

State of Colorado Uniform Voting System Request for Proposal (RFP) Cover Sheet

SEALED RESPONSES MUST BE MAILED OR DELIVERED TO:

Colorado Department of State

Attn: Al Davidson

1700 Broadway

Suite 200

Denver, CO 80290

SOLICITATION NUMBER:	CDOS-UVS-2013-01
DEADLINE DATE AND TIME:	December 4, 2013 at 5:00 PM MOUNTAIN TIME
PURCHASING CONTACT:	Al Davidson
PHONE NUMBER:	303-895-2200, ext. 6361 (for delivery questions only)

BIDDERS MUST SUBMIT ONE (1) ORIGINAL AND NINETEEN (19) COPIES OF THE PROPOSAL AND ONE ELECTRONIC COPY FOR BOTH THE BUSINESS PROPOSAL AND COST PROPOSAL.

BIDDERS MUST COMPLETE THE BELOW INFORMATION.

F.E.I.N.	95-3248916
DELIVERY DATE	December 3, 2013 (RFP Response)
AUTHORIZED SIGNATURE	
TYPED/PRINTED NAME	Phillip W. Braithwaite
TITLE	CEO
COMPANY NAME	Hart InterCivic, Inc.
ADDRESS	15500 Wells Port Drive
CITY/STATE/ZIP	Austin, Texas 78728
CONTACT FOR CLARIFICATIONS	Justin Morris
CONTACT TITLE	Director of Sales, West Region
PHONE NUMBER	303.957.7426
FAX NUMBER	512.252.6466
EMAIL ADDRESS	jmorris@hartic.com

IMPORTANT: THE FOLLOWING INFORMATION MUST BE ON THE OUTSIDE OF THE RFP SUBMITTAL ENVELOPE AND/OR PACKAGE. SEE THE RFP FOR MORE DETAILED INSTRUCTIONS.

<VENDOR NAME>

RFP # CDOS-UVS-2013-01 <BUSINESS OR COST> PROPOSAL

DUE ON DECEMBER 2, 2013 AT 5:00PM MDT

PACKAGE # OF #

Please be advised that telegraphic or electronic responses (Fax, Western Union, Telex, etc.) cannot be accepted as a sealed proposal. Bidders are urged to read the RFP documents thoroughly before submitting a response.

This Proposal Cover Sheet **must** be signed by a representative of the vendor who is legally authorized to bind the vendor to their proposal. Vendors will be required to submit confirmation of their F.E.I.N. number prior to any issuance of Contracts, Purchase Orders, or payments resulting from this RFP.

RETURN THIS SHEET WITH THE PROPOSAL

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December 4, 2013

State of Colorado

Colorado Department of State

Attn: Al Davidson, CDOW-UVS-2013-01 Proposal
1700 Broadway, Suite 200
Denver, CO 80290

RE: Request for Proposal, RFP# CDOS-UVS-2013-01
Uniform Voting System

Dear Mr. Davidson:

Enclosed is Hart InterCivic's response to the State of Colorado's Request for Proposal for a Uniform Voting System. Selecting Hart will allow the State to seamlessly transition to the most modern system in today's market while maintaining reliability and compliance with the latest federal VVSG 1.0 (2005) standards.

Hart's solid reputation for successful project delivery, customer satisfaction and business integrity has been built through quality service to state, county and local government. We have provided election products and services to hundreds of jurisdictions nationwide to conduct thousands of secure, accurate and reliable elections. Hart customers include forty-five Colorado Counties, two of the five largest U.S. counties and the State of Hawaii. In January 2011, Hart was selected to provide the new state-wide system to the State of Oklahoma. Hart is proud of our reputation and the success of the jurisdictions currently using our products and services.

Hart's response to this RFP is centered on our "Verity" product line, which is the most modern system in today's market. When Hart began developing the Verity family of technology, we set out with one idea in mind: to build an all-new, modern voting system that learns from the lessons of the past decade and that builds upon the best foundations. Built around the core values of usability, adaptability and trusted transparency, Verity is a system designed not just for today, but for the future. This, backed by industry leading implementation, project management, training, and onsite service and support make Hart the right choice for the State of Colorado.

Verity is the latest, most comprehensive solution on the market today. Other industry vendors continue to sell solutions based on technology and parts that have been around for years. Not Hart. Verity is truly different.

Key values of the Verity System that support the State's needs:

Usability

- Intuitive hardware and software
- Flexible by-mail options based on jurisdiction size or desired method
- Modern user interfaces, with plain language notifications, for the best, most accurate voting experience
- Efficient ballot definition
- Easy configuration, transport and setup of lightweight voting devices
- Fast, customizable results reporting

Adaptability

- A comprehensive, holistic solution, with a living software platform for election management tasks (Verity Election Office) and the reassurance of certification for voting functions (Verity Voting)
- Paper and electronic voting devices with a shared design platform, which can be leveraged to a variety of implementation needs, including easy transition to by mail
- Scalability and configurability

Transparency

- The most current technology and best practices for application security, role management, intrusion detection, software validation, and data validation
- Easy efficient audits, with robust user-selectable filters for ballot images and cast vote record data exports
- Robust, readable audit logs with best practices for information design

Key components of the Verity Voting System that support the State's needs:

Central Scan Paper Ballot Voting

- Verity Central - the software application that allows election officials to scan and resolve absentee/by-mail or in-person ballots on standard-sized paper. Every aspect of Verity Central is designed for efficiency, fast throughput, and a high degree of transparency in working with scanned ballot images. The system is scalable and can accommodate multiple networked scanning client workstations. Verity Central supports robust auditability, with highly filterable ballot image searches, and access to original and annotated ballot images.

In-Person Voting, for Voter Service Centers

- Verity Scan – a durable, precinct-count (or small scale by-mail), paper ballot scanning system utilizing 100% digital technology
- Verity Touch Writer, with Verity Access – an accessible ballot marking device that prints full size ballots, providing every voter equality, privacy and anonymity; Verity Access is a HAVA-compliant Audio Tactile Interface (ATI) for voters with disabilities
- Verity Ballot – a ballot on demand system allowing for anywhere, anytime paper ballot printing

Election Management Software

- The industry's most versatile election management software for election definition, ballot management and tabulation that offers new possibilities for data analytics and is extensible for future capabilities. The Colorado Counties can be confident that all votes are secure, private and accurately counted.
- A complete package of services that includes a well-documented, professional training program for the SOS, Counties, and Poll Workers and onsite support for acceptance testing and installation, pre-election, Election Day and post-election activities.

Hart offers a tailored approach to fit the State's needs. Hart appreciates that while we bring considerable implementation experience to our clients, it is our commitment to understanding our customers' distinctive election environment that ultimately results in success. The powerful combination of the Verity Election Office software platform and VVSG-compliant Verity Voting components offers new possibilities for Colorado customization, to seamlessly integrate a variety of registration, voting, and reporting functions across a single uniform platform and enhances efficiency. Our comprehensive solution addresses every aspect of election management and the usability of the voting system for both voters and election officials, and it provides secure reporting. Hart's inclusive election management software uses an industry-standard operating system and tools, providing maximum flexibility for application enhancement and integration with the State's existing systems and processes.

Hart is an experienced provider of election technology. Hart is a technology innovator and boasts an extensive product patent portfolio. In particular, Hart is the only voting system vendor who has recently designed and developed a completely custom voting system for a statewide customer (Oklahoma, 2011). Also, Hart was the first voting system vendor to field federally-certified digital scanning technology (as early as 2001) to dramatically improve mark recognition and auditability. Hart has provided elections solutions to jurisdictions in fifteen states (including California, Colorado, Hawaii, Indiana, Illinois, Kentucky, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Virginia, and Washington) plus the District of Columbia, and serves more than 17 million registered voters.

The Verity system provides the State with the highest value and best solution in the industry. Total cost of ownership is minimized with the Verity system in two ways; first, through very competitive pricing and second, through low operational and maintenance costs. Re-configurable devices designed for VVSG compliance and smart, adaptable software enables the State to extend the useful life of the Verity solution, protecting the State's initial investment. By design, Hart customers become self-sufficient faster than those purchasing other systems – it is simply our philosophy. Our superior training and enablement, supply chain efficiencies and minimal failure rates mean customers have little-to-no dependency on Hart for consistently conducting successful elections.

The State is assured of a trusted voting system at every stage of the election process. The Verity system is designed with integrated security features, including verifying with automatic processes and authenticating component output through multiple, independent data paths within the system.

Hart is a low-risk, proven and trusted partner. Adhering to the highest standards of personal integrity and ethics, Hart offers a continued commitment to the elections community with organic growth, product development and efficient support of its products. Unlike some other providers, Hart does not suffer from the distraction of integrating and supporting other companies' hardware/software solutions and operational processes. In addition to Hart's unparalleled industry experience, the company has been recognized for its exemplary commitment to business ethics with The Samaritan Center Award.

This commitment is reflected through our Relationships Matter Program – Hart's approach to ensuring that each of our customers has a point of personal contact and liaison within the Hart organization. The Program is the conduit for customer's voices to be heard throughout our organization and leads to our continued joint prosperity. Hart is able to deliver success to our customers because we listen, we learn, we implement, we partner and most importantly, we do the right thing. In our 2013 annual customer survey, 92% of Hart customers rated the company's support as "above average" or "excellent"; 95% of Hart customers would recommend Hart to a colleague; and overall, according to published survey results from the top three election vendors in the United States, Hart has the best customer service and satisfaction ratings.

Hart combines our integrity and ethics with solid financial strength and stability, the best and most reliable technology, and a low risk solution with the most tenured team of services professionals found in any of the election companies. Hart has worked with states and counties across the country to facilitate successful elections and continue to offer our clients unequalled service and support.

As required by the RFP, Hart states the following:

1. All material and enclosures comprising our proposal are listed in the Table of Contents.
2. Hart has received Amendments #1 and #2 as well as the Answers to Vendor Questions

3. Hart does not have any current or pending projects with the State of Colorado other than normal business activity regarding the Hart Voting System.
4. There are no known conflicts related to this RFP.
5. Hart's proposed solution includes strategic partnerships with SOE Software and Business Ink.
6. The references included in our proposal may release information to the State of Colorado.
7. Hart is proposing a UVS solution that addresses Categories A, B, C, D, G and H.
8. As CEO of Hart, I am authorized to commit the company to the work proposed.

We understand that the selection of a new voting system is important to all stakeholders. You are investing in more than voting machines. You want the assurance that you are purchasing a complete solution that will result in accurate, secure and efficient elections and provide the best value to the State taxpayers. Hart assures this commitment through an integrated voting system solution that can grow with your needs and a dedicated, experienced project team that is ready to serve you. We look forward to a successful partnership with you on this important procurement.

Sincerely,

Phillip W. Braithwaite
CEO

Executive Summary

Hart InterCivic: Unparalleled Distinction (Reliable, Responsive, Respected)

For over a century, Hart has exclusively served the needs of state and local governments. Our passion is democracy and ensuring the sanctity of the vote. Helping our customers consistently conduct secure, accurate and reliable elections is at the heart of everything we do. More than what we do is **how** we do it. From the nation's smallest jurisdictions to its largest, there are reasons why Hart is synonymous with election excellence: unrivaled product quality and performance, superior customer service and the industry's most tenured and knowledgeable staff.

The State of Colorado can realize significant benefits from implementation of the Verity Solution. Key benefits include:

- The State of Colorado can meet or exceed HAVA requirements through the fully compliant and integrated Verity System, including central scanning capability (Central), digital ballot counters for in-person voting (Scan), and an accessible voting device that provides a verifiable paper audit trail (Touch Writer with Access).
- The State of Colorado can have confidence that all votes are secure, private, and counted with the system architecture and software included in the Verity System.
- State of Colorado voters with disabilities can vote privately and independently by using the Touch Writer with Access.

The Verity System is a fully integrated voting system backed by project management, training, and onsite service and support. Hart provides a secure, accurate, and durable voting system that is easy to use for voters and precinct officials.

Hart's Proposed Solution to the State

After thoroughly examining the RFP, gathering information during Hart's participation at the Bidder's Conference, responding to the State's request for input to the RFP draft and visiting counties across the State, Hart's understanding of the required voting solution is outlined below. We are confident Hart's proposed solution will meet the State's requirements more effectively than any other provider. However, we offer the following examples of unique requirements that determined the way Hart tailored our response and ultimately the solution the company would deliver to the State.

Our proposed solution for the State of Colorado includes hardware, software, and services based on the unique characteristics and technical design of the Verity system. Hart offers a fully integrated, digital voting system that blends central count paper ballot scanning for absentee/by-mail ballots with in-person paper ballot scanning and accessible ballot marking devices. In addition, our proposed solution includes ballot on demand printing for cost-effective convenience, remote transmission of results, and central count tabulation software. We believe that Verity is the only 2005-compliant modern voting system that includes **all** of these robust capabilities. Using the Verity Voting system, voters can cast their vote independently, accurately, and securely. In addition, Verity offers unmatched usability, transparency, and adaptability. For all of these reasons, it's the right choice for the State of Colorado.

To assist in the State's understanding of the Verity system, we provide the following introduction to its components and how each is used.

Central Scanning for Paper Ballot Voting

- **Verity Central** (2005-compliant voting system software). Verity Central is the software application that allows election officials to scan and resolve absentee/by-mail or in-person ballots on standard-sized paper. Every aspect of Verity Central is designed for efficiency, fast throughput, and a high degree of transparency in working with scanned ballot images. The system is scalable, to accommodate multiple networked scanning client workstations, if desired. The scalability also includes the ability to “right-size” scanners based on the size of the jurisdiction. If allowed by local election code, ballots with questionable voter marks can be resolved through an innovative on-screen resolution process. Verity Central supports robust auditability, with highly filterable ballot image searches, and access to original and annotated ballot images. When all ballots have been scanned and resolved, Verity Central writes Cast Vote Records to vDrive portable USB flash media, which can be tabulated in the Verity Count tabulation software. It is important and helpful to note that Verity Central does not tabulate votes itself; because it simply scans and records Cast Vote Records, this allows jurisdictions to begin scanning before the close of polls on Election Day, thereby greatly accelerating results reporting.

In-Person Voting Devices, for Voter Service Centers

- **Verity Scan** (2005-compliant voting system device). After marking a paper ballot, the voter feeds it directly into the Scan at the polling place (or if used as a small-scale by-mail solution, the elections staff performs this task). The ballot image is stored as a Cast Vote Record on vDrive portable USB flash media, which can be retrieved and tabulated by the Verity Count software application. Verity Scan is also capable of printing ballot count totals or unofficial Tally results in the polling place. Verity Scan includes a compact and durable integrated storage case, for secure, easy transportation and storage. The dimensions of the closed carrying case with the device inside are approximately 18.79”w x 15.55”d (17.39”d including handle) x 7.72”h.
- **Verity Touch Writer, with Verity Access** (2005-compliant voting system device). The accessible paper ballot marking device. For reduced cost and easy maintenance, Touch Writer is compatible with COTS printers, and it prints a marked, full ballot from blank stock, to provide equality of access for all voters. Ballot formatting designs support best practices authored by AIGA Design for Democracy (2007) and the Brennan Center for Justice (2008). Verity Access includes tactile buttons and audio ballot capability, as well as compatibility with other adaptive devices, such as jelly switches or sip and puff devices. Like Verity Scan, Touch Writer includes a compact and durable integrated storage case, for secure, easy transportation and storage.
- **Verity Ballot** (2005-compliant voting system device). Verity Ballot is a compact, easily portable Ballot-On-Demand device allowing for anywhere, anytime paper ballot printing. Ballot allows the State or County to reduce costs by managing many ballot styles electronically, while printing only the ballots you need, when you need them. Like Scan and Touch Writer, Verity Ballot includes a compact and durable integrated storage case, for secure, easy transportation and storage.

In-Person Voting Peripherals

- **Ballot Box.** Designed to work seamlessly with the Verity Scan device, the Verity Ballot Box is designed to be secure, light weight, and easy to deploy. Using an innovative folding design, the durable ballot box includes separate secure compartments for scanned and un-scanned ballots, and it folds to just 5” thin, for easy transportation and storage.
- **Voting booth.** Like the Verity Ballot Box, the specially designed voting booth for Verity Touch Writer is designed to be light weight and easy to set up. The booth includes only three

parts to assemble, and it also includes a durable nylon privacy screen. The Verity voting booth is also designed to comply with VVSG requirements for accessibility and within-reach controls. The booth folds to just 4” thin and may be stored in a convenient nylon based fabric bag for easy transportation and storage.

Software applications

- **Verity Layout** (election management software). Verity Layout is part of Verity Election Office, an election management platform designed for holistic interoperability with the Verity Voting components. Placing election management and voting system functions under one Verity “umbrella” provides the best of both worlds – flexible adaptability in a living software platform, plus the reassurance of certification for voting functions. With this unique, adaptable architecture, the State or County can have more flexibility as its needs change over time, whether in ballot formatting rules, customized integration or reporting needs, or other election management tasks; this forward-thinking architecture is an excellent match for the State of Colorado’s desire to unify different “silos” under one uniform system. Verity Layout accepts jurisdiction- and election-related data through a fresh, modern, highly usable interface, and it displays previews of how ballot styles will look in the Verity Voting system. Ballot formatting designs support best practices authored by AIGA Design for Democracy (2007) and the Brennan Center for Justice (2008). After election-related data is entered in Layout, the application can produce a flat file in a format compatible for import into Verity Build, the election definition software. To ensure system security, Layout is always installed on a workstation separate from certified voting workstations, thereby preserving an “air gap” at all times.
- **Verity Build** (2005-compliant voting system software). Build is the Verity Voting System software application that enables users to define, or “lock down” ballot styles and generate election definitions. Verity Build can accept properly-formatted imports from a variety of sources, including statewide data management tools, or Hart-designed tools such as Verity Layout. In addition to producing paper and electronic ballot styles, Build allows users to program voting device behavior in a variety of ways. After ballot generation, Build electronically writes the election data file (including all ballot styles) to portable USB flash media known as vDrives, which can then be deployed for a variety of different voting types, such as central scanning, with Verity Central, or in-person voting with Verity Scan and Verity Touch Writer. After generating election definitions, Verity Build can also print ballots or output them electronically, for third-party printers. Verity Build is scalable, to accommodate multiple networked ballot printing client workstations, if desired.
- **Verity Relay (optional)** (2005-compliant voting system software). Relay is the Verity software application that reads, stores, and transfers Cast Vote Records from remote satellite stations to the central counting facility. Relay does not tabulate votes; Relay reads the CVRs from Verity Central or in-person device vDrives, and transfers the CVRs to a Relay receiving station, which then writes the CVRs to portable USB flash media, which can be tabulated in the Verity Count tabulation software. To ensure system security, the Relay receiving station at the central facility is always installed on a workstation separate from Verity Count tabulation software, thereby preserving an “air gap” at all times. Relay stations can communicate via wireless, local area network (LAN) or modem connection.
- **Verity Count** (2005-compliant voting system software). Count is the Verity software application that tabulates and reports Cast Vote Records stored on vDrives. vDrives inserted into the tabulation workstation can contain by-mail/absentee votes from Central, or in-person votes from Scan devices. Once the CVRs have been read and tabulated, Count can produce a variety of standard and customized reports. Verity Count also includes

intuitive, attractive, easy to use “dashboards” to monitor progress on Election Night, or to perform post-election audits, in a highly filterable way. Verity Count can also produce reports and data exports in a variety of formats, including HTML.

- **Verity vDrive.** The flash memory media device that carries the election definition to Verity devices, including Scan and Touch Writer. vDrives also store Cast Vote Records (CVRs) and audit information.
- **Verity Key.** A two-factor authentication device, used to secure access to critical functions throughout the election. Two-factor authentication means that users must have the physical Key device, which is similar to a USB token, as well as knowing the passcode associated with the physical security device. This electronic device is required for access to secure functions in the Build, Central, Count, and Relay applications, including tasks such as accepting and locking down ballot styles, opening new election functions, and tabulating votes.

The Verity System is a multi-faceted voting system supported by project management, training, service, and support. Along with extensive technical expertise, Hart has a clear understanding of the election process and the needs of election officials.

Verity is the Right Choice for the State of Colorado

Hart has provided elections solutions to jurisdictions in fifteen states (including California, Colorado, Hawaii, Indiana, Illinois, Kentucky, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Virginia, and Washington) plus the District of Columbia, and serves more than 17 million registered voters. Hart is familiar with the State of Colorado and its priorities, already being the voting system vendor of choice in forty-five of the sixty-four Colorado Counties.

Hart InterCivic provides full-service elections. The foundation of our solution is Hart’s over 100 years of experience in all aspects of elections. Hart entered the industry printing ballots for Texas counties and has grown to provide a complete range of elections products and services to a large network of states, counties, and municipalities.

The State of Colorado will be assured of a secure voting system at every stage of the election process. The Verity System was designed with integrated security features, including automatic processes verifying and authenticating the output of each component through multiple, independent data paths through the system. Verity is the only electronic voting system to combine a modern interface, highly secure components in the polling place, and the convenience and integration of Windows-based election management software in the elections office.

Quality is a concern in every aspect of the Verity System. The Verity System was developed and is manufactured under ISO 9001:2000 certified processes to ensure quality. Stringent testing has demonstrated the System’s durability even in the harshest environments. This commitment to quality also applies to our print production facility certification process, whether it is a facility chosen by Hart or the State.

Hart’s personnel are experienced with the State’s elections process. We have worked with the State of Colorado and its counties to facilitate successful elections since the 2006 election cycle. The Hart personnel that will support the project have worked on site in Colorado, adding a unique advantage to the current knowledge of the fundamentals to the election process and procedures. Any new administrative changes that will be introduced in 2014 elections and beyond will be incorporated and adapted by our team.

Conclusion

The installation of a voting solution requires more than a vendor, it requires a trusted partner. Hart has maintained an outstanding reputation in the elections industry, and that reputation is backed by a long history of personal integrity and ethics. We have provided election products and services to hundreds of counties and thousands of municipalities nationwide and have supported every major election system on the market today. Hart's solid reputation for customer satisfaction and business integrity has been built through over a century of quality service to county government. We offer the State a trusted partner relationship, one that provides candid and sound advice to avoid unnecessary risk and to guarantee a successful implementation for the constituents, election officials and the State.

Hart's Verity solution will meet, and/or exceed, the needs required as stated in the RFP. Verity will provide the most modern and advanced voting system on the market today. As described in our response, the Hart solution preserves the State's existing priorities (such as ballot secrecy) while sensibly introducing a successful strategy to implement SCORE integration and other State applications.

The decision to modernize the voting system is an exciting and historic undertaking for all stakeholders. Such an endeavor is an extremely important investment in the political process, as it is a model for other jurisdictions in the U.S. and other countries. The solution Hart is offering is a prudent and sound investment for today and the future. These components, coupled with Hart's experience with successful large and small scale implementations further mitigate the risk in this procurement. We look forward to a trusted partnership in this exciting and historical endeavor.

Relevant Business Experience

Successful elections are the heart of our business. More than 590 U.S. jurisdictions, including two of the five largest counties and the States of Hawaii and Oklahoma, rely on Hart each day to conduct secure, accurate, accessible and reliable elections whether by-mail, or in-person. Hart is honored to submit the following references for our Hart Voting System.

	State / Jurisdiction and Project Description Contact Name and Title, Email and Phone Number	# of Registered Voters	Project Start / End Dates
(1)	State of Hawaii In September 2004 Hart began a project for the use of the Hart Voting System to support accessible voting for the State of Hawaii. Hart's tasks included delivering equipment, testing the system, and conducting training for State staff and poll workers. The aggressive schedule included fulfilling the plan to use the system that same month for the Primary election. Hart worked closely with the State to implement the system as desired, including integration with the legacy ES&S system. In 2006 the State of Hawaii again leased the Hart Voting System for the September Primary Election and the November General Election. Hart provided ballot setup, poll worker training, and tabulation services, resulting in successful elections. Hart's tasks included delivering equipment, testing the system, and conducting training for State staff and poll workers. Hart worked closely with the State to implement the system successfully for use as desired, including integration with the State's ES&S paper ballot system. In 2008 the State again leased the Hart Voting System, adding our digital scanning system for paper ballots. In other words, based on its prior	Hart provides a turnkey operation 705,668 registered voters	June 2004 – December 2014 (with an option to extend the full service contract through December 2020)

State / Jurisdiction and Project Description Contact Name and Title, Email and Phone Number		# of Registered Voters	Project Start / End Dates
	experience with Hart for accessible voting, the State of Hawaii chose to implement and use the entire line of Hart Voting System devices – the DRE, the digital in-precinct scanner and Central Count. In 2010, Hart was awarded a multi-year contract by the State for the leasing of the Hart Voting System in its entirety. Hart is the sole vendor to supply election products and services to Hawaii voters through 2014. Over the course of Hart's partnership with the State, we have deployed and supported over 3,000 pieces of equipment. All work has been performed on time and within budget. Mr. Scott Nago, Chief Election Officer Scott.Nago@hawaii.gov 808-453-8683 Mr. Rex Quidalla, Voter Services Manager rex.m.quidilla@hawaii.gov 808-453-8683		
(2)	State of Oklahoma In 2011, after a thorough RFP, demonstration and selection process, Hart was awarded the State's voting equipment and services contract. On behalf of Oklahoma's 77 counties, the State selected Hart from three qualifying responses. Hart provided the counties with over 2,200 digital scan units, corresponding ballot boxes, the EMS software suite, over 100 pieces of COTS hardware, associated voting device peripherals (batteries, headphones, etc.). Hart Professional Services included equipment deployment and set-up, testing, training (staff, election officials,	2.1 million registered voters	2011 - ongoing

State / Jurisdiction and Project Description Contact Name and Title, Email and Phone Number		# of Registered Voters	Project Start / End Dates
	and train the trainer), and early voting, election day support and post-election activities. Since initial award, Hart has provided a utility to be used with our scanning software and a UOCAVA integration application. All work has been performed on time and within budget. Mr. Paul Ziriaux, Director, SBOE pziriaux@elections.ok.gov 405-521-2391 Ms. Pam Slater, Election Technology Coordinator pslater@elections.ok.gov 405- 522-6626		
(3)	Harris County, Texas Harris County is the third most populous county in the U.S. with 1.9 million registered voters. The County selected the Hart Voting System in the summer of 2001 to replace its punch card voting system. The implementation to a countywide system was managed over several election cycles in the course of 18 months. Initially, the County implemented DRE voting for a city officers' election in Houston at Early Voting sites, where approximately 40 to 50 percent of votes are cast in a typical countywide election. Phase II involved the use of Hart's absentee-by-mail voting system (Ballot Now), along with DRE voting systems at Early Voting sites for the primary, and demonstration eSlate voting units in all polling locations. Phase III was a full DRE implementation at the poll sites with ballots provided in three languages (English, Spanish, and Vietnamese) in a countywide general election.	1.9 million registered voters	2002 – ongoing

State / Jurisdiction and Project Description Contact Name and Title, Email and Phone Number	# of Registered Voters	Project Start / End Dates
In this implementation, Hart replaced a central count punch card voting system with the Hart Voting System. Hart was responsible for writing the interface to allow the punch card tabulation system to work with the Hart Voting System's Tally application. This interface imported the punch card tabulation results into Tally, and then combined the vote totals with the Early Voting and by-mail vote totals into a consolidated vote total on a precinct-by-precinct basis. Tally also reported results into the statewide database maintained by the Texas Secretary of State, as well as exported results to the County's Web site for public viewing. In late August 2010, a three alarm fire broke out in a County-owned warehouse. The County's entire inventory of election equipment was housed in the facility. With over 10,000 pieces of election equipment destroyed and early voting for the General election beginning in less than six weeks, the County turned to Hart as their trusted election advisor. Hart immediately put a Disaster Recovery Team in place whose members included representatives from Hart's Professional Services and Supply Chain departments. A production and implementation plan was put into place which included paper and electronic voting systems. Working closely with the County and our manufacturing partners, Hart has been successful in providing the County with their desired amount of equipment (3,500+ machines) for Early Voting and Election Day.		

State / Jurisdiction and Project Description Contact Name and Title, Email and Phone Number		# of Registered Voters	Project Start / End Dates
	All work has been performed on time and within budget. Mr. Stan Stanart, County Clerk sstanart@cco.hctx.net (713) 755-3550 Mr. Johnnie German, Elections Administrator jgerman@cco.hctx.net 713-755-5792		
(4)	Orange County, California Orange County is the nation's fifth-largest county with over 1,500,000 registered voters and 2,200 precincts. The Hart Voting System installation for Orange County covers every facet of the elections process including by-mail voting, Early Voting, and Election Day balloting in five languages: English, Spanish, Vietnamese, Korean, and Chinese. It is one of the largest electronic voting system installations in the country. For this installation, Hart provided 9,000 eSlate voting terminals and voting booths, with 1,750 modified with Disabled Access Units (DAUs); 1,750 Judge's Booth Controllers; and all associated hardware. Software provided includes Hart's comprehensive ballot management solution (BOSS and Tally) and Ballot Now, a fully integrated by-mail voting solution. Additionally, Pitney Bowes, a leading provider of mailstream solutions, developed a mail handling system designed to integrate with Hart's by-mail election process. In addition to the numerous polling place voting units, Hart provided our comprehensive ballot management solution (BOSS and Tally) and Ballot Now, our fully integrated by-mail voting	1.6 million registered voters	2003 – ongoing

State / Jurisdiction and Project Description Contact Name and Title, Email and Phone Number		# of Registered Voters	Project Start / End Dates
	solution. In the November 2006 General Election, 503,046 absentee ballots were issued – representing 33.6% of registered voters. Since the initial installation in 2003, the County has purchased Verifiable Ballot Option (VBO) units to provide a voter verifiable paper audit trail of each vote cast on the eSlate electronic voting units. Mr. Neal Kelley, Registrar of Voters Neal.Kelley@rov.ocgov.com 714-567-5139 Ms. Kay Cotton, Director, Voter Services kay.cotton@rov.ocgov.com 714-567-7600		
(5)	Hamilton County, Ohio Although most jurisdictions in Ohio use DRE voting systems, Hamilton County chose to use paper ballots in the polling place. To provide this capability, the County purchased Hart's eScan digital scanning units in March 2006, as well as eSlate voting units equipped with DAU modules and VBO units for accessible voting. Absentee-by-mail ballots are provided using Hart's Ballot Now application. In its effort to comply with the Help America Vote Act of 2002 (HAVA), the Hamilton County Board of Elections researched current election technology and tested a variety of voting systems before selecting the Hart Voting System. The County's purchase of the Hart Voting System allowed voters to cast their ballots on new voting technology for the first time in 30 years. The County has recently started producing their own paper ballots for all	599,433 registered voters	2006 - ongoing

State / Jurisdiction and Project Description Contact Name and Title, Email and Phone Number		# of Registered Voters	Project Start / End Dates
	elections except November General Elections. Hart has developed a Ballot Production Procedures document and provided this to the County for guidance on best practices. The County continues to become more self-sufficient in managing its elections. Ms. Sherry Poland, Elections Administrator sherry.poland@hamilton-co.org 513-632-7088 Ms. Sally Krisel, Deputy Director sally.krisel@hamilton-co.org 513-632-7011		
(6)	Tarrant County, Texas Tarrant County (Fort Worth) chose the Hart Voting System in 2001, with its Tally application, to consolidate and report vote totals. Hart wrote an interface with the ES&S Eagle precinct-based optical scan system so that the vote totals are imported into Tally, and then used the Hart-developed consolidation product, consolidated and reported according to the County's requirements. The results are also fed to the County's Web site continuously as returns are available. Tarrant County uses an internally developed, mainframe-based voter registration system. Hart wrote a software utility that allows the Hart Voting System to interface with this system. The net result is that the precinct worker qualifies the voter, and once this task is complete, the JBC is instructed by the voter registration system to print an Access Code linked to the appropriate ballot style and precinct. Tarrant County also has a copy of its voter registration database on CD for use in the event of a communications failure, allowing	926,682 registered voters	2001 - ongoing

State / Jurisdiction and Project Description Contact Name and Title, Email and Phone Number		# of Registered Voters	Project Start / End Dates
	uninterrupted voting. Since its initial purchase, the County has chosen to add eScan units to its voting equipment inventory. The eScans are used in the polling places to image paper ballots, replacing the County's ES&S equipment. The County has also purchased 200 additional standard eSlate units. Mr. Steve Raborn, Elections Administrator srraborn@tarrantcounty.com (817) 831-6480 Mr. Stephen Vickers, Assistant Elections Administrator svickers@tarrantcounty.com (817) 831-6437		

Hart has not been involved in any litigation over contract performance.

Prior Proposals

Hart has submitted proposals to the following states or territories between July 2008 and November 2013. We have submitted numerous proposals to counties and cities across the U.S. during this same time period. Hart can share the information for these responses also, should the State of Colorado be interested.

State of Territory	State of Oklahoma
Contact name, telephone and email address	Mr. Paul Ziriaux, Director, SBOE pziriaux@elections.ok.gov 405-521-2391
Date proposal submitted	October 14, 2010
Result of Hart's bid	Awarded to Hart
Brief description of Hart's proposal	In 2011, after a thorough RFP, demonstration and selection process, Hart was awarded the State's voting equipment and services contract. On behalf of Oklahoma's 77 counties, the State selected Hart from three qualifying responses.

State of Territory	State of Hawaii
Contact name, telephone and email address	Scott Nago, Chief Election Officer Scott.Nago@hawaii.gov 808-453-8683
Date proposal submitted	February 23, 2010
Result of Hart's bid	Awarded to Hart
Brief description of Hart's proposal	Hart was awarded a multi-year contract by the State for the leasing of the Hart Voting System in its entirety. Hart is the sole vendor to supply turnkey election services, including training, election products, warehousing and storage, and early voting and election day support, to Hawaii voters through 2014.

State of Territory	Commonwealth of Virginia
Contact name, telephone and email address	Ebony K Beaver, VCO, VCA procurement@dgs.virginia.gov 804-786-0177
Date proposal submitted	October 15, 2013
Result of Hart's bid	Not yet awarded
Brief description of Hart's proposal	Hart proposed to a state-wide supply of election products and services, including in-person, absentee and central count voting devices, training, and early voting and election day

	support.
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State of Territory	State of Alaska
Contact name, telephone and email address	Shawn Henderson, Procurement Officer shawn.henderson@alaska.gov 907-465-3899
Date proposal submitted	August 15, 2013
Result of Hart's bid	Awarded to PCC Technology Group
Brief description of Hart's proposal	Hart partnered with VR Systems, Inc., proposing the development, implementation, data conversion, testing, installation, maintenance, support and training of a new centralized, integrated statewide voter registration and election management system that includes an electronic pollbook solution for the State of Alaska.

State of Territory	Republic of the Philippines
Contact name, telephone and email address	<i>Hon. Sixto S. Brillantes Jr., COMELEC Office of the Chairman</i> chairman@comelec.gov.ph 632-527-2771
Date proposal submitted	May 4, 2009
Result of Hart's bid	Awarded to Smartmatic
Brief description of Hart's proposal	Hart partnered with Indra and SAHI, proposing the first ever full service, automated national election to the country. This included voting equipment delivery and deployment, logistics, results transmission, change management, voter education and operations.

State of Territory	Commonwealth of Puerto Rico
Contact name, telephone and email address	Hector Conty Perez, President, Comisión Estatal de Elecciones de Puerto Rico HConty@cee.gobierno.pr 787-294-1190
Date proposal submitted	August 2, 2011
Result of Hart's bid	Awarded to Dominion
Brief description of Hart's proposal	Hart proposed the development, implementation, testing, installation, maintenance, support and training of a customized electronic paper based voting solution for the Commonwealth of Puerto Rico.

Project Management

Hart InterCivic has a proven track record of delivering quality projects on time and within budget for its customers.

Please see the Project Plan and Project Workbook included in Tab 11.0, “Proposed Staffing” for additional information. The Plan and Workbook are used for all project implementations and include items managed by the Hart Project Manager including Risk Management, Issue Management, Staffing, Budget, Change Control, etc.

Advantages of Hart’s Methodology

Hart’s project management methodology offers several advantages:

- **Project Management reduces risk.** Using a structured project management process in system implementation helps to identify risk and uses predefined contingencies to combat project failure.
- **Constant communication avoids surprises.** Hart employs comprehensive communication plans to keep every project stakeholder adequately informed of project milestones, issue handling, and risk identification. Better communication reduces risk and allows everyone to succeed.
- **Clear documentation prevents confusion.** Standard training documentation, meeting minutes, and acceptance criteria are examples of the documents delivered. A list of customer responsibilities, including due dates, is also included (preferably at contract signing) to help ensure that project deadlines are met.
- **Project Management allows accurate estimates of cost and effort.** Using a proven method of delivery, Hart can predict how much a project will cost with a high degree of accuracy.

Hart’s Project Management Principles

Hart employs a Project Management approach based on the Project Management Institute (PMI) framework and extensive experience managing elections technology deployments for government agencies. This approach serves as a template that is customized and adapted to meet the specific requirements of each county. The Hart Project Team will apply these practices throughout the life cycle of the Colorado UVS project.

Our Project Management practices are concentrated around continuous oral and written communications. We accomplish this communication through weekly status meetings, monthly status reports, and formal project reviews with senior leadership. The Project Plan serves as the key communication device for articulating the project status and future goals. Using a structured project management process in system implementation helps to identify risk and uses predefined contingencies to combat project failure.

The State of Colorado and its counties will benefit from the key elements of Hart’s project management philosophy:

- **Communication.** Hart employs comprehensive communication plans to keep project stakeholders adequately informed of project milestones, issue handling, and risk identification. Better communication reduces risk and ensures successful project completion. Frequent and scheduled communication is a critical component of the Hart Project Management methodology. The earlier issues are identified and plans for resolution put in place, the lower the risk that a single issue causes project delays.

- **Project Reporting.** Project reporting consistently occurs internally and externally to keep all parties informed of project status and pending issues. At a minimum, the Hart Team holds a weekly status review meeting by telephone or in person between the Project Manager and the designated CDOS/County Project Manager. To facilitate open communication, these meetings often involve other project members. Weekly meetings provide a format to review the project status and discuss and resolve any pending issues.
- **Documentation.** Standard training documentation, meeting minutes, and acceptance criteria are examples of the documents delivered. A list of customer responsibilities, including due dates, is also included (preferably at contract signing) to help ensure that project deadlines are met.
- **Risk Mitigation.** Hart emphasizes risk management as a critical element of Project Management. Throughout all phases of the project, we constantly assess risks and implement mitigation strategies to address those risks. The Project Manager tracks and reports the risks weekly and addresses those risks using contingency plans that are defined when a risk is identified.
- **Quality Management.** Quality is a fundamental principle of Hart's business approach. Our customers expect quality and we value the importance of quality; the only way to ensure quality is to implement Quality Controls throughout the complete life cycle of a project. Hart's Quality Control techniques are built on industry standard practice. Hart's disciplined approach to quality assurance and control encompasses the practices of planning and prevention, the use of senior-level experienced staff, and a determined focus on client-based requirements.
- **Change Control.** Change control procedures deal with out-of-scope issues. When a consensus is gained that identifies an issue as out-of-scope, change control procedures are initiated to decide how to proceed. These procedures are defined during the Project Planning phase. If the decision is made to expand the baseline scope of the project to include an "out-of-scope" issue, the appropriate project contractual documentation must be updated, as well as the baseline scope definition.

Project Management Process

Hart has created a project management process specific to the implementation of workflow-oriented solutions. This process has evolved over several years and represents collective input from many project teams and certified project managers.

The Hart Project Management Process consists of three phases:

- **Analysis/Startup Phase.** The objectives for this phase are for CDOS/the County to learn and understand the Hart product offering and for Hart to conduct a general survey of the office and gather information for application set up and training needs (Business Process Analysis), highlighting changes from previous processes.
- **Implementation Phase.** This phase consists of hardware configuration and installation, software development and installation, system testing, user training, and documentation. A Preliminary Project Schedule is included with this proposal.
- **Support Phase.** In this phase, the project is transitioned from implementation to ongoing support status.

Analysis Phase: Business Process Analysis

Hart uses the Business Process Analysis (BPA) to help customers prepare to move from a legacy system to Hart's new system. This practice significantly augments the State's and counties

understanding of the proposed software as well as Hart's understanding of a particular County's processes.

For a project to be successful, all stakeholders need to understand the current and proposed business processes. When this information has been exchanged, potential areas for concern can be identified. The early identification of these issues will dramatically increase the potential for completing the project on time and within budget.

The BPA process yields Organization Change Management results, including documentation of processes for warehousing, election setup, mail ballot processing, Early Voting administration, and Election Day administration. Also provided is documentation of County Administrative Processes and State Elections Division Administrative Processes.

On-Site Analysis

The first part of Hart's BPA is gathering basic information about a customer's current method of conducting business. A Hart Professional Services Project Manager will visit each county to understand how the current elections process works and to establish a relationship with the users. In many cases, this Project Manager will provide application training and on-site support later in the project.

During the site walkthrough, the Professional Services Project Manager will note the current elections process workflow and may gather supporting document samples. The Project Manager will also work with appropriate County personnel to complete a Gap Analysis worksheet to review and determine areas for training and process integration.

In addition to conducting a site walkthrough, a project manager will assess risk and take care of any administrative items required for the daily running of the project, through an introductory site visit with the County.

Documentation

Specific deliverables are provided to each county during (or after) the site visit:

- **Business Process Analysis.** This document describes the current business process for all office functions at a high level of detail using narrative and workflow diagrams. Supporting sample documentation, forms, screenshots, etc., are attached for reference.
- **Variance (Gap) Analysis.** This document describes variances between current processes and the Hart voting system, and can include application and procedural issues. Each variance is detailed by describing the current feature or process, describing how that same feature/process is supported or handled within the Hart system, explaining the impact of the variance to the County, and providing a recommendation for managing the variance. The County and the Hart Project Manager subsequently review the Variance Analysis to determine whether recommendations are acceptable or if further research or modifications are necessary.
- **Project Plan and Schedule.** After completion of the BPA, the County and Hart Project Manager meet to review the Variance (Gap) Analysis and evaluate any needed changes to the Project Plan or Schedule.

These documents are delivered to the customer as a project milestone. Hart believes this part of the process promotes early discussion of appropriate issues, adds clarity to the understanding of the scope of work for both parties, and provides a framework for a successful project.

Implementation Phase

After Analysis and Planning have been completed, the project moves into the Implementation Phase. The execution of the project plan consists of hardware configuration, software configuration and testing, training, and documentation. Each activity has multiple steps, some of which may be performed concurrently.

Please see Tab 6.8, “Implementation” for additional information.

Training

The Hart training methodology provides a combination of instructor-driven lecture and student laboratory exercises to reinforce training materials and maximize student knowledge retention. The typical approach for a topic includes instructor lecture, instructor demonstration, a student walkthrough at the appropriate workstations, and student participation in an exercise that reinforces the subject.

Each student will be provided with a student-training guide and appropriate documentation for the formal Hart classes attended. The student training guide not only serves as an integral part of the training class but also is a valuable post-class reference or job aid.

Please see Tab 6.7, Training for additional information.

Staffing Plan

The Project Manager for the CDOS UVS implementation project will be David Magedson. David is responsible and accountable for all project deliverables, project personnel, and project budget. Reporting directly to the Hart assigned Colorado Project Director, Rich Geppert, David will work very closely with the CDOS project manager.

As the Project Director, Rich will serve to protect the project from threats, serve as an escalation point for the CDOS and provide long-term management of the Hart/State relationship. Rounding out the management team, Pete Lichtenheld will serve as the Project Executive Sponsor, providing a further escalation level to the State and counties, and internal authorization and funding for the Project.

The Project will be divided into four functional divisions, all reporting to the Project Manager:

1. Training: this team will be led by Senior Consultant and Training Specialist Jonathan Butterworth and will consist of subject matter experts and professional trainers who will provide full and complete knowledge transfer, documentation, and support to CDOS and county Voting Device Technicians, Election Technicians, IT Staff, and Training Staff.
2. Supply Chain and Logistics: this team will be led by Corporate Supply Chain Manager Dan Gately. Duties include responsibility for all hardware deliverables, supply chain management, and warehouse consulting and support for state and county Voting Device Technicians.
3. Engineering Services: this team will be led by Applications Engineer David Patino. The team will be responsible for integration of the new Hart Voting System with the SCORE voter registration systems and other State systems.
4. Voter Outreach Services: With Hart’s partner, SOE, our proposed solution includes an optional Voter Education Web Portal which will assist the State and all counties with providing voter education and information to voters in Colorado with finding information

about the new voting system and how the new voting locations work along with the new associated processes. The portal can include videos and other training content.

As is standard practice for Hart voting system implementations, the Hart Project Manager will focus on team integration, and will work to bring together all key members of the Hart and State project team into a unified, functional team. This begins with building a trusted relationship with the State project manager, and the two will then work together to ensure complete team integration.

This will be facilitated by regularly scheduled project team meetings that will take place throughout the life cycle of the project. Additionally, there will be a focus on open communication, beginning with monthly reports on project deliverables, milestone status, and schedule tracking. Open communication and establishing trusted business partnerships are a cornerstone of Hart's project management philosophy.

