



King County
Metropolitan King County Council
Committee of the Whole

STAFF REPORT

Agenda Item No.:	4	Date:	9 July 2007
Motion No.:	2007-0328	Prepared by:	Nick Wagner

SUBJECT

Review of the Executive's recommendation to buy ballot tracking and automatic signature verification equipment and software.

PURPOSE

The purpose of this staff report is to familiarize councilmembers with issues and options arising from the Executive's recommendation to use \$2.7 million in Help America Vote Act (HAVA) funding to buy new ballot tracking and signature verification equipment and software. The Executive's recommendation is contained in a business case transmitted with Proposed Motion 2007-0328. Staff have identified issues related to Council principles and options for possible action. Staff are seeking direction from the committee about which options to develop further and bring back to the committee for consideration and possible action.

BACKGROUND

A. Legislative History and Guiding Principles

During the past several years the Council has engaged in active oversight of King County elections and has enacted legislation to ensure continued improvement in the conduct of elections.¹ One of the Council's major policy directives occurred in June of 2006, when the Council adopted Ordinance 15523 directing the Executive to conduct all King County elections by mail ("Vote-by-Mail") on a date in 2007 or 2008 to be determined by the director of Records, Elections and Licensing ("REALS").

One of the conditions for moving to Vote-by-Mail was ballot tracking. Ordinance 15523 provided in part: "There shall be an electronic tracking system established for tracking ballots so that voters can, through use of the Internet, follow the movement of their ballots as they move from King County to the voter and back to King County for counting and crediting the voter for voting."²

¹ See Ordinances 15333, 15453, 15519, 15523, 15524, 15560, 15623, 15627, 15652 and Motions 12285, 12299, 12307, 12334, and 12493.

² Ordinance 15523, section 3.

Besides meeting one of the Council's conditions for the transition to Vote-by-Mail, ballot tracking has the potential to increase public confidence in the election process, which is one of several key principles that the Council endorsed in Motion 12493 on 2 April 2007. The other principles were accuracy, reliability, accountability, and security. The following excerpts from Motion 12493 explain the importance of these principles in the context of buying new technology:

- **Public Confidence.** “Public confidence in the election process rests on voters’ firm conviction that the process is secure—that only qualified voters have voted and that the vote count is accurate and has not been tainted by either error or fraud.”
- **Accuracy, Reliability, and Accountability.** “The introduction of computer technology into the election process has improved elections by allowing results to be reported more quickly and by making possible new methods of verifying the accuracy of voter registration records and vote counts.”
- **Security.** “The use of computer technology has also created, however, a potential for new kinds of error and fraud, such as tampering with electronic voting machines, which must be guarded against.”

Another principle supported by councilmembers is ballot secrecy, which is the subject of Proposed Motion 2007-0312. If adopted by the Council, that motion would establish a County policy “that no unique identifying numbers or marks of any kind may be placed on ballots that could allow an individual voter to be identified with a particular ballot.” The motion would also set, as “the highest priorities of King County” in the process of tabulating ballots and reporting elections results, “to ensure an accurate vote count and to preserve the secrecy of individual ballots.” The motion was reported out of the Committee of the Whole on 2 July 2007 with a “Do Pass” recommendation.

B. Business Case Requirement

In anticipation that the development of ballot tracking capability would be a part of the transition to Vote-by-Mail, the Executive applied for and obtained \$2.7 million in federal Help America Vote Act of 2002 (“HAVA”) funds for equipment and software for both ballot tracking and signature verification. In August 2006 the Executive transmitted to the Council a proposed supplemental capital appropriation for authority to spend those HAVA funds. In order to have more complete information before making a decision, the Council approved the appropriation but through proviso requested an analysis of options in the form of a business case and restricted expenditure of the HAVA funds. The proviso reads:

Of the \$4,771,500 appropriated for OIRM Capital Projects (Project 377190), none of the \$2,700,000 for ballot tracking and processing and signature verification equipment and software shall be expended or encumbered until after the council reviews and approves by motion: (1) an Information Technology Business Case for 224 the ballot tracking and processing and signature verification equipment and software that: (a) fully complies with the Guiding Principles and other applicable requirements set forth in the Strategic

Technology Plan 2006-2008; and (b) has been reviewed and approved by the project review board; and (2) the election security plan that the council asked the executive to provide in Motion 12299, Subsection D.³

The business case requested by the Council was transmitted on 16 May 2007. A copy is Attachment 2 to this staff report. The business case appears to comply with the Council's proviso in that it has been approved by the Project Review Board and follows the template recommended by the County's Office of Information Resource Management ("OIRM") for information technology business cases, though the sections on cost-benefit analysis and performance measurement standards seem incomplete, as described later in this report.⁴ In Proposed Motion 2007-0328 (Attachment 1 to this report) the Executive requests approval of the business case in order to spend the HAVA funding to purchase the recommended equipment and software.

The proposed motion is not ready for action. Staff have identified several issues and options for proceeding and are seeking direction from the committee about which options to develop further and bring back to the committee for consideration and possible action. In addition, the ongoing expert, peer, and citizen reviews of the business case that were called for in Motion 12493 are expected to be ready soon for presentation to the committee, together with the results of a review commissioned by the Executive branch.

C. King County's Current Practice Related to Ballot Tracking and Signature Verification

Key aspects of King County's current practice regarding mail ballot tracking and signature verification can be summarized as follows:⁵

1. Ballot Tracking

Currently, ballots are not tracked individually when they are sent out from King County Elections ("KCE") to the voters, though the list of voters to whom ballots should be sent is generated by KCE from the voter registration rolls. The outbound assembly and mailing process is handled by an outside vendor and is described in detail in Exhibit 2 to the business case.

Individual ballot tracking begins when the envelope containing the voter's ballot is received by King County Elections ("KCE") from the voter. The ballot is then tracked through the signature verification process, but the tracking is done manually, as is the counting of envelopes and ballots and the compilation of ballot processing statistics. In addition, the current system does not permit voters to use the Internet to "follow the movement of their ballots as they move from King County to the voter and back to King County for counting and crediting the voter for voting," as required by Ordinance 15523 after the transition to Vote-by-Mail.

³ Ordinance 15623, Proviso P13.

⁴ In reference to the proviso requirement that the Executive submit the requested election security plan, the Executive has submitted an updated election security plan, and the Committee of the Whole has been briefed on the plan.

⁵ A detailed account is provided in Exhibit 2 to the Executive's business case, which is Attachment 2 to this report, and in the business case itself, especially at pages 5-7.

2. Signature Verification

The current system reads the voter's identifier on the outside of the incoming ballot envelope and displays, on the computer monitor of an election worker, the voter's signature. The election worker compares the signature on the monitor with the signature on the outside of the actual ballot envelope (which has not yet been opened).

D. The Executive's Concerns About Current Practice

Elections staff point to the following limitations in current practice: (a) it does not allow tracking of individual ballots before they are received back from the voter or after the voter's signature has been verified (for example, although elections staff can tell a voter that his or her name was on the list of voters who should have received a mail ballot, staff cannot say with certainty that a ballot envelope bearing the voter's name and address was delivered to the postal service); and (b) because current practice is largely manual, it is labor intensive, time-consuming, vulnerable to error and inconsistency, and slow (Business Case, pp. 6-7).

THE EXECUTIVE'S PROPOSAL

To address the limitations of current practice, the Executive proposes, through the purchase of new equipment and software, to make the following changes:

1. Process incoming ballots in-house, instead of through an outside contractor.
2. Take a digital picture of the voter's signature on the ballot envelope so that it can be displayed on a computer monitor side-by-side with the voter's on-file signature.
3. Implement "automatic signature recognition" (also known as "automatic signature verification"), which involves using a software application to make an initial comparison between a voter's signature on the outside of a ballot envelope and the same voter's signature that is on file with KCE.
4. Track individual ballot data automatically instead of manually. This will include posting of tracking data on the Internet, as required by Ordinance 15523.
5. Track individual ballots through to the opening of the ballot envelope, instead of only through signature verification. (Business Case, pp. 7-8, 17-18)

These changes are expected to improve the speed and efficiency of, among other things, ballot tracking, signature verification, and ballot reconciliation,⁶ and to provide voters with greater confidence that their ballots have been received and counted.

In order to effect these changes, the Executive proposes to buy equipment and software from Pitney Bowes and software from VoteHere. The VoteHere portion of the proposal would consist primarily of aggregating data from various tracking points and making those data available, as appropriate, to KCE staff and, via the Internet, to voters.

⁶ Reconciliation consists in large part of comparing the numbers of ballots at each stage of ballot processing to make sure no ballots have been lost or added.

ISSUES

The Executive's business case follows the Council's direction to propose "an electronic tracking system established for tracking ballots so that voters can, through use of the Internet, follow the movement of their ballots as they move from King County to the voter and back to King County for counting and crediting the voter for voting."⁷ However, Council staff have identified the following issues regarding the Executive's proposal.

A. Insufficiently-developed Technology

Automatic signature verification ("ASV") is not needed in order to comply with the Council's directives to conduct elections entirely by mail and allow voters to track their ballots via the Internet. Instead, the Executive is proposing ASV in the interest of increasing the speed and lowering the cost of ballot processing and making signature comparison decisions more consistent.

The automatic signature verification ("ASV") solution that the Executive proposes to buy from Pitney Bowes does not yet exist. Pitney Bowes is currently considering partnering with one of two software vendors to produce such a solution, but no solution is expected to be ready before the beginning of the 2008 election cycle. For that reason, no cost or price has yet been set for it.

The Council may wish to consider whether it is advisable to approve the purchase of ASV technology before it has been completely developed and tested in an election environment in other jurisdictions.

