

VoteHere VHTi™: Frequently Asked Questions

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VHTi Basics

What is VHTi?

VHTi is an independent verification and validation (IV&V) audit system that monitors an election end-to-end and is independent of the voting system. The VHTi system is 100% transparent and will detect if ballots are corrupted through error or fraud. Independent audits enabled by VHTi can prove the validity of all ballots counted in any election.

VHTi can be added to any electronic or optical scan voting system as an integrated software component, or with an optional external hardware module that includes a processor, data storage, and receipt printer.

What does VHTi do in an election?

VHTi monitors ballots and election data end-to-end and in real time, enabling independent audit and validation of election results. Voters can take home an optional private receipt to verify that their vote was counted properly, while maintaining ballot secrecy throughout.

VHTi makes voting as accountable and trustworthy as banking by implementing a similar independent audit and “customer” verification approach, with minimal burden on election administration, the voting system, or voters.

What does VHTi give election officials and voters?

VHTi gives election officials and voters two things:

- 1.) *Election officials get proof of election results validity:* Ballots and data are monitored in real-time and can be audited independently. Accuracy of election results is validated down to a single vote. Problems are detected immediately, and can be traced to their source and solved in a timely and decisive manner.
- 2.) *Voters get optional vote verification:* Voters can get a short receipt to verify their ballot was included in the results with zero additional polling place effort. A second optional layer of verification lets voters verify specific contests. Both options protect voter privacy.

Why is there so much controversy about election validity?

Elections have always been very difficult to conduct properly, despite the best efforts of hard-working election officials. The controversy in the 2000 Florida election is just one chapter in a long book of election controversies. In 2004 in the State of Washington, the close race for Governor is still in the courts. Both Washington in 2004 and Florida in 2000 voted overwhelmingly by paper ballot, and in both cases paper ballots failed to deliver clarity about voter intent and the outcome of the election.

In fact, there has always been a debate over the accuracy and validity of paper ballots. From the 1920's through the 1950's there was a grass-roots outcry over paper ballot counting inaccuracies, and 29 States moved from paper ballots to mechanical lever machines (precursors to today's electronic voting solutions). In the 1960's and 1970's, there was a movement to embrace punch card voting as a faster, less expensive way to manage the voting process. Direct Record Electronic (DRE) voting machines were introduced in the late 1970's as a way to modernize aging mechanical lever machines, speed up the voting process, and improve vote capture accuracy. Now, DRE's are caught in

controversy about security issues stemming from a lack of independent audit and verification capability.

Is electronic voting a bad idea?

Electronic voting is a great idea; electronic voting improperly implemented is potentially problematic. Studies have shown that voting with DRE's can dramatically boost the vote capture accuracy, accessibility, and cost-effectiveness of elections.

For example, Maryland and Georgia are the only states in the US that use all-DRE voting. According to a new [study](#) of the 2004 national election by the CalTech-MIT Voting Technology Project, Maryland and Georgia rank #1 and #3 in vote capture rates as measured by lowest residual vote rates.

But capturing votes accurately is just one part of the equation. The reality of the 2004 election is that no matter what voting system we voted on in the US - DRE, lever, punchcard, optical scan, absentee, or paper ballot - voters walked away from the polls with no way to track their vote to the election results, and no assurance of election results validity through independent audit. Electronic voting needs independent end-to-end audit and verification capabilities to regain voter confidence.

The concept of independent end-to-end audit and verification is new in the world of elections. But such audit and verification is a well-established best practice in many other types of electronic transactions including ATM banking, online banking, e-commerce, lotteries, credit cards, express-shipping, and more. People have made trillions of these transactions safely and verifiably.

Now, with VHTi, such safety and verifiability is available to voters and election officials. For the first time ever, election results can be validated through independent, end-to-end audit, and each voter can verify that their vote was counted properly in the election results – with full privacy and ballot secrecy retained.

Why do we need independent validation and verification in elections?

Independent audit and verification is a well-established best practice in many types of electronic transactions including banking, e-commerce, lotteries, credit cards, and express shipping. People make millions of these transactions safely and verifiably every day.

