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Hand-Counted Paper Ballots: Frequently Asked Questions

Note: the following is based on a document originally prepared in collaboration with Roy Lipscomb.

Glossary: Some Useful Terms to Know

HCPB

Hand-Counted Paper Ballots.

Electronic voting machine

A computer used for collecting and counting votes in the polling place.

DRE

Direct Recording Electronic (a.k.a., touch-screen) voting machine.

Optical scanner voting machine

Opscan (or optiscan), a computer that counts votes by detecting the choices marked on a paper ballot by the voter.

Security

Protection against mistakes, accidents, and fraud.

HAVA

Help America Vote Act, passed by Congress in 2002, intended to upgrade and regulate the voting systems used in the United States.

HCPB Fundamentals

What are HCPB?

Hand-Counted

Tallied by citizens without the aid of tools other than paper and pencils.

Paper

A durable medium which allows data to be clearly and permanently inscribed.

Ballot

A list of contests and the corresponding candidates and initiatives (if any) in an election.

What are the essential elements of HCPB?

- The paper ballot, marked with the voter's choices, is the official record of the voter's choices and is the record used in the official vote counting.
- The citizens who do the hand-counting include representatives from the different parties on the ballot. This provides essential checks and balances on the counting.
- The counting takes place in the polling place immediately after the polls close.

What are the benefits of HCPB?

- Reliable—Other systems rely on HCPB for confirmation of their results.
- Simple—It's less prone to equipment breakdown, poll worker confusion than other systems.
- Easy to use—People without disabilities need only a pen or pencil. People with disabilities can be provided with other appropriate accessories.

- Authoritative—It employs the actual document prepared by the voter, not a reproduction.
- Secure—Once placed in the ballot box, the ballot is inaccessible before the counting.

Why choose HCPB against the recommendation of so many computer experts?

- Many, perhaps most, computer experts prefer HCPB.
- Some computer experts say, “Don’t rely on computer experts—not even us!” In other words, evaluate the various systems and see which meets the standards required by a democracy.

Aren’t HCPB simply a nostalgic throwback to some idyllic “good old days”?

Not at all. Longing to return to the “old days” before computers existed would be as misguided as longing for some idyllic, electronic paradise where computers are trusted to control every aspect of our lives. Computers are essential to maintaining and improving life and liberty in today’s complex world.

Aren’t HCPB systems obsolete?

- Our interest is the best way to conduct elections, regardless of how old or new the system is.
- Computers are newer technology than pencils but people still find pencils to be the more appropriate technology for some tasks. The same is true of paper money.

What are the details of the HCPB process?

1. Creating the ballots
 - Can be preprinted and delivered to the polling place.
 - Can be printed as a blank ballot at the polling place.

2. Storing the ballots
 - In a public ballot box, of clear, see through plastic, accessible only for inserting ballots, until the counting starts.
3. Marking the ballots
 - By pen or pencil.
 - By electronic printing machine.
 - By disabled-assistance devices.
4. Verifying the ballots
 - By the voter before casting the ballot.
5. Casting the ballots
 - The ballot gets inserted into a ballot box by the voter.
6. Isolating the ballots
 - The ballots are kept in a ballot box that is viewable by the public and inaccessible except to deposit ballots, until the poll officials open it to count the votes.
7. Counting the ballots
 - The ballots are removed from the ballot box, shuffled randomly, and counted, with each vote announced loudly to the public.
8. Reporting the results
 - The resulting tallies are posted in the polling place and reported to the central authority.
9. Transporting the ballots
 - Accompanied by poll workers and possibly by other representatives of opposing political interests.
10. Archiving the ballots
 - Warehoused securely in a vault until the expiration date.

What are the possible problems unique to HCPB?

- Running out of paper ballots.
- Running out of pens or pencils.
- Problems other than the above are not unique to HCPB systems.

How trustworthy are HCPB systems?

(Questions like the following might be addressed.)

- Don't HCPB reopen our elections to fraud and vote rigging?
- Don't HCPB allow voters or poll workers to deposit extra ballots?
- Don't HCPB allow voters to more easily sell their votes? (This can be done in a process called "vote chaining," here-in defined.)
- Aren't HCPB more error prone than electronic voting machines?
- Aren't HCPB inaccurate?
- Isn't chain of custody a serious problem with HCPB?
- Who would select the people that do the hand-counting?
- What criteria would be used to select the hand-counters?
- How would the hand-counters be selected?
- Why do you think HCPB will produce a totally accurate result?
- Would audits ever be needed after an initial HCPB count?
- How should HCBP audits be conducted?
- How can we trust the people doing the hand-counting?
- Can't all our concerns about possible malfunctions and/or rigging of voting machines be allayed by one or more of the following?
- "Open source" software?
- The paper record of the voter's choices which is produced by some electronic voting machines? (This paper record is also sometimes called, "Voter Verified Paper Audit Trail" (VVPAT), "Voter Verified

Audit Trail” (VVAT) and “Voter Verified Paper Ballot” (VVPB). (This term is a misnomer. Since this paper record is not physically used for the official count, it’s by definition not a ballot.)

