Survey of Accessible Voting Machines in Massachusetts

Bay State Council of the Blind

November 2016

Introduction

Following the presidential election on November 8th, 2016, the Bay State Council of the Blind (BSCB) conducted a survey to assess the voting experience of Massachusetts citizens with disabilities. The BSCB is the Massachusetts affiliate of the American Council of the Blind (ACB,) a leading national blindness consumer advocacy organization.

The questionnaire focused on the AutoMARK Voter Assist Terminal, an accessible voting machine that satisfies the Commonwealth’s obligations under the Help America Vote Act. The AutoMARK provides a touch screen with magnification for voters with low vision, an audio ballot and braille keypad for blind users, and a puff-sip interface for voters who have difficulty holding a pen. These terminals, required in every polling place, are now ten years old. Our objective was to collect feedback in order to determine how well the voting machines were working.

Methodology

With the cooperation of approximately a dozen organizations that serve Massachusetts citizens who are blind or who have disabilities, the BSCB distributed a link to a brief 11-item online questionnaire through Survey Monkey. Organizations receiving the survey link included the Disability Policy Consortium, the Massachusetts Office on Disability, Easter Seals, Rev Up, the Worcester Talking Book Library, the National Federation of the Blind of Massachusetts, the Carroll Center, the Massachusetts Association for the Blind and Visually Impaired, and others. Participating organizations distributed the link through their online networks. The BSCB distributed the link to members through an announce list. The survey was active for ten days after the election.

In total, information was collected on 82 polling places from 106 respondents. There was no random sampling, and the survey should not be considered statistically valid.
Summary

Table 1: Did you vote in Massachusetts in the November 8th elections, either on election day or by early voting?

<table>
<thead>
<tr>
<th>Did not vote</th>
<th>Voted by Absentee Ballot</th>
<th>Voted Early</th>
<th>Voted on Election Day</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>44</td>
<td>50</td>
<td>106</td>
</tr>
</tbody>
</table>

Table 2: Did your polling place have an accessible voting machine?

<table>
<thead>
<tr>
<th>Don’t Know</th>
<th>No</th>
<th>No response</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>6</td>
<td>16</td>
<td>74</td>
<td>106</td>
</tr>
</tbody>
</table>

Table 3: Were you able to successfully use the machine to mark a ballot, either alone or with assistance?

<table>
<thead>
<tr>
<th>No response</th>
<th>Used the voting machine ALONE to cast my ballot</th>
<th>Used the voting machine WITH ASSISTANCE to cast my ballot</th>
<th>Was NOT able to use the Voting Machine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>42</td>
<td>22</td>
<td>8</td>
<td>106</td>
</tr>
</tbody>
</table>

Table 4: How familiar were the on-site poll workers with the voting machine and its use?

<table>
<thead>
<tr>
<th>Extremely knowledgeable</th>
<th>Little or no knowledge</th>
<th>Mostly knowledgeable</th>
<th>No response</th>
<th>Not very knowledgeable</th>
<th>Somewhat knowledgeable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>3</td>
<td>21</td>
<td>38</td>
<td>5</td>
<td>12</td>
<td>106</td>
</tr>
</tbody>
</table>

In which, if any, of the following areas do you have difficulty while voting

(For technical reasons, table 5 is not available. Approximately 75% of respondents were blind and 25% were deaf or had limited mobility.)

Table 6: Were you able to cast your vote without others around you knowing your choices?

<table>
<thead>
<tr>
<th>No</th>
<th>No response</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>22</td>
<td>75</td>
<td>106</td>
</tr>
</tbody>
</table>

Table 7: Apart from the time spent waiting in line, approximately how long did it take to vote?

<table>
<thead>
<tr>
<th>15 to 30 minutes</th>
<th>30 to 45 minutes</th>
<th>45 minutes to one hour</th>
<th>Less than 15 minutes</th>
<th>No response</th>
<th>Over one hour</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>2</td>
<td>1</td>
<td>62</td>
<td>22</td>
<td>1</td>
<td>106</td>
</tr>
</tbody>
</table>
Discussion

Of those voters who went to a polling place, either for early voting or on election day, 74 (78.7%) had access to a voting machine. Six (6.4%) reported there was no machine, and 10 (10.6%) didn’t know. Four of the polling places without terminals were for early voting. Two were on the day of the election.

58.3% said they could use the machine independently, and another 30.6% said they could use it with assistance. In total, 88.9% were successful. The results were nearly the same for early voting and same-day voting.

