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.

IN THE SENATE OF THE UNITED STATES

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introduced the following bill; which was read twice and referred to the Committee on

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.

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

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) Short Title.—This Act may be cited as the “Protecting American Votes and Elections Act of 2019”.

(b) Table of Contents.—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.
Sec. 2. Paper ballot and hand tabulation requirements.
Sec. 3. Risk-limiting audits.
Sec. 5. Financial assistance to States.
Sec. 6. Cybersecurity requirements for and testing and certification of voting systems.
Sec. 7. Voting system cybersecurity requirements.
Sec. 8. Ballot cybersecurity, confidentiality, and access for individuals with disabilities.
Sec. 9. Application of Help America Vote Act to Northern Mariana Islands.
Sec. 10. Biennial reports on election security.

SEC. 2. PAPER BALLOT AND HAND TABULATION REQUIREMENTS.

(a) Voter-verifiable Paper Ballots.—Section 301(a)(2) of the Help America Vote Act of 2002 (52 U.S.C. 21081(a)(2)) is amended to read as follows:

“(2) Paper ballot requirement.—

“(A) Voter-verifiable paper ballots.—

“(i) Paper ballot requirement.—

“(I) In general.—The voting system shall require the use of an individual, durable, voter-verifiable, paper ballot of the voter’s vote that shall be marked and made available for physical inspection and verification by the voter before the voter’s vote is cast and tabulated. For purposes of this subclause, the term ‘individual, durable, voter-verifiable, paper ballot’ means a paper ballot marked by the voter by hand or a paper ballot printed or marked through the use of a
ballot marking device, so long as the voter shall have the option to mark his or her ballot by hand.

“(II) Requirements for ballot marking devices.—Except as required to meet the accessibility requirements under paragraph (3), in the case of a ballot marking device—

“(aa) the printed or marked paper ballot shall be presented to the voter for physical inspection and verification before the ballot is tabulated and preserved in accordance with clause (ii);

“(bb) the paper ballot shall be printed or marked in such a way that vote selections, including all vote selections scanned by voting systems to tabulate votes, can be inspected and verified by the voter without training or instruction or audited by election officials without the aid of any machine or other equipment; and
“(cc) the ballot marking device shall be designed and built in a manner in which it is mechanically impossible for the device to add or change the vote selections on a printed or marked ballot at any time after the ballot has been presented to the voter for inspection and verification under item (aa).

“(III) CONFIDENTIALITY.—The voting system shall not preserve or mark the individual, durable, voter-verifiable paper ballots in any manner that makes it possible, at any time after the ballot has been cast, to associate a voter with the ballot cast by the voter or with any other record of the voter’s vote selections.

“(ii) PRESERVATION AS OFFICIAL RECORD.—The individual, durable, voter-verifiable, paper ballot used in accordance with clause (i) shall constitute the official ballot and shall be preserved and used as the official ballot for purposes of ballot
tabulation and any recount or audit conducted with respect to any election for Federal office in which the voting system is used.

“(iii) HAND TABULATION REQUIREMENTS FOR RECOUNTS.—

“(I) IN GENERAL.—Each paper ballot used pursuant to clause (i) shall be tabulated by hand in any recount conducted with respect to any election for Federal office.

“(II) INCONSISTENCIES.—In the event of any inconsistencies or irregularities between any vote tallies determined through the use of an optical scanning device and vote tallies determined by tabulating by hand the individual, durable, voter-verifiable, paper ballots used pursuant to clause (i), and subject to subparagraph (B), the individual, durable, voter-verifiable, paper ballots shall be the true and correct record of the votes cast.

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

“(B) SPECIAL RULE FOR TREATMENT OF

DISPUTES WHEN PAPER BALLOTS HAVE BEEN

SHOWN TO BE COMPROMISED.—

“(i) IN GENERAL.—In the event

that—

“(I) there is any inconsistency

between any vote tallies determined

through the use of an optical scanning
device and vote tallies determined by

tabulating by hand the individual, du-

rable, voter-verifiable, paper ballots

used pursuant to subparagraph (A)(i)

with respect to any election for Fed-

eral office; and

“(II) it is demonstrated by clear

and convincing evidence (as deter-
mined in accordance with the applica-

ble standards in the jurisdiction in-

volved) in any recount, audit, or con-
test of the result of the election that
the paper ballots have been com-
promised (by damage or mischief or
otherwise) and that a sufficient num-
ber of the ballots have been so com-
promised that the result of the elec-
tion could be changed;
the determination of the appropriate rem-
edy 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 de-
termining 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 com-
promised, 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.
“(C) EFFECTIVE DATE.—Each State and
jurisdiction shall be required to comply with the
requirements of this paragraph for the first reg-
ularly scheduled election for Federal office held
more than 1 year after the date of the enact-
ment of the Protecting American Votes and
Elections Act of 2019, and for each subsequent
election for Federal office.”.

(b) **Conforming Amendments.**—

(1) **Individual with Disabilities.**—Section
301(a)(3)(B) of such Act (52 U.S.C.
21081(a)(3)(B)) is amended by striking “direct re-
cording electronic voting system or other”.

(2) **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 para-
graph (2))” after “voting system”.

(3) **Effective Date.**—Section 301(d) of such
Act (52 U.S.C. 21081(d)) is amended by striking
“Each State” and inserting “Except as otherwise
provided in this section, each State”.

