



THE ANSWER TO LONG VOTER LINES WAS PROVEN IN THE AUGUST 2022 WILLIAMSON COUNTY ELECTION: HAND-MARKED PAPER BALLOTS BEATS BMDs HANDS DOWN

Executive Summary

In the August 4, 2022 state primary/county general election, voting lines on election day snaked inside and outside at a number of voting centers as voters waited to vote. Some waits were estimated to have taken an hour and a half.

The stated reason from officials was an extra-long ballot that included judge retention/removal decisions. But that wasn't the only cause.

Ballot Marking Devices (BMDs) was the other, more glaring explanation as voters waited to get to a BMD to write out their vote and then took an extraordinary amount of time working through the BMD process to print their ballot. A number of the 25 voting centers had anywhere from four to six to ten BMDs in anticipation of the voter turnout. But even the large number of voting machines did not solve the immense wait problem and the frustration it caused.

The frightening result: There's no telling how many voters couldn't wait longer, gave up and left the voter center without casting a vote.

The solution to this problem is easy. Remove the BMDs, move to hand-marked, high-security paper ballots and go double on the number of privacy ballot marking booths in each voting center. That will save money, lower staffing needs at the voting center and provide for easier voter throughput.

Issue

The issue here, plain and simple, are the BMDs that the Williamson County Election Commission (WCEC) and the state of Tennessee Secretary of State and Election Coordinator seem to be so wedded to. These officials want more and more of them in Tennessee's 95 counties. Regrettably, they require a voter's time to mark – probably similar to marking a paper ballot. But when the ballot is long, the lines back up because there's only a finite number of BMDs that economically can be used at each voter center to handle voter turnout.

Instead of looking at the problem logically, while keeping in mind the safety and security of voters and their votes, as well as the cost of a solution, these election officials seem married to the machine vendors. In fact, there is concern that Williamson County may be planning to purchase even more BMDs beyond the 200+ they already have.

Yeah, that's the answer. Let's go throw more money at the problem, which is a typical bureaucratic answer to an easily solvable issue.

We offer a different solution.

Discussion

Every now and then the county's elections necessitate a longer, more detailed ballot. Be they the addition of amendments, special issues, retention votes, etc., the ballots require a voter's time to work through all decisions. Most voters don't spend the time BEFORE the election deciding how they will vote to minimize their time in the voting booth. We get that. But the answer is not more money for more BMDs.

Right now, the Williamson County Election Commission has committed to use a vendor's BMDs on which to mark a ballot before casting it. (We believe that is a mistake and doesn't help the security of an election.) Election officials claim the BMDs ensure easy voter flow to the scanners and help adjudication.

But these officials are overlooking the simple, cost-effective solution that can:

- Cure the wait to cast a ballot;
- Reduce the cost of machinery and workforce working the election; while
- Returning a sense of confidence to the voters that their vote was counted as they cast it because the electronics had been reduced in the process.

The solution is to get rid of the technology and machines that have done nothing but destroy voters' faith in the country's, state's and county's election processes given the number of documented problems that have been unearthed in electronic voting systems.

The long ballot in the Williamson County, Tennessee August 4, 2022 election was mostly due to a long list of judges that were undergoing a retention vote. It understandably took a lot of time for voters to work through the ballot, and, if they hadn't read the ballot in advance of voting, some spent time reading through the ballot while at the BMD. That caused lines, especially on election day with its increased turnout, to quickly grow and snake throughout the voter center, as well as out the door, in some cases. Some estimates put the wait at several voter centers at an hour and a half. We feel that's inexcusable.

The real problem was not the ballot, but the BMDs. It wasn't the time it took to register to vote or slipping the ballot into the scanner. It was to use the BMDs.

Several poll watchers performed time studies on the process while monitoring the voter center for both early voting and election day voting in the August 4th election. They noted that early in the election, before major crowds appeared, it took on average all of seven seconds for someone to feed their ballot into the scanner. But it took at least three minutes on average to get to the BMD after registration and more than ten minutes on average for a voter to use the BMDs. That's almost a quarter of an hour for one person to wait for and use the BMD to produce their ballot before the real crowds arrived. Multiply that by the increase of voters, especially on election day.

