

STATE BOARD OF ELECTIONS

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Memorandum

To: Senate Budget and Taxation Committee
Health and Human Services Subcommittee
February 26, 2016

House Appropriations Committee
Subcommittee on Public Safety and Administration
March 3, 2016

From: Linda H. Lamone, State Administrator of Elections

Subject: Response to Department of Legislative Services' FY 2017 Budget Analysis

Thank you for the opportunity to respond to the Department of Legislative Services' (DLS) analysis of the State Board of Elections' (SBE) Fiscal Year 2017 budget.

Recommended Actions

DLS recommends deferring funding for the Agency Election Management System (AEMS) and bases its recommendation on the complexity of implementing a new voting system and the "numerous issues that have arisen as well as the difficulty of starting a new project in an election year." See DLS Analysis of SBE's Operating Budget, page 13.

Before responding to DLS' reasons for recommending deferral, it is important to understand how critical this system is to conducting elections in Maryland. Conducting an election and complying with Maryland's legal and administrative requirements requires multiple information technology systems¹. The exchange of data between these systems is critical, and AEMS is the middleware that connects all of the other systems and ensures that the data is formatted so that the other systems can use the data. AEMS also performs essential election functions (*e.g.*, ballot definition) using complex logic and Maryland specific rules and many of the most public parts of an election (*e.g.*, online list of candidates, election results).

Using candidate data, polling place locations, congressional and other district associations, AEMS applies Maryland rules and laws to define each unique ballot. In the upcoming primary election, there are over 250 unique ballot styles or combinations of candidates, and this number can grow to about 1,000 unique styles in a gubernatorial primary election.

¹ In addition to AEMS, these systems include the new voting system, the statewide voter registration system, the candidate filing system, electronic pollbooks, and a server for unofficial election night results reports and the web.

The need for a technical solution to perform this function was realized in the 1980s, and over the years, there have been several significant re-development phases and enhancement. Today, SBE's election management system is outdated, solely dependent on the current vendor, and expensive and cumbersome to maintain. It was built in Visual Basic 6, a language that is no longer supported. While SBE is fortunate that the same programmer has been supporting this system over for over 15 years, she is the *only* person with intimate knowledge of how the system works. This poses a significant risk to each election, and as the system ages and is asked to perform more robust tasks and interface with current technology, the risk increases. Over the last three fiscal years, SBE has paid about \$1.8 million to support the existing system – about 50% of the estimated cost of the proposed system.

DLS' stated reasons for deferring this funding request concern concurrent projects in an election year and issues with the implementation of the new voting system. There is no doubt that the new voting system project is complex and time-consuming. This system has three networks and thousands of pieces of equipment to receive, test and maintain, new technology to learn, and new procedures to write and test. It is, however, important to note that significant work on this project was performed *concurrent* with the 2014 election cycle. This was accomplished with a strong, experienced project team that kept the project moving forward while SBE staff conducted the 2014 elections.

Planning for AEMS will need to start while SBE is preparing for the 2016 elections, but this can again be managed with a strong, experienced project team. We have already documented existing processes and functionality and identified new functionality, which will streamline the planning process. With the bulk of the work related to the new voting system complete, SBE resources can be more involved in the AEMS project planning.

Lastly, it is important to keep in mind that implementing the new AEMS will be a multi-year project regardless of when it starts. As a result, there will *always* be an election to support while planning for this project.

For the reasons stated above, SBE strongly urges that funding for AEMS **not** be deferred.

Issues Raised in the Department of Legislative Services' Analysis

1. *SBE should comment on why no employees have received certification in the years that the certification has been available and why 50% of employees are expected to be certified in 2016.* (page 5)

We regret that the data for the Managing for Results measures related to SBE's certification program are not correct. The correct data are:

- Number of certification related courses offered by SBE in 2013 was one. A cyber security course was offered on June 17, 2013, at SBE's biennial meeting.
- Number of LBE employees participating in the 2013 program was 239. All attendees are required to sign in to receive credit for the course.
- Percent of LBE employees that obtained certification in 2012 - 2015 was 37.5%. SBE intends to increase the percentage of employees with certification in future years.