B. Human vs. Machine Verification of Signatures

The purpose of ASV is not to improve the accuracy of signature verification. According to Pitney Bowes, the goal is for ASV to be "as good as a human." Instead of improved accuracy, the primary purposes of ASV are speed, consistency, and cost-savings.⁸ Although these are appropriate purposes as far as they go, the use of an automated process for signature verification raises the following policy issues:

1. Accuracy and Reliability

How accurate and reliable is ASV in general, and how accurate are the implementations of ASV by the vendors whom the Executive has considered, relative to one another? According to Pitney Bowes, the Washington Secretary of State is currently developing standards for the use of ASV, but that work is not complete. Once the Secretary of State has established minimum standards for certification of ASV, it would be up to the Council whether to accept products that meet those minimum standards or to require a higher degree of accuracy for the use of ASV in King County elections.

⁷ Ordinance 15523, section 3.

⁸ Consistency could be viewed as a form of accuracy, but it entails consistent application of both the desirable and the undesirable aspects of a given form of technology.

2. Opportunity for Public Observation

ASV by definition precludes independent observation by election observers, except for the human checking of signatures that the ASV system has rejected. By contrast, both King County's current signature verification system and the proposed new Pitney Bowes system, if it is implemented without ASV, involve an election worker's manual comparison of the ballot envelope signature with the voter's on-file signature. This manual comparison is at least potentially observable by the public, though KCE staff have indicated that such observation is impractical in a Vote-by-Mail environment and that even now observers do not watch or check the individual work of elections staff in verifying signatures.

C. Elections Staff Workload

Currently, elections staff are planning, in a Presidential election year, to (1) move into a new facility, (2) move to Vote-by-Mail, (3) implement new equipment and software for ballot tracking, (4) implement new ballot tabulation equipment and software that has not been used in an election in the United States, and (5) implementing automatic signature verification that is still in development. Only items (1), (2), and (3) are required by Council legislation. When questioned by councilmembers and Council staff about whether the attempting to accomplish all five changes in the same election cycle might constitute an unnecessary risk, elections staff continues to deny that there is reason for concern.

D. One Vendor vs. Two Vendors

According to Pitney Bowes account manager Paul Harrington, Pitney Bowes itself can provide all the functionality proposed in the Executive's business case, including close-to-real-time reporting. Although VoteHere has the additional capability of being able to track ballots all the way through to tabulation, the Executive has recommended not to track ballots that far (partly because such tracking requires a unique identifier on each ballot, which raises ballot secrecy issues). Elections staff are in agreement that if Pitney Bowes can provide all the tracking and reporting that are required, there would be advantages in using only one vendor for that purpose instead of two. It is unknown at this point what impact such a change would have on cost.

E. Cost-Benefit Analysis

Section 1.7.5 of the business case (pp. 13-14) is entitled "Cost benefit analysis," but it contains no quantitative analysis to support its conclusions that (1) "this automated process will mitigate rising costs associated with ballot packet tracking and accountability" and (2) "[a]utomating the current system for vote-by-mail elections will mitigate against rising costs associated with the current labor intensive manual process including staffing, space requirements, equipment and related expenses." In response to Council staff's request for such quantitative analysis, elections staff provided information about recent increases in the staff costs associated with manual ballot processing, but provided no other analysis except to state: "The purchase of equipment and

software for automation should logically mitigate the rising costs associated with manual ballot processing.”⁹

F. Performance Measurement

Section 1.8 of the business case states in general terms that the performance of the new equipment and software “will be measured against established requirements, criteria and anticipated benefit outcomes,” but there is no statement of the “baseline and target values . . . for each measurement,” which are supposed to be included in the business case.¹⁰ Without baseline and target values, it is more difficult to assess whether the proposed acquisition and implementation of new equipment and software have been successful. In response to a question from Council staff, elections staff have provided target values, but not the baseline values with which to compare them.

G. Justification of the \$2.7 million appropriation request

The cost of the purchases that the Executive is recommending appears to be as follows:

Products & Services	Capital Cost	Operating Cost	Totals
Pitney-Bowes Solution ¹¹	\$1,319,167	\$262,000	\$1,581,167
VoteHere	\$300,000 ¹²	\$45,000	\$345,000
Totals	\$1,619,167	\$307,000	\$1,926,167

Assuming these amounts are accurate, the Executive’s proposal would leave a surplus of almost \$800,000 of HAVA funds that would not be earmarked for any purpose stated in the business case, though it appears from an entry in Exhibit 9 of the business case that the amounts listed for Pitney Bowes do not include automatic signature verification (assuming that is what is meant by “automated signature”).

The Council may wish to consider: (1) requesting clarification of these amounts and (2) adopting a striking amendment limiting the Executive’s spending authority to the actual amount justified in the Executive’s business case, while maintaining the proviso on the remaining portion of the

⁹ Elections staff have suggested that ballot tracking via the Internet is required by Council legislation and therefore does not need to be justified; however, the issue raised by Council staff concerns the Executive’s proposed method of implementing the ballot tracking, not ballot tracking per se.

¹⁰ The required contents of the “Benefits Realization Measurement” section of a PRB phase 2 business case are described as follows in the OIRM (Office of Information Resource Management) template: “Identify the measurement techniques that will be used to prepare the Benefit Realization report in Phase 5 of the project. Measurements should indicate benefit achievement as directly as possible to the benefit and be identified for each significant benefit driving the business case. Baseline and target values must be included for each measurement with the PRB phase 2 business case submittal.”

¹¹ According to Exhibit 9, p. 2, of the business case, the cost figures for Pitney Bowes “does not include cost for automated signature [sic] as it is currently being developed.”

¹² VoteHere’s proposal lists a price of \$400,000. According to elections staff, this price is for the newest version of VoteHere’s software; the Executive intends to buy an older version.

\$2.7 million of HAVA funds until the Executive has made a specific proposal for spending those funds.

OPTIONS

Staff have identified the following general options and are seeking direction from the Council on whether these options (or others) should be afforded further exploration.

Option 1: Approve the Executive's proposal as transmitted.

This option would have the benefit of allowing elections staff to move forward with implementation of the recommended solution and avoiding potential delay. The risk of this option is that it would leave unanswered the questions posed in this staff report, which might result in a solution that is less than optimal.

Option 2: Approve the Executive's proposal, with conditions.

Under this option, the Council would approve the Executive's proposal, but would attach conditions to the approval, based on issues such as those raised above. This option would have the benefit of allowing the Executive to move forward with implementation of its proposed solution, while reducing the risk that the specific manner of implementation might run contrary to Council policy. For example:

1. The Council might consider deleting ASV from the proposal pending further development of the technology, receipt of additional data about its accuracy, and other jurisdictions' experience in using ASV.
2. The Council might restrict expenditure approval to the approximately \$1.9 million that the Executive has attempted to justify in its proposal, requiring Council approval of an additional business case to support expenditure of the remaining \$2.7 of the HAVA grant for ballot tracking and signature verification equipment and software.

Option 3: Defer approval of the Executive's proposal, pending receipt of additional information.

If the Council chose this option, action on the Executive's proposal would be deferred, pending receipt of additional information, such as the information pertaining to:

1. The feasibility and cost of having Pitney Bowes perform the entire scope of work pertaining to ballot tracking and signature verification, rather than including VoteHere;
2. The Executive's cost-benefit analysis; or
3. Performance measurement standards.

This option would have the benefit of allowing the Council to have more complete information upon which to base its decision. The risk of this approach is the potential for delay in the

implementation of the proposed solution. Elections staff assert that this would prevent implementation of Vote-by-Mail in 2008.

Option 4: Do not approve the Executive's proposal.

This option would have the benefit of avoiding risks associated with the Executive's proposal, but would not address the concerns that led the Executive to make its proposal. In addition, unless the Council directed the Executive to implement a different method of ballot tracking, that requirement for the transition to Vote-by-Mail would not be met.

NEXT STEPS

Council staff seek guidance from the committee on particular options or areas of inquiry to explore further.

INVITED

1. Sherril Huff, Director, REALS, DES
2. Bill Huennekens, Vote-by-Mail Transition Manager, REALS, DES
3. Laird Hail, Information Systems Manager, REALS

ATTACHMENTS

1. Proposed Motion 2007-0328 (p. 11)
2. Ballot Tracking and Automatic Signature Verification Business Case (w/o exs.) (p. 15)
3. Transmittal Letter (p. 47)



Signature Report

July 9, 2007

Motion

Proposed No. 2007-0328.1

Sponsors Gossett and Constantine

1 A MOTION approving the Information Technology
2 Business Case and recommended solution for the purchase
3 of ballot tracking and accountability equipment and
4 software.

5
6 WHEREAS, the King County council on June 19, 2006, passed Ordinance 15523
7 authorizing the director of the records, elections and licensing services division to
8 conduct all elections entirely by mail ballot in accordance with state laws beginning in
9 2007 or 2008 as determined by the director if certain conditions are met, and

10 WHEREAS, conducting all elections in King County by mail will allow the
11 county to focus resources and systems to gain efficiencies and increase security and
12 accountability by limiting dependency on human interaction and ballot handling, and

13 WHEREAS, the council on October 16, 2006, passed Ordinance 15623 requiring
14 the council review and approve by motion an Information Technology Business Case for
15 the ballot tracking and processing and signature verification equipment and software that:
16 fully complies with the Guiding Principles and other applicable requirements set forth in

Motion

17 the Strategic Technology Plan 2006-2008; and has been reviewed and approved by the
18 project review board, and

19 WHEREAS, the Information Technology Business Case fully complies with the
20 guiding principles and applicable requirements set forth in the Strategic Technology Plan
21 2006-2008, and

22 WHEREAS, the Information Technology Business Case has been reviewed and
23 approved by the project review board;

24 NOW, THEREFORE, BE IT MOVED by the Council of King County:

25 The Information Technology Business Case and recommended solution for ballot
26 tracking and accountability provided in Ordinance 15623, Section 1, Proviso P13,
27 submitted by the county executive are hereby approved. The aforementioned business
28 case regarding the necessary purchase of a ballot tracking and accountability system in
29 Ordinance 15623, Section 1, Proviso P13, including: relative security, cost, reliability,
30 functionality and usability. As a result, the recommendation for the purchase of a ballot

Motion

31 tracking and accountability system as outlined in the Information Technology Business
32 case is approved.