**SEC. 3. Risk-Limiting Audits.**

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

“**SEC. 303A. Risk-Limiting Audits.**

“(a) Definitions.—In this section:
“(1) Risk-limiting audit.—The term ‘risk-limiting audit’ means, with respect to any election contest, a post-election process that—

“(A) has a probability of at least 95 percent of correcting the reported outcome if the reported outcome is not the correct outcome;

“(B) will not change the outcome if the reported outcome is the correct outcome; and

“(C) involves a manual adjudication of voter intent from some or all of the ballots validly cast in the election contest.

“(2) Reported outcome; correct outcome; outcome.—

“(A) Reported outcome.—The term ‘reported outcome’ means the outcome of an election contest which is determined according to the canvass and which will become the official, certified outcome unless it is revised by an audit, recount, or other legal process.

“(B) Correct outcome.—The term ‘correct outcome’ means the outcome that would be determined by a manual adjudication of voter intent for all votes validly cast in the election contest.
“(C) OUTCOME.—The term ‘outcome’ means the winner or set of winners of an election contest.

“(3) MANUAL ADJUDICATION OF VOTER INTENT.—The term ‘manual adjudication of voter intent’ means direct inspection and determination by humans, without assistance from electronic or mechanical tabulation devices, of the ballot choices marked by voters on each voter-verifiable paper record.

“(4) BALLOT MANIFEST.—The term ‘ballot manifest’ means a record maintained by each jurisdiction that—

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

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

“(C) accounts for all ballots validly cast regardless of how or whether they were tabulated and includes a precise description of the manner in which the ballots are physically stored, including the total number of physical groups of ballots, the numbering system for each group, a
unique label for each group, and the number of ballots in each such group.

“(b) REQUIREMENTS.—

“(1) IN GENERAL.—

“(A) AUDITS.—

“(i) IN GENERAL.—Each State and jurisdiction shall administer risk-limiting audits of the results of all election contests for Federal office held in the State in accordance with the requirements of paragraph (2).

“(ii) EXCEPTION.—Clause (i) shall not apply to any election contest for which the State or jurisdiction conducts a full recount through a manual adjudication of voter intent.

“(B) FULL MANUAL TABULATION.—If a risk-limiting audit conducted under subparagraph (A) corrects the reported outcome of an election contest, the State or jurisdiction shall use the results of the manual adjudication of voter intent conducted as part of the risk-limiting audit as the official results of the election contest.

“(2) AUDIT REQUIREMENTS.—
“(A) Rules and procedures.—

“(i) In general.—Not later than 1 year after the date of the enactment of this section, the chief State election official of the State shall establish rules and procedures for conducting risk-limiting audits.

“(ii) Matters included.—The rules and procedures established under clause (i) shall include the following:

“(I) Rules and procedures for ensuring the security of ballots and documenting that prescribed procedures were followed.

“(II) Rules and procedures for ensuring the accuracy of ballot manifests produced by jurisdictions.

“(III) Rules and procedures for governing the format of ballot manifests and other data involved in risk-limiting audits.

“(IV) Methods to ensure that any cast vote records used in a risk-limiting audit are those used by the voting system to tally the results of the election contest sent to the chief
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State election official of the State and
made public.

“(V) Rules and procedures for
the random selection of ballots to be
inspected manually during each audit.

“(VI) Rules and procedures for
the calculations and other methods to
be used in the audit and to determine
whether and when the audit of each
election contest is complete.

“(VII) Rules and procedures for
testing any software used to conduct
risk-limiting audits.

“(B) PUBLIC REPORT.—

“(i) IN GENERAL.—After the comple-
tion of the risk-limiting audit and at least
5 days before the election contest is cer-
tified, the State shall publish a report on
the results of the audit, together with such
information as necessary to confirm that
the audit was conducted properly.

“(ii) FORMAT OF DATA.—All data
published with the report under clause (i)
shall be published in machine-readable,
open data formats.
“(iii) Protection of anonymity of votes.—Information and data published by the State under this subparagraph shall not compromise the anonymity of votes.

“(c) Effective Date.—Each State and jurisdiction shall be required to comply with the requirements of this section for the first regularly scheduled election for Federal office held more than 1 year after the date of the enactment of the Protecting American Votes and Elections Act of 2019, and for each subsequent election for Federal office.”.

(b) Conforming Amendments Related to Enforcement.—Section 401 of such Act (52 U.S.C. 21111) is amended by striking “and 303” and inserting “303, and 303A”.

(c) Clerical Amendment.—The table of contents for such Act is amended by inserting after the item relating to section 303 the following new item:

“Sec. 303A. Risk-limiting audits.”.


(a) In General.—Section 401 of the Help America Vote Act of 2002 (52 U.S.C. 21111), as amended by section 3(b), is amended—
(1) by striking “The Attorney General” and inserting “(a) IN GENERAL.—The Attorney General”; and

(2) by adding at the end the following new subsections:

“(b) AVAILABILITY OF PRIVATE RIGHT OF ACTION.—Any person who is aggrieved by a violation of section 301 or 303A which has occurred, is occurring, or is about to occur after the date that is 6 years after the date of the enactment of the Protecting American Votes and Elections Act of 2019 may file an action under section 1979 of the Revised Statutes of the United States (42 U.S.C. 1983) to enforce the requirements under such section.

