

The Florida Senate
PROFESSIONAL STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: Ethics and Elections Committee

BILL: CS/SB 1174

INTRODUCER: Committee on Ethics and Elections and Senators Dockery and Villalobos

SUBJECT: Voting Systems

DATE: April 18, 2007

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Fox	Rubinas	EE	Fav/CS
2.			JU	
3.			CJ	
4.			TA	
5.				
6.				

I. Summary:

Committee substitute for Senate Bill 1174 mandates that precinct-count optical scan systems and marksense ballots must be used for all election-day and early voting, except for voters with disabilities who may vote on touchscreen equipment retrofitted with a voter verifiable paper audit trail, or "VVPAT." It provides that all early voters may vote either with a marksense ballot or touchscreen machine equipped with VVPAT. Further, the bill provides that the VVPAT shall be the official ballot for purposes of manual recounts on touchscreen voting machines. Voting system certification standards and definitions are amended and created, to conform.

The bill also provides for a post-election audit of 2 percent of the precincts, to be completed by the 9th day following certification of the election results.

It also removes certain audio/visual requirements for voting systems for the disabled.

Provisions of the bill takes effect at various times prior to the fall primary election in 2008.

This bill substantially amends ss. 97.021, 101.5603, 101.5606, 101.56062, 101.591, 102.166, and creates s. 101.56075 of the Florida Statutes.

II. Present Situation:

The genesis of the current bill can be traced to the 2000 presidential contest and subsequent Florida recount. The election highlighted numerous shortcomings in the voting systems in place

at the time --- namely, the infamous punch-card systems and the error-prone, central-count optical scan systems.¹

The Florida Legislature responded at the next session by enacting the Florida Election Reform Act of 2001.² Along with numerous other reforms, a cornerstone of the Act was to replace problematic and antiquated voting systems with what were believed to be better, more reliable systems. The Act abolished the use of punch card, central-count optical scan, mechanical lever, and freehand paper³ voting systems, and authorized in their place either *precinct-count optical scan*⁴ or the yet-unproven, but cutting edge, *touchscreen voting system technology*.⁵

The State appropriated about \$12 million from the general revenue fund to help 41 counties upgrade their voting systems.⁶ The money was distributed to the counties by the Department of State in two separate installments pursuant to the following funding formula: smaller counties (population of 75,000 or less) received \$7500 per precinct; and, larger counties (population over 75,000) received half that much, or \$3,750 per precinct. The rationale behind the funding scheme was to provide *half* of what it would cost the larger counties to purchase a *precinct-count optical scan system* (a/k/a, the “state match”), and enough money for the smaller counties to fully fund an optical scan purchase.

There were no strings attached to the money. Every county was free to purchase either a precinct-count optical scan system or throw-in with a lot more local money to purchase the expensive touchscreen systems. Ultimately, 15 Florida counties⁷ --- including some of the largest like Broward, Hillsborough, Miami-Dade, and Palm Beach – decided to purchase primarily⁸ touchscreen systems (collectively, “the touchscreen counties”). Subsequently, a number of

¹ Central-count optical scan systems are those where the voter designates selections on a marksense ballot and deposits it in a box for subsequent tabulation at a central facility like the supervisors’ office. Because the voter is not present when the ballot is run through the tabulating equipment, errors cannot be corrected. Of the three most-widely-used voting systems in Florida at the time, central-count optical scan had by far the highest error rate at 5.69%, followed by punch cards at 3.83%; precinct-count optical scan, where ballots are placed into a tabulator at the precincts and do allow for the voter to make corrections, had the lowest error rate at 0.79%. The Florida Senate, Committee on Ethics and Elections, *Review of the Voting Irregularities of the 2000 Presidential Election*, p. 9 (March 2001) (Report No. 2001-201).

² Ch. 2001-40, LAWS OF FLA.

³ Freehand paper systems, in use only in Union County back in 2000, required the voter to mark his or her ballot selections with a check mark. The election officials subsequently hand-counted the ballots to determine election results.

