

To: Doug Chapin
From: Dan Tokaji
Date: April 3, 2005
Re: Accessibility for Voters with Disabilities

This memorandum summarizes the present state of access to the voting process for people with disabilities. After providing a few words of background, the memorandum discusses current legal protections for voters with disabilities in the United States. It then addresses existing research on the accessibility of the voting process for people with disabilities, in an effort to evaluate the extent to which our present elections systems provide equal access to these voters. It concludes by considering questions on which additional research is still needed.

Background

As an initial matter, it is helpful to break down the subject of disability access to the voting process into two distinct parts. The first part is *polling place access*. This encompasses the means by which citizens with disabilities get to the apparatus used for voting. In some cases, achieving polling place access may require eliminating barriers that would prevent someone with a mobility impairment from entering the polling place – for example, stairs between the parking lot and front door of the building where voting is taking place. In other cases, it may be necessary to actually bring the apparatus used for voting to the voter, through so-called “curbside voting.”

The second component of disability access is *accessible voting technology*. Some voters with disabilities, such as those who are blind or have manual dexterity limitations, may have little difficulty getting to the polling place unassisted. Once they get into the polling place, however, adaptive technology may be necessary for them to cast a secret ballot. For without accessible technology, people with some disabilities have no choice but to rely on third parties – such as family members or poll workers – to assist them. Jim Dickson of the American Association of People with Disabilities, who is blind, describes his own experience in a way that captures the practical difficulties that voters with certain disabilities face:

Once, after my wife cast my ballot, she said to me, "Jim I know you love me. Now I know that you trust me, because you think I'm marking this ballot for that idiot." Twice in Massachusetts and once in California, while relying on a poll worker to cast my ballot, the poll worker attempted to change my mind about whom I was voting for. I held firm, but to this day I really do not know if they cast my ballot according to my wishes. To voters with disabilities, there is always some level of uncertainty when another person marks your ballot for you.¹

¹James C. Dickson, Testimony Before the N.Y. City Council Committees on Mental Health, Mental Retardation, Alcoholism, Drug Abuse and Disability Services (July 22, 2002), *quoted in* Michael Waterstone, “Civil Rights and the Administration of Elections: Toward Secret Ballots and Polling Place Access,” 8 *J. of Gender, Race & Justice* 101 (2004).

While the number of voters who require some type of accommodation to vote independently cannot be precisely estimated, it is likely several million. Of the approximately 280 million people in the United States, census data reveals that about one in five has some type of disability and that one in ten has a “severe” disability. Of those over 65 years old, more than half have a disability.² The American Association of People with Disabilities estimates that over 14 million people with disabilities voted in the 2000 election but that more than 21 million people with disabilities of voting age did not vote.³

It is also important to keep in mind that the broad category of voters with disabilities encompasses individuals with many different types of physical and mental impairments, including:

- people with mobility impairments that prevent them from walking independently, who rely upon a wheelchair, walker, or other device to ambulate,
- people with visual impairments that make it difficult or impossible for them to read a printed ballot,
- people with auditory impairments, who are unable to hear instructions from poll workers,
- people with cognitive impairments that prevent them from reading the ballot without assistance, and
- people with manual dexterity impairments that prevent them from marking certain types of ballots without assistance.

Although it is common refer to people with disabilities collectively, the type of accommodations that voters require will vary depending upon their disability. In addition, there are undoubtedly other disabilities, in addition to those listed, that would require some accommodation. It is impossible to identify every single disability that might require accommodation here. Instead, this memorandum will at least attempt to identify what is being done – and what might be done – to provide access to the five broad categories of disabled voters identified above.

The Lay of the Law

There are five statutes germane to the voting rights of people with disabilities. First, the Voting Rights Act of 1965 (as amended in 1982) requires that voters requiring assistance due to a

²General Accounting Office, *Voters with Disabilities: Access to Polling Places and Alternative Voting Methods* 14 (2001)(“GAO Report”).

