

**Department of Legislative Services  
Maryland General Assembly  
2005 Session**

**FISCAL AND POLICY NOTE**

House Bill 107 (Delegate Montgomery, *et al.*)  
Ways and Means

**Election Law - Voting Systems - Verification and Accessibility**

This bill requires a voting system that does not use a document ballot to produce an accessible voter-verified paper audit trail of each vote cast that must be made available for inspection and verification by the voter at the time the vote is cast. The voting system must provide alternative language accessibility and accessibility to site impaired individuals, and the State Board of Elections (SBE) must adopt regulations regarding voting systems for the site impaired and for alternative language accessibility. The Governor must allocate the resources required to implement the voter system verification provisions, except that federal funds previously committed to implement the Help America Vote Act 2002 (HAVA) may not be used. The voting system requirements are effective for each election occurring after January 1, 2006.

The bill is effective July 1, 2005.

**Fiscal Summary**

**State Effect:** General fund expenditures could increase by \$28.6 million in FY 2006 for the cost of additional voting units (DREs) and 24,000 printer add-ons. Out-year expenditures reflect additional costs associated with administering the statewide and presidential primary and general elections and warehousing additional DREs.

(in dollars)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	28,550,000	1,552,000	1,312,000	1,312,000	400,000
Net Effect	(\$28,550,000)	(\$1,552,000)	(\$1,312,000)	(\$1,312,000)	(\$400,000)

*Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect*

**Local Effect:** None. Uncodified bill language requires the Governor to allocate the resources necessary to implement this bill.

**Small Business Effect:** None.

---

## Analysis

**Bill Summary:** The bill requires the voter verifiable system to allow a voter to correct any error made by the voting system before the paper record is preserved at the polling place. The accessible voter-verified paper audit trail would be the official record of the election and would be used in the event of a recount. The bill also requires SBE to conduct a random sampling of 2% of the total number of voting precincts in each legislative district that produce an accessible voter-verifiable paper audit trail to compare the paper record against the electronically recorded results.

At least one voting unit accessible to the blind and hearing impaired must be located at each polling place in the State, and must have the ability to allow a voter to cast and verify all selections made by both visual and nonvisual means.

SBE must adopt regulations governing any voting system used by the State or any political subdivision that: (1) provides individuals who are blind and visually impaired with access that is equivalent to that provided to individuals who are not blind or visually impaired; (2) provide individuals who reside in a precinct where any limited English proficient population constitutes 3% of the overall population within the geographic region served by that precinct with access that is equivalent to that provided to individuals who are English proficient.

“Access” means the ability to receive, use, select and manipulate data, and operate controls included in voting systems.

“Nonvisual” means synthesized speech.

**Current Law:** HAVA requires all voting systems beginning January 1, 2006 to (1) permit voters to verify their selections on the ballot, notify them of overvotes, and permit them to change their vote and correct any errors before casting the ballot; and (2) be capable of producing a permanent paper record for the voting system that can be manually audited and is available as an official record for recounts. However, HAVA does not require that a paper record be produced for each voter at the polling place.

State law provides that SBE may not certify a voting system unless it determines that the voting system will (1) protect the secrecy of the ballot; (2) protect the security of the voting process; (3) count and record all votes accurately; (4) accommodate any ballot used in the State; (5) protect all other rights of voters and candidates; and (6) be capable of creating a paper record of all votes cast in order that an audit trail is available in the event of a recount.

A county is required to pay its share of one-half of the State's cost of acquiring and operating the uniform statewide voting systems for voting in polling places and for absentee voting. A county's share of the cost of acquiring and operating the uniform statewide voting systems is based upon the county's voting age population.

Fifty percent of any federal funds received for improvements in voting systems and equipment is distributed to the State and 50% of any federal funds received for improvements in voting systems and equipment is distributed, on the basis of a county's voting age population, to the counties that have implemented the uniform statewide voting system provided for under this Act in the fiscal year in which the funds are received.

Section 203 of the federal Voting Rights Act of 1964 requires bilingual election procedures in various states and counties for voters who speak Spanish, Chinese, Filipino, Japanese, Vietnamese, and more than a dozen Native American and Alaskan Native languages. A jurisdiction is covered under Section 203 where the number of U. S. citizens of voting age is a single language group within the jurisdiction:

- is more than 10,000; or
- is more than 5% of all voting age citizens; or
- on an Indian reservation, exceeds 5% of all reservation residents; and
- the illiteracy rate of the group is higher than the national illiteracy rate

**Background:** Chapter 564 of 2001 required SBE to select a uniform statewide voting system for voting at polling places. SBE entered into a \$55 million contract to purchase over 16,000 electronic touchscreen voting units from Diebold Election Systems in January 2002. All local jurisdictions with the exception of Baltimore City implemented this voting system for the March 2004 presidential primary election.

