

# HOUSE BILL REPORT

## HB 2745

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**As Reported by House Committee On:**  
Technology, Telecommunications & Energy

**Title:** An act relating to voting systems.

**Brief Description:** Enhancing integrity of voting systems.

**Sponsors:** Representatives Miloscia, Nixon, Simpson, G., Talcott, Rockefeller and Upthegrove;  
by request of Secretary of State.

**Brief History:**

**Committee Activity:**

Technology, Telecommunications & Energy: 1/27/04, 2/4/04 [DPS].

### Brief Summary of Substitute Bill

- Prohibits the use of punchcard voting machines after January 1, 2006.
- Requires Direct Recording Electronic (DRE) voting machines to provide either a paper record or an alternative method for voters to verify that votes were cast as intended, and provide an opportunity to repeat the voting process if necessary.
- Specifies that paper records become the official ballot under certain circumstances, such as manual recounts.
- Requires county auditors to audit 4 percent of the DREs the day after the election by comparing the electronic result to the paper result for three randomly selected races or issues.
- Requires the Secretary of State (Secretary) to convene a task force of elections and technology experts, as well as members of the Legislature.

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### HOUSE COMMITTEE ON TECHNOLOGY, TELECOMMUNICATIONS & ENERGY

**Majority Report:** The substitute bill be substituted therefor and the substitute bill do pass.  
Signed by 16 members: Representatives Morris, Chair; Ruderman, Vice Chair; Sullivan, Vice Chair; Crouse, Ranking Minority Member; Nixon, Assistant Ranking Minority Member; Anderson, Blake, Bush, Delvin, Hudgins, Kirby, McMorris, Romero, Tom, Wallace and Wood.

**Minority Report:** Without recommendation. Signed by 1 member: Representative McMahan.

**Staff:** Katie Blinn (786-7114).

**Background:**

Certification:

Voting equipment and vote tallying equipment must be approved by the Secretary in order to be used by county auditors to conduct elections. The Secretary must inspect, evaluate, and publicly test all voting equipment, make a report following each examination, and provide a copy of the report to each county auditor. Any change that does not impair the equipment's accuracy, efficiency or capacity, or extend its function, may be made without another examination or approval.

Voting machines must:

- Maintain secrecy;
- Permit the voter to vote for any person, office, and measure for which he or she has the right to vote;
- Correctly register votes cast;
- Prevent a vote for more than one candidate by a single operation of the device, except for president and vice-president of the United States; and
- Be tested, certified, and used in at least one other state or election jurisdiction, except for functions that are unique to Washington.

Vote tallying equipment must:

- Correctly count the votes on properly marked ballots;
- Ignore improperly marked portions of a ballot while counting the properly marked portions of the ballot;
- Count the number of ballots tallied for each precinct, the number of votes for each candidate, and the number of votes for and against each issue;
- Accommodate name rotation;
- Produce precinct and cumulative totals in printed form; and
- Be tested, certified, and used in at least one other state or election jurisdiction, except for functions that are unique to Washington.

County auditors are responsible for the preparation, maintenance, and operation of equipment used in their counties. An agreement to purchase or lease a voting system is subject to the Secretary's approval that the equipment is actually the same as that certified, and that the equipment is still operating correctly after it is delivered to the county.

Regular Testing and Procedures:

Before an election, the format of each ballot in each machine and the precinct for which the machine has been prepared must be recorded. At least three days prior to each primary and general election, the Secretary must conduct a logic and accuracy test on each vote tallying system. If an error is detected, the cause of the error must be determined and corrected before the election. Voting machines must correctly record the votes on a ballot, and the ballot must

be available for audit purposes after the election. At the polling place, voting machines containing ballots for one congressional, legislative or county council district must be grouped together and physically separated from machines containing ballots for other districts.

DRE Voting Machines:

The federal Help America Vote Act of 2002 (HAVA) requires states to place an electronic voting device in each polling place that is accessible to persons with disabilities, allowing them to vote in privacy. The devices currently on the market that meet these requirements are Direct Recording Electronic devices, known as DRE's.

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**Summary of Substitute Bill:**

Certification:

A voting device or vote tallying system, or the component software, must be tested and approved by an independent testing authority (ITA) approved by the Federal Election Assistance Commission in order to be certified for use in Washington. The Secretary must publicly demonstrate all voting systems submitted for review, and post the certification reports to the internet. The Secretary may withdraw certification for cause, following a public hearing. After January 1, 2006, punchcard voting machines are prohibited. A voting system vendor submitting a system to the Secretary for certification must allow the Secretary access to the source code.

Existing equipment certifications remain in effect until January 1, 2006, but equipment purchased after July 1, 2004 must be subject to the new requirements. The Secretary must consult with the Information Services Board when establishing procedures for the procurement of new voting systems through master contracts. If using federal HAVA funds to procure new voting systems, county auditors must consider the use of master contracts approved by the Secretary for those purchases.

