



VOTEC Corporation

VOTEC Guidelines for Acquiring and Using Computer Voter Check-In Systems

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Purpose of this Guidelines Document

1. To define “computer voter check-in systems”.
2. To assist purchasers in the process of evaluating computer voter check-in systems.
3. To provide guidelines for computer voter check-in system accessibility.
4. To provide guidelines for computer voter check-in process resiliency.
5. To clarify that computer voter check-in systems that don’t provide a screen for the voter to interact with full time separate from the poll worker screen is in violation of HAVA Title III.
6. To clarify that computer voter check-in systems that do not provide a screen for the voter to interact with separate from the poll worker screen is likely in violation of the ADA and the National Rehabilitation Act of 1973 as Amended, Section 508.
7. To clarify that computer voter check-in system functionality specification and verification is the responsibility of the state, or in lieu of state specifications, the using organization.
8. To clarify that computer voter check-in system security specification and verification is the responsibility of the using organization.
9. To clarify that computer voter check-in systems must be Logic and Accuracy tested before each election.



Expanding on the above

1. Definition and purpose of computer voter check-in systems

Definition of a computer voter check-in system: A computer system 1) to authorize people appearing at the polls and wishing to vote at the time of appearance to vote or 2) to inform such people if there are legal obstacles to voting and if / how these obstacles could be cleared.

A computer voter check-in system is used in proximity to voting equipment to qualify persons appearing at the location of the check-in system to be either:

- eligible to vote
- eligible to vote provisional
- eligible to vote if they return with required ID and / or their previously issued absentee ballot
- not at a location where their vote will count
- not eligible to vote

If a person is eligible to vote or vote provisional, the computer voter check-in system must enable voting the correct contests and questions (ballot) by 1) delivering a ballot identifier to a poll worker to select the proper ballot or 2) delivering a ballot identifier to voting equipment that will allow the equipment to deliver the proper ballot to the voter along with the ballot's provisional status.

If a person is not eligible to vote at the date and time of their appearance at a voting site, the computer voter check-in system must notify the poll worker and/or voter of this fact.

If a person is eligible to vote at the date and time of appearance but they must vote elsewhere for their vote to count, the computer voter check-in system must tell the voter where they can vote for their vote to count.

A computer voter check-in system must record that a person has appeared and requested to vote and how their request was processed.

A computer voter check-in system must have redundancy and/or resiliency that will allow processing of persons wishing to vote that will allow voting to continue if the primary computer voter check-in system fails completely.

2. To assist purchasers of computer voter check-in systems in the process of evaluating available products.

Prior to purchasing a computer voter check-in system, a government entity should familiarize themselves with the legal requirements for voter check-in in their jurisdiction.

They should familiarize themselves with the environment where the poll place components will be used and what that implies regarding physical, electrical, and communication requirements for the poll place equipment.

As part of evaluating each aspect of a candidate system, a checklist should be prepared for completion by all candidate system providers. The checklist should provide ample room for comments.



Prior to evaluating candidate systems, the prospective purchaser should ask all system providers to provide a list of features that go beyond the legally required and physically required functionality.

Prior to developing an RFP, the purchasing organization should discuss and document the value of extra features.

The procurement process can begin at this time under the auspices of the organization's purchasing department.

3. To provide guidelines for computer voter check-in system accessibility.

Although people with disabilities like to participate everywhere that assistive technology will allow, most prospective poll workers understand that there are often visual tasks that are required. Thus, making the poll worker screen accessible to the blind and low vision is not useful at the polls nor a good use of resources by the organization developing a computer voter check-in system nor of the purchasing organization's funds.

Because the check-in process is accessed by all voters who appear at the polls and nothing that a voter is required to do at check-in requires vision, voters with disabilities will be able to check in independently only if they are provided with a touch screen that allow for attachment of headphones and for input by voters unable to use the touch screen for input.

Voters should be provided their touch screen for the duration of the check-in process so they are not pressured to return a shared screen to their poll worker thus rushing their interactions.

4. To provide guidelines for computer voter check-in process resiliency.

The legally required functions of a poll book must be performed if an election is to proceed on schedule.

Thus, computer voter check-in systems must be backed up by backup systems that are not subject to the same failure modes as the primary system.

