

110TH CONGRESS  
1ST SESSION

# S. 1869

To amend the Help America Vote Act of 2002 to require new voting systems to provide a voter-verified permanent record, to develop better accessible voting machines for individuals with disabilities, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

JULY 25, 2007

Mr. ENSIGN introduced the following bill; which was read twice and referred to the Committee on Rules and Administration

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## A BILL

To amend the Help America Vote Act of 2002 to require new voting systems to provide a voter-verified permanent record, to develop better accessible voting machines for individuals with disabilities, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Voting Integrity and  
5 Verification Act of 2007”.

1 **SEC. 2. PROMOTING ACCURACY, INTEGRITY, AND SECUR-**  
 2 **ITY THROUGH PRESERVATION OF A VOTER-**  
 3 **VERIFIED PERMANENT PAPER RECORD.**

4 (a) IN GENERAL.—Section 301 of the Help America  
 5 Vote Act of 2002 (42 U.S.C. 15481) is amended—

6 (1) by redesignating subsections (b), (c), and  
 7 (d) as subsections (c), (d), and (e), respectively; and

8 (2) by inserting after subsection (a) the fol-  
 9 lowing:

10 “(b) ADDITIONAL REQUIREMENTS FOR VOTING SYS-  
 11 TEMS PURCHASED AFTER 2012.—In addition to the re-  
 12 quirements of subsection (a), each voting system pur-  
 13 chased after December 31, 2012, and used in an election  
 14 for Federal office shall meet the following requirements:

15 “(1) INDIVIDUAL PERMANENT PAPER  
 16 RECORD.—The voting system shall produce an indi-  
 17 vidual permanent paper record for each ballot that  
 18 is cast.

19 “(2) VERIFICATION.—

20 “(A) IN GENERAL.—In lieu of the require-  
 21 ments of subsection (a)(1), the voting system  
 22 shall—

23 “(i) permit the voter to verify the ac-  
 24 curacy of the voter’s ballot (in a private  
 25 and independent manner), by allowing the  
 26 voter to review an individual paper version

of the voter's ballot before the voter's ballot is cast and counted;

“(ii) provide the voter with the opportunity (in a private and independent manner) to change the ballot and correct any error discovered on the individual paper version of the voter's ballot before the ballot is cast and counted (including the opportunity to correct the error through the issuance of a replacement ballot if the voter was otherwise unable to change the ballot or correct any error); and

“(iii)(I) preserve the individual paper version of the voter's ballot, after the voter has certified that the same accurately reflects the voter's intent, as the individual permanent paper record; and

“(II) preserve such individual permanent paper record in accordance with the provisions of paragraph (3)(B); and

“(iv) meet the requirement of subparagraphs (A)(iii) and (C) of subsection (a)(1).

“(B) READABILITY REQUIREMENTS FOR MACHINE-MARKED OR PRINTED PAPER BAL-

1       LOTS.—All voter verified paper ballots marked  
 2       or printed through the use of a marking or  
 3       printing device shall be clearly readable by the  
 4       naked eye and by a scanner or other device  
 5       equipped for voters with disabilities so that a  
 6       voter is able to verify the accuracy of such bal-  
 7       lots via both visual and non-visual means.

8       “(3) MANUAL AUDIT CAPACITY.—In lieu of the  
 9       requirements of subsection (a)(2)(B):

10           “(A) IN GENERAL.—Each individual paper  
 11       record produced under paragraph (1) shall be  
 12       suitable for a manual audit equivalent or supe-  
 13       rior to that of a paper ballot voting system.

14           “(B) PRESERVATION.—The voting system  
 15       shall preserve each individual permanent paper  
 16       record—

17           “(i) within the polling place in the  
 18       manner in which all other paper ballots are  
 19       preserved within such polling place; or

20           “(ii) in the absence of such manner or  
 21       method, in a manner which is consistent  
 22       with the manner employed by the jurisdic-  
 23       tion for preserving paper ballots in general.

24           “(C) CONSISTENCY WITH OTHER  
 25       RECORDS.—All electronic records produced by

any voting system shall be consistent with the individual permanent paper records produced by such voting system. In the event of any inconsistencies or irregularities between any electronic records and the individual permanent paper records, the individual permanent paper records shall be the true and correct record of the votes cast.

“(D) USE AS OFFICIAL RECORDS.—The individual permanent paper records shall be used as the official records for purposes of any recount or audit conducted with respect to any election for Federal office in which the voting system is used.