Once a voting system has been certified, no changes may be made by a county auditor without notifying the Secretary. The change must be approved by an ITA prior to submission to the Secretary. If the vendor believes that a modification is necessary during the 10 days prior to an election, an emergency examination that is valid only for the upcoming election may be performed by the Secretary without the prior ITA review. A vendor must notify the Secretary anytime a source code is modified and allow access to the modified version.

Regular Testing and Procedures:

County auditors must provide written, signed verification during a logic and accuracy test that the voting system and its component software, in the version used, are certified. The test following a purchase or lease of a voting system to determine if the system is the same as that certified by the Secretary must be conducted by the county auditor as the purchaser or lessee. During the logic and accuracy test conducted prior to an election, the county auditor must again provide proof that the voting system in use is certified, and that all ballot styles have been programmed correctly. Each voting device must be physically sealed, kept in a secure location, and protected against unauthorized access until election day.

Polling places are no longer required to physically separate voting devices with ballots for one district from voting devices with ballots for another district. Rather, the individual ballot displayed to the voter must only contain the candidates for one district. Ballot counting systems must produce periodic reports in between counting sessions.

Wireless communications may not be used in a voting system. All elements of a ballot counting system must be observable and secured, and may not be connected to, or operated on, any electronic network, including internal office networks, the internet, or the World Wide Web. Transfer of information from the ballot counting system to another system must be made via disk, tape, or other physical means rather than a direct electronic connection. However, vote tallies from poll site-based counting devices may be transmitted electronically if the electronic method is not directly connected to the voting system. These provisions do not prevent the state from participating in the SERVE pilot project for military and overseas voters, authorized during the 2003 legislative session.

#### Task Force:

The Secretary must convene a task force of elections and computer security experts known as the Washington Voting Systems Board (Board) to study the potential for election fraud. The Board shall include:

- At least five county auditors;
- At least two information technology professionals;
- The Director of the Department of Information Services;
- A representative of the Washington disability access group;
- The Director of Elections;
- The Secretary;
- A member of each of the four caucuses of the Legislature; and
- A statistician.

The Secretary shall report to the Legislature during the 2005 and 2006 legislative sessions on the status of a variety of election issues, including alternate methods for voters using DRE's to verify the votes cast.

#### DRE Voting Machines:

The DRE voting machines must have *either* a voter-verified paper record of the votes cast, *or* an alternative method for the voter to verify votes in a technology that is distinct from the DRE.

If the DRE produces a paper record, the paper must be machine-readable for purposes of counting the votes cast in a technology distinct from the DRE. The DRE must allow the voter to review the paper record prior to finalizing his or her vote, and spoil the record and repeat the voting process if necessary. If the DRE is programmed to display ballots in multiple languages, each paper record must be printed in the language used by the applicable voter. The electronic record is the official record of each vote, but the paper record becomes the official record for specified circumstances, such as manual recounts, and must be treated with the same procedure and security as traditional ballots. Unauthorized removal of a DRE paper record from a polling place is a class C felony. The day after the election, the county auditor must conduct an audit of votes cast on DRE machines. The auditor must randomly select 4

percent of the DRE machines used and, for three races or issues randomly selected, compare the electronic results to the paper results.

An alternative method to verify votes cast on a DRE must be approved by the Washington Voting Systems Board before it may be certified for use in Washington, and the Secretary must notify the Legislature when it makes such a certification. The alternative method must maintain privacy, while allowing a voter to verify that the votes were cast and recorded as intended. The alternative method must allow the voter an opportunity to repeat the voting process if the verification does not reflect his or her votes.

### **Substitute Bill Compared to Original Bill:**

#### Certification Process:

The substitute bill reinstates the requirement that voting equipment and vote tallying equipment be certified in another state before it can be certified in Washington. The substitute bill changes how a re-examination or re-approval is conducted after a voting system has been modified by a county auditor by requiring that the modification first be approved by an ITA prior to submission to the Secretary, or allowing for an emergency examination by the Secretary if the modification is needed during the last 10 days before an election. The substitute bill requires a voting system vendor to allow the Secretary access to the source code when submitting a system for certification, and anytime the source code is modified after certification.

#### DREs:

The substitute bill requires a DRE to have *either* a voter-verified paper record *or* an alternative method for the voter to verify the votes in a technology that is distinct from the DRE. The substitute bill clarifies that if a DRE uses paper records, the paper version becomes the official ballot under specified circumstances, such as a manual recount. The DRE must allow the voter to spoil the paper record and repeat the voting process if the voter decides that the paper does not reflect his or her vote, and the paper must be machine readable in a technology distinct from the DRE. The substitute bill requires the county auditor to conduct an audit of votes cast on DRE machines the day after the election. The auditor must randomly select 4percent of the DRE machines used and, for three races or issues, compare the electronic results to the paper results.

Any alternative methods of voter-verification must be approved by the Board before it can be certified for use in Washington, and the Secretary must notify the Legislature if it certifies such a method. The alternative method must maintain privacy while allowing a voter to verify that the votes were cast and recorded as intended, and must allow the voter an opportunity to repeat the voting process if the verification does not reflect his or her votes.

