Spring 2011

The Optical Scan Voting Machine and The 65 and Older Staten Island Voter

Matthew C. Desaro
Binghamton University--SUNY

THE OPTICAL SCAN VOTING MACHINE AND THE 65 AND OLDER STATEN ISLAND VOTER

BY

MATTHEW C. DESARO

BA, Binghamton University, 2009
BS, Binghamton University, 2009

CAPSTONE PROJECT

Submitted in partial fulfillment of the requirements for the degree of
Masters in Public Administration in the
Graduate school of
Binghamton University
State University of New York
2011

Accepted in partial fulfillment of the requirements for
the degree of Masters in Public Administration
in the Graduate School of
Binghamton University
State University of New York
2011

Dr. Kristina Lambright _____

Assistant Professor

Department of Public Administration

May 12, 2011

Dr. Pamela A. Mischen _____

Assistant Professor

Department of Public Administration

May 12, 2011

Mr. Michael J. Coppotelli _____

Chief of Staff

Office of New York State Assemblyman Lou Tobacco

May 12, 2011

Executive Summary

The Help America Vote Act of 2002 (HAVA) was signed into law with the explicit goals of: (1) creating a program by which States could utilize federal funds to replace punch card voting systems, (2) establishing the Election Assistance Commission (EAC) to act as the administrator for Federal elections and provide assistance to States in the compliance with the new Federal election standards, and (3) establishing those new Federal standards for which the States would now have to abide. For New York State, the last State to conform to the new requirements and only after a court order was issued mandating that effect, the change to a new voting machine was long overdue. This change, however, brought with it issues of its own as the implementation of the new Optical-Scan voting machines, especially given that voters had used the lever machines for decades.

While the hypothesis of this research was that the technological aspect of the new voting machines would negatively affect the future turnout of 65 and older voters on Staten Island (Richmond County), the findings showed that technology aspect of the new machines was a non-factor. Conversely, issues relating to voter privacy and poll worker expertise were identified as problems. This research outlines 3 recommendations to rectify these issues, namely that: (1) more public outreach should be conducted prior to the next election, which will again utilize the optical-scan voting machines; (2) privacy at both the ballot marking station and the ballot feeding station should be improved; and (3) more adequate and comprehensive training should be provided to poll workers and their supervisors. While the focus of this research was on the 65 and older voting group, these issues are not unique to this cohort and may thus be applied to the voting public in general.

Dedication

To the people at Binghamton University who I have,
over the past six years, come to call friends, colleagues, teachers & mentors:
your support in all of my academic & extracurricular endeavors has been
truly inspiring & allowed me to flourish both intellectually & socially.

Acknowledgements

Firstly, thank you to my family: my mother for pushing me, my father for encouraging me, & my sister for inspiring me. Also to my Aunts, Uncles & Cousins: you are among the most talented, intelligent people I know. Thank you for setting the bar so high and supporting me as I try to surpass it.

Thank you to the staff of the Binghamton University Center for Civic Engagement. Throughout this Capstone process you have offered me guidance, opinion, humor and an environment where I was allowed to explore and expand my understanding of civic engagement and myself.

Thank you to Assemblyman Lou Tobacco, his Chief of Staff, Michael Coppotelli & Director of Constituent Relations, Thomas Ambrosole: if not for you I would not have had the opportunity to complete this project and experience the sometimes tumultuous world of Staten Island politics.

Finally, thank you to Binghamton University. My time here has afforded me relationships with I cherish with people I adore. Little did I know that making the decision to attend Binghamton University six years ago would afford me a loving relationship, incredible friendships, and memories of great times that I will always look back upon fondly.

Table of Contents

List of Tables and Figures

Problem Definition

On November 7th, 2000, Americans from every state and county around the nation exercised their Constitutional right to vote for their elected representatives, including the 43rd President of the United States. While one can argue that the effects of any Presidential election on the country are profound, hindsight would also contend that no voter fully comprehended the impact of this election which culminated with questions of circumvented democracy. In October of 2002, President George W. Bush signed the Help America Vote Act of 2002 (HAVA) into law.

HAVA did much to change the environment within which Americans choose their leaders. One such shift was that of the mechanism individuals use to physically cast their ballots. HAVA does not explicitly prohibit any specific kind of voting equipment but rather imposes certain guidelines by which all voting machines must conform. HAVA mandated that all voting machines within the United States produce a "permanent paper record with a manual audit capacity," which the mechanical lever-based voting machines utilized in many states, including New York, did not. This requirement of a paper-trail effectively outlaws the conventional equipment and makes necessary the purchasing of new voting machines, or the retrofitting of a permanent paper recording device to the older ones.