33

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

ATTEST:

Attachments A. VBM Transition, Ballot Tracking and Accountability



King County

**Department of
Executive Services**

Columbia Center
701 Fifth Avenue, Room 3210
Seattle, WA 98104-7055

206-296-3824 Fax 206-296-3829
TTY Relay: 711

To: Executive Ron Sims

From: Information Technology Project Review Board

Date: May 9, 2007

Re: Business Case—Elections Ballot Tracking and Accountability

The below signatures, comprising King County's Information Technology Project Review Board, reviewed the Information Technology Business Case and recommended solution and have found it to satisfy PRB business case requirements. The requisite due diligence and analysis were performed and the business case and recommended solution is hereby approved.

Robert V. Cowan, Director
Office of Management and Budget

5-14-07

Paul H. Tanaka,
County Administrative Officer

5/14/07

David S. Martinez,
Chief Information Officer

Sheryl V. Whitney,
Assistant County Executive

Cover Page 1 of 2

Project Title:	VBM Transition
Project Subtitle:	Ballot packet tracking and accountability
Project Number: (If Existing Project)	
Date of Submittal:	May 15, 2007
Agency/Department:	REALS, DES
Business Sponsor:	Paul Tanaka
Prepared By:	Bill Huennekens

Project Primary Benefit Alignment:

	Accountability/Transparency	Customer Service/Access	Efficiency	Risk Management
<i>Check one only</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Business Outcomes: (Check all that apply)

Efficiency	<input type="checkbox"/>	Offers a positive return on investment (ROI)
	<input checked="" type="checkbox"/>	Improves productivity and/or reduces future expenditures
Public Access & Customer Service	<input checked="" type="checkbox"/>	Improves accessibility of public records
	<input checked="" type="checkbox"/>	Improves accessibility to county services, resources, and/or officials
	<input checked="" type="checkbox"/>	Improves the quality and/or usability of internal and/or external county services
Transparency and Accountability for Decisions	<input checked="" type="checkbox"/>	Makes decisions and decision-related materials more easily available
	<input checked="" type="checkbox"/>	Supports ability to track long-term outcomes
	<input checked="" type="checkbox"/>	Supports visibility into the decision process
	<input type="checkbox"/>	Supports input and feedback related to countywide decisions
Risk Management	<input checked="" type="checkbox"/>	Intended to improve security and provide legally mandated services and basic operations support
Other	<input type="checkbox"/>	Fulfill regulatory requirements
	<input checked="" type="checkbox"/>	Provide tactical agency operational improvements
	<input type="checkbox"/>	

Technical Outcomes: (Check all that apply)

Increases architectural flexibility	<input type="checkbox"/>	Utilizes open standards
	<input type="checkbox"/>	Employs web-based technologies
	<input checked="" type="checkbox"/>	Utilizes commercial off the shelf software
	<input checked="" type="checkbox"/>	Leverages and/or extends integration architecture
Improves data management	<input checked="" type="checkbox"/>	Increases data security
	<input type="checkbox"/>	Increases data privacy
	<input checked="" type="checkbox"/>	Improves data accuracy
Improves technology operations	<input checked="" type="checkbox"/>	Reduces data redundancy
	<input checked="" type="checkbox"/>	Enhances system reliability
	<input checked="" type="checkbox"/>	Consolidates hardware/software
	<input checked="" type="checkbox"/>	Standardizes or streamlines existing operations

Project Type: (Will Help Determine PRB Review Plan)

	Implementation	Business Case/Study/Plan	IT Equipment Replacement
<i>Check One Only</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cover Page 2 of 2

Project Phase: (Underline project phase applicable to this submittal)

Budget Request:

- Conceptual Review - Provide a concise, informative, high level summary for sections 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, and 2.0. Conceptual review summaries should be 1-3 pages only.**

- Formal Budget Request**

Project Review Board Business Case Deliverables

- Phase II - PRB Business Case Presentation**
 - **Update for any major changes to scope, schedule, and budget if significantly different from the Budget Request Business Case.**
 - **OMB and agency to confirm baseline (current)/ target measurements and identify and plan for future budget actions prior to PRB review.**
- Other – This business case is responsive to Council Ordinance 15623 that provisos HAVA grant funding for the purchase of a ballot packet tracking and accountability system for King County.**

Change Summary from previous submittals of Business Case:

1) Describe any important or significant changes to project scope, schedule, and budget from previous version of business case submittal.

The target date for transition to vote by mail is a special election in 2008.

2) Describe any important or significant changes to expected benefits or ongoing O&M costs and other operational impacts from previous version of business case submittal.

NA, no previous business case submitted.

Executive Summary

On June 19, 2006, the King County Council adopted Ordinance 15523, directing Elections in King County be conducted entirely by mail in 2007 or 2008, effectively establishing King County as the largest local jurisdiction in the United States to conduct all elections by mail. The transition to an entirely vote-by-mail elections system will streamline operations, allowing resources to be focused on the process that voters have chosen in increasing numbers.

The County Council specified four conditions to be met prior to implementation of vote by mail. Among these requirements, the County Council requested a business case for the creation of an electronic tracking system that will allow voters, through the use of the Internet, to follow the movement of their ballot as it travels from King County to the voter and back to King County for counting and crediting the voter for voting.

When King County transitions to all mail voting in 2008, King County Elections will have the technology to allow each individual voter to track the status of their ballot packet; the ultimate indication of transparency and accountability of the vote-by-mail election process. This accountability will build voters' trust and confidence in the integrity of the election process and will improve ballot reconciliation.

This business case analyzes technologies from the four vendors who responded to our request for information. These technologies will allow voters to determine if:

1. Voter's ballot packet has been assembled and handed off to United States Postal Service (USPS).
2. King County confirms receipt of returned ballot packet (i.e. voted and USPS un-deliverables).
3. Signature on ballot packet has been verified or challenged.
4. Ballot packet has been opened for ballot extraction.

Additionally, this business case examines these technologies to see how each would increase the accuracy, accountability, security, transparency and efficiency of our mail ballot processing.

Based on the careful evaluation of the four vendors who responded to our request for information through this business case, King County Elections recommends investment in two: the Pitney Bowes Relia-Vote and VoteHere MiBT solutions.

The Pitney Bowes Relia-Vote and VoteHere MiBT (Mail-in Ballot Tracker) solutions provide the best equipment and software applications available and will enable King County to meet its overall goals – the ability for voters to follow the movement of their ballots from King County, to the voter, and back to King

County for counting and crediting. This solution will provide King County with increased accuracy, accountability, security, transparency and efficiency.

1.1 Problem statement, vision and goals

When King County moves to all vote-by-mail, in early 2008, about 35 percent of registered voters who currently vote at the polls will join the nearly 65 percent of permanent absentee voters and cast their ballots by mail, rather than at their polling places. This increase will result in nearly 1 million voters receiving a mail ballot packet for each countywide election.

The current process of tracking and accounting for mail ballots as they are prepared for mailing, received from voters and readied for tabulation is manual and labor intensive. With the current resources, systems and equipment the ability to achieve the level of reconciliation required will be challenging.

Additional applications and equipment are needed to enhance and effectively alter this process with automation. Change is necessary to achieve the highest level of accuracy, accountability, security, transparency and efficiency.

As King County Elections moves towards an entirely vote-by-mail system, the following goals are sought:

- Improve the **accuracy** of our elections by 1) minimizing the hand-off between staff and processes, 2) minimizing the manual aspects of work such as data entry of reconciliation data and 3) improve the consistency of decisions by utilizing technology.
- Improve the **accountability** of our elections by 1) increasing the amount and type of data we capture and use for reconciliation processes and 2) providing near real-time reconciliation.
- Improve the **security** of our elections by 1) limiting inbound processes performed off-site and 2) minimizing the movement of physical ballots between processes and staff.
- Improve the **transparency** of our elections by 1) creating simple, efficient work flows and 2) capturing and reporting the status of a voter's mail ballot packet at various points in the process.
- Improve the **efficiency** of our elections by 1) eliminating or combining processes where appropriate and 2) utilizing technology to increase through-puts.

In addition, any equipment acquired for ballot packet tracking and accountability will adhere to the established goals and guiding principles set forth in King County's 2006 Strategic Technology Plan, improving efficiency, public access and customer service, transparency and accountability, risk management, technology architectural flexibility, data management, and technology operations. See page six of the King County, Washington, Strategic Technology Plan 2006-

2008, at

[http://www.metrokc.gov/oirm/services/reports/strategic_plan/Strategic Technology Plan 2006-2008.pdf](http://www.metrokc.gov/oirm/services/reports/strategic_plan/Strategic_Technology_Plan_2006-2008.pdf).

1.2 Overview and background

Current Process

Ballot-related materials, voted absentee and mail ballots are currently batched together upon return to King County in trays of 200 to 400 ballot packets (signature envelope, security envelope and ballot). Each batch of ballot packets is monitored as it moves through the process from receipt to tabulation and any transaction to that batch and its associated data are recorded manually on a batch slip. This transaction data is used to validate that all ballot packets are accounted for and any discrepancies are identified and resolved immediately.

The reconciliation and accountability processes and procedures currently in use for the inbound ballot packets were recognized nationally in 2006 as best practices by the National Association of County Recorders, Election Officials and Clerks.

See, current process flow chart, exhibit 1. For a complete description of the current process and the procedures used, please refer to exhibit 2.

Focus Group Research

To meet the requirements described in the ballot tracking and accountability mandate in section two of King County Ordinance 15523, focus groups were conducted, exploring voters' expectations and preferences for a ballot tracking system. See, exhibit 3, for complete focus group findings.

