MILITARY HEROES INITIATIVE GRANT # E4064914 U.S. ELECTION ASSISTANCE COMMISSION

Pilot Project Plan for Providing Voting Assistance and Electronic Ballot Delivery to Georgia Veterans with Disabilities

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1.0 The Military Heroes Initiative

In September 2010 the U.S. Election Assistance Commission selected the Information Technology and Innovation Foundation (ITIF) as the recipient of the Military Heroes Initiative (MHI) research grant. ITIF is a non-partisan, non-profit think tank whose mission is to formulate and promote public policies to advance technological innovation and productivity. ITIF publishes policy reports, holds forums and policy debates, advises elected officials and their staff, and is an active resource for the media. ITIF has partnered with Operation BRAVO Foundation, a pioneer in developing voting alternatives for military and overseas citizens, and the Georgia Tech Research Institute, a global leader in universal design and evaluation of information technology and consumer products.

More than 49,000 U.S. service members have been wounded in action since 2001. Many have sustained permanently disabling injuries, including loss of multiple limbs, loss of sight, and traumatic brain injury. In addition, Post Traumatic Stress Disorder is increasingly being diagnosed in service members returning from Iraq and Afghanistan. The purpose of this research grant is to identify potential ways to improve voting technology and processes for these service members when they return to civilian life. The scope of work includes defining a pilot project to field test procedural and technology innovations that could enable more veterans with disabilities to participate in the electoral process and to vote privately and independently. This report presents a preliminary plan for a pilot project proposed to be implemented for the 2014 election cycle in Georgia. Since many other states have similar accessible voting provisions, this blueprint could easily be adapted for use by other jurisdictions.

2.0 The Problem

The number of veterans with severe disabilities continues to grow as a result of the War on Terrorism. The MHI target population is veterans with a 30% or greater disability rating who are patients in Department of Veterans Affairs (VA) and other treatment and rehabilitation facilities. Particular focus has been given to those diagnosed with TBI, PTSD, and polytrauma injuries. In addition to dealing with the functional limitations caused by their disabilities, this population faces two further complications relative to voting participation. They have become disabled fairly recently and many are still in the process of adapting to this life-changing trauma and learning to use personal assistive technologies. In addition, many are separated from their families and support networks because they are undergoing medical treatment and rehabilitation in facilities away from their place of residence.

In 2008 the VA issued a directive (VHA Directive 2008-053) to provide policy guidance to facility administrators regarding voting assistance for VA patients. Among other things, this directive mandates that the Director of each VA facility must ensure that patients are granted authorized absence as necessary to register and vote and that those unable to leave the facility are provided assistance for registering and voting by absentee ballot.

Discussions with the Voluntary Service Office in the Veterans Health Administration and several VA regional medical centers indicate that the voting assistance support available for patients in VA facilities is limited. The VA relies entirely on volunteer staff to provide this assistance, which is just one of many duties they perform. The volunteers typically do not have the time or the necessary training to provide

appropriate voting assistance. It appears that when assistance is provided it is limited to patients who are residents of the state where the facility is located. Patients from other states are not helped because volunteers do not have information about voting procedures in other jurisdictions.

This research also found that there appears to be very little coordination between state and local election offices and VA facilities regarding voter registration and voting. Twenty-seven of the forty-seven states responding to the MHI state accessibility practices survey cited limited interactions with the VA. Nineteen reported no activity. Similarly, discussions with VA personnel revealed very little interchange with state or local election officials. The VA website references the Election Assistance Commission website for registration and voting information.

In the summer of 2008 a major issue arose when some VA facilities refused to allow voter registration to take place on their premises. There was a misperception that registration was a political activity and therefore not permissible in federal facilities. This was possibly generated by the fact that voter registration drives are often conducted under the auspices of political parties. The California Secretary of State as well as other election officials worked with VA Headquarters and members of Congress to rectify this situation. As a result, the VA issued the directive cited above. This directive is due to expire on September 30, 2013.

3.0 Defining the Pilot Project Approach

The State of Georgia was used as a case study for this research. There are two principal voting methods currently provided for voters with disabilities in Georgia: voting in person at the polls or voting absentee by mail. All Georgia polling places are required to be physically accessible and be equipped with accessible voting machines. All polling places use the same type of voting machine. These devices have a touchscreen display that can be magnified to enhance readability. They can also provide an audio ballot with the use of headphones and a keypad. In addition to election day voting, early and advance in person voting is an option at designated locations. These provisions primarily accommodate mobility and vision impairments. Veterans with disabilities who can travel to the polls may still not be able to vote privately and independently as mandated by the Help America Vote Act. They may require assistance which Georgia poll workers are trained to provide. The voter may also bring a person of their choosing to assist them.

Voters with disabilities may also vote using the absentee by mail process. This is the process most applicable to voters residing in treatment facilities. The standard absentee procedure is for an election official to send a paper ballot by mail to the voter's home address. However, voters with disabilities may have their ballots delivered to an alternative address such as a residential care facility. The ballot must be marked by hand and returned by mail to the local election office. The ability to vote by mail is very helpful for voters with impaired mobility who may find it difficult to travel to a polling place. But a hand marked paper ballot is not an accessible voting method for many types of disabilities. Voters may not have adequate manual dexterity, vision or fine motor control to handle, read and precisely mark a paper form. Consequently, many of these voters will require assistance. If they reside in a care or treatment facility where assistance is not available, they may be disenfranchised. Georgia allows election officials to personally deliver ballots to voters who are hospitalized on a primary or general election day. At present this assistance is intended for emergency situations, not for longterm hospitalization situations. The state election office has developed guidance for nursing home administrators on how to assist residents with the absentee voting process. Local election officials can provide assistance to VA facilities, but there are no special provisions for this support.

The review of VA voting assistance practices and Georgia accessible voting practices revealed two issues for institutionalized veterans with disabilities: the limited availability of voting assistance from either VA or local election office sources, and the need for a more accessible absentee voting method. The pilot project should adopt a two-pronged approach to address these issues. First, institutionalized veterans should be provided an enhanced level of voting assistance. Second, additional technology aids should be introduced to enable more veterans with disabilities to vote privately and independently.