Please see the Project Plan document included in Tab 11.0, "Proposed Staffing" for additional information.

UVS Software

Detailed Description

- **Verity Layout** (election management software). Verity Layout is part of Verity Election Office, an election management platform designed for holistic interoperability with the Verity Voting components. Placing election management and voting system functions under one Verity “umbrella” provides the best of both worlds – flexible adaptability in a living software platform, plus the reassurance of certification for voting functions. With this unique, adaptable architecture, the State can have more flexibility as its needs change over time, whether in ballot formatting rules, customized integration or reporting needs, or other election management tasks. Verity Layout accepts jurisdiction- and election-related data through a fresh, modern, highly usable interface, and it displays previews of how ballot styles will look in the Verity Voting system. Ballot formatting designs support best practices authored by AIGA Design for Democracy (2007) and the Brennan Center for Justice (2008). After election-related data is entered in Layout, the application can produce a flat file in a format compatible for import into Verity Build, the election definition software. To ensure system security, Layout is always installed on a workstation separate from certified voting workstations, thereby preserving an “air gap” at all times.
- **Verity Build** (2005-compliant voting system software). Build is the Verity Voting software application that enables users to define, or “lock down” ballot styles and generate election definitions. Verity Build can accept properly-formatted imports from a variety of sources, including statewide data management tools, or Hart-designed tools such as Verity Layout. In addition to producing paper and electronic ballot styles, Build allows users to program voting device behavior in a variety of ways. After ballot generation, Build electronically writes the election data file (including all ballot styles) to portable USB flash media known as vDrives, which can then be deployed for a variety of different voting types, such as central scanning, with Verity Central, or in-person voting with Verity Scan and Verity Touch Writer. After generating election definitions, Verity Build can also print ballots or output them electronically, for third-party printers. Verity Build is scalable, to accommodate multiple networked ballot printing client workstations, if desired. Verity Build is designed for powerful functionality and straightforward operation for the elections office staff. One of the main ways that Verity Build supports user independence is by accepting data imports based on a format that is open and documented. In this way, different software tools can be used to enter data into the certified voting system. Whether users wish to maximize interoperability with existing software infrastructure, such as statewide election information management systems, or whether users want to use Layout, the Verity Election Office software application that can format data in manner compatible with the certified Verity Build application, Verity is designed to maximize flexibility, choice, and user independence for data entry. In addition, jurisdiction information that does not change from election to election is saved in an “Election Preferences” profile, which eliminates redundant data entry and greatly streamlines the election definition process.
- **Verity Central** (2005-compliant voting system software). Verity Central is the software application that allows election officials to scan and resolve absentee/by-mail or in-person ballots on standard-sized paper. Every aspect of Verity Central is designed for efficiency, fast throughput, and a high degree of transparency in working with scanned ballot images. The system is scalable, to accommodate multiple networked scanning client workstations, if desired. If allowed by local election code, ballots with

questionable voter marks can be resolved through an innovative on-screen resolution process. Verity Central supports robust auditability, with highly filterable ballot image searches, and access to original and annotated ballot images. When all ballots have been scanned and resolved, Central writes Cast Vote Records to vDrive portable USB flash media, which can be tabulated in Verity Count tabulation software. It is important and helpful to note that Verity Central does not tabulate votes itself; because it simply scans and records Cast Vote Records, this allows jurisdictions to begin scanning before the close of polls on Election Day, thereby greatly accelerating results reporting.

- **Verity Relay (optional)** (2005-compliant voting system software). Relay is the Verity software application that reads, stores, and transfers Cast Vote Records from remote satellite stations to the central counting facility. Relay does not tabulate votes; Relay reads the CVRs from polling place vDrives, and transfers the CVRs to a Relay receiving station, which then writes the CVRs to portable flash media, which can be tabulated in the Verity Count tabulation software. To ensure system security, the Relay receiving station at the central facility is always installed on a workstation separate from Verity Count tabulation software, thereby preserving an “air gap” at all times. Relay stations can communicate via wireless, local area network (LAN) or modem connection.
- **Verity Count** (2005-compliant voting system software). Count is the Verity software application that tabulates and reports Cast Vote Records stored on vDrives. vDrives inserted into the tabulation workstation can contain by-mail/absentee votes from Central or in-person votes from Scan devices. Once the CVRs have been read and tabulated, Count can produce a variety of standard and customized reports. Verity Count also includes intuitive, attractive, easy to use “dashboards” to monitor progress on Election Night, or to perform post-election audits, in a highly filterable way. Verity Count can also produce reports and data exports in a variety of formats, including HTML.

Clarifying Requirements

Under Hart’s license and support fee, Hart will provide firmware and software product release upgrades to the licensed Hart products (exclusive of labor). These upgrades are typically produced as a result of changing federal, state, or local requirements, a request of customers, software bug corrections, or the addition of features and functionality that will improve the product.

Major system releases usually include new functionality, upgrades to meet new statutory and regulatory requirements, defect repairs, and improved performance. Hart does not “patch” its certified systems. All software changes are incorporated into a planned, tested and certified system release that is inclusive of all system applications. This approach is used regardless of the size of the change – be it a minor defect repair or the addition of major new functionality.

Before any application revisions can be released to the field for implementation, the changes must be submitted to an independent Voting System Testing Laboratory (VSTL) and/or the EAC for approval. After VSTL and/or EAC approval, the changes must be submitted for state and/or local approval. When all approval processes are complete, Hart issues updates for equipment in the field and updated documentation is provided as part of the upgrade process.

The State may propose, suggest, or recommend changes to the Hart Software at any time in writing to Hart. Such proposals, suggestions, or recommendations will become Hart’s property and Hart may include any such proposals, suggestions, or recommendations, solely at Hart’s option, in subsequent periodic Hart Software updates. Hart is under no obligation to change,

alter, or otherwise revise the Hart Software according to the State's proposals, suggestions, or recommendations.

Programming Language(s)/Version Numbers

All Verity applications software, on the desktop or the device, are developed using Microsoft C#.NET 4.5.

3rd Party Software Utilization

Verity is provided as a standalone computing system with all required third party software preinstalled by Hart on the voting devices and PCs. There is no requirement on the part of the customer to add and/or maintain any software components.

Security Hardening

The Verity system includes the following security features that are incorporated for complete system hardening:

- **User account management and password storage.** The workstation components used to manage election data, from creating ballot definitions to tallying final vote counts, are all protected by a role-based access control model and authenticated user accounts. The role-based authorization model allows administrators to easily apply the principle of least privilege by assigning users only those privileges necessary to carry out their job function. User passwords are maintained by the system in one-way salted hash format (PBKDF2).
- **Digital signatures of data.** All data maintained on the vDrive, including ballot definitions and cast vote records, are protected with digital signatures. These cryptographic signatures are generated using the HMAC specification. This allows the device receiving a vDrive to verify the integrity and origin of the data before it is processed. This feature enforces existing policy and legal requirements that protects vote data in transit.
- **Two-factor authentication.** All cryptographic key material is secured by a two-factor authentication system. Cryptographic keys are required by workstation components to generate and verify vDrive digital signatures. These keys are stored on the cryptographic module (certified to FIPS-1 Level 3) and are further protected by the cryptographic module passcode. To access the key material, the two-factor authentication requires both: (1) something you have (the cryptographic module) and (2) something you know (the cryptographic passcode).
- **Network encryption of data.** Network transfer of data occurs only in specific, limited circumstances among customer-managed facilities. These transfers typically occur over temporary local private networks composed of a few machines. All client-server connections are protected using Secure Socket Layer (SSL) and mutual digital certificate authentication. Sybase network encryption features are enabled with mutual digital certificate authentication to secure connections to a remote DB.
- **Individual DB credentials for every customer.** Common design practice for workstation-based commercial applications accessing a bundled DB usually involves the use of a hard-coded DB password in the application binary. This practice introduces a number of risks that are mitigated in the voting device design by the use of customer-specific DB credentials. The application generates a random set of strong authentication credentials at installation time. These credentials are unique to the jurisdiction and are completely subject to the election authority's control. There are no hard-coded passwords or encryption keys in the application binaries or source code.

- **Audit logs for all components.** All components in the system, including workstation devices used to work with election data, and devices used to cast and record votes on Election Day, support a persistent logging mechanism to capture all security-related system events.
- **Continuous integrity checks.** The voting device components run continuous background monitoring to ensure the integrity of the executable firmware. Firmware is stored internal to the device in non-volatile memory along with a verification table that provides a cyclic redundancy check (CRC) code for each of several code sections. When code execution begins, an operating system task performs a CRC calculation of each code section. The system is halted with a failure message if the calculated CRC does not match the expected value from the verification table. This verification operation is performed continuously while the system is active and provides protection against hardware failures and attempts to corrupt the device application.
- **Code Verification.** The firmware that resides in the voting device components is audited against unauthorized changes before and after the election. A cryptographically secure digital hash is used to verify that the device firmware is identical to the certified version on file with the responsible authority. This provides an additional technical protection against attempts to modify election software on voter terminals. Independent hash code testing can be conducted using a third party program to extract the hash code from installed software, and the hash code can be compared to that of the original source data to confirm that it has not been altered or corrupted.
- **Triple redundant storage of vote records.** When a voter casts a ballot, the information is recorded in three physically separate locations: internal memory, paper ballot, and on the vDrive. The different handling and usage profiles of these data storage components yield different risk profiles. These diverse risk profiles significantly increase the difficulty of compromising vote records in all three locations. Triple redundancy of data allows election officials to recover polling place “recount” data from the different storage sources. They can then investigate and reconcile any claims of fraud or device malfunction.

Source Code/Escrow

Upon award, technical documentation will be placed on-file with the Colorado Secretary of State, including escrow of the source code. The State and/or County may access those materials as prescribed by the Division of Elections.

If required, Hart will enter into an escrow agreement for the Verity system source code with the State of Colorado and a qualified escrow agent.

The escrow agreement would authorize the escrow agent to release the source code to the State if and when the State is deemed to have a right as defined in the agreement. Examples of specific terms of the agreement under which the source code may be released include:

- Hart’s cessation, for any reason, to do business;
- Discontinuation of maintenance of software; and/or
- Insolvency or bankruptcy.

In all cases, the terms of the *Verity System License, Support, and Warranty Agreement*, including confidentiality provisions, remain in effect. Specific language governing the escrow agreement will be determined in conjunction with contract negotiation.

The copy of the source code placed in escrow shall be reproduced and maintained on magnetic tape, CD-ROM, or disk using a commonly accepted data recording protocol. Program

documentation sufficient to allow a competent programmer to use and maintain the source code programs will accompany the source code.

Internally, Hart has implemented thorough security measures to ensure the integrity of the Verity system source code. For example, the server upon which source code rests has:

- A firewall to protect it from intrusion and virus files
- Microsoft security templates enabled, including complex passwords changed every 42 days
- Real-time antivirus scanning of all incoming files
- Real-time updating of virus definition files, which is then pushed to all computers on the network
- Daily full backup to prevent loss of any data

Hart also has instituted physical security measures for facilities management. Critical or sensitive business information processing facilities are housed in secure areas, protected by a defined security perimeter with appropriate security barriers and entry controls. They are physically protected from unauthorized access, damage, and interference. A clear desk and clear screen policy is recommended to reduce the risk of unauthorized access or damage to papers, media, and information-processing facilities. Access to all facilities is through card access. Confidential or proprietary information is locked in secure storage areas.

Trusted Build

Currently, Hart practices a Trusted Build process with the State of Colorado whereby any PC or laptop purchased by a Colorado County is shipped from Hart to the CDOS for Trusted Build installation. Hart can continue this practice with the Verity equipment, should the CDOS choose to have the Trusted Build installed at your location.

Similarly, Hart practices a Trusted Build process in California whereby the PC or laptop is shipped to the California County and a Hart Professional Services team member meets the equipment on location for the Trusted Build installation, overseen by the County. Hart can begin this practice with the Verity equipment, should the CDOS choose to have the Trusted Build installed at the County location.

UVS Hardware

Detailed Description

- **Verity Scan.** The in-person (or small-scale by-mail), digital ballot-imaging component of the Verity Voting system. After marking a paper ballot, the voter feeds it directly into the Scan at the polling place. The ballot image is stored as a Cast Vote Record on a media device that can be retrieved and tabulated by the Verity Count software application. Verity Scan is also capable of printing ballot count totals or unofficial Tally results in the polling place. Verity Scan includes a compact and durable integrated storage case, for secure, easy transportation and storage. The dimensions of the closed carrying case with the device inside are approximately 18.79”w x 15.55”d (17.39”d including handle) x 7.72”h.
- **Verity Touch Writer, with Verity Access.** The accessible paper ballot marking device. For reduced cost and easy maintenance, Touch Writer is compatible with COTS printers, and it prints a marked, full ballot from blank stock, to provide equality of access for all voters. Ballot formatting designs support best practices authored by AIGA Design for Democracy (2007) and the Brennan Center for Justice (2008). The Verity Access controller includes tactile buttons and audio ballot capability, as well as compatibility with other adaptive devices, such as jelly switches or sip and puff devices. Like Verity Scan, Touch Writer includes a compact and durable integrated storage case, for secure, easy transportation and storage.
- **Verity Ballot (optional).** Verity Ballot is a compact, easily portable ballot on demand device allowing for anywhere, anytime paper ballot printing. Ballot allows the County to reduce costs by managing many ballot styles electronically, while printing only the ballots you need, when you need them. Like Scan and Touch Writer, Verity Ballot includes a compact and durable integrated storage case, for secure, easy transportation and storage.
- **Verity vDrive.** The USB flash memory media device that carries the election definition to Verity devices, including Scan and Touch Writer. vDrives also store Cast Vote Records (CVRs) and audit information.
- **Verity Key.** A two-factor authentication device, used to secure access to critical functions throughout the election. Two-factor authentication means that users must have the physical Key device, which is similar to a USB token, as well as knowing the passcode associated with the physical security device. This electronic device is required for access to secure functions in the Build, Central, and Count applications, including tasks such as accepting and locking down ballot styles, opening new election functions, and tabulating votes.

Polling Place Peripherals

- **Ballot Box.** Designed to work seamlessly with the Verity Scan device, the Verity Ballot Box is designed for security, light weight, and ease of deployment. Using an innovative folding design, the durable ballot box includes separate secure compartments for scanned and un-scanned ballots, and it folds to just 5” thin, for easy transportation and storage.
- **Voting booth.** Like the Verity Ballot Box, the specially designed voting booth for Verity Touch Writer is designed for light weight and easy set up. The booth includes minimal parts for quick setup and it can be locked into place in one easy motion. The Verity Voting booth includes durable fabric privacy screens and is designed to comply with VVSG requirements for accessibility and controls within reach.

Clarifying Requirements

Under Hart’s license and support fee, Hart will provide software product release upgrades to the licensed Hart products (exclusive of labor). These upgrades are typically produced as a result of changing federal, state, or local requirements, a request of customers, software bug corrections, or the addition of features and functionality that will improve the product.

Major system releases usually include new functionality, upgrades to meet new statutory and regulatory requirements, defect repairs, and improved performance. Hart does not “patch” its certified systems. All software changes are incorporated into a planned, tested and certified system release that is inclusive of all system applications. This approach is used regardless of the size of the change – be it a minor defect repair or the addition of major new functionality.

Before any application revisions can be released to the field for implementation, the changes must be submitted to an independent Voting System Testing Laboratory (VSTL) and/or the EAC for approval. After VSTL and/or EAC approval, the changes must be submitted for state and/or local approval. When all approval processes are complete, Hart issues updates for equipment in the field and updated documentation is provided as part of the upgrade process.

The State may propose, suggest, or recommend changes to the Hart Software at any time in writing to Hart. Such proposals, suggestions, or recommendations will become Hart's property and Hart may include any such proposals, suggestions, or recommendations, solely at Hart's option, in subsequent periodic Hart Software updates. Hart is under no obligation to change, alter, or otherwise revise the Hart Software according to the State’s proposals, suggestions, or recommendations.

Hardware Device Specifications

Verity hardware devices are proprietary to Hart and are the configured models with which Hart will perform all the requisite federal and state testing and certification. As mandated by Federal and State certification parameters, the Verity System (including third party hardware) follows stringent parameters which include, but are not limited to, hardware, firmware and software version control. The sustainability and maintenance of the version control requires only Hart personnel to configure Verity and the third party hardware within the certification guidelines.

The Verity Scan and Touch materials lend nicely to heavy duty use and strenuous environments. The materials include:

- PC/ABS Thermoplastic (Polycarbonate mixed with acrylonitrile butadiene styrene)
 - stronger and more heat resistant than typical ABS and lighter than standard PC
 - typically used in the automotive industry for its longevity and structural integrity
 - cost effective option where rigidity and strength are required in conjunction with toughness and weight savings
- Nylon
 - Highly wear resistant – used for tablet flip latch and sliders

Recommended loading guidelines:

Can be stacked four high

The Verity booths and Scan ballot box materials lend nicely to heavy duty use and strenuous environments. The materials include:

- High strength Polypropylene (PP) Thermoplastic
- Rugged and highly resistant to fatigue loading

- Low density for minimizing weight
- Heat resistant (same material as microwaveable Tupperware)

Recommended loading guidelines:
Can be stacked 5 high

Pictures of Verity's unique, compact design are shown below.



Above: Verity Scan, Touch Writer, the voting booth in the carrying bag, and the folded Scan Ballot Box



Above: Verity Scan, open and closed case

Verity Voting Devices – Physical Access Controls

Verity voting devices have a variety of physical access controls to ensure that sensitive equipment is accessed only by authorized personnel. These access controls include keyed locks, features to support the use of tamper-evident seals, port protection, and non-standard electrical wiring in strategic areas. To be specific:

- Two keyed locks restrict a user's ability to open the integrated case that surrounds each voting device (i.e. "the suitcase").

- The exterior handle to each case was purposely designed with two mated parts that are easily surrounded by “zip tie”- type tamper evident seals, to prevent unauthorized users from opening the case.
- Inside each voting device case, the compartment that contains the sensitive flash memory device (vDrive) that contains the election definition, cast vote records, and audit logs is secured by a keyed lock.
- The compartment that contains the vDrive also includes features that support the use of tamper-evident seals.
- The removable, dockable tablet display inside each voting device includes a keyed locking mechanism to manage the storage, removal, and configuration of the tablet. In addition, the dockable display is further protected with an electromechanical control that notifies the system software of any unauthorized disconnection.
- All ports on Verity voting devices (e.g., USB ports for peripheral printers, etc.) are physically shaped in non-standard ways (i.e., they are also “keyed”), and they accommodate only Hart-proprietary cables and devices, in order to prevent unauthorized users from inserting unauthorized, standard commercial-off-the-shelf cables or devices into Verity voting machines.

In addition to physical access that prevent foreign devices from being inserted into Verity device ports, the internals of the devices are also electrically wired in non-standard ways, so any foreign devices are recognized, and the port is disabled in response to unauthorized insertions.

Finally, all ports on Verity voting devices can be covered with a metal security plate during storage and transport, to prevent unauthorized access to ports. Although the metal plate can be easily secured without tools, it can be sealed with “zip-tie” style tamper-evident seals, so that the port cannot be removed without detection.

The Verity ballot box, which is used with Verity Scan, also includes a number of physical access controls, including:

- Keyed lock to protect the main access door
- Keyed lock to protect the maintenance panel on the rear of the ballot box
- Support for tamper evident seals in the following areas:
 - Main access door
 - Rear access panel
- Movable cover for emergency ballot slot (in case power to the Scan is ever disabled)

Preventative Maintenance Schedules

Preventive maintenance requirements for the Verity System are minimal and are performed by Hart staff. Hart provides two Preventative Maintenance offers (neither included in the proposed pricing included with this response):

1. Every three years – coin battery replacement, scanner calibration, touch calibration, labor for software upgrades (if any) on devices and PCs. Please note, certain capabilities may be productized separately and not included in Verity upgrades/updates.
2. As above plus annual scanner and touch calibration and rechargeable battery replacement analysis.

The Verity System components require very little maintenance during the interim between elections.

Database

Database System

Verity is provided as a standalone computing system with all required third party software preinstalled by Hart, including SQL Server for the desktop computers, and SQL Server Embedded for the devices. There is no requirement on the part of the customer to maintain or service the database as its use and structure is proprietary to Verity. Additionally, the data model for the database is specific to the software architecture and does not provide open data models that can be applied for direct access, maintenance or mining.

Data Security

Verity security covers physical, electronic, software and policies for Verity customers

- Authentication is internal to Verity
 - User accounts and passwords are managed by Verity
 - Account management is not part of an application
- Authorization is role-based
 - Each user has a role
 - Each independent operation is authorized by the system based on role
 - Role Based Access Control (RBAC)
 - NIST-Approved Security Pattern
- Digital signatures provide tamper evidence and non-repudiation for
 - Verity executables
 - Election definition and device configuration
 - Cast Vote Records
 - Audit logs
- Verity Key serves two functions
 - Secure transport of secrets such as keys for digital signatures
 - Keyed to a single election
 - Two-factor
 - All user and system actions are logged and auditable

Verity implements an AAA security model separate from the host operating system and the State's infrastructure. This includes role based access control (RBAC). Verity Build, Central, and Count are physically separated from the intranet and extranet in order to reduce network-based risks. The Verity Layout workstations may be additionally configured to be part of the State's access control infrastructure.

All of the data, including logs, cast vote records, and election definitions, are digitally signed using FIPS 140-2 SHA-2 NIST approved methods to ensure non-repudiation. These methods include: implementing a local network that is not connected to other office or public networks; RBAC user accounts and 2-factor authorization for key actions; kiosk setup that does not allow users direct access to the operating system

The integrity of critical operating system files is protected by:

1. Implementation of the Enhanced Write Filter features of Windows 7 embedded to prevent changes
2. A system validation tool feature that allows users to verify the hashes on critical files of the operating system
3. A secure BIOS on polling place devices that ensures the system will only boot into the authentic Verity software environment

Back-up

On the voting devices, audit logs and cast vote records are redundantly stored to the vDrive (portable USB flash media), and to a partition on the Compact Flash card that also stores the device firmware. To recover the backup data, a user would enter an authorization passcode to access maintenance functions, insert a new vDrive, and follow steps on the device interface to transfer the backed up data to the “recovery” vDrive.

Technical Requirements of County computers

Verity is provided as a standalone computing system with all required hardware and software available from Hart, including computers. There is no requirement on the part of the County to purchase, maintain or service additional PCs for use with Verity.

Affirmation

Hart acknowledges that CDOS or a Colorado County which has implemented the Verity system will be sole owner and custodian of all election related data generated by the devices and shall have the unrestricted right to access and use this data without interference by or assistance from Hart, provided the CDOS or County has been appropriately trained.

Data Migration

Verity's Layout application (for election data management) offers robust and flexible capabilities to import election data from external systems to accelerate ballot planning while minimizing errors due to manual data entry. Layout is able to import data in CSV and XML formats. Layout is able to import both full and partial data sets (to replace, or append to, existing data).

Layout import file formats and native import capabilities have been exercised during testing. Documented data sets (e.g. field name, data type, description) exist for each of the elements listed below, which may be modified as required to accommodate Colorado State and/or County data elements. Additional customization may be required to integrate Colorado State data exports into an import-ready format for Layout.

- Election Data – general use election and jurisdiction data, including the type of ballot rotation to be used (if any)
- Ballot Images – metadata for images that may be placed on the ballot
- Party List – political party data, including sequencing, primary ballot header text and image association
- Polling Places – polling place names and descriptions
- Precincts – precinct and split names, descriptions and numbers of registered voters
- Party Precinct Voters – number of registered voters for the precinct and party
- Districts – district names and descriptions
- Contests – contest definitions, including name, type, instructions, rotation, number of choices, etc.
- Choices – contest options, including name, “yes/no,” party, sequencing, etc.
- Additional Information –choice detail text
- Ballot Instructions – instructions for the printed ballot and audio prompts
- Polling Place / Precinct Associations – precincts assigned to polling places
- Precinct / District Associations – precincts assigned to districts
- District / Contest Associations – contests assigned to districts
- Precinct / Contest Associations – contests assigned to precincts

After the project is awarded, Hart Product Management and Engineering personnel will conduct a working session with the State's subject matter expert(s) to complete a knowledge transfer and to gather data import requirements. Hart will capture and document the requirements for review and iteration with the State.

In parallel, Hart will collaborate with the State to define a project plan covering development work to be performed by the State (such as adding or modifying any data export capabilities) and work Hart that will perform (such as adding or modifying election elements and fields) to meet the requirements. The project plan will cover not only development tasks, but also development and execution of a detailed test plan and updated system documentation. Hart and the State will also define a phased roadmap that aligns with the overall project scope and delivery timeline.

The data integration services described above are included in Hart's proposal. In short, Hart is confident that the Verity system can and will successfully integrate with the State's election management and voter registration systems. Furthermore, Verity's unique architecture, which includes the Verity Election Office data management platform, along with VVSG-compliant

voting components, ensure that the Verity system can grow and change to meet the State of Colorado's needs as they evolve over time. This adaptability was a central design goal for Verity, and it distinguishes our uniquely modern system from previous generations of election technology.

Data Conversion/Integration

Hart has extensive experience integrating its products to legacy and competitor systems. Election results in any election may come from many different sources, especially during the transition to a new voting system. Voting may be conducted by absentee-by-mail, early voting, voter service centers, overseas military voting, provisional voting, or other means. Each voting method may be provided by a different vendor or system, each having its own form of results tabulation and reporting. Hart has years of proven experience in integrating and reporting the results from different vendors' voting systems into one cohesive, clear set of results and reports. Hart's design and development team includes experienced application design, engineering, and programming staff to support custom integration with other systems. We have managed numerous successful election results integrations using the Hart Voting System's Fusion software to provide customers with consolidated reports from ballots cast on punch card, optical scan, and other electronic voting systems.

The following are examples of the integration activities associated with installing Hart's voting system in a jurisdiction using other manufacturers' equipment, including voter registration systems and vote tabulation software.

State of Hawaii

In September 2004, Hart completed a project for the use of our voting system to support accessible voting for the State of Hawaii. Hart worked closely with the State to implement the system for use as desired, including integration with the legacy ES&S system.

The September 2004 Primary Election was the initial use of accessible Hart electronic voting units for the State of Hawaii. The project included deployment, set up, and management of Hart's equipment at each of the 353 Election Day polling places. Hart also provided services for ballot set-up, poll worker training, and tabulation. Twelve regional substations were established across seven islands for the modem transfer of results to the State Counting Center.

The November 2004 General Election marked the full use of the Hart system, including 12 Absentee Walk-In sites and 353 Election Day polling locations. Each of the Absentee Walk-In sites was equipped with an average of five voting devices. Each Election Day polling place included two voting devices. Regional substations were again used for the modem transfer of results to the State Counting Center. Hart again provided services for ballot set-up, poll worker training, and tabulation.

Key to this project was Hart providing tabulation integration between the State's legacy ES&S Unity 2.1 tabulation system and the Hart's tabulation application. The result of the integration was vote tabulation reports that merged totals from the two systems. Reports were generated centrally on Oahu, and Hart developed the system to provide these reports to the County Counting centers on the islands of Hawaii, Kauai, and Maui.

Given the aggressive time frame to execute processes for the 2004 Primary Election, Hart provided a proprietary consolidation product to integrate the ES&S .ASC file output with the Hart tabulation output and provide the merged results in a delimited text file. The Hart system

received the hand-carried ES&S .ASC file data at one location on Oahu, merged this data with Hart results on the entire State election, and provided this delimited text report to the State at the one location on Oahu.

City of Philadelphia, Pennsylvania

With the expertise of the Hart Project Management team, the City of Philadelphia was able to seamlessly integrate Hart's absentee voting component with Danaher's Guardian Election Management System.

- When ballots were created using the Danaher Guardian software, ballot data was simultaneously created for the Hart system.
- Hart's ballot-on-demand feature allowed the City elections staff to print over 40,000 ballots on-demand, avoiding costly commercial printing charges.
- After the ballots were scanned (using off-the-shelf equipment) and tabulated, Hart's tabulation application integrated with the Danaher Guardian system to import results from Hart's tabulation application for reporting vote totals.
- The City produced a single report that included both the Election Day and absentee voting totals.

Harris County (Houston), Texas

The implementation for Harris County required that Hart write an interface for the County's VEMACS voter registration system to the Hart voting device.

During Early Voting, an instance of the voter registration database was supplied to the early voting stations using a dial-up modem connection.

- Poll workers easily and accurately identified voters using the voter registration database.
- Upon identification and selection from the database, the voter registration system would send data to the Hart voting device via a serial port that instructed the device to print an Access Code appropriate to the voter's precinct information.
- More recently, the dial-up, thin client system was replaced with a laptop Windows-based personal computer connected via dial-up through a Web interface to an instance of the central voter registration database. The poll worker verifies the voter's information and then prints a label for signature by the voter. The label is then placed on the list of registered voters, and concurrently an Access Code is printed by the voting device so that the voter will automatically receive the correct ballot style.

Travis County (Austin), Texas

For the Travis County implementation, Hart developed a requirements document for an interface into the County's legacy voter registration and tabulation systems. Hart was also responsible for importing results from the central tabulation stations into our tabulation system in order to consolidate Early Voting and Election Day voting totals.

- After the County opted to centralize results, Hart wrote a program that was used to consolidate the output of three systems (from Diebold, ES&S, and Hart) into Hart's tabulation system.
- A laptop computer was available at early voting stations with communications to the central voter registration database. (A static version of the database was also on CD at the polling place in case of communication failure.)

- Labels for signature and Access Codes were printed automatically once the voter's information was verified.

Tarrant County (Fort Worth), Texas

The implementation for Tarrant County required that Hart write an interface to the ES&S Eagle precinct-based optical scan system so that the vote totals are imported into Hart's tabulation system, and then using a Hart-developed consolidation product, consolidated and reported according to the County's requirements.

- Results were fed to the County's Web site continuously as returns were available.
- Hart also wrote an interface to the County's internally developed, mainframe-based voter registration system.
- The voter registration database can be accessed remotely from the polling place. A static copy is also available on CD at the polling place in case of communication failure.

Other Jurisdictions

The integration efforts described above are only a sample of the extensive successful integrations performed by Hart. Tabulation integration systems similar in function to that described for the State of Hawaii have been completed successfully for Harris and Tarrant counties in Texas; for Orange County in California; for 15 counties in Kentucky, and eight counties in Washington. Integration between various voter registration (VR) systems and a Hart voting device, similar to that described for Harris County, have been completed for Tarrant, McLennan, Ector, and Fort Bend counties in Texas; for Orange County in California; and other accounts.

Other Types of Integration

In addition to the above projects, Hart has also provided custom applications that integrate with legacy systems.

Along with deep technical expertise, Hart has a clear understanding of the election process and the needs of election officials. We have developed solutions to a variety of election-related problems, including data archiving, warehousing, communications systems to transfer election data from the field, database management, ballot preparation, systems to speed up the production of reports and processing of election data, and much more.

Test Strategy

By the time of implementation, the Verity Voting system will have been thoroughly tested and certified to VVSG 1.0 (2005) requirements and submitted to the Colorado Secretary of State for certification. These two processes place much scrutiny on the Verity Voting system, including various test phases, execution and completion.

Hart develops and tests our Verity software in teams incrementally in small chunks, usually 1 to 2 week “sprints”. The team consists of designated developers and testers. The sprint team itself works solely on a specific set of features outlined at the beginning of the sprint. By the end of the sprint a feature must be tested and demonstrated in order to be considered complete. In addition, regression and unit test components are devised to ensure overarching integrity. Team members also perform ongoing testing, throughout the release cycle. This process inherently minimizes the risk of defect by focusing a high level of attention on the change and verifying its result at the end and throughout the process. It also means early demonstrable and acceptance testable software.

Communication Testing

A networking communications test that ensures efficient communication and usability of system will be conducted. Average time of operations will be verified for typical operations under heavy load.

Performance Testing

Existing high performance systems will be deployed to minimize performance concerns. Performance testing will consist of judging the expected loads on the given system. If they are sufficient as to cause a performance concern, then a performance test will be constructed that puts the system under expected load so performance can be accurately judged and adjusted until reasonable performance is achieved.

Load Testing

The Verity Voting system already supports very large data loads, as evidenced by our internal development and QA testing as well as the testing that will be completed for VVSG testing and certification. Minimal to no additional load testing should be needed.

Full Integration Testing

Integration concerns will be mitigated by the fact that Hart’s customization and testing follows the same rigorous process control as any Hart product offering. One major component of the test will be a regression comparison test that is run routinely throughout the development cycle as new testing releases are completed. The regression engine exercises large areas of the system to emulate system wide election activities. Its primary focus is to ensure that the major imports and exports of the system including key reports have not changed in behavior unexpectedly between progressive releases of the software. As a result, data inconsistencies and other defects are found and corrected very early in the development process, long before a customer has received a release.

Security, backup and disaster recovery testing

Up to date third party technologies are used to ensure out of the box security and redundancy. The County may choose to purchase redundant hardware to defend against single point of failure issues. Hart will provide recommended procedures and configuration assistance to ensure access

to system remains secure and reliable. The approach to system security and reliability will be very similar to that of what has been successfully implemented and used for years by our largest customers.

Acceptance Testing

Hart will assist the State to coordinate and conduct acceptance testing of voting equipment and software by providing onsite administrative and technical support.

The acceptance test confirms the functionality of the Verity Voting system polling place equipment as the jurisdiction first receives delivery. In performing an acceptance test, the jurisdiction is verifying that the equipment is in good working order. The State/County and/or the local jurisdictions will be responsible for acceptance testing, with support from Hart. Jurisdiction staff that will take part in acceptance testing includes warehouse contacts, election officials, information specialists, and other support personnel.

Upon delivery of the Verity Voting system components, the Project Manager and the State will schedule acceptance testing for each component. Initial acceptance testing of the Verity Voting system devices encompasses exercising all functionality of each individual unit to verify it is in good working order “out of the box.” Acceptance or rejection of each unit is documented on a Hart-provided spreadsheet containing the individual serial numbers of each unit shipped.

An end-to-end test (i.e., a “mock election”) of the Verity Voting system to include computer hardware and peripheral equipment (i.e., printers and scanners), software applications and a selective sample of voting devices may also be performed to verify the functionality of the voting system and to provide election officials with additional hands-on system training.

Hart will work with the State to agree on specific acceptance testing criteria. These criteria will include timeframes for Hart to correct any failures and present the equipment for retesting.

The jurisdiction will perform a functionality test between election cycles to verify that the voting system equipment is operating correctly and is election-ready. Manual functional tests are available for each subsystem, including testing of the input switches and buttons on the voting devices. Functionality tests may be performed as often as the jurisdiction sees fit; once per year being a recommended minimum. Neither the acceptance test nor the functionality test is a logic and accuracy test or a ballot proofreading exercise.

Training

“We were impressed by Hart InterCivic’s services, support and training. They always met or exceeded our expectations.” ~Beverly Kaufman, County Clerk (Retired), Harris County, Texas

Hart’s training concentrates on mastering the skills required to run smooth, successful elections with the Verity System. Our goal is for the customer to achieve a level of proficiency with the Verity System that allows for independent management of a successful election. An added benefit to the State or County is that our Training Consultants are veterans of all aspects of elections.

Training Objectives

Hart’s training program develops the election management skills required of permanent and temporary State or County elections office staff, technical troubleshooters, and poll workers. Regardless of the audience, our proven curriculum is designed around the following objectives:

- Task-orientation. Our curriculum is designed in modules that reflect specific tasks commonly encountered during pre-election ballot programming; testing; equipment preparation, deployment and setup; and tabulation and reporting of election results. Our step-by-step procedures support specific tasks required to use the Hart Verity Voting System successfully and efficiently.
- Hands-on methods. Our first priority is to teach using hands-on training methods, and each module of training includes hands-on exercises.
- Development of skills. Instead of “telling,” we train. In other words, we teach skills and we test that learners have achieved a basic facility with them. Retention of information and mastery of skills, which are key objectives of our training methodology, require a level of attention and care that goes beyond merely “telling.”
- High activity level. Our training curriculum is active, with a mixture of “classroom lecture” and “hands-on lab.” A variety of activities ensures that trainees remain engaged.
- Repetition and practice. Our training includes a separate simulation section during which trainees practice and review skills at their own pace. Written reviews are available as well.
- Simulation of real-world procedures. While training manuals are valuable resources, we are committed to training step-by-step procedures with materials, paperwork, and forms *identical* to those that will be used during real-world election operations. By gaining exposure to actual paperwork and procedures, elections staff, technical troubleshooters, and poll workers can feel more comfortable with the Verity Voting System and the associated State or County documentation.

Training Expertise

Hart conducts training for each new installation and recognizes that training expertise is a key factor in our users’ consistent success.

A professional Hart Training Consultant conducts all training in person for all office staff, poll worker trainers, troubleshooting personnel, and warehouse staff. To achieve the objectives outline above, our trainers use a variety of training methods, including hands-on exercises, multi-media presentations, discussions, and role-playing.

The Training Consultant provides feedback during exercises and provides various evaluation tools to help trainees assess their mastery and retention of new skills.

Training Methodology and Curriculum

The Hart curriculum has been tested through many successful elections with millions of votes cast. Thousands of election officials and poll workers have experienced first-hand how the Hart curriculum provides the skills needed to master essential tasks from ballot preparation to voting equipment setup to Election Night tabulation and reporting.

While our training solution always begins with a proven standardized curriculum, the curriculum is also continuously refined and tailored to meet the changing needs of Hart Verity Voting System customers.

Training courses include Operations Manuals, Training Manuals, and a variety of other media, including videos and graphic presentations. All of these are designed with a single objective: to help trainees achieve proficiency and self-sufficiency in the tasks required to conduct a smooth, successful election with the Hart Verity Voting System.

Training materials are provided to election officials during scheduled courses. Soft copies of the materials are provided to the jurisdiction in an easy-to-duplicate PDF format.

Courses Offered

While Hart takes its superior standardized curriculum as a starting point, the process of planning specific training events is oriented to each customer's local needs. State or County officials work with the Hart Project Manager and the Training Consultant to determine which courses are most appropriate and which staff members should attend each course.

Typical audiences include permanent and temporary election office staff, information technology (IT) personnel, warehouse staff, and poll workers.

Standard courses included in the standard Hart curriculum are described below. Specific course timeframes depend on local customization. As the State or County's staff or expertise level changes, the jurisdiction can purchase additional training or "refresher" courses which are provided in the same professional manner as all other Hart training.

Course	Number of Attendees	Duration	Audience	Topics	Courseware
Verity Management & Best Practices	Up to 20	4 hours	Elections Officials	The course includes learning how to manage the voting system for an efficient, successful election and how to complete administrator-specific tasks including assigning user passwords and accessing audit	Management Manual (including all election logs in electronic format)

				trail reports.	
Election Office Training	Up to 10	2 days	Elections officials, Election staff, data entry specialists	The course includes laying out ballots and import and export processes.	Operations Manuals and Training Guides
Build Operator Training	Up to 10	4 hours	Elections officials, Elections staff, Layout and Build specialists	The course includes security, formatting and generating ballots, proofreading, exporting and importing data, printing ballots and writing vDrive containing ballot information for the voting system components.	Operations Manuals and Training Guides
Central Operator Training	Up to 10	1 day	Elections officials, Elections staff and Central operators	The course includes scanning ballots, saving cast vote records back to the vDrives, sending the vDrives to Count for tabulation and resolution process training.	Operations Manuals and Training Guides
Count and Relay Operator Training	Up to 12	1 day	Elections officials, Elections staff, Count and Relay operators	The course includes security, processing vDrives from Relay and County, exporting and importing data, resolving write-ins and provisional ballots, reporting and a walk through of logic and accuracy testing.	Operations Manuals and Training Guides
Polling Place Operations	Up to 20	3 hours	Elections officials,	An essential course for	Desk Reference

(Administrative)			Elections staff and Lead/Alternate Poll workers	elections officials, and the entire elections department staff, to gain an understanding of the voting system. The course includes training on how to set up the polling place, open the polls, run the equipment, identify when voters may need assistance, suspend (and reopen) or close the polls, power down the system, handle the vDrive appropriately (if applicable), and pack the components for return to the warehouse. This course includes instructions on features such as the handling of provisional ballots. The course includes simulations, and it includes an optional written review. The Polling Place Operations course includes a segment on troubleshooting, and each trainee is provided an easy-to-read desk reference. The Polling Place Operations course	and Self-paced review materials
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				is taught to poll workers as separate courses. Poll workers and their alternates receive training from trained County professionals who have taken part in Hart's Train-the-Trainer program.	
Polling Place Courses Train-The-Trainer	Up to 20	2 days	Elections staff and/or local facilitators	Methodology, syllabi, course materials in soft copy and electronic format, practice teaching sessions, and presentation equipment orientation	Polling Place Desk Reference and Trainer's Handbook
Support Procedures	Up to 20	2 days	Elections officials, support personnel, and warehouse staff	Review storage, preparation, delivery, and maintenance procedures; review the voting system computer configurations; physically set up and connect the system hardware, and perform acceptance and functionality testing. Pre- and post-election activities include practicing troubleshooting procedures and preparing the hardware systems for an election. Also included are recommendations, procedures, and logs for election	Operations Manuals and Training Guides

				event troubleshooting technicians and help desk operators.	
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With Hart's partner, SOE, our proposed solution optionally includes an Online Training Platform that can be used to provide equipment training during rollout for staff and poll workers to get uniform training on the new voting system. This content would be custom developed based on the State's needs.

Training Materials

Hart provides training materials for State or County staff members and poll workers. Hart also provides soft copies of training materials for further duplication.

Planning the Training Program

To tailor the standard curriculum to local requirements, a Hart Training Consultant or Project Manager performs a training needs assessment as part of the implementation's business process analysis (BPA) and variance analysis. The goal in performing this assessment is to identify how best to bridge the gap between existing elections procedures and training, and the requirements of the new Hart Verity Voting System implementation. A sample training planner is provided below.

After reviewing the findings of the training needs assessment and variance analysis, the Training Consultant revisits the training plan from the original proposal in order to meet the customer's training needs. Our experienced trainers then identify options for where, when, and how initial training services are conducted. Hart also offers options for follow-up training sessions, including onsite classes, training in Users Group meetings, computer-based instruction, or online training utilizing Web conferencing.

Hart Verity System Training Planner - Sample CO UVS County																	
Details Course Titles	Trainees						Class Details			Calculations							
	Central Office Personnel	Support/Warehouse Personnel	Paper Ballot Resolution Team Members	Relay Operators	Poll Workers	IT Staff	CDOS Staff	Maximum Class Size	Time Allowed for Course	Sessions Per Day	Number of Trainees	Number of Sessions	Number of Person-Days	Number of Simultaneous Sessions	Number of Calendar Days	Number of Classroom Hours	Number of Trainer Person-Hours Work
Verity Management and Best Practices Course	6	2	2			2	2	20	4 hours	2	14	1	0.5	1	0.5	4	6
Election Office Operator Training Course	6					2	2	10	2 days	0.5	10	1	2	1	2	16	24
Build Operator Training Course	6					2	2	10	4 hours	2	10	1	0.5	1	0.5	4	6
Central Operator Training Course	4		2			2	2	10	1 day	1	10	1	1	1	1	8	12
Count/Relay Operator Training Course	6			2		2	2	12	1 day	1	12	1	1	1	1	8	12
Support Procedures Course (includes Acceptance Testing)	4	4				2	2	20	2 days	0.5	12	1	2	1	2	16	24
Verity Polling Place Operations Course (Administrative)	6	4				2	2	20	3 hours	2	14	1	0.5	1	0.5	4	6
Polling Place Train-the-Trainer	6				6	2	2	20	2 days	0.5	16	1	2	1	2	16	24
Total Number of Trainees		98						This is the Hart InterCivic Training Planner.									
Total Calendar Days of Training		9.5						The table is based on: -No more than two software course trainees per available PC. -Implementing Hart InterCivic's Train-the-trainer program for poll worker training									
Total Classroom Hours of Training		76						This training planner is intended to reflect training included in the initial phase of implementation. Training is not ongoing or repeating unless otherwise indicated in the contract.									
Total Trainer Person-Hours of Work		114															

Sample Training Planner

Implementation

Hart uses a project management framework approach that is based on the Project Management Institute (PMI) framework. This approach is enhanced through customization and application of “best practices” tested and proven during our extensive experience managing technology deployment for government agencies.

The Project Manager facilitates the creation of a comprehensive project plan and then works with cross-functional teams to plan and manage customer programs using proven “best practice” methodologies.

