



ADDRESSING THE MAIN CONCERNS OF OUR ELECTION SYSTEM IN WILLIAMSON COUNTY

Citizens have tried again and again to demonstrate with solid research that there are dangerous exposure problems with our current voting system. But the Williamson County Election Commission (WCEC), a number of Williamson County Commissioners and the Tennessee State Election Commission (SEC) all have refused to listen to the statistical, video and factual findings. And they continue to force citizens to vote on highly risky systems. This must change before citizens can have faith in their election system once again or a dramatic issue completely destroys any trust left.

In addition to vote centers, which I've written about earlier, here are some of the top examples that need to be addressed either in legislation or litigation.

1. First, **voting machines can and have been hacked**. This has been documented across the nation ([here](#), [here](#), [here](#), [here](#), [here](#), and more [here](#))... [with and without election day internet access](#)... as well as [here in Williamson County](#) in October 2021. The [SVP of Security for our current vendor, ES&S, even admits it's true these voting machines can be hacked](#). And **vulnerable machines can produce incorrect results and bad elections**: [Here](#) and [here](#). So why do our election officials continue to force citizens to vote on these machines that glitch, malfunction, break down, stop working and can be hacked, when there are safer, more secure and less expensive options available? Don't think hacking is a big deal and may die away? Think again... it's on the upswing [as this list proves](#).

SOLUTION:

- Replace the ballot marking devices (BMDs) entirely with watermarked, hand-marked paper ballots, a process which the Williamson County had promised to study but abandoned their promise when they got their money in 2023 for more machines.
- Develop legislation that would override TCA 2-9-109, which requires certain counties like Williamson County to use voting machines.
- Allow counties to move to hand-counting ballots, which can be done in reasonable time and for reasonable cost, [here](#) and [here](#).
- If machines must be retained, allow an inspection of the machines (BMDs and tabulators) before/after elections by cybersecurity experts. We can inspect a car or house before we buy, why can't we inspect the machines before we vote? If we can't inspect, why should we trust?
- If machines are retained, force the state to hire cyber experts to inspect every new machine that enters Tennessee from a vendor (it doesn't happen now) for [nefarious components](#). If vendors won't allow this, then the machines can't be trusted. So why use them?
- Demand election commissions perform a [hash validation](#) of each and every machine before, during and after an election to verify if there was any tampering with the machines (software, hardware).
- Force election commissions that use the ES&S ExpressVote/ExpressLink ballot system (which Williamson County does) and/or ballots on demand to have a cybersecurity

inspection of every machine by a cybersecurity expert to ensure these machines – [which ARE NOT certified by the Election Assistance Commission \(EAC\)](#) -- do not contain any nefarious hardware or software. No one has a clue what is inside them and our election commission doesn't ask.

- If machines are retained, implement penetration testing in every voting location before, during and after an election to ensure the location is secure from cyber malfeasance.
 - Even more, if machines are retained, hire a non-partisan cybersecurity group to perform an assessment of the entire Williamson County Election system, from top to bottom and at all locations to ensure against the latest types of hacks.
2. Second, neither the county nor the state **is allowed by the vendors to inspect the inside components of these machines with a cybersecurity expert by their side**. We're told that would void the contract with the machine vendor. In fact, no one inspects these machines as they enter the state or county. So there is absolutely no way citizens can know if there are [disguised wireless components](#) or [components from China](#) – our nation's arch nemesis -- inside these machines **that can and will affect how the machines perform**. (Some states like Michigan contract with vendors like ES&S to produce machines that CAN contain modems so they can modem election results back to election offices. If Tennessee can't inspect machines for modems, how do we know that a modem-heavy machine or machines haven't been inadvertently shipped to Tennessee by mistake? We don't. And when the tabulator tape says, "no modem detected," how do we know that is indeed the case? Personally, I don't trust a company that won't let me inspect their product before, during or after I buy it.) [Here's just one type of chip found on some voting machines.](#)

SOLUTION:

- Force the removal of these risky machines and substitute with watermarked, hand-marked paper ballots [counted by hand](#).
 - Counting by hand can be done in a timely and less risky manner.
- Institute a process similar [to one that Spring Hill instituted in their April 2023 municipal election](#) that removed all internet and the BMDs. So, it CAN be done.
 - Number the ballots and track/report daily the beginning and ending number of paper ballots in each precinct, the number of signatures-to-vote in the registration book, the number of registrations-to-vote forms, and the number of ballot stubs attached to the registrations-to-vote forms to ensure they all balance. Just like a bank teller must do before leaving for the evening. They should equal the number of voters who voted and ballots in the tabulator or ballot box.
 - Force election commissions to reconcile the number of registrations to vote against the number of ballots that should be in the tabulator at the end of the voting session (according to the registration number on the upper right corner of the registrar's computer) and in view of poll watchers. The Williamson County Election Commission refuses to do this at the close of a poll where poll watchers can view this action and result. Why are they being so secretive?

