

**Accessible Voting Technology Initiative  
Assistive Technology Applications for the Voting Process**

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## **An analysis of assistive technology to support possible tasks and activities in voting**

The six draft tables that follow represent a compilation and organization of possible tasks and activities voters may engage in as they navigate the voting process.

Each table is associated with one type of disability involving one fundamental sensory or physical functional limitation.

1. Mobility (lower extremity)
2. Mobility (upper extremity)
3. Vision
4. Hearing
5. Deaf/Blind
6. Cognitive

As will become apparent, the voting tasks listed for casting a ballot describe in-person voting. While absentee processes are not listed, assistive technologies for paper handling processes done at home are listed for similar activities associated with voting.

I believe the tables reveal a number of accessibility gaps in the process for each disability group, and hope that identification of these gaps may stimulate work towards finding solutions.

I am certain other members of our team will have additions, subtractions, suggestions, questions and comments in response to these tables. I welcome them, and hope that what I've provided can be a thought provoking start to something more complete, and of eventual significant value to our efforts to enhance voting accessibility for all people with disabilities.

- Greg McGrew

## How to read the tables

The first column in each table lists the unique tasks and activities I have identified in the voting process. The rest of the columns show assistive technology devices that someone with that disability may employ to perform the task or access the information.

This information is in two columns. The first two are current or common ASSISTIVE TECHNOLOGY. 'Adaptive computer access software and/or hardware' refers to those existing AT tools that offer alternate computer access to people that cannot (or find it difficult to) use a computer by typing with their ten fingers.

- AT the voter may own and travel with, referred to as personal
- AT that may be provided by the polling place or for use by the public and provided by some other entity. This AT is referred to as provided to public or at the polling place.

In these two columns:

- N/A indicates that for that particular disability group, there is no applicable functional limitation (and therefore, AT) associated with that task, or that by virtue of the task itself is to be performed, there would not be either personal or public AT associated with it.
- A question mark (?) in a cell indicates that there may not currently be any assistive technology that addresses that functional limitation associated with that task.

The final column lists EMERGING TECHNOLOGY are not yet widely used to enable voting participation by people with disabilities, but should be considered as potential tools for facilitating some part of voting participation for people with some type of functional limitation. These would include products currently on the market, but also more fundamental technologies that could potentially be incorporated into assistive technology designs that would enhance the accessibility of the voting process for some people.

## **Other existing and emerging technologies that may impact voting accessibility in the future.**

These technologies are identified in the tables in activities where they might be helpful to voters.

### **Mobile technologies: smart phones, tablets**

The functionality of these products continues to broaden as developers create more task-specific apps. The development of apps that could facilitate the successful completion of voting process tasks could provide voting access for people with disabilities at relatively low cost. For example, apps might facilitate

- reading the ballot and instructions
- voting by voice
- verifying the results.

### **Other technology developments that could improve voting for people with disabilities:**

1. A mobile technology-based system, used by a voter who is blind or has trouble understanding written text, that can read text on visual flat screen displays (VFSD) that voters could encounter on voting machines. VFSDs are often difficult for current photo scanning/character recognition systems to capture and read accurately due to the nature of the screen refresh.
2. Context aware sensing technology in mobile device where the device picks up signal at polling place that pulls up user interface from cloud designed for use by voter with specific type of disability or functional limitations. A voter uses this as a remote to carry out voting process.
3. Voting machines that would automatically configure to customized accessible interface when voter checks in to poll. Configuration would be determined based on information provided during voter registration or when signing in.
4. Gesture recognition as input method for voting machines (Wii, Kinect)
5. Augmented reality (directions for printing, depositing ballot, etc.)
6. Way-finding technology providing guidance to tagged (RFID, other) equipment through mobile device

## Mobility Disability (lower extremity)

This table highlights the basic need for those adaptations and technologies that facilitate physical access to the poll. The assistive technologies and adaptations listed here have been around for many years, are fairly prevalent, and are generally low tech in nature. That said, they are all fundamental to the ability of the individuals in this group to independently vote in person at the poll, and in the case of architectural accessibility features, many are mandated by law.