Since the inception of the Election Preparedness and Professional Development Program in 2009, SBE has offered all seven core courses and four elective courses². By the end of 2012, SBE had offered all of the core courses and certified 90 local election officials (37.5%). Course selections in 2013 - 2015 enabled all certified members to maintain their certification. Newly hired local election officials attended courses offered by SBE, but since SBE has not yet re-offered all seven core courses, these individuals have not yet been certified.

Core courses are typically offered in off-election years, and in a normal off-election year, SBE would have offered in 2015 one or two courses. With the extensive training requirements for the new voting system, SBE deferred courses in 2015. SBE is currently considering whether to offer a core or another course at the annual conference of the Maryland Association of Election Officials in June 2016.

2. *SBE should comment on whether additional tests will be conducted to address missing components of the October mock election.* (page 11)

Testing of the new voting system is an on-going process. The mock election gave State and local election officials the opportunity to program and load ballots; conduct the usual pre-election tests; mark, cast, scan and tabulate ballots; load results into the central election database; and generate results. While not every step of election process was included in the mock election, important processes were included and the scope of the mock election enabled election officials to focus exclusively on new processes with the new voting system.

In addition to the mock election testing, SBE and the local boards of elections have conducted:

- Network Testing – User acceptance testing was performed on all networks³. Additional testing has been conducted on the regional collection networks. These tests included burst and continuous, simultaneous data transfers from each regional collection site to the central local board of elections' office.
- Volume Testing – SBE and the local boards tabulated a high volume of voted ballots to identify how many ballot images can fit on a thumb drive and how long it takes to load ballot images on a full memory device.
- Electronic Pollbook Testing – SBE and the local boards performed a statewide test of the new software for the electronic pollbook. This software included changes needed for the same day registration or address change process.
- Municipal Elections – The Rockville and College Park municipal elections served as the ultimate test of the voting system. SBE and the Montgomery County Board of Elections supported the Rockville municipal election and were able to use the equipment and follow processes in a real election environment. While neither SBE nor a local board supported the College Park election, the same voting system was

² The seven core courses are: (1) Pre-Election; (2) Project, Time (Schedule), Quality and Risk Management; (3) Personnel; (4) Election Laws and Ethics; (5) Elections Office Management; (6) Voter Registration Policies and Procedures; and (7) Post-Election. The four continuing education courses SBE has offered are: (1) Disability Awareness; (2) Training the Trainers; (3) Redistricting; and (4) Comprehensive Audits.

³ All local board have two networks - one for unofficial election night results and one for official election results. Baltimore, Montgomery, and Prince George's Counties have regional networks for reporting unofficial election night results.

used in that election and performed well. These elections were examples of successful “tests” of the voting system.

- Ballot Paper Testing – SBE verified that sample ballot activation cards for the ballot marking devices work with the device and can be read and tabulated by the ballot scanners.

Many local boards have or plan to test using the new voting system in preparation for the upcoming election. Representatives of the local boards report that informal, local tests are extremely valuable in learning the system and gaining confidence in it.

3. *SBE should provide an update of the implementation of same-day registration, including how it will account for Chapter 6 of 2016.* (page 12)

Regulations to implement same day registration and address changes are effective February 29, 2016. These regulations outline when an individual using this process votes a regular ballot and when an individual votes a provisional ballot, the process for canvassing and counting the provisional ballot, and the voter education and election judge requirements.

As noted in the analysis, SBE will pre-qualify Maryland residents who appear to be eligible but not yet registered to vote. Chapter 6 of *2016 Laws of Maryland* changes eligibility requirements, and these changes will be incorporated into the pre-qualification process. Parole and probation information will not be considered when determining whether to pre-qualify an unregistered individual, but information related to imprisonment will be.

