AGENDA ITEM 28

Consider awarding proposals received for election equipment to the best proposal meeting specifications - Election Systems & Software, Inc.

John Willingham addressed the Court regarding the needs of the Elections Department.

Moved: **Judge Doerfler**
Seconded: **Commissioner Boatright**
Motion: To approve part of a Request For Proposal which will update Election Day equipment in the form of five (5) ballot optical scanners for Elections.
Vote: **5 - 0**

< Attachment >

Request for Proposal

for Williamson County, Texas

Proposal No. 03WC907

WILLIAMSON COUNTY THE STATE OF TEXAS

July 16, 2003
2:00 p.m.

COPY

ELECTION SYSTEMS & SOFTWARE

ELECTION
SYSTEMS & SOFTWARE

July 11, 2003

Ms. Ginny Atkinson
Purchasing, 3rd Floor
Suite 303, Williamson County Courthouse
710 Main Street
Georgetown, Texas 78626

Dear Ms. Atkinson,

Election Systems & Software, Inc. (ES&S) welcomes the opportunity to propose our proven iVotronic™ DRE Touch Screen voting system, Model 100 Precinct Ballot Counter, Model 150/650 Central Ballot Counter, supporting products, and customer services to Williamson County, Texas.

We are committed to providing a system that directly addresses the technological requirements identified in your RFP. We have an experienced and talented team ready to provide Williamson County with a successful system implementation, as well as continuing proactive support for years of subsequent trouble-free elections.

Our proposal provides a tailored, comprehensive solution that takes into consideration the requirements of administering elections in Williamson County. Our iVotronic DRE Touch Screen System combined with our other product options:

- Addresses requirements established by HAVA
- Replaces outdated technology with proven electronic systems
- Provides a fully integrated In-Person Early Voting and Election Day System from a single supplier
- Provides all voters the ability to vote in privacy, which maintains their right to a secret ballot

In designing our proposed solution for Williamson County, we drew on our years of experience in supporting jurisdictions of all sizes, as well as our recent success in numerous iVotronic touch screen and Model 100 system elections.

ES&S has provided election solutions to Williamson County for more than twelve years. We would appreciate the opportunity to be of further service. We believe our comprehensive solution satisfies the County's objectives better than any other alternative. Our solution is proven, cost effective, and backed by a company committed to the election industry. We are fully prepared to deliver on our commitments, and it would be an honor to provide this proven solution.

Sincerely,

Don Blakely
Vice President
Southwest Division

Proprietary Notice

This proposal contains Election Systems and Software, Inc. (ES&S) confidential information, which is provided for the sole purpose of permitting the recipient, Williamson County, Texas, to evaluate the Proposal submitted herewith. This proposal is submitted in confidence and contains some or all of the following types of information: trade secrets, technical information, commercial information, financial information, and labor relations information. Disclosure of any of the information contained in any of the documents herein would result in undue loss to ES&S. In consideration of receipt of this document, the recipient agrees to maintain such information in confidence and to not reproduce or otherwise disclose this information to any person outside the group directly responsible for evaluation of its contents. There is no obligation to maintain the confidentiality of any information from ES&S that becomes publicly known through no fault of the recipient, or is received without obligation of confidentiality from a third party owing no obligation of confidentiality to ES&S.

Williamson County, Texas

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Declaration of Confidential Sections

The proposal sections listed below contain Election Systems and Software, Inc. (ES&S) confidential information, which is provided for the sole purpose of permitting the recipient, Williamson County, Texas, to evaluate the Proposal submitted herewith.

Proposal Section	Description
Section 1	❑ Future Vision
Section 3	❑ Proposed Solution
	❑ Preliminary Implementation Timeline
Section 6	❑ Organization Chart
	❑ Experience Statements
Section 7	Pricing Sheet
Appendices	❑ Appendix A – References
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	❑ Appendix E – ES&S Training Plan
	❑ Appendix F – ES&S Connect™ Voter Education and Voter Outreach Plan

Executive Summary

The following section contains ES&S Executive Summary and Future Vision.

Executive Summary

Election Systems and Software (ES&S) welcomes the opportunity to propose our proven iVotronic DRE Touch Screen voting system to Williamson County, Texas. Our proposal will provide for a tailored, comprehensive solution that addresses the entire election process from start to finish.

No other company has the experience, the proven track record, and the end-to-end solution that can match ES&S.

For over 30 years, ES&S has been the industry leader with more than 400 dedicated election professionals supporting over 2,000 jurisdictions.

Why have we earned this position of leadership? Because we can be trusted to deliver voting solutions that work. ES&S will ensure that Williamson County is successful in the eyes of the voting public and the candidates you serve.

Meeting Your Key Objectives

The election department faces a difficult, but critically important task. ES&S is committed to ensuring that Williamson County is fully prepared to successfully satisfy the Help America Vote Act and any future election legislation.

In designing our proposed solution for you, we drew on our years of experience in supporting jurisdictions of all sizes, as well as our recent success with numerous iVotronic touch screen elections. We believe that our proposed solution will satisfy the key objectives that you identified in your Request for Proposal.

"Voters love the ES&S touch screen because it is easy to use, there is no over-voting, and the review page allows them to change their vote."

-Judy Anderson, Supervisor of Elections, Charlotte County Florida

Ease of Use for Poll Workers

ES&S is recognized as the easiest system for the poll worker to set up. **There are no cables to connect or heavy equipment to lift.** The ES&S system also is the most convenient for the poll worker to use for curbside voting. ES&S designed the voting terminal to satisfy OSHA and Personal Protective Equipment requirements. The iVotronic voter terminal weighs 9.75 pounds and, when placed in the lightweight voting booth, is a configuration ideally suited to poll worker pick up and delivery to the polling place.

Ease of Use for Voters

The iVotronic System offers voters a system that is simple to use with only four easy steps.

Voters receive instant visual feed back from the LCD touch screen interface when making their vote selection and casting their ballot. Eleven of twelve DRE manufacturers have chosen to use touch screen technology. ES&S also no longer uses smart card technology because we discovered in 1995, the card could be inserted in many configurations which caused frustration for the voter. Our research also led us away from the use of any type of rotary dial device.

Voters with Special Needs

The ADA Certified iVotronic Terminal provides improved access to voters with physical disabilities by ensuring that ballots are cast in complete privacy with full ballot security—a capability critically important to facilitating full voter participation in your Elections. For those voters that are not capable of entering the polling location the poll workers can easily transport the lightweight unit to accommodate curbside voting.

Ease of Use for Election Officials

The "Generic Terminal" design of the iVotronic Voting System simplifies preparation, delivery, and return of equipment. Because terminals do not require election-specific data, any terminal can be delivered to any polling place.

Implementation of Project Plan

ES&S recognizes the effort involved in implementing a new voting system. To make the transition as easy as possible, ES&S assigns a Project Manager (PM) as the single point of contact for your account. This Project Manager understands your expectations and will work with you to ensure that our solution fully meets your expectations.

Certification

All proposed ES&S voting system hardware and software has undergone Independent Testing Authority (ITA) testing for compliance with FEC Voting System Standards and has successfully completed Texas Secretary of State Certification.

Quality of Documentation

ES&S training materials suitably identify and illustrate each of the system's features with easy step-by-step operation and maintenance instructions. Training materials consist of hardware manuals, software user guides, and tutorials prepared and published by ES&S in accordance with industry standard practices for electronic and mechanical equipment.

Staff Support

ES&S certified trainers provide hands-on instruction for Election Department personnel. Our training staff has been involved in the implementation of numerous systems and they thoroughly understand the unique demands that are placed on the election office and personnel.

"Their staff is professional, and that's the key to all of it--they're professional. You can depend on them, and they have the supportive services you need. ES&S is the best."

-Jackie L. Currie, City Clerk & Chief Elections Officer, City of Detroit

Community Outreach

ES&S offers a unique and comprehensive program called ES&S Connect™ Voter Education and Voter Outreach Program.

Storage

ES&S provides staff training for the handling, storage, and routine care of the tabulation systems. This training focuses on the initial acceptance of the voting equipment, distribution, and identification procedures appropriate for each client and proper care, storage, and handling procedures.

DRE Hardware

The iVotronic screen is designed to handle more than **30 million touches**, which far exceeds the industry standard of three million. This significantly extends the useful life of the terminal.

Absentee Tabulation Hardware

The ES&S Model 150/650 system are designed and classified as a self-contained, automatically fed, centralized, optical-scan tabulator. The Model 150/650 system processes folded or creased ballots without special handling requirements or pre-scoring during the printing process. The Model 150/650 system also identifies overvotes, write-ins, blank, and any mutilated ballots during ballot processing.

Integrated Systems

The iVotronic DRE System, Unity® Election Management System software, and the Model 650 and Model 150 Optical Scan Absentee Systems are fully integrated components of our proposed solution.

Software

ES&S's Unity suite of software is a Windows-based Election Management System suite that will fully integrate with your hardware solution with accuracy, control, and integrity of all election data elements.

Vendor Qualifications and Experience

Supporting the election administrators and voters since 1964, we have grown to provide election systems and services to jurisdictions representing *more than 56% of the registered voters in the United States.*

Technical Support

ES&S is structured to offer unparalleled Customer Service and Technical (Software and Hardware) Support. Our support is available through our toll free telephone access, the Internet and from our Addison Texas support facility.

Development

Because ES&S focuses solely on elections, we believe we have the best ongoing research and development efforts in the industry. From high usability standards that ensure all Americans unassisted voting access, to the possibility of Internet Voting, no other company in the world focuses so much energy and passion on emerging voting technologies.

Warranty

The ES&S warranty covers the equipment, as well as all hardware, firmware, labor and services to keep the proposed tabulation system in proper working order.

Maintenance

ES&S provides Hardware Maintenance Services and Software Maintenance and Support after the expiration of the warranty period. Optional maintenance includes both remedial and preventive maintenance services, including all labor and parts.

Partnership

ES&S views our past and future relationship with Williamson County as a ***partnership***. Our goal is to be an integral team member and to establish a relationship built on these foundations:

- ❑ An understanding of the County's special needs and concerns.
- ❑ Demonstrated awareness of the election processes that impact these needs and concerns.
- ❑ Taking full responsibility for providing solutions that address these needs and concerns.

ES&S will assist in anticipating and providing for any special voting infrastructure needs—from Election Day logistics—to training election staff and poll workers, closing the polls, and reporting the final results.

You can count on ES&S to support you in your mission to conduct reliable, trouble-free, and accurate elections.

"ES&S definitely is the voters' top choice. We have gone through a very extensive public review process to select the right election management vendor. Clearly, ES&S delivers the most comprehensive offering, and we are all impressed with how easy the ES&S equipment is to use."

-Amy Storm-Farley, Mesa County Colorado Elections Director

Seamless Integration

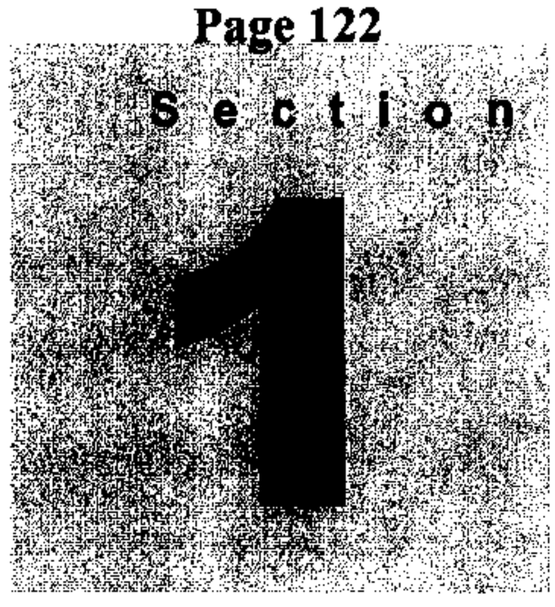
ES&S understands the importance of delivering a new voting solution that supports existing processes. We are fully prepared to seamlessly integrate our voting systems and solutions, allowing fewer efforts during the change process. Education and support during your first few elections are critical success factors.

We are the proven industry leader when it comes to assisting the election administration staff, poll workers, and voters to understand the transition from one voting system to another. All of our solutions are designed for ease of use and ease of understanding. We make the transition process simple and safe.

- ES&S judges the success of our installations by our clients' abilities to more efficiently manage their election process when using our systems. Our solution will significantly improve the accuracy, timeliness, and cost effectiveness of the County's election process.
- No other company can match the resources and talent ES&S can provide to Williamson County.
- Elections are our only business and we are extremely proud of our successful track record.

Summary

ES&S thanks Williamson County for the opportunity to be your "Vendor of Choice." We believe our comprehensive solution satisfies the County's objectives better than any other alternative. Our solution is proven cost effective and backed by a company committed to the election industry. We are fully prepared to deliver on our commitments.



Future Vision

The following section contains ES&S Future Vision.

Future Vision

The Future

Williamson County understands that election reform is an ongoing discussion in the country today, and that there are many theories as to the future of voting in the United States. It is extremely important to Williamson County that a prospective proposer be engaged in research and development with an eye on the future of voting systems in the country, whether it be voting by the Internet, voting by telephone, or some other as yet unnamed application. Our agreement with the proposer is not merely a sales transaction; it is a partnership in which Williamson County and the Proposer will work together to offer the citizens of Williamson County the most up-to-date voting technology at a reasonable cost and with full faith and reliability that no voter need be concerned about the accuracy or counting of each and every vote cast. Williamson County is especially concerned that the anticipated costs, if any, for additional "audit trails", mandated upgrades, or unit printouts that may be required by state or federal law be included in the proposal.

ES&S has always led the election industry in innovations. ES&S was the company that introduced low cost touch screen technology to the election community in 1995. Since then ES&S has had multitudes of improvements and Williamson county would be on the receiving end of all of these improvements, not being offered a first generation product utilizing already outdated technology.

As Williamson County is aware there are numerous congressional leaders calling for a voter verification processes to be attached to the HAVA bill. These congressional leaders have over three hundred computer scientists joining them on calling for this mandate.

ES&S is a customer driven company and foreseeing this possibility has already developed a voter verifiable product that would be a in field retrofit to the product being proposed to Williamson County. There are *no other* Texas certified election company's that can demonstrate this possible mandate.

Market focus

ES&S is the leader in the creation, development, and manufacture of the industry's most advanced integrated election solutions; including:

- A Windows-based election management system
- Voter registration management solutions
- ADA-compatible Direct Recording Electronic (DRE) system with voter verification printing capabilities
- Optical-scan central and precinct-count systems
- Modular Space Saving Warehouse with full inventory Management
- Design
- Fully automated signature verification system for incoming absentee process
- Fully automated high-speed ballot outgoing processing system
- Implementation and On-Going Election Services

The company is also looking to the future by introducing Anywhere Voting Architecture (AVA). AVA is a proven Web-enabled capability, specifically designed to provide election administrators with the framework to quickly, reliably and safely manage and communicate election information.

AVA leverages existing technology into the next generation of election management. It helps transform traditional paper-based voting into a secure poll-based, Internet-enabled experience.

ES&S's Team Services Approach has a long history of providing end-to-end election technology solutions and implementation / installation project management to election administrators around the world. Supporting the election administrators and voters since 1964, we have grown to provide election systems and services to jurisdictions representing more than 56% of the registered voters in the United States. Our unparalleled experience in the election industry includes the implementation of statewide as well as large-scale voter registration and vote tabulation systems.

ES&S's Research and Development supports our product lines with investments aimed at ensuring ES&S's leadership as an elections-only company. ES&S is a well-capitalized, professionally managed company, capable of continuously sustaining high-quality development and ongoing, long-term support to our customers

Statement of future strategy

ES&S has always been at the forefront of election innovation. **The research and development budget of over four million dollars is probably double that of any other vendor.** Many of our election dollars are going to ensure that ES&S is Internet ready when that occurs (which it will).

We are investing in technology allowing transmission of totals over cellular and satellite phones. We are continuing our project of the TEAM approach, which eliminates huge capital outlays by local government, allows the county to always have the latest technology without fear of obsolescence and with the freedom to make a change. The company is in a strong position, both financially and in the market place. More than 56% of the jurisdictions in the United States are using our systems and ES&S is the only company that has made a sizeable penetration of the foreign market. The future looks excellent for ES&S.

Bid Forms

The following section contains Williamson County Proposal Form.

WILLIAMSON COUNTY PROPOSAL FORM

DIRECT RECORDING ELECTRONIC (DRE) VOTING SYSTEM AND/OR OPTICAL SCAN (OPSCAN) VOTING SYSTEM FOR WILLIAMSON COUNTY

PROPOSAL NUMBER: 03WC907

NAME OF PROPOSER: Election Systems & Software

Mailing Address: 11208 John Galt Boulevard

City: Omaha State: TX Zip: 68137

Email Address: _____

Telephone: (800) 247-8683 Fax: (402) 593-8107

Operating as (circle condition that applies) an individual, a Company, a Corporation, organized and existing under the law of the State of Texas, or a Proprietorship, or Joint Venture (consisting of _____).

ADDENDA ACKNOWLEDGMENT:

1) The undersigned acknowledges receipt of the following addenda: (List by number and date appearing on addenda.)

Addendum No.	Date	Addendum No.	Date
_____	_____	_____	_____
_____	_____	_____	_____

CHECK ONE OF THE FOLLOWING:

■ low item basis. (Will accept award on "any or all" items.)

■ "all or none" basis. (Will accept award of "all" items only. If left blank, low item will apply.)

CONTRACT

2) The undersigned agrees that upon receipt of the notice of award of his/her proposal, he/she will execute the formal Contract and deliver proof of insurance coverage as required by the Contract Documents.

3) The undersigned further agrees to execute the formal Contract and deliver proof of insurance as required within ten (10) days from date of notice of award of this proposal. In case the undersigned fails or neglects to appear within the specified time to execute the Contract and provide the aforementioned required documents the undersigned will be considered as having abandoned the Contract.

GENERAL STATEMENT

4) The undersigned has checked all of the above figures, and understands that the County will not be responsible for any errors or omissions on the part of the undersigned in preparing this proposal.

5) It is agreed that this proposal may not be withdrawn for a period of sixty (60) days from the date and time of proposal acknowledgement.

6) Wherever in this proposal an amount is stated in both words and figures, in case of discrepancy between words and figures, the written words shall govern.

7) The undersigned declares that the person or persons signing this Proposal Form is/are fully authorized to sign on behalf of the firm listed and to fully bind the firm listed to all the conditions and provisions thereof.

8) It is agreed that no person or persons or company other than the firm listed below or as otherwise indicated has any interest whatsoever in this proposal or the Contract may be entered into as a result of the proposal and that in all respects the proposal is legal and firm, submitted in good faith without collusion for fraud.

9) It is agreed that the undersigned has complied or will comply with all requirements of local, state, and national laws, and that no legal requirement has been or will be violated in making or accepting this proposal in awarding the contract to him and/or in the prosecution of work required.

PRINCIPALS:

10) The names and addresses of all persons interested in this proposal as Principals are as follows:

a) If the proposer is a corporation, give legal name of corporation, State where incorporated, and names, titles, and addresses of three (3) corporate officers, including the President; if a partnership, give name of the firm and names and addresses of all of the partners; if an individual, give full name and address; if joint venture or joint association, give legal name of joint venture or joint association, names of member firms, information regarding member firms shall be provided as required above.

The undersigned, by his/her signature, represents that he/she is authorized to bind the proposer to fully comply with the terms and conditions of the attached Request for Proposal, Specifications, and Special Provisions for the amount(s) shown on the accompanying proposal sheet(s). By signing below, you have read the entire document and agreed to the terms therein.

Richard J. Jablonski

_____ Date of PROPOSAL: _____
Signature of Person Authorized to Sign PROPOSAL

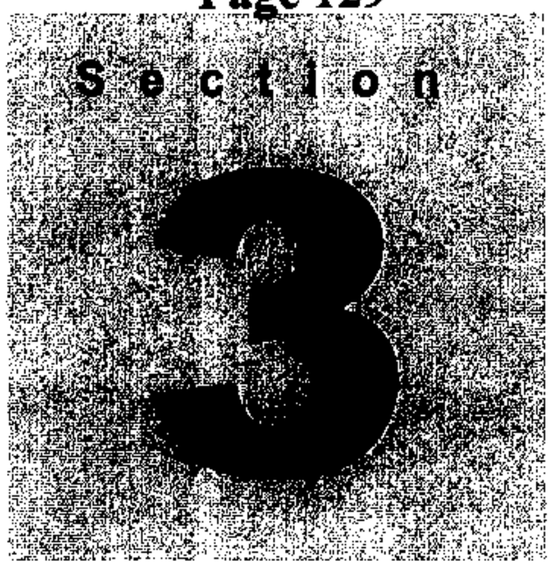
Printed Name and Title of Signer: Richard J. Jablonski Treasurer/Secretary

(SEAL IF PROPOSER IS A CORPORATION)

DO NOT SIGN OR SUBMIT WITHOUT READING ENTIRE DOCUMENT

Signature required on awarded proposal only.

_____ _____
Hon. John C. Doerfler, County Judge
for the Williamson County Commissioners Court
Date



Proposed Solution

The following section contains ES&S's four proposed options in response to RFP Proposal Specifications Scope 1.1, 1.2, 1.3 and 1.4.

SECTION

3

In this section:

- Proposed System Overview
- iVotronic DRE System Description
- Model 150 Optical Scan Central Scanner
- Unity Election System
- System Diagram

Option 1 - Technical Overview

ES&S is recommending a fully integrated electronic voting system for Williamson County. The proposed system includes:

- The iVotronic™ DRE Touch Screen System for Election Day and Early Voting In Person
- The Model 150 Optical Scan Central Scan System for Absentee By Mail
- The Election Management System located at the Williamson County facility running ES&S Unity® Election System software.

Note: *The following sections are numbered to correspond with the numbered features on our* ***System Diagram.*** *The* ***System Diagram*** *is at the end of this section*

Proposed System Overview

"The Election Systems & Software equipment worked wonderfully. Spokane County is very pleased with the quality of the ES&S equipment and their tremendous support in implementing an exciting new optical scan, poll site tabulating process for our voters. The ES&S team was very professional and knowledgeable, providing on-site training to staff and educating both the voters and over 1,000 election board workers in the new election process."

-Sherry Bays, Spokane County Washington Superintendent of Elections

The iVotronic DRE Touch Screen System is used for Early Voting In-Person and Election Day.

The iVotronic voting unit is a standalone voter terminal capable of being programmed to support multiple precincts and ballot styles for a single polling location. The iVotronic system consists of a stand-alone voter terminal, and a proprietary Personal Electronic Ballot (PEB). Voters make their selections and cast their ballots on the touch screen voter terminal.

Our solution provides for the use of optical scan ballots for Absentee By-Mail. The Absentee By-Mail tabulation system includes one stand-alone Model 150 High Speed Central Scanners. The Model 150 system processes all absentee ballots, produces reports, and accumulates totals. The information is saved to disk and is then loaded into the Central Accumulation System.

The Unity Election System is used for all election functions including election content definition, accumulation of precinct level results from the iVotronic DRE voting system, and the Model 150 Absentee Mail system, and it provides for reporting and display of these results in real-time. The Election System includes a Windows 2000 LAN, configured with mirrored hard drives for automatic backup and fault tolerance, three (3) PCs, an Okidata Laser Printer for printing paper ballots on demand and an Hewlett-Packard 2300 Laser Printer for all other system reports.

iVotronic DRE System Description

The iVotronic unit is a Direct Recording Electronic (DRE) Touch Screen voting system with design features that ensure a secure, fast, and easy voting process.

Each iVotronic terminal weighs less than ten pounds, which makes maintenance, setup, and delivery effortless.

The iVotronic voting system may be activated for voters by either a polling place official using a proprietary Personal Electronic Ballot (PEB) memory device, or the voter themselves by inserting a voter specific ballot activator PEB.

Our proposed Option 1 process provides for the Early Voting and Election Day Official to activate the iVotronic voting system for voters by using a proprietary Personal Electronic Ballot (PEB) memory device.

Voters make ballot selections by pressing the iVotronic touch screen in the target response area or the candidate name for the candidate / issue of their choice.

The iVotronic system:

- Does not allow overvoting.
- Allows voters to change their selections an indefinite number of times.
- Allow voters to review their selections before casting their ballots.
- Voters may also cast write-in votes by selecting the write-in position in a contest and entering the name of the write-in candidate by pressing letters on the keyboard screen display.

iVotronic ADA System Features

"The Election Systems & Software equipment worked wonderfully. Spokane County is very pleased with the quality of the ES&S equipment and their tremendous support in implementing an exciting new optical scan, poll site tabulating process for our voters. The ES&S team was very professional and knowledgeable, providing on-site training to staff and educating both the voters and over 1,000 election board workers in the new election process."

-Sherry Bays, Spokane County Washington Superintendent of Elections

In addition to the standard touch screen capability, the ADA-compliant iVotronic terminal allows selection of a unique audio ballot that permits the voter to listen to the ballot read to them via an audio headset.

The audio ballot, individually "spoken" to the voter based on their specific ballot style, is constructed from a stored dictionary of real voice files containing instructions and election elements such as candidate names, contest titles, and referenda text.

Blind or low vision voters are able to navigate the ballot using specially shaped iVotronic scroll and selection buttons to assist them with the voting process.

The iVotronic voting system can be programmed to display or read the ballot in an unlimited number of languages. If the election is set-up for multiple languages, the voter selects a language of choice using either a touch-screen language choice selection or a key selection if using the ADA audio ballot.

❶ Early Voting In-Person

When using the iVotronic system for Early Voting In-Person, the same Election Day processes apply for poll opening, voting, and closing.

The major differences are:

- The process spans the Early Voting In-Person period and does not occur on the same day.
- The Supervisor PEB that is prepared for Early Voting In-Person contains all ballot styles available in the County and the results are reported based on the Election Day precincts. A Supervisor PEB is prepared for each of the poll sites used for Early Voting In-Person voting.

- When opening the polls, a Supervisor Terminal must be opened after opening the Voter Terminals.
- When closing the polls, the Supervisor Terminal must be closed after closing all Voter Terminals.

Prior to starting Early Voting, poll workers prepare each iVotronic terminal for voting by opening the polls and producing a zero tape. The zero tape verifies that all units are clear prior to the start of voting. When the Supervisor Terminal is opened using the Supervisor PEB, it downloads *all* County ballot styles into the Supervisor Terminal.

At the end of each day during Early Voting, all terminals and PEBs are secured to prevent unauthorized access. After the Early Voting In-Person voting period is over, the poll closing procedure is followed using all iVotronic terminals at the site.

The Supervisor PEBs from all sites are then delivered to the Central Site and read into the system using the PEB reader attached to one of the Workstations on the system.

❷ Election Day Voting

During the poll-opening process, the poll worker uses the Supervisor PEB to open each Voter Terminal. This prepares each iVotronic terminal for voting and records the serial number of each opened iVotronic terminal in the PEB's memory.

The final step in the poll-opening process is to print a zero tape. The poll worker prints the zero tape by attaching the Communications Pack to the serial port of the last terminal opened.

Poll officials activate the terminal for the voter using the Master PEB. When the Master PEB is inserted, the poll official chooses the voter's correct ballot style, then leaves the voter to privately mark his or her ballot.

Once the polls close, the poll-closing process begins. During this phase, the poll worker uses the Supervisor PEB to close each Voter Terminal. Ballot images from all terminals are accumulated on the Master PEB at the close of polls, which is then used to produce an accumulated precinct report.

In addition, the serial number of each closed unit is verified against the list of opened units that had previously been stored in the Supervisor PEB.

Once Election Day polls are closed, precinct-wide results are accumulated from all voter terminals and stored in the Supervisor PEB. Results reports are printed using the Communications Pack that is provided at each polling location.

❸·Absentee By Mail System

The proposed ES&S Model 150 system is designed and classified as a self-contained, automatically fed, centralized, optical-scan tabulator. The Model 150 system is a stand-alone voting system, capable of tabulating ballots and producing all necessary reports.

The Model 150 system counts, retains, and reports complete election results.

The Model 150 system uses an 8½" x 14" optical scan paper ballot. The ballots contain preprinted code marks that identify each ballot style. The Model 150 system is designed to read and tabulate any precinct's type or style of ballot, in any sequence without pre-sorting or special program instructions.

Ballots are processed at a rated speed of over 150 per minute. The Model 150 system processes folded or creased ballots without special handling requirements or pre-scoring during the printing process. The Model 150 system also identifies overvotes, write-ins, blank, and any mutilated ballots during ballot processing.

The proposed ES&S system provides results reporting capabilities directly from the Model 150 system for the processed absentee ballots and from the Unity Election System. Model 150 reporting provides standard reports that include precinct and summary reports. These reports are displayed in media or in summary format (includes overvotes and undervotes).

The system also provides an "Event Log" and a "Status Log." The Model 150 scanner accurately records and reports each ballot read by the system. Any ballot-reading error results in an immediate halt to the counting process. The system then immediately displays the appropriate message to the operator.

As a ballot is read, the scanner provides the following functions:

- The scanner reads the ballot and checks the pre-printed codes along the edge to determine the ballot's precinct and type.
- The scanner reads voter choices for candidates or issues, taking only a fraction of a second per ballot.
- As the scanner reads the ballot, it checks for irregularities. If the scanner detects an irregular ballot (i.e. a blank or torn ballot) the machine stops and provides the operator with explicit handling instructions.

Unity Election System Overview

The Unity system is a suite of ES&S developed application software modules that contain all the functionality required to manage every facet of your elections.

Unity Election Data Manager (EDM)

The Unity Election Data Manager is a database program that maintains all jurisdiction and election information. This 32-bit Windows application software is menu driven and uses Windows standard conventions for database input. No unique skill sets are required to operate this application software.

The Unity Election Data Manager (EDM) is the ballot data entry section used to enter or import all initial ballot data, including precincts, districts, precinct/district relationships, contests, and candidates.

Typically, a master election database is created once for all precincts, districts, and precinct/district relationships. This master file builds each election-specific file to which election-specific contests and candidates can be manually added or imported using a text file.

Once this data is imported, ballot-specific information is added (for example, referenda text, fonts, and instructional information) to complete the ballot definition process.

Unity Ballot Image Manager (BIM)

The Unity Ballot Image Manager (BIM) is a graphical database typesetting system that uses the election-specific file from the Unity Election Data Manager (EDM) as its input. This application is similar to many commercially available desktop publishing systems and is designed specifically for the graphical design and layout of ES&S ballots.

The Unity Ballot Image Manager is used to construct the ballot image for the absentee ballots from the information in the Unity Election Data Manager and create the camera-ready artwork or electronic artwork used in ballot production.

After all ballots are finalized, the database created by the Unity Election Data Manager and Unity Ballot Image Manager is used to build the files used by the Unity Hardware Programming Manager (HPM) for loading election data onto the iVotronic PEBs and the Model 150 EPROM.

Unity Ballot On Demand (BOD)

The Unity Ballot On Demand (BOD) provides an easy solution for printing the ES&S paper ballots using an inexpensive desktop laser printer. The Unity Ballot On Demand module allows the user to print single copies of a ballot, or allows multiple ballots to be in batches in unattended mode.

Unity Hardware Programming Manager (HPM)

The Unity Hardware Programming Manager (HPM) is used for "burning" the election information onto the various Memory Devices used by the tabulation subsystems.

The Unity Hardware Programming Manager imports the ballot definition file that is created by the Unity Election Data Manager and the Unity Ballot Image Manager. The HPM then creates the parameter data for all proposed systems.

Unity Data Acquisition Manager (DAM)

The Unity™ Data Acquisition Manager, host configuration is used to simultaneously collect precinct results records from the Polling Place Sites or Regional Sites. Unity Data Acquisition Manager is configured with an internal, eight (8) modem adapter board support eight (8) dial-up phone lines at 56k baud rate.

The telephone line bank connected to this unit is arranged in a "hunt group" by the common carrier providing the lines so that a single telephone number is dialed by all remote units and is connected to the first free line encountered.

Election judges transport the Master PEB to the nearest designated receiving station. ES&S's proposed system solution is configured to include transmission capability from the receiving stations.

As each precinct-level image results record is received by Unity Data Acquisition Manager, the record is appended to the queue file of received precinct records on the Central Site \ network file server. This data is then read by Unity Election Reporting Manager and updated into the election results database. Complete audit logs are kept in an audit file at the Central Site LAN, recording all events by precinct ID and time/date stamp.

Unity Election Reporting Manager (ERM)

The Unity Election Reporting Manager (ERM) is a 32-bit Windows application that contains all the functionality required to accumulate and report jurisdiction-wide election results from all ES&S tabulators.

As precinct results from the iVotronic and Model 150 systems are received and updated into the ERM, they are available in real-time in multiple formats, both in aggregate and detailed form.

The Unity Election Reporting Manager keeps log records of all system activity, including the number of ballots accumulated from each precinct and from each source.

ERM also provides the County with displays and reports showing precincts counted/not counted. Further safeguards against fraudulent activity are added with the functionality of the user-defined Suspend File that allows election officials to catch precinct results that meet a specified criteria (for example, a ballot count in a precinct that exceeds the number of registered voters in that precinct).

Multiple PC workstations, properly integrated and provided with the proper security clearance, may also be used for screen based ad-hoc results inquiry by designated contest and candidate and view either summary results or select desired precincts.

One or more workstations can be used to continuously display current results on monitor screens that page through lists of all or specified contests.

Script files can be prepared that independently control the contest displayed at each workstation as well as the time that each page is displayed before advancing to the next page. These "display stations" can be connected to large screen TV monitors or projection systems for large group viewing via commercially available adapter hardware.

In addition to the results displays, Unity Election Reporting Manager has a multitude of standard reports that can be printed or stored in an electronic "print image" file. All reports are selected from a drop-down menu tab and can be customized by the user by designating desired report parameters from a report options screen.

Options include reporting overvotes and undervotes, several levels of title headings, the inclusion of page numbering and timestamps, and the inclusion of contest totals. The selected options can either apply to the current report to be printed or stored for use in future reports of that type. Each report type has stored a report options parameter profile.

Report selections also include the ability to restrict the contests and/or precincts that apply to the report. The use of script files is available for storing report titles and specified lists of precincts and contests for any custom district reports. If the user prefers to create their own report from a database, an ASCII export function is available to create a fixed format results file that can be imported into a database, such as Access.

Election Central Network System

The Election Central Network system is integrated with the Unity Election System. The Central Site system is used for all election functions including:

- Election content definition
- Ballot layout and printing
- Memory device preparation
- Results Accumulation from the iVotronic and Model 150

The Central System consists of a Windows 2000 LAN configured with mirrored hard drives for automatic backup and fault tolerance, three (3) PCs, an Okidata Laser Ballot Printer and an Hewlett-Packard 2300 Laser Printer for election coding, ballot layout and printing, election night reporting, communications, and results display.

Also networked onto the system is the Data Acquisition Server for controlling all communications between the Central System and the Polling Place Sites. The Data Acquisition Server is configured to support the eight (8) communication lines, allowing for concurrent connection with up to eight (8) Regional Sending Sites.

Summary

Williamson County can expect a fully integrated voting system that addresses each and every phase of your election process: voting, vote tabulation, and results reporting.

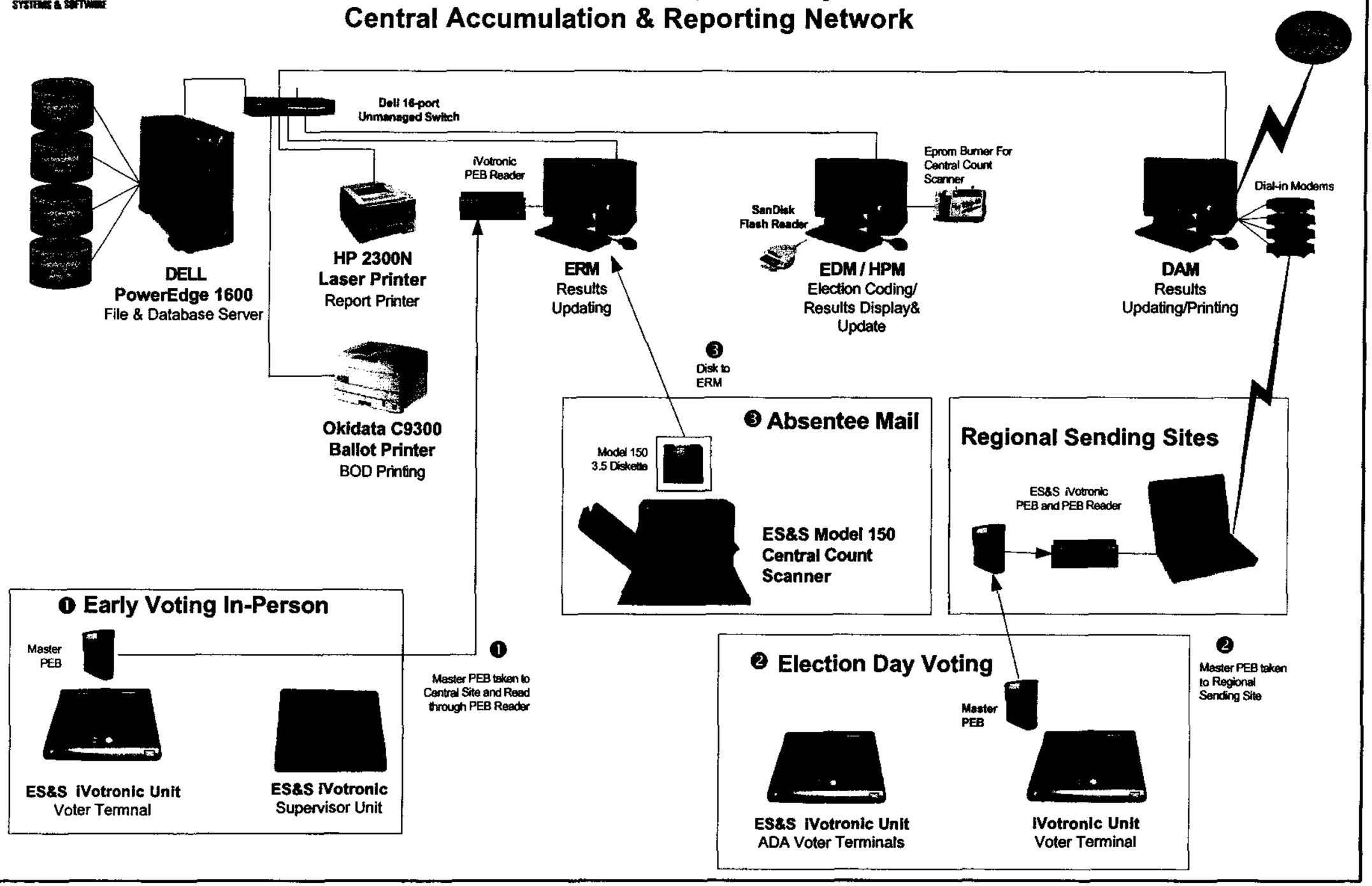
We propose our iVotronic DRE Touch Screen system, the Model 150 Central Ballot Counter, and Unity Election System as effective solutions to meet your requirements.

ES&S products are tested by an independent testing authority, certified to meet or exceed the standards of the U.S. Federal Election Commission, and have been proven and validated through use in thousands of actual elections worldwide.

WILLIAMSON COUNTY, TX.

Option 1

iVotronic™ , Model 150, and Unity®
Central Accumulation & Reporting Network



ELECTION SYSTEMS & SOFTWARE
WILLIAMSON COUNTY, TX - *OPTION #1*
ELECTION TABULATION AND REPORTING SYSTEM

DESCRIPTION
DETAIL EQUIPMENT LISTING
WINDOWS NT 4.0 FILE AND DATA BASE SERVER: **QTY**

Dell PowerEdge 1600SC - 2.8GHz with 512K Cache+B32	1
1GB SDRAM (2X512 SDRAM DIMM)	1
Windows 2000 Server with 5 Client Licenses	1
PERC3-SC w/32MB Cache, 1 Internal Channel	1
Cabled SCSI Drives, RAID 5 Hard Drive Configuration	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 1st	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 2nd	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 3rd	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 4th	1
Cable SCSI - RAID 5	1
Intel 100 Dual Port Network Adapter	1
56K PC Intenal Modem	1
48X IDE CD-ROM	1
Standard Windows Keyboard	1
Dell 17" M782 Monitor	1
Adaptec 39160 SCSI Controller - 2nd Controller	1
Redundant Power Supply	1
Spare Redundant Power Supply	1
Onboard NIC	1
3.5" 1.44MB Floppy Drive	1
Microsoft System Mouse	1
PowerVault 100T DDS4 Tape Backup 20/40GB w/int. cont.	1
Tape Media, IDE, Travan 20/40 GB - 5 Pack	1
3Yr Same Day 4Hr Onsite 7Day/24Hr w/Eng. to Eng. support	1
CA Arcserve Server Backup Software	1
APC Smart UPS-700 STNDALN, 120V	1
Dell 2016 16-port 10/100 Fast Ethernet Unmanaged Switch	1
FILE SERVER TOTAL:	
Dell OptiPlex GX270 MiniTower - 2.60GHz P-IV w/512K Cache	3
Windows XP Pro	3
512MB ECC SDRAM (2 DIMMS)	3
Quietkey PS/2 Keyboard	3
40 GB 7200RPM Hard Drive	3
Zip 250 Disk Drive	3
17" Dell M782 Monitor	3
48X Max, CD-RW	3
Integrated 10/100 3COM PCI Adapter	3
Serial Port Adapter	3
Energy Star Label	3
64MB nVidia, GeForce 4MX, DVI w/VGA adapter	3
3.5" 1.44MB Floppy Drive	3
Dell PS/2 2-Button Mouse	3
Integrated Sound Blaster Compatible	3
ZIP 250 Media 2 Pack	3
Internal Dell Business Audio Speaker	3
Norton AntiVirus 2003	3
3Yr Parts + Onsite Labor (Next Business Day)	3
APC Back-UPS ES 725 Battery Backup	3
U.S. Robotics 56K External Modem & Cable (Support)	1
pcAnywhere Communications Software	2
WORKSTATION TOTAL:	

ELECTION SYSTEMS & SOFTWARE
WILLIAMSON COUNTY, TX - *OPTION #1*
ELECTION TABULATION AND REPORTING SYSTEM

DESCRIPTION
DETAIL EQUIPMENT LISTING

WINDOWS NT 4.0 FILE AND DATA BASE SERVER:	QTY
Dell Latitude C640 Notebook	1
Mobile Pentium III Processor 2.0 GHz-M 14.1 XGA	1
256MB SDRAM (2 DIMMS)	1
Internal 56K Modem	1
20GB Hard Drive 9.5MM	1
Microsoft Office Small Business	1
8-Cell Lithium-Ion Battery	1
8-Cell Lithium-Ion Secondary Battery	1
Leather Carrying Case	1
24-10-24X Max Variable CD-RW	1
4MB Video Card	1
3 Year Parts + Onsite Labor (Next Business Day)	1
Tripp-Lite Notebook Surge Protector	1
1.44MB Floppy Drive	1
Windows XP Pro	1
HARDWARE TOTAL:	
TESTING/INSTALLATION TOTAL:	1
Emprom Burner EMP-11 (for the Model 150)	1
Emprom Eraser (for the Model 150)	1
Adobe TypeManager	1
Adobe Distiller	1
WinZip Software	2
Cat. 5 Ethernet Cables - 50 ft.	6
Equinox 8 Port Multi Modem Adapter	1
Sandisk Compact Flash Drive	2
ES&S PEB Reader	3
ADDITIONAL HARDWARE/SOFTWARE TOTAL:	
Okidata C9300-DXN 30 PPM Laser Ballot Printer	1
Hewlett-Packard 2300 DTN - 25 PPM Laser Printer	1
PRINTER TOTAL:	
TOTAL SYSTEM PRICE:	

SECTION

3

In this section:

- Proposed System Overview
- iVotronic DRE System Description
- Model 150 Optical Scan Central Scanner
- Unity Election System
- System Diagram

Option 2 - Technical Overview

ES&S is recommending a fully integrated electronic voting system for Williamson County. The proposed system includes:

- The iVotronic™ DRE Touch Screen System for Early Voting In Person
- The Model 650 Optical Scan Central Scan System for Absentee By Mail and Election Day paper ballot tabulation
- The Election Management System located at the Williamson County facility running ES&S Unity® Election System software.

Note: *The following sections are numbered to correspond with the numbered features on our* ***System Diagram.*** *The* ***System Diagram*** *is at the end of this section*

Proposed System Overview

"The Election Systems & Software equipment worked wonderfully. Spokane County is very pleased with the quality of the ES&S equipment and their tremendous support in implementing an exciting new optical scan, poll site tabulating process for our voters. The ES&S team was very professional and knowledgeable, providing on-site training to staff and educating both the voters and over 1,000 election board workers in the new election process."

-Sherry Bays, Spokane County Washington Superintendent of Elections

The iVotronic DRE Touch Screen System is used for Early Voting In-Person.

The iVotronic voting unit is a standalone voter terminal capable of being programmed to support multiple precincts and ballot styles for a single polling location. The iVotronic system consists of a stand-alone voter terminal, and a proprietary Personal Electronic Ballot (PEB). Voters make their selections and cast their ballots on the touch screen voter terminal.

Our solution provides for the use of optical scan ballots for Absentee By-Mail. The Absentee By-Mail and Election Day tabulation system includes three (3) stand-alone Model 650 High Speed Central Scanners. The Model 650 system processes all absentee and Election Day paper ballots, produces reports, and accumulates totals. The information is saved to disk and is then loaded into the Central Accumulation System.

The Unity Election System is used for all election functions including election content definition, accumulation of precinct level results from the iVotronic DRE voting system, and the Model 650 Absentee Mail system, and it provides for reporting and display of these results in real-time. The Election System includes a Windows 2000 LAN, configured with mirrored hard drives for automatic backup and fault tolerance, two (2) PCs, an Okidata Laser Ballot Printer and an Hewlett-Packard 2300 Laser Printer.

iVotronic DRE System Description

The iVotronic unit is a Direct Recording Electronic (DRE) Touch Screen voting system with design features that ensure a secure, fast, and easy voting process.

Each iVotronic terminal weighs less than ten pounds, which makes maintenance, setup, and delivery effortless.

The iVotronic voting system may be activated for voters by either a polling place official using a proprietary Personal Electronic Ballot (PEB) memory device, or the voter themselves by inserting a voter specific ballot activator PEB.

Our proposed Option 2 process provides for the Early Voting Official to activate the iVotronic voting system for voters by using a proprietary Personal Electronic Ballot (PEB) memory device.

Voters make ballot selections by pressing the iVotronic touch screen in the target response area or the candidate name for the candidate / issue of their choice.

The iVotronic system:

- Does not allow overvoting.
- Allows voters to change their selections an indefinite number of times.
- Allow voters to review their selections before casting their ballots.
- Voters may also cast write-in votes by selecting the write-in position in a contest and entering the name of the write-in candidate by pressing letters on the keyboard screen display.

iVotronic ADA System Features

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-Sherry Bays, Spokane County Washington Superintendent of Elections

In addition to the standard touch screen capability, the ADA-compliant iVotronic terminal allows selection of a unique audio ballot that permits the voter to listen to the ballot read to them via an audio headset.