The implementation of the new voting machines has been a long process, with New York State being the final state to comply with HAVA and only then after being sued by the U.S. Department of Justice and being ordered to comply by U.S. District Court Judge Gary L. Sharpe (Bauman, 2007). New York City finally utilized the new system for the first time on September 14, 2010, for primary elections (Board of Elections in the City of New York, 2010). The new voting procedure employs the use of the Elections Systems & Software Inc. (ES&S) DS200

scanner and AutoMARK ballot marking device. With this system, voters complete a ballot through the darkening of ovals corresponding to their choices on a paper ballot, either through the use of a marker or the AutoMARK device for individuals with disabilities, and then inserting the paper ballot into the DS200 scanner. The scanner then scans the paper ballot, electronically tallies the votes, and holds the paper ballot in a secure compartment within the machine itself.

In attempting to address the issues that arose as a result of the 2000 Presidential election, the federal government enacted the Helping America Vote Act of 2002. The act may have many positive effects, like creating a system which can be held accountable in the event of an irregularity, but HAVA may also have unintentional negative effects as well. According to the Pew Research Center, "38% of Americans age 65+ go online or use computers, compared with 74% of 50-64 year-olds, 86% of 30-49 year olds, and 91% of 18-29 year-olds." The center also shows that only 55% of 65+ year-olds own a cell phone, compared to 86% of the 18-29 year-old counterparts. In addition, 65+ year olds are listed as the least likely to utilize a high-speed internet connection when going online at 19%, where as 18-29 year olds are listed at 69% (2008). At the same time, older voters are also the most likely to vote. In 2008 election, 72.4 percent of registered individuals 65-74 and 67.8 percent of registered individuals 74+ voted. This is overwhelmingly more than the 48% of registered 18-24 year olds who voted in that same election (U.S. Census Bureau, 2008). Given this adversity to technology, as a result of the new voting machines due to HAVA, older adults may be more resistant to adopting the new more technologically infused voting system.

Voting is the most central component of our representative democracy. Without the act of voting the voice of the people would not be heard, leaders would not be held accountable, and the government that Lincoln spoke of in his Gettysburg Address, of the people, by the people, for

the people, would have never existed. This is especially important to elected officials, such as Assemblyman Tobacco, because a change in the way that citizens vote could affect voter-turnout, the results of elections, and ultimately the direction of a municipality, state, or even the nation as a whole. HAVA creates a new environment for the voting public, most of whom are aging and less likely to be familiar with microprocessor-based technologies. HAVA may therefore introduce factors that work counter to its implied goal of advancing democratic principles and increasing transparency in the election process.

Given the routine turnout of older adults come election day, any impediment to their presence is of great importance to any person running for elected office. As of 2000, Richmond County had 11.3 percent of its population listed as 65 years of age or older (U.S. Census Bureau, 2000). Assemblyman Tobacco currently maintains a very strong approval rating with this cohort, and a lack of turnout would thus affect his elections results. While the Assemblyman won his most recent elections by a margin approaching 60%, a dip might encourage better funded and higher quality opposition in future elections.

Research Question

In an attempt to understand the effects of the Help America Vote Act of 2002 (HAVA) on the voting public, this research will examine:

1. How do the new electronic voting machines introduced as a result of HAVA affect the voter turnout of individuals over the age of 65 on Staten Island, NY?

Literature Review

While much academic research and discussion has been done on voter turnout and the interaction of technology with an aging population, there is little to no exploration into a combination of the two: the impact that voting technology may have on the turnout of the senior voter. Given this lack of information, this literature review will examine the two issues separately. With the installation of new electronic voting machines across the United States, specifically in New York City which in 2000 had nearly one-eighth of its population identify themselves as 65 years of age or older, such research has become both necessary and timely (U.S. Census, 2000).

Voter Turnout

There are many variables that may dictate whether an individual American exercises his or her right to cast a vote. Some of those mentioned in literature include political attitudes (Powell, 1986), voter fatigue (Boateng, 2008),), and proximity to polling locations (Brady & McNulty, 2011; McNulty, Dowling & Ariotti, 2009). None of this literature, however, deals with the role that technology plays in turnout.