⁴ Beginning in the late 1980’s, many counties in Florida moved to an optical scan voting system. These systems use a ballot card with names of candidates and descriptions of issues preprinted next to an empty circle, oval or incomplete arrow. A voter indicates his or her choice by filling in the empty circle or oval or by completing the arrow. Precinct-count optical scan systems, as opposed to central-count systems, require the voter to deposit his or her ballot into an automatic tabulating device at the polling place.

⁵ In 2001, touchscreen technology was in its infancy in this country. Although limited experience with the touchscreens indicated an undervote rate that was troublingly high --- about 3%, roughly the same as for the old punch-card systems --- many believed that this figure was the result of voter inexperience with the systems, and that voter education efforts would drastically reduce these error rates.

⁶ See 2001 General Appropriations Act, Specific Appropriation No. 2898B and Ch. 2001-40, ss. 71, 74, 76, LAWS OF FLA.

⁷ Broward, Charlotte, Collier, Hillsborough, Indian River, Lake, Lee, Martin, Miami-Dade, Nassau, Palm Beach, Pasco, Pinellas, Sarasota, and Sumter counties.

⁸ Counties that use touchscreen equipment still needed optical scan equipment to process absentee voters.

optical-scan counties have chosen to implement touchscreen systems for early voting (collectively, “the hybrid counties”).⁹

Despite the efforts of election administrators, there continues to be public concern with respect to the accuracy and security of paperless touchscreen voting systems. In response to these ongoing concerns, voting system manufacturers have designed a voter verified paper audit trail (“VVPAT”) to retrofit existing touchscreen voting systems. The VVPATs consist of a strip of paper (part of a roll of paper, like on cash register machines) under transparent glass: 1) that the voter can review (but not touch) to verify that the machine has recorded the correct vote prior to casting the ballot; and, 2) often serves as the official record in the event of a recount.

Unfortunately, the VVPATs did not perform well in the 2006 election cycle, so poorly, in fact, that many advocates for the paper retrofits prior to the election have now come out against using them. A 240-page report of the Cuyahoga County (Cleveland), Ohio 2006 primary by the Election Science Institute (“ESI”), a nonpartisan, nonprofit voter interest group, provided disturbing evidence of the real-world problems with VVPATs. As reported and summarized by another respected nonpartisan, nonprofit voting organization, electionline.org:

Buried some 93 pages into the (ESI) report, which was commissioned by county leaders and produced by the San Francisco-based Election Science Institute, are details of errors that included poll workers loading thermal paper into VVPAT printers backwards, blank audit trails, “accordion-style” crumpling of ballots, long blank spaces between ballots that could have represented missing or unprinted VVPATs, torn and taped-together VVPATs and missing ballot text.

ESI researchers found that *nearly 10 percent of VVPAT ballots sampled were in some way compromised, damaged or otherwise uncountable*, an alarmingly high proportion for a state that requires that paper be used as the ballot of record in the event of a recount.

That led ESI to the ominous conclusion that “in the event of a recount or election contest, the risk of legal challenges is exceptionally high if no significant modifications are made to the current election system.”

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“Ten percent is a complete disaster and totally defeats the purpose of a VVPAT,” said David Dill, a Stanford University computer science professor and founder of Verified Voting(.org). “You can blame it on poll worker training, but there are ways to design equipment that makes user error less likely. There are indications that Diebold has done a less than adequate job in design. The company has adopted a generally reluctant and unenthusiastic stance to paper trails and it shows in the design.”

The answer to VVPAT problems, Dill said, would be precinct-counted optical-scan units.¹⁰

⁹ Bay, Brevard, Clay, Escambia, Jackson, Levy, Marion, Monroe, Nassau, Okaloosa, Orange, Osceola, Santa Rosa, St. Johns, Taylor, and Washington counties.

(emphasis added).

Some may argue that focusing on the foibles and failures of VVPATs during the 2006 election cycle does not take account of the numerous instances in which they performed properly. But, as Florida witnessed during the 2002 primary election --- where the Governor had to issue an emergency order to keep the polls open for two extra hours statewide because of widespread problems with the new touchscreen voting systems in just 2 of the 67 counties (Broward and Miami-Dade) --- it appears that the safest course in implementing new voting equipment is to hope for the best but expect, and plan for, the worst.

