



County of Alameda Registrar of Voters
Election Voting Systems

ANALYSIS of OPTIONS

May 15, 2006

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1.0 EXECUTIVE SUMMARY

In 2001, the County of Alameda Registrar of Voters purchased an electronic touch screen voting system from Diebold Election Systems because the old Votomatic voting system used by the County of Alameda (County) had been decertified by the California Secretary of State. In March 2005, the Registrar of Voters advised the County of Alameda Board of Supervisors (Board) that a new law (California Elections Code Sec. 19350-19252) required voter verifiable paper receipt printers on each Touch Screen voting terminal used in elections after January 1, 2006. While the Diebold voting equipment met the Help America Vote Act (HAVA) accessibility requirements, the voting system did not have a voter verifiable paper receipt and therefore would need to be upgraded or replaced.

During the past year, the Registrar of Voters convened a County Election Equipment Committee composed of representatives of the Registrar of Voters, County Counsel, General Services Agency, Information Technology Department and the County Administrator's Office to review voting equipment options and advise on a recommendation. The Board had authorized the Registrar of Voters to negotiate an agreement with Diebold Elections, Inc. for the trade-in of the current Touchscreen voting terminals (Touchscreens) for upgraded Touchscreens with the voter verifiable paper receipt printer and return to your Board for approval of the contract after the equipment was certified by the Secretary of State. Due to delays in certification of the Diebold voting equipment, it was recommended by the County's Election Equipment Committee that the Registrar of Voters issue a Request for Proposal for a "blended" voting system (RFP) to incorporate Touchscreen voting terminals for accessibility and Optical Scan voting equipment (Scanner) for paper ballots.

Based on public input and review of vendor RFP proposal responses, the Alameda County Registrar of Voters identified the six (6) options for election voting equipment systems for possible use in the November 2006 General Election.

- Option #1: "Blended Voting System" – Touchscreen and Scanner at Polls
- Option #2: "Central Optical Scan Ballot Counting" – Touchscreen and only Paper Ballots at Polls
- Option #3: "No Touch Screen Voting Terminals" – Ballot Marking Device and Scanner at Polls
- Option #4: "Ballot Marking Device with Central Vote Counting"
 - Ballot Marking Device and only Paper Ballots and no Scanner at Polls
- Option #5: "Ballot Marking Device with Vote Counting by Hand"
 - Ballot Marking Device and only Paper Ballots and no Scanner at Polls
- Option #6: "Reject RFP" – Only Paper Ballots at Polls, Explore other Options

Each of these options is comprised of different voting system components and will require updating and modifying existing operating procedures for preparing, conducting and completing an election. In addition, each of these options has its own unique set of financial costs, benefits and risks. To determine the best and most cost effective option(s) for meeting the County's requirements for an voting system, the Registrar of Voters has conducted and completed a cost/risk analysis of these options to identify and recommend one or more options for the Boards consideration and approval for use in the November 2006 General Election and address the future election needs of the County.

This Cost /Risk Analysis reviewed and analyzed the various election voting options available to the County based on public input and the submitted vendor proposal responses to the RFP for voting systems. Upon reviewing the public and government impacts, cost analysis and risk assessment for the six (6) options being considered by the County, this analysis recommends that the County proceeds with completing their RFP and procurement process for a voting system and implement Option #1: "Blended Voting System" – Touchscreen and Scanner at Polls. Option #1 provides the County with the greatest benefits, cost savings and flexibility among the options being considered and can be implemented in time for the November 2006 General Election.

HAVA funds may be used to purchase a "blended voting system" through the end of December 2006. After January 1, 2007, HAVA funds may only be used to purchase fully-accessible voting equipment which would cost more than purchasing a "Blended Voting System". Option #1 provides the County with a choice of Federal and State tested and certified "blended voting systems" from either Diebold Election Systems (Diebold) or Sequoia Voting Systems (Sequoia) which were the two (2) top ranked vendors by the County's RFP Evaluation Committee.

This analysis does not recommend implementing any of the other voting system options that were reviewed. The County should not explore other options because the County can not implement them by the November 2006 General Election. This will put the County at a high risk of not being able to use available HAVA funds prior to June 30, 2007. After this date, HAVA funds can not be used to upgrade and purchase voting systems. In addition, the United States Department of Justice (DOJ) has begun suing state and local governments for failing to comply with HAVA. DOJ filed HAVA lawsuit against State of New York on March 1, 2006. Therefore, the County needs to show due diligence in their efforts to implement a HAVA-compliant voting system for the November 2006 General Election.

For the past year, the County has initiated a project to procure a HAVA-compliant voting system. Along the way, the scope of this project has changed affecting the cost and time required to procure the voting system. Currently, there is limited time available to the County to procure and receive delivery of voting equipment, train election staff, and prepare, test and implement the voting system in time for the November 2006 General Election. It is important to note that other state and local governments are facing these same voting system issues as the County and are rushing to procure the limited supply of voting equipment and product support resources available for the November 2006 General Election. To ensure successful implementation of a HAVA-compliant voting system for the November 2006 General Election,

the County needs to begin implementing one of the recommended options by mid-May 2006. Further delays may increase the costs for procuring and implementing a voting system and affect the type and quality of voting system for the November 2006 General Election.

2.0 BACKGROUND

2.1 Summary of Events

In 2001, the County of Alameda Registrar of Voters purchased an electronic touch screen voting system from Diebold Election Systems because the old Votomatic voting system used by the County of Alameda (County) had been decertified by the California Secretary of State. In March 2005, the Registrar of Voters advised the County of Alameda Board of Supervisors (Board) that a new law (California Elections Code Sec. 19350-19252) required voter verifiable paper receipt printers on each Touch Screen voting terminal used in elections after January 1, 2006. While the Diebold voting equipment met the Help America Vote Act (HAVA) accessibility requirements, the voting system did not have a voter verifiable paper receipt and therefore would need to be upgraded or replaced. The Registrar of Voters convened a County Election Equipment Committee composed of representatives of the Registrar of Voters, County Counsel, General Services Agency, Information Technology Department and the County Administrator's Office to review voting equipment options and advise on a recommendation. On May 17, 2005 the Registrar of Voters presented to the Board four options and their related costs for meeting the State requirement. The options were (1) retrofit the current Touch Screen voting terminals with printers, (2) trade-in the current Touch Screen voting terminals for new Touch Screen voting terminals with verifiable paper audit trail printers, (3) trade-in the current Touch Screen voting terminals for a fewer amount of new Touch Screen voting terminals and add a paper ballot optical scan for a "blended" system or (4) issue an RFP to review all options. The most cost effective option at that time, as recommended by the Registrar of Voters, was option (2) equipment trade-in.

Because of a number of speakers on the subject, this matter was continued to the June 28, 2005 Board meeting in which the Board accepted the original recommendation and authorized the Registrar of Voters to negotiate an agreement with Diebold Elections, Inc. for the trade-in of the current TS voting terminals for TS voting terminals with the voter verifiable paper receipt printer and return to your Board for approval of the contract after the equipment was certified by the Secretary of State. It was anticipated by the Registrar of Voters that certification of the Diebold equipment would occur in July 2005. However, additional testing was requested by the State and certification did not occur in July. Therefore, it was recommended by the County's Election Equipment Committee that the Registrar of Voters issue a Request for Proposal for a "blended" voting system to incorporate TS voting terminals for accessibility and Optical Scan (OS) voting equipment for paper ballots. On August 30, 2005, the Board approved a recommendation from the Acting Registrar of Voters to issue a Request for Proposal (RFP).