Of the voters who responded to a question about poll workers’ familiarity with the machine, 39.7% reported that workers were very knowledgeable, and another 30.9% said they were mostly knowledgeable. It appears that about 70% of workers are sufficiently familiar with the machine to offer assistance. Of the other workers, 11.8% had very limited knowledge. There was little difference between early voters and same-day voters.

89.3% believed their ballot was private. Of those responding to the question, 10.7% reported they could not cast a vote privately. Early voters reported slightly more privacy than same-day voters.

73.8% of voters cast a ballot in less than 15 minutes. Another 21.4% voted in less than half an hour. For 3.5% of respondents, it took between half an hour and an hour to vote. One person who voted early reported an experience that lasted more than an hour. In general, it took about the same amount of time to vote early and on election day.

Recommendations

- For a presidential election, six voters reported there was no accessible machine at their polling place. It’s likely the number would be higher for local elections. There needs to be more oversight and vigilance to ensure that all cities and towns are complying with HAVA.

- Approximately 42% of respondents took advantage of early voting, making it a popular option. Only 10% voted by absentee ballot. It’s very important for an accessible machine to be at every polling place that is open for early voting.

- One in ten voters with a disability doesn’t know if their polling place has an accessible terminal. Poll workers need to be more proactive in offering it as an option.

- One-third of poll workers would benefit from more training in the use of the terminal.

- One in ten disabled respondents said their ballot was not private. Confidentiality will be enhanced by thoughtful positioning of the terminal, good repair, and well-trained staff.

Conclusion

With the implementation of HAVA, Massachusetts voters with disabilities have far more privacy and independence than they had ten years ago. Unfortunately, inconsistencies remain. Most users liked the AutoMARK terminal, and most of the difficulties identified in the survey could be easily addressed with maintenance and training. More vigilance is needed to ensure a consistently positive experience for all voters.
Since the implementation of the Help America Vote Act (HAVA) in 2006, all polling places in the U.S. have been required to have an accessible voting machine. In Massachusetts, the AutoMARK Voter Assist Terminal provides a touch screen with magnification for voters with low vision, an audio ballot and braille keypad for blind users, and a puff-sip interface for voters who have difficulty holding a pen. The accessible terminal is an alternate way to mark a ballot and is an option for all voters.

These machines are now ten years old. The Bay State Council of the Blind (BSCB) has prepared this brief, ten-minute survey to assess how well they are working. We are seeking feedback from registered voters who used or tried to use an accessible terminal in Massachusetts during the election on November 8th, 2016. All information will be confidential, and the identity of individual respondents will not be used. Surveys must be completed by November 18th. The results of the survey will be given to Secretary of the Commonwealth William Galvin to improve the voting experience of people with disabilities in future elections.

Please note that taking this survey is not a substitute for direct action. If you feel that your right to vote has been violated, call the Secretary of the Commonwealth’s Elections Division at 1-800-462-8683.

We would like to hear from voters in every precinct in Massachusetts. Thank you for taking the time to complete this survey!

Please use the Next button to begin the survey.

1. Did you vote in Massachusetts in the November 8th elections, either on election day or by early voting?
   - Voted on Election Day
   - Voted Early
   - Voted by Absentee Ballot
   - Did not vote

2. In which city or town did you vote?

3. Please identify where you voted, either by ward and precinct, address of polling place, or name of building:

4. Did your polling place have an accessible voting machine?
   - Yes
   - No
   - Don’t Know

5. Were you able to successfully use the machine to mark a ballot, either alone or with assistance?
   - Used the voting machine ALONE to cast my ballot
   - Used the voting machine WITH ASSISTANCE to cast my ballot
Was NOT able to use the Voting Machine

6. How familiar were the on-site poll workers with the voting machine and its use?
   Extremely knowledgeable
   Mostly knowledgeable
   Somewhat knowledgeable
   Not very knowledgeable
   Little or no knowledge

7. In which, if any, of the following areas do you have difficulty while voting (check all that apply)
   Reading a ballot and seeing where to mark choice
   Hearing or following instructions
   Holding a pen or stylus to mark ballot
   Other (please specify)

8. Were you able to cast your vote without others around you knowing your choices?
   Yes
   No

9. Please describe what happened to cause others to know your choices:

10. Apart from the time spent waiting in line, approximately how long did it take to vote?
   Less than 15 minutes
   15 to 30 minutes
   30 to 45 minutes
   45 minutes to one hour
   over one hour

11. In your own words, please describe your voting experience:

    Thank you for participating in the survey!
Appendix B

Action Items on Accessible Polling Places

To improve access for Massachusetts voters with disabilities, the Bay State Council of the Blind is submitting the following comments, both positive and negative, to the Secretary of the Commonwealth. We request that the Secretary’s office contact the polling places with the feedback, and provide any necessary support and follow up to ensure a positive voting experience for all voters.