Banks, for example, have earned our near-universal trust with three key elements:

1. Accurate electronic transactions: The vast majority of financial transactions are electronic because that is the most accurate way to count money. The practice of hand-counting dollar bills was abandoned decades ago, and no one would advocate for a return to a paper money economy.
 - In elections, many still cling to the notion that hand-counted paper ballots are most accurate.
2. Independent audit: Private firms and government regulators audit banks to independently ensure that everyone's money is properly handled.
 - In elections, audits are not comprehensive because there is so little end-to-end data to audit.
3. Customer verification: The banking industry also relies on customer verification. Think about how you bank with an ATM, debit card, or online: You get a receipt for every

transaction. It's a "receipt" because you "receive" it and keep it to later reconcile with your monthly bank statement. If you see an error in your bank statement, the receipt provides proof of the transaction to the bank.

- In elections, voters walk away from the polls with no way to know whether their vote was counted properly or even counted at all.

Adding independent validation and verification technology like VHTi to elections will prove the validity of an election results and will give voters the chance to track their vote like they track their money – with full ballot secrecy protection.

Why should voters care about verifying their vote?

Until now, voters have had no way of knowing if their vote was counted properly in the final results. Potential security holes in DRE voting systems have been publicized, leading to a drop in voter confidence. We know paper ballot-based systems have a long history of problems. But DRE's, paper ballots, and all other types of voting systems used in the US in 2004 have one thing in common: None gives voters the ability to verify that their vote was counted properly in the election results.

Think about how you bank or make credit card purchases: You get a receipt for every transaction to reconcile against your monthly statement. If you see an error in your bank statement, that receipt gives you proof of the transaction details to dispute with the bank. As a result, banks are almost universally trusted in this country.

VHTi can bring banking-strength auditability and verifiability to elections, while also protecting every voter's secret ballot. We should be able to verify that our vote, like our money, was counted properly.

How does VHTi work?

VHTi is an independent verification and validation (IV&V) audit system that monitors an election end-to-end and is independent of the voting system. The VHTi system is 100% transparent and will, with near certainty, detect if ballots are corrupted, whether maliciously or accidentally.

VHTi makes voting as accurate and accountable as banking by implementing this same approach to election audit and verification, with minimal burden on election administration, the election system, and voters. There are five basic steps in an election with VHTi:

1. VHTi monitors ballot data produced in an election as it is produced for the full ballot chain of custody. VHTi then creates its own audit data and separates it from the primary ballot data, so it doesn't interfere with the main election process.
2. State election officials can then take that separate VHTi audit data and allow anyone to independently audit it. This gives independent validation of whole election results.
3. Every voter gets a "basic receipt" with zero additional effort. The basic receipt allows voters to verify that their ballot was counted in the final results. Most voters won't even notice it since VHTi prints the "basic receipt" only after they have cast their ballot on the electronic voting system.
4. VHTi offers voters the option to take home a "detailed receipt" to verify that their votes for specific contests were counted properly – with full privacy and little to no additional polling place effort. The "detailed receipt" provides a spot-check on the

election. Only a few voters are likely to take a few minutes to verify their votes for specific contests with a “detailed receipt”.

5. After the election, voters with receipts verify their ballots against the independently audited election results. In the end, voters will have confidence that what they see upon verification really means that their vote was counted properly because someone has independently audited the whole election.

You can step through a quick demonstration of VHTi here:

<http://www.votehere.com/downloads.html>

Why should I trust VHTi?

VHTi is not just another “trust me” technology. In fact, exactly the opposite - it is a “trust no one” technology.

The ideal in elections has always been to enable transparent third party audit – audits that convince voters of the validity of election results. However, voters generally do not understand how a lever machine works, or how a punch card system works, how a ballot is optically scanned, or how a paper ballot chain of custody works because most voters cannot be part of the election process beyond casting a vote on election day. Instead, voters must trust that authorities, party observers, and watchdog groups will scrutinize both the mechanism and the process of our elections.

Now, VoteHere has enabled a new level of transparency, allowing independent parties to audit whole election results, and giving voters the chance to check if their ballot was counted properly inside those independently audited results.

VoteHere began a full-disclosure process in 1999 by filing (and as a result, publishing) the underlying VHTi technology patents. We made the early observation that audit systems cannot hide behind “trade secrets,” and so decided to publish our technology. In September 2003, we publicly released detailed technical documentation. And in 2004, we published two versions of the full VHTi source-code plus technical documentation for public scrutiny. This is unprecedented in the world of election systems. Following is the link to see the VHTi source code: http://www.votehere.com/vhti_ref_source_code.asp

The VHTi software code is published, the cryptographic protocols are published, and all the election data is published. It’s all laid out in the open. This lets anyone independently audit the results of the whole election, and every voter can verify that their vote was counted properly in the final results.