Technology and Senior Citizens

The technology that has become common-place in most American's daily lives, utilizes micro-processors. However this micro-processor based technology is most often associated with the younger generations rather than with the 65 and older cohort. In some cases, this is a misconception. For example in 2010, the growth rate of 65 and older adults use of social networking sites such as Facebook and Twitter increased 100%, which dwarfed the growth rate of the heaviest users, 18-29 year olds, which grew by only 13% (Madden, 2010). Arguably this

discrepancy is at least in part due to the 18-29 year old age group being early adopters, and while the act of uploading a photo to Facebook or updating a status on Twitter isn't the same as the act of voting, this fact does speak to the ability of seniors to adapt to contemporary technological advances. One shortcoming in this rationale, however, is that the principle reason that older individuals adopt such technology as the internet is due to the earlier adoption of their children and grand children and their wish to keep in contact with them which voting obviously does not afford (Swindell, 2001). The older population may eventually adopt the new technology, but will not adopt it nearly as quick as their younger counterparts or in as short an amount of time as the new voting machines have been instituted. While many older adults may have joined the internet, a *digital divide* still exists.

The *digital divide*, is defined as, "disparities in information technology based upon demographic factors such as race, ethnicity, income, education and gender" (Mossberger, Tolbert & Stansbury, 2003). Craig Warren Smith, founder of The Digital Divide Institute (2010), a nonprofit organization dedicated to bringing broadband internet to disenfranchised communities, defines the *digital divide* even more simply as, "the gap between those individuals who *can* benefit from digital technology and those who *cannot.*" Taking these two definitions into account, the issue is access and ability, which are tied to various socioeconomic factors.

When applying the issue of the *digital divide* to the older population, access is not always as simple as it sounds. The grandchildren of these individuals will have been born into our digital age, while their parents may be exposed to the various contemporary microprocessor-based technologies at their job (Swindell, 2001). The 65 and older generation may not have any exposure with the exception of through their lineage, assuming they have children. The ability to effectively operate a microprocessor-based piece of technology is not implicit in all people. In

fact, when taking into account the normative changes that occur in individuals as they age, for example a decrease in the sharpness of one's eyesight, or the onset of issues like arthritis, one's interactions with technology also change—many times resulting in an unwillingness to learn new technology that may not conform to the needs of older individuals (Charness and Boot, 2009).

The interaction of the 65 and older voting population and the new more technologically advanced voting machines is indeed an interesting one. Voter turnout can be affected by so many variables, but individuals still show up to the polls. Additionally, while the older populations seem to be late adopters, or non adopters, of newer technology one must wonder whether this apparent aversion to new technology will actually affect the turnout of this group, which historically has been highly motivated and civically engaged.

Methodology

The purpose of this project is to determine the impact, if any, that the change from lever-based voting machines to electronic optical scan voting machines may have on the voter turnout of the 65 and older voting population of Staten Island. As mentioned in the literature review, much research has been performed on voter turnout in the general sense, but not much can be found with regard to the 65 and older age bracket. This may be due at least in part to the great amount of research on the generation behind the 65 and older population, the baby boomers.

The optical scan voting machines were utilized by New York State for the first time in the 2010 primary elections. While HAVA was signed into law in 2002, New York State didn't conform until recently under federal court order (Bauman, 2008). Given this short time span between implementation and this research, little to no secondary data was available or accessible. Due to these two impediments, the researcher decided to conduct focus groups in the attempt to obtain qualitative first-person data.

During the month of March, the principal investigator visited Senior Centers located on Staten Island, New York. Of the fifteen Senior Centers on Staten Island that are still in operation, three were chosen to take part in this research. These three centers, the Mount Loretto Friendship Club, the Great Kills Friendship Club, and the Arrochar Friendship Club, were chosen based upon their locations in socio-economic and demographically diverse sections of Staten Island, NY, and their being of interest to the Office of Assemblyman Tobacco.

Pre-Focus Group Survey

The principal researcher obtained access to the Senior Center population through the existing relationships between those Senior Centers and the Office of New York State Assemblyman Tobacco. I visited the selected Senior Centers and administer a brief demographic survey (Appendix B). The survey asked for the participant's first name and first initial of their last name so that they could be identified if they qualified for the focus group. Other than their first name and last initial, the survey had no identifiable characteristics and only sought to discover if individuals were 65 of age or older and if they voted in the 2010 New York State Gubernatorial election at a polling location that utilized the new Optical Scan voting machines.