A paper pollbook system is acceptable when voting is done by precinct or the volume of paper required to print a list of all a municipality's voters is manageable.

A PDF file or files on a thumb drive in a format that can have comments added could be used as a backup. A complete backup would include an operating system bootable from a flash drive along with the program necessary to handle the PDF file(s).

If a computer at the polls is part of the backup system the poll places must have a power supply sufficient to handle the day's voting including possible extended hours.

5. To clarify that computer voter check-in systems that don't provide a screen for the voter to interact with full time separate from the poll worker screen is in violation of HAVA Title III.

HAVA Title III - Uniform and Nondiscriminatory Election Technology and Administration Requirements specify that Election Technology and Administration must be uniform.

At its best, uniformity of technology should mean interactions with technology that provides and accepts voter information, including votes, should avoid presenting different information or voting protocols to voters except as required for independent access by people with disabilities.



At its best, uniformity of administration should mean interactions with voters including responses to inquiries, notifications (SMS, phone, mail, email, etc.), public information (TV, Radio, internet, town halls, posters, flyers, etc.), hearings, and all other interactions should provide the same information with the intent that all who rely upon it will see it as the same information. Allowance must, of course, be made for corrections and updates. It is best when corrections and updates are identified as such.

6. To clarify that computer voter check-in systems that do not provide a screen for the voter to interact with separate from the poll worker screen is likely in violation of the ADA and the National Rehabilitation Act of 1973 as Amended, Section 508.

At its best, complying with the above Acts provides voters with disabilities the opportunity to perform an important task independently with the dignity that affords.

Independence cannot be afforded when:

- the voter is dependent on a poll worker's interpretation of what the voter is being told because the voter can't see it on their own screen or hear the audio of the words exactly as the election authority says they should be presented
- the computer screen is being shared and thus the voter's access to their information and instructions is being interrupted and thus possibly causing confusion
- the voter can not make private choices such as party preference in some states

Note: Not all blind and low vision voters use smart phones so using that technology is discriminatory

7. To clarify that computer voter check-in system functionality specification and verification is the responsibility of the state, or in lieu of state specifications, the using organization.

A computer voter check-in system's functionality should be understood by the provider. Specifying the functionality is a government function. Testing state functionality should be specified by each state whether tested at the state or municipal level.

8. To clarify that computer voter check-in system security specification and verification is the responsibility of the using organization.

Using organizations can be expected to have IT support that specifies and verifies security for all the using organization's computer systems. The using organization must satisfy itself that best available security is in use for any central computer systems involved in configuring the poll place devices for each election and for compiling the information collected by the poll place devices and for any communication channels between poll place devices and central systems.

Security failure in poll place devices can be lumped with hardware and software and configuration and data loading failures since they all lead to taking the failed device out of service.

Security of poll place devices will be enhanced by prohibiting installation of an internet browser or any other software that allows internet connections other than to a site controlled by the using organization.

Security of poll place devices will be enhanced by prohibiting flash drives other than authorized models from being accepted by the operating system.



Security of poll place devices will be enhanced by using multi-factor authentication (MFA).

The biggest upset a computer voter check-in system could cause would be inaccurately recording or silently failing to record voter check-in transactions.

The antidote for this possible system failure would be including a printer dedicated to printing a line per voter with name, voter id if registered, date, time, ballot style including party, whether voting provisionally, and any other information pertinent to the jurisdiction where the voter appeared.

This printout should be verified and initialed as each voter is checked in.

9. To clarify that computer voter check-in system poll place components must be Logic and Accuracy tested before each election. The central system needs to have its logic verified for the current election.

Logic refers to the ability to deliver correct results when each combination of voter status and voter ballot style is processed through the system.

Accuracy refers to testing the ability of each piece of equipment that is to be deployed for an election exhibits standard functionality – a computer powers up, its keyboard, screen, speaker and peripherals and communication channel(s) are all performing as expected.

There are many ways a computer voter check-in system can fail.

Hardware

- Computer
- Printer
- Scanner
- Smart card burner
- WIFI
- Cellular communications
- Power sources – wall outlet and battery

Software – Computers that should show identical functionality do not.

- Operating system updates fail
- Communications software updates fail

They must all be considered when designing a Logic and Accuracy test.