The audio ballot, individually "spoken" to the voter based on their specific ballot style, is constructed from a stored dictionary of real voice files containing instructions and election elements such as candidate names, contest titles, and referenda text.

Blind or low vision voters are able to navigate the ballot using specially shaped iVotronic scroll and selection buttons to assist them with the voting process.

The iVotronic voting system can be programmed to display or read the ballot in an unlimited number of languages. If the election is set-up for multiple languages, the voter selects a language of choice using either a touch-screen language choice selection or a key selection if using the ADA audio ballot.

❶ Early Voting In-Person

When using the iVotronic system for Early Voting In-Person:

- The process spans the Early Voting In-Person period and occurs over several days.
- The Supervisor PEB that is prepared for Early Voting In-Person contains all ballot styles available in the County and the results are reported based on the Election Day precincts. A Supervisor PEB is prepared for each of the poll sites used for Early Voting In-Person voting.
- When opening the polls, a Supervisor Terminal must be opened after opening the Voter Terminals.

- When closing the polls, the Supervisor Terminal must be closed after closing all Voter Terminals.

Prior to starting Early Voting, poll workers prepare each iVotronic terminal for voting by opening the polls and producing a zero tape. The zero tape verifies that all units are clear prior to the start of voting. When the Supervisor Terminal is opened using the Supervisor PEB, it downloads *all* County ballot styles into the Supervisor Terminal.

At the end of each day during Early Voting, all terminals and PEBs are secured to prevent unauthorized access. After the Early Voting In-Person voting period is over, the poll closing procedure is followed using all iVotronic terminals at the site.

The Supervisor PEBs from all sites are then delivered to the Central Site and read into the system using the PEB reader attached to one of the Workstations on the system.

❷·Absentee By Mail and Election Day System

The ES&S Model 650 system is designed and classified as a self-contained, automatically fed, centralized, optical-scan tabulator. The Model 650 system is a stand-alone voting system, capable of processing ballots, producing reports, and creating an accumulated totals file that is output on a standard zip drive disk and loaded into the Central Accumulation System.

The Model 650 system is capable of holding a stack of up to 400 ballots and processing them at the following rates:

- 14" 325 ballots per minute ,
- 17" 310 ballots per minute,
- 19" 275 ballots per minute

The Model 650 system processes folded or creased ballots without special handling requirements or pre-scoring during the printing process. The Model 650 system also identifies overvotes, write-ins, blank, and any mutilated ballots during ballot processing.

The proposed ES&S system provides results reporting capabilities directly from the Model 650 system for the processed absentee ballots and from the Unity Election System.

The Model 650 Reporting System provides grand total, precinct-level, and audit record reports. These reports are displayed in media or in summary format (includes overvotes and undervotes). The system also provides an "Event Log" and a "Status Log."

As a ballot is read, the scanner provides the following functions:

- The scanner reads the ballot and checks the pre-printed codes along the edge to determine the ballot's precinct and type.
- The scanner reads voter choices for candidates or issues, taking only a fraction of a second per ballot.
- As the scanner reads the ballot, it checks for irregularities. If the scanner detects an irregular ballot (i.e. a blank or torn ballot) the machine stops and provides the operator with explicit handling instructions.

The Model 650 system's design and logic includes validation routines, self-diagnostics, and other security measures to protect vital parts and operating states. The Model 650 system is also equipped with a backup and recovery subsystem that provides for the reliable retention of data.

Unity Election System Overview

The Unity system is a suite of ES&S developed application software modules that contain all the functionality required to manage every facet of your elections.

Unity Election Data Manager (EDM)

The Unity Election Data Manager is a database program that maintains all jurisdiction and election information. This 32-bit Windows application software is menu driven and uses Windows standard conventions for database input. No unique skill sets are required to operate this application software.

The Unity Election Data Manager (EDM) is the ballot data entry section used to enter or import all initial ballot data, including precincts, districts, precinct/district relationships, contests, and candidates.

Typically, a master election database is created once for all precincts, districts, and precinct/district relationships. This master file builds each election-specific file to which election-specific contests and candidates can be manually added or imported using a text file.

Once this data is imported, ballot-specific information is added (for example, referenda text, fonts, and instructional information) to complete the ballot definition process.

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The Unity Ballot Image Manager is used to construct the ballot image for the absentee ballots from the information in the Unity Election Data Manager and create the camera-ready artwork or electronic artwork used in ballot production.

After all ballots are finalized, the database created by the Unity Election Data Manager and Unity Ballot Image Manager is used to build the files used by the Unity Hardware Programming Manager (HPM) for loading election data onto the iVotronic PEBs and the Model 650 EPROM.

Unity Ballot On Demand (BOD)

The Unity Ballot On Demand (BOD) provides an easy solution for printing the ES&S paper ballots using an inexpensive desktop laser printer. The Unity Ballot On Demand module allows the user to print single copies of a ballot, or allows multiple ballots to be in batches in unattended mode.

Unity Hardware Programming Manager (HPM)

The Unity Hardware Programming Manager (HPM) is used for "burning" the election information onto the various Memory Devices used by the tabulation subsystems.

The Unity Hardware Programming Manager imports the ballot definition file that is created by the Unity Election Data Manager and the Unity Ballot Image Manager. The HPM then creates the parameter data for all proposed systems.

Unity Election Reporting Manager (ERM)

The Unity Election Reporting Manager (ERM) is a 32-bit Windows application that contains all the functionality required to accumulate and report jurisdiction-wide election results from all ES&S tabulators.

As precinct results from the iVotronic and Model 650 systems are received and updated into the database, they are available in real-time in many formats, both in aggregate and detailed form.

The Unity Election Reporting Manager keeps log records of all system activity, including the number of ballots accumulated from each precinct and from each source.

ERM also provides the County with displays and reports showing precincts counted/not counted. Further safeguards against fraudulent activity are added with the functionality of the user-defined Suspend File that allows election officials to catch precinct results that meet a specified criteria (for example, a ballot count in a precinct that exceeds the number of registered voters in that precinct).

Multiple PC workstations, properly integrated and provided with the proper security clearance, may also be used for screen based ad-hoc results inquiry by designated contest and candidate and view either summary results or select desired precincts.

One or more workstations can be used to continuously display current results on monitor screens that page through lists of all or specified contests.

Script files can be prepared that independently control the contest displayed at each workstation as well as the time that each page is displayed before advancing to the next page. These "display stations" can be connected to large screen TV monitors or projection systems for large group viewing via commercially available adapter hardware.

In addition to the results displays, Unity Election Reporting Manager has a multitude of standard reports that can be printed or stored in an electronic "print image" file. All reports are selected from a drop-down menu tab and can be customized by the user by designating desired report parameters from a report options screen.

Options include reporting overvotes and undervotes, several levels of title headings, the inclusion of page numbering and timestamps, and the inclusion of contest totals. The selected options can either apply to the current report to be printed or stored for use in future reports of that type. Each report type has stored a report options parameter profile.

Report selections also include the ability to restrict the contests and/or precincts that apply to the report. The use of script files is available for storing report titles and specified lists of precincts and contests for any custom district reports. If the user prefers to create their own report from a database, an ASCII export function is available to create a fixed format results file that can be imported into a database, such as Access.

Election Central Network System

The Election Central Network system is integrated with the Unity Election System. The Central Site system is used for all election functions including:

- Election content definition
- Ballot layout and printing
- Memory device preparation
- Results Accumulation from the iVotronic and Model 650

The Central System consists of a Windows 2000 LAN configured with mirrored hard drives for automatic backup and fault tolerance, two (2) PCs, an Okidata Laser Ballot Printer and an Hewlett-Packard Laser Printer for election coding, ballot layout and printing, election night reporting, and results display.

Summary

Williamson County can expect a fully integrated voting system that addresses each and every phase of your election process: voting, vote tabulation, and results reporting.

We propose our iVotronic DRE Touch Screen system, the Model 650 Central Ballot Counter, and Unity Election System as effective solutions to meet your requirements.

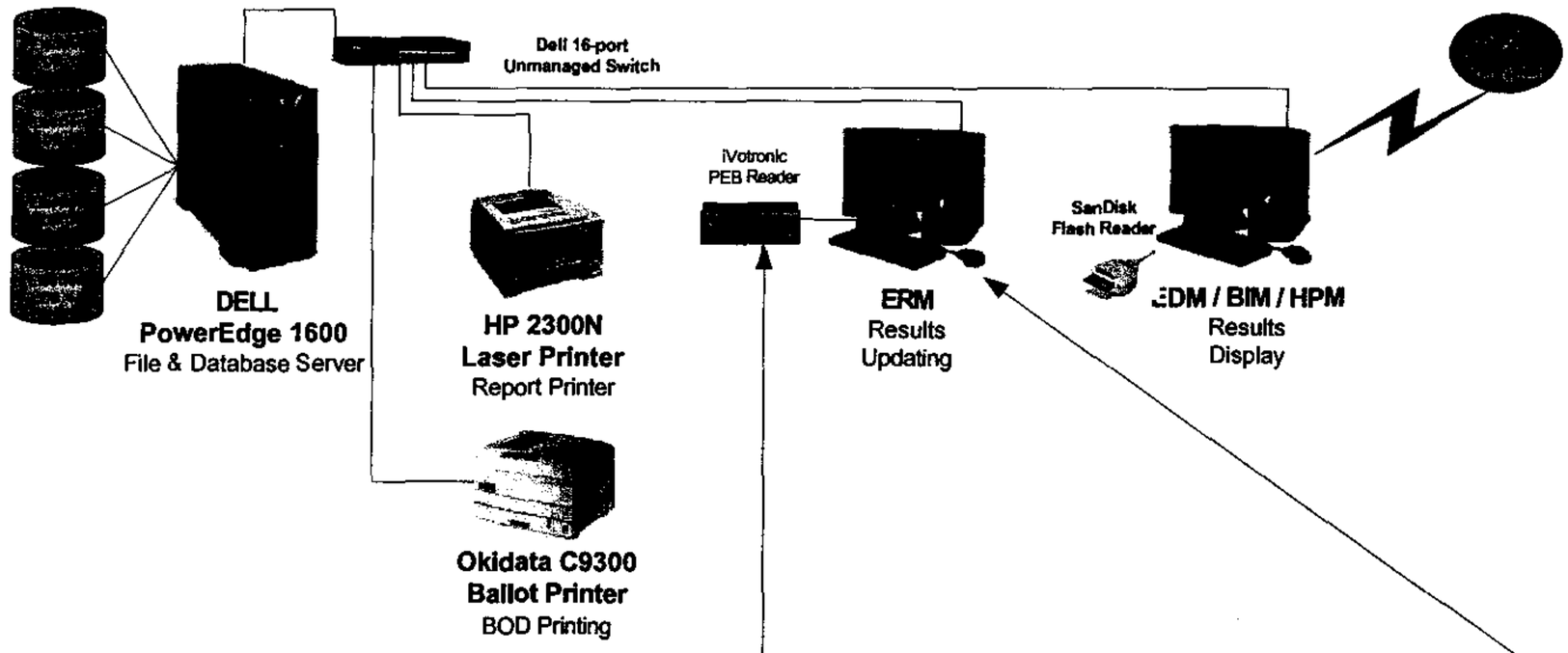
ES&S products are tested by an independent testing authority, certified to meet or exceed the standards of the U.S. Federal Election Commission, and have been proven and validated through use in thousands of actual elections worldwide.

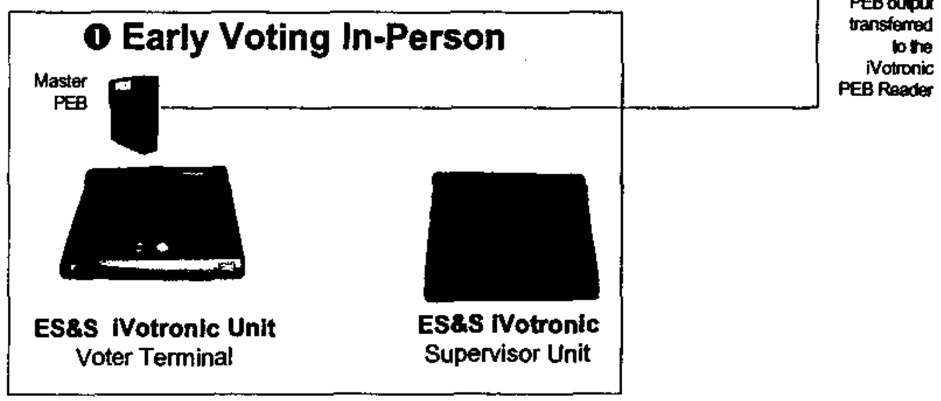
WILLIAMSON COUNTY, TX.

Option 2

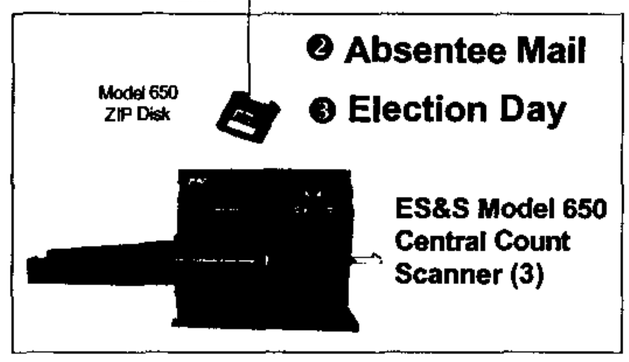
iVotronic™ , Model 650, and Unity®

Central Accumulation & Reporting Network





❶ PEB output transferred to the iVotronic PEB Reader



ELECTION SYSTEMS & SOFTWARE
WILLIAMSON COUNTY, TX - *OPTION #2*
ELECTION TABULATION AND REPORTING SYSTEM

DESCRIPTION
DETAIL EQUIPMENT LISTING

WINDOWS NT 4.0 FILE AND DATA BASE SERVER:	**QTY**
Dell PowerEdge 1600SC - 2.8GHz with 512K Cache+B32	1
1GB SDRAM (2X512 SDRAM DIMM)	1
Windows 2000 Server with 5 Client Licenses	1
PERC3-SC w/32MB Cache, 1 Internal Channel	1
Cabled SCSI Drives, RAID 5 Hard Drive Configuration	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 1st	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 2nd	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 3rd	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 4th	1
Cable SCSI - RAID 5	1
Intel 100 Dual Port Network Adapter	1
56K PC Intenal Modem	1
48X IDE CD-ROM	1
Standard Windows Keyboard	1
Dell 17" M782 Monitor	1
Adaptec 39160 SCSI Controller - 2nd Controller	1
Redundant Power Supply	1
Spare Redundant Power Supply	1
Onboard NIC	1
3.5" 1.44MB Floppy Drive	1
Microsoft System Mouse	1
PowerVault 100T DDS4 Tape Backup 20/40GB w/int. cont.	1
Tape Media, IDE, Travan 20/40 GB - 5 Pack	1
3Yr Same Day 4Hr Onsite 7Day/24Hr w/Eng. to Eng. support	1
CA Arcserve Server Backup Software	1
APC Smart UPS-700 STNDALN, 120V	1
Dell 2016 16-port 10/100 Fast Ethernet Unmanaged Switch	1
FILE SERVER TOTAL:	
DELL GX270 WORKSTATIONS:	
Dell OptiPlex GX270 MiniTower - 2.60GHz P-IV w/512K Cache	2
Windows XP Pro	2
512MB ECC SDRAM (2 DIMMS)	2
Quietkey PS/2 Keyboard	2
40 GB 7200RPM Hard Drive	2
Zip 250 Disk Drive	2
17" Dell M782 Monitor	2
48X Max, CD-RW	2
Integrated 10/100 3COM PCI Adapter	2
Serial Port Adapter	2
Energy Star Label	2
64MB nVidia, GeForce 4MX, DVI w/VGA adapter	2
3.5" 1.44MB Floppy Drive	2
Dell PS/2 2-Button Mouse	2
Integrated Sound Blaster Compatible	2
ZIP 250 Media 2 Pack	2
Internal Dell Business Audio Speaker	2
Norton AntiVirus 2003	2
3Yr Parts + Onsite Labor (Next Business Day)	2
APC Back-UPS ES 725 Battery Backup	2
U.S. Robotics 56K External Modem & Cable (Support)	1
pcAnywhere Communications Software	2
WORKSTATION TOTAL:	
TESTING AND INSTALLATION COST - OMAHA	
TESTING/INSTALLATION TOTAL:	1

ELECTION SYSTEMS & SOFTWARE
WILLIAMSON COUNTY, TX - *OPTION #2*
ELECTION TABULATION AND REPORTING SYSTEM

DESCRIPTION
DETAIL EQUIPMENT LISTING

WINDOWS NT 4.0 FILE AND DATA BASE SERVER:	QTY
ADDITIONAL ELECTION HARDWARE/SOFTWARE:	
Adobe TypeManager	1
Adobe Distiller	1
WinZip Software	2
Cat. 5 Ethernet Cables - 50 ft.	6
Sandisk Compact Flash Drive	2
ES&S PEB Reader	2
ADDITIONAL HARDWARE/SOFTWARE TOTAL:	
PRINTERS:	
Okidata C9300-DXN 30 PPM Laser Ballot Printer	1
Hewlett-Packard 2300 DTN - 25 PPM Laser Printer	1
PRINTER TOTAL:	
TOTAL SYSTEM PRICE:	

SECTION

3

In this section:

- Proposed System Overview
- iVotronic DRE System Description
- Model 150 Optical Scan Central Scanner
- Unity Election System
- System Diagram

Option 3 - Technical Overview

ES&S is recommending a fully integrated electronic voting system for Williamson County. The proposed system includes:

- The iVotronic™ DRE Touch Screen System for Election Day use by disabled voters at each precinct polling place.
- The Model 650 Optical Scan Central Scan System for Absentee By Mail and Election Day paper ballot tabulation
- The Election Management System located at the Williamson County facility running ES&S Unity® Election System software.

Note: *The following sections are numbered to correspond with the numbered features on our* ***System Diagram.*** *The* ***System Diagram*** *is at the end of this section*

Proposed System Overview

"The Election Systems & Software equipment worked wonderfully. Spokane County is very pleased with the quality of the ES&S equipment and their tremendous support in implementing an exciting new optical scan, poll site tabulating process for our voters. The ES&S team was very professional and knowledgeable, providing on-site training to staff and educating both the voters and over 1,000 election board workers in the new election process."

-Sherry Bays, Spokane County Washington Superintendent of Elections

The iVotronic DRE Touch Screen System for compliance with Election Day ADA requirements. The iVotronic voting unit is a standalone voter terminal capable of being programmed to support multiple precincts and ballot styles for a single polling location. The iVotronic system consists of a stand-alone voter terminal, and a proprietary Personal Electronic Ballot (PEB). Voters make their selections and cast their ballots on the touch screen voter terminal.

Our solution provides for the use of optical scan ballots for both Absentee By-Mail and Election Day voters. The Absentee By-Mail and Election Day tabulation system includes three stand-alone Model 650 High Speed Central Scanners.

The Model 650 system processes all absentee ballots, produces reports, and accumulates totals. The information is saved to disk and is then loaded into the Central Accumulation System.

The Unity Election System is used for all election functions including election content definition, accumulation of precinct level results from the iVotronic DRE voting system, and the Model 650 Absentee Mail system, and it provides for reporting and display of these results in real-time. The Election System includes a Windows 2000 LAN, configured with mirrored hard drives for automatic backup and fault tolerance, two (2) PCs an Okidata Laser Ballot Printer and an Hewlett-Packard Laser Printer.

iVotronic DRE System Description

The iVotronic unit is a Direct Recording Electronic (DRE) Touch Screen voting system with design features that ensure a secure, fast, and easy voting process.

Each iVotronic terminal weighs less than ten pounds, which makes maintenance, setup, and delivery effortless.

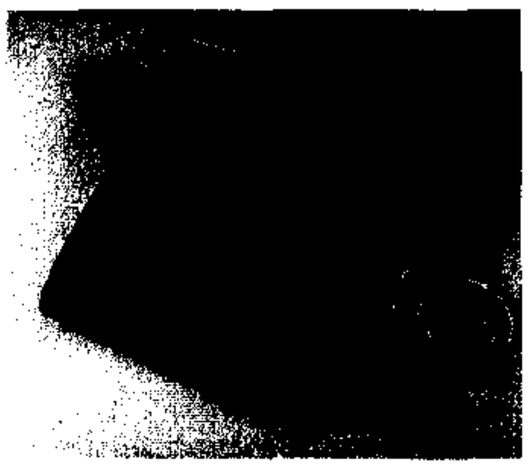
The iVotronic voting system may be activated for voters by either a polling place official using a proprietary Personal Electronic Ballot (PEB) memory device, or the voter themselves by inserting a voter specific ballot activator PEB.

Our proposed Option 3 process provides for the Election Day Official to activate the iVotronic voting system for voters by using a proprietary Personal Electronic Ballot (PEB) memory device.

The iVotronic system:

- Does not allow overvoting.
- Allows voters to change their selections an indefinite number of times.
- Allow voters to review their selections before casting their ballots.
- Voters may also cast write-in votes by selecting the write-in position in a contest and entering the name of the write-in candidate by pressing letters on the keyboard screen display.

iVotronic ADA System Features



"The Election Systems & Software equipment worked wonderfully. Spokane County is very pleased with the quality of the ES&S equipment and their tremendous support in implementing an exciting new optical scan, poll site tabulating process for our voters. The ES&S team was very professional and knowledgeable, providing on-site training to staff and educating both the voters and over 1,000 election board workers in the new election process."

-Sherry Bays, Spokane County Washington Superintendent of Elections

In addition to the standard touch screen capability, the ADA-compliant iVotronic terminal allows selection of a unique audio ballot that permits the voter to listen to the ballot read to them via an audio headset.

The audio ballot, individually "spoken" to the voter based on their specific ballot style, is constructed from a stored dictionary of real voice files containing instructions and election elements such as candidate names, contest titles, and referenda text.

Blind or low vision voters are able to navigate the ballot using specially shaped iVotronic scroll and selection buttons to assist them with the voting process.

The iVotronic voting system can be programmed to display or read the ballot in an unlimited number of languages. If the election is set-up for multiple languages, the voter selects a language of choice using either a touch-screen language choice selection or a key selection if using the ADA audio ballot.

❶ Election Day Voting

During the poll-opening process, the poll worker uses the Supervisor PEB to open each Voter Terminal following the designated procedures. This prepares each iVotronic terminal for voting and records the serial number of each opened iVotronic terminal in the PEB's memory.

The final step in the poll-opening process is to print a zero tape. The poll worker prints the zero tape by attaching the Communications Pack to the serial port of the last terminal opened.

During the poll-opening process, the poll worker uses the Supervisor PEB to open each Voter Terminal. This prepares each iVotronic terminal for voting and records the serial number of each opened iVotronic terminal in the PEB's memory.

Poll officials activate the terminal for the voter using the Master PEB. When the Master PEB is inserted, the poll official chooses the voter's correct ballot style, then leaves the voter to privately mark his or her ballot.

Once the polls close, the poll-closing process begins. During this phase, the poll worker uses the Supervisor PEB to close each Voter Terminal. Ballot images from all terminals are accumulated on the Master PEB at the close of polls, which is then used to produce an accumulated precinct report.

In addition, the serial number of each closed unit is verified against the list of opened units that had previously been stored in the Supervisor PEB.

Once Election Day polls are closed, precinct-wide results are accumulated from all voter terminals and stored in the Supervisor PEB. Results reports are printed using the Communications Pack that is provided at each polling location.

❷·Absentee By Mail and Election Day System

The ES&S Model 650 system is designed and classified as a self-contained, automatically fed, centralized, optical-scan tabulator. The Model 650 system is a stand-alone voting system, capable of processing ballots, producing reports, and creating an accumulated totals file that is output on a standard zip drive disk and loaded into the Central Accumulation System.

The Model 650 system is capable of holding a stack of up to 400 ballots and processing them at the following rates:

- 14" 325 ballots per minute ,
- 17" 310 ballots per minute,
- 19" 275 ballots per minute

The Model 650 system processes folded or creased ballots without special handling requirements or pre-scoring during the printing process. The Model 650 system also identifies overvotes, write-ins, blank, and any mutilated ballots during ballot processing.

The proposed ES&S system provides results reporting capabilities directly from the Model 650 system for the processed Absentee-By-Mail and Election Day ballots and from the Unity Election System.

The Model 650 Reporting System provides grand total, precinct-level, and audit record reports. These reports are displayed in media or in summary format (includes overvotes and undervotes). The system also provides an "Event Log" and a "Status Log."

As a ballot is read, the scanner provides the following functions:

- The scanner reads the ballot and checks the pre-printed codes along the edge to determine the ballot's precinct and type.
- The scanner reads voter choices for candidates or issues, taking only a fraction of a second per ballot.
- As the scanner reads the ballot, it checks for irregularities. If the scanner detects an irregular ballot (i.e. a blank or torn ballot) the machine stops and provides the operator with explicit handling instructions.

The Model 650 system's design and logic includes validation routines, self-diagnostics, and other security measures to protect vital parts and operating states. The Model 650 system is also equipped with a backup and recovery subsystem that provides for the reliable retention of data.

Unity Election System Overview

The Unity system is a suite of ES&S developed application software modules that contain all the functionality required to manage every facet of your elections.

Unity Election Data Manager (EDM)

The Unity Election Data Manager is a database program that maintains all jurisdiction and election information. This 32-bit Windows application software is menu driven and uses Windows standard conventions for database input. No unique skill sets are required to operate this application software.

The Unity Election Data Manager (EDM) is the ballot data entry section used to enter or import all initial ballot data, including precincts, districts, precinct/district relationships, contests, and candidates.

Typically, a master election database is created once for all precincts, districts, and precinct/district relationships. This master file builds each election-specific file to which election-specific contests and candidates can be manually added or imported using a text file.

Once this data is imported, ballot-specific information is added (for example, referenda text, fonts, and instructional information) to complete the ballot definition process.

Unity Ballot Image Manager (BIM)

The Unity Ballot Image Manager (BIM) is a graphical database typesetting system that uses the election-specific file from the Unity Election Data Manager (EDM) as its input. This application is similar to many commercially available desktop publishing systems and is designed specifically for the graphical design and layout of ES&S ballots.

The Unity Ballot Image Manager is used to construct the ballot image for the absentee ballots from the information in the Unity Election Data Manager and create the camera-ready artwork or electronic artwork used in ballot production.

After all ballots are finalized, the database created by the Unity Election Data Manager and Unity Ballot Image Manager is used to build the files used by the Unity Hardware Programming Manager (HPM) for loading election data onto the iVotronic PEBs and the Model 650 EPROM.

Unity Ballot On Demand (BOD)

The Unity Ballot On Demand (BOD) provides an easy solution for printing the ES&S paper ballots using an inexpensive desktop laser printer. The Unity Ballot On Demand module allows the user to print single copies of a ballot, or allows multiple ballots to be in batches in unattended mode.

Unity Hardware Programming Manager (HPM)

The Unity Hardware Programming Manager (HPM) is used for "burning" the election information onto the various Memory Devices used by the tabulation subsystems.

The Unity Hardware Programming Manager imports the ballot definition file that is created by the Unity Election Data Manager and the Unity Ballot Image Manager. The HPM then creates the parameter data for all proposed systems.

Unity Election Reporting Manager (ERM)

The Unity Election Reporting Manager (ERM) is a 32-bit Windows application that contains all the functionality required to accumulate and report jurisdiction-wide election results from all ES&S tabulators.

As precinct results from the iVotronic and Model 650 systems are received and updated into the database, they are available in real-time in many formats, both in aggregate and detailed form.

The Unity Election Reporting Manager keeps log records of all system activity, including the number of ballots accumulated from each precinct and from each source.

ERM also provides the County with displays and reports showing precincts counted/not counted. Further safeguards against fraudulent activity are added with the functionality of the user-defined Suspend File that allows election officials to catch precinct results that meet a specified criteria (for example, a ballot count in a precinct that exceeds the number of registered voters in that precinct).

Multiple PC workstations, properly integrated and provided with the proper security clearance, may also be used for screen based ad-hoc results inquiry by designated contest and candidate and view either summary results or select desired precincts.

One or more workstations can be used to continuously display current results on monitor screens that page through lists of all or specified contests.

Script files can be prepared that independently control the contest displayed at each workstation as well as the time that each page is displayed before advancing to the next page. These "display stations" can be connected to large screen TV monitors or projection systems for large group viewing via commercially available adapter hardware.

In addition to the results displays, Unity Election Reporting Manager has a multitude of standard reports that can be printed or stored in an electronic "print image" file. All reports are selected from a drop-down menu tab and can be customized by the user by designating desired report parameters from a report options screen.

Options include reporting overvotes and undervotes, several levels of title headings, the inclusion of page numbering and timestamps, and the inclusion of contest totals. The selected options can either apply to the current report to be printed or stored for use in future reports of that type. Each report type has stored a report options parameter profile.

Report selections also include the ability to restrict the contests and/or precincts that apply to the report. The use of script files is available for storing report titles and specified lists of precincts and contests for any custom district reports. If the user prefers to create their own report from a database, an ASCII export function is available to create a fixed format results file that can be imported into a database, such as Access.

Election Central Network System

The Election Central Network system is integrated with the Unity Election System. The Central Site system is used for all election functions including:

- Election content definition
- Ballot layout and printing
- Memory device preparation
- Results Accumulation from the iVotronic and Model 650

The Central System consists of a Windows 2000 LAN configured with mirrored hard drives for automatic backup and fault tolerance, two (2) PCs, an Okidata Laser Ballot Printer and an Hewlett-Packard 2300 for election coding, ballot layout and printing, election night reporting, and results display.

Summary

Williamson County can expect a fully integrated voting system that addresses each and every phase of your election process: voting, vote tabulation, and results reporting.

We propose our iVotronic DRE Touch Screen system, the Model 650 Central Ballot Counter, and Unity Election System as effective solutions to meet your requirements.

ES&S products are tested by an independent testing authority, certified to meet or exceed the standards of the U.S. Federal Election Commission, and have been proven and validated through use in thousands of actual elections worldwide.

WILLIAMSON COUNTY, TX.

Option 3

Model 650 and Unity® Central Accumulation & Reporting Network

Created By:
Election Systems & Software
July 16, 2003
File: Williams.VSD
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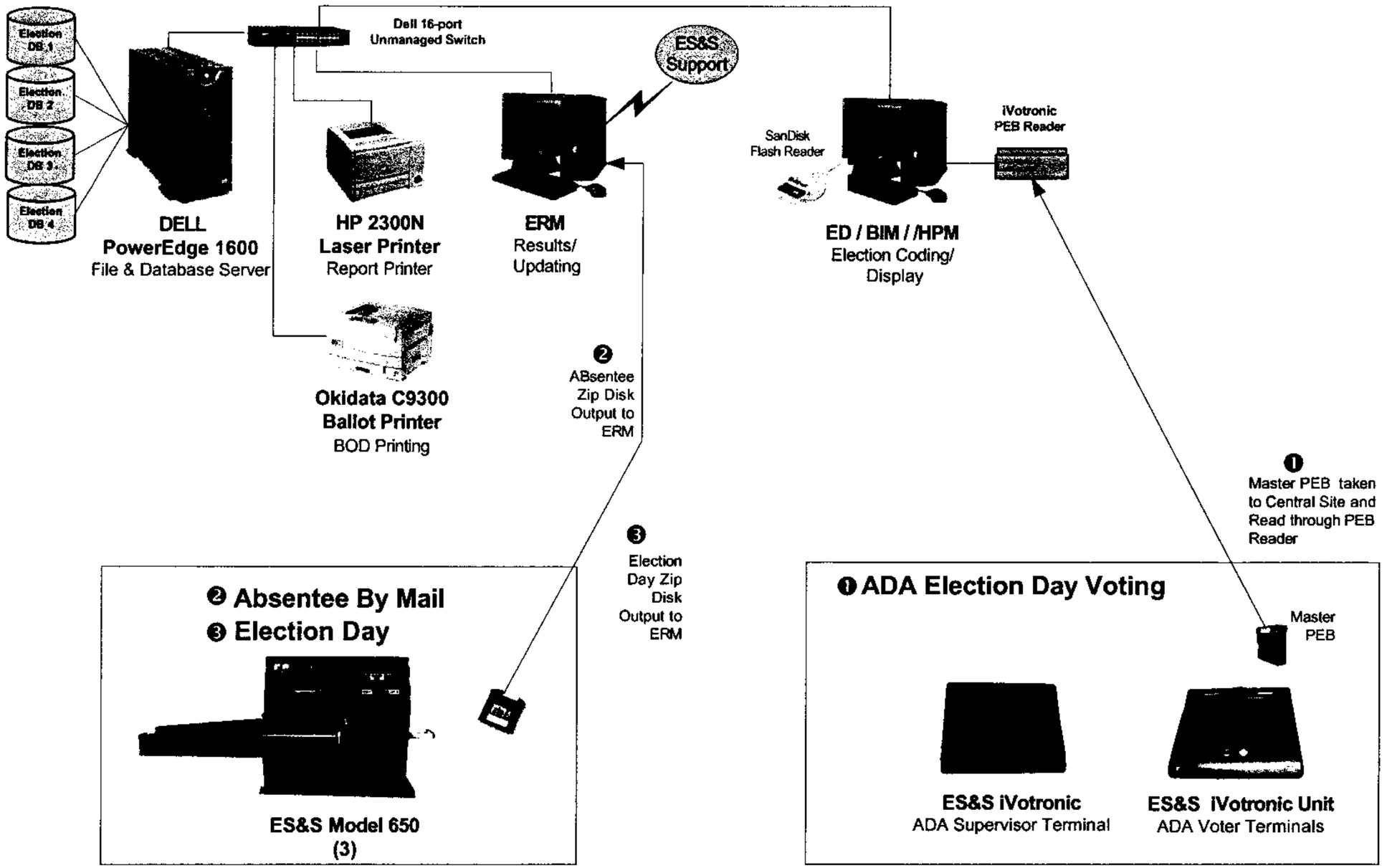


ELECTION SYSTEMS & SOFTWARE
WILLIAMSON COUNTY, TX - *OPTION # 3*
ELECTION TABULATION AND REPORTING SYSTEM

DESCRIPTION
DETAIL EQUIPMENT LISTING

WINDOWS NT 4.0 FILE AND DATA BASE SERVER:	**QTY**
Dell PowerEdge 1600SC - 2.8GHz with 512K Cache+B32	1
1GB SDRAM (2X512 SDRAM DIMM)	1
Windows 2000 Server with 5 Client Licenses	1
PERC3-SC w/32MB Cache, 1 Internal Channel	1
Cabled SCSI Drives, RAID 5 Hard Drive Configuration	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 1st	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 2nd	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 3rd	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 4th	1
Cable SCSI - RAID 5	1
Intel 100 Dual Port Network Adapter	1
56K PC Intenal Modem	1
48X IDE CD-ROM	1
Standard Windows Keyboard	1
Dell 17" M782 Monitor	1
Adaptec 39160 SCSI Controller - 2nd Controller	1
Redundant Power Supply	1
Spare Redundant Power Supply	1
Onboard NIC	1
3.5" 1.44MB Floppy Drive	1
Microsoft System Mouse	1
PowerVault 100T DDS4 Tape Backup 20/40GB w/int. cont.	1
Tape Media, IDE, Travan 20/40 GB - 5 Pack	1
3Yr Same Day 4Hr Onsite 7Day/24Hr w/Eng. to Eng. support	1
CA Arcserve Server Backup Software	1
APC Smart UPS-700 STNDALN, 120V	1
Dell 2016 16-port 10/100 Fast Ethernet Unmanaged Switch	1
FILE SERVER TOTAL:	
DELL GX270 WORKSTATIONS:	
Dell OptiPlex GX270 MiniTower - 2.60GHz P-IV w/512K Cache	2
Windows XP Pro	2
512MB ECC SDRAM (2 DIMMS)	2
Quietkey PS/2 Keyboard	2
40 GB 7200RPM Hard Drive	2
Zip 250 Disk Drive	2
17" Dell M782 Monitor	2
48X Max, CD-RW	2
Integrated 10/100 3COM PCI Adapter	2
Serial Port Adapter	2
Energy Star Label	2
64MB nVidia, GeForce 4MX, DVI w/VGA adapter	2
3.5" 1.44MB Floppy Drive	2
Dell PS/2 2-Button Mouse	2
Integrated Sound Blaster Compatible	2
ZIP 250 Media 2 Pack	2
Internal Dell Business Audio Speaker	2
Norton AntiVirus 2003	2
3Yr Parts + Onsite Labor (Next Business Day)	2
APC Back-UPS ES 725 Battery Backup	2
U.S. Robotics 56K External Modem & Cable (Support)	1
pcAnywhere Communications Software	2
WORKSTATION TOTAL:	

ELECTION SYSTEMS & SOFTWARE
WILLIAMSON COUNTY, TX - *OPTION # 3*
ELECTION TABULATION AND REPORTING SYSTEM

DESCRIPTION
DETAIL EQUIPMENT LISTING

WINDOWS NT 4.0 FILE AND DATA BASE SERVER:	QTY
TESTING AND INSTALLATION COST - OMAHA	
TESTING/INSTALLATION TOTAL:	1
ADDITIONAL ELECTION HARDWARE/SOFTWARE:	
Adobe TypeManager	1
Adobe Distiller	1
WinZip Software	2
Cat. 5 Ethernet Cables - 50 ft.	6
Sandisk Compact Flash Drive	2
ES&S PEB Reader	2
ADDITIONAL HARDWARE/SOFTWARE TOTAL:	
PRINTERS:	
Okidata C9300-DXN 30 PPM Laser Ballot Printer	1
Hewlett-Packard 2300 DTN - 25 PPM Laser Printer	1
PRINTER TOTAL:	
TOTAL SYSTEM PRICE:	

SECTION

3

In this section:

- Model 100 Precinct Ballot Counter System Description
- iVotronic DRE Touch Screen System Description
- Unity Election System Description
- Election Central Network Diagram

Option 4 - Technical Overview

ES&S is recommending a fully integrated electronic voting system for Williamson County. The proposed system includes:

- The **Model 100** Precinct Ballot Counter for Election Day voting
- The **iVotronic™ DRE Touch Screen Voting System** for Election Day ADA Compliance
- The **Model 150** Optical Scan Central Scan System for Absentee Mail Ballot voting
- An Election Central Network operating ES&S **Unity® Election System** software

Note: *The following sections are numbered to correspond with the numbered features on our* ***System Diagram.*** *The* ***System Diagram*** *is at the end of this section.*

❶· Model 100 Election Day System

"The Election Systems & Software equipment worked wonderfully. Spokane County is very pleased with the quality of the ES&S equipment and their tremendous support in implementing an exciting new optical scan, poll site tabulating process for our voters. The ES&S team was very professional and knowledgeable, providing on-site training to staff and educating both the voters and over 1,000 election board workers in the new election process."

-Sherry Bays, Spokane County Washington Superintendent of Elections

The Model 100 system is a voter initiated optical scan system used at the polls on Election Day. When the voter places the ballot into the tabulator, it reads and tabulates the ballot, then drops it into the secured ballot box.

The Model 100 system is both menu driven and software driven. Poll officials and technicians navigate options quickly and efficiently with a well-structured menu tree format.

The unit has a 106-character Liquid Crystal Display (LCD) screen that is used to communicate with the voter and election officials. The LCD displays the public counter, error messages, and message prompts for the voter and election officials.

This menu tree provides a favorable user interface by providing prompts for the four buttons located on the panel of the Model 100 unit. To carry out any task on Election Day, poll officials need only to follow the directions displayed on the LCD display.

The Model 100 system operates on standard 110 Volt AC electrical services and is equipped with an on-board power supply, charging circuit, and sealed lead-acid battery for uninterruptible power.

The Model 100 system's Memory Card is a standard battery backed-up SRAM PCMCIA memory card. The Memory Card is secured within a sealed compartment behind the unit's locked front panel. The vote tally and audit logs are stored on the Memory Card. All error and major events are recorded with the date and time from the system's real-time clock.

Audit trails are written on to the Memory Card as well as to the Model 100 system. If a machine fails, the card and its stored data can be removed and inserted into a backup machine.

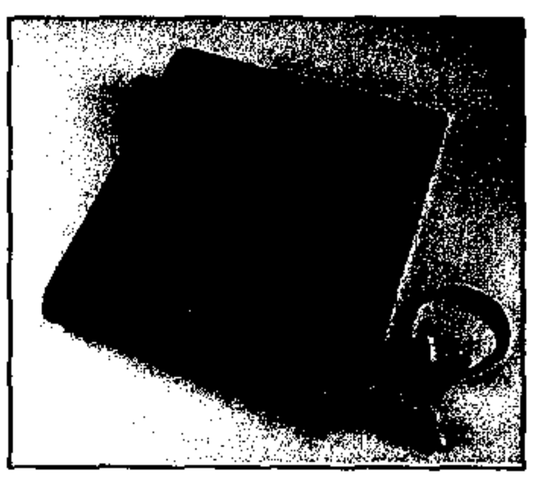
The Model 100 system supports multiple optional communication protocols and the Unity Election System provides several methods for obtaining the poll level results and communicating this information to the central site system.

Our proposed solution provides for Regional Modem Transmission Sites that are equipped with a Laptop PC using a standard landline internal modem. The modem dials up and connects to the Unity Data Acquisition Manager Host at the Central Site.

As the Unity Data Acquisition Manager receives each precinct-level image results record, the record is appended to the queue file of received precinct records on the Central Site network file server. The Unity Election Reporting Manager then reads the data, and the data is then updated into the election results database.

Complete audit logs are kept in an audit file at the Central Site LAN, recording all events by precinct ID and time/date stamp.

❷·The iVotronic Election Day ADA System



iVotronic DRE unit with audio headphones

The iVotronic voting system is a stand-alone voter terminal capable of being programmed to support multiple precincts and ballot styles for a single voting location. The iVotronic voting system is activated for voters by either a polling place official using a proprietary Personal Electronic Ballot (PEB) memory device, or the voter themselves by inserting a voter specific ballot activator PEB. If the election is set up for multiple languages, the voter selects a language of choice using a key selection.

The ADA-compliant iVotronic terminal has a unique audio ballot that permits the voter to listen to the ballot through an audio headset.

The audio ballot, individually *spoken* to the voter based on ballot style, is constructed from a stored dictionary of real voice files containing instructions and election elements such as candidate names, contest titles, and referenda text.

Blind or low vision voters are able to navigate the ballot using specially shaped iVotronic scroll and selection buttons to assist them with the voting process.

Voters can cast write-in votes by selecting the write-in position in a contest and entering the name of the desired candidate by pressing the letters on the keyboard displayed on the iVotronic touch-screen.

Our proposed configuration provides for iVotronic PEBs to be delivered to Regional Sites for data accumulation and results reporting.

❸ Model 150 Absentee Mail Ballot System

The proposed ES&S Model 150 system is designed and classified as a self-contained, automatically fed, centralized, optical-scan tabulator. The Model 150 system is a stand-alone voting system, capable of tabulating ballots and producing all necessary reports.

The Model 150 system counts, retains, and reports complete election results.

The Model 150 system uses an 8½" x 14" optical scan paper ballot. The ballots contain preprinted code marks that identify each ballot style. The Model 150 system is designed to read and tabulate any precinct's type or style of ballot, in any sequence without pre-sorting or special program instructions.

Ballots are processed at a rated speed of over 150 per minute. The Model 150 system processes folded or creased ballots without special handling requirements or pre-scoring during the printing process. The Model 150 system also identifies overvotes, write-ins, blank, and any mutilated ballots during ballot processing.

The proposed ES&S system provides results reporting capabilities directly from the Model 150 system for the processed absentee ballots and from the Unity Election System. Model 150 reporting provides standard reports that include precinct and summary reports. These reports are displayed in media or in summary format (includes overvotes and undervotes).

The system also provides an "Event Log" and a "Status Log." The Model 150 scanner accurately records and reports each ballot read by the system. Any ballot-reading error results in an immediate halt to the counting process. The system then immediately displays the appropriate message to the operator.

As a ballot is read, the scanner provides the following functions:

- The scanner reads the ballot and checks the pre-printed codes along the edge to determine the ballot's precinct and type.
- The scanner reads voter choices for candidates or issues, taking only a fraction of a second per ballot.
- As the scanner reads the ballot, it checks for irregularities. If the scanner detects an irregular ballot (i.e. a blank or torn ballot) the machine stops and provides the operator with explicit handling instructions.

Election Central Network System

The Election Central Network system is integrated with the Unity Election System. The Central Site system is used for all election functions including:

- Election content definition
- Ballot layout and printing
- Memory device preparation
- Results transmission from the Model 100 and iVotronic
- Results Accumulation from the Model 100, iVotronic and Model 150
- Reporting and display

The Central Site Hardware consists of:

- A single high-availability Dell™ PowerEdge File Server using the Windows 2000 LAN operating system. It is configured with three mirrored hard drives and one "hot spare" for automatic backup and additional fault tolerance
- Three (3) Dell high-end Workstations for Election Night reporting, results display, and updating precinct results
- Hewlett-Packard 2300 DTN Laser Printer for report
- Okidata C9300 Laser Ballot Printer
- One external modem to enable remote support form ES&S technical support centers
- Other peripherals to support the various tabulator media

Unity Election System Overview

Unity is a suite of ES&S developed application software modules that contain all the functionality required to manage every facet of your elections.

Unity Election Data Manager (EDM)

The Unity Election Data Manager is a database program that maintains all jurisdiction and election information. This 32-bit Windows application software is menu driven and uses Windows standard conventions for database input. No unique skill sets are required to operate this application software.

The Unity Election Data Manager (EDM) is the ballot data entry section used to enter or import all initial ballot data, including precincts, districts, precinct/district relationships, contests, and candidates.

Typically, a master election database is created once for all precincts, districts, and precinct/district relationships.

This master file builds each election-specific file to which election-specific contests and candidates can be manually added or imported using a text file.

Once this data is imported, ballot-specific information is added (for example, referenda text, fonts, and instructional information) to complete the ballot definition process.

Unity Ballot Image Manager (BIM)

The Unity Ballot Image Manager (BIM) is a graphical database typesetting system that uses the election-specific file from the Unity Election Data Manager (EDM) as its input. This application is similar to many commercially available desktop publishing systems and is designed specifically for the graphical design and layout of ES&S ballots.

The Unity Ballot Image Manager is used to construct the ballot image for the absentee ballots from the information in the Unity Election Data Manager and create the camera-ready artwork or electronic artwork used in ballot production. After all ballots are finalized, the database created by the Unity Election Data Manager and Unity Ballot Image Manager is used to build the files used by the Unity Hardware Programming Manager (HPM) for loading election data onto the Model 100 PCMCIA Cards and the Model 650 systems.

Unity Ballot On Demand (BOD)

The Unity Ballot On Demand (BOD) provides an easy solution for printing the ES&S paper ballots using an inexpensive desktop laser printer. The Unity Ballot On Demand module allows the user to print single copies of a ballot, or allows multiple ballots to be in batches in unattended mode.