The project is managed in the three following overlapping phases:

- **Phase I: Plan / Design**
- **Phase II: Build / Deploy**
- **Phase III: Manage / Support**

Phase I: Plan / Design

This phase begins during proposal / negotiation activities where the scope and approach are planned and described. At contract award, the Project Manager reviews the final proposal / agreement and begins scheduling project setup / initiation activities. The Project Manager coordinates a project kickoff meeting with the County’s designated Project Manager / Team and begins compiling the following components of the detailed project work plan and schedule:

- **Scope/Definition:** Summary of the scope of the project as defined in the final proposal/agreement documents, identifying all the components necessary to meet the County’s requirements.
- **Project Team:** Identification of key individuals, including their roles/responsibilities.
- **Communication Plan:** Contact information for project team members and management, proposed schedule/format for standing project management meetings, escalation protocol for critical communications, proposed schedule/format of written communications, such as meeting notes, required reports, and so forth.
- **Issue Management Plan:** Procedures for identification, tracking, and resolution of project issues including escalation protocol, as well as identification of known open issues.
- **Risk Management Plan:** Initial identification of known risks, risk mitigation strategies, and contingency plans.
- **Integration Plan:** Identification of “work packages/processes” necessary based on defined scope and any related requirements/expectations including the following:
 - Shipping/delivery
 - Asset management
 - System acceptance
 - Deployment planning
 - Polling place setup
 - On-site support
 - Equipment retrieval (post-election)
 - Equipment processing (post-election)

- Equipment maintenance
- Schedule: Identification of known timeframes and key milestones.
- Test Plan: Procedures for ensuring that the software application integration operates successfully in the County's environment.
- Quality Management Plan: Identification of performance standards, triggers, remedies, and escalation protocol.
- Change Control Plan: Procedures for identification, review and approval of changes to the project plan.

The project work plan and schedule provides guidance for managing the project and developing detailed activities, tasks, and a detailed work plan to manage the project. The project work plan and schedule is revised as necessary to properly manage the project. A working draft of the project work plan and schedule is reviewed in the project kickoff meeting to promote the refinement and mutual acceptance of the draft project plan.

The Project Manager is responsible for engaging the appropriate resources necessary to execute the project work plan and schedule, and for the implementation of custom processes necessary to meet the County's requirements.

Successful deployment of a new voting system depends on a mutual understanding of current processes and the County's objectives for the new voting system. Therefore, County staff will be involved in planning the project in a collaborative effort. These activities are necessary to establish a detailed integration plan that addresses all aspects of the project. The results of these planning activities are used to develop a migration plan, which defines each step necessary to incorporate the use of the Hart Verity Voting system in the County's election activities, while addressing risk areas and carrying out mitigation activities defined by the risk management plan. Typical onsite support events included in Phase I include:

Event	Resource Onsite
Kickoff Meeting	Project Manager, Training Consultant
Work Process Analysis – Process interviews and information gathering	Project Manager

Phase II: Build / Deploy

While planning / design activities may continue throughout the project, Phase I ends with placement of initial orders for equipment / services. Phase II: Build / Deploy includes placement of orders, shipping of equipment, delivery, and customer acceptance. During this phase, Hart's Project Manager works closely with the County's Project Manager to implement the project work plan and schedule, identify and resolve issues, manage risks, monitor Hart performance, and ensure clear communication with the entire project team.

This phase includes initial onsite training of County personnel. Other key activities include system initial configuration, acceptance testing, preparation of voter education materials and pre-election data entry and validation. This continues through the first scheduled election event. Typical onsite support events included in Phase II include:

Event	Resource Onsite
Warehouse	Project Manager

Preparation/Equipment Delivery	
Initial Staff Training	Training Consultant
Mock Election (Training)	Project Manager
Equipment Acceptance Testing	Project Manager
System Configuration and Acceptance	Project Manager
Initial Poll Worker Training	Training Consultant

With Hart's partner, SOE, our proposed solution optionally includes an asset tracking system to assist the State in managing all the new equipment and provide an auditable, real-time, chain-of-custody tracking system. The tracking system can be implemented in all sixty four counties and the data collected at the county level can be aggregated to the State level for monitoring and audit purposes.

Phase III: Manage / Support

Following acceptance, the project enters Phase III: Manage / Support. Attention turns to election-specific data management, ballot production, deployment plans, voter education, final training, Election Day field support, tabulation and reporting, data archiving and management, post-election auditing, and storage and warehousing.

During this phase, the Project Manager focuses initially on resolving any issues that remain open and ensuring stable ongoing support processes. Upon completion of the County's first election, Hart's Project Manager coordinates with the County's Project Manager to prepare and conduct a project review.

The project review will summarize the project work plan and schedule; review project team performance; review project highlights, key issues/resolutions, lessons learned/best practices; and recognize key contributions. Following the completion of the County's second election, Hart's Project Manager will repeat this process.

Support plans will, of course, be modified as necessary in cooperation with the County prior to each election in order to ensure that resources are allocated properly. In the event the County requests additional support, the scope would need to be defined and implemented. This is a proven model designed to scale easily to the final support configuration.

During the Manage/Support phase, major election events recycle through the Plan/Design and Build/Deploy phases as appropriate. The Manage/Support phase also includes project closeout activities for termination of the project at the appropriate time.

Typical onsite support events included in Phase III include:

Event	Resource Onsite
Ballot Design and Production	Project Manager
Ballot Proofing and Printing	Project Manager
Pre-LAT Testing	Project Manager

Early Voting Support	Project Manager, Training Consultant
Election Day Equipment Preparation	Project Manager, Training Consultant
Public Test Support	Project Manager, Training Consultant
Election Day Support	Project Manager, Training Consultant, Other Hart Team Members TBD
Post-Election Support (Write-Ins, Reporting, Audits, Warehousing)	Project Manager

Risk Management

Hart emphasizes risk management as a critical element of project management. Beginning with a detailed Risk Assessment at the beginning and continuing throughout all phases of the project, Hart employs constant communications to quickly identify risks and implement mitigation strategies to address them.

The Project Manager tracks and reports the risks on a regular basis, and addresses those risks using contingency plans that are defined once a risk is identified. Risks that cannot be mitigated by the Project Manager and the County's Project Manager are escalated to Hart senior management to avoid negative impacts to the project. Hart is committed to quality and works with County staff to make each project a tremendous success for all stakeholders.

Continual assessment of project risks is essential to be successful. As the project moves forward, Hart will assess the risks at every management meeting and milestone achievement.

Testing

The Verity System is continually tested, from comprehensive tests during manufacturing to automatic self-tests and other diagnostic tests during operation. Each component maintains a complete audit trail, recording all system operations including test activities. These automatic system diagnostics, audit trails, and summary reports help ensure data completeness and integrity.

Please see Tab 6.6, Test Strategy for additional testing information.

Acceptance Testing

Hart can assist the County to coordinate and conduct required system acceptance testing of voting equipment and software by providing administrative and technical support.

Acceptance testing will consist of the setup and operation of both hardware and software components.

Upon delivery of Verity System components, the Program Manager and the County's contact will establish the specific events and schedule associated with acceptance testing.

An end-to-end (round-trip) test of the election management software is normally included in acceptance testing to verify the system software.

Logic and Accuracy Testing

Hart will provide comprehensive logic and accuracy testing procedures to validate the integrity of the election database and the accuracy of the Verity System. These procedures will encompass pre-election testing, as well as Election Day parallel and post-election testing, if required.

A Hart manual, detailing procedures for managing logic and accuracy testing on the Verity System, is available.

Help Desk Services

Hart provides a toll-free telephone number service and maintains a fully staffed Customer Support Center (CSC). The CSC is located at Hart's headquarters in Austin, Texas.

The primary means of contacting Hart's CSC during normal operating hours is via telephone through the toll-free customer support line. Outside normal operating hours, the customer support line prompts callers to leave an emergency voice mail message that activates a page or mobile phone call to a CSC consultant. A dedicated, toll-free customer support fax line also is available 24/7 as is e-mail access. Incidents may also be created and monitored 24/7 via Hart Support Online (<https://hartsupport.hartic.com>).

The Customer Support Center hours are Monday through Friday 7:00 a.m. to 6:00 p.m. Central Time, except for Hart company holidays, which are published each December for the succeeding calendar year.

Hart Customer Support is available 24/7 for the period immediately prior to, and after, each election. This support includes initial ballot creation, by-mail setup period, and Election Day. There are no restrictions to County staff contacting Hart's Customer Support Center though Hart prefers a single point of contact for the County.

Upon receipt of a Customer Support Request (CSR), a CSC consultant reviews the information and assigns a priority for urgency of a response. The response is defined as communicating to the customer the status of the problem analysis and potential remedies or workarounds. Hart's problem severity levels and response goals for Customer Support Requests received during normal working hours are shown below.

Severity	Type of Problem/Request	Response Goal
1	System is down, or major critical functionality is not operating	Within 1 business hour
2	Non-critical but major functionality or hardware is inoperative	Within 4 business hours
3	System feature or minor hardware is malfunctioning or inoperative	Within 2 business days
4	Cosmetic in nature	Will determine if it should be included in a future maintenance release
Response Time Goals. Hart's Customer Support Center quickly and efficiently responds to requests from customers.		

Responses to Customer Support Requests received via voice mail/page, fax, online or e-mail outside normal operating hours may be delayed unless previous arrangements have been made for standby support resources.

Below is a table of support functions and required personnel for each implementation deliverable.

Support Deliverable	Description	Required Tasks	Project Role(s) (Personnel)
Final Configuration and Ordering of Equipment	Based on the results of analysis of the County's current work processes and system requirements, Hart will formulate a detailed project plan specifying the details of the system implementation. Upon approval of the plan by the County, the requisite types and quantities of equipment and software will be ordered per contract agreements.	Conduct Business Process Analysis for the County	- Hart subject matter experts - County election staff personnel
		Finalize type and quantity of all equipment and software needed for project	- Hart Project Manager - County Project Manager
		Confirm correct software and firmware to be loaded	- Hart Project Manager - County Project Administrator
		Order Hart polling place equipment	Hart Tech Services staff
		Order third-party hardware and software	Hart Tech Services staff
Delivery of Equipment	Equipment in the specified quantities will be delivered to the County for testing. PC computers used to run Hart proprietary software applications will arrive pre-configured with their respective applications already installed. All equipment received will be logged into the equipment inventory management system. **Hart will work with CDOS to affect a verification system to ensure that the Trusted Build is installed on all Hart computers in the State.	Pre-configure and test Hart application hardware	Hart Tech Services staff
		Receive equipment and log into inventory management system	- Hart Project Manager - County staff
Logic and Accuracy Testing of Equipment	Hart Project Manager will work with CDOS and the County project team to develop and finalize a logic and accuracy test plan and scripts	Develop logic and accuracy test plan for County approval	Hart Project Manager

Support Deliverable	Description	Required Tasks	Project Role(s) (Personnel)
	appropriate for the Hart Voting System and acceptable to CDOS. Test procedures agreed to in the plan will be executed jointly by Hart technical staff and representatives of the County's project team. All test results will be recorded and reported according to the plan.	County review and approve plan	County project team
		Conduct logic and accuracy testing and record and report results	Hart Tech Services staff and representatives of the County project team
Training of County Personnel	Perform a training needs assessment. Training on all aspects of operating and maintaining the Hart Voting System components. All trainees will receive the appropriate training materials.	Training needs assessment	Hart Training staff
		Training of CDOS and County personnel	County staff
Acceptance Test of System by County Personnel	Hart Project Manager will work with the County project team to develop and finalize an acceptance test plan and scripts appropriate for the Hart voting system. Test procedures agreed in the plan will be executed by members of the County elections staff under the tutelage of Hart technical staff or subject matter expert. All test results will be recorded and reported according to the plan.	Develop Acceptance Test Plan	Hart Project Manager
		County review and approve plan	County project team
		Conduct acceptance testing and record and report results	- County staff - Hart Tech Services staff
		Document test results and sign acceptance	- County staff - Hart Tech Services staff - County Project Administrator
On-Going Support/ Maintenance of Equipment	Hart will provide support procedures documentation and training for CDOS the County. Documentation and training will include standard procedures for equipment maintenance, Return	Provide documentation and training on support and maintenance of Hart systems/equipment	- Hart Training staff - County Staff

Support Deliverable	Description	Required Tasks	Project Role(s) (Personnel)
	Material Authorization (RMA) for equipment repairs, parts and supplies ordering, Help Desk assistance, Hart Support Online (issue tracking system), and data transfer via the Hart secure FTP site. Hart on-going support will include services enumerated in the <i>Hart Master Agreement</i> included as part of the system implementation contract.	Provide contracted support and maintenance services	• Hart Project Manager • Hart Tech Services • Hart Customer Support representatives
Periodic Reporting	Hart Project Manager will provide a brief written weekly project status report to the County Project Manager.	Generate brief weekly project status report	• Hart Project Manager
Monthly Status Report	Hart Project Manager will provide a detailed monthly project status report.	Generate monthly detailed project status report	• Hart Project Manager
Status Meetings	Hart Project Manager will participate in meetings to review project status with the County project management team on an agreed scheduled basis.	Generate and present status report	• Hart Project Manager
Overall Project Management	Hart Project Manager will ensure compliance with contract agreement and is available to meet and confer with the County. The Hart Project Manager is responsible for project performance, tasks and subtasks, and deliverables.	Oversee project performance and status	• Hart Project Manager
Election Day Support	Provide telephone and on-site support on Election Day.	Coordinate and schedule elections support team	• Hart Project Manager
		Assist poll workers with troubleshooting problems	• Elections Support Team
		Provide telephone hotline	
		Provide on-site support	• Election Day field support staff

Support

Please see Tab 6.8, “Implementation” for additional Support information.

Post-Election Support

After each County’s first election, the Hart Project Management Team will work with the County and CDOS to transition that County to ongoing support status. Any assistance that CDOS or a county may need is easily obtained from our Customer Support Center. Hart will certainly help CDOS develop a support transition plan should the State wish to transfer support of the counties to itself or a third party.

Hart provides a toll-free telephone number service and maintains a fully staffed Customer Support Center (CSC). The CSC is located at Hart’s headquarters in Austin, Texas.

The primary means of contacting Hart’s CSC during normal operating hours is via telephone through the toll-free customer support line. Outside normal operating hours, the customer support line prompts callers to leave an emergency voice mail message that activates a page or mobile phone call to a CSC consultant. A dedicated, toll-free customer support fax line also is available 24/7 as is e-mail access. Incidents may also be created and monitored 24/7 via Hart Support Online (<https://hartsupport.hartinc.com>).

The Customer Support Center hours are Monday through Friday 7:00 a.m. to 6:00 p.m. Central Time, except for Hart company holidays, which are published each December for the succeeding calendar year.

Hart Customer Support is available 24/7 for the period immediately prior to, and after, each election (60 days prior and through completion of the final canvass), for all system components. This support includes initial ballot creation, by-mail setup period, early voting, Election Day, post-election activities and canvass. Additionally, we can extend the 24/7 technical support in the event of a recount.

Upon receipt of a Customer Support Request (CSR), a CSC consultant reviews the information and assigns a priority for urgency of a response. The response is defined as communicating to the customer the status of the problem analysis and potential remedies or workarounds. Hart’s problem severity levels and response goals for Customer Support Requests received during normal working hours are shown below.

Severity	Type of Problem/Request	Response Goal
1	System is down, or major critical functionality is not operating	Within 1 business hour
2	Non-critical but major functionality or hardware is inoperative	Within 4 business hours

3	System feature or minor hardware is malfunctioning or inoperative	Within 2 business days
4	Cosmetic in nature	Will determine if it should be included in a future maintenance release
Response Time Goals. Hart's Customer Support Center quickly and efficiently responds to requests from customers.		

Responses to Customer Support Requests received via voice mail/page, fax, online or e-mail outside normal operating hours may be delayed unless previous arrangements have been made for standby support resources.

Ongoing support continues throughout the initial warranty period. Support for third-party components will be provided in accordance with the manufacturer's warranty passed through Hart to the State.

The State may also participate in the Hart Users Group, where customers share ideas, benefit from each other's experience, and offer valuable feedback and suggestions that help us achieve our goal of continuous improvement.

Hart also offers Internet support with a tracking program called Hart Support Online™. Customers with IDs and passwords may submit electronic "tickets" with questions or issues over the Internet. This tool enables customers to determine the status of their support call, 24 hours a day, 7 days a week. All users who submit items via the browser interface must have a Hart Support Online (HSO) user account and appropriate privileges. Individuals who have a HSO user account can also submit items via e-mail.

Warranty Period Support

The Verity Voting system is covered by a one year manufacturer's warranty.

The warranty period begins upon delivery of the Verity equipment. While the product is under warranty, Hart will correct any existing function that does not perform per the specifications of that product. Malfunctioning hardware will be returned to be repaired or replaced with a serviceable unit. Standard post-election repair/replacement response time is no more than 10 business days, plus shipping time. This warranty, however, does not cover damage resulting from abuse or use outside of prescribed operation.

Hart may provide product release upgrades to licensed Hart software products during the warranty period. These upgrades are produced as a result of changing federal or state requirements, or the addition of features and functionality that will improve the product. Software capabilities that are required to maintain compliance with standards are incorporated into the system, presented for certification, and delivered to customers under the terms of the Verity Voting system Warranty, Support, and License Agreement.

Extended warranty plans are available beyond the initial warranty period. Services during an extended warranty period continue at the same level as those in the original warranty.

In all cases, Hart is committed to ensuring that the State's equipment and software will be fully operational during all election cycles while under warranty. Cost depends on the number of units covered and the length of the extension period.

Third-party software and equipment that Hart sells to the jurisdiction to support the Verity Voting system is warranted by the respective manufacturer. Hart passes through to the jurisdictions any warranties given by the manufacturer, to the extent permitted by the manufacturer.

Extended warranties for third-party software and equipment are available as provided by the manufacturer.

Voting Equipment Maintenance Support

The Verity Voting system includes an Annual License & Support Subscription Fee, combining Licensing, Sublicensing and Support (General Software Support, Software Support Services, Engineering Services). The license and support subscription fee includes:

- An annual right to use the products
- Standard Help Desk Support with escalation
- Future software and firmware version upgrades for the Verity product line (exclusive of labor)
- A Relationships Matter Account Representative assigned to the County Relationships Matter is Hart's approach to making certain that each of our customers has a point of personal contact and a liaison within the Hart organization. The Relationships Matter Account Representative assists with the transition from the implementation phase of the project and helps guide our customers through budget planning, use of services and other consultative processes.

Unique system design features make Verity the easiest electronic voting system on the market to store, maintain and prepare for deployment. Unlike other systems, each Verity component does not have to be individually programmed for use in a new election. The federally certified firmware installed on each component remains constant from one election to the next, and only the election specific data set changes. This advanced system design allows jurisdictions to reconfigure Verity components for a new election by simply archiving data from the previous election and providing the new election data set via a secure USB drive.

Each Verity voting device is stored in its own specially designed voting booth that also serves as a durable and secure transport/storage case. These special system design features combine to keep both warehouse maintenance and "back office" support requirements to an absolute minimum for all Verity system components.

Sample Reports

Verity offers numerous standard reports plus customizable report options. The standard reports offered include:

Layout (Ballot Design)

- Jurisdiction Configuration Report
- Polling Place List, Summary
- Polling Place List, with Details
- All Contests
- Contest Associations
- Ballot Style Associations
- Validation Summary Report
- Exceptions Report

Build (Election Definition)

- Jurisdiction Configuration Report
- Polling Place List, Summary
- Polling Place List, with Details
- All Contests
- Contest Associations
- Ballot Style Associations
- Exceptions Report
- Ballots Printed
- Flash Memory Devices (vDrives) Created

Central (Central Scanning)

- Configuration Report
- Election Media Report
- Scan Batches Report
- Deleted Batch Report
- Scan Batch Summary Report
- Scanned Ballots by Precinct
- Scanned Ballots by Batch
- Resolve Status
- Deleted Ballot Report
- Certified Write-In Report
- CVR Report
- Duplicate Ballot Report

Count (Tabulation & Reporting)

- Cumulative Report
- Precinct Report
- Canvass Report
- Blank Ballot Report
- Voting Device Reports

- Polling Places Report
- Alias Report
- Write-In Report
- Precincts Reporting Report
- Flash Memory Device (vDrive) Status Report
- Manual Vote Recording Report
- Residual Votes Report
- Audit Log Report
- Device Log Report

Relay (Remote Transmission)

- Flash Memory (vDrive) Processing Reports – for sending stations
- Received Data Report – for receiving stations
- Generated Media Report – for receiving stations

Verity also allows users to easily create customized reports based on user-selected filtered data (e.g., only certain precincts, contests, etc.). Available filters include:

- District filter
- Precinct/split filter
- Party filter
- Contest filter
- Ballot options filter
- Flash Memory Device (vDrive) ID filter
- Batch ID filter
- Voting Device Type filter
- Voting Device ID filter
- Polling Place filter
- Voting Type filter

Furthermore reports are exportable in a manner compatible with common COTS word-processing tools, to allow further customization and formatting changes.

The Verity System is capable of producing election results in multiple output formats including printed, PDF, TXT, CSV, HTML and XML.

Due to the page limitation of this Sample Reports section, only a portion of Hart's Sample Reports are included in this response.

Sample Project Artifacts

Samples of Hart’s statewide implementation project artifacts for the States of Hawaii and Oklahoma may be found immediately following this page.

Every Hart Verity implementation begins with a Project Charter and includes a Project Plan, Project Workbook and Project Schedule. The items included in each document are outlined below:

Project Charter	Project Plan	Project Schedule	Project Workbook
Project description	General information about the Project	Project Tasks	Data
Assigned Hart Project personnel and their level of authority (project leaders)	Project Scope Management Plan	Task Due Dates	Stoplight Report
Business Need	Project Organization Structure	Task Duration	Risk Management Matrix
Project Justification	Project Schedule Management Plan	Identification of any interdependencies between tasks	Issues Log
Pre-assigned Hart resources (project staff)	Resource Plan		Action Items
Hart and customer stakeholder identification	Project Cost Management Plan		Roster
Project scope, description and deliverables	Project Communication Management Plan		Roles & Responsibilities
	Project Risk and Issues Management Plan		Resource Commitment Matrix
	Project Quality Management Plan		Decision Log
	Signatures		Communication Plan
	Document Control		Stakeholder Analysis
			Change Control Log
			Timesheet Totals
			Timesheet

Due to the page limitation of this Sample Project Artifacts section, only the State of Hawaii Charter, the State of Oklahoma Project Plan and the State of Hawaii Project Schedule are included with this response. A sample Project Workbook is included in Tab 6.1, “Project Management.”

General Questions

- 1. What staff support from DCOS and counties do you envision needing during the implementation of the UVS in a county? Identify each resource by location (CDOS or county), role or responsibility, technical skills needed, suggested expertise in years, and any clarifying comments.**

Verity was designed on a platform of adaptability. This feature translates into Verity implementation. Simply stated, staff support can be as little or as much as each county desires or needs. For example, if a county wants minimal responsibility during the implementation process, other than training, Hart will adapt the Project Plan accordingly. Conversely, should the county want maximum responsibility during the implementation process, Hart will adapt accordingly. Resources needed, whether at the State or County level, could include Project Managers, Training/Support Managers, Engineering Support Staff, Administrative Support Staff, Election Specialists, Training Specialists, Field Technicians, Election Support Specialists, Software and System Integration Specialists, System Testers, Technical Services Specialists, and Warehouse and Logistics personnel.

Please see Tab 6.7, “Training” and Tab 10, “Preliminary Project Schedule and Staffing Plan” for additional information regarding DCOS and county staff that may be needed during any part of the implementation.

- 2. How many county implementations do you feel you could support simultaneously?**

Having been awarded the most recent two statewide voting system contracts (Hawaii and Oklahoma) and successfully implementing the system across the States at the same time, Hart is confident that, if the State chooses, a statewide implementation of the Verity System in its 64 Colorado counties can be easily accomplished.

- 3. What is your coverage, terms and duration for warranties of the hardware, software, and other deliverables provided pursuant to this RFP?**

The Scan and Touch Writer with Access voting devices are covered by a one year manufacturer’s warranty.

The warranty period begins upon delivery of the Verity System equipment. While the product is under warranty, Hart will correct any existing function that does not perform per the specifications of that product. Malfunctioning hardware will be returned to be repaired or replaced with a serviceable unit. Standard post-election repair/replacement response time is no more than 10 business days, plus shipping time. This warranty, however, does not cover damage resulting from abuse or use outside of prescribed operation.

Hart will provide product release upgrades to licensed Hart InterCivic software products during the warranty period. These upgrades are produced as a result of changing federal or state requirements, or the addition of features and functionality that will improve the product. Software capabilities that are required to maintain compliance with standards are incorporated into the system, presented for certification, and delivered to customers under the terms of the Verity System Warranty, Support, and License Agreement.

Extended warranty plans are available beyond the initial warranty period. Services during an extended warranty period continue at the same level as those in the original warranty.

In all cases, Hart is committed to ensuring that the equipment and software will be fully operational during all election cycles while under warranty. Cost depends on the number of units covered and the length of the extension period.

Third-party software and equipment that Hart sells to the jurisdiction to support the Verity System is warranted by the respective manufacturer. Hart passes through to the jurisdictions any warranties given by the manufacturer, to the extent permitted by the manufacturer.

Extended warranties for third-party software and equipment are available as provided by the manufacturer.

4. What is your coverage, terms and duration for maintenance of the hardware components of your UVS solution?

The Verity System annual hardware/firmware licensing fee as proposed, is an Annual Fee combining Licensing, Sublicensing and Support (General Software Support, Software Support Services, Engineering Services). The license and support fee includes:

- An annual right to use the products
- Standard Help Desk Support with escalation
- Future software and firmware version upgrades for the Scan, Touch Writer with Access, and Central product lines (exclusive of labor)
- A Relationships Matter Account Representative assigned to the State of Colorado

Relationships Matter is Hart's approach to making certain that each of our customers has a point of personal contact and a liaison within the Hart organization. The Relationships Matter Account Representative assists with the transition from the implementation phase of the project and helps guide our customers through budget planning, use of services and other consultative processes.

5. What is your coverage, terms and duration for licensing of the software components of your UVS solution?

The Verity System annual software licensing fee as proposed, is an Annual Fee combining Licensing, Sublicensing and Support (General Software Support, Software Support Services, Engineering Services). The license and support fee includes:

- An annual right to use the products
- Standard Help Desk Support with escalation
- Future software and firmware version upgrades for the Scan, Touch Writer with Access, and Central product lines (exclusive of labor)
- A Relationships Matter Account Representative assigned to the State of Colorado

Relationships Matter is Hart's approach to making certain that each of our customers has a point of personal contact and a liaison within the Hart organization. The Relationships Matter Account Representative assists with the transition from the implementation phase of the project and helps guide our customers through budget planning, use of services and other consultative processes.

6. Are updates and modifications to the UVS because of legislative mandates a part of your support agreement or are they custom enhancements?

Under Hart's license and support fee, Hart will provide firmware and software product release upgrades to the licensed Hart products (exclusive of labor). These upgrades are typically produced as a result of changing federal, state, or local requirements, a request of customers, software bug corrections, or the addition of features and functionality that will improve the product.

Major system releases usually include new functionality, upgrades to meet new statutory and regulatory requirements, defect repairs, and improved performance. Hart does not "patch" its certified systems. All software changes are incorporated into a planned, tested and certified

system release that is inclusive of all system applications. This approach is used regardless of the size of the change – be it a minor defect repair or the addition of major new functionality.

Before any application revisions can be released to the field for implementation, the changes must be submitted to an independent testing authority (ITA) for approval. A requirement of the ITA is to review product documentation as part of the change package. After ITA approval, the changes must be submitted for state and/or local approval, which also requires updated documentation. When all approval processes are complete, Hart issues updates for equipment in the field and updated documentation is provided as part of the upgrade process.

7. What is the certification status of each component within your proposed solution? Include a matrix showing the following:

- a. Component Identification**
- b. Federal certification date**
- c. The federal certification standard currently met (e.g. 2005 VVSG)**
- d. Any state certifications**
- e. Projected certification date and standard if not currently certified**
- f. Project certification date and standard for a future planned upgrade certification**

Certification is currently in process. The Verity System will be VSTL certified to VVSG 1.0 (2005) and be submitted to the Colorado Department of State for certification.

8. What features of your proposed solution exist to ensure ballot secrecy? Please describe those features.

For all system components:

- No Verity component stores any uniquely identifying voter information (e.g. registration identifiers, voter names, residences, etc.)
- The Verity system always employs “air gaps” between Verity Voting equipment and other components/functions/networks (so, for example, if a barcode interface is ever used with ballot-on-demand, or to activate an electronic ballot on Touch Writer, it would only be scanning a ballot style identifier, not unique voter information)
- Cast Vote Records never include unique identifying information that can be associated with a specific ballot
- Cast Vote Records are stored without recording the Date/Time the file was created, so that voter order cannot be reconstructed

For printed ballots:

- Verity Build (the election definition software application that is also used to print ballots) includes a user-customizable option that allows election administrators to decide whether to include anonymous unique identifiers on ballots, or not
- Stubs may be included, or not, and the stub numbering is NOT associated with any number that appears on any ballot
- If users want to completely leave off unique identifiers of any kind on printed ballots, they can – in this way, no ballot has a unique or sequential number of any kind, human-readable or not
- If users want to use unique identifiers to disallow scanning of duplicate ballots, the unique identifiers are randomized, in a non-sequential way
- Users can turn off human-readability of any numbers

- In short, if a user of the Verity system wishes to manage ballots and stubs and inventory numbers with non-unique ballots, he/she can do so; in this way, no unique ballot could ever be associated with a unique voter
- Verity Scan is compatible with the use of privacy sleeves
- Verity Scan includes fabric privacy screens to protect ballot secrecy while a voter is using the machine

For Electronic Ballots (BMD, Touch Writer):

- Access Codes are based on precinct identifiers only
- Verity Touch Writer includes fabric privacy screens to protect ballot secrecy while a voter is using the machine
- Verity Touch Writer employs distinctive color coding for interface screens, so polling place officials who need to provide assistance can always tell at a glance whether a voter screen includes private ballot selections, or not
 - Screens with voter selection marks are light gray
 - Screens that include information only, with no voter selection marks, are blue

In Tabulation/Reporting:

Verity Count is designed to comply with Colorado statutes concerning the reporting of precinct results that contain small numbers of ballots; users may consolidate those votes with other results and report them in user-defined ways, so as to protect the secrecy of votes when small numbers of ballots are involved

9. What is your organization chain-of-command for escalating problems needing resolution?

The Colorado Project Manager should be the first point of contact for any escalation issues. If this contact does not satisfy the State or County, the Project Director would be the next point of contact followed by the Project Sponsor, the President and lastly, Hart's CEO.

Hart intentionally chooses to have a flat organization so that customers and team members are empowered to resolve any challenge efficiently, effectively and in a timely manner.

10. What purchase options do your company offer (e.g. payment in full upon delivery, financing, leasing)?

Hart offers various purchase options including payment in full upon delivery, net terms, financing, and one time or multi-year leasing.

11. What is the maximum number for each of the following items that your Election management System allows:

- **Precincts**
Verity supports 3,000 precincts per election, with 20 splits per precinct.
- **Contests**
Verity supports 1,200 contests
- **Candidates**
Verity does not currently have a defined limit. It will be effectively limited by paper ballot geometry; however that is dependent on the template selections made by the customer.
- **Political Parties**

Verity supports up to 32 parties

- **Ballot Styles**

Verity supports up to 6,000 ballot styles in a General/Open Primary, or 144,000 ballot styles in a Closed Primary.

- **Precincts per Ballot Style**

Verity supports up to 2,000 (or 6,000 if it is Precinct Splits) precincts per ballot style.

- **Ballot Styles per Precinct**

Verity supports up to 20 ballot styles per precinct (just the number of Precinct Splits).

- **Other limitations?**

Verity supports 1,200 contests per election

Verity supports 100 options per contest

Verity supports a maximum of 8 voting types (CVR sources)

12. What interface capabilities, with the CDOS voter registration system (SCORE), can your Election Management Software provide? Is there a defined extract format for precinct and district definitions, registration statistics, and candidate or contest information that is or may be made compatible with SCORE? What interface data formats are available (e.g. EML, XML, CSV, and ASCII)?

The Verity EMS platform can provide CSV and XML data formats.

Hart has extensive experience integrating its products with other systems. Hart has years of proven experience in integrating and reporting information from different systems into one cohesive, clear set of information. Hart's design and development team includes experienced application design, engineering, and programming staff to support custom integration with other systems.

13. What are the security features and capabilities of your proposed system and processes? Include the following areas in your response to this question:

- **How do you protect the audit logs (e.g., encryption, hashing)?**

Audit logs for an election are digitally signed using public/private key signing technology.

- **Does your system documentation contain suggested security auditing procedures? If so, please provide.**

Every Verity component has a System Validation Tool. If this is activated during power up, the system can save hash information on an inserted USB drive, to ensure that components are running only the authorized versions of software. Procedures for using this tool are including in the Verity engineering documentation set.

In addition to providing integrated technology features such as the System Validation tool, Hart's training program for election administrators and software users always includes best practices for security during the pre-voting, voting, and post-voting periods, including warehouse and storage considerations, polling place security operations, and post-election audits.

- **Do you provide an executable application whitelist with digitally signed programs?**

Yes, Hart provides whitelist technology.

- **How does your system prevent unauthorized, non-whitelisted applications from running?**

The devices and the PC apps (exclusive of Relay and Layout) run as dedicated applications, therefore no access to the underlying operating system is available. Auto run and similar functions are not available. The devices use a secure-boot process in which operating system and executable software are digitally signed, read-only, and verified before boot. The PCs use a secured BIOS.

- **What specific hardening procedures and standards are your voting devices held to?**

Verity voting devices run a “secure boot” sequence:

- The voting devices boot from signed media
- A private signing key is secured at Hart
- The Device BIOS verifies the signatures before the allowing device to boot
- The boot media is tamper resistant and tamper evident
- The BIOS is write protected
- The executable code cannot overwrite BIOS
- **What database encryption mechanisms are used by your system for data at rest and in transit? Please describe, in detail, all uses of data encryption/decryption in your proposed solution.**

Data in transit is encrypted by AES-256, SHA-2 and RSA 2048. Audit logs, cast vote records, and election definitions are digitally signed using FIPs 140-2 SHA-2 NIST approved methods.

- **What password features are included in your posed solution (e.g., complexity, reuse)?**

Password complexity rules can be set by the user. The options include the number of failed login attempts, change frequency, minimum length and special characters.

- **Is there any remote communication technology associated with your proposed solution? If so, explain.**

Relay is the Verity software application that reads, stores, and transfers Cast Vote Records from remote satellite stations to the central counting facility. Relay does not tabulate votes; Relay reads the CVRs from polling place vDrives (portable USB flash media), and transfers the CVRs to a Relay receiving station, which then writes the CVRs to portable flash media, which can be tabulated in the Verity Count tabulation software. To ensure system security, the Relay receiving station at the central facility is always installed on a workstation separate from Verity Count tabulation software, thereby preserving an “air gap” at all times. Relay stations can communicate via wireless, local area network (LAN) or modem connection.

- **What processes are you using for source code review and compiler security verification?**

The VSTL will review Verity source code and compiler security verification during the testing and certification process.

- **What independent security audits has your posed system received?**

The VSTL will certify the Verity system to VVSG 1.0 (2005) and the various states which Hart will submit Verity for certification will perform independent security audits.

14. What post-election audit capabilities are provided by your system and what processes or procedures do you offer to support a post-election audit, including a risk limiting audit?

Verity Count tabulation and reporting software contains an easy-to-use “Auditing Dashboard” that is a native feature of the software application. The auditing dashboard allows users to select the sub-set of cast vote record data to be included in the audit, by simply selecting from a robust set of user-defined “filters.” Available filters include:

- District filter
- Precinct/split filter
- Party filter
- Contest filter
- Ballot options filter
- USB Flash Memory Device (vDrive) ID filter
- Batch ID filter
- Voting Device Type filter
- Voting Device ID filter
- Polling Place filter
- Voting Type filter
- Workstation ID filter

Once the desired set of cast vote record data has been selected with filters, the CVR data can be exported as raw data, which can be reviewed and tabulated using common third-party tools, or the data can be printed as human-readable cast vote record reports (one per page), so they can be hand-counted.

The auditing filters available in Verity Count are the same filters available in Verity Central, so ballot images can also be searched and filtered, to facilitate easy comparisons between ballots and tabulated data.

Because the list of auditable filters for Cast Vote Record data and ballot images is robust, Verity’s auditing capabilities can support a wide variety of state and local procedural rules that govern any type of audit, whether a fixed percentage, “risk limiting,” or other method is used, regardless of what specific sub-set of ballots is to be audited, how many rounds of auditing may be required, and so on.

In addition to these post-election audit capabilities, robust audit logs are an integral part of every component of the Verity system.

Throughout all phases of operation, all Verity System components maintain complete audit logs. All audit reports, audit trail documents, databases, and final reports may be archived in hard copy and/or saved electronically to CD ROM, as needed.

Activity logs are available for each component of the Verity System. This includes each software application (Build, Central, Count) and the hardware components used in the polling place (Scan and Touch Writer with Access). These logs may be viewed on-screen or printed as hard copies.

15. To what extent, if any, do the hardware and software products you are proposing to Colorado meet the requirement of Section 508 of the Rehabilitation Act of 1973 and subsequent amendments to that Act?

Verity hardware and software is partly 508-compliant, based on best practices for user interface design.

Hart has experience from prior implementations in completing Voluntary Product Accessibility Template (VPAT) forms, and we would be happy to complete a similar exercise for the State of Colorado, if desired.

16. What products or services do you provide in the areas of Voter Education and Voter Outreach? This is an informational question only.

The successful rollout of a new voting system depends not only on outstanding equipment, a superb election administration team, and proper training. It also hinges on a locally directed and broad-based voter education and outreach (VEO) program. Toward this end, Hart provides a variety of optional voter education materials and guidance.

Hart's VEO program encourages the following:

- Reaching out to all voters, including underrepresented communities.
- Leveraging local resources through partnerships with advocacy groups, trade and professional organizations, chambers of commerce, political subdivisions, and others.
- Providing a consistent message across jurisdictions, coordinating with other election messages such as voter registration, "Get Out The Vote," poll worker recruitment, and student outreach.
- Utilizing appropriate means to reach the target voter audiences, including direct mail, advertising, public demonstrations, and strategic Web links.

Voter Education Materials

Hart's voter education materials include soft copy and printed samples of an educational poster, brochure, and fliers, as well as other outreach information.

- Media informational packet and press release template
- Newspaper advertisement (1/8 page)
- Direct mail stuffer (1/3 page)
- Educational e-mail to community partners (English only)
- Web site content
- "How to Vote" brochure
- Informational fliers (8.5 inches x 11 inches)
- Educational poster (11 inches x 17 inches or 20 inches x 28 inches)
- One "How to Vote" video in English and Spanish
- One newsletter article template

All collateral materials are provided in Microsoft Word or Adobe PDF format (English only, unless otherwise noted).

This proposal does not include printing, shipping, copies of video products, or customization of print or video products.

Media Kits

Media kits include information on the Hart Voting System and a template the State or County may use to create a localized press release. One kit is provided, and others may be printed from

the electronic files provided. We recommend distribution to all local media during scheduled media visits, before interviews, and before special events.

Newspaper Advertisements

Newspaper advertisements reach a large and diverse audience. Hart will include the content for a standard newspaper advertisement. The cost of running the actual ad is not included in the proposal pricing.

Direct Mail Content

Direct mail is the perfect medium for explaining detailed information or instructions, because it offers direct communication with a targeted audience. Hart encourages the State or County to identify local utilities, governments, schools, senior organizations, and others to leverage opportunities for inserting “How to Vote” materials at no cost. Hart provides standard soft copy of the insert to cooperating entities to copy and include. The State or County is responsible for printing and mail service costs of direct mailings. Should an entity be willing to insert a “How to Vote” flier, but unable to absorb the printing costs for the piece, it is the State’s or County’s responsibility to decide whether to cover the printing costs.

Educational e-Mail

The number of people using the Internet and e-mail as their primary sources of information increases every day. Hart can provide the State or County with the contents for a standard informational e-mail for distribution by the State or County. This e-mail message highlights how to vote and the accessibility features of the new voting system. The e-mail can include invitations to scheduled local events and election information. One of the benefits of an educational e-mail is that there are no direct costs associated with distribution.

Interactive Web Site Content

Hart can provide the voter education content for the State or County Web site. This content will include both written and visual information, such as a Microsoft PowerPoint presentation and “How to Vote” video(s), on how to use the new system in formats suitable for those with landline modems and higher speed access. The State or County may also include information about the local VEO program and an interactive page through which viewers may request education materials or to schedule a demonstration event, if available. Links to the Web site can also be placed on related Web sites such as the State’s or County’s home page, other local political subdivisions, and media outlets.

The State or County will be responsible for purchasing the special URL, programming, maintenance fees, and any costs associated with tracking the number of “hits” the Web site receives.

Web Portal

With Hart’s partner, SOE, our proposed solution optionally includes a Voter Education Web Portal which will assist the State and all counties with providing voter education and information to voters in Colorado with finding information about the new voting system and how the new voting locations work along with the new associated processes. The portal can include videos and other training content.

Newsletter Article

A template for a newsletter article about the new voting system can be provided. This template is appropriate for local customization and then distribution to community groups for placement into their newsletters. One of the benefits of sharing a newsletter article with local community groups is that there are no direct State or County costs associated with distribution of the information.

Voter Education at the Polls

Providing clear voter education materials and verbal instructions at each polling place is a must. Hart has many options available for consistent, sound voter education at the polls, including the a demonstration voting unit that gives voters the opportunity to practice on the voting equipment before proceeding to live voting.

The State or County can be provided with PDF files for voter instruction materials that poll workers can use to illustrate the use of the system. Hart can work with the State or County to ensure that consistent messaging is in place at the polls. Large posters, in-hand voter instruction brochures and/or fliers, and in-booth instructions can all be available. Short “How to Vote” videos can be placed in polling places equipped to show them.

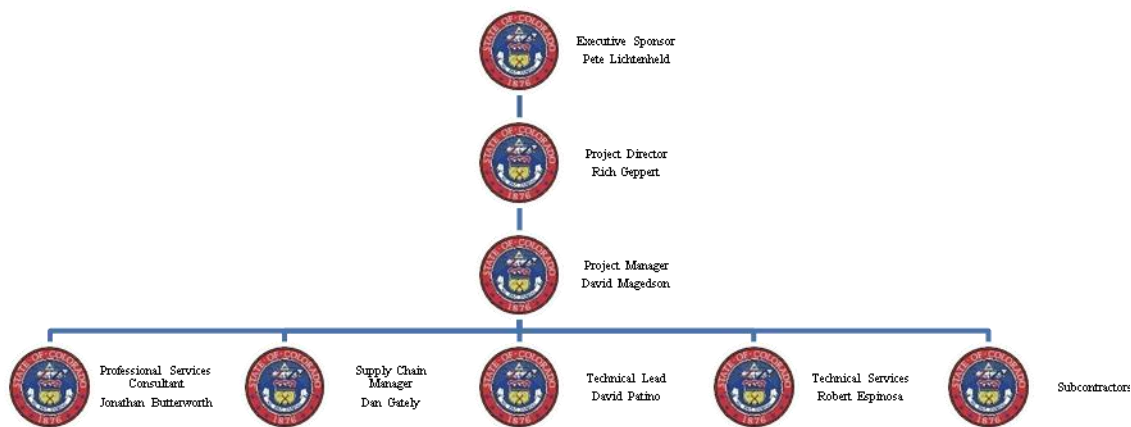
Preliminary Project Schedule and Staffing Plan

A preliminary Project Schedule may be found immediately following this page.

The project organization chart of proposed project personnel (Core Team) is located below. Hart recognizes that with a project of this size, scope and nature of work, the hiring of local contractors to perform training and possibly junior level project management duties as the workload increases will be required. Hart has a long and successful history of managing contract labor on similarly sized projects. Since 2004 in the State of Hawaii, we have used contract labor each election cycle to augment the Core Hart Team. Our contracted partners who have assisted us with conducting successful elections include Altres, Inc. and Employers Options, Inc. In addition, in the State of Oklahoma, Hart has successfully partnered with Insight Global, Inc., to supply field technicians and polling place support across all 77 counties in the State. While Insight Global has a presence in Colorado, any potential contractor labor companies will be subject to Hart's rigorous evaluation process prior to final selection. This process will include verification with the State.

Hart commits to replacing project personnel whose performance is unsatisfactory to CDOS or any County, with other personnel whose experience and skills are acceptable to CDOS or the County.

As with all Hart implementations, the project is led by the Project Manager, who is responsible for the oversight, deliverables, schedules, and duty and task assignments of all personnel – whether Hart employees or subcontractors.



Proposed Staffing

Customer Focused Support

Selecting Hart as your new voting system provider assures the State of Colorado of the most proven, up-to-date, accurate voting technology available combined with the superior services and support necessary for success. To that end, Hart brings the best of experience to the State's Universal Voting System project. We offer you a highly qualified team whose members are skilled in all areas of elections, electronic voting systems, and large-scale initiatives.

Highlights of our corporate election experience include the following.