The reason that a pre-focus group survey was used was to identify qualified participants for the focus group. A qualified participant is a senior who was present at one of the senior centers, who identified themselves as 65 years of age or older and who voted in the 2010 New York State Gubernatorial election using the new Optical Scan voting machines. Additionally, the final question on the survey asked respondents whether or not they would be willing to participate in a focus group. In addition to the yes or no answers available for this question, there is choice available which states, "Maybe, but I have some questions." Those who checked the maybe box had their questions answered, and then were asked again to participate in the focus

group if there were not already enough participants who checked yes. In all cases, once 6-8 participants were available for the focus group, i.e. were qualified and open to participating, they were chosen and the remaining surveys were discarded. All surveys were destroyed after this research was completed in order to continue to provide confidentiality.

Focus Groups

Based upon their answers to the survey questions, 6-8 eligible participants, i.e., those being 65 years of age or older and who voted in the 2010 New York State Gubernatorial election using the new Optical Scan voting machines, per Senior Center were randomly selected to participate in a focus-group. The individuals who participated in the focus-groups were asked a series of questions searching to understand their feelings about the new Optical-Scan voting machines and how it might affect their propensity to vote using those machines in the future (Appendix C).

The focus groups were approximately fifteen to twenty minutes in length, being mindful of the firm schedule maintained at the Senior Centers. Confidentiality was also guaranteed to all focus group participants, as all of the data collected was not attached to any identifiable characteristics. While the focus groups were digitally recorded and handwritten notes taken, any identifiable characteristics, such as the participants' names, were redacted from any analysis and remained unattached from the surveys. Additionally, all data was analyzed thematically, focusing on themes presented throughout the focus groups rather than who mentioned those topics during collection.

Limitations

As with any research, this research is not without its limitations. One such constraint was the limited time for data collection. The Capstone Seminar lasts only until the end of the Spring

2011 academic semester and thus dictates how much time is available for data collection and analysis. While this is a limitation on how much data can be collected, it helps the clarity of the research presented by allowing researchers to remain on task and organized.

Geographical limitations also played a role as the research population was located in Staten Island, NY, and the researcher was located during the academic year in Vestal, NY, locations which are 180 miles away from each other. This limitation was the most restrictive especially when taken in conjunction with the temporal restriction mentioned above. Had the distance between researcher and research population been less, more focus groups at more locations could have been preformed.

While visiting all fifteen Senior Centers may have been optimal, offering a larger sample group, given the lack of proximity between the investigator and the sample groups and the restrictive time allowed for data collection and analysis, the investigator chose instead to survey and hold focus groups at only three. Given this concern of generalizability, the researcher was sure to choose Senior Centers located in three socio-economically and demographically diverse areas of Staten Island. Future research could be pursued by those with substantially greater resources in both time and ability and could perform a more comprehensive study visiting all the Senior Centers.

Findings

Based upon the data collected during three separate focus group sessions, thematic analysis identified three recurring themes expressed by focus group participants. These themes are: (1) the technology involved in the new Optical Scan voting machines is not likely to affect future voter turnout; (2) there are concerns about the privacy of the current voting experience; and (3) there are concerns about the expertise of poll workers and their supervisors.

Finding 1: The technology involved in the new Optical Scan voting machines is not likely to affect future voter turnout by the 65 and older voting cohort.

The focus of this research was on whether or not the technology of the new optical scan voting machines would affect future turnout of the 65 and older voting population on Staten Island. All of the focus group participants were aware of the change, prior to actually using them in the election. Of the 19 individuals who participated in the three focus groups, only 1 mentioned that she would consider voting absentee because of the new technology employed by the new voting machines. Other than this one instance, the discontent seemed to be more with change in general or an issue relating to the implementation of the new voting machines.

