marks that may or may not have been read by the machine.

There is a need for further examples of questionable votes, clarification of ambiguities, and revised instructions on how to classify and count questionable votes in the official audit procedures.

Some observer comments:

*They seemed to have [questionables] straight by the third batch or so, but that was 30% of the way through the count.*

*They didn't focus on evaluating ballots that were questionable until after they found that the vote counts were off.*

*Later these dozen or so unusual votes were used to "explain away" nearly every discrepancy and recorded values on [Official Report] that had little to do with totals counters had put forward.*

## C.5 Counting Write-In Votes and Cross-Endorsed Candidates

Several years ago we noted a high degree of confusion and lack of training of counters in counting cross-endorsed candidates. This year, as in recent years, we can report great improvement in this area. This year we note no less accuracy in counting cross-endorsed candidate votes than those for other candidates. This been a significant improvement in the last couple of years. Yet, we note an increase in the number of cases where only the total votes for candidates were counted, rather than separately by party and unknown.

Write-ins did not present problems to officials this year. However, as covered previously in Section A, our observations, not the audits, surfaced a flaw in election equipment, procedures, and law that causes legitimate write-in votes not to be counted.

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<sup>15</sup> AccuVote Optical Scanners, those used in Connecticut, are designed to count only based on marks within bubbles, and must count bubbles when they are 0.16% filled in, with acceptable marking material. Thus questionable votes should only be those with some markings within the bubble and where those markings were done by an unacceptable marker or fill in an area that may be less than 0.16%, perhaps no more than 1/4 or 1/3 filled in the judgment of officials.



# Official Audit Report Data Analysis

The information for the statistics in this section is produced from the official forms. The images of those forms and our detail data compiled from those forms is available at <http://CTElectionAudit.org>

After the local counting sessions, officials complete and submit the Official Audit Report Forms to the SOTS. Where possible, observers collect copies of the forms at the counting session, we also receive the official copies of the forms from the SOTS Office.

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## Ballot Count Accuracy

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Among our greatest concerns are the discrepancies reported. The following table shows all districts with ballot count discrepancies.

In this year's audits there were significant differences reported in several towns. Any unexplained difference greater than or approaching the automatic recanvass trigger of 0.5% should be a concern..

Unlike vote counts, discussed later, there are no questionable ballots counts. Any difference in ballot counts must be due to optical scanner or human error. Human errors are not limited to audit hand counts. Scanners or ballots could have been mishandled and incorrectly counted on election-day, or misplaced on election-day or subsequently.

Compared to previous years this represents fewer such differences. Unfortunately, as covered earlier our observers noted more concerns than in the past with the integrity of the counting process.

Machine Totals (Tape)	Audit Count	Difference	Percent Difference
Aug 2014			
176	1	175	99.4%
169	0	169	100.0%
249	255	-6	-2.4%
54	55	-1	-1.9%
Nov 2014			
690	0	690	100.0 %
2320	2242	78	3.4 %
1442	1422	20	1.4 %
2171	2166	5	0.2 %
1396	1401	-5	-0.4 %
747	744	3	0.4 %
3615	3618	-3	-0.1 %
2389	2387	2	0.1 %
5287	5285	2	0.0 %
1790	1788	2	0.1 %
3608	3609	-1	0.0 %
1300	1299	1	0.1 %
1298	1299	-1	-0.1 %
1598	1597	1	0.1 %
3182	3181	1	0.0 %
678	677	1	0.1 %
1314	1313	1	0.1 %

Ballot Count Differences - Table 7

Based on observer reports, we do not believe that all of the hand counts are accurate because of the questionable counting methods observed. On the other hand, because of these differences and incorrectly completed reports, we also have no basis to conclude that the scanners counted all ballots accurately.

Year Nov	Districts with Ballot Count Differences	Total Differences	Districts Audited	Greatest Differences	
2014	16 <sup>16, 17</sup>	127	77	78, 20, 5	3.4%, 1.4%, 0.4%
<sup>18</sup> 2013	18	70	66	21, 19, 4	2.6%, 1.9%, 0.4%
2012	20	115	75	42, 25, 12	2.1%, 0.4%, 0.4%
2011	16	34	73	9, 2, 2	1.4%, 0.9%, 0.7%

Ballot Count Trends - Table 8

## Vote Count Accuracy

In November there was (1) town with four (4) counts reported as zero in the audit that had votes in the election. There were the following differences five or greater reported:

Col C Machine Totals (Tape)	Col D Undisputed Vote Totals	Col E Questionable	Col F Total Hand Count (D + E)	Difference (F - D or E - D)	Percent Difference
August					
	None				
November					
214	0	0	0	214	100.0%
194	0	0	0	194	100.0%
166	0	0	0	166	100.0%
1461	1516	0	1516	-55	-3.80%
299	271	5	276	23	7.70%
1425	1407	0	1407	18	1.30%
240	256	0	256	-16	-6.70%
591	606	12	618	-15	-2.50%
447	460	0	460	-13	-2.90%
1623	1611	0	1611	12	0.70%
2382	2362	8	2370	12	0.50%
2677	2655	10	2665	12	0.40%
334	344	0	344	-10	-3.00%
49	39	0	39	10	20.40%

<sup>16</sup> Excluding districts with a zero count reported for machine or hand counts.

<sup>17</sup> Statistics in this line for 2014 corrected 1/31/2014

<sup>18</sup> As stated earlier, even year elections are more comparable to even year elections, and odd year elections are more comparable to odd year elections.

534	544	0	544	-10	-1.90%
9	0	0	0	9	100.0%
310	301	0	301	9	2.90%
367	376	0	376	-9	-2.50%
634	625	0	625	9	1.40%
236	245	0	245	-9	-3.80%
493	485	0	485	8	1.60%
2536	2525	3	2528	8	0.30%
1555	1547	0	1547	8	0.50%
481	489	3	492	-8	-1.70%
663	656	0	656	7	1.10%
1266	1273	0	1273	-7	-0.60%
640	626	7	633	7	1.10%
1325	1305	13	1318	7	0.50%
615	600	9	609	6	1.00%
1631	1625	0	1625	6	0.40%
1361	1355	0	1355	6	0.40%
681	675	0	675	6	0.90%
1173	1158	9	1167	6	0.50%
562	567	0	567	-5	-0.90%
1544	1529	10	1539	5	0.30%
763	768	0	768	-5	-0.70%
1022	995	22	1017	5	0.50%
1620	1552	63	1615	5	0.30%
924	910	9	919	5	0.50%
1401	1406	1	1407	-5	-0.40%
1248	1253	11	1264	-5	-0.40%
221	216	0	216	5	2.30%
899	894	0	894	5	0.60%

Candidate Count Differences 5 or Greater - Table 9

The table presents, by number and percentage, vote differences greater than 5 between hand counted votes and machine-counted votes when all ballots with questionable votes are included and all votes for cross-endorsed candidates are totaled.

Based on observer reports, **we do not believe that all of the hand counts of votes are accurate** because of the questionable counting methods observed. On the other hand, because of these differences, **we also have no basis to conclude that all the scanners counted all votes accurately.**

The following tables show the number of candidate counts with various levels of count differences between the optical scanners and the hand counts, after considering ballots with questionable votes may have been counted or may not have been counted by the scanners<sup>19</sup>:

Candidate Vote Count Difference Range	Number of Differences In Range	% of All Candidate Counts
0	451	66.2%
1-3	179	26.3%
4-6	28	4.1%
7-9	8	1.2%
>9	15	2.2%
Average Difference in Votes:	1.86	

Summary of Vote Count Differences 2014 -Table 10

Candidate Vote Count Difference Range	2014 % of All Candidate Counts	2013 % of All Candidate Counts	2012 % of All Candidate Counts	2011 % of All Candidate Counts
0	66.2%	60.1%	64.1%	56.1%
1-3	26.3%	35.5%	25.8%	34.5%
4-6	4.1%	4.0%	4.7%	7.0%
7-9	1.2%	1.1%	2.0%	1.6%
>9	2.2%	1.3%	3.4%	0.8%
Average Difference in Votes:	1.86	0.96	1.80	1.12

Trend of Vote Count Differences by Range -Table 11

<sup>19</sup> That is giving the maximum benefit of any doubt to the scanners: Counting a difference only when a scanner counted more votes than the sum of questionable votes and undisputed votes; or when a scanner counted less than the number of undisputed votes.