Unity Hardware Programming Manager (HPM)

The Unity Hardware Programming Manager (HPM) is used for "burning" the election information onto the various Memory Devices used by the tabulation subsystems. The Unity Hardware Programming Manager imports the ballot definition file that is created by the Unity Election Data Manager and the Unity Ballot Image Manager. The HPM then creates the parameter data for all precinct-based Election Day and Absentee tabulators.

Unity Data Acquisition Manager (DAM)

The Data Acquisition Manager (DAM) is used to process either electronically transmitted or locally read PCMCIA cards from the Model 100 system that contains the poll level results from each polling place. The transmitted results may be from either landline modem based Modem Transmission Sites or wireless communications from each poll.

As the Unity Data Acquisition Manager receives each precinct-level image results record, the record is appended to the queue file of received precinct records on the Central Site network file server. The Unity Election Reporting Manager then reads the data, and the data is then updated into the election results database. Complete audit logs are kept in an audit file at the Central Site LAN, recording all events by precinct ID and time/date stamp.

The Data Acquisition Manager collects and passes election data from the election tabulation equipment to the Central Site LAN to accumulate the precinct-level results. As the Data Acquisition Manager receives each precinct-level image results record, the record is appended to the queue file of received precinct records on the Central Site network file server. This data is then read by the Election Reporting Manager and updated into the election results database.

Complete audit logs are kept in an audit file at the Central Site LAN, recording all events by precinct ID and time/date stamp.

Unity Election Reporting Manager (ERM)

The Unity ERM is a 32-bit Windows application that contains all the functionality required to accumulate and report jurisdiction-wide election results from all ES&S tabulators.

As precinct results from the Model 100 and iVotronic Systems are received and updated into the database, they are available in real-time in many formats, both in aggregate and detailed form.

The Unity Election Reporting Manager keeps log records of all system activity, including the number of ballots accumulated from each precinct and from each source. It will also provide Iosco County with displays and reports showing precincts counted/not counted.

Further safeguards against fraudulent activity are added with the functionality of the user-defined Suspend File that allows election officials to catch precinct results that meet a specified criteria (for example, a ballot count in a precinct that exceeds the number of registered voters in that precinct).

Multiple PC workstations, properly integrated and provided with the proper security clearance, may also be used for screen based ad-hoc results inquiry by designated contest and candidate and view either summary results or select desired precincts.

One or more workstations can be used to continuously display current results on monitor screens that page through lists of all or specified contests. Script files can be prepared that independently control the contest displayed at each workstation as well as the time that each page is displayed before advancing to the next page. These "display stations" can be connected to large screen TV monitors or projection systems for large group viewing via commercially available adapter hardware.

In addition to the results displays, Unity Election Reporting Manager has a multitude of standard reports that can be printed or stored in an electronic "print image" file. All reports are selected from a drop-down menu tab and can be customized by the user by designating desired report parameters from a report options screen.

Options include reporting overvotes and undervotes, several levels of title headings, the inclusion of page numbering and timestamps, and the inclusion of contest totals. The selected options can either apply to the current report to be printed or stored for use in future reports of that type. Each report type has stored a report options parameter profile.

Report selections also include the ability to restrict the contests and/or precincts that apply to the report. The use of script files is available for storing report titles and specified lists of precincts and contests for any custom district reports. If the user prefers to create their own report from a database, an ASCII export function is available to create a fixed format results file that can be imported into a database, such as Access.

Summary

Williamson County can expect a fully integrated voting system that addresses each and every phase of your election process: voting, vote tabulation, and results reporting.

We propose our iVotronic DRE Touch Screen system, the Model 100 Optical Scan Precinct Tabulator, the Model 150 Central Ballot Counter, and Unity Election System as effective solutions to meet your requirements.

ES&S products are tested by an independent testing authority, certified to meet or exceed the standards of the U.S. Federal Election Commission, and have been proven and validated through use in thousands of actual elections worldwide.

WILLIAMSON COUNTY, TX

Option 4

Model 100, iVotronic, Model 150
Central Accumulation & Reporting System

ELECTION SYSTEMS & SOFTWARE

Created By:
Election Systems & Software
July 16, 2003
File: WILLTEX4.VSD
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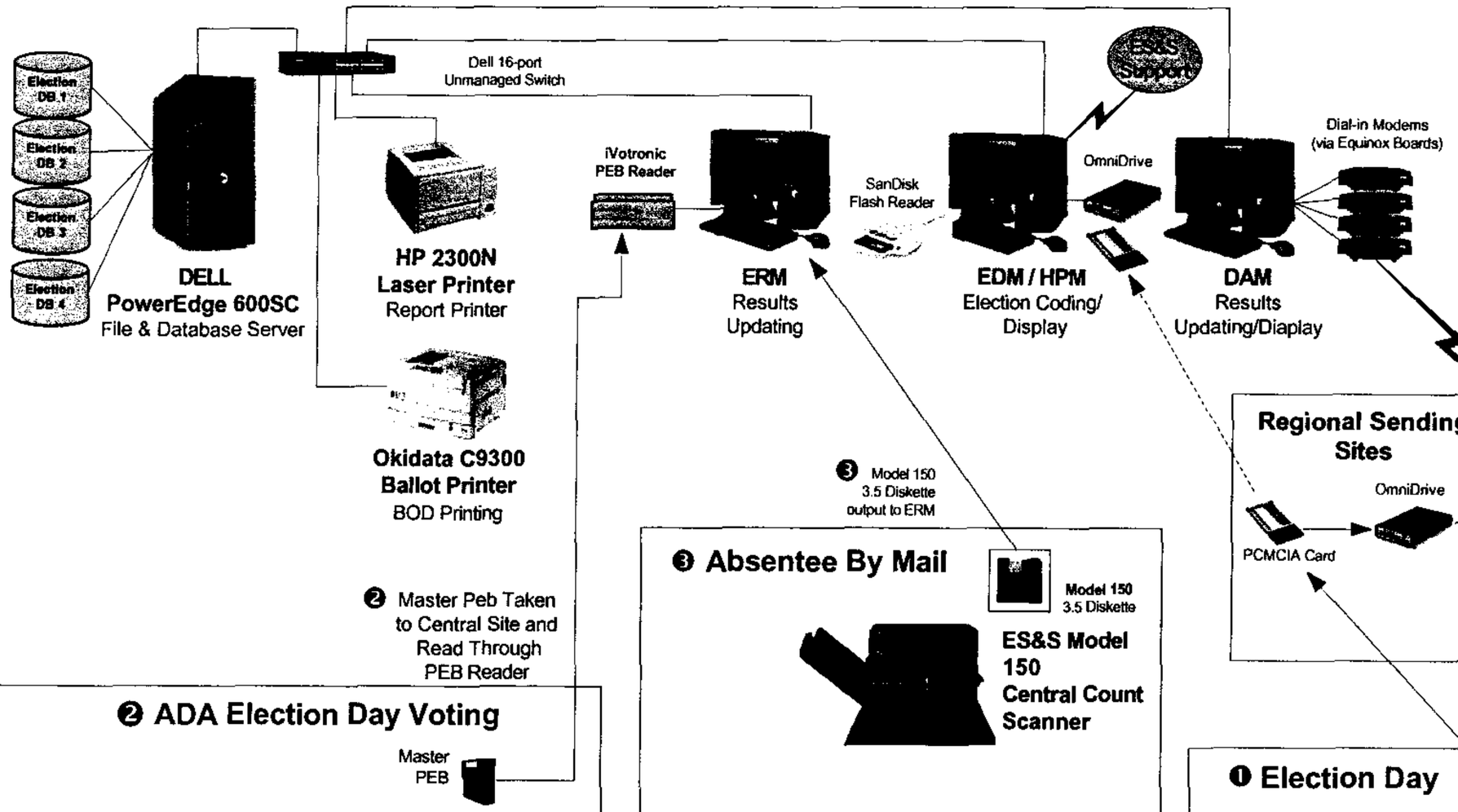


ELECTION SYSTEMS & SOFTWARE
WILLIAMSON COUNTY, TX - OPTION #4
ELECTION TABULATION AND REPORTING SYSTEM

DESCRIPTION
DETAIL EQUIPMENT LISTING

WINDOWS NT 4.0 FILE AND DATA BASE SERVER:	**QTY**
Dell PowerEdge 1600SC - 2.8GHz with 512K Cache+B32	1
1GB SDRAM (2X512 SDRAM DIMM)	1
Windows 2000 Server with 5 Client Licenses	1
PERC3-SC w/32MB Cache, 1 Internal Channel	1
Cabled SCSI Drives, RAID 5 Hard Drive Configuration	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 1st	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 2nd	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 3rd	1
36GB Ultra 160 SCSI 10K RPM Hard Drive - 4th	1
Cable SCSI - RAID 5	1
Intel 100 Dual Port Network Adapter	1
56K PC Intenal Modem	1
48X IDE CD-ROM	1
Standard Windows Keyboard	1
Dell 17" M782 Monitor	1
Adaptec 39160 SCSI Controller - 2nd Controller	1
Redundant Power Supply	1
Spare Redundant Power Supply	1
Onboard NIC	1
3.5" 1.44MB Floppy Drive	1
Microsoft System Mouse	1
PowerVault 100T DDS4 Tape Backup 20/40GB w/int. cont.	1
Tape Media, IDE, Travan 20/40 GB - 5 Pack	1
3Yr Same Day 4Hr Onsite 7Day/24Hr w/Eng. to Eng. support	1
CA Arcserve Server Backup Software	1
APC Smart UPS-700 STNDALN, 120V	1
Dell 2016 16-port 10/100 Fast Ethernet Unmanaged Switch	1
FILE SERVER TOTAL:	
DELL GX270 WORKSTATIONS:	
Dell OptiPlex GX270 MiniTower - 2.60GHz P-IV w/512K Cache	3
Windows XP Pro	3
512MB ECC SDRAM (2 DIMMS)	3
Quietkey PS/2 Keyboard	3
40 GB 7200RPM Hard Drive	3
Zip 250 Disk Drive	3
17" Dell M782 Monitor	3
48X Max, CD-RW	3
Integrated 10/100 3COM PCI Adapter	3
Serial Port Adapter	3
Energy Star Label	3
64MB nVidia, GeForce 4MX, DVI w/VGA adapter	3
3.5" 1.44MB Floppy Drive	3
Dell PS/2 2-Button Mouse	3
Integrated Sound Blaster Compatible	3
ZIP 250 Media 2 Pack	3
Internal Dell Business Audio Speaker	3
Norton AntiVirus 2003	3
3Yr Parts + Onsite Labor (Next Business Day)	3
APC Back-UPS ES 725 Battery Backup	3
U.S. Robotics 56K External Modem & Cable (Support)	1
pcAnywhere Communications Software	2
WORKSTATION TOTAL:	

ELECTION SYSTEMS & SOFTWARE
WILLIAMSON COUNTY, TX - OPTION #4
ELECTION TABULATION AND REPORTING SYSTEM

DESCRIPTION
DETAIL EQUIPMENT LISTING

WINDOWS NT 4.0 FILE AND DATA BASE SERVER:	QTY
REGIONAL SENDING SITE (Optional - This is the Pricing of One Regional Sending Site)	
Dell Latitude C640 Notebook	1
Mobile Pentium III Processor 2.0 GHz-M 14.1 XGA	1
256MB SDRAM (2 DIMMS)	1
Internal 56K Modem	1
20GB Hard Drive 9.5MM	1
Microsoft Office Small Business	1
8-Cell Lithium-Ion Battery	1
8-Cell Lithium-Ion Secondary Battery	1
Leather Carrying Case	1
24-10-24X Max Variable CD-RW	1
4MB Video Card	1
3 Year Parts + Onsite Labor (Next Business Day)	1
Tripp-Lite Notebook Surge Protector	1
1.44MB Floppy Drive	1
Windows XP Pro	1
REGIONAL SITE TOTAL:	
TESTING AND INSTALLATION COST - OMAHA	
TESTING/INSTALLATION TOTAL:	1
ADDITIONAL ELECTION HARDWARE/SOFTWARE:	
Emprom Burner EMP-11 (for the Model 150)	1
Emprom Eraser (for the Model 150)	1
Adobe TypeManager	1
Adobe Distiller	1
OmniDrive (for reading/burning PCMCIAs)	2
WinZip Software	2
Cat. 5 Ethernet Cables - 50 ft.	6
Equinox 8 Port Multi Modem Adapter	1
Sandisk Compact Flash Drive	2
ES&S PEB Reader	2
ADDITIONAL HARDWARE/SOFTWARE TOTAL:	
PRINTERS:	
Okidata C9300-DXN 30 PPM Laser Ballot Printer	1
Hewlett-Packard 2300 DTN - 25 PPM Laser Printer	1
PRINTER TOTAL:	
TOTAL SYSTEM PRICE:	

Section

4

Proposal Specifications

The following section contains:

- System Performance – System Capabilities
- Voter Adaptation – Election Worker Adaptation
- Training and Voter Education
- Warranty, Support and System Documentation
- Voting System(s) Error – Reporting / Remedies
- Question About The Voting System(s)

Section 4
Proposal Specifications

9. System Performance - System Capabilities

The performance and capability standards listed here refer to both the DRE Voting System and the OpScan Voting System, where applicable. The requirements of such shall include, but not be limited to, the following:

9.1 Accuracy:

9.1.1 Produce a record of each vote and report all votes cast;

DRE and OMR- Yes

The iVotronic Direct Recording Electronic (DRE) Touch Screen system, and the Model 650, Model 150 Central Ballot Counters, and the Model 100 Precinct Ballot Counter provide an audit trail that includes the number of ballots cast. The record of every vote for the OMR systems is the paper ballot itself.

The iVotronic system records a ballot image of each voter's ballot. Ballot image audit data is in list format, and each record consists of: the precinct; the ballot style; the number of straight party votes; the number of write-ins; and each candidate selection identified by candidate number, candidate name and office. These records are stored randomly and are in no way connected to the voter.

9.1.2 Report all votes cast with 100% accuracy;

DRE - Yes

The iVotronic system complies with this requirement and has been certified by an Independent Testing Authority to comply with the Federal Election Commission Voting System Standards.

Due to the electronic nature of these systems, however, ES&S cannot guarantee that a catastrophic electronic component failure within a PC may not temporarily corrupt an output file during the update to the reporting engine. There are checks to verify such an error, in which case the results from the iVotronic system can simply be re-collected and a new update performed. The votes within the iVotronic system can be re-collected an indefinite number of times for verification of results.

OMR - Yes

Our OMR systems have been certified to comply with the FEC requirement to "*...achieve an error rate not to exceed one error in one million characters...*" However, the nature of optical scan systems subject them to voter errors and marginally marked ballots. Also, due to the electronic nature of systems, ES&S cannot guarantee that a catastrophic electronic component failure within a PC may not temporarily corrupt an output file during the update to the reporting engine. There are checks to verify such an error, in which case the results can simply be re-collected and a new update performed.

9.1.3 Control logic and data processing methods to detect errors and provide correction method;

DRE - Yes

An image of all election data is stored as three identical images on three devices. During each vote process and during the reporting process, the three memory modules are compared. All devices should have identical content. In the event of a variation in content between modules, an error condition is entered.

OMR - Yes

Model 150/650: As each ballot is read, the unit uses the start and stop bars printed on the ballot to perform a full test of all read head sensors in each active column just prior to, and immediately after reading all voting positions.
If any head fails the test (does not see both dark and light), an error message will occur and the ballot will not be tabulated. Certain checksum validation is performed after each ballot is read. All checksums are also validated prior to printing a poll results report after the polls are closed. If any unit begins to fail during ballot processing, error messages are displayed that indicate the problem. In the event that a tabulator begins to fail on Election Day, a trained technician will replace the unit by transferring the memory card to a backup unit.

Model 100: Any error or condition that requires user intervention is displayed on the LCD of the Model 100 system. Although several different messages can be seen during the course of Election Day, the poll worker will only be given two choices. Any message regarding a mis-fed ballot prompts the user to press the "OK" button and then re-insert the ballot. Any message concerning a ballot condition such as a blank or overvoted ballot prompts the user to either "Accept" or "Return" the ballot by pressing the appropriate button.

9.1.4 Alert voter to under votes and over votes before final vote is cast;

DRE – Yes

The iVotronic system does not permit overvoting. Voters attempting to overvote will have their selection changed to the last candidate or issue selected. At the conclusion of voting, voters may select "Review Ballot." The Review Ballot displays all offices and the associated voter selections on the screen. If no choice has been made in a particular contest, the voter may return to the office and make a selection at this time. Voters attempting to cast a blank ballot will be notified that their ballot is blank. Voters casting a blank ballot will be required to press the Vote Button a second time before the system will accept their ballot. The iVotronic system functions as follows:

Validating the Voter's selection: When a voter presses the box next to a candidate's name, the name highlights and an "X" appears in the box. This system response immediately indicates to the voter who they have selected. After the voter has made all of their candidate choices, the voter records his or her vote by pressing the red VOTE button.

Overvoting: With the iVotronic System, voters cannot overvote their ballots. The iVotronic System only permits the legally allowed number of vote choices in all contests.

Undervoting: iVotronic voter terminals require the voters to at least "view" all ballot pages before being able to cast ballots. This requirement helps prevent ballot fall-off and accidental early voting. If the voter presses the VOTE button before viewing the last ballot page, the voter terminal displays the message, "You must view all pages before casting your vote."

The voter touches the screen to acknowledge the message and then the ballot redisplays as the voter left it. Also, at any point in the voting process, voters can review earlier choices by depressing the screen message "Previous page" and additional votes or changes can be made.

Also, when the voter is on the last page of the ballot and depresses the VOTE button, the voter is presented with options:

1. All offices can be displayed providing the voter the opportunity to review and make additional choices.
2. Or, the voter can simply cast his or her ballot. In the ADA mode, when the voter depresses the VOTE button on the last page, the voter is provided the opportunity to return to the ballot, through the voice files, and make additional choices or changes.

Model 150/650: The Model 150/650 systems are designed and used as a central count voting system where the voter is not present during the time the ballots are processed. If a ballot is cast incorrectly, the counter can be set to stop processing and prompt the operator to remove the ballot to be examined. At a later time, all ballots that were removed may be run through the counter to tabulate the results of all races that were voted correctly. Undervoting, overvoting, and cross-over statistics are maintained by the Model 150/650 systems and are available as part of the systems precinct and cumulative reports.

Model 100: The Model 100 system can be programmed to alert the voter/poll official of an overvoted or blank ballot. In the case that a voter makes a mistake, the Model 100 system will stop and hold the ballot to allow voter privacy. At the same time it will emit an audible signal and indicate the specific problem on the LCD display. At this point, the voter or election official will be prompted to have the counter either accept or reject the ballot. If the voter wishes to mark another ballot, the original ballot is placed in a spoiled ballot envelope and the voter is issued a new ballot.

9.1.5 Permit "provisional" voters to cast ballots and permit the maintenance and review of their ballots, within guidelines established by the Texas Election Code, the Secretary of State, and the Help America Vote Act;

DRE - Yes

The iVotronic DRE voter terminal has the capability of processing electronically *provisional* or challenged ballots and has employed this capability in many jurisdictions in Texas.

ES&S pioneered the ability to electronically accommodate provisional ballots, directly through the voter terminal. Provisional ballots receive a unique alphanumeric code at the time the ballot is prepared for the voter. This unique number is then electronically "attached" to the challenged voter's ballot image in the audit trail and is used after Election Day for the special processing of the ballot image prior to final certification of official election results.

The Unity Election Management software provides the tools required to process coded ballots and generate the official election results.

OMR - Yes

For a provisional ballot on optical scan systems, ES&S recommends the voted ballot be placed in a Provisional Ballot Envelope until the credentials of the voter can be verified.

9.1.6 Provide for the storage and tabulation of write-in votes, whether declared write-ins or anything goes write ins;

DRE - Yes

The iVotronic DRE Voting System provides an advanced, yet simple method for accommodating and capturing write-in votes. A write-in vote location occurs directly under each office where write-in voting is allowed. If a voter selects the box next to the message, "Write-In," a text entry screen is automatically displayed. It allows the voter, with one motion, to select individual letters spelling out the candidate's name (and address in some states) for whom the voter wishes to vote.

The transcribed name is then displayed on the text screen where it can be corrected, if necessary. When the voter finishes and presses **>>Accept<<** on the screen, the ballot reappears with the write-in name selected.

A write-in vote location is provided in each office where write-in voting is allowed. The write-in name may be changed or deleted any time prior to the voter casting his or her ballot. Write-in names are printed on the polling location results tape in the proper office location for which they belong.

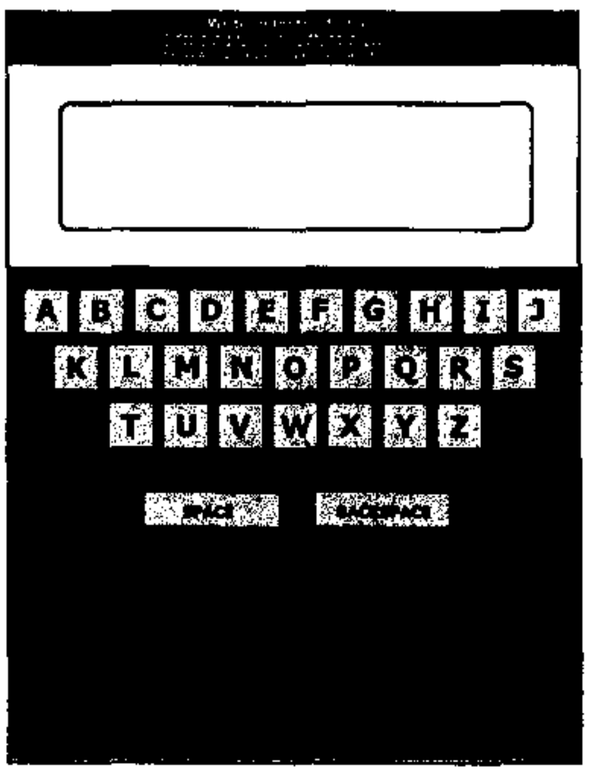


Figure 1. iVotronic Write-in Screen

Additionally, the iVotronic write-in method provides a substantial advantage for election officials. Our write-in method provides officials with a printed name rather than a hand-written entry. People will misspell names regardless of whether they are touch typing the name or handwriting it.

With a computer-printed name, however, election officials do not have to decipher handwriting or spelling.

OMR - Yes

To enter a write-in candidate, the voter fills the oval next to the write-in line for the office of his/her choice and writes the candidate's name. The Model 150/650 system can be programmed to stop on a write-in ballot. When processing is halted due to a write-in ballot, County staff determine whether the write-in names are valid and/or certified. After write-in candidates are hand-tallied, the ballots containing write-in votes are then sent back through the scanner to count the remaining offices on the ballot.

On the Model 100 Precinct Ballot Counter, voters indicate their intent to write in a candidate's name by filling in the oval to the left of the line provided for write-in candidates. The Model 100 system can be programmed by using the diverter mechanism inside the Model 100 ballot box separate those ballots containing write-in votes from the ballots containing no write-in votes. At that point write-in votes can be manually logged at either the precinct or a regional or central counting unit.

9.1.7 Provide for the tabulation of votes cast in split precincts, where all voters residing in one (1) precinct are not voting the same ballot style;

DRE - Yes

The iVotronic Voting System supports split precincts in a very simple, easy-to-use manner. In a split precinct, the Precinct Official uses the voter's registration to select the appropriate "split" (i.e., ballot style) for the voter from the iVotronic Ballot Selection Page. In the Voter Activated Configuration, the Precinct Judge makes the selection on the iVotronic Supervisor Terminal; the Voter Personal Electronic Ballot (PEB) is loaded with the proper "split ballot," and the voter votes on any open iVotronic voter terminal. In the Poll Worker Activated Configuration, this ballot selection by the precinct official takes place at the Voting Terminal. The ballot appears and the voter votes only the eligible contests. The ballots stored on the Supervisor Terminal or Activator PEB are labeled appropriately so they are easily identified by split.

OMR - Yes

The Model 150/650 systems support the tabulation of ballots from split precincts. The election official determines which ballot the voter is eligible for and issues that voter the correct ballot style. The ballot style issued to the voter will have only the offices for which the voter is entitled to vote. The ballot styles are named and numbered appropriately so they are easily identified by style, party, or precinct. A single precinct report still produces all the election results within a split precinct.

9.1.8 Provide for the tabulation of votes cast in combined precincts, where more than one (1) precinct is voting at the same location, on either the same ballot style or a different ballot style;

DRE and OMR - Yes

This situation is handled similarly to a split precinct. Ballots in the combined precinct are simply coded as different ballot styles, each of which is assigned to a certain precinct. The zero report and precinct report can be produced with combined totals or broken down by precinct.

9.1.9 Provide for the determination of ballot styles, in which all variable races are used to produce a variety of ballots applicable to voters residing within particular jurisdictional offices;

DRE and OMR - Yes

The ES&S Unity Election System Election Data Manager, automatically determines all ballot styles based on the precinct-district information entered into it. This data is then used by the Ballot Image Manager to automatically create and lay out ballots for both the DRE and OMR systems.

9.1.10 Permit diagnostic testing of all the major components within each unit;

DRE - Yes

The iVotronic Voting System uses a comprehensive system of copy and Cyclical Redundancy Checking (CRC) to ensure that all votes are stored and tabulated with the utmost accuracy. In addition, the iVotronic includes a high level of redundancy to ensure accuracy in vote storage. These detailed checks and balances guarantee that the iVotronic never stores a vote in a defective memory system.

Every time a terminal powers up, it verifies the data on each chip for accuracy against the other two chips. Transparent Error correction will occur if two-thirds of the chips match. Otherwise, the terminal shuts down and does not allow further voting on that iVotronic terminal until the data is retrieved and the problem is resolved by a trained service person.

OMR - Yes

Model 150/650: The Model 150/650 systems perform self-diagnostics upon startup. Many self-checks are intrinsic in unit operation that reduce the amount of testing required for normal use. Many of these self-checks are performed as part of the power-up sequence.

These include validation of memory checksums for each program section, election parameter section and results section which includes verifying that the checksums are unchanged from their previous value when the unit was powered off. Failure of any of the tests will prevent the start of normal operation.

Other checks are performed as part of the unit operation. As each ballot is read, the unit uses the start and stop bars printed on the ballot to perform a full test of all read-head sensors in each active column just prior to and immediately after reading all voting positions. If any head fails the test (e.g., does not see both dark and light), an error message will occur and the ballot will not be tabulated. Certain checksum validation is performed after each ballot is read.

All checksums are also validated prior to printing a poll results report after the polls are closed.

Model 100: The Model 100 system is a self-contained battery operated counter that provides menu driven access to all necessary preventive maintenance. Diagnostics Testing prepares the scanner for the election. Functions include scanner calibration and election testing. All critical menus are password protected to prevent unauthorized access to critical areas. The election setup procedure involves diagnostic procedures that calibrate all of the sensors, which are verified during the testing procedure. The calibration procedure also verifies proper operation of the hardware and mechanical paper transport. All of these options are accessed through the menu system under the "System Setup", and "Diagnostic" modes. All critical menus are password protected to prevent unauthorized access to critical areas. All critical areas are tested during startup as part of the systems self-diagnostics.

The Model 100 system uses a self-diagnostic routine during boot up that tests the system's memory modules and firmware.

9.1.11 Provide printout results containing candidates and/or issues in an alphanumeric format next to the vote totals for same by means of a programmable ballot from the unit itself;

DRE and OMR - Yes

All ES&S precinct-based voting systems provide an accumulated alphanumeric zero report at the opening of polls and an accumulated alphanumeric results report at the closing of polls on Election Day. The iVotronic DRE accumulates the results on the Master PEB as each terminal is closed. The Model 150/650 Central Ballot Counters and Model 100 Precinct Ballot Counter systems also print a zero report before processing begins and a results report after processing ends.

9.1.12 Provide logic and accuracy tests in the memory of the main processor and the programmable memory device used on Election Day; including zero printouts before and after each election; follow standards set out in the Texas Election Code and Secretary of State guidelines;

DRE - Yes

The L&A (Logic & Accuracy) process for the iVotronic system is very simple. It involves taking a sampling of the equipment to be used in the upcoming election and putting a known set of vote data into those units. The input/output of this known data set follows normal Election Day procedures. The results produced from the L&A can be stored in two ways: the data set can remain on a PEB, or the audit data produced from the L&A can be stored on a PC hard drive, floppy disk, or zip disk.

Election Day startup routines check the master PEB and all terminals for vote totals prior to opening the unit for voting. If any terminal was not "cleared and tested" prior to delivery, the system will not allow it to be opened. A zero report is produced in every polling location before voting begins.

OMR - Yes

Model 150/650: The Model 150/650 central scanners use a volatile bank of RAM (Random Access Memory) to store both Election Day totals and results from the L&A test. This RAM bank is a single section and totals must be set to zero (after the L&A Test) in order to prevent the results of the test from being combined with Election Day totals. L&A test totals are stored to disk and secured with the L&A materials. Totals should then be cleared to zero from the scanner before the counting of live ballots begins. L&A procedures could include that a second test be conducted after the election using the same test data from the first test.

Model 100: The Model 100 system's Logic and Accuracy tests are conducted by opening the polls on each Model 100 system, feeding a pre-audited test deck, and printing a report. The report is then compared to the pre-determined results of the test deck. This procedure tests all memory locations, and Model 100 system functionality that is used on election day. After the test, the PCMCIA card from the Model 100 system is zeroed, and the machine is prepared for delivery to the polls. All test actions are recorded on the audit log of the PCMCIA card with a time and date stamp.

9.1.13 Provide zero printouts for early voting equipment if used on Election Day;

DRE – Yes

Election Day startup routines check the master PEB and all terminals for vote totals prior to opening the unit for voting. If any terminal was not "cleared and tested" prior to delivery, the system will not allow it to be opened. A zero report is produced in every polling location before voting begins.

OMR – Not applicable

9.1.14 Permit recounts and contests to be conducted under rules as set out by the Texas Election Code and Secretary of State directive.

DRE - Yes

The iVotronic System allows jurisdictions to choose from several recount options depending on what the jurisdiction prefers. These options are as follows:

1. A jurisdiction may use the Master Supervisor PEB that was used to close the polls and tally the election-night results to reprint the Precinct Results Tape on the day of the recount.
2. A jurisdiction may choose to clear out the election-night vote totals in the Election Reporting Manager software and then reload the results into the program on the day scheduled for the recount. Those results are uploaded into the software from the Master Supervisor PEBs that were used to close the polls and tally election night results via a Supervisor Terminal.
3. A jurisdiction may choose to re-collect totals from every machine in a precinct into a new PEB and print out a precinct results tape to verify against the original tape printed out election night.

4. A jurisdiction may use the iVotronic audit trail to print individual ballot images then hand-count results if desired.

OMR - Yes

Model 150/650: Audit materials, along with the permanent secret record of the cast ballots, provide the basis for any recount or contest of election with the OMR tabulation systems. Recounts can be conducted in the following manner:

1. Electronic re-tabulation of ballots can be performed on the same scanner, or if required, on a different scanner. The same memory chip must be used to ensure that the election parameters during the recount were the same as those occurring Election Day. The ballots fed through the scanner and the results are compared on a precinct-by-precinct basis.
2. A manual recount may be conducted by hand-counting all ballots and comparing the results on a precinct-by-precinct basis.

Model 100: The Model 100 system provides three distinct audit trails with which to verify election results:

1. The Model 100 Memory Card stores the totals electronically as they are tabulated, and these totals can be printed by the Model 100 system or uploaded to the results accumulation network and printed for reconciliation with the Model 100 produced reports.
2. The Model 100 system prints the official precinct results and an audit log. The audit log is a chronological record of the abnormal conditions that occurred in the precinct during the election, and each event carries the date and time at which it occurred.
3. The actual voted ballots are maintained within the secured ballot box of the Model 100 system until a precinct worker unseals the ballot compartment at the close of polls.

The foregoing audit materials along with the permanent, secret record of the cast ballots provide the basis for any recount or contest of election with the proposed PC based precinct optical scan voting and tabulation system. Recounts, per se, can be conducted in a the following manner:

Electronic re-tabulation of ballots on the same Model 100 system, or if required, using a different Model 100 system. The same PCMCIA memory card must be used to confirm that the election parameters during the recount were the same as the election parameters on Election Day. The ballots are hand fed through the Model 100 system, and the results are compared on a precinct-by-precinct basis. This method is generally used when recounting a limited number of precincts.

A manual recount may be conducted by hand counting all ballots, and comparing the results on a precinct-by-precinct basis. Only the presence of a permanent, secret record of the cast ballot permits this type of recount.

9.1.15 Record and report all undervotes and overvotes.

DRE – Yes

Undervotes: Because voters have the right to elect not to vote in a particular race/election the DRE system cannot "prevent" a voter from consciously choosing not to vote. It can only allow that every voter has an equal opportunity to vote on every item. iVotronic voter terminals require the voters to at least "view" all ballot pages before being able to cast ballots. This requirement helps prevent ballot fall-off and accidental early voting. If the voter presses the VOTE button before viewing the last ballot page, the voter terminal displays the message, "You must view all pages before casting your vote." The voter touches the screen to acknowledge the message and then the ballot redisplays as the voter left it. Also, at any point in the voting process, voters can review earlier choices by depressing the screen message "Previous page" and additional votes or changes can be made.

Also, when the voter is on the last page of the ballot and depresses the VOTE button, the voter is presented with options:

1. All offices can be displayed providing the voter the opportunity to review and make additional choices.
2. Or, the voter can simply cast his or her ballot.

In the ADA mode, when the voter depresses the VOTE button on the last page, the voter is provided the opportunity to return to the ballot, through the voice files, and make additional choices or changes.

Overvotes: With the iVotronic System, voters cannot overvote their ballots. The iVotronic System only permits the legally allowed number of vote choices in all contests.

Voters attempting to overvote will have their selection changed to the last candidate or issue selected. At the conclusion of voting, voters may select "Review Ballot." The Review Ballot displays all offices and the associated voter selections on the screen. If no choice has been made in a particular contest, the voter may return to the office and make a selection at this time. Voters attempting to cast a blank ballot will be notified that their ballot is blank. Voters casting a blank ballot will be required to press the Vote Button a second time before the system will accept their ballot.

OMR: - Yes

Model 150/650: The Model 150/650 systems are designed and used as a central count voting system where the voter is not present during the time the ballots are processed. If a ballot is cast incorrectly, the counter can be set to stop processing and prompt the operator to remove the ballot to be examined. At a later time, all ballots that were removed may be run through the counter to tabulate the results of all races that were voted correctly. Undervoting, overvoting, and cross-over statistics are maintained by the Model 150/650 systems and are available as part of the systems precinct and cumulative reports.

Model 100: The Model 100 reports can be modified to contain overvotes and undervotes, or to print without them. The Model 100 system currently records the following data to an internal file during voting with a time/date stamp of occurrence.

1. Blank Ballots Accepted
2. Blank Ballots Rejected (if programmed)
3. Overvoted Ballots Accepted
4. Overvoted Ballots Rejected (if programmed)
5. Write In Ballots Accepted
6. With all races, the number of over votes and under votes is kept as part of the individual race record also.

Reporting Overvotes and Undervotes: The proposed ES&S Unity System produces standard election reports and displays in accordance with state specific requirements. The precinct and accumulated totals reports provide a quick and effective means to accommodating candidate and media requests for totals and are available upon demand. High-speed printers are configured as part of the system Accumulation/Reporting Stations (PC and related software).

A multiplicity of report types are available from the Unity Election Reporting Manager. Each report has numerous variations since the user has the ability to select from many option designations prior to initiating printing of the report. Options include:

- report titles, whether page numbers are included,
- time stamps are included,
- overvotes print
- undervotes print
- total votes per candidate print,
- percentages are printed for overvotes and undervotes,
- candidate percentages are based on votes cast in the office or votes eligible to be cast based on ballots cast,
- reports should print as 1 column or as the standard 2 column,
- number of copies to print, etc.

Reports, available at any time in the accumulation process, show the election results in either condensed or detailed form. The system proves the ability to *include/exclude overvotes and undervotes.* Available Reports:

Precinct Reports
Election Summary
Election Canvass
Precincts Counted
Jurisdictional Canvass
Local Office Canvass

9.2 Audit

9.2.1 Provide for a detailed record of each ballot image cast;

DRE - Yes

The iVotronic System provides a complete and extensive audit trail. Voter terminals store complete ballot images, including write-ins, as voters cast their votes. These images are randomly stored in the system according to a millisecond timer that ensures voter privacy. Images can be collected from each terminal and printed for hand counting, if required. Ballot image audit data is also in list format.

Each record consists of the precinct; the ballot style; the number of straight-party votes; the number of write-ins; and each candidate selection identified by candidate number, candidate name and office.

OMR – Yes

Model 150/650: The Model 150/650 and Model 100 systems can maintain election audit trails with supporting documentation to verify the correctness of reported results. These audit trails are in a form that presents a concrete archival record of all system activity related to vote tallies. Audit record generation is automatically printed to minimize the possibility of operator mistake or omission.

The system incorporates a real-time clock as part of the system hardware. The Model 150/650 and Model 100 systems maintain an absolute record of the time and date of a record relative to an event whose time and data are known and recorded. All audit record entries include the time and date stamp.

Once the Model 150/650 and Model 100 systems are activated for ballot processing, the contents of the event log are preserved during any interruption of power to the system and until processing and data reporting have been completed. A printed record is produced on the system printer.

9.2.2 Maintain ballots by each sub-unit, independent of the main processing system;

DRE - Yes

Each iVotronic Voter Terminal is an independent system that records the ballot images of ballots actually voted on that terminal; there is no main processing unit that ties all the systems together during Election Day. ES&S specifically designed the iVotronic system to consist of individual, independent units to eliminate the failure fears of a "main processing unit."

Each iVotronic-voting terminal has three independent internal Flash EPROMs and one removable Compact Flash Card. Each voter's ballot image, of his or her vote selections, is recorded in each device when voters cast their ballots. These independent memories are compared to each terminal cycle for accuracy and completeness. iVotronic terminals do not utilize any ballot image storage device that requires battery backup or rotating media, so they provide the highest level of ballot image protection. Ballot images from all terminals are accumulated on the Master PEB at the close of polls, which is then used to produce an accumulated precinct report.

OMR: The Model 150/650 and Model 100 systems are independent systems which maintain ballot data independent of the mains processing system.

9.2.3 Provide that each voter's ballot is secret and the voter cannot be identified by image or code;

DRE - Yes

To protect voter ballot privacy and anonymity, Vote Image Data is randomly recorded according to a rolling millisecond timer. This randomization makes it impossible to trace any voted ballot image back to a particular voter.

OMR - Yes

ES&S's paper-based, optical-scan systems employ ballots that are not coded, numbered, or otherwise linked to the voter in any way.

9.2.4 Provide for summary reports of votes cast on each voting device, extracting information from a memory device or a data storage device;

DRE - Yes

A summary report of votes cast on each device can be produced by using the iVotronic Communication Pack. However, the system is designed to eliminate the need to print a report for each separate voting device. At the close of polls, all totals are collected onto the Master PEB and then a precinct-results report is produced of the combined totals.

OMR - Yes

Model 150/650: A summary report of votes cast can be printed directly from the Model 150/650 optical scan system.

Model 100: A summary report of votes cast can be printed directly from the Model 100 precinct ballot counter.

9.2.5 Provide printed records regarding the opening and closing of the polls to include, but not be limited to, the following:

9.2.5.1 Identification of election;

DRE - Yes

OMR - Yes

9.2.5.2 Identification of each unit;

DRE - Yes

OMR - Yes

9.2.5.3 Identification of ballot format;

DRE - Yes

OMR - Yes

9.2.5.4 Identification of candidate and/or issue, verifying zero start;

DRE - Yes

OMR - Yes

9.2.5.5 Identification of all ballot fields and all special voting options;

DRE - Yes

OMR - Yes

9.2.5.6 Summary report of votes cast for each device, or ability to extract same;

DRE - Yes

OMR - Yes

9.2.5.7 Prevent printing of summary reports before the sequence of events required for closing of the polls are completed;

DRE - Yes

OMR – Non-applicable

9.2.5.8 Opening the polls reports should have all system audit information required;

DRE - Yes

OMR – Non-applicable

9.2.5.9 No data should be lost during generation of reports;

DRE - Yes

OMR - Yes

9.2.5.10 Integrity and security of data maintained according to time frame for federal, state and local elections;

DRE - Yes

OMR - Yes

Although an unlimited number of paper reports can be printed that will meet the federal requirement for maintaining election information, this security requirement is not a function of the reports themselves. Data is stored on a PC hard drive and/or the flash EPROM chips or PCMCIA cards in both the DRE and OMR systems. There is no limit to the length of time that data stored in either of these formats can be maintained.

9.2.5.11 Prevent unauthorized functions in an improper sequence;

DRE – Yes

User messages will be displayed if the proper sequence of actions is not followed, and reports may not be printed on the iVotronic system until all terminals in the polling place close. This requirement is held true whether printed reports are needed or not.

OMR – Yes

ES&S's central count and precinct ballot systems prevent the user from operating the unit in an improper sequence. Log Audit Reports can be printed online in real-time to track system operations.

9.2.5.12 Include security provisions compatible with administrative set up operational use;

DRE - Yes

All ES&S systems are designed with multiple security features, which are compatible with administrative set up and operational use.

OMR - Yes

9.2.5.13 Require pre-election testing of logic and accuracy;

ES&S recommends thorough Logic & Accuracy (L&A) Testing prior to each election. The testing routines will be reflected in the audit reports of the systems.

DRE - Yes

OMR - Yes

9.2.5.14 Require logic and accuracy results be stored in memory of main unit processor and Election Day device;

DRE – Yes

OMR - Yes

9.2.5.15 Provide for programmable memory device to be sealed in unit with means of tamper detection;

All systems' memory units are contained within the system and can be further secured with coded seals. System tampering through the unit interface will be recorded to the audit log of the unit. Physical tampering cannot be recorded to the audit log.

DRE - Yes

OMR - Yes

9.2.5.16 Allow for extraction of data from memory devices via land lines or cell phones for removal to host;

Whether paper reports are produced or not, all data is still available to be loaded into the central tabulating system.

DRE - Yes

OMR - Yes

9.2.5.17 Prevent loss of results, images and inaccurate vote count;

Printing results from any ES&S tabulator cannot jeopardize the integrity of data or erase vote or audit data.

DRE - Yes

Internal ballot memories are contained in three flash EPROMs that do *not* require any external electrical power to retain vote memory. Every time a terminal powers up, it verifies the data on each chip for accuracy against the other two chips. Transparent Error correction will occur if 2/3 of the chips match.

Otherwise, the terminal shuts down and does not allow further voting on that iVotronic terminal until the data is retrieved and the problem is resolved by a trained service person.

OMR - Yes

Model 150/650 data is periodically backed up to disk to ensure easy recovery in case of a power outage. Data is stored on a disk during the backup function and loaded back into the scanner memory counters from the disk. Recovery is a manual operation initiated by the, "Add to Memory" push-button on the operator panel.

Vote tally and audit logs are stored on a SRAM PCMCIA Card (Memory Card). While inside the Model 100 system, the PCMCIA card receives electricity from the counter's power supply. When the Card is removed from the Model 100 system or a power failure occurs, it receives power from an internal battery.

9.2.5.18 Remain in operation during power surge or other abnormal electrical occurrences;

All reporting features are available while operating on battery power.

DRE - Yes

The iVotronic Voting System includes rechargeable Nickel Metal Hydride (NiMH) batteries in every terminal that power all aspects of the voting system. These batteries provide a safe and efficient backup power source and surge protection system. To provide the best possible security, iVotronic memories do not require battery backup. The iVotronic design also includes terminals powering down when not in use, allowing for backup power conservation.

OMR - Yes

The Model 150/650 systems stores vote totals in nine separate locations within the memory. The removable media is stored in a proprietary format that is only recoverable by the reporting system.

ES&S recommends an Un-interruptible Power System (UPS) be provided during the usage, in the event that the system is inadvertently turned off. Because central scanners are not used in the volatile polling location environment, all battery backup is supplied by commercially available UPS systems.

The Model 100 system has an internal battery that functions exactly as an external UPS does. The battery and power supply protect the electronic components from being damaged by a power surge, and the unit automatically switches to battery power if the AC power is lost.

The Model 100 back-up and recovery subsystem provides backup in the event of a power or machine failure. The Model 100 system includes a 12-volt sealed lead-acid battery that requires no special maintenance. The battery obtains its charge automatically from the system power supply. It ensures complete protection from power failure and provides up to six hours of normal operation in the event of a power failure.

9.2.5.19 Provide security procedures system-wide, from turn on to turn off;

DRE – Yes

PEB Port Interface Security

The port and the device are both designed by ES&S and incorporate proprietary infrared communication. The physical size and shape of the port is different from any commercially available communications port. This alone prevents any other type of device from being placed in the port. Also, the proprietary infrared port and communication protocol can only be activated by an ES&S PEB that successfully passes the Cyclical Redundancy Checking that occurs with each activation of the voter terminal. This CRC checking and the verification of the time/date/terminal stamp, which indicates when and on what terminal the PEB was last used to vote, are used to prevent voters from engaging in fraudulent activity.

Flash Card Slot Security

The iVotronic DRE terminals, as proposed, contain a removable compact flash card. The card inserts in the rear of the unit and a security seal is placed on the compartment door to prevent and/or detect any unit tampering.

Seals can also be placed on the iVotronic voting booth and communications pack to prevent opening of the unit and gaining access to voter terminals and PEBs, respectively, without detection.

The iVotronic Voting System uses multiple electronic codes to electronically seal all hardware to be used in an upcoming election. These election qualifications, polling location and precinct identification codes prevent tampering or other unauthorized use. In addition, the iVotronic design requires the election process to proceed in the proper sequence. Any functions that do not follow the proper sequence, such as closing the polls before the legal closing time, require an election-specific password. In sum, the iVotronic design provides tamperproof hardware that can only be operated in the proper election sequence.

Security - Prior to the Election:

- *Clear and Test:* A supervisor PEB cannot open voter terminals for voting until they have passed the "Cleared and Tested" function on the password-protected Service Menu. This test ensures that the Public Count resets to zero before any new election activity.
- *Qualification Code:* The iVotronic system also employs an election-specific Election Qualification Code (EQC) that provides system-wide security. During maintenance, a single supervisor terminal electronically generates an election-specific EQC.

Most importantly, this EQC system prevents "pirate" PEBs or terminals from being entered into the system. If such an attempt is made, the system documents the attempt in the event log for audit purposes.

- *Focused Security:* Voter terminals will not allow voting until properly opened by the Supervisor PEB.
- *Detect Pre-existing Vote Totals:* If a supervisor PEB already contains votes, it cannot open a voter terminal in the normal manner.
- *The Public Count:* The voter terminals display their Public Count on the screen when powered up by any PEB. Precinct Officials can and should check that the Public Count is zero when opening the voter terminals for voting. In addition, the
- *Opening Date and Time Recorded:* The iVotronic system limits access to the "Set date and time" feature via password-protection. Time and date stamping occurs throughout the iVotronic election process including each terminal opening date and time. Each voter terminal always records the exact date and time that it was opened for voting.