No participants preferred the new Optical Scan voting machines over the formerly used lever machines; in fact all but two individuals indicated some degree of distaste for the new machines. One focus group participant who was unhappy said that "the old voting machines worked fine. We knew how to use them and they worked fine. This is just one more way for [the City of New York] to waste money on useless stuff and then shove it down the publics' throats!" This outrage was tempered by the two female participants who did not dislike the machines but rather felt indifferent to it. One of these women who indicated themselves as indifferent was quoted as saying, "[the new voting machines] are fine. Change is going to happen, [seniors] just have to get used to what's new to them and what they don't understand." One male participant in the third and final focus group seemed insulted that research would be done specifically focused on the 65 and older age group. He thought that it implied that the older age cohort would have an issue with the new voting machines due to their more technologically-advanced components, and that this was insulting to the capabilities of seniors. He assured me, and the rest of that focus group echoed his sentiments, that the issues that he had with the new voting

machines had nothing to do with the new technology—in fact he thought the old machines were more advanced then the new ones. He illustrated this point by reminding the group that the city had moved from a machine that was mechanical in nature, to using the basics: paper and pencil.

Finding 2: Seniors expressed concerns about the privacy of the current voting experience.

The most common concern communicated by the seniors in the three focus groups was regarding privacy. In order to fully understand this issue, it is beneficial to put it into context by comparing the privacy of the voting experience afforded by the current optical-scan voting machines with that of the previously used lever based machines. Privacy, for the purposes of this research, will be defined as the ability for a voter to cast their vote without the real or perceived ability of others to uncover their ballot choices.

Firstly, one must understand the different ways that the two voting systems afford their users privacy. Figure 1 shows both the older lever-based voting machine and the optical scan voting machine ballot marking station and ballot scanning system on the right, center and left, respectively.

Figure 1

Lever-Based Voting Machine	Optical Scan Ballot Marking Station	Optical Scan Ballot Scanning System

The most striking difference regarding privacy between how votes were cast in the lever machine versus the optical scan machines is that in the former, the voter was surrounded on four

sides, most importantly behind the voter, while they were casting their vote. Focus group participants overwhelmingly mentioned their uneasiness with the new system and their lack of what they deemed adequate privacy—not only behind them, where the curtain is located on the lever machines, but also adjacent to them on each side where privacy panels were noted to be "too short," "useless," and "a joke."

In additon to the issues mentioned about the surrounding panels, there was another privacy-related issue concerning what happens after the ballot is manually filled out. Once a ballot is manually filled out by a voter, the ballot is then supposed to be placed into a privacy sleeve and fed into the Ballot Scanning System. The focus group members mentioned that they were: (1) given a sleve that didn't entirely shield their ballot; (2) not given a privacy sleeve; or (3) didn't know that such sleeves were available. While 1 is a flaw in the design of the system, 2 and 3 are issues that are related to the expertise of poll workers.

Finding 3: Seniors expressed concerns about the expertise of poll workers and those poll workers' supervisors.

One unexpected occurrence in the focus groups was that many of the participants were poll workers or had been poll workers in the past—of the 19 participants in the focus groups, 7 were past or current poll workers. For the three focus group participants who were poll workers but chose not to be poll workers for this past election, they did so because they were not satisfied with the training that was offered for poll workers to operate the new voting machines. Those 3, however, mentioned that there were other individuals who felt the same way and decided not to continue being a poll worker, saying that they were not alone in their sentiment.

The individuals who had been poll workers were in a unique position of being able to adequately assess the competence of the poll workers that were serving when they went to vote

in this election given their personal expertise. These participants were the same ones who had indicated during the focus groups that they had not been given a privacy sleeve—some of these asked the poll workers for one specifically and were met with what one participant described as a "puzzled deer-in-the-headlights type look." She continued, "[the poll worker] looked at me like I had three heads!"

The seeming lack of poll worker expertise extended to the various mechanisms afforded to those voters who may have had an issue with either seeing or marking the paper ballot. Two such tools were magnifying sheets and Ballot Marking Devices (BMDs). Magnifying sheets are essentially a plastic sheet with magnifying capabilities that when positioned over the ballot, allow a person with visual difficulties to read the ballot more easily. Ballot Marking Devices (BMDs) are computerized systems that enable the user to enlarge the print on their ballot and mark their ballot.BMDs are used to assist the blind and individuals without control of their arms and hands to vote. Some seniors mentioned that the use of the magnifying sheet further exacerbated their concerns over privacy—they feared that they would enlarge the type so much that others would be able to easily read it. Additionally, they were either unaware of the BMDs or felt embarrassed about asking to use one. One senior who mentioned this feeling of embarrassment explained that he didn't believe seniors should be treated any differently than anyone else. He further clarified that he shouldn't have to undergo the social discomfort of asking to use the BMD, and that had the text on the ballot been large enough for anyone to read without the use of a magnification instrument, there would be no issue at all.