To facilitate this process, election judges will use the electronic pollbooks to register and check-in individuals and issue ballots to the newly registered voters or voters with a new address. The software has been updated and tested by SBE and all of the local boards. The State’s voter registration system was updated to accept new data from same day registrants or voters who provide an address change during early voting. SBE and the local boards have also tested importing and processing this data. Lastly, SBE distributed step-by-step instructions on the same day registration and address change process and will continue to support the local boards as they implement this new requirement.

4. *SBE should provide an update of its choice for the post-election audit.* (page 12)

Immediately after the 2016 Primary Election, SBE, in partnership with the local boards, intends to pilot three different methods to audit the voted ballots. After conducting these pilots, SBE and the local boards will identify each method’s advantages and disadvantages and the preferred audit method for future elections.

At this time, the three audit methods under consideration are:

- Randomly select a fixed percentage of precincts and contests to audit. For those precincts, perform a manual tally of digital images of the voted ballots for the selected contests and compare results from the manual tally against the results from the voting system.
- Randomly select contests and individual ballots to audit. For these ballots, perform a ballot level audit by comparing the digital images of the voted ballots against the voting system report that shows how the system tabulated each vote on each ballot.

- Use independent software to review ballots and generate independent election results that can be compared against the results from the voting system.

This effort is dependent on funding. SBE will need a statistician to identify the appropriate sample size and confidence level for the audit and the software and support to conduct the independent automated tabulation of election results. SBE is in the process of obtaining quotes for these services.

5. *SBE should provide all changes in cost that arise as a result of the change in the voting process at early voting sites.* (page 16)

The change in how early voters will mark their ballots will impact:

- The quantity of pre-printed ballots. Since most voters during early will be issued pre-printed ballot and be instructed to vote them by hand, more pre-printed ballots will be ordered. Since SBE and the local boards are currently working on ballot orders, the number of pre-printed ballots to order is not yet determined but will be sufficient to stock each early voting with all ballot styles. The cost per ballot is approximately \$0.21 per ballot.
- The quantity of ballot activation cards. Since fewer voters during early voting will use the ballot marking device, fewer ballot activation cards will be needed. The cost per ballot activation card is estimated to be approximately \$0.10. This change will reduce the cost for ballot activation cards by approximately \$30,000.
- Many local boards expect to recruit and train additional election judges to assist with issuing paper ballots. The number of and cost for additional judges will vary by county.
- Additional voting booths may be required by some local boards. SBE has surveyed the local boards to determine if and how many additional voting booths will be required. The initial survey results indicate that not all local boards will require additional booths. The per voting booth cost is \$109.50, but SBE expects to be able to obtain a reduced cost by renting booths.
- No contingency ballots will be required. (These ballots would be used if none of the ballot marking devices in an early voting center could be used.) Since pre-printed ballots will be at each early voting center, there is no need for these ballots. In the 2014 General Elections, contingency ballots cost \$145,000.
- SBE is working with the transportation company to determine if the equipment change (replacing ballot marking devices and ballot activation printers with standing voting booths and more paper ballots) impacts the transportation plan and cost.
- Local boards will need to evaluate if their existing storage can accommodate the increased quantity of ballots.
- Local boards will need to provide early voters with pens to mark the pre-printed ballots.

6. *SBE should explain how it plans to properly allocate ballots to each early voting site, ensuring that there are sufficient amounts of each ballot style. Additionally, SBE should explain how it will ensure that each voter will vote using the correct ballot style.* (page 16)

SBE will use historical early voting data and turnout estimation strategies to determine the appropriate number of ballots to print for early voting. As representatives of the local boards are constantly monitoring the early voting centers, additional ballots can be

deployed if an early voting center is running low on ballots. Each local board also has a ballot on demand printer that can be used to print ballots in case additional ballots are needed.

