



September 28, 2020

The Shelby County Commission (via email BOC.email@shelbycountyttn.gov)
160 North Main Street
Memphis, TN 38103

RE: Verified Voting statement about risk of reliance on ballot-marking devices

Dear Members of the Shelby County Commission,

As in our public comment submitted in March, Verified Voting urges the Election Commission to select voting equipment that will ensure Shelby County voters have secure, resilient and verifiable elections. Verified Voting is a leading national non-profit nonpartisan organization focused on the responsible use of technology in elections.

In light of the security, cost, and resilience concerns described below, [Verified Voting endorses the use of paper ballots, marked primarily with a pen, and supplemented with ballot-marking devices \(BMDs\) for voters who need to use them, as the best method for recording votes in public elections](#). We urge the Shelby County Election Commission to choose a system that complies with these requirements. More than 65% of U.S. counties, with more than 139 million voters, currently deploy exactly this type of system.

All electronic voting systems, including BMDs, have security vulnerabilities. Integral to mitigating these vulnerabilities is an independent means of checking the systems. Given current technology, paper ballots that voters can readily verify provide such a means. These ballots can be used in manual audits and recounts to check that votes were tabulated accurately. The [2018 National Academies of Science, Engineering and Medicine Consensus Report Securing the Vote: Protecting American Democracy](#), which represents the nation's best scientific understanding of election security and integrity, states: "By hand marking a paper ballot, a voter is, in essence, attending to the marks made on his or her ballot. A BMD-produced ballot need not be reviewed at all by the voter. Furthermore, it may be difficult to review a long or complex BMD-produced ballot." Preliminary research published since the National Academies completed their work suggests that, without intervention, very few voters check BMD-produced ballots with enough attention to catch errors. Given present knowledge, purchasing computerized ballot-marking devices for all voters falls short of ensuring a secure and verifiable election for all.

Systems that use hand-marked paper ballots also are less expensive and more resilient than systems that rely on BMDs for all in-person voters. Most paper ballots, whether hand-marked or machine-marked, are tabulated by scanners, and often a polling place will require only a single scanner. In contrast, polling places that require all voters to use BMDs must provide enough of these expensive machines to accommodate all the voters who need them. If some BMDs fail for any reason, or if not enough machines are allocated to accommodate turnout at a polling place, voters can be disenfranchised due to long lines. Contrariwise, if a scanner breaks down, voters can deposit their paper ballots securely for later scanning: the equipment does not become a bottleneck.

For these reasons, Verified Voting recommends providing hand-marked paper ballots as the primary voting method, supplemented with BMDs—at much lower cost than providing and supporting BMDs for all voters.

Respectfully submitted,

Mark Lindeman, Interim Co-Director
Cris Landa, Interim Co-Director

Verified Voting is a national, non-profit non-partisan information and advocacy organization focused exclusively on ensuring the security, integrity, and trustworthiness of computerized election technology. Our mission is to strengthen democracy for all voters by promoting the responsible use of technology in elections. We seek to ensure that Americans can be confident their votes are cast as intended and counted as cast. Our Board of Directors and Circle of Advisors include some of the most prominent computer scientists and cybersecurity experts in the country working in the elections arena as well as current and former state and local elections officials.