The four participants who had served as poll workers in the 2010 Gubernatorial Election mentioned that the issue of lack of expertise was not so much with the poll workers themselves as with the poll worker supervisors. One such participant mentioned that her supervisor "knew

less about the process than [the poll worker] did." This unfamiliarity with the new voting technology on the part of the poll worker supervisors was echoed by two of the other women in the first focus group, and three more in the third. When asked whether they believed the new voting machines themselves to be the root of the issues they noticed, or if it was some other condition, they all answered with factors more akin to the implementation of the voting machines, rather than with the voting machines themselves.

Recommendations

As illustrated in Table 1, three recommendations were developed based upon my research findings. These recommendations are: (1) conduct more public outreach prior to the next election which will again utilize the optical-scan voting machines; (2) improve privacy at both the ballot marking station and the ballot feeding station; and (3) provide more adequate and comprehensive training to poll workers and their supervisors. While the original research question was concerned with the technology of the new optical-scan voting machines, the research suggests that the concerns with the new voting machines have more to do with their implementation then the voting machines themselves.

Table 1

Research Findings and Corresponding Recommendations

Number	Finding	Recommendation
1	Technology involved in the Optical-Scan voting machines is not likely to affect future voter turnout	Leading up to the next election which will utilize the Optical-Scan voting machines, more public outreach should be attempted
2	There are concerns about the privacy of the current voting experience	Improve privacy at both the ballot marking station and the ballot feeding station
3	There are concerns about the expertise of poll workers and their supervisors	Provide more adequate and comprehensive training to poll workers and their supervisors

Recommendation 1: Leading up to the next election which will utilize the Optical-Scan voting machines, more public outreach should be attempted

While finding 1 states that the technology of the new voting machines will not be a determinant as to whether or not the 65 and older voter would turn out to the polls, there also seemed to be a general distrust of the new machines and the motives for their implementation. These feelings seemed based more on misconceptions and lack of knowledge than any actual issue with the machines themselves. To further illustrated this point, one of the questions posed in the focus groups was whether or not participants had been made aware of the new voting machines prior to actually using them, and if so from where. While all of the participants said that they had in fact been made aware of the new machines, they were not aware of why they were being implemented or how they worked.

The New York City Board of Elections did an outreach program to educate voters, but it was on a voluntary basis, that is, organizations would have to volunteer their space to hold these informational events. While the reality is that anyone outside of absentee voters who voted in the

2010 Gubernatorial Election was exposed to the new voting machines, this experience is nothing compared to the decades of using the lever-based machines. While the familiarity will no doubt increase with every subsequent election that the new system is used, the New York City Board of Elections could expedite this process through a more robust education initiative. One example of this would be for election officials to specifically target senior centers with the informational seminars that are already in place. This remedy would not require a new tutorial to be developed, but rather just the human resources expenditure of having personnel participate in outreach. This should be feasible done on an off-year, that is, a year without an election.

Recommendation 2: Improve privacy at both the ballot marking station and the ballot feeding station

The complaint that had the highest frequency of occurrence was that of concerns about privacy. Implementation issues arise first during the ballot marking portion, when a voter is filling out their paper ballot, and then again once the paper ballot is fed into the Optical-Scan machine. The two portions, marking the ballot and feeding it into the scanner, will be examined separately in the interest of clarity.

During ballot marking.

While a voter is marking their ballot, they have a three-sided enclosure around their paper. This protection, however, is drastically less then what most voters are used to, being surrounded on 4 sides including a curtain behind the voter. Additionally, the new enclosures only hide the paper ballot, as opposed to the lever-based machines that surrounded the entire voter. Whether or not a person can actually read another person's ballot is not as important as whether or not a voter believes that another person can read their ballot. The security that that voters were used to with the old voting machines was no longer available to them which left voters as

hesitant and uneasy. This feeling, however, could be mitigated by utilizing a voting booth designed to resemble the older voting booths. While the ballot would still be paper, the act of voting could take place within a familiar, and *safe* space, of a 4 sided voting booth that surrounds the voter. Following the ballot-marking portion of voting, ballot scanning must also be changed to provide more privacy to the voter.

During ballot scanning.