Range of % of Count Difference	Number of Candidate Counts	2014 % Of All Counts In Range	2013 % Of All Counts In Range	2012	2011
0	451	66.2%	60.1%	68.5%	56.1%
> 0 and < 0.5 %	121	17.8%	17.6%	19.4%	18.8%
0.5 % and < 1.0 %	33	4.8%	12.1%	4.1%	14.4%
1.0 % and < 2.0 %	8	1.2%	7.0%	3.1%	6.4%
2.0 % and < 5.0 %	29	4.3%	2.8%	2.8%	2.5%
5.0 % and < 10.0 %	27	4.0f%	0.4%	3.7%	.5%
10.0 % and greater	12	1.8%	0.3%	2.9%	1.3%
Average Difference %		.43%	.14%	.29%	.28%

Trend of Vote Count Differences by Percent -Table 12

In general, the November 2014 data shows little if any improvement over past years, especially when compared to the last even year, 2012



## “Questionable” Votes

Observations and comments from election officials indicate confusion about classifying “undisputed ballots” and about counting “questionable votes.” An undisputed ballot is a ballot with no apparent problem or questionable votes on it. A questionable vote is a mark on a ballot that may not have been read properly by the optical scanner. Audits exhibited a variety of interpretations of what constitutes “undisputed” and “ballots with questionable votes.” Audit statistics confirm these observations.

See Section C.4 for a more complete discussion of questionable votes. November 2014:

Col C Machine Totals (Tape)	Col D Undisputed Vote Totals	Col E Questionable	Col F Total Hand Count (D + E)	Difference  (F-D or E-D)	Percent Questionables
686	387	299	686	0	43.60%
600	334	266	600	0	44.30%
545	299	246	545	0	45.10%
484	272	213	485	0	44.00%
1890	1814	73	1887	3	3.90%
1755	1681	72	1753	2	4.10%
1712	1643	68	1711	1	4.00%
1764	1698	67	1765	0	3.80%
1620	1552	63	1615	5	3.90%
1443	1381	59	1440	3	4.10%
1653	1614	40	1654	0	2.40%
1773	1735	39	1774	0	2.20%
1737	1703	38	1741	0	2.20%
1398	1362	36	1398	0	2.60%
1202	1172	31	1203	0	2.60%
1301	1270	30	1300	1	2.30%
1235	1208	25	1233	2	2.00%
1073	1058	24	1082	0	2.20%
1120	1093	24	1117	3	2.10%
1248	1228	23	1251	0	1.80%
1022	995	22	1016	6	2.20%
204	182	22	204	0	10.80%
188	168	20	188	0	10.60%
28	9	19	28	0	67.90%
1097	1088	19	1097	0	1.70%
194	176	18	194	0	9.30%

734	719	18	737	0	2.50%
983	965	17	982	1	1.70%
1020	1000	16	1016	4	1.60%
722	710	16	726	0	2.20%
300	290	16	306	0	5.30%
857	839	16	855	2	1.90%
758	739	16	755	3	2.10%
1615	1597	16	1613	2	1.00%
1523	1514	16	1530	0	1.10%
1782	1763	15	1778	4	0.80%
221	216	14	230	0	6.30%
802	786	14	800	2	1.70%
788	774	14	788	0	1.80%
611	596	14	610	1	2.30%
673	660	14	674	0	2.10%
952	941	14	955	0	1.50%
366	353	14	367	0	3.80%

Questionable Votes Over 13 November 2014 - Table 8

For the August 2014 Primary there were relatively few questionable votes recorded, with the largest number for a candidate being six (6).

Comparing results for recent elections, this November shows a significant step backwards from the past three elections.

2014 Overall % Questionables	2013 Overall % Questionables	2012 Overall % Questionables	2011 Overall % Questionables
1.37%	0.63%	0.50%	0.77%
2014 Counts over 13 Questionables	2013 Counts over 13 Questionables	2012 Counts over 13 Questionables	2011 Counts over 13 Questionables
45	19	33	52

Trend in Questionable Votes -Table 9

# About

## The Connecticut Citizen Election Audit

The purpose of the Connecticut Citizen Election Audit (Citizen Audit) is to increase integrity and confidence in elections, for the benefit of the voters of Connecticut. We provide independent audit observations, independent audits, and independent reports focusing on the integrity of elections and election administration. We are non-partisan and strive for objectivity and integrity in our work. Organized originally in 2007, as the Connecticut Citizen Election Audit Coalition, our primary activity has been observing and reporting on post-election audits.

### EXECUTIVE DIRECTOR/BOARD

Significant decisions and reports are approved by majority vote of the Board. Members of the Board are experienced volunteer observers, with diverse skills, political affiliation, and geographic representation. Current members of the Board are:

- Luther Weeks, Executive Director
- Jean de Smet, Aaron Goode, Douglas Lary, Tessa Marquis, Victoria Usher, Julie Watson Jones

### CITIZEN POWERED

The Citizen Audit is an entirely volunteer, citizen powered organization. We appreciate every Citizen Audit volunteer. Without scores of volunteers spending days and hours each election objectively observing, auditing, and reporting, the promise of publicly verifiable elections could not be pursued and will never be attained.