TASK	ASSISTIVE TECHNOLOGY [personal]	ASSISTIVE TECHNOLOGY [provided to public or at polling place]	EMERGING TECHNOLOGY (numbers reference technologies described at the end of this document)
<b>REGISTERING TO VOTE</b>			
1. Reading text from paper forms, websites	N/A	N/A	
2. Writing text, signing paper forms	N/A	N/A	
3. Filling out online forms (computer typing, mouse, stylus)	N/A	N/A	
4. Travel to registration site	Wheelchair, vehicle adapted with hand controls	Accessible public transportation (bus, accessible cab)	
5. Enter registration site	Walker, wheelchair, cane	Ramp, lift, automatic door, lever door handle	
6. Mailing forms	Walker, wheelchair, cane	N/A	
7. Calling election office	N/A	N/A	
8. Pull documentation together for registration	Walker, wheelchair, cane	N/A	
<b>LEARNING ABOUT CANDIDATES AND BALLOT ISSUES, LEARNING ABOUT HOW ELECTIONS WORK (PROCESS)</b>			
9. Reading text from books, newspapers, magazines, websites, email, social network sites, TV	N/A	N/A	
10. Hearing reports from TV, radio, websites, live	N/A	N/A	

events, direct and phone contact with others			
11. Reading graphics, text from snail mail, websites, newspapers, TV	N/A	N/A	
12. Attend political rally or town hall meeting to hear candidates	Vehicle with hand, adapted controls; Walker, wheelchair, cane	Accessible public transportation (bus, accessible cab); Ramp, lift, automatic door, lever door handle	
<b>FINDING OUT WHEN AND WHERE ELECTIONS WILL BE HELD AND OPTIONS FOR VOTING</b>			
13. Hearing information from others directly (face to face, phone), TV, radio	N/A	N/A	
14. Accessing a calendar and assigning appointment time/place to a date.	N/A	N/A	
<b>GETTING TO THE POLLING SITE</b>			
15. Locate, identify, access needed documents	Walker, wheelchair, cane		
16. Present documents at poll	N/A	N/A	
<b>SIGNING IN AND GETTING YOUR BALLOT</b>			
17. Travel to poll site	Vehicle with hand, adapted controls	Accessible public transportation (bus, accessible cab)	
18. Enter poll site	Walker, wheelchair, cane	Ramp, lift, automatic door, lever door handle	
19. Maneuver in polling site	Walker, wheelchair, cane	N/A	
20. Position for access to voting booth/machine	Walker, wheelchair, cane	N/A	
21. Speak to poll worker	N/A	N/A	
<b>LEARNING HOW TO MARK YOUR BALLOT</b>			
22. Read paper instructions	N/A	N/A	
23. Read instructions on digital machine	N/A	N/A	

24. Hear instructions from poll worker	N/A	N/A	
25. Hear instructions from digital machine	N/A	N/A	
<b>CASTING YOUR BALLOT</b>			
26. Mark paper ballot with pen, stylus	N/A	N/A	
27. Type on digital machine	N/A	N/A	
28. Press buttons on machine	N/A	N/A	
29. Flip levers on machine	N/A	N/A	
30. Transport paper ballot to scanner or poll worker	Walker, wheelchair, cane	N/A	

## Mobility Disability (upper extremity)

Voting involves the intake of information by the voter, subsequent documentation of the voter's choices and decisions, and verification by the voter that such choices and decisions were accurately and effectively recorded. For voters who cannot use their hands, the benefits of using a computer (including smart mobile devices) to perform these tasks become apparent when one recognizes the availability of effective adaptive computer software and hardware designed to facilitate computer use by people with this type of impairment.

TASK	ASSISTIVE TECHNOLOGY [personal]	ASSISTIVE TECHNOLOGY [provided to public or at polling place]	EMERGING TECHNOLOGY (numbers reference technologies described at the end of this document)
<b>REGISTERING TO VOTE</b>			
1. Reading text from paper forms, websites	Book stand, copy stand, mouthstick	Book stand, copy stand	
2. Writing text, signing paper forms	Cuff with pen holder, mouthstick, signature guide	Cuff with pen holder, mouthstick, signature guide	
3. Filling out online forms (computer typing, mouse, stylus)	<b>Adaptive computer access software and/or hardware :</b> Speech recognition software, headstick, mouthstick, cuff w/ stylus holder, head pointing system, eyegaze system, mousekeys, onscreen scanning keyboard w/ switch(es)	Speech recognition software, cuff w/stylus holder, head pointing system, mousekeys, onscreen scanning keyboard w/ switch(es)	
4. Travel to registration site	N/A	N/A	
5. Enter registration site	N/A	Automatic door	
6. Mailing forms	Scanner/email using <b>adaptive computer access software and/or hardware</b>	N/A	
7. Calling election office	Adapted phone (large buttons, switch operated, voice controlled)	N/A	
8. Pull documentation	<b>Adaptive computer access</b>	Adaptive computer access	