The research team examined several ballot delivery and marking methods and associated procedural modifications for their potential to efficiently and effectively expand voting participation options:

- Polling place voting:
 - Georgia's accessible touchscreen system
 - Generic optical scan system with automated marking assistance
- Unsupervised absentee voting:
 - Paper ballot delivery by mail
 - Electronic ballot delivery by email attachment
 - Electronic ballot delivery by website download
 - Supervised absentee voting: In person paper ballot delivery Ballot delivery by electronic ballot device

The term "supervised" absentee voting refers to an instance where an election official or other officially designated party personally delivers ballots to voters. This is contrasted with "unsupervised" voting where the voter (possibly assisted by a family member of other agent of their choosing) obtains an absentee ballot through his own action.

The team considered these alternatives in the context of the current voting methods and election administration procedures used in Georgia. However, many other states have similar accessible voting provisions so these results have broad applicability beyond the State of Georgia.

4.0 Pilot Alternatives Assessment

The research team convened a panel to assess the alternative ballot delivery and voting assistance methods and select a method to implement in the pilot project. This panel consisted of Georgia state and county election officials, representatives from The Center for Election Systems, and an accessibility expert from GTRI. The Center for Election Systems is an organization that works with the Georgia Secretary of State's office in support of the statewide electronic voting system. A reference document describing each of the alternatives was distributed in advance to the panel members. Process diagrams

were included to illustrate the election official and voter activities associated with each alternative. These diagrams are presented in Appendix A.

This document defined three categories of assessment factors to be considered: administrative workload, voter accessibility and system security. Administrative workload pertains to the level of effort and complexity that each alternative would entail for election officials. Level of effort refers to how much additional work would be required to implement a new ballot delivery and voting assistance method. There could also be offsetting workload reductions realized. Administrative complexity encompasses a number of factors such as changes to procedures, requirements for additional staff or new staff skills, and how well a new method integrates with existing systems.

Accessibility challenges arise from the impact of a disability condition on a voter's ability to perform the activities associated with voting. The nature and severity of disability conditions ranges over a broad spectrum and would entail creating a similarly broad spectrum of compensating measures to enable universal private and independent voting. For example, loss of visual acuity will affect a voter's ability to read a paper ballot. The nature and extent of the visual impairment will dictate whether a magnifying glass or large print ballot will be a sufficient solution or if conversion from printed text to audio or some other type of aid might be needed. Electronic voting systems provide the opportunity to build assistive features into the system software and can incorporate a variety of interface protocols to enable a voter to use his or her own personal assistive technology to interact with the system.

However, solutions that accommodate some types of disabilities introduce problems for others. For example, some persons have difficulty viewing light emitting displays, so an electronic touchscreen device might not be an acceptable voting method for them. Voters lacking fine motor control may also find a touchscreen challenging to use. A paper ballot may be easier for a voter with concentration and memory impairments to use than an electronic device because it is a static document that doesn't require scrolling. So the challenge for the pilot project is to identify a voting method that, on balance, provides a greater overall degree of accessibility than the current paper ballot by mail approach.

The 2005 Voluntary Voting System Guidelines state the following objectives for voting system security:

- To protect critical elements of the voting system
- To establish and maintain controls to minimize errors
- To protect the system from intentional manipulation, fraud and malicious mischief
- To identify fraudulent or erroneous changes to the voting system
- To protect secrecy in the voting process.

Security threats encompass both intentional malicious acts as well as inadvertent errors. Both types of actions can degrade the integrity of the process. Table 1 presents potential security threats associated with each pilot alternative. An "X" indicates that a threat listed in the left hand column applies to the

ballot delivery method noted. This table is based on work done by NIST and Operation BRAVO's previous experience with fielding voting projects.¹

				Email	Website	Supervised	Supervised
	Touchscreen	Automark	Postal Mail	Attachment	Download	Paper Ballot	with Device
Ballot lost by							
postal service			х				
Ballot							
misdelivered			х				
Ballot sent late			х				
Control of devices	х	х					х
Control of voted							
ballots						Х	х
Denial of service							
on server disrupts							
delivery				Х	х		
Email treated as							
spam				X	x		
Error in voter							
history			х	х	х		
Incorrect ballot							
style provided			х	х	х	х	х
Incorrect voter							
address			х	х	х		
Severe weather							
disrupts delivery			х				
Someone other							
than voter							
retrieves ballot			х	X	х		
System not							
properly set up	Х	х					
Unvalidated							
software	Х	х					
Voter coercion			х	х	х	х	х
Voter copies ballot							
for another							
person(s)			х	х	х		
Voter gives own							
ballot to another							
person			х	х	х		
Vote selling			Х	Х	х		
Voter spoofed to							
bogus website					х		

Table 1: Potential System Security Threats

The panel dismissed the alternative of using an optical scan polling place voting system with ballot marking assistance as an alternative to Georgia's accessible touchscreen system because it does not provide significant advantages in either voter accessibility or system security over the system currently in use. The administrative workload associated with operating an optical scan system as the HAVA-

¹ National Institute of Standards and Technology. "Security Considerations for Remote Electronic UOCAVA Voting," NISTIR 7770, February 2011. "Security Best Practices for the Electronic Transmission of Election Materials for UOCAVA Voters," NISTIR 7711, September 2011. "Information System Security Best Practices for UOCAVA-Supporting Systems," NISTIR 7682, September 2011. "A Threat Analysis on UOCAVA Voting Systems," NISTIR 7551, December 2008.

mandated accessible voting system in addition to Georgia's standard touchscreen polling place voting system would be substantial.

The panel considered the unsupervised absentee alternatives of electronic ballot delivery by email attachment and website download to be more accessible for more types of disabilities than paper ballots delivered by mail. The delivery of the ballot in electronic format enables voters to use their own computers and personal assistive technology aids to read and mark their ballots. This could enable more voters with disabilities to make their ballot selections privately and independently. While an electronically delivered ballot would be easier for many voters with disabilities to review and mark than a paper ballot, some would still require assistance with the process of printing and returning the ballot by mail.