Security - During the Election

- *Override Password Needed to Close Polls Early:* As an added precaution against pre-election vote fraud, voter terminals cannot be closed and have their votes collected before the official election closing date and time without the precinct-specific override password that accompanies the ballot.
- *Limited Master PEB Exposure:* Typically, each precinct has only one master supervisor PEB on site. Precinct Officials always maintain possession of the master supervisor PEB. This master Supervisor PEB runs the election.
- *Check the Ballot:* Voter Terminals check the incoming ballot for the same unique ballot qualification code that was programmed into the Supervisor PEB, which opened the terminals for voting. If the ballot is not coded for this precinct and this election, the Voter Terminal will not accept it for voting.
- *Enforce Voter PEB Qualification (Voter Activated Only):* Before the supervisor terminal loads a ballot into a voter PEB, it checks the voter PEB for the unique ballot identification code from the ballot last loaded into the voter PEB. If no previous ballot identification code exists on the PEB, the supervisor terminal loads the ballot normally.

  If the ballot identification data on the voter PEB matches the ballot identification code that is about to be loaded onto the voter PEB, the supervisor terminal loads the ballot normally.

However, if the ballot identification code in the voter PEB does not match the unique ballot identification code for this precinct and election, the supervisor terminal issues an audible alarm and displays the message that this voter PEB has not been properly qualified since the last election and cannot be used in this election until it has been qualified.

- *Password Protection:* Password protection restricts access to the Service Menu and the Election Central Application Menu.

Security - After the Election

- *Accountability:* The single supervisor PEB used to open all voter terminals at the beginning of the election also produces a "Zero Tape." This zero tape shows which serial number terminals were opened, exactly what date and time they were opened, and the number of votes on each Voter Terminal when it was opened, which by definition should be zero.
- That same supervisor PEB closes all voter terminals and collects all votes. Because the supervisor PEB recorded the serial numbers of all opened voter terminals, it requires that all opened voter terminals also be closed. This feature assists Precinct Officials in ensuring no terminals were inadvertently missed.
- *Closing Date and Time Recorded:* Voter terminals include their closing date and time on the master supervisor PEB when closed. The supervisor PEB then reports the closing date and time for each voter terminal directly beneath its corresponding opening date and time on the precinct report.

  This inclusion allows Election Officials to audit when each voter terminal at a precinct was opened and closed on Election Day. This data can also be compared to the zero tape, which was produced during the opening process.
- *Must Close Voter Terminal to Read Votes:* The supervisor PEB must first close a voter terminal before it can collect the terminal's vote totals. Once closed, the voter terminal cannot be voted on again until it is "Cleared and Tested" and opened for voting. When a supervisor PEB closes a voter terminal, the voter terminal reads the supervisor PEB first to see if this supervisor PEB has already closed and collected vote totals for this serial number voter terminal. If it has, the voter terminal will not copy its vote totals to the supervisor PEB.

  Seals are placed on the iVotronic voting booths to prevent opening of the unit and gaining access to the Voter Terminal without detection. Physical security (i.e., locking and security) is also important. Many of our clients, for example, provide extra security for programmed PEBs as these, after all, contain election ballots. These should be provided the same level of protection as any printed ballots.

Similarly, once terminals are "cleared and tested" and implanted with the new EQC, any attempt to tamper with individual terminals will be detected.

- *Transmission* - The iVotronic uses proprietary protocols during electronic transmission of results. Also, login and password codes are embedded in the coding of each memory device in order to allow it to access the Data Acquisition Manager at election central. Anyone attempting to tamper with a file in transit (during electronic transmission from Election Day polls to election central), will find that the file will effectively be destroyed. The Unity Election System will detect the corrupted file and ignore it completely; the user can then re-send files. The Unity Election System will only update the network with files, which land uninterrupted.

OMR - Yes

Model 150/650: The security of the Model 150/650 systems reside within its election definition. No data other than the current election ID data may be added to or updated. The EPROM chip contains the election definition as well as the control program for the scanner. When the EPROM is removed, the scanner becomes inoperable. After the control program is installed, the hardware circuitry has no capability to write or otherwise change the program. The scanner's design does not include any form of data entry keypad that can be used to alter programming. All operator functions are limited to the machine controls provided on the front panel.

The EPROM chip itself is contained in the back of the unit, which is secured by a keyed lock. An Authorized Election Official should secure the key to the Model 150/650 systems. The locking rear panel prevents unauthorized access to the internal components including the election program EPROM chip. The lock is adequate to prevent casual access, however the system should not be left in an unsecured area while the election programs are installed.

Model 100: To eliminate unauthorized access, ES&S has designed a multi level security platform into the Model 100 system. The design of the Model 100 system precludes unauthorized access to any of the data associated with the vote recording, counting, auditing or reporting processes.

The system is constructed with keyed security locks to prevent unauthorized access to the unit, its ballot box or its interface electronics. Only authorized elections staff or poll workers can access the Model 100 system's key secured reporting features.

The Model 100 system's memory card is secured within a sealed compartment behind the units locked front panel. All error and major events are recorded with the date and time from the systems real-time clock.

Audit trails are written onto the Card as well as the Model 100 system.

The "zero report" produced before the polls open on Election Day also assures that the vote totals have not been tampered with. Access to the Model 100 system's on/off switch is also restricted by the use of keyed switch.

9.2.5.20 Prevent tampering or destruction of information through the introduction of a magnetic device;

DRE and OMR - Yes

All FEC-qualified systems are required to pass the FCC part 15, class B test for magnetic interference prior to approval. Aside from passing this test, the information stored within the systems is protected by lock and key to prevent any interference of data, either magnetic or otherwise. DRE systems consist of a sealed terminal that does not allow access to anyone except trained technicians with the proper tools.

9.2.5.21 Provide for safeguards against tampering, theft or damage;

At present the systems provide limited protection against physical stealing of terminals, although this is a major violation of federal and state election laws. It is the responsibility of election officials to protect against such actions.

DRE - Yes

The iVotronic DRE terminals, as proposed, contain a removable compact flash card. The card inserts in the rear of the unit and a security seal is placed on the compartment door to prevent and/or detect any unit tampering. Seals can also be placed on the iVotronic voting booth and communication pack to prevent opening of the unit and gaining access to voter terminal and PEBs, respectively, without detection.

OMR - Yes

Model 150/650: The Central Ballot Counter is a tabletop unit that is physically secured by lock and key. Further tamper prevention and detection can be installed by placing coded seals on the scanner rear access panel.

Model 100: The design of the Model 100 system precludes unauthorized access to any of the data associated with the vote recording, counting, auditing or reporting processes. The Model 100 system is constructed with keyed security locks to prevent unauthorized access to the unit, its ballot box or its interface electronics. Only authorized elections staff or poll workers can access the Model 100 system's key secured reporting features.

9.2.5.22 Insure that test data has been purged from the system.

DRE - Yes

All test data must be removed from the system before the polls can be opened. If any terminal has not been "cleared and tested" prior to Election Day, it will not allow the poll officials to open it for voting. The "clear and test" routine is performed prior to Election Day on each terminal to clear all previous totals and perform diagnostic testing of the terminal. If this situation occurs, the polling place can continue to operate as it normally would. The terminal could then be "cleared and tested" by the poll official with phone support, or a technician could "clear and test" the terminal then open it for voting.

OMR - Yes

Model 150/650: The Model 150/650 central scanners will not count ballots until the totals are zeroed. Also, it is standard operating procedure to clear the totals and produce a zero report before any ballots are processed.

Model 100: All ES&S voting systems provide a zero report at the opening of polls on election day. Zeros can also be produced at any time after the election if the steps have been taken to zero the results from the memory card. Normally, the memory cards from the Model 100 systems are kept for a period of time after the election equal to the time that the ballots are kept. When the point in time comes to reuse the PCMCIA cards, they are "burned" with the information for the current election, which overwrites any pre-existing data.

9.3 Backup System:

9.3.1 Install a self-contained internal battery;

DRE - Yes

The iVotronic Voting System includes rechargeable NiMH batteries in every terminal that power all aspects of the voting system. These batteries provide a safe and efficient backup power source and surge protection system. *To provide the best possible security, iVotronic memories do not require battery backup*. The iVotronic design also includes terminals powering down when not in use, which allows backup power conservation.

OMR

Model 150/650: Because central scanners are not used in the volatile polling location environment, all battery backup is supplied by commercially available UPS systems.

Model 100: The Model 100 system contains a battery backup that will maintain system operation for up to six hours. The Model 100 system writes each valid ballot with audit trail information to the PCMCIA memory card at the time the ballot is read by the counter. This keeps all valid ballot storage current with the activity on the counter.

9.3.2 Recharge continuously while connected by AC;

All ES&S systems that contain internal batteries are constantly monitored by the charging circuit to keep the battery operating at peak performance.

9.3.3 Power all components, including illumination, audible and disabled voters' tools;

DRE - Yes

The iVotronic Voting System includes rechargeable NiMH batteries in every terminal that power all aspects of the voting system. These batteries provide a safe and efficient backup power source at times when AC power is not available. *To provide the best possible security, iVotronic memories do not require battery backup*. The iVotronic design also includes terminals powering down when not in use, which allows backup power conservation.

9.3.4 Backup battery should engage immediately with no loss of data in the event of disruption of electrical connection;

DRE - Yes

The iVotronic transitions to full battery power seamlessly, with no loss of data in the event of disruption of electrical connection.

OMR - YES

The Model 100 back-up and recovery subsystem provides backup in the event of a power or machine failure. The Model 100 system includes a 12-volt sealed lead-acid battery that requires no special maintenance. The battery obtains its charge automatically from the system power supply. It ensures complete protection from power failure and provides up to six hours of normal operation in the event of a power failure.

9.3.5 Provide data on battery life span in the event of power interruption; at least thirteen (13) hours of battery life to sustain voting equipment for poll opening and closing;

ES&S bids this as an exception.

Clarification: The iVotronic DRE system proposed will operate *continually* for four hours. However, power is expended only when the unit is being operated—with time *between* voters using no battery power whatsoever. Backup battery life for the iVotronic system varies according to display screen size, color/black and white options, increased ballot length, and volume of voter turnout. Our 12.1" monochrome screen, for example, has demonstrated that it can last longer than a full Election Day, having been successfully in operation since 1995 using off-the-shelf D-cell batteries for backup power.

For such unforeseen power interruptions, ES&S has added the long-lasting, rechargeable NiMH battery feature to its iVotronic system capability. Additionally, using commercially available portable UPS systems in the polling places on Election Day may provide unlimited additional backup power.

Model 100: The Model 100 back-up and recovery subsystem provides backup in the event of a power or machine failure. The Model 100 system includes a 12-volt sealed lead-acid battery that requires no special maintenance. The battery obtains its charge automatically from the system power supply.

The battery ensures complete protection from power failure and provides up to six hours of normal operation in the event of a power failure.

9.4 Speed of System

9.4.1 Permit voters to cast ballots as quickly as possible without any loss of degree of accuracy;

DRE - Yes

The time needed to vote is completely a function of the size and complexity of the ballot. Such factors are totally out of ES&S's control. However, our "One-action-One choice" voting methodology and our voter information and education program allow voters to enter ballot choices quickly and expeditiously. iVotronic voter terminals accept individual ballot selections with no delay. Thus, voter "throughput" is a function of the voter's ability to make choices directly on the screen in one touch.

OMR - Yes

Model 100: The Model 100 system accepts and records a ballot in approximately 5 seconds. Voter throughput is mainly determined on the average time it takes for the poll officials to process a voter and issue a ballot, and the number of voting booths available for voters to mark their ballots.

9.4.2 Provide on screen instructions to provide for voter awareness of the voting unit's operation;

DRE - Yes

Voting on the iVotronic terminal is simple and straightforward and requires a foolproof, four-step process that is posted inside the voting booth and on screen prompts.

Step 1 – Voter or Poll Worker inserts the PEB into the iVotronic Voter Terminal.

Step 2 - Voter chooses the preferred ballot language and the ballot appears in the voter's language of choice.

Step 3 - Voter makes their one-touch choices.

Step 4- Voter depresses the "Vote" button and casts their vote.

OMR - Yes

Model 150/650: Absentee ballots are mailed with instructions (e.g., how to fill in the oval next to the voter's choice and what type of writing instrument to use). Duplicate, easy-to-follow instructions are clearly printed on each ballot.

Model 100: Voting on paper ballots is intuitive and familiar to virtually all voters. Folding, mailing, handling and storage of the paper ballot do not affect its ability to accurately retain votes. The voter can operate the Model 100 precinct counter by simply inserting their ballot into the precinct counter. The voter may ask for poll worker assistance at any time during the voting process.

9.4.3 Provide for an accurate and immediate transfer of data, if requested, to permit the dissemination of election results to the media and candidates in an expeditious manner.

DRE - Yes

As part of the iVotronic system, ES&S includes a Communication Pack with a printer and modem capability (one Communication pack per poll or advance voting location). The printer in the Communication Pack prints the system zero tape and the results from that poll. The Communication Pack modem is an embedded analog modem module with a speed of 14,400 bps. This modem requires a traditional phone or fax line.

OMR - Yes

Model 150/650: The Model 150/650 systems provide for results reporting capabilities directly from the Central Ballot Counters or from ES&S's Unity Election Reporting Manager (ERM) Software. Unity ERM automatically accumulates absentee mail ballot, absentee in-person and Election Day totals. Model 150/650 reporting provides standard reports that include multi-level jurisdiction and multi-purpose reports. The system also provides an "Event Log" and a "Status Log," a "Long Summary" report which includes over and under votes and a "Media" Report. The Model 150/650 provides a public counter on the unit's control panel display.

Model 100: The Model 100 scanner generates and stores election results in the following formats:

- Paper copies produced by the scanner's internal printer or by an external printer connected to the scanner.
- Data stored on a removable PC Card that is later read by Election Reporting Manager software.
- Data that can be transferred via modem directly from the scanner to a central computer running Election Reporting Manager.

9.5 Early Voting By Personal Appearance:

9.5.1 Allow voters from any voting precinct to vote at any location;

DRE - Yes

OMR - Yes

9.5.2 Allow units used during early voting to be de-programmed and re-programmed for use on Election Day, if necessary;

DRE & OMR - Yes

9.5.3 Allow for units used during early voting to be de-programmed and re-programmed at another early voting location, if necessary;

DRE - Yes

The advanced design of the iVotronic DRE system allows for Voter Terminals used during early voting to also be de-programmed and re-programmed at another early voting location.

The reason this transfer can be readily accomplished is that iVotronic was designed to encompass generic Voter Terminals. Any Voter Terminal can be used in any voting location and any change can be made right up to the time polls open.

The steps to prepare a voter terminal for use at another early voting location are as follows:

(1) Upload the Audit Data to a PC—Time Required= 2 to 4 minutes

(2) Clear and Test the Voter Terminal—Time Required = 1 to 2 minutes

9.5.4 Provide a means of electronically integrating early voting by personal appearance results with an OpScan Voting System;

Early Voting In-Person results will be electronically integrated with ES&S OMR Voting Systems' results via the proposed Unity Election Management System. The Unity Election Reporting Manager will provide for separate and/or combined reports.

9.6 Early Voting By Mail:

9.6.1 Provide a means of electronically integrating early voting by mail results with DRE Voting System;

DRE - Yes

ES&S proposes the Model 650 or Model 150 Central Counter for use in processing By Mail ballots. These results will be electronically integrated with Early Voting In-Person and Election Day results via the proposed Unity Election Management System. The Unity Election Reporting Manager will provide for separate and/or combined reports. **Refer to Section 3, Proposed Solution, Options 1-4 for Technical Overview and System Diagram.**

9.6.2 Allow for the tabulation of early voting by mail ballots that are returned after Election Day in accordance with the provisions of the Texas Election Code.

The ES&S Central Ballot Counters provide the ability for tabulation of ballots returned after Election Day. These ballot totals are added to the totals produced on Election Day and reports are printed to reflect the corrected totals.

9.7 Reporting Requirements:

9.7.1 Provide a cumulative, canvas and precinct report of early voting by mail, early voting by personal appearance and Election Day as one (1) total;

Yes

The Unity Election Reporting Manager allows the user to define reporting groups in the final results database. Results from the different types of ballots can be put into separate groups and then combined during reporting.

Combining totals from separate groups is as simple as choosing "Election Totals" as the reporting group. This default setting automatically combines the totals from any or all of the user defined groups.

9.7.2 Provide a cumulative, canvass and precinct report of early voting by mail and early voting by personal appearance as one (1) total;

Yes

This report is produced in exactly the same manner described in 9.7.1 above.

9.7.3 Provide a cumulative, canvas and precinct report of Election Day as one (1) total;

Yes

This report is produced in exactly the same manner described in 9.7.1 above.

9.7.4 Provide for unofficial, official, and late ballot official reports in any variety including early voting, Election day and total vote;

Official or unofficial reports consisting of any combination of vote data, and presented in any available format, can be produced at any time during the tabulation of votes, or thereafter.

9.7.5 Provide the ability to custom design an election report to include, but not be limited to, the following information:

9.7.5.1 Name of election;

9.7.5.2 Political subdivisions involved - separate reports should be available for each subdivision in the format enumerated above;

9.7.5.3 Date of election;

9.7.5.4 Type of report;

9.7.5.5 Total number of registered voters in each voting precinct;

9.7.5.6 Formatting of election results by capturing election data embedded in the database and producing specialized reports, i.e., a report of Presidential vote by legislative district or commissioner precinct.

Yes

The Election Reporting Manager can produce reports that meet *all of the above requirements*. These requirements are met by special options in the coding of elections.

9.7.5.7 Provide a report on undervotes and overvotes.

A variety of report types are available from the Unity Election Reporting Manager. Each report has numerous variations since the user has the ability to select from many option designations prior to initiating printing of the report. Options include:

- report titles, whether page numbers are included,
- time stamps are included,
- overvotes print
- undervotes print
- total votes per candidate print,

- percentages are printed for overvotes and undervotes,
- candidate percentages are based on votes cast in the office or votes eligible to be cast based on ballots cast,
- reports should print as 1 column or as the standard 2 column,
- number of copies to print, etc.

9.7.6 Provide for election night reporting, a listing of precincts reporting and a listing of precincts not reporting;

Yes

During, Election Night, the Election Reporting Manager provides for user initiated printed reports or an independent scrolling display of precincts counted/not counted. The report and the scrolling display options allow the user to specify which data set is used and precincts counted or precincts not counted.

9.7.7 Provide for the operator of the reporting system to change the appearance of the report by reformatting the data;

Yes

The user cannot alter the basic report formats in the Election Reporting Manager. However, all data may be exported as an ASCII flat file and subsequently imported into any spreadsheet or database application for use in creating customized reports.

9.7.8 Provide for the removal of an already counted precinct and a re-counting of that same precinct in the event of errors in transmission;

Yes

The Election Reporting Manager allows the system operator to zero one or any combination of precincts, and then recount those precincts.

9.7.9 Provide individualized sample ballot information for posting on the County Clerk's website and for reproduction and distribution;

Yes

The Ballot Image Manager module of the Unity Election Management System is used for the design and layout of ballots. From this application, exact Election Day ballot images can be produced as PDF files using Adobe Acrobat software. These PDF files can then be posted to the local jurisdiction's website.

9.7.10 Provide for the automatic transmission of election results through whatever medium chosen by the County Clerk, whether it be via the Internet, telephone lines, electronic data, and the like, while adhering to the transmission rules set out in the Texas Election Code and Secretary of State rule;

Yes

The Unity® Data Acquisition Manager, host configuration is used to simultaneously collect precinct results records from the polling place sites or Regional Sites. ES&S's proposed system solution is configured to include transmission capability from the regional receiving stations.

The optional Unity iReport system is a host-based media reporting solution that enables election jurisdictions to electronically compose and distribute election results to a variety of reporting outlets within just minutes of poll closure.

iReport enables the timely communication of your election results to the public in an accurate and user-friendly format that is critical to the success of every election. ES&S would be happy to discuss this option with Wiliamson County.

9.7.11 Provide for the storage of election results in any version of software required, i.e., Access, Excel, Adobe, ASCII;

Yes

The Election Reporting Manger can export voting results in an ASCII format that can be imported into any database or spreadsheet application.

9.7.12 Provide for election results to be produced in such a manner as to allow for easy copying for paper distribution upon request.

Yes

All report formats from the Election Data Manager are set up on standard 8.5x11 inch paper and can be easily reproduced using a standard photocopy machine.

9.8 Independence of Voting System:

9.8.1 Be independent of offerer after training is complete;

Yes

ES&S's goal is to have our clients be self-sufficient if they so choose. This is one reason why ES&S has developed the Unity Election System, as it assists election jurisdictions in running seamless, self-reliant elections. *We believe that with the right staff committed, Williamson County can be completely independent and operating on its own in as little as one full election cycle.* Planning to implement the system in this fashion allows our clients the opportunity to become familiar with our system operations, given each specific election in their cycle, before they become self-sufficient.

9.8.2 Produce complete specifications for election administration use, including hardware and software specifications, technical documentation, user manuals, user videos, posters, etc.

Yes

ES&S will supply Williamson County with all system documentation and training materials. If so desired, Williamson County can contract with ES&S Professional Services to customize materials to the county's specifications.

9.8.3 Be capable of standalone and network operation.

Yes

ES&S does not recommend that the Election Data Manager and Ballot Image Manager be used over a network. It is currently designed to operate on a stand-alone basis because ballot design is not normally a multi-user task. All other modules of the Unity Suite of software can operate, and are intended to do so, over a network.

10. Voter Adaptation - Election Worker Adaptation

It must be noted here that Voter Adaptation and Election Worker Adaptation refer to the DRE Voting System and the OpScan Voting System, where applicable. The requirements of such shall include, but may not be limited to, the following:

10.1 Voter Comfort:

10.1.1 Font size should be adjustable for ease of sight;

DRE - Yes

The iVotronic system font sizes are adjustable and can be enlarged up to 14-point type. Current development efforts are concentrating on incorporating bitmap text images into ballot designs, which will allow ballots to incorporate any size font that can be produced by word processing software chosen for creating the bitmaps.

OMR - Yes

Any size font can be incorporated into an optical scan ballot design. However, there are limitations on space that must be taken into consideration when designing an optical scan ballot.

10.1.2 Ballot should be easy to read, follow a logical progression, be appealing to the voter's eye and include easy-to–follow instructions for use;

DRE - Yes

ES&S's watchword for ballot design is "voter use and visibility." The length of the ballot and its contents dictate the design. The iVotronic ballot can be designed for maximum readability, logical flow and appeal—subject of course, to state election laws, rules and procedures. Ballots can be designed in either "portrait" or split-screen formats, which can vary by ballot type and complexity.

OMR - Yes

ES&S optical scan ballots can be designed in a one-, two-, or three-column format. The length and complexity of the ballot dictates its design. Optical scan ballots can be designed for maximum readability, logical flow and appeal—subject to State election law, rules, and procedures.

10.1.3 Voter should be prompted when not using the device correctly;

DRE - Yes

The iVotronic system emits audible signals and displays prompts to assist voters and workers. The system does not allow voters to make mistakes such as casting their ballot without viewing all ballot pages, overvoting, or cross-party voting.

OMR - Yes

Model 100: Any error or condition that requires user intervention is displayed on the LCD of the Model 100 Precinct Ballot Counter. Although several different messages can be seen during the course of Election Day, the voter will only be given two choices.

Any message regarding a mis-fed ballot prompts the user to press the "OK" button and then re-insert the ballot. Any message concerning a ballot condition such as a blank or overvoted ballot prompts the user to either "Accept" or "Return" the ballot by pressing the appropriate button.

10.1.4 Device should be adaptable to all disabled voters, from a restructuring of the voting unit to the removal of the device for transporting to a non-ambulatory voter in an automobile;

The State of Texas certifies the ES&S iVotronic DRE as an ADA-compliant system. iVotronic voter terminals are completely ADA accessible.

In fact, the 9.75-pound, portable iVotronic unit can be placed directly on the lap of the voter, if so desired. In this way, the voter can vote with maximum ease and visibility. Voter terminals can also be disconnected from an AC outlet and used for curbside voting. The iVotronic has internal batteries that serve as backup power and power for other tasks such as curbside voting.

Figure 2. iVotronic System and Curbside Voting

Simply put, instead of trying to reinvent the wheel, we adopted technology that has already become increasingly familiar to many low-vision and blind voters. This technology is the same technology that will be increasingly encountered as other electronic services to blind or low-vision voters.

10.1.5 Device must meet all requirements for allowing a visually impaired or blind voter to cast a secret ballot, if so desired;

DRE - Yes

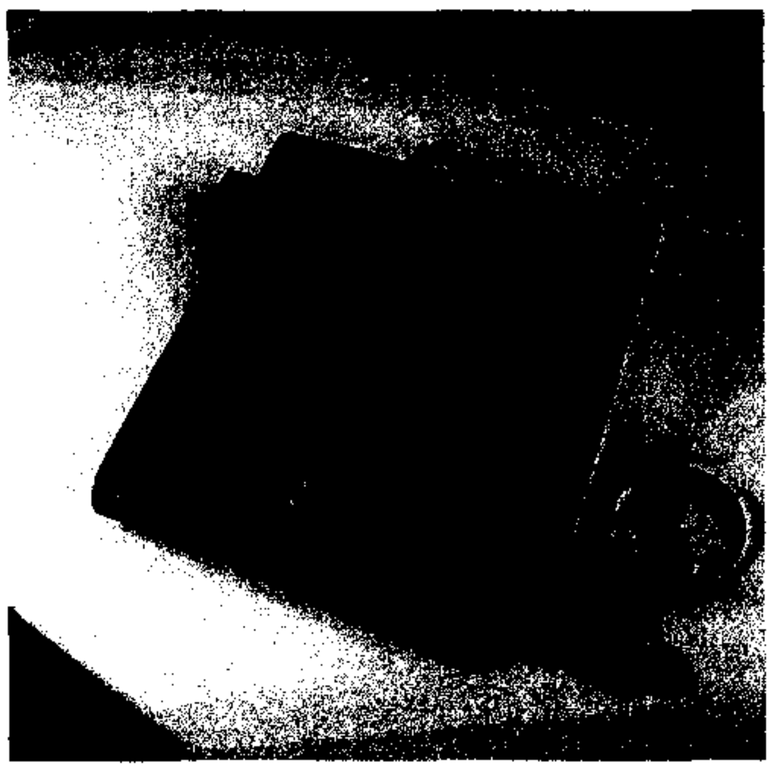


Figure 3. ADA iVotronic system with Audio Headphones

The iVotronic voting terminal incorporates a unique, field-tested audio-ballot capability that allows a low-vision or blind voter to vote with complete privacy and security. The iVotronic election system has incorporated assistance technology developed by the Trace Research Center at the University of Wisconsin, one of the nation's leading research organizations dedicated to developing accessibility technology for all electronic input devices.

The iVotronic system employs a set of raised accessibility buttons located in the bottom middle of the iVotronic screen. To proceed through the ballot, the voter is instructed to feel for the arrow-shaped up and down buttons. To register a candidate choice in an office, the voter reaches for, and depresses, a diamond-shaped button. To complete voting, the voter is prompted to depress the oval-shaped vote button at the top of the ballot. Voters can even make write-in selections on the iVotronic voter terminal.

Letters of Endorsement from users of the ES&S ADA iVotronic system are included in **Appendix A: ES&S References.**

10.1.6 Voter should be aware by clear means of ballot choice;

DRE - Yes

Once the touch screen is activated, ballot selections are made on the iVotronic system by applying light pressure to the screen with a fingertip. The area that the user presses to make a selection is either a box located next to the voter's choice of function, ballot, candidate, or the actual text.

A ballot is not cast until the voter completes voting on the ballot and presses the VOTE button.

OMR - YES

The voter marks the ballot by filling in the oval next to the candidate of choice. A vertical line separates columns on multi-column ballots so there is no confusion about which oval matches with which candidate. Also, voter instructions appear directly on the ballot.

10.1.7 Voter must be allowed to change selection until the voter is satisfied with choice.

DRE - Yes

The voter may review and/or change their selection an unlimited number of times before they cast their ballot.

The iVotronic system provides two methods for the votes to review their ballot prior to casting it.

1. The voter may review previous ballot pages by touching the "Previous Page" area on the screen. This touch causes the previous ballot page to be displayed with all candidate selections highlighted for easy review. A voter may also touch the "Next Page" selection on the screen to view ballot data on subsequent ballot pages.

2. An optional review method is activated during the ballot definition phase of ballot preparation in ES&S's Unity Election Data Manager. When activated, this method causes a Review Summary Ballot screen to appear after the last ballot page. The summary ballot screen provides the contest title of each ballot office, the number of selections allowed for the contest, and the candidate(s) currently selected in the office.provides the contest.

If no candidate is selected, a message appears in the candidate area under each office title indicating "No Candidate Selected." A voter may edit each office by simply touching the contest title they wish to edit and that contest is displayed showing all candidates selected and not selected. The voter may change contest selections and then return to the summary page to continue the edit process, or cast the ballot by pressing the vote button. a second time.

In addition, the County can choose to provide the available "undervote" option, which is activated when the voter depresses the vote button on the last page of the iVotronic ballot. When the button is depressed, the voter is provided with a list of offices where the voter made no ballot choices. At this point, the voter can either complete the ballot by depressing the vote button again or the voter can make additional ballot choices on the undervoted offices.

In the ADA mode, when a voter depresses the vote button on the last page of the ballot, the voter is provided two options through the voice files on the audio headset. The voter can complete the vote by depressing the vote button again. Or, the voter can choose to return to the ballot and make changes or additional choices.

Unlike other DRE voting devices, the iVotronic ADA system provides complete privacy to the blind or low vision voter by not displaying ballot data and choices on the display screen.

During ADA operating mode the iVotronic system only displays the message "Unit in Audio Assisted Ballot Mode." If a voter needs assistance from a poll worker, this message shows the voting unit's operational mode.

OMR - Yes

Traditionally, voters who make a mistake on an optical scan ballot must return their ballot to the local election jurisdiction before another ballot may be issued. The original ballot(s) are then spoiled and secured by the election body. Local election law dictates how many ballots an individual may be issued.

10.1.8 Voter must be allowed to review all ballot choices before casting the ballot;

If no candidate is selected, a message will appear in the candidate area under each office title indicating, "No Candidate Selected."

A voter may edit each office, if so desired, by simply touching the contest title they wish to edit. That contest will be displayed showing all candidates selected and not selected. The voter may change contest selections and return to the review page to continue the edit process, or cast their ballot by pressing the vote button a second time.

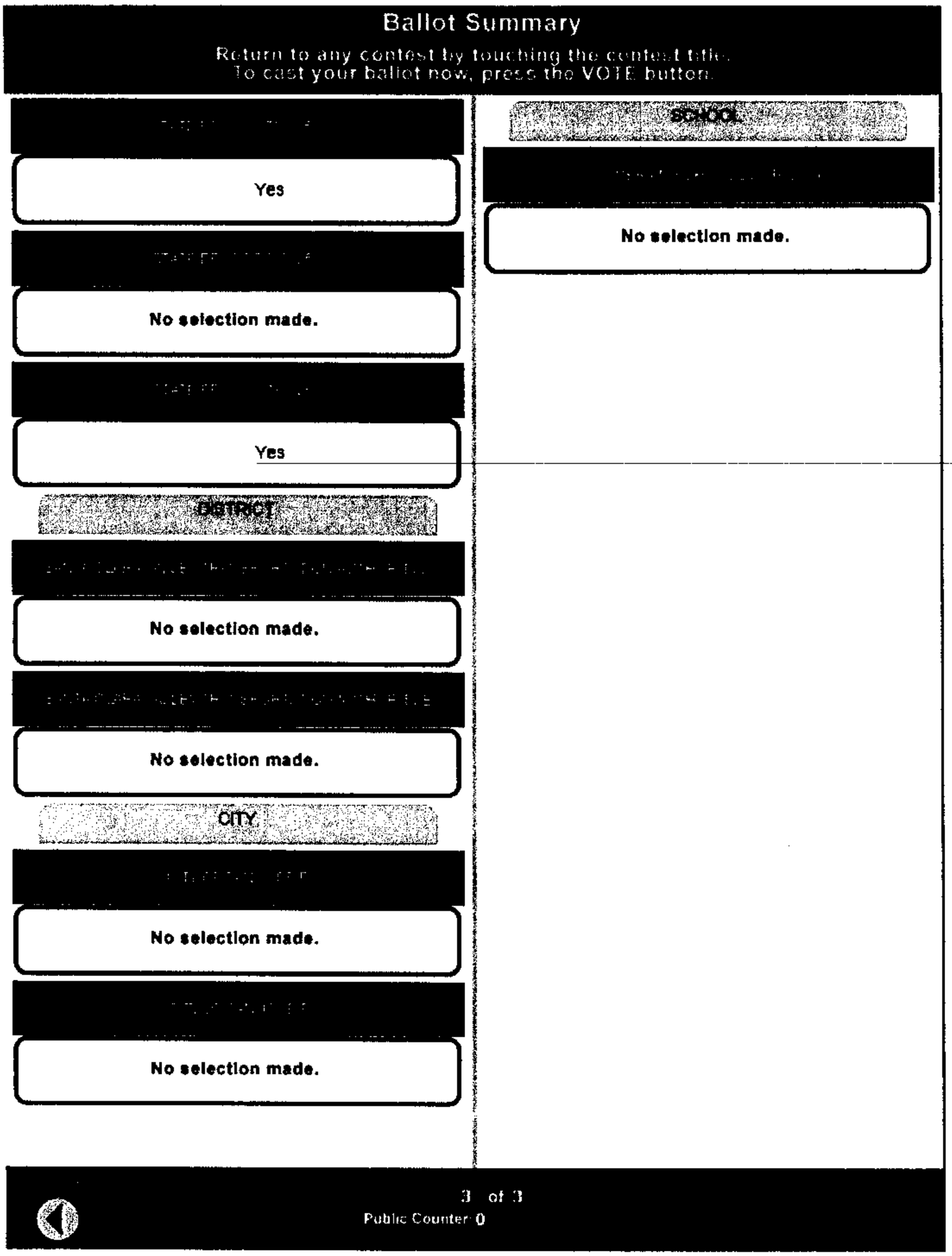


Figure 4: iVotronic Ballot Summary Screen

OMR - Yes

Optical scan ballots always allow voters the opportunity to review their ballots before casting their votes.

10.1.9 Voter booth must meet Secretary of State standards for privacy, either through utilization of current Williamson County voting booths or booths that accompany the offeror's product.

iVotronic Voter terminals come in a convenient carrying case that holds everything necessary to assemble a Voting Booth for the terminal. The voting booth is certified in the State of Texas as part of the system. The carrying case includes the following:

- Fold-Up Privacy Screens that Lock into Place
- Straight Leg Extenders
- Foam Padding
- Two-Leg Storage Brackets
- A Voter Instruction Card

The iVotronic booth and terminal are configured to function as one integrated unit. For example, the iVotronic case is constructed to allow external AC plug in/plug out capabilities directly through the booth case itself, rendering other booths hard to use. In addition, the booth design currently used in many jurisdictions does not have a top panel.

Figure 5: Poll Worker transporting iVotronic System and Voting Booth

The ES&S iVotronic booth provides a top curtain, providing privacy and visibility for a touch-screen device. The iVotronic booth is wheelchair accessible and sturdy enough to accommodate voters that rely on the booth to help support them as they vote.

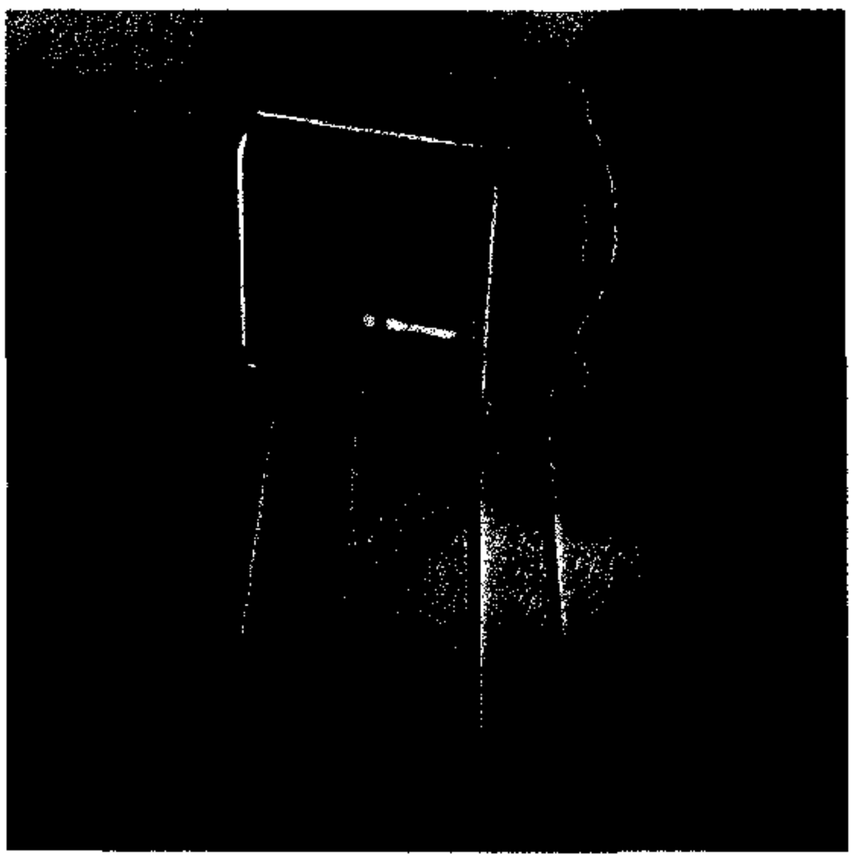


Figure 6: iVotronic System in Voting Booth

OMR – Yes

Model 100: Voters mark their ballot in a conventional private voting booth and then insert their ballot into the Model 100 precinct counter.

10.1.10 Demonstration unit should be available to allow voter to "practice" if necessary before entering the voting device itself;

Williamson County can use any of the units purchased as "demo" units. Any device can be loaded with a demonstration ballot and placed in the polls on Election Day for voters to "practice" with before they vote. ES&S systems are designed for maximum ease of usability for voters, poll workers, and Elections Staff. All systems are simple to learn and use, and can be operated by a voter with no prior training. **Please refer to Appendix E, for the ES&S Training Plan.**

10.1.11 Voter must be able to cast an "emphasis" vote in one or more races after voting "straight party" and still retain the vote for the selected party's candidate in any race in which an emphasis vote was cast.

DRE

Because Texas allows straight party voting in a general election, voters can vote a number of ways on iVotronic system. First, voters can vote a straight party which automatically chooses all that party's candidates in each office up to the "Vote for limit" (Assuming that party has a full slate of candidates). Second, if a voter wants to vote straight party for another party, the voter can either cancel the first party and vote the second party or simply choose the second party and the first party and all associated party candidates will be deselected.

After having made a straight party vote, the voter can also make a crossover (or "emphasis") vote by simply selecting another party's candidate(s) in any desired office. However, all other straight party choices in all other offices remain selected. In sum, iVotronic provides complete voter flexibility in changing ballot selections.

OMR

The Optical Scan systems allow the voter to vote for a candidate from the party not selected in a straight ticket by simply marking that different party selection in an office. The Scanners will read the straight ticket option, but also cancel the choice from the straight ticket and accept the different party choice. However, all remaining candidates for all other offices from the first party remain selected.

10.1.12 Voter must be able to cast a "crossover" vote in one or more races after voting "straight party" and record a vote for a candidate other than the selected party's candidate in any race in which a crossover vote was cast.

DRE - Yes

See answer in 10.1.11.

10.2 Election Judges and Clerks Comfort:

10.2.1 Voting device should be a weight that is easily managed by all election workers, regardless of gender or age.

DRE - Yes

Each DRE voting device weighs approximately 9.75 pounds and is easy to set up and operate by all people, regardless of gender or age.

OMR - Yes

The Model 150/'650 Central Ballot Counters are tabletop units that reside on top of a rolling cart. Any election worker can easily maneuver this cart.

The Model 100 precinct counters and carrying case weigh a total of 33 pounds. The only setup required is to lift the counter from the case and place it on top of the ballot box. Some jurisdictions choose to have the precinct counter delivered, in it's operational position, on top of the ballot box

10.2.2 If required, devices should be equipped with wheels for easy moving;

Yes

All ES&S systems are designed with wheels to facilitate the movement and setup of the devices.

10.2.3 Devices should be able to be transported, without damage to internal circuitry by means of Williamson County Road Crew trucks;

DRE - Yes

The iVotronic design has also taken into account the need to transport the system from the storage facility to polling locations, and back on a regular basis.

Specifically, the main CPU board and touch screen in all iVotronic terminals are mounted with an elastomeric substance that allows for jostling and returns the components to a normal operating position.

Also, the carrying case for the iVotronic terminals, which opens up as a voting booth, is padded with foam and is specifically designed to hold and protect the iVotronic terminal.

OMR - Yes

The Model 100 unit comes complete with an airtight and durable carrying case that can be locked and transported without additional packing. Its sturdy construction renders it capable of withstanding impact, shock, and vibration loads accompanying surface and air transportation.

10.2.4 Devices should be of such size as to be able to move through doorways into various size polling places for storage in a particular location within the polling place prior to Election Day use;

DRE - Yes

iVotronic terminals are stored and shipped in a self-contained voting booth specifically designed and engineered for the unit. The booth is the size of a medium size suitcase and weighs approximately 40 lbs.

The booth was designed to be carried like a suitcase, providing easy access to and from the polling location. Stacking pods on the booth allow 6 units to be stored in approximately 5 square feet of space.

OMR -

ES&S offers a sturdy, metal ballot box (see **Figure 7**) with easily maneuverable casters. Optional locking casters can be added.

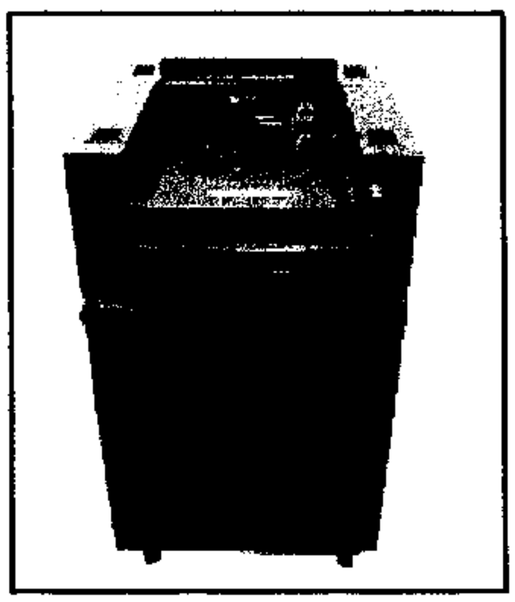


Figure 7: Model 100 Metal Ballot Box.

10.2.5 Devices should be able to withstand frequent loading and unloading, stacking, assembling, disassembling, reassembling, and heavy use;

DRE - Yes

The rugged design of the iVotronic booth allows the system to be stacked, stored, moved, loaded, unloaded, and used in a normal precinct count election environment.

OMR – Yes

The design of the Model 100 Precinct Ballot Counter allows the system to be stored, moved, loaded, unloaded, and used in a normal precinct count election environment.

10.2.6 Devices should be stackable, within the Williamson County Elections Administrator's Election Warehouse/Counting Station = 1,500 square feet;

DRE - Yes

Warehouse Storage Recommendations

Standard Pallet: 42" (106.7 cm) x 48" (122)

Stacks per Pallet: 2; 14 Sq. Ft. (1.3 Sq. M)

Booths per stack: 6 (maximum)

OMR - Yes

Storage Requirements Precinct Counter

Precinct Counters in their cases are 10.5"h x 16.5"w x 22"l.

Precinct Counters can be stacked 5 high. 5 Counters require 2.5-sq. ft. of floor space.

10.2.7 Devices should allow for an Election Judge or Clerk to assist a voter in activation, either through remote help or direct access to the voting unit;

DRE – Yes

The iVotronic system can function in two different configurations that differ in the manner that the Voter Terminals are activated for voters. The first configuration is Poll Official Activated. In this configuration, poll officials activate the terminal for the voter using the Master PEB. When the Master PEB is inserted, the poll official chooses the voter's correct ballot style, then leaves the voter to privately mark his or her ballot.

The second configuration is Voter Activated. In this configuration, poll officials activate a Voter PEB using a Supervisor Terminal at the check-in table(s). The voter then takes the PEB, activates the terminal, votes their ballot, and returns the PEB to poll officials as they exit the polls.

OMR – Yes

Model 100: The voter can operate the Model 100 precinct counter by simply inserting their ballot into the precinct counter. The voter may ask for poll worker assistance at any time during the voting process if encountering difficulty.

10.2.8 Election Judges and Clerks should have easy access to all activity taking place in the voting units, being able to monitor the movement of voters into and out of the voting booth;

DRE & OMR - Yes

All ES&S voting booths and systems with accompanying voting booths allow the voter maximum privacy but allow poll officials to monitor activity around the voting booths. **Please refer to the Workflow Diagrams in Appendix D of this proposal.**

10.2.9 Election Judges and Clerks should have (a) method of immediate detection if a voting unit is not operating properly;

DRE - Yes

In the rare circumstances where machine problems occur, the iVotronic system diagnoses the problem, makes an audible chirping noise, and displays an error message on the screen which details the problem and the requisite steps to resolve the problem. Depending on the screen message, appropriate action can then be taken. We train election workers to contact Election Central, describe the problem as delineated on the screen of the iVotronic Voter or Supervisor Terminal, and decide which corrective action must be taken. With the 9.75-pound iVotronic voting unit, it is possible to carry an errant unit to the telephone to describe any problems to maintenance personnel.

OMR – Yes

Model 100: Any error or condition that requires user intervention is displayed on the LCD of the Model 100 system. Although several different messages can be seen during the course of Election Day, the poll worker will only be given two choices. Any message regarding a mis-fed ballot prompts the user to press the "OK" button and then re-insert the ballot.

Any message concerning a ballot condition such as a blank or overvoted ballot prompts the user to either "Accept" or "Return" the ballot by pressing the appropriate button.

10.2.10 Programmable memory device should be easy for Election Judges and/or Clerks to operate after the closing of the polls;

DRE - Yes

At the close of the polls on Election Day, the Master PEB used to open terminals downloads a set of results from each iVotronic voter terminal. The Master PEB is inserted, the “yes” response to closing is activated, and upon prompting, the PEB is easily removed and inserted into the next and subsequent terminal to be closed. The iVotronic terminal can only be closed after poll closing, documented by each iVotronic system’s internal Real-Time Clock.

OMR – Yes

At the close of the polls on Election Day, the poll official removes the Model 100 PCMCIA card from the Model 100 unit for transport to their designated Regional Site. The official unlocks the sliding door on the front of the Model 100 ballot box and removes the card by pushing the eject button next to the card slot. The card is ejected. The officials secure the card in the appropriate transport envelope and delivers it to the Regional Site for results transmission to Election Central.

10.2.11 Devices should be "tamper-proof" while in a storage configuration either in the warehouse or the polling location.

DRE - Yes

Seals are placed on the iVotronic voting booths to prevent opening of the unit and gaining access to the Voter Terminal, without detection. Physical security (i.e., locking and security) is also important.