Over the years, the local boards have developed various strategies to mitigate the risk that election judges issue a voter the wrong ballot style. In prior elections, each early voting center had to stock all ballot styles for provisional voting. As a result, election judges are generally familiar with the process of issuing and verifying ballot styles.

These strategies include deploying more election judges to verify that the voter has been issued the correct ballot, using separate judges to issue ballots, providing better visual cues of the ballot style number (*e.g.*, increase the font size of the ballot style number printed on the ballot stub and the corresponding party affiliation), and organizing ballot styles into colored folders. The ballot printers have agreed to increase the font size of the ballot stub and party affiliation, and the local boards are implementing the strategies that have worked best in their counties.

7. *SBE should provide an update on the development of a standard number of voters to ensure secrecy of ballots produced by BMDs. SBE should also explain steps that will be taken at early voting sites and on Election Day to ensure that voters who use BMDs are not confused while voting.* (page 16)

At its February 25, 2016, meeting, the members of the State Board of Elections discussed how many voters must use the BMD to ensure compliance with Election Law Article, §9-102(f)(1) of the *Annotated Code of Maryland*⁴. After significant discussion, the members approved a draft concept requiring that a minimum of two voters at each early voting center during each day of early voting will use the BMD (up to 16 voters during the early voting period) and on election day, a minimum of two voters at each precinct will use the BMD. This draft concept means that at least 4,904 voters statewide will use the BMD to make selections. The State Board of Elections scheduled a special meeting on Friday, March 4, 2016, at 4 pm to review and hear any public comments and determine the minimum number of voters using the BMD.

Regardless of the minimum number of voters using the BMD, SBE will develop and distribute written instructions on how to navigate a contest with multiple screens of candidates and provide specific instructions for election judges to give to voters using the BMD. Election judges assigned to the BMDs will receive specialized information on how to assist voters who have questions about navigating the ballot. SBE has asked representatives of the University of Baltimore's Usability Lab to assist with these instructions.

8. *SBE should comment on whether the limit of candidates on screen will continue to be an issue for the entire duration that the State uses this voting system, and if so, provide an update of plans to address the issue in future elections.* (page 16)

⁴ This section requires that the voting system selected by the State Board of Elections provide equivalent access to voters with disabilities without creating a segregated ballot.

SBE expects that Election Systems & Software's (ES&S) next software release for the ballot marking devices will provide flexibility in displaying candidates' names on the screen. One possible option is allowing multiple columns – instead of a single column – of candidates on each screen. Other possible changes include improving instructions and changing the text on the navigation buttons (*e.g.*, “Previous” could change to “Previous Contests” and “More” could change to “See more candidates”).

SBE and ES&S are already discussing how to improve the display and navigation in the ballot marking devices and expect to address the identified concerns for subsequent elections.

9. *SBE should comment on the progress each local board has made with their outreach campaigns and any concerns that the State Board has regarding the lack of voter outreach and an increase in voter wait times.* (page 17)

To date, Maryland's grassroots voter outreach program has consisted primarily of public demonstrations of the new voting system and efforts to provide information via social media.

Public demonstrations of the new voting system are being conducted in nearly all counties statewide. Local boards with more staff and resources are able to engage with county residents most actively, and the majority of demonstrations are held at free venues, such as senior centers, regional libraries, community associations, regional grocery stores, civic centers, places of worship, high schools, community colleges, and universities. These events include a hands-on demonstration of the new voting system, voter registration, and distributing flyers and other handouts with election information.

SBE, in partnership with the local boards, has centralized a social media communications campaign to promote the new voting system and related election information across various channels of communication. SBE maintains social media accounts on Facebook and Twitter. Thirteen local boards are tweeting about “how Maryland votes” on Twitter (#MDvotes2016) and 16 local boards are posting the same on Facebook. A small number of local boards are using YouTube or Instagram to share information.