Accessibility advantages notwithstanding, the panel expressed concerns about the security implications of electronic ballot delivery in an unsupervised environment. As indicated in the table above, there are many security threats associated with unsupervised absentee voting regardless of the delivery method used. Election officials exercise substantial control over all aspects of polling place voting – the physical space, the personnel, the procedures and the equipment. But they have much less control over absentee voting. Remote electronic delivery of ballots by email attachment or website download introduces more system elements for election officials to manage as well as dependence on communications links controlled by other entities. While Georgia currently provides electronic ballot delivery to UOCAVA voters wherever they may be, the panel did not think this method could be justified for domestic voters when there were other less risky alternatives available. The MOVE Act of 2009 mandated the states to provide an electronic delivery option for UOCAVA voters because historically, large numbers of UOCAVA voters have been disenfranchised due to lengthy mail transit time and the unreliability of delivery. To ameliorate this situation, the Congress decided that the ability to provide quicker and more flexible ballot access for this category of voters outweighed the attendant security risks.

The panel instead selected supervised electronic ballot delivery as the preferred alternative for a pilot project. This method combines the accessibility advantages of an electronic ballot format and the security and accessibility benefits of an absentee ballot delivery environment under the supervision of an election official. The use of an electronic ballot delivery device provides the opportunity to incorporate automated voter aids. The supervision of an election official ensures that voting assistance is available for voters who need it. The Center for Election Systems already creates electronic ballot formats for UOCAVA voters. Existing procedures and training materials can be adapted with minimal effort. The biggest workload consideration is the staffing to provide voting assistants in residential care facilities. It might be possible to train veterans to fulfill this role, much as the Department of Defense does with Voting Assistance Officers. Alternatively, the voting assistant might be a volunteer or a staff member at the facility.

The State of Oregon has piloted a similar system for voters with disabilities. County election workers equipped with iPads and portable printers went to nursing homes, community centers and other locations to assist voters. Voters with poor vision could adjust the font size and screen colors, or they

could have the iPad read them the candidate names and the voter pamphlet, if they wished. A voter with limited mobility could attach a sip-and-puff device to control the screen. Joysticks and paddles could also be connected using Bluetooth wireless technology. This voting method was very well-received by the voters and consequently the Oregon Secretary of State's office extended the use of this technology statewide for the May 2012 primary election.

5.0 Purpose of the Pilot Project

The purpose of the proposed project is to examine the feasibility of utilizing voting assistants equipped with portable electronic ballot delivery devices to administer absentee voting in VA and other veteran care facilities. This solution would ensure that assistance is available when needed while also providing automated aids to enable more veterans with disabilities to vote privately and independently. A number of automated aids, such as ballot marking assistance and sample ballot trial runs for voter orientation, will be installed on the ballot delivery device. The presentation of ballot content will incorporate accessibility best practices.

The project has two goals:

1) To assess the feasibility of employing voting assistants to provide voter assistance and administer the absentee voting process in VA facilities.

An essential element for the success of the project is the development of a cadre of personnel to serve as voting assistants. These individuals will be responsible for providing assistance to voters and managing the use of the ballot delivery devices. Ideally, the pilot will be able to recruit veterans with disabilities to serve in these positions. An element of the assessment will address the issues encountered in recruiting, training and employing veterans for this role. Other elements to be assessed are the demand for, and utilization of, voting assistance by facility residents; the effectiveness of on-site assistance; and the desirability and/or feasibility of continuing this practice after the conclusion of the pilot.

2) To measure the impact on voting participation and voter satisfaction resulting from the provision of voting assistance, automated aids and accessible formats for voters with disabilities.

Voting participation will be assessed in terms of determining the number of voters who participated who otherwise would not have voted and the number of voters who were able to vote privately and independently using the electronic ballot delivery device. Voter satisfaction will deal with the questions of how well various elements of the process worked for the voters, the difficulties voters encountered with the process, and recommendations for improvements.

6.0 Project Overview

The project would be implemented under the auspices of the Georgia Secretary of State and the State Election Office for the 2014 election cycle, beginning with the June primary. Pilot sites would be VA

residential care facilities and state-operated veteran homes in Georgia. VA outpatient clinics might also be included to provide broader state coverage and a larger pool of potential voters. One or more voting assistants will be designated for each participating facility to provide voter assistance and administer the absentee voting process for eligible voters in their assigned facility. Voting assistance would begin in April to allow time for pilot voters to register, if necessary, and to become familiar with the use of ballot delivery device. Voting would take place for the duration of the early voting period. The assistants could be veterans residing in the facility or in the nearby community. Alternatively this role could be performed by an election official or a volunteer or employee of the facility. Guidelines and training materials will be developed prescribing the duties and responsibilities of this position.

All facility patients who are qualified to vote in the State of Georgia will be invited to participate in the project. The voting assistants will have registration and voting information for all Georgia counties and will coordinate as required with the election officials of the home counties of facility patients. All the required ballot styles for a particular facility will be available on the electronic ballot delivery device programmed for that location. Voted ballots will be returned by mail to the appropriate election office for processing and tabulation. In addition, an attempt will be made to identify out-of-state VA facilities with Georgia patients and have one or more participate in the pilot. Patients in Georgia facilities who are residents of other states will not be able to take part. However, the experience of working with out-of-state facilities to support Georgia voters will provide insight into how this might be done in the future.

Each facility will receive a portable electronic ballot delivery device and portable printer prior to the early voting period so voters will have the opportunity to become familiar with this technology. The ballot delivery device could be a laptop or tablet computer or similar commercially available portable electronic device. Voters will have the option of using their own personal assistive technology for interaction. Sample ballots and a voting trial run process will be provided for practice.

Just prior to the start of the early voting period blank ballots could either be directly loaded on each device or delivered via website download. Automated ballot marking assistance will be included as an accessibility feature. The system will fully utilize the accessibility features native to the ballot delivery device, such as adjustment of font size and display brightness and audio rendition of ballot instructions and choices. The device's existing interface capabilities will also enable the use of a variety of personal assistive technology devices, such as sip and puff controls.

The device can be deployed in two ways. Voters could come to a designated location to use the device to make their ballot choices independently if possible, or with assistance if needed. In addition, the voting assistant could transport the device to voters who are not mobile since the device is easily portable. When the voter has completed making his or her ballot choices, the voted ballot will be printed using the portable printer and sealed in a privacy envelope. It will be returned to the appropriate local election office by mail. Local election officials will remake these ballots into official ballots that can be scanned by the voting system tabulator. They will use the same procedure developed for processing UOCAVA ballots which are also delivered electronically, marked and printed by the voter and returned by mail.

