
1—Universal option to vote on Hand-Marked Paper Ballots (HMPB)

Please clarify that every voter shall be offered an HMPB when voting in person. Current language could be used to force voters to vote on ballot marking devices (BMDs).

Specific language is necessary to close a loophole in the current text in which, for example, a state can institute a voting system that can rightfully claim to fulfill the requirement of offering voters a hand-marked paper ballot by allowing them to vote by mail, yet still force voters to use a ballot marking device (BMD) when voting in person.

Another loophole is that an HMPB cast by an in-person voter may be rejected later under the current text. When a voter appears in person they first should be offered an opportunity to be authenticated and, upon authentication, vote on a hand marked paper ballot without further eligibility checks. Providing an absentee ballot package that later may or may not pass signature review is not sufficient; it must be a regular ballot that is offered.

Having no alternative to a BMD when voting in person, as some jurisdictions require, has already been shown to lead to long lines due to an inadequate number of machines being allocated to certain in-person voting locations.

States intent on suppressing the vote may

- seek to require in-person voting on BMDs so that there are long lines of waiting voters in demographically targeted areas
- offer a blank paper ballot such as the Federal Write-In Absentee Ballot (FWAB) that requires the voter to manually write in all the “down ballot” contests and their votes
- offer a vote-by-mail package that later may or may not pass signature review.

Please amend S.1 by adding the language indicated by **red bold-faced underscored** to the following section:

SEC. 1502. PAPER BALLOT AND MANUAL COUNTING REQUIREMENTS.

(a) In General.—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-VERIFIED PAPER BALLOTS.—

(i) PAPER BALLOT REQUIREMENT.— (I) The voting system shall require the use of an individual, durable, voter-verified, paper ballot of the voter’s vote that shall be marked and made available for inspection and verification by the voter before the voter’s vote is cast and counted, and which shall be counted by hand or read by an optical character recognition device or other counting device. For purposes of this subclause, the term ‘individual, durable, voter-verified, paper ballot’ means a paper ballot marked by the voter by hand or a paper ballot marked through the use of a nontabulating ballot marking device or system, so long as the voter shall have the option to mark his or her ballot by hand **at the polling place or vote center, if in-person voting is offered by the district. Said ballot shall be pre-printed with the contests and candidates, and shall be cast and tallied along with other in-person ballots.**

2—No barcodes for recording votes

Printouts from BMDs shall not use barcodes or QR codes to encode votes. Such votes are not voter-verifiable.

We're delighted that S.1 requires that all ballot summary cards (a term we prefer over "ballots" when used to describe the paper records produced by ballot marking devices) be clearly readable by the voter as outlined in the quoted text below. However, ballot marking devices currently in use around the nation print ballot summary cards that contain both human-readable text and data encoded in bar codes or QR codes. **It is the encoded votes, not the human-readable text, that is actually counted.**

The problem with this approach is that voters cannot verify that the votes they can read on the ballot summary card match the votes that are actually counted, which essentially negates the value of the voter verification process. Professor Philip Stark, inventor of the risk-limiting audit, has testified in court that this results in elections that are “unauditable” because there is no way of knowing that the votes on the paper record that would be used in an audit accurately reflect the intent of the voters.

This is why we're asking that the bill specify that bar codes or QR codes cannot be used to encode votes.

Please amend S.1 by adding the language indicated by **red bold-faced underscored** to the following section:

1504. Durability and readability requirements for ballots

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 following new paragraph:

(7) DURABILITY AND READABILITY REQUIREMENTS FOR BALLOTS

(A) DURABILITY REQUIREMENTS FOR PAPER BALLOTS

(i) IN GENERAL—All voter-verified paper ballots required to be used under this Act shall be marked or printed on durable paper.

(ii) DEFINITION—For purposes of this Act, paper is “durable” if it is capable of withstanding multiple counts and recounts by hand without compromising the fundamental integrity of the ballots, and capable of retaining the information marked or printed on them for the full duration of a retention and preservation period of 22 months.

(B) READABILITY REQUIREMENTS FOR PAPER BALLOTS MARKED BY BALLOT MARKING DEVICE—All voter-verified paper ballots completed by the voter through the use of a ballot marking device shall be clearly readable by the voter without assistance (other than eyeglasses or other personal vision enhancing devices) and by an optical character recognition device or other device equipped for individuals with disabilities.

Barcodes, QR codes, or any kind of vote recording code that cannot be verified by the voter without using a code-reading device, are prohibited for use in tallying votes.

Current voluntary guidelines propose that the voting system (not the voter) be able to verify a voter’s selections:
From “Recommendations for Requirements for (VVSG) 2.0 - February 29, 2020:

1.1.2-I – Test codes and images

The voting system must include the ability to verify that any encoded version or images of voter selections on a ballot are created correctly.

Discussion — The purpose is to ensure that an encoded version of voter selections such as provided by a ballot marking device (BMD) using QR codes contains the voter’s selections exactly as made. It will also ensure that any image of the ballot made by a scanner correctly matches the ballot. BMDs may encode other items as appropriate in codes, for example, ballot style ID.”

3—Ballot images of paper ballots shall be preserved as public records

Ballot images produced and used by modern optical/digital scanning equipment allow the public to determine whether or not there has been an accurate vote count. They are a supplementary verification tool that allows for third party/independent audits to establish voter confidence in election outcomes, providing the increased security of redundancy. Ballot images should be made publicly accessible within hours of scanning, but no later than 5 days.

All modern voting equipment uses digital scanners that create a full-page digital image of both sides of each ballot. These digital scanners don't actually count the votes directly from paper ballots as did the prior generation of voting machines, but instead count the votes by processing those images. Because the images are used for counting votes, they must be considered to be covered by existing law that requires voting materials to be preserved for 22 months after federal elections.