As applied by VHTi, cryptography reduces the need to trust election officials, hardware, software, procedures, and vendors. None of today’s current voting systems can offer this – not paper ballots, VVPB, or DRE’s. With all of today’s voting systems, we are forced to trust that our votes are handled properly beyond the poll-site.

Can’t someone just change the votes in the main results database?

No, because the math equations in VHTi track each and every vote from the voting machine to the ballot box through the final election results. For each step in the processing of votes, a math equation proves that the step was done correctly and can be verified independently.

VHTi would detect if even a single vote is added, deleted, or changed because the math equations that manage all the votes end-to-end would compute differently than expected

and would then raise an alarm that the results were altered. Also, remember that all the math equations, software code, and vote data are published for full independent audit by anyone, further guaranteeing that the results are 100% valid.

How does VHTi change the voting process?

Verification with VHTi is optional for all voters. Voters not wishing to verify vote as normal and are given a basic receipt with zero additional effort.

For voters who choose the option to verify specific contests, the VHTi voting process is fairly simple – similar to an ATM PIN-code process. After voting, each voter can choose a basic receipt or a detailed receipt. The basic receipt is the default choice and gives the voter a receipt that can be used to verify that their whole ballot was handled properly end-to-end, but does not include the ability to verify votes for individual contests. The detailed receipt includes verification of the voter's choices in any contests the voter chooses to verify.

How hard is it for voters to learn how to use VHTi?

In focus group testing, the vast majority of voters found the verification process was easy to perform, particularly after stepping through the process once. Even with minimal pre-voting education, voters were able to complete the process efficiently.

VoteHere provides comprehensive pre-election voter education materials for election officials to integrate into voter pamphlets and other voter education materials. Also, because voter verification with VHTi is optional, voters have the choice of whether to take the time to verify or just vote as normal, so most voters will not even perform the extra verification steps.

How does the receipt prove that my vote was counted properly?

VHTi proves that the ballot the voting system will count is the ballot you actually intended to cast. VHTi does this through a simple procedure conducted in the privacy of the voting booth during which you create a receipt that prints enough of your voted ballot to prove its correctness to you, but not enough to let you prove how you voted to someone else.

The final piece of the process is the independent audit. All the receipt data, all the ballots, and all the ballot chain of custody data are made available for independent audit. VHTi source code and cryptography is also open for independent audit. When a voter verifies a receipt, she verifies it inside that independently audited election data managed by VHTi's openly-available source code and cryptography.

What is the difference between the two types of receipts?

Every voter gets a "basic receipt" with zero additional effort. The basic receipt allows voters to verify that their ballot was counted in the final results. Most voters won't even notice it since VHTi prints the "basic receipt" only after they have cast their ballot on the electronic voting system.

VHTi offers voters the option to take home a "detailed receipt" to verify that their votes for specific contests were counted properly – with full privacy and little additional polling place effort. The "detailed receipt" provides a spot-check on the election. Only a small percentage of voters are likely to take a few minutes to verify their votes for specific contests with a "detailed receipt".

Providing voters an opportunity to verify their vote provides election officials with tremendous opportunities for detecting election problems quickly and thoroughly. Statistically, even if a small number of voters faithfully verify their ballots using VHTi, any election anomaly would be caught with near certainty. If anything interferes with a ballot anywhere from the time it leaves the voter's brain to the time it is tallied in the final election results, its detection would be guaranteed and could be proven.

More about the VHTi detailed receipt can be viewed here:

<http://www.votehere.net/vhtiprotects.html>

How does the VHTi receipt protect ballot secrecy to defeat vote selling and coercion?

The private receipt contains several features to protect ballot secrecy. Once outside the voting booth, the receipt masks the voter's choices because all the choices in a contest are printed on the receipt, and the codes cannot indicate how someone voted. Additionally, VHTi includes an anti-coercion feature that allows a voter to change codes on their receipt for the choices in a contest they did not vote for in order to fool a coercer or vote buyer. This feature only affects what is printed on the receipt and does not affect the voter's actual vote choices. More about the VHTi detailed receipt can be viewed here:

<http://www.votehere.net/vhtiprotects.html>

On the other hand, it is clear that today's VVPB printers do violate ballot secrecy. As of February 2005, all commercially-available VVPB printers violate ballot secrecy because all utilize a reel-to-reel continuous scroll to store the ballots. This is the design standard today because of serious reliability issues of other types of printing devices. The scroll records each ballot in the order that voters voted on each machine, making it easy to track how each voter voted. Even the computer scientists who favor VVPB condemn reel-to-reel paper trails as violating voter privacy.

