Good afternoon, Chairman Ghanbari, Vice Chair Plummer, Ranking Member Thomas, and members of the Homeland Security Committee. My name Tom Howard, I'm a resident of Clark County and am a retired Air Force Officer, DOD consultant and residential home builder. Thank you for this opportunity to provide testimony on behalf of HB 472.

The focus of my testimony is ORC 3506.022 which reads in part "Hand counted paper ballots may be adopted for use in elections in any county, instead of the use of voting machines." This is a subsection of 3506.02 which describes the way counties may adopt electronic voting machines, and which of course, all 88 counties in Ohio have now done so.

During sponsor testimony, concerns were raised about replacing voting machines with hand counted ballots and examples were given by a member of the committee on why, in their opinion, it would be a bad idea because it would be too costly and take more time than using the machines. Before addressing these concerns, there are several points I'd like to make.

- First, this legislation is not about replacing voting machines with hand counted ballots but about giving counties the option to choose whether they want to do so. What's odd about Section 3506.02 of the ORC is that it allows counties to choose whether to adopt electronic voting machines but doesn't provide them with an "opt-out" provision if they wanted to choose an alternative system to the machines. It's like a law being passed granting couples the freedom to marry but not giving them the option to file for a divorce if things don't work out.
- Second, even if passed, it won't have an immediate impact on the way our elections are currently run. We'll still be using voting machines, but each county will decide, after doing their own feasibility study, whether it makes sense to adopt hand counted ballots and if so, give voters the opportunity to vote on it.
- Third, it's important to consider the scenario where it's possible that hand counted ballots may be the only option that we have to run an election. Just last month, FBI Director Wray testified before Congress that since the attack on Israel in October of last year, the threat from

foreign terrorists have risen to a whole new level including ransomware and cyberattacks that could significantly impact parts of our critical infrastructure such as the election system and the power grid. Given that level of threat, it is not beyond the realm of possibilities that large parts of the power grid could be taken out that would render the machines useless. What would be the backup plan in that event? The answer: hand counted paper ballots just like we used to run our elections in Ohio for the first 130 years of its existence. This is why it is imperative that each Board of Elections consider hand counted ballots as a viable backup option in their contingency and continuity of operations planning.

The issue that hand counted ballots would require more poll workers and be more costly to the counties for each election is yet to be determined but will be part of the feasibility study performed by each county. Any increased costs associated with extra poll workers would be offset to some degree by the elimination of recurring maintenance fees associated with the precinct tabulstors.

In addition, when one considers that we are now at the halfway point on the machine's life expectancy timeline of ten years, the counties will soon face a substantial cost to replace them, and this would be a significant cost savings that would be factored into any feasibility study taken to adopt hand count ballots.

Another perception is that hand-counting ballots would be slower than the machines and might not be completed by the time the polls close on election day. Last year a county in Missouri proved this can be done by hand counting ballots for a municipal election in the same amount of time that it normally took the machines.

In summary, even if it turns out that hand counted ballots cost more than using the machines, this is not the sole determining factor in determining feasibility. If everyone trusted the voting machines, we wouldn't be having this discussion. But mistrust in electronic voting machines is not new and goes back to their inception. In 2004 when Kerry lost to Bush, congressional hearings were held to see if the voting machines could be manipulated to flip votes. A software developer testified under oath that not only would it be possible to do so, but he had developed a program to do just that and no one at the BOE would be able to detect it unless they had access to the source code, which of course, is not releasable since it is proprietary. Since then, the voting machines have undergone increased scrutiny and have been the subject of suspicion by both political parties.

For example, in the past three years, independent teams of cybersecurity professionals in three states have conducted rigorous forensic examinations of a particular voting machine vendor that also has machines in Ohio and found them riddled with security flaws. As a result, the agency within the Department of Homeland Security charged with protecting the nation's election infrastructure, CISA, issued a security advisory to warn BOEs about some of these flaws, but failed to address all of them. These recent findings of security flaws found in voting machines in other states begs the question if these flaws exist in Ohio's machines. That, combined with the fact that, at the end of the day, voters don't know what's going on inside the secretive source code buried in the voting machine, is the reason why many voters mistrust them and why they are looking for an alternative such as hand counted ballots.

In closing, I ask that you support the proposed ORC Section 3506.022 and by doing so, uphold the rights of the people of Ohio to have their voice heard by their government. Again, I'd like to thank each of the members of the Homeland Security Committee for this opportunity to present, and I'd also like to thank Representatives Willis and Peterson for sponsoring this bill.