7.0 Project Participants

The project will be conducted under the auspices of the Georgia Secretary of State and the State Election Office. It is anticipated that a significant number of county election offices statewide will be engaged because project voters will be residents of jurisdictions all over the state. Election officials in Fulton, Richmond, Laurens and Baldwin Counties are expected to play a significant role because the VA Medical Centers and the state veterans homes are located in these counties.

At a minimum, the project will invite participation from the following facilities:

- 1. Atlanta VA Medical Center
- 2. Dublin VA Medical Center
- 3. Charlie Norwood VA Medical Center
- 4. The Shepherd Center
- 5. Georgia War Veterans Nursing Home
- 6. Georgia War Veterans Home

As noted above, these facilities are located in Fulton, Richmond, Laurens and Baldwin Counties. Their physical and website addresses are provided in Appendix B. To increase the size of the potential pool of volunteer voters and the range of disability conditions represented, the Georgia Secretary of State's office may also wish to include the VA Outpatient Clinics. There are twenty of these clinics distributed around the state. Their physical and website addresses are provided in Appendix B. In addition, any VA facility in the country providing care and treatment for veterans with disabilities from Georgia could be invited to take part.

8.0 Legislative Authority

Current Georgia law allows election officials to send absentee ballots for voters with disabilities to a different address than their residence. County election officials may also hand deliver ballots to hospitalized voters. Guidance to nursing home administrators for voter registration assistance, absentee ballot request and voting assistance has also been issued. So some elements of the necessary policy framework are in place. However, legislation will be needed to authorize a pilot project using electronic ballot delivery and marking technology for non-UOCAVA voters. It may also be required to allow the implementation of procedures for employing absentee voting assistants in group residential care facilities.

Draft legislation will need to be introduced in the 2013 legislative session to obtain authorization for a pilot project in 2014. First, a sponsor is needed to introduce the bill. The Government Affairs Committee of the Georgia House of Representatives is the committee that handles election-related legislation. Coordination should begin with the appropriate legislative staff in September 2012, so necessary groundwork can be laid and a draft bill pre-filed with the Clerk of the House prior to the convening of the Assembly on the second Monday in January 2013. This will expedite the legislative approval process.

9.0 Project Activities and Timeline

The pilot is proposed to be implemented under the auspices of the Georgia Secretary of State's office for the 2014 federal election cycle (including the June primary, any runoff contests and the general election). After legislation is passed, an executive board will be established to provide policy guidance and oversight for the project. Board members will be representatives of the Georgia State Election Office, The Center for Election Systems, election officials from counties with participating facilities, the Georgia Office of Veterans Services, and each of the participating facilities. The following discussion outlines the major activities required to define, implement and evaluate the project. A start date of June 2013 is assumed.

9.1 Enroll Facilities (Months 1-3)

The Georgia State Election Office will need to coordinate with the Office of Voluntary Service in the Veterans Health Administration and potentially the Regional Counsel of the VA Southeast Regional Network to establish policy guidance and obtain permission to begin discussions with the Directors of the VA Medical Centers in Georgia. Coordination with the Georgia Department of Veterans Service will be needed for the participation of the two state veterans homes. Each facility will need to designate a point of contact for the project executive board. In addition, each facility must provide an appropriate space for voting assistance activities including ballot delivery and marking. A Memorandum of Agreement should be prepared to specify the roles and responsibilities of the facility, the voting assistants, and state and local election offices.

9.2 Define Automated Aids and Accessible Ballot Formats (Months 3-4)

Under the Military Heroes Initiative, Georgia Tech Research Institute (GTRI) conducted a needs assessment for the project target population to identify the characteristic injuries of the population, and to identify the voting needs of that population to ensure that proposed interventions in voting technology are focused on reducing the most consequential barriers. The characteristic injuries identified included traumatic brain injury (TBI), post-traumatic stress disorder (PTSD), and polytrauma (concurrent injury to the brain and multiple body areas). These injuries can result not only in physical limitations, but also in issues with cognition, sensation and perception, and emotion, which can impact a person's ability to vote in many different ways.

GTRI identified specific impairments that can result from the characteristic injuries, and the various aspects of the voting process that can be impacted by those impairments. GTRI then identified hardware and software features of an absentee ballot marking device that would help eliminate barriers to accessible and independent voting for the target population. Some of the key hardware features include:

- *Portability.* The system should be able to be brought to users where they are, rather than requiring users to go to the system.
- *Flexible use.* The system should support a variety of physical use cases it should be small and light enough to be hand-held, capable of being mounted on a portable stand for use from a bed or chair, and capable of being installed as a fixed kiosk in a central voting location.

- *Headphone jack.* The system should provide a standard headphone jack so that it can be used privately with speech output.
- *Interface with external controls.* The system should be capable of interfacing with a variety of external controls, such as a keyboard, mouse, access switches, sip-and-puff devices, etc.

The software features that were identified were further divided into ballot design features and adjustability and accessibility features. Ballot design features include:

- *Sparse layout.* Only essential information should be displayed on ballot pages, to reduce clutter and focus attention on the most important page elements.
- *Large controls.* Active areas of on-screen controls should be large, to facilitate touchscreen use and reduce selection errors, particularly for users with dexterity and fine motor control issues.
- *Large fonts.* The minimum font size in the interface should be 14 point, with larger fonts used for critical information such as contest titles and candidate and party names.
- *Mixed case.* All text in the interface should be presented in mixed case for improved readability.
- *High contrast.* There should be good contrast between text and background predominantly black and white, with some shades of gray. Color should be used sparingly for critical elements like user selections and error notifications.
- *Consistent layout*. Each page of the ballot should have a consistent layout for titles, controls, and other information.
- *Error handling.* The system should prevent errors where possible (for example, by not allowing overvotes to occur) and should clearly notify users of potential errors (such as an undervote).
- *Summary/review page.* The system should present a summary/review page before the ballot is finalized. Users can review all their selections, view error messages, and return directly to contests to make changes from this page.