For example, many clients provide extra security for programmed PEBs since these represent critical election ballots that must be afforded the same level of protection as printed ballots.

Similarly, once terminals are cleared, tested, and implanted with the new EQC, any attempt to tamper with individual terminals will be detected.

OMR – Yes

Model 150/650: The securities of the Central Ballot Counters reside within the election definition. No data other than the current election ID data may be added to or updated.

The Electronic Erasable Programmable Read Only Memory (EPROM), contains the election definition in addition to the control program for the scanner. When the EPROM is removed, the scanner becomes inoperable.

The EPROM chip is contained at the rear of the unit and secured by a keyed lock. The locking rear panel prevents unauthorized access to the internal components, inclusive of the election program EPROM.

Model 100: – The Model 100 Precinct Ballot Counter is secured with a security shield that covers the unit. The Model 100 system is then locked onto the top of the ballot box, which prevents the security shield from being removed. The ballot box contains keyed locks to prevent the entry into the ballot compartments, the tabulator platform, and the ballot slot. If all the doors are closed and locked, there is not access to the ballot box even after the tabulator is removed.

11. Training and Voter Education

It must be noted here that Training Requirements refer to the DRE Voting System and the OpScan Voting System, where applicable.

Such requirements shall include, but may not be limited to:

11.1 Offerer must be prepared to offer extensive training program on all phases of the Voting System(s) to all personnel, including but not limited to:

11.1.1 The Elections Department, which shall be responsible for the administration of all election related functions, as well as the storage, maintenance programming and transportation of all equipment and the programming of the tabulating equipment and the production and electronic storage of all election results;

11.1.2 The Central Counting Station personnel, who shall be responsible for the intake and tabulation of all election returns;

11.1.3 In addition, the political subdivisions in Williamson County that will utilize the new Voting System(s) must be trained on the applicability of the new technology to their individual elections. Training should be to an extent that Williamson County personnel will be able to independently administer an election on the new Voting System(s) without proposer presence. Information must be provided in writing and through a series of individual and group training sessions, which should include a "hands-on" approach to using the new system.

The ES&S Training Program is inclusive of hands-on, high-level system training on all electronic components relative to the Model 650 and Model 150 Absentee Mail Systems, the iVotronic DRE Touch Screen system, Model 100 Precinct Ballot Counter and the Unity Election Management System.

Please refer to Appendix E, for the ES&S Training Plan.

11.2 At a minimum, the following subjects shall be included in the individual and group training sessions:

11.2.1 Programming of units;

11.2.2 Preparation of each individual unit;

11.2.3 Preparation of polling place to accept voting devices;

11.2.4 Electronic transmission of election results;

11.2.5 Tabulation of results;

11.2.6 Equipment and software used at the central counting station;

11.2.7 Information to be used in training Election Judges and Clerks;

11.2.8 Methods of ensuring the accuracy of precinct results;

11.2.9 Full understanding of the audit procedures;

11.2.10 Conduct of a recount;

11.2.11 Conduct of a contest;

11.2.12 Records preservation requirements;

11.2.13 Printing, designing and reformatting election reports;

11.2.14 Troubleshooting to solve temporary problems;

11.2.15 Safeguards to prevent tampering or theft;

11.2.16 Hot points for system errors.
11.2.17 Counting of "late ballots";
11.2.18 Counting of "provisional" ballots.

The comprehensive training program proposed by ES&S is based on our demonstrated, successful training program for the Model 100 systems. Our training program is inclusive of the items listed above. **Please refer to Appendix E for the ES&S Training Plan.**

11.3 Proposer must be prepared to offer extensive training for early voting by mail personnel, early voting by personal appearance personnel and Election Day personnel. Training by proposer, together with assistance from Williamson County Elections Administrator personnel, should produce a system whereby these individuals will be able to independently conduct an election in their respective polling locations, without on-site assistance. Again, information must be provided in writing, in the form of manuals or videos, or the like to assist in carrying out an election on the new Voting System(s) without fault or failure. Before reaching this independent stage, proposer must be prepared to offer individualized "hands-on" training classes for election personnel, until the Williamson County Elections Administrator is satisfied that an independent confidence has been established.

The effective training of Absentee/Early Voting and Election Day personnel is directly related to both the successful initial adoption and ongoing operation of any new voting system.

Indeed, ES&S contends that this is the *most* critical component of our installation and support plan for the Election System we propose to Williamson County. Simply put, the precinct official training program can either make or break an election system installation and its ongoing functionality. **Please refer to Appendix E for the ES&S Training Plan.**

11.4 At a minimum, the following subjects shall be included in the training sessions mentioned above:

11.4.1 Setting up and testing the voting equipment;

11.4.2 Operation of the voting device from start to finish;

11.4.3 Processing of voters, from the regular voter, to the challenged voter;

11.4.4 (This item was left blank in the original RFP)

11.4.5 Troubleshooting methods to quickly identify and resolve any problems;

11.4.6 Daily opening and closing of early voting by personal appearance locations; the one time opening and closing of polling locations on election day;

11.4.7 Modem transmission of election results;

11.4.8 Printing of zero counts before and after the polls open and close;

11.4.9 Assisting voters who require help while in the voting process;

11.4.10 Immediate determination of device problems;

11.4.11 Using the battery backup during electrical failure;

11.4.12 Taking a malfunctioning piece of equipment out of service;

11.4.13 Closing the polls and producing results in any of the methods available for that particular device.

The Training Plan developed by ES&S will provide hands-on training inclusive of the items listed above. **Please refer to Appendix E for the ES&S Training Plan.**

11.5 Williamson County may require that Voter education be addressed in (the) form of flyers, videos, shopping mall displays, Website sources, public service announcements through the media and other such methods proven as reliable in informing and educating voters on the proper operation of the new equipment. Education through civic associations, labor unions, committee meetings, chamber meetings and the like, should also be addressed in responding to this RFP.

ES&S offers a public information, education, and outreach program to introduce and inform the public about the new iVotronic DRE Touch Screen System and our Model 100 Precinct Ballot Counter.

Our research and experience has shown that while media coverage, sample ballots, and other printed materials are important, the most effective way to educate and inform voters is through hands-on, on-site "mock" voting on the iVotronic terminal prior to Election Day.

As part of our optional Voter Education Program, ES&S will assist Williamson County in developing a program specific for the County's needs. The heart of our voter information and education program will be to:

- Identify community groups
- Schedule a select number of high-impact demonstrations
- Recruit and train voter education specialists
- Program iVotronic voter terminals with mock ballots
- Assist in the overall management of the project

Please refer to Appendix F, ES&S Connect™ Voter Education and Voter Outreach Plan for plan options.

11.6 Successful proposer shall provide, throughout the term of this contract and upon the request of Williamson County, additional training for new employees in key roles at no additional charge to Williamson County.

ES&S has outlined a training plan in this proposal for the County's review and approval.

If additional training is required, for example, because of turnover of the County's key employees, ES&S will be happy to provide the requested additional training at rates and times to be agreed upon by the parties.

11.7 Any other training, except as specifically mentioned herein, shall be provided to Williamson County by the successful offerer at mutually agreed upon rates.

ES&S acknowledges the requirements of this Subsection 11.7 and agrees to work with Williamson County to provide additional training the County feels it needs at rates and times to be agreed upon by both parties.

12. Warranty, Support and System Documentation

12.1 Warranty commensurate with voting system standards in existence at the time of the awarding of the proposal;

ES&S will provide a one-year warranty on our proprietary equipment and software. Such warranty provides that ES&S will repair or replace any component of our proprietary equipment or software which, while under normal use and service, (a) fails to perform in accordance with its documentation in all material respects, or (b) is defective in material or workmanship. ES&S will also warrant that our proprietary equipment and software will operate in conjunction with all third party equipment and software that meets ES&S' specifications, provided elsewhere in this Proposal. This warranty will be provided subject to certain conditions, including without limitation a requirement that the County promptly notify ES&S of any failure of performance or defect.

12.2 Acceptance testing for each unit delivered;

ES&S encourages the County to utilize mutually agreed upon acceptance criteria for the purposes of acceptance testing and payment for, deliverables agreed to in the contract. ES&S' Standard Agreement contains objective acceptance testing criteria to be used by the parties in connection with the County's acceptance of the hardware and software to be provided under the contract. ES&S respectfully requests that the County review and consider the previously developed acceptance criteria for the purposes of objectively determining whether or not the system components meet minimum acceptance criteria.

12.3 Analysis of the life expectancy of each piece of hardware and software;

In accordance with FEC standards, our voting systems are designed to withstand normal use without deterioration or excessive maintenance costs for a period of ten (10) years. In addition to the one-year warranty provided to the County, ES&S offers post-warranty maintenance and support agreements that will, among other things, ensure compliance with FEC voting system standards. In addition, ES&S will at all times support both the current and previous versions of Microsoft (TM) software and other third-party operating system software that we may employ in our software and firmware products. As it may become necessary for the County to procure new or additional third-party hardware that remains compatible with any new versions of, or necessary updates to, proprietary or third-party software, ES&S has included in its pricing proposal the anticipated costs for such hardware over a ten-year period.

12.4 Documentation on support and training history;

Our unparalleled experience is a prime reason ES&S is continually selected "vendor of choice."

A partial list of ES&S partnerships that reflects our ability to provide support and training to major jurisdictions is provided in **Table 1.** The column labeled PWs reflects the number of actual poll workers trained directly by ES&S associates. Other jurisdictions listed implement the Train-the-Trainer Program. **Please refer to Appendix E for the ES&S Training Plan.**

Table 1. Support and Training to Major Jurisdictions

JURISDICTION	YR.	REG. VOTERS	POLLS	PWS
Miami-Dade County, Florida	81/00'	1,600,000	2,536	15,000
Sarasota County, Florida	2002	220,485		1,490
Cook County, Illinois	76/99'	1.5 million	2,540	15,000
City of Chicago, Illinois	81/99'	1.6 million	2,536	
City of Detroit, Michigan	1998	650,000	650	
Commonwealth of Rhode Island	1997	632,000	587	3,500
Dallas County, Texas	1998	1.1 million	795	
Hennepin County, Minnesota	1999	535,000	430	
Maricopa County, Arizona	1996	1.5 million	953	
San Mateo County, California	1992	375,000	522	3,815
State of Hawaii	1998	600,000	380	2,088
State of Maryland*	1994	17 jurisdictions		
State of Oklahoma	1992	2.5 million	2,108	8,400

12.5 Documentation showing that system is upgradeable;

As a part of ES&S' one-year warranty for our proprietary equipment and software, ES&S may provide new releases or upgrades to the software, along with appropriate documentation, on a schedule defined by ES&S ("Updates").

Upon the expiration of the warranty, the County may elect to receive software maintenance and support, as described in ES&S' Standard Agreement. Updates will continue to be provided by ES&S as long as the County receives software maintenance and support.

12.6 Documentation that shows the temperature requirements for storage of the units and the range below and above that number for possible system failure or loss of performance;

All ES&S systems have been designed and built to meet or exceed the NASED/ITA environmental and handling test requirements.

These tests include parameters relating to environmental extremes of humidity and temperature and handling scenarios that include shock, vibration, and dropping. All of these matters can be found in the ITA certification reports from Wyle labs.

DRE

The iVotronic Voting System will operate in a polling place environment with temperature ranges of 60°F-100°F and less than 95% non-condensing humidity. Storage Conditions are 0°-120° F.

OMR

The Model 650, Model 150, and Model 100 units withstand storage temperatures ranging from -15° to +150° F and is capable of operating throughout a temperature range of +40° to +100°F. Humidity for storage should not exceed 88%.

12.7 Documentation showing that construction components are non-corrosive material and meet strength test requirements;

All systems are constructed of non-corrosive materials. However, the iVotronic terminal and the iVotronic PEB both contain components that could be interpreted as corrosive. The PEB contains a lithium battery, but the case is designed so the battery is self-contained and a security screw is employed to ensure that it is not accessible to the end-user. The terminal contains a lithium battery and a NiCad battery pack.

Again, the case is designed such that the lithium battery is self-contained and security screws are also employed here to ensure that it is unaccessible to the end user. The battery pack is accessible by the end user, but it is fully insulated with no exposed terminals. It employs a thermal fuse—an added safety measure—to prevent any threat should the battery terminal become shorted.

OMR

All ES&S OMR systems are of sturdy construction rendering them capable of withstanding impact, shock, and vibration loads accompanying surface and air transportation.

12.8 Manuals, videos, specifications and the like for all equipment, hardware and software that are part and parcel of the Voting System(s);

ES&S will provide manuals, existing product overview presentations, and documentation for the proposed Williamson County system. All training materials will be provided as part of the proposed Williamson County system implementation.

12.9 Complete user and technical documentation, printed and in an electronic format.

ES&S will provide user and technical documentation on all proposed products as part of the system implementation. Documentation will be provided in printed and electronic PDF format.

13. Voting System(s) Errors—Reporting and Remedies

The Proposer shall immediately inform the Williamson County Clerk's Office of any system error occurring in any facility in which the voting system is being utilized. Errors shall include, but may not be limited to, hardware and software errors. All said errors should be fully analyzed as to the cause and remedy for same. If there are such system faults, there will be no charge to Williamson County for the remedy. Williamson County reserves the right to address the errors individually, if necessary.

As noted in our response to **Bid Terms and Conditions, Appendix C** of this proposal:

In preparing a response to this Section, ES&S assumes that "any facility" is any location within the County in which the voting system is being utilized to conduct an election. Assuming that our interpretation is correct, our response is as follows:

In the event an error occurs in the usage of the voting system, we will agree to promptly notify the County. In this regard, it will be appropriate to structure guidelines on what constitutes an "error." ES&S agrees there will be no charge to the County for remedying the "error," so long as its cause is not due to the act, error, omission, or negligence by, or on behalf of, the County, its employee, agent, or representative.

14. Answer These Questions About Your Voting System(s)

14.1 Identify each item of equipment, software and service you are proposing on a separate price sheet. Beside each item, include the price per unit (sale or lease or contract, if different), the total number of devices recommended and the total price (sale or lease or contract, if different).

The proposed systems have been listed in detail in the Pricing Proposal prepared in response to this RFP. **Please refer to Section 7, Pricing Sheets.**

14.2 Describe the particulars of your DRE Voting Device:

14.2.1 Definition of screen sizes;

The proposed DRE voting device screen size is 12.1".

14.2.2 Definition of font sizes;

The iVotronic ballot can currently be designed using 6-14 point type.

14.2.3 Definition of color options;

Special regions—office, party or voted candidate names—can be highlighted for effect in different colors.

14.2.4 Weight of each individual device;

Table 2. Equipment Specifications

Equipment Description	Weight
12.1" Terminal	9.75 lbs.
Polling Booth	32.55 lbs.
12.1" Terminal and Booth	42.3 lbs.
PEB	.25 lbs.

14.2.5 Weight of accompanying hardware;

See **Table 2** above.

14.2.6 Booth availability;

Voter Privacy: The iVotronic system provides voter privacy throughout the voting process. Each voter terminal booth is equipped with privacy side panels and a top panel. A person must stand directly over the iVotronic display to clearly view the screen. The backlit LCD ballot screen is designed to prevent anyone from reading a voter's ballot screen.

14.2.7 Language availability;

The iVotronic system can employ virtually any written language. When a multiple language ballot is needed, the first screen voters see is the ballot language choice. After the voter chooses their language of choice, the ballot appears in that language and that language alone.

14.2.8 Methodology for voting by the disabled;

The State of Texas Certifies the ES&S iVotronic DRE system as an ADA-compliant system

The iVotronic voting terminal incorporates a unique, field-tested audio-ballot capability that allows a blind or low vision voter to vote with complete privacy and security.

- The iVotronic system employs a set of raised accessibility buttons located in the bottom middle of the iVotronic screen. To proceed through the ballot, the voter is instructed to feel for the arrow shaped up and down buttons. To register a candidate choice in an office, the voter depresses, a diamond shaped button. To complete voting, the voter is prompted to depress the oval shaped vote button at the top of the ballot. Voters can even make write-in selections on the ADA iVotronic voter terminal!
- iVotronic Voter Terminals are lightweight and battery powered, they can be placed on a table if someone needs to sit while voting, placed in the lap of a person in a wheelchair, or taken to a car for curbside voting.

14.2.9 Are devices independent or interconnected;

Each iVotronic Voter Terminal is an independent system that records the ballot images of ballots actually voted on that terminal; there is no main processing unit that ties all the systems together during Election Day.

ES&S specifically designed the iVotronic system with individual, independent units to eliminate the fear of a main processing unit failure. Each iVotronic-voting terminal has three independent internal Flash EPROM and one removable CompactFlash Card. Each voter's ballot image, of his or her vote selection, is recorded in each device when the voter casts his or her ballot. These independent memories are compared to each terminal cycle for accuracy and completeness.

14.2.10 Is the device a touch-screen, stylus activated, wheel activated, or other;

An easy-to-use touch screen acts as the interface between the iVotronic terminal and the system users. This touch screen displays ballots to the voters, and system messages, instructions and settings to the election officials. Reusable PEBs activate the touch screen.

Once the touch screen is activated, ballot selections are made on the iVotronic system by applying light pressure to the screen with a fingertip. The area that the user presses to make a selection is either a box located next to the voter's choice of function, ballot, candidate, or the actual text.

14.2.11 List any other features that distinguish your unit;

There are several key additional features that distinguish the iVotronic system from other touch-screen systems.

- The State of Texas certifies the iVotronic audio ballot as ADA-compliant.
- The iVotronic ADA terminals use proven, tested ADA technology that is quickly becoming used in everyday applications such as ATM machines. The iVotronic system is designed for easy upgrading, as necessary.
- The iVotronic system uses real voice files for low-vision or blind voters. Some systems use synthesized voice data that is difficult to understand, especially for candidate names.
- The iVotronic system transmits the results by modem directly from the polls.
- The iVotronic system produces an *accumulated* zero report and precinct results reports at each poll.
- The iVotronic system is currently Internet capable.
- Each iVotronic voter terminal is, in effect, a separate election system. Generic terminals are not precinct-specific until opened on Election Day. This makes delivery extremely simple.
- The iVotronic system is characterized by Ease of Election Day Operation. Opening the polls takes one action by a poll worker. Voting is accomplished by the voter touching the screen to register his or her choices.
  There are no numbers to insert, no dials to twist, and no smart cards that may be used incorrectly.
- Closing the units and printing/transmitting election results is the simplest in the industry.
- We have proven we accommodate early voting.
- We have proven we accommodate curbside voters.
- We have proven we accommodate provisional voters.
- We have proven we integrate election results from a variety of ballot configurations.

14.3 Describe the particulars of your OpScan Voting Device:

14.3.1 Size of paper ballot available;

The **Model 150** system will accept an 8.5 x 14-inch ballot. The Optical Scan ballot may be single- or double-sided and in the form of one or more cards as required.

Table 3. Model 150 Ballot Design Parameters

Standard Ballot Size	Voting positions per column/side
81/2" x 14"	36 x 3 columns = 108/side

The **Model 650** and **Model 100** systems will accept 14", 17", and 19" ballots. The optical scan ballot may be single- or double-sided and in the form of one or more cards as required.

Table 4. Model 650 and Model 100 Ballot Design parameters

Ballot Size	Number of positions	Columns	Total Positions
14" Ballot	36 positions per column	6 columns	216 total positions
17" Ballot	41 positions per column	6 columns	241 total positions
19" Ballot	51 positions per column	6 columns	306 total positions

14.3.2 Font sizes available;

There is no limit to the number or size of TrueType fonts that can be used on a ballot.

14.3.3 Colors available;

Any color, shading, graphics, and lines may be used with certain restrictions (e.g., darkness of shading and how close the lines, shading, color screens and graphics may be to active voting positions).

14.3.4 Columns available;

The ES&S OMR ballots are designed with a maximum of three columns on the front and three columns on the back.

14.3.5 Marking devices that can be used;

The Optical Scan ballots require no special marking device. Any type of ink pen can be used in marking the response area of the ballot, with the exception of red, green, and yellow. ES&S does however recommend the use of the Bic Round Stic medium point ballpoint pen, which can be purchased at any office supply store.

If you choose to use pencils for ballot marking, ES&S recommends the Ebony pencil, since all ballot marks need to be dark enough to be read by the counter. Using a pencil other than an Ebony pencil may result in the ballot being returned to the voter.

14.3.6 Counting and correcting process for reading ballots;

The Model 150 and Model 650 central counter systems accurately record and report each ballot read by the system. Any ballot reading error results in an immediate halt in the counting process causing the system to immediately displays the appropriate warning message to the operator.

As a ballot is read, the Model 150 and Model 650 systems provide the following:

- The scanner reads the ballots and checks the pre-printed codes along the edge to determine each ballot's precinct and type.
- The scanner reads voter choices for candidates or issues. This entire process takes only a fraction of a second for each ballot.
- As the scanner reads the ballot, it checks for irregularities. As a safety feature (e.g., torn ballot), the machine stops and provides the operator with easy-to-understand instructions for handling their ballot.

Note: *To ensure ballot reading accuracy, ballots should be printed according to the recommended ES&S specifications and requirements.*

The Model 100 system can be programmed to alert the voter/poll official of an over-voted ballot. In the case that a voter makes a mistake, the Model 100 system will stop and hold the ballot to allow voter privacy. At the same time it will emit an audible signal and indicate the specific problem on the LCD display. At this point, the voter or election official will be prompted to have the counter either accept or reject the ballot.

If the voter wishes to mark another ballot, the original ballot is placed in a spoiled ballot envelope and the voter is issued a new ballot.

As each ballot is scanned, the Model 100 will tally all acceptable votes and increase the running total for each race.

14.3.7 Over vote and Under vote procedures;

Model 150/650: The procedure for correcting overvoted and undervoted ballots is described in our Section 14.3.6 response.

Ballots containing overvotes or undervotes are reviewed by the "Ballot Review Committee" for clarification of voter intent based on State election law.

Model 100 Precinct Ballot Counter: The Model 100 system can be programmed to alert the voter/poll official of an over-voted ballot or a blank ballot. The procedure for correcting overvoted and undervoted ballots is described in our Section 14.3.6 response. Ballots containing overvotes or undervotes are reviewed by the "Ballot Review Committee" for clarification of voter intent based on State election law.

14.3.8 Speed of count;

The Model 650 system processes ballots at a rated speed of 300 per minute and the Model 150 system processes ballots at a rated speed of 150 per minute.

The Model 150/650 systems are designed to read any type or style of ballot, from any precinct, in any sequence without pre-sorting or special program instructions during tabulation. Folded or creased ballots can be processed without extensive special handling requirements and do not need to be pre-scored during the printing process. Both central ballot counters identify overvotes, write-ins, blank, and mutilated ballots during ballot processing.

The Model 100 precinct ballot counter scans a ballot, reading both sides of the ballot simultaneously in a matter of seconds. NASED ITA testing shows the ballot transport speed is 7 inches per second. With continuous feeding, approximately 15 ballots can be scanned per minute, which is approximately 1,000 hand-fed ballots in one hour. The counter's speed ensures ballot reading accuracy while still preventing lines from forming at the polls.

14.3.9 Quality and weight of paper that can be used;

The Model 650, Model 150, and Model 100 optical scan ballots are printed on standard white 80 lb. opaque paper.

14.3.10 List any other particulars that distinguish your unit.

Model 650 and Model 150 Central Ballot Scanners

- The Model 150 Central Counter has a rated speed of 150 ballots per minute and the Model 650 Central Counter has a rated speed of 300 ballots per minute. These Central Counter systems can read both sides of the ballot simultaneously. They are capable of processing all by-mail ballots within the unit and require no external PC connections to tabulate results.
- Easy-to-use operator interface makes learning to use the systems easy and require absolutely no computer knowledge to operate.
- The proposed ES&S systems provide for results reporting capabilities directly from the Model 650 and Model 150 systems or from ES&S Unity Election Reporting Manager Software.

  Model 650 and Model 150 reporting provide standard reports to include multi-level jurisdiction and multi-purpose reports.
- The systems provide an "Event Log" and a "Status Log," a "Long Summary" report, which includes overvotes and undervotes, and a "Media" Report.

- The Model 650 and Model 150 systems provide a public counter on the unit's control panel display. The system is configured with a log printer that provides for a real-time, on-going hard copy audit log to record the total number of ballots counted on a per-batch basis.
- Reports are available on demand and can be produced at any time during the ballot counting process.

Model 100 Precinct Ballot Counter

- **Security and Reliability.** The Model 100 with its rugged, stainless steel chassis features two independent, lockable ballot containers to separately retain both write-in and oval/arrow response area ballots. An emergency ballot compartment is also included to securely store ballots.
- **State-of-the Art Flexibility.** Driven by an Intel™ processor, the Model 100 system uses QNX™ operating software, which provides real-time resource management, true multi-tasking capability, and unparalleled election accuracy. The Model 100 system also efficiently processes right or left-hand oval and arrow response-area ballots, and ballots may be inserted without any orientation restrictions.
- **Fast Election Reporting.** The Model 100 system's internal thermal printer legibly prints out vote totals, and enables election officials to immediately transmit results to election central.
- **Transmission Options.** The system also comes equipped with dual PCMCIA slots, and optional CDPD modem for transmitting results, and two external serial ports an done parallel port allowing the connection of a wide array of external components. All election definition programs are securely retained on the PCMCIA memory card within each Model 100 unit.
- **Tested, Certified, Proven.** The Model 100 system has been fully tested by an independent testing authority, certified to meet or exceed the rigorous standards of the U.S. Federal Election Commission, and proven through the use in thousands of actual elections worldwide. More than 12,000 Model 100 units are accurately and reliably supporting election throughout the world today.

14.4 How does the Voting System(s) allow the voter to vote a straight party vote, a crossover?

DRE

When the voter selects a straight-party option, the terminal automatically selects all candidates representing the chosen party in all partisan contests on the ballot. If the voter deselects that straight-party option, all candidates who were automatically selected in that chosen party become automatically deselected.

If the voter selects a straight-party voting option, and then chooses a different straight-party option, all of the candidates that had been selected by this first straight-party option will automatically deselect. The candidates that represent the second straight-party selection will become highlighted.

The iVotronic system allows the voter to vote for a candidate from the party not selected in a straight ticket by simply making that new selection in an office. This will cancel the choice from the straight ticket and accept the new choice by use of a single action. However, all remaining candidates for all other offices from the first party remain selected.

OMR

The Optical Scan systems allow the voter to vote for a candidate from the party not selected in a straight ticket by simply marking that different party selection in an office. The Scanners will read the straight ticket option, but also cancel the choice from the straight ticket and accept the different party choice. However, all remaining candidates for all other offices from the first party remain selected.

14.5 How are write-in votes handled on each Voting System(s)?

DRE

The iVotronic DRE Voting System provides a most advanced, yet simple, methodology for accommodating and capturing write-in votes. A write-in vote location occurs directly under each office where write-in voting is allowed. If a voter selects the box beside the words "Write-In," a text entry screen is automatically displayed. It allows the voter, in fluid motion, to select individual letters spelling out the candidate's name (and address in some states) for whom the voter wishes to vote.

The written-in name is then displayed on the text screen and can be corrected, if needed. When the voter has finished and presses **>>Accept<<** on the screen, the ballot reappears with the write-in name selected. A write-in vote location is provided in each office where write-in voting is allowed. The write-in name may be changed or deleted anytime prior to the voter casting his or her ballot. Write-in names are printed on the polling location results tape in the proper office location for which they belong.

OMR

Model 150/650: To enter a write-in candidate, the voter fills the oval beside the write-in line for the office of his/her choice and writes the name of the candidate. The Model 650 and Model 150 Central Ballot Scanners can be programmed to stop on a write-in ballot.

When processing is halted due to a write-in ballot, County staff are able to determine whether the write-in names are valid and/or certified. After write-in candidates are hand-tallied, the ballots containing write-in votes are sent back through the scanner to count the remaining offices on the ballot.

Model 100: Voters indicate their intent to write in a candidate's name by filling in the oval to the left of the line provided for write-in candidates. The Model 100 system can be programmed by using the diverter mechanism inside the system's ballot box to separate those ballots containing write-in votes from the ballots containing no write-in votes. At that point write-in votes can be manually logged at either the precinct or a regional or central counting unit.

14.6 How are provisional voters' ballots handled?

DRE

The iVotronic DRE voter terminal has the capability of processing electronically provisional ballots and has employed this capability in many Texas Counties. ES&S pioneered the ability to accommodate challenged ballots electronically directly through the voter terminal. Provisional voter ballots receive a unique alphanumeric code at the time the ballot is prepared for the voter.

This unique number is then electronically "attached" to the provisional voter's ballot image in the audit trail and is used after Election Day for the special processing of the ballot image prior to final certification of official election results. The Unity Election Management software provides the tools required to process coded ballots and generates the official election results.

OMR

Handling optical-scan provisional ballots is a manual and logistical task that is accomplished by the election officials prior to ballot tabulation. Texas Election Law guides all provisional ballot-handling routines.

14.7 Describe in detail the method for handling recounts on each Voting System. Electronic recount? Manual recount? Including the Secretary of State mandated manual count of ballots after an election? Can each voter's ballot be reproduced as is? If so, does voter anonymity remain in place?

DRE

The iVotronic System allows jurisdictions to choose from several recount options, depending on jurisdictional preferences. A list of options follows:

- A jurisdiction may use the Master Supervisor PEB that was used to close the polls and tally the election night results to reprint the Precinct Results Tape on the day of the recount.
- A jurisdiction may choose to clear out the election night vote totals in the Unity software and reload the results into the program on the day scheduled for the recount. Those results are uploaded into the software from the Master Supervisor PEBs that were used to close the polls and tally Election Night results via a Supervisor Terminal.
- A jurisdiction may choose to recollect totals from every machine in a precinct into a new PEB and print out a precinct results tape to verify against the original tape printed out Election Night.
- A jurisdiction may use the iVotronic audit trail to print individual ballot images, then hand count results if so desired.

OMR

Audit materials, along with the permanent, secret record of the cast ballots, provide the basis for any recount or contest of election with the OMR tabulation system. Recounts can be conducted in the following manner:

- Electronic re-tabulation of ballots on the same scanner, or if required, using a different Model 150/Model 650 high-speed scanner. The ballots fed through the scanner and the results are compared on a precinct-by-precinct basis.
- A manual recount may be conducted by hand counting all ballots and comparing the results on a precinct-by-precinct basis.

14.8 Describe every means of transmitting election results. By modem? By diskette? By paper? By cartridge? Other?

DRE and OMR

The ES&S proposed solution is the most expeditious method available today for gathering results. Our solution transmits election results to the central tabulation system directly from the polling place via the use of landline modems. Data can also be loaded into the tabulation system locally by hand carrying the iVotronic system's Master PEB and the Model 100 system's PCMCIA card from each polling location to the site of the central system.

14.9 What are the reporting and audit techniques that are incorporated into each Voting System?

DRE

At the close of polls, the iVotronic system can generate complete alphanumeric printouts of election results in multiple copies, if so desired. These are summary, not Ballot-by-Ballot printouts. Ballot-by-Ballot printouts can be obtained through the iVotronic audit trail that actually prints out individual ballot images. Summary election data is generated through the Unity election results reporting system.

OMR

Model 150/650: The Model 650 and Model 150 systems can maintain election audit trails with supporting documentation to verify the correctness of reported results. These audit trails are in a form that present a concrete archival record of all system activity related to vote tallies. Audit record generation is automatically printed to minimize the possibility of operator mistake or omission.

The systems incorporate a real-time clock as part of the system hardware. The Model 650 and Model 150 systems maintain an absolute record of the time and date of a record relative to an event where time and data are known and recorded. All audit record entries include the time and date stamp. The purpose of the real-time record is to provide the Model 650 and Model 150 operators with continuous updates of the machine status.

This information allows effective operator intervention during an error condition and contributes to the reconstruction of election-related events necessary for recounts or litigation. A printed record is produced on the system printer.

A last occurrence event log is stored in the real-time clock, battery-backed memory and is printed out whenever a status report is requested. Generation of entries is not terminated or interfered with by program control and does not require intervention by any person. Physical security and integrity of records depends on election official procedural controls during machine operation to ensure continuation of the printed log.

Once the Model 650 and Model 150 systems are activated for ballot processing, the contents of the event logs are preserved during any interruption of power to the system and until processing and data reporting have been completed. A printed record is produced on the system printer.

Model 100: The Model 100 system's Audit Log records all user actions with time and date stamp. These include time of polls opened, polls closed, time of each blank or overvoted ballot, time of any skewed ballot or mis-fed ballot, etc. Blank Ballots Accepted, Blank Ballots Rejected, Overvoted Ballots Accepted, Overvoted Ballots Rejected, Write In Ballots Accepted.

The Model 100 system also logs critical events with a time/date stamp to the audit record. Those messages include last clock change, last power on, last polls open, number of system halts, ballot accounting log, election card installed time, ballot test time, switch actions, diagnostics check times, counters cleared time, polls opened time, polls closed time. The Model 100 audit log and precinct report prints automatically at the close of polls. The Audit log records the time and date of the poll opening and the poll closing but not the time that particular ballots were cast. All other requested information is contained on the precinct report and audit log.

14.10 Describe the types of election reports available from each Voting System. Describe the flexibility available in the production of these reports.

DRE

Once the polls have been closed, Precinct Officials use the Master Supervisor PEB for printing and transmitting the precinct results by modem. When a Master PEB containing collected vote totals is inserted into a closed terminal, the Print/Modem Precinct Results Screen displays. The precinct results report comprises the baseline output of election results.

This report prints from either the Supervisor Terminal (Voter Activated) or any Voter Terminal (Poll Worker Activated) on the 40-column printer included in the Precinct's Communications Pack. Precinct Reports include the following:

- Name of precinct
- Total Public Count of voters that voted in this precinct
- Serial numbers of *all* Voter Terminals opened for voting in this precinct
- Serial numbers of all Voter Terminals closed for voting in this precinct
- Opening and closing date and time of each Voter Terminal
- Public Count for each Voter Terminal
- Protective Counter for each Voter Terminal
- Title of each contest (or proposition) on the ballots for this precinct
- Allowable number of votes in each contest (vote for 2)

- Number of votes cast in each contest (or proposition)
- Names of each of the candidates in each contest
- Number of votes cast for each candidate in each contest
- Percentage of the contest votes that each candidate received
- Number of Write-In votes cast in each contest
- Actual Write-In text for each Write-In vote in the contest
- Date and time the report was printed
- Space for Precinct Official and operator signatures
- Other fixed text as requested by the local jurisdictions

OMR

Model 150/650: The Model 150 and Model 650 Systems' Central Scanners are able to generate a number of unique reports, to include the Audit Log Report. (Note: *To ensure full utilization of the ballot scanner, ES&S recommends that these reports, and the examples provided on the proceeding pages, are fully examined.*) A brief explanation of each report follows:

Grand Totals Report – Short Format

Provides a countywide vote summary for each candidate and issue option on the ballot.

Grand Totals Report – Long Format

Provides a countywide vote summary for each candidate and issue option on the ballot, including overvotes and undervotes.

Status Report – Short Format

Accounts for the total number of ballots that are counted by the scanner. Tabulation results are broken down by precinct and ballot type (Democratic, Republican, Non-Partisan, etc.).

Status Report –Long Format

Accounts for the total number of ballots that are counted by the scanner. Tabulation results are broken down by precinct and ballot type (Democratic, Republican, Non-Partisan, etc.). It addition to race statistics in each precinct, it includes percentages for write-ins, under-votes and over-votes.

Precinct Report – Short Format

Provides a vote summary for each candidate and issue option on the ballot for each precinct.

Precinct Report – Long Format

Provides a vote summary for each candidate and issue option on the ballot for each precinct.

Model 100

Results Reports

Poll Workers may select from the following report formats and report types to print your results reports.

- Report Format

  Report format is programmed as part of the election definition. The format is applied to Poll Reports and Precinct Reports. Reports printed in media format will show candidates, candidate vote totals, and write-in totals. Reports printed in summary format will show candidates, candidate vote totals, write-ins, undervote, and overvote totals.

- Report Types

  Status Report

  This report shows the number of ballots accepted, broken down by ballot type. This report also displays the ballot counts for each precinct and the totals for the polling place.

  Poll Report

  This report displays the total results for every contest voted on the scanner.

  Precinct Report

  This report displays the results for every contest voted on the scanner broken down by precinct.

- System Reports

  Initial State Report

  This report shows system settings when the scanner is powered up. Configuration settings are included if the election definition is loaded.

  Audit Log Report

  This report lists all events that have occurred since the PC Card was initially loaded. It also displays the total number of write-in as well as the number of accepted and rejected blank ballots, the number of overvoted ballots and the number of crossover ballots.

  Zero/Certification Report

  This report prints automatically when the polls are opened. It shows the date and time the polls were opened, displays zero counts for all contests, and prints signature lines for poll worker certification.

- Diagnostic Reports

  Configuration Report

  This report shows system and election configuration along with scanning parameters and cell window locations.

Debug Report

This report displays low-level system settings and ES&S technical support staff use these reports to diagnose problems with the Model 100 system.

Unity Election Reporting Manager

The Unity Election Reporting Manager provides the greatest flexibility in our reporting system. Reports containing election results also allow selection of all contests or designated contests as well as all polls or designated polls. In addition, reports can be printed using script files that are set up in advance. These script files can contain designated contests and designated polls and can be used in canvas reports for subtotaling of polls in a district as long as the polls are consecutively listed.

A variety of report types is available from Unity. Each report has numerous variations since the user has the ability to select from many option designations prior to initiating printing of the report. Options include:

- Report titles, whether page numbers are included
- Time stamps are included
- Overvotes print
- Undervotes print
- Total votes per candidate print
- Percentages are printed for overvotes and undervotes
- Candidate percentages are based on votes cast in the office, or votes eligible to be cast, based on ballots cast
- Reports should print as 1-column, or the standard 2-column
- Number of copies to print

14.11 How does the Voting System(s) incorporate different languages into the units or the voting devices?

All English and non-English languages must first be entered into the Election Data Manager (EDM). EDM allows the user to identify each language required in an election, for example a three-language election may consist of English, Spanish, and Chinese. Once each language has been identified, EDM dynamically creates language-specific data entry screens for all required election information. For example, the Candidate data entry area will consist of three dialogs, one for English, one for Spanish, and one for Chinese.

The jurisdiction is responsible for all language translations and entering them into EDM. The software does not automatically translate English into foreign languages.

There are two ways to enter any language election information into EDM:

1. directly enter data via data entry screens
2. import data via ASCII files

Once all language specific data has been entered into the EDM it is seamlessly passed to all other required Unity modules.

Any language can be incorporated into the design of the optical-scan ballot for use with the Model 100, Model 650, and Model 150 Optical Scan Systems.

14.12 If the operating system is Windows NT based, what procedures are in place for a change to Windows 2000?

All ES&S software is designed to operate under a Windows 98 or NT operating system on the desktop. Some components need to access the DOS interface inside Windows. Upgrades are normally released once a year or as changes in State Law dictate. Upgrades to the installed system are included with the software maintenance agreement, unless otherwise specified. New software programs that may offer more functionality are not included in general maintenance and upgrades unless otherwise specified in the maintenance agreement. Current versions of software are generally supported as long a County wishes to use them and their maintenance contract is kept current. The ES&S software is compatible with any network operating system that is compatible with the desktop operating system used.

ES&S has a new version (Unity 2.4) that is undergoing certification and will operate under Windows 2000 or Windows XP on the desktop.

14.13 What security measures are in place to ensure that any Internet activity is not compromised?

All Internet reporting is done 100 percent "downstream" of the accumulation system, to eliminate the threat of anyone accessing election data. Internet reporting can function in several different ways. All use the highest standard of data encryption and other security as needed.

Normally, election reports that are posted to a county web site are simply HTML tagged reports, generated by the Election Reporting Manager posted using normal County requirements. It is important to note *all* ES&S Internet reporting solutions have been developed with security in mind and are designed to fully protect the integrity of *all* data.

14.14 What will be impacted in the voting process in the event of a power failure? Explain in detail the backup procedures. Explain in detail the remedies available should there be a power failure and a battery failure.

DRE

The iVotronic terminal has a six D-cell rechargeable battery stick for power backup. These batteries are constantly charged during the day from the AC outlet. If AC power fails, iVotronic voter terminals can continue to function on internal DC power for many hours. The "conversion" from AC to DC internal power is automatic and does *not* affect a voter in the act of voting.

Internal ballot memories are contained in three flash EPROMs that do *not* require any external electrical power to retain vote memory.

Thus, even if a voter terminal powers down after backup batteries fail, the internal memories will remain unaffected and no data will be lost.

iVotronic Voter Terminals store votes in three identical redundant flash-EPROM memories. All memories are copy and CRC (cyclical redundancy checking) checked during every activation sequence.

If the copy does not find each memory identical to the others, or if the CRC check does not find a cohesive body of data, the Voter Terminal will not allow any further voting to occur. Upon the next activation, the Voter Terminal immediately recognizes that data is not being stored properly. Thus, the iVotronic terminal will not continue to store large amounts of corrupted or erroneous vote/ballot data into its memories with no notification to election officials.

In the event that a Voter Terminal memory fails, a technician can place an uncorrupted memory from the malfunctioning unit into any working unit for vote retrieval. *No votes are ever "lost" with the checks and balances incorporated in the iVotronic System.* Because the iVotronic terminal is designed as a stand-alone unit, a memory chip failure in one unit does *not* affect the successful operation of the remaining Voter Terminals and PEBs. *The iVotronic design provides the most thorough error detection methods of any DRE on the market today.*

OMR

Model 150/650: In the event the Model 150 and Model 650 systems have a memory error, the system has a software reset that does not affect vote totals in memory. The system should be periodically backed up by using the diskette storage device. In the event that the system fails on Election Day, the system can be powered back up and the vote totals added back to the system via the diskette.

Model 100: The Model 100 system has an internal battery that functions exactly as an external UPS does. The battery and power supply protect the electronic components from being damaged by a power surge, and the unit automatically switches to battery power if the AC power is lost.

14.15 What system is in place that would identify and record any attempt at tampering with the voting device by either the voter or an election official?

Both the iVotronic DRE and all ES&S OMR systems share multiple built-in security features. Pre-election tampering can be prevented and detected by the use of coded seals that act to physically lock and seal the system carrying cases prior to the election.

Other electronic security features assure that any equipment that was not properly prepared, or was tampered with, will not operate on Election Day.

14.16 What is the minimum lead time required for making last minute ballot changes, necessitated by death, withdrawal, eligibility, or court action?

Based on Texas Election Law, last-minute ballot changes can be accommodated by the proposed system in a minimum amount of time. The action taken is primarily dependent on whether or not reprinting of OMR ballots is necessary.

Unity Election Management System

In order to make a system-wide ballot change that involves the reprinting of ballots, the user would modify the applicable office/name/issue in the Unity Election Data Manager. ***Any change***, such as adding or deleting a name or office, ***can be accomplished in less than five minutes***.

After the change is made in the Election Data Manager, the files must be "re-merged" to create the Ballot Definition File for the Ballot Image Manager. This is an automated process but it can take five to ten minutes in a large, complex election.

The Ballot Image Manager can then be used to produce a new optical-scan ballot to be reprinted and a new interface file for the Hardware Programming Manager.

DRE

The iVotronic terminals are generic—*any* iVotronic Terminal can be delivered to *any* polling location. The system does not become location-specific until it is opened for voting. The iVotronic Terminal does not require pre-loading of ballot data like other DRE machines. In the iVotronic System, only PEBs store ballot data prior to Election Day and require programming. Therefore, ***iVotronic Terminals truly facilitate non-geographical or non-locational voting***.

The iVotronic System utilizes far fewer PEBs than terminals. For example, if a precinct has six voter terminals, that precinct will require, at the most, three PEBs. Thus, if a ballot change does occur, the lead-time required to implement that change system-wide decreases greatly when compared to other systems that require ballot loading in every terminal.

Depending on the change, PEBs can be reprogrammed in 30 seconds, per PEB. For example, if we are considering 229 Master PEBs, all 229 can be reprogrammed in less than two hours. This can be decreased even more if multiple terminals are employed to reprogram PEBs. This feature is unique among DRE systems and could conceivably prevent an election disaster. A last-minute change might not allow a visit to *every* polling place to change thousands of voting devices. The six-ounce PEBs may be returned to Election Central and the changes made in a matter of hours, not days.

OMR

Each Model 650, Model 150, and Model 100 memory module can be re-burned in a matter of seconds. The time frame for reprinting of OMR ballots would be based on the quantities required.

14.17 What are the procedures for an Election Day Judge (Early Voting or Election Day) to ensure that the ballot presented on the Voting System(s) is the correct ballot for the precinct involved?

DRE

Poll officials determine the appropriate ballot style as part of the voter qualification process. The ballot style number is then noted on a piece of paper and hand carried to the voter terminal where the poll official selects the ballot style on the screen. The ballot styles are listed on the screen of the iVotronic terminal in alphanumeric format when the Supervisor PEB is inserted into any voter terminal.

OMR

The optical-scan ballot is issued in a similar fashion. The voter's ballot style is determined as poll workers check them in. The poll workers then issue the voter the correct ballot before sending the voter to the privacy booth to vote.

14.18 What is the method used for qualifying a voter and granting the voter access to the Voting System(s)?

The process presently utilized by Williamson County for voter qualification would change very little, if at all. Voters would present themselves at the qualification table and Poll Workers would check the Poll Book and verify voter eligibility.

The precinct and ballot style number would be noted on a piece of paper and the Poll Worker would refer to this information to activate the iVotronic Voting Terminal with the appropriate ballot.

In the case of the Model 100 Precinct Ballot Counter, the Poll Worker issues the voter the correct ballot.

14.19 What procedure is in place to inform the voter of an under vote or over vote?

DRE

The iVotronic system does not permit overvoting. Voters attempting to overvote will simply change their selection to the last selection (e.g., candidate or issue) selected. At the conclusion of voting, voters may touch "Review Ballot" and all "unvoted" offices will appear on the screen. Voters attempting to cast a blank ballot will be prevented from doing so unless overridden by the Poll Worker, at the voter's request. The iVotronic system functions as follows:

Validating the Voters selection: When a voter presses the box next to a candidate name, the name highlights and an "X" appears in the box. This system response immediately indicates to the voter their selection.

Overvoting: With the iVotronic System, voters cannot overvote their ballots. The iVotronic System only permits the legally allowed number of vote choices in all contests.

Undervoting: iVotronic Voter Terminals require the voter to "view" all ballot pages before being able to cast their ballot. This requirement helps prevent ballot fall-off and accidental early voting.

If the voter presses the VOTE button before viewing the last ballot page, the Voter Terminal displays the message, "You must view all pages before casting your vote" for approximately five seconds, redisplaying the ballot as the voter left it.

Also, at any point in the voting process, voters can review earlier choices by depressing the screen message, "Previous page," allowing additional vote changes to be made.

Ballot Review: When the voter is on the last page of the ballot and depresses the "vote" button, the voter is presented several options. First, all "undervoted" offices can be displayed, providing the voter an opportunity to make additional choices. Or the voter may simply cast his or her ballot. In the ADA mode, when the voter depresses the vote button on the last page, the voter is provided an opportunity to return to the ballot through the voice files and make additional choices or changes.