- **Elections Experience**—Hart has extensive, broad-based elections experience, including providing direct recording electronic voting systems, providing and supporting optical scan voting systems, printing ballots, providing elections supplies kits, and providing information and support to counties. Hart was the first voting system vendor to field federally-certified *digital* scanning technology (as early as 2001) to dramatically improve mark recognition and auditability.
- **Project Management**—Meeting customer expectations is the core of our corporate commitment and project management philosophy. Hart Project Managers receive internal training regarding these duties. Additionally, we use the Project Management Body of Knowledge (PMBOK), developed by the Project Management Institute, to ensure our Project Managers are trained in, and follow, all industry-standard project management practices.
 - **Risk Mitigation.** Hart emphasizes risk management as a critical element of Project Management. Throughout all phases of the project, we constantly assess risks and implement mitigation strategies to address those risks. The Project Manager tracks and reports the risks weekly and addresses those risks using contingency plans that are defined when a risk is identified.
 - **Change Control.** Change control procedures deal with out-of-scope issues. When a consensus is gained that identifies an issue as out-of-scope, change control procedures are initiated to decide how to proceed (see Change Control Procedures in the Draft Project Plan). If the decision is made to expand the baseline scope of the project to include an “out-of-scope” issue, the appropriate project contractual documentation must be updated, as well as the baseline scope definition.
- **Technical Support**—On-site support personnel are fully trained in the technical aspects of the Verity Voting System and are further supported by technical staff at Hart's Customer Support Center.
- **Training**—Hart has assembled a team of professional educators to design the training program supporting installations of the Verity Voting System. The training staff has experience in elections procedures, instructional technology, software application training, working with adult learners, and training for diverse educational backgrounds.
- **Research and Development**—Hart's research and development group has focused on the use of technology in elections for many years. Their skills include designing, engineering, programming, testing, and writing technical documentation.
- **Warehouse Management and Logistics**—Many Hart customers have benefited from our analysis and evaluation of warehouse workflow and storage needs.
- **Integration with Legacy Systems** – Hart has worked with jurisdictions to facilitate the import and export of data to legacy systems.

Hart has always been a very people-centered company. With the Verity Voting system, we extend that people-centric focus to the human centered needs *behind* the technology: it is a system that offers simplicity, absolute confidence in the results, and enough flexibility to serve your needs for many years. Those are the values that make Verity the right choice for Colorado. These are the values that embody the Verity promise:
The Future of Elections.

Our RFP Response and Project Plan identify members of the Core and Extended Hart Project Team. References for the Hart Core team include:

- State of Hawaii – Scott Nago, Chief Election Officer, Scott.Nago@hawaii.gov
- Orange County, California – Neal Kelly, Registrar of Voters, Neal.Kelley@rov.ocgov.com
- City of Long Beach, California – Poonam Davis, Bureau Manager, Elections, poonam.davis@longbeach.gov
- Travis County, Texas – Dana Debeauvoir, County Clerk, dana.debeauvoir@co.travis.tx.us

Hart recognizes that with a project of this size, scope and nature of work, the hiring of local contractors to perform training and possibly junior level project management duties as the workload increases will be required. We have a long and successful history of managing contract labor on similarly sized projects. Since 2004 in the State of Hawaii, we have used contract labor each election cycle to augment the Core Hart Team. Our contracted partners who have assisted us with conducting successful elections include Altres, Inc. and Employers Options, Inc. In addition, in the State of Oklahoma, Hart has successfully partnered with Insight Global, Inc., to supply field technicians and polling place support across all 77 counties in the State. While Insight Global has a presence in Colorado, any potential contractor labor companies will be subject to Hart's rigorous evaluation process prior to final selection. This process will include verification with the State.

Hart commits to replacing project personnel whose performance is unsatisfactory to CDOS or any County, with other personnel whose experience and skills are acceptable to CDOS or the County.

The Project Plan, Project Workbook and Project Core Team Resumes may be found following this page.



Hart InterCivic

[Project Number]

State of Colorado Universal Voting System

Project Management Plan

Version: 1.0 Date: 10/23/2013

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**Hart InterCivic
(State of Colorado UVS)
Project Management Plan**

A. General Information

Project Number TBA **Date:** 10/23/13

Project Name: State of Colorado UVS

Project Manager: David Magedson

Authorized by: Rich Geppert
(Project Sponsor)

B. Project Change Control Plan

Forms and Templates:

Project Charter
Change Control Log (in Project Workbook)
Project Change Request Form (CR)
Work Breakdown Structure
Customer Data Sheet

The Project Scope includes the major deliverables, project objectives, project assumptions, project constraints, and the contract. The Project Scope is found in the approved Project Charter and detailed in the Work Breakdown Structure (WBS). The Project Scope Management Plan describes how the Project Scope will be managed and controlled by the project management team.

B. 1. CHANGE MANAGEMENT PROCESS

Project change control is a formal process used to identify, evaluate, track, and accept or reject changes submitted to the project after the Project Charter has been signed off and baselined. This process is essential to effectively manage changes as they arise throughout the project.

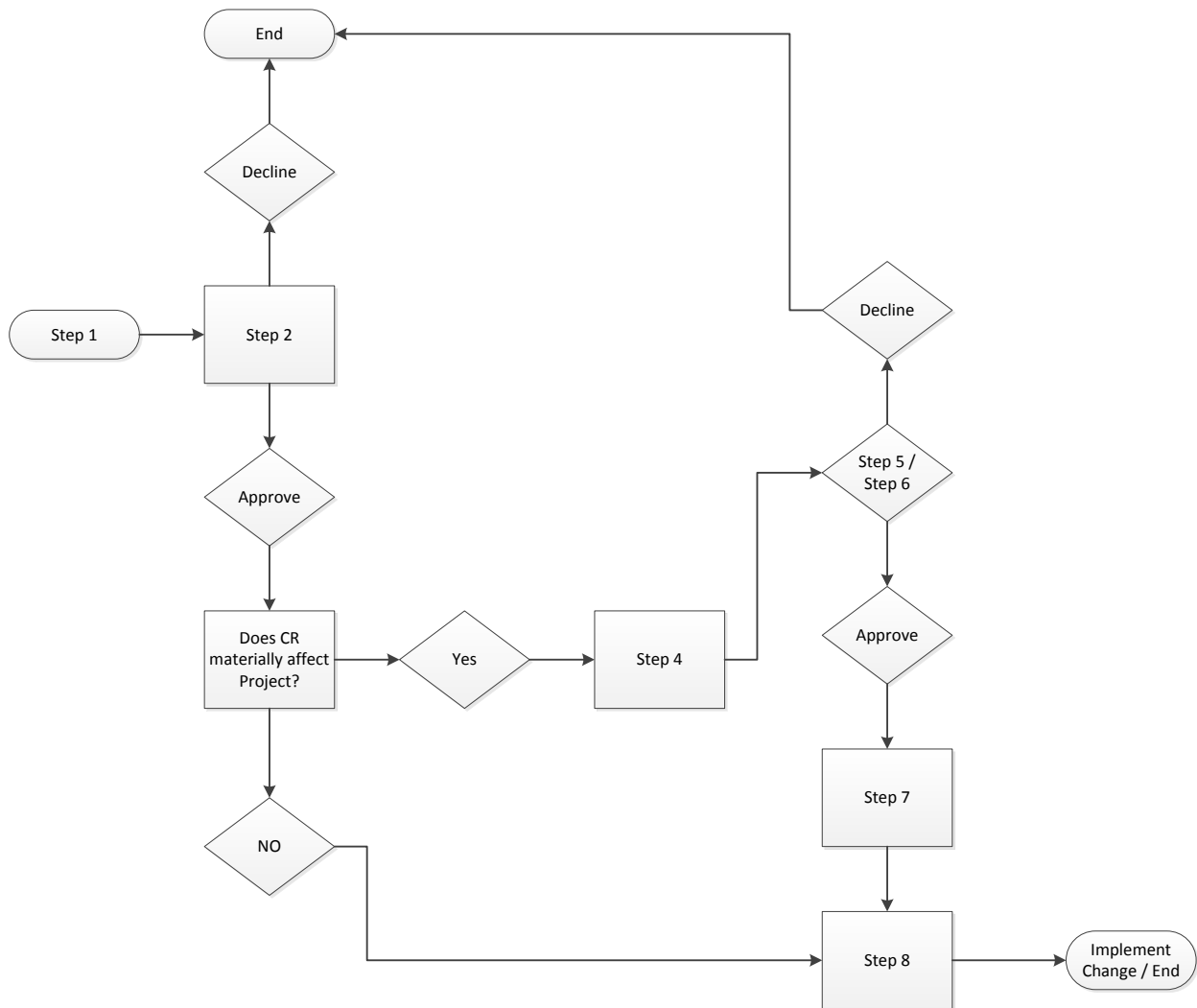
Project change control provides the project managers and project sponsors with a process to determine and assess the impact of each proposed change before the actual change is allowed to be further developed and / or implemented. This control process is critical to managing and maintaining the project schedule, scope, budget, risk, and quality.

The project will follow the process outlined below to manage changes to the project's scope, schedule, cost, or quality. This change control plan may be executed to change the approved charter during project planning or to change the approved project plan (including the charter) during project execution.

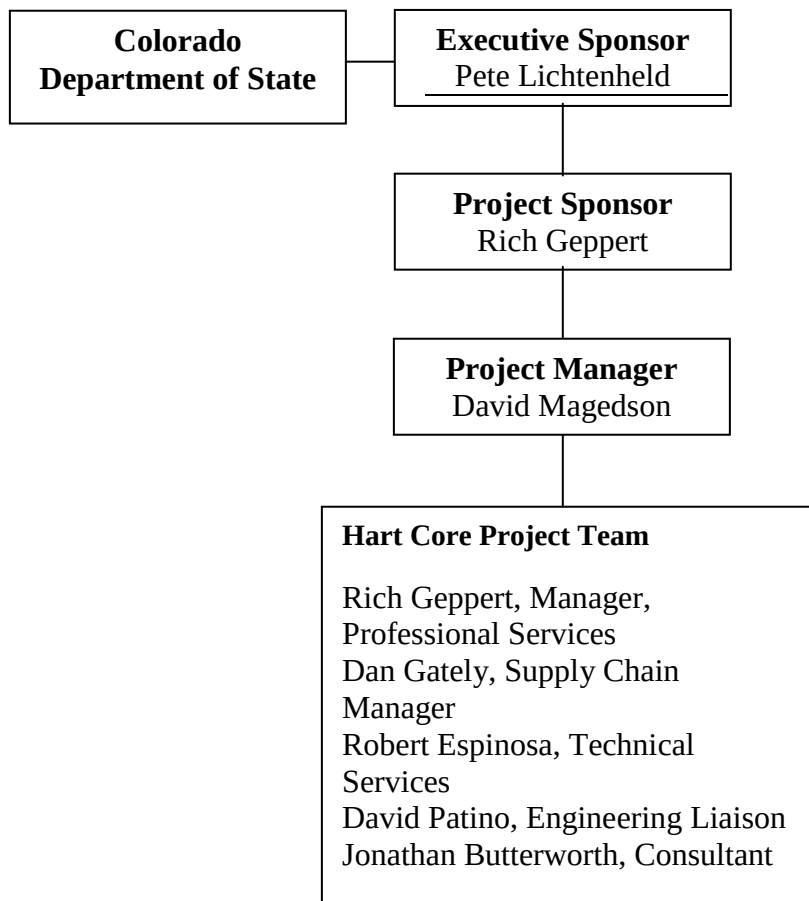
Step	Action
1	Change requestors will describe proposed changes to the project's scope, deliverables, schedule, cost, or quality in writing and submit to the Project Manager on the approved CR Form. Changes originated by Hart personnel are submitted to the Hart Project Manager. Changes originated by the State or counties are submitted to the State Project Manager.
2	The respective Project Manager will evaluate the requested change and its impact on the project scope, schedule, budget, quality, and risk. After consultation with the other team's project manager (Hart to State or State to Hart), the originating Project Manager will enter the item on the Change Control Log and assign a sequential change control number.
3	Unless otherwise indicated by the Hart Project Sponsor, the Hart Project Manager is authorized to approve/disapprove changes that do not affect the project scope, schedule, budget, quality, or risk.
4	If the change request will affect the overall project scope, schedule, cost, quality, or risk as described in the approved charter or project plan, the Hart Project Manager will provide the Project Sponsor with a recommendation to approve or disapprove.
5	The Hart Project Sponsor reviews the Project Manager's recommendation and approves or disapproves referred change requests.
6	For the State, final approval and setting of priority for CR's comes from the Elections Change Control Board or UVS Steering Committee.
7	After a decision by the originating Project Team, the CR Form is signed by the Hart Project Manager, the CDOS UVS Project Manager, the CDOS Elections Director or designee, and the Hart Project Sponsor, if applicable.
8	The Project Managers will file the original Project Change Form with the project documentation and update the Change Control Log to reflect the decision made.

B. 2. CHANGE MANAGEMENT PROCESS DIAGRAM

Step numbers in the diagram below correspond to the steps in Section B.1., above.



C. Project Organization Structure



D. Project Schedule Management Plan

Forms and Templates:

Project Schedule Template

Action Items Log (from Project Workbook)

D.1 PROJECT SCHEDULE DEVELOPMENT

In order to determine the total time required to complete the project, the Project Manager and Team will concurrently develop a schedule with the provided project plan template. The Schedule will determine the following for each activity:

Duration: How long each individual activity will take.

Sequence: The order in which the activities must be performed.

Dependence: Whether start or completion of an activity is dependent upon the start or completion of another activity.

The project phases/deliverables, work packages, and activities are identified during the creation of the Work Breakdown Structure (WBS). These activities are recorded on the Project Schedule. The Schedule will be created and maintained in Microsoft Project.

The Schedule provides a place to list all resources needed to complete each activity. These are identified as Resources (team members responsible for completion.) The Project Managers will use the Project Schedule, in conjunction with the Action Items Log, to assign tasks.

D.2 PROJECT SCHEDULE CONTROL PLAN

The Project Manager will assign activities to team members and note on the Project Schedule and/or Action Items Log. As owners of activities, team members are responsible for personally completing or assuring completion of assigned activities. The Schedule Control Plan will be followed to assure the project is completed on time.

Step	Action
1	The Project Managers will provide a Project Schedule.
2	The Project Managers will assign activities to team members using the Project Schedule and Action Items Log.
3	The Project Managers are responsible for updating the Project Schedule and Action Items Log every week.
4	Every week, project progress for each activity will be updated in the % complete column. Only 3 entries are possible: • 0% (Not Started), • X% (Percent Completed), or • 100% (Complete). Deliverables not completed by the scheduled Due Date require an explanation and a commitment of when they will be delivered. The Actual Completion Date will be recorded.
5	Every Week, the Project Managers should review project and task status with team members.
6	The Project Managers will contact any resources (aka task owners) who are behind to discuss corrective actions needed.

7	The Project Managers may use the updated Schedule and Action Item Log contents to report project status to the Project Sponsors.
8	The Schedule and Action Items Log will be updated and archived..

E. Resource Plan

E.1 PROJECT RESOURCE INFORMATION

[For each of the resources needed on the project determine the following: 1) Cost estimates for each resource, 2) Estimated hours for each resource, 3) Availability of each resource, and 4) Estimated skill set and work products/deliverables.]

*See “Project Workbook – Roster” and “Project Workbook – Resource Commitment Matrix (RCM)”

Hart’s Project Manager shall be available by telephone during Mountain Time business hours and respond to a CDOS inquiry within one business day.

E.2 RESOURCE STAFFING PLAN

[After establishing the human resources required for the project, develop a staffing plan that shows the number of personnel, by resource category type (i.e., developer), that will be required on the project on a monthly basis.]

*See “Project Workbook – Roles and Responsibilities (R&R)”

F. Project Cost Management Plan

Forms and Templates:

Pricing Model

Budget Worksheet (from Project Workbook)

F.1 BUDGET TRACKING

The State and Hart will work together to develop a living budget, showing, by County, projected timing of purchases, quantities of equipment needed and project cost. The starting document for this purpose will be the “Budget” worksheet in the Project Workbook.

Step	Action
1	As counties individually purchase the UVS, the Project Managers will track timing, quantities, and projected cost on the Budget worksheet.
2	This worksheet will be updated on an as-needed basis (minimally upon order and expenditure).
3	Every week, the Project Managerd should compare actual costs to date to projected costs to date to determine variances and state the information according to the communication plan.
4	The Project Managers notify the Project Sponsor/CDOS Elections Director in advance if trends show actual costs may exceed projected costs.

G. Project Communication Management Plan

Forms and Templates:

Internal Kickoff Meeting Agenda

Agenda/Minutes Document

Issues Log (from Project Workbook)

Action Items Log (from Project Workbook)

Decision Log (from Project Workbook)

Risk Register (from Project Workbook)

G.1 HART STAKEHOLDERS ROLES AND RESPONSIBILITIES

Stakeholder Name	Role	Responsibility
Phillip Braithwaite	CEO	Continued Project authorization
Derek Hutson	President	Continued Project authorization
Pete Lichtenheld	Executive Sponsor	Protect the Project from external risks
Rich Geppert	Project Sponsor	Direct management oversight. Help protect the Project from external risks.
David Magedson	Project Manager	Overall responsibility and accountability for successful execution of the Project. Principal communication interface with customer.
Jim Canter	VP Development	Assistance in direction of technical development.
Justin Morris	Regional Sales Manager	Key trusted interface with customer.
David Patino	Project Technical Lead	Development and support of custom applications.
Jennifer Gray	Accounting	Assist in budget tracking and customer invoicing/payment processing
Jonathan Butterworth	Consultant	Responsible for training personnel in HVS operations, equipment and Train-the-Trainer. Interface frequently with customer staff.
Dan Gately	Supply Chain Manager	Work closely with Project Manager to manage equipment ordering and supply, and ensure timely deliveries of equipment.
Robert Espinosa	Technical Services	Work closely with Project Manager to manage fulfillment of computer, HVS software, and third-party peripheral deliverables.

G.2 EXTERNAL STAKEHOLDERS ROLES AND RESPONSIBILITIES

Stakeholder Name	Role	Responsibility
The Voters	Ultimate System Users	Will provide ultimate approval of the System.
Scott Gessler	Secretary of State	
Judd Choate	CDOS Elections Director	Direct management oversight of the Project. Principal operational interface with Hart.
	CDOS UVS Project Manager	
	County Project Manager	
	County Staff	

G.3 STAKEHOLDER CONTACT INFORMATION

Name	Title/Organization	Phone	E-mail
Phillip Braithwaite	CEO / Hart	512-252-6566	pbraithwaite@hartic.com
Derek Hutson	President / Hart	512-252-6407	dhutson@hartic.com
Pete Lichtenheld	VP, Operations / Hart	512-252-6578	plichtenheld@hartic.com
Rich Geppert	Manager, Professional Services / Hart	512-252-6632	rgeppert@hartic.com
David Magedson	Project Manager / Hart	512-252-6801	dmagedson@hartic.com
Jim Canter	VP, Engineering / Hart	512-252-6410	jcanter@hartic.com
Justin Morris	Regional Sales Director / Hart	303-957-7426	jmorris@hartic.com
David Patino	Applications Engineer / Hart	512-252-6818	dpatino@hartic.com
Jennifer Gray	Accounting Specialist / Hart	512-252-6620	jgray@hartic.com
Jonathan Butterworth	Consultant / Hart	512-252-6541	jbutterworth@hartic.com
Dan Gately	Supply Chain Manager / Hart	512-252-6817	dgately@hartic.com
Robert Espinosa	Technical Services / Hart	512-252-6455	respinosa@hartic.com
Scott Gessler	Secretary of State /		

Name	Title/Organization	Phone	E-mail
	CDOS		
Judd Choate	Director of Elections / CDOS		
	CDOS Project Manager		
	County Staff		

G.4 REGULAR MEETING REQUIREMENTS

Meeting	Hart Internal Project Team Meeting
Owner	Project Manager
Timeframe/ Frequency/Trigger	Weekly, Day/Time
Attendees	Hart Project Manager, Hart Project Sponsor (Optional), Hart Consultant, etc..
Tools/Instruments	Project Plan, Project Workbook, Project Schedule, Meeting Agenda/Minutes Document
Reporting/ Documentation method	Meeting Agenda/Minutes Document, Updated Project Workbook, Updated Project Schedule

Meeting	Hart/CDOS Project Team meeting
Owner	Project Managers
Timeframe/ Frequency/Trigger	Weekly, Day/Time
Attendees	Hart Project Manager, CDOS Project Manager, County Project Manager (as required), Other Staff TBD
Tools/Instruments	Meeting Agenda/Minutes Document, Project Plan, Project Schedule, Project Workbook
Reporting/ Documentation method	Minutes, Updated Project Workbook, Updated Project Schedule

Meeting	Executive Management Meeting
Owner	Project Managers
Timeframe/ Frequency/Trigger	Monthly
Attendees	Hart Project Manager, Project Sponsor, Executive Sponsor, CDOS Project Manager, CDOS Elections Director, others as needed

Tools/Instruments	Project Plan, Issues List, Risk Log
Reporting/ Documentation method	Updated Issues List; Updated Risk Log, Stoplight Report

G.5 INFORMATION DISTRIBUTION, STORAGE, AND DISPOSITION

Report/Document Title	Project Plan (Contains Project Charter, Project Schedule, Issues Log, Risk Assessment, and Communications Management Plan)
Target Audience	Hart / CDOS Project Team and Management
Primary Notification/ Distribution Method	Posted
Timeframe/ Frequency/Trigger	Updated as needed.
Storage Location	TBA

Report/Document Title	Team Meeting Minutes
Target Audience	Project Team
Primary Notification/ Distribution Method	Posted/Emailed
Timeframe/ Frequency/Trigger	Posted/Emailed within 24 hours of applicable meetings
Storage Location	TBA

H. Project Organizational Change Management Plan

Forms and Templates:

Work Process Analysis (see attached sample templates)

Project Workbook

Communication Management Plan

The Organizational Change Management Plan involves defining roles and responsibilities within both the vendor and customer organizations, and identifying how roles, and processes, will change with the implementation of a new voting system. As such, this portion of the overall Project Plan is closely linked to the Communications Management Plan. Aspects of organizational change management that are interlinked with the Communications Management Plan include listing and describing stakeholders, identifying communication strategies for each stakeholder group, and targeting communication methods, messages, and timelines for delivery.

The most important tool in the Organizational Change Management Plan template is the Work Process Analysis (WPA). The WPA has proven to be an invaluable tool that Hart uses to address process changes needed with the advent of the new voting system, and help the customer organization manage the change

that comes with the new implementation. Upon the commencement of the Colorado UVS project, the Hart Project Manager will work with the CDOS project team to perform a WPA. The WPA will consist of a series of interviews with key staff, in order to document as completely as possible current, legacy policies and procedures. Coming out of this process, the Hart and CDOS teams will collaboratively work together to construct a Gap Analysis, and Hart will produce a document that identifies gaps in process and knowledge, and recommend ways to bridge those gaps, either through training or process changes. Hart will work with CDOS to manage the change needed, help team members with changes to their job functions, and matriculate that change throughout the organization(s) as needed, to help institutionalize the new processes.

Following the completion of the WPA process with CDOS, Hart will perform the same process with each county, as it's implemented, thus making sure process and job duty changes are well thought out and planned.

For the Colorado UVS project, Hart recommends performing a BPA with the State, and with each County to be implemented, using appropriate templates for the counties depending on their size.

I. Project Risk and Issues Management Plan

Forms and Templates:

Risk Register (from Project Workbook)

Issues Log (from Project Workbook)

A risk is an uncertain event or condition that, if it occurs, has a positive or negative effect on the project's objectives. The Risk Management Plan describes how risk identification, risk analysis, and risk control will be accomplished on the project.

I.1 RISK MANAGEMENT STEPS

Step	Action
	RISK IDENTIFICATION
1	At the beginning of the project, team members will brainstorm applicable risks.
2	The Project Managers will log risks on the Risk Management Matrix.
3	Any team member should notify their respective Project Manager of additional risks at any point in the project. The Project Manager will log risks on the Risk Management Matrix.
	RISK ANALYSIS
5	The project team will collectively determine trigger events/indicators for each risk. The Project Managers will note these on the Risk Management Matrix.
6	The project team will determine the probability, impact, detectability and importance matrix values for each risk. The Project Managers will note on the Risk Management Matrix.
7	The Project Managers will rank risks quantitatively according to the values on the Risk Management Matrix and will sort risks accordingly.
8	The project team will brainstorm risk responses and descriptions for each of the risks noted on the Risk Management Matrix. The Project Managers will note on the Risk Management Matrix.
9	If project scope, quality, cost or schedule is not impacted, the Project Managers will decide which risks to address and manner of addressing risks.

10	If project scope, quality, cost or schedule is impacted, the Project Managers will recommend which risks to address and manner of addressing risks to the Project Sponsors.
11	Any resulting changes in scope, quality, cost or schedule are noted on the Change Control Log.
	RISK MONITORING and CONTROL
12	At each project team meeting, Project Manager(s) and team will cover items on the Risk Register.
13	As necessary, Project Managers will take or recommend contingency action based on trigger events/indicators.

I.2 ISSUE MANAGEMENT STEPS

All project stakeholders are empowered to identify issues needing resolution to assure project success. An issue is a point or matter in discussion or in dispute, or a point or matter that is not settled and is under discussion. The Issue Management Plan describes how issue identification, issue resolution planning and reporting, and issue monitoring and control will be accomplished on the project.

Step	Action
	ISSUE IDENTIFICATION
1	E-mail the issue to the Project Manager(s) or raise the issue during the project meeting.
2	Provide enough information about the issue so it can be assessed.
3	The Project Manager will log all issues upon receipt on the Issue Log.
	ISSUE RESOLUTION PLANNING & REPORTING
4	Resolutions to issues will be determined in order to assure project objectives are achieved.
5	Project Managers assign issue ownership to a team member.
6	Issue Owner investigates, coordinates, and develops proposed resolution.
7	Issue Owner e-mails proposed resolution to Project Manager(s).
8	Project Managers determines whether consensus or approval is required.
9	Project Managers assign resolution to Issue Owner.
10	Issues Log will be kept current to inform the Project Sponsor of current status and progress on reported issues.
	ISSUE MONITORING CONTROL
11	Project Manager(s) records issue updates on Issues Log.
12	Issue Owner reports status by e-mail to Project Manager(s) as designated in the communication plan.
13	An Issues Review will be held at every Project Meeting, to review status, identify obstacles, remove barriers, and identify new issues.
14	Project Manager(s) will update and archive Issues Log to benefit current and future projects.
15	The Project Managers escalate complex or high-risk issues to Project Sponsor and executive management (if applicable).

K. Signatures

The signatures of the people below relay an understanding in the purpose and content of this document by those signing it. By signing this document you agree with the project plan as written.

Name/Title	Signature	Date
Hart Project Manager		
CDOS Project Manager		

L. Document Control**Change History**

Version	Release Date	Description [list of change, reason for change, & editor's name]
1.0	10/23/13	First Draft – CO UVS – Rich Geppert

State of Colorado

Department of State



Uniform Voting System Request for Proposal RFP # CDOS-UVS-2013-01

Appendix B System Requirements Table October 1, 2013

INSTRUCTIONS FOR COMPLETING SYSTEM REQUIREMENTS TABLES

The Vendor must assign a Response Code to each listed requirement. Use only the values of 1, 2, 3, 4, or 5 as a Response Code. The Response Code values and meanings follow:

- 1 – The proposed solution **provides full functionality for the requirement**. Some configuration may be necessary. This functionality is considered part of the base solution cost.
- 2 – The proposed solution **provides partial functionality for the requirement**. Customization and additional costs are required to meet full functionality and **customization is being proposed**. In such cases, the Vendor shall provide a description, in the Vendor Response column, of the partial functionality provided. If customization would cause a certification issue, please explain in the Vendor Response column. Customization Costs to provide complete functionality shall be included in the Cost Proposal in the Customization Cost category.
- 3 – The proposed solution **does not provide any functionality required for the requirement**. Customization and additional costs are required to meet full functionality and **customization is being proposed**. If customization would cause a certification issue, please explain in the Vendor Response column. Customization Costs to provide complete functionality shall be included in the Cost Proposal in the Customization Cost category.
- 4 – The specific requirement is **not met, and the vendor does not propose a customization or service to meet it**. In such cases, the Vendor shall provide in the Vendor Response column an explanation of the reason(s) for not proposing customization to meet the requirement, including any potential workaround options.
- 5 – The Vendor is **not proposing a solution for requirements within the Requirement Category**, but is proposing solutions to requirements in other Appendix B table categories. For example, a vendor may be proposing a solution that addresses Electronic Voting Equipment only. In this example, the vendor would mark each Electronic Voting Equipment requirement with the appropriate Response Code and mark all the requirements in other categories with a Response Code of “5”.

CDOS may include a **Note** at the end of a requirement statement requesting information from vendors. Vendors should address the Note by providing answers or information in the Vendor Response column. If the answer or information is lengthy and is provided in another area of the vendor’s RFP response, a specific reference to that area may be provided in the Vendor Response column. If multiple notes are listed in a requirement, please identify the note number associated with each vendor response.

System Requirements Tables for the following categories of requirements are contained in this Appendix B. Each category is stored in its own MS Word table. Each category is further divided into sub-categories. The major categories and category definitions are as follows:

- **A – Election Management System (EMS)** – this category addresses the software needed to programmatically create an election, design ballots, program voting system configurations, view stored cast votes and ballot images for adjudication, and provide for system reports.
- **B – Polling Location Ballot Scanner and Tabulation Equipment** – this category covers hardware and software used at a polling location to scan and tabulate ballots.
- **C – Central Ballot Scanner and Tabulation Equipment** – this category includes hardware and software used at a central location to scan and tabulate ballots. This equipment is typically used for processing mail/absentee ballots in volume.
- **D – Electronic Voting Equipment** – this category includes hardware and software that allow a voter to enter a vote by interfacing with an electronic device (e.g. touchscreen, touch controls, audible speech, sip and puff, paddles) rather than manually marking a ballot. By statute, the electronic voting equipment must generate a verifiable paper trail in the form of a printout or an actual machine marked ballot. The electronic voting equipment may or may not tabulate the votes. If the equipment is the type that marks a ballot, it is possible that the ballot will be scanned and tabulated by another piece of equipment. In this case, the machine marked paper ballot is the VVPAT.
- **E – Automated Ballot Envelope Scanning, and Signature Verification** – this category includes hardware and software to scan ballot envelopes, capture an image of the envelope (including voter signature), and affix certain information to the envelope (e.g. date, time, county identifier). The signature verification function is typically software driven and performed without human intervention. When exceptions are encountered by the automated system, an authorized user can view the signature captured by the envelope scanner or physically view the actual envelope and compare the signature image with the signature maintained in the voter registration system.
- **F – Mail Ballot Tracking** – this category addresses requirements for a mail ballot tracking system to be used by all counties in Colorado.
- **G – Vendor Training and Support** – this category addresses training and support requirements of the voting system vendor.
- **H – Miscellaneous Requirements** – this category identifies miscellaneous requirements related to auditing, voting system certification, testing of hardware/software, security, and system documentation.

The Requirements tables are set up to not allow rows to break across pages. If a vendor response is long enough to cause a table row to be longer than one page can handle, please change the Microsoft Word Row Property for that particular row to allow it to break across pages.

A vendor may respond to any or all of the Requirement Categories “A” through “F”, depending on the products and services the vendor is offering to Colorado. For instance, a particular vendor may only be offering a Mail Ballot Tracking system and; therefore, would only respond to the Mail Ballot Tracking category “F”. Another example might be a vendor who only wants to propose an Electronic Voting Equipment solution and; therefore, would only respond to the Electronic Voting Equipment category “D”.

Any vendor who responds to one or more of the Requirement Categories “A” through “F” must also, where applicable, complete the Requirement Categories of “G” for Vendor Training and Support and “H” for Miscellaneous Requirements.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Election Creation	A-1	Allow county and state election officials the ability to generate and maintain an administrative database containing the definitions and descriptions of political subdivisions and offices within their jurisdiction.	1	
Election Creation	A-2	Provide definition for separate ballot styles that reflect different combinations of contests that are included depending on place of residence of the voter or similar administrative criteria.	1	
Election Creation	A-3	Provide software capability for the creation of newly defined elections.	1	
Election Creation	A-4	Provide software capability for the retention of previously defined election setups.	1	
Election Creation	A-5	Provide software capability to copy, edit, and delete previously defined elections.	1	
Election Creation	A-6	Generate all required master and distributed copies of the voting program in conformance with the definition of the ballot for each voting location and voting device, including devices required to facilitate mail-in voting and voters with disabilities.	1	
Election Creation	A-7	Provide for all distributed copies of the voting program, resident or installed, in each voting device to include all software modules required to monitor system status and generate machine-level audit reports, to accommodate device control functions performed by voting location officials and maintenance personnel, and to accept and accumulate votes.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Election Creation	A-8	Provide for a unified, integrated centralized database that allows global edits by authorized users. Note: Please describe how the system minimizes the need to update a particular data element in multiple locations for a change made to that data element anywhere within the database. For instance, removing a candidate that appears in multiple ballot styles or changing a voting location designation that appears in multiple places in the database.	1	Note: The Verity Layout data management software and Verity Build election definition software work hand-in-hand to manage and deploy election data in a global, unified fashion, thereby minimizing the need to update data elements in multiple locations. Once election data is entered into Verity Layout, the software application produces a single flat file in a format that can be imported by Build, the election definition software in Verity Voting. The same election definition that is produced by Build is read by Verity Central, for central scanning, or is deployed to voting devices, on portable flash media (vDrives), so all components of the voting system are using the same common data set. Last-minute changes in ballot information may be incorporated quickly and smoothly. The specific measures to be taken depend on the stage of the ballot development process at the time the change is to be implemented. If the Build database has not been finalized, changes are as simple as editing the data fields affected by the change in the Build file import (typically done by using Layout) and continuing the normal processes. If the Build database has been generated and the vDrives (portable USB flash media) containing the election definition have already been written, State or County staff can simply copy the existing election dataset and create a new one (typically done by using Layout). The new database can then be opened to edit the data fields affected by the change, and then the data is re-exported to Build. Once the updated data is in Build new vDrives containing the revised election definition data can be written.
Election Creation	A-9	Provide a test mode which supports testing to validate the correctness of election programming for each voting device and ballot style and ensure that the ballot display corresponds with the installed election program.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Election Creation	A-10	Be able to import electronically from the Secretary of State and counties in an agreed-upon format that contains, at a minimum, the following data: a. Full candidate name b. Candidate sequence, title and text of ballot questions, and voting language options c. Office name d. Contest name, including candidate name in case of retention contest e. Maximum number to vote for each office f. Party affiliation g. Number of eligible registered voters at the precinct h. Number of active registered voters at the precinct.	1	Regarding “registered voters” versus “active voters,” Verity default data formats provide the user the ability to apply the appropriate label in Count tabulation reports, but standard file formats do not simultaneously store both sets of registration data; users would enter one or the other into Count, and label the report headings accordingly..
Election Creation	A-11	Be able to export electronically to the Secretary of State and counties in an agreed-upon format that contains, at a minimum, the following information: a. Full candidate name b. Office name c. Contest name d. Number of votes for each candidate and ballot question e. Number of votes against each ballot question f. Number of undervotes in each contest g. Number of overvotes in each contest h. Number of people voting by precinct and by party affiliation (if applicable) i. Number of registered voters at the precinct level (by party affiliation, if applicable)	1	
Election Creation	A-12	Allow EMS authorized users the ability to create custom voter instructions that may include images.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Election Creation	A-13	Provide the flexibility to have an election created by an authorized user (vendor, county, state or other third party) and import or export as necessary.	1	
Election Creation	A-14	Accommodate multiple languages (English and Spanish required). Note: Please explain the capabilities of your system to handle multiple languages.	1	The Verity Voting system provides alternative language accessibility in accordance with the requirements of Section 203 of the Voting Rights Act of 1965. Hart has deployed our voting system in many jurisdictions requiring multiple languages on the ballot. We have provided ballots in up to five languages for a single jurisdiction, and have the capability to provide up to nine languages for a given election. Paper ballots may be produced as single-language or bilingual.
Election Creation	A-15	Allow for a mock election setup and support for public use prior to the initiation of a live election.	1	
Election Creation	A-16	Allow for precinct numbers containing at least 10 digits/characters.	1	
Ballot Creation	A-17	Provide for standard ballot layout prototypes to be edited for ease of election specification.	1	
Ballot Creation	A-18	Provide an authorized user the ability to customize the standard ballot layouts.	1	
Ballot Creation	A-19	Provide software capability for authorized users to create newly defined ballot layouts. The system will be designed so as to facilitate error-free definition of ballot layouts for electronic voting equipment and paper ballot optical scanning equipment. For example, the system should have the capability to report discrepancies between ballot layouts.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot Creation	A-20	Allow for creation of two-sided and multi-page ballots. Note 1: Please explain how your system handles the creation of multi-page ballots. Note 2: Please explain any built-in control your system has for preventing bleed-through ink from erroneously marking votes on both sides of a two-sided ballot.	1	Note 1: Verity Layout and Verity Build automatically generate additional ballot pages in those instances where a user has entered a quantity or length of contests that surpasses the layout space available for the size of paper that the user has selected. When additional pages are created in the ballot templates, the system also automatically tracks “page x of y” information, which is automatically displayed on each ballot sheet (i.e. face), so that voters know how many pages the ballot spans. Note 2: Bleed-through ink is dependent upon the ballot paper chosen for ballot printing. Though not required, Hart recommends using Hart Official Ballot Stock, thus eliminating the possibility of bleed-through ink.
Ballot Creation	A-21	Have the capability to reprogram, download, and reinstall a ballot for an electronic voting device or paper ballot optical scanner. Note: Please explain the process and procedure, with time frames, required to reprogram, download, and reinstall a ballot on the voting device in the event that there is a change to a name or contest on the ballot in the final few weeks before an election.	1	Last-minute changes in ballot information may be incorporated quickly and smoothly. The specific measures to be taken depend on the stage of the ballot development process at the time the change is to be implemented. If the Build database has not been finalized, changes are as simple as editing the data fields affected by the change in the Build file import (typically done by using Layout) and continuing the normal processes. If the Build database has been generated and the vDrives (portable USB flash media) containing the election definition have already been written, State or County staff can simply copy the existing election dataset and create a new one (typically done by using Layout). The new database can then be opened to edit the data fields affected by the change, and then the data is re-exported to Build. Once the updated data is in Build, new vDrives containing the revised election definition data can be written. These changes can be accomplished in a manner of minutes. Configuration of each voting device with the new election definition takes approximately 3-4 minutes per device.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot Creation	A-22	For each election, generate and maintain a contest title and candidate name database and provide for the production or definition of properly formatted ballot layouts for use on paper ballots and electronic voting devices. This database will assist the operator to design and edit ballot layouts for paper ballots and electronic voting devices with a minimum amount of repetitive tasks.	1	
Ballot Creation	A-23	Provide a mechanism for the definition of the ballot, including the definition of the number of allowable choices for each office, contest, measure, and for special voting options such as write-in candidates. Note: Please state your solution's maximum number of potentially active voting positions (arranged to identify party affiliations if a primary election), offices and their associated labels and instructions, candidate names and their associated labels and polling instructions, and issues or measures and their associated text and instructions.	1	Verity is designed to support the following system limits: • 3000 precincts per election, with 20 splits per precinct • 600 districts per election • 32 parties per election • 1200 contests per election • 100 options per contest • Max. 8 voting types (CVR sources)
Ballot Creation	A-24	Provide for the retention of previously defined ballot layouts.	1	
Ballot Creation	A-25	Provide for the modification of previously defined ballot layouts, subject to additional security requirements, after an election has been defined.	1	See comments in A-21, above.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot Creation	A-26	Provide for all voting options and specifications as provided for in the Colorado Revised Statutes, including the requirements for a recall election and instant runoff voting (IRV) (section 1-7-1003, C.R.S.). Note: Ranked Voting Methods, including IRV, are currently features used in local jurisdiction elections and not at the State or County level. However; since counties often conduct elections for local jurisdictions, please explain the capabilities of your system to create and process a ballot that contains one or more contests requiring a ranked voting and tabulation process.	2	The Verity system supports Ranked Choice Voting with three ranking choices per contest. Customization would be required to incorporate the specific requirements concerning rules and algorithms that govern the tabulation of ranked choices in the manner desired by jurisdictions that use ranked choice voting. The unique architecture of the Verity family allows data required for tabulation of ranked choices to be output from Verity Voting to Verity Election Office, where customized applications can be developed to tabulate the data in accordance with specific RCV rules.
Ballot Creation	A-27	Generate sample ballots for each ballot style that will not be accepted or counted by a scanner.	1	
Ballot Creation	A-28	Generate a consolidated sample ballot containing all races, issues and questions.	1	Due to the large number of races that could be included in an election definition, a true “bedsheet” style ballot layout for all races is unwieldy; however, Verity Voting can produce an “All Contests” report that includes all of the information requested, and more.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot Creation	A-29	Produce ballot content output for paper ballot printing, with the following capabilities: - Accommodate non-proprietary print-ready format (e.g. PDF). - Accommodate multiple stub sizes within same election. - Accommodate multiple stubs on a ballot. - Accommodate variable paper ballot stub sizes up to three inches. - Customize paper ballots with sequential numbering and static fields on ballot stubs. - Handle multiple font features. - Handle special character sets associated only with non-English languages. Note 1: Please provide your ballot size capabilities and layout options. Note 2: Please provide information about your system's font capabilities (e.g. typefaces, sizes, kerning and leading, color, bolding, underscoring, and italics).	1	Note 1: Ballot length options include 8.5x11 8.5x14; 8.5x17 and 11x17. In addition, users may create ballots with or without stubs, in a variety of sizes. Ballots may include zero, one or two stubs, in sizes that range from 1" to 3". The largest ballot that Verity can support is 11x14, plus a 3" stub, to be printed on standard ledger 11x17. Verity offers tremendous flexibility in ballot design through the use of ballot templates. Templates are a powerful mechanism for defining and applying ballot layout characteristics such as the number of columns, font styles, images, borders, colors, shading and other key aspects of ballot presentation. Ballot layout rules support best practices authored by AIGA Design for Democracy (2007) and the Brennan Center for Justice (2008). Ballot templates are stored as XML files and are editable. The templates include: standard and condensed layouts for standard ballot sizes; one, two, three, or four column layouts; bolding applied to headers and option names; and italics applied to the second language selected on any bilingual template. Note 2: If desired, ballot templates can be customized to: adjust font sizes; adjust font (the System supports most Windows compatible fonts); apply bolding, underlining and italics to specific ballot elements; accommodate table formats, e.g. for tax levy information; adjust margins and location of ballot elements. Additionally, images may be included on ballots.
Ballot Processing	A-30	Output ballot content to an election media device for use in equipment (electronic voting devices, scanners, tabulators, etc.).	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot Processing	A-31	Output ballot content to accommodate accessible voting, including adjustable audio and visual output. Note: Please detail capacity limits of data fields for accessible voting (e.g. font sizes, display options).	1	• Standard size setting: font sizes vary from 21-32pt font. • Large size setting: All text is 40pt font • Small size setting: font sizes vary from 18-22pt font. • Display can be masked for non-sighted voter use. • Two high contrast modes: Black text on white background and white text on black background
Ballot Processing	A-32	Allow authorized users to electronically adjudicate ballots to reflect voter intent, while retaining the originally marked ballot image. Note: Please explain the process of ballot adjudication using your system.	1	Verity Central includes a unique on-screen, color-coded ballot adjudication feature that increases the efficiency and accuracy of ballot adjudication and avoids the necessity to alter the original paper ballot in any way. Central identifies ballots requiring adjudication (write-ins, mismarks, overvotes, undervotes), according to parameters set by the State election code and local election officials. Adjudication occurs by reviewing the ballot's digital image on the computer screen to record write-in votes or resolve questions of voter intent. As issues are resolved, election officials use a simple menu-driven interface to make and record decisions. An audit log, including the user ID, records all resolution decisions, providing a complete record of the adjudication process.
Vote Results Reporting	A-33	Report vote tally results by individual voting device. Note: For the purposes of this RFP, the Vote Results Reporting requirements are shown as part of the EMS. Some vendors may have a reporting module that is considered separate from their EMS and, if so, can explain that in their response to this requirement.	1	
Vote Results Reporting	A-34	Report vote tally results by contest jurisdiction-wide.	1	
Vote Results Reporting	A-35	Report vote tally results by contest by precinct.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Vote Results Reporting	A-36	Report the total votes for each candidate for each contest, as well as by candidate by precinct.	1	
Vote Results Reporting	A-37	Report vote tally results by voting location.	1	
Vote Results Reporting	A-38	Report vote tally results by ballot source (e.g. Early Vote, Election Day, Mail, and Provisional).	1	To report provisional votes separately, election administrations would need to create a separate voting source called “Provisional” in the election definition, and only those provisional ballots that have been accepted for inclusion in the tabulated results would be scanned.
Vote Results Reporting	A-39	Report votes by ballot style.	1	To accomplish this, the administrator would set up Precinct Groups in Verity Count software that match existing ballot styles.
Vote Results Reporting	A-40	Report votes by ballot batch.	1	
Vote Results Reporting	A-41	Report votes by ballot style within precinct.	1	
Vote Results Reporting	A-42	Report undervotes and overvotes in each contest, with the option to exclude from reports.	1	
Vote Results Reporting	A-43	Provide the capability to report ranked-choice voting results.	2	The Verity System supports Ranked Choice Voting with three ranking choices per contest. Customization would be required to incorporate the specific requirements concerning rules and algorithms that govern the tabulation of ranked choices in the manner desired by jurisdictions that use ranked choice voting. The unique architecture of the Verity family allows data required for tabulation of ranked choices to be output from Verity Voting to Verity Election Office, where customized applications can be developed to tabulate the data in accordance with specific RCV rules.
Vote Results Reporting	A-44	Report a summary of results in addition to the detailed Statement of Votes Cast reports.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Vote Results Reporting	A-45	Report certified write-in candidate results in each contest with the ability to exclude from reports.	1	
Vote Results Reporting	A-46	Import election night voter registration counts for Active and Total voters and report percent turnout relevant to vote tally for both Active and Total registrations.	1	Users have the ability to specify whether Verity Count reports list “active registered voters” or “total registered voters.” However, users are limited to uploading only one of the two classes of data into Verity Count; it cannot manage both separately/simultaneously.
Vote Results Reporting	A-47	Report and export each report in either PDF, XLS, TXT, EML, or CSV formats. Note: Please identify the formats available in your system.	1	Verity can report and export in PDF, XLS, TXT, SML and CSV formats.
Vote Results Reporting	A-48	Provide for Zero reports to be printed prior to first upload of voting results.	1	
Vote Results Reporting	A-49	Allow the capability to select any combination of reports to be run and logged at any time permissible.	1	
Vote Results Reporting	A-50	Provide customization of report headers (e.g. “Unofficial” or “Final Unofficial”), contest labels and print layout. Note: Please explain any character limitations imposed by your system on labeling, reporting or exporting.	1	Any reports and exports support the field limits for the data entered in Verity Layout.
Vote Results Reporting	A-51	Include creation date, time, and page numbers on all reports.	1	
Vote Results Reporting	A-52	When the total number of votes cast by voters on a specific ballot style/precinct or with a particular voting method or at a particular voting location is less than the currently allowed threshold of ten, the vote tallies for all such subgroups are to be reported in aggregations such that each category always contains at least ten, per section 1-8-308(b), C.R.S. This is also applicable to property owner ballots. Note: Please explain how your system will accommodate this requirement for all reports to maintain voter privacy.	1	Verity includes a feature that has been specifically designed to meet this known Colorado requirement. In Verity Count, if the user attempts to run a report that would include results less than the currently allowed threshold of ten cast ballots, Count will present a warning, and the user must configure the aggregated results into user-defined columns (groupings) so that no aggregation contains less than the allowed threshold.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Vote Results Reporting	A-53	Allow the minimum threshold number of votes to be changed if the legal requirement changes. This requirement refers to section 1-8-308(b), C.R.S.	1	Verity allows users to set the minimum threshold number.
Vote Results Reporting	A-54	Be able to include or exclude property owner ballot results from reports.	1	
Vote Results Reporting	A-55	Provide an option to suppress a race or candidate from all reports, when either is withdrawn from the ballot.	1	
Vote Results Reporting	A-56	Provide an easily readable method to identify the candidate(s)/measure with the most votes in each contest. If more than one winner is possible, identify all winners. Note: Your system should have this feature as an option, so not used on partial results reports.	1	This capability is available via Verity's customized reporting tool.
Vote Results Reporting	A-57	Have the capability to report political party designation for each candidate for partisan elections.	1	
Import/Export	A-58	Import/export ballot information and voter registration information files to be exchanged from/to Colorado's centralized statewide voter registration database (SCORE).	1	The import/export format would need to be agreed upon by the State and Hart. If the State cannot export information in the required formats, then additional customization would be required to accomplish the integration. This additional customization may be at an additional cost to the State.
Import/Export	A-59	Display detailed upload status for each portable vote storage media unit (e.g. memory card) by polling location and counting center. Note: For example, users should be able to visually confirm an exact match between the physical portable vote storage media unit being uploaded and the unit identified by the EMS. (e.g. If an authorized user is uploading "Polling Location A, Memory Card 01", onscreen the user should be able to visually confirm that the system is uploading "Polling Location A, Memory Card 01." Please explain how your solution handles this scenario.	1	When each "vDrive" USB flash memory drive containing Cast Vote Records is read into the Verity Count tabulation software, the on-screen display identifies/confirms the following: Status – "Read" vDrive ID # Quantity of ballots on vDrive Quantity of audit log entries on vDrive Polling Place Location Name