Adjustability and accessibility features include:

- *Adjustable font size.* Users should be able to adjust the size of the text on the screen, with the layout automatically reflowing to accommodate changes to font size while preserving the overall screen layout.
- *Adjustable contrast.* Users should be able to select from a range of display schemes that provide a variety of contrast options.
- *Context-sensitive help.* The system should provide a help system that provides help content relevant to the current step in the process (for example, on a write-in screen).
- *Voice output.* The system should provide a simple voice output system that is easy to operate for a novice user with little to no screen reader experience.
- *Save and resume.* Concentration issues and fatigue are major considerations for the target population. Because ballots can be long and involved and take an extended period of time to complete (especially when using assistive technologies), the system should provide the ability for users to save an in-progress ballot and return to it later, after a period of rest.

GTRI has an ongoing program of research to investigate the impact of various hardware and software interventions, with a goal of developing a set of best practices for ballot design, control design, and other factors based on experimental data. The electronic ballot delivery and marking device proposed for the pilot would integrate as many of the above features as feasible, using the latest guidance available from GTRI's research. The Center for Election Systems creates all the ballot formats used for polling place voting and absentee voting for all Georgia jurisdictions. The Center would also create any accessible format features recommended for the pilot project.

9.3 Adapt Absentee Voting Policies and Procedures (Months 5-6)

Existing Georgia absentee policies and procedures can be adapted with minimal modifications for the pilot project. For example, the guidance provided for nursing home administrators will be reviewed and modified, if required, for facility staff as well as voting assistant personnel. The procedures for creating ballots for electronic delivery to UOCAVA voters will be utilized for the electronic ballot delivery device. Election officials will utilize the same process for transcribing returned pilot ballots that they currently use for UOCAVA ballots.

9.4 Adapt Training Materials for Election Officials, Voting Assistants and Voters (Months 5-6)

Existing training materials for poll workers can be adapted for use by voting assistants. The existing State Election Office guidance for nursing home administrators will be reviewed and modified, if necessary, for facility staff as well as for voting assistant personnel. Voting assistants will need instructional materials for the operation of the ballot delivery device and a trouble shooting guide.

Voters will need information about project participation and what that entails. For example, they will be expected to complete a questionnaire about their experience and perhaps also be interviewed for project evaluation purposes. They will need to be informed of the dates and times that voting assistants will be available and when and where they can vote. They will be asked to sign a volunteer participation form to indicate their agreement to participate in the project and acceptance of their responsibilities.

9.5 Recruit Voting Assistants (Months 6-8)

The preferred source for voting assistants is the patient population in the participating facilities or veterans with disabilities living in a nearby community. Utilizing members of the target population will send a positive message about voting participation and generate a sense of rapport with the volunteer voters. The policies and procedures developed in tasks 9.3 and 9.4 will help define the capabilities required for performing this work. Identifying the assistants by the eighth month will allow ample time for training. The Department of Defense Transition Assistance Program actively promotes the employment of former military service members with disabilities as they are transitioning to civilian life. The Richmond County election office has previously considered this program as a means of obtaining office assistance. This program could be a source of funding for the training and payment of the voting assistants.

Alternatively, members of the VA volunteer corps or facility employees could be recruited. The VA could be encouraged to put a higher priority on voting assistance and make it a standard work assignment.

Poll workers and election office staff are another potential worker pool to draw on, but these resources are typically fully committed for other election administration work.

9.6 Recruit Volunteer Voters (Months 6-8)

The target voter population consists of Georgia veterans with a disability rating who are in treatment or residing in a VA facility or a state veterans home. An outreach effort will be needed to bring the project to the awareness of these voters and encourage them to volunteer. Participating facilities can publicize the effort within their respective institutions. In addition, the VA operates six Vet Centers and the Georgia Department of Veterans Service has 45 Field Offices distributed around the state. These organizations also could be engaged in publicizing the project.

9.7 Develop Evaluation Plan (Months 6-7)

The Secretary of State's office will need to identify an evaluation team to collect data on the project and provide an independent evaluation of the results. This team will specify the assessment criteria in coordination with the executive board. They will develop an evaluation plan laying out the data collection requirements and the proposed analysis methods. All participants (e.g., voters, election officials, VA personnel) will be asked to complete a questionnaire about their experiences and some may also be personally interviewed.

The facility voting assistants will be required to collect data such as the number of voters who used the voter assistance services and what services were provided, the number of voters who used paper ballots and could vote independently, the number who used paper ballots with assistance, the number of voters who used the ballot delivery device, the types of personal assistive technology voters employed with the device (if any), which accessibility features of the device were utilized, how many voters used the device independently and how many required assistance, problems that were encountered and how resolved.

At a minimum, the election officials and the Center for Election Systems will need to monitor the impact of pilot preparation and implementation on their workload. They will also be expected to document any issues with policies, procedures or the voting devices as they arise and record how they were resolved.

Voters will be required to complete a questionnaire with demographic information (e.g., age, level of education, gender, description of their disability condition), their degree of competence with computers and personal assistive technology (if utilized), which voter assistance services they used and how satisfied they were with the service provided, how they voted (e.g., paper ballot unassisted, paper ballot assisted, ballot delivery device unassisted, ballot delivery device assisted) and their degree of satisfaction with the voting process. Some may also be personally interviewed.

9.8 Develop System Deployment Plan (Months 6-7)

The initial version of this plan will define the activities and implementation schedule associated with deploying the system in the field for the primary election. It will be revised as necessary for any subsequent special elections and the general election, based on the lessons learned from the primary. The primary will be used as the trial run for the new procedures and ballot delivery method. This will

provide the opportunity to fine tune the policies and procedures, training materials, system features and any other operational matters. The initial plan should include activities such as conducting training for the project participants (e.g., voters, voting assistants, election officials), preparing the designated areas in the participating facilities that will be used for ballot marking, acquiring ballot delivery devices and printers, preparing and installing ballots and automated aids on the devices, conducting system tests to ensure that all features are functioning correctly, and deploying the ballot delivery devices and printers to the facilities. Since the pilot will operate for the duration of the early voting period, procedures for securing the ballot delivery devices for overnight storage will be required.

9.9 Prepare for System Deployment (Months 8-11)

This period will be spent conducting training, developing the accessible balloting document formats and automated aids, preparing and testing the ballot delivery devices, and staging the system for deployment.