On August 30, 2005, the County issued an RFP for an integrated "blended" voting system consisting of a combination of one (1) or two (2) TS voting terminals to be used at each polling place, or one (1) Ballot Marking Device (BMD) at each polling place to meet HAVA accessibility requirements, plus a precinct-based paper ballot optical scanning device with ballot box in each polling place and a central count paper ballot optical scanning system to count absentee ballots (mail ballots). The voting system, both hardware and software, was to be easy to use by all voters, accessible to those with disabilities, including visual disabilities, convenient

for early voting and capable of running Instant Runoff Voting (IRV) elections, in addition to a number of other technical and operational requirements of the Registrar of Voters. In general, the “blended” system’s accessible equipment would provide unassisted voting for voters with disabilities to allow the voter to vote like any other voter, and provide voting in the three (3) required languages in Alameda County; English, Spanish and Chinese. The optical scan voting equipment would provide a paper ballot for all other voters.

The original intent of the RFP was to identify a voting system that met the County voting requirements, HAVA requirements, was certified by the California Secretary of State by December 31, 2005, and to award to the highest ranked vendor. However, the State continued to add tests to the certification process that delayed a number of the vendors who submitted a RFP proposal response to meet the December 31, 2005 certification requirement in the RFP.

Options were (1) waive the required State certification date of December 31, 2005 since the State continued to add tests, or (2) cancel all bids and start a new bidding process. In consultation with the Office of County Counsel, it was their opinion that under the circumstances, the State certification award date of December 31, 2005 stated in the RFP could be waived. Since there are limited vendors providing voting system, a new RFP would only generate bids from the same pool of vendors and a new RFP process could possibly delay the start of a new contract should State certifications come through for vendors that responded to this current RFP.

By the beginning of March 2006, it was too late for any vendor to supply voting equipment for the June 6, 2006 Primary Election because they need three to four months from contract signing date to deliver equipment to the County for acceptance testing. On March 14, 2006, the Board authorized the start of contract negotiations with the two highest ranked bidders (Diebold Election Systems and Sequoia Voting Systems) that were ranked highest by the County Selection Committee and select the system that best meets the Registrar of Voters requirements for the November 2006 election.

2.2 Assumptions and Constraints

The Help America Vote Act (HAVA) was passed by Congress in 2002 to provide assistance with the administration of and establishment of election administration standards for Federal elections. While the HAVA requirements only apply to Federal elections, it is essential that these same procedures be followed for any local or State election as well. HAVA provides the states with funds, which, in part, are to be disseminated to the counties to meet the various provisions of the Act. Among other things, the Act requires:

- Nationwide implementation of provisional voting
- Voter ID requirements for new voters in Federal elections
- Replacement of punch card and lever voting machines
- Voting system accessibility for voters with specific needs
- A centralized statewide voter registration database in each State and territory
- Specialized handling of absentee ballot applications for military and overseas voters
- Each State and territory to define what constitutes a valid vote

California had already implemented many of these requirements, including provisional voting, permanent absentee voting for military and overseas voters, and the establishment of voting systems standards defining a valid vote. With minor modifications to existing systems and procedures, many California counties have been able to meet these requirements with relative ease.

The HAVA requirements went into effect on January 1, 2006. Although the current voting system used in Alameda County has accessible voting equipment that complies with HAVA, the County's existing Touch Screen voting terminals do not provide a Voter Verified Paper Audit Trail (VVPAT) as required by California Elections Code Sec. 19350-19252. Therefore, the County needs to upgrade their voting system to ensure compliance with both Federal and State election laws and regulations. The County has approximately \$8.7 million in HAVA 301 funds to be used to provide accessible equipment at the polls.

Voting systems purchased by counties must be federally-qualified and state-certified. Counties purchasing and implementing voting systems not federally-qualified and state-certified may not be eligible to receive HAVA and State funds to cover their costs for the purchase and operation of their voting system and may be sued for not complying with HAVA and other State election laws. In addition, the option to use the County's \$8.7 million in Federal funding to purchase a "blended" voting as specified in the County's RFP will expire on January 1, 2007. After that date all voting equipment used at the polls must be accessible to voters with disabilities. Furthermore, Federal funding under HAVA 301 will expire on June 30, 2007. Based on these negative impacts, options that recommend voting systems that are not fully federally-qualified and state-certified were rated low as options for the County.

2.3 Methodology

In completing the cost/risk analysis of the six (6) options, the following criteria were considered in the evaluation of each listed option:

Public Impacts:

- Promote voter confidence that their vote would be accurately recorded and remain private and secure
- Provide accessibility for all voters including voters requiring language assistance and voters with disabilities to vote privately, securely and independently
- Provide all voters the opportunity to correct incorrectly-marked ballots (second chance voting) which may contain over-voting and under-voting

Governmental Impacts:

- Comply with Federal HAVA 2002 and State election legislation
- Meet Federal and State voting systems certification requirements
- Provide an integrated system for all voting functions, including ballot design and printing, voting, auditing, and tabulation
- Prepare, setup, operate and maintain public elections
- Accurate and timely processing, computing, certifying and reporting of election results
- Provide voting system which be upgraded to meet changes in Federal and State election laws and requirements

Financial/Non-Financial Cost Impacts

- Use Federal and State funds available to the County to modernize and operate County's voting system
- Minimize the use of County funds to upgrade and operate County's voting system
- Minimize increases in cost and resources required to upgrade and operate County's voting system
- Minimize increases in cost for future voting system upgrades
- Minimize County cost for ongoing maintenance of the system
- Responsibly minimize County costs to administer elections

Risk Assessment:

- Avoid and reduce risk of lawsuits due to non-compliance of Federal and State election laws
- Be able to provide voting accessibility to voters with disabilities to vote independently and privately
- Improved voter accuracy due to reduction of undervotes and overvotes
- Able to implement a Federal and State certified voting system for use in time for the November 2006 General Election
- Avoid implementing a voting system that is not upgradeable to address changes in Federal and State election legislation and regulations

2.4 Stakeholders

Listed below are the major interested parties (stakeholders) that may be impacted (positively or negatively) by the voting system to be implemented by the County for the November 2006 General Elections. There are two major groups of stakeholders: Public and Government Stakeholders. Each of these major groups of stakeholders and individual stakeholders have similar and different voting system requirements and needs. It is important to identify and review their requirements in order to determine which voting systems meets and addresses the major needs of the stakeholders. Along with the list of major stakeholders, list of their major voting system requirements have been identified and listed for review:

Public Stakeholders	Overview of Voting system Requirements
Voters (General)	- Confidence that their vote will be accurately recorded and remain private and secure. - Ballot easy to understand and complete - Provides "Second Chance" option to notify voter of over and under voting at the Polls - Ease of use
Voters requiring Language Assistance	- Accessible for voters requiring language assistance to vote privately and independently - Provide election voting information, instruction and ballot in Spanish, Chinese as well as English - Ballot easy to understand and complete - Provides "Second Chance" option notify voter of over and under voting at the Polls - Ease of use
Voters with Disabilities	- Accessible for all voters with disabilities to vote privately and independently - Accessible for voters who are visually impaired and require visually enhanced characters which are easy to read and/or require audio - Accessible for voters who have limited dexterity or physical mobility and are unable to vote by physically marking a paper ballot or press on a touch screen or key pad - Provides "Second Chance" option to notify voter of over and under voting at the Polls - Ease of use
Election Candidates	- Functionally reliable and accurate voting system - Ballot easy to understand and complete - Ability to easily cast write-in votes - Confident vote recorded accurately - Accurate and timely processing and counting of votes - Accurate and timely reporting and certification of election results