3. Third, because the current ES&S machine-produced ballots encase the voter's candidate selections in a bar code, citizens have been **asking for watermarked, hand-marked paper ballots (HMPBs)** as an alternative to the ballot marking devices to guard against some of the potential vulnerabilities from easily hacked voting machines. (Keep in mind the BMDs can be hacked [as shown here in a court case.](#)) [Since it's the QR/bar code that the tabulator reads, NOT the printed names underneath the QR or Bar Code – and who can read QR/Bar Code?](#) -- voters truly don't currently have a VOTER-VERIFIABLE PAPER AUDIT TRAIL, as dictated by law ([TCA 2-20-101\(b\)\(6\)](#)). So, how can voters VERIFY their vote by looking at the ballot and "reading" the bar code? They can't!

SOLUTION:

- Remove the ballot marking devices with their bar-coded (or QR-coded) ballots and replace them with watermarked, hand-marked paper ballots counted by hand. This will give voters a voter-verifiable paper audit trail as dictated by law. And, if nothing else, this can save an enormous amount of purchase and upkeep money on machines, not to mention [time in the voting booth](#).
4. Fourth, in June 2023, the Williamson County Election Commission made a very big deal of promising the Williamson County Commission that they would perform a study in **how to bring watermarked, hand-marked paper ballots (HMPBs) into the county's voting system** in exchange for the Commission approving the WCEC's purchase of ES&S voting machines. Despite an overwhelming number of citizen complaints against machines, they were approved. Less than a year later, after the WCEC was denied \$100k to hire [a leftist Chicago firm to develop that HMPB process](#), the WCEC sheepishly and quietly dropped their promise to the Commission and citizens for a HMPB study. Nothing has been done on the study since. By the way, [at least 70% of Americans vote on hand-marked paper ballots](#). What does most of the nation know about ballot security that Williamson County officials don't?

SOLUTION:

- Replace all current members of the WCEC because of their failure to do what they promised to do in studying the issue and in clandestinely securing in 2023 the funding to purchase the voting machines.
 - Adopt the study of how hand-marked paper ballots can be added to an election system that is currently being performed by citizen-led Tennessee Voters for Election Integrity.
 - Do NOT consult with a leftist organization [like The Elections Group](#) to do what citizens can do at little-to-no cost. This ain't rocket science!
 - Do not allow the Williamson County Election Commission to use mis- and dis-information about the process [like they did in 2023 to sway the County Commission](#) into approving a study.
5. Fifth, in Williamson County **we vote in vote centers, a process that citizens did not approve, nor were asked to approve.** (They're also [illegal according to the Tennessee Constitution](#) and the [Tennessee Code Annotated 2-7-115\(a\)](#), as we should be voting in precincts not vote centers.) This concept, introduced in Williamson County in 2020, immediately cut the number of voting locations in the county by 42%, from 43 to 25, but allowed voters to vote in any of these now 27

locations. The problem? In addition to increased wait times now to vote at most all election day locations, vote centers were supposed to increase voter participation, but that hasn't happened. More importantly, all 27 polls – as well as the main election office -- must now have the internet piped in to ensure voters don't go vote hoping, which could be attempted in vote centers. On top of that, the VPN that protects that internet connection? The company that makes that VPN, Cisco, was hacked in 2022 and [current research demonstrates VPNs are exceptionally weak in protecting against intrusions](#). And in the November 5, 2024 election, it was noted that many of the VPNs now have rabbit ears, indicating an expected ability to receive/send wireless signals. So now our voting locations have a weakly protected internet in each and every voting location and at least one computer system therein – the off-the-shelf Dell registration computers – have installed wireless components called iDRAC chips. Plus, a number of the voting locations are located near Williamson County Public Libraries, all of which have documented, open, free WIFI access. A hacker could sit yards from a vote location, access this open internet and hack into the election system and manufacture voters and votes. Companies that spend [billions of dollars on security to protect their data are getting hacked daily](#). With these insubstantial VPNs, Williamson County is comparatively spending pennies to protect its citizens' votes. While the WCEC still wants us to believe that our voting machines can't connect to the internet and be hacked.

