

City of Alexandria, Virginia

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10-28-2003

MEMORANDUM

DATE: OCTOBER 23, 2003

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: PHILIP SUNDERLAND, CITY MANAGER *PS*

SUBJECT: CONSIDERATION OF THE REALLOCATION OF CAPITAL FUNDS FOR THE PURCHASE OF NEW VOTING EQUIPMENT FOR THE CITY

ISSUE: City Council consideration of a request for authorization to purchase new voting equipment.

RECOMMENDATIONS: That City Council:

- (1) Reallocate \$641,150 from the Market Square capital renovation account to the Information Technology Plan capital account to purchase new voting equipment; and
- (2) Authorize the Electoral Board to seek partial reimbursement from the State Electoral Board (estimated at \$75,000).

BACKGROUND: Under the Help America Vote Act of 2002 (Public Law 107-252), all localities throughout the country are required to have at least one accessible voting machine in each polling place used in elections for federal office after January, 2006. Specifically, this new federal law states that localities must have a voting system that is "accessible for individuals with disabilities, including non-visual accessibility for the blind and visually impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters." The law further states that each locality must provide at least one direct recording electronic (DRE) voting system or other voting system equipped for individuals with disabilities at each polling place.

Purchasing new voting equipment for the City was considered, but not funded, when the City prepared its FY 2004 Capital Improvement Program funding. However, since then the need, details and costs to support the rationale to purchase new voting equipment have become clearer, as well as a funding opportunity has arisen which will make the purchase of new voting equipment financially feasible in FY 2004.

Currently, citizens in Alexandria vote on an optical scan system that is not accessible to all voters. It is not possible for individuals with disabilities (including the blind and

visually impaired) to vote on this system in a manner that provides the same opportunity for access, participation and privacy that is provided for other voters. Therefore, the City is required to purchase at least one accessible voting machine for each polling place.

The Alexandria Electoral Board, which is comprised of three members who are appointed by the Alexandria Circuit Court for staggered three-year terms, is responsible for overseeing the voting process in Alexandria. The Electoral Board began researching accessible voting systems in early 2001 in anticipation of the need to replace the City's existing voting equipment, purchased in 1995. The Board took this action because the voting equipment was beginning to experience problems such as frequent ballot jams, power failures, and mechanical malfunctions. None of these problems compromised the accuracy of any election because the Board thoroughly tests all voting machines prior to each election, repairs malfunctioning machines, and utilizes backup voting machines on election day. However, these problems have contributed to delays in voting and election reports. In short, while currently operable, the electronic components of the City's eight-year old voting system is near the end of its useful life. The Electoral Board therefore recommends that it is time to replace the City's voting machines.

Localities in Virginia are required to use voting systems which are certified by the State Board of Elections, and new voting systems must undergo rigorous testing by independent experts before they are certified by the State. In addition, after City Council authorizes the purchase of new equipment, the United States Department of Justice will also need to approve the proposed purchase of new voting machines. Based upon prior Justice Department reviews and decisions, this request should be approved. Once the request to purchase new voting machines has been approved by the Justice Department, the Electoral Board will send notifications to all of the registered voters in the City, and will also advertise the change in the local newspaper. It is planned to have the new system in place by the February 10, 2004 Presidential Primary.

DISCUSSION: The Electoral Board reviewed all of the voting systems which are currently certified by the State Board of Elections, with input from the Alexandria Commission on Persons with Disabilities, conducted a test of the Hart eSlate system in November, 2002, and tested the Advanced Voting Solutions WINVote system in May 2003. After careful analysis of both systems, test results, input from staff, soliciting input from approximately 40 groups and individuals such as the Commission on Persons with Disabilities, N.A.A.C.P., League of Women Voters, Hispanic Advisory Committee, Office on Aging and Adult Services, and receiving input from citizens, elected officials, and political parties, the Board unanimously recommended that the City enter negotiations to purchase the Hart eSlate system. The eSlate is a fully electronic voting system that is manufactured by Hart Intercivic Corporation, a business that has marketed products to state and local government since 1912. The system is certified by the State Board of Elections. The eSlate is currently in use in Charlottesville, Virginia and Houston, Texas, and will be implemented in Orange County, California in 2004. The following is the rationale for this decision.

a) Ease of Voter Use and Accessibility: On a pilot basis, the eSlate was tested in one regular precinct and for the absentee voting precinct and surveyed along with the current optical scan system in the federal election in November, 2002. Voters expressed a high degree of satisfaction with both the existing optical scan system and the eSlate system.