Government Stakeholders:	Overview of Voting system Requirements
United States Election Assistance Commission	1. New and upgraded voting system comply with Federal HAVA program requirements as stated above 2. Accurate and timely reporting and certification of election results
California Secretary of State	1. New and upgraded voting system comply with Federal HAVA program requirements as stated above 2. Voting system complies with Federal and State legislation and regulations 3. Accurate and timely reporting and certification of election results
County Board of Supervisors	1. Comply with all Federal and State election legislation and regulation 2. Functionally reliable, secure, and transparent. 3. A voting system which complies with County requirements 4. New and upgraded voting system which complies with Federal HAVA program requirements as stated above 5. Take full advantage of the Federal funding available to the County 6. Minimize the use of County and local government funds to modernize, operate, and maintain voting system 7. Responsibly minimize the cost to administer elections 8. Accurate and timely processing and counting of votes
Local Government Jurisdictions: Cities, School and Special Districts	1. Provide custom ballots for voting in city, school and special district public elections 2. Accurate and timely processing and counting of votes for city, school and special district public elections 3. Accurate and timely reporting and certification of election results for city, school and special district public elections 4. Minimize the use of County and local government funds to modernize, operate and maintain voting system 5. Meet local jurisdiction Instant Runoff Voting (IRV) requirements
County Registrar of Voters (ROV)	1. Promote public confidence in the administration of elections 2. Ability to prepare, setup, operate, and maintain for public elections 3. Setup and manage polling places 4. Compute and certify voting results 5. Upgradeable voting system to comply with future election needs and regulations 6. Responsibly minimize the cost of administering elections
County Election Poll Workers	1. Easy to prepare, setup, operate and manage public election 2. Reduced learning curve on the use and management of voting system 3. Setup and manage polling places 4. Accurately and securely open and close a polling place

2.5 Project References

The following documents and resources were used for this cost/risk analysis:

- Vendor proposals submitted in response to County of Alameda Request for Proposals (RFP) for Election Voting System October 2005
- Reference materials from the California Secretary of State Voting Systems Website
- Materials and presentations from the California Secretary of State Voting Systems Testing Summit 2005 (November 28-29, 2005)
- United States Federal Election Commission Voting System Standards

3.0 OPTIONS

3.1 Option # 1: “Central Optical Scan Ballot Counting”

– Touchscreen and Paper Ballots at Polls

Option #1: “Blended Voting System” – Touchscreen and Scanner at Polls. This option recommends proceeding with the County’s original Voting system RFP requirements to purchase and implement a “Blended Voting System.” This solution provides each polling place one (1) Touch Screen voting terminal for accessibility for voters with disabilities and one (1) Optical Scanner for precinct-level ballot counting which provides “Second Chance Voting” for voters who under and over vote on their election ballot.

This option seems to provide the greatest benefits primarily because it is a blended voting system which has received Federal and State testing and certification. Therefore, the voting system complies with Federal HAVA and State election legislation and regulations. This option provides Touch Screen voting terminals at the polls for voting accessibility for voters with disabilities to vote independently and privately. In addition, this option provides optical scanners at the polls to provide direct feedback to voters to reduce over and under voting and provides precinct-level vote counting for timely reporting of local election results. This option also provides direct feedback to voters on over, or under, votes prior to casting their ballot. If the Board of Supervisors approve this option by May 2006, it is feasible to have it implemented in time for the November 2006 General Election.

Option # 1: “Blended Voting System” - Touchscreen and Scanner at Polls	
Equipment at the Polls:	• Paper Ballots • 1 Touch Screen Voting Terminal • 1 Optical Scan Voting Machine
Central Vote Counting Equipment:	• Optical Scan Machines – Central Processing
Key Points:	• Complies with County RFP Requirements – Meets and complies with County RFP requirements to implement an integrated “Blended Voting System”. • Federal and State Certified Voting System – Provides County with 100% Federal and State certified voting system that complies with existing Federal and State election legislation and regulations
Risk Assessment	Overall Risk – Low: Proposed voting systems from major vendors that provide voting systems domestically and internationally and have received Federal and State testing and certification.

Option #1 Conclusion:

Option #1: “Blended Voting System” – Touchscreen and Scanner at Polls. This option has received Federal and State testing and certification. This option addresses and meets several Federal HAVA and State election legislation and regulations. Some existing procedures will need to be refined, and additional procedures put into place, to completely meet HAVA compliance.

3.2 Option # 2: “Central Optical Scan Ballot Counting”

– Touchscreen and only Paper Ballots and no scanners at Polls

Option #2: “Central Optical Scan Ballot Counting” – Touchscreen and only Paper Ballots and no Scanners at Polls recommends scaling down County RFP requirements to implement a “Blended Voting System” by eliminating the use of Optical Scanners for precinct-level ballot counting. This option instead puts only paper ballots at the polls which are retrieved on election night and counted centrally. County would have one (1) Touch Screen voting terminal at each polling place to provide accessibility for voters with disabilities.

The major difference in this option from Option 1 - “Blended Voting System” is that paper ballot counting will not be done at the polls and instead will be done centrally. This option would not provide direct feedback to voters on over and under voting at the polls and does not offer precinct-level vote counting at the polls which may delay timely reporting of local election results. These are minor non-financial costs which the County can overcome through increased voter education and reengineering some of their election processes. Most importantly, each voting system in this option has received Federal and State testing and certification. Therefore, the voting system complies with Federal HAVA and State election legislation and regulations. If the Board of Supervisors approve this option by May 2006, it is feasible to have it implemented in time for the November 2006 General Election

Option # 2: “Central Optical Scan Ballot Counting” – Touchscreen and only Paper Ballots at Polls	
Equipment at the Polls:	• Paper Ballots • 1 Touch Screen Voting Terminal
Central Vote Counting Equipment:	• Optical Scan Voting Machines – Central Processing
Key Points:	• Scale down County RFP Requirements - Scale down County RFP requirements to implement an integrated “Blended Voting System”. • Federal and State Certified Voting System – Provides County with 100% Federal and State certified voting system that complies with existing Federal and State election legislation and regulations • No Precinct-Level Vote Counting – Use paper ballots at the Polls with votes counted centrally • Does not meet “Second Chance Voting” requirement.

Option # 2: “Central Optical Scan Ballot Counting” – Touchscreen and only Paper Ballots at Polls	
Risk Assessment	<u>Overall Risk is Low</u> - Proposed voting systems from major vendors that provide voting systems domestically and internationally and have received Federal and State testing and certification.

Option #2 Conclusion:

Option #2: “Central Optical Scan Ballot Counting” – Touchscreen and only Paper Ballots and no Scanners at Polls. This option has received Federal and State testing and certification. This option addresses and meets several Federal HAVA and State election legislation and regulations. Some existing procedures will need to be refined, and additional procedures put into place, to completely meet HAVA compliance.

3.3 Option # 3: “Ballot Marking Device and Optical Scanner”

– Ballot Marking Device and Scanner at Polls

Option #3: “No Touch Screen Voting Terminals” – Ballot Marking Device and Scanner at Polls recommends purchasing and implementing a “Blended Voting System” by purchasing and providing one (1) Ballot Marking Device at each polling place to provide accessibility for voters with disabilities. Continue to purchase and provide one Optical Scanner for precinct-level ballot counting at each polling place.

Option #3 provides benefits with the use of optical scanners at the polls to provide direct feedback to warn voters of over and under voting at the polls and provides precinct-level voting counting for timely processing and reporting of local election results.

This option proposes using Ballot Marking Devices (BMD), instead of Touch Screen voting terminals, to provide voting accessibility to voters with disabilities to vote independently and privately. Only one BMD (ES&S AutoMARK) has been certified. Other BMDs including Equalivote and Vote-PAD are new products that have not been widely used in prior elections which could provide the County with data to determine their effectiveness in providing voting accessibility to voters with disabilities. The AutoMARK, an electronic BMD, has been used by several California counties for about 14 months.

Most BMDs, except for the AutoMARK, have not received Federal and State testing and certification. The County would need to receive approvals from the California Secretary of State to use BMDs with other voting systems. In addition, either a new RFP would have to be issued or the County would have to start negotiations with the third ranked vendor (ES&S) to obtain the appropriate BMD to meet the County’s voting system requirements would be required. The AutoMARK, an electronic BMD, has been used by several California counties for about 14 months. This option would not be awarded in time for the November 2006 General Election.