## Acknowledgements

Coordination and editing for this project by Luther Weeks with data entry and verification by Doug Lary and Vicki Usher along with editing by members of the Citizen Audit Board.

This report would not be possible without the contributions of volunteer days by citizen observers.

We appreciate the responsive and cordial replies to our requests for information from the SOTS Office and from Registrars of Voters across Connecticut.

## Contact/Additional Information

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All reports and additional supporting data are available at <http://www.CTElectionAudit.org>

## Appendix A - Observation Report Statistics

Question	% Yes:	Nov 2014	Nov 2012	Aug 2014	Aug 2012
Were the ballots delivered to the site by at least two individuals?		100%	88%	78%	95%
Were you permitted to observe that ballot container seals were not tampered with?		94%	95%	97%	100%
Were the ballot container seals intact?		91%	97%	93%	97%
Were you able to see the seals and the seal numbers on the Moderator's Return?		72%	86%	90%	97%
Did the supervisor review the state audit procedures with the counting team?		81%	73%	57%	73%
Did the supervisor clarify procedures for everyone before beginning to count ballots?		85%	79%	66%	70%
Did the supervisor review the ballot and vote counting procedures in detail with the counting teams?		79%	78%	62%	57%
Was the total number of BALLOTS counted before the VOTES were counted for races?		89%	70%	94%	88%
Were the BALLOTS counted by each team such that a 2nd election official verified each count?		65%	77%	69%	77%
If multiple teams counted BALLOTS, was the totaling independently verified by a second election official?		74%	81%	80%	81%
IF HASHMARKING USED: Did a second official observe that each vote was read accurately?		56%	45%	41%	50%
IF HASHMARKING USED: Did a second official make duplicate hashmarks OR observe that each hashmark was recorded accurately?		59%	36%	38%	50%
IF STACKING/PILES USED: Was the vote counting process such that two election officials verified each vote was stacked as marked?		58%	64%	78%	100%
IF STACKING/PILES USED: Were the stacks of ballots counted such that two election officials verified that each stack was counted accurately?		56%	54%	83%	100%
IF HASHMARKING USED: Were you permitted to see that each vote was read accurately?		97%	100%	100%	100%
IF HASHMARKING USED: Were you permitted to see that each hashmark was recorded accurately?		97%	100%	100%	100%
IF STACKING/PILES USED: Were you permitted to see that each vote was placed in a correct stack?		100%	93%	95%	100%

Question	% Yes:	Nov 2014	Nov 2012	Aug 2014	Aug 2012
IF STACKING/PILES USED: Were you permitted to see that the count of ballots in piles was accurate?		100%	88%	95%	100%
Were counters kept unaware of the election totals for the ballots or races they were counting until counting and recounting each race was finally complete?		72%	73%	57%	67%
If initial counts were off, were counters kept unaware of the exact and approximate level of difference?		40%	52%	71%	40%
Were votes on questionable ballots ruled upon separately race by race for reporting as questionable votes in the Audit Report?		74%	79%	83%	97%
Were votes on such ballots ruled upon prior to the tallying of votes for each race AND counts not adjusted based on knowledge of the results of the total count for each race?		79%	77%	79%	83%
Did elections officials find a match between machine counts and manual counts at the end of the initial count of each races?		12%	10%	71%	38%
Did elections officials try to resolve mismatched counts by counting again?		61%	79%	93%	100%
Did elections officials try to resolve mismatched counts by changing counting teams?		34%	43%	25%	41%
Did elections officials resolve mismatched counts by the end of the audit?		32%	35%	79%	100%
Were you able to confirm that hashmarks for each team and batch were tallied accurately? (i.e You could confirm that the number of hashmarks matched the total for each group of hashmarks.)		77%	97%	100%	100%
Were you able to confirm that the number of ballots from multiple teams/batches was tallied accurately?		76%	90%	100%	100%
Were you able to confirm that the number of votes from multiple teams/batches was tallied accurately?		71%	89%	100%	100%
Did elections officials record counts, including unresolved discrepancies if any, on official forms by the end of the audit?		84%	97%	100%	97%
Were you given an opportunity to have a copy or make a copy of the official forms?		81%	86%	97%	94%
Did the BALLOT counts on the optical scanner tape(s) printed on election-night match the tabulator tape ballot count transcribed on the audit report form(s)?		85%	81%	96%	100%
Did the RACE counts on the optical scanner tape(s) printed on election-day match the machine tape race counts transcribed IN COLUMN 'C' on the audit report form(s)		76%	72%	100%	97%
Were the ballots under the observation of at least two individuals at all times during the observation?		97%	85%	87%	94%
Could you confirm that ballots were returned to their proper containers?		94%	97%	100%	97%