Respondents reported there was no accessible voting machine at the following polling places:

- Arlington, Town Hall (early voting)
- Canton, Town Hall (early voting)
- Gardner, Library
- Lunenburg, Town Hall (early voting)
- Malden, Emerald Street
- Methuen, Police station (early voting)

Respondents reported that they didn’t know if there was an accessible voting machine at the following polling places:

- Amherst, Fire Department
- Arlington, Town Hall (early voting)
- Boston, Ward 22, Pct 6
- Boston, City Hall (early voting)*
- Dudley, Pct 2 Dudley Town Hall
- Littleton, Town Hall (early voting)
- Northampton, City Hall, 210 Main Street (early voting)
- Quincy, Ward 3, Precinct 2 81 Prospect Avenue First Baptist Church
- Shrewsbury, SAC Park
- Worcester Ward 10(Maywood St. Apartment., off of May St.

*Another respondent reported an excellent experience here during early voting. Poll workers may need to proactively approach individuals with white canes, service animals, wheelchairs, etc. to inquire if they would like to use the machine.

Respondents said that a machine was present but they couldn’t use it to cast a ballot in the following polling places:

- Wellesley, Town Hall (early voting), broken machine.
- Wellesley main library, 530 Washington Street. No poll worker familiar with machine.
- Worcester, 72 Pullman Street. Machine broken; mechanic came half an hour later Staff not knowledgeable.
- Worcester, Mt Carmel Rec Center (early voting,) poll workers not familiar with machine
Respondents reported that poll workers had very little knowledge of machines at the following polling places:

- Arlington, Bishop School Precinct 11
- Braintree Town Hall (early voting)
- Boston, 15 Harbor Point BLVD, Boston MA 02125
- Malden, Salemwood School
- Wellesley, Main Library
- Worcester, 72 Pullman St, Worcester, MA 01606
- Worcester, Mt Carmel Rec Center (early voting)

At the following locations, respondents reported that they needed assistance with the machine and that poll workers were extremely knowledgeable:

- Acton Town Hall, (early voting)
- Malden, 89 Pearl Street
- Mattapan, Ward 14
- Peabody (no polling place given)
- Watertown, Cunniff School
- Westboro Town Hall (early voting)
- Worcester Art Museum
- Worcester, Precinct 5, Ward 3
- Worcester UUCW 90 Holden St. (early voting)

Respondents reported they were not able to privately cast a ballot at the following polling places:

- Allston, Jackson Mann School. Voter had had a previous bad experience and chose to get assistance
- Arlington, Bishop School Precinct 11. Machine printer jammed and police officer had to look over ballot to see what had or had not printed.
- Gardner Library, parent filled out ballot because no machine was available. Described as “awkward.”
- Littleton Town Hall, early voting. Spouse completed ballot because there didn’t appear to be a machine.
- Peabody (no polling location given), machine visible to public at check-out table
- Quincy, Ward 3, Precinct 2 81 Prospect Avenue First Baptist Church. Voter has never seen an accessible machine at this polling place. Husband filled out ballot.
- Wellesley main library, 530 Washington Street, 02482. Staff couldn’t figure out how to use machine, so voter had to ask a friend to fill out the ballot
- Wellesley Town Hall, early voting. Machine not working, so assistance needed.
- Worcester, 72 Pullman St, Worcester, MA 01606. Machine broken, so warden filled out the ballot

In the following polling places, respondents indicated that it took more than 45 minutes to cast a ballot after checking in:


Noteworthy Comments:

Acton Town Hall (early voting.) “Very thrilled first time I used the AutoMARK because of my progressive visual limitations I had not realized how much it could help”
Arlington Town Hall (early voting.) “I used my own electronic magnifier but struggled where to mark at times. I was not aware of the alternate voting tool.”

Arlington, Bishop school Precinct 11 “I LOVE the AutoMark but the machine at my polling place jammed while printing the last two times I used it - I reported the problem to poll workers both times but they didn’t seem too interested so on November 8, I also reported the problem directly to town clerk's office & Secretary Galvin's office. Poll workers are always very friendly to me personally but they have a consistently negative attitude about the AutoMark, saying things like: “that thing never works” (not true) or “the other blind lady who votes here said she doesn't need the machine” (irrelevant), and nearly every time I vote, the machine is not turned on or plugged in, so I have to wait for someone to come with the key (and usually they don't know which key it is, or who has it...so that takes a few minutes...). Fortunately on November 8 there was a policeman with a very GOOD attitude (M. Flynn) who helped me reset the AutoMark (so my blind friend could use it after me - it worked perfectly for my friend) & also helped me check over my ballot (AutoMark did warn me there was a problem with printing my ballot - back of ballot was totally blank so I marked questions 2, 3 & 4 manually with a magnifying glass). AutoMark is wonderful when it works (even when it didn't work for me, at least it DID tell me there was a problem) - a little more maintenance on the machines & a LOT more education for poll workers would make a big difference for me as a visually impaired voter. Thanks for reading!”