OMR

The Model system 100 can be programmed to alert the voter/poll official of an overvoted ballot. In the case that a voter makes a mistake, the Model 100 system will stop and hold the ballot to ensure voter privacy. At the same time it will emit an audible signal and indicate the specific problem on the LCD display.

At this point, the voter or election official will be prompted to have the counter either accept or reject the ballot. If the voter wishes to mark another ballot, the original ballot is placed in a spoiled ballot envelope and the voter is issued a new ballot.

Model 150/650: The Model 150 and Model 650 systems are designed and used as a central count voting system where the voter is not present during the time the ballots are processed. If a ballot is cast incorrectly, the counter can be set to stop processing and prompt the operator to remove the ballot to be examined. At a later time, all ballots that were removed may be run through the counter to tabulate the results of all races that were voted correctly. Undervoting, overvoting and crossover statistics are maintained by the Model 150 and Model 650 units and are available as part of the system's precinct and cumulative reports.

14.20 What procedure is in place to allow the voter to review the ballot prior to casting the ballot?

DRE

The iVotronic system provides two methods for the voter to review their ballot prior to casting their ballot.

1. The first method is always available to the voter. The voter may review previous ballot pages by simply touching the "Previous Page" area of the screen. This touch causes the previous ballot page to be displayed, with all candidate selections highlighted for easy review. A voter may also touch the "Next Page" area of the screen to view ballot data on subsequent ballot pages.
2. The second method is an additional optional method that is activated during the ballot definition phase of ballot preparation in the Unity database program. When activated, this method will cause a review ballot screen to appear after the first press of the VOTE button by the voter. The review ballot screen provides the contest title of each ballot office, the number of selections allowed for the contest, and the candidate(s) currently selected in the office.

   If no candidate is selected, a message will appear in the candidate area under each office title indicating, "No Candidate Selected." A voter may edit each office, if so desired, by simply touching the contest title they wish to edit. That contest will be displayed showing all candidates selected and those not selected. The voter may change contest selections and then return to the review page to continue the edit process or cast their ballot by pressing the vote button a second time.

OMR

Voters have the opportunity to review their ballots before inserting them into the Model 100 Precinct Ballot Counter or in the case of Absentee By-Mail, reviewing the ballots before mailing them.

14.21 Explain in detail voting a secret ballot by the blind or visually impaired. What provisions are made for voters with other disabilities? What provisions are made for voters who vote from their automobile?

The iVotronic Texas-certified ADA system incorporates a unique, field-tested audio-ballot capability that allows a visually impaired voter to vote with complete privacy and security. The unique feature of the iVotronic audio ballot is that it incorporates real voice files—not synthesized, hard-to-understand, computer voice files.

The voter hears the candidate names through the headphones as they scroll through the ballot with the ADA-compliant accessibility panel.

The iVotronic ADA system employs a set of raised accessibility buttons located in the bottom middle of the iVotronic screen. To proceed through the ballot, the voter is instructed to feel for the arrow-shaped up and down buttons. To register a candidate choice in an office, the voter reaches for and depresses a diamond-shaped button. To complete voting, the voter is prompted to depress the oval-shaped vote button at the top of the ballot. Visually impaired voters can even make write-in selections on the iVotronic voter terminal.

The iVotronic system is ideal for voters that must vote from their automobile. The iVotronic system consists of fully independent voting terminals that are not cabled together or otherwise linked to each other. The voting terminal weighs only 9.75 pounds and will operate fully on battery power for many hours. The terminals can easily be handed directly to a voter in an automobile after the poll worker selects the correct ballot style.

14.22 Does the voting device provide the voter with any documentation that the voter has cast a ballot as the voter has chosen? If not, is this upgrade a possibility? If this is a possibility, what would be the additional cost of such an enhancement? (If applicable, please list this as an option on your price sheet.)

The proposed ES&S systems has the capability to produce, at the time the voter votes his or her ballot or at the time the polls are closed, a paper version or representation of the voted ballot or of all the ballots cast on a unit of the voting system.

14.23 Explain why your Voting System is easy for voters to use. Take into account demographic information relating to race, age, gender, economic status, and education. Do you have statistics to back up your claims? If so, please include such statistics.

The design of the iVotronic Voting System makes it easy to use for everyone: Election Headquarters, Poll Officials, Voters, and Support Staff. The iVotronic Voting System operates anywhere: at Election Central for pre/post election administrative purposes, in-person early voting, and at the polling location for traditional, curbside, and challenged voting. The iVotronic system moves smoothly from one operating environment to the next.

Voters find the iVotronic system easy to use. Why? The uniquely shaped PEB, with no connecting pins, ensures that the voter can activate the Voter Terminal easily. The unit does not utilize a smart card or require the voter to key in numbers with the potential of transposing numbers on a keypad. The iVotronic system offers the ability for the voter to use either a stylus or finger touch to cast a vote, ensuring that voters with limited dexterity can still cast a ballot.

Voting is a quick four-step process. Voters make their choices by pressing directly on the terminal touch screen. When a voter has made all voting choices, said voter simply presses the terminal's red VOTE Button to cast the ballot. *General surveys, conducted in several major jurisdictions, have given the iVotronic system a 98% approval rating.*

OMR

Model 100: The system used by the voter to indicate his election selections is fundamental to the success of the entire voting process. The voting method must in no way impede the voter or fail in faithfully and clearly recording the voters' choices. A hand marked paper ballot satisfies these requirements in several ways. Voting on paper ballots is intuitive and familiar to virtually all voters. Folding, mailing, handling and storage of the paper ballot do not affect its ability to accurately retain votes, as is the case with punch cards. As an audit trail, the paper ballot allows positive verification of the tabulation back to the point of the voter's pencil.

14.24 Provide statistical information showing that your system does not permit a percentage of under votes that is significantly higher than the percentage for other devices or systems. Please provide comparative data (e.g., data from a "mixed" jurisdiction showing under vote percentages on DRE devices versus under vote percentages from optical scan devices in the same election, in the same jurisdiction).

Because voters have the right not to vote in a particular race/election, the DRE system cannot "prevent" a voter from consciously choosing not to vote. The system does give every voter the opportunity to vote on every ballot item. iVotronic voter terminals require the voters to view all ballot pages before casting their ballots. This requirement helps prevent ballot fall off and accidental early voting. If the voter presses the *Vote* button before viewing the last ballot page, the voter terminal displays the message: "You must view all pages before casting your vote." The voter touches the screen to acknowledge the message and then the ballot redisplays the ballot as the voter left it.

Also, at any point in the voting process, voters can review earlier choices by depressing the screen message "Previous page" and additional votes or changes can be made.

When the voter is on the last page of the ballot and depresses the *Vote* button, the voter is presented with two options:

1. All offices can be displayed and allows the voter the opportunity to review and make additional choices or changes.
2. The voter can simply cast the ballot.

In the ADA mode, when the voter depresses the *Vote* button on the last page, the voter can return to the ballot (following audio voice file prompts), and make additional choices or changes.

Although many jurisdictions have accumulated statistics on voter drop off, we were unable to locate statistics on DRE drop off vs paper (OMR) dropoff.

Voter drop off has generally been more prevalent on voting devices that display a full face ballot. Voters may have a tendency to scan the entire ballot at a glance and mentally eliminate races that are of no interest to them. The same theory may apply to optical ballots that allow voters to scan most of the ballot at a glance.

Voter recorders that require voters to look at one page at a time seem to have a much better completion rate. These devices would include both punch card and DREs. Election theorists feel that when a voter only sees a single page at a time, they are more likely to vote all selections on that page.

The review screen on DRE units also highlight unvoted offices, prompting the voter to return to that race. Poor ballot design legibility, and lack of interest also contribute to voter drop off.

14.25 What methods of voter information have you found to be the most successful in establishing voter familiarity and comfort with your system?

The very best voter education takes place at the polls minutes before the voter enters the booth. A Poll Worker provides the voter with a demonstration of the iVotronic system. For this reason, we stress the importance of our comprehensive Poll Worker Training Program. **Please refer to Appendix E for the ES&S Training Plan.**

14.26 What are the environmental controls for the Voting System(s)?

DRE

The iVotronic Voting System will operate in a polling place environment with temperature ranges of 60°F-100°F and less than 95% non-condensing humidity. Storage Conditions are 0°-120° Fahrenheit.

OMR

The Model 150 and Model 650 Central Ballot Counters withstand storage temperatures ranging from -15°F to +150°F and is capable of operation throughout the temperature range of +40°F to +100°F. Humidity for storage should not exceed 88%.

The Model 100 Precinct Ballot Counter withstands storage temperatures ranging from 0° to 120° F and is capable of operation throughout the temperature range of 60° to 100° F and less than 95% non-condensing humidity.

14.27 What are the storage limitations for the Voting System(s)?

DRE

Warehouse facilities often serve multiple purposes for election administrators. They are used as a location to store and maintain the voting equipment, as a testing area prior to distribution, as a work area to collect audit data, and as a staging or training area prior to distribution for elections. Based on the actual usage planned, the physical warehouse requirements will vary.

ES&S recommends iVotronic units be stored at their optimum storage capacity—within their booth, stacked six-units high, with two stacks per pallet. We recommend the pallets have a cellophane wrap to prevent tipping.

If the iVotronic units are connected to their AC power within the booth, and the booths are daisy-chained as recommended, periodic charge maintenance can be performed for each stack of iVotronic units on the pallet by simply powering one iVotronic unit in each stack. While ten iVotronics can be powered in a series from one AC wall outlet, we do not recommend stacking the iVotronics over six units high.

A normal pallet measures a mere 42" by 48." With six iVotronic units stored in their booths, storage space (height) is cut to a minimum of just slightly over six feet. Each pallet requires a modest storage space of (approximately) 14 square feet of floor space. Racking allows for multiple pallet storage within the same floor space. Allowance for aisles and access to pallets must also be factored in.

Normal environmental conditions are appropriate for storage of the iVotronic. It should be noted: *Temperatures below 50°F or in excess of 100°F will lead to a faster discharge rate for the unit's batteries.* The units are designed to be safely stored under normal conditions within the booths, for a period of up to six months with no maintenance required. Prior to election usage, we recommend that each iVotronic unit be given a 24-hour charge. In addition, we suggest that each unit be subjected to normal pre-election logic and accuracy testing with actual election information. Sufficient warehouse space should be reserved for this function unless other facilities are available.

Alternate storage methods can be utilized (e.g., storing the unit and booth separately). In such cases, units should be kept in their original shipping carton with foam inserts to buffer against damage (i.e., tipping). In these cartons, the units are typically stored on a pallet in four stacks that are five units high. The units may also be stored within the booths, but without the cellophane wrapping. In such case, we recommend that the stacks of two per pallet be no more than four units high.

OMR

Model 150/650

The Model 150 system is a table-top unit measuring 27.27" x 21.25" x 16.25". It weighs 120 lbs.

The Model 650 system is a table-top unit measuring 28" x 24.8" x 23". It weighs 148 lbs.

Either of these Central Counter systems may be placed on a wheeled cart or table to facilitate its handling, transport, and installation. They are delivered with a protective dust cover in a shipping container that renders it capable of withstanding impact, shock, and vibration loads accompanying surface and air transportation. We recommend that the Model 150 and Model 650 systems be stored with their dust covers in place, and transported in the shipping containers n which factory delivery was made. If the equipment is to be stored in an uncontrolled environment, we recommend that they be stored in the original shipping materials.

Model 100: The Model 100 system comes complete with an airtight and durable carrying case that can be locked and transported without additional packing. Its sturdy construction renders it capable of withstanding impact, shock, and vibration loads accompanying surface and air transportation. If stored in an uncontrolled environment, the Model 100 unit should be kept in its portable airtight carrying case. The metal ballot box separates into two sections that nest inside one another for easy transportation.

Storage Requirements Precinct Counter

Precinct Counters in their cases are 10.5"h x 16.5"w x 22"l.

Precinct Counters can be stacked 5 high. 5 Counters require 2.5 sq. ft. of floor space.

14.28 How should the Voting System(s) be tested prior to absentee voting and Election Day to ensure the accuracy and readiness of each device?

DRE

The iVotronic Preventive Maintenance schedule provides all functions necessary to prepare and test equipment function before every election. The iVotronic Service Menu contains the following preventive maintenance features. Average preparation time per unit is approximately three minutes. Pre-election testing is based on the length and complexity of the test performed (i.e., how many ballot styles will need to be tested on each unit). Average testing time is about 6 to 7 minutes to test every ballot configuration based on a multiple page ballot. Total testing and preparation time is approximately 10 minutes per unit.

Clear and Test Terminal: This tests all memory function in the iVotronic Terminals for proper data storage, clears any previously stored election data, and codes the terminal with the proper EQC for the current election.

This feature also resets the public counter to zero and readies the terminal for opening on Election Day. If a terminal passes the clear and test function, Williamson County can be assured that all memory is functioning properly and the unit is ready for the election.

Qualify PEBs: This function performs the same memory test on the PEB as the Clear and Test function performs for the Terminal.

Test Modem: This function allows the user to test a modem line before Election Night.

Test Printer: This feature prints a test message to the printer to ensure that it is completely functional. The user should also check the printer ribbon and paper to ensure proper darkness and quantity, respectively.

In addition to the diagnostic testing listed above, ES&S recommends Logic & Accuracy Testing of all systems prior to the election.

OMR

Model 150/650: The Model 150/650 systems use a volatile bank of RAM to store both Election Day totals and results from the L&A test. This RAM bank is a single section and totals must be set to zero (after the L&A Test) in order to prevent the results from the test from being combined with Election Day totals. L&A test totals should be stored to disk and secured with the L&A materials.Totals should then be cleared to zero from the Model 150/650 before counting of live ballots begins. L&A procedures could include that a second test be conducted after the election using the same test data from the first test.

Model 100: Logic and Accuracy tests are conducted by opening the polls on each Model 100 system, feeding a pre-audited test deck, and printing a report. The report is then compared to the pre-determined results of the test deck. This procedure tests all memory locations, and Model 100 system functionality that is used on election day. After the test, the PCMCIA card from the Model 100 system is zeroed, and the machine is prepared for delivery to the polls. All test actions are recorded on the audit log of the PCMCIA card with a time and date stamp.

14.28 Are there any recommendations in place for matching the number of voters at any given Election Day polling location with the number of voters who have been properly qualified for voting and have signed the signature roster?

DRE

This task is accomplished by adding together the public counter from each voter terminal and comparing it to how many voters have actually signed in. ES&S recommends that poll workers do this several times during the day, if time allows, to catch any mistakes made prior to closing. Also, at the end of the day, the accumulated precinct report shows the total number of ballots cast, which can be compared to the number of voters that signed the precinct register.

Model 100

The Model 100 LCD display is used to communicate the status of the Model 100 system to the voter and precinct officials. It displays the public counter, error messages, and prompts for the voter and election official.

14.29 How are early vote totals and election day totals added together?

The Unity Election Reporting Manager allows the user to define reporting groups in the final results database. For example three groups would be created: Election Day, Early Voting, and By Mail. The system automatically creates a fourth group defined as Election Totals. Before totals are updated or reports are printed, the user specifies which group to update or report. During reporting, the user can specify the Election Totals Group to produce a report containing data from the Election Day, Early Voting and By-Mail groups combined.

Section

5

Proposer Background and Qualifications

The following section contains the Proposer Background and Qualifications information.

Section 5
Proposer Background and Qualifications

15.1 Give a brief history of your company and a statement of your future strategy for voting systems and for the company;

Election Systems and Software, Inc. (ES&S) is a Delaware corporation headquartered in Omaha Nebraska. Originally incorporated in 1981 as American Information Systems, Inc., the Company changed its name to Election Systems & Software, Inc. in connection with its November 1997 acquisition of the Elections Division of Business Records Holdings Corporation, Inc. ES&S is privately held.

ES&S is the largest election-only company in the world. With more than 400 employees operating from seven regional U.S. offices, our experience, resources, and commitment to the industry, together with our NASED-certified equipment, state-of-the-art software solutions, and outstanding support services, uniquely qualifies ES&S to be Williamson County's vendor of choice. Our commitment to the County, as evidenced by the successful working relationship we've shared these many years, is further proof that ES&S is fully dedicated to providing Williamson County with superior election systems, software, and support into the 21st Century.

In no other industry is the financial health of the Company as important as in the election industry. Since 1970, more than twenty vendors of election systems have gone out of business, often leaving their customers with systems that were no longer supported. *ES&S is a well-capitalized, professionally managed company, capable of continuously sustaining high-quality development and ongoing, long-term support to our customers.*

ES&S offers a broad range of voting systems and products including direct recording electronic, precinct optical scan, central optical scan and the related ancillary products.

Experience

Supporting the election administrators and voters since 1964, we have grown to provide election systems and services to jurisdictions representing over half of the US's registered voters. We have assembled an unequaled staff of seasoned election professionals who have accumulated more than 4,000 combined years of experience to you.

ES&S has a long history of providing end-to-end election technology solutions and implementation installation project management to election administrators around the world.

Solutions include voter registration software systems, voter authentication, optical scan in central, precinct & absentee modes and direct record electronic voting in early voting, precinct and vote anywhere modes and complete election results reporting systems.

ES&S's team has the unique experience necessary to successfully provide a large-scale electronic voting system and professional support. This level of experience is unequaled and unmatched and clearly demonstrates the exceptional quality that only ES&S provides.

ES&S is the recognized world's leading election technology company providing election equipment, election administration software and professional services to approximately 56% of the registered voters in the United States.

15.2 Provide the total number of jurisdictions currently using your Voting System(s), and the number of jurisdictions currently considering your product; include a list of reference entities similar in size and demographics to Williamson County that currently use your system per the reference requirements listed in the References Section of the Standard Terms and Conditions and as stated below;

ES&S has roughly 2,800 clients scattered throughout the U.S., Canada, and South America.

Table 1. ES&S References Comparable in Size & Demographics to Williamson County

County or State	Demographics and ES&S products
Sarasota County, Florida Kathy Dent 101 S. Washington Blvd. Sarasota, FL 34236 Tel: 941-861-8601 Fax: 941-861-8609	Registered Voters: 231,000 Polls: 142 iVotronic DRE System with audio ballot (1,200 units) Unity Election Management System
San Mateo County, California Mr. Warren Slocum Assessor-County Clerk-Recorder 401 Marshall Street Redwood City, CA 94063 Tel: 650.363.4988	Registered Voters – 375,000 Polls – 522 Optech IIIP Eagle Precinct Count – 550 units Optech IV-C Central Counter – 2 units EMS, AERO, BGS, Novell Network System
Pasco County, Florida Mr. Kurt Browning Supervisor of Elections Dade City, FL 33523 Tel: 352.521.4302	Registered Voters – 220,455 iVotronic DRE Touch Screen Systems
Bexar County* Cliff Borofski County Clerk Purchasing Department 233 N. Pecos Suite 320 San Antonio, TX 78209-3178 Tel: 210.335.0362 ***Larger County, but Texas Reference**	Registered Voters – 835,270 Polling Places - 425 iVotronic Direct Record Electronic (DRE) Touch Screen System Model 650 High-Speed Centralized Optical Scanner Unity Management System
Dallas County, Texas Bruce Sherbet Election Administrator 2377 Stemmons Freeway, STE 820 Dallas, Texas 75207 Tel: 214.819.6336 Fax: 214.819.6374 ***Larger County, but Texas Reference**	Registered Voters: 1.1 million+ Polls 795 Regional Transmission Sites – 10 iVotronic DRE Touch Screen System* Model 100 Precinct Count (515 units) Model 650 Central Count (2 units) Unity Election Management System ***Just upgraded from Votronic to iVotronic (400 Voter Terminals; 700 ADA terminals)**

15.3 Attach a complete jurisdiction reference list. Include jurisdiction name, contact name, address, telephone number, fax number and size of jurisdiction.

The success of ES&S is directly attributable to the company's sound manufacturing principles, proven track record of accurate and timely election results delivery, and our ability to meet our customers' requirements.

On average, ES&S provides ten electronic elections per week. In response to Williamson County's Request For Proposal, we have provided a profile of major accounts that demonstrates the breadth of solutions and services we provide. **(See the reference list in Question #15.2 above).**

15.4 Describe available financing options, including possible lease purchase arrangements; Please include a copy of any legal documents and/or terms and conditions of such arrangement.

ES&S will provide financing options for the County's consideration. We offer lease purchase arrangements for three-, five-, and seven-years. First payments are usually due 12 months from date of installation. Utilizing third-party financing, we will secure the very best interest rates available. Please refer to **Section 7, Pricing Sheets and Appendix C, Bid Terms and Conditions and the ES&S Sample Agreement.**

15.5 How often are major system revisions released? Are your system revisions approved by the Secretary of State? Briefly explain system updates, releases and revisions that have occurred over the last three (3) years;

Research and Development

ES&S is constantly engaged in R&D for product enhancements. Hardware, software, and firmware improvements are engineered, developed, and tested on an on-going basis. Enhancements made to comply with changes in election law are released within the time frame mandated by the governing agency. Typically, we release enhancements every year. Firmware or software enhancements initiated or generated by ES&S, or required due to changes in Election Law, will be made available to Williamson County under the terms of the Software License Agreement and/or Hardware Maintenance Agreement.

Software and firmware upgrades, while typically charged to the customer, will be furnished to the County free of charge during the initial warranty period, subject to completion of certification.

Recent System Updates, Releases, and Revisions:

ES&S releases major system revisions as required to meet existing and new client needs. Examples of changes made to enhance the iVotronic DRE Voting system over the last three years include:

- **Large, Easy-To-Read-Screen:** Sizes for the iVotronic display screen have increased from 10.4 inches to 12.1 inches and 15.1 inches.

- **ADA-compatible:** The iVotronic combines portability, audio capability, and easy-to-use-buttons to empower disabled voters and permit privacy. Additional memory can be expanded through the use of Compact Flash Memory cards.

- **Increased memory capacity:** Memory has increased from 2M to 16M while ballot storage has increased from approximately 1,000 images to 10,000 images.

- **Multiple Language Capability:** This innovative ballot option provides multilingual voting instructions.

- **Infrared Personalized Electronic Ballot (PEB) or Optional Smart Card:** A portable databack efficiently relays voter and ballot information.

- **High Impact Plastic Case:** The tough, lightweight shell increases protection during warehouse storage and delivery.

All ES&S system revisions are submitted to an approved Independent Testing Authority for qualification under the FEC guidelines. When product revisions have been approved by the ITA they are submitted to the Secretary of State for approval under Texas statutory and regulatory requirements.

15.6 Describe your company's policy relating to source code;

As a standard practice, ES&S maintains in escrow with DSI Technology Escrow Services a copy of all program source code developed and used for our proprietary software and firmware, as well as any changes, modifications or updates to the source code. If the County requires the escrow to be with another party, it shall pay the additional cost associated therewith. Should ES&S cease operations and become unable to maintain and support our proprietary software and firmware while under an obligation to do so, the County shall have the right to obtain the source code to the extent necessary to enable the County to use ES&S' proprietary software and firmware in accordance with the terms of the final contract. Because the source code is key to the continued operation of ES&S' business and constitutes a trade secret, ES&S cannot otherwise agree to a release of the source code to the County. The source code will remain the property of ES&S and may not otherwise be used by the County.

15.7 Briefly explain how your company and your system can uniquely provide solutions for the Williamson County voting process, now and for the future;

Corporate and Financial Stability: ES&S offers Williamson County a large, stable election-only corporation backed by hundreds of multi-talented election experts. Williamson County will have the considerable resources of ES&S at hand to support your election efforts when others are stretched to the limit.

United States based: ES&S is an American election company. ES&S is privately held and does not have to rely on foreign capital or speculative foreign stock purchases for financing.

Experience: ES&S has contributed to the successful management of more than 35,000 elections.

With more than 400 full-time election professionals worldwide, our company boasts an astonishing 4000+ years of collective experience. ***No other election corporation even comes close.***

Pioneered touch screen voting systems ES&S pioneered touch-screen voting in the United States. Now, with over one million voters having voted on our original Votronic DRE touch-screen system, we are the *only* election company that can offer such system reliability and integrity.

In fact, the Votronic technology is one of the only touch-screen systems awarded a United States patent. The patented iVotronic DRE touch-screen system is based on the highly successful, patented Votronic touch-screen DRE platform, used in public elections since November l995.

All the field tested, proven, production operating elements of the original Votronic system have been advanced during the development of the iVotronic System, to include:

- An Election-specific operating system
- A system-wide Election Qualification Code (EQC)
- A redundant ballot image audit trail and memory chip
- A mother board
- An infrared Communication System
- A patented, Personalized Electronic Ballot activating system
- A Voter or Poll Worker activation methodology
- System redundancy

The iVotronic platform represents next-generation, add-on features to the original Votronic platform, to include ADA capability, a larger screen, and augmented internal memory.

15.8 Does your equipment have proprietary components that must be purchased from offerer?

The proposed systems are proprietary in design and manufacture and utilizes an ES&S proprietary election-specific operating system. There are many reasons for choosing this path, one of, which is extended life expectancy. To ES&S, life expectancy is not just how long the voting system's components operate before failure, but how long the system can be serviced and maintained. However, with the exception of consumable supplies, ES&S will provide all components under the terms of the warranty and hardware maintenance agreement.

15.9 What additional certifications have your Voting System(s) achieved, i.e., NASED, Wylie, in addition to Texas Secretary of State certification?

In addition to Texas Secretary of State certification, the iVotronic DRE touch-screen system was NASED-certified. The iVotronic system has been examined and tested by the NASED-approved, Independent Testing Authority to evaluate system hardware compliance. Hardware operation and non-operation tests have been conducted to confirm that the iVotronic voting system hardware and software conform with the requisite technical specifications.

In addition to Texas Secretary of State certification, the Model 650, Model 150, and Model 100 systems are NASED-certified (i.e., Certification #020100). These systems have been examined and tested by the NASED-approved, Independent Testing Authority to evaluate system hardware compliance.

Hardware operation and non-operation tests have been conducted to confirm that the optical scan ballot counting system's hardware and software meet the necessary technical specifications. Tests completed entailed system environmental hardware tests under conditions simulating intended storage, operation, transportation, and maintenance; and operational tests verifying system performance and function under normal and abnormal conditions.

The proposed Unity Election System has successfully met the required acceptance criteria per Federal Election Commission standards and completed NASED-ITA testing by Wylie and Metamor. **Please refer to Appendix B for the Certification Documents.**

Table 1: ES&S Texas and ITA Certification Status for Systems Proposed

Product	Texas Certification	ITA Certification
iVotronic	September 11, 2002	July 30, 2002
Model 100	October 23, 2001	July 2, 2002
Model 650	September 11,2002	August 22, 2002
Model 150	October 23, 2001	July 2, 2002
Unity v. 2.2	September 11, 2002	August 29, 2002

Section

6

Proposer Implementation

The following section contains:

- Preliminary Implementation Timeline
- Organization Chart
- Experience Statements

Section 6
Proposer Implementation

16.1 Transmission of Election Results

What type of results transmission from precinct polling places does your system provide? When should testing be performed prior to actual transmission of election results? Please provide a "best practices" method for results transmission recommended either from your company's experience in another jurisdiction or from research and development.

ES&S has prepared the following detailed information—certain to ensure accurate and timely precinct reporting for Williamson County—in response to this question.

The detailed information refers both to the Model 150, Model 650, and Model 100 Optical Scan systems and the iVotronic DRE system, except where otherwise noted.

What type of results transmission from precinct polling places does your system provide?

DRE: The iVotronic Communications Pack utilizes a modem to transmit poll location results directly to Election Central. The Communications Pack uses a standard voice grade analog telephone line with a RJ-11 wall jack. ES&S is currently integrating Code Division Multiple Access (CDMA) technology into the iVotronic Com Pack for *cell phone use*.

This technology has been implemented successfully in other ES&S products and this feature will be available for use with the iVotronic in the second release. Analog or cellular are both reliable technologies. *Cellular transfer rates are faster, but more expensive*.

Poll locations without existing phone lines will require the installation of a line to transmit results. The installation of phone lines should be ordered as soon as possible for these polling locations. For locations without a phone line installed, a procedure must in place to have election judges transport the master PEB to the nearest designated receiving station (four regional sites) or to Election Central. ES&S's proposed system solution is configured to include transmission capability from the receiving stations. This provides a backup system for polls without transmission capability or that may encounter problems transmitting on Election Night.

In response to this RFP we are proposing modem transmission from the regional sites.

Model 100: The totals from the Model 100 precinct ballot counters used at each poll can be sent to Election Central for storage and accumulation using several different communication paths. It is important to note that all communications used by ES&S have been developed internally, use proprietary formats, and may not be interfered with by any outside source.

The primary method involves having a standard analog "landline" modem in each unit. At the close of polls the poll worker is instructed to plug a phone line into the modem and press a button to inform the computer that a line has been attached. From this point on, the transmission is fully automated. Each DAM Host at election central is configured to support 10 phone lines.

The phone lines are configured to rollover to the next available connection on either host. Should one of the DAM Hosts fail election night, a single DAM Host will be capable of receiving results from the Model 100 systems in a reasonable time frame. Industry standard 4 or 8 port serial multiplexor boards are used to support up to 10 phone lines per DAM Host. Standard U.S. Robotics external modems are used by the DAM Host software to communicate with the Model 100 systems.

The DAM Hosts run ES&S' Data Acquisition Manager Host software that controls all of the communication between both the Model 100 systems and the Regional sites where laptops may be used as backup for any polling places that fail to send their results directly from the Model 100 systems.

Another alternative for communication of precinct results from the Model 100 system s to the Vote Tabulation System is the use of Cellular Digital Packet Data, (CDPD). This service requires that the County is covered under a reliable wide-area CDPD network. CDPD is a wide-area network architecture that provides for wireless transmission of packet data as an extension of existing Transmission Control Protocol/Internet Protocol (TCP/IP) data communications networks. CDPD is an ideal solution for transaction-based communications and for transmissions involving short and "bursty" messages, such as sending precinct results from a Model 100 system.

Central Ballot Counters: Non-applicable

When should testing be done prior to actual transmission of election results?

Testing should be accomplished during the system implementation phase. The following procedures are recommended to ensure the successful communication of Election Day results:

1. County Election Personnel will determine the availability of phone lines at the poll location. Once this determination is made, a list of poll locations with or without phone lines will be assembled.
2. ES&S recommends that every poll location responsible for transmitting results must have its phone line verified for compliance with the iVotronic Communications Pack. This may be accomplished by using an iVotronic Supervisor Terminal, phone test PEB, and Communications Pack. During the poll location visit, the tester will determine if the phone line is a direct line or if any dialing prefix must be used to dial an outside line. After obtaining dialing information, the testing personnel will dial the number to the Central Accumulation System to ensure that a connection is made and that results are transmitted.
3. Information regarding the phone line (gathered during the site survey- e.g., dialing prefix, phone line location, analog/digital), should be documented and entered into a database. The information in this database will be used to become a part of the poll location data sheet.
4. At the same time the communication test is performed, Williamson County personnel will also measure the poll location and verify electrical outlets, phone location, and handicap accessibility.

This information will be used to diagram the poll location equipment setup and will also become part of the poll location data sheet for the location.

Please provide a "best practices" method for results transmission recommended either from your company's experience in another jurisdiction or from research and development.

Best practices methods employed at other ES&S accounts utilizing modem transmission from the Election Day polls include:

- Conduct a poll site survey.
- Prepare a floor plan drawing of the poll and identify location of the voting area, electrical outlets, and modem lines. Include the floor plan in the poll workers' precinct kits. Maintain a copy of the floor plans at the election office.
- Tag the modem line and provide poll workers with specific location information (e.g., tag color, text, shape).
- Document poll information including the phone string required (e.g., dial 9, 8, or 1), length of pause until outside line is active, account codes required, and area codes required.
- Identify and document the type of modem line (i.e., digital or analog).

16.2 Personnel Training

Proposer is requested to provide a schedule for the training of Elections Administrator personnel, Early Voting personnel and Election Day personnel. The training schedule should include materials for distribution in the form of manuals, guides, videos and the like and any other method recommended to train the above personnel in every phase of the administration of elections under the new Voting System(s). Training materials should include step-by-step instructions on set-up, operation, device failure, transmission of results (electronic or otherwise), close out and troubleshooting. Personnel should be able to follow the material and perform the tasks independently after completing training.

The ES&S Training Program will include all phases for the Optical Scan and the DRE voting systems. The ES&S Training Program is inclusive of high-level system training on all electronic components pertaining to:

- The Model 650 Central Ballot Counter for Absentee By-Mail Voting
- The Model 150 Central Ballot Counter for Absentee By-Mail and In-Person Voting
- The iVotronic DRE Touch Screen for Early Voting In-Person & Election Day Voting
- The Model 100 Precinct Ballot Counter for Election Day Voting
- The Unity Election Management System
- The Election Central Network
- The Receiving Substation Transmission Backup Systems

Only ES&S has the requisite resources, experience, and demonstrated capability necessary to implement an election system inclusive of "Professional Services." ES&S believes in matching specific, proven solutions to specific environments.

The ES&S Professional Services Team assigned to Williamson County will work closely with all Election office personnel to facilitate a successful system implementation and to familiarize election officials with all aspects of the Model 150/650 Central Ballot Counters, the iVotronic DRE System, and the Model 100 Precinct Ballot Counter.

A dedicated Professional Services Project Manager (PM) will be assigned to the project. The PM will be responsible for managing the project, ensuring the successful completion of services and deliverables, and allowing Williamson County the ability to assume full independence and administration for the system.

One of the key functional categories of the ES&S Professional Services Approach is a comprehensive training program. The ES&S Project Management Team will directly assist the County Elections Staff in developing the appropriate training curriculum and the requisite training materials. The ES&S Comprehensive Training Program is sub-divided as follows:

- County Elections/County Election Staff Training (Hardware/Software)
- County Election Staff Training (Early Voting, In-Person and Election Day)
- Training Associated with a Successful Voter Education Campaign (optional)

Our Comprehensive Training Program utilizes a hands-on approach that includes system overview, setup, operations, troubleshooting, and a question and answer session. In response to this bid, ES&S, in consultation with Williamson County, will review and finalize the training program and related materials.

Training Materials

ES&S has developed comprehensive set of **step-by-step training** materials for our election systems clientele. Materials are available for elections staff responsible for every level of system administration, system management, and election preparation. This documentation consists of hardware manuals, software user guides, and tutorials prepared and published by ES&S in accordance with industry standard practices for electronic and mechanical equipment. The materials suitably identify and illustrate each system's features—again, step-by-easy-step—and provide instructions for the proper operation and maintenance of system components.

The PM assigned to Williamson County will meet with key personnel to review existing procedures and develop reference manuals specific to Williamson County and State of Texas election laws and requirements. *All materials will be developed specifically for the product(s) implemented by Williamson County*. Such training materials, coupled with a comprehensive hands-on training session, will provide the County with an efficient means of introducing election staff to the new system and instructing everyone involved regarding the required system operations.

ES&S product documentation provided for the proposed system implementation includes the:

Model 650 Central Count Absentee System

- Operator's Manual
- Maintenance Manual

Model 150 Central Count Absentee System

- Operator's Manual
- Maintenance Manual

iVotronic DRE Touch Screen System

- Operator's Manual
- Election Judges' Manual
- Maintenance Manual
- Quick Operations Guide

Model 100 Precinct Ballot Counter

- Operator's Manual
- Maintenance Manual

Unity Election Management System

- Unity Election Data Manager
- Unity Ballot Image Manager
- Unity Hardware Programming Manager
- Unity Data Acquisition Manager
- Unity Election Reporting Manager

16.3 Workflow:

Proposer is requested to provide a detailed diagram of the workflow for using the Voting System(s) in the conduct of an election, with specific emphasis on the November 4, 2003, Election and shall provide a detailed plan, on paper regarding the electronic medium, including all tasks to be performed, the number of personnel required and the time requirements to accomplish all tasks. Items in the plan shall include, but shall not be limited to, the following:

16.3.1 Preparing a polling place for set up and use of the Voting System(s), taking into account the amount of space available.

16.3.2 Equipment to be utilized and the number of personnel to be employed.

16.3.3 Procedures at the central station, and

16.3.4 Whether one station or regional stations will be established.

ES&S has prepared Proposed System Diagrams inclusive of workflow diagrams. After discussion with the Election Office, ES&S understands that Williamson County is requesting system implementation in time for Early Voting for the November 4, 2003 Election. Please refer to **Appendix D** for the workflow diagrams that outlines ES&S's proposed use of our voting systems.

Provide a detailed plan, on paper regarding the electronic medium, including tasks to be performed,

ES&S has prepared a Preliminary Implementation Timeline in response to this bid. Please refer to **Section 6** for a copy of the **Preliminary Implementation Timeline**. The Preliminary Timeline outlines major tasks, related sub-tasks, and includes the goals; personnel and time required to accomplish the tasks. The Preliminary Timeline addresses the tasks required to implement the proposed system and conduct the November 4, 2003 Election. It will be further customized based on information gathered during the initial communication meetings between ES&S and Williamson County.

16.3.1 Preparing a polling place for set up and use of the Voting System(s), taking into account the amount of space available,

Based on ES&S's vast experience of implementing systems we have prepared a detailed response outlining the following recommended steps for reviewing and preparing a polling place for Williamson County.

1. Conduct a site-survey of each poll and prepare a floor plan of the location within the polling place to be used for voting. Floor plan should include identification of power requirement, location of electrical outlets, phone location, and handicap accessibility. Additional information necessary for site set up should include: phone dialing prefix, type of line (e.g., digital or analog), access requirements to phones during non-working hours, and emergency contact numbers for the polling place. City modem transmission to other polls is to be implemented.
2. Polls without existing phone lines will require installation of phone lines. Phone lines should be ordered and installed in a timely manner to allow for sufficient modem testing.
3. Phone line at each polling place should be tested to confirm modem capability.

Estimates of space

The most important variable is the size of the precinct in terms of expected turnout. The greater the number of voters, the higher number of voter terminals and space required.

If a given precinct is using 5 iVotronic terminals on election day, this would require approximately 5 square feet per iVotronic Voter Terminal for a total of 25 square feet based on this example. Allowing for a 3'x 7' worktable for use by poll workers qualifying voters (21 square feet) and an additional 5 square feet per poll official (25 square feet) for a minimum space of 71 square feet. Over and above that would be the amount of square footage required for traffic flow and voter comfort and privacy. A sample polling place diagram has been included in this section of the proposal.

16.3.2 Equipment to be utilized and the number of personnel to be employed.

Equipment Preparation for use at the polls

The following is a detailed list of the steps required to prepare DRE units for use in the field. We are basing our estimates on over 10 years of experience in managing similar hardware in dozens of large and small elections,

DRE Hardware to prepare:

1. iVotronic Voter Terminals.
2. iVotronic Communication Packs.
3. Supervisor PEBs.

Pre-election preparation tasks:

1. Clear and Test - 2 minutes for Terminals and PEBs.

2. Physical inspection - 5 minutes
3. Test election set-up/pre-testing ADA voice files - 5 minutes per ADA voter terminal.
4. Test modems in communication packs - 2 minutes.
5. Final inspection/packing for early voting/election day - 2 minutes per unit.

Optical Scan Hardware to Prepare

Model 100 precinct counters / ballot boxes

Pre-election preparation tasks:

1. Test Model 100 with pre-audited test deck – 5 minutes, may increase with larger test deck.
2. Verify test results – 1 minute.
3. Clear PCMCIA election card – 20 seconds.
4. Seal PCMCIA compartment 10 – 10 seconds.

Polling Location Procedures

Poll workers can easily perform all polling location procedures. When poll workers arrive on the day of the election, the following preparation duties are required to set up the ES&S voting systems.

DRE

1. Set up each voting booth/voting terminal – 3 minutes for each booth.
2. Daisy chain the voting booth power cords together – 1 minute.
3. Insert the Master PEB to open each voting terminal – 45 seconds for each terminal.
4. Print the accumulated zero tape – 2 minutes.

Note: We do recommend using at least two people to physically lift and move a voting booth if necessary.

Optical Scan

1. Remove the security lid from the tabulator – 10 seconds.
2. Inspect ballot box compartments to make sure they are empty – 15 seconds.
3. Turn the tabulator on - boot up time is about 40 seconds.
4. Print zero tape – approximately 1 minute depending on the number of offices and candidates in the election.

16.3.3 Procedures at the central counting station, and

The procedures identify the tasks required in setting up the central counting station and regional stations.

The task list includes personnel and time requirements. The ES&S proposed solution provides for electronic transmission of results directly from Williamson County regional sites. The regional stations would then serve as designated collection sites for poll supplies brought in by election officials and as back-up sites in the event that a poll was unable to transmit results.

Procedures at Central Counting Station

Task	Estimates		
	Time	Equipment	Personnel
Power up Unity Election Reporting and Tabulation System Print Zero Report	5 min	Modems, Printer, DAM PCs, ERM PCs	1
Power up Absentee Ballots Scanners, Zero Counters Print Zero Report	5 min	Absentee Scanners	1
Run Pre-Test on Absentee Scanners	5-10 min	Scanners, Test Deck	1/Scanner
Reconcile Results, Zero Scanners Produce a Zero Report	5 min	Scanners, Test Deck	1
Scan Absentee Ballots	N/A	Scanners	1/Scanner
Update Results Database with Absentee Ballot Data	1-2 min	Scanner, Disk From Scanner (if applicable) and Unity ERM	1
Start up Unity Software Applications to Receive Modem Transmissions Update Results Database Print Reports Display Results Update WEB Results	5 min	Tabulation Network	1
Monitor Tabulation System as Results are Being Received	N/A	Tabulation Network	1
Locally Upload PEB Data Not Transmitted From Polls or Regional Sites.	20 sec per PEB	Supervisor Terminal or PEB Reader	1

Task	Estimates		
	Time	Equipment	Personnel
Print Reports as Needed	1 min per Report	Election Reporting Manager	1
Run Post-Test on Absentee Scanners	5-10 min	Scanners, Test Deck	1/Scanner

16.3.4 Whether one (1) station or regional stations are established.

Central Counting

Review and preparation of receiving substation: The proposed ES&S configuration provides for the optional electronic transmission of Election Day totals directly from the polls to Election Central.

Procedures at Receiving Station

Task	Estimates		
	Time	Equipment	Personnel
Power Up DAM Client PC, Connect PEB Reader, and Connect to Phone Line, Dial into Host.	5 min	DAM PC, PEB Reader, and Phone Line	1
Download Precinct List From Host	2 min	DAM PC	1
Receive PEBs From Polling Places	N/A	Tables, Check-in Log	2
Move PEBs to DAM Operator Station	1 min	PEB's	1
Read PEBs and Then Secure in PEB Transfer Case.	10sec/ PEB	DAM PC, PEB Reader, and PEB	1
After All PEBs are in – Disconnect from Host, Close/Pack PC &PEB Reader, and deliver PC and PEBs to Central Counting Location.	30min	DAM PC, PEB Reader, PEBs, Other Supplies	1

16.4 Elections Administrator Training:
In addition to the Training requirements stated herein, the following requirements shall be applicable in regard to Elections Administrator Training:

16.4.1 Proposer is requested to provide a detailed notebook, guidelines, checklists, videos, and the like for training Election Department personnel in the administration of the system, from its initial implementation to the retention of election records after an election.

Our training program is designed around a proven combination of easy to follow printed materials and line-item checklists, and extensive hands-on training.

During our training, participants will perform the functions of set-up, operation close down, and basic troubleshooting of the iVotronic voting system. Following the formal training, your poll workers will be able to refer to written guidelines, checklists, and other materials.

In addition to traditional instructor-led, student-centered training, ES&S would strongly recommend that serious consideration be given to the integration of technology–based, eLearning. This methodology permits the provision of initial and refresher training for election staff and poll workers using customized eLearning courses available via the Internet, through your Intranet, or by CD-ROM. The on-line format is easily updated to reflect changes to procedure or law and is far superior to the static content of a videotape.

While the specific details of the training curriculum and associated timeline will reflect our jointly developed and mutually agreed project plan, we recommend election training and education activities generally include the following:

- Poll Worker Training – focus on election day processes, poll opening procedures, election day operation, troubleshooting, poll closing procedures, and results collection.
- Operations Training – designed for the election administration staff at the County or State level rather than the poll workers, this training provides a more in-depth understanding of the operation of each of the tabulators provided to the State including DRE and optical scan.
- Warehouse Staff Training – designed for those responsible for the handling, storage, and routine care of the tabulation systems, this training focuses on areas to ensure that the investment made in the new voting equipment is protected.
- Administrative and Data Center Staff Training – tailored to meet the unique configuration for the County's network and software configuration, this training is designed to ensure that those who need to operate the modules of the Unity Election System are capable of performing all of the necessary operations.
- Voter Education – designed to provide the voter with easy to understand guidance on how to interface with the new voting system, this material will be developed in close coordination with the State. Often, the materials used in this area are dependent on the State's approach, but should stress building the voters' confidence and understanding in working with the equipment.

16.4.2 This plan should include, but may not be limited to developing ballot formats, diagnostics, voting schematics, electronic transmissions, non-modem transmissions, compiling election returns, formatting reports and releasing results.

The project management team assigned to Williamson County will work with County election personnel to review existing procedures and processes for revision based on implementation of the proposed system. Review and revision is inclusive of items listed above

16.4.3 Training should also include extensive information on how to solve every potential problem that might develop in the election process.

ES&S's Comprehensive Training Program is designed to provide hands-on training to Election Administrator personnel and any other applicable personnel responsible for the administration and management of the proposed system.

Our training includes extensive information. The intent of this information (validated in the successful conduct of hundreds of elections) is to incorporate the operational lessons learned and best practices in those many elections and to prepare the customer to successfully operate ES&S hardware and software.

Please refer to the **ES&S Training Plan** included in **Appendix E** of our proposal.

16.5 On-Site Support:
In addition to the On-Site Support requirements stated herein, the following requirements shall be applicable in regard to On-Site Support:

16.5.1 Proposer is requested to provide a short term on-site (through the November 4, 2003 Special Election) and a long-term plan for proposer support.

Short-Term On-site Support Plan: We believe it is imperative to implement the common best practices inherent in any project management endeavor. Therefore, we have taken an approach that builds on these common best practices. Our organizational strategies include the development of a project team.

We assign a project manager who has direct responsibility for the successful management of the service engagement with our client. Most projects require assistance from our other fulfillment departments to support the project. They are designated as a part of the project team and identified in the initial organization. In addition, to the Project Manager, there may be other staff assigned directly to the project team. Equally important, is the staff assigned by the client to the project.

We have learned that when either the client team or our team is understaffed, then problems are inevitable. Therefore, a key part of our project initiation is to identify staff and roles within both organizations.

ES&S is structured with the following departments to assist its clients: Customer Service and Technical (Software and Hardware) Support.

It is standard operating procedure that all of our clients are serviced out of the groups mentioned above. The ease of use for all of our support functions is utilized by our clients via our toll-free telephone access as well as through the Internet. Our extensive staff and the knowledge that they embody ensure timely and accurate election materials are delivered to our clients.

The number of software or hardware technicians deployed to a specific client site before, during and after an election are dependent on the client's needs and the service agreement in place. ES&S offers its clients a wide range of services in connection with its tabulation systems.