Now, imagine if WCEC got rid of the BMDs and turned to a cheaper, but far more secure option – a hand-marked, high-security paper ballot? Instead of five expensive BMDs in a vote center, the WCEC could set up ten or twenty of the stand-up privacy cardboard voting booths where voters would mark their ballot. Twice as many options for voters to mark ballots and all of seven seconds to count it. The

existing scanners – if we must use them – already accept a paper ballot (the absentee ballots are run/counted on these same machines). So, no issues there for this solution.

You see, no county can predict or plan for the right number of voters in an election. You can't buy enough BMDs to handle a voter flow problem – it's just not practical or economical. Heck, the problem in August occurred with just 20% of Williamson County voters voting. What if 30% showed up? There's no way to foresee how much equipment is needed. And it just doesn't make sense to continue spending more and more money to purchase more BMDs and pay for their ongoing licenses, fees, and repair costs. That is not a good use of taxpayers' money.

Especially in a down-turning economy that's in the middle of a recession!

What we recommend is for the county to test this non-BMD concept and turn five or ten of the voting centers into a paper-ballot-only vote center without the BMDs. Compare them against vote centers that are still using the BMDs and more technology. (Oh and anticipate that some voters who do not like more secure voting processes, preferring the fact that machinery can glitch and mess up an election, will show up and attempt to undermine the experiment by purposefully accelerating problems.) We would wager voter flow throughput would be a lot smoother. It would more easily handle larger crowds. And, certainly, the cost would be a lot less in terms of personnel. Keep in mind, the county already has approximately 125 of the stand-up blue privacy voting booths.

Besides, you can't hack paper.¹

The arguments beyond this for getting rid of the BMDs are plentiful. Numerous reports, studies, articles etc. have underscored the fallacy of trusting BMDs and some of these studies can be found in this [whitepaper here.](#)² BMDs:

- Can be hacked, mis-programmed, misconfigured or contain malware;
- Touchscreens can be mis-calibrated causing "vote flipping;"
- Are less auditable and less secure than paper ballots;
- Rely on voters detecting error on the ballot, yet only 5-7% of voters find/report issues;
- Are software-dependent;
- Involve a QR code or Bar code for a ballot to be read; Voters can't verify a QR/Bar code. So voters don't truly have a Voter-verifiable-paper-audit-trail as per Tennessee law;
- Accuracy can't be confirmed by testing or audit;
- Actually, produce longer lines of voters than paper ballots;
- Have a history of not functioning correctly;
- Increase the cost at a voter center because of the need to have extra personnel to walk every voter through the process of marking a ballot, many times returning to that same voter to answer questions... not to mention the need for IT staff to keep the machines running; and
- Have been documented by [election experts as untrustworthy.](#)³

¹ <https://www.theatlantic.com/magazine/archive/2017/12/guardian-of-the-vote/544155/>

² <https://tennesseeelectionintegrity.com/wp-content/uploads/2022/10/BMDS-are-not-good-10-093022.pdf>

³ <https://tennesseeelectionintegrity.com/wp-content/uploads/2022/05/Halderman-Rebuttal-080221.pdf>

So, do election officials want to continue experiencing problems with the technology that complicates the voting process and causes its results to be less trustworthy? Or do they want to find the simple solution to the problem of lines, long waits and technological difficulties? Then get rid of the BMDs.

Recommendation

To solve the problem with voting lines that cause voters to get tired of waiting to vote and leave a voter center without voting:

- Remove the ballot marking devices from the voting process;
- Replace them with hand-marked, high-security paper ballots; and
- Go double on the number of privacy ballot marking booths in each voting center.

Conclusion

This simple solution will save money, lower staffing needs at the voting center, provide for easier voter throughput and give voters a far more trustworthy voting experience.

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