- Random audits of the paper record?
- Other statistical techniques for detecting errors?
- Paper Ballots, machine counted?
- Encryption of the computerized ballots?
- Wouldn’t the Holt Bill resolve all concerns about electronic voting machines?

How accessible are HCPB systems? (HAVA compliance)

- Will HCPB be a help or a hindrance to voters whose right to vote has at times been violated and suppressed—for instance, people of color, low-income people, college students?
- Will HCPB result in long lines at the polls?

How practical are HCPB?

- Aren’t HCPB less accurate than electronic voting machines?
- Aren’t HCPB easier to “misplace” or “damage” than the paper trail printed by touch-screen voting machines?
- Don’t HCPB cost more than electronic voting machines?
- Don’t some jurisdictions have ballots that are too complicated for HCPB?
- Won’t HCPB create a need for additional poll workers?
- Won’t HCPB demand too much time and effort from already tired poll workers?
- Won’t HCPB take too much time?
- Are there “abbreviated” or “partial” versions of HCPB?
- Won’t HCPB require more poll workers?

- Will it be difficult to recruit more poll workers?
- Won't HCPB require poll officials to be more highly trained than if they are using an electronic voting machine?
- Won't HCPB require poll officials to be more alert and observant than if they are using an electronic voting machine?

What can I do to get HCPB adopted in my state and my locale?

- How do I find out whether a HCPB procedure is approved in my State?
- How do I find out whether a HCPB procedure is actually used anywhere in my State?
- How do I persuade our State and/or local officials to adopt HCPB?

Other Voting Systems

Why not vote by mail, like Oregon?

- Ballots may get lost in the mail.
- Ballots may be altered or discarded by any number of people who handle the ballots before they get counted.

Why not vote via the Internet?

- Ballots can easily be hacked, either on the voting machine itself, or in transit to the central collection point.
- The receiving website may be hacked.
- Internet service may be disrupted, intentionally or unintentionally.

Why not continue to use lever machines?

- They can be hacked without being noticed.
- Like computers, they can break down.

- They are bulky and expensive to store, transport, and maintain.

Why not use punch card ballots?

- Their data is not verifiable by the voter.
- Punching the holes is an unreliable process.
- Counting is done by machines—mistakes can go unnoticed.

Aren't electronic voting machines designed to be secure?

- Manufacturers and testing companies don't allow security experts to assess the strength of the security built into the voting machines.
- Software experts have demonstrated the hackability of various systems, even without having full knowledge of those systems.
- Complicated security procedures are sometimes skipped by poll workers.
- Votes and programs are stored on credit-card-sized computer memories that are easily misplaced or substituted.
- Electronic voting systems can easily be damaged or otherwise rendered inoperable.

Why should we be concerned about electronic voting?

- The contents of the machine, and how the machine processes the ballots, is kept a secret from the public. Consequently, election outcomes are susceptible to being changed by undetectable errors, accidental or otherwise.
- The machines have a history of hardware and software breakdowns during actual elections.

Shouldn't certification of electronic voting machines remove concern?

Ideally, yes. But in practice:

- Certification is often little more than “rubber-stamp approval,” based mostly on vendor assurances that problems will be fixed in the future.

- Machines are always susceptible to bugs, breakdowns, and other malfunctions.

Aren't electronic voting machines more reliable than other voting systems?

HCPB are relied upon to confirm results of other voting systems, including electronic voting machines. That means HCPB are considered more reliable than other voting systems, including electronic voting systems.

Isn't "chain of custody" easier to observe with voting machines than with HCPB?

HCPB has the clearest and most reliable chain of custody between the time the ballot is cast and the time the ballot's votes are tallied.

Isn't an electronic voting machine safe if it's not connected to another computer?

Electronic voting machines can be hacked by anyone who has access to the machine. That person does not need to be knowledgeable; hacking can be accomplished by simply inserting and then removing a memory card. This can take less than one minute.

Won't all the problems with electronic voting machines eventually be fixed?

- Systems that currently have serious problems should not in be use in critical situations. Such systems are considered by technical specialists to be in the "test" or "shakeout" phase.
- Computer experts say that all major computer software has undetected bugs-undetected and unsuspected even by the developers who created the software.
- Some computer experts promise that all such problems will be fixed some day, but their proposals are merely speculative. No foolproof strategy for protecting against all bugs and hacks has yet been put forth, and most computer experts are inclined to believe that no such strategy is possible.

Do HCPB advocates totally rule out the use of electronic voting machines?

HCPB advocates are opposed to the use of electronic voting machines in our elections, for the storing and counting of votes.

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