One problem with keeping the votes on a person's ballot confidential during the interim period between when the voter completes marking their ballots and when the voter feeds their ballot into the optical-scan machine is that the ballots did not fit into the privacy sleeves. This is an obvious fix as the purchasing of privacy sleeves that are large enough to fully hide the ballot. Additionally, in line with the third recommendation below, had poll-workers been adequately trained on how to assist voters in feeding their ballots into the scanner, some concerns of privacy could have been mitigated.

Recommendation 3: Provide more adequate and comprehensive training to poll workers and their supervisors

If poll worker training was important before the new voting machines were employed, it is that much more important because of the transition to the new voting machines. While two out of the three focus groups all had either current or former poll workers as participants, all participants mentioned that they felt that whatever interaction they had with poll workers seemed to be inadequate. This was illustrated clearly through some of the participants not knowing that a privacy sleeve should have been given to them or that such a privacy sleeve even existed.

With regard to poll worker supervisors, focus group participants who also served in the 2010 elections as poll workers, felt inadequately supported by their supervisors. These same poll

worker/participants felt ill-equipped to deal with various situations that might arise related to their job. The fact that they had little to no faith in the competence of their supervisors led to more confusion and less confidence in their ability to do their job.

While this study did not collect data on the training that poll workers and poll worker supervisors received in the 2010 Election, the fact that this issue came up so frequently raises questions about how well were these individuals trained. While this recommendation is based on the data collected through the focus groups and not an actual inventory of the poll worker training process, it does imply that a full analysis of the training process should occur and that the process should be improved, if necessary.

Conclusion

This research uncovered important concerns regarding the change from lever-based voting machines to the new optical-scan voting machines. However, these issues were not those sought out by the research question. This does not diminish their importance or the opportunity for the New York City Board of Elections to remedy the short-comings. If the issues discovered were because of the optical-scan machines themselves, there would be the potential for a financial shortfall as the City of New York invested millions of dollars in the new system. This is not the case—the problems are all implementation-based, which should be easiest to rectify. Given that the motivation of HAVA was so progressive in nature, the Board of Elections should itself be forward-thinking and work to correct these issues prior to the next election.

References

Alsnih, R. & Hensher, D.A. (2003). The mobility and accessibility expectations of seniors in a anging population. *Transportation Research Part A: Policy and Practice, 37*, 903-916.

Bauman, V. (2007, November 26). New York not meeting voting regulations. *The Associated Press.* Retrieved from http://www.ccfi.us/hava/resources/nynotmettinghava11.26.07.html

Boateng, E. (2008, April 30). *America has voting fatigue.* Retrieved from http://www.fairvote.org/america-has-voting-fatigue

Brady, H.E. & McNulty, J.E. Turning out to vote: The costs of finding and getting to the polling place. Forthcoming in *American Political Science Review.*

Charness, N. & Boot, W.R. (2009). Aging and information technology use: Potential barriers. *Current Directions in Psychological Science, 18*, 253-258.

Franklin, M.N. (2004). *Voter turnout and the dynamics of electoral competition in established democracies since 1945.* Cambridge, UK: Cambridge University Press.

Help America Vote Act of 2002 § 1, 42 U.S.C. § 15301 (2002).

Madden, M. (2010). Older adults and social media. *Pew Internet & American Life Project.* Retrieved from http://pewresearch.org/pubs/1711/older-adults-social-networking-facebook-twitter

McNulty, J.E., Dowling, C.M. & Ariotti, M.H. (2009). Driving saints to sin: Increasing the difficulty of voting dissuades even the most motivated voters. *Political Analysis, 17.*

Mossberger, K., Tolbert, C.J., & Stansbury, M. (2003). *Virtual inequality.* Washington, D.C.: Georgetown University Press.

Powell Jr., G.B. (1986). Voter turnout in comparative perspective. *The American Political Science Review, 80*, 17-43.

Smith, C.W. (2010). "Digital divide" defined. Retrieved from http://www.digitaldivide.org/digital-divide/digital-divide-defined/digital-divide-defined/

Swindell, R.F. (2001). Technology and the over 65s? Get a life. *Social Alternatives, 20*, 17-23.

