

115TH CONGRESS  
2D SESSION

# S. 3049

To amend the Help America Vote Act of 2002 to require paper ballots and risk-limiting audits in all Federal elections, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

JUNE 12, 2018

Mr. WYDEN (for himself, Mrs. GILLIBRAND, Ms. WARREN, Mrs. MURRAY, Mr. MARKEY, and Mr. MERKLEY) 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 paper ballots and risk-limiting audits in all Federal elections, 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 “Protecting American  
5 Votes and Elections Act of 2018”.

6 **SEC. 2. FINDINGS.**

7 Congress makes the following findings:

8 (1) Access to the ballot, free and fair elections,  
9 and a trustworthy election process are at the core of

1 American Democracy. Just as the Founding Fathers  
2 signed their names to paper supporting their views  
3 for a government by and for the people, access to  
4 the paper ballot is the best way to ensure elections  
5 stay by and for the American people. Using paper  
6 provides an easily auditable, tamper proof, and sim-  
7 ple way for citizens to access their ballot. It is for  
8 these reasons and more that using paper ballots to  
9 ensure resilient and fair elections should be the pri-  
10 ority of this Nation.

11 (2) Risk-limiting audits will help to protect our  
12 elections from cyberattacks, by ensuring that if the  
13 electoral outcome is incorrect, for instance because  
14 someone tampered with the electronic counts or re-  
15 porting, the audit has a large, known probability of  
16 correcting the outcome by requiring a full hand  
17 count. Paper ballots are vital to the audit process  
18 since, other than through manual inspection of a  
19 sample of paper ballots, there is currently no reliable  
20 way to determine whether an election was hacked or  
21 the outcome was miscalculated.

22 (3) Risk-limiting audits are a cost effective way  
23 of auditing election results. They generally require  
24 inspecting only a small percentage of the ballots cast  
25 in an election, and proceed to a full hand count only

1 when sampling does not provide strong evidence that  
 2 the reported outcome is correct. This will ensure  
 3 that Americans have confidence in their election re-  
 4 sults, without the cost of a full recount of every bal-  
 5 lot in the country.

6 **SEC. 3. PAPER BALLOT AND MANUAL COUNTING REQUIRE-**  
 7 **MENTS.**

8 (a) IN GENERAL.—Section 301(a)(2) of the Help  
 9 America Vote Act of 2002 (52 U.S.C. 21081(a)(2)) is  
 10 amended to read as follows:

11 “(2) PAPER BALLOT REQUIREMENT.—

12 “(A) VOTER-VERIFIED PAPER BALLOTS.—

13 “(i) PAPER BALLOT REQUIREMENT.—

14 (I) The voting system shall require the use  
 15 of an individual, durable, voter-verified,  
 16 paper ballot of the voter’s vote that shall  
 17 be marked and made available for inspec-  
 18 tion and verification by the voter before  
 19 the voter’s vote is cast and counted, and  
 20 which shall be counted by hand or read by  
 21 an optical character recognition device or  
 22 other counting device. For purposes of this  
 23 subclause, the term ‘individual, durable,  
 24 voter-verified, paper ballot’ means a paper  
 25 ballot marked by the voter by hand or a

1 paper ballot marked through the use of a  
2 nontabulating ballot marking device or sys-  
3 tem, so long as the voter shall have the op-  
4 tion to mark his or her ballot by hand.

5 “(II) The voting system shall provide  
6 the voter with an opportunity to correct  
7 any error on the paper ballot before the  
8 permanent voter-verified paper ballot is  
9 preserved in accordance with clause (ii).

10 “(III) The voting system shall not  
11 preserve the voter-verified paper ballots in  
12 any manner that makes it possible, at any  
13 time after the ballot has been cast, to asso-  
14 ciate a voter with the record of the voter’s  
15 vote without the voter’s consent.

16 “(ii) PRESERVATION AS OFFICIAL  
17 RECORD.—The individual, durable, voter-  
18 verified, paper ballot used in accordance  
19 with clause (i) shall constitute the official  
20 ballot and shall be preserved and used as  
21 the official ballot for purposes of any re-  
22 count or audit conducted with respect to  
23 any election for Federal office in which the  
24 voting system is used.

1           “(iii) MANUAL COUNTING REQUIRE-  
2           MENTS FOR RECOUNTS AND AUDITS.—(I)  
3           Each paper ballot used pursuant to clause  
4           (i) shall be suitable for a manual audit,  
5           and shall be counted by hand in any re-  
6           count or audit conducted with respect to  
7           any election for Federal office.