SOLUTION:

- Eliminate TCA 2-3-302, which somehow established vote centers as a legal alternative to precinct voting. We have not found an AG opinion that directly addresses the constitutionality of vote centers vs. precincts.
 - Give citizens who have been forced to vote in vote centers the option to opt out of them and back into precinct voting.
 - Return registration-to-vote during early or election day voting to the system we used until 2020, with paper registration books with no computers. The books are hard copy printouts of the voter roll that voters sign next to their name when they check in to vote. This would also eliminate the need for computer registration. More financial savings.
 - Watermarked, hand-marked paper ballots would eliminate the need for ballot marking devices (except for ADA needs).
6. Sixth, despite what the Williamson County Election Commission and the Tennessee Secretary of State may claim, **our voter rolls are dirty and filled with systemic problems**. They contain names of voters who have died, who have moved out-of-state or to other places in the state, who are illegal, or have been registered by the state and shouldn't be on the rolls in the first place. How do we know? In September/October 2022, Tennessee Voters for Election Integrity performed a canvas of our then-current voter roll for Williamson County which revealed enough concerns that should have been addressed. [Here is our report](#) released in early 2023. Nothing has been done, meaning our rolls are prime targets for nefarious actors to invade the rolls and use these phantom voters therein for manipulating vote totals. Some of the specifics per our analysis:
- The State Elections Coordinator says NCOA is run annually. Data suggests this is not true.

- Registration date changes in database moving voter to “eligible” registration date range.
- Abnormal numbers of registrations on Sundays, holidays (>20 years of data reviewed).
- Enormous spikes last date of eligibility before an election (>20 years of data reviewed).
- General data practice issues (Williamson County and State):
 - Re-using Voter Numbers.
 - Changing numbers without linking history.
 - Active switch to inactive – How long? When removed? In another database when removed?
 - Coding Accuracy Support System (CASS) should also be run regularly to catch invalid addresses & should be run prior to National Change of Address (NCOA).
 - Missing logical checks at input – Example: Nonsense ages (example: Birth year 0204, Negative age, Registration date same year as birth year).

One national group, [United Sovereign Americans](#) (USA), has forensically analyzed state voter rolls in 21 member states (including Tennessee), to see if the voter rolls are accurate. The conclusive answer: No. USA teams/citizens in nine of those 21 states have filed mandamus lawsuits; one has gone to appeal. The local [Tennessee team spearheaded a scorecard](#) that found 89,000 unique votes in Tennessee in the 2022 federal election were impacted by apparent voter violations. Each impacted vote could have been hijacked by nefarious actors in the past. The same local team plans to forensically analyze the 2024 election.

In addition, earlier this year, the State Election Office identified 14,000 names in the state’s voter rolls that didn’t appear to be citizens of the state yet were on the rolls. State Election Coordinator Mark Goins sent them a letter [requesting that they produce documentation to show that they were citizens and belonged on the rolls](#). The ACLU then threatened a lawsuit and the EO pulled back. The full 14,000 were never completely vetted and are still on our voter rolls. However, [the law is clear](#) that [aliens CAN be struck from the voter rolls](#)... and Tennessee should have completed the effort.

SOLUTION:

- Force the Coordinator of Elections in Tennessee to [revive and complete the process of having questionable individuals on the voter rolls prove](#) that they belong there, or remove them.
 - Dig into the issues our canvass found with the state’s management of the voter roll process, clean up our findings and improve the diligence with which the state’s Election Office performs its voter roll cleaning duties.
 - Allow the United Sovereign Americans group to present their data/research to you for further documentation of the problem state-wide.
 - The Williamson County Voter Roll [List Maintenance Program](#) should be completed every year instead of every two years and the necessary steps should be taken to update the roll every odd- AND even-numbered year, instead of just in every odd-numbered year.
7. The state has mandated several **post-election audits** to imply to consumers that everything is safe and secure in Tennessee elections. Unfortunately, that’s not the case and the two audits I reference don’t help. Actually, they give citizens a false sense of security since citizens think the

audits are thorough and their elections safe, yet election officials and their audits only look at a small portion – not all aspects -- of the election in order to ensure they are, truly, safe. They aren't.

