

ABSTRACT

The HAVA (Help America Vote Act), introduced in 2002, mandated that all polling places provide privacy and independence to all voters. Given this, many jurisdictions have been forced into making a choice between traditional solutions (such as paper ballots) and newer electronic voting systems. Electronic voting machines have been seen as the solution to many usability and accessibility problems, but very little literature exists to indicate whether this is the case among specific populations such as disabled, elderly, and non-English speaking voters. This research will focus on designing an audio accessible voting interface for visually disabled voters, using specifications from a large-scale survey of blind individuals conducted by Piner & Byrne (2010). The CHILVote interface utilizes the given design guidelines and includes using a male text-to-speech voice, a flexible navigation structure, adjustable speed and volume, and an optional review section. Measuring error rates, voting time, and user satisfaction will allow for a comparison between electronic and non-electronic voting systems to understand what aspects (if any) disenfranchise blind voters. Possible solutions or areas of improvement for future designs will also be discussed.

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