8           “(II) In the event of any inconsist-  
9           encies or irregularities between any elec-  
10          tronic vote tallies and the vote tallies de-  
11          termined by counting by hand the indi-  
12          vidual, durable, voter-verified, paper ballots  
13          used pursuant to clause (i), and subject to  
14          subparagraph (B), the individual, durable,  
15          voter-verified, paper ballots shall be the  
16          true and correct record of the votes cast.

17          “(iv) APPLICATION TO ALL BAL-  
18          LOTS.—The requirements of this subpara-  
19          graph shall apply to all ballots cast in elec-  
20          tions for Federal office, including ballots  
21          cast by absent uniformed services voters  
22          and overseas voters under the Uniformed  
23          and Overseas Citizens Absentee Voting Act  
24          and other absentee voters.

1           “(B) SPECIAL RULE FOR TREATMENT OF  
2           DISPUTES WHEN PAPER BALLOTS HAVE BEEN  
3           SHOWN TO BE COMPROMISED.—

4                   “(i) IN GENERAL.—In the event  
5           that—

6                           “(I) there is any inconsistency  
7                           between any electronic vote tallies and  
8                           the vote tallies determined by count-  
9                           ing by hand the individual, durable,  
10                          voter-verified, paper ballots used pur-  
11                          suant to subparagraph (A)(i) with re-  
12                          spect to any election for Federal of-  
13                          fice; and

14                           “(II) it is demonstrated by clear  
15                           and convincing evidence (as deter-  
16                           mined in accordance with the applica-  
17                           ble standards in the jurisdiction in-  
18                           volved) in any recount, audit, or con-  
19                           test of the result of the election that  
20                           the paper ballots have been com-  
21                           promised (by damage or mischief or  
22                           otherwise) and that a sufficient num-  
23                           ber of the ballots have been so com-  
24                           promised that the result of the elec-  
25                           tion could be changed,

the determination of the appropriate remedy with respect to the election shall be made in accordance with applicable State law, except that the electronic tally shall not be used as the exclusive basis for determining the official certified result.

“(ii) RULE FOR CONSIDERATION OF BALLOTS ASSOCIATED WITH EACH VOTING MACHINE.—For purposes of clause (i), only the paper ballots deemed compromised, if any, shall be considered in the calculation of whether or not the result of the election could be changed due to the compromised paper ballots.”.

(b) CONFORMING AMENDMENT CLARIFYING APPLICABILITY OF ALTERNATIVE LANGUAGE ACCESSIBILITY.—Section 301(a)(4) of such Act (52 U.S.C. 21081(a)(4)) is amended by inserting “(including the paper ballots required to be used under paragraph (2))” after “voting system”.

(c) OTHER CONFORMING AMENDMENTS.—Section 301(a)(1) of such Act (52 U.S.C. 21081(a)(1)) is amended—

1 (1) in subparagraph (A)(i), by striking “count-  
 2 ed” and inserting “counted, in accordance with  
 3 paragraphs (2) and (3)”;

4 (2) in subparagraph (A)(ii), by striking “count-  
 5 ed” and inserting “counted, in accordance with  
 6 paragraphs (2) and (3)”;

7 (3) in subparagraph (A)(iii), by striking “count-  
 8 ed” each place it appears and inserting “counted, in  
 9 accordance with paragraphs (2) and (3)”;

10 (4) in subparagraph (B)(ii), by striking “count-  
 11 ed” and inserting “counted, in accordance with  
 12 paragraphs (2) and (3)”.

13 (d) EFFECTIVE DATE.—Notwithstanding section  
 14 301(d) of the Help America Vote Act of 2002 (52 U.S.C.  
 15 21081(d)), each State and jurisdiction shall be required  
 16 to comply with the amendments made by this section for  
 17 the regularly scheduled election for Federal office in No-  
 18 vember 2020, and for each subsequent election for Federal  
 19 office.

20 **SEC. 4. ACCESSIBILITY AND BALLOT VERIFICATION FOR IN-**  
 21 **DIVIDUALS WITH DISABILITIES.**

22 (a) IN GENERAL.—Section 301(a)(3)(B) of the Help  
 23 America Vote Act of 2002 (52 U.S.C. 21081(a)(3)(B)) is  
 24 amended to read as follows:



1 “(B)(i) satisfy the requirement of subpara-  
2 graph (A) through the use of at least 1 voting  
3 system equipped for individuals with disabili-  
4 ties, including nonvisual and enhanced visual  
5 accessibility for the blind and visually impaired,  
6 and nonmanual and enhanced manual accessi-  
7 bility for the mobility and dexterity impaired, at  
8 each polling place; and

9 “(ii) meet the requirements of subpara-  
10 graph (A) and paragraph (2)(A) by using a sys-  
11 tem that—

12 “(I) allows the voter to privately and  
13 independently verify the permanent paper  
14 ballot through the presentation, in acces-  
15 sible form, of the printed or marked vote  
16 selections from the same printed or  
17 marked information that would be used for  
18 any vote counting or auditing; and

19 “(II) allows the voter to privately and  
20 independently verify and cast the perma-  
21 nent paper ballot without requiring the  
22 voter to manually handle the paper ballot;  
23 and”.