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Import/Export	A-60	Prevent the upload of wrong or duplicate portable vote storage media units. Note: Please explain your system's safeguards against errant or multiple uploads from portable vote storage media units and how to correct the problem if it should happen.	1	Because each vDrive portable USB memory device has a unique ID # which is validated when the device is inserted into the Verity Count tabulation workstation, it is impossible for a vDrive to be uploaded more than once. In the event that a vDrive is erroneously inserted more than once, the software application generates a message to the user that the memory device has already been read, and should be removed.
Import/Export	A-61	Produce and print a list, at any time in the process, showing which portable vote storage media units have and which have not been uploaded.	1	
Import/Export	A-62	Save a report to a local or portable drive for transfer to a networked computer in a non-proprietary format.	1	
Import/Export	A-63	Display error messages and instructions to recover during importing and exporting operations.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Data Storage and Processing	A-64	Maintain election data in a secure environment. Note: Please describe how EMS data is stored and secured from unauthorized access and/or manipulation.	1	Security Overview: • Verity security covers physical, electronic, software and policies • Authentication is internal to Verity • User accounts and passwords are managed by Verity • Account management is not part of an application • Authorization is role-based • Each user has a role • Each independent operation is authorized by the system based on role • Role Based Access Control • NIST-Approved Security Pattern • Digital signatures provide tamper evidence and non-repudiation for • Verity executables • Election definition and device configuration • Cast Vote Records • Audit logs • Verity Key serves two functions • Secure transport of secrets such as keys for digital signatures ◦ Keyed to a single election • Two-factor ◦ All user/ system actions are logged and auditable Verity implements an AAA security model separate from the host operating system and the County's infrastructure. This includes role based access control (RBAC). Verity Build, Central, and Count are physically separated from the intranet and extranet in order to reduce network-based risks. The Verity Layout workstations may be additionally configured to be part of the County's access control infrastructure. Cast Vote Records are digitally signed to ensure non-repudiation and non-mutability. They are stored as clear text to ensure auditability and transparency. The data is secured using asymmetric keys. Access to cast vote record export and tabulation functionality is protected by NIST approved RBAC mechanisms.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Data Storage and Processing	A-65	Provide the capability for counties to upload, from election media, externally created election setup data.	1	
Data Storage and Processing	A-66	Provide a means to upload vote count results to the EMS from vote collection/tabulation equipment.	1	
Data Storage and Processing	A-67	Provide statistics of batches (e.g. number of ballots in each batch, number of batches pending, number of batches deleted, and number of batches saved). Note: Does your system have a batch size and/or number of batches limitation and, if so, what is it?	1	The largest batch size that the COTS scanner can accommodate is 750 ballots per batch. Verity has no limitation on the number of batches that can be saved.
Data Storage and Processing	A-68	Have the ability to delete saved ballot batches from the system. Note: Please explain how your system manages batch accountability identification.	1	Each batch has a numerical identifier, and the status of saved batches can be viewed on-screen, or printed in a status report. Users may also enter customized “batch notes” for individual batches to assist in their identifications, workflow issues, and so forth. Finally, as is the case with all activities associated with Verity software applications, deletion and saving of batches, as well as other workflow activities, are recorded in Verity’s detailed audit logs.
Data Storage and Processing	A-69	Have data backup capabilities. Note: Please explain any system data backup capabilities and protocols within your system.	1	All information managed by the polling place tabulators is saved in physically separate devices (Scan: in the Scan internal memory, on the vDrive USB flash media, and the original marked paper ballots scanned through the device; Touch Writer with Access: in the voting device, and on the vDrive), providing back-up and redundant data storage in the event any one of the components malfunctions. In accordance with VVSG 1.0 requirements, please note that the Touch Writer BMD does not store voter selections.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
A – ELECTION MANAGEMENT SYSTEM (EMS)**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Data Storage and Processing	A-70	Have redundancy capabilities. Note: Please explain any general and real time redundancy features.	1	All information managed by the polling place equipment is saved in physically separate devices (Scan: in the Scan internal memory, on the vDrive USB flash media, and the original marked paper ballots scanned through the device; Touch Writer with Access: in the voting device, and on the vDrive), providing back-up and redundant data storage in the event any one of the components malfunctions. In accordance with VVSG 1.0 requirements, please note that the Touch Writer BMD does not store voter selections.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Scanning	B-1	Accurately capture votes from paper ballots. Note 1: Please indicate the speed of your polling location ballot scanner. Note 2: Please describe how acceptance/rejection criteria for ballot marks are established for your polling location scanner. Note 3: Please explain how your polling location scanner is impacted by ballots containing fold creases or other irregularities.	1	Note 1: The Verity Scan in-person ballot scanner is designed to process up to approximately 720 ballots (single sheet, duplex ballot) per hour. It is important to note that scanner throughput rates are only one factor in the ballot processing equation. Other key factors include efficient design and execution of workflow processes, workspace/facility layout, and supervisory attention. With some concentrated effort in these areas, throughput can be enhanced dramatically, and Hart's system design, training, project management, and continuing support are all structured specifically to help our customers achieve efficient, secure, and consistent performance in all areas of operation. Note 2: The Verity threshold for the percentage of the target area that will cause a mark to count is 5%. Note 3: Scan is not adversely affected by the presence of "normal" fold lines, i.e. fold lines that are normal artifacts of by mail voting operations including folding, inserting, mailing, voter handling, re-mailing and pre-scan processing.
Scanning	B-2	Notify the voter or an authorized user of errors before accepting the ballot.	1	
Scanning	B-3	Accept overvoted ballots, upon review, in a manner that allows the voter to review each case of an overvote, one case at a time, and to provide clearly understandable options to further review the ballot, or cast the ballot without further review if the voter chooses not to ask for a replacement ballot.	1	.
Scanning	B-4	Accept undervoted ballots, upon review, in a manner that allows the voter to review each case of an undervote, one case at a time, and to provide clearly understandable options to further review the ballot, or cast the ballot without further review.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Scanning	B-5	Handle, and reliably account for, multi-page ballots, including when the pages become separated from each other. Count votes regardless of the sequence that pages are scanned or if some pages are not scanned. Note: Please explain how your system reliably accounts for multi-page ballots, including when the pages become separated from each other.	1	The ballot counter is incremented once for a multi-sheet ballot, and the sheet counter is incremented once for each sheet. Sheets do not have to be scanned in a specific order. If sheets are missing, votes on the scanned sheets are still counted correctly.
Scanning	B-6	Display a Public Counter, which shows the number of ballot pages processed.	1	Verity's public counter displays the number of ballots processed. Verity has a separate sheet counter for the purpose of page counts.
Scanning	B-7	Display a Protective Counter showing the count of all ballot pages processed on the equipment, which is not reset after an election.	1	Verity's private counter displays the number of ballots processed. Verity has a separate sheet counter for the purpose of page counts.
Scanning	B-8	Accept ballots in any of the four possible orientations.	1	Verity accepts portrait ballots that can be scanned face down or face up; and header-first or footer-first.
Hardware	B-9	Display the unit serial number(s) of tabulation devices both physically and within any applicable software, logs, or reports.	1	
Tabulation	B-10	Have the ability to write cast vote records to an election media device during operation that the EMS can disallow from being tabulated prior to the close of polls on Election Day. Note: Please describe the security your equipment provides for ensuring media is not removed until procedurally authorized.	1	Verity Voting devices include features to support the user of tamper evident seals, so that administering jurisdictions can ensure that media is not removed until procedurally authorized. In addition, if election media is somehow accessed inside the secure compartment and removed while a device is in operation, the device will present an error condition, which cannot be resolved except by re-starting the equipment with the media re-installed, and by re-entering an authorization passcode to resume operation of the device.
Tabulation	B-11	Provide a secure means to upload vote count results to the EMS.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Error Handling	B-12	Identify and reject ballots that are not valid. Note: Please explain how your system identifies ballots that have been printed on nonstandard paper or on a home printer.	1	The Verity Scan device has specific tolerances that govern the image size, margins, and target areas that it finds acceptable. If a ballot is printed in a manner that does not conform to those tolerances, the Verity Scan device will reject the ballot and generate a plain language error message indicating that the ballot cannot be recognized.
Transportability	B-13	Be easily transported by one person. Note: Describe the transportability characteristics of your equipment (e.g. weight, width, height, wheels).	1	Verity Scan and Touch Writer include an integrated carrying case for secure, durable protection during storage and transport. The dimensions of the closed carrying case with the device inside are 18.79”w x 15.55”d (17/39”d including handles) x 7.72”h with a weight of approximately 31 lbs. The dimensions of the Scan ballot box are 28”h x25.625”w x23.75”d (deployed); 28”h x 25.625”w x 5”d (collapsed; stored) with a weight of 26.5 lbs.
Supplies	B-14	Provide dust-and-moisture-proof covers for transportation and storage purposes. Note: Please describe your equipment covers.	1	Besides the convenient carrying/storage case that is an integrated part of the Scan and Touch Writer design, corrugated plastic cases are also available for transportation and storage as well as durable canvas bags for the voting booth and ballot box.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Scanning	C-1	Accurately scan paper ballots into identifiable and locatable batches. Note 1: Please indicate the speed of your central location ballot scanner. Note 2: Please explain how your central location scanner is impacted by ballots containing fold creases or other irregularities.	1	Verity Central, Hart's high-speed central count solution, supports a variety of COTS scanners ranging from 100 ppm to 170 ppm. It is important to note that scanner throughput rates are only one factor in the ballot processing equation. Other key factors include efficient design and execution of workflow processes, workspace/facility layout, and supervisory attention. With some concentrated effort in these areas, throughput can be enhanced dramatically, and Hart's system design, training, project management, and continuing support are all structured specifically to help our customers achieve efficient, secure, and consistent performance in all areas of operation. The Count scanner is not adversely affected by the presence of "normal" fold lines, i.e. fold lines that are normal artifacts of by mail voting operations including folding, inserting, mailing, voter handling, re-mailing and pre-scan processing.
Scanning	C-2	Be capable of establishing single ballot batches.	1	
Scanning	C-3	Retain an electronic image of each voted paper ballot in a non-proprietary format. Note 1: Please describe the format(s) you offer for ballot images. Also describe how your system handles adequate resolution of saved images relative to the paper original. Note 2: Please describe how each electronic image will retain its relationship to the voted paper ballot and any reduction in resolution or compression used before retention of the image.	1	.Note 1: Verity Central saves the same image that is used to analyze the ballot. It is saved in BMP format. Note 2: When the ballot image is saved, there is no reduction in resolution or compression.
Scanning	C-4	Allow the authorized user to verify ballot quantities counted to ballots provided by batch prior to saving to the system.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Scanning	C-5	Allow the authorized user to verify ballot quantities counted to ballots provided by batch after saving to the system.	1	
Scanning	C-6	Allow the authorized user to rerun a batch of ballots, if necessary, without impacting results to date.	1	
Scanning	C-7	Have the ability to logically delete (not physically) saved ballot batches from the system. Note: Please explain how your system manages batch accountability identification.	1	Each batch has a numerical identifier, and that status of saved batches can be viewed on-screen, or printed in a status report. Users may also enter customized “batch notes” for individual batches to assist in their identification, workflow issues, and so forth. Finally, as is the case with all activities associated with Verity software applications, deletion and saving of batches, as well as other workflow activities, are recorded in Verity’s detailed audit logs.
Scanning	C-8	Identify and segregate ballots or ballot images with overvotes for adjudication. Note: Please explain how your central count solution allows for physically locating a specific ballot in a batch of ballots.	1	After each batch of ballots is scanned, Verity Central identifies every image in the batch with its status (e.g., “processed,” “not recognized,”) and a sequence number, on a separate line. In the event that a specific ballot must be physically located in a batch, the sequence of the ballot in the scan batch can be cross-referenced with the physical batch.
Scanning	C-9	Identify and segregate ballots or ballot images with write-ins for adjudication.	1	
Scanning	C-10	Identify and segregate, for adjudication, ballots or ballot images that cannot be read.	1	
Scanning	C-11	Identify and segregate, for adjudication, ballots or ballot images that are read as blank.	1	
Scanning	C-12	Provide information to an authorized user as to why a ballot was segregated.	1	
Scanning	C-13	Assign a unique number to the batch of ballots and verify that the count is zero upon beginning a scan and giving a total number of ballot pages processed at the close of the batch scan.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Scanning	C-14	Handle scanning of both front and back page of a ballot when data is contained on back of ballot page.	1	
Scanning	C-15	Handle and reliably account for multi-page ballots, including when the pages become separated from each other. Count votes regardless of the sequence that pages are scanned or if some pages are not scanned. Note: Please explain how your system reliably accounts for multi-page ballots when pages are out of order or when all ballot pages are not returned, including when the pages become separated from each other.	1	The ballot counter is incremented once for a multi-sheet ballot, and the sheet counter is incremented once for each sheet. Sheets do not have to be scanned in a specific order. If sheets are missing, votes on the scanned sheets are still counted correctly.
Scanning	C-16	Accept ballots in any of the four possible orientations.	1	
Scanning	C-17	Display publicly the number of ballot pages processed.	1	
Scanning	C-18	Display a Protective counter showing the count of all ballot pages processed on the equipment, which is not reset after an election.	1	
Scanning	C-19	Allow the option to disable or enable the review of undervoted ballots.	1	
Hardware	C-20	Display the unit serial number(s) of tabulation devices both physically and within any applicable software, logs, or reports.	1	

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Tabulation	C-21	Accurately capture votes marked by a voter or a ballot marking device on a paper ballot without adjusting machine thresholds. Note 1: Please characterize the accuracy of your central ballot scanner in capturing voter intent. Note 2: Please describe how acceptance/rejection criteria for ballot marks are established for your central location scanner.	1	Verity Central includes a unique on-screen, color-coded ballot adjudication feature that increases the efficiency and accuracy of ballot adjudication and avoids the necessity to alter the original paper ballot in any way. Central identifies ballots requiring adjudication (write-ins, mismarks, overvotes, undervotes), according to parameters set by the state election code and local election officials. Adjudication occurs by reviewing the ballot's digital image on the computer screen to record write-in votes or resolve questions of voter intent. As issues are resolved, election officials use a simple menu-driven interface to make and record decisions. An audit log, including the user ID, records all resolution decisions, providing a complete record of the resolution process.
Tabulation	C-22	Account for overvotes in every contest where overvotes occur. Note: Please explain how overvotes are handled by your system.	1	Verity Central identifies ballots requiring adjudication (write-ins, mismarks, overvotes, undervotes), according to parameters set by the State election code and local election officials. Adjudication occurs by reviewing the ballot's digital image on the computer screen to determine whether marks detected as overvotes are accurate reflections of voter intent or not. Contests identified as containing overvotes have unique color-coding in the on-screen image, and election officials use a simple menu-driven interface to make and record decisions (i.e. confirm the scanner's detection of an overvote, or allow the user to override the scanner and mark the cast vote record in accordance with the observer's adjudication of voter intent. An audit log, including the user ID, records all resolution decisions, providing a complete record of the adjudication process.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Tabulation	C-23	Account for undervotes in every contest where undervotes occur. Note: Please explain how undervotes are handled by your system.	1	Verity Central identifies ballots requiring adjudication (write-ins, mismarks, overvotes, undervotes), according to parameters set by the State election code and local election officials. Adjudication occurs by reviewing the ballot's digital image on the computer screen to determine whether target areas detected as undervotes are accurate reflections of voter intent or not. Contests identified as containing undervotes have unique color-coding in the on-screen image, and election officials use a simple menu-driven interface to make and record decisions (i.e. confirm the scanner's detection of an undervote, or allow the user to override the scanner and mark the cast vote record in accordance with the observer's adjudication of voter intent. An audit log, including the user ID, records all adjudication decisions, providing a complete record of the adjudication process.
Tabulation	C-24	Have the ability to write cast vote records to an election media device during operation that the EMS can disallow from being tabulated prior to the close of polls on Election Day. Note: Please describe the security your equipment provides for ensuring media is not removed until procedurally authorized.	1	If an election media device (vDrive) is removed from the Verity Voting workstation running the Verity Central scanning application, the application will immediately exit, and a user will be prevented from using the software application again until the media device is re-inserted in the workstation, and the user enters an authorized user login.
Tabulation	C-25	Provide a secure means to upload vote count results to the EMS.	1	
Error Handling	C-26	Identify and reject ballots that are not valid. Note: Please explain how your system identifies ballots that have been printed on nonstandard paper or on a home printer.	1	Verity Central has specific tolerances that govern the image size, margins, and target areas that it finds acceptable. If a ballot is printed in a manner that does not conform to those tolerances, the Verity Central software application will not process the ballot, and the batch status report will indicate the specific sheet or sheets that could not be recognized. Because the batch report includes numbers identifying the sequence in which sheets were processed, the numbers can be used to cross-reference the physical ballot in the stack, allowing it to be identified and outstacked.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Error Handling	C-27	Continue ballot scanning while electronically or physically segregating and sorting ballots to user-identified categories that need additional attention. Note 1: Please describe how your system handles these situations: - Ballots are unreadable by the scanner. - Notifying an authorized user whether a ballot has been scanned successfully or not. - Notifying an authorized user that a ballot has been previously scanned. - Identifies where a voter marked the box for a write-in but did not write in a name, and where the voter did not mark the box but did enter a write-in candidate on the line. Note 2: Please describe how the relationship of paper ballot to ballot scan to cast vote record will be maintained when this physical or electronic sorting or segregation is taking place.	1	Note 1: - Verity Central has specific tolerances that govern the image size, margins, and target areas that it finds acceptable. If a ballot is does not conform to those tolerances, the Verity Central software application will not process the ballot, and the batch status report will indicate the specific sheet or sheets that could not be recognized. Because the batch report includes numbers identifying the sequence in which sheets were processed, the numbers can be used to cross-reference the physical ballot in the stack, allowing it to be identified and manually outstacked. - Batch status reports provide a clear, plain language indication of whether each sheet processed was recognized and successfully processed or not. - Election administrators have the option to decide whether printed ballots will include unique identifiers embedded in the barcodes in order to disallow the scanning of duplicate ballots. If users choose to print ballots with unique IDs, and if a ballot is scanned more than once, Verity Central will provide a clear, plain language message in the batch status report indicating the specific ballot or ballots which are duplicates. If Verity Central is configured in a networked arrangement, with multiple scanning stations attached to a central server, Verity Central has the ability to identify duplicate ballots that are scanned at different workstations. - If a voter successfully marks the target area for a write-in, Verity Central will segregate the ballot with that contest for adjudication, regardless of whether the voter writes in a name or not; and if the target area is not marked, the contest will be presented as an undervote, for adjudication.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot	D-1	Display choices for the contests, (candidates and measures) of the election for each ballot style.	1	
Ballot	D-2	When activated for the voter, display prominent ballot identifiers, including precinct, party, and similar identifiers, in order to give the voter the opportunity to verify that they will be voting on the correct ballot.	1	
Ballot	D-3	Record each voter's candidate and measure selections as the ballot is cast. Note: This requirement is not applicable to certain ballot marking devices that depend on a produced paper ballot being processed and tabulated elsewhere.	1	
Ballot	D-4	Have a public counter that displays the number of ballots cast or marked, depending on the functionality of the electronic voting equipment.	1	
Ballot	D-5	Make clear to the voter how to cast a ballot or print a marked ballot, such that the voter has minimal risk of doing so accidentally, but when the voter intends to cast the ballot or complete the ballot marking session, the action can be easily performed.	1	
Ballot	D-6	Assure that the ballot marking device automatically returns to a state such the next voter cannot learn how the previous voter voted, once the paper ballot is printed.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot	D-7	Allow voters, including voters with disabilities, to be able to review their write-in input to the ballot interface, edit that input, and confirm that the edits meet their intent. Note: Please describe how voters, including voters with disabilities, will be able to review their write-in input to the ballot interface, edit that input, and confirm that the edits meet their intent.	1	At the polling place, the voter viewing the ballot on the voting device selects Write-In when it is presented as an option for a specific contest. Upon selecting the write-in option, an easy-to-navigate electronic keyboard appears on the screen (in alphabetic format, not QWERTY). The voter highlights a letter, presses the button to record that letter, and sequentially repeats the process to spell out the name of a write-in candidate. When the write-in process is complete, the voter's ballot reappears with the name the voter entered displayed under the write-in option. The voter is also able to review his/her write-in choice(s) on the ballot summary screen and if needed, modify the spelling or choice of candidate. Complete audio instructions are provided to voters using the audio ballot feature.
Ballot	D-8	Provide a method by which voters with disabilities can choose the language of the ballot visually and through the audio interface. Note: Please describe how your electronic voting units provide a method by which voters with disabilities can choose the language of the ballot visually and through the audio interface.	1	Regardless of whether a voter is disabled or not, the first screen the voter views (or hears, if using the audio interface) is the language selection screen (if more than one language is required). All screens are available through the audio interface.
Hardware	D-9	Display a Protective counter showing the count of all ballots processed on the equipment, which is not reset after an election.	1	
Hardware	D-10	Display the unit serial number(s) of tabulation devices both physically and within any applicable software, logs, or reports.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Accessibility	D-11	Provide electronic voting equipment designed to allow for installation in a voting location accommodating access by voters with disabilities in compliance with the Americans with Disabilities Act (ADA), HAVA and all applicable federal and state laws that address accessibility to voting for persons with disabilities. Note: Please describe how your system's features comply with HAVA, ADA and other Federal and State laws that require accessibility for voters with a variety of disabilities, including visual or cognitive impairments. Identify the EAC standards your system meets.	1	Hart's Verity Touch Writer with Access is an accessible paper ballot marking device designed to conform with VVSG 1.0 (2005) standards, including standards for controls within reach (i.e. frontal and parallel wheelchair approach) and accessibility for persons with visual, cognitive, or dexterity impairments. The unit contains a controller that includes tactile buttons and audio ballot capability, as well as compatibility with other adaptive devices, such as jelly switches or sips and puff devices.
Accessibility	D-12	Meet the standards for accessible voting systems listed in section 1-5-704, C.R.S. The size of a ballot position and the font size of candidate information must be in accordance with Colorado Election Rules. Note: Please stipulate the maximum available positions on the voting device, based on such size of a ballot position and the font size of candidate information, to be used for an election.	1	Verity Touch Writer allows voters to select a suitable font size, according to the federal VVSG 1.0 requirements for accessibility. (The minimum and maximums listed in CRS 1-5-704 are not in conformance with VVSG 1.0 requirements for our display screen size.) • Standard size setting: font sizes vary from 21-32pt font. • Large size setting: All text is 40pt font • Small size setting: font sizes vary from 18-22pt font. • Display can be masked for non-sighted voter use. • Two high contrast modes: Black text on white background and white text on black background
Accessibility	D-13	Include a privacy enclosure or voting booth that contains the electronic voting device(s) designated for voters with disabilities and complies with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) providing sufficient dimensions to allow access to voters who use wheelchairs. Note: Please explain how your voting device complies with all forward and side reach requirements of the ADA and ADAAG.	1	Hart's Verity Touch Writer with Access is an accessible paper ballot marking device designed to conform with VVSG 1.0 (2005) standards, including standards for controls within reach (i.e. frontal and parallel wheelchair approach) and accessibility for persons with visual, cognitive, or dexterity impairments.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Accessibility	D-14	Include electronic voting units adaptable for voters with disabilities either through adjustability of the device or the voting booth or inclusion of an auxiliary device. The auxiliary device should also be lightweight and removable making it portable for use on a voter's lap or provide an alternative solution. Note 1: Please describe your accessible alternative input devices. List such devices and explain the operation of each device and how it accommodates voters with disabilities. Note 2: Please explain how your proposed system accommodates voters with visual disabilities. Include with the description how portions of the displayed ballot may be intensified and/or enhanced, in contrast and font size and then restored to the initial size. Note 3: Please explain how your electronic voting device can be repositioned to accommodate a variety of voters with disabilities. Include any information about the ability of the voter to independently adjust the device. Note 4: Is the voting screen glare-free regardless of positioning? Note 5: Please explain any magnifying capacity of the electronic voting device. Note 6: If your electronic voting unit uses an activation card, please explain how it may be used easily by voters, including voters with disabilities. Note 7: Please explain how your electronic voting unit adequately provides privacy for a voter who uses a wheelchair. Note 8: Please explain how a voter can verify the accuracy of the cast votes. Note 9: Please describe additional features of your system that are designed to accommodate voters with disabilities.	1	Note 1: The Verity Touch Writer accessible device includes Verity Access, which is a handheld audio-tactile interface (ATI). Verity Access supports the following input controls: • Tactile buttons, including “SELECT” and “HELP.” • A rotary wheel, to “MOVE” through the electronic and/or audio ballot. • COTS two-switch adaptive devices, such as jelly switches or “sip-and-puff” devices The Verity Access controller also includes Braille markings. Note 2: The Verity Touch Writer accessible device offers the following features to accommodate voters with visual disabilities • Full audio ballots for voters who are blind, including natural recorded human speech • Audio ballots allow users to select the volume, speed, and pitch of recorded audio. For voters with visual impairments, Touch Writer supports adjustable font display sizes and two high-contrast visual modes: white text on black background, or black text on white background. Note 3: The Verity Touch Writer device has a removable/dockable display which can be used with touchscreen or ATI inputs, which allows voters to position the voting interface in a variety of places, according to the voter's comfort. For example, the voting display/interface and the separable ATI controller could be placed on a table top, in a person's lap, or even in “arms” or holders designed to hold tablet-style devices when mounted to a wheelchair, for example. Note 4: The Verity Touch Writer device includes a removable/dockable display, so voters can reposition the device in the event of glare. The Touch Writer display also has a “matte” style display, to minimize glare.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
	D-14	Continued from above		Note 5: Verity Touch Writer allows voters to select a suitable font size, according to the federal VVSG 1.0 requirements for accessibility. (The minimum and maximums listed in CRS 1-5-704 are not in conformance with VVSG 1.0 requirements for our display screen size). • Standard size setting: font sizes vary from 21-32pt font. • Large size setting: All text is 40pt font • Small size setting: font sizes vary from 18-22pt font. Note 6: Verity Touch Writer does not use an activation card. Voters use the touchscreen or the accessible ATI controller to activate their own ballot with access code information provided by a polling official. Note 7: Verity Touch Writer is paired with a proprietary voting booth that includes privacy screens designed to comply with VVSG 1.0 requirements for both privacy and accessibility. Note 8: The voter has the opportunity to review and confirm choices on the Ballot Summary. The voter may return to the ballot and make or change choices as many times as desired, until the “Print Ballot” option is selected. Note 9: All of the follow features of the Verity Touch Writer device maximize choice for voters with disabilities, and flexible deployment for election administrators: - Verity’s voting devices reflect universal design principles; our scanning and ballot marking devices employ a common platform and common interface designs, for equality of access; election administrators can state with confidence that all voters are voting on the same system. - The Verity Touch Writer device is a multi-purpose device that can be used by voters with or without special needs.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
	D-14	Continued from above		- Touch Writer's privacy booth supports frontal and parallel wheelchair approaches, unlike some voting devices that require voters to be positioned in a parallel position only. - Because Touch Writer can be deployed separately from the paper ballot scanning device, election administrators have the freedom to position the accessible device wherever in the polling place may provide the best physical access, instead of being limited to whatever may be required for a single device; in short, flexible deployment allows placement for best physical access. - Users can configure all of the following: - o Audio volume - o Audio speech rate - o Visual magnification - o Visual contrast - o Ballot mode - o Video only - o Audio only - o Video-audio synchronized
Accessibility	D-15	Allow for importing of audio ballot content from an outside source (e.g. candidates or pre-recorded audio.). Note: Please explain the process and procedure, with time frames, required to re-program the audio read-back on the voting device in the event that there is a change to a name or contest on the ballot in the final few weeks before an election.	1	Last-minute changes in audio information may be incorporated quickly and smoothly. The specific measures to be taken depend on the stage of the ballot development process at the time the change is to be implemented. If the Build database has not been finalized, changes are as simple re-recording or importing the desired audio (typically done by using Layout) and continuing the normal processes. If the Build database has been generated and the vDrives containing the election definition have already been written, the Build database can be updated with new audio, and then new vDrives containing the updated audio would need to be written.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Accessibility	D-16	Allow for a voter to change volume and/or speed of an audio ballot. Note: Explain how the voter can fast-forward through instructions and measure text.	1	A voter using the Verity Access ATI controller can simply turn the MOVE wheel to fast forward through instructions and measure text; turning the wheel takes the voter to the next element on the ballot.
Accessibility	D-17	Provide for audio instructions for the ballot and a mechanism for voters with visual impairments to cast a ballot or print a marked ballot, either on the voting unit itself or on a separate device designed for this purpose. The process shall imitate the process used by sighted voters with the exception of the audio interface.	1	
Accessibility	D-18	Support an enlarged-print ballot screen image for voters with visual impairments. Following the casting of a vote or the printing of a marked ballot, the machine must reset to its initial state to accommodate the next voter.	1	
Accessibility	D-19	Accommodate voters regardless of their ability to read.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Accessibility	D-20	Allow for connection of personal auxiliary devices, such as sip/puff or jelly switch devices. Note: Please describe such capabilities provided by your system.	1	The Touch Writer with Access is a highly accessible voting device. Voters with mobility impairments can cast ballots independently, using mouth straws (pointing devices), knuckles, feet, and even partial limbs. The Touch Writer with Access ATI controller allows multiple means of auxiliary input by persons with disabilities. One of the supported methods is two large, externally mounted controls (jelly switches) that permit operation of the voting unit by people lacking fine motor skills or digital dexterity. The voting unit also supports use of standard medical accessible switches, such as “sip-and-puff” devices sometimes used by persons with severe disabilities to operate their wheelchairs. The “sip-and-puff” switch may be disconnected from the wheelchair and plugged into the voting device. The voter then may vote independently, using only breath controls (and not hands) to navigate through the ballot. The voting device allows voters with hearing impairments to use their own amplification devices through a standard neck loop (assuming that the voter with hearing impairments uses a dual-mode hearing device). Voters with literacy challenges may also use the audio ballot reader to support their understanding of the ballot intent.
Ease of Use	D-21	Be designed so that actions performed by the voter, such as making a vote selection or changing a vote, are easily understood so that errors are prevented to the maximum extent possible, and so that recovery from an erroneous action is facilitated by the features of the system prior to casting the ballot or printing a marked ballot. Note: Please explain how your proposed system facilitates voter actions prior to casting a ballot or printing a marked ballot.	1	The voter has the opportunity to review and confirm choices on the Ballot Summary. The voter may return to the ballot and make or change choices as many times as desired, until the “Print Ballot” option is selected.
Ease of Use	D-22	Accommodate font sizes that are adjustable for ease of sight.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ease of Use	D-23	During the voting process or prior to casting the vote, display (visually or using audio, as applicable) a summary indicating the choices made or skipped.	1	
Ease of Use	D-24	Allow the voter the ability to change a selection until the voter is satisfied with the choice at any time prior to the final casting of a ballot or printing a marked ballot. Note: Please explain here how your proposed voting system allows the voter to review and/or modify his/her selections before final casting of the vote or printing of the marked ballot.	1	The voter has the opportunity to review and confirm choices on the Ballot Summary. The voter may return to the ballot and make or change choices as many times as desired, until the "Print Ballot" option is selected. Should the voter choose to return to a specific contest, the action may be taken from the Ballot Summary page by selecting the desired contest or by pressing the back button until the appropriate contest appears.
Ease of Use	D-25	Provide a method for the voter to confirm the choices before casting the ballot or printing a marked ballot, signifying to the voter that casting or printing the ballot is irrevocable and directing the voter to confirm his/her intention to cast or print the ballot, and shall further signify to the voter that the ballot has been cast or printed after the voting session is complete..	1	
Ease of Use	D-26	Provide a means to demonstrate the operation of the electronic voting device to the voters.	1	
Ease of Use	D-27	Disallow a voter to overvote a contest and will enable the voter to correct the selections. Note: Please explain how your proposed system shall not allow a voter to overvote a contest and enable the voter to correct his or her selections.	1	The Touch Writer with Access will not allow a voter to select more choices than are allowed for each contest or ballot issue. If a voter attempts to overvote a contest, the unit will, in a contest that requires a single vote, deselect the first selection and replace it with the second selection the voter chooses. In a contest where the voter may vote for multiple candidates for an office (e.g., school Board of Trustees), the unit will not accept more votes than are allowed. The voter is required to delete a previous selection before adding one that would exceed the maximum allowed.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ease of Use	D-28	Warn voters that they have undervoted a contest and permit them to correct or accept the undervote. Note: Please explain here how your proposed system shall warn voters that they have undervoted a contest and permit them to correct or accept the undervote.	1	The Ballot Summary displays a contest-specific list of ballot selections, including contests in which the voter has made no selection (i.e., undervoted). Undervoted contests are indicated by plain language instructions indicating that the voter has selected fewer options than they could have. After reviewing the selections, the voter has the opportunity to change selections in any contest(s). By selecting the desired contest, the voter goes from the Ballot Summary directly to the specific contest or proposition on the ballot, allowing the voter to make a choice or a change in a previous selection.
Ease of Use	D-29	Provide a means of recording the votes cast for write-in candidates for any contest that allows write-in candidates. This capability shall allow the entry of as many names of candidates as the voter is entitled to select for each contest in compliance with Colorado's Election Law. Note: Please explain how your proposed system allows for write-in votes for any authorized contest.	1	The Touch Writer with Access accommodates write-in voting as an integral part of the electronic voting process. When designing the ballot in Build, the elections staff selects the appropriate number of write-in options for each contest. At the polling place, the voter viewing the ballot on the voting unit selects Write-In when it is presented as an option for a specific contest. Upon selecting the write-in option, an easy-to-navigate electronic keyboard appears on the screen. The voter highlights a letter, presses the button to record that letter, and sequentially repeats the process to spell out the name of a write-in candidate. When the write-in process is complete, the voter's ballot reappears with the name the voter entered displayed under the write-in option.
Ease of Use	D-30	During election setup, provide an option to provide the voter with a list of certified write-in candidates.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ease of Use	D-31	Provide a screen response that will allow a voter to request a list of certified write-ins if the election setup provided that option.	3	Although Verity does not support an “on-demand” option to display a list of certified write-ins, its ballot design application does allow users to create information-only ballot text boxes or pages that can be inserted into the ballot to present information such as lists of certified write-ins to the voter. In this instance, it would be appropriate and straightforward for the ballot designers to insert that information immediately after the introductory “About Your Ballot” page that presents the voter with information about contests and candidates for their ballot style, at the start of the voting session.
Ease of Use	D-32	Allow authorized users the ability to modify the voter instructions for an electronic or audio voting session.	1	Electronic and audio ballot instructions can be created through a combination of static (“hard-coded”) text and audio, as well as user-defined (customizable) instruction boxes.
Ease of Use	D-33	Provide an authorized user an ability to reset screen calibration, including between uses in an election. Note: Please explain if your electronic voting equipment logs such calibration and produces any warnings when calibration needs to be reset.	1	Verity device touch screens are calibrated once at the manufacturing facility, and no additional calibration is required. Verity device touch screens use 5-wire touch technology, which, compared to older 4-wire designs, increases reliability of touch to millions of touches before any recalibration is required. Verity touch screens are rated to 35 million touches without a failure, with a MTBF of 490,000 hours. Although calibration of touch screens is not necessary, Verity touch screens do include diagnostic capabilities to confirm the proper operation of touch screens.
Uninterrupted Operation	D-34	Provide, in case of power interruption, a means for voting operations to continue. This feature shall consist of either an uninterruptible power supply (UPS) or other means to keep electronic voting equipment active. Note: Please specify how your system will provide notice of power loss or low-battery state, so that election judges or election officials can take appropriate steps.	1	The voting device includes a battery indicator icon which provides election judges or officials a status of the current battery state.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Uninterrupted Operation	D-35	Provide for continuous uninterrupted operation for a minimum of two hours in case of power failure. Note: Please specify how long your system will operate without an external power source and under what conditions. If the device does not have a battery backup, what size of UPS will be required to maintain operation for two hours?	1	In conformance with VVSG 1.0 requirement, a battery provides two hours of power to protect against power failures and will not lose any data even if power is interrupted. A UPS may be used if longer battery run time is desired. Touch Writer requires a 1500VA UPS to provide 2 hours of backup power. Also, additional backup batteries can be deployed in the polling place supplies, to provide backup power for more than two hours.
Uninterrupted Operation	D-36	In the event of the failure of an electronic voting unit, retain a record of all votes cast prior to the failure. Note: Please explain how your system retains and reports votes cast in the event of a loss of power.	1	In conformance with VVSG 1.0 requirement, a battery provides two hours of power to protect against power failures and will not lose any data even if power is interrupted. A UPS may be used if longer battery run time is desired. Whether the provided battery or a UPS is used, all data is retained. The Verity tabulation and reporting software application, Count, is carried out in a separate environment (usually the central election office) and is not connected to the voting unit(s). A UPS may be used with the Count PC, thus providing a means to continue the tallying and reporting functionality during power loss.
Voter Verifiable Paper Trail	D-37	Include, with each voting device, the functionality of a Voter-Verified Paper Audit Trail (VVPAT) that meets all Federal and State Certification requirements. Note 1: Please explain how your proposed voting device complies with this requirement. Note 2: Explain if your proposed system has an alternate means of counting a non-ballot type of VVPAT for audit purposes. The alternative means can include but is not limited to the availability of bar codes and readers for the VVPAT.	1	Note 1: Verity Touch Writer with Access is the accessible paper ballot marking device. In conjunction with an electronic interface, Touch Writer prints a fully marked ballot from blank stock, providing equality of access for all voters, because pre-printed ballots for hand-marking and machine-printed ballots all share the same format (which is not true of all voting systems). Touch Writer is designed to conform with VVSG 1.0 (2005) standards. Note 2: This is not applicable to Verity Touch Writer, as the ballot marking device produces an actual marked ballot that can be scanned or hand-counted like any other paper ballot. (In other words, the paper audit trail is not a “non-ballot” type.)

