

**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.)

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Prepared By: Ethics and Elections Committee

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BILL: SB 2164

INTRODUCER: Senator Villalobos

SUBJECT: Voting Systems

DATE: April 13, 2007

REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Fox	Rubinas	EE	<b>Pre-meeting</b>
2.			JU	
3.			TA	
4.				
5.				
6.				

## I. Summary:

Senate Bill 2164 mandates that precinct-count optical scan systems and marksense ballots must be used for all election-day voting, except for voters with disabilities who shall have the right to 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-certification election audit of 2 percent of the precincts, to be completed by the 9<sup>th</sup> 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. 101.5603, 101.5606, 101.56062, 101.591, 102.166, and creates s. 101.56075 of the Florida Statutes.

## II. Present Situation:

*Note: This bill embodies the Governor’s original proposal for paper-based voting systems. The Governor has since abandoned this approach in favor of a new proposal that requires precinct-count optical scan systems at early voting and on election day for all but disabled voters --- who could either vote by marksense ballot or on existing touchscreen machines retrofitted with VVPAT.*

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.<sup>1</sup>

The Florida Legislature responded at the next session by enacting the Florida Election Reform Act of 2001.<sup>2</sup> 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 paper<sup>3</sup> voting systems, and authorized in their place either *precinct-count optical scan*<sup>4</sup> or the yet-unproven, but cutting edge, *touchscreen voting system technology*.<sup>5</sup>

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

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<sup>1</sup> 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).

<sup>2</sup> Ch. 2001-40, LAWS OF FLA.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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.

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.<sup>6</sup>

(emphasis added).

The VVPATs present an additional recount dilemma for Florida: VVPATs will drastically slow down and complicate the recount process, since *every VVPAT ballot* would have to be manually counted. This is precisely what the Florida Election Reform Act of 2001 sought to avoid by limiting the manual review to just the *problematic* ballots --- the ones with overvotes and undervotes. Recounting every VVPAT has the potential to return the state to the chaos of the 2000 presidential election recount. But instead of counting hanging chads on punch card ballots, this time teams of election officials may be faced with making sense of millions of printouts on tiny rolls of paper --- a fair percentage of which may well be compromised through either careless election administration, printer problems, or both.

Some may argue that focusing on the foibles and failures of VVPATs during the 2006 election process 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

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<sup>6</sup> 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](http://bocc.cuyahogacounty.us/GSC/pdf/esi_cuyahoga_final.pdf))

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 --- it appears the best course in evaluating new voting equipment 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.”

**Section 2.** Amends s. 101.5606, F.S.; modifies the voting system certification standards to require touchscreen voting systems to produce a VVPAT, and to require that all voting systems 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 voting, except for voters with disabilities who shall have the right to vote on touchscreen equipment with a VVPAT; provides that all early voters may vote by either marksense ballot or touchscreen machine equipped with VVPAT.

**Section 5.** Effective July 1, 2008, amends s. 101.591, F.S.; requires the county canvassing board do random, public audit of 2 percent of precincts, to be completed no later than 9 days after the election results are certified; requires the canvassing board 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.

**Section 6.** Effective July 1, 2008, amends s. 102.166, F.S.; requires that the VVPAT is the “official ballot for the manual recounts” on touchscreen machines.

**Section 7.** 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 Governor's estimated cost of implementing the provisions of this act is \$32.5 million. cursory review by legislative staff indicates that the cost may be decidedly higher.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

The woes that Florida experienced in 2002 in trying to implement new and unproven voting equipment and deploy qualified poll workers in less than 18 months militate for an effective date after the 2008 election cycle.



## **VIII. Summary of Amendments:**

None.

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

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