“(c) NO EFFECT ON STATE PROCEDURES.—Nothing in this section may be construed to affect the availability of the State-based administrative complaint procedures required under section 402 to any person filing a complaint under this subsection.”.

(b) USE OF PROTECTION AND ADVOCACY SYSTEM GRANTS FOR DISABILITY ACCESS ENFORCEMENT.—Section 292(a) of the Help America Vote Act of 2002 (52 U.S.C. 21062(a)) is amended by striking “; except that” and all that follows and inserting a period.
SEC. 5. FINANCIAL ASSISTANCE TO STATES.

(a) In General.—
(1) ADDITIONAL GRANT PROGRAMS.—Subtitle D of title II of the Help America Vote Act of 2002 (52 U.S.C. 21001 et seq.) is amended by adding at the end the following new part:

“PART 7—PAYMENTS TO STATES FOR REPLACEMENT VOTING DEVICES

“SEC. 297. REPLACEMENT OF PAPERLESS VOTING SYSTEMS.

“(a) In General.—Not later than 45 days after the date of the enactment of this part, the Commission shall establish a program under which the Commission shall make a payment under this part to each eligible State.

“(b) Use of Funds.—

“(1) In General.—A State shall use the funds provided under a payment under this section to replace nonqualified voting systems with a voting system that—

“(A) uses optical scanning devices that meet the requirements of section 301(a)(7) to read and tabulate votes;

“(B) is capable of facilitating the requirements for risk-limiting audits under section 303A; and
“(C) meets such minimum security standards as established by the Director of Cybersecurity and Infrastructure Security under section 2215 of the Homeland Security Act.

“(2) LIMITATION.—A State may not use the funds provided under a payment made under this section to acquire any electronic device that a voter can use to mark a paper ballot.

“(e) DEADLINE.—A State receiving a payment under the program under this section shall ensure that all nonqualified voting systems in the eligible State have been replaced before the first regularly scheduled general election for Federal office held more than 1 year after the date of the enactment of the Protecting American Votes and Elections Act of 2019.

“(d) ELIGIBLE STATE.—

“(1) IN GENERAL.—For purposes of this section, the term ‘eligible State’ means any State that—

“(A) has precincts within the State that used a nonqualified voting system to record votes in the regularly scheduled general election for Federal office held in November 2018; and

“(B) submits to the Commission a notice not later than the date that is 6 months after
the date of the enactment of this part (in such form as the Commission may require) that con-
tains—

“(i) an estimate of the cost of replac-
ing nonqualified voting systems within the State with voting systems described in sub-
section (b);

“(ii) certifications that the State will use the payment to replace such non-
qualified voting systems by the deadline described in subsection (c);

“(iii) certifications that the State will continue to comply with the laws described in section 906;

“(iv) certifications that the replace-
ment voting systems will meet the require-
ments of subsection (b); and

“(v) such other information and cer-
tifications as the Commission may require which are necessary for the administration of the program.

“(2) Compliance of states that require changes to state law.—In the case of a State that requires State legislation to carry out an activ-
ity covered by any certification submitted under this
subsection, the State shall be permitted to make the certification notwithstanding that the legislation has not been enacted at the time the certification is submitted and such State shall submit an additional certification once such legislation is enacted.

"(e) AMOUNT OF PAYMENT.—

“(1) IN GENERAL.—The amount of funds provided to a State under a payment under this section shall be equal to the product obtained by multiplying—

“(A) the lesser of—

“(i) total amount appropriated for payments pursuant to the authorization under subsection (g); or

“(ii) the total amount of costs estimated by all eligible States on the notices submitted under subsection (d)(1)(B)(i); by

“(B) the State allocation percentage for the eligible State (as determined under paragraph (2)).

“(2) STATE ALLOCATION PERCENTAGE.—The State allocation percentage for any eligible State is the amount (expressed as a percentage) equal to the quotient obtained by dividing—
“(A) the total voting age population of all eligible States (as reported in the most recent decennial census); by 

“(B) the voting age population of the eligible State (as reported in the most recent decennial census).

“(f) NONQUALIFIED VOTING SYSTEM.—For purposes of this section, the term ‘nonqualified voting system’ means any voting system that does not use individual, durable, voter-verifiable paper ballots meeting the requirements of section 301(a)(2) (other than for purposes of meeting the accessibility requirements of section 301(a)(3)).

“(g) AUTHORIZATION OF APPROPRIATIONS.—

“(1) IN GENERAL.—There is authorized to be appropriated to the Commission to carry out this section $500,000,000 for fiscal year 2019.

“(2) AUTHORIZATION OF APPROPRIATIONS FOR COMMISSION.—In addition to the amounts authorized under paragraph (1), there are authorized to be appropriated to the Commission such sums as may be necessary to administer the programs under this part.
SEC. 297A. ACQUISITION OF ACCESSIBLE BALLOT MARKING DEVICES FOR VOTERS WITH DISABILITIES.

(a) In general.—The Commission shall pay to States the amount of eligible accessible ballot marking device costs.

(b) Eligible Accessible Ballot Marking Device Costs.—

(1) In general.—For purposes of this section, the term ‘eligible accessible ballot marking device costs’ means costs paid or incurred by a State or local government to acquire an accessible ballot marking device.