³DREDF, *Guide to Voting Equipment Usability and Accessibility for People with Disabilities* (2003).

disability be given that assistance by persons of their choice.⁴ Second, the Voting Accessibility for Elderly and Handicapped Act (“VAEH”) requires that polling places be accessible, but does not specifically address the technology used for voting.⁵ Third, Section 504 of the Rehabilitation Act of 1973 prohibits the exclusion of people with disabilities from activities receiving federal funding.⁶ Fourth, the Americans with Disabilities Act forbids discrimination against people with disabilities in public accommodations and by public entities.⁷ Finally, the Help America Vote Act of 2002 requires that every polling place have at least one voting unit accessible to people with disabilities by the time of the federal elections in 2006.⁸ While the precise scope of these laws’ requirements remains a matter of some disagreement, they collectively mandate both access to polling places and accessible voting equipment.

Section 504 and the ADA are both broadly applicable anti-discrimination statutes. Section 504 applies to entities receiving federal funding, Title II of the ADA prohibits discrimination by public entities, and Title III of the ADA prohibits discrimination in public accommodations. Voting is a covered activity under the ADA, but it is not entirely clear what exactly this law demands when it comes to voting.

Some commentators have argued that this requirement is reasonably interpreted to require “accessible polling places and secret and independent ballots.”⁹ Court rulings have not been uniform, however, when it comes to the responsibilities of election administrators under the ADA and Section 504. For example, a Michigan federal district court concluded that these laws did not confer a right to cast a secret ballot on blind voters.¹⁰ On the other hand, a federal court in Florida more recently concluded that visually and manually impaired voters rights were violated, when election officials failed to provide touch screen voting machines that would allow them to vote independently.¹¹ In addition, a federal court in New York found that a county’s failure to provide accessible polling places violated the ADA.¹² There is therefore some

⁴42 U.S.C. § 1973aa-6.

⁵42 U.S.C. § 1973ee.

⁶29 U.S.C. § 794.

⁷42 U.S.C. §§ 12132, 12181-89.

⁸42 U.S.C. § 15481(a)(3)(B).

⁹Michael Waterstone, “Constitutional and Statutory Voting Rights for People with Disabilities,” 14 *Stan. L. & Pol’y Rev.* 353, 360 (2003).

¹⁰*Nelson v. Miller*, 950 F. Supp. 201 (W.D. Mich. 1996).

¹¹*American Ass’n of People with Disabilities v. Hood*, 310 F. Supp. 2d 1226 (MD. Fla. 2004).

¹²*New York v. County of Schoharie*, 82 F. Supp. 2d 19 (N.D.N.Y. 2000).

precedent for the idea that the ADA requires that disabled voters be provided access to polling places and technology that allows them to vote independently.

Whatever the requirements of previously enacted federal laws, the Help America Vote Act is clear in mandating the provision of accessible technology for people with disabilities. Accessible voting technology must be provided to people with disabilities by January 1, 2006. As a practical matter, states and counties have until the first federal election in 2006 to comply with this requirement. HAVA requires that people with disabilities be provided “the same opportunity for access and participation (including privacy and independence)” as other voters. Included among those whose disabilities must be accommodated are “blind and visually impaired” voters.¹³ This requirement may be satisfied by providing at least “one direct record electronic voting system or other voting system equipped for individuals with disabilities at each polling place.”¹⁴ In addition, all voting equipment purchased after January 1, 2007, with HAVA Title II funds must meet disability access standards.

HAVA also recalls for research to be conducted on accessible voting technology. HAVA calls for the Election Assistance Commission (“EAC”) to conduct periodic studies is accessible voting for people with disabilities, including those who are blind or visually impaired.¹⁵ In addition, HAVA required the EAC and the National Institute of Standards and Technology (“NIST”) to report to Congress on “human factor research,” including the usability of different types of voting equipment for individuals with disabilities and others.¹⁶ This report was released on April 30, 2004 and is discussed below.