“(4) ACCESSIBILITY FOR INDIVIDUALS WITH DISABILITIES.—The voting system shall—

“(A) meet the requirement of subsection (a)(3)(A) through the use of at least one voting system that is fully accessible for individuals with disabilities at each polling place; and

“(B) meet the requirements of subsection (a)(3)(A) and paragraph (2)(A) by using a system that—

“(i) allows the voter to privately and independently verify the content of the per-

manent paper ballot through the conversion of the human readable content of the vote selections into accessible form;

“(ii) ensures that the entire process of ballot verification and vote casting is equipped for individuals with disabilities; and

“(iii) does not preclude the supplementary use of Braille or tactile ballots.”.

**SEC. 3. AWARD PROGRAM FOR DEVELOPMENT OF ACCESSIBLE VOTING SYSTEMS.**

(a) DEFINITIONS.—In this section:

(1) INSTITUTE.—The term “Institute” means the National Institute of Standards and Technology.

(2) DIRECTOR.—The term “Director” means the Director of the Institute.

(3) VOTING SYSTEM.—The term “voting system” has the meaning given such term by section 301(b) of the Help America Vote Act of 2002 (42 U.S.C. 15481(b)).

(b) ESTABLISHMENT OF PROGRAM.—

(1) IN GENERAL.—The Director shall establish a program to competitively award cash prizes to eligible persons that advance the research, development, demonstration, and application of voting sys-

1       tems which are specifically designed to enhance ac-  
2       cessibility and provide independence for persons with  
3       disabilities during the voting process.

4               (2) ADVERTISING AND SOLICITATION OF COM-  
5       PETITORS.—

6               (A) ADVERTISING.—The Director shall  
7       widely advertise prize competitions to encourage  
8       broad participation, including participation by  
9       individuals, universities, and large and small  
10      businesses.

11              (B) ANNOUNCEMENT THROUGH FEDERAL  
12      REGISTER NOTICE.—The Director shall an-  
13      nounce each prize competition by publishing a  
14      notice in the Federal Register. This notice shall  
15      include the subject of the competition, the dura-  
16      tion of the competition, the eligibility require-  
17      ments for participation in the competition, the  
18      process for participants to register for the com-  
19      petition, the amount of the prize, and the cri-  
20      teria for awarding the prize.

21              (3) ADMINISTRATION OF COMPETITIONS.—The  
22      Director shall enter into an agreement with a pri-  
23      vate, nonprofit entity for the administration of the  
24      prize competitions.

25              (c) PRIZE COMPETITIONS.—

(1) IN GENERAL.—The program established under paragraph (1) shall consist of competitions for the development of technology designed for persons with the following classifications of disabilities:

(A) Hearing.

(B) Visual.

(C) Manual, tactile, and mobility.

(D) A combination of the disabilities described in subparagraphs (A), (B), and (C).

(2) CASH PRIZES.—

(A) IN GENERAL.—Prizes shall be awarded by the judges appointed under paragraph (4) based on the criteria under paragraph (3).

(B) AUTHORITY TO NOT AWARD PRIZE.—  
If the judges determine that no registered participants meets the objective performance criteria established pursuant to paragraph (3), no prize shall be awarded.

(C) LIMITATION ON AMOUNT AND NUMBER OF PRIZES.—No more than 2 prizes may be awarded for any competition and the amount of any prize shall not exceed \$1,000,000.

(3) CRITERIA.—

(A) IN GENERAL.—The Director shall develop criteria for awarding prizes under this



1 section such that prizes are based on the  
2 functionality and usability of a prototype acces-  
3 sible voting machine.

4 (B) REQUIREMENTS.—The criteria devel-  
5 oped under subparagraph (A) shall—

6 (i) take into account the challenges  
7 voters with disabilities face during the vot-  
8 ing process, including—

9 (I) the need of voters with man-  
10 ual disabilities to be able to use pros-  
11 thetics and personal assistive devices  
12 during the voting process without  
13 electromagnetic interference;

14 (II) the challenges facing voters  
15 with visual impairments and the best  
16 means to accommodate those voters,  
17 including, the need for voters to  
18 manually adjust font size (to account  
19 for persons with poor vision and tun-  
20 nel vision), color content, and contrast  
21 for electronic voting machines;

22 (III) the need of voters to use  
23 various voter system interfaces such  
24 as synchronized audio output that al-  
25 lows the voter to adjust the rate of

1 speech, the audiofrequency, and vol-  
 2 ume of the audio interface and which  
 3 provides that such setting shall reset  
 4 to a standard default for each voter;