together for registration	<b>software and/or hardware</b>	software and/or hardware	
<b>LEARNING ABOUT CANDIDATES AND BALLOT ISSUES, LEARNING ABOUT HOW ELECTIONS WORK (PROCESS)</b>			
9. Reading text from books, newspapers, magazines, websites, email, social network sites, TV	Headstick, mouthstick, cuff w/stylus holder; Book stand, copy stand, <b>Adaptive computer access software and/or hardware</b>	N/A	
10. Hearing reports from TV, radio, websites, live events, direct and phone contact with others	N/A	N/A	
11. Reading graphics, text from snail mail, websites, newspapers, TV	Copy holder, mouthstick, headstick, Voice controlled remote	N/A	
12. Attend political rally or town hall meeting to hear candidates	N/A	N/A	
<b>FINDING OUT WHEN AND WHERE ELECTIONS WILL BE HELD AND OPTIONS FOR VOTING</b>			
13. Hearing information from others directly (face to face, phone), TV, radio	N/A	N/A	
14. Accessing a calendar and assigning appointment time/place to a date.	N/A	N/A	
<b>GETTING TO THE POLLING SITE</b>			
15. Locate, identify, access needed documents	Headstick, mouthstick	N/A	
16. Present documents at poll	N/A	N/A	
<b>SIGNING IN AND GETTING YOUR BALLOT</b>			
17. Travel to poll site	Vehicle with adapted hand, adapted controls	N/A	
18. Enter poll site	N/A	Ramp, automatic door, lever door handle	

19. Maneuver in polling site	N/A	N/A	
20. Position for access to voting booth/machine	N/A	N/A	
21. Speak to poll worker	N/A	N/A	
<b>LEARNING HOW TO MARK YOUR BALLOT</b>			
22. Read paper instructions	Copy holder, page turner, mouthstick, headstick	Copy holder, page turner	
23. Read instructions on digital machine	Switch access to plug into voting machine	Switch access for moving through pages	
24. Hear instructions from poll worker	N/A	N/A	
25. Hear instructions from digital machine	N/A	N/A	
<b>CASTING YOUR BALLOT</b>			
26. Mark paper ballot with pen, stylus	Cuff w/pen holder, mouth stick, head stick	?	2, 3, 4
27. Type on digital machine	Head stick, mouth stick, cuff w/pen holder	Cuff w/pen holder, voting machine with scanning and adaptive switch(es)	2, 3, 4
28. Press buttons on machine	Head stick, mouth stick, cuff w/pen holder	Cuff w/pen holder, voting machine with scanning and adaptive switch(es)	2, 3, 4
29. Flip levers on machine	Head stick, mouth stick, cuff w/pen holder	Cuff w/pen holder	2, 3, 4
30. Transport paper ballot to scanner or poll worker	Mouth stick w/ grabber on the end	Voting machine with feature that transports ballot to proper location	2, 3, 4

## Visual Disability

The fundamental process adaptation for blind voters is the conversion from print or electronic text to speech (or Braille, tactile) of all information the voter needs throughout the voting process. There are plenty of software tools to make this happen for electronic text. An added level of software is needed to do this for print – optical character recognition. With that comes an added level of complexity to the conversion and subsequent increase in likelihood of conversion error.

TASK	ASSISTIVE TECHNOLOGY [personal]	ASSISTIVE TECHNOLOGY [provided to public or at polling place]	EMERGING TECHNOLOGY (numbers reference technologies described at the end of this document)
<b>REGISTERING TO VOTE</b>			
1. Reading text from paper forms, websites	Portable text-speech device (Intel Reader), scanner & optical character recognition (ocr) software w/ speech output, screen readers	N/A	
2. Writing text, signing paper forms	Writing guide	N/A	
3. Filling out online forms (computer typing, mouse, stylus)	Screen reading software, braille reader	N/A	
4. Travel to registration site	Mobile device with speech/braille output navigation system, public transportation app for mobile device with speech/braille output	N/A	
5. Enter registration site	Cane	N/A	
6. Mailing forms	N/A	N/A	
7. Calling election office	N/A	N/A	
8. Pull documentation together for registration	Scanner & ocr w/ speech output	N/A	
<b>LEARNING ABOUT CANDIDATES AND BALLOT ISSUES, LEARNING ABOUT HOW ELECTIONS WORK (PROCESS)</b>			
9. Reading text from books,	Scanner & ocr w/ speech	N/A	