(2) Accessible Ballot Marking Device Defined.—For purposes of this section, the term ‘accessible ballot marking device’ means a ballot marking device that is used by the State or local government exclusively to comply with the requirements of section 301(a)(3) (as applied to elections for Federal office occurring after the date that is 6 years after the date of the enactment of the Protecting American Votes and Elections Act of 2019).

(e) Payments.—

(1) Limitations.—

(A) In general.—Except as provided in subparagraph (B), the Commission shall not
pay eligible accessible ballot marking device
costs with respect to more than 1 accessible bal-
lot marking device in any precinct.

“(B) EXCEPTION.—The Commission may
pay for more than 1 accessible ballot marking
device in any precinct if the State demonstrates
the need for more accessible ballot marking de-
vices in such precinct due to the number of vot-
ers with disabilities voting in such precinct com-
pared to other precincts.

“(2) RULES AND PROCEDURES.—The Commis-
ion shall establish rules and procedures for submis-
sion of eligible accessible ballot marking device costs
for payments under this section.

“(3) INSUFFICIENT FUNDS.—In any case in
which the amounts appropriated under subsection
(d) are insufficient to pay all eligible accessible bal-
lot marking device costs submitted by States with
respect to any Federal election, the amount of such
costs paid under subsection (a) to any State shall be
equal to the amount that bears the same ratio to the
amount which would be paid to such State (deter-
mined without regard to this paragraph) as—

“(A) the number of individuals who voted
in such Federal election in such State; bears to
“(B) the total number of individuals who voted in such Federal election in all States submitting a claim for eligible accessible ballot marking device costs.

“(d) Authorization of Appropriations.—

“(1) In general.—There is hereby authorized to be appropriated to the Commission to carry out this section $250,000,000 for fiscal years 2019 through 2025.

“(2) Availability.—Any amounts appropriated pursuant to paragraph (1) shall remain available without fiscal year limitation until expended.

“PART 8—FUNDING FOR BALLOT DESIGN AND PRINTING

“SEC. 298. PAYMENTS FOR BALLOT DESIGN AND PRINTING.

“(a) In general.—The Commission shall pay to States the amount of eligible ballot design and printing costs.

“(b) Eligible Design and Printing Costs.—For purposes of this section, the term ‘eligible ballot design and printing costs’ means, with respect to any State, costs paid or incurred by the State or any local government within the State for the design and printing of any ballot that—
“(1) is used in an election for Federal office occurring after the date of the enactment of this part; and

“(2) meets such minimum standards for usability and accessibility as established by the Commission, in consultation with the Director of the National Institute of Standards and Technology, for purposes of this section.

“(e) SPECIAL RULES.—

“(1) RULES AND PROCEDURES.—The Commission shall establish rules and procedures for submission of eligible ballot design and printing costs for payments under this section.

“(2) INSUFFICIENT FUNDS.—In any case in which the amounts appropriated under subsection (d) are insufficient to pay all eligible ballot design and printing costs submitted by States with respect to any Federal election, the amount of such costs paid under subsection (a) to any State shall be equal to the amount that bears the same ratio to the amount which would be paid to such State (determined without regard to this paragraph) as—

“(A) the number of individuals who voted in such Federal election in such State; bears to
“(B) the total number of individuals who voted in such Federal election in all States submitting a claim for eligible ballot design and printing costs.

“(d) Authorization of Appropriations.—

“(1) In general.—There is hereby authorized to be appropriated to the Commission such sums as are necessary to carry out this part.

“(2) Availability.—Any amounts appropriated pursuant to paragraph (1) shall remain available without fiscal year limitation until expended.

“PART 9—FUNDING FOR POST-ELECTION RISK-LIMITING AUDITS

“SEC. 299. PAYMENTS FOR POST-ELECTION RISK-LIMITING AUDITS.

“(a) In general.—The Commission shall pay to States the amount of eligible post-election audit costs.

“(b) Eligible Post-election Audit Costs.—For purposes of this section, the term ‘eligible post-election audit costs’ means, with respect to any State, costs paid or incurred by the State or local government within the State for—

“(1) the conduct of any risk-limiting audit (as defined in section 303A) with respect to an election
for Federal office occurring after the date of the enactment of this part; and

“(2) any equipment, software, or services necessary for the conduct of any such risk-limiting audit.

“(c) Special Rules.—

“(1) Rules and Procedures.—The Commission shall establish rules and procedures for submission of eligible post-election audit costs for payments under this section.

“(2) Insufficient Funds.—In any case in which the amounts appropriated under subsection (d) are insufficient to pay all eligible post-election audit costs submitted by States with respect to any Federal election, the amount of such costs paid under subsection (a) to any State shall be equal to the amount that bears the same ratio to the amount which would be paid to such State (determined without regard to this paragraph) as—

“(A) the number of individuals who voted in such Federal election in such State; bears to

“(B) the total number of individuals who voted in such Federal election in all States submitting a claim for eligible post-election audit costs.
“(d) Authorization of Appropriations.—

“(1) In general.—There is hereby authorized to be appropriated to the Commission such sums as are necessary to carry out this part.

“(2) Availability.—Any amounts appropriated pursuant to paragraph (1) shall remain available without fiscal year limitation until expended.”.