9.10 Implement for Primary Election (Months 11-16)

Facility voting assistants will be deployed two months prior to the primary election to have time to help voters submit their voter registration applications before the deadline. They will be equipped with ballot delivery devices and printers so they can assist voters with becoming familiar with the voting process and the use of the device, using a sample election. The real primary ballots will be loaded on the devices prior to the start of the early voting period for the June primary. At the conclusion of the election, all aspects of the pilot will be evaluated and the results used to modify the procedures and/or device programming, as required, for any subsequent runoff elections and the November general election. The deployment plan will be adjusted as appropriate for subsequent elections.

9.11 Implement for General Election (Months 16 - 20)

Facility voting assistants again will be deployed two months prior to the general election to provide voter assistance services and help voters become familiar with using the voting device. The general election ballots will be loaded on the devices prior to the start of the early voting period. At the conclusion of the election, all aspects of the pilot will again be evaluated. A report will be provided to the Secretary of State's office accompanied by a recommendation regarding the future use of voting assistants and electronic ballot delivery devices for institutionalized veterans with disabilities.

10.0 Budget

Based on our experience with previous pilot programs, we estimate project staffing requirements to include one full time project manager, one full time research analyst, and one full time administrative assistant for twenty months. The project manager would manage the project in accordance with guidance from the State Election Office and the executive board. He or she would provide oversight and direction to the project team, coordinate work efforts on all tasks, review and approve all project documents prior to delivery to the State Election Office, prepare status reports and resolve issues. The research analyst would provide research support as needed for all the tasks and assist the project manager with reviewing and commenting on project reports. The administrative assistant would be

responsible for maintaining project documentation and overall records management, the scheduling of coordination meetings and other project-related meetings, preparing meeting minutes, maintaining contact lists and submitting project status updates for publication on the State Election Office webpage. A nominal travel budget would be needed for coordination meetings at various locations statewide.

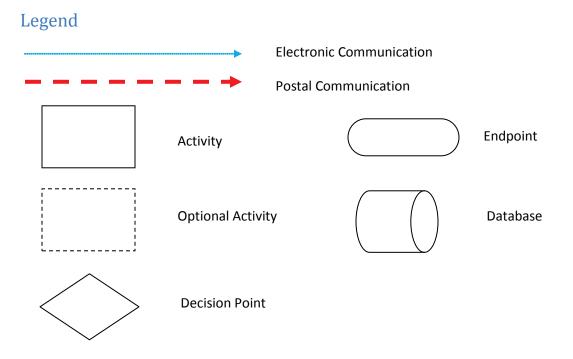
The project team would consist of a mix of state and local election officials, personnel from the Center for Election Systems, and consultants. State and local officials would be the principal parties involved in the review and revision of policies and procedures, assisted by the project manager and research assistant. The project manager and research assistant will work with election officials to revise training materials as required to reflect the new policies and procedures.

The Center for Election Systems is responsible for creating ballots and the administration of the Georgia statewide voting system. Depending on the degree of complexity involved, the Center could also implement the accessible formats and automated aids recommended for use on the ballot delivery devices. They may require technical assistance for more complex applications. The Center would program the ballot delivery devices, load the ballot for each election, and conduct pre-election testing according to their usual procedures.

GTRI is recommended for defining the automated balloting aids and accessible ballot formats, based on their Military Heroes Initiative research. They could also assist the Center for Election Systems with implementing the recommendations. We suggest that one of the state universities could conduct the project evaluation. It may be possible to get the ballot delivery devices and portable printers donated by vendors. The combined cost of a single ballot delivery device and a portable printer is approximately \$800. The cost of equipment for the six VA and state veteran home facilities would be \$4,800. If the nineteen VA clinics in the state were included, this cost would increase by \$15,200, to a total of \$20,000.

If disabled veterans are used as voting assistants, the Department of Defense Transition Assistance Program might be a source of funding for the cost of their training and reimbursement for their time. If VA volunteers are used, there is no direct cost for their time. If VA staff are used, the VA could be expected to cover this expense.