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
D – ELECTRONIC VOTING EQUIPMENT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Voter Verifiable Paper Trail	D-38	Provide a means for voters with disabilities (visually impaired or unable to read) to review the VVPAT. Note: The review of the VVPAT by voters that cannot see or read the VVPAT requires a feature that enables read-back from the physical VVPAT.	4	This is not applicable to Verity Touch Writer, as the ballot marking device produces an actual marked ballot that can be scanned or hand-counted like any other paper ballot. (In other words, the paper audit trail is not a “non-ballot” VVPAT.) As the paper audit trail is not a traditional “VVPAT,” in the sense of being a paper record associated with a DRE voting device, the Touch Writer ballot marking device is not required to conform to VVSG 1.0 standards for VVPAT accessibility, which require read-back from the physical VVPAT. VVSG 1.0 does not require ballot marking devices to meet the same accessibility standards for VVPAT-DRE records. Although VVSG 1.0 does not require read-back from physical marked ballots, the VVSG 1.0-compliant design of Touch Writer does include features to allow voters to confirm their selections before the marked ballot is printed.
Voter Verifiable Paper Trail	D-39	Have the capability, if proposing a VVPAT solution that is not an official marked ballot, for the print on the VVPAT to be large enough and dark enough for voters to verify and for election judges to read easily during a recount. Note: Please explain the type of paper used to record the VVPAT and the characteristics of the paper impression to ensure ease of reading and fade resistance. For instance; 18 point font, bold and double spaced would be preferred.	4	Not applicable. The version of Verity that is being proposed does not include a VVPAT solution that is not an official marked ballot.
Transportability	D-40	Be easily transported. Note: Describe the transportability characteristics of your electronic voting equipment (e.g. weight, width, height, wheels).	1	Verity Scan and Touch Writer include an integrated carrying case for secure, durable protection during storage and transport. The dimensions of the closed carrying case with the device inside are 18.79”w x 15.55”d (17/39”d including handles) x 7.72”h with a weight of approximately 31 lbs. The dimensions of the Scan ballot box are 28”h x25.625”w x23.75”d (deployed); 28”h x 25.625”w x 5”d (collapsed; stored) with a weight of 26.5 lbs.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
E – AUTOMATED BALLOT ENVELOPE SCANNING AND SIGNATURE VERIFICATION**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Mail Ballot Envelope Processing	E-1	Provide hardware with the capability to scan mail ballot envelopes and perform the following functions: a. Scan and capture voter ID barcode b. Scan and capture envelope and signature images c. Log envelope as received d. Endorse (customizable) & date/time stamp envelope e. Separate envelopes that may need manual intervention Note 1: Please provide information about your ballot envelope sorting equipment, including what versions are available for counties with various volumes of envelopes. Can your equipment perform all these above functions in a single pass? If not, please explain the number of passes required and the actions taken on each pass. Note 2: Please indicate if your solution has the capability, assuming envelope and ballot are designed properly, to determine the ballot style of the enclosed ballot.	5	
Mail Ballot Envelope Processing	E-2	Be capable of generating an output file, with voter ID and voter's envelope signature, to be matched with SCORE voter registration data and used in the Automated Signature Verification process.	5	
Mail Ballot Envelope Processing	E-3	Be capable of updating the mail ballot envelope output file with status values (e.g. received, accepted, rejected) so that the SCORE system can use the output file to update voter registration records. Note: Please provide a list of code values your system assigns for ballot envelope processing status.	5	
Mail Ballot Envelope Processing	E-4	Allow an authorized user the ability to update the disposition code for an envelope (e.g. from "challenged" to "good").	5	
Mail Ballot Envelope Processing	E-5	Be configurable for ballot envelope size and design.	5	

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM D – ELECTRONIC VOTING EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Mail Ballot Envelope Processing	E-6	Be configurable for thickness detection.	5	
Mail Ballot Envelope Processing	E-7	Automatically separate envelopes when voter ID required into a separate stack or identify them electronically for easy separation.	5	
Mail Ballot Envelope Processing	E-8	Have an option for sort/pass with the ability to customize sorting definition (e.g. style, precinct, district, unaccepted envelope, signature discrepancy and no signature). Note: Please explain the sort options available in your system.	5	
Mail Ballot Envelope Processing	E-9	Provide a high-volume solution for counties with a large voter population. Note 1: Please specify the throughput capacity on your high-volume envelope processor. Note 2: County size by registered voter population is as follows: Large = Over 25,000 voters Medium = 10,000 – 25,000 voters Small = Fewer than 10,000 voters	5	
Mail Ballot Envelope Processing	E-10	Provide a low-volume solution for counties with a small or medium voter population (see E-9 requirement Note 2). Note: Please specify the throughput capacity on your low-volume envelope processor.	5	
Mail Ballot Envelope Processing	E-11	Provide configurable reports for tray id, tray count and pieces status.	5	

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM D – ELECTRONIC VOTING EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Automated Signature Verification	E-12	Provide tested/proven Automated Signature Verification (ASV) software, which can automatically compare a voter's ballot envelope signature with the SCORE voter registration signature based on a customer selected confidence determination. Note: Please provide any information about your system that might be an alternative to manual removal of the signature security tab on mail ballot envelopes.	5	
Automated Signature Verification	E-13	Be configurable to meet or exceed a state established acceptance threshold for signature acceptance.	5	
Automated Signature Verification	E-14	Provide user activity log records that include full description of all human intervention during the ASV process.	5	
Automated Signature Verification	E-15	Provide an audit function to verify the accuracy of machine accepted signatures.	5	
Automated Signature Verification	E-16	Extract returned ballot envelopes for manual review when the signature does not meet the acceptance threshold level, is unreadable, or is missing.	5	
Automated Signature Verification	E-17	Create a record when the signature does not meet the acceptance threshold level. This record will be used to generate a letter when the signature cannot be manually verified. Note: Please explain your process for creating and using these records.	5	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
F – MAIL BALLOT TRACKING**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Mail Ballot Tracking	F-1	Track a mail ballot envelope from the time it is prepared for the voter in an elections office or by a vendor, through every stage of the U.S. Postal Service mail delivery system.	5	
Mail Ballot Tracking	F-2	Track a mail ballot through stages of the ballot acceptance process after return to the County by the voter. Note: Explain which processes within the Elections Office can be tracked by your system after the ballot envelope is received in that office.	5	
Mail Ballot Tracking	F-3	Provide sufficient report capability for the election officials to ascertain the status of any and all mail ballots in each stage of the mail ballot process tracked by the system.	5	
Mail Ballot Tracking	F-4	Provide a system whereby voters can “opt in” to receive messages about their ballot’s status in the process.	5	
Mail Ballot Tracking	F-5	Provide a system whereby voters who have chosen to “opt in” to receive messages about their ballot’s status in the process can choose to “opt out”.	5	
Mail Ballot Tracking	F-6	Provide a messaging system that delivers messages via a website to voters who have requested notification about their ballot’s status.	5	
Mail Ballot Tracking	F-7	Provide a messaging system that delivers messages via email to voters who have requested notification about their ballot’s status.	5	
Mail Ballot Tracking	F-8	Provide a messaging system that delivers messages via text messaging to voters who have requested notification about their ballot’s status.	5	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
F – MAIL BALLOT TRACKING**

Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Mail Ballot Tracking	F-9	Have sufficient capacity to provide the same level of service to as few as one or as many as 64 counties at the same time. (Estimate up to 4 million records if all counties are participating.)	5	
Mail Ballot Tracking	F-10	Be able to utilize all email and text messaging vendor systems in use in Colorado.	5	
Mail Ballot Tracking	F-11	Provide each individual county the ability to personalize messages to its voters based on its elections setup, processes, etc.	5	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
G – VENDOR TRAINING & SUPPORT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Hardware & Software Support	G-1	Include availability of vendor support personnel to assist in hardware and software installation and setup onsite.	1	
Hardware & Software Support	G-2	Include availability of vendor support personnel to assist in hardware and software installation and setup from a remote help desk.	1	
Training	G-3	Include availability of vendor supported onsite training personnel to train CDOS and County users.	1	
Training	G-4	Include availability of self-study user training via the Internet or electronic media.	1	
Voting Period Support	G-5	Provide 24-hour available technical support for all system components beginning sixty days prior to an election and continuing until the completion of the official canvass (generally twenty days after an election). Note: Please describe your capability to provide extended support, beyond twenty days after and election, for circumstances such as a recount.	1	See Section 6.7

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
G – VENDOR TRAINING & SUPPORT**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Hardware Parts and Supplies	G-6	Include hardware solutions for the UVS that are supported by a supply chain contingency plan. Note: Please provide an explanation of your supply chain contingency planning. The intent of this requirement is to assess the risk to Colorado of one or more of your suppliers not being able to provide needed components. Identify the depth of your supply chain (e.g. one, two, or more suppliers deep).	1	Hart owns and maintains its Verity design which for the supply chain includes, but is not limited to: CAD Drawings, CAD Models, Bill of Materials, Test Equipment, Software, Firmware, Approved Vendors List, Tooling, Fixtures, Assembly Methods, Inspection Documentation, Process Documentation, etc. A part of Hart's Supply Chain Management includes a Supply Chain Planning Document for any offered Voting System (i.e., Hart Voting System, Verity System, etc.). Contained within this document is an Approved Vendors List (AVL). To become a member of the AVL, the vendor is required to successfully pass a stringent review by our Engineering and Operations departments. The review includes a company evaluation, proof of capability and financial stability, longevity, long term production goals, risks, risk mitigation plans, and other imperative vendor proof points. The Verity supply chain is based on Hart's selection of a Tier 1 Contract Manufacturer that has the following capabilities: System Integration/Box Build; Printed Circuit Board Assembly line; ISO 9001 Manufacturing Certification; follows IPC Class II build, inspection, repair guidelines for electronic assemblies; supply chain that includes custom cables and custom sheet metal; full depot repair services; will accept on-site inspections from EAC approved labs; serial number tracking in manufacturing and repair utilizing Parent/Child methodology; and operational second site for production should first site suffer catastrophic damage. Hart utilizes Master Service Agreements (MSAs) for off the shelf components/ parts to insure a steady flow of parts. Hart's MSA partners are required to hold additional stock beyond the current build plan and have a master recovery plan in place. For custom plastics and metal components, Hart's partners have a long history of supplying parts to Hart without interruption. Hart has never experienced a stock outage due to an inability to deliver related to a calamitous event.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM G – VENDOR TRAINING & SUPPORT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Hardware Parts and Supplies	G-7	Make equipment parts and supplies available through December 31, 2020.	1	
Hardware Parts and Supplies	G-8	Not require royalty fees, user fees, or other charges or limitations on the printing of ballots designed or printed on vendor devices. Similarly, no fee or limitation shall be placed on any electronic file, report or representation of the vote produced by vendor devices or software.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
H – MISCELLANEOUS REQUIREMENTS**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-1	Store sufficient data in an unalterable system audit log file to allow the auditing of all operations related to election setup, ballot creation, ballot tabulation, results consolidation and report generation. The audit log file shall contain: - An identification of the program and version being run. - An identification of the election file being used. - A record of all options entered by the operator, including operator ID. - A record of all actions performed by a subsystem of the system. - A record of all tabulation and consolidation input. - Audit log records that are created and maintained in the sequence in which operations were performed, with date/time stamps. Note 1: Please explain what audit trail techniques and audit reports are incorporated in your proposed system. Note 2: Please provide a list of all audit log files, the file location within the voting system, and the procedures to navigate to and retrieve them from the voting system. Note 3: Please describe steps needed to protect the audit logs from possible unintentional or intentional erasure or alteration. Note 4: Please provide a sample set of audit reports (system logs, etc.) from an election in a county with 200,000 or more registered voters (not necessarily in Colorado).	1	Note 1: There are two logs per PC Apps: - A system log that tracks login attempts, user management, etc. - An application log that tracks all activities within an application Note 2: Audit logs for PC applications are located at [root drive]:Verity\Elections\[Election Id]\Logs Polling place devices have one log, stored on the internal Compact Flash memory card, and on the portable flash memory (vDrive), in this location: Root\[vDrive ID]\logs. Users typically retrieve logs through Verity's easy-to-use, intuitive software interfaces, by simply printing the logs as reports. All logs are plain-text, so they can also be examined without a proprietary tool. Note 3: No user steps are needed to protect the audit logs from possible unintentional or intentional erasure or alteration. Access rights to create, modify, or delete are not available to any user. Access to the log files on certified PC apps is also restricted by configuring the OS into kiosk mode. Note 4: Please see Section 7.0 for sample reports.
Auditing	H-2	Accommodate random audits on electronic voting and tabulation devices.	1	
Auditing	H-3	Accommodate random audits on paper vote capture and tabulation devices.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
H – MISCELLANEOUS REQUIREMENTS**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-4	Log all activity on voting equipment including: when turned on/off, any errors, power failure, power restoration, when an error occurred and when an error was resolved.	1	
Auditing	H-5	Run real time reports, when needed.	1	
Auditing	H-6	Run post-election diagnostics on all auditable equipment in a manner that does not endanger the integrity of the election record. Note: Please explain your system's post-election diagnostic capabilities.	1	During the post-election period, cast vote records and audit logs can be stored separately from the voting devices themselves, by simply removing the vDrive flash memory drives and retaining them in a location separate from the voting equipment. When the equipment is in storage, without vDrives installed, it can be powered on and accessed by personnel with authorization passcodes, and all of the normal diagnostic functions are available, including power-on-self-test, touch screen diagnostics, and scanner module calibration. Verity Voting workstations can produce audit reports during the post-election period in a manner that does not endanger the integrity of the election record.
Auditing	H-7	Provide for adequate information to facilitate a recount under Colorado law.	1	
Auditing	H-8	Have a permanent paper record of each vote for audit purposes.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
H – MISCELLANEOUS REQUIREMENTS**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-9	Support a Risk Limiting Audit, as defined in section 1-7-515(5)(b), C.R.S. sufficient to audit the functionality of electronic and paper vote capture as well as vote tabulation devices. Note 1: Please describe how your proposed system supports the execution of a Risk Limiting Audit. Note 2: Does your solution place unique identifying numbers on ballots as they are scanned? Note 3: Section 1-7-515, C.R.S. stated that Colorado must begin risk-limiting audits in 2014, but was revised in the 2013 session to extend the start of the requirement to 2017.	1	Note 1: Verity Count tabulation and reporting software contains an easy-to-use “Auditing Dashboard” that is a native feature of the software application. The auditing dashboard allows users to select the sub-set of cast vote record data to be included in the audit, by simply selecting from a robust set of user-defined “filters.” Available filters include: • District filter • Precinct/split filter • Party filter • Contest filter • Ballot options filter • Flash Memory Device (vDrive) ID filter • Batch ID filter • Voting Device Type filter • Voting Device ID filter • Polling Place filter • Voting Type filter • Workstation ID filter Once the desired set of cast vote record data has been selected with filters, the CVR data can be exported as raw data, which can be reviewed and tabulated using common third-party tools, or the data can be printed as human-readable cast vote record reports (one per page), so they can be hand-counted. The auditing filters available in Verity Count are the same filters available in Verity Central, so ballot images can be searched and filtered, to facilitate easy comparisons between ballots and tabulated data. Note 2: Verity Central and Verity Scan do not place identifying numbers on ballots as they are scanned.
Auditing	H-10	Incorporate a real time clock as part of the system hardware and all audit log record entries shall include a date/time stamp.	1	
Auditing	H-11	Use a real time clock that will continue to run during a power loss.	1	The real-time clock is powered by the motherboard battery, independently of the device battery or AC power.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
H – MISCELLANEOUS REQUIREMENTS**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-12	Print audit reports on the standard system hardcopy output device when the following conditions are met: a. The generation of an audit trail report does not interfere with the production of other output reports. b. The entries can be identified so as to facilitate their recognition, segregation and retention. c. The physical security of the audit record entries can be ensured.	1	
Auditing	H-13	Create audit records during the election definition and ballot preparation phases showing completion of the baseline ballot layouts and any modifications to them, a description of the modifications and a date/time stamp.	1	
Auditing	H-14	Create audit records during the pre-election phase that include electronic and manual data entered and maintained by election personnel, election definitions, instances of all final ballot layouts and the ballot preparation edit event log.	1	
Auditing	H-15	Create audit records prior to the initiation of ballot counting to verify hardware and software status. These particular audit records shall include the identification of the software release, the identification of the election to be processed and the results of hardware and software diagnostic tests.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
H – MISCELLANEOUS REQUIREMENTS**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-16	Create in-process audit records containing data documenting system operation during diagnostic routines and any machine generated error and exception messages. Examples of these audit records include: a. System startup diagnostic and status messages. b. Checks that pre-count reports show zeroes. c. The source and disposition of system interrupts resulting in entry into exception handling routines. d. All messages generated by exception handlers. e. The identification code and number of occurrences for each hardware and software error or failure. f. All operator actions. g. Notification of system login or access errors, file access errors and physical violations of security. h. Other exception events such as power failures, failure of critical hardware components, data transmission errors, and other types of operating anomalies.	1	
Auditing	H-17	Provide an in-process audit report, for post-election use, consisting of data containing a record when each vote is initiated and each ballot is cast.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
H – MISCELLANEOUS REQUIREMENTS**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-18	Print reports necessary to assist election officials in performing a manual count as required by Colorado election law and rules. Note 1: Please explain how your proposed system can create the reports necessary to allow election officials to perform and validate a manual count. Note 2: Please explain how, in the case of a recount, the election can be reconstructed ballot by ballot, while still maintaining voter privacy.	1	Note 1: Verity Count tabulation and reporting software allows users to create customized reports that can support the validation of manual counts. The customized report interface allows users to select the sub-set of results to be included in the manual count, by simply selecting from a robust set of user-defined “filters.” Available filters include: • District filter • Precinct/split filter • Party filter • Contest filter • Ballot options filter • Flash Memory Device (vDrive) ID filter • Batch ID filter • Voting Device Type filter • Voting Device ID filter • Polling Place filter • Voting Type filter • Workstation ID filter Once the desired set of results has been selected with filters, reports can be printed to validate the manual count. The reporting filters available in Verity Count are the same filters available in Verity Central, so ballot images can be also be searched and filtered, to facilitate easy comparisons between ballots and tabulated data. Note 2: The reporting and image search filters described above allow users to reconstruct an election ballot by ballot, while still preserving voter privacy, because Verity includes a variety of features, such as options to disallow unique IDs, as well as prohibitions on the inclusion of serial numbers in CVRs, to preserve voter privacy. The fact that Verity offers official paper ballots to all voters, for equal access, also allows election officials to recreate the election, ballot by ballot, in case of a recount.
Auditing	H-19	Record audit log entries onto durable non-volatile storage.	1	

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
H – MISCELLANEOUS REQUIREMENTS**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-20	Export audit logs in formats suitable for use by elections officials and the public including common electronic formats (PDF, Excel, CSV, TXT, EML).	1	
Certification	H-21	Be certified or certifiable by the EAC, another state, or Colorado. Note 1: If not certified, please explain. Note 2: See section 1-5-601.5, C.R.S. for Colorado voting system certification compliance with federal regulations. RFP section 5.3.11 has a question on certification status of vendor proposed solutions.	1	Federal EAC certification is currently in process. The Verity Voting System will be VSTL and EAC certified to VVSG 1.0 (2005) and submitted to the Colorado Secretary of State for certification.
Testing	H-22	Be configurable so as to be capable of performing the following functions on all system hardware/software, in compliance with current Colorado statutes and rules: a. Hardware test b. Logic and Accuracy Test c. Post-Election Audit d. Pre-Recount Logic and Accuracy Test e. And capable of performing the Colorado Risk Limiting Audit commencing no later than 2017.	1	
Testing	H-23	Allow authorized user creation of scripted simulation Logic and Accuracy tests with various patterns (e.g. 1,2,3 or 1,1,1 or 1,2,3,4,5...). Note: Please explain how your system allows for pre-determined simulation for creating test ballots and electronic voting equipment test input.	1	The Verity system is designed to automatically create test decks containing one mark per option. The system also has the ability to import marking patterns created outside of Verity and use these to print marked test ballots.
Testing	H-24	Have the capability to test ballot layouts to verify the allowable number of votes for a contest or question and the combinations of voting patterns permitted or required by the using jurisdiction.	1	
Testing	H-25	Provide capability to permit diagnostic testing of all the major components within each electronic vote capture device.	1	

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM H – MISCELLANEOUS REQUIREMENTS				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Testing	H-26	Ensure non-contamination of voting data through tests of all data paths and memory locations to be used in actual vote recording.	1	
Testing	H-27	Provide evidence in an audit record that test data has been expunged.	1	
Testing	H-28	Allow the ability to load and test audio ballots in electronic vote capture equipment.	1	
Testing	H-29	Provide the ability to print all necessary reports for proofing the results of logic and accuracy testing.	1	
Security	H-30	Provide an environment whereby all databases and data are maintained with provisions for operational security, access control and auditability. Note 1: Please describe the authentication protocols for access to the EMS database and your system's processes for providing operational security and auditability. Note 2: System security must not obstruct authorized access to event or audit logs, and printing or exporting of reports.	1	For Notes 1. and 2., please see Section 6.4
Security	H-31	Require two factor authentication for access to the EMS and all tabulation equipment. This means an authorized user will need a physical device (e.g. token, card) and something memorized (e.g. password) to access the software or equipment.	1	
Security	H-32	Allow tamper evident seals to be placed on all equipment doors, openings, and data access points such that unauthorized access is either prevented or clearly indicated by the damage to or destruction of a seal. Note: Please describe the security offered by your proposed system relating to tamper evident seal placements.	1	Please see Section 6.3, UVS Hardware, for additional details on physical access controls in Verity Voting devices. Tamper evident seals may be placed on any Verity equipment door, opening or access point. Seals are not included in our Cost Proposal.

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
H – MISCELLANEOUS REQUIREMENTS**

Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Security	H-33	Allow all access points to equipment to be visible and subject to oversight of seals, unless the access point is behind doors or a cover. Access points that are not visible should also accommodate tamper evident seals.	1	Please see Section 6.3, UVS Hardware, for additional details on physical access controls in Verity Voting devices. Tamper evident seals may be placed on any Verity equipment door, opening or access point. Seals are not included in our Cost Proposal.
Security	H-34	Report unauthorized modifications to audit data or audit logs. Note: Please explain your system's capabilities to restrict user authorizations and access rights for creating, reading, modifying, and deleting audit data or logs.	1	Note: Verity logs are tamper-evident on all systems. Access rights to create, modify, or delete are not available to any user. Access to the log files on certified PC apps is also restricted by configuring the OS into kiosk mode.
Security	H-35	Allow for installation and auditing of a Trusted Build per Colorado Election Rules.	1	
Documentation	H-36	Include a clear set of documented instructions for election judges to set up voting equipment. These instructions should be modifiable by county personnel.	1	
Documentation	H-37	Include documented instructions for troubleshooting any voting equipment issues that may arise.	1	
Documentation	H-38	Include a complete set of User and Technical documentation.	1	
Documentation	H-39	Include current certification documentation and VSTL and/or state test reports.	1	

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
1		Contract Signed	0 days	Yes	Mon 3/17/14	Mon 3/17/14		
2		Kickoff Meeting	1 day	No	Mon 3/24/14	Mon 3/24/14	1FS+1 wk	HPM,HT,CDOS,CPM
3		Produce Initial Project Plan Documents	30 days	No	Mon 3/17/14	Mon 4/28/14		
4		Project Schedule	30 days	No	Mon 3/17/14	Fri 4/25/14		HPM,CPM
5		Acceptance Test Plan	30 days	No	Mon 3/17/14	Fri 4/25/14	4SS	CPM,HPM
6		Evaluation Plan	30 days	No	Mon 3/17/14	Fri 4/25/14	5SS	HPM,CPM
7		Other Plan Elements	30 days	No	Mon 3/17/14	Fri 4/25/14	6SS	CPM,HPM
8		Project Plan Acceptance	0 days	Yes	Mon 4/28/14	Mon 4/28/14	6	
9		Status Reports	695 days	No	Fri 4/4/14	Fri 12/2/16		
43		Weekly Status Meetings	696 days	No	Thu 3/27/14	Thu 11/24/16		CPM,HPM
184		Monthly Status Meetings	676 days	No	Wed 4/9/14	Wed 11/9/16		CPM,CDOS,HPM,H
217		Quarterly Status Meetings	656 days	No	Fri 4/11/14	Fri 10/14/16		CED,CPM,HPM,HPS
229		Training for CDOS Staff	9.38 days	No	Tue 4/1/14	Mon 4/14/14		
230		Verity Management and Best Practices Course	4 hrs	No	Tue 4/1/14	Tue 4/1/14	2FS+1 wk	HT,CPM,CDOS
231		Election Office Operator Training Course	2 days	No	Tue 4/1/14	Thu 4/3/14	230	HT,CPM,CDOS
232		Build Operator Training Course	4 hrs	No	Thu 4/3/14	Thu 4/3/14	231	HT,CPM,CDOS
233		Central Operator Training Course	1 day	No	Fri 4/4/14	Fri 4/4/14	232	HT,CPM,CDOS
234		Count/Relay Operator Training Course	1 day	No	Mon 4/7/14	Mon 4/7/14	233	HT,CPM,CDOS
235		Support Procedures Training Course	2 days	No	Tue 4/8/14	Wed 4/9/14	234	HT,CPM,CDOS
236		Polling Place Operations Training Course	2 hrs	No	Thu 4/10/14	Thu 4/10/14	235	HT,CPM,CDOS
237		Train the Trainer Training Course	2 days	No	Thu 4/10/14	Mon 4/14/14	236	HT,CPM,CDOS
238		Assisting Voters with Disabilities Training Course	1 hr	No	Mon 4/14/14	Mon 4/14/14	237	HT,CPM,CDOS
239		Data Integration	27 days	No	Fri 3/21/14	Mon 4/28/14		
240		SCORE	27 days	No	Fri 3/21/14	Mon 4/28/14		
241		Requirements	4 days	No	Fri 3/21/14	Wed 3/26/14		
242		Define data requirements	2 days	No	Tue 3/25/14	Wed 3/26/14	2	CDOS,CPM,HPM,HT
243		Define file formats	1 day	No	Mon 3/24/14	Tue 3/25/14	242SF	HTS,CDOS
244		Define election process flow	1 day	No	Fri 3/21/14	Mon 3/24/14	243SF	CDOS,HTS
245		Sub Project Execution (if necessary)	15 days	No	Mon 3/24/14	Fri 4/11/14		
246		Software coding	10 days	No	Mon 3/24/14	Fri 4/4/14	244	HTS

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
247		Module testing	5 days	No	Mon 4/7/14	Fri 4/11/14	246	HTS
248		System Level Testing	11 days	No	Mon 4/14/14	Mon 4/28/14		
249		Test Design	10 days	No	Mon 4/14/14	Fri 4/25/14	247	CPM
250		Test Execution	1 day	No	Mon 4/28/14	Mon 4/28/14	249	CPM,HPM
251		System Acceptance	0 days	Yes	Mon 4/28/14	Mon 4/28/14	250	
252		Target County Verity Implementation	17.25 days?	No	Mon 3/17/14	Wed 11/19/14		
253		Contract Signed	1 day	Yes	Tue 4/15/14	Tue 4/15/14		
254		Order Hardware	2 days	No	Wed 4/16/14	Thu 4/17/14		
255		Verity System Components	1 day	No	Wed 4/16/14	Wed 4/16/14	253	CPM,HTS
256		Other Hardware - PCs, Scanners, and Printers	1 day	No	Thu 4/17/14	Thu 4/17/14	255	HTS
257		Order Software	2 days	No	Wed 4/16/14	Thu 4/17/14		
258		Verity Applications and Firmware	1 day	No	Wed 4/16/14	Wed 4/16/14	253	HTS
259		3rd Party Software	1 day	No	Thu 4/17/14	Thu 4/17/14	258	HTS
260		Kickoff Meeting with County	1 day?	Yes	Wed 4/23/14	Wed 4/23/14	253FS+1 wk	CS,HT,HPM
261		County approval of Project Schedule / Acceptance Test Plan / Evaluation Plan	0 days	Yes	Wed 4/23/14	Wed 4/23/14	260FF	
262		Order Supplies	1 day	No	Thu 4/24/14	Thu 4/24/14	260	HPM
263		Order Training Materials	1 day	No	Thu 4/24/14	Thu 4/24/14	260,261	HT
264		Workflow, Time, and Resource Planning	19.5 days?	No	Wed 4/23/14	Tue 5/20/14		
265		Work Process Analysis	19.5 days?	No	Wed 4/23/14	Tue 5/20/14		
266		Variance Analysis	5.5 days?	No	Wed 4/23/14	Wed 4/30/14		
267		Customer's Elections Organization	4 hrs	No	Thu 4/24/14	Thu 4/24/14	260	CS,HPM
268		Ballot Design Process	1 day	No	Wed 4/23/14	Thu 4/24/14	267	
269		Input Data	4 hrs	No	Thu 4/24/14	Thu 4/24/14	267	CS,HPM
270		Work Process Analysis	4 hrs	No	Thu 4/24/14	Thu 4/24/14	269SS	CS,HPM
271		Resources	4 hrs	No	Thu 4/24/14	Thu 4/24/14	270SF	CS,HPM
272		Facilities	4 hrs	No	Wed 4/23/14	Thu 4/24/14	271SF	CS,HPM
273		Documentation	4 hrs	No	Wed 4/23/14	Wed 4/23/14	272SS	CS,HPM
274		Warehouse Workflow	2 days?	No	Thu 4/24/14	Fri 4/25/14	268	
275		Logic and Accuracy Testing	1 day?	No	Thu 4/24/14	Thu 4/24/14	273	HPM,CS

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
276		Warehousing	1 day	No	Thu 4/24/14	Thu 4/24/14	275SS	CS,HPM
277		Preparing equipment for early voting	1 day	No	Thu 4/24/14	Thu 4/24/14	276SS	CS,HPM
278		Security	1 day	No	Fri 4/25/14	Fri 4/25/14	277	HPM,CS
279		Supply distribution	1 day	No	Fri 4/25/14	Fri 4/25/14	278SS	CS,HPM
280		Equipment marshalling and delivery	1 day	No	Fri 4/25/14	Fri 4/25/14	279SS	CS,HPM
281		Selection of Polling Places	1 day	No	Fri 4/25/14	Fri 4/25/14	280SS	CS,HPM
282		By Mail Workflow	0.5 days	No	Mon 4/28/14	Mon 4/28/14	274	
283		Training	4 hrs	No	Mon 4/28/14	Mon 4/28/14	281	CS,HPM
284		Work Processes	4 hrs	No	Mon 4/28/14	Mon 4/28/14	283SS	CS,HPM
285		Resources	4 hrs	No	Mon 4/28/14	Mon 4/28/14	284SS	CS,HPM
286		Facilities	4 hrs	No	Mon 4/28/14	Mon 4/28/14	285SS	CS,HPM
287		Early Voting In-Person Workflow	0.5 days	No	Mon 4/28/14	Mon 4/28/14	282	
288		Training	4 hrs	No	Mon 4/28/14	Mon 4/28/14	286	CS,HPM
289		Work processes	4 hrs	No	Mon 4/28/14	Mon 4/28/14	288SS	CS,HPM
290		Resources	4 hrs	No	Mon 4/28/14	Mon 4/28/14	289SS	CS,HPM
291		Facilities	4 hrs	No	Mon 4/28/14	Mon 4/28/14	290SS	CS,HPM
292		Polling Place work process	4 hrs	No	Mon 4/28/14	Mon 4/28/14	291SS	CS,HPM
293		Close-Out procedures	4 hrs	No	Mon 4/28/14	Mon 4/28/14	292SS	CS,HPM
294		Absentee Resolution Boards	4 hrs	No	Mon 4/28/14	Mon 4/28/14	293SS	CS,HPM
295		Election Day Workflow	1 day	No	Tue 4/29/14	Tue 4/29/14	287	
296		Training	1 day	No	Tue 4/29/14	Tue 4/29/14	294	CS,HPM
297		Work processes	1 day	No	Tue 4/29/14	Tue 4/29/14	296SS	CS,HPM
298		Resources	1 day	No	Tue 4/29/14	Tue 4/29/14	297SS	CS,HPM
299		Facilities	1 day	No	Tue 4/29/14	Tue 4/29/14	298SS	CS,HPM
300		Polling Place work process	1 day	No	Tue 4/29/14	Tue 4/29/14	299SS	CS,HPM
301		Close-Out procedures	1 day	No	Tue 4/29/14	Tue 4/29/14	300SS	CS,HPM
302		Receiving Substation Operations	1 day	No	Tue 4/29/14	Tue 4/29/14	301SS	CS,HPM
303		Central Counting Station	1 day	No	Tue 4/29/14	Tue 4/29/14	302SS	CS,HPM
304		Voter Education	0.5 days	No	Wed 4/30/14	Wed 4/30/14	295	
305		Public Education and Outreach Program	4 hrs	No	Wed 4/30/14	Wed 4/30/14	303	CS,HPM

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
306		Phone Bank and other tools, as applicable	4 hrs	No	Wed 4/30/14	Wed 4/30/14	305SS	CS,HPM
307		Administrative Workflow	0.5 days	No	Wed 4/30/14	Wed 4/30/14	304	
308		Sample Ballots	4 hrs	No	Wed 4/30/14	Wed 4/30/14	306	CS,HPM
309		Poll Worker Recruitment	4 hrs	No	Wed 4/30/14	Wed 4/30/14	308SS	CS,HPM
310		Election Night	4 hrs	No	Wed 4/30/14	Wed 4/30/14	309SS	CS,HPM
311		BPA Documentation Preparation	9 days	No	Thu 5/1/14	Tue 5/13/14		
312		Complete Gap/Risk Analysis	3 days	No	Thu 5/1/14	Mon 5/5/14	307	HPM
313		Write Document	5 days	No	Tue 5/6/14	Mon 5/12/14	312	HPM
314		Refine Project Plan	1 day	No	Tue 5/13/14	Tue 5/13/14	313	HPM
315		BPA Review and Acceptance	6 days	No	Tue 5/13/14	Tue 5/20/14		
316		Customer Review BPA	1 wk	No	Tue 5/13/14	Mon 5/19/14	313	CS
317		Joint Review and Acceptance Meeting	1 day	Yes	Tue 5/20/14	Tue 5/20/14	316	CS,HPM,HT
318		Appliation and Peripheral Hardware Configuration in Austin	4.25 days	No	Fri 5/2/14	Thu 5/8/14		
319		Receive Application and Peripheral Hardware	1 day	No	Fri 5/2/14	Fri 5/2/14	256FS+2 wks	HTS
320		Configure Hardware	2 days	No	Mon 5/5/14	Tue 5/6/14	319	HTS
321		Test Hardware	1 day	No	Wed 5/7/14	Wed 5/7/14	320	HTS
322		Ship Hardware	2 hrs	No	Thu 5/8/14	Thu 5/8/14	321	HTS
323		Deploy Verity System Software and Hardware	0.75 days	No	Wed 5/14/14	Thu 5/15/14		
324		Customer Receives Computer Hardware	2 hrs	No	Wed 5/14/14	Wed 5/14/14	322FS+4 days	CS
325		Configure, Test, and Set Up Systems	4 hrs	No	Wed 5/14/14	Wed 5/14/14	324	CS,HPM
326		Customer Acceptance	0 days	Yes	Thu 5/15/14	Thu 5/15/14	325	CS,HPM
327		Receive and Accept Verity Voting Hardware	32 days?	No	Mon 4/28/14	Tue 6/10/14		
328		Conduct Warehouse Facility Planning	2 days	No	Mon 4/28/14	Tue 4/29/14	274	CS,HPM
329		Warehouse Facility Sub-Project Implementation	2 days	No	Wed 4/30/14	Thu 5/1/14	328	CS,HPM
330		Conduct Warehouse Utilities and Procedures Training	1 day	No	Thu 5/1/14	Thu 5/1/14	329FF	
331		Delivery of Verity Voting Equipment	9 days?	No	Thu 5/29/14	Tue 6/10/14		
332		Receive Hardware and Enter into Inventory	3 days?	No	Thu 5/29/14	Mon 6/2/14	255FS+30 days	CS
333		Conduct Customer Acceptance Test	4 days	Yes	Tue 6/3/14	Fri 6/6/14	332	CS,HPM
334		Configure for Use	1 day	No	Mon 6/9/14	Mon 6/9/14	333	CS
335		Place in Storage for Election Use	1 day	No	Tue 6/10/14	Tue 6/10/14	334	CS

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
336		Dispose of old equipment	20 days?	No	Wed 4/30/14	Tue 5/27/14	328	CS
337		Conduct Mock Election "Round Trip"	1 wk	No	Wed 6/11/14	Tue 6/17/14	335	CS,HPM,HT
338		Conduct Voting for the November 4, 2014 General Election	173 days?	No	Mon 3/17/14	Wed 11/12/14		
339		Voter Education and Outreach	134 days	No	Thu 5/1/14	Tue 11/4/14		
340		TBA - See Outreach Statement of Work	134 days	No	Thu 5/1/14	Tue 11/4/14	260	CS,HPM
341		County Staff Training	19.38 days	No	Wed 5/21/14	Tue 6/17/14		
342		Create Training Plan/Schedule	10 days	No	Wed 5/21/14	Tue 6/3/14	317	CS,HT
343		Secure County Approval of Training Plan	0 days	Yes	Wed 6/4/14	Wed 6/4/14	342	
344		Verity Management and Best Practices Course	4 hrs	No	Wed 6/4/14	Wed 6/4/14	343	CS,HT
345		Election Office Operator Training Course	2 days	No	Wed 6/4/14	Fri 6/6/14	344	CS,HT
346		Build Operator Training Course	4 hrs	No	Fri 6/6/14	Fri 6/6/14	345	CS,HT
347		Central Operator Training Course	1 day	No	Mon 6/9/14	Mon 6/9/14	346	CS,HT
348		Count/Relay Operator Training Course	1 day	No	Tue 6/10/14	Tue 6/10/14	347	CS,HT
349		Support Procedures Training Course	2 days	No	Wed 6/11/14	Thu 6/12/14	348	CS,HT
350		Polling Place Operations Training Course	2 hrs	No	Fri 6/13/14	Fri 6/13/14	349	CS,HT
351		Train the Trainer Training Course	2 days	No	Fri 6/13/14	Tue 6/17/14	350	CS,HT
352		Assisting Voters with Disabilities Training Course	1 hr	No	Tue 6/17/14	Tue 6/17/14	351	CS,HT
353		Preview and Prepare Early Voting / Election Day Polling Places	30 days	No	Mon 6/2/14	Fri 7/11/14		
354		Space	30 days	No	Mon 6/2/14	Fri 7/11/14		CS,HPM
355		Electric Power	30 days	No	Mon 6/2/14	Fri 7/11/14	354SS	CDOS,HPM
356		Telecommunications	30 days	No	Mon 6/2/14	Fri 7/11/14	355SS	CS,HPM
357		Security	30 days	No	Mon 6/2/14	Fri 7/11/14	356SS	CS,HPM
358		Program Ballot	10 days?	No	Fri 9/5/14	Thu 9/18/14		
359		Ballot Certification	0 days	Yes	Fri 9/5/14	Fri 9/5/14		
360		Order Sample Ballots	10 days	No	Fri 9/5/14	Thu 9/18/14	359	CS
361		Data Entry / Import into Layout	1 day	No	Fri 9/5/14	Fri 9/5/14	359	CS,HPM
362		Proof Ballot	1 day?	No	Mon 9/8/14	Mon 9/8/14	361	CS
363		Enter foreign language text (if required)	1 day?	No	Tue 9/9/14	Tue 9/9/14	362	CS,HPM
364		Record Audio	1 day?	No	Wed 9/10/14	Wed 9/10/14	363	CS,HPM

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
365		Final text / audiot proof of ballot	1 day?	No	Thu 9/11/14	Thu 9/11/14	364	CS
366		Round Trip	1 day?	No	Fri 9/12/14	Fri 9/12/14	365	CS,HPM
367		Ballot Ready for Election	0 days	Yes	Mon 9/15/14	Mon 9/15/14	366	
368		Create vDrives	1 day?	No	Mon 9/15/14	Mon 9/15/14	367	CS
369		By Mail Voting	173 days?	No	Mon 3/17/14	Wed 11/12/14		
370		Order blank ballot stock for office printing	1 day?	No	Mon 3/17/14	Mon 3/17/14		
371		Send files to printer (or print in office)	2 days	No	Tue 9/16/14	Wed 9/17/14	368	CS
372		Print ballots	1 wk	No	Thu 9/18/14	Wed 9/24/14	371	CS
373		Mail ballots - UOCAVA	2 days	No	Thu 9/18/14	Fri 9/19/14	372SS	CS
374		Mail ballots - Regular	4 days	No	Wed 10/15/14	Mon 10/20/14	373	CS
375		Receive ballots	33 days	No	Mon 9/29/14	Wed 11/12/14	373FS+1 wk	CS
376		Resolution Board Training	2 hrs	No	Mon 10/20/14	Mon 10/20/14	375	CS,HT
377		Scan/Resolve ballots	11 days	No	Mon 10/20/14	Tue 11/4/14	376	CS
378		Write CVRs to vDrives	1 hr	No	Tue 11/4/14	Tue 11/4/14	377	HT,CS
379		Early Voting (EV)	36.5 days	No	Tue 9/16/14	Wed 11/5/14		
380		Training	0.25 days	No	Fri 10/24/14	Fri 10/24/14		
381		Polling Place Operations Training Course(s)	2 hrs	No	Fri 10/24/14	Fri 10/24/14	386FS-7 days	CS,HT
382		Pre-define Verity Voting Units in the Warehouse	2 hrs	No	Tue 9/16/14	Tue 9/16/14	368	CS
383		Marshall and Deploy Equipment to Early Voting Polling Place(s)	1 day	No	Fri 10/24/14	Fri 10/24/14	386FS-7 days	CS
384		Disburse Supplies	4 hrs	No	Fri 10/24/14	Fri 10/24/14	383SS	CS
385		Setup Polls	2 hrs	No	Fri 10/24/14	Fri 10/24/14	384	CS
386		Early Voting Period	6 days	No	Mon 10/27/14	Mon 11/3/14		
387		EV field support	6 days	No	Mon 10/27/14	Mon 11/3/14	386SS	CS,HPM,HT
388		EV Closeout	2 hrs	No	Mon 11/3/14	Mon 11/3/14	387FF	CS,HPM
389		Return Equipment to Warehouse	4 hrs	No	Wed 11/5/14	Wed 11/5/14	388FS+1 day	CS
390		Conduct Election Day Voting (ED)	25 days?	No	Tue 10/7/14	Mon 11/10/14		
391		Marshal Equipment for ED	1 day?	No	Mon 10/20/14	Mon 10/20/14	383	CS
392		Conduct Poll Worker Training	1 wk	No	Tue 10/7/14	Mon 10/13/14	368FS+3 wks	CS,HT

State of Colorado UVS
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ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
393		Predefine Veirty Voting Units for ED locations at Warehouse	1 day	No	Tue 10/21/14	Tue 10/21/14	391	CS
394		Deploy equipment to ED polling place(s)	3 days	No	Wed 10/29/14	Fri 10/31/14	393FS+1 wk	CS
395		Disburse Supplies	6 hrs	No	Fri 10/31/14	Fri 10/31/14	394FF	CS
396		Setup Polls	2 hrs	No	Mon 11/3/14	Mon 11/3/14	395	CS
397		ED Field Support	1 day	No	Mon 11/3/14	Tue 11/4/14	396	HPM,HT,CS
398		Close Polls	2 hrs	No	Tue 11/4/14	Tue 11/4/14	397FF	CS,HPM
399		Transmit Unofficial Results to Count (if applicable)	1 hr	No	Tue 11/4/14	Tue 11/4/14	398FF	CS
400		Deliver vDrives to Counting Station	2 hrs	No	Tue 11/4/14	Tue 11/4/14	399FF	CS
401		Return Equipment to Warehouse	4 days	No	Wed 11/5/14	Mon 11/10/14	400	CS
402		Central County Station Planning and Operation	100.13 days	No	Tue 6/17/14	Tue 11/4/14		
403		Establish Comprehensive Procedures	5 days	No	Tue 6/17/14	Tue 6/24/14		
404		Workflow	1 wk	No	Tue 6/17/14	Tue 6/24/14	341	CS,HPM
405		Receiving Area	1 wk	No	Tue 6/17/14	Tue 6/24/14	404SS	CS,HPM
406		Tally Area	1 wk	No	Tue 6/17/14	Tue 6/24/14	405SS	CS,HPM
407		Verification Area	1 wk	No	Tue 6/17/14	Tue 6/24/14	406SS	CS,HPM
408		Return Distribution	1 wk	No	Tue 6/17/14	Tue 6/24/14	407SS	CS,HPM
409		Records Management	1 wk	No	Tue 6/17/14	Tue 6/24/14	408SS	CS,HPM
410		L&A Test	1 day	No	Fri 10/24/14	Mon 10/27/14	397SF-5 days	CS,HPM
411		Marshal and Distribute Equipment to Central Counting Station	2 days	No	Mon 10/20/14	Tue 10/21/14		CS
412		Set Up CCS	1 day	No	Wed 10/22/14	Wed 10/22/14	411	CS
413		CCS Training	2 hrs	No	Thu 10/23/14	Thu 10/23/14	412	CS,HT
414		Tabulate Election Results	0.5 days	No	Tue 11/4/14	Tue 11/4/14		
415		Early Voting vDrives to Count	1 hr	No	Tue 11/4/14	Tue 11/4/14	388	CS
416		Absentee vDrives to Count	1 hr	No	Tue 11/4/14	Tue 11/4/14	378	CS
417		Election Day vDrives to Count	1 hr	No	Tue 11/4/14	Tue 11/4/14	398	CDOS
418		Generate Reports	1 hr	No	Tue 11/4/14	Tue 11/4/14	417	CS
419		Post Election Warehousing	0.13 days	No	Tue 11/4/14	Tue 11/4/14		
420		Backup and Archive Results	1 hr	No	Tue 11/4/14	Tue 11/4/14	418	CS

State of Colorado UVS
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ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
421		Conduct Post Election Analysis / Project Wrap Up	5.25 days	No	Tue 11/4/14	Tue 11/11/14		
422		Document and Analyze Lessons Learned	5 days	No	Tue 11/4/14	Tue 11/11/14	418	CS,HPM,HT
423		Election Review	2 hrs	No	Tue 11/11/14	Tue 11/11/14	422	HPM
424		Target County / Hart / CDOS (if required) Project Review and Wrap Up Meeting	0.5 days	No	Tue 11/18/14	Wed 11/19/14		CPM,CS,HPM,HPS,I
425		Finalize Transition Plan to Support	4 hrs	No	Tue 11/18/14	Wed 11/19/14	423FS+1 wk	
426		Insert Adams County Sub Project Implementation Schedule Here		Yes				
427		Insert Alamosa County Sub Project Implementation Schedule Here		Yes				
428		Insert Arapahoe County Sub Project Implementation Schedule Here		Yes				
429		Insert Archuleta County Sub Project Implementation Schedule Here		Yes				
430		Insert Baca County Sub Project Implementation Schedule Here		Yes				
431		Insert Bent County Sub Project Implementation Schedule Here		Yes				
432		Insert Boulder County Sub Project Implementation Schedule Here		Yes				
433		Insert Broomfield County Sub Project Implementation Schedule Here		Yes				
434		Insert Chaffee County Sub Project Implementation Schedule Here		Yes				
435		Insert Cheyenne County Sub Project Implementation Schedule Here		Yes				
436		Insert Clear Creek County Sub Project Implementation Schedule Here		Yes				
437		Insert Conejos County Sub Project Implementation Schedule Here		Yes				
438		Insert Costilla County Sub Project Implementation Schedule Here		Yes				

