

Testimony of Robert Ferraro
SAVE our Votes
to
House Ways & Means Committee
February 1, 2007

Thank you for the opportunity to testify in support of HB 18.

With today's testimony I would like to explain how a recent document, that committee members received from the State Board of Elections (BOE), is very misleading and could cause confusion about the real issues that we face. In addition, I would like to briefly review a series of alarming scientific studies that have come out since the last session of the legislature when the House voted 137-0 in support of the Hixson/Bobo verified voting bill.

First, the 2-page BOE document, titled "Overview of Maryland's Voting System" erroneously claims that "With Maryland's touchscreen voting system, there are no issues of voter intent." In fact, there is always a question of voter intent with MD's system, because there is absolutely no way for voters to verify the recording of their vote. The BOE claims that they are "confident" about the accuracy of the system because of the tests of the voting units, but the National Institute of Standards & Technology recently issued a white paper that stated that it is impossible to test a voting system that relies solely on software to record the vote, as MD's system does. HB 18 would not rely on just the "confidence" of our BOE, but instead, provide every voter with the ability to verify the correct recording of their ballot and prove the accuracy of the election results with valid audits.

It is important to remember that although the BOE claims to regard testing as the most important guarantor of accuracy, lawsuit discovery documents have shown that it allowed our 2004 Presidential Primary election to be held on a system that had not passed testing and never informed the public about this fact.

Secondly, the document falsely claims that the voting system is the most accurate system ever used in the state. In fact, there is no way to know whether MD's system is accurate or not because there is no way to properly recount or audit the machine tallies. The statistics cited in the document do not refer to accuracy but to residual vote rates. This is the rate of no vote being recorded for the top race on the ballot. If a large percentage of people choose to not vote for any candidate in that race, there will be a high residual vote rate even if the system is 100% accurate. Conversely, if a malfunction or malicious program assigns votes to all of those blank ballots, the residual vote rate will be lowest ever recorded in history, 0%, while being completely inaccurate.

Residual vote rates can be useful in evaluating voting systems, however. The 0.3% rate cited was the lowest in the nation in 2004 and MD should be proud of that number. But MD also had the lowest residual vote rate in 2000 when 19 counties used an optical scan system. In Harford County, which used an optical scan system in 2000, the residual vote rate was even lower than the 2004 figure for the DRE

systems. It was 0.2%. So, if you want to measure systems by residual vote rates, then optical scan systems can, in fact, match or better the performance of DRE systems, as the Cal Tech / MIT study showed.

The third misleading section is the one about security. All of the independent researchers who have done studies about Maryland's voting system have reached the exact opposite conclusion than the BOE. They have all declared the system at very high risk of having corrupted election results.

It is important to note that all of these studies were done on voting systems that had passed the testing that is the basis for the BOE's "confidence". Every single study found serious security vulnerabilities that testing failed to uncover.

In December of 2005, after Diebold had declared that a vulnerability discovered by Harri Hursti could not be exploited in a real election, he demonstrated that it could be exploited, without leaving a trace, in a mock election in Leon County, Florida, on the exact same system that we use for absentee voting in MD. In January, 2006, the "interpreted code" that allowed this exploit was then discovered to exist, as well, on all Diebold touchscreen systems.

In February, a California report explained the seriousness of this vulnerability by confirming that the code was illegal under the voting system standards and the necessity of a voter-verified paper audit trail by stating that, "successful attacks can only be detected by examining the paper ballots."

Then, in May 2006, Mr. Hursti discovered even more serious vulnerabilities in the Diebold touch-screen systems. Dr. Michael Shamos, who testified to this committee recently, described this as "the most severe security flaw ever discovered in a voting system." But more shocking than that was the fact that Diebold and the Maryland BOE had been aware of this vulnerability for more than two years, and Diebold chose not to fix the security holes and the BOE chose not to alert other states or national officials.

Since the groundbreaking research of Dr. Rubin in July of 2003, there have been 19 scientific reports related to voting systems used in Maryland. All have found serious problems and almost all have called for voter-verified paper records and valid audits. I urge you to vote for HB 18 and help us restore integrity in Maryland's elections.

All of the reports are listed on the SAVE our Votes website, with short summaries of their significance and links to the full reports. Go to:

<http://www.saveourvotes.org/reports/index.htm#20>