Client's preferences and their own in-house capabilities normally dictate the amount of service ES&S provides. **Please refer to Section 7, Pricing Sheets, for Professional Services pricing information.**

Long-Term Support: ES&S also has a centralized Customer Support function. Project teams and clients alike are able to utilize our toll-free telephone number – with staff on hand from 8 to 5 across all U.S. time zones. In addition, the ES&S website ((www.essvote.com) is always available with up-to-date product and company information. These resources help ensure timely answers – and effective election material planning and deliveries.

ES&S is an election management company. With more than 400 hundred employees dedicated to servicing the customer, we are uniquely qualified to provide Williamson County with the same level of service they have trusted for years. The Addison Texas facility employees know Williamson County and will continue to provide excellent support during implementation and beyond.

Each jurisdiction and client is unique; therefore, ES&S is eager to customize nearly any combination or depth of service for you. A continuous review of your specific (and sometimes changing) needs, preferences and in-house capabilities will always drive the final solution.

16.5.2 Proposer shall include a description of the type of support to be provided, the number and qualifications of experts provided, and the costs of said support, if not part of the whole package.

ES&S employs a diverse team of dedicated professionals who support service requirements through its project managers, software/network specialists, ballot layout specialists, hardware/firmware programmers, hardware service technicians, etc. ES&S staff are extensively trained and have "real world" experience in the implementation and support of various types of election systems and processes. Staff are assigned to project account teams based on specific client requirements, (i.e., hardware and software types, depth and duration of on-site support required, and account location).

ES&S believes much of its strength comes from its people's ability to build upon best practices – and it has many practices from which to build.

Managing all or some portion of approximately 1200 to 4000 elections per year (depending on even or odd years), ES&S takes pride in its ability to continuously improve processes—sharing best practices internally and with clients.

With each new project implementation (or continuous full service account) ES&S designates a project manager who has ultimate responsibility for the successful coordination of services and timing throughout the engagement.

Most projects require assistance from various functional areas of the Company – and the designated project manager ensures each piece of the project comes together sequentially and successfully.

ES&S's approach to your account would include an initial meeting to fully understand the details and uniqueness of your needs.

This first meeting encompasses an initial confirmation of the project timeline, completion of a site-survey, establishment of a formal communication plan and the clear definition of roles between jurisdiction and ES&S. Meeting and understanding the roles and responsibilities of the staff assigned to elections from your organization will be critically important to the success of the engagement.

Following the first meeting, ES&S will quickly access and finalize the assignment (and number) of key support professionals to your project team. This helps ensure, not only a superior system solution -- but a service team in-line with expectations and needs. **Please refer to Section 6 for Experience Statements for ES&S Professional Services Project Managers.**

From that point, the ES&S Project Team stays in constant communication internally and with the client. Weekly meetings are typically scheduled so progress can be shared and challenges proactively avoided. **Please refer to Section 7, Pricing Sheets, for Professional Services pricing information.**

16.5.3 Offerer shall provide a time frame under which it is anticipated that Williamson County will eventually assume independent administration of the new Voting System(s).

ES&S judges the success of its installations by the ability of our customers to more efficiently manage their election process using our systems.

Our comprehensive training program has been developed to promote a strong level of competency for all intended users.

We feel that professionals who work with the product on a daily basis can only conduct training on this level. With this thought in mind, ES&S is proposing extensive hands-on training for Williamson County, utilizing our experienced Professional Services Training and Support staff. This training staff has been involved in the implementation of systems in jurisdictions similar in size and complexity to Williamson County and thoroughly understands the unique demands that are placed on the election office and personnel.

Our Comprehensive Training Program coupled with the service and support provided by the Professional Services Team ensures that Williamson County can expect to assume independent programming and administration of the new voting system after the first election. The Training Program includes the development of processes, manuals, checklist, and forms specific to county and election laws and requirements.

ES&S's Toll-Free Telephone Support and User Meetings provide clients with initial and ongoing support.

16.5.4 Williamson County will make the final decision on when on-site vendor support will no longer be required—as such, provide information necessary for the county to determine the budget impact of continued on-site support.

Charges for support (following an initial installation) are typically based on time and related expense. Daily rates vary by level and/or expertise of support required. Service Agreements are frequently arranged following an installation.

They are customized to the respective client's unique needs and carry the added benefit of security and best rates. Each client determines the level of support that will best fit his or her situation and budget. The following questions can be used to help evaluate the potential costs and benefits:

1. Are current county staff able to accomplish the required tasks during the course of a standard work day (8 hours)?
2. If current county in-house resources are unable to accomplish the required task in a standard work day (8 hours), are employees paid overtime or do they accrue comp time in order to complete the required task?
3. Are temporary resources hired to assist county staff in accomplishing the required tasks? If so, what type of cost does Williamson County normally incur in the use of temporary resources on a per-election basis, on an annual basis?
4. Has Williamson County experienced employee turnover requiring hiring and training of new employees? If so, it is necessary to consider the obvious expenses as well as the time lost due to the learning curve required of a new employee?

The benefits to contracting with ES&S for the provision of services:

1. Eliminate the concern for employee turnover, the associated cost, training and the expected learning curve.
2. Eliminate the total reliance on trained in-house resources and the possibility of their leaving at inopportune times, being incapacitated by illnesses or accident, and/or personal problems.
3. Eliminate the reliance on a limited number of people trained to handle key tasks, (ballot coding, ballot layout, system preparation, maintenance, etc.).
4. County can be assured that the most competent and experienced personnel in the industry will perform critical tasks.
5. In the event of unforeseen complications, the vendor will have more resources to address the problem than the County.

16.6 Education and Outreach:

In addition to the Education and Outreach requirements stated herein, the following requirements shall be applicable in regard to Education and Outreach:

16.6.1 Offerer is requested to provide a plan for educating the voting public, the media, candidates, voters and all interested parties on the operation of the new Voting System(s).

ES&S offers an optional program called "ES&S Connect™ Voter Education and Voter Outreach Program. Our program provides the critical "Election Connection" between the election office and the voter to ensure a successful election. We propose a comprehensive public information, and voter outreach program to assist our clients in accomplishing these essential election management objectives:

- Educate voters on how to vote on the new system.
- Increase voter registration and voter turnout among *all* demographic segments of the jurisdiction to include minorities, youth, seniors, non-English speaking citizens, and those voters with physical disabilities.
- Train Election Staff and Poll Workers on system operation.

Our public information and education and outreach program introduces and informs the public about our Model 100 Precinct Ballot Counter and the iVotronic DRE Touch Screen System. Our plan is based on similar plans that we have implemented, with great effectiveness, in introducing these voting systems to a number of election jurisdictions throughout the U.S.

Our research and experience has shown that while media coverage, sample ballots, and other printed materials are important, the most effective way to educate and inform voters is through hands-on, on-site "mock" voting on the Model 650 system, the Model 100 system, and the iVotronic terminal prior to Election Day. Thus, the heart of our voter information and education program will be to:

- Identify community groups
- Schedule demonstrations
- Recruit and train voter education specialists
- Program voter terminals using mock ballots
- Assist in overall management of the project

16.6.2 Proposer must be prepared to assist the Williamson County Clerk in a media campaign in order to inform the citizens of Williamson County of the new Voting System(s).

The first step in our optional Media Outreach Plan will be a coordinated effort between ES&S, the Williamson County Clerk and the print and electronic media. This will result in production of a comprehensive media plan with two objectives in mind:

1. To secure cooperation from the media in obtaining ongoing news coverage on the new iVotronic system. As part of this objective we will:
   a. Conduct initial media briefing on voting system to include; system description, operation, security and outputs.
   b. Provide video/DVD materials for public demonstrations and public service announcements on "How to vote"."
   c. Provide written materials that can be reproduced in the printed media including "Four Easy Steps To Voting".
   d. Conduct ongoing media briefings on contract "Check Points."
      - When equipment is delivered to County
      - Pre-election check-out and preparation
      - Pre-election L &A
      - Early Voting coverage
      - Voter information/education outreach appointments
2. Develop election Information/Data/Research/Specialized reports for media use for election reporting:
   - Initial Media briefing on election results production/timing.
   - Obtain requests for specialized reports, research alternatives.
   - Produce related graphic materials that can be used as handouts.

Section

6

Timeline Disclaimer

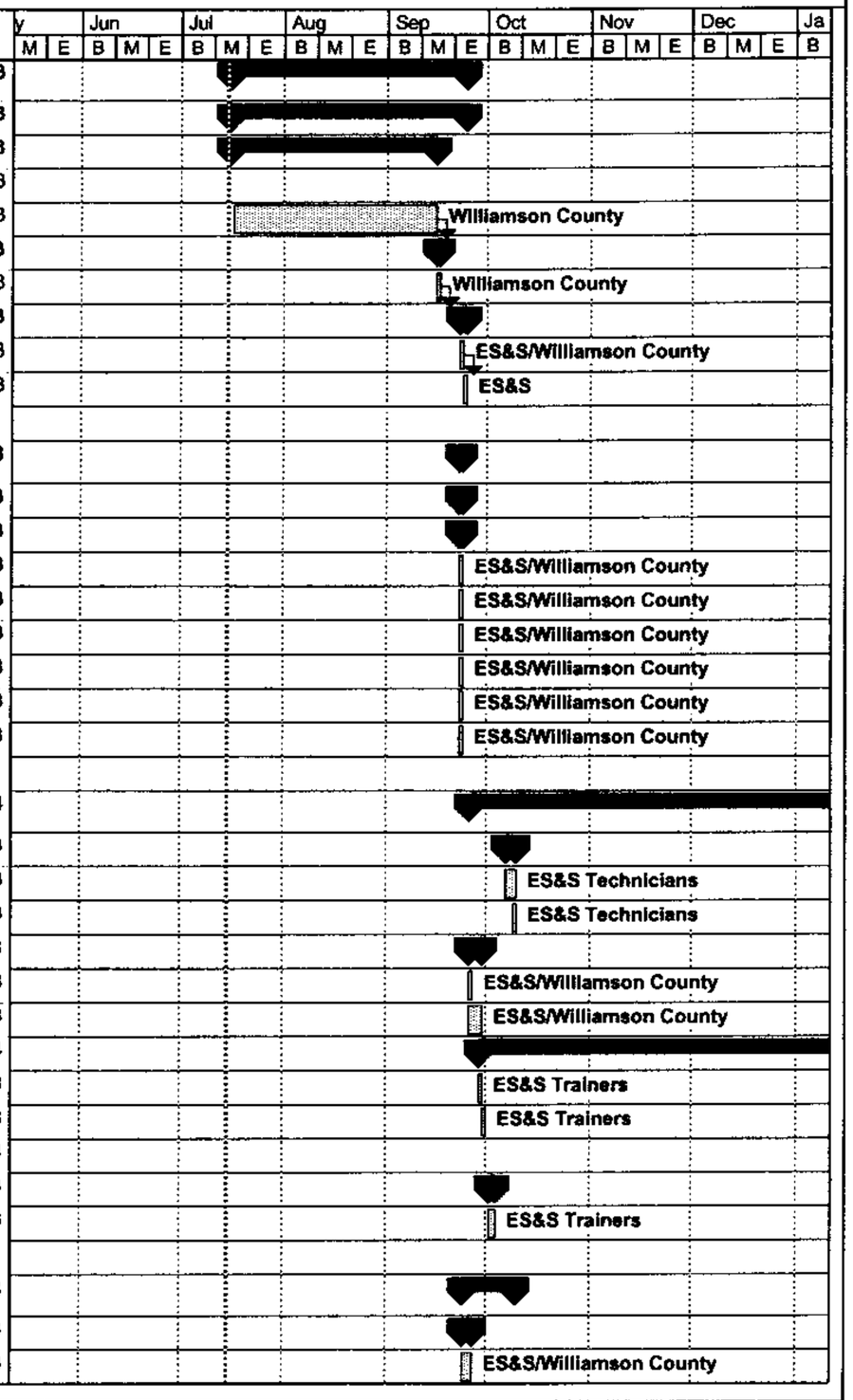
The following project timeline is preliminary and subject to change by ES&S and Williamson County, Texas due to changes in, among other things, the timing of the award, the completion of a contract, scope of services, and first election use.

Williamson County, TX

Option 1 Phase 1 - DRE for Election Day and Early Voting, Model 150 for Absentee Mail and Unity Election System

Preliminary Implementation Timeline

ID	Task Name	Start	Finish
1	**INITIATING**	Wed 7/16/03	Wed 9/24/03
2	**Project Initiation and Vendor Selection Process**	Wed 7/16/03	Wed 9/24/03
3	**RFP Issued**	Wed 7/16/03	Mon 9/15/03
4	Proposal Submitted	Wed 7/16/03	Wed 7/16/03
5	Proposal Evaluated	Thu 7/17/03	Mon 9/15/03
6	**Finalists Selected**	Tue 9/16/03	Tue 9/16/03
7	Contract Awarded	Tue 9/16/03	Tue 9/16/03
8	**Contract Negotiated**	Tue 9/23/03	Wed 9/24/03
9	Contract Signed	Tue 9/23/03	Tue 9/23/03
10	ES&S Sales Order Entered & Work Officially Begins	Wed 9/24/03	Wed 9/24/03
11			
12	**PLANNING**	Tue 9/23/03	Tue 9/23/03
13	**Project Kick-off**	Tue 9/23/03	Tue 9/23/03
14	**Conduct Initial Planning Session**	Tue 9/23/03	Tue 9/23/03
15	Clarify Findings of Business Analysis (Warehousing, Technical Analysis)	Tue 9/23/03	Tue 9/23/03
16	Clarify Contract Milestones and Expected Deliverables	Tue 9/23/03	Tue 9/23/03
17	Formalize Project Timeline and Statement of Work	Tue 9/23/03	Tue 9/23/03
18	Establish Formal Communication Plan for Duration of Project	Tue 9/23/03	Tue 9/23/03
19	Review Client's Procedures & Processes for Absentee and Election Day Voting	Tue 9/23/03	Tue 9/23/03
20	Establish Training Class Schedules	Tue 9/23/03	Tue 9/23/03
21			
22	**INSTALLATION, TRAINING**	Fri 9/26/03	Fri 1/23/04
23	**Network & Software System Installation**	Tue 10/7/03	Thu 10/9/03
24	Install Election Central Network System & Software	Tue 10/7/03	Thu 10/9/03
25	Test, Document & Train Client's IT Staff on Settings/Configurations	Thu 10/9/03	Thu 10/9/03
26	**Ship Model iVotronic & Model 150 units**	Fri 9/26/03	Mon 9/29/03
27	Receive & Inventory Election Equipment	Fri 9/26/03	Fri 9/26/03
28	Conduct Functional Acceptance Test	Fri 9/26/03	Mon 9/29/03
29	**Conduct Hardware & Software Training**	Mon 9/29/03	Fri 1/23/04
30	Train Client's End User Staff on iVotronic	Mon 9/29/03	Mon 9/29/03
31	Train Client's End User Staff on Model 150	Tue 9/30/03	Tue 9/30/03
32	Train Selected Client Staff on Unity Suite	Mon 1/19/04	Fri 1/23/04
33	**Train Poll Workers**	Thu 10/2/03	Fri 10/3/03
34	Conduct Train the Trainer Poll Worker Training	Thu 10/2/03	Fri 10/3/03
35			
36	**BALLOT LAYOUT, PRINTING**	Wed 9/24/03	Thu 10/9/03
37	**Review Election Data Manager Setup with Client Staff**	Wed 9/24/03	Fri 9/26/03
38	Ensure Contests & Candidates are Set Up, Jurisdictional Relationships, etc.	Wed 9/24/03	Fri 9/26/03



This Preliminary Timeline represents a tentative timeline of major tasks. All tasks, completion dates, and resource requirements will be mutually agreed upon by ESS and Williamson County, TX.

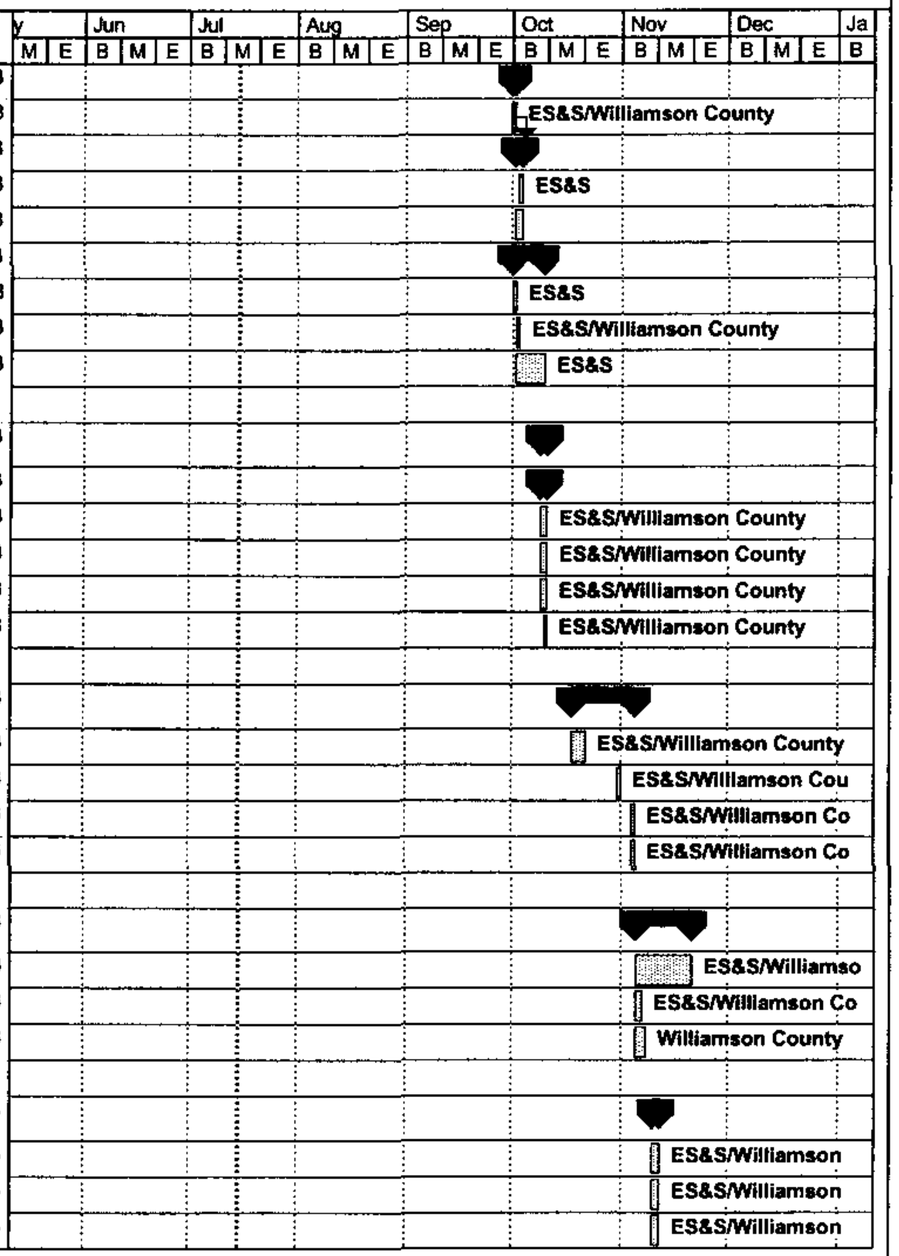
01/06/2004

Williamson County, TX

Option 1 Phase 1 - DRE for Election Day and Early Voting, Model 150 for Absentee Mail and Unity Election System

Preliminary Implementation Timeline

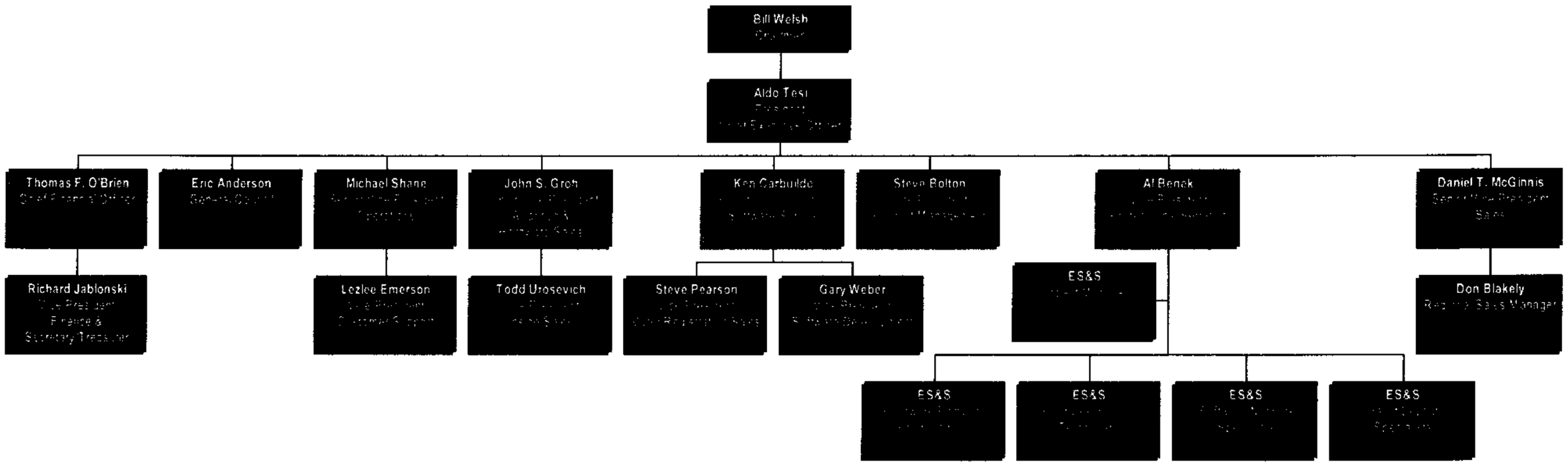
ID	Task Name	Start	Finish
39	**Complete Absentee / Election Day Ballot Layout- Central Count & iVotronic Ballots**	**Wed 10/1/03**	**Wed 10/1/03**
40	Generate Proofs, Finalize Changes and Secure Client Sign-off	Wed 10/1/03	Wed 10/1/03
41	**Complete Hardware Coding Process**	**Thu 10/2/03**	**Fri 10/3/03**
42	Memory Chip Coding - Model 150	Fri 10/3/03	Fri 10/3/03
43	PEB Coding - iVotronic	Thu 10/2/03	Fri 10/3/03
44	**Print & Deliver Absentee Ballots - Model 150**	**Wed 10/1/03**	**Thu 10/9/03**
45	Proceed with File Transmission of Files to Printer	Wed 10/1/03	Wed 10/1/03
46	Ensure Accurate Specifications and Delivery Requirements on Ballot Order	Thu 10/2/03	Thu 10/2/03
47	Supervise Printing and Delivery of Ballots	Thu 10/2/03	Thu 10/9/03
48			
49	**PRE-ELECTION TESTING**	**Thu 10/9/03**	**Fri 10/10/03**
50	**Vote Test Results On iVotronic's & Model 150**	**Thu 10/9/03**	**Fri 10/10/03**
51	Prepare Auto Simulation Program	Thu 10/9/03	Fri 10/10/03
52	Prepare Test Deck for Model 150	Thu 10/9/03	Fri 10/10/03
53	Perform Logic & Accuracy Testing - Model 150 & iVotronic	Thu 10/9/03	Fri 10/10/03
54	Load Results Into Unity and Print/Verify Printed Reports	Fri 10/10/03	Fri 10/10/03
55			
56	**Early In-Person Voting**	**Sat 10/18/03**	**Tue 11/4/03**
57	Open polls for Early Voting	Sat 10/18/03	Tue 10/21/03
58	Close polls for Early Voting.	Fri 10/31/03	Fri 10/31/03
59	Accumulate Results - iVotronic & Model 150	Tue 11/4/03	Tue 11/4/03
60	Complete Required Reporting of Results	Tue 11/4/03	Tue 11/4/03
61			
62	**POST ELECTION SUPPORT**	**Wed 11/5/03**	**Thu 11/20/03**
63	Canvass and Certification	Wed 11/5/03	Thu 11/20/03
64	Review and Resolve any Election Day Procedure Issues	Wed 11/5/03	Thu 11/6/03
65	Retrieve Polling Place Equipment	Wed 11/5/03	Fri 11/7/03
66			
67	**PREPARE FOR NEXT ELECTION CYCLE**	**Mon 11/10/03**	**Tue 11/11/03**
68	Election Debrief Meeting	Mon 11/10/03	Tue 11/11/03
69	Plan Points Forward	Mon 11/10/03	Tue 11/11/03
70	Initiate Improvement Strategies	Mon 11/10/03	Tue 11/11/03



This Preliminary Timeline represents a tentative timeline of major tasks. All tasks, completion dates, and resource requirements will be mutually agreed upon by ESS and Williamson County, TX.

01/06/2004

ES&S Organization Chart



Mike Devereaux

Vice President, Western Sales Region

Qualifications

Mike Devereaux started with the predecessor of ES&S and was one of the original four associates that started the company. Through his 22 years of election experience, Mike has been involved in every aspect of the industry from training precinct workers to ballot layout and printing.

Current Responsibilities

Mike is currently responsible for overall sales and customer service in the United States region west of the Mississippi.

Accomplishments & Expertise

- Has been involved with elections in more than 750 counties in the U.S.
- Contributed to elections in some of the country's largest jurisdictions, including Dallas County (Dallas), Texas; Multnomah County (Portland), Oregon; Bexar County (San Antonio), Texas; State of Hawaii and Mahoning County (Youngstown), Ohio.
- Mike currently has 11 people that report directly to him
- Intricately involved in state voter registration sales in Missouri, New Mexico, Nebraska to name a few.

Allan J. Benek

Vice President, Professional Services

Qualifications

More than 14 years of election experience; thirteen as the Director of the Board of Elections in Geauga County, Ohio.

- Elections Center
  - Certified Election Registration Administrator – Graduate, 1996
  - Code of Ethics and Standards for Election Officials – Committee Member and Author
  - Professional Education Program – Board Member, 1998-2000
- IACREOT
  - Education Certification – Committee Member 1991-1995
  - Election Section – Committee Member 1990-1995
- BA Degree in Sociology – John Carroll University, 1979

Summary Experience

Allan began his career with the Geauga County Board of Elections in 1987 as the youngest Elections Director in the State of Ohio. He was responsible for the conversion and implementation of optical scan tabulation equipment in 1993. This included changes to procedural guidelines, staff training, pollworker education, and developing and conducting voter outreach programs. Allan administered all aspects of the election department as it related to federal, state and local elections, voter registration and campaign finance.

During his tenure he served as President and Vice President of the Ohio Association of Election Officials, spent ten years as a Member of the Board of Trustees, eight years as a member of the legislative committee and two years as Chairman of that committee. Allan testified numerous times before the Ohio General Assembly in matters relating to election reform and law change. He also testified as an expert witness on behalf of local election boards on statutory matters in election contests and legal disputes.

Allan's current role at ES&S is serving as Director of Professional Services. This department oversees all project management including full service, specified service and installation of new accounts. Allan joined ES&S in 2000.

Page 2 – Allan J. Benek
Director, Professional Services Division

Relevant Experience

- ES&S - Dallas County, Texas
- Managed and integrated Votronic touch screen technology, M100 optical scan precinct readers and M550 central scan tabulation systems which utilized 791 precincts during the November 2000 General Election and 1219 precincts in the May 2001 Joint Election. Currently, Dallas County, Texas is the only jurisdiction using these three technologies simultaneously The November 2000 General Election included more than 220,000 Votronic touch screen users during the early voting process which sharply reduced the need for paper absentee ballots. Votronic touch screen users represented over one-third of the total voter turnout for this election.
- Assisted with personnel training on procedures relating to the upload and accumulation of Votronic DRE tabulation and reporting.
- Supervised Logic and Accuracy Testing and participated in the development and implementation of recount procedures.

Geauga County, Ohio – Director of the BOE

- First person from the State of Ohio to complete both the IACREOT Continuing Education Program and the CERA designation from the Election Center.
- Recipient of the Secretary of State Pinnacle Award for Exemplary Service to Ohio Elections, 1998.
- Member of the Ohio State Association's Legislative Committee, which was formed to update old election statutes.
- Member and Vice Chair (1998) of the First Standing Committee on Ethical Standards for Election Officials

Assisted with the preparation of the documents that are now published as the National Principals and Standards of Conduct

John Hofmann

Project Manager

Qualifications

- Systems Implementation Project Manager for Bexar, County
- Certified ES&S Election Official and Poll Worker Facilitator
- Certified in The Basics of ES&S Unity Election Software

Summary Experience

John is responsible for the project management of assigned accounts. This usually includes installation of software and hardware, election official and poll worker training, development or establishment of a warehouse or warehouse procedures, development of testing procedures for the hardware and software, working with contractors to assure quality ballot production and equipment delivery.

John is a relative new-comer to ES&S. John has a long history of project management in the private sector. For the past 8 years he has supervised many large scale projects, worth millions of dollars. He came to ES&S with a technical background in computer software development and management. Most recently, John managed a team of software developers developing an enterprise portal for corporate communication via the Internet. And managed multifacited sales demo programs.

His expertise and skill areas are people, project management, defining objectives, gathering information, conceptualizing alternatives, and developing/executing plans.

Additional responsibilities include:

- Project Definition and Planning
- Risk Identification and Management
- Resource Allocation
- Project Progress Monitoring and Tracking
- Cost Control
- Project Status Updates to Corporate
- Project Deliverables Delivery
- Project Team Leadership

On-Site Project Management and/or Election Support:

Bexar County, Texas

- 2003 San Antonio River Authority Election – Election Support
- 2003 Bexar County Project Manager

San Mateo, California

- 2002 Statewide General – Project Manager

Mesa County, Colorado

- 2002 City of Grand Junction Primary Election – Election Support

Technical Skills

- Unity Election Management System
- IV-C-400 Precinct Count System
- Model 550/650 Central Count System
- Eagle Precinct Count System

Kirstin Eschberger

Project Manager I

Qualifications

- More than 4 years experience in elections, all of which are with ES&S
- Certified in UNITY Election Software
- Continued studies in Project Management, Software and Hardware Networking Systems

Current Responsibilities

Kirstin's current role at ES&S is serving as an assistant Project Manager for Sussex County, NJ and Passaic County, NJ. This position provides election management and support which includes:

- Managing project scope
- Implementing task assignments
- Assisting with the contract and budget
- Hiring personnel
- Warehousing
- Handling system maintenance
- Supervising election-day deliveries
- Training election officials and poll workers
- Providing election-day support

Relevant Experience

Kirstin began her career with ES&S as a Customer Service Representative and has supported elections for both large and small accounts.

Accomplishments & Expertise

Provided professional support in:

- Collier County, FL
- Macomb County, MI
- County of San Francisco, CA
- The State of Hawaii
- The State of Rhode Island
- The State of Maryland
- The City of St. Albert, Alberta, CN
- The City of Vancouver, Ontario, CN
- Orangeburg County, SC
- City of Carrollton, TX
- Merced County, CA
- Nevada County, CA
- Tuolomne County, CA

Education & Experience

- Completed degree from Stephen F. Austin State University in Fine Arts with a minor in Psychology.
- Prior to Project Management, Kirstin worked in customer service and coordinated election proposals at ES&S.

John H. Walker
Project Manager

Qualifications

- Ashland County Board of Elections board member, Chairman for two years
- Ashland County Board of Elections Director for seven years
- Advanced Education Committee Chairman for the Ohio Association of Election Official

Summary Experience

As ES&S project manager for Mahoning County, John is responsible for:

- Scheduling shipment of election equipment
- Setting up warehouse for election equipment storage
- Training election staff and poll workers on ES&S systems

Relevant Experience

ES&S, Mahoning County, Ohio

- Served as project manager for Mahoning County, Ohio.
- Arranged and participated in iVotronic system acceptance testing.
- Set up the storage and warehousing of election equipment.
- Coordinated and managed training for the election staff and poll workers.

Additional ES&S Projects

- Assisted with the presentation of the iVotronic and Unity systems in Beaumont, TX resulting in a $2 million dollar sale.
- Served in four different states for 2002 election site support.

Accomplishments & Expertise

- Brought the Ashland County Board of Elections to a technologically advanced system in the State of Ohio and received recognition by the Secretary of State.
- Served as an Election Observer in Albania with IFES.
- Received the Pinnacle Award from Secretary of State Bob Taft, now Governor of Ohio, for exemplary service to Ohio's election system and overseas systems.
- Experienced in working with ES&S's Model 150, 315 and 550 systems for more than five years.
- Implemented the first BDS, BOR and ERS systems in the State of Ohio.

Education & Certification

- Advanced Education Certification for IACREOT.
- Attended more than 600 hours of instruction from the State of Ohio and IACREOT.
- Attended numerous ES&S classes on Unity, specifically ERM and DAM.

Section

7

Pricing Sheet

The following section includes ES&S' proposed pricing for Williamson County, Texas.

WILLIAMSON COUNTY
PRICING SHEET
Option 1

***NOTE*: PROPOSER MUST COMPLETE A SEPARATE PRICING SHEET FOR EACH OPTION UNDER SECTION 1, "Scope" (1.1; 1.2; 1.3; 1.4), FOR WHICH PROPOSER SUBMITS A PROPOSAL, *AND* MUST INDICATE THE OPTION NUMBER ON EACH PRICING SHEET.**

Proposals must include the cost figures in detail, including separate costs for all items proposed. Please Refer to Special Requirements Section of RFP. Proposers may include a separate sheet for additional space.

1. PURCHASE PRICE:

The purchase price shall be based on the attached Special Requirements and Scope of Work. Purchase Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Proposer shall itemize the following as well as any other required components additional costs and/or optional costs. The purchase price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System and/or Optical Scan (OpScan) Voting System.

	DESCRIPTION	**PRICE**
1.1	Number of voting devices recommended, taking into account Williamson County voting history, current registered voter population, and number of precincts and polling places	
	(1) Model M150 (252) Voter Terminals (88) ADA Voter Terminals (22) Supervisor Terminals (88) Communication Packs	
1.2	Cost for each individual device	
	Model M150	$38,500
	Voter Terminal	$3,195
	ADA Voter Terminal	$3,295
	Supervisor Terminal	$3,095
1.3	Cost for software to implement the Voting System(s)	$105,000
1.4	Cost for licensing	Included
1.5	Cost for maintenance, annual and/or per election	Included
	(Prices are annual amounts)	
	Model M150	$1,400
	Voter Terminal	$21,420
	ADA Voter Terminal	$7,480
	Supervisor Terminal	$1,870
1.6	Miscellaneous costs	
	Third Party Items	$29,121

	Election Service (64) Days	$92,230
	Shipping and Handling	$7,990
	Existing Customer Discount	$180,000
1.7	**TOTAL PURCHASE PRICE**	$1,390,523
1.7.1	Items Available as Option (Unity Election Reporting Manager assumed to be previously acquired)	
1.7.2	Time and Material Cost for Maintenance	_____

2. PURCHASE WITH OPTION TO RENEW ANNUAL MAINTENANCE
The Purchase Price with Renewals shall be based on the attached Special Requirements and Scope of Work. The Purchase Price with Renewals shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Purchase Price with Renewals shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System for the initial term of the contract plus the option to renew maintenance for five renewal periods.

	DESCRIPTION	**PRICE**
2.1	Purchase Price	$1,390,523
2.2	Maintenance Renewal # 1	$60,148
2.3	Maintenance Renewal # 2	$62,554
2.4	Maintenance Renewal # 3	$65,057
2.5	Maintenance Renewal # 4	$67,659
2.6	Maintenance Renewal # 5	$70,365
2.7	**TOTAL PURCHASE COST WITH MAINTENANCE**	**$1,716,306**

3. LEASE / PURCHASE PRICE
Lease / Purchase shall mean lease with the option to purchase at some future date. The Lease / Purchase Price shall be based on the attached Special Requirements and Scope of Work. The Lease / Purchase Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Lease / Purchase Price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System if Lease / Purchased.

	DESCRIPTION	**PRICE**
3.1	Lease / Purchase Payment #1 due 1 year after delivery	$314,546
3.2	Lease / Purchase Payment #2 due 2 years after delivery	$314,546
3.3	Lease / Purchase Payment #3 due 3 years after delivery	$314,546
3.4	Lease / Purchase Payment #4 due 4 years after delivery	$314,546
3.5	Lease / Purchase Payment #5 due 5 years after delivery	$314,546
3.6	Lease / Purchase Payment # _____ due on _____	
3.7	**TOTAL LEASE / PURCHASE COST**	**$1,572,730**

4. LEASE PRICE
The Lease Price shall be based on the attached Special Requirements and Scope of Work. The Lease Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Lease Price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System for the initial term of the contract plus five renewal periods.

	DESCRIPTION	**PRICE**
3.1	Lease Payment – Initial Term due 1 year after delivery	$388,240
3.2	Lease Payment – Renewal # 1 due 1 year after delivery	$388,240
3.3	Lease Payment – Renewal # 2 due 1 year after delivery	$388,240
3.4	Lease Payment – Renewal # 3 due 1 year after delivery	$388,240
3.5	Lease Payment – Renewal # 4 due 1 year after delivery	$388,240
3.6	Lease Payment – Renewal # 5 due on _____	_____
3.7	**TOTAL LEASE / PURCHASE COST**	$1,941,200

5. CASH DISCOUNT
Please insert in the blank space below your company's cash discount policy for payment of invoices. (Example -- 2% 15-days, 1% 30-days, Net 30-days) 0 %

WILLIAMSON COUNTY
NON-COLLUSION STATEMENT

"The undersigned affirms that they are duly authorized to execute this Contract, that this company, corporation, firm, partnership or individual has not prepared this proposal in collusion with any other proposer, and that the contents of this proposal as to prices, terms or conditions of said proposal have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this proposal."

Proposer hereby assigns to purchaser any and all claims for overcharges associated with this Contract which arise under the antitrust laws of the United States, 15 USCA Section 1 et seq., and which arise under the antitrust laws of the State of Texas, Tex. Bus. & Com. Code, section 15.01, et seq.

WILLIAMSON COUNTY
PRICING SHEET
Option 2

***NOTE*: PROPOSER MUST COMPLETE A SEPARATE PRICING SHEET FOR EACH OPTION UNDER SECTION 1, "Scope" (1.1; 1.2; 1.3; 1.4), FOR WHICH PROPOSER SUBMITS A PROPOSAL, *AND* MUST INDICATE THE OPTION NUMBER ON EACH PRICING SHEET.**

Proposals must include the cost figures in detail, including separate costs for all items proposed. Please Refer to Special Requirements Section of RFP. Proposers may include a separate sheet for additional space.

1. PURCHASE PRICE:

The purchase price shall be based on the attached Special Requirements and Scope of Work. Purchase Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Proposer shall itemize the following as well as any other required components additional costs and/or optional costs. The purchase price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System and/or Optical Scan (OpScan) Voting System.

	DESCRIPTION	**PRICE**
1.1	Number of voting devices recommended, taking into account Williamson County voting history, current registered voter population, and number of precincts and polling places (3) Model M650 (88) ADA Voter Terminals (22) Supervisor Terminals (22) Communication Packs	
1.2	Cost for each individual device	
	Model M650	$40,000
	ADA Voter Terminal	$3,295
	Supervisor Terminal	$3,095
1.3	Cost for software to implement the Voting System(s)	$105,000
1.4	Cost for licensing	Included
1.5	Cost for maintenance, annual and/or per election	Included
	(Prices are annual amounts)	
	Model M650	$7,800
	ADA Voter Terminal	$7,480
	Supervisor Terminal	$1,870
1.6	Miscellaneous costs	
	Third Party Items	$22,630
	Election Service (58) Days	$88,230
	Shipping and Handling	$4,450

	Existing Customer Discount	$46,200
1.7	**TOTAL PURCHASE PRICE**	$675,920
	1.7.1 Items Available as Option (Unity Election Reporting Manager assumed to be previously acquired)	
	1.7.2 Time and Material Cost for Maintenance	_____

2. PURCHASE WITH OPTION TO RENEW ANNUAL MAINTENANCE
The Purchase Price with Renewals shall be based on the attached Special Requirements and Scope of Work. The Purchase Price with Renewals shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Purchase Price with Renewals shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System for the initial term of the contract plus the option to renew maintenance for five renewal periods.

	DESCRIPTION	**PRICE**
2.1	Purchase Price	$675,920
2.2	Maintenance Renewal # 1	$39,629
2.3	Maintenance Renewal # 2	$41,214
2.4	Maintenance Renewal # 3	$42,863
2.5	Maintenance Renewal # 4	$44,577
2.6	Maintenance Renewal # 5	$46,631
2.7	**TOTAL PURCHASE COST WITH MAINTENANCE**	**$890,834**

3. LEASE / PURCHASE PRICE
Lease / Purchase shall mean lease with the option to purchase at some future date. The Lease / Purchase Price shall be based on the attached Special Requirements and Scope of Work. The Lease / Purchase Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Lease / Purchase Price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System if Lease / Purchased.

	DESCRIPTION	**PRICE**
3.1	Lease / Purchase Payment # 1 due 1 year after delivery	$152,898
3.2	Lease / Purchase Payment # 2 due 2 years after delivery	$152,898
3.3	Lease / Purchase Payment # 3 due 3 years after delivery	$152,898
3.4	Lease / Purchase Payment # 4 due 4 years after delivery	$152,898
3.5	Lease / Purchase Payment # 5 due 5 years after delivery	$152,898
3.6	Lease / Purchase Payment # _____ due on _____	
3.7	**TOTAL LEASE / PURCHASE COST**	**$764,490**

4. LEASE PRICE

The Lease Price shall be based on the attached Special Requirements and Scope of Work. The Lease Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Lease Price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System for the initial term of the contract plus five renewal periods.

	DESCRIPTION	**PRICE**
3.1	Lease Payment – Initial Term due 1 year after delivery	$201,513
3.2	Lease Payment – Renewal # 1 due 1 year after delivery	$201,513
3.3	Lease Payment – Renewal # 2 due 1 year after delivery	$201,513
3.4	Lease Payment – Renewal # 3 due 1 year after delivery	$201,513
3.5	Lease Payment – Renewal # 4 due 1 year after delivery	$201,513
3.6	Lease Payment – Renewal # 5 due on _____	_____
3.7	**TOTAL LEASE / PURCHASE COST**	$1,007,565

5. CASH DISCOUNT

Please insert in the blank space below your company's cash discount policy for payment of invoices. (Example -- 2% 15-days, 1% 30-days, Net 30-days) 0 %

WILLIAMSON COUNTY
NON-COLLUSION STATEMENT

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Proposer hereby assigns to purchaser any and all claims for overcharges associated with this Contract which arise under the antitrust laws of the United States, 15 USCA Section 1 et seq., and which arise under the antitrust laws of the State of Texas, Tex. Bus. & Com. Code, section 15.01, et seq.

WILLIAMSON COUNTY
PRICING SHEET
Option 3

***NOTE*: PROPOSER MUST COMPLETE A SEPARATE PRICING SHEET FOR EACH OPTION UNDER SECTION 1, "Scope" (1.1; 1.2; 1.3; 1.4), FOR WHICH PROPOSER SUBMITS A PROPOSAL, *AND* MUST INDICATE THE OPTION NUMBER ON EACH PRICING SHEET.**

Proposals must include the cost figures in detail, including separate costs for all items proposed. Please Refer to Special Requirements Section of RFP. Proposers may include a separate sheet for additional space.

1. PURCHASE PRICE:

The purchase price shall be based on the attached Special Requirements and Scope of Work. Purchase Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Proposer shall itemize the following as well as any other required components additional costs and/or optional costs. The purchase price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System and/or Optical Scan (OpScan) Voting System.

	DESCRIPTION	**PRICE**
1.1	Number of voting devices recommended, taking into account Williamson County voting history, current registered voter population, and number of precincts and polling places (3) Model M650 (88) ADA Voter Terminals (22) Supervisor Terminals (22) Communication Packs	
1.2	Cost for each individual device	
	Model M650	$40,000
	ADA Voter Terminal	$3,295
	Supervisor Terminal	$3,095
1.3	Cost for software to implement the Voting System(s)	$105,000
1.4	Cost for licensing	Included
1.5	Cost for maintenance, annual and/or per election	Included
	(Prices are annual amounts)	
	Model M650	$7,800
	ADA Voter Terminal	$7,480
	Supervisor Terminal	$1,870
1.6	Miscellaneous costs	
	Third Party Items	$22,630
	Election Service (58) Days	$88,230
	Shipping and Handling	$4,450

	Existing Customer Discount	$46,200
1.7	**TOTAL PURCHASE PRICE**	$675,920
	1.7.1 Items Available as Option (Unity Election Reporting Manager assumed to be previously acquired)	
	1.7.2 Time and Material Cost for Maintenance	_____

2. PURCHASE WITH OPTION TO RENEW ANNUAL MAINTENANCE
The Purchase Price with Renewals shall be based on the attached Special Requirements and Scope of Work. The Purchase Price with Renewals shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Purchase Price with Renewals shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System for the initial term of the contract plus the option to renew maintenance for five renewal periods.

	DESCRIPTION	**PRICE**
2.1	Purchase Price	$675,920
2.2	Maintenance Renewal # 1	$39,629
2.3	Maintenance Renewal # 2	$41,214
2.4	Maintenance Renewal # 3	$42,863
2.5	Maintenance Renewal # 4	$44,577
2.6	Maintenance Renewal # 5	$46,631
2.7	**TOTAL PURCHASE COST WITH MAINTENANCE**	**$890,834**

3. LEASE / PURCHASE PRICE
Lease / Purchase shall mean lease with the option to purchase at some future date. The Lease / Purchase Price shall be based on the attached Special Requirements and Scope of Work. The Lease / Purchase Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Lease / Purchase Price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System if Lease / Purchased.

	DESCRIPTION	**PRICE**
3.1	Lease / Purchase Payment # 1 due 1 year after delivery	$152,898
3.2	Lease / Purchase Payment # 2 due 2 years after delivery	$152,898
3.3	Lease / Purchase Payment # 3 due 3 years after delivery	$152,898
3.4	Lease / Purchase Payment # 4 due 4 years after delivery	$152,898
3.5	Lease / Purchase Payment # 5 due 5 years after delivery	$152,898
3.6	Lease / Purchase Payment # _____ due on _____	
3.7	**TOTAL LEASE / PURCHASE COST**	**$764,490**

4. LEASE PRICE

The Lease Price shall be based on the attached Special Requirements and Scope of Work. The Lease Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Lease Price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System for the initial term of the contract plus five renewal periods.

	DESCRIPTION	**PRICE**
3.1	Lease Payment – Initial Term due 1 year after delivery	$201,513
3.2	Lease Payment – Renewal # 1 due 1 year after delivery	$201,513
3.3	Lease Payment – Renewal # 2 due 1 year after delivery	$201,513
3.4	Lease Payment – Renewal # 3 due 1 year after delivery	$201,513
3.5	Lease Payment – Renewal # 4 due 1 year after delivery	$201,513
3.6	Lease Payment – Renewal # 5 due on _____	_____
3.7	**TOTAL LEASE / PURCHASE COST**	$1,007,565

5. CASH DISCOUNT

Please insert in the blank space below your company's cash discount policy for payment of invoices. (Example -- 2% 15-days, 1% 30-days, Net 30-days) 0 %

WILLIAMSON COUNTY
NON-COLLUSION STATEMENT

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Proposer hereby assigns to purchaser any and all claims for overcharges associated with this Contract which arise under the antitrust laws of the United States, 15 USCA Section 1 et seq., and which arise under the antitrust laws of the State of Texas, Tex. Bus. & Com. Code, section 15.01, et seq.