Regardless of design, disabilities groups are opposed to VVPB and other forms of paper ballots because they deprive sight-impaired voters of the ability to vote on a secret ballot.

Why are all choices from a contest shown on the receipt?

This protects the privacy of each voter's ballot in order to prevent vote selling or vote coercion. The private receipt masks the voter's choices. More about the VHTi detailed receipt can be viewed here: <http://www.votehere.net/vhtiprotects.html>

Does VHTi adhere to accessibility standards?

Yes. Electronic machines are required by the Help America Vote Act (HAVA) to be accessible and VHTi software works with the existing machines.

What does VHTi stand for?

VoteHere Technology inside. If you are using a voting machine with VHTi, it means that machine has the best possible security in the world today and you will be able to verify that your vote was counted properly in the final election results.

What independent experts support your approach to election security?

The open transparency of VHTi has allowed independent experts in the fields of elections, computer science, and cryptography to evaluate VHTi.

Currently, both Carnegie-Mellon Professor Michael Shamos and MIT Professor Ron Rivest are teaching graduate-level coursework using VHTi protocols for secure electronic voting. Professor Shamos has been called upon by many states to provide expert testimony about election reform and security. Professor Rivest is a cryptography pioneer, Turing Award winner, member of the CalTech/MIT Voting Technology Project, and is Chairman of the Security and Transparency subcommittee of the Technical Guidelines Development Committee (TGDC), the group setting federal standards for the Federal Election Assistance Commission (EAC) under the Help America Vote Act (HAVA).

You can read about our public support here:

http://www.votehere.com/vhti/documentation/support_for_votehere_august04.pdf

Voter-Verified Paper Ballots vs. VHTi

Why shouldn't we implement voter verified paper ballots (VVPB)?

Paper ballots have a long, well understood history of fraud and error. Since 1851, The New York Times has published 4,744 articles on paper ballot fraud. This equates to one article every 12 days for the past 150 years. These articles document 800 known cases of election fraud (one every 68 days.) The vast majority of these cases of fraud exploited paper ballot weaknesses.

Even now, the State of Washington remains tangled in a paper ballot hand recount crisis for its 2004 Gubernatorial election that includes allegations of fraud and error. The root of the crisis in Washington State is ambiguity around paper ballot handling, with controversies over mis-counted ballots, felon votes being counted, and much more. Washington State votes overwhelmingly on paper ballots (mostly optical scan), and these problems all share a root cause in lack of end-to-end auditability and voter verification *in the results*.

Voter-verified paper ballots would only provide assurance that the electronic voting system recorded the voter's intent properly. VVPB provides no assurance that the voter's ballot was counted properly, and therefore no independent assurance of the election results. At best, VVPB is a partial solution and at worst a placebo.

Worse yet, as of February 2005, all commercially-available VVPB printers violate ballot secrecy because all utilize a reel-to-reel continuous scroll to store the ballots. This is the design standard today because of serious reliability issues of other types of printing devices. The scroll records each ballot in the order that voters voted on each machine, making it easy to track how each voter voted. Even the computers scientists who favor VVPB condemn reel-to-reel paper trails as violating voter privacy. But today, it's the only VVPB design available.

Many others agree that VVPB is a bad idea, including the national leadership of the League of Women Voters, nearly all disabilities advocates, the bi-partisan Congressional drafters of the Help America Vote Act (HAVA), and fast-growing numbers of academics and scientists.

VHTi goes beyond VVPB and other kinds of paper ballots by allowing voters to verify not just that their vote was recorded (as VVPB does) but that their vote was actually counted properly as well (which VVPB absolutely cannot do) – all without reintroducing the known weaknesses of paper ballots or violating ballot secrecy.

Isn't seeing the paper ballot drop into a physical ballot box the most secure voting method?

No. While seeing the paper ballot drop into a box may be psychologically comforting, once it is in the ballot box there is no way of knowing if that ballot was counted properly in the final results. The paper ballot box is really a "black box" in which votes disappear and can no longer be tracked through the rest of the election process. With paper ballots, voters cannot verify that their vote was counted properly in the results - or even counted at all.

In e-voting, there is nothing to recount. Isn't that a problem?

While the need for meaningful audits of elections is clear, recounts in elections with paper ballots are needed mostly to overcome the inaccuracies caused by the difficulty of counting paper ballots - whether by hand or machine means. Paper ballots tend to get mis-counted, spoiled or lost, as we saw in the 2000 election. Electronic voting eliminates the need to recount paper ballots, though the need for a meaningful and transparent audit of election procedures, systems, and results still exists.