Digital ballot images, when used in conjunction with the original paper ballots, are an extremely helpful tool that can be used by election officials, candidates/campaigns, and the public to check the accuracy of election results and even diagnose specific problems in machine tallies. Compared with reviewing the paper ballots themselves, which may not be available for review, they can save time and money, and can potentially play an important role in strengthening voter confidence. Yet jurisdictions around the country are not dependably preserving these records or making them publicly available.

We request that S.1 be amended to require that ballot images be preserved as public records that are published for review by the public.

Ballot images do not provide sufficient information to identify voters and do not undermine the privacy of the vote. Concerns raised about a voter's ballot becoming publicly identifiable because of a "unique write-in" or a distinctive mark (the latter being illegal in nearly all jurisdictions) are unfounded, because there is no way to prove the identity of who actually marked that ballot. Thus, all ballot images should be published without redaction or limitation.

Public access to ballot images is the kind of transparency we need in our elections. The claim that ballot images will result in an increase in vote-buying is also a spurious argument. Even finding that exact ballot among the many thousands or millions of ballots in a district is hardly worth the work when any voter could prove they voted in a specific way by simply showing their absentee ballot to the vote buyer. Statutes prohibiting vote selling and coercion already exist. More importantly, when specified by law to be preserved as public records, and made freely available, ballot images can provide the actual evidence of an election's outcome for the public (and any candidate) to independently verify by recounting if they wish.

We believe the ability of the public to substantiate the results by reviewing and auditing the ballot images is far more beneficial than protecting a person who might add illegal distinguishing marks to the ballot and provide a means to identify their ballot. Therefore, we believe this is one of the most important election security amendments to S.1.

Please amend S.1 by adding new paragraph 9 as indicated by **red bold-faced underscored** to Section 1506:

SEC. 1506. PAPER BALLOT PRINTING REQUIREMENTS.

Section 301(a) of the Help America Vote Act of 2002 (52 U.S.C. 21081(a)), as amended by section 1504, is further amended by adding at the end the following new paragraph:

(8) PRINTING REQUIREMENTS FOR BALLOTS.—All paper ballots used in an election for Federal office shall be printed in the United States on paper manufactured in the United States.

(9) DIGITAL BALLOT IMAGES REQUIRED AS PUBLIC RECORDS.—
Digital ballot images that are created by optical scanners or other voting machines shall be preserved and made freely available online as public records within 5 business days of election results being published. Strong chain of custody procedures, comparable to those used for ballots and media with votes shall be used to retain the images securely. Security protocols, such as creating a security hash for the files, shall be implemented to ensure that the files containing the digital ballot images have not been altered. Also, machine readable "Cast Vote Records" shall be produced which provide the official evaluation of voter intent for each ballot, linked to the ballot images.

4—Routine independent audits of all federal elections in addition to Risk Limiting Audits (RLAs)

RLAs are an efficient way of auditing and confirming the outcomes of races with substantial margins of victory. RLAs are less efficient when evaluating races with tight margins. To encourage public understanding and confidence, additional robust methods of auditing vote counts should include one or more of the following:

- Risk-Limiting Audit
- Hand count
- Count of votes on digital ballot images (with statistically significant matching of ballot images with corresponding paper ballots).

We call for a public 100% hand count of every federal race with margins of 1% or less.

SEC. 1502. PAPER BALLOT AND MANUAL COUNTING REQUIREMENTS.

1502(a) amends HAVA 301(a)(2)(A)(iii)(I)

...

(iii) MANUAL COUNTING REQUIREMENTS FOR RECOUNTS AND AUDITS.—(I) Each paper ballot used pursuant to clause (i) shall be suitable for a manual audit, and shall be counted by hand in any recount or audit conducted with respect to any election for Federal office.

Discussion: It's great that the bill now specifies that paper ballots be counted by hand in any recount or audit. Yet as it stands, the bill does not require auditing at all. Our request is that the bill mandate that independent audits be conducted in any federal election with a margin of victory less than or equal to one percent.

We also concur with the concerns and recommendations submitted by the State Audit Working Group (SAWG) in their letter to Senators Schumer, Merkley, and Klobuchar, and the Senate Rules Committee on 3/21/2021, regarding grants and procedures (pp. 9-10).

From their [letter](#) (← please click link to view their recommended changes on pp. 9-10) :

“CONCERN: Grants for audits. We believe requirements for grants should be stronger, to help ensure effective RLAs. Election compliance, and decisions on voter eligibility, are necessary for effective Risk Limiting Audits (RLAs), so grants should cover them as well. Well-designed RLAs can determine if there are significant flaws, and convince the public that these flaws exist or don't, as the case may be.

Below we suggest additions and ~~strikeouts~~ to create strong standards. Risk-limiting Audits (RLAs) are one approach, and there are other equally strong approaches which deserve to be explored, such as validating ballot images against paper ballots, and tallying 100% of the images. States are more likely to apply if they have a choice of different types of audits.

Other audits, of election compliance, and decisions on voter eligibility, are necessary for effective audits. Grants should cover them.”

...

“CONCERN: Coverage of RLAs. It would *not* be helpful to audit only a few higher margin federal races with wide margins. When a state gets a federal grant, it needs to audit all Federal contests within 5 years, though in the interim, they may start small.

Requiring State rules within a year of enactment is unnecessarily fast, since even federal implementing rules will take time. It is enough to have rules within a year of getting a grant.”

We're big fans of RLAs

Please view our 3½-minute RLA explainer video (produced by NVRTF for general audiences) by clicking on this link: <https://youtu.be/V4WI4otRp3Y>