Appendix A – Process Diagrams



Poll Site Voting

Figure 1: Administrative Poll Site Ballot Creation

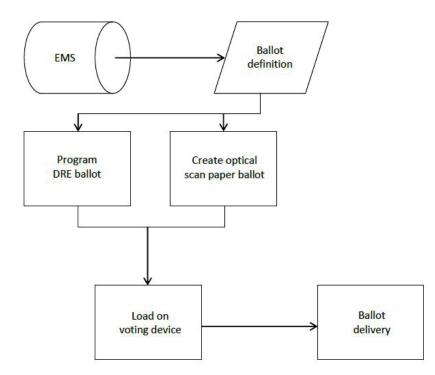


Figure 2: DRE Ballot Delivery and Marking

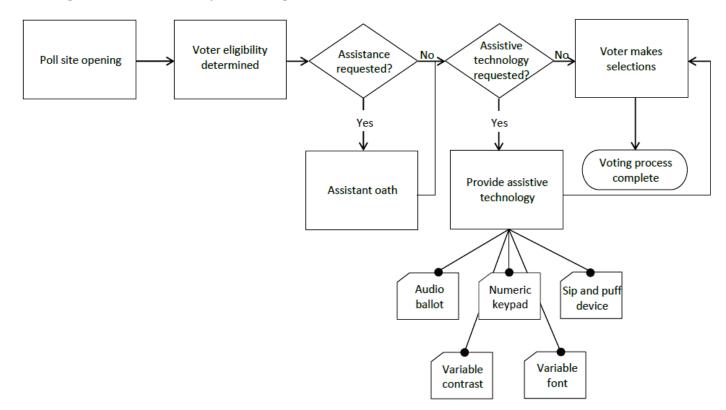


Figure 3: AutoMARK Ballot Delivery and Marking

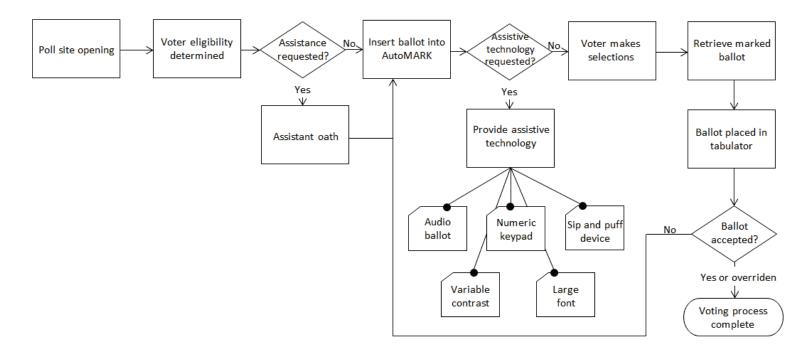
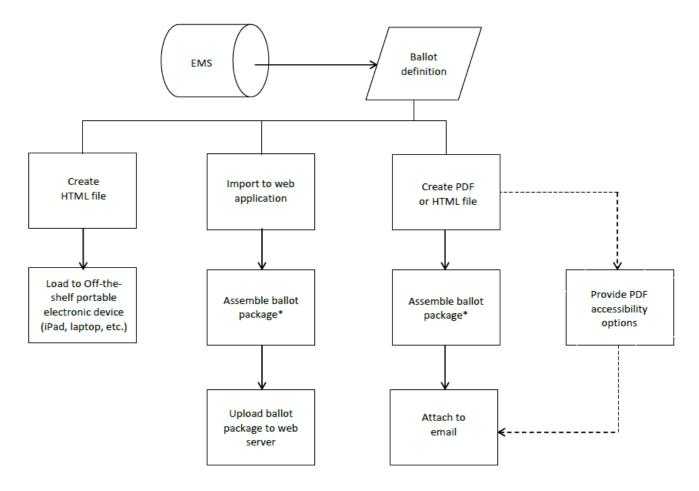


Figure 4: Administrative Electronic Absentee Ballot Creation



*Ballot package includes voting instructions, ballot, voter affidavit and template for making return envelope.

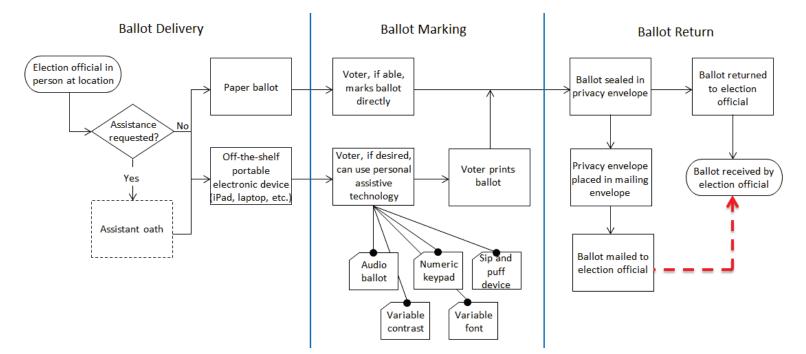


Figure 5: Voter, Supervised Ballot Delivery, Marking, and Return

Absentee voting

Figure 6: Administrative Unsupervised Ballot Delivery

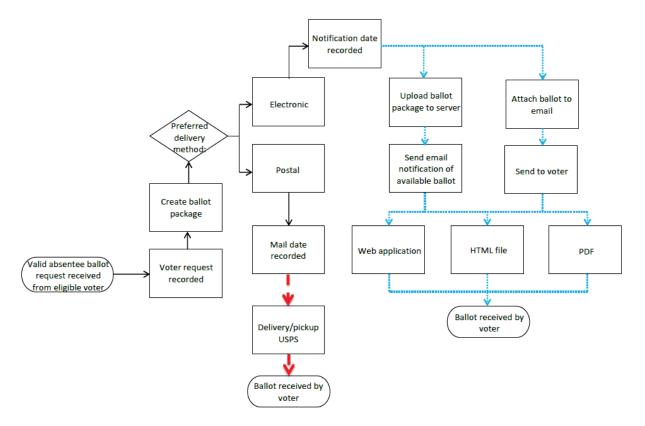


Figure 7: Voter Unsupervised Ballot Delivery

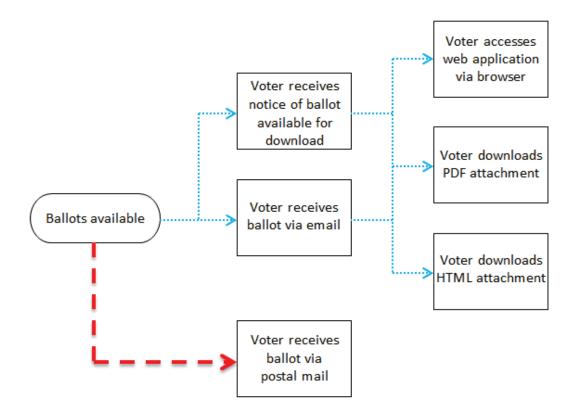


Figure 8: Voter Unsupervised Ballot Marking

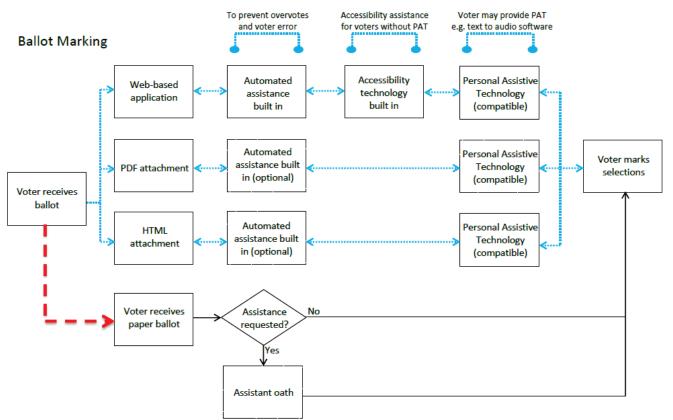
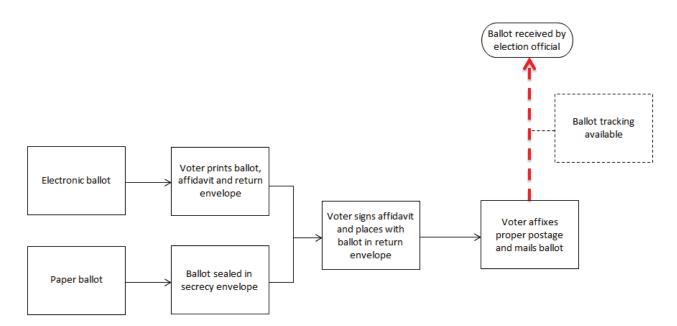
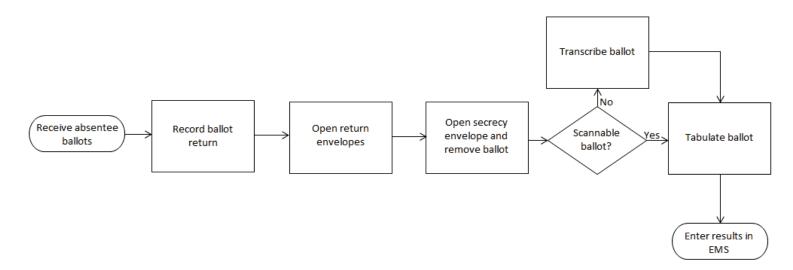