Diebold does not currently make a DRE voting unit with paper record capability. The bill would require Diebold to develop this capacity as an add-on to the current system. This upgrade would be subject to the federal voluntary voting system standards to which Maryland is a signatory. However, these standards do not currently include guidelines

for paper record printers on DRE voting units. The Federal Election Commission advises that standards are in the process of being developed in conjunction with the National Institute of Standards and Technology and the Election Assistance Commission, which is the agency responsible for enforcing HAVA.

Any upgrade to the current voting system must also undergo a State certification test as well as independent testing and validation at the local level to verify the functionality of the entire voting system. Official election results are currently stored on removable memory cards inside of each DRE machine. These cards are transported to local boards of election after polling places close on election night. The cards are capable of producing a permanent paper record of all ballots cast.

**State Fiscal Effect:** The State would bear the entire cost of implementing the bill's provisions since the bill requires the Governor to allocate the required resources. Under current law, the State currently is responsible for 50% of the cost of the current statewide voting system; local governments must pay their proportionate share of the remaining 50% according to voting age population.

Because the bill does not permit implementation using federal funds under HAVA, the cost for upgrading the current voting system with paper record capabilities would require a significant increase in general fund expenditures. The precise cost for modifying the system according to the bill's requirements is difficult to estimate due to the unavailability of actual quotes from voting system vendors who are reluctant to develop and market printer add-ons without guidance in the way of federal standards. However, some vendors have approximated a per unit cost for printers between \$400 and \$800. Additional costs related to implementing printer add-ons are displayed (see **Exhibit 1**) and discussed below.

---

**Exhibit 1**

	<u><b>FY 2006</b></u>	<u><b>FY 2007</b></u>	<u><b>FY 2008</b></u>	<u><b>FY 2009</b></u>	<u><b>FY 2010</b></u>
Printer	\$14,400,000	\$0	\$0	\$0	
Additional DREs	13,750,000	0	0	0	
Support Services		400,000	200,000	200,000	
Warehousing	400,000	400,000	400,000	400,000	\$400,000
Equipment					
Replacement	0	672,000	672,000	672,000	
Random Sampling		<u>80,000</u>	<u>40,000</u>	<u>40,000</u>	
<b>Total</b>	<b>\$28,550,000</b>	<b>\$1,552,000</b>	<b>\$1,312,000</b>	<b>\$1,312,000</b>	<b>\$400,000</b>

---

*Printer Costs:* Exhibit 1 uses a per unit cost of \$600 for a total of 24,000 printer units. This includes printers for 19,000 DREs currently required statewide, and 5,000 additional DREs needed as a result of the bill.

*Additional DREs:* SBE estimates that 5,000 additional DREs would be needed to compensate for the increase in time that an individual voter will take to cast a ballot using a voter verifiable paper record system. Research in other states suggest that Maryland's current ratio of one DRE for every 200 voters would have to be raised to one DRE for every 150 voters to accommodate longer individual voting times. The cost of each DRE is approximately \$2,750.

*Pre-election Activities:* This category of expenditures includes the added costs for pre-election security testing of printer add-ons as well as independent validation and verification of its components, and updating the election judges manual with instructions for operating the printers, and software upgrades to the existing voter system to support use of the printer add-ons.

*Warehousing:* This figure represents the additional cost of storing the 5,000 additional DRE units and all 24,000 printer add-ons.

*Equipment Replacement:* Equipment failure is an ordinary consequence of large lots of voting hardware. SBE estimates a 7% failure rate for printer add-ons, which is comparable to the rate used for DREs.

*Random Sampling:* The bill requires random sampling of 2% of voters statewide. Using a total of 3 million voters, a total of 60,000 ballots would be sampled. At a rate of four minutes per ballot, 4,000 total hours would be required to complete the random sampling. Assuming ballot samplers were paid a rate of \$10 per hour, the total cost for random sampling would be \$40,000 per election.

SBE could also incur additional expenses as a result of the bill's provisions requiring access to the voting system by individuals who are not English proficient. This would require ballot translation and software reprogramming for each ballot style in an applicable precinct. The cost per ballot is estimated at \$2,600. A precise effect on SBE in an election year, however, cannot be reliably estimated since information regarding which precincts have non-English proficient individuals is not readily available. According to the 2000 census, an estimated 459 voting precincts in 2000 were comprised of over 3% Asian individuals and 540 precincts had a Hispanic population of over 3%, but the actual English proficiency of these populations could vary.

During the 2004 election, SBE translated a total of nine ballots in Montgomery and Prince George's counties in accordance with the federal Voting Rights Act of 1964. There were 82 ballot styles for the State in the previous general election.

---

### **Additional Information**

**Prior Introductions:** None.

**Cross File:** None.

**Information Source(s):** Carroll County, Harford County, Montgomery County, Prince George's County, St. Mary's County, Maryland State Board of Elections, Department of Legislative Services

**Fiscal Note History:** First Reader - February 17, 2005  
mp/jr

---

Analysis by: Michelle L. Harrison-Davis

Direct Inquiries to:  
(410) 946-5510  
(301) 970-5510