newspapers, magazines, websites, email, social network sites, TV	output, screen reading software		
10. Hearing reports from TV, radio, websites, live events, direct and phone contact with others	TV Speak (through PC)	N/A	
11. Reading graphics, text from snail mail, websites, newspapers, TV	Scanner & ocr w/ speech output, screen reading software	N/A	
12. Attend political rally or town hall meeting to hear candidates	Mobile device with speech/braille output navigation system, public transportation app for mobile device with speech output	N/A	
<b>FINDING OUT WHEN AND WHERE ELECTIONS WILL BE HELD AND OPTIONS FOR VOTING</b>			
13. Hearing information from others directly (face to face, phone), TV, radio	N/A	N/A	
14. Accessing a calendar and assigning appointment time/place to a date.	Braille mobile device, screen reading software		
<b>GETTING TO THE POLLING SITE</b>			
15. Locate, identify, access needed documents	Portable text-speech device	Scanner & ocr w/ speech output, screen reading software	
16. Present documents at poll	N/A	N/A	
<b>SIGNING IN AND GETTING YOUR BALLOT</b>			
17. Travel to poll site	Mobile device with speech/braille output navigation system, public transportation app for mobile device with speech output	N/A	
18. Enter poll site	Cane	N/A	

19. Maneuver in polling site	Cane	?	6
20. Position for access to voting booth/machine	Cane	?	6
21. Speak to poll worker	N/A	N/A	
<b>LEARNING HOW TO MARK YOUR BALLOT</b>			
22. Read paper instructions	Portable text-speech device, scanner & ocr software w/ speech/braille output	Portable text-speech device, scanner & ocr software w/ speech/braille output	
23. Read instructions on digital machine		Text-to-speech option on voting machine	1
24. Hear instructions from poll worker	N/A	N/A	
25. Hear instructions from digital machine	N/A	N/A	
<b>CASTING YOUR BALLOT</b>			
26. Mark paper ballot with pen, stylus	Writing guide	Writing guide	
27. Type on digital machine			
28. Press buttons on machine	Portable text-speech device	Braille labels	
29. Flip levers on machine	Portable text-speech device	Braille labels (?)	
30. Transport paper ballot to scanner or poll worker	Cane. portable text-speech device	Voting machine with feature that transports ballot to proper location	

## Hearing Disability

Throughout the voting process there are tasks involving communication with others. These tasks represent the primary challenge faced by people who are deaf as they participate in the process. That said, there are long used, effective strategies and technologies available to facilitate communication between the deaf voter and those they need to interact with during the process.

TASK	ASSISTIVE TECHNOLOGY [personal]	ASSISTIVE TECHNOLOGY [provided to public or at polling place]	EMERGING TECHNOLOGY (numbers reference technologies described at the end of this document)
<b>REGISTERING TO VOTE</b>			
1. Reading text from paper forms, websites	N/A	N/A	
2. Writing text, signing paper forms	N/A	N/A	
3. Filling out online forms (computer typing, mouse, stylus)	N/A	N/A	
4. Travel to registration site	N/A	N/A	
5. Enter registration site	N/A	N/A	
6. Mailing forms	N/A	N/A	
7. Calling election office	tty		
8. Pull documentation together for registration	N/A	N/A	
<b>LEARNING ABOUT CANDIDATES AND BALLOT ISSUES, LEARNING ABOUT HOW ELECTIONS WORK (PROCESS)</b>			
9. Reading text from books, newspapers, magazines, websites, email, social network sites, TV	N/A	N/A	
10. Hearing reports from TV, radio, websites, live events	Closed captioning, amplified headphones, hearing aid, phone amplifier	N/A	
11. Reading graphics, text	N/A	N/A	