Option # 3: “Ballot Marking Device and Optical Scanner” – Ballot Marking Device and Scanner at Polls	
Equipment at the Polls:	• Paper Ballots • 1 Ballot Marking Device • 1 Optical Scan Voting Machine
Central Vote Counting Equipment:	• Optical Scan Voting Machines – Central Processing
Key Points:	• No Touch Screen Voting Terminals at Polling Places – Eliminate the use of Touch Screen voting terminals and requires ballot marking device for voting accessibility. • Would need to begin contract negotiation with the third ranked vendor or issue new RFP. If ballot marking device is to be used with another voting system, it would need to get State approval to use ballot marking device with other voting election systems
Risk Assessment	<u>Overall Risk is Medium:</u> Option proposes using Ballot Marking Devices that have not received Federal and State testing and certification for use with other voting systems. Required CA Secretary of State approval for use with other voting systems. Lack of voting accessibility may exist with some or all Ballot Marking Devices since they have not been widely used in prior election and there is limited information regarding their usability and accessibility by voters with disabilities.

Option #3 Conclusion:

Option #3: “Ballot Marking Device and Optical Scanner” – Ballot Marking Device and Paper Ballots at Polls. Some Ballot Marking Devices such as Equalivote and Vote-PAD have not received Federal and State testing and certification. These uncertified Ballot Marking Devices may not address and meet all Federal HAVA and State election legislation and regulations. Ballot Marking Devices include the ES&S AutoMARK which has received Federal and State testing and certification. County would need to receive approval from the California Secretary of State to use Ballot Marking Devices with other voting systems. In addition, the County would probably be required to do more research and analysis on ballot marking devices plus complete an additional RFP for ballot marking devices. Estimated time that it would take is five (5) to six (6) months to complete these additional activities. The County would not be able to implement this option in time for the November 2006 General Election.

3.4 Option # 4: “Ballot Marking Device with Central Vote Counting”

– Ballot Marking Device and only Paper Ballots no Scanners at Polls

Option #4: “Ballot Marking Device with Central Vote Counting - Ballot Marking Device and only Paper Ballots and no Scanners at Polls recommends scaling down County RFP requirements to purchase and implement a “Blended Voting System” by eliminating the use of Touch Screen voting terminals and Optical Scanners for precinct-level ballot counting at the polls and instead puts paper ballots at the polls and count the ballots at a central location on Election Night. Option #4 would require the County to purchase and provide one (1) ballot marking device to provide accessibility for voters with disabilities at each polling place.

The major difference in this option from Option 3 - “Ballot Marking Device and only Optical Scanner” is that vote counting will not be done at the polls and instead will be done centrally.

This option proposes using Ballot Marking Devices (BMD), instead of Touch Screen voting terminals, to provide voting accessibility to voters with disabilities to vote independently and privately. BMDs including Equalivote and Vote-PAD are new products that have not been widely used in prior elections which could provide the County with data to determine their effectiveness in providing voting accessibility to voters with disabilities.

Most BMDs except for the ES&S AutoMARK, have not received Federal and State testing and certification. The County would need to receive approvals from the California Secretary of State to use BMDs with other voting systems. . In addition, either a new RFP would have to be issued or the County would have to start negotiations with the third ranked vendor (ES&S) to obtain the appropriate BMD to meet the County’s voting system requirements would be required. The AutoMARK, an electronic BMD, has been used by several California counties for about 14 months.

With the elimination of having optical scanners at the polls, this option does not provide direct feedback on over and under voting to the general voter at the polls and does not offer precinct-level vote counting which may delay timely reporting of local election results. This option would not be awarded in time for the November 2006 General Election.

Option # 4: “Ballot Marking Device with Central Vote Counting” – Ballot Marking Device and only Paper Ballots and no Scanners at Polls	
Equipment at the Polls:	• Paper Ballots • 1 Ballot Marking Device • 1 Optical Scan Voting Machine
Central Vote Counting Equipment:	• Optical Scan Voting Machines – Central Processing
Key Points:	• Scale down County RFP Requirements - Scale down County RFP requirements to implement an integrated “Blended Voting System”. • No Touch Screen Voting Terminals at Polling Places – Eliminate the use of Touch Screen voting terminals and requires the County to use some type of ballot marking device for voting accessibility. • Requires Addition State Approval – County needs to get State approval if it wishes to use ballot marking devices with other voting election systems • No Precinct-Level Vote Counting – Use paper ballots at the Polls with votes counted centrally
Risk Assessment	<u>Overall Risk is Medium:</u> Option proposes using Ballot Marking Devices that have not received Federal and State testing and certification for use with other voting systems. Lack of voting accessibility may exist with some or all Ballot Marking Devices since they have not been widely used in prior election and there is limited information regarding their usability and accessibility by voters with disabilities.

Option #4 Conclusion:

Option #4: “Ballot Marking Device with Central Vote Counting” – Ballot Marking Device and Paper Ballots and no Scanners at Polls. Except for the ES&S AutoMARK, Ballot Marking Devices have not received Federal and State testing and certification. Therefore this option may not address and meet all Federal HAVA and State election legislation and regulations. County would need to receive approval from the California Secretary of State to use ballot marking devices with other voting systems. In addition, the County would probably be required to do more research and analysis on ballot marking devices plus complete an additional RFP for ballot marking devices. It is estimated time that it would take five (5) to six (6) months to complete these additional activities. The County would not be able to implement this option in time for the November 2006 General Election.

3.5 Option # 5: “Ballot Marking Device with Vote Counting by Hand”

– Ballot Marking Device and only Paper Ballots and no Scanners at Polls

Option #5: “Ballot Marking Device with Vote Counting by Hand” - Ballot Marking Device and only Paper Ballots at Polls recommends scaling down County RFP requirements to purchase and implement a “Blended Voting System” by eliminating the use of any electronic ballot counting system and instead purchase and provide one (1) ballot marking device to provide accessibility for voters with disabilities. Option #5 continues to use paper ballots at the polls and hand process and count the paper ballots and count the ballots at a central location on Election Night.

The County would be required to begin negotiation with a new vendor for ballot marking devices. It is estimated that it would take five (5) to six (6) months to complete these additional activities

In addition, the County may need to redesign the paper ballots to accommodate hand counting of votes and will be required to do extensive process reengineering and massive volunteer recruitment in order to count votes by hand. Additional analysis would need to be completed to determine whether the County would be able to hand count votes and certify a general election within 28 days as required by State law. The County would not be able to implement this option in time for the November 2006 General Election.

Option # 5: Ballot Marking Device with Vote Counting by Hand – Ballot Marking Device and only Paper Ballots and no Scanners at Polls	
Equipment at the Polls:	• Paper Ballots • 1 Ballot Marking Device
Central Vote Counting Equipment:	• None – Votes counted by Hand
Key Points:	• Scale down County RFP Requirements - Scale down County RFP requirements to implement an integrated “Blended Voting System”. • No Touch Screen Voting Terminals at Polling Places – Requires the County to use some type of ballot marking device for voting accessibility. • Not known what CA Secretary of State reviews of this option would be required • No Precinct-Level Vote Counting – Use paper ballots at the Polls with votes counted by hand centrally • Hand Counting of Votes - Use paper ballots at the Polls with votes counted centrally by hand

Option # 5: Ballot Marking Device with Vote Counting by Hand – Ballot Marking Device and only Paper Ballots and no Scanners at Polls	
Risk Assessment	<u>Overall Risk is Medium</u> Option proposes using Ballot Marking Devices that have not received Federal and State testing and certification for use with other voting systems. Required CA Secretary of State approval for use with other voting systems. Lack of voting accessibility may exist with some or all Ballot Marking Devices since they have not been widely used in prior election and there is limited information regarding their usability and accessibility by voters with disabilities.