In order to align with voters' expectations and ensure ballot secrecy and voter privacy, King County Elections (KCE) established the following four ballot packet tracking points to enable voters to track their ballot packets in the outbound and inbound processes.

1. Voter's ballot packet has been assembled and handed off to United States Postal Service (USPS)
2. King County confirms receipt of returned ballot packet (i.e. voted and USPS un-deliverables).
3. Signature on ballot packet has been verified or challenged.
4. Ballot packet has been opened for ballot extraction.

1.3 Constraints and dependencies

Limitations of current ballot tracking and accountability process

Though nationally recognized, the current ballot tracking and accountability process has limitations, especially as a jurisdiction the size of King County transitions to countywide voting by mail.

- 1. Designed for reconciliation.** The process is designed for reconciliation and focuses on accounting of envelopes and ballots to provide assistance for resolving discrepancies across process points in the reconciliation process. It uses total count and does not capture individual voter information on ballot packets as a basis for reconciliation. The system is not specifically designed to allow voters to track their ballot at various points in the process.
- 2. Limited tracking spectrum.** Current tracking begins at the "inbound sort" by capturing absentee voter identification number (AVID). There is no tracking of the individual ballot packet piece in the outbound process, when the ballot packet is sent from King County Elections to the voter.
- 3. Batch level reconciliation.** The current process does not track and account for ballot materials end-to-end at the voter specific level. There is currently no option for a voter to track the movement of their ballot beyond signature verification, nor are there systems in place for ballot processing staff to track beyond this point at the detailed, voter-specific level.
- 4. Labor intensive and time consuming.** The current process involves manual quality control, manual counting of mail pieces and ballots, manual input of total counts with challenge and ballot duplication categories, as well as manual compilation of summary statistics. The process is time consuming, occasionally taking over three hours to reconcile the numbers of signatures challenged for the end of day reports.
- 5. Potential for human errors and inconsistencies in application.** The labor-intensive manual processes can increase the possibility for errors, discrepancies and inconsistencies. It requires substantial quality control efforts to identify and correct errors, discrepancies and inconsistencies.
- 6. Creates processing capacity limitations.** Over 60 percent of voters are registered as permanent absentee voters. On average, 75 to 80 percent of all votes cast in a given election are cast by absentee ballot. When vote-by-mail is implemented, an additional 35 to 40 percent of ballot packets will need to be produced, assembled, processed, tracked and accounted for, requiring

additional staff, space and equipment, along with processing time needed for timely tabulation.

An investment in technology to automate these processes is necessary, to maintain uncompromised quality assurance and accuracy that meets or exceeds current accountability achievements.

Limitations on tracking ballots to the voter level

Part of the research conducted through the focus groups investigated the level that voters wanted to track their ballot and helped define what level of perceived secrecy voters would be willing to give up to achieve the preferred tracking capability. More specifically, voters were asked their opinions of placing a barcode or unique identifier directly on the ballot to confirm it went through a tabulation machine and was counted. Placing a barcode on the ballot would allow tracking of each individual ballot throughout the process, but would create issues of ballot secrecy.

Voters in the focus groups concluded that once their ballot is received they trust it will be counted. They are not interested in the use of a barcode because they fear it may be used to identify how they voted.

As a result of the focus group research and the uncertain legal and political implications, the final step of ballot tracking: confirmation that the ballot was not only opened but actually tabulated is not currently a recommended tracking point. While the encryption technology does exist, there is a tie with the voter to their ballot, posing ballot secrecy issues and legal concerns. This step also has several unknown risks that must be addressed carefully before King County considers ballot tracking to the point of tabulation.

1.4 Specific business objectives

After thoughtfully examining our current process and evaluating the King County Council's requirements for ballot and ballot envelope tracking, the specific business objectives identified for ballot tracking and accountability are:

- 1. Perform ballot sorting, data capture and batching in-house.**
This will increase ballot security and provide greater process transparency to the observing public. This will also allow for process efficiency by decreasing transport time and minimizing numerous manual hand-offs.

- 2. Capture the signature image on the envelope.** Working with the image of the signature envelope, as opposed to the ballot-containing envelope itself, will allow KCE to place ballots in secure storage while the signature verification process occurs. Process

efficiency will be gained from side-by-side comparison on a computer monitor.

3. **Implement automatic signature recognition.** The use of automatic signature recognition will provide greater efficiency to the signature verification process. Automating this process will provide greater consistency in evaluating signatures. Ultimately, KCE staff will examine each signature rejected by the software application.
4. **Automate data capture for reconciliation.** Automating data captured for accountability and reconciliation will remove the variable of manual data entry, providing greater efficiency and accuracy. Greater accountability and transparency will be accomplished through improved reporting capabilities.
5. **Capture voter data after a ballot packet has been opened.** The ability to capture data after a voter's ballot packet has been opened and the security envelope with the ballot has been removed, will increase process transparency, allowing the voter to confirm that their ballot is ready for tabulation. This will occur with hand scanners at each opening station or through high speed envelope scanners at quality control stations. Data captured will also provide greater accountability and efficiency for reconciliation purposes.

1.5 Project assumptions and risks

In moving towards implementation of a ballot tracking and accountability system, there are several baseline assumptions and known risks that must be explored. The following list of assumptions relate specifically to upgrading and introducing new components to our current ballot tracking and accountability system and form the foundation by which all future work will be built.

It is assumed that with vote by mail, the standards for transparency, tracking and accountability must be present to assure voters' confidence that their ballots are processed and counted. It is with these assumptions that the current ballot packet tracking and accountability processes and procedures have been studied and evaluated, and technology applications explored to meet the expectations concerning ballot packet tracking and accountability.

Security

- Security and ballot safety will be primary elements in the consideration and evaluation of various vendor solutions for improving ballot tracking and accountability.

Legislation changes

- The ability to track each ballot through the entire tabulation process requires the placement of a unique identifier on the ballot. At any point in time, a court order or adoption of new legislation by Congress or the state legislature could prohibit the presence or use of a unique identifier on the ballot. This will prevent tracking individual ballots once they have been opened and separated from the reply envelope, severing ties between ballot and voter. KCE does not recommend placing a unique identifier on the ballot at this point in time. For more information, please reference exhibit 4, the white paper prepared on ballot tracking with and without a unique identifier.
- The Office of the Secretary of State (OSOS) will have established rules and regulations for the automated signature verification technology software and hardware applications by December 2007, to assure there is sufficient time for installation, training and testing of the module and data compatibility with existing election systems (GEMS, DIMS and web applications).

Equipment

- The selected equipment and software solution modules will be available and ready to be integrated incrementally, assuring a gradual transition to vote by mail with thorough and precise ballot tracking and accountability processes.

Transition Schedule

- It is assumed that there will be no unforeseen or unanticipated King County, Washington State, and/or federal legislative changes that will impede the transition to vote-by-mail in King County.
- The schedule for transition to VBM in 2008 incorporates the assumption that the 2007-2008 elections calendar will not be altered unexpectedly. This includes the presidential preference primary in February or March 2008.

Oversight

- KCE will continue to look to the recommendations of the Citizens' Election Oversight Committee (CEOC) and previous recommendations made by other oversight groups as the transition to all-mail voting continues.
- Technology projects will be managed within the Information Technology Governance structure. It is imperative that funding to support the VBM transition work and schedule be released on a timely basis to adhere to the approved time frame.

Communications

- KCE will maintain open lines of communication in order to seek stakeholder input to implement the optimal system.
- Through education and communication, King County Elections will provide system and equipment information and implementation updates regularly to voters and other stakeholder groups.
- To help ensure success, King County Elections will clearly communicate transition progress internally so that all Elections' staff are aware of the goals, objectives, status, and issues surrounding the transition.

Management and Leadership

- KCE will continue to demonstrate improvements through results in successful elections before the transition to VBM to continue building trust and confidence among voters, elections staff and stakeholders.

1.6 Plan of work, timeline, approach, key milestones

1.6.1 Plan of work, timeline

Prior to establishing an improved system to electronically track and account for movement of ballot packets from King County to the voter and back to King County, the following work must be accomplished.

1. A review of the current ballot tracking and accountability process and procedures. **Completed.**
2. Explore and study the availability of current technologies and related software and hardware applications to track and account for ballot packet materials. **Completed.**
3. Determine and establish ballot packet tracking points for access by voters to meet their information needs. **Completed.**
4. Determine and establish business needs that will support data capture and generation of information for the established ballot packet tracking points while serving the purpose for reconciliation. **Completed.**
5. Determine, establish and document the functional business requirements of a ballot packet tracking and accountability system that will meet the business needs of the mail ballot processing team and generate data and information required for the ballot packet track points. **Completed.**

6. Assess the functionality of each technology application deployed for tracking and accounting for ballot materials individually and how each will work with one another as an effective, integrated solution for managing the ballot packet tracking and accounting process. **Completed.**
7. Evaluate the compatibility and extent of integration of image and data captured by each of the vendor's proposed ballot tracking and accountability solutions with current systems: voter registration data and information management systems (DIMS) and ballot building, tabulation technology systems (GEMS and others). **Completed.**
8. Determine and establish criteria and mandatory requirements for the ballot tracking and accountability system. **Completed.**
9. Evaluate and determine the effectiveness and efficiency of each proposed ballot tracking and accountability solution in regard to each of the established functional business requirements and criteria. **Completed.**

Timeline

Date	Action Items	Status
April 5, 2007	Develop and establish business needs	Completed
April 5, 2007	Develop and establish functional requirements	Completed
April 12, 2007	Develop and establish criteria and mandatory requirements	Completed
April 23, 2007	Evaluation of vendor proposed systems	Completed
May 15, 2007	Information Technology Business Case and recommended solution due to the Council	Completed
June 29, 2007	Council action on Information Technology Business Case and recommended solution	In progress
Sept. 10, 2007	Develop and establish testing and implementation schedule to be negotiated with vendor during contract development.	In progress
Sept. 10, 2007	Contract completed and signed.	In progress

1.6.2 Approach

The transition to vote by mail is a collaborative and inclusive effort that involves every staff member at King County Elections. The business processes currently in place will be altered significantly and in some cases redesigned to implement an enhanced electronic ballot tracking and accountability system. The input, buy-off and involvement of the entire organization are critical. Lessons learned, institutional knowledge of current mail ballot processing core staff, prior capital investments, and

reviews by other jurisdictions using the technology will be leveraged to maximize the opportunity for success and mitigate project risks.