Figure 9: Voter Unsupervised Ballot Return



Tabulation

Figure 10: Administrative Tabulation



Appendix B - Facility Locations and Contact Information

VA Medical Centers and Georgia Veterans Homes

- Atlanta VA Medical Center 1670 Clairmont Road, Decatur, GA 30033 Phone: 404-321-6111 <u>http://www.atlanta.va.gov/</u>
- Dublin VA Medical Center 1826 Veterans Blvd, Dublin, GA 31021 Phone: 478-272-1210 <u>http://www.dublin.va.gov/</u>
- Charlie Norwood VA Medical Center Freedom Way, Augusta, GA 30904-6285 Phone: 706-733-0188 <u>http://www.augusta.va.gov/</u>
- The Shepherd Center (VA contract facility) 2020 Peachtree Road NW, Atlanta, GA 30309-1465 Phone: 404-352-2020 <u>http://www.shepherd.org/</u>
- Georgia War Veterans Nursing Home

 1101 15th Street, Augusta, Georgia 30901
 Phone: 706-721-2531
 http://www.georgiawarveteranshome.org/
- Georgia War Veterans Home
 2249 Vinson Hwy SE, Milledgeville, Georgia 31062
 Phone: 478-445-6826
 http://veterans.georgia.gov/georgia-war-veterans-home

VA Outpatient Clinics and Community-Based Outpatient Clinics

Outpatient Clinics:

1. Athens Clinic

9249 Highway 29 North, Athens, GA 30601 Phone: (706) 227-4534 http://www.augusta.va.gov/Athens Georgia.asp

2. Decatur Clinic

755 Commerce Drive, Decatur, GA 30033 Phone: (404) 329-2222

 Hinesville Primary Care Clinic 740 East General Stewart Way, Suite 103, Hinesville, GA 31313 Phone: 888-878-6884 http://www.charleston.va.gov/visitors/hinesville.asp

Community-Based Outpatient Clinics (CBOC):

4. Albany Clinic

526 West Broad Avenue, Albany, GA 31701 Phone: 229-446-9000 http://www2.va.gov/directory/guide/facility.asp?ID=851&dnum=All

5. Austell VA Clinic

2041 Mesa Valley Way, Austell, GA 30082 Phone: 404-329-2222 http://www2.va.gov/directory/guide/facility.asp?ID=5219&dnum=All

6. Blairsville Clinic

1294 Highway 515 East, Suite 100, Blairsville, GA 30512 Phone: 404-329-2222 http://www2.va.gov/directory/guide/facility.asp?ID=6014&dnum=All

7. Columbus CBOC

1310 13th Avenue, Columbus, GA 31906 Phone: (706) 257-7205 http://www.centralalabama.va.gov/visitors/columbus.asp

8. East Point

1513 Cleveland Avenue, East Point, GA 30344 Phone: 404-321-6111 X 2600 <u>http://www2.va.gov/directory/guide/facility.asp?ID=5367&dnum=All</u>

9. Perry Outreach Clinic

2370 S. Houston Lake Road, Kathleen, GA 31047 Phone: 478-224-1309 http://www2.va.gov/directory/guide/facility.asp?ID=5689&dnum=All

10. Lawrenceville Clinic

1970 Riverside Pkwy, Lawrenceville, GA 30043 Phone: 404-417-1750 http://www2.va.gov/directory/guide/facility.asp?ID=5220&dnum=All

11. Macon Clinic

5398 Thomaston Road, Suite B, Macon, GA 31220 Phone: 478-476-8868 http://www2.va.gov/directory/guide/facility.asp?ID=5307&dnum=All

12. Newnan Clinic

39-A Oak Hill Ct., Newnan, GA 30265 Phone: 404-329-2222 http://www2.va.gov/directory/guide/facility.asp?ID=5899&dnum=All

13. NE Georgia/Oakwood Clinic

3931 Munday Mill Road, Oakwood, GA 30566 Phone: 404-728-8210 http://www2.va.gov/directory/guide/facility.asp?ID=849&dnum=All

14. Rome CBOC

30 Chateau Dr, SE, Rome, GA 30161 Phone: 706-235-6581 http://www2.va.gov/directory/guide/facility.asp?ID=5604&dnum=All

15. Savannah Primary Care Clinic

325 West Montgomery Crossroad, Savannah, GA 31406 Phone: (912) 920-0214 <u>http://www.charleston.va.gov/visitors/Savannah.asp</u>

16. St. Marys CBOC

205 Lake Shore Point, St. Marys, GA 31558 Phone: 912-510-3420 http://www.northflorida.va.gov/NORTHFLORIDA/visitors/stmarys.asp

17. Stockbridge Outreach Clinic

175 Medical Blvd., Stockbridge, GA 30281 Phone: 404-329-2222 http://www2.va.gov/directory/guide/facility.asp?ID=5693&dnum=All

18. Valdosta CBOC

2841 N. Patterson Street, Valdosta, GA 31602 Phone: 229-293-0132 http://www.northflorida.va.gov/visitors/valdosta.asp

19. Waycross Clinic

515B City Blvd, Waycross, GA 31501 Phone: 912-279-4400 http://www2.va.gov/directory/guide/facility.asp?ID=6097&dnum=All

Contract Facility:

20. The Shepherd Center 2020 Peachtree Road, NW, Atlanta, GA 30309-1465 Phone: 404-352-2020 <u>http://www.shepherd.org/</u>