Option #5 Conclusion:

Option #5: “Ballot Marking Device with Vote Counting by Hand” – Ballot Marking Device and Paper Ballots and no Scanners at Polls. The County would be required to begin negotiation with a new vendor for ballot marking devices. Estimated time is five (5) to six (6) months to complete these additional activities

In addition, the County may need to redesign the paper ballots to accommodate hand counting of votes since it now takes five (5) days to perform the 1% manual tally on 10 precincts, and will be required to locate additional space, do extensive process reengineering and massive volunteer recruitment in order to count votes by hand. Additional analysis would need to be completed to determine whether the County would be able to hand count votes and certify a general election within 28 days as required by State law. The County would not be able to implement this option in time for the November 2006 General Election.

3.6 Option # 6: “Reject RFP”

– Only Paper Ballots at Polls with votes counted centrally, Explore other Options

Option #6: “Reject RFP” – Paper Ballots at Polls with Votes Counted Centrally, Explore other Options recommends rejecting the County RFP requirements to purchase and implement a “Blended Voting System” by not purchasing any equipment now until more research has been done on voting systems. County would continue to use its existing Diebold voting system while exploring other options. Paper ballots would be used at the polls and counted centrally with equipment borrowed from other governmental agencies, if possible.

Possible options for consideration that have been proposed include:

- Waiting until existing voting systems mature and new certified systems come on the market in California before issuing a new RFP.
- Develop or contract for the development of County’s own voting system

It is estimated time that it would take five (5) to six (6) months to complete these additional activities. With these added activities, the County would not be able to implement a HAVA and State-compliant voting system in time for the November 2006 General Election. All major voting system vendors who submitted RFP proposals have stated that leasing voting equipment

would not be an available option to the County for the November 2006 General Election as was available for the June 2006 Primary Election.

If the County decided to implement this option, it would need to procure accessible voting equipment for the polls in order to be HAVA compliant and would need to continue using the Diebold vote counting program which counts votes at a central facility. The County would need to trade in County's existing Touchscreens for upgraded Diebold Touchscreens at the polls and optical scanners for counting votes centrally.

All of these options require continued use of the County's Diebold voting system for the November 2006 General Election.

Option # 6: "Reject RFP" – Only Paper Ballots at Polls with Votes Counted Centrally, Explore other Options	
Equipment at the Polls:	• Paper Ballots • Borrow accessible voting equipment for each precinct if possible
Central Vote Counting Equipment:	• Optical Scan Voting Machines – Central Processing
Key Points:	• Reject County RFP Requirements • No Precinct-Level Vote Counting • No New Equipment Purchases – Use Paper Ballots at the Polls with vote counted centrally with leased equipment if possible. • Federal HAVA funds could be used to lease equipment, if it was available, for the November 2006 General Election, but remaining HAVA funds may not be sufficient to purchase equipment • Major voting system vendors have indicated in the RFP proposals that leasing accessible voting equipment is not an option for the November 2006 General Election • After January 1, 2007, it will no longer be possible to use Federal HAVA 301 funds for purchasing a "blended voting system" • June 30, 2007 is deadline for County to use available HAVA funds • Do more research on other alternatives • Wait until after 2007 when Federal and State voting system standards may become stable • Wait until voting equipment which is perceived as more reliable and secure comes on the market and is certified for use in California.

Option # 6: “Reject RFP” – Only Paper Ballots at Polls with Votes Counted Centrally, Explore other Options	
Risk Assessment	<u>Overall Risk is High/Low *</u> Major voting system vendors have indicated to the County that leasing accessible voting equipment for the November 2006 General Election is not an available option to the County. County may lose available HAVA 301 funding if it is unable to implement a Federal and State-compliant voting system by the November 2006 General Election. County liable to laws suits from governmental agencies, public and private organizations and citizens for not having a Federal and State-compliant voting system. <u>Overall Risk is High/Low *</u> County has an option to reject all RFP requirements and submitted proposals and proceed with the Board's original decision in June 2005 to trade-in their existing Diebold Touchscreens for upgraded Diebold Touchscreens and optical scanners. Following this path would lead the County toward implementing a “blended voting system”. If the Board acts by mid-May 2006 with this alternative, there would be sufficient time to implement this system by the November 2006 General Election. * Risk level will depend on which actions are taken by County for this option.

Option #6 Conclusion:

Option #6:“Reject RFP” – Only Paper Ballots at Polls with Votes Counted Centrally, Explore other Options. This option rejects all proposals submitted in response to the RFP. This allows the County to redefine the County’s requirements reissue a RFP for a voting system. It is estimated that it would take five (5) to six (6) months to complete these additional activities. With these added activities, the County would not be able to implement a HAVA and State-compliant voting system in time for the November 2006 General Election. All major voting system vendors who submitted RFP proposals have stated that leasing voting equipment would not be an available option to the County for the November 2006 General Election as was available for the June 2006 Primary Election. All of these options require continued use of the County’s Diebold voting system for the November 2006 General Election.

4.0 PUBLIC AND GOVERNMENT IMPACTS

A list of interested parties (stakeholders) was identified along with their requirements and needs for a voting system in Section 3.5. Public stakeholders include: Voters (General), Voters requiring Language Assistance, and Voters with Disabilities.

An impact analysis was completed for each voting system option to determine whether it had any negative effect on each stakeholder's voting system requirements and needs. Based on the impact review of each stakeholder's requirements, an overall impact rating was assigned to the stakeholder for each voting system option.

The magnitude of impact (high, medium, low, or none) for each stakeholder on each option used the following guidelines:

- High Impact - Indicates that the magnitude of negative impact is significant and stakeholder support and preparation is critical to the alternative's success
- Medium Impact - Indicates that there is a manageable negative impact to the stakeholder
- Low Impact - Indicates the alternative will have a minor negative impact to the stakeholder
- Zero - Indicates that the stakeholder will not be negatively impacted by the alternative

Public Stakeholders	Impact on Stakeholder's Voting System Requirements					
	Option # 1	Option # 2	Option # 3	Option # 4	Option # 5	Option #6
1. Voters (General)	Zero	Low	Zero	Low	Low	Low
2. Voters requiring Language Assistance	Zero	Low	Zero	Low	Low	Low
3. Voters with Disabilities	Zero	Low	Med	Med	Med	Med
4. Election Candidates	Zero	Low	Low	Low	High	Low
<u>Overall Negative Impact</u>	Zero	Low	Low	Low	Low	Low
<u>Comments</u>	Impacts on public stakeholders primarily affected voters with disabilities regarding accessibility to vote independently and privately on voting system options proposing to use Ballot Marking Devices that have not received Federal and State testing and certification. The ES&S AutoMARK ballot marking device has been certified. General voters and voters requiring language assistance were impacted when optical scanners were not available at the polls to provide direct feedback for over and under voting.					

	Impact on Stakeholder's Voting System Requirements					
Government Stakeholders	Option # 1	Option # 2	Option # 3	Option # 4	Option # 5	Option #6
1. California Secretary of State	Zero	Zero	Med	Med	Med	High
2. Alameda County Board of Supervisors	Zero	Low	Low	Low	Med	Med
3. Local Government Jurisdictions: Cities, School and Special Districts	Zero	Low	Low	Low	High	Low
4. Alameda County Registrar of Voters	Low	Low	Low	Low	High	Low
5. County Election Poll Workers	Low	Low	Low	Low	High	Low
Overall Negative Impact	Low	Low	Low	Low	Med./ High	Medium
Comments	Government stakeholders were impacted on options that generally proposed voting systems which have not received Federal and State testing and certification. Additional research, reviews and approvals would most likely be required from the County Board of Supervisors and California Secretary of State to implement these untested and uncertified voting systems. High impacts on government stakeholders would occur if Option #5 is selected which propose to count votes by hand. County Registrar of Voters would need to reengineer its election processes and recruit additional large numbers of volunteers to count votes by hand. Risk that counting of votes and certification of election may not be complete within 28 days as required by State law.					