(2) Clerical Amendment.—The table of contents for the Help America Vote Act of 2002 (52 U.S.C. 30101 et seq.) is amended by inserting after the item related to section 296 the following:

“PART 7—Payments to States for Replacement Voting Devices

“Sec. 297. Replacement of paperless voting systems.

“Sec. 297A. Acquisition of accessible ballot marking devices for voters with disabilities.

“PART 8—Funding for Ballot Design and Printing

“Sec. 298. Payments for ballot design and printing.

“PART 9—Funding for Post-Election Risk-Limiting Audits

“Sec. 299. Payments for post-election risk limiting audits.”.

(b) Modifications to Protection and Advocacy System Grants.—Section 291(b) of the Help America Vote Act of 2002 (52 U.S.C. 21061(b)) is amended—

(1) by striking “as set forth in subsections (c)(3)” and inserting “as set forth in subsections (c)(1)(B) (regardless of the fiscal year), (c)(3)”;

(2) by striking “except that” and all that follows and inserting “except that the amount of the
grants to systems referred to in subsection (c)(3)(B) of that section shall not be less than $70,000 and the amount of the grants to systems referred to in subsections (c)(1)(B) and (c)(4)(B) of that section shall not be less than $35,000.’’.

SEC. 6. CYBERSECURITY REQUIREMENTS FOR AND TESTING AND CERTIFICATION OF VOTING SYSTEMS.

(a) IN GENERAL.—Subtitle A of title XXII of the Homeland Security Act of 2002 (6 U.S.C. 651 et seq.) is amended by adding at the end the following:

“SEC. 2215. MANDATORY CYBERSECURITY REQUIREMENTS FOR SYSTEMS USED IN FEDERAL ELECTIONS.

“Not later than 180 days after the date of enactment of Protecting American Votes and Elections Act of 2019, the Secretary, acting through the Director, shall promulgate rules establishing minimum cybersecurity requirements for the use in Federal elections of—

“(1) optical scanning devices (within the meaning of section 301(a)(7) of the Help America Vote Act of 2002);

“(2) ballot marking devices (within the meaning of section 301(a)(10) of such Act);

“(3) election management systems, including those systems used—
“(A) to configure optical scanning devices and ballot marking devices;
“(B) to aggregate election results; and
“(C) to design paper ballots;
“(4) electronic poll books;
“(5) any government database, website, or associated information system used by voters or government agencies for voter registration (including the management of voter registration status);
“(6) systems used to deliver or publish election results; and
“(7) such other components of voting systems (as defined in section 301(b) of such Act) as is determined appropriate by the Director.

“SEC. 2216. TESTING AND CERTIFICATION OF BALLOT MARKING AND OPTICAL SCANNING DEVICE CYBERSECURITY.

“(a) In general.—Any State or jurisdiction which intends to use a ballot marking device or an optical scanning device in an election for Federal office may submit an application to the Director for cybersecurity testing and certification of the hardware and software of such device under this section.

“(b) Application, Assignment, and Testing.—
“(1) Assignment.—
“(A) IN GENERAL.—Upon receipt of an application for testing under this section, the Director, in consultation with the Director of the National Institute of Standards and Technology, shall contract with a qualified laboratory for the testing of whether the ballot marking device or optical scanning device intended to be used by the State or jurisdiction, as the case may be, meets the requirements of section 301(a)(7)(B) of the Help America Vote Act of 2002.

“(B) OPTIONAL TESTING OF STATE REQUIREMENTS.—In the case of a ballot marking device or optical scanning device for which the source code has been published under an open source license, the contract under subparagraph (A) shall also include, at the request of any State or jurisdiction, testing of whether such device meets any applicable requirements of the State or jurisdiction.

“(2) REQUIREMENTS FOR TESTING.—Any contract described in paragraph (1) shall require the qualified research laboratory to—

“(A) not later than 30 days before testing begins, submit to the Director for approval the
protocol for the simulated election scenario used for testing the security of the ballot marking device or optical scanning device, as the case may be;

“(B) use only protocols approved by the Director in conducting such security testing; and

“(C) submit to the Director a report on the results of the security testing.

“(3) QUALIFIED RESEARCH LABORATORY.—For purposes of this section, the term ‘qualified research laboratory’ means a laboratory accredited under this subsection by the Director, in consultation with the Director of the National Institute of Standards and Technology.

“(c) REPORTING AND CERTIFICATION.—The Director shall—

“(1) publish on the website of the Cybersecurity and Infrastructure Security Agency the results of the testing conducted under subsection (b); and

“(2) certify a ballot marking device or optical scanning device if the ballot marking device or optical scanning device, as the case may be, is determined by the qualified research laboratory to meet
the requirements of section 301(a)(7)(B) of the Help
America Vote Act of 2002.

“(d) Prohibition on Fees.—The Director may not
charge any fee to a State or jurisdiction, a developer or
manufacturer of a ballot marking device or optical scan-
ing device, or any other person in connection with testing
and certification under this section (including any testing
conducted under subsection (b)(1)(B)).”.

(b) Conforming Amendment.—The table of con-
tents in section 1(b) of the Homeland Security Act of
2002 (Public Law 107–296; 116 Stat. 2135) is amended
by inserting after the item relating to section 2214 the
following:

“Sec. 2215. Mandatory cybersecurity requirements for systems used in Federal
elections.