1 (b) SPECIFIC REQUIREMENT OF STUDY, TESTING,  
2 AND DEVELOPMENT OF ACCESSIBLE PAPER BALLOT  
3 VERIFICATION MECHANISMS.—

4 (1) STUDY AND REPORTING.—Subtitle C of  
5 title II of such Act (52 U.S.C. 21081 et seq.) is  
6 amended by inserting after section 246 the following  
7 new section:

8 **“SEC. 246A. STUDY AND REPORT ON ACCESSIBLE PAPER**  
9 **BALLOT VERIFICATION MECHANISMS.**

10 “(a) STUDY AND REPORT.—The Director of the Na-  
11 tional Science Foundation shall make grants to not fewer  
12 than 3 eligible entities to study, test, and develop acces-  
13 sible paper ballot voting, verification, and casting mecha-  
14 nisms and devices and best practices to enhance the acces-  
15 sibility of paper ballot voting and verification mechanisms  
16 for individuals with disabilities, for voters whose primary  
17 language is not English, and for voters with difficulties  
18 in literacy, including best practices for the mechanisms  
19 themselves and the processes through which the mecha-  
20 nisms are used.

21 “(b) ELIGIBILITY.—An entity is eligible to receive a  
22 grant under this part if it submits to the Director (at such  
23 time and in such form as the Director may require) an  
24 application containing—

1           “(1) certifications that the entity shall specifi-  
2           cally investigate enhanced methods or devices, in-  
3           cluding non-electronic devices, that will assist such  
4           individuals and voters in marking voter-verified  
5           paper ballots and presenting or transmitting the in-  
6           formation printed or marked on such ballots back to  
7           such individuals and voters, and casting such ballots;

8           “(2) a certification that the entity shall com-  
9           plete the activities carried out with the grant not  
10          later than December 31, 2020; and

11          “(3) such other information and certifications  
12          as the Director may require.

13          “(c) AVAILABILITY OF TECHNOLOGY.—Any tech-  
14          nology developed with the grants made under this section  
15          shall be treated as non-proprietary and shall be made  
16          available to the public, including to manufacturers of vot-  
17          ing systems.

18          “(d) COORDINATION WITH GRANTS FOR TECH-  
19          NOLOGY IMPROVEMENTS.—The Director shall carry out  
20          this section so that the activities carried out with the  
21          grants made under subsection (a) are coordinated with the  
22          research conducted under the grant program carried out  
23          by the Commission under section 271, to the extent that  
24          the Director and Commission determine necessary to pro-  
25          vide for the advancement of accessible voting technology.

1       “(e) AUTHORIZATION OF APPROPRIATIONS.—There  
 2 is authorized to be appropriated to carry out subsection  
 3 (a) \$10,000,000, to remain available until expended.”.

4           (2) CLERICAL AMENDMENT.—The table of con-  
 5 tents of such Act is amended by inserting after the  
 6 item relating to section 246 the following new item:

“Sec. 246A. Study and report on accessible paper ballot verification mecha-  
 nisms.”.

7 **SEC. 5. RISK-LIMITING AUDITS.**

8       (a) IN GENERAL.—Title III of the Help America  
 9 Vote Act of 2002 (52 U.S.C. 21081 et seq.) is amended  
 10 by inserting after section 303 the following new section:

11 **“SEC. 303A. RISK-LIMITING AUDITS.**

12       “(a) DEFINITIONS.—In this section:

13           “(1) RISK-LIMITING AUDIT.—

14               “(A) IN GENERAL.—The term ‘risk-lim-  
 15 iting audit’ means a post-election process such  
 16 that, if the reported outcome of the contest is  
 17 incorrect, there is at least a 95 percent chance  
 18 that the audit will replace the incorrect outcome  
 19 with the correct outcome as determined by a  
 20 full, hand-to-eye tabulation of all votes validly  
 21 cast in that election contest that ascertains  
 22 voter intent manually and directly from voter-  
 23 verifiable paper records.

1           “(B) REPORTED OUTCOME.—The term ‘re-  
 2           ported outcome’ means the outcome of an elec-  
 3           tion contest which is determined according to  
 4           the canvass and which will become the official,  
 5           certified outcome unless it is revised by an  
 6           audit, recount, or other legal process.