HAVA does not empower the EAC to promulgate binding regulations with respect to accessible voting technology. It does, however, confer upon the EAC responsibility for developing and adopting “voluntary voting system guidelines” in conjunction with NIST.¹⁷ These guidelines are voluntary, in that the states are not required to abide by them, though two-thirds of the states do so. Prior to enactment of HAVA, the Federal Election Commission had responsibility for adopting voluntary voting system guidelines, and the FEC’s 2002 guidelines will remain in effect until new ones are adopted.¹⁸

One problem states face is that it does not appear that the EAC and NIST will adopt new

¹³42 U.S.C. § 15481(a)(3)(A).

¹⁴42 U.S.C. § 15481(a)(3)(B).

¹⁵42 U.S.C. § 15381(a)

¹⁶42 U.S.C. § 15383.

¹⁷42 U.S.C. § 15362.

¹⁸42 U.S.C. § 15362(e).

guidelines before the end of the year.¹⁹ This puts those states that have not already adopted accessible voting technology in a difficult position: either buy new machines now that comply with current NIST standards or wait until new ones will issued, an option that will leave very little time to convert before the first federal elections in 2006.²⁰

The 2002 FEC guidelines currently in effect provide in general terms that voting systems should “meet the accessibility needs of a broad range of voters with disabilities.” In order to facilitate accessibility to people with mobility limitations, the guidelines impose certain physical requirements applicable to all polling places. For example, they require a “maximum high forward reach” of 48 inches, in order to ensure that the voting apparatus is not placed too high to be reached by people in wheelchairs.

With respect to the technology used inside polling places, the 2002 standards are silent with respect to paper-based systems such as punch cards, optical scans, and hand-marked paper ballots – probably because they assume that these systems cannot readily be used without assistance by people with impairments that prevent them from reading from marking a paper ballot. The 2002 standards *do* prescribe access requirements for Direct Record Electronic (“DRE”) voting technology, providing that they shall have “the capability to provide access to voters with a broad range of disabilities.” Specifically, DRE systems are to include an audio capacity to allow independent voting by voters with visual or cognitive impairments that prevent them from reading. The 2002 standards also provide that DRE systems should allow voters to adjust contrast settings and color, presumably so the screen may be adjusted and viewed by people with less severe visual impairments. They also provide that touchscreen devices have a “tactilely discernable” input that does not require “tight grasping, pinching, or twisting of the wrist.” The system should also allow the voter to indicate if more time is needed to vote, and have sound cues to indicate if an error has been made.

In terms of state laws, there is considerable variation in their treatment of voting access that makes any generalizations perilous. Overall, 36 states have a statute or regulation providing that polling places should be accessible to people with disabilities, while 17 have one providing that the voting both area should accommodate wheelchairs. Only 13 states have laws requiring that voting technology accommodate people with disabilities. However, several of the states without laws on the books have policies of providing access for at least some disabled voters.²¹

The Accessibility of the Voting Process

Having described the legal framework governing disability access to the vote, I now consider the extent to which polling places and voting technology really are accessible to people

¹⁹Elizabeth Schneider, “In Ohio, Congressman Cold to Extending HAVA,” *electionline.org Weekly*, March 25, 2005, available at <http://www.electionline.org/index.jsp?page=Newsletter%20Mar%2024%2005>.

²⁰Schneider, *supra* note 19.

²¹GAO Report, *supra* note 2, at 17.

with disabilities. The most thorough study of voting access to date is a report published in 2001 by the United States General Accounting Office. As a part of its study the GAO randomly selected 100 counties and visited polling places in those counties on Election Day 2000. The GAO examined those polling places from the parking lot to the voting booth, looking primarily at whether they provided access to people with mobility impairments.