After significant study and trials on all electronic systems certified for use in Virginia, the Alexandria Commission on Persons with Disabilities weighed in heavily in favor of eSlate. In a memorandum to the City Council and City Manager (attached), the Commission stated, "We believe that the Hart eSlate provides the best opportunity for providing the most accessible voting technology to Alexandria residents with disabilities." The system features font enlargement and audio capacity for sight impaired voters and a sip and puff attachment allowing even a voter with total paralysis to vote unassisted, ensuring his/her constitutional right to cast a secret ballot.

b) Security: The eSlate is hardwired and does not use a smart card as is the case with most touch screen systems. It is less vulnerable to external tampering than wireless and/or software driven systems. This is not to suggest that wireless, software driven systems like those purchased by Arlington and Fairfax Counties and other jurisdictions are not secure. It is that the Electoral Board believes that the eSlate system is more secure. The key to properly securing an electronic voting system is the administration of comprehensive pre-election logic and accuracy test open to bipartisan observation. Alexandria has and will continue to conduct these tests prior to each election.

c) Maintenance and Durability: The eSlate is not a touch screen system. It does not have to be recalibrated after each election as do touch screen systems. This increases system longevity and makes the voter/system interactivity more precise. The voter turns a dial and presses an enter key to highlight and select choices. This can be thought of as a mouse (though stationary) and "Enter" key on a PC. While it may seem somewhat more low-tech than touch screen, many computer application environments (medical diagnostics in particular) employ this technology due to its lower maintenance requirements and durability.

d) Rationale for Replacing all of the City's Voting Equipment: In lieu of purchasing an entire replacement voting system, the City could purchase one direct recording electronic (DRE) voting machine for each of the City's 25 polling places to satisfy the federal requirements associated with the Help America Vote Act of 2002. The Electoral Board and City staff considered this option and recommend replacement of all of the City's voting equipment with DRE voting machines because the use of two systems would have serious negative consequences in several phases of the electoral process.

i) Election Preparation: The operation of two voting systems would increase the risk of system errors and reduce efficiency in system preparation. Two separate protocols would be followed in programming and testing two systems. Proper programming and testing ensures, among other things, that when a voter selects "Candidate A" that "Candidate A" is awarded the vote. Programming and testing procedures are

meticulous, intensive, and time consuming. The use of two systems would greatly increase the risk of errors and double the time needed to program and test.

In addition, it would be far more challenging, time consuming and costly to train staff and precinct election officials with two systems. Voting systems are complex computer systems that require a great deal of training, experience and support to operate. Staff and precinct election officials would be required to learn operating and trouble shooting for two systems rather than one system.

- ii) **Voting and Election Day Operations:** Election day operations are also complicated by running two systems. It would be more difficult for staff and election officials to respond to breakdowns with two systems. In addition, under Virginia election law, each voter is to be offered an opportunity for a demonstration prior to voting. In the case of a new system this should be encouraged. The use of two systems would double this responsibility and would delay voters. It is also likely that more election officials would have to be employed. Much is expected of precinct election officials. They put in a 15 to 16 hour day (more if two systems are used), spend 2 to 3 hours in training, and are paid \$100 to \$150 per election. Efforts should be made to simplify their election day task rather than to add to the complexities associated with operating two different systems.
- iii) **Producing and Reporting Results:** Integration of election results from different voting systems would increase the risk of reporting errors and be less efficient. When the polls close precinct election officials would have to produce reports from two separate systems, report twice electronically or telephonically to election headquarters, and complete two reports documenting results. Staff at election headquarters would have to integrate results manually and enter them into reporting programs. The number of points where errors might occur would increase dramatically. This would increase the risk of errors and delay the reporting of returns by an hour or more. Errors and delays could shake the trust that Alexandria citizens have in their electoral system.
- iv) **Cost of Two Systems:** Because of high fixed costs and software costs, staff estimates that it would cost approximately \$260,000 to provide one accessible machine per precinct, including the cost of software and an absentee voting system. In addition, it would be necessary to spend approximately \$200,000 to replace the City's optical scan voting system. Therefore, the total cost for this alternative would be approximately \$460,000, and this would only provide one accessible machine per polling place. While this is less expensive up front than replacing the entire voting system, it would result in a very inefficient system to administer, as

well as it would be very confusing for voters, and it would be in place for five to ten years.

e) Timing of the Purchase of a New Voting System: The City is required to purchase accessible voting machines for use in federal elections that are held after January 2006. Purchase prior to 2006, when most jurisdictions around the country will be implementing, is in the City's interest in order to avoid competing with other jurisdictions for vendor system service. The Electoral Board recommends implementing the new system during the February 10, 2004, Presidential Primary because this will allow time to prepare, train and obtain real-time hands on experience with the new voting equipment with staff and election officials prior to use in the high turnout Presidential Election.