Question	% Yes:	Nov 2014	Nov 2012	Aug 2014	Aug 2012
Were the ballot containers resealed?		93%	89%	100%	100%
Were seal numbers recorded correctly on forms?		96%	91%	100%	100%
Do you have any concerns over the way the room was laid out?		11%	7%	0%	12%
Do you have any concerns that the auditing was not well-organized?		31%	17%	13%	18%
Do you have any concerns with the integrity of the counting and totaling process?		33%	17%	0%	6%
Do you have any concerns that the manual count was inaccurate?		42%	20%	0%	6%
Do you have any concerns that the officially reported information is inaccurate?		26%	10%	0%	6%
Do you have any concerns with the transparency/observability of the process?		14%	5%	3%	6%
Do you have any concerns with the chain-of-custody?		25%	27%	23%	17%
Were there any memory card problems in pre-election testing or on election-day?		40%	63%	55%	50%
Were there any problems with the IVS voting system for persons with disabilities? (Or were some not setup?)		9%	5%	13%	6%
Were there any other significant events, ballot problems, scanner problems or occurrences before during or after the election of note?		38%	13%	3%	22%

Observation Report Statistics -Table 10

## Appendix B. Standing Recommendations

Each of our previous reports included recommendations and updated recommendations to the Legislature and the Secretary of the State, as follows:

### I. Independent Audits

The current system of the conduct of audits by individual towns lacks consistency, accuracy, and professionalism. A nonpartisan, independent audit board or professional team of independent auditors should conduct the audits.

However, if audits continue to be conducted by local officials, we recommend the measures below to improve the security and integrity of Connecticut's election outcomes. Many of these same recommendations would apply if an independent audit board were established, with the board performing many of the audit functions now performed or recommended by the Secretary of the State.

### II. Audit Selection, Notification and Reporting

A. Amend PA 07-194 on selection and notification to:

1. In elections where federal and/or constitutional statewide offices appear on the ballot, require that the Secretary of the State randomly select the races to be audited during the same public event as the random selection of districts, at least one such race should be randomly selected from those federal races on the ballot and one race selected from statewide races on the ballot.
2. For municipal elections and primaries require that races randomly selected for audit be chosen by the Secretary of the State for all districts, or, at least, require local drawing of races be announced and held publicly in each selected municipality.
3. Require that towns selected for audit be officially notified of their selection in a legally acceptable form, including an immediate posting of the list of audit sites on the Secretary of the State's Website.
4. Require that towns provide ample notice of the scheduling and location of post-election audits to the Secretary of the State and on their municipal websites or local newspapers. We urge the Secretary of the State's office to review how other states are establishing and publicizing the schedule of audits and race selection to ensure maximum public notice and transparency.

B. Amend PA 07-194 to mandate deadlines for:

1. Random selection of audit locations
2. Completion of audits
3. Municipalities report of audit results to the Secretary of the State's office

C. Amend PA 07-194 on reporting to:

1. Mandate a deadline for completion of required reports from UConn and require that those reports include statistical data on deviations from the standards set in the audit law and reports on any incomplete or missing audit data
2. Mandate timely publication of a final comprehensive report of each statewide audit. Require that the report include local statistics and analysis from local audit report forms, elections officials' and observers' (if any) comments, and conclusions regarding the effectiveness of the audit. The report should be readily available to the public.

D. Amend PA 07-194 on reporting to:

1. Require that audit reports be compared to the machine tapes and final election results (including amended results, if applicable) to assure that the correct machine tape counts are recorded.
2. Require that all originally machine counted ballots be counted in the audit. i.e. including machine counted Absentee Ballots and Election-day Registration Ballots.

### III. General Provisions

A. Procedures that will yield trusted audits must be specified in law or regulation and must be made enforceable by the State Elections Enforcement Commission. Procedures should also provide a mechanism for the Secretary of State's office to report irregularities to appropriate authorities such as the State Elections Enforcement Commission.