Boston, Ward 22, Pct 6. “I don't personally need accommodations for voting. My polling place was difficult to access physically for anyone with mobility issues - lots of stairs, twists and turns. I didn't see where the alternative entrance was/not well marked. Lots of languages were available, I did not see anyone providing an accommodation, just a lower platform for wheelchair users. It was really chaotic, even at 9am.”

Boston City Hall (early voting.) “My voting experience went really well. This was my first time voting in Boston. I was pleasantly surprised that there were several AutoMARK and that the police are workers were knowledgeable about the machine.”

Braintree Town Hall (early voting.) “People were willing to help but I ended up having to turn the screen off in order to vote privately since the machine was right out in the middle of the floor. We did speak to the person in charge and expressed some concerns and suggestions.”

Brighton, 20 Chestnut Hill Ave, Veronica B. Smith Senior Center (early voting.) “This was my first time voting in a general election and it was extremely positive. The poll workers were friendly, knowledgeable, and eager to assist.”

Cambridge, O'Neil Library (early voting.) “Very good, but absentee ballots and voting measures need to be offered with braille overlay and publicized as such so those who cannot go vote in-person can still maintain privacy and be blind. I was able to go vote in-person, but felt I needed to take a sighted friend with me just in case.”

Harwich, Harwich Community Center, 100 Oak Street. “Satisfactory. I appreciate very much being able to cast my vote independently using this machine. I wish my town did more to publicize the existence of this voting machine (and provide instruction in its use). If that were done then I think more registered voters would use it.”

Lynn City Hall (early voting.) “Extremely positive. It was good going into poles and having worker discretely ask me if I needed the accessible voting machine. I lived in Medford for several years and was appalled to have poll worker shout across room, This one needs the blind machine, or being told to come back later when the person in charge of the blind machine was available to help me.”

Malden, Salemwood School. “One worker was helpful having us use a table near where they tabulate votes. Two of the workers said there was not table and we would need to use a booth which would of been difficult for a wheelchair and helper. Generally people seem unaware as to what is needed for special needs especially if the person is in a wheelchair.”

Malden, Emerald Street. “The location was not accessible to wheelchair users, hard to move around the room not enough space, the location is not ventilated because of daily tobacco use in that building so the air quality is
unacceptable. The only accessible location for voting was a booth with a lower table. There were no signs letting voters know they could ask for assistance.”

Mansfield Town Hall (early voting.) “Voting went very smoothly and it felt wonderful to cast my ballot independently. The AutoMark machine was set up and waiting for me to arrive. The town clerk said she had tested it, and was thrilled that I was using the machine.”

Natick, precinct 4. “This election it was very positive. The machine worked without any problems. Previous elections, approximately 4 out of every five times the machine would not print out my votes.”

New Bedford City Hall, 133 William Street (early voting.) “Always use New Bedford City Hall because the clerks are friendly and helpful. The machine is sometimes situated in the general path of other citizens so it’s important to have the screen turned off.”

Northampton City Hall, 210 Main Street (early voting.) “When calling City Hall to inquire on the availability of an accessible voting machine for early voting, I was told that they only had a machine with a touch screen for low vision people and that no one knew how to use it.”

Norwood, Town Hall Building (early voting.) “Machine in a room where others could have been looking over my shoulder while voting as no separation between accessible machine for privacy, but nobody was in the area that I was when voting, so not an issue for me. A very good & important experience for me as a blind person new to blindness within 10 years as I was using an absentee ballot before. Love accessible machine!”

Peabody, 1 Wilson Terrace. “I love that I can walk right into my polling location and be seated right away with my ballot and feed it into the machine without any difficulties and/or errors. They always have a contact or someone physically there that knows what to do if something goes wrong.”

Quincy, Ward 3, Precinct 2 81 Prospect Avenue First Baptist Church. “My husband completed my ballot for me - Wanting to ensure he had my wishes met, he’d quietly confirm my choices. Though our voices were very low, it is uncomfortable to think others might overhear. We have never seen an accessible voting machine set up at our voting location. Since there is not one set up, I don’t ask for one since it would create a “production.” And, why should I have to ask - I would think it would be integrated into the voting design as it is in New York. It’s almost intimidating to have to ask for something which should already be available. I also called the Board of Elections a year ago and asked about the machines - I was told, oh, yes, we’ll put up a sign announcing their availability. I pointed out that blind people can’t read signs which surprised the official.”