This year, the state implemented what it calls “Random selection of county election commission audits.” ([TCA 2-20-103.](#)) Beginning in 2024, three counties will be randomly selected by the Secretary of State following the August election and six counties following the November election to conduct an audit. If a county is not chosen for this audit and they use tabulators, they will conduct a mandatory paper ballot audit of the top races in both August and November.

Unfortunately, this random selection audit is nothing but a hand-recount of four tabulators supposedly chosen at random (although that selection process is never demonstrated in front of the public). The hand recount is to match the ballot count with the tabulator tapes from the four tabulators. It is anything but a thorough audit.

The second audit is an automatic mandatory (“traditional tabulation”) audit of the vote for president and the vote for governor following those November general elections which is to be undertaken by any county election commission which uses precinct-based optical scanners to count the ballots (TCA 2-20-103). Such an audit was just completed in Williamson County following the November 5, 2024 election. The problem with this audit is:

- It does nothing with auditing the voter rolls for their cleanliness in the first place (garbage in, garbage out).
- It does nothing to audit the full process the county undertook for the election (machines vs. hand-marked paper ballots; the use of uncertified equipment; the fact that ES&S’ updating of the election machines is not open to or the results available to the public; the state not cleaning their rolls; having non-certified information techs set-up and monitor registration equipment in school vote centers without taking an election oath; the presence of open WIFI in certain vote centers; the fact that we can’t inspect machines for wireless components yet the internet is piped into the vote center where those machines are in use; the fact that [VPN technology can no longer adequately protect against internet signals](#); the storage area for election equipment is not protected by video security 24/7/365, etc.)
- The audit uses voting machines to re-count the ballots that are being checked... and we’ve already established that the voting machines cannot be trusted because of their innate vulnerabilities.
 - Ballots counted on one tabulator will be recounted on another tabulator. If we can’t trust the first tabulator, why is a second tabulator from the same company used to re-count the ballots? Why should we trust it? Is it not possible that the same modified result might be obtained on the second tabulator? Why are they not hand-counted?
- Despite official public records requests from citizens, the Williamson County Election Commission does NOT produce every report that the ES&S machines are capable of producing in order to allow citizens to check the election and the machine’s performance. These reports include:
 - Cumulative results – both unofficial and official

- Canvass results
- Precinct results
- Residual votes report
- Precincts reporting
- Polling places reporting
- Write-in status
- VDrive status report
- Voting device report
- Audit log report
- Device logs report
- System log report

These items do not contain any personally identifiable information, so the release of these public records does not impinge on voter privacy. Also, none of the above is proprietary to the vendor, so the release of these public records does not impinge any intellectual property rights of the vendor.

SOLUTION:

- Re-evaluate and revise all the audits (which are necessary for election integrity) and make them more comprehensive and, therefore, more valuable as an audit. Right now, they're lipstick on a pig. Make them far more valuable.
 - Compel the Williamson County Election Commission to produce all reports.
8. **Support for all the changes that need to be made in our election process can be found in a Republican National Committee (RNC) resolution** titled "[A Return to Excellence in American voting and elections](#)" and adopted at their August 2023 meeting in Milwaukee. It advocates for much of the concerns we have expressed for the past four years to state and county election bureaucrats.
 9. Finally, if you want the **insights of one of the best election integrity/data scientist** in America today, here are the [top ten points to implement for exceptional election integrity](#). It is written by Captain (retired) Seth Keshel, MBA, who is a former Army Captain of Military Intelligence and Afghanistan veteran. His analytical method of election forecasting and analytics is known worldwide, and he has been commended by President Donald J. Trump for his work in the field. Not every one of his points applies to Williamson County or Tennessee, but most do, especially ballots and vote centers. As he says in this missive: "Voting systems were not designed to be convenient; they were designed to be secure."
 10. Another report, just updated by five national election scientists (Jared Black, Stu Cvrk, Paul deWitt, John Droz, Garrett Ziegler), identifies **30 recommendations which can further improve the nation's election integrity systems**. Here is the report: [U S Election Integrity: Recommendations Report](#). Here is a [one-page synopsis](#) of the report.
 11. And if you need **election experts to come to Tennessee** to discuss this information with you, or assist in presenting their research that backs up this document, I have talked with both [Clay Parikh \(here\)](#) and [Rick Weible \(here\)](#) and believe they can come to Nashville for that purpose.

Both are national experts who have served across the nation as expert witnesses and election integrity experts.

Frank Limpus
[Tennessee Voters for Election Integrity](#)
Franklin, TN
615-668-9938

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