1.6.3 Key Milestones

- **May 15, 2007:** Transmittal of the Information Technology Business Case to the Council.
- **June 29, 2007:** Council action on Information Technology Business Case and recommended solution.
- **First quarter, 2008:** Modular and incremental implementation of tracking and accountability equipment; including delivery, thorough testing and verification of hardware and software.

1.7 Benefits and other impacts

Upgraded ballot tracking and accountability technologies will make ballot processing and tracking more accurate, accountable, secure, transparent, and efficient. New equipment and software will enhance the security of elections administration and contribute to the process of maintaining public trust and confidence in King County's election administration processes.

1.7.1 Customer benefits and other impacts

- Automation in the recommended system will allow King County to create, deliver and process the increased volume of ballots resulting from countywide vote-by-mail.
- Ability for voter to access ballot packet tracking information on the Internet, verifying and accounting for movement of their ballot packet.
- Reconciliation and production of election reports occur in nearly real-time.
- Public trust and confidence will be increased as a result of individual tracking.

1.7.2 Employee impacts

- Manual efforts required to process, track and account for ballot packets will be streamlined; opportunities for errors in processing and tracking will be reduced.
- Staff will be trained in the roles, responsibilities, processes and procedures required with the new system, in turn, enhancing quality assurance and facilitating ballot packet tracking and accountability process management.
- Reassignment and training of staff to perform data integration with other Elections data systems (e.g. DIMS, web applications).

1.7.3 Business process benefits and other impacts

Four main business process benefits will be realized by upgrading King County's ballot packet tracking and accountability equipment and software:

1. Use of up-to-date technology.

New sorting, scanning, and database hardware and software will allow King County to apply technology to enhance operations and reduce manual steps that will improve the accuracy of data collection. The recommended systems employ new security features that reduce the possibility of unauthorized access, modification and/or deletion of system data.

2. Improved process consistency and reliability.

Automation will minimize manual handling and processing of ballot packets, improving consistency and reliability of data captured, and reducing human handling and processing errors.

3. Improved quality control

Automation reduces processing time, allowing more time for quality control and auditing of the process, procedures and data captured.

4. Improved ballot security

Reduced handling of ballot packets allows them to remain in the secure vault until they are ready for opening and tabulation.

1.7.4 Technology infrastructure benefits and other impacts

A cohesive, comprehensive and wholly integrated ballot delivery and processing system with ballot tracking capabilities will strengthen King County Elections' technology infrastructure and meet the county's strategic technology objectives by:

- Strengthening security and information privacy practices by minimizing manual handling and processing;
- Improving processing speed and capacity;
- Improving reliability and accuracy of tracking data captured by auditing and validation reports;
- Improving data storage and processing capacity;
- Improving flexibility and scalability in the application of technology solutions;
- Improving efficiency and enabling electronic integration across systems;
- Using open (vendor independent) standards to promote flexibility, interoperability, cost effectiveness and mitigate the risk of dependence on individual vendors;
- Improving public access to information concerning the status of a voter's ballot package that meet voter expectations and need;
- Improving the quality and timeliness of ballot processing workflow.

1.7.5 Cost benefit analysis

In time, this automated process will mitigate rising costs associated with ballot packet tracking and accountability. The \$2.7 million available in grant resources will support procurement and significantly offset initial costs for the recommended solution.

Automating the current system for vote-by-mail elections will mitigate against rising costs associated with the current labor intensive manual process including staffing, space requirements, equipment and related expenses. With deployment of improved technologies, the quality control for sorting, data and image capture, signature verification and process management will be increased.

1.8 Benefit realization measurements

Based on the benefits described above for customers, business processes, technological infrastructure and cost, the ballot packet tracking and accountability system will be monitored and evaluated. The functional performance of equipment and related software will be measured against established requirements, criteria and anticipated benefit outcomes; ultimately realizing six sigma standards, a goal KCE has established internally.

1.9 Project governance

Elections administration is at the core of public service and local government. King County Elections, the King County Executive, the King County Council and their respective staff have established requirements and guidelines to meet and exceed these voter's expectations for ballot tracking and accountability for the transition to vote-by-mail.

The King County Council has placed a proviso on the funding for an upgraded ballot tracking and accountability system, pending approval by motion of this information technology business case and recommended solution.

Implementation of the solution will be performed under the oversight of the Office of Information Resource Management (OIRM) Project Review Board to ensure appropriately managed scope, schedule, budget and risk.

1.10 Project Management

The VBM transition will be guided and directed by a team of managers from the Records, Elections and Licensing Services (REALS) Division Administration and the Elections Section; serving as the Vote by Mail Transition Leadership Team. This team will set the scope for the transition, monitor risk and quality, and make recommendations on proposed changes to the scope of the transition.

VBM Transition Leadership Team

Name	Position	E-mail address
Sherril Huff	Director Designee, REALS	sherril.huff@metrokc.gov
Sean Bouffiou	Finance and Human Resources Administrator	sean.bouffiou@metrokc.gov
Bill Huennekens	VBM Transition Manager	bill.huennekens@metrokc.gov
Bobbie Egan	Communication Specialist	bobbie.egan@metrokc.gov
Scott Baynard	Superintendent of Records, providing insight as previous Quality Assurance and Improvement Coordinator	scott.baynard@metrokc.gov
Garth Fell	Acting Election Program Manager—Ballot Processing and Delivery	garth.fell@metrokc.gov
Sandy McConnell	Acting Election Program Manager—Elections Operations	sandy.mcconnell@metrokc.gov
Laura Lockard	Acting Election Program Manager – Voter Services	laura.lockard@metrokc.gov
Laird Hail	Elections Technology Services Manager	laird.hail@metrokc.gov
Harry Sanders	GIS Supervisor/Special Projects Manager	harry.sanders@metrokc.gov

1.10.1 Transition planning sessions

Meetings are held weekly, as the election schedule allows, to review work documents, materials and information. Currently, meetings occur each Thursday afternoon and last for three hours.

1.10.2 Facilitation

Meetings of the Transition Leadership Team are facilitated by the Transition Manager with the support of Waldron & Co. staff.

1.10.3 Materials and documentation

Materials and documentation for meetings are distributed to team members by the afternoon before the meeting, at the latest, to give individuals adequate time to prepare for the meeting.

1.10.4 Meeting agendas and minutes

Meeting agendas are prepared by the Transition Manager and minutes are taken by transition support staff. These documents are archived in a shared drive accessible by team members.

1.11 Project staffing

The Transition Leadership Team is supported by a team of staff dedicated to the transition process, the Transition Team.

VBM Transition Team

Name	Position	E-mail address
-------------	-----------------	-----------------------

Bill Huennekens	Transition Manager	bill.huennekens@metrokc.gov
Courtney Caswell	Functional Analyst (Focus on Regional Voting Centers)	courtney.caswell@metrokc.gov
Colleen Kwan	Functional Analyst (Focus on Ballot Tracking and Accountability)	colleen.kwan@metrokc.gov
Megan Coppersmith	Communication Specialist (Internal and External Communications)	megan.coppersmith@metrokc.gov
Bonnie Duncan	Fiscal Specialist (HAVA Grant Accounting)	bonnie.duncan@metrokc.gov
Alex Herzog	Administrative Specialist III (Transition Administration and Ballot Drop Locations)	alex.herzog@metrokc.gov
Jim Hunt	Functional Analyst (Focus on Information & Technology)	james.hunt@metrokc.gov
Lauren Engel	GIS Analyst	lauren.engel@metrokc.gov

1.11.1 Weekly team meetings

Transition Team meetings are held weekly each Monday morning to plan the upcoming week's activities and work schedule.

1.11.2 Meeting facilitation

Weekly meetings of the Transition Team are facilitated by the Transition Manager.

1.11.3 Meeting agendas and minutes

Meeting agendas are prepared by the Transition Manager and minutes are taken by transition support staff. These documents are archived in a shared drive accessible by team members.

1.12 Architecture and interoperability

The data captured and generated for ballot tracking must be interchangeable electronically with the existing voter registration system and Web application software in use. This electronic integration must be as easy, seamless and as close to real time as possible. This interface should be automated and simple to use, with minimal manual intervention and facilitation.

1.13 Alternatives and feasibility

An alternative to the upgraded ballot tracking and accountability system is to maintain the status quo, relying on the labor intensive, manual process. Due to the increase in mail ballots to be processed, maintaining the status quo will present significant risks, including longer hours, multiple shifts and more processing staff.

1.14 Preferred approach

Outbound mailing of ballot packets

After extensive evaluation of the equipment, office space, staff and commitment necessary to perform bulk insertion of 1 million ballot packets needed for a countywide vote-by-mail election, King County Elections has found continued outsourcing of this process is the best solution. King County Elections will continue to work with the current and any future print and insertion vendors to improve the accountability of this process. Therefore, vendor's responses to outbound insertion solutions were not rated.