III. Effect of Proposed Changes:

Section 1. Amends s. 101.5603, F.S.; creates definitions for the terms “direct recording electronic voting method” and “voter-verifiable paper audit record”; amends the definitions of the terms “ballot” and “marking device.”

Section 2. Amends s. 101.5606, F.S.; modifies the voting system certification standards to require touchscreen voting systems to produce a VVPAT linked to individual ballot images that have a unique identifier; requires all voting systems to produce standardized election results reporting as determined by the Department of State.

Section 3. Amends s. 101.56062, F.S.; deletes a number of audio/visual requirements for voting systems accessible by the disabled.

Section 4. Effective July 1, 2008, creates s. 101.56075, F.S.; mandates that precinct-count optical scan systems and marksense ballots must be used for all election-day and early voting, except for voters with disabilities who may vote on touchscreen equipment with a VVPAT.

Section 5. Effective July 1, 2008, amends s. 101.591, F.S.; requires that the supervisor of elections do a public audit of the first race on the ballot in 2 percent of precincts chosen at random by the local canvassing board, to be completed no later than 9 days after the election results are certified; provides for the selection and use of additional, alternative precincts in the event of VVPAT malfunction; requires the supervisor of elections to provide an audit report to the Department of State within 15 days after the completion of the audit; authorizes the department to adopt uniform audit procedures by rule.

Section 6. Effective July 1, 2008, amends s. 102.166, F.S.; mandates that the VVPAT is the “official ballot for the manual recount” on touchscreen machines; provides that in the case of VVPAT malfunction, the supervisor shall use the audit record in the machine as the official record to count only the problematic ballots.

¹⁰ Dan Seligson, *News Analysis: The Coming Paper-Trail Debacle?*, Electionline Weekly (August 17, 2006) (<http://electionline.org/Newsletters/tabid/87/ctl/Detail/mid/643/xmid/202/xmfid/3/Default.aspx>); see also, Election Science Institute, *DRE Analysis for May 2006 Primary Cuyahoga County, Ohio* (August 2006) (http://bocc.cuyahogacounty.us/GSC/pdf/esi_cuyahoga_final.pdf)

Section 7. Amends s. 97.021, F.S., to conform.

Section 8. Appropriates approximately \$35.68 million from the Grants and Donations Trust Fund (HAVA money) to the Division of Elections for the purpose of implementing the Act.

Section 9. Except as otherwise provided, the act takes effect July 1, 2007.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The bill appropriates \$35,678,060 from the Grants and Donations Trust Fund (HAVA money) to the Division of Elections for the purpose of implementing the Act, presumably broken down approximately as follows:

- \$22.86 million, for election-day, optical scan tabulators [15 touchscreen counties]
- \$7.82 million, for VVPAT paper retrofits for touchscreen voting equipment [all counties]
- \$5 million, for ballot-on-demand systems for early voting --- including optical scan tabulators [29 hybrid counties]

It is unclear at this time whether the State will be able use the HAVA money to pay the \$27.86 million for optical-scan tabulators and ballot-on-demand systems. (The HAVA money *is* available to purchase the VVPAT retrofits.) The State is involved in ongoing discussions with the federal Election Assistance Commission, the agency charged with administering the HAVA program, to try and resolve the HAVA funding issue.

It is also unclear precisely what assumptions are underlying the cost figures cited above. For example, does the \$5 million for ballot-on-demand systems budget for *one* printer per early voting site, which would clearly be insufficient because a printer problem would effectively equate to having no ballots at the site? A minimum of *two* printers per site appears to be a necessity.

VI. Technical Deficiencies:

None.

VII. Related Issues:

The fact that the proposed ballot-on-demand technology is relatively untested combined with the disastrous results experienced in Broward and Miami-Dade counties during the 2002 primary, when the State authorized the use of *new and unproven* touchscreen voting equipment with scarcely more than 12 months lead time, militate strongly for implementation of this act in the 2010, not the 2008, election cycle. Noteworthy, also, is the fact that the State of Maryland recently decided to abandon its statewide touchscreen voting system in favor of an optical scan system, *effective for the 2010 election cycle*.

VIII. Summary of Amendments:

None.

This Senate Professional Staff Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.