FISCAL IMPACT: The cost of providing 225 accessible voting machines, software, and a new absentee voting system is \$716,150. The cost will be somewhat offset by approximately \$75,000 of federal funding (approximately \$3,000 per precinct) that will pass through the State as a reimbursement to the City, resulting in a net City capital cost of approximately \$641,150. When the City surpluses its old voting equipment, it is likely that some nominal dollar amount may be achieved if some other locality wishes to buy the City's system (such as for parts, spares, new precincts, etc.). In addition, the maintenance and support costs will be \$32,750 per year.

The proposed source of funding for this purchase are existing allocated capital funds which have been previously approved for the planned future Phase II renovation of Market Square. With the discussion of the five main siting options for the Visitors Center, including the possibility of Market Square as a Visitors Center site, the hiring of an engineering firm to develop the specifications for the Market Square renovation project has been deferred until after the City Council decision on the Visitors Center currently scheduled for late January 2004. This means that it is unlikely that a construction award for Market Square renovation will occur in this fiscal year, thereby creating the opportunity for the reallocation of funds to finance the purchase of the proposed new voting equipment. While this resolves the funding situation in FY 2004, it will mean that the \$641,150 will need to be added to the FY 2005 CIP to make the Market Square account whole.

ATTACHMENT: Letter from the Alexandria Commission on Persons with Disabilities to City Council and the City Manager dated August 21, 2003.

STAFF:

Michele Evans, Assistant City Manager
Mark Jinks, Assistant City Manager
Ignacio Pessoa, City Attorney
Tom Parkins, General Registrar
Eric Spicer, Elections Administrator



Acpd

Alexandria Commission on Persons with Disabilities

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2003 AUG 22 P 3:09



TO: City Manager, Mayor and Members of City Council
 FR: Chet Avery, Chair, Alexandria Commission On Persons With Disabilities
 DT: August 21, 2003
 RE: The Acquisition and Installation of Accessible Voting Machines

After receiving a report on accessible voting machines at the August 13, 2003 meeting of the Alexandria Commission on Persons with Disabilities, the commission voted unanimously to endorse and recommend that you adopt the Hart InterCivic eSlate electronic voting system as the voting system of choice for the City and take steps to establish a budget plan to have these voting machines installed for the primary voting that will take place in 2004.

As you may know, members of the commission have worked very closely with the Registrar of Voters Office and staff in assessing accessible voting machines. Commission members accompanied the Registrar to Charlottesville in the Fall of 2002 where we assessed the accessible voting machines used in that city's Fall election. In addition members of the Commission arranged and accompanied the Registrar, the Secretary of the Electoral board and staff to conduct a visit to the National Technology Center of the National Federation of the Blind (NFB) in Baltimore to assess the eight accessible voting machines located at the Center. Based upon these site visits and other information The Registrar of Voters Office identified two accessible voting machines for a demonstration that was held in their offices this Spring. At this demonstration members of the Commission had the opportunity to test the two (2) voting systems that had been selected by the Registrar of Voters for testing by the public. Severely physically and manually disabled and blind members of the Commission who tested the two machines came to the conclusion that the Hart eSlate provided the most access options and the best accessibility features for persons with disabilities. Those with severe mobility and manual impairments and those with visual impairments can easily use the input devices for the machine.

We found that the Diebold voting system was very limited in its accessibility to persons with disabilities. Only one method of input was provided. This touch screen input device was impossible to use by someone with a severe physical disability that affected their ability to use their arms. This device also created difficulty for those with visual impairments for the many

lengthy audio prompts made a vote selection a ponderous procedure as voting decisions took two to three times as long as the casting of a vote on the other accessible voting machine. Moreover, information we received indicates that the Hart machine is more secure in limiting voter fraud and vote manipulation.

We believe that the Hart eSlate provides the best opportunity for providing the most accessible voting technology to Alexandria residents with disabilities.

Since many members of Alexandria's disabled community are unable to use the current voting system, it is imperative that the City Manager recommend a budget and the City Council approve and institute these new voting machines as soon as possible. We hope that council members will agree with our recommendation and support the eSlate electronic voting system.

If you have any questions about this Commission recommendation, please contact me or Jeffery McAllister, Tel. 703 567-3524, a member of the Commission's Accessible Enhancement committee.

The members of the Alexandria Commission On Persons With Disabilities (ACPD) want to thank you for making positive decisions that enhance equal opportunities for citizens with disabilities to participate fully in the life of this city.

Chet Avery
Chair, ACPD

cc: Beverly Steele
Jack Powers
MaryAnn Griffin
Debbie Ludington
Tom Parkins