VHTi satisfies the need for a meaningful and transparent audit of electronic election results. The electronic audit enabled by VHTi is far more accurate than recounting paper ballots and can detect a problem with accuracy down to a single vote. By publicly publishing the ballots, results, and intermediate data of an election using VHTi's Election Transcript, any independent election observer may audit the full results of an election. This ensures that election results are checked by an independent set of auditors. If a discrepancy is uncovered with even a single vote, VHTi's audit capabilities can trace the discrepancy to its source. Simultaneously, each voter can see that his or her vote was counted properly. Paper ballot systems cannot provide that assurance to voters.

Independent audit and verification is a well-established best practice in many types of electronic transactions, including ATM banking, online banking, e-commerce, lotteries, credit cards, express shipping, and more. People have made trillions of these transactions safely and verifiably. Keep in mind that bank audits do not entail recounts of paper dollars. More broadly, no one would advocate for a return to a paper-based economy.

How is the VHTi receipt different from the VVPB paper ballot audit trail?

VVPB is a record of the voter's ballot that would be used in a paper recount, though there may be legal issues around using it for recount because it is not a "source document" completed by the voter. The voter cannot take it home, and it cannot be used by the voter to check that their vote was counted in the final election results.

VHTi's receipt is the voter's proof that their vote was recorded properly in the polling place and counted properly in the final election results. It would not be used in a recount because it masks the voter's actual choices from anyone else. In fact, recounting paper ballots is not necessary with VHTi because VHTi's Election Transcript enables an independent and transparent audit of whole election results with accuracy down to a single vote. This provides proof that all votes in an election were counted properly.

How is the VHTi receipt similar to the VVPB paper ballot audit trail?

VVPB is similar to VHTi in just one way: Both allow the voter to see that their vote choices were properly recorded by the electronic voting machine in the polling place. After that, VVPB has no use to the voter because they cannot track their vote beyond the polling place. VHTi takes voter verification a step further by allowing the voter to check that their vote

was counted in the final election results. And the public Election Transcript from VHTi allows anyone to independently verify that whole election results are valid.

Operational and Policy Topics

Do laws currently provide adequate provisions for a VHTi-managed election?

Election laws and procedures vary between states, counties, and even precincts. As we enter the era of electronic elections, many of these laws and procedures will need to be adjusted because they were drafted in the era of lever machines and paper ballots. In the end, electronic voting with an end-to-end audit trail such as VHTi simplifies elections greatly, and laws and procedures can be simplified and adjusted to match.

What new resource demands does VHTi add to the election operation?

VHTi adds minimal new demands to a jurisdiction already using an electronic voting system. Before and after the election, election authorities perform a few steps from a central location to set up VHTi for the election and enable decrypted vote tallying for the final results. These steps are performed in a highly automated fashion using VHTi's election management tools.

During the election, VHTi is self-sustaining. Pollsite demands are near zero because voter verification is optional and receipt length is usually short for voters who verify. Concerns about printers jamming and long pieces of paper requiring secure storage and transportation are eliminated. In most implementations, VHTi uses existing standard receipt printers like those used reliably on ATM's. More information about how VHTi works within election operations can be found here <http://www.votehere.com/documents.html>.

What happens if a voter detects a problem?

VHTi provides the ability to detect and report a problem so that it can be remedied – any time during the election process. For the first time ever, each voter would be able to prove that her vote counted, leading to improved confidence in the election results.

In the polling place, like any election, voters can ask a poll worker to spoil their ballot and start over. Election procedures would then be used to decide if that DRE should be taken out of service.

After the election and during the canvass, the voter should inform the election officials of the problem so that it can be traced and remedied.

What happens if a county or independent audit detects a problem?

Election procedures would govern the actions taken if a problem is detected. In general, VHTi enables election officials to trace the cause of a problem back to its source as part of the audit process. VHTi can even recover lost votes due to DRE reliability issues.

Sales and Implementation Topics

What does it take to integrate VHTi into an electronic voting system?

Integration effort is relatively low. Of all the voter verification solutions on the market, VHTi requires the least effort to integrate into current voting systems and election operations. VHTi has the lowest ongoing operating costs because it eliminates the need to transport, guard, count, and recount paper ballots and contemporaneous paper replicas.

How much flexibility is there around implementing VHTi?