from snail mail, websites, newspapers, TV			
12. Attend political rally or town hall meeting to hear candidates	Hearing aid	(Live transcription, sign language interpreter)	
<b>FINDING OUT WHEN AND WHERE ELECTIONS WILL BE HELD AND OPTIONS FOR VOTING</b>			
13. Hearing information from others directly (face to face, phone), TV, radio	Hearing aid, tty, closed captioning, amplified headphones	N/A	
14. Accessing a calendar and assigning appointment time/place to a date.	N/A	N/A	
<b>GETTING TO THE POLLING SITE</b>			
15. Locate, identify, access needed documents	N/A	N/A	
16. Present documents at poll	N/A	N/A	
<b>SIGNING IN AND GETTING YOUR BALLOT</b>			
17. Travel to poll site	N/A	N/A	
18. Enter poll site	N/A	N/A	
19. Maneuver in polling site	N/A	N/A	
20. Position for access to voting booth/machine	N/A	N/A	
21. Speak to poll worker	AAC device	Typing communication aid (Lightwriter, Interpretype, other)	
<b>LEARNING HOW TO MARK YOUR BALLOT</b>			
22. Read paper instructions	N/A	N/A	
23. Read instructions on digital machine	N/A	N/A	
24. Hear instructions from poll worker	Voice recognition – mobile device	Typing communication aid (Lightwriter, Interpretype, other)	
25. Hear instructions from digital machine	Voice recognition – mobile device	(presented in visual format)	
<b>CASTING YOUR BALLOT</b>			

26. Mark paper ballot with pen, stylus	N/A	N/A	
27. Type on digital machine	N/A	N/A	
28. Press buttons on machine	N/A	N/A	
29. Flip levers on machine	N/A	N/A	
30. Transport paper ballot to scanner or poll worker	N/A	N/A	



## Deaf/Blind

As with Blind voters, the fundamental process adaptation for deaf/blind voters is the conversion of print to some form the deaf/blind voter can perceive and understand. But in this case, conversion to speech is not a usable alternative. Information must be provided in a tactile form.

TASK	ASSISTIVE TECHNOLOGY [personal]	ASSISTIVE TECHNOLOGY [provided to public or at polling place]	EMERGING TECHNOLOGY (numbers reference technologies described at the start of this document)
<b>REGISTERING TO VOTE</b>			
1. Reading text from paper forms, websites	Scanner/ocr to Braille output	Scanner/ocr to Braille output	
2. Writing text, signing paper forms			
3. Filling out online forms (computer typing, mouse, stylus)	Braille display	Braille display	
4. Travel to registration site	Mobile device with braille output navigation system, public transportation app for mobile device with braille output	N/A	
5. Enter registration site	cane	N/A	
6. Mailing forms	Braille translator, printer	N/A	
7. Calling election office	Braille tty	N/A	
8. Pull documentation together for registration	Braille labels	N/A	
<b>LEARNING ABOUT CANDIDATES AND BALLOT ISSUES, LEARNING ABOUT HOW ELECTIONS WORK (PROCESS)</b>			
9. Reading text from books, newspapers, magazines, websites, email, social network sites, TV	Scanner/ocr to Braille output	N/A	
10. Hearing reports from TV, radio, websites, live events	?	N/A	

11. Reading graphics, text from snail mail, websites, newspapers, TV	Scanner/ocr to Braille output	N/A	
12. Attend political rally or town hall meeting to hear candidates	?	?	
<b>FINDING OUT WHEN AND WHERE ELECTIONS WILL BE HELD AND OPTIONS FOR VOTING</b>			
13. Hearing information from others directly (face to face, phone), TV, radio	Braille tty, Speech recognition to Braille, speech to Braille reporting	N/A	
14. Accessing a calendar and assigning appointment time/place to a date.	Braille calender	N/A	
<b>GETTING TO THE POLLING SITE</b>			
15. Locate, identify, access needed documents	Braille labels	N/A	
16. Present documents at poll	N/A	N/A	
<b>SIGNING IN AND GETTING YOUR BALLOT</b>			
17. Travel to poll site	Cane	N/A	
18. Enter poll site	Cane	N/A	
19. Maneuver in polling site	Cane	?	
20. Position for access to voting booth/machine	Cane	N/A	
21. Speak to poll worker	Portable Braille notetaker with speech output (e.g. Braille Lite)	N/A	
<b>LEARNING HOW TO MARK YOUR BALLOT</b>			
22. Read paper instructions	Scanner/ocr to Braille output	Scanner/ocr to Braille output	
23. Read instructions on digital machine	?	Scanner/ocr to Braille output	1
24. Hear instructions from poll worker	Speech recognition to Braille, speech to Braille reporting	Braille translator	
25. Hear instructions from digital machine	Speech recognition to Braille, speech to Braille reporting	(Braille output option on voting machine)	