7           “(C) INCORRECT OUTCOME.—The term  
 8           ‘incorrect outcome’ means an outcome that dif-  
 9           fers from the outcome that would be determined  
 10          by a full tabulation of all votes validly cast in  
 11          that election contest, determining voter intent  
 12          manually, directly from voter-verifiable paper  
 13          records.

14          “(D) OUTCOME.—The term ‘outcome’  
 15          means the winner or set of winners of an elec-  
 16          tion contest, which might be candidates or posi-  
 17          tions.

18          “(2) BALLOT MANIFEST.—The term ‘ballot  
 19          manifest’ means a record maintained by each county  
 20          that—

21                 “(A) is created without reliance on any  
 22                 part of the voting system used to tabulate  
 23                 votes;

24                 “(B) functions as a sampling frame for  
 25                 conducting a risk-limiting audit; and

1           “(C) contains the following information  
2           about ballots cast and counted:

3                   “(i) The total number of ballots cast  
4                   and counted in the election (including  
5                   undervotes, overvotes, and other invalid  
6                   votes).

7                   “(ii) The total number of ballots cast  
8                   in each contest in the election (including  
9                   undervotes, overvotes, and other invalid  
10                  votes).

11                  “(iii) A precise description of the  
12                  manner in which the ballots are physically  
13                  stored, including the total number of phys-  
14                  ical groups of ballots, the numbering sys-  
15                  tem for each group, a unique label for each  
16                  group, and the number of ballots in each  
17                  such group.

18           “(b) REQUIREMENT.—

19                   “(1) IN GENERAL.—

20                   “(A) AUDITS.—Each State and jurisdic-  
21                   tion shall administer risk-limiting audits of the  
22                   results of all elections for Federal office held in  
23                   the State in accordance with the requirements  
24                   of paragraph (2).

1           “(B) FULL MANUAL TALLY.—If a risk-lim-  
 2           iting audit conducted under subparagraph (A)  
 3           leads to a full manual tally of an election con-  
 4           test, the State or jurisdiction shall use the re-  
 5           sults of the full manual tally as the official re-  
 6           sults of the election contest.

7           “(2) AUDIT REQUIREMENTS.—

8           “(A) RULES AND PROCEDURES.—

9           “(i) IN GENERAL.—Risk-limiting au-  
 10          dits shall be conducted in accordance with  
 11          the rules and procedures established by the  
 12          chief State election official of the State not  
 13          later than 1 year after the date of the en-  
 14          actment of this section.

15          “(ii) MATTERS INCLUDED.—The rules  
 16          and procedures established under clause (i)  
 17          may include the following:

18               “(I) Rules for ensuring the secu-  
 19               rity of ballots and documenting that  
 20               prescribed procedures were followed.

21               “(II) Rules and procedures for  
 22               ensuring the accuracy of ballot mani-  
 23               fests produced by jurisdictions.

24               “(III) Rules and procedures for  
 25               governing the format of ballot mani-

1           ests, cast vote records, and other  
2           data involved in risk-limiting audits.

3           “(IV) Methods to ensure that  
4           any cast vote records used in a risk-  
5           limiting audit are those used by the  
6           voting system to tally the election re-  
7           sults sent to the Secretary of State  
8           and made public.

9           “(V) Procedures for the random  
10          selection of ballots to be inspected  
11          manually during each audit.

12          “(VI) Rules for the calculations  
13          and other methods to be used in the  
14          audit and to determine whether and  
15          when the audit of each contest is com-  
16          plete.

17          “(VII) Procedures and require-  
18          ments for testing any software used to  
19          conduct risk-limiting audits.

20          “(B) TIMING.—The risk-limiting audit  
21          shall be completed not later than the date that  
22          the result of the election is certified by the  
23          State.

24          “(C) PUBLIC REPORT.—After the comple-  
25          tion of the risk-limiting audit, the State shall



1           publish a report on the results of the audit, to-  
 2           gether with such information as necessary to  
 3           confirm that the audit was conducted properly.

4           “(c) EFFECTIVE DATE.—Each State and jurisdiction  
 5   shall be required to comply with the requirements of this  
 6   section for the regularly scheduled election for Federal of-  
 7   fice in November 2020, and for each subsequent election  
 8   for Federal office.”.

9           (b) CONFORMING AMENDMENTS RELATED TO EN-  
 10   FORCEMENT.—Section 401 of such Act (52 U.S.C. 21111)  
 11   is amended by striking “and 303” and inserting “303, and  
 12   303A”.

13          (c) CLERICAL AMENDMENT.—The table of contents  
 14   for such Act is amended by inserting after the item relat-  
 15   ing to section 303 the following new item:

“Sec. 303A. Risk-limiting audits.”.