5.0 COST/ RISK ANALYSIS

The Cost /Risk Analysis Section provides cost, and risk information associated with each voting system option. The review includes details regarding the projected initial and on-going financial cost, non-financial benefits and risk for each option.

5.1 Financial Cost:

This section identifies and lists the projected financial costs for each voting system option. Financial cost data use for this analysis was provided in proposals submitted in response to the County's RFP for voting systems.

5.1.1 Available Funds to Purchase Upgraded Voting System

The County has two sources of funds available for use for the purpose of purchasing an upgraded voting system: HAVA 301 and funds received from Diebold buy-back and trade-in of existing County Touchscreens.

Federal HAVA 301 funds of \$8,779,361 are available to the County to purchase a voting system. After June 30, 2007 HAVA funds can not be used for the purchase of a voting system.

Existing County-owned Diebold Touchscreens can be traded in or sold back to Diebold. In a letter to the County, Diebold confirmed that they will provide the County with both a trade-in package, as well as a buy-back option should the County select another system vendor for the new voting system. Should the County select Diebold, they will provide a \$6.1 million trade-in allowance towards the purchase of an upgraded Diebold voting system. Should the County select another vendor like Sequoia, Diebold will provide between \$3.024 to \$3.6 million buy-back option. The final costs may vary from those projected from the cost data provided by the major voting system vendors due to changes in product pricing and contract negotiations.

5.1.2 Option #1 and Option #2 Financial Cost

The most detailed and accurate financial costs were provided in the vendor proposals submitted in response to the County's RFP for voting systems. On March 14, 2006, the Board authorized the Registrar of Voters to start contract negotiations with the two highest ranked bidders (Diebold Election Systems and Sequoia Voting Systems) that were ranked highest by the County Selection Committee and was judged to provide the best voting system options that best met the Registrar of Voters requirements for the November 2006 election.

Option #1: "Blended Voting System" – Touchscreen and Scanner at Polls and Option #2: "Central Optical Scan Ballot Counting" – Touchscreen and only Paper Ballots voting systems have been certified and are eligible to receive and use Federal HAVA funds of approximately \$8.7 million to help the County cover the cost for purchasing, implementing and maintaining these voting systems. The cost for voting systems for Option #1 and Option #2 from Diebold Election Systems (Diebold) and Sequoia Voting Systems (Sequoia) are detailed below:

Options Eligible to Use Federal HAVA Funds to Upgrade Voting System	Option #1 "Blended System" – Touchscreen and Scanner at Polls	
	Diebold	Sequoia
Total Projected Cost for 1000 scanners and 1000 DRE's	\$16.2 to 17 million	\$ 12.8 to 13.5 million
Diebold Equipment Buy-Back/Trade-In Allowance	\$ (6.1 million)	\$ (3.0 million)
Federal HAVA Funds Available to County for Upgrading Voting System	\$ (8.7 million)	\$ (8.7 million)
Projected Cost to the County	\$1.4 to 2.2 million	\$1.1 to 1.8 million

Option #1 Conclusion:

For Option #1, the projected cost to the county of the voting system for a three (3) year period is projected to be \$1.1 to \$2.2 million depending on the system selected. These costs may change based on the final equipment prices obtained through final contract negotiations.

Options Eligible to Use Federal HAVA Funds to Upgrade Voting System	Option #2 "Central Optical Scan Ballot Counting" – Touchscreen and only Paper Ballots at Polls	
	Diebold	Sequoia
Total Projected Cost 30 central scanners and 1000 DRE's	\$16.2 to 17 million	\$ 12.8 to 13.5 million
Diebold Equipment Buy-Back/Trade-In Allowance	\$ (6.1 million)	\$ (3.0 million)
Federal HAVA Funds Available to County for Upgrading Voting System	\$ (8.7 million)	\$ (8.7 million)
Less 1000 Scanners	\$(7.54 million)	\$(5.72 million)
Plus 30 central scanners	\$1.43 million	\$2.26 million
Projected Cost to the County	\$0	\$0

Option #2 Conclusion:

For Option #2, the total cost of the voting system for a three (3) year period would be covered by HAVA 301 and the trade in of the existing Diebold equipment. These costs may change based on the final equipment prices obtained through final contract negotiations. The cost of this option is within the budget of Diebold buy-back/trade-in credit and County's HAVA 301 funds available to the County to pay for this system. No additional funds from the County would be required to pay for this system.

5.1.3 Option #3, #4 and #5 Financial Cost

Option #3, #4 and #5 recommends scaling down County RFP requirements to purchase and implement a “Blended Voting System” by eliminating the use of any electronic ballot counting system and instead purchase and provide one (1) ballot marking device to provide accessibility for voters with disabilities. If the County decides to implement an option which uses BMDs, the County would either need to issue a new RFP for BMD as required by the County’s procurement procedures or at least begin negotiations with the third highest ranked vendor (ES&S) which has the AutoMARK ballot marking device which is certified. The projected costs for Option #3, #4 and #5 is based on using the AutoMARK and ES&S voting system. This voting system is certified and eligible to receive and use Federal HAVA funds of approximately \$8.7 million to help the County cover the cost for equipment purchase, implementation and maintenance.

Options Eligible to use Federal HAVA Funds to Upgrade Voting System for ES&S AutoMARK	Option #3 "Ballot Marking Device and Optical Scanner"
	ES&S
Total Projected Cost	\$11.8 to 12 million
Diebold Equipment Buy-Back/Trade-In Allowance	\$ (3.0 million)
Federal HAVA Funds Available to County for Upgrading Voting System	\$ (8.7 million)
Projected Cost to the County	\$100,000 to 300,000
HAVA 301 Budget Status	Over Budget

Option #3 Conclusion:

For Option #3, the total cost of the voting system for a three (3) year period is projected to be \$11.8 to \$12 million. The cost of this option is over the budget of Diebold buy-back/trade-in credit and County’s HAVA 301 funds available to the County to pay for this system. The County would be required to provide additional funds to pay for this system. These costs may change based on the final equipment prices obtained through final contract negotiations.

Options Eligible to use Federal HAVA Funds to Upgrade Voting System for ES&S AutoMARK	<u>Option #4</u> "Ballot Marking Device with Central Vote Counting"
	ES&S
Total Projected Cost	\$6.3 to 6.6 million
Diebold Equipment Buy-Back/Trade-In Allowance	\$ (3.0 million)
Federal HAVA Funds Available to County for Upgrading Voting System	\$ (8.7 million)
Projected Cost to the County	\$(5.1 to 5.4 million)
HAVA 301 Budget Status	Within Budget

Option #4 Conclusion:

For Option #4, the total cost of the voting system for a three (3) year period is projected to be \$6.3 to \$6.6 million. The cost of this option is within the budget of Diebold buy-back/trade-in credit and County's HAVA 301 funds available to the County to pay for this system. No additional funds from the County would be required to pay for this system. These costs may change based on the final equipment prices obtained through final contract negotiations.

Options Eligible to use Federal HAVA Funds to Upgrade Voting System for ES&S AutoMARK	<u>Option #5</u> "Ballot Marking Device with Vote Counting by Hand"
	ES&S
Total Projected Cost	\$6.1 to 6.3 million
Diebold Equipment Buy-Back/Trade-In Allowance	\$ (3.0 million)
Federal HAVA Funds Available to County for Upgrading Voting System	\$ (8.7 million)
Projected Cost to the County	\$(5.4 to 5.6 million)
HAVA 301 Budget Status	Within Budget

Option #5 Conclusion:

For Option #5, the total cost of the voting system for a three (3) year period is projected to be \$6.1 to \$6.3. The cost of this option is within the budget of Diebold buy-back/trade-in credit and County's HAVA 301 funds available to the County to pay for this system but there would be additional costs for the increase in election staff and ballot workers, plus material and facility costs required to count votes by hand. Additional research and analysis would be required to determine the additional cost for these items.