Inbound processing of mail ballot packets

After examining our current process and evaluating the King County Council's requirement to provide voters with the ability to track their ballots, King County Elections recommends that technologies be purchased and implemented to:

- 1. Perform ballot sorting, data capture and batching in-house.** This will increase ballot security and provide greater process transparency to the observing public. This will also allow for process efficiency by decreasing transport time and minimizing numerous manual hand-offs.
- 2. Capture the signature image on the envelope.** Working with the image of the signature envelope, as opposed to the ballot-containing envelope itself, will allow KCE to place ballots in secure storage while the signature verification process occurs. Process efficiency will be gained from side-by-side comparison on a computer monitor.
- 3. Implement automatic signature recognition.** The use of automatic signature recognition will provide greater efficiency to the signature verification process. Automating this process will provide greater consistency in evaluating signatures. Ultimately, KCE staff will examine each signature rejected by the software application.
- 4. Automate data capture for reconciliation.** Automating data captured for accountability and reconciliation will remove the variable of manual data entry, providing greater efficiency and accuracy. Greater accountability and transparency will be accomplished through improved reporting capabilities.
- 5. Capture voter data after a ballot packet has been opened.** The ability to capture data after a voter's ballot packet has been opened and the security envelope with the ballot has been removed will increase process transparency, allowing the voter to confirm that their ballot is ready for tabulation. This will occur with hand scanners at each opening station or through high speed envelope

scanners at quality control stations. Data captured will also provide greater accountability and efficiency for reconciliation purposes.

1.15 Opposing arguments and responses

Opposing arguments and views surrounding specific elements of ballot packet tracking and accountability solutions are listed below.

Automatic Signature Recognition (ASR) for signature verification

Concerns have been raised about the difficulty for individuals other than machine operators to observe signature verification in an ASR environment. Observations of this process would be limited, as the bulk of verification will be done through software application and monitored by trained staff.

In implementing ASR, King County Elections would follow rules adopted by the OSOS outlining the use of this technology. The technology is designed to allow for users to set minimum confidence levels for automated signature verification. King County would work under the OSOS guidelines in setting these confidence levels and the information regarding confidence levels would be widely available.

Once the confidence rating is set, the technology accepts signatures that pass a certain level. Signatures that do not pass this confidence rating will not be permanently rejected but rather removed from the batch and reviewed by a trained, human operator. No signature will be rejected without human eyes confirming that indeed, the signatures do not match. The system's reliability and consistency will be audited and monitored constantly to ensure the acceptance and rejection levels are in compliance with state rules and regulations.

The implementation of ASR will not eliminate all human verification but will reduce the number of signature that a human operator will need to compare. A reduction in ballot packets requiring human verification will reduce the number of staff needed to perform the human verification and streamline the process.

It is a logical assumption that the implementation of ASR will result in a more consistent interpretation of signature matches. The software application uses the same criteria and methodology each time, from the same technology used in many other industries.

Barcodes or identifying marks on ballots

Allowing voters to track their ballots entirely through tabulation would require a unique identifier on the ballot itself. The main concerns of placing unique identifiers on the ballot revolve around three aspects: political, legal, and preserving the secrecy of the voter's ballot.

Political Concerns

The State of California has prohibited the use of a unique identifier on the ballot and Washington State may not be far behind. While an amendment was introduced but not adopted in the latest Legislative session, this issue is far from resolved and will likely be discussed in the future.

Ongoing Legal Issues

Four counties in Washington State offer voters a Web interface to track their ballot through tabulation. San Juan County is one of these counties and has been named in a lawsuit to remove this feature. The outcome of the court case is not yet decided and will likely set precedent regarding voter secrecy and ballot tracking in Washington.

Maintaining the secret ballot

The use of a unique identifier on a ballot for the purpose of tracking voted ballots is viewed by some as compromising the voter's right to a secret ballot. While the encryption technology available is compelling, King County Elections does not want to compromise the spirit or legal definition of the secret ballot. Sufficient accountability can be attained with tracking to the return envelope level, not to the ballot.

The ability to track and account for each ballot packet is essential to open and transparent elections. However, tying the voter back to his or her ballot may pose legal concerns and has several unknown risks that must be addressed carefully before King County considers ballot tracking through tabulation.

Enhancing the tracking system already in place, a bar code on the ballot envelope and with other data collection tools and process management software, will improve ballot tracking and reconciliation, and give voters ultimately what they want: the ability to verify their ballot packet was received by King County and their signatures were verified.

King County Elections' recommends further discussion and study of enhanced ballot tracking using a unique identifier on the ballot when and if legal issues in San Juan County are resolved and acceptance of such technology is studied. Until then, we believe the public is best served by tracking ballots by the outer envelope and not using a bar code on the ballot.

2.0 Budget

The need created by the transition to vote-by-mail and the award of a federal grant through the Help America Vote Act (HAVA) provide a unique opportunity to improve and enhance King County's ballot packet tracking and accountability

system. The available \$2.7 million in HAVA funds will fund King County's expenditure to purchase, implement, and initially maintain the equipment.

The solution proposed for accountability and ballot tracking purposes will meet strategic business needs, policy directives and add valued service to voters in a vote-by-mail environment.

2.1 Vendor proposals

Proposals can be found with the information submitted in response to the requests for information submitted by each of the vendors in exhibits 5 to 8.

3.0 Vendor background

Diebold Election Systems

Diebold Corporation purchased Global Elections Systems in 2001 to form Diebold Election Systems. Diebold Election Systems products and services are used in Klickitat County, Washington, Los Angeles County, California, Ohio, Georgia, Utah, Mississippi and Maryland along with many other jurisdictions in California, Arizona, Kansas, and Florida

Cowart Gagnon

Cowart Gagnon, a Puyallup based company, has provided mailing processing equipment and solutions since 1988. Spokane County is currently implementing the Cowart Gagnon equipment investigated by King County.

K&H Printing

K&H Printing has provided a variety of election services to counties in Washington since the 1940s. K&H currently prints ballots for Snohomish County and provides an automated ballot tracking and accountability system. Note: K&H Printing chose not to submit a bid for this project.

Pitney Bowes

Pitney Bowes is a Fortune 350 company that has provided mail processing services for 85 years. The technology underlying the Relia-Vote system is used in over 25 Fortune 500 companies.

The Relia-Vote system has operated in Orange County, CA since 2004 and was used in 9 counties during the 2006 election cycle.

VoteHere

Founded in 1998, VoteHere is a division of Dategrity Corporation and is based in Bellevue, WA. The system is currently used for ballot tracking in over 20 counties in Washington, Spokane County is the largest jurisdiction. The system investigated by King County Elections, the MiBT

(Mail-in Ballot Tracker) has been used in over 70 elections in Washington State.

3.1 Current vendor

Diebold Elections Systems is the current vendor for outsourced outbound and inbound mail ballot processes. Diebold Elections Systems provides services for ballot printing; outbound ballot packet assembly; mail sorting and bulk mail entry; and inbound ballot sorting and data capture.

3.2 Selection process

Each of the vendors providing solutions for ballot envelope tracking and accountability in the elections industry were invited to present their solutions: Diebold Elections System, Cowart Gagnon, K&H Printing, Pitney Bowes, and VoteHere.

These vendors were sent a request for information and asked to provide pricing information based on the predetermined functional requirements. Vendors were provided three weeks to submit product information and clarify any questions. K&H Printing did not respond to the request for information or provide pricing information, and was not further considered.

The following functional ballot packet tracking points and associated business requirements were distributed to potential vendors to obtain possible hardware and software solutions and cost estimates.

BALLOT PACKET TRACKING POINTS	FUNCTIONAL REQUIREMENTS
--------------------------------------	--------------------------------

<p>1. Voter's ballot packet has been assembled and handed off to USPS</p>	<p>1. Insertion (bulk and daily insertion)</p> <ul style="list-style-type: none"> A. Bulk insertion for all election-qualified voters on file: confirm correct ballot materials assembled. B. Daily insertion for new registrations and re-issues: confirm correct ballot materials assembled. Correct return ballot packet format for data capture to be the same as bulk insertion. C. Over-the-counter insertion and issuance of ballots: confirm correct ballot materials assembled. Correct return ballot packet format for data capture to be the same as bulk insertion. D. Must have the capability for possible future addition of randomized unique identifier on ballot and/or ballot stub. <p>2. Capture of data from outbound envelope and ballot that confirms correct ballot materials assembled.</p> <p>3. Ability to upload to and / or provide seamless election data information to Data Information Management System (DIMS) / voter registration system.</p> <p>4. Third party confirmation program for in-house Quality Assurance management.</p>
<p>2. King County confirms receipt of ballot packet</p>	<p>1. Data captured from inbound envelope to confirm King County Elections' receipt of ballot packets.</p> <p>2. Ability to upload data to and/or provide seamless electronic data interface with DIMS/voter registration system.</p>

<p>3. Signature on ballot packet has been verified or challenged</p>	<p>1. Automated signature verification that is compatible with DIMS.</p> <ul style="list-style-type: none"> A. Ability to capture image of envelope for automated and manual signature verification and public information requests. B. Ability to capture data from envelope to confirm voter's signature was verified or challenged. C. Automation to maximize efficiency for signature verification process. D. Automation to maximize efficiency for exceptions handling and data management. Currently there are 19 challenge codes. E. Ability to upload data to and/or provide seamless electronic data interface with DIMS / voter registration system.
<p>4. Ballot packet has been opened for ballot extraction</p>	<ul style="list-style-type: none"> 1. Capabilities for scale and dimension differentiation to pre-qualify ballot packets for opening. (These functions will be used to screen out packets with missing ballots or multiple ballots enclosed.) 2. Sort signature-verified ballot packets by legislative district or ballot code or other criterion as specified for recount purposes. 3. Automated slicing/opening of envelopes. 4. Batch in 200-400 per tray to prepare for extraction. 5. Ability to capture data from ballot envelope to confirm it was opened for extraction. 6. Ability to upload data captured to and/or provides seamless electronic data interface with DIMS/voter registration system. 7. Ability to capture unique identifier on ballot for exceptions handling and data management. (To preserve future functionality, if necessary.) 8. Ability to upload ballot unique identifier data to and/or provide seamless electronic data interface with DIMS/voter registration system. (To preserve future functionality, if necessary.)