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
439		Insert Crowley County Sub Project Implementation Schedule Here		Yes				
440		Insert Custer County Sub Project Implementation Schedule Here		Yes				
441		Insert Delta County Sub Project Implementation Schedule Here		Yes				
442		Insert Denver County Sub Project Implementation Schedule Here		Yes				
443		Insert Dolores County Sub Project Implementation Schedule Here		Yes				
444		Insert Douglas County Sub Project Implementation Schedule Here		Yes				
445		Insert Eagle County Sub Project Implementation Schedule Here		Yes				
446		Insert El Paso County Sub Project Implementation Schedule Here		Yes				
447		Insert Elbert County Sub Project Implementation Schedule Here		Yes				
448		Insert Fremont County Sub Project Implementation Schedule Here		Yes				
449		Insert Garfield County Sub Project Implementation Schedule Here		Yes				
450		Insert Gilpin County Sub Project Implementation Schedule Here		Yes				
451		Insert Grand County Sub Project Implementation Schedule Here		Yes				
452		Insert Gunnison County Sub Project Implementation Schedule Here		Yes				
453		Insert Hinsdale County Sub Project Implementation Schedule Here		Yes				
454		Insert Huerfano County Sub Project Implementation Schedule Here		Yes				
455		Insert Jackson County Sub Project Implementation Schedule Here		Yes				

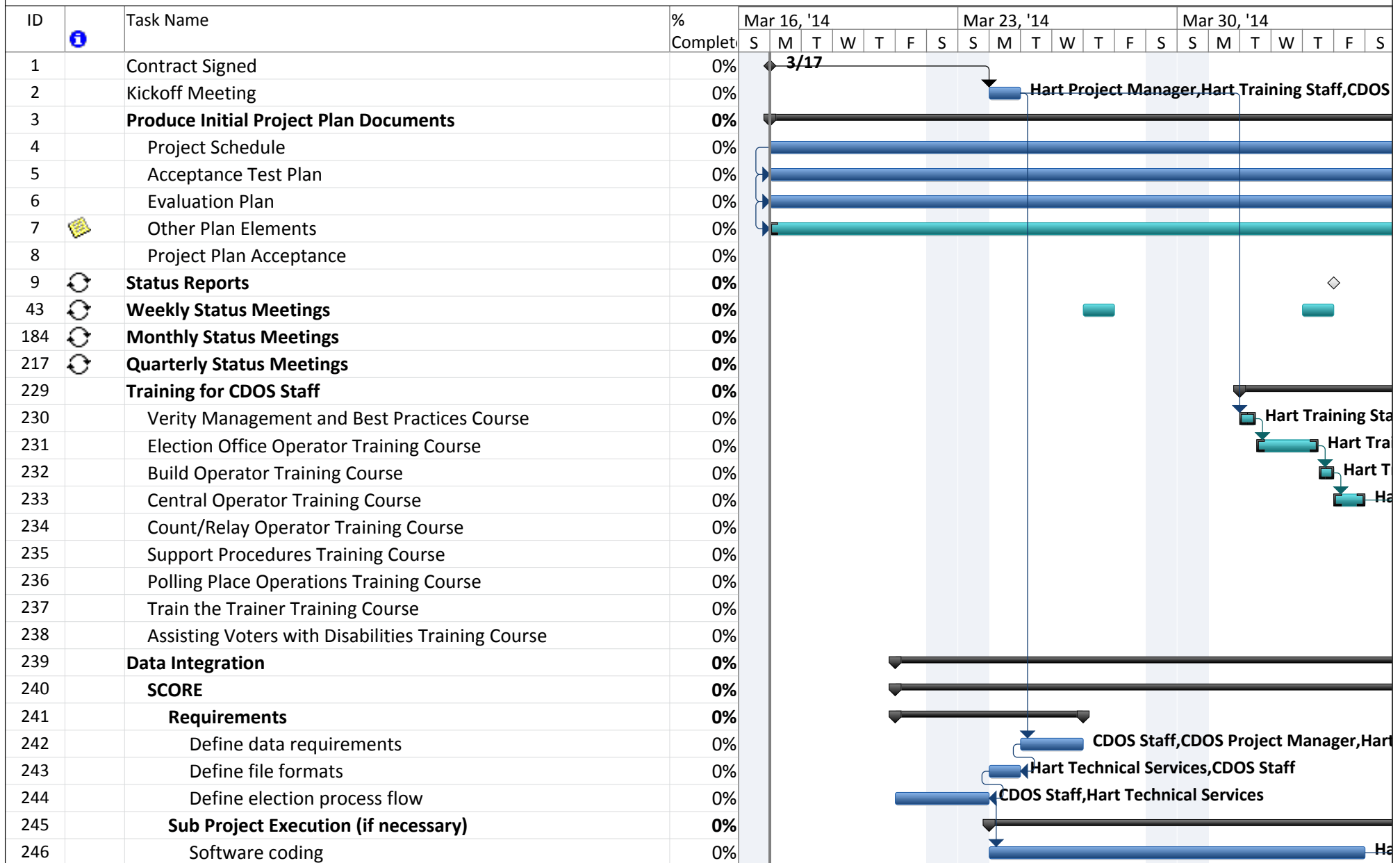
State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
456		Insert Jefferson County Sub Project Implementation Schedule Here		Yes				
457		Insert Kiowa County Sub Project Implementation Schedule Here		Yes				
458		Insert Kit Carson County Sub Project Implementation Schedule Here		Yes				
459		Insert La Plata County Sub Project Implementation Schedule Here		Yes				
460		Insert Lake County Sub Project Implementation Schedule Here		Yes				
461		Insert Larimer County Sub Project Implementation Schedule Here		Yes				
462		Insert Las Animas County Sub Project Implementation Schedule Here		Yes				
463		Insert Lincoln County Sub Project Implementation Schedule Here		Yes				
464		Insert Logan County Sub Project Implementation Schedule Here		Yes				
465		Insert Mesa County Sub Project Implementation Schedule Here		Yes				
466		Insert Mineral County Sub Project Implementation Schedule Here		Yes				
467		Insert Moffat County Sub Project Implementation Schedule Here		Yes				
468		Insert Montezuma County Sub Project Implementation Schedule Here		Yes				
469		Insert Montrose County Sub Project Implementation Schedule Here		Yes				
470		Insert Morgan County Sub Project Implementation Schedule Here		Yes				
471		Insert Otero County Sub Project Implementation Schedule Here		Yes				
472		Insert Ouray County Sub Project Implementation Schedule Here		Yes				

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	Duration	Milest	Start	Finish	Predecessors	Resource Initials
473		Insert Park County Sub Project Implementation Schedule Here		Yes				
474		Insert Phillips County Sub Project Implementation Schedule Here		Yes				
475		Insert Pitkin County Sub Project Implementation Schedule Here		Yes				
476		Insert Prowers County Sub Project Implementation Schedule Here		Yes				
477		Insert Pueblo County Sub Project Implementation Schedule Here		Yes				
478		Insert Rio Blanco County Sub Project Implementation Schedule Here		Yes				
479		Insert Rio Grande County Sub Project Implementation Schedule Here		Yes				
480		Insert Routt County Sub Project Implementation Schedule Here		Yes				
481		Insert Saguache County Sub Project Implementation Schedule Here		Yes				
482		Insert San Juan County Sub Project Implementation Schedule Here		Yes				
483		Insert San Miguel County Sub Project Implementation Schedule Here		Yes				
484		Insert Sedgwick County Sub Project Implementation Schedule Here		Yes				
485		Insert Summit County Sub Project Implementation Schedule Here		Yes				
486		Insert Teller County Sub Project Implementation Schedule Here		Yes				
487		Insert Washington County Sub Project Implementation Schedule Here		Yes				
488		Insert Weld County Sub Project Implementation Schedule Here		Yes				
489		Insert Yuma County Sub Project Implementation Schedule Here		Yes				

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ID		Task Name	% Complete	Mar 16, '14							Mar 23, '14							Mar 30, '14						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
247		Module testing	0%																					
248		System Level Testing	0%																					
249		Test Design	0%																					
250		Test Execution	0%																					
251		System Acceptance	0%																					
252		Target County Verity Implementation	0%																					
253		Contract Signed	0%																					
254		Order Hardware	0%																					
255		Verity System Components	0%																					
256		Other Hardware - PCs, Scanners, and Printers	0%																					
257		Order Software	0%																					
258		Verity Applications and Firmware	0%																					
259		3rd Party Software	0%																					
260		Kickoff Meeting with County	0%																					
261		County approval of Project Schedule / Acceptance Test Plan / Evaluation Plan	0%																					
262		Order Supplies	0%																					
263		Order Training Materials	0%																					
264		Workflow, Time, and Resource Planning	0%																					
265		Work Process Analysis	0%																					
266		Variance Analysis	0%																					
267		Customer's Elections Organization	0%																					
268		Ballot Design Process	0%																					
269		Input Data	0%																					
270		Work Process Analysis	0%																					
271		Resources	0%																					
272		Facilities	0%																					
273		Documentation	0%																					
274		Warehouse Workflow	0%																					
275		Logic and Accuracy Testing	0%																					

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ID		Task Name	% Complete	Mar 16, '14							Mar 23, '14							Mar 30, '14						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
276		Warehousing	0%																					
277		Preparing equipment for early voting	0%																					
278		Security	0%																					
279		Supply distribution	0%																					
280		Equipment marshalling and delivery	0%																					
281		Selection of Polling Places	0%																					
282		By Mail Workflow	0%																					
283		Training	0%																					
284		Work Processes	0%																					
285		Resources	0%																					
286		Facilities	0%																					
287		Early Voting In-Person Workflow	0%																					
288		Training	0%																					
289		Work processes	0%																					
290		Resources	0%																					
291		Facilities	0%																					
292		Polling Place work process	0%																					
293		Close-Out procedures	0%																					
294		Absentee Resolution Boards	0%																					
295		Election Day Workflow	0%																					
296		Training	0%																					
297		Work processes	0%																					
298		Resources	0%																					
299		Facilities	0%																					
300		Polling Place work process	0%																					
301		Close-Out procedures	0%																					
302		Receiving Substation Operations	0%																					
303		Central Counting Station	0%																					
304		Voter Education	0%																					
305		Public Education and Outreach Program	0%																					

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	% Complete	Mar 16, '14							Mar 23, '14							Mar 30, '14						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
306		Phone Bank and other tools, as applicable	0%																					
307		Administrative Workflow	0%																					
308		Sample Ballots	0%																					
309		Poll Worker Recruitment	0%																					
310		Election Night	0%																					
311		BPA Documentation Preparation	0%																					
312		Complete Gap/Risk Analysis	0%																					
313		Write Document	0%																					
314		Refine Project Plan	0%																					
315		BPA Review and Acceptance	0%																					
316		Customer Review BPA	0%																					
317		Joint Review and Acceptance Meeting	0%																					
318		Appliation and Peripheral Hardware Configuration in Austin	0%																					
319		Receive Application and Peripheral Hardware	0%																					
320		Configure Hardware	0%																					
321		Test Hardware	0%																					
322		Ship Hardware	0%																					
323		Deploy Verity System Software and Hardware	0%																					
324		Customer Receives Computer Hardware	0%																					
325		Configure, Test, and Set Up Systems	0%																					
326		Customer Acceptance	0%																					
327		Receive and Accept Verity Voting Hardware	0%																					
328		Conduct Warehouse Facility Planning	0%																					
329		Warehouse Facility Sub-Project Implementation	0%																					
330		Conduct Warehouse Utilities and Procedures Training	0%																					
331		Delivery of Verity Voting Equipment	0%																					
332		Receive Hardware and Enter into Inventory	0%																					
333		Conduct Customer Acceptance Test	0%																					
334		Configure for Use	0%																					
335		Place in Storage for Election Use	0%																					

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	% Complete	Mar 16, '14							Mar 23, '14							Mar 30, '14						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
336		Dispose of old equipment	0%																					
337		Conduct Mock Election "Round Trip"	0%																					
338		Conduct Voting for the November 4, 2014 General Election	0%																					
339		Voter Education and Outreach	0%																					
340		TBA - See Outreach Statement of Work	0%																					
341		County Staff Training	0%																					
342		Create Training Plan/Schedule	0%																					
343		Secure County Approval of Training Plan	0%																					
344		Verity Management and Best Practices Course	0%																					
345		Election Office Operator Training Course	0%																					
346		Build Operator Training Course	0%																					
347		Central Operator Training Course	0%																					
348		Count/Relay Operator Training Course	0%																					
349		Support Procedures Training Course	0%																					
350		Polling Place Operations Training Course	0%																					
351		Train the Trainer Training Course	0%																					
352		Assisting Voters with Disabilities Training Course	0%																					
353		Preview and Prepare Early Voting / Election Day Polling Places	0%																					
354		Space	0%																					
355		Electric Power	0%																					
356		Telecommunications	0%																					
357		Security	0%																					
358		Program Ballot	0%																					
359		Ballot Certification	0%																					
360		Order Sample Ballots	0%																					
361		Data Entry / Import into Layout	0%																					
362		Proof Ballot	0%																					
363		Enter foreign language text (if required)	0%																					
364		Record Audio	0%																					

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	% Complete	Mar 16, '14							Mar 23, '14							Mar 30, '14						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
365		Final text / audiot proof of ballot	0%																					
366		Round Trip	0%																					
367		Ballot Ready for Election	0%																					
368		Create vDrives	0%																					
369		By Mail Voting	0%																					
370		Order blank ballot stock for office printing	0%																					
371		Send files to printer (or print in office)	0%																					
372		Print ballots	0%																					
373		Mail ballots - UOCAVA	0%																					
374		Mail ballots - Regular	0%																					
375		Receive ballots	0%																					
376		Resolution Board Training	0%																					
377		Scan/Resolve ballots	0%																					
378		Write CVRs to vDrives	0%																					
379		Early Voting (EV)	0%																					
380		Training	0%																					
381		Polling Place Operations Training Course(s)	0%																					
382		Pre-define Verity Voting Units in the Warehouse	0%																					
383		Marshall and Deploy Equipment to Early Voting Polling Place(s)	0%																					
384		Disburse Supplies	0%																					
385		Setup Polls	0%																					
386		Early Voting Period	0%																					
387		EV field support	0%																					
388		EV Closeout	0%																					
389		Return Equipment to Warehouse	0%																					
390		Conduct Election Day Voting (ED)	0%																					
391		Marshal Equipment for ED	0%																					
392		Conduct Poll Worker Training	0%																					

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	% Complete	Mar 16, '14							Mar 23, '14							Mar 30, '14						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
393		Predefine Veirty Voting Units for ED locations at Warehouse	0%																					
394		Deploy equipment to ED polling place(s)	0%																					
395		Disburse Supplies	0%																					
396		Setup Polls	0%																					
397		ED Field Support	0%																					
398		Close Polls	0%																					
399		Transmit Unofficial Results to Count (if applicable)	0%																					
400		Deliver vDrives to Counting Station	0%																					
401		Return Equipment to Warehouse	0%																					
402		Central County Station Planning and Operation	0%																					
403		Establish Comprehensive Procedures	0%																					
404		Workflow	0%																					
405		Receiving Area	0%																					
406		Tally Area	0%																					
407		Verification Area	0%																					
408		Return Distribution	0%																					
409		Records Management	0%																					
410		L&A Test	0%																					
411		Marshal and Distribute Equipment to Central Counting Station	0%																					
412		Set Up CCS	0%																					
413		CCS Training	0%																					
414		Tabulate Election Results	0%																					
415		Early Voting vDrives to Count	0%																					
416		Absentee vDrives to Count	0%																					
417		Election Day vDrives to Count	0%																					
418		Generate Reports	0%																					
419		Post Election Warehousing	0%																					
420		Backup and Archive Results	0%																					

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	% Complete	Mar 16, '14							Mar 23, '14							Mar 30, '14						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
421		Conduct Post Election Analysis / Project Wrap Up	0%																					
422		Document and Analyze Lessons Learned	0%																					
423		Election Review	0%																					
424		Target County / Hart / CDOS (if required) Project Review and Wrap Up Meeting	0%																					
425		Finalize Transition Plan to Support	0%																					
426		Insert Adams County Sub Project Implementation Schedule Here	0%																					
427		Insert Alamosa County Sub Project Implementation Schedule Here	0%																					
428		Insert Arapahoe County Sub Project Implementation Schedule Here	0%																					
429		Insert Archuleta County Sub Project Implementation Schedule Here	0%																					
430		Insert Baca County Sub Project Implementation Schedule Here	0%																					
431		Insert Bent County Sub Project Implementation Schedule Here	0%																					
432		Insert Boulder County Sub Project Implementation Schedule Here	0%																					
433		Insert Broomfield County Sub Project Implementation Schedule Here	0%																					
434		Insert Chaffee County Sub Project Implementation Schedule Here	0%																					
435		Insert Cheyenne County Sub Project Implementation Schedule Here	0%																					
436		Insert Clear Creek County Sub Project Implementation Schedule Here	0%																					
437		Insert Conejos County Sub Project Implementation Schedule Here	0%																					
438		Insert Costilla County Sub Project Implementation Schedule Here	0%																					

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	% Complete	Mar 16, '14							Mar 23, '14							Mar 30, '14						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
439		Insert Crowley County Sub Project Implementation Schedule Here	0%																					
440		Insert Custer County Sub Project Implementation Schedule Here	0%																					
441		Insert Delta County Sub Project Implementation Schedule Here	0%																					
442		Insert Denver County Sub Project Implementation Schedule Here	0%																					
443		Insert Dolores County Sub Project Implementation Schedule Here	0%																					
444		Insert Douglas County Sub Project Implementation Schedule Here	0%																					
445		Insert Eagle County Sub Project Implementation Schedule Here	0%																					
446		Insert El Paso County Sub Project Implementation Schedule Here	0%																					
447		Insert Elbert County Sub Project Implementation Schedule Here	0%																					
448		Insert Fremont County Sub Project Implementation Schedule Here	0%																					
449		Insert Garfield County Sub Project Implementation Schedule Here	0%																					
450		Insert Gilpin County Sub Project Implementation Schedule Here	0%																					
451		Insert Grand County Sub Project Implementation Schedule Here	0%																					
452		Insert Gunnison County Sub Project Implementation Schedule Here	0%																					
453		Insert Hinsdale County Sub Project Implementation Schedule Here	0%																					
454		Insert Huerfano County Sub Project Implementation Schedule Here	0%																					
455		Insert Jackson County Sub Project Implementation Schedule Here	0%																					

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	% Complete	Mar 16, '14							Mar 23, '14							Mar 30, '14						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
456		Insert Jefferson County Sub Project Implementation Schedule Here	0%																					
457		Insert Kiowa County Sub Project Implementation Schedule Here	0%																					
458		Insert Kit Carson County Sub Project Implementation Schedule Here	0%																					
459		Insert La Plata County Sub Project Implementation Schedule Here	0%																					
460		Insert Lake County Sub Project Implementation Schedule Here	0%																					
461		Insert Larimer County Sub Project Implementation Schedule Here	0%																					
462		Insert Las Animas County Sub Project Implementation Schedule Here	0%																					
463		Insert Lincoln County Sub Project Implementation Schedule Here	0%																					
464		Insert Logan County Sub Project Implementation Schedule Here	0%																					
465		Insert Mesa County Sub Project Implementation Schedule Here	0%																					
466		Insert Mineral County Sub Project Implementation Schedule Here	0%																					
467		Insert Moffat County Sub Project Implementation Schedule Here	0%																					
468		Insert Montezuma County Sub Project Implementation Schedule Here	0%																					
469		Insert Montrose County Sub Project Implementation Schedule Here	0%																					
470		Insert Morgan County Sub Project Implementation Schedule Here	0%																					
471		Insert Otero County Sub Project Implementation Schedule Here	0%																					
472		Insert Ouray County Sub Project Implementation Schedule Here	0%																					

State of Colorado UVS
DRAFT VERITY Project Schedule

ID		Task Name	% Complete	Mar 16, '14							Mar 23, '14							Mar 30, '14						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
473		Insert Park County Sub Project Implementation Schedule Here	0%																					
474		Insert Phillips County Sub Project Implementation Schedule Here	0%																					
475		Insert Pitkin County Sub Project Implementation Schedule Here	0%																					
476		Insert Prowers County Sub Project Implementation Schedule Here	0%																					
477		Insert Pueblo County Sub Project Implementation Schedule Here	0%																					
478		Insert Rio Blanco County Sub Project Implementation Schedule Here	0%																					
479		Insert Rio Grande County Sub Project Implementation Schedule Here	0%																					
480		Insert Routt County Sub Project Implementation Schedule Here	0%																					
481		Insert Saguache County Sub Project Implementation Schedule Here	0%																					
482		Insert San Juan County Sub Project Implementation Schedule Here	0%																					
483		Insert San Miguel County Sub Project Implementation Schedule Here	0%																					
484		Insert Sedgwick County Sub Project Implementation Schedule Here	0%																					
485		Insert Summit County Sub Project Implementation Schedule Here	0%																					
486		Insert Teller County Sub Project Implementation Schedule Here	0%																					
487		Insert Washington County Sub Project Implementation Schedule Here	0%																					
488		Insert Weld County Sub Project Implementation Schedule Here	0%																					
489		Insert Yuma County Sub Project Implementation Schedule Here	0%																					

Roster							
Project	State of Colorado UVS				Project #	TBA	
Project manager	David Magedson				Sponsor	Rich Geppert	
Project artifacts	TBA				Updated	10/23/2013	
Name	Core/ Extended Team	Title	Dept.	Phone	Cell Phone	E-Mail	Project Role
Pete Lichtenheld	Extended	VP, Operations	Hart Operations	512-252-6578		plichtenheld@hartic.com	Hart ExecutiveSponsor
Rich Geppert	Extended	Mgr, Professional Services	Hart Operations	512-252-6632		rgeppert@hartic.com	Hart Project Sponsor
David Magedson	Core	Project Manager	Hart Operations	512-252-6801		dmagedson@hartic.com	Hart Project Manager
Jim Canter	Extended	VP, Engineering	Hart Engineering	512-252-6410		jcanter@hartic.com	Technical Development
Justin Morris	Extended	Director of Sales, West Region	Hart Sales	303-957-7426		jmorris@hartic.com	Customer Interface
David Patino	Core	Applications Engineer	Hart Engineering	512-252-6818		dpatino@hartic.com	Technical Development
Jennifer Gray	Extended	Accounting Specailist	Hart Accounting	512-252-6620		jgray@hartic.com	Accounting/Invoicing
Jonathan Butterworth	Core	Consultant	Hart Operations	512-252-6541		jbutterworth@hartic.com	Consultant/Trainer
Dan Gately	Core	Supply Chain Manager	Hart Operations	512-252-6817		dgately@hartic.com	Supply Chain Manager
Robert Espinosa	Core	Technical Services	Hart Operations	512-252-6455		respinosa@hartic.com	Technical Services
TBA	Core	Project Manager	Hart Operations	TBA		TBA	Hart County-Level Project Manager(s)

Active Contests Options List

Sample County — General Election 11/07/2006 — Election Locked for Tally

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English

Party	Option	Party	Option		
Instructions:, Ballot Instruction, 0 Option					
STRAIGHT PARTY, Straight Party, 3 Options					
Voting for a party automatically marks all candidates that have been assigned to that party in contests where straight-party voting is allowed.					
REP	Republican Party	NP	Write-in		
DEM	Democratic Party				
LIB	Libertarian Party				
FEDERAL, Ballot Text, 0 Option					
United States Senator (w1), Office, 4 Options -- Straight Party					
Vote for One					
REP	Aaron Anderson (i)	COUNTY, Ballot Text, 0 Option			
	Delegate -- Mary Jones (d)				
	Paul Herrera (d)				
DEM	Brian Baxter	County Commissioner, Office, 5 Options Vote For 2 -- Straight Party			
	Delegate - Howard Vallejo (d)				
	Delegate - Paula Tufts (d)				
NP	Carl Carlson	Vote for Two			
	Delegate - James Smitt (d)				
	Delegate - Brenda Faye (d)				
NP	Write-in	REP	Bob Benson		
STATE, Ballot Text, 0 Option		DEM	Howard Henderson		
State Treasurer, Office, 2 Options -- Straight Party		LIB	Paula Peterson		
Vote for One		REP	Walter Wright		
DEM	Harriet Hanson (i)	DEM	Yolanda Young		
REP	Irene Ivens	School Board, Office, 6 Options Vote For 3			
State Attorney General, Office, 3 Options -- Straight Party					
Vote for One					
DEM	Jim Jacobs (i)	Vote for Three			
REP	Kelley Kincross				
LIB	Heather Wood				
State Board of Education (w2), Office, 6 Options Vote For 2 -- Straight Party		NP	Samuel Simmons		
Vote for Two		NP	Llad Long		
REP	Nathan Green (i)	NP	Grant Green		
DEM	Harold Freed (i)	NP	Catherine Carlson		
REP	Kathryn Smith	NP	Wendy Williamson		
DEM	Jerry Johnson	NP	Travis Taylor		
NP	Write-in	CITY, Ballot Text, 0 Option			
Knoxville City Council, Office, 6 Options Vote For 3					
Vote for Three					
NP	Patricia Patterson	Mayor of Knoxville (w1), Office, 4 Options			
NP	Olive Oehler				
NP	Gerald Graham				
NP	George Gibson				
NP	Paula Motezna				
NP	Quinn Vallejo	Vote for One			
PROPOSITIONS, Ballot Text, 0 Option					

PROPOSITION 1, Proposition, 2 Options					
A YES vote means you are for the proposition. A NO vote means you are against the proposition.					
Shall STATE taxes be increased by \$20,100,000 annually in the first full fiscal year of implementation, and by \$20,100,000 as adjusted for inflation plus the percentage change in state population for each fiscal year after the first full fiscal year of implementation, by reinstating the 0.2 percent sales tax on tourist-related items, including lodging services, restaurant food and drinks, private tourist attraction admission, and tour bus and sightseeing tickets for the purpose of funding statewide tourism marketing and promotional programs under the State Tourism Board in order to assist future tourism growth and promote the state's continuing economic health?					
NP	Yes	PROPOSITION 2, Proposition, 2 Options			
NP	No				
A YES vote means you are for the proposition. A NO vote means you are against the proposition.					
Do you want to increase property taxes to fund Schools K-12?					
NP	Yes	PROPOSITION 2 Distribution, Proposition, 3 Options Vote For 3 -- Dependent on PROPOSITION 2 / Yes			
NP	No				
Vote for one or more areas to fund.					
NP	Computer Equipment	Vote for one or more areas to fund.			
NP	School Buildings				
NP	Teacher Salaries				
Contests: 18					
Options: 46					

Audit Trail

Date	User	Area	Action
11/22/2005	username	Party	Delete
08:53:38	Party Code="NP", English Name="", Internal Party ID=1, Non-Partisan=Yes, Primary Ballot Header="Non-Partisan Ballot", English Audio ID=		
11/22/2005	username	Party	Add
08:53:39	Party Code="REP", English Name="Republican Party", Internal Party ID=2, Non-Partisan=No, Primary Ballot Header="", English Audio ID=3583		
08:53:39	Party Code="NP", English Name="Non-Partisan", Internal Party ID=1, Non-Partisan=Yes, Primary Ballot Header="Official Ballot", English Audio ID=3581		
08:53:39	Party Code="LIB", English Name="Libertarian Party", Internal Party ID=4, Non-Partisan=No, Primary Ballot Header="", English Audio ID=3585		
08:53:39	Party Code="DEM", English Name="Democratic Party", Internal Party ID=3, Non-Partisan=No, Primary Ballot Header="", English Audio ID=3584		
11/22/2005	username	Polling Place	Add
08:53:47	ID=1, Name="Election Office", Description="123 Down Town Street"		
08:53:47	ID=7, Name="Rec Center", Description="8300 Mapleton"		
08:53:47	ID=6, Name="Firestation", Description="Main at Cedar"		
08:53:47	ID=5, Name="Library", Description="422 Broadway"		
08:53:47	ID=4, Name="High School", Description="10th & Walnut"		
08:53:47	ID=3, Name="School House", Description="789 Cross Walk Lane"		
08:53:47	ID=2, Name="Court House", Description="456 Stone Steps Avenue"		
08:53:47	ID=10, Name="American Legion", Description="402 Washington St"		
08:53:47	ID=9, Name="Barber Shop", Description="Jim's - 822 Broadway"		
08:53:47	ID=8, Name="Hospital", Description="9201 Park Avenue"		
11/22/2005	username	Precinct	Add
08:53:50	ID=1, Name="1001", Split Name="", # Reg Voters=500, English Audio ID=		
08:53:50	ID=3, Name="1003", Split Name="", # Reg Voters=500, English Audio ID=		
08:53:50	ID=2, Name="1002", Split Name="", # Reg Voters=500, English Audio ID=		
08:53:50	ID=14, Name="2005", Split Name="", # Reg Voters=1000, English Audio ID=		
08:53:50	ID=9, Name="2004", Split Name="", # Reg Voters=1000, English Audio ID=		
08:53:50	ID=11, Name="2003", Split Name="2003B", # Reg Voters=500, English Audio ID=		
08:53:50	ID=8, Name="2003", Split Name="2003A", # Reg Voters=500, English Audio ID=		

Audit Trail

Sample County — General Election 11/07/2006 — Election Locked for Tally

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Date	User	Area	Action
11/22/2005	username	Precinct	Add
08:53:50	ID=7, Name="2002", Split Name="", # Reg Voters=1000, English Audio ID=		
08:53:50	ID=6, Name="2001", Split Name="", # Reg Voters=1000, English Audio ID=		
08:53:50	ID=5, Name="1005", Split Name="", # Reg Voters=500, English Audio ID=		
08:53:50	ID=4, Name="1004", Split Name="", # Reg Voters=500, English Audio ID=		
11/22/2005	username	Contest	Add
08:54:03	ID=1, Name="Instructions:", English Audio ID=3586		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=1, Contest Name=(1)"Instructions:", Contest Type=B, Sequence=1, # Choices=0, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=No, DO Contest ID=, DO Option ID=		
11/22/2005	username	Contest	Add
08:54:03	ID=3, Name="STRAIGHT PARTY", English Audio ID=3587		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=3, Contest Name=(3)"STRAIGHT PARTY", Contest Type=S(Straight-Party), Sequence=2, # Choices=1, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=Yes, DO Contest ID=, DO Option ID=		
11/22/2005	username	Instruction Text	Add
08:54:03	ID=1, Instruction Text="Voting for a party automatically marks all candidates that have been assigned to that party in contests where straight-party voting is allowed.", Contest Name="STRAIGHT PARTY", English Audio Id=3588		
11/22/2005	username	Contest	Add
08:54:03	ID=4, Name="FEDERAL", English Audio ID=3589		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=4, Contest Name=(4)"FEDERAL", Contest Type=T, Sequence=3, # Choices=0, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=No, DO Contest ID=, DO Option ID=		
08:54:03	ID=5, Contest Name=(5)"United States Senator", Contest Type=C(Office), Sequence=4, # Choices=1, # Write-ins=1, Include in Straight-Party="Y, Cumulative=N, Include in Rotation=Yes, DO Contest ID=, DO Option ID=		

Audit Trail

Sample County — General Election 11/07/2006 — Election Locked for Tally

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Date	User	Area	Action
11/22/2005	username	Instruction Text	Add
08:54:03	ID=2, Instruction Text="Vote for One", Contest Name="United States Senator", English Audio Id=3591		
11/22/2005	username	Contest	Add
08:54:03	ID=5, Name="United States Senator", English Audio ID=3590		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=6, Contest Name=(6)"STATE", Contest Type=T, Sequence=5, # Choices=0, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=No, DO Contest ID=, DO Option ID=		
11/22/2005	username	Contest	Add
08:54:03	ID=7, Name="State Treasurer", English Audio ID=3593		
08:54:03	ID=6, Name="STATE", English Audio ID=3592		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=8, Contest Name=(8)"State Attorney General", Contest Type=C(Office), Sequence=7, # Choices=1, # Write-ins=0, Include in Straight-Party="Y, Cumulative=N, Include in Rotation=Yes, DO Contest ID=, DO Option ID=		
08:54:03	ID=7, Contest Name=(7)"State Treasurer", Contest Type=C(Office), Sequence=6, # Choices=1, # Write-ins=0, Include in Straight-Party="Y, Cumulative=N, Include in Rotation=Yes, DO Contest ID=, DO Option ID=		
11/22/2005	username	Instruction Text	Add
08:54:03	ID=3, Instruction Text="Vote for One", Contest Name="State Treasurer", English Audio Id=3594		
11/22/2005	username	Contest	Add
08:54:03	ID=8, Name="State Attorney General", English Audio ID=3595		
11/22/2005	username	Instruction Text	Add
08:54:03	ID=4, Instruction Text="Vote for One", Contest Name="State Attorney General", English Audio Id=3596		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=9, Contest Name=(9)"State Board of Education", Contest Type=C(Office), Sequence=8, # Choices=2, # Write-ins=2, Include in Straight-Party="Y, Cumulative=N, Include in Rotation=Yes, DO Contest ID=, DO Option ID=		

Audit Trail

Sample County — General Election 11/07/2006 — Election Locked for Tally

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Date	User	Area	Action
11/22/2005	username	Instruction Text	Add
08:54:03	ID=5, Instruction Text="Vote for Two", Contest Name="State Board of Education", English Audio Id=3598		
11/22/2005	username	Contest	Add
08:54:03	ID=9, Name="State Board of Education", English Audio ID=3597		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=11, Contest Name="(11)"County Commissioner", Contest Type=C(Office), Sequence=10, # Choices=2, # Write-ins=0, Include in Straight-Party="Y, Cumulative=N, Include in Rotation=Yes, DO Contest ID=, DO Option ID=		
08:54:03	ID=10, Contest Name="(10)"COUNTY", Contest Type=T, Sequence=9, # Choices=0, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=No, DO Contest ID=, DO Option ID=		
11/22/2005	username	Contest	Add
08:54:03	ID=11, Name="County Commissioner", English Audio ID=3600		
08:54:03	ID=10, Name="COUNTY", English Audio ID=3599		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=12, Contest Name="(12)"School Board", Contest Type=C(Office), Sequence=11, # Choices=3, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=Yes, DO Contest ID=, DO Option ID=		
11/22/2005	username	Instruction Text	Add
08:54:03	ID=6, Instruction Text="Vote for Two", Contest Name="County Commissioner", English Audio Id=3601		
11/22/2005	username	Contest	Add
08:54:03	ID=12, Name="School Board", English Audio ID=3602		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=13, Contest Name="(13)"CITY", Contest Type=T, Sequence=12, # Choices=0, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=No, DO Contest ID=, DO Option ID=		
11/22/2005	username	Contest	Add
08:54:03	ID=13, Name="CITY", English Audio ID=3604		

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Date	User	Area	Action
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=14, Contest Name=(14)"Knoxville City Council", Contest Type=C(Office), Sequence=13, # Choices=3, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=Yes, DO Contest ID=, DO Option ID=		
11/22/2005	username	Contest	Add
08:54:03	ID=14, Name="Knoxville City Council", English Audio ID=3605		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=15, Contest Name=(15)"Mayor of Knoxville", Contest Type=C(Office), Sequence=14, # Choices=1, # Write-ins=1, Include in Straight-Party="N, Cumulative=N, Include in Rotation=Yes, DO Contest ID=, DO Option ID=		
11/22/2005	username	Instruction Text	Add
08:54:03	ID=9, Instruction Text="Vote for One", Contest Name="Mayor of Knoxville", English Audio ID=3608		
11/22/2005	username	Contest	Add
08:54:03	ID=15, Name="Mayor of Knoxville", English Audio ID=3607		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=17, Contest Name=(17)"PROPOSITION 1", Contest Type=P(Proposition), Sequence=16, # Choices=1, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=Yes, DO Contest ID=, DO Option ID=		
08:54:03	ID=16, Contest Name=(16)"PROPOSITIONS", Contest Type=T, Sequence=15, # Choices=0, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=No, DO Contest ID=, DO Option ID=		
11/22/2005	username	Contest	Add
08:54:03	ID=17, Name="PROPOSITION 1", English Audio ID=3610		
08:54:03	ID=16, Name="PROPOSITIONS", English Audio ID=3609		
11/22/2005	username	Instruction Text	Add
08:54:03	ID=10, Instruction Text="A YES vote means you are for the proposition. A NO vote means you are against the proposition.", Contest Name="PROPOSITION 1", English Audio Id=3611		

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Date	User	Area	Action
11/22/2005	username	Proposition Text	Add
08:54:03	ID=1, Proposition Text="Shall STATE taxes be increased by \$20,100,000 annually in the first full fiscal year of implementation, and by \$20,100,000 as adjusted for inflation plus the percentage change in state population for each fiscal year after the first full fiscal year of implementation, by reinstating the 0.2 percent sales tax on tourist-related items, including lodging services, restaurant food and drinks, private tourist attraction admission, and tour bus and sightseeing tickets for the purpose of funding statewide tourism marketing and promotional programs under the State Tourism Board in order to assist future tourism growth and promote the state's continuing economic health?"; Contest Name="PROPOSITION 1", English Audio Id=3612		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=18, Contest Name="(18)"PROPOSITION 2", Contest Type=P(Proposition), Sequence=17, # Choices=1, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=Yes, DO Contest ID=", DO Option ID=		
11/22/2005	username	Instruction Text	Add
08:54:03	ID=11, Instruction Text="A YES vote means you are for the proposition. A NO vote means you are against the proposition.", Contest Name="PROPOSITION 2", English Audio Id=3614		
11/22/2005	username	Contest	Add
08:54:03	ID=18, Name="PROPOSITION 2", English Audio ID=3613		
11/22/2005	username	Proposition Text	Add
08:54:03	ID=2, Proposition Text="Do you want to increase property taxes to fund Schools K-12?", Contest Name="PROPOSITION 2", English Audio Id=3615		
11/22/2005	username	Active Contest (PLC)	Add
08:54:03	ID=19, Contest Name="(19)"PROPOSITION 2 Distribution", Contest Type=P(Proposition), Sequence=18, # Choices=3, # Write-ins=0, Include in Straight-Party="N, Cumulative=N, Include in Rotation=Yes, DO Contest ID=18, DO Option ID=1		
11/22/2005	username	Instruction Text	Add
08:54:03	ID=12, Instruction Text="Vote for one or more areas to fund.", Contest Name="PROPOSITION 2 Distribution", English Audio Id=3617		
11/22/2005	username	Contest	Add
08:54:03	ID=19, Name="PROPOSITION 2 Distribution", English Audio ID=3616		
11/22/2005	username	Proposition Text	Add
08:54:03	ID=3, Proposition Text="Vote for one or more areas to fund.", Contest Name="PROPOSITION 2 Distribution", English Audio Id=3618		

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Date	User	Area	Action
11/22/2005	username	Option	Add
08:54:05	ID=1, Cand/Option	Text(English="Republican Party"), Active Contest=(3)"STRAIGHT PARTY", Party="2", Incumbent=N, Write-in=N, Sequence=1, English Audio ID=3619	
08:54:05	ID=3, Cand/Option	Text(English="Libertarian Party"), Active Contest=(3)"STRAIGHT PARTY", Party="4", Incumbent=N, Write-in=N, Sequence=3, English Audio ID=3621	
08:54:05	ID=2, Cand/Option	Text(English="Democratic Party"), Active Contest=(3)"STRAIGHT PARTY", Party="3", Incumbent=N, Write-in=N, Sequence=2, English Audio ID=3620	
08:54:05	ID=3, Cand/Option	Text(English="Carl Carlson"), Active Contest=(5)"United States Senator", Party="1", Incumbent=N, Write-in=N, Sequence=3, English Audio ID=3624	
08:54:05	ID=2, Cand/Option	Text(English="Brian Baxter"), Active Contest=(5)"United States Senator", Party="3", Incumbent=N, Write-in=N, Sequence=2, English Audio ID=3623	
08:54:05	ID=1, Cand/Option	Text(English="Aaron Anderson"), Active Contest=(5)"United States Senator", Party="2", Incumbent=Y, Write-in=N, Sequence=1, English Audio ID=3622	
08:54:05	ID=1, Cand/Option	Text(English="Jim Jacobs"), Active Contest=(8)"State Attorney General", Party="3", Incumbent=Y, Write-in=N, Sequence=1, English Audio ID=3627	
08:54:05	ID=2, Cand/Option	Text(English="Irene Ivens"), Active Contest=(7)"State Treasurer", Party="2", Incumbent=N, Write-in=N, Sequence=2, English Audio ID=3626	
08:54:05	ID=1, Cand/Option	Text(English="Harriet Hanson"), Active Contest=(7)"State Treasurer", Party="3", Incumbent=Y, Write-in=N, Sequence=1, English Audio ID=3625	
08:54:05	ID=3, Cand/Option	Text(English="Heather Wood"), Active Contest=(8)"State Attorney General", Party="4", Incumbent=N, Write-in=N, Sequence=3, English Audio ID=3629	
08:54:05	ID=2, Cand/Option	Text(English="Kelley Kincross"), Active Contest=(8)"State Attorney General", Party="2", Incumbent=N, Write-in=N, Sequence=2, English Audio ID=3628	
08:54:05	ID=3, Cand/Option	Text(English="Kathryn Smith"), Active Contest=(9)"State Board of Education", Party="2", Incumbent=N, Write-in=N, Sequence=3, English Audio ID=3632	
08:54:05	ID=2, Cand/Option	Text(English="Harold Freed"), Active Contest=(9)"State Board of Education", Party="3", Incumbent=Y, Write-in=N, Sequence=2, English Audio ID=3631	
08:54:05	ID=1, Cand/Option	Text(English="Nathan Green"), Active Contest=(9)"State Board of Education", Party="2", Incumbent=Y, Write-in=N, Sequence=1, English Audio ID=3630	
08:54:05	ID=2, Cand/Option	Text(English="Paula Peterson"), Active Contest=(11)"County Commissioner", Party="4", Incumbent=N, Write-in=N, Sequence=3, English Audio ID=3635	
08:54:05	ID=1, Cand/Option	Text(English="Howard Henderson"), Active Contest=(11)"County Commissioner", Party="3", Incumbent=N, Write-in=N, Sequence=2, English Audio ID=3634	
08:54:05	ID=4, Cand/Option	Text(English="Jerry Johnson"), Active Contest=(9)"State Board of Education", Party="3", Incumbent=N, Write-in=N, Sequence=4, English Audio ID=3633	
08:54:05	ID=5, Cand/Option	Text(English="Bob Benson"), Active Contest=(11)"County Commissioner", Party="2", Incumbent=N, Write-in=N, Sequence=1, English Audio ID=3638	
08:54:05	ID=4, Cand/Option	Text(English="Yolanda Young"), Active Contest=(11)"County Commissioner", Party="3", Incumbent=N, Write-in=N, Sequence=5, English Audio ID=3637	
08:54:05	ID=3, Cand/Option	Text(English="Walter Wright"), Active Contest=(11)"County Commissioner", Party="2", Incumbent=N, Write-in=N, Sequence=4, English Audio ID=3636	
08:54:06	ID=2, Cand/Option	Text(English="Linda Martino"), Active Contest=(15)"Mayor of Knoxville", Party="1", Incumbent=N, Write-in=N, Sequence=2, English Audio ID=3652	
08:54:06	ID=1, Cand/Option	Text(English="Belinda Jones"), Active Contest=(15)"Mayor of Knoxville", Party="1", Incumbent=N, Write-in=N, Sequence=1, English Audio ID=3651	
08:54:06	ID=2, Cand/Option	Text(English="No"), Active Contest=(17)"PROPOSITION 1", Party="1", Incumbent=N, Write-in=N, Sequence=2, English Audio ID=3655	

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Date	User	Area	Action
11/22/2005	username	Option	Add
08:54:06	ID=1, Cand/Option Text(English="Yes"), Active Contest=(17)"PROPOSITION 1", Party="1", Incumbent=N, Write-in=N, Sequence=1, English Audio ID=3654		
08:54:06	ID=3, Cand/Option Text(English="Robert Lee"), Active Contest=(15)"Mayor of Knoxville", Party="1", Incumbent=N, Write-in=N, Sequence=3, English Audio ID=3653		
08:54:06	ID=1, Cand/Option Text(English="Yes"), Active Contest=(18)"PROPOSITION 2", Party="1", Incumbent=N, Write-in=N, Sequence=1, English Audio ID=3659		
08:54:06	ID=3, Cand/Option Text(English="Teacher Salaries"), Active Contest=(19)"PROPOSITION 2 Distribution", Party="1", Incumbent=N, Write-in=N, Sequence=3, English Audio ID=3658		
08:54:06	ID=2, Cand/Option Text(English="School Buildings"), Active Contest=(19)"PROPOSITION 2 Distribution", Party="1", Incumbent=N, Write-in=N, Sequence=2, English Audio ID=3657		
08:54:06	ID=1, Cand/Option Text(English="Computer Equipment"), Active Contest=(19)"PROPOSITION 2 Distribution", Party="1", Incumbent=N, Write-in=N, Sequence=1, English Audio ID=3656		
08:54:06	ID=2, Cand/Option Text(English="No"), Active Contest=(18)"PROPOSITION 2", Party="1", Incumbent=N, Write-in=N, Sequence=2, English Audio ID=3660		
11/22/2005	username	Option Details	Add
08:54:12	ID=1, Option Detail Text(English="Delegate -- Mary Jones"), Active Contest=(5)"United States Senator, Option Name=Aaron Anderson, English Audio ID=3663		
08:54:12	ID=1, Option Detail Text(English="Delegate - James Smitt"), Active Contest=(5)"United States Senator, Option Name=Write-in, English Audio ID=3667		
08:54:12	ID=1, Option Detail Text(English="Delegate - James Smitt"), Active Contest=(5)"United States Senator, Option Name=Carl Carlson, English Audio ID=3667		
08:54:12	ID=2, Option Detail Text(English="Delegate - Paula Tufts"), Active Contest=(5)"United States Senator, Option Name=Brian Baxter, English Audio ID=3666		
08:54:12	ID=1, Option Detail Text(English="Delegate - Howard Vallejo"), Active Contest=(5)"United States Senator, Option Name=Brian Baxter, English Audio ID=3665		
08:54:12	ID=2, Option Detail Text(English="Paul Herrera"), Active Contest=(5)"United States Senator, Option Name=Aaron Anderson, English Audio ID=3664		
08:54:12	ID=2, Option Detail Text(English="Brenda Faye"), Active Contest=(5)"United States Senator, Option Name=Write-in, English Audio ID=3668		
08:54:12	ID=2, Option Detail Text(English="Brenda Faye"), Active Contest=(5)"United States Senator, Option Name=Carl Carlson, English Audio ID=3668		
11/22/2005	username	Poll Precinct Assoc.	Add
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="ELECTION", Precinct=(1)"1001"		
08:54:20	Polling Place=(8)"Hospital", Polling Place Type="ELECTION", Precinct=(5)"1005"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(5)"1005"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(4)"1004"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(3)"1003"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(2)"1002"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(1)"1001"		