“Sec. 2216. Testing and certification of ballot marking and optical scanning de-
vice cybersecurity.”.

SEC. 7. VOTING SYSTEM CYBERSECURITY REQUIREMENTS.

(a) Ballot Tabulating Devices.—Section 301(a)
of the Help America Vote Act of 2002 (52 U.S.C.
21081(a)) is amended by adding at the end the follow-
ing new paragraph:

“(7) Ballot tabulating methods.—

“(A) In general.—The voting system
tabulates ballots by hand or through the use of
an optical scanning device that meets the re-
quirements of subparagraph (B).
“(B) Requirements for optical scanning devices.—Except as provided in subparagraph (C), the requirements of this subparagraph are as follows:

“(i) The device is designed and built in a manner in which it is mechanically impossible for the device to add or change the vote selections on a printed or marked ballot.

“(ii) The device is capable of exporting its data (including vote tally data sets and cast vote records) in a machine-readable, open data standard format required by the Commission, in consultation with the Director of the National Institute of Standards and Technology.

“(iii) The device consists of hardware that—

“(I) is certified under section 2216 of the Homeland Security Act; and

“(II) demonstrably conforms to a hardware component manifest describing point-of-origin information (including upstream hardware supply...
chain information for each component) that—

“(aa) has been provided to the Commission, the Director of Cybersecurity and Infrastructure Security, and the chief State election official for each State in which the device is used; and

“(bb) may be shared by any entity to whom it has been provided under item (aa) with independent experts for cybersecurity analysis;

“(iv) The device utilizes technology that prevents the operation of the device if any hardware components do not meet the requirements of clause (iii).

“(v) The device operates using software—

“(I) for which the source code, system build tools, and compilation parameters—

“(aa) have been provided to the Commission, the Director of Cybersecurity and Infrastructure
Security, and the chief State election official for each State in which the device is used; and

“(bb) may be shared by any entity to whom it has been provided under item (aa) with independent experts for cybersecurity analysis; and

“(II) that is certified under section 2216 of the Homeland Security Act.

“(vi) The device utilizes technology that prevents the running of software on the device that does not meet the requirements of clause (v).

“(vii) The device utilizes technology that enables election officials, cybersecurity researchers, and voters to verify that the software running on the device—

“(I) was built from a specific, untampered version of the code that is described in clause (v); and

“(II) uses the system build tools and compilation parameters that are described in clause (v).
“(viii) The device contains such other security requirements as the Director of Cybersecurity and Infrastructure Security requires.

“(C) WAIVER.—

“(i) IN GENERAL.—The Director of Cybersecurity and Infrastructure Security, in consultation with the Director of the National Institute of Standards and Technology, may waive one or more of the requirements of subparagraph (B) (other than the requirement of clause (i) thereof) with respect to any device for a period of not to exceed 2 years.

“(ii) PUBLICATION.—Information relating to any waiver granted under clause (i) shall be made publicly available on the Internet.

“(D) EFFECTIVE DATE.—Each State and jurisdiction shall be required to comply with the requirements of this paragraph for the regularly scheduled election for Federal office in November 2024, and for each subsequent election for Federal office.”.
(b) Other Cybersecurity Requirements.—Section 301(a) of the Help America Vote Act of 2002 (52 U.S.C. 21081(a)), as amended by subsection (a), is amended by adding at the end the following new paragraphs:

‘‘(8) Prohibition of Use of Wireless Communications Devices in Systems or Devices.—

‘‘(A) In General.—No system or device upon which ballot marking devices or optical scanners are configured, upon which ballots are marked by voters (except as necessary for individuals with disabilities to use ballot marking devices that meet the accessibility requirements of paragraph (3)), or upon which votes are cast, tabulated, or aggregated shall contain, use, or be accessible by any wireless, power-line, or concealed communication device.

‘‘(B) Effective Date.—Each State and jurisdiction shall be required to comply with the requirements of this paragraph for the regularly scheduled election for Federal office in November 2020, and for each subsequent election for Federal office.

‘‘(9) Prohibiting Connection of System to the Internet.—
“(A) IN GENERAL.—No system or device upon which ballot marking devices or optical scanners are configured, upon which ballots are marked by voters, or upon which votes are cast, tabulated, or aggregated shall be connected to the Internet or any non-local computer system via telephone or other communication network at any time.

“(B) EFFECTIVE DATE.—Each State and jurisdiction shall be required to comply with the requirements of this paragraph for the regularly scheduled election for Federal office in November 2020, and for each subsequent election for Federal office.”.

(c) SPECIAL CYBERSECURITY RULES FOR CERTAIN BALLOT MARKING DEVICES.—

(1) IN GENERAL.—Section 301(a) of the Help America Vote Act of 2002 (52 U.S.C. 21081(a)), as amended by subsections (a) and (b), is amended by adding at the end the following new paragraph:

“(10) BALLOT MARKING DEVICES.—

“(A) IN GENERAL.—In the case of a voting system that uses a ballot marking device, the ballot marking device shall be a device that—

“(i) is not capable of tabulating votes;
“(ii) except in the case of a ballot marking device used exclusively to comply with the requirements of paragraph (3), is certified in accordance with section 232 as meeting the requirements of subparagraph (B); and

“(iii) is certified under section 2216 of the Homeland Security Act as meeting the requirements of clauses (iii) through (viii) of section 301(a)(7)(B).