5.1.4 Option # 6 Financial Cost

Option #6: "Reject RFP" – Paper Ballots at Polls with Votes Counted Centrally, Explore other Options recommends rejecting the County RFP requirements to purchase and implement a "Blended Voting System" by not purchasing any equipment now until more research has been done on voting systems. After January 1, 2007, it will no longer be possible to use Federal HAVA 301 funds for purchasing a "blended voting system" which increases the cost of purchasing and upgrading a voting system for the County. In addition, June 30, 2007 is the deadline for the County to use available HAVA funds.

The County may explore the option of trading in their existing Diebold Touchscreens for upgraded Diebold Touchscreens and optical scanners to implement a "blended voting system" in time for the November 2006 General Election. Projected costs for this voting system are listed below:

Option Eligible to use Federal HAVA Funds to Upgrade County's Voting System by trading in existing Diebold Touchscreens for Upgraded Diebold Touchscreens and Scanners	<u>Option #6</u> "Reject RFP"
	Diebold
Total Projected Cost	\$16.2 to 17 million
Diebold Equipment Buy-Back/Trade-In Allowance	\$ (6.1 million)
Federal HAVA Funds Available to County for Upgrading Voting System	\$ (8.7 million)
Projected Cost to the County	\$1.4 to 2.2 million

Option #6 Conclusion:

If the County explores trading in its existing Diebold Touchscreen for upgraded Touchscreens and Scanners as was originally approved by the Board of Supervisor in June 2005, the total cost of the voting system for a three (3) year period is projected to be \$16.2 to \$17 million. The projected cost to the county is between \$1.4 and \$2.2 million. These costs may change based on the final equipment prices obtained through final contract negotiations.

5.2 Risk Assessment:

The purpose of the Risk Assessment Section is to understand the major risks associated with voting systems and determine the level of risk associated with the various options being considered. A risk is a factor or event that may jeopardize the voting system from achieving the anticipated benefits or increase the cost of the project.

For each general voting system risk identified, the probability of the risk occurring and the impact it may have on each option is defined by the following guidelines:

Probability of Risk

- High indicates that the event is high likely to occur
- Medium indicates that the event is likely to occur
- Low indicates that the event is not likely to occur

Impact of Risk

- High indicates that the event has a significant impact to the voting system
- Medium indicates that the event will impact the voting system
- Low indicates that the impact is relatively minor to the voting system
- None indicates that the risk will not impact the voting system

This analysis focuses on the following major risks to voting systems:

1. **Non-compliance with Federal and State Election Laws** - Unable to implement voting system which is compliant with Federal HAVA and State election legislation and regulations. **Impact of this Risk is high.** Implementation of a voting system that does not comply with Federal HAVA and State election legislation and regulations put the County at high risk of being sued by the Federal and State government as well as public and private organizations and citizens. County would not be eligible to receive HAVA 301 funding if purchasing and implementing a voting system that doesn't comply with Federal and State election laws. Voting equipment and systems which have not received Federal and State testing and certification run the risk of not being in compliance with Federal and State election legislation and regulations.
2. **Lack of Voting Accessibility at the Polls** - Unable to implement voting system that is not fully accessible to voters with disabilities to vote independently and privately. **Impact of this Risk is high.** . Will disenfranchise disabled voters. Implementation of a voting system that does not provide adequate voting accessibility for voters with put the County at high risk of being sued by the Federal and State government as well as public and private organizations and citizens. Voting equipment and systems which have not received Federal and State testing and certification run the risk of not providing adequate voting accessibility to voters with disabilities.

3. **Lack of direct Feedback on Over and Under Voting at the Polls** – Unable to implement voting system that provides direct feedback to voters at the polls to warn of over and under voting to allow voters to correct such errors prior to casting their ballot into the ballot box. **Impact of this Risk is Medium.** The United States Election Assistance Commission which recommends standards for voting systems states that voting systems should a “Second Chance” voting option that provides direct feedback to voters for over and under voting at the polls so voters have the option of correcting their ballots prior to casting it into the ballot box. Voting systems that do not provide the “Second Chance” option at the polls would require the County to develop and provide additional voter education and instruction to reduce over and under voting error rates.
4. **Voting System not available for November 2006 General Election** - Unable to successfully develop, test, setup, operate and maintain proposed voting system for November 2006 General Election. **Impact of this Risk is high.** Delays in purchasing and implementing a HAVA and State compliant voting system in time for the November 2006 General Election puts the County at high risk of losing the HAVA 301 funds which have been allocated to the County for use to upgrade its voting system to comply with HAVA and State election legislation and regulation. HAVA funds may not be available to the County if the County waits till after January 1, 2007 to purchase and implement their voting system.
5. **Unable to Upgrade Voting System** - Unable to successfully upgrade voting system to meet new and future changes to Federal and State election legislation and regulations. **Impact of this Risk is high.** New and future changes to Federal and State election legislation and regulations may require the County to upgrade their voting system in the future. Not being able to upgrade a voting system creates a large financial burden on the County by require greater expenditure of funds to replace an obsolete voting system. Federal and State funds like HAVA 301 may not be available to the County in the future to cover costs for replacing or upgrading voting systems.

	Probability of Risk like to Occur					
Voting system Risk:	Option # 1	Option # 2	Option # 3	Option # 4	Option # 5	Option #6
1. <u>Non-compliance with Federal and State Election Laws</u> Impact of Risk: High County open to possible law suits from governmental agencies, public and private organizations and citizens.	Low	Low	Medium	Medium	Medium	High/ Low *
2. <u>Lack of Voting Accessibility at the Polls</u> Impact of Risk: High County open to possible law suits from governmental agencies, public and private organizations and citizens.	Low	Low	Medium	Medium	Medium	High/ Low *
3. <u>Lack of Direct Feedback to avoid Over and Under voting at the Polls</u> Impact of Risk: Medium County could experience increase rates of disqualified votes which may increase public dissatisfaction of County's election system and lead to increase public/government inquiries and investigations.	Low	Medium	Low	Medium	Medium	Medium /Low *
4. <u>Voting System not available for November 2006 General Election</u> Impact of Risk: High County may lose HAVA 301 funding if it delays and not implementing a compliant voting systems by Nov. 2006	Low	Low	High	High	High	High/ Low *
5. <u>Unable to Upgrade Voting System</u> Impact of Risk: High Financial cost will be greater and may not be affordable if County can not upgrade their voting system to comply with changes in Federal and State election laws.	Low	Low	Medium	Medium	Medium	High/ Low *
<u>Overall Risk</u>	Low	Low	Medium	Medium	Medium	High/ Low *

Option #1 – “Blended Voting System”

Option #3 – “No Touch Screen Voting Terminals”

Option #5 – “BMD with Vote Counting by Hand”

Option #2 – “Central Optical Scan Ballot Counting”

Option #4 – “BMD with Central Vote Counting”

Option #6 – “Reject RFP”

* Risk may be High or Low depending on which action the County takes for Option #6.

5.3.1 Risk Assessment for Options 1 and 2

Options 1 and 2 have low overall risk due because the proposed voting systems are from major vendors (Diebold and Sequoia) that provide voting systems domestically and internationally and have received Federal and State testing and certification. Option 1 and 2 could be implemented in time for the November 2006 General Election if the Board of Supervisors takes action by May 2006. Since the voting systems from Option 1 and 2 have been certified, adequate voting accessibility for voters with disabilities is provided through the use of Touch Screen voting terminals. Since these systems have been implemented by many counties within the United States and in California, there is a large wealth of information and experience which the County can use to be able to implement the proposed system in time for the November 2006 General Election. In addition, the vendors of these systems have a historical track record of being able to provide and support upgrades to their voting systems to meet changes in Federal and State election legislations and regulations.