Overall, the GAO found that only 16% of all polling places had no potential impairments, while 84% had at least one impediment. The most common means of dealing with such impediments was to provide “curbside voting,” through which the mechanism is brought outside the polling location to the voter, when he or she cannot physically enter the polling place. However, the GAO found that 28% of polling places nationwide had at least one impediment and did *not* offer curbside voting.²²

The GAO Report had less to say about the accessibility of *voting technology* to people with visual, manual, or cognitive impairments. It did note that “the types and arrangement of voting equipment may also pose challenges for people with mobility, vision, or dexterity impairments.” While some polling places provided assistance to voters with disabilities, the report noted that *none* of the polling places that it visited had special ballots or voting equipment for blind voters (such as audio or Braille ballots).²³

From a disability access perspective, contemporary DRE voting machines offer significant advantages over existing paper-based systems. Most important among these advantages is that they allow a secret and independent ballot for people with visual, manual, and cognitive impairment who, until now, have been forced to rely on friends, relatives, or poll workers to mark their ballots for them. Several DRE models now on the market have an audio capacity for those who are blind or have visual impairments.²⁴ This capacity may also allow independent voting by those with cognitive impairments that prevent them from reading. Some DRE systems also have devices such as a “sip and puff tube” or “jelly switch” that allow people with manual dexterity impairments to cast votes independently. They may also be positioned or brought to the curb in order to accommodate people with mobility impairments.

Pursuant to HAVA’s requirement, the EAC and NIST released a report in April 2004 addressing the usability of current voting systems.²⁵ Among the topics addressed was the usability of voting technology by people with visual, auditory, cognitive, dexterity, and mobility

²²GAO Report, *supra* note 2, at 7-8.

²³*Id.* at 7.

²⁴Naumi Feldman & Julie Hyman, “Voting Technology for People with Disabilities” (Mar. 2003), available at <http://www.aapd-dc.org/dvpmain/votemachines/downloads/Manhattan%20voters%20experiences.pdf>.

²⁵Sharon J. Laskowski, et al., *Voting Systems and Products* (2004).

impairments.²⁶ As the report noted, the issues faced by people with disabilities include difficulties in: 1) entering the building where voting takes place, 2) reaching controls or reading ballots or displays from a seated position, 3) interacting with controls due to lack of fine motor skills, 4) communicating orally with poll workers, 5) obtaining auditory feedback, and 6) reading printed ballots or visual displays. Given the heterogeneity of the disabled population, the report recommended the development of general design standards rather than specific performance criteria for disability access. It also recommended development of a “uniform set of test procedures” to assess conformity with these design standards.

Neither the GAO report nor the EAC/NIST report discusses the accessibility of any specific products, instead focusing generally on the types of accommodations that might be provided to different categories of disabled voters. The most thorough assessment of different voting technologies that I have seen is a 2003 report prepared by the Center for Independence of the Disabled in New York (“CIDNY”) and the Manhattan Borough President, entitled *Voting Technology for People with Disabilities*.²⁷ This report discusses the accessibility of different DRE systems to people with a variety of disabilities, including dexterity, mobility, visual, hearing, and cognitive impairments. Among the specific products evaluated were DRE systems marketed by the major voting technology vendors (Diebold, Sequoia, ES&S, Hart and Avante). All of these vendors manufacture products with audio ballots for people with visual impairments, although there were variations in the ease of use. There were also variations in the usability of different voting machines by people in wheelchairs and those with manual dexterity limitations. The report stressed that, whatever technology is adopted, it is imperative that poll workers be provided with extensive training so that they may properly assist voters with different types of disabilities.

The Electronic Voting Controversy

There has of course been a vigorous debate over the security of contemporary electronic voting technology.²⁸ In the course of this debate, disability rights advocates have for the most part been strong supporters of electronic voting, due to its capacity to allow people with disabilities to vote independently. And it is undoubtedly true that, of the technologies currently certified, electronic voting provides unparalleled advantages for certain voters with disabilities – specifically, those with visual or cognitive impairments that prevent them from reading, and those with dexterity impairments that prevent them from marking a paper ballot.

While a full discussion of the electronic voting debate is well beyond the scope of this memorandum, it should be noted that the proposal to require that electronic voting machines generate a contemporaneous paper record, or “voter verified paper audit trail” (“VVPAT”), creates special complications from a disability access perspective. Voters who cannot read

²⁶*Id.* § 2.2.2.

²⁷Feldman & Hyman, *supra* note 24.