“(B) REQUIREMENTS.—

“(i) IN GENERAL.—A ballot marking device meets the requirements of this subparagraph if, during a double-masked test conducted by a qualified independent user experience research laboratory (as defined in section 232(b)(4)) of a simulated election scenario which meets the requirements of clause (ii), there is less than a 5 percent chance that an ordinary voter using the device would not detect and report any difference between the vote selection printed on the ballot by the ballot marking device and the vote selection indicated by the voter.
“(ii) SIMULATED ELECTION SCENARIO.—A simulated election scenario meets the requirements of this clause if it is conducted with—

“(I) a pool of subjects that are—

“(aa) diverse in age, gender, education, and physical limitations; and

“(bb) representative of the communities in which the voting system will be used; and

“(II) ballots that are representative of ballots ordinarily used in the communities in which the voting system will be used.

“(C) EFFECTIVE DATE.—Each State and jurisdiction shall be required to comply with the requirements of this paragraph for the regularly scheduled election for Federal office in November 2022, and for each subsequent election for Federal office.”.

(2) PROCEDURE FOR TESTING.—

(A) IN GENERAL.—Subtitle B of title II of the Help America Vote Act of 2002 (52 U.S.C.
SEC. 232. TESTING AND CERTIFICATION OF BALLOT MARKING DEVICES.

“(a) In General.—Any State or jurisdiction which intends to use a ballot marking device (other than a ballot marking device used exclusively to comply with the requirements of section 301(a)(3)) in an election for Federal office may submit an application to the Commission for testing and certification under this section.

“(b) Application, Assignment, and Testing.—

“(1) In General.—An application under subsection (a) shall be submitted not later than 18 months before the date of the election for Federal office in which the ballot marking device is intended to be used and shall contain such information as the Commission requires.

“(2) Assignment.—Upon receipt of an application for testing under this section, the Commission shall contract with a qualified independent user experience research laboratory for the testing of whether the ballot marking device intended to be used by the State or jurisdiction meets the requirements of section 301(a)(10)(B).
“(3) Requirements for testing.—Any contract described in paragraph (2) shall require the qualified independent user experience research laboratory to—

“(A) not later than 30 days before testing begins, submit to the Commission for approval the protocol for the simulated election scenario used for testing the ballot marking device;

“(B) use only protocols approved by the Commission in conducting such testing; and

“(C) submit to the Commission a report on the results of the testing.

“(4) Qualified independent user experience research laboratory.—For purposes of this section:

“(A) In general.—The term ‘qualified independent user experience research laboratory’ means a laboratory accredited under this subsection by the Election Assistance Commission in accordance with standards determined by the Commission, in consultation with the Director of the National Institute of Standards and Technology and the Secretary of Homeland Security.
“(B) CRITERIA.—A laboratory shall not be accredited under this subsection unless such laboratory demonstrates that—

“(i) no employee of, or individual with an ownership in, such laboratory has, or has had during the 5 preceding years, any financial relationship with a manufacturer of voting systems; and

“(ii) any group of individuals conducting tests under this section collectively meet the following qualifications:

“(I) Experience designing and running user research studies and experiments using both qualitative and quantitative methodologies.

“(II) Experience with voting systems.

“(c) REVIEW BY INDEPENDENT BOARD.—

“(1) IN GENERAL.—The Commission shall submit for approval to an independent review board established under paragraph (3) the following:

“(A) Any protocol submitted to the Commission under subsection (b)(3)(A).

“(B) Any report submitted to the Commission under subsection (b)(3)(C).
“(2) FINAL APPROVAL.—Not later than the date that is 12 months before the date of the election for Federal office in which a State or jurisdiction intends to use the ballot marking device, the independent review board shall report to the Commission on whether it has approved a report submitted under paragraph (1)(B).

“(3) INDEPENDENT REVIEW BOARD.—

“(A) IN GENERAL.—An independent review board established under this paragraph shall be composed of 5 independent scientists appointed by the Commission, in consultation with the Director of the National Institute of Standards and Technology.

“(B) QUALIFICATIONS.—The members of the independent review board—

“(i) shall have expertise and relevant peer-reviewed publications in the following fields: cognitive psychology, experimental design, statistics, and user experience research and testing; and

“(ii) may not have, or have had during the 5 preceding years, any financial relationship with a manufacturer of voting systems.
“(4) Publication.—The Commission shall make public—

“(A) any protocol approved under this subsection;

“(B) any report submitted under subsection (b)(3)(C); and

“(C) any determination made by an independent review board under paragraph (2).

“(d) Certification.—If—

“(1) a ballot marking device is determined by the qualified independent user experience research laboratory to meet the requirements of section 301(a)(7); and

“(2) the report submitted under subsection (b)(3)(C) is approved by a majority of the members of the independent review board under subsection (d)(2),

then the Commission shall certify the ballot marking device.

“(e) Prohibition on Fees.—The Commission may not charge any fee to a State or jurisdiction, a developer or manufacturer of a ballot marking device, or any other person in connection with testing and certification under this section.”.

(B) Conforming Amendments.—
(i) Section 202(2) of the Help America Vote Act of 2002 (52 U.S.C. 20922(2)) is amended by inserting “and ballot marking devices” after “hardware and software”.