As mentioned above in section 1.14, King County initially asked vendors to submit proposed solutions for the outbound insertion and mailing of mail ballot packets. King County Elections recommends continuing to outsource this work. The risk, complexity and resources necessary to bring this function in-house would not be a wise investment for King County at this time.

In addition to the submitted responses, several site visits were embarked upon to see the proposed technologies in real-world applications. Three staff members traveled to Miami Dade County, Florida, to observe the Pitney Bowes insertion and inbound equipment in operation. Staff also observed the K&H solution in operation in Snohomish County, Washington. Diebold equipment was observed in operation in a test environment in Whatcom County, Washington and other proposed Diebold equipment was observed in use in another business application.

Interviews were conducted with several counties in Washington that use the VoteHere product. Cowart Gagnon equipment is currently in the early stage of implementation in Spokane County, and as a result, was not available for observation.

Information submitted by the vendors was extensive and complex, requiring a subgroup of members of the Transition Leadership Team to be established. This subgroup examined the information provided by the vendors to rate them on the previously established criteria outlined in section 3.3. These ratings and recommendations were brought back to the entire Transition Leadership Team and thoroughly reviewed, discussed and approved by the whole group. See, exhibit 9.

3.3 Selection criteria

1. Vendor's ability to meet the functional business requirements listed below. These include all essential outbound and inbound functional business requirements. They include:

1. Data capture to confirm receipt of returned ballot packets.
2. Ability to upload data with minimal manual intervention and/or facilitation.
3. Capture image of signature from the envelope.
4. Capture entire image of envelope with ability to parse out signature for verification.
5. Compare ballot envelope signature and reference signature in voter registration database with use of automated signature verification (ASR) software.
6. Upload results from automated signature verification and export signature images for viewing within DIMS.
7. Has weight and/or dimension differentiation function(s) to pre-qualify ballot packets for opening.

8. Ability to sort ballot packet envelopes by legislative district or by other specified criteria after signature is verified
9. Has sliced / open functionality for sealed ballot packet envelopes.
10. Be able to batch in 200-400 per tray to prepare for opening and extraction.
11. Data capture function to confirm envelope has been opened for extraction.
12. Has interface and tools for system integration and process management.

2. Ability to meet requirements set forth in the security plan.

Vendor solution must meet general requirements of Elections Security Plan. It must have the ability to secure (to the maximum extent possible) hardware, software, database and any data interface links from accidental and/or unauthorized modification and/or deletion and/or access. The system must provide the ability to maintain a chain of custody of ballots and envelopes throughout the entire process.

In addition, the system is expected to facilitate:

1. Maintenance of an open and transparent election environment for public observation.
2. Compliance with established legal and procedural security through established chain of custody, data validation, audit reports, transaction logs and two person integrity.
3. Compliance with established technical and system security through use of strong passwords.

3. Risk exposure. Minimize King County's risk exposure due to delays, complexities of solution and vendor's lack of knowledge and experience with elections and King County Elections' business procedures.

4. Accuracy. There should be quality control elements in place to verify the accuracy of data captured. Quality control measures include but are not limited to well defined procedures for data validation reports and audit of sample(s) at scheduled time intervals throughout the election processing cycle at each data capture point.

5. Capacity, scalability, flexibility and ease of use. System should have the ability to handle the necessary volume of inbound ballot mail pieces, able to meet new requirements, accommodate growth, and ability to handle various sized elections, easily configurable for different operations, and settings easily adjustable to address variable election administration needs.

6. Compatibility, open architecture, universal data format.

The data captured and generated for ballot packet tracking must be interchangeable electronically with the existing voter registration system and

Web application software in use. The electronic data interchange should be easy, seamless and as close to real time as possible. The interface developed and used for such interchange should be simple and as automated as possible with minimal manual intervention and facilitation.

7. Reliability, nature and frequency of maintenance.

The system is expected to function continuously without fail through an election processing cycle. The mean time between failures should equal a minimum of two million ballot packets / document pieces. There should be built-in redundancy without any single point of failure. Maintenance issues should be dealt with easily with minimal delay, so as not to affect ballot processing. If vendor's technical support is required on site, the response time and problem resolution must be at a level that addresses and meets King County Elections' deadline requirements. Easy access to component and replacement parts should be readily available for malfunction and failure resolution.

8. Space and weight. The layout and design of equipment and hardware should minimize space and weight requirements without sacrificing operational flow, efficiency and effectiveness, and without posing any risk associated with weight overload per square foot of floor space in the new Elections' facility in Renton. The weight and space established for the equipment is 125 pounds per square foot. With a maximum of two machines, each machine should not exceed 11 feet wide and 40 feet long.

9. Cost. Consistent with the previous business case, the cost of the equipment is evaluated against the amount of HAVA funds available \$2.7 million.

3.4 Vendor rating

Inbound process

Vendors were evaluated on functional requirements and established criteria using a six point scale from zero to five. Zero was equivalent to "Does not meet requirements / criterion" and five equaled "Exceeds all elements of requirements / criterion."

VoteHere stood separate from Diebold, Pitney Bowes and Cowart Gagnon as it offered a process management software application (MiBT) with minimal hardware. In terms of functional requirements, VoteHere's solution scored not applicable for ten of the 12 requirements, and obtained a rating on two: the ability to capture voter identifying data after the envelope was opened, and system integration and process management.

Of the 12 functional requirements, Diebold, Pitney Bowes and Cowart Gagnon scored similarly with their ability to capture signature information and batch in groups of 200 to 400 ballot packets per tray.

Both Pitney Bowes and Cowart Gagnon were able to offer hardware and/or software in 11 of the 12 functional requirements, and Diebold offered 10 of the 12. Pitney Bowes scored a total of 85 with Cowart Gagnon trailing at 82 and Diebold with 71.

Vendor's solutions were then scored on eight criteria: security; accuracy; capacity; scalability, flexibility and ease of use; compatibility; reliability and maintenance; space and weight; and cost. The total scores for criteria were very close, with Pitney Bowes at 25, followed by Cowart Gagnon at 24 and Diebold at 23.

Individual scoring of potential vendors can be found in exhibit 9. Section 3.6 also describes scores and justifications.

3.5 Vendor recommendation and justification

King County Elections recommends purchasing and implementing two Pitney Bowes' Olympus II Relia-Vote 32 Bin scanning and sortation systems and associated software and hardware configuration for ASR. King County also recommends purchasing and implementing VoteHere's MiBT ballot packet tracking software and solution.

The VoteHere MiBT ballot tracking software comes in two versions: envelope-only tracking (at a reduced cost), and full envelope and ballot tracking. At this time, KCE recommends the purchase of the envelope-only tracking version, with the option to upgrade to the full version if and when necessary.

Pitney Bowes' Olympus II Relia-Vote 32 Bin scanning and sortation system and associated software and hardware configuration for ASR will address the first three specific business objectives – 1) Perform ballot packet sorting, data capture and batching in-house, 2) Capture the signature image on the envelope and 3) Implement automatic signature recognition. Two systems are recommended for redundancy and to accommodate the volume associated with a jurisdiction the size of King County.

The Pitney Bowes' solution rated highest when evaluated for functional requirements and against the evaluation criteria. The Pitney Bowes system received a total weighted score of 85 for evaluation of functionalities and a 25 when evaluated against the criteria.

As detailed in exhibit 9, the Pitney Bowes equipment is the preferred equipment as it has the capabilities to:

- Capture ballot packet id, endorse with date/time and compare to the database for id validity.

- The Pitney Bowes equipment has ability to find ballot packet id anywhere on ballot envelope and differentiate based on weight and thickness of the ballot packet, allowing this to be done at first pass through vendor scan/sort equipment.
- Adjustable sorting schemes and expandable number of bins. Digital display of sorter bin contents. Capable of adding challenge code to outside of ballot packets after signatures were verified on second pass if desired.

Pitney Bowes is currently developing an interface to the Parascript technology. Pitney Bowes has extensive experience using Parascript technology in other industries and King County Elections will have the opportunity to work with Pitney Bowes on development of an interface that will directly meet organizational and voter's needs.

There are potential risks associated with the Pitney Bowes solution regarding integration with our current systems. However, these risks are mitigated through current implementation in Pierce County, Washington, and Solano County, California, as they use the same election management and voter registration systems as King County. King County expects to benefit from lessons learned in these implementations.

VoteHere's MiBT ballot packet tracking software offers the only true system integration and process management tool and will help us address the fourth and fifth specific business objectives – 4) Automate data capture for reconciliation with an emphasis on challenged ballots and ballots separated for duplication and 5) capture voter data after a ballot packet has been opened.

MiBT is specifically designed to take data captured at various points in the process and provide a near real-time look at where ballot packets are in the mail ballot process and show process area balances or imbalances. Processes can be fully automated by scanning barcodes on mail pieces at various points in the process.

VoteHere's MiBT ballot tracking software is in use and working effectively in several jurisdictions in Washington.

In order to fully realize the benefits of the Pitney Bowes and VoteHere solutions, King County Elections may need to supplement the system with additional scanners, or other equipment, at key processing points. For instance, in order to capture information at opening, we will need small desktop scanners (\$200 each) that attach to a personal computer (about \$1,500 each). These scanners can capture the ballot packet id at a rate of over 2,000 per hour. If deployed in a location without a PC, it would be necessary to purchase a PC in addition to the scanner. Other options include high speed scanners that process at a faster speed and would be used at high volume locations and range in cost from

\$15,000 to \$70,000. These solutions will be further explored during the process design efforts conducted with the selected vendors.

The additional tracking point locations for internal management and applicable equipment will be analyzed as part of the scope of work done by the vendor(s) selected to implement the ballot tracking and accountability solution.

The other vendors that offered solutions are not recommended for a variety of reasons.