²⁸I discuss this debate in considerable detail in my recently published article “The Paperless Chase: Electronic Voting and Democratic Values,” 73 *Fordham L.R.* 1711 (2005).

printed text would be unable to “check” any paper audit trail, and voters with manual dexterity impairments would have difficulty handling paper ballots.

A handful of states, including California and Ohio, will require implementation of the VVPAT effective 2006. It remains uncertain how or whether those states will both comply with this mandate *and* the disability access requirements of HAVA. This is probably one of the most pressing issues that VVPAT states face.

There has lately been considerable discussion of so-called “hybrid” voting technology, so labeled because it represents a cross between DRE and optical-scan voting technology. Two such systems – the ES&S “Automark” and the “Populex”²⁹ – are presently being marketed, although neither is presently certified.³⁰ These systems have DRE-like interfaces, accessible to people with disabilities, but would print out a paper ballot that could then be read by an in-precinct tabulator like an optical scan ballot. Supporters of this type of technology argue that it both satisfies the VVPAT requirement and accommodates people with disabilities. Opponents, including the American Association of People with Disabilities, argue that this technology is not really accessible to people with disabilities, because voters with visual and manual impairments will not be able to use it without assistance. These voters would be dependent upon a third party to take the paper ballot from the printer to the in-precinct tabulator, compromising the secrecy of the ballot. The AAPD therefore argues that hybrid voting systems do not comply with HAVA’s requirement that voters with disabilities be provided the “same opportunity for access and participation (including privacy and independence)” as able-bodied voters.³¹

Conclusion: Next Steps

There is unquestionably a need for additional research, with respect to both the accessibility of polling places and the accessibility of voting technology. On polling place access, there appears to be a need for a study comparable to that which the GAO did during the 2000 election. Such a study would examine: (1) the extent to which there are still physical barriers to polling places that would prevent people with mobility impairments from entering the polling place, (2) whether accommodations such as curbside voting are provided, where such barriers exist, and (3) whether polling booths are set up so as to allow people with physical disabilities to see and reach the equipment they must use, in accordance with the FEC’s 2002 standards.

²⁹For a description of the Automark, see http://www.vogueelection.com/products_automark.html. For a description of the Populex system, see http://www.populex.com/DPB_Intro.htm.

³⁰Elizabeth Schneider, “‘Hybrid’ Voting Machines Raise Questions About Certification, Accessibility,” *electionline Weekly*, March 31, 2005, available at <http://www.electionline.org/index.jsp?page=Newsletter%20March%2031%202005>.

³¹See Letter from James C. Dickson to J. Kenneth Blackwell, Feb. 5, 2005, available at <http://www.aapd-dc.org/dvpmain/votemachines/blackwell.html>.

There is an even greater need for research into the question of accessible voting technology. It is clear that DRE technology provides advantages over paper-based systems from the standpoint of disability access, but there is little systematic research on how well different products accommodate people with different types of disabilities.³² Further complicating matters, states and counties are in something of a time crunch when it comes to the accommodation of people with disabilities. They will have to have at least one accessible voting machine in place at each polling place by the first federal election in 2006. That means that they will have to select and begin procurement of these systems this year.

Notwithstanding this time crunch, further research on the accessibility of voting technology would likely be useful. That is particularly so, given HAVA's requirement that any new voting equipment purchased with HAVA Title II monies after January 1, 2007 be accessible to people with disabilities. In determining what type of equipment to purchase, it would be helpful to know how well different products accommodate the various categories of disabilities identified above (visual, manual, mobility, hearing, and cognitive). This would require having people with these type of disabilities use the equipment, and surveying them afterwards to assess how effectively it accommodated them. This type of research will be critical, as local and state governmental entities make determinations about what type of equipment to purchase.

³²The Center for American Politics and Citizenship at the University of Maryland is presently undertaking an assessment of voting technology and ballot design. For information on this project, see http://www.capc.umd.edu/rpts/VotingTech_par.html. The project, funded by the National Science Foundation, is examining the impact of "human factors" upon the use of voting technology. It is not clear whether accessibility to those with disabilities is a major focus of their research.