#### Other Changes:

The substitute bill clarifies that each individual voting device must be physically sealed when it is distributed to the polling sites. Membership on the new task force, the Washington Voting Systems Board, is altered. Tallies from poll-site counting devices may be transmitted electronically as long as the electronic method is not directly connected to the voting system.

The Secretary, in consultation with the Information Services Board, must establish procedures for procuring new voting systems through master contracts. If using federal HAVA funds to procure new voting systems, county auditors must consider the use of master contracts approved by the Secretary for those purchases. Finally, the substitute bill allows existing equipment certifications to remain in effect until January 1, 2006, but requires equipment purchased after July 1, 2004 to be subject to the new requirements.

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**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date of Substitute Bill:** The bill takes effect July 1, 2004, except for sections 18 through 21, 25, and 26, relating to DRE voting machines, which take effect January 1, 2006.

**Testimony For:** The controversy around DRE voting is decreasing citizens' confidence in our election system. The Secretary has constitutional authority to administer elections. While the Secretary certifies what equipment may be used in Washington, it is each county auditor who decides which of the certified systems to purchase and use. Changes in voting technology always raise concerns and make people nervous. Citizens must trust and have confidence in the voting systems. The DREs have been in use in many states for many years already. They are in use in Snohomish County and have received a very positive response. The HAVA requires every polling place in America to allow persons with visual disabilities to be able to vote in privacy. The DREs are the only device on the market that allow visually disabled persons to vote in privacy. The United States Senate recently appropriated the funds to allow local jurisdictions to buy equipment that will accommodate visually disabled voters. The bill outlaws punchcard voting equipment, which will cause those counties that still use punchcards to move to a mix of DREs and optical scan. Many counties will continue to use optical scan for the vote-by-mail population. The Secretary is flexible with the language of the bill. The old lever machines were used for 40-50 years and they had no paper trail. The costs of implementation are covered by the HAVA funds unless a county decides to use only DRE devices in the polling places, which is more costly since the county will have to purchase more of them. Washington's certification and training program mitigates the chances of a Florida fiasco occurring here.

States should not rely entirely on computer software, especially since it is proprietary and secret. It is impossible to write software that is entirely bug-free. The election system should be structured so that we never have to entirely trust the software. An independent audit trail is needed, which includes an opportunity for the voter to verify the paper ballot prior to the vote being finalized. Detection of fraud requires a significant percentage of the ballots to be counted in order to compare. Do not make state law so specific that it freezes the current technology. Provide flexibility to the Secretary to adopt better technology as it is developed, with input from computer security experts, elections systems experts, statisticians, etc. However, do put into state law that software source information must be made available to the states during the certification process. The voting system security standards set by the FEC in

1998 and 2002 are too weak. The current ITA process is not thorough enough. We must prevent collusion among the vendors. Georgia and Florida are examining the vendors' source code.

Great Britain has performed pilot projects on internet voting, voting by telephone, vote-by-mail, and text messaging. This pilot projects were performed to increase voter turnout. Voter participation rates increased the most with the vote-by-mail pilot project, but that may simply be the novelty factor. Great Britain requires the vendors to show the source code to the elections officials. There is no international standard yet for electronic voting.

The changes to DREs take effect in 2006 because the equipment that Snohomish already has cannot accommodate those changes. Time is needed for the technology to catch up. Snohomish County has already set its budget for 2004 and the costs of reverting back to an optical scan election are not included in that budget. The paper trail can be used for an automatic recount, a requested recount, a canvassing board requested recount, and a recount ordered by Superior Court. The Secretary is willing to add a statistician to the new Board. The county auditors support the bill and already do much of what the bill requires. Snohomish County is saving lots of money by using DRE devices. Those savings are paying off the cost of the purchased machines. It is important that people with visual disabilities are able to vote in private. The Secretary's strong commitment to accommodating visually impaired voters is appreciated. The DRE changes should take effect now, for the 2004 election.

**Testimony Against:** The Secretary's move to a paper trail is appreciated. No one who sits on the new Board should have a conflict of interest. All current types of voting systems do not work: punchcard, optical scan, DRE, lever machines, etc. We need to install a safety valve, preventing the use of new technology, until we are certain it works. Do not experiment with citizens' votes. The DRE machines were let loose too early. The equipment is part of the reason why voter turnout is so low. Do not wait until 2006 to require a voter-verified paper ballot because Snohomish County can revert to optical scan. The bill needs to be amended to make the paper ballot always the official ballot. It is very important to make sure that electronic voting equipment is programmed correctly to prevent fraud. Do not use any system that does not already have a paper trail. Do not trust the Snohomish County equipment.

**Persons Testifying:** (In support) Representative Miloscia, prime sponsor; Sam Reed, Secretary of State; David Jefferson, Lawrence Livermore National Laboratory; Julian Bowrey, Office of the Deputy Prime Minister of England; David Elliot, Office of the Secretary of State; Bob Terwilliger, Snohomish County Auditor; and Toby Olson, Governor's Committee on Disability.

(With concerns) John Cusick.

(Opposed) John Gideon and Linda Franz, Citizens for Voting Integrity; George Hill, MD; and Andy Stephenson.

**Persons Signed In To Testify But Not Testifying:** None.