The Cowart Gagnon equipment was not rated as high as Pitney Bowes. The information supplied by Cowart Gagnon was essentially a collection of equipment brochures, with no insight into improving processes or meeting business functions. Cowart Gagnon does propose using the Parascript technology mentioned above but did not provide interface specifications. Overall the Cowart Gagnon solution is seen as a risk because the vendor has not fully implemented in any election jurisdiction. Their elections experience is limited to one medium sized jurisdiction.

Diebold has an inherent advantage as the current vendor for the election management and voter registration systems and the recommended solution for the ballot tabulation equipment upgrade. Diebold currently has an interface for the Parascript technology described above, recently implementing it in Los Angeles County, California for automatic signature recognition of returned absentee ballots. However, overall the proposed solution lacks the flexibility and functionality sought by KCE. Some examples of this include: no demonstrated high speed ballot packet tracking and accountability equipment, no flexibility for sorting with the existing equipment, and no ballot packet size or weight differentiation function.

In summary, by combining the quality equipment and process management expertise from Pitney Bowes, the database and process management tools offered by VoteHere and the expertise of King County Elections, the citizens of King County will be well served with a ballot packet tracking and accountability system they can rely on.

In addition to meeting outlined criteria and the expectations of the public, Pitney Bowes has a worldwide reputation for service and quality in mail processing. The combination of Pitney Bowes, VoteHere and Diebold, the recommended tabulation vendor, will offer checks and balances for the overall tabulation system.

Attached Exhibits

Exhibit 1: Nine Major Processing Points

Exhibit 2: Ballot Tracking & Accountability: Study of Current Process

Exhibit 3: King County Elections Focus Groups

Exhibit 4: VBM: Ballot tracking with and without a unique identifier on the ballot

Exhibit 5: Diebold Elections Systems: Response to Questions

Exhibit 6: Pitney Bowes: Response to Questions

Exhibit 7: Cowart Gagnon: Response to Questions

Exhibit 8: VoteHere: Response to Questions

Exhibit 9: Evaluation of vendor proposed solution

May 16, 2007

The Honorable Larry Gossett
Chair, King County Council
Room 1200
C O U R T H O U S E

Dear Councilmember Gossett:

This transmittal provides a comprehensive analysis and recommendation that addresses ballot tracking and accountability, an essential element in King County's transition to all-mail voting in 2008. This information technology business case, which has been reviewed and approved by the Information Technology Project Review Board, is provided to council members in response to the supplemental appropriations proviso contained in Ordinance 15623, as adopted on October 16, 2006.

Of the \$4,771,500 appropriated for OIRM Capital Projects (Project 377190), none of the \$2,700,000 for ballot tracking and processing and signature verification equipment and software shall be expended or encumbered until after the council reviews and approves by motion: (1) an Information Technology Business Case for the ballot tracking and processing and signature verification equipment and software that: (a) fully complies with the Guiding Principles and other applicable requirements set forth in the Strategic Technology Plan 2006-2008; and (b) has been reviewed and approved by the project review board

When the Council passed Ordinance 15523 on June 19, 2006 making King County the largest jurisdiction in the nation to conduct all-mail elections, it provided the commitment and vision to transform the way we conduct elections. The council specified four conditions to be met prior to implementing all-mail voting. This business case outlines a recommended solution for one of those cases: "an electronic tracking system established for tracking ballots so that voters can, through use of the Internet, follow the movement of their ballots as they move from King County to the voter and back to King County for counting and crediting the voter for voting". In addition, the report provides councilmembers with information necessary to make informed

policy decisions that will allow King County to meet the goal of conducting our first all mail election in April 2008.

This business case analyzes technologies from the four vendors who responded to our request for information that will allow voters to use the Internet to determine if:

1. Voter's ballot packet has been assembled and handed off to United States Postal Service (USPS).
2. King County confirms receipt of returned ballot packet (i.e. voted and USPS undeliverables).
3. Signature on ballot packet has been verified or challenged.
4. Ballot packet has been opened for ballot extraction.

Throughout Elections' effort in developing this business case, the issue of privacy of a voter's ballot has been constant. In focus groups on ballot tracking and accountability, in the courtroom, at legislative hearings, and in media articles/presentations much discussion has and is occurring about identifying ballots so they can be tracked by the voter. We believe that the part of the council's proviso stating ... "back to the County for counting and crediting the voter for voting" is satisfied by a process that identifies the ballot envelope and not the ballot itself. This is what we've heard voters say and, accordingly, the recommendation is not to code or bar code the ballot itself for tracking.

Information outlined in this business case will give our voters the highest level of ballot accountability while preserving every voter's right to a secret ballot. The hallmarks of this business case include redesigning our elections processes with technologies used in other business applications to provide more accurate, accountable, secure, transparent and efficient elections. The recommended technologies include mail processing equipment reengineered to track ballots, similar to how businesses track important mail.

The evaluation process began with analysis of four vendor solutions that met King County Elections' business objectives with one vendor solution that uniquely provides the software technology component for process management. Diebold Election Systems, Cowart Gagnon and Pitney Bowes submitted proposals for incoming ballot tracking solutions as well as VoteHere's proposed solution for process management. Proposals were evaluated on eight criteria including: security, accuracy, capacity, compatibility, reliability and maintenance, space and weight, and cost. The Pitney Bowes' Relia-Vote balloting system received the top score for ballot tracking and accountability equipment.

The Pitney Bowes' mail balloting system has been used in several similarly sized jurisdictions including Orange County, California with over 3 million ballots processed. The Relia-Vote mail balloting system uses mail technology that has been perfected over the past 85 years that will:

- ✓ provide high speed mail ballot packet sorting and data capture equipment,
- ✓ differentiate returned mail ballots through size, weight and data confirmation,
- ✓ expedite the signature verification process through digital image capture and automated signature verification; and
- ✓ provide a near-instant audit trail for all incoming ballot packet materials.
- ✓ A complete ballot accountability system cannot be achieved by equipment alone. VoteHere's MiBT (Mail-in Ballot Tracker) ballot tracking software offers the only true data integration and process management tool.

MiBT is specifically designed to take data captured at various points in the process and provide a nearly real-time look at ballot packet location throughout the mail ballot process and provide extensive opportunities for ballot packet accounting. Processes can be fully automated by scanning barcodes on mail envelope pieces at various points in the process. VoteHere's MiBT ballot tracking software has been used to track more than 1 million ballot envelopes in 20 Washington State counties.

After thoughtfully examining our current process and evaluating the County Council's requirement to provide voters with the ability to track their ballots, the following specific business objectives were established:

- ✓ **Perform ballot packet sorting, data capture and batching in-house.** Bringing this process in-house will increase ballot security and provide greater process transparency to the observing public. This will also allow for process efficiency by decreasing transport time between the U.S. Postal Service and the signature verification process thereby increasing security and reducing the numerous manual hand-offs.
- ✓ **Capture a digital image of each voter's signature from the return envelope.** Working with the image of the signature envelope will allow King County Elections (KCE) to place unopened ballot packets in secure storage while the signature verification process occurs. Additionally, efficiency will be gained from a side-by-side comparison of the signatures on a single computer monitor.
- ✓ **Implement automatic signature recognition (ASR).** The use of automatic signature recognition will provide greater efficiency to the signature verification process using trusted banking industry technology. ASR will provide greater consistency in evaluating signatures with statewide rules established by the Secretary of State. KCE staff will perform a second signature comparison check to confirm each signature rejected by the equipment.

- ✓ **Automate data capture for reconciliation of ballot duplication and challenged ballots.** Automating data captured for accountability and reconciliation will remove the variable of manual data entry, providing greater efficiency and accuracy. Greater accountability and transparency will be accomplished through improved reporting capabilities.
- ✓ **Capture voter data after a ballot packet has been opened.** The ability to capture data off the voter’s opened return envelop to confirm the ballot was verified will increase process transparency and allow the voter to confirm that their signature was checked and that their ballot was sent forward for tabulation. Data captured will also provide greater accountability and efficiency for reconciliation purposes.

The following is a summary of the key issues considered in making a recommendation of the Pitney Bowes and VoteHere solutions:

	Pitney Bowes ReliaVote	VoteHere MiBT
Capture data of returned mail ballot packets.	✓	
Differentiate weight, size and data from returned mail ballot packets.	✓	
Digital capture of signature on envelope to enhance ballot security.	✓	
Automatic signature recognition.	✓	
Automated ballot envelope Reconciliation.		✓
Ability to capture voter data after a ballot packet is opened.		✓
Total data integration and process management tool.		✓

By combining the quality equipment and process management expertise from Pitney Bowes, the database and process management tools offered by VoteHere and the expertise of King County Elections’ staff, the citizens of King County will be well served with a ballot envelope tracking and accountability system they can rely on.

In addition to meeting outlined criteria and the expectations of the public, Pitney Bowes has a worldwide reputation for service and quality in mail processing. The combination of Pitney Bowes and VoteHere with Diebold’s higher speed tabulation solution, the tabulation vendor recommended in the March 30 report, will offer checks and balances for the overall tabulation system.

The Honorable Larry Gossett

May 16, 2007

Page 5

To move forward with the procurement and transition to the Pitney Bowes and VoteHere solutions and countywide implementation of vote-by-mail, legislative action must be taken. I urge you to pass the motion approving the ballot tracking and accountability business case and keep the momentum of this historic transition to vote-by-mail moving forward. Your continued involvement and support are vital to the success of this effort.

Sincerely,

Ron Sims
King County Executive

Enclosures

cc: King County Councilmembers

ATTN: Ross Baker, Chief of Staff

Shelley Sutton, Policy Staff Director

William Nogle, Lead Staff, Operating Budget, Fiscal Management and
Mental Health Committee

Anne Noris, Clerk of the Council

Bob Cowan, Director, Office of Management and Budget

Paul Tanaka, County Administrative Officer, Department of Executive Services (DES)

Sherril Huff, Director Designee, Records, Elections and Licensing Services Division, DES