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Date	User	Area	Action
11/22/2005	username	Poll Precinct Assoc.	Add
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(4)"1004"		
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(3)"1003"		
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(2)"1002"		
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(1)"1001"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(14)"2005"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(9)"2004"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(1)"2003-2003B"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(8)"2003-2003A"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(7)"2002"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(6)"2001"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(5)"1005"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(4)"1004"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(3)"1003"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(2)"1002"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="EARLY", Precinct=(1)"1001"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(14)"2005"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(9)"2004"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(11)"2003-2003B"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(8)"2003-2003A"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(7)"2002"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="EARLY", Precinct=(6)"2001"		
08:54:20	Polling Place=(10)"American Legion", Polling Place Type="ELECTION", Precinct=(14)"2005"		
08:54:20	Polling Place=(9)"Barber Shop", Polling Place Type="ELECTION", Precinct=(9)"2004"		
08:54:20	Polling Place=(7)"Rec Center", Polling Place Type="ELECTION", Precinct=(11)"2003-2003B"		
08:54:20	Polling Place=(7)"Rec Center", Polling Place Type="ELECTION", Precinct=(8)"2003-2003A"		
08:54:20	Polling Place=(6)"Firestation", Polling Place Type="ELECTION", Precinct=(7)"2002"		

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Date	User	Area	Action
11/22/2005	username	Poll Precinct Assoc.	Add
08:54:20	Polling Place=(5)"Library", Polling Place Type="ELECTION", Precinct=(6)"2001"		
08:54:20	Polling Place=(4)"High School", Polling Place Type="ELECTION", Precinct=(4)"1004"		
08:54:20	Polling Place=(3)"School House", Polling Place Type="ELECTION", Precinct=(3)"1003"		
08:54:20	Polling Place=(2)"Court House", Polling Place Type="ELECTION", Precinct=(2)"1002"		
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(14)"2005"		
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(9)"2004"		
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(11)"2003-2003B"		
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(8)"2003-2003A"		
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(7)"2002"		
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(6)"2001"		
08:54:20	Polling Place=(1)"Election Office", Polling Place Type="EARLY", Precinct=(5)"1005"		

11/22/2005	username	Precinct Contest Assoc.	Add
08:54:22	Contest=(1)"Instructions:Precinct=(1)"1001"		
08:54:22	Contest=(3)"STRAIGHT PARTY"Precinct=(7)"2002"		
08:54:22	Contest=(3)"STRAIGHT PARTY"Precinct=(6)"2001"		
08:54:22	Contest=(3)"STRAIGHT PARTY"Precinct=(5)"1005"		
08:54:22	Contest=(3)"STRAIGHT PARTY"Precinct=(4)"1004"		
08:54:22	Contest=(3)"STRAIGHT PARTY"Precinct=(3)"1003"		
08:54:22	Contest=(3)"STRAIGHT PARTY"Precinct=(2)"1002"		
08:54:22	Contest=(3)"STRAIGHT PARTY"Precinct=(1)"1001"		
08:54:22	Contest=(1)"Instructions:Precinct=(9)"2004"		
08:54:22	Contest=(1)"Instructions:Precinct=(8)"2003-2003A"		
08:54:22	Contest=(1)"Instructions:Precinct=(7)"2002"		
08:54:22	Contest=(1)"Instructions:Precinct=(6)"2001"		
08:54:22	Contest=(1)"Instructions:Precinct=(5)"1005"		
08:54:22	Contest=(1)"Instructions:Precinct=(4)"1004"		

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Date	User	Area	Action
11/22/2005	username	Precinct Contest Assoc.	Add
08:54:22	Contest=(1)"Instructions:Precinct=(3)"1003"		
08:54:22	Contest=(1)"Instructions:Precinct=(2)"1002"		
08:54:22	Contest=(1)"Instructions:Precinct=(14)"2005"		
08:54:22	Contest=(1)"Instructions:Precinct=(11)"2003-2003B"		
08:54:22	Contest=(5)"United States SenatorPrecinct=(8)"2003-2003A"		
08:54:22	Contest=(5)"United States SenatorPrecinct=(7)"2002"		
08:54:22	Contest=(5)"United States SenatorPrecinct=(6)"2001"		
08:54:22	Contest=(5)"United States SenatorPrecinct=(5)"1005"		
08:54:22	Contest=(5)"United States SenatorPrecinct=(4)"1004"		
08:54:22	Contest=(5)"United States SenatorPrecinct=(3)"1003"		
08:54:22	Contest=(5)"United States SenatorPrecinct=(2)"1002"		
08:54:22	Contest=(5)"United States SenatorPrecinct=(1)"1001"		
08:54:22	Contest=(4)"FEDERALPrecinct=(9)"2004"		
08:54:22	Contest=(4)"FEDERALPrecinct=(8)"2003-2003A"		
08:54:22	Contest=(4)"FEDERALPrecinct=(7)"2002"		
08:54:22	Contest=(4)"FEDERALPrecinct=(6)"2001"		
08:54:22	Contest=(4)"FEDERALPrecinct=(5)"1005"		
08:54:22	Contest=(4)"FEDERALPrecinct=(4)"1004"		
08:54:22	Contest=(4)"FEDERALPrecinct=(3)"1003"		
08:54:22	Contest=(4)"FEDERALPrecinct=(2)"1002"		
08:54:22	Contest=(4)"FEDERALPrecinct=(14)"2005"		
08:54:22	Contest=(4)"FEDERALPrecinct=(11)"2003-2003B"		
08:54:22	Contest=(4)"FEDERALPrecinct=(1)"1001"		
08:54:22	Contest=(3)"STRAIGHT PARTYPrecinct=(9)"2004"		
08:54:22	Contest=(3)"STRAIGHT PARTYPrecinct=(8)"2003-2003A"		
08:54:22	Contest=(3)"STRAIGHT PARTYPrecinct=(14)"2005"		

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Date	User	Area	Action
11/22/2005	username	Precinct Contest Assoc.	Add
08:54:22	Contest=(3)"STRAIGHT PARTY	Precinct=(1)"2003-2003B"	
08:54:22	Contest=(5)"United States Senator	Precinct=(14)"2005"	
08:54:22	Contest=(5)"United States Senator	Precinct=(11)"2003-2003B"	
08:54:22	Contest=(7)"State Treasurer	Precinct=(1)"1001"	
08:54:22	Contest=(6)"STATE	Precinct=(9)"2004"	
08:54:22	Contest=(6)"STATE	Precinct=(8)"2003-2003A"	
08:54:22	Contest=(6)"STATE	Precinct=(7)"2002"	
08:54:22	Contest=(6)"STATE	Precinct=(6)"2001"	
08:54:22	Contest=(6)"STATE	Precinct=(5)"1005"	
08:54:22	Contest=(6)"STATE	Precinct=(4)"1004"	
08:54:22	Contest=(6)"STATE	Precinct=(3)"1003"	
08:54:22	Contest=(6)"STATE	Precinct=(2)"1002"	
08:54:22	Contest=(6)"STATE	Precinct=(14)"2005"	
08:54:22	Contest=(6)"STATE	Precinct=(11)"2003-2003B"	
08:54:22	Contest=(6)"STATE	Precinct=(1)"1001"	
08:54:22	Contest=(5)"United States Senator	Precinct=(9)"2004"	
08:54:22	Contest=(9)"State Board of Education	Precinct=(2)"1002"	
08:54:22	Contest=(9)"State Board of Education	Precinct=(1)"1001"	
08:54:22	Contest=(8)"State Attorney General	Precinct=(9)"2004"	
08:54:22	Contest=(8)"State Attorney General	Precinct=(8)"2003-2003A"	
08:54:22	Contest=(8)"State Attorney General	Precinct=(7)"2002"	
08:54:22	Contest=(8)"State Attorney General	Precinct=(6)"2001"	
08:54:22	Contest=(8)"State Attorney General	Precinct=(5)"1005"	
08:54:22	Contest=(8)"State Attorney General	Precinct=(4)"1004"	
08:54:22	Contest=(8)"State Attorney General	Precinct=(3)"1003"	
08:54:22	Contest=(8)"State Attorney General	Precinct=(2)"1002"	

Ballot Content Proof

English - Two Column Letter With Images - Ballot Style 1			
Precinct Name (Party)	Reg Voters	Precinct Name (Party)	Reg Voters
1001 (NP)	125	2002 (DEM)	250
1001 (REP)	125	2002 (LIB)	250
1001 (DEM)	125	Total voters for 2002 :	1000
1001 (LIB)	125	Precincts: 32	
Total voters for 1001 :	500	Reg Voters: 5,000	
1002 (NP)	125		
1002 (REP)	125		
1002 (DEM)	125		
1002 (LIB)	125		
Total voters for 1002 :	500		
1003 (NP)	125		
1003 (REP)	125		
1003 (DEM)	125		
1003 (LIB)	125		
Total voters for 1003 :	500		
1004 (NP)	125		
1004 (REP)	125		
1004 (DEM)	125		
1004 (LIB)	125		
Total voters for 1004 :	500		
1005 (NP)	125		
1005 (REP)	125		
1005 (DEM)	125		
1005 (LIB)	125		
Total voters for 1005 :	500		
2003 2003A (NP)	125		
2003 2003A (REP)	125		
2003 2003A (DEM)	125		
2003 2003A (LIB)	125		
Total voters for 2003 2003A:	500		
2001 (NP)	250		
2001 (REP)	250		
2001 (DEM)	250		
2001 (LIB)	250		
Total voters for 2001 :	1000		
2002 (NP)	250		
2002 (REP)	250		

Ballot Content Proof

English - Two Column Letter With Images - Ballot Style 1

Type	Contest
BI	Instructions:
SP	STRAIGHT PARTY
BT	FEDERAL
OF	United States Senator (w1) -- Straight Party
BT	STATE
OF	State Treasurer -- Straight Party
OF	State Attorney General -- Straight Party
OF	State Board of Education (w2), Vote For 2 -- Straight Party
BT	COUNTY
OF	County Commissioner, Vote For 2 -- Straight Party
OF	School Board, Vote For 3
BT	PROPOSITIONS
PR	PROPOSITION 1
PR	PROPOSITION 2
PR	PROPOSITION 2 Distribution, Vote For 3
PR	PROPOSITION 2 / Yes
BI:	1
BT:	4
OF:	6
PR:	3
SP:	1
Total:	15

Ballot Content Proof

English - Two Column Letter With Images - Ballot Style 2

Precinct Name (Party)	Reg Voters
2003 2003B (NP)	125
2003 2003B (REP)	125
2003 2003B (DEM)	125
2003 2003B (LIB)	125
Total voters for 2003 2003B:	500
2004 (NP)	250
2004 (REP)	250
2004 (DEM)	250
2004 (LIB)	250
Total voters for 2004 :	1000
2005 (NP)	250
2005 (REP)	250
2005 (DEM)	250
2005 (LIB)	250
Total voters for 2005 :	1000
Precincts: 12	
Reg Voters: 2,500	

Type	Contest	Type	Contest
BI	Instructions:	PR	PROPOSITION 2 Distribution, Vote For 3Dependent On PROPOSITION 2 / Yes
SP	STRAIGHT PARTY		
BT	FEDERAL	BI:	1
OF	United States Senator (w1) -- Straight Party	BT:	5
BT	STATE	OF:	8
OF	State Treasurer -- Straight Party	PR:	3
OF	State Attorney General -- Straight Party	SP:	1
OF	State Board of Education (w2), Vote For 2 -- Straight Party	Total:	18
BT	COUNTY		
OF	County Commissioner, Vote For 2 -- Straight Party		
OF	School Board, Vote For 3		
BT	CITY		
OF	Knoxville City Council, Vote For 3		
OF	Mayor of Knoxville (w1)		
BT	PROPOSITIONS		
PR	PROPOSITION 1		
PR	PROPOSITION 2		

Ballot Content Proof

Ballot Style List by Precinct

Ballot Style: 1	
Precinct Name(s)	
1001	
1002	
1003	
1004	
1005	
2001	
2002	
2003 2003A	

Ballot Style: 2	
Precinct Name(s)	
2003 2003B	
2004	
2005	

Ballot Style List by District

Sample County — General Election 11/07/2006 — Election Ready

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Ballot Style: 1

District Name: District 1

Precincts Name(s)

1001

1002

1003

1004

1005

District Name: District 2

Precincts Name(s)

2001

2002

2003 2003A

Ballot Style: 2

District Name: District 2

Precincts Name(s)

2003 2003B

2004

2005

Contest List With Details

Sample County — General Election 11/07/2006 — Election Locked for Tally

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Precinct		Reg Voters	Precinct		Reg Voters	Precinct		Reg Voters	Precinct		Reg Voters
STRAIGHT PARTY			United States Senator			State Treasurer			State Attorney General		
1001		500	1001		500	1001		500	1001		500
1002		500	1002		500	1002		500	1002		500
1003		500	1003		500	1003		500	1003		500
1004		500	1004		500	1004		500	1004		500
1005		500	1005		500	1005		500	1005		500
2001		1,000	2001		1,000	2001		1,000	2001		1,000
2002		1,000	2002		1,000	2002		1,000	2002		1,000
2003 2003A		500	2003 2003A		500	2003 2003A		500	2003 2003A		500
2003 2003B		500	2003 2003B		500	2003 2003B		500	2003 2003B		500
2004		1,000	2004		1,000	2004		1,000	2004		1,000
2005		1,000	2005		1,000	2005		1,000	2005		1,000
Precincts: 11 (All)			Precincts: 11 (All)			Precincts: 11 (All)			Precincts: 11 (All)		
Reg Voters: 7,500			Reg Voters: 7,500			Reg Voters: 7,500			Reg Voters: 7,500		

Contest List With Details

Precinct	Reg Voters	Precinct	Reg Voters	Precinct	Reg Voters
State Board of Education					
1001	500	County Commissioner			
1002	500	1001	500	School Board	
1003	500	1002	500	1001	500
1004	500	1003	500	1002	500
1005	500	1004	500	1003	500
2001	1,000	1005	500	1004	500
2002	1,000	2001	1,000	1005	500
2003 2003A	500	2002	1,000	2001	1,000
2003 2003B	500	2003 2003A	500	2002	1,000
2004	1,000	2003 2003B	500	2003 2003A	500
2005	1,000	2004	1,000	2003 2003B	500
		2005	1,000	2004	1,000
Precincts: 11 (All)				2005	1,000
Reg Voters: 7,500		Precincts: 11 (All)		Precincts: 11 (All)	
		Reg Voters: 7,500		Reg Voters: 7,500	
Knoxville City Council					
2003 2003B	500	Knoxville City Council			
2004	500				
2005	500				
Precincts: 3		Precincts: 3			
Reg Voters: 2,500		Reg Voters: 2,500			

Contest List With Details

Precinct	Reg Voters	Precinct	Reg Voters	Precinct	Reg Voters	Precinct	Reg Voters
Mayor of Knoxville		PROPOSITION 1		PROPOSITION 2		PROPOSITION 2 Distribution	
2003 2003B	500	1001	500	1001	500	1001	500
2004	1,000	1002	500	1002	500	1002	500
2005	1,000	1003	500	1003	500	1003	500
Precincts: 3		1004	500	1004	500	1004	500
Reg Voters: 2,500		1005	500	1005	500	1005	500
		2001	1,000	2001	1,000	2001	1,000
		2002	1,000	2002	1,000	2002	1,000
		2003 2003A	500	2003 2003A	500	2003 2003A	500
		2003 2003B	500	2003 2003B	500	2003 2003B	500
		2004	1,000	2004	1,000	2004	1,000
		2005	1,000	2005	1,000	2005	1,000
		Precincts: 11 (All)		Precincts: 11 (All)		Precincts: 11 (All)	
		Reg Voters: 7,500		Reg Voters: 7,500		Reg Voters: 7,500	
						Total Contests: 12	

Assigned Precinct Report

District Name		Precinct Name	Total Number of Precincts Assigned to this District:
DISTRICT 1			
		1001	5
		1002	
		1003	
		1004	
		1005	
DISTRICT 2			6
		2001	
		2002	2
		2003-2003A	
		2004	
		2005	
		2003-2003B	
Total Number of Districts with Assignments:			

Precincts Not Assigned Report

Precinct Name	Precinct Name
---------------	---------------

2003 2003B	
------------	--

Total Unassigned Precincts: 1

Media Production List

MBB Serial Number	Card Type	Date and Time Created	Mode
1	MBB	11/22/2005 09:17:05	Test
2	MBB	11/22/2005 09:19:11	Test
3	MBB	11/22/2005 09:21:16	Test
4	MBB	11/22/2005 09:25:21	Test
5	MBB	11/22/2005 09:25:47	Test
6	MBB	11/22/2005 09:26:11	Test
MBBs: 6			

MBB Serial Number	Card Type	Date and Time Created	Mode
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Polling Place List - Early Voting - Detail

Precinct		Reg Voters	Precinct		Reg Voters
Election Office (1)					
123 Down Town Street (1)					
1001		500	Court House (2)		
1002		500	456 Stone Steps Avenue (2)		
1003		500	1001		500
1004		500	1002		500
1005		500	1003		500
		500	1004		500
		500	1005		500
2001		1,000	2001		1,000
2002		1,000	2002		1,000
2003 2003A		500	2003 2003A		500
2003 2003B		500	2003 2003B		500
2004		1,000	2004		1,000
2005		1,000	2005		1,000
Precincts: 11			Precincts: 11		
Reg Voters: 7,500			Reg Voters: 7,500		
Polling Places: 3					
Precincts: 11					
Reg Voters: 7,500					

Polling Place List - Early Voting - Summary
Sample County — General Election 11/07/2006 — Election Locked for Tally
2.8) **Page 1**

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ID	Polling Place
1	Election Office 123 Down Town Street
2	Court House 456 Stone Steps Avenue
3	School House 789 Cross Walk Lane

Polling Place List - Election Day Voting - Detail

Sample County — General Election 11/07/2006 — Election Locked for Tally

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Precinct	Reg Voters	Precinct	Reg Voters	Precinct	Reg Voters	Precinct	Reg Voters
Election Office (1)		Court House (2)		School House (3)		High School (4)	
123 Down Town Street (1)	500	456 Stone Steps Avenue (2)	500	789 Cross Walk Lane (3)	500	10th & Walnut (4)	500
1001		1002		1003		1004	
Precincts: 1		Precincts: 1		Precincts: 1		Precincts: 1	
Reg Voters: 500		Reg Voters: 500		Reg Voters: 500		Reg Voters: 500	

Polling Place List - Election Day Voting - Detail

Sample County — General Election 11/07/2006 — Election Locked for Tally

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Precinct	Reg Voters	Precinct	Reg Voters	Precinct	Reg Voters	Precinct	Reg Voters
Library (5)		Firestation (6)		Rec Center (7)		Hospital (8)	
422 Broadway (5)		Main at Cedar (6)		8300 Mapleton (7)		9201 Park Avenue (8)	
2001	1,000	2002	1,000	2003 2003A	500	1005	500
Precincts: 1		Precincts: 1		2003 2003B	500	Precincts: 1	
Reg Voters: 1,000		Reg Voters: 1,000		Precincts: 2		Reg Voters: 500	

Polling Place List - Election Day Voting - Detail

Sample County — General Election 11/07/2006 — Election Locked for Tally

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Precinct	Reg Voters	Precinct	Reg Voters
Barber Shop (9)		American Legion (10)	
Jim's - 822 Broadway (9)		402 Washington St (10)	
2004	1,000	2005	1,000
Precincts: 1		Precincts: 1	
Reg Voters: 1,000		Reg Voters: 1,000	
		Polling Places: 10	
		Precincts: 11	
		Reg Voters: 7,500	

Polling Place List - Election Day Voting - Summary

Sample County — General Election 11/07/2006 — Election Locked for Tally

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ID	Polling Place
1	Election Office 123 Down Town Street
2	Court House 456 Stone Steps Avenue
3	School House 789 Cross Walk Lane
4	High School 10th & Walnut
5	Library 422 Broadway
6	Firestation Main at Cedar
7	Rec Center 8300 Mapleton
8	Hospital 9201 Park Avenue
9	Barber Shop Jim's - 822 Broadway
10	American Legion 402 Washington St

Precinct List

Precinct (Party)	Reg Voters	Precinct (Party)	Reg Voters	Precinct (Party)	Reg Voters
1001 (NP)	125	2001 (REP)	250	2005 (DEM)	250
1001 (REP)	125	2001 (DEM)	250	2005 (LIB)	250
1001 (DEM)	125	2001 (LIB)	250	Registered Voters:	1,000
1001 (LIB)	125	Registered Voters:	1,000		
Registered Voters:	500				
		Precinct (Party)	Reg Voters		
1002 (NP)	125	2002 (NP)	250	Total Voters:	7,500
1002 (REP)	125	2002 (REP)	250	Total Precincts:	11
1002 (DEM)	125	2002 (DEM)	250		
1002 (LIB)	125	2002 (LIB)	250		
1002 (LIB)	125	Registered Voters:	1,000		
Registered Voters:	500				
		Precinct (Party)	Reg Voters		
1003 (NP)	125	2003 2003A (NP)	125		
1003 (REP)	125	2003 2003A (REP)	125		
1003 (DEM)	125	2003 2003A (DEM)	125		
1003 (LIB)	125	2003 2003A (LIB)	125		
1003 (LIB)	125	Registered Voters:	500		
Registered Voters:	500				
		Precinct (Party)	Reg Voters		
1004 (NP)	125	2003 2003B (NP)	125		
1004 (REP)	125	2003 2003B (REP)	125		
1004 (DEM)	125	2003 2003B (DEM)	125		
1004 (LIB)	125	2003 2003B (LIB)	125		
1004 (LIB)	125	Registered Voters:	500		
Registered Voters:	500				
		Precinct (Party)	Reg Voters		
1005 (NP)	125	2004 (NP)	250		
1005 (REP)	125	2004 (REP)	250		
1005 (DEM)	125	2004 (DEM)	250		
1005 (LIB)	125	2004 (LIB)	250		
1005 (LIB)	125	Registered Voters:	1,000		
Registered Voters:	500				
		Precinct (Party)	Reg Voters		
2001 (NP)	250	2005 (NP)	250		
		2005 (REP)	250		

Security Audit Report

Date/Time Stamp	User ID	Event Description	Event Details
11/25/2005 12:43:30	username	DATABASE OPENED	SC General VBO - c:\boss\database\051122-085148\BossData.db
11/25/2005 12:43:28	username	DATABASE CLOSED	
11/25/2005 12:43:23	username	DATABASE OPENED	Sample County General VBO - c:\boss\database\051122-100044\BossD
11/25/2005 12:43:22	username	DATABASE CLOSED	
11/25/2005 12:40:28	username	DATABASE OPENED	Sample County General VBO - c:\boss\database\051122-100044\BossD
11/25/2005 12:40:25	username	DATABASE CLOSED	
11/25/2005 12:35:11	username	DATABASE OPENED	SC General VBO - c:\boss\database\051122-085148\BossData.db
11/25/2005 12:35:08	username	DATABASE CLOSED	
11/25/2005 12:33:29	username	DATABASE OPENED	Sample County General VBO - c:\boss\database\051122-100044\BossD
11/25/2005 12:32:48	username	LOGON	username
11/22/2005 15:39:11	username	LOGOFF	
11/22/2005 15:39:11	username	DATABASE CLOSED	
11/22/2005 15:11:30	username	DATABASE OPENED	Sample County General VBO - c:\boss\database\051122-100044\BossD
11/22/2005 15:11:24	username	LOGON	username
11/22/2005 10:40:23	username	LOGOFF	
11/22/2005 10:39:59	username	DATABASE CLOSED	
11/22/2005 10:39:56	username	ELECTION LOCKED	
11/22/2005 10:36:53	username	BALLOT ACCEPTED	
11/22/2005 10:35:31	username	KEY ACCESSED	signing key access
11/22/2005 10:34:52	username	BALLOT GENERATED	
11/22/2005 10:33:35	username	BALLOT REJECTED	
11/22/2005 10:31:41	username	BALLOT GENERATED	
11/22/2005 10:30:35	username	BALLOT REJECTED	
11/22/2005 10:29:12	username	BALLOT GENERATED	
11/22/2005 10:27:52	username	BALLOT REJECTED	
11/22/2005 10:20:38	username	BALLOT GENERATED	
11/22/2005 10:13:45	username	DATABASE OPENED	Sample County General VBO - c:\boss\database\051122-100044\BossD
11/22/2005 10:01:46	username	ADDED ELECTION	Sample County General VBO - c:\boss\database\051122-100044\BossD
11/22/2005 10:01:46	username	DATABASE CLOSED	
11/22/2005 10:01:39	username	DATABASE OPENED	SC General VBO - c:\boss\database\051122-085148\BossData.db

Security Audit Report

Date/Time Stamp	User ID	Event Description	Event Details
11/22/2005 10:00:55	username	DATABASE CLOSED	
11/22/2005 10:00:55	username	DATABASE OPENED	SC General VBO - c:\boss\database\051122-085148\BossData.db
11/22/2005 10:00:36	username	LOGON	username
11/22/2005 09:28:32	username	LOGOFF	
11/22/2005 09:28:32	username	DATABASE CLOSED	
11/22/2005 09:28:25	username	DATABASE OPENED	SC General VBO - c:\boss\database\051122-085148\BossData.db
11/22/2005 09:28:02	username	DATABASE CLOSED	
11/22/2005 09:28:02	username	ELECTION LOCKED	
11/22/2005 09:27:58	username	DATABASE OPENED	SC General VBO - c:\boss\database\051122-085148\BossData.db
11/22/2005 09:26:33	username	DATABASE CLOSED	
11/22/2005 09:04:39	username	BALLOT ACCEPTED	
11/22/2005 09:02:32	username	KEY ACCESSED	signing key access
11/22/2005 08:57:47	username	BALLOT GENERATED	
11/22/2005 08:53:08	username	DATABASE OPENED	SC General VBO - c:\boss\database\051122-085148\BossData.db
11/22/2005 08:52:41	username	ADDED ELECTION	SC General VBO - c:\boss\database\051122-085148\BossData.db
11/22/2005 08:52:41	username	DATABASE CLOSED	- C:\BOSS\Database\
11/22/2005 08:52:39	username	DATABASE OPENED	- C:\BOSS\Database\
11/22/2005 08:52:00	username	DATABASE CLOSED	username
11/22/2005 08:52:00	username	DATABASE OPENED	First Admin user: username
11/22/2005 08:51:48	username	LOGON	username
11/22/2005 08:51:47		FIRST USE	
11/22/2005 08:51:47		ADDED USER	

Election Report - Unofficial Test

Primary Election - Sample County - 8/9/2006

Election Title:	Primary Election
Election State:	Open
Jurisdiction Title:	Sample County
Election Date:	8/9/2006
BOSS Election ID:	47
Ballot Now ID:	1107982025
Public Counter:	0
Private Counter:	4
Number of Scan Batches:	4
Total Accepted Ballots:	11

Election MBBs - Unofficial Test

Primary Election - Sample County - 8/9/2006

MBB ID	MBB State	Election Source	Number of CVRs
6	Open	Uncommitted	0
CVR Total:			0

Scan Batch Report - Unofficial Test

Primary Election - Sample County - 8/8/2006

Batch Notes: Absentee Democrat

Batch: 2

Election Source: Absentee

Image	Precinct	Page	Serial #	Sequence #	Language	Party	Status	Description
1	2002	1	17	6	English	DEM	Accepted	
2	2002	2	17	6	English	DEM	Accepted	
3	2001	1	16	5	English	DEM	Accepted	
4	2001	2	16	5	English	DEM	Accepted	
5	1005	1	15	4	English	DEM	Accepted	
6	1005	2	15	4	English	DEM	Accepted	
7	1004	1	14	3	English	DEM	Accepted	
8	1004	2	14	3	English	DEM	Accepted	
9	1002	1	12	1	English	DEM	Accepted	
10	1002	2	12	1	English	DEM	Accepted	
11		0	-1	0	English	REP	Rejected	Unidentified Form
12		0	-1	0	English	REP	Rejected	Unidentified Form

Batch Summary Data

Total Ballots Accepted	5
Images Rejected	2

Deleted Batches - Unofficial Test

Primary Election - Sample County - 8/9/2006

Batch ID	User ID	Election Source	Date and Time Deleted		Batch Notes
1	username	Absentee	2/13/2005	1:13:26PM	test

Scan Batch Summary - Unofficial Test

Primary Election - Sample County - 8/9/2006

Batch ID	User ID	Election Source	Ballots Scanned	Ballots Deleted	Ballots In Batch	Batch Notes
1	username	Absentee	2	2	0	test
2	username	Absentee	5	0	5	Batch 2 - Early
3	username	Absentee	3	0	3	Batch 3 - Early
4	username	Absentee	1	0	1	Batch 4 - Early
Totals:			11	2	9	

Printed Ballots By Precinct - Unofficial Test

Primary Election - Sample County - 8/9/2006

Precinct / Party	Print Date	User	Starting SN	Type	Language	# Printed
1001 DEM	2/10/2005	2:43:20PM username	1	Test	English	2
REP	2/10/2005	2:43:37PM username	21	Test	English	2
Total for Precinct						4
1002 DEM	2/10/2005	2:43:22PM username	3	Test	English	2
REP	2/10/2005	2:43:39PM username	23	Test	English	2
Total for Precinct						4
1003 DEM	2/10/2005	2:43:23PM username	5	Test	English	2
REP	2/10/2005	2:43:40PM username	25	Test	English	2
Total for Precinct						4
1004 DEM	2/10/2005	2:43:25PM username	7	Test	English	2
REP	2/10/2005	2:43:42PM username	27	Test	English	2
Total for Precinct						4
1005 DEM	2/10/2005	2:43:26PM username	9	Test	English	2
REP	2/10/2005	2:43:43PM username	29	Test	English	2
Total for Precinct						4
2001 DEM	2/10/2005	2:43:27PM username	11	Test	English	2
REP	2/10/2005	2:43:45PM username	31	Test	English	2
Total for Precinct						4

Printed Ballots By Precinct - Unofficial Test

Primary Election - Sample County - 8/9/2006

Precinct / Party	Print Date	User	Starting SN	Type	Language	# Printed
2002 DEM	2/10/2005	2:43:29PM username	13	Test	English	2
REP	2/10/2005	2:43:46PM username	33	Test	English	2
Total for Precinct						4
2003 DEM	2/10/2005	2:43:33PM username	19	Test	English	2
REP	2/10/2005	2:43:50PM username	39	Test	English	2
Total for Precinct						4
2004 DEM	2/10/2005	2:43:30PM username	15	Test	English	2
REP	2/10/2005	2:43:47PM username	35	Test	English	2
Total for Precinct						4
2005 DEM	2/10/2005	2:43:32PM username	17	Test	English	2
REP	2/10/2005	2:43:49PM username	37	Test	English	2
Total for Precinct						4
Total Number of Ballots Printed:						40

Scanned Ballots By Precinct - Unofficial Test

Primary Election - Sample County - 8/9/2006

Precinct Name	Batch	Total	Unresolved	Resolved	Written to MBB	Not Processed
1001	3	1	0	1	0	0
	Totals:	1	0	1	0	0
1002	2	2	0	2	0	0
	Totals:	2	0	2	0	0
1003	2	2	0	2	0	0
	3	2	0	2	0	0
	Totals:	4	0	4	0	0
2001	2	1	0	1	0	0
	4	1	0	1	0	0
	Totals:	2	0	2	0	0

Summary Data

Total Ballots	9
Unresolved Ballots	0
Resolved Ballots	9
Written to MBB	0
Not Processed	0

Scanned Ballots By Batch - Unofficial Test

Primary Election - Sample County - 8/9/2006

Batch	Precinct Name	Total	Unresolved	Resolved	Written To MBB	Not Processed
2	username	2/13/2005 12:13:15PM				
	1002	2	0	2	0	0
	1003	2	0	2	0	0
	2001	1	0	1	0	0
	Totals	5	0	5	0	0
3	username	2/13/2005 12:16:15PM				
	1001	1	0	1	0	0
	1003	2	0	2	0	0
	Totals	3	0	3	0	0
4	username	2/13/2005 12:18:36PM				
	2001	1	0	1	0	0
	Totals	1	0	1	0	0

Summary Data

Total Ballots	9
Unresolved Ballots	0
Resolved Ballots	9
Written To MBB	0
Not Processed	0

Resolve Status Report - Unofficial Test

Primary Election - Sample County - 8/9/2006

Batch	User ID	Date / Time	Total	Unresolved	Resolved	Not Processed
2	username	2/13/2005 12:13:15PM	5	0	5	0
3	username	2/13/2005 12:16:15PM	3	0	3	0
4	username	2/13/2005 12:18:36PM	1	0	1	0
Totals:			9	0	9	0

Deleted Ballots - Unofficial Test

Primary Election - Sample County - 8/9/2006

Serial Number	Batch ID	User ID	Deleted from	Date and Time deleted		Precinct	Language	Party
1	1	username	Processed Ballots	2/13/2005	1:13:26PM	1001	English	DEM
2	1	username	Processed Ballots	2/13/2005	1:13:26PM	1001	English	DEM
Total Deleted Ballots:		2						

Certified Write-Ins - Unofficial Test

Sample County General - Sample County - 11/7/2006

Contest Title	Certified Write-Ins
U.S. Senator	Uncertified
State Treasurer	Uncertified
Board of Education	Uncertified Abbe Wade
Knoxville City Council	Uncertified

Election Database Audit Log - Unofficial Test

Sample County General - Sample County - 11/7/2006

Record	User ID	Date / Time	Code	Description	Detail
1	username	2/9/2005 12:53:09PM	88	Initialize New Election	Election ID 48, Mode Test
2	username	2/9/2005 12:53:45PM	5	Open Election	Election Id 48, Mode Test
3	username	2/9/2005 12:53:45PM	42	Voter Counters	Pub: 000000 Pvt:000000000
4	username	2/9/2005 12:53:45PM	43	MBB ID	MBB ID: 5, Present: YES
5	username	2/9/2005 12:53:45PM	45	Security DB Version	3.00.00
6	username	2/9/2005 12:53:45PM	46	Database Version	3.00.00
7	username	2/9/2005 12:53:45PM	47	Ballot Now Version	3.00.21
8	username	2/9/2005 12:53:45PM	48	BNIP Version	3.00.21
9	username	2/9/2005 12:58:24PM	90	Application Exit	
10	operuser	2/9/2005 1:53:16PM	5	Open Election	Election Id 48, Mode Test
11	operuser	2/9/2005 1:53:16PM	42	Voter Counters	Pub: 000000 Pvt:000000000
12	operuser	2/9/2005 1:53:16PM	43	MBB ID	MBB ID: 5, Present: YES
13	operuser	2/9/2005 1:53:16PM	45	Security DB Version	3.00.00
14	operuser	2/9/2005 1:53:16PM	46	Database Version	3.00.00
15	operuser	2/9/2005 1:53:16PM	47	Ballot Now Version	3.00.21
16	operuser	2/9/2005 1:53:16PM	48	BNIP Version	3.00.21
17	username	2/9/2005 1:55:40PM	5	Open Election	Election Id 48, Mode Test
18	username	2/9/2005 1:55:40PM	42	Voter Counters	Pub: 000000 Pvt:000000000
19	username	2/9/2005 1:55:40PM	43	MBB ID	MBB ID: 5, Present: YES
20	username	2/9/2005 1:55:40PM	45	Security DB Version	3.00.00
21	username	2/9/2005 1:55:40PM	46	Database Version	3.00.00
22	username	2/9/2005 1:55:40PM	47	Ballot Now Version	3.00.21
23	username	2/9/2005 1:55:40PM	48	BNIP Version	3.00.21
24	clientuser	2/9/2005 2:00:39PM	5	Open Election	Election Id 48, Mode Test
25	clientuser	2/9/2005 2:00:39PM	42	Voter Counters	Pub: 000000 Pvt:000000000
26	clientuser	2/9/2005 2:00:39PM	43	MBB ID	MBB ID: 0, Present: YES
27	clientuser	2/9/2005 2:00:39PM	45	Security DB Version	3.00.00
28	clientuser	2/9/2005 2:00:39PM	46	Database Version	3.00.00
29	clientuser	2/9/2005 2:00:39PM	47	Ballot Now Version	3.00.21
30	clientuser	2/9/2005 2:00:39PM	48	BNIP Version	3.00.21
31	clientuser	2/9/2005 2:02:17PM	5	Open Election	Election Id 48, Mode Test
32	clientuser	2/9/2005 2:02:17PM	42	Voter Counters	Pub: 000000 Pvt:000000000
33	clientuser	2/9/2005 2:02:17PM	43	MBB ID	MBB ID: 5, Present: YES
34	clientuser	2/9/2005 2:02:17PM	45	Security DB Version	3.00.00
35	clientuser	2/9/2005 2:02:17PM	46	Database Version	3.00.00
36	clientuser	2/9/2005 2:02:17PM	47	Ballot Now Version	3.00.21
37	clientuser	2/9/2005 2:02:17PM	48	BNIP Version	3.00.21
38	clientuser	2/9/2005 2:02:43PM	5	Open Election	Election Id 48, Mode Test
39	clientuser	2/9/2005 2:02:43PM	42	Voter Counters	Pub: 000000 Pvt:000000000
40	clientuser	2/9/2005 2:02:43PM	43	MBB ID	MBB ID: 5, Present: YES
41	clientuser	2/9/2005 2:02:43PM	45	Security DB Version	3.00.00
42	clientuser	2/9/2005 2:02:43PM	46	Database Version	3.00.00
43	clientuser	2/9/2005 2:02:43PM	47	Ballot Now Version	3.00.21
44	clientuser	2/9/2005 2:02:43PM	48	BNIP Version	3.00.21
45	clientuser	2/9/2005 2:03:35PM	5	Open Election	Election Id 48, Mode Test
46	clientuser	2/9/2005 2:03:35PM	42	Voter Counters	Pub: 000000 Pvt:000000000
47	clientuser	2/9/2005 2:03:35PM	43	MBB ID	MBB ID: 5, Present: YES
48	clientuser	2/9/2005 2:03:35PM	45	Security DB Version	3.00.00
49	clientuser	2/9/2005 2:03:35PM	46	Database Version	3.00.00
50	clientuser	2/9/2005 2:03:35PM	47	Ballot Now Version	3.00.21
51	clientuser	2/9/2005 2:03:35PM	48	BNIP Version	3.00.21
52	clientuser	2/9/2005 2:04:00PM	5	Open Election	Election Id 48, Mode Test
53	clientuser	2/9/2005 2:04:01PM	42	Voter Counters	Pub: 000000 Pvt:000000000
54	clientuser	2/9/2005 2:04:01PM	43	MBB ID	MBB ID: 5, Present: YES

Election Database Audit Log - Unofficial Test

Sample County General - Sample County - 11/7/2006

Record	User ID	Date / Time		Code	Description	Detail
55	clientuser	2/9/2005	2:04:01PM	45	Security DB Version	3.00.00
56	clientuser	2/9/2005	2:04:01PM	46	Database Version	3.00.00
57	clientuser	2/9/2005	2:04:01PM	47	Ballot Now Version	3.00.21
58	clientuser	2/9/2005	2:04:01PM	48	BNIP Version	3.00.21
59	username	2/9/2005	3:53:05PM	90	Application Exit	
60	username	2/10/2005	8:43:17AM	5	Open Election	Election Id 48, Mode Test
61	username	2/10/2005	8:43:17AM	42	Voter Counters	Pub: 000000 Pvt:000000000
62	username	2/10/2005	8:43:17AM	43	MBB ID	MBB ID: 5, Present: YES
63	username	2/10/2005	8:43:17AM	45	Security DB Version	3.00.00
64	username	2/10/2005	8:43:17AM	46	Database Version	3.00.00
65	username	2/10/2005	8:43:17AM	47	Ballot Now Version	3.00.21
66	username	2/10/2005	8:43:17AM	48	BNIP Version	3.00.21
67	username	2/10/2005	11:23:10AM	90	Application Exit	
68	username	2/10/2005	11:39:22AM	5	Open Election	Election Id 48, Mode Test
69	username	2/10/2005	11:39:22AM	42	Voter Counters	Pub: 000000 Pvt:000000000
70	username	2/10/2005	11:39:22AM	43	MBB ID	MBB ID: 5, Present: YES
71	username	2/10/2005	11:39:22AM	45	Security DB Version	3.00.00
72	username	2/10/2005	11:39:22AM	46	Database Version	3.00.00
73	username	2/10/2005	11:39:22AM	47	Ballot Now Version	3.00.21
74	username	2/10/2005	11:39:22AM	48	BNIP Version	3.00.21
75	username	2/10/2005	11:42:36AM	90	Application Exit	
76	username	2/10/2005	11:44:02AM	5	Open Election	Election Id 48, Mode Test
77	username	2/10/2005	11:44:02AM	42	Voter Counters	Pub: 000000 Pvt:000000000
78	username	2/10/2005	11:44:02AM	43	MBB ID	MBB ID: 5, Present: YES
79	username	2/10/2005	11:44:02AM	45	Security DB Version	3.00.00
80	username	2/10/2005	11:44:02AM	46	Database Version	3.00.00
81	username	2/10/2005	11:44:02AM	47	Ballot Now Version	3.00.21
82	username	2/10/2005	11:44:02AM	48	BNIP Version	3.00.21
83	clientuser	2/10/2005	1:15:52PM	5	Open Election	Election Id 48, Mode Test
84	clientuser	2/10/2005	1:15:52PM	42	Voter Counters	Pub: 000000 Pvt:000000000
85	clientuser	2/10/2005	1:15:52PM	43	MBB ID	MBB ID: 0, Present: YES
86	clientuser	2/10/2005	1:15:52PM	45	Security DB Version	3.00.00
87	clientuser	2/10/2005	1:15:52PM	46	Database Version	3.00.00
88	clientuser	2/10/2005	1:15:52PM	47	Ballot Now Version	3.00.21
89	clientuser	2/10/2005	1:15:52PM	48	BNIP Version	3.00.21
90	clientuser	2/10/2005	1:16:15PM	5	Open Election	Election Id 48, Mode Test
91	clientuser	2/10/2005	1:16:15PM	42	Voter Counters	Pub: 000000 Pvt:000000000
92	clientuser	2/10/2005	1:16:15PM	43	MBB ID	MBB ID: 5, Present: YES
93	clientuser	2/10/2005	1:16:15PM	45	Security DB Version	3.00.00
94	clientuser	2/10/2005	1:16:15PM	46	Database Version	3.00.00
95	clientuser	2/10/2005	1:16:15PM	47	Ballot Now Version	3.00.21
96	clientuser	2/10/2005	1:16:15PM	48	BNIP Version	3.00.21
97	clientuser	2/10/2005	1:17:15PM	5	Open Election	Election Id 48, Mode Test
98	clientuser	2/10/2005	1:17:15PM	42	Voter Counters	Pub: 000000 Pvt:000000000
99	clientuser	2/10/2005	1:17:15PM	43	MBB ID	MBB ID: 5, Present: YES
100	clientuser	2/10/2005	1:17:15PM	45	Security DB Version	3.00.00
101	clientuser	2/10/2005	1:17:15PM	46	Database Version	3.00.00
102	clientuser	2/10/2005	1:17:15PM	47	Ballot Now Version	3.00.21
103	clientuser	2/10/2005	1:17:15PM	48	BNIP Version	3.00.21
104	clientuser	2/10/2005	1:17:51PM	5	Open Election	Election Id 48, Mode Test
105	clientuser	2/10/2005	1:17:51PM	42	Voter Counters	Pub: 000000 Pvt:000000000
106	clientuser	2/10/2005	1:17:51PM	43	MBB ID	MBB ID: 5, Present: YES
107	clientuser	2/10/2005	1:17:51PM	45	Security DB Version	3.00.00
108	clientuser	2/10/2005	1:17:51PM	46	Database Version	3.00.00