United States Census Bureau. (2000). Census 2000 demographic profile highlights for New York City, New York. Retrieved from http://factfinder.census.gov/servlet/SAFFFacts?_event=&geo_id=16000US3651000&_geoContext=01000US|04000US36|16000US3651000&_street=&_county=new+york+city&_cityTown=new+york+city&_state=04000US36&_zip=&_lang=en&_sse=on&ActiveGeoDiv=&_useEV=&pctxt=fph&pgsl=160&_submenuId=factsheet_1&ds_name=ACS_2009_5YR_SAFF&_ci_nbr=null&qr_name=null&reg=&_keyword=&_industry=

Appendix A

Human Subjects Protocol Approval

Date: March 14, 2011

To: Matthew DeSaro, DPA

From: Anne M. Casella, CIP Administrator

Human Subjects Research Review Committee

Subject: Human Subjects Research Approval

Protocol Number: 1644-11

Protocol title: *Electronic Voting Machines and the 65 and Older Voter*

Your project identified above was reviewed by the HSRRC and has received an Exempt approval pursuant to the Department of Health and Human Services (DHHS) regulations, 45 CFR 46.101(b)(2).

An exempt status signifies that you will not be required to submit a Continuing Review application as long as your project involving human subjects remains unchanged. If your project undergoes any changes these changes must be reported to our office prior to implementation, using the form listed below:http://humansubjects.binghamton.edu/2009_Forms/012_Modification%20Form.rtf

Principal Investigators or any individual involved in the research must report any problems involving the conduct of the study or subject participation. Any problems involving recruitment and consent processes or any deviations from the approved protocol should be reported in writing within five (5) business days as outlined in Binghamton University, Human Subjects Research Review Office, Policy and Procedures IX.F.1 Unanticipated Problems/adverse events/complaints. We also require that the following form be submitted:http://humansubjects.binghamton.edu/Forms/Forms/Adverse%20Event%20Form.rtf

University policy requires you to maintain as a part of your records, any documents pertaining to the use of human subjects in your research. This includes any information or materials conveyed to, and received from, the subjects, as well as any executed consent forms, data and analysis results. These records must be maintained for at least six years after project completion or termination. If this is a funded project, you should be aware that these records are subject to inspection and review by authorized representative of the University, State and Federal governments.

Please notify this office when your project is complete by completing and forwarding to our office the following form: http://humansubjects.binghamton.edu/Forms/Forms/Protocol%20Closure%20Form.rtf

Upon notification we will close the above referenced file. Any reactivation of the project will require a new application.

This documentation is being provided to you via email. A hard copy will not be mailed unless you request us to do so.

Thank you for your cooperation, I wish you success in your research, and please do not hesitate to contact our office if you have any questions or require further assistance.

cc: file

Kristina Lambright

Diane Bulizak, Secretary
Human Subjects Research Review Office
Biotechnology Building, Room 2205
85 Murray Hill Rd.
Vestal, NY 13850
dbulizak@binghamton.edu
Telephone: (607) 777-3818
Fax: (607) 777-5025

Appendix B

Pre-Focus Group Survey*

You have been invited to participate in a research project about 65 and older Americans and their interaction with the new Optical Scan Voting Machines.

We are asking all individuals to complete a brief demographic survey in order to determine eligibility for a focus group after the surveys are collected. This survey is only 5 questions.

Your survey responses will be confidential. Your decision whether or not to participate is completely voluntary. If you decide not to participate, your relationship with Binghamton University or the Office of New York State Assemblyman Lou Tobacco will not be affected. If you do choose to participate, you do not have to answer all the questions and may stop at any time.

Questions about your rights as a volunteer in research can be directed to Binghamton University's Human Subjects Research Review Committee at (607) 777-3818. Other questions about the survey can be directed to Matthew C. DeSaro c/o Office of Assemblyman Louis R. Tobacco (718) 967-5194.

---

1. Gender
☐Female ☐Male

2. First Name and Last Initial
_____

3. Age
☐49&below ☐50-64 ☐65-70 ☐71-75 ☐76&above

4. Did you vote in the last New York State Governor's election using the new voting machines?
☐Yes ☐No ☐I don't know ☐I prefer not to say

5. Would you be willing to participate in a focus group?
☐Yes ☐No ☐Maybe, I have some questions

*Note: The actual survey was a much larger font and took up the entirety of one whole page.

Appendix C

Focus Group Initial Questions

1. Did you hear about the new voting machines prior to actually using them? If so, how?

2. How would you describe your experiences with the former lever-based voting machines?

3. How would you describe your experience with the new optical-scan voting machines?

4. Were there any things you preferred or disliked about the new optical-scan voting machines versus the former lever-based voting machines?

5. How do you think the new voting process can be changed to better serve the needs of the 65 and older voting population on Staten Island?