5 (IV) the need of voters to simul-  
 6 taneously use a tactile interface that  
 7 permits the voter to rewind, repeat,  
 8 pause, and skip any audio cues, pres-  
 9 entations, and ballot measures;

10 (V) the need of voters who rely  
 11 on mobility aids, such as wheelchairs,  
 12 to adjust the height of a voting sys-  
 13 tem and to be able to see any visual  
 14 cues or prompts from a seated posi-  
 15 tion; and

16 (VI) the need of voters with cog-  
 17 nitive disabilities including using vis-  
 18 ual and audio cues simultaneously;

19 (ii) require that any prototype acces-  
 20 sible voting machine entered into the prize  
 21 competition allows voters with disabilities  
 22 to independently verify the accuracy of the  
 23 ballot cast on the voting system; and

24 (iii) be designed to—

1 (I) stimulate innovation in the  
2 development and design of accessible  
3 voting systems in a way that Federal  
4 procurement standards cannot;

5 (II) help overcome traditional ob-  
6 stacles in the design of accessible vot-  
7 ing systems;

8 (III) educate, inspire, and moti-  
9 vate the public to participate in the  
10 process of developing and designing  
11 accessible voting systems; and

12 (IV) enhance the accessibility  
13 and independence of the voting proc-  
14 ess.

15 (C) CONSULTATION WITH OTHER ENTI-  
16 TIES.—In establishing the criteria under sub-  
17 paragraph (A), the Director shall consult—

18 (i) with various disability rights  
19 groups with special knowledge concerning  
20 the challenges facing persons with disabil-  
21 ities in each of the classifications in sub-  
22 paragraphs (A), (B), and (C) of paragraph  
23 (1);

24 (ii) with other Federal agencies, in-  
25 cluding—

1 (I) the Election Assistance Com-  
 2 mission; and

3 (II) the National Science and  
 4 Technology Council; and

5 (iii) with private organizations, includ-  
 6 ing professional societies and industry as-  
 7 sociations.

8 (4) JUDGES.—

9 (A) IN GENERAL.—For each prize competi-  
 10 tion the Director shall appoint a panel of quali-  
 11 fied judges. Such panel shall include individuals  
 12 from outside the Institute and from the private  
 13 sector.

14 (B) DISQUALIFICATION.—A judge may  
 15 not—

16 (i) have personal or financial interests  
 17 in, or be an employee, officer, director, or  
 18 agent of, any entity that is participating in  
 19 the prize competition; or

20 (ii) have a familial or financial rela-  
 21 tionship with an individual who is partici-  
 22 pating in the prize competition.

23 (d) ELIGIBILITY.—An person is eligible to win a prize  
 24 under this section if—

1           (1)(A) in the case of a corporation, such person  
2           is incorporated and maintains a primary place of  
3           business the United States; and

4           (B) in the case of an individual or partnership,  
5           such individual, or each such individual in the part-  
6           nership, is a citizen of the United States or an alien  
7           lawfully admitted for permanent residence in the  
8           United States;

9           (2) such person is not an employee or entity of  
10          the United States or an laboratory accredited under  
11          section 231 of the Help America Vote Act of 2002  
12          (42 U.S.C. 15371); and

13          (3) such person registers for the competition by  
14          submitting an application containing such informa-  
15          tion as the Director may require.

16          (e) TRADE SECRETS.—The Director shall, to the ex-  
17          tent possible, protect any trade secrets or proprietary in-  
18          formation related to any submission for a competition  
19          under this section.

20          (f) TERMINATION.—No prizes shall be awarded under  
21          this section for competitions announced after September  
22          30, 2010.

23          (g) AUTHORIZATION OF APPROPRIATIONS.—

24                 (1) IN GENERAL.—

1           (A) AWARDS.—There are authorized to be  
2           appropriated to the Director \$2,000,000 for  
3           each of the fiscal years 2008, 2009, and 2010  
4           for the purpose of awarding prizes in competi-  
5           tions pursuant to this section.

6           (B) ADMINISTRATION.—In addition to the  
7           amounts authorized in subparagraph (A), there  
8           are authorized to be appropriated to the Direc-  
9           tor \$1,000,000 for each of fiscal years 2008,  
10          2009, and 2010 for the administrative costs of  
11          carrying out this section.

12          (2) CARRYOVER OF FUNDS.—Funds appro-  
13          priated for prize awards under this section shall re-  
14          main available until expended, and may be trans-  
15          ferred, reprogrammed, or expended for other pur-  
16          poses only after the expiration of 10 fiscal years  
17          after the fiscal year for which the funds were origi-  
18          nally appropriated.

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