5.3.2 Risk Assessment for Options 3, 4 and 5

Options 3, 4 and 5 have medium overall risk because these options propose using Ballot Marking Devices (BMDs) some of which have not received Federal and State testing and certification for use with other voting systems. Lack of voting accessibility may exist with some or all BMDs since they have not been certified. In addition, BMDs have not been widely used in prior elections. So, there is limited information regarding their usability and accessibility by voters with disabilities.

If the County wants to purchase the only certified Ballot Marking Device (ES&S AutoMARK), it would have to begin negotiating with the third ranked vendor (ES&S) which could make this voting system unavailable for use for the November 2006 General Election. In addition, several BMDs like Equalivote and Vote-PAD are custom-made ballot templates for specific election and therefore used once and may not be reusable or upgradeable for use in future elections.

5.3.3 Risk Assessment for Option 6

Option #6 rejects the current voting system RFP and may place a high or low overall risk on the County depending on which actions are taken by the Board of Supervisors. Key risks for Option #6 include:

- Leasing accessible voting equipment is not an option for the November 2006 General Election as was available for June 2006 Election.
- Deadline for implementing “Blended Voting System” is January 1, 2007. After this date all voting equipment used at polls must be fully accessible at a greater cost to the County.
- June 30, 2007 deadline for using Federal HAVA 301 funds for purchasing and upgrading voting system. After this date, HAVA funds will not be available for purchasing and upgrading voting system.

- US Department of Justice (DOJ) has begun suing state and local governments for failing to comply with HAVA. DOJ filed HAVA lawsuit against State of New York on March 1, 2006.

Major voting system vendors have indicated to the County that leasing accessible voting equipment for the November 2006 General Election is not an available option to the County. County may lose available HAVA 301 funding if it delays implementing a compliant voting system by the November 2006 General Election as well as being sued by governmental agencies, public and private organizations and citizens. This puts the County in high risk.

The County may reduce the risk of this option if it explores the option of trading in their existing Diebold Touchscreens for upgraded Diebold Touchscreens and optical scanners to implement a “blended voting system” in time for the November 2006 General Election. The County had originally planned to implement this option in June 2005. A financial review of this option indicated that HAVA 301 funds and the credit received from the equipment trade-in would cover the cost for the upgraded Touchscreens and Optical Scanners and provide unspent HAVA funds that could be used for voting system testing, training, implementation and maintenance. This approach is projected to be the most cost effective alternative.

Note: With all options that cannot be implemented in time for the November 2006 General Election, the Diebold vote counting system and Diebold voting equipment would have to be used in order to conduct the election.

6.0 RECOMMENDATIONS

Recommendations were based on reviewing the public and government impacts, cost analysis and risk assessment of the six (6) options for updating the County's voting system.

6.1 Recommendations

Upon reviewing the public and government impacts, cost analysis and risk assessment for the six (6) options being considered by the County, this analysis recommends that the County proceeds with completing their RFP and procurement process for a voting system and implement Option #1: "Blended Voting System" – Touchscreen and Scanner at Polls. Option #1 provides the County with the greatest benefits, cost savings and flexibility among the options being considered and can be implemented in time for the November 2006 General Election.

HAVA funds may be used to purchase a "blended voting systems" through the end of December 2006. After January 1, 2007, HAVA funds may only be used to purchase fully-accessible voting equipment which would cost more than purchasing a "Blended Voting System". Option #1 provides the County with a choice of Federal and State tested and certified "blended voting systems" from Diebold Election Systems (Diebold) and Sequoia Voting Systems (Sequoia) which were the two (2) top ranked vendors by the County's RFP Evaluation Committee. The proposed Diebold "blended voting system" cost approximately \$16.2 to 17 million. Diebold will provide a \$6.1 million trade-in allowance for the County to trade in their existing Touchscreens for new upgraded Diebold Touchscreens and optical scanners. The cost to the County is \$1.4 to \$2.2 million.

The proposed Sequoia "blended voting system" cost approximately \$12.8 to \$13.5 million. If the County selects Sequoia, Diebold proposed to buy back the County's existing Touchscreens for approximately \$3 million. Due to the reduced amount offered by Diebold for buying back the County's existing Diebold Touchscreen, the Sequoia voting system would cost \$1.1 to \$1.8 million. The cost difference between the Diebold and Sequoia voting systems may change based on the final equipment prices obtained through final contract negotiations.

The proposed Diebold and Sequoia "blended voting systems" are comparable in product quality and performance. Both systems require the same level of product support and training for implementation, operation and maintenance. State and local governments have experienced problems with the Diebold and Sequoia voting systems. In most cases, these problems were caused by human errors related to the lack of available and appropriate knowledge, training, planning, management and resources to successfully support preparing, testing, operating and maintaining these voting systems. Diebold and Sequoia have functional and technical training and support which are available to the County to ensure successful implementation, operation and maintenance of these voting systems.

Exploring other options under Option #6 is not recommended because the County can not implement them by the November 2006 General Election and will put the County at a high risk of not being able to use available HAVA funds prior to June 30, 2007. After this date,

HAVA funds can not be used to upgrade and purchase voting systems. In addition, the United States Department of Justice (DOJ) has begun suing state and local governments for failing to comply with HAVA. DOJ filed HAVA lawsuit against State of New York on March 1, 2006. Therefore, the County needs to show due diligence in their efforts to implement a HAVA-compliant voting system for the November 2006 General Election.

This analysis does not recommend implementing any of the other voting system options reviewed. Although Option #2: “Central Optical Scan Ballot Counting” provides similar benefits as Option #1: “Blended Voting System”, it does not provide the HAVA “Second Chance Voting” option which provides direct feedback of overvoting to all voters at the polls. The possible cost saving in not providing optical scanners at the polls is not significant considering the cost of additional voter outreach, education and instructions required to notify voters of the result of overvoting may result in having their vote not count.

The remaining options (Option #3, 4 and 5) are not recommended because they can not be implemented in time for the November 2006 General Election. Under these options, the County would continue using its existing Diebold vote counting system and would have to purchase compatible Diebold voting equipment in order to conduct the election. Based on RFP responses from the voting system providers, leasing voting equipment for the November 2006 General Election is not an available option for the County.

Closing recommendations of this analysis refers to the three elements which make up what is known as the project management triple constraint that includes: scope (deliverables, quality), cost (resources, budget) and time (activities, schedule). These elements are linked together and are often depicted as a triangle because each facet is crucial, with no one part being more important than the other. When one element is changed, it almost invariably changes one or both of the other elements.

For the past year, the County has initiated a project to procure a HAVA-compliant voting system. Along the way, the scope of this project has changed affecting the cost and time required to procure the voting system. Currently, there is limited time available to the County to procure and receive delivery of voting equipment, train election staff, and prepare, test and implement the voting system in time for the November 2006 General Election. It is important to note that other state and local governments are facing these same voting system issues as the County and are rushing to procure the limited supply of voting equipment and product support resources available for the November 2006 General Election. To ensure successful implementation of a HAVA-compliant voting system for the November 2006 General Election, the County needs to begin implementing one of the recommended options by mid-May 2006. Further delays may increase the costs for procuring and implementing a voting system and affect the type and quality of voting system for the November 2006 General Election.

6.2 Project Contributors

The following groups and individuals that provided information, input and advisement in preparation and completion of this cost/risk analysis:

- Alameda County Registrar of Voters Department
- Alameda County Voting Advisory Committee
- Alameda County Voting Accessibility Advisory Committee
- Alameda County Election Poll Workers
- Alameda County General Services Agency - Purchasing Department
- Shamrock Associates, Inc.
 - o Bill O'Neill, President and Subject Matter Expert on Voting systems
- Visionary Integration Professionals
 - o Brian Fitzgerald, Director
 - o Lawrence Lin, Senior Project Consultant