B. The Secretary of State's Office should:

1. Establish mechanisms and controls to audit the audits (log, detect and take action on errors) to assure that prescribed methods are followed. Audit reports that are incomplete or contain obvious or unexplained discrepancies should be rejected by the Secretary of the State's office and corrective action taken by election officials.
2. Increase competency of registrars and election officials in election audits through mandatory educational programs that include security, audit organization, and conduct; the steps and details of the audit procedures; counting methods; and organizing and supervising the audit teams.

C. Amend PA 07-194 to:

1. Mandate investigation and independent analysis of data discrepancies over legally defined limits which are not thoroughly and reasonably explained.
2. Require that copies of the Moderators' Returns, and machine tapes, be present at the audit for review.



3. Mandate that all ballots in all elections remain sealed until thirty days after all audits and audit investigations are complete. They should be released only after the Secretary of the State's notification in writing that the audit and investigations are complete. During that period ballots should only be unsealed temporarily for the purpose of recounts, audits, and state investigations – and resealed whenever audits, recounts, and investigations are complete or continued.
4. Resolve the conflicting demands for any extended audit investigations with the need for re-programming of memory cards in preparation for new elections or referenda.
5. Limit the role that candidates can perform in the post-election audit process. Opposed candidates, even if they are sitting registrars, should not supervise or have official roles in post-election audits. The Secretary of the State's office should develop procedures to identify who will supervise and have an official role in audits in cases of this kind of conflict.
6. Set forth specific and enforceable criteria for chain-of-custody, access logs, and secure storage facilities for ballots, memory cards, and machines. The Secretary of the State's office should establish a system of random unannounced inspections of storage facilities and access logs.

#### IV. Audit Procedures

- A. The Secretary of the State should provide detailed guidance on methods of auditing that are efficient, transparent, specific, and accurate. National efforts should be reviewed, such as California's recently adopted audit procedures, the audit practices of Minnesota, recommendations of the Brennan Center, and the *Principles and Best Practices for Post Election Audits*<sup>20</sup>.
- B. The Secretary of the State should amend procedures to:
  1. Remove the subjectivity associated with the identification of what constitutes an undisputed ballot and a ballot containing a questionable vote.
  2. Require all tallies be performed in public and audit reports be filled out as part of the actual public audit and displayed publicly at the end of the audit along with the tally sheets.
  3. Revise the audit procedures to more clearly require the counting and reporting of all votes for candidates by party, unknown, and to count and report write-in bubbles in audited races, and any write-in votes found outside of write-in envelopes.

#### V. Public Involvement

Observers' rights should be established in law. As long as observers don't interfere with the hand counting process, the public should be allowed to observe and verify all phases of the election audit from district and race selection through any follow-up investigation.

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<sup>20</sup> <http://www.electionaudits.org/principles>

## VI. Random District Selection Integrity

In order that the random district selection is publicly verifiable and more accurate, with mechanisms for re-establishing audit integrity in the case of errors discovered:

### A. Amend Sec. 9-50b to:

Require registrars to maintain an accurate list of districts with the Secretary of the State for inclusion in the Central Voter Registration System (CVRS), with each district identified by a unique district number for the municipality.

### B. Amend Sec 9-314 to:

1. Require the Head Moderator to submit copies of each district Moderator's Return totals and copies of all closing scanner tapes from the election or primary with the Head Moderator's Return shortly after the election or primary to the Secretary of the State. Provisions for later amended returns should also be included. Each district should be identified by unique district number for the municipality as listed in the CVRS.
2. Require the Secretary of the State to make available a copy of the District Moderators' Reports and Head Moderator's Reports for public review.

### C. Amend PA 07-194 to:

1. Require the Secretary of the State to make available a copy of an extract of districts from the CVRS for public review at the random district drawing.
2. Require that each district in the drawing be identified by municipality and by the unique district number listed in the CVRS and the district reports.
3. Require in the case of errors discovered after the drawing or in the list of districts for random selection (omissions, non-existent districts, or ambiguities), that they must be, by law, resolved in a way that restores the integrity of the audit. For instance, when selected districts are ambiguous, audit integrity could be restored by clarifying the ambiguity. When districts are omitted from the drawing, integrity could be restored by auditing those districts.

## VII. Election Law and Procedure Changes To Count All Write-Ins

Change the law and closing procedures to require that write-in bubbles be hand counted and compared to the tape, race by race, and both numbers reported in the Moderator's Return. If the counts do not match, officials should be required on election night to find missing write-in ballots in the main bin and to count any registered write-in votes on those ballots.

Change audit procedures to require that the audit count write-in bubbles for races audited on ballots in the write-in envelope, report those numbers on the audit report, and to report any write-in ballots found outside of the write-in envelope.