(ii) The heading for subtitle B of title II of such Act is amended by inserting “; Ballot Marking Devices”.

(iii) The table of contents for the Help America Vote Act of 2002 (52 U.S.C. 30101 et seq.) is amended—

(I) by inserting “; Ballot Marking Devices” at the end of the item relating to subtitle B of title II; and

(II) by inserting after the item related to section 231 the following:

“Sec. 232. Testing and certification of ballot marking devices.”.

SEC. 8. BALLOT CYBERSECURITY, CONFIDENTIALITY, AND ACCESS FOR INDIVIDUALS WITH DISABILITIES.

(a) IN GENERAL.—Section 301(a)(3)(B) of the Help America Vote Act of 2002 (52 U.S.C. 21081(a)(3)(B)), as amended by section 2(b)(1), is amended to read as follows:
“(B)(i) satisfy the requirement of subparagraph (A) through the use of at least 1 voting system at each polling place that—

“(I) is equipped for individuals with disabilities, including nonvisual and enhanced visual accessibility for the blind and visually impaired, and contains features to support enhanced manual accessibility for the mobility and dexterity impaired;

“(II) in the case of any election for Federal office occurring after the date that is 6 years after the date of the enactment of the Protecting American Votes and Elections Act of 2019—

“(aa) marks ballots that are identical in size, ink, and paper stock to those ballots that would be marked by hand or a ballot marking device used by voters who do not have accessibility needs;

“(bb) marks the ballot in such a way that someone examining the ballot will not be able to readily deter-
mine whether the ballot was marked by hand or machine; and

“(cc) combines ballots produced by the voting system with ballots marked by voters using other types of voting systems used by the State or jurisdiction in a way that prevents identification of which ballots were cast using each voting system; and

“(III) is made available for use by any voter who requests to use it; and

“(ii) in the case of any election for Federal office occurring after the date that is 6 years after the date of the enactment of the Protecting American Votes and Elections Act of 2019, meet the requirements of subparagraph (A) and paragraph (2)(A) by using a system that allows the voter to privately and independently verify the accuracy of the permanent paper ballot through the presentation, in accessible form, of the printed or marked vote selections from the same printed or marked information that would be used for any vote tabulation or auditing; and”.
(b) **Clarification With Respect to Application of Requirement to Ballots Marked at Home.**—

Section 301(a)(3) of such Act (52 U.S.C. 21081(a)(3)) is amended by adding at the end the following new flush sentence:

“Nothing in subparagraph (B) shall be construed to prohibit the use of an accessible ballot that may be printed or marked by the voter at home.”.

**SEC. 9. APPLICATION OF HELP AMERICA VOTE ACT TO NORTHERN MARIANA ISLANDS.**

Section 901 of the Help America Vote Act of 2002 (52 U.S.C. 21141) is amended by striking “and the United States Virgin Islands” and inserting “the United States Virgin Islands, and the Northern Mariana Islands”.

**SEC. 10. BIENNIAL REPORTS ON ELECTION SECURITY.**

(a) **In General.**—

(1) **Biennial report.**—Not later than September 20 of each odd numbered year the Secretary of the Department of Homeland Security shall submit to the appropriate congressional committees a report on the security of Federal elections.

(2) **Supplemental reports.**—The Secretary of Homeland Security may submit to the appro-
appropriate congressional committees periodic updates to
the most recently filed report under paragraph (1).

(3) CONSULTATION.—In preparing any report
under this section, the Secretary of Homeland Secu-
rity shall consult with the Director of National Intel-
ligence, the Secretary of Defense, and the Election
Assistance Commission.

(b) MATTERS INCLUDED.—Reports under subsection
(a) shall include the following:

(1) A list of States and jurisdictions that have
received training, advice, and other cybersecurity as-
stance from the Department of Homeland Secu-
rit y.

(2) An inventory of the election equipment
(hardware and software versions) that was used in
each election precinct to conduct each election for
Federal office during the period covered by the re-
port.

(3) A list of known, unpatched security
vulnerabilities in election equipment that was used
in each election precinct to conduct each election for
Federal office during the period covered by the re-
port.

(4) Statistics about cyber attack attempts de-
tected by States or the Federal government against
State election infrastructure during the period covered by the report.

(5) Incident reports from cyber attacks that required remediation during the period covered by the report.

(6) A full assessment of the security of Federal elections during the period covered by the report.

(7) An assessment of Federal and State cybersecurity efforts to prepare for future Federal elections, together with any recommendations on further actions with respect to such efforts.

The Secretary of Homeland Security may modify reports provided under paragraph (5) to anonymize any information that would reveal the identity of the victim of such cyber attack if such revelation would disrupt the relationship between the Department of Homeland Security and a State or jurisdiction.

(c) Treatment of Classified Material.—Reports submitted under this section shall be submitted in unclassified form, but may include a classified annex.

(d) Appropriate Congressional Committees.—For purposes of this section, the term "appropriate congressional committees" means—

(1) the Committee on Rules and Administration, the Committee on Homeland Security and Gov-
ernmental Affairs, the Select Committee on Intelligence, and the Committee on Appropriations of the Senate; and

(2) the Committee on House Administration, the Committee on Homeland Security, the Permanent Select Committee on Intelligence, and the Committee on Appropriations of the House of Representatives.