<b>CASTING YOUR BALLOT</b>			
26. Mark paper ballot with pen, stylus	N/A	N/A	2, 3, 6
27. Type on digital machine	N/A	N/A	2, 3, 6
28. Press buttons on machine	N/A	Braille labels	2, 3, 6
29. Flip levers on machine	N/A	Braille labels	2, 3, 6
30. Transport paper ballot to scanner or poll worker	?	?	2, 3, 6

## Cognitive disability

As for other types of disabilities, the adaptation of the voting process for people with cognitive disabilities revolves around conversion of information to a form the person can digest and process. People with reading disabilities may just need text-to-speech conversion. However, depending on the level and type of cognitive impairment, the voter may need information presented in more 'plain language'. Currently, I am aware of no assistive technology products available to consumers that make this kind of conversion.

TASK	ASSISTIVE TECHNOLOGY [personal]	ASSISTIVE TECHNOLOGY [provided to public or at polling place]	EMERGING TECHNOLOGY [See technologies listed at the start of this document]
<b>REGISTERING TO VOTE</b>			
1. Reading text from paper forms, websites	Portable text-speech device, scanner & ocr software w/ speech output, screen readers	N/A	
2. Writing text, signing paper forms	N/A	N/A	
3. Filling out online forms (computer typing, mouse, stylus)	N/A	N/A	
4. Travel to registration site	N/A	N/A	
5. Enter registration site	N/A	N/A	
6. Mailing forms	N/A	N/A	
7. Calling election office	N/A	N/A	
8. Pull documentation together for registration	N/A	N/A	
<b>LEARNING ABOUT CANDIDATES AND BALLOT ISSUES, LEARNING ABOUT HOW ELECTIONS WORK (PROCESS)</b>			
9. Reading text from books, newspapers, magazines, websites, email, social network sites, TV	Portable text-speech device, scanner & ocr software w/ speech output, screen readers	N/A	
10. Hearing reports from TV, radio, websites, live events		N/A	
11. Reading graphics, text from	Portable text-speech device,	N/A	

snail mail, websites, newspapers, TV	scanner & ocr software w/ speech output, screen readers		
12. Attend political rally or town hall meeting to hear candidates	N/A	N/A	
<b>FINDING OUT WHEN AND WHERE ELECTIONS WILL BE HELD AND OPTIONS FOR VOTING</b>			
13. Hearing information from others directly (face to face, phone), TV, radio		N/A	
14. Accessing a calendar and assigning appointment time/place to a date.	Prompting app on smart device	N/A	
<b>GETTING TO THE POLLING SITE</b>			
15. Locate, identify, access needed documents	Simple organizational tools/apps on smart device	N/A	
16. Present documents at poll		N/A	
<b>SIGNING IN AND GETTING YOUR BALLOT</b>			
17. Travel to poll site	N/A	N/A	
18. Enter poll site	N/A	N/A	
19. Maneuver in polling site	Portable text-speech device (e.g. IntelReader for reading signs)	N/A	
20. Position for access to voting booth/machine	N/A	N/A	
21. Speak to poll worker	N/A	N/A	
<b>LEARNING HOW TO MARK YOUR BALLOT</b>			
22. Read paper instructions	Portable text-speech device, scanner & ocr software w/ speech output, screen readers	scanner & ocr software w/ speech output, screen readers	
23. Read instructions on digital machine	?	(speech output option for instructions on voting machine)	1
24. Hear instructions from poll worker	N/A	N/A	
25. Hear instructions from digital	N/A	N/A	

machine			
<b>CASTING YOUR BALLOT</b>			
26. Mark paper ballot with pen, stylus	N/A	N/A	2, 3, 5, 6
27. Type on digital machine	N/A	N/A	2, 3, 5, 6
28. Press buttons on machine	N/A	N/A	2, 3, 5, 6
29. Flip levers on machine	N/A	N/A	2, 3, 5, 6
30. Transport paper ballot to scanner or poll worker	N/A	N/A	2, 3, 5, 6