Shrewsbury, SAC Park. “Hard to balance myself while standing. To hold on to a flimsy booth and hold a pen is challenging.”

Waltham, Ward Number: 03 Precinct Number: 2, Northeast Elementary School. “wanted to use speech. No headphones were available so I used magnification which I was barely able to use. Only one magnification level available.”

Waltham City Hall (early voting.) “By the time the prep was done to actually find the machine, it was a pretty good experience, though I could not figure out how to turn the screen off, so it felt to me like people could go by and look who I was voting for. Plus, it took them about 15 minutes or so to even find the machine, which was frustrating.”

Watertown Town Hall (early voting.) “I was very happy with how the process worked. My family included two blind people and two of the three of us also have some difficulty standing for long periods of time. The poll worker got us in quickly, assisted us in filling-out the paperwork required to vote early and in getting to and from the accessible voting machine. All-in-all, a very good experience.”

Watertown, Phillips School. “Perfect. Folks guided me to the machine, helped me insert the ballot in the proper direction, and then left me alone.”
Watertown, Cunniff School. “The machine was not set up properly. If I had not had sighted assistance, I would not have been able to use voting machine. It seemed as if no one had used the machine before I did on Voting Day.”

Wellesley, Schofield School. “Fine no issues. I did call the Town Clerk as the last election I used the machine the ballot faced toward the room. I asked them to turn the table for this election for privacy which they did. The warden checked with me to make sure it was ok.”

Wellesley Town Hall (early voting.) “Not inspiring. The machine was near the front where people walked by on their way to cast there own votes. Then it wouldn't work properly when the attendant tried to help set it up for me and I had to have the person I had come in with write down my choices.”

Worcester, 280 May Street (early voting.) “Having to wait for a second machine was frustrating, but ultimately it was good to vote. The officials were very sympathetic about me wanting to vote privately, and no one offered to just do it for me. For that I was grateful.”

Worcester, UUCW 90 Holden Street (early voting.) “On arrival to the polling sight, the AutoMARK voting machine would not take the ballot. At least 7 ballots were unfolded and attempts were made to flatten out the ballot, but the machine would not feed the ballot for scanning. They replaced the machine and it still didn't work. A technician from AutoMARK finally arrived and fixed the machine. I had left, leaving my mobil number, and when it was repaired, I was picked up from my house and was driven to the polling sight to cast my ballot in privacy. The technician fixed ten machine so that the early voting could allow voters who needed to use the accessible machine to vote without difficulty. I was the first and only voter to request use of the AutoMARK on the first day of early voting.”

Worcester, 90 Holden Street (early voting.) “I would have liked a poll worker to have asked me if I needed help with the machine. I had to put the ballot in twice as the first time it did not process it and could not read it. I did not remember that happening in the past. But once the ballot was in the voting process went smoothly, including the printing of the ballot.”

Worcester, Ward 2 Precinct 2. “Though I am very familiar with the accessible voting machine, this time voting was not a smooth experience. The volume adjuster did not work, so when the ballot was inserted, I couldn't hear anything. When assistance came nothing could be done but to re-boot the machine. After a lengthy wait for the machine to be ready, at the point for the ballot to be printed, a error message came on to get assistance. Again another very lengthy wait for someone from the election committee to come and trouble shoot. Once that was done very efficiently I completed my ballot. It seems the problem was that someone had tampered with the printer cartridge, and the officials at the precinct thought the cartridge had been removed, so once assistance arrived at the precinct he was able to fix it quickly and he stayed while I finished to make sure that it completed properly. I was very grateful to him, because it was very important that I was able to vote independently and with privacy, since I used the button that blackens the screen so that no one can see who I am voting for.”

Worcester, 72 Pullman St, Worcester, MA 01606. “Uncomfortable and frustrated the machine was not in working condition when I had arrived.”

Worcester, Precinct 5, Ward 3. “First time I have used the accessible machine. It was a great experience. The volunteer worker set up the machine, asked if I needed the print to be made larger. I told him that I couldn’t see print anymore, and he handed me the headphones. I then went ahead and voted independently from there. I am a braille reader, and there was braille on the machine. However, some of the braille was incorrect. So that was the only issue I had. I figured out the braille, it wasn't horrible, but incorrect braille. For example, the word "enter" was e n s e r, but I figured it out. With such a great experience, I won't be apprehensive to vote the next time.”