VHTi works with any DRE, optical scan, or Internet voting system – in the polling place or absentee – with flexible voter and back-end options. Supported scenarios include:

1. Software can be directly integrated into most DRE systems with no additional hardware.
2. VHTi can be delivered in an optional external hardware device to work with any DRE or optical scan system. This may be necessary for older DRE systems, precinct optical scan systems, and central count optical scan systems.
3. VHTi includes back-end audit capabilities to track and remove ballots from non-eligible voters – transparently and openly for all parties to see.
4. Voter interface options include standard printer options with software privacy functions and special printer options with automated privacy functions.
5. VHTi can be integrated into vote by e-mail and other Internet systems to enable absentee voting by overseas military voters and others.

See <http://www.votehere.com/documents.html> for more information on implementation options.

Do you sell an electronic voting machine?

We do not sell a full voting machine. VHTi is software that can be added to any manufacturer's electronic voting machines to ensure the integrity of voting on those machines. VHTi is also offered in an outboard hardware device that plugs into an existing DRE.

Do you replace the software on the electronic voting machine?

We do not replace the software on the electronic voting machine. We just add a layer of voter verification and audit software.

What does VHTi cost?

The up-front list price of VHTi is roughly half the list price of voter-verified paper ballot (VVPB) printers. Just as important, the ongoing administrative costs of VHTi will be at least 90% less than VVPB because there are no paper ballots to collect, transport, store, and hand recount under high-security conditions.

Final pricing is determined according to the specifics of the implementation. Please email sales@votehere.com for details.

What partners can I buy VHTi from?

VHTi can work with any electronic voting machine. We currently have partnership agreements with AVS and Sequoia but we will work with any of the election vendors. Please email sales@votehere.com for information.

VHTi Reference Implementation Code Release

Why did you release VHTi source code in April, to NIST in June and update in October?

VHTi is based on the concept of transparent provable elections. Being good students of cryptography, we understand that security through obscurity is no security at all. It is important that voters have confidence that their votes are counted properly. This is achieved by an open, transparent electronic voting system.

Between 1999 and 2004, VoteHere filed patents on the technology that underlies the cryptographic protocols that were released. VoteHere released its full source-code as part of a reference implementation that implements the cryptographic protocols in April 2004. VoteHere released the same source code to NIST in June 2004. In October 2004, VoteHere released a Snapshot Release of an update to the protocols.

What exactly did you release?

- Reference source-code that implements the VHTi technology
- Instructions on how to build the source
- Samples of VHTi's function usage
- Document of known issues

You can download the full package here:

http://www.votehere.com/vhti_ref_source_code.asp

Will you be releasing all VoteHere code from now on?

This release currently represents all the VHTi source code. VoteHere is committed to continue releasing periodic VHTi source code updates for public scrutiny.

About VoteHere, Inc.

VoteHere Background

Founded in 1998, VoteHere, Inc., a venture capital-backed company headquartered in Bellevue, Washington, is an industry leader in secure, patented election audit technology. VoteHere's technology has been used in over 90 elections in the US and Europe, for over 50 worldwide clients and partners, reaching nearly 13 million voters.

VoteHere is committed to bringing elections to the same standards of verifiable accuracy as banking, e-commerce, credit cards, express shipping and other types of transactions we trust every day. VoteHere is striving to return transparency to elections, confidence to voters, and assurance to election officials. With VoteHere, we can have independent, end-to-end audit and verification to prove the validity of elections for the first time ever. The VoteHere website is www.votehere.com.

LEADERSHIP HIGHLIGHTS

Jim Adler, Founder & CEO – widely regarded as an authority on the subjects of cryptography, security and e-voting. He served on California's groundbreaking 1999 Internet Voting Task Force, testified before legislatures on the subject of e-voting, and is defining certification procedures for e-voting systems. Currently, he is co-chair of the IEEE voter-verification standards committee, which is defining national standards as part of the Help America Vote Act of 2002.

Brian O'Connor, VP Business Development & Sales – 15 years of experience in the voting system, information technology, and systems integration business. He has served in an executive capacity for such established voting companies as Sequoia Voting Systems, Global Election Systems, and Danaher Controls.

Ralph Munro, Chairman of the Board – Former Washington Secretary of State, led advancement in the efficiency of state election services including absentee voting, voter registration, election reporting, and voter information.

Robert G. Wolfe, Board Director – General Partner for Northwest Venture Associates and former President and COO of GT Group Telecom. Also provided Investment banking expertise at Goldman Sachs and Merrill Lynch and was President and CEO of Capital Savings Bank.