WILLIAMSON COUNTY
PRICING SHEET
Option 4

***NOTE*: PROPOSER MUST COMPLETE A SEPARATE PRICING SHEET FOR EACH OPTION UNDER SECTION 1, "Scope" (1.1; 1.2; 1.3; 1.4), FOR WHICH PROPOSER SUBMITS A PROPOSAL, *AND* MUST INDICATE THE OPTION NUMBER ON EACH PRICING SHEET.**

Proposals must include the cost figures in detail, including separate costs for all items proposed. Please Refer to Special Requirements Section of RFP. Proposers may include a separate sheet for additional space.

1. PURCHASE PRICE:

The purchase price shall be based on the attached Special Requirements and Scope of Work. Purchase Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Proposer shall itemize the following as well as any other required components additional costs and/or optional costs. The purchase price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System and/or Optical Scan (OpScan) Voting System.

	DESCRIPTION	**PRICE**
1.1	Number of voting devices recommended, taking into account Williamson County voting history, current registered voter population, and number of precincts and polling places	
	(1) Model M150 (88) ADA Voter Terminals (22) Supervisor Terminals (88) Model M100 (22) Communication Packs	
1.2	Cost for each individual device	
	Model M150	$38,500
	Model M100	$5,375
	ADA Voter Terminal	$3,295
	Supervisor Terminal	$3,095
1.3	Cost for software to implement the Voting System(s)	$105,000
1.4	Cost for licensing	Included
1.5	Cost for maintenance, annual and/or per election **(Prices are annual amounts)**	Included
	Model M150	$1,400
	Model M100	$1,716
	ADA Voter Terminal	$7,480
	Supervisor Terminal	$1,870
1.6	Miscellaneous costs	
	Third Party Items	$29,738

Election Service (59) Days	$90,300
Shipping and Handling	$4,710
Existing Customer Discount	$67,400

1.7 **TOTAL PURCHASE PRICE** $1,081,874

1.7.1 Items Available as Option _____

1.7.2 Items Available as Option (Unity Election Reporting Manager assumed to be previously acquired)

PURCHASE WITH OPTION TO RENEW ANNUAL MAINTENANCE

The Purchase Price with Renewals shall be based on the attached Special Requirements and Scope of Work. The Purchase Price with Renewals shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Purchase Price with Renewals shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System for the initial term of the contract plus the option to renew maintenance for five renewal periods.

	DESCRIPTION	**PRICE**
2.1	Purchase Price	$1,081,874
2.2	Maintenance Renewal # 1	$54,075
2.3	Maintenance Renewal # 2	$56,238
2.4	Maintenance Renewal # 3	$58,487
2.5	Maintenance Renewal # 4	$60,827
2.6	Maintenance Renewal # 5	$63,260
2.7	**TOTAL PURCHASE COST WITH MAINTENANCE**	**$1,374,761**

2. LEASE / PURCHASE PRICE

Lease / Purchase shall mean lease with the option to purchase at some future date. The Lease / Purchase Price shall be based on the attached Special Requirements and Scope of Work. The Lease / Purchase Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Lease / Purchase Price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System if Lease / Purchased.

	DESCRIPTION	**PRICE**
3.1	Lease / Purchase Payment # 1 due 1 year after delivery	$244,727
3.2	Lease / Purchase Payment # 2 due 2 years after delivery	$244,727
3.3	Lease / Purchase Payment # 3 due 3 years after delivery	$244,727
3.4	Lease / Purchase Payment # 4 due 4 years after delivery	$244,727
3.5	Lease / Purchase Payment # 5 due 5 years after delivery	$244,727
3.6	Lease / Purchase Payment # _____ due on _____	
3.7	**TOTAL LEASE / PURCHASE COST**	**$1,223,635**

3. LEASE PRICE

The Lease Price shall be based on the attached Special Requirements and Scope of Work. The Lease Price shall include, but may not be limited to, hardware, software, licenses, maintenance training, upgrades, etc. Prices shall be based on the itemized list provided for Purchase Price above. The Lease Price shall be the total cost for a turnkey implementation of Direct Recording Electronic (DRE) Voting System or Optical Scan (OpScan) Voting System for the initial term of the contract plus five renewal periods.

	DESCRIPTION	**PRICE**
3.1	Lease Payment – Initial Term due 1 year after delivery	$310,981
3.2	Lease Payment – Renewal # 1 due 1 year after delivery	$310,981
3.3	Lease Payment – Renewal # 2 due 1 year after delivery	$310,981
3.4	Lease Payment – Renewal # 3 due 1 year after delivery	$310,981
3.5	Lease Payment – Renewal # 4 due 1 year after delivery	$310,981
3.6	Lease Payment – Renewal # 5 due on _____	_____
3.7	**TOTAL LEASE / PURCHASE COST**	$1,554,905

5. CASH DISCOUNT

Please insert in the blank space below your company's cash discount policy for payment of invoices. (Example -- 2% 15-days, 1% 30-days, Net 30-days) __0__%

WILLIAMSON COUNTY
NON-COLLUSION STATEMENT

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Proposer hereby assigns to purchaser any and all claims for overcharges associated with this Contract which arise under the antitrust laws of the United States, 15 USCA Section 1 et seq., and which arise under the antitrust laws of the State of Texas, Tex. Bus. & Com. Code, section 15.01, et seq.

Appendix

In this section:

- ES&S References
- ADA Letters

ES&S References and ADA Letters

References

Williamson County requires proposer to supply with this proposal, a list of at least three (3) references where like services have been supplied by their firm. Include name of firm, address, telephone number and name of representative.

ES&S have provided below three references that are similar to the size of Williamson County, Texas and similar in services proposed.

Name of Firm:	**Dallas County, Texas**
Address:	2377 Stemmons, 8th Floor Dallas, TX 75207
Telephone:	(214) 819-6335
Contact:	Mr. Bruce Sherbet, Election Administrator

Name of Firm:	**Cook County, Illinois**
Address:	69 West Washington, Room 500 Chicago, IL 60602
Telephone:	312.603.0928
Contact:	Mr. Gary Rycyzyn, Director of Elections

Name of Firm:	**Maricopa County, Arizona**
Address:	300 W. 3rd
Telephone:	(602) 506-3535
Contact:	Helen Purcell, County Clerk

01/06/2004

NFB

Of California

Nancy Burns, *President*

175 East Olive Avenue, Suite 308 Burbank, CA 91502
Tel 818 558 6524 Fax 818 729 7030 www.nfbcal.org

August 28, 2002

Louis W. Dedier
Director, Voting Systems
Elections Division
1500 11th Street
Sacramento, CA 95814

Dear Lou:

Thank you for bringing yet another accessible voting machine to the NFBC office.

You are probably aware that the response to Election Systems & Software was very positive. It was felt by some that the initial instructions should be somewhat clarified; but were assured that this would not be a problem. We want to compliment ES&S on including the cost of the voice adaptation in the total price.

The question has been raised as to why or why not use the touch tone keypad. For most blind or visually impaired people this is fine. However, our concern is with the large, aging population which is sometimes uncomfortable using this system. We feel the three button system used by ES&S would be satisfactory to all blind and visually impaired people.

Thank you again for your time and interest in this project. The NFBC looks forward to having accessible voting machines.

Sincerely,

Nancy Burns

Nancy Burns

Atlanta Metropolitan Chapter
of the
National Federation of the Blind of Georgia, Inc.

"Mentoring the Blind Leaders of Tomorrow"

Mr. Anil Lewis – President

February 11, 2002

Judd Ryan
Regional Sales Manager
Election Systems & Software
Faxed to: 312-419-8511

Dear Mr. Ryan:

I really appreciate the initiative Election Systems & Software (ES&S) has taken to provide the disability community with exposure to the ES&S accessible voting technology. Furthermore, I appreciate this opportunity to give you feedback on your DRE equipment. Of the seven machines I had the opportunity to use at the demonstration project conducted by our Secretary of State's office, I must say the ES&S machine was my pick of the litter.

There was extreme competition from both the Global and Hart Intercivic machines. And like the Global and hart machines, your unit provided excellent speech output, and had a very intuitive screen-to-speech layout, which facilitated a simple, but thorough, voting experience. All machines were very responsive to the keystrokes. And unlike the Global, the ES&S unit allowed the user to scroll quickly through a ballot without having to wait on all non-relevant information.

The feature that set the ES&S machine above the others was its simple four key interface. I found this superior to the Global 10-key interface. I feel the 10-key provided a little confusion as to whether it was the 10-key layout or the telephone keypad layout. As I remember, it was a telephone layout, but on a 10-key keyboard interface, which added to the confusion. The hart rotary interface took a while for me to manipulate effectively, and the rotary interface is not conducive to the logical linear layout of a ballot. Basically, the four button interface with up, down, select, and cast ballot buttons, coupled with the speech output provide a simple user friendly tool that can be used effectively by the elderly, the illiterate, the mobility impaired, as well as, by the blind.

Aside from the low vision access, which can be accommodated with a font change or larger monitor, the only real criticism of the ES&S machine is that when attempting to place a vote for a write-in candidate, there was a delay in the speech output while scrolling through the alphabet. This seemed odd to me because the unit was very responsive with respect to the other information. This should have a simple remedy. Perhaps you could mention this to the software designers.

I realize voting is a business, and ES&S is a company driven by its need to make a profit. But as with any business, there is joy in producing a product that improves a person's quality of life. Therefore, let me take this opportunity to express my extreme appreciation for the work that ES&S has done to improve the quality of life for the blind by allowing us to be able to cast a private, independent vote and participate in the democratic process. Please feel free to contact me if I can be of any assistance.

Yours truly,

Mr. Anil Lewis, President
Atlanta Metropolitan Chapter
National Federation of the Blind of Georgia

Cc: McArthur Jarrett President, NFB of Georgia

P. O. Box 56859 Atlanta, Georgia 30343 – Voice: (404) 212-2021 Fax: (404) 212-2022
ATLANTA@NFBGA.ORG - HTTP://WWW.NFBGA.ORG/ATLANTA.HTML

Deaf Community Services of San Diego, Inc.

August 22, 2002

Ms. Sally McPherson
Department Head
Registrar of Voters
5201 Ruffin Road, Suite I
San Diego, CA 92123

Dear Ms. McPherson:

As the Chief Executive Officer of the Deaf Community Services of San Diego, I am writing to let you know that I have had a chance to test the new iVotronic touch screen voting system developed by Election Systems & Software, Inc. (ES&S) and I was very impressed with this new technology.

Deaf Community Services is a champion of bridging the digital divide and always strives to educate the deaf and hard of hearing community about the many advantages of computer technology. The iVotronic is very easy to use, ADA-compliant, portable, wireless, and displays voter options in several languages.

I hope you too will recognize the numerous benefits of ES&S's iVotronic when it comes time to choose a new modernized electronic voting system to implement throughout the county in 2004. Thank you.

Sincerely,

Thomas A. Galey

Thomas A. Galey
CEO
Deaf Community Services of San Diego

3930 Fourth Avenue / Suite 300 / San Diego, CA 92103 / TTY (619)398-2440 / Voice (619)398-2441 / FAX (619)398-2444

Appendix

B

In this section:

- iVotronic ITA Certifications
- Model 650 ITA Certifications
- Model 150 ITA Certifications
- Model 100 ITA Certifications
- Unity ITA Certifications
- Texas State Certification for iVotronic, Model 150, Model 100, and Model 650.

ITA and State Certifications

The following section contains ITA Certifications.

Wyle Document No. 45827B-028

wyle laboratories

July 30, 2002

ES&S
11208 John Galt Blvd.
Omaha, NE 68137

Attn: Sue McKay

Subject: ITA Qualification Testing of the ES&S Model iVotronic DRE Precinct Counter, Firmware Release 7.4.5.0

Reference: ESS P.O. 512395-00

Dear Ms. McKay,

This is to notify you that we have completed a source review of the revised iVotronic firmware, Release 7.4.5.0. The review was performed to ensure that the revised release continued to meet the requirements of conformity to the FEC guidelines for source code quality including reliability, robustness, and maintainability. Additionally, limited regression testing was performed to verify continued functionality of the hardware using this release.

It was demonstrated that the revised release 7.4.5.0 continued to meet the source code design guidelines and thus has been qualified to the Federal Elections Commission Standards for Punchcard, Marksense, and Direct-Recording Electronic Voting Systems, January 1990.

Please note that the firmware referenced herein is limited to the operation of the iVotronic DRE Precinct Counter and as such, does not encompass any ancillary voting system software which typically resides on a personal computer for administrative and ballot definition activities.

A copy of the 7.4.5.0 source report has already been forwarded to your attention under separate cover.

If I may be of further assistance, please feel free to call me at (256) 837.4411, ext. 590, or fax (256) 830-2109.

Sincerely,

Dawn K. Bates
Contracts Manager

wyle laboratories

August 22, 2002

ES&S
11208 John Galt Blvd.
Omaha, NE 68134

Attention: Sue McKay

Subject: ITA Qualification Testing of the ES&S Model 650 Central Ballot Counter

Reference: ESS Purchase Order No. 0325695

Dear Ms. McKay,

The Model 650 Central Ballot Counter, Hardware Version 1.0, and machine resident firmware, Release 1.1.9.1, was subjected to reliability, hardware, and functional testing. It was demonstrated that the voting machine successfully met the required acceptance criteria and thus has been qualified to the Federal Elections Commission Standards for Punchcard, Marksense, and Direct-Recording Electronic Voting Systems, January 1990.

Please note that the qualification testing referenced herein is limited to the operation of the Model 650 Central Ballot Counter and its machine resident firmware and as such, does not encompass any ancillary voting system software which typically resides on a personal computer for administrative and ballot definition activities.

A formal report documenting the qualification testing and the resulting test data will be issued under separate cover.

If I may be of further assistance, please feel free to call me at (256) 837-4411, ext. 590, or fax (256) 830-2109.

Sincerely,

WYLE LABORATORIES
Eastern Operations

Dawn K. Bates
Cpmtracts Manager

01/06/2004

Wyle Letter No. 46437B-011

wyle laboratories

July 2, 2002

ES&S
11208 John Galt Blvd.
Omaha, NE 68137

Attention: Sue McKay

Subject: ITA Qualification Testing of the ES&S Model 150 Central Scanner Voting Machine, Release 2.0.1.0

Reference: ESS P.O. 514399

Dear Ms. McKay,

The Model 150 Central Scanner Voting Machine and associated machine resident firmware, Release 2.0.1.0, was subjected to functional testing to verify continued compliance with the Federal Elections Commission Standards for Punchcard, Marksense, and Direct-Recording Electronic Voting Systems, January 1990. Specifically, a source review of the revised Release 2.0.1.0 was performed to ensure that the code continued to meet the software design recommendations as contained in the Standard. Additionally, regression testing was performed to verify continued functionality of the hardware using this release.

It was demonstrated that the Model 150 using Release 2.0.1.0 successfully met this criteria and thus has been qualified to the Federal Election Commission Standards of Punchcard, Marksense, and Direct-Recording Electronic Voting Systems, January 1990.

Please note that the qualification testing referenced herein is limited to the operation of the Model 150 Central Scanner and its machine resident firmware and as such, does not encompass any ancillary voting system software which typically resides on a personal computer for ballot definition programming, etc.

If I may be of further assistance, please feel free to give me a call at 256.837.4411, ext. 590, or fax 256.830.2109.

Sincerely,

Wyle Laboratories, Inc.

Dawn K. Bates
Contracts Manager

wyle laboratories

Wyle Letter No. 446603-012 Revised

July 2, 2002

ES&S
11208 John Galt Boulevard
Omaha, NE 68137

Attention: Sue McKay

Subject: ITA Qualification Testing of the Model 100 Precinct Ballot Counter, Revised Firmware Release 4.8.0.0

Reference: ES&S Purchase Order 507365

Dear Ms. McKay,

The Model 100 Precinct Ballot Counter and associated machine resident firmware, Release 4.8.0.0 was subjected to functional testing to verify continued compliance with the Federal Elections Commission Standards for Punchcard, Marksense, and Direct-Recording Electronic Voting Systems, January 1990. Specifically, a source review of the revised Release 4.8.0.0 was performed to ensure that the code continued to meet the software design recommendations as contained in the Standard. Additionally, regression testing was performed to verify continued functionality of the hardware using this release.

It was demonstrated that the Model 100 using Release 4.8.0.0 successfully met this criteria and thus has been qualified to the Federal Elections Commission Standards for Punchcard, Marksense, and Direct-Recording Electronic Voting Systems, January 1990.

Please note that the qualification testing referenced herein is limited to the operation of the Model 100 and its machine resident firmware at the precinct level and as such, does not encompass any ancillary voting system software which typically resides on a personal computer for ballot definition activities, report canvassing, absentee voting, etc.

If I may be of further assistance, please feel free to give me a call at (256) 837-4411, ext. 590, or fax (256) 830-2109.

Sincerely,

Wyle Laboratories, Inc.

Dawn K. Bates
Contracts Manager

SysTest labs

1630 Welton Street Suite 500, Denver, CO 80202 303-575-6881 Fax 303-575-6882 www.systest.com

Election Systems & Software
11208 John Galt Boulevard
Omaha, NE 68137

August 29, 2002

Attn: Sue McKay

Re:

Dear Ms. McKay:

The purpose of this letter is to confirm our email exchange of 28 August 2002. During our ITA test effort for Unity 2.2, it was our understanding that the reporting packages were reformatting of tallied data. Based on this understanding, Unity 2.2 was validated and shown to comply with the 1990 VSS for both obtaining consolidated reports in accordance with Section 2.2.3.4 and the vote tally data in accordance with Section 4.8.2.4. The State Specific Transfer Reports are outside of the federal standards and are the responsibility of the state to verify in their certification test.

If you would like to discuss this, please feel free to contact me.

Sincerely,

Gail Audette
Vice President of Engineering
SysTest Labs

The State of Texas

Elections Division
P.O. Box 12060
Austin, Texas 78711-2060
www.sos.state.tx.us

Phone: 512-463-5650
Fax: 512-475-2811
TTY: 7-1-1
(800) 252-VOTE (8683)

Gwyn Shea
Secretary of State

REPORT OF EXAMINATION OF MODIFICATIONS TO ELECTION SYSTEMS AND SOFTWARE, INC.'S iVOTRONIC VOTING SYSTEM

PRELIMINARY STATEMENT

On September 11, 2002, Election Systems and Software, Inc. (the "Vendor") presented modifications to its iVotronic voting system for examination and certification. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Glover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the system, followed by review and testing by the examiners. Examiner reports on the system are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF iVOTRONIC

The iVotronic is a direct recording electronic system (DRE) with accessibility components used for precinct voting and accumulation. The system consists of one or more voting terminals and a supervisor Personalized Electronic Ballot (PEB), which election officials use to activate and load the appropriate ballot into the terminal. The examined version was iVotronic, v. 7.4.5.0. The last version certified for use in Texas is 7.2.5.0.

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

The modifications to the iVOTRONIC Voting System, subject to the condition below:

1. Preserve the secrecy of the ballot;
2. Are suitable for the purpose for which it is intended;
3. Operate safely, efficiently, and accurately;
4. Are safe from fraudulent or unauthorized manipulation;
5. Permit voting on all offices and measures to be voted on at the election;
6. Prevent counting votes on offices and measures on which the voter is not entitled to vote;
7. Prevent counting votes by the same voter for more than one candidate for the same office or, in elections in which a voter is entitled to vote for more than one candidate for the same office, prevents counting votes for more than the number of candidates for whom the voter is entitled to vote;
8. Prevent counting a vote on the same office or measure more than once;
9. Permit write-in voting;
10. Are capable of permitting straight-party voting; and
11. Are capable of providing records from which the operation of the system may be audited.

CONDITION

The vendor must submit revised user instructions to the Secretary of State designed to re-emphasize the need to test for the presence of votes on the PEB prior to opening the system for voting.

CONCLUSION

The examiners were disturbed by the ability to run a logic and accuracy test with votes resident on the PEB. The vendor demonstrated that this is an administrative issue, but one that may put pressure on election officials not as familiar with the system as the vendor. Accordingly, I hereby grant the Vendor's application for certification of the above modifications to the iVOTRONIC voting system, subject to the above condition.

Signed under my hand and seal of office, this 11th day of December, 2002.

Gwyn Shea
Secretary of State

The State of Texas

Elections Division
P.O. Box 12060
Austin, Texas 78711-2060
www.sos.state.tx.us

Phone: 512-463-5650
Fax: 512-475-2811
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(800) 252-VOTE (8683)

Gwyn Shea
Secretary of State

REPORT OF EXAMINATION OF ELECTION SYSTEMS AND SOFTWARE, INC.'S MODEL 650 OPTICAL SCAN VOTING SYSTEM

PRELIMINARY STATEMENT

On September 11, 2002, Election Systems and Software, Inc. (the "Vendor") presented its Model 650 optical scan voting system for examination. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Glover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the system; the examiners then examined its accuracy and security features. Examiner reports on the system are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF THE MODEL 650 OPTICAL SCAN VOTING SYSTEM

The Model 650 is an optical scan ballot scanner designed to be used at the precinct polling place. The version of the Model 650 presented for examination was 1.1.9.1. The last version certified for use in Texas is 1.1.8.0.

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

The Model 650 voting system:

1. Preserves the secrecy of the ballot;
2. Is suitable for the purpose for which it is intended;
3. Operates safely, efficiently, and accurately;
4. Is safe from fraudulent or unauthorized manipulation;
5. Permits voting on all offices and measures to be voted on at the election;
6. Prevents counting votes on offices and measures on which the voter is not entitled to vote;
7. Prevents counting votes by the same voter for more than one candidate for the same office or, in elections in which a voter is entitled to vote for more than one candidate for the same office, prevents counting votes for more than the number of candidates for whom the voter is entitled to vote;
8. Prevents counting a vote on the same office or measure more than once;
9. Permits write-in voting;
10. Is capable of permitting straight-party voting; and
11. Is capable of providing records from which the operation of the system may be audited.

CONCLUSION

The examiners recommended certification of the Model 650 optical scanner. Accordingly, I hereby certify the Model 650 v. 1.1.9.1 for use in elections in Texas.

Signed under my hand and seal of office, this 11th day of December, 2002.

Gwyn Shea
Secretary of State

STATE OF TEXAS

REPORT OF EXAMINATION OF ELECTION SYSTEMS AND SOFTWARE, INC.'S MODIFICATIONS TO MODEL 100 AND MODEL 550/150 OPTICAL SCAN VOTING SYSTEMS

PRELIMINARY STATEMENT

On October 23, 2001, Election Systems and Software, Inc. (the "Vendor") presented modifications to its Model 100 and Model 150/550 optical scan voting systems for examination and certification. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems; and
3. Mr. Glenn Glover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the systems; the examiners then examined their accuracy and security features. Examiner reports on the systems are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF MODIFICATIONS TO MODEL 100 AND MODEL 550/150 OPTICAL SCAN VOTING SYSTEMS

The Model 100 and Model 150/550 were modified to allow them to interface with the Vendor's Unity Election System Software. The Model 100 was modified to allow it to read longer 17 and 19 inch ballots. The firmware version of the Model 100 presented for examination was version 4.7.2. The firmware version of the Model 150/550 presented for examination was version 1.4.1.

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

The modifications to the Model 100 and Model 150/550 voting systems:

1. Preserve the secrecy of the ballot;
2. Are suitable for the purpose for which they are intended;
3. Operate safely, efficiently, and accurately;
4. Are safe from fraudulent or unauthorized manipulation;
5. Permit voting on all offices and measures to be voted on at the election;
6. Prevent counting votes on offices and measures on which the voter is not entitled to vote;
7. Prevent counting votes by the same voter for more than one candidate for the same office or, in elections in which a voter is entitled to vote for more than one candidate for the same office, prevent counting votes for more than the number of candidates for whom the voter is entitled to vote;
8. Prevent counting a vote on the same office or measure more than once;

9. Permit write-in voting;
10. Are capable of permitting straight-party voting; and
11. Are capable of providing records from which the operation of the system may be audited.

CONCLUSION

A majority of the voting systems examiners recommended certification. Accordingly, I hereby certify the Model 100 v. 4.7.2 and the Model 150/550 v. 1.4.1 for use in elections in Texas.

Certified under my hand and seal of office, this 11 day of Jan., 2002.

GEOFFREY S. CONNOR
ASSISTANT SECRETARY OF STATE

The State of Texas

Elections Division
P.O. Box 12060
Austin, Texas 78711-2060
www.sos.state.tx.us

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(800) 252-VOTE (8683)

Gwyn Shea
Secretary of State

REPORT OF EXAMINATION OF ELECTION SYSTEMS AND SOFTWARE, INC.'S UNITY ELECTION SYSTEM

PRELIMINARY STATEMENT

On September 11, 2002, Election Systems and Software, Inc. (the "Vendor") presented its Unity Election System for reexamination in compliance with House Bill 1419, 77th Legislature, which requires reexamination of all voting systems of each county to determine whether the voting system continued to comply with the minimum applicable standards prescribed by law. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Glover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated Unity and the examiners then examined the system. Examiner reports on the systems are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF UNITY

Unity is an integrated suite of modular software programs that enable an election official to enter and maintain a database of jurisdiction and election information, format ballot layouts, and program election equipment. The system also collects, accumulates, and reports the voting results. The overall version presented for reexamination was 2.2 and consisted of the following components:

EDM - Election Data Manager	version 7.1.1.0
HPM – Hardware Program Manager	version 3.6.0.0
DAM – Data Acquisition Manager (Host)	version 2.5
DAM – Client	version 4.3
ERM – Election Reporting Manager	version 6.3.2.0.

The last version of Unity certified for use in Texas is 1.1.

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

The Unity Election System, subject to the condition below:

1. Preserves the secrecy of the ballot;
2. Is suitable for the purpose for which it is intended;
3. Operates safely, efficiently, and accurately;
4. Is safe from fraudulent or unauthorized manipulation;
5. Permits voting on all offices and measures to be voted on at the election;
6. Prevents counting votes on offices and measures on which the voter is not entitled to vote;

7. Prevents counting votes by the same voter for more than one candidate for the same office or, in elections in which a voter is entitled to vote for more than one candidate for the same office, prevents counting votes for more than the number of candidates for whom the voter is entitled to vote;
8. Prevents counting a vote on the same office or measure more than once;
9. Permits write-in voting;
10. Is capable of permitting straight-party voting; and
11. Is capable of providing records from which the operation of the system may be audited.

CONDITION

The vendor must submit changes to the Secretary of State in order for her staff to verify that the audit log provides clear information that can easily be understood by the user and that demonstrates consistency of the date/time stamp.

CONCLUSION

The majority of examiners determined that the Unity system's audit trail was confusing and required interpretation by the vendor, when it should provide clear information. The log also had an inconsistent date/time stamp. These issues can be corrected and verified by Secretary of State personnel rather than through a full re-examination. Accordingly, I hereby certify the Unity Election System v. 2.2 for use in elections, subject to the above condition.

Signed under my hand and seal of office, this 11th day of December, 2002.

Gwyn Shea
Secretary of State

Appendix

C

In this section:

- ES&S Bid Terms and Conditions
- ES&S Sample Agreement

ES&S Bid Terms and Conditions / ES&S Sample Agreement

Bid Terms and Conditions

AWARD

CONTRACT: This Proposal, when properly accepted by Williamson County, shall constitute a contract equally binding between the successful proposer and Williamson County.

The successful proposer may be required to sign an additional agreement containing terms necessary to ensure compliance with the proposal.

As an overall comment, ES&S respectfully requests that the County consider using ES&S' standard Voter Tabulation System and Services Agreement, a copy of which is attached hereto ("ES&S' Standard Agreement"). It has been designed specifically for the provision of election products and services to a customer and ES&S believes that it provides more clarity and certainty to the County by specifically setting forth the rights and obligations of each party. The content of this RFP and all provisions of the successful proposal deemed pertinent by the parties may be easily incorporated into ES&S' Standard Agreement.

MISCELLANEOUS

TERMINATION FOR DEFAULT: Williamson County reserves the right to enforce the performance of this contract in any manner prescribed by law or deemed to be in the best interest of the County in the event of breach or default of this contract. Non-Performance of the proposer in terms of specifications shall be a basis for the termination of the contract by the County. The County shall not pay for commodities/services which are unsatisfactory. Vendors will be given a reasonable opportunity before termination to correct the deficiencies. This, however, shall in no way be construed as negating the basis for termination for non-performance.

It is ES&S' position that neither party to a contract have the ability to terminate a contract without cause, or without proper notice and cure periods. Therefore, ES&S' Standard Agreement, which is attached hereto, provides for termination upon any material breach of the contract which is not cured within 30 days after the breaching party receives notice thereof, or by either party in the event that funds are not appropriated or otherwise made available to support the continuation of performance by the County.

8.1.1 comply with Section 504 of the Federal Rehabilitation Act of 1973 and its subsequent amendments and Title II of the Federal Americans with Disabilities Act and it subsequent amendments; and

Neither of these acts nor the rules and regulations promulgated thereunder address the application of such acts to the manufacture and use of a voting system. However, please see our responses to **Proposal Specifications, Section 10:*Voter Adaptation – Election Worker Adaptation* and Section 14 *Answer These Questions About Your Voting System(s)*, (subsection 14.2)** for an explanation of the features of our voting system that aid voting by those with a disability and the certification provided the State of Texas.

8.4 The Secretary of State has promulgated Administrative Rules for the adoption of standards for voting by the disabled and the tests that must be passed by a voting system that is seeking certification under same. **It is emphasized here that while the Williamson County Voting system Selection Committee is allowed to participate in a demonstration of a voting system that has not been certified by the Secretary of State, the final decision on which offerer will be awarded the bid will include only those offerers who have been certified at the time of the award decision.**

ES&S meets or exceeds all General Criteria requirements set forth by the Texas Election Code based on successful certification of the proposed systems by the Office of the Secretary of the State of Texas. **Refer to Appendix B, for the Certification Documents.**

ELECTION SYSTEMS & SOFTWARE, INC.
VOTER TABULATION SYSTEM AND SERVICES AGREEMENT

This Agreement is made as of the date it is executed by the last of the parties named below (the "Effective Date"),

BETWEEN: Election Systems & Software, Inc., a Delaware corporation ("ES&S");

AND: _____
("Customer").

RECITALS:

A. Customer has agreed to purchase/license voter tabulation equipment and related software and services from ES&S for use in _____ (the "Jurisdiction"). The terms and conditions under which such equipment, software and services shall be provided are set forth in the **GENERAL TERMS** attached hereto.

B. The following Exhibits are incorporated into, and constitute an integral part of, this Agreement (check all that apply):

_____ Exhibit A (Pricing Summary)

_____ Exhibit B (ES&S Equipment Description and Pricing)

_____ Exhibit C (ES&S Software Description and Pricing)

_____ Exhibit D (Third Party Items)

_____ Exhibit E (Election Support Services)

_____ Exhibit F (Hardware and Software Maintenance and Support Services (Post-Warranty Period))

_____ Exhibit G (Acceptance Criteria)

_____ Exhibit "H" (Certificate of Insurance)

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each of the parties hereto:

- Agrees to the **GENERAL TERMS** and the terms and conditions set forth in each Exhibit.
- Agrees that at all times, this Agreement shall be governed by and construed in accordance with the laws of the State of _____, without regard to conflicts of law principles that would require the application of the laws of any other state.
- Represents and warrants to the other party that as of the date of its signature below it has full power and authority to enter into and perform this Agreement, and that the person signing below on its behalf has been properly authorized to execute this Agreement.
- Acknowledges that it has read this Agreement, understands it and intends to be bound by it.

ELECTION SYSTEMS & SOFTWARE, INC.
11208 John Galt Boulevard
Omaha, NE 68137
Fax No.: (402) 970-1276

_____
Signature

_____
Name (Printed or Typed)

_____
Title

_____
Date

_____
_____
_____
Fax No.: _____

_____
Signature

_____
Name (Printed or Typed)

_____
Title

_____
Date

GENERAL TERMS
ARTICLE 1
DEFINITIONS

All capitalized terms used, but not otherwise defined, in these General Terms or in an Exhibit shall have the following meanings:

a. "Documentation" means the operating instructions, user manuals or training materials for the Equipment and Software.

b. "Equipment" means ES&S Equipment and Third Party hardware or equipment.

c. "ES&S Equipment" means ES&S' proprietary hardware or other equipment.

d. "ES&S Hardware Maintenance Services" and "ES&S Software Maintenance and Support" means those services described on Exhibit F.

e. "ES&S Software" means ES&S' proprietary election software (including the ES&S Firmware), all Updates and items delivered to Customer pursuant to Article III of Exhibit F and, unless licensed pursuant to a separate written agreement, all Add-Ons and New Products licensed to Customer.

f. "GAAP" means United States generally accepted accounting principles, as in effect from time to time.

g. "Software" means ES&S Software and Third Party software.

h. "RFP" means (i) one or more written communications from Customer (including a formal Request for Proposal) which collectively request a proposal from ES&S to provide the Equipment, Software and services described in this Agreement and generally set forth Customer's requirements, and (ii) ES&S' responses thereto.

ARTICLE 2
SALE OF ES&S EQUIPMENT AND THIRD PARTY ITEMS/LICENSE OF ES&S SOFTWARE

2.1 **Purchase Terms.** Subject to the terms and conditions of this Agreement, ES&S agrees to sell, and Customer agrees to purchase, the ES&S Equipment and the Third Party Items described on Exhibits B and D. The payment terms for the ES&S Equipment and Third Party Items are set forth on Exhibit A. Title to the Equipment shall pass to Customer when Customer has paid ES&S the total amount set forth on Exhibit A for the ES&S Equipment, ES&S Software and Third Party Items.

2.2 **Grant of Licenses.**

a. **ES&S Software Excluding ES&S Firmware.** Subject to the terms and conditions of this Agreement, ES&S hereby grants to Customer a nonexclusive, nontransferable license to use ES&S' software, described on Exhibit C, and related Documentation in the Jurisdiction while Customer is using the ES&S Equipment. The license allows Customer to use and copy ES&S' software (in object code only) and the

Documentation, solely for the purposes of defining and conducting elections and tabulating and reporting election results in the Jurisdiction.

b. **ES&S Firmware.** Subject to the terms and conditions of this Agreement, ES&S hereby grants to Customer a nonexclusive, nontransferable license to use ES&S' firmware, which is delivered as a part of the ES&S Equipment and is further described on Exhibit C (the "ES&S Firmware"). The license allows Customer to use the ES&S Firmware (in object code only) in the Jurisdiction and solely in the course of operating the ES&S Equipment as contemplated by the Documentation therefor.

c. **COLLECTIVE DEFINITION AS "ES&S SOFTWARE". THE ES&S SOFTWARE DESCRIBED IN SECTION 2.2(a) AND THE ES&S FIRMWARE ARE ES&S' PROPRIETARY SOFTWARE PRODUCTS AND ARE HEREINAFTER COLLECTIVELY REFERRED TO AS THE "ES&S SOFTWARE".**

d. **Prohibited Uses.** Customer shall not take any of the following actions with respect to the ES&S Software or the Documentation:

i. Reverse engineer, decompile, disassemble, re-engineer or otherwise create, attempt to create, or permit, allow or assist others to create, the source code or the structural framework for part or all of the ES&S Software;

ii. Cause or permit any use, display, loan, publication, transfer of possession, sublicensing or other dissemination of the ES&S Software or Documentation, in whole or in part, to or by any third party without ES&S' prior written consent; or

iii. Cause or permit any change to be made to the ES&S Software without ES&S' prior written consent; or

iv. Cause or permit any copying, reproduction or printing of any output generated by the ES&S Software in which ES&S owns or claims any proprietary intellectual property rights (e.g., copyright, trademark or patent), including, but not limited to, any ballots, ballot shells or code stock.

2.3 **License Fees**. In consideration for ES&S' grant of the license for the ES&S Software described in Section 2.2(a), Customer shall pay ES&S the ES&S Software License Fees set forth on Exhibit A. The consideration for ES&S' grant of the license for the ES&S Firmware is included in the cost of the ES&S Equipment.

2.4 **Term of Licenses**. The licenses granted in Section 2.2 shall commence upon the delivery of the ES&S Software described in Section 2.2(a). The licenses shall survive the termination of all other obligations of the parties under this Agreement and the termination of all Exhibits; provided, however, that ES&S may terminate either license if Customer fails to pay the consideration due for, or breaches Sections 2.2, 2.5, or 3.6 with respect to, such license. Upon the termination of either of the licenses granted in Section 2.2 for ES&S Software or upon Customer's discontinuance of the use of any ES&S Software, Customer shall immediately return such ES&S Software and the related Documentation (including any and all copies thereof) to ES&S, or (if requested by ES&S) destroy such ES&S Software and Documentation and certify in writing to ES&S that such destruction has occurred.

2.5 **Source Code**. The licenses granted in Section 2.2 do not permit Customer to use the source code for the ES&S Software. ES&S has placed the source code in escrow with its third party escrow agent and will likewise place in escrow the source code for all Updates, Add-Ons and New Products (as defined in Section 2.6 below) provided to Customer. Should ES&S cease operations and become unable to maintain and support any of the ES&S Software, Updates, Add-Ons or New Products provided to Customer while under an obligation to do so, Customer may obtain the source code for such item(s) for the sole purpose of enabling the continued use of such item(s) in accordance with this Agreement. The source code shall remain at all times the property of ES&S and may not otherwise be used by Customer. The cost of using an alternative third party escrow agent shall be borne by Customer.

2.6 **Updates, Add-Ons and New Products.**

a. **Updates.** During the Warranty Period (as defined in Section 3.2(a) below), ES&S may provide new releases, upgrades or maintenance patches to the ES&S Software, together with appropriate Documentation ("Updates"), on a schedule defined by ES&S. Customer is responsible for obtaining any upgrades or purchases of Third Party Items required to operate the Updates. All Updates shall be deemed to be ES&S Software for purposes of this Agreement upon delivery. Customer may install the Updates in accordance with ES&S' recommended instructions or may request that ES&S install the Updates. ES&S may charge Customer at its then-current rates to (i) install the Updates or (ii) provide maintenance and support on the ES&S Software that is required as a result of Customer's failure to timely or properly install an Update. If Customer proposes changes in the ES&S Software to ES&S, such proposals will become ES&S' property. ES&S may, in its sole discretion, elect to make or not to make such changes without attribution or compensation to Customer or any third party. Upon termination of the Warranty Period, Customer shall be entitled to receive the Software Maintenance and Support described on Exhibit F if it has so elected in Section B of the signature page to this Agreement.

b. **Add-Ons and New Products.** From time to time, ES&S may offer to Customer new features that can be added on to the ES&S Software ("Add-Ons") or new software products ("New Products"). Customer may elect to license an Add-On or New Product upon the payment of a license fee to ES&S. Unless any such license is effectuated pursuant to a separate license agreement, the Add-On or New Product shall be deemed to be part of the ES&S Software upon payment of such license fee. Each Add-On or New Product that is deemed to be part of the ES&S Software will be covered by a one-year warranty under the terms and conditions set forth in Section 3.2(a), commencing upon delivery, and Customer may thereafter elect to receive Software Maintenance and Support therefor upon the expiration of such one-year warranty.

2.7 **Compliance with Law.** In performing its obligations or enjoying its rights under this Agreement, each party shall comply with all applicable laws and regulations. In addition, ES&S represents and warrants to Customer that, at the time of delivery, the ES&S Equipment and ES&S Software will comply with all applicable requirements of federal and state election laws and regulations and will have been certified by the appropriate state authorities for use in the Jurisdiction. ES&S further represents and warrants that during the Warranty Period and thereafter so long as Customer is receiving ES&S Hardware Maintenance Services and ES&S Software Maintenance and Support, the ES&S Equipment and ES&S Software shall be maintained or upgraded by ES&S in such a way as to remain compliant with all applicable federal and state election laws and regulations, including all current and future requirements

necessary to remain certified for use in the Jurisdiction. For the purposes of the immediately preceding sentence, "maintained or upgraded" shall mean such changes to individual items of the ES&S Equipment or ES&S Software as are technologically feasible and commercially reasonable. This Section 2.7 shall not obligate ES&S to replace the voter tabulation system contracted for herein. Customer shall be responsible for the cost of any Third Party Items that ES&S notifies Customer are hereinafter required in order for the ES&S Equipment and ES&S Software to remain compliant and certified.

ARTICLE 3
MISCELLANEOUS

3.1 **Delivery; Risk of Loss.** ES&S anticipates shipping the Equipment and Software identified on Exhibits B-D to Customer on or before the "Estimated Delivery Dates" listed on Exhibit A. The Estimated Delivery Dates are merely estimates and may be revised by ES&S because of delays in executing this Agreement, changes requested by Customer and other events. ES&S will notify Customer of revisions to the Estimated Delivery Dates as soon as ES&S becomes aware of such revisions. Risk of loss for the Equipment and Software shall pass to Customer when such items are delivered to Customer's designated location. The parties shall conduct and complete, within 30 days after delivery, the acceptance testing procedures outlined on Exhibit G to confirm that the ES&S Equipment and ES&S Software perform in accordance with the warranties set forth in Sections 3.2(a) and 3.2(b) below (the "Acceptance Testing"). Upon completion of the Acceptance Testing, representatives of both parties will execute the "Certificate of Acceptance" included at Exhibit G.

3.2 **Warranties.**

a. **ES&S Equipment/ES&S Software.** ES&S warrants that for a 1-year period (the "Warranty Period"), it will repair or replace any component of the ES&S Equipment or ES&S Software which, while under normal use and service: (i) fails to perform in accordance with its Documentation in all material respects, or (ii) is defective in material or workmanship. The Warranty Period will commence upon completion of the Acceptance Testing. Any repaired or replaced item of ES&S Equipment or ES&S Software shall be warranted only for the unexpired term of the Warranty Period. All replaced components of the ES&S Equipment or ES&S Software will become the property of ES&S. This warranty is effective provided that (I) Customer promptly notifies ES&S of the failure of performance or defect and is otherwise in compliance with its obligations hereunder, (II) the ES&S Equipment or ES&S Software to be repaired or replaced has not been repaired, changed, modified or altered except as authorized or approved by ES&S, (III) the ES&S Equipment or ES&S Software to be repaired or replaced is not damaged as a result of accident, theft, vandalism, neglect, abuse, use which is not in accordance with instructions or specifications furnished by ES&S or causes beyond the reasonable control of ES&S or Customer, including acts of God, fire, riots, acts of war, terrorism or insurrection, labor disputes, transportation delays, governmental regulations and utility or communication interruptions, and (IV) Customer has installed and is using the most recent Update, or the second most recent Update, provided to it by ES&S.

b. **System.** ES&S warrants that the ES&S Equipment and ES&S Software will operate in conjunction with the Third Party Items during the Warranty Period, provided that (i) Customer has installed and is using the most recent Update, or the second most recent Update, provided to it by ES&S, and (ii) the Third Party Items are

performing in accordance with their own specifications and documentation in all material respects and are not defective in material or workmanship. In the event of a breach of this warranty, ES&S will repair or replace the item of ES&S Equipment or ES&S Software that is causing such breach to occur. Customer acknowledges that ES&S has merely purchased the Third Party Items for resale or rental to Customer, and that the proprietary and intellectual property rights to the Third Party Items are owned by parties other than ES&S ("Third Parties"). Customer further acknowledges that except for the payment to ES&S for the Third Party Items, all of its rights and obligations with respect thereto flow from and to the Third Parties. ES&S shall provide Customer with copies of all documentation and warranties for the Third Party Items which are provided to ES&S.

c. **Exclusive Remedies.** **IN THE EVENT OF A BREACH OF SUBSECTIONS 3.2(a) or 3.2(b), ES&S' OBLIGATIONS, AS DESCRIBED IN SUCH SUBSECTION, ARE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES. ES&S EXPRESSLY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED, WHICH ARE NOT SPECIFICALLY SET FORTH IN THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

3.3 **Routine Maintenance For ES&S Equipment During Warranty Period**. During the Warranty Period, Customer may request that ES&S provide the Routine Maintenance Services described in Section 2(b) of Exhibit F for one or more units of ES&S Equipment. Any such request shall be made at least 60 days before the Routine Maintenance Services are desired. The per-unit fee for such Routine Maintenance Services is set forth on Exhibit A and shall be due within 30 days after invoice. The terms and conditions of Section 2(b) of Exhibit F shall govern the providing of the Routine Maintenance Services. When the ES&S Equipment is not in use, Customer shall properly store the ES&S Equipment in accordance with the storage requirements established in the Documentation. Upon termination of the Warranty Period, Customer shall be entitled to receive the Hardware Maintenance Services described on Exhibit F if it has so indicated in Section B of the signature page to this Agreement.

3.4 **Limitation Of Liability.** Neither party shall be liable for any indirect, incidental, punitive, exemplary, special or consequential damages of any kind whatsoever arising out of or relating to this Agreement. Neither party shall be liable for the other party's negligent or willful misconduct. Except for such liability as may arise under Section 3.8(a), ES&S' total liability to Customer arising out of or relating to this Agreement shall not exceed the aggregate amount to be paid to ES&S hereunder. Any action by Customer against ES&S must be commenced within 1 year after the cause of action has accrued. By entering into this Agreement, Customer agrees to accept responsibility for (a) the selection of the Equipment and Software to achieve Customer's intended results; (b) the use of the Equipment and Software; (c) the results obtained from the use of the Equipment and Software; (d) the selection of, use of and results obtained from any equipment, software or services not provided by ES&S and used with the Equipment or Software; (e) errors that arise from mechanical or electronic component failures that are not covered under warranty or not subject to preventative efforts or cure under this Agreement; or (f) user errors, voter errors or problems encountered by any individual in voting that are not otherwise a result of the failure of ES&S to perform. ES&S shall not be liable under this Agreement for any claim, damage, loss, judgment, penalty, cost, amount paid in settlement or fee that is caused by (y) Customer's failure to timely or properly install and use the most recent Update, or the second most recent Update, provided to it by ES&S or (z) Customer's election not to receive, or to terminate, the Hardware Maintenance Services or the Software Maintenance and Support.

3.5 **Taxes; Interest.** Customer shall provide ES&S with proof of its tax-exempt status. If Customer does not provide such proof, it shall pay, or shall reimburse ES&S for, all sales and use, excise or other similar taxes imposed on the transactions contemplated by this Agreement; provided, however, Customer shall in no event be liable for taxes imposed on or measured by ES&S' income. If Customer disputes the applicability of any tax to be paid pursuant to this Section 3.5, it shall pay the tax and may thereafter seek a refund. Any disputed or undisputed payment not paid by Customer to ES&S when due shall bear interest from the due date at a rate equal to the lesser of one and one-half percent per month or the maximum amount permitted by applicable law for each month or portion thereof during which it remains unpaid.

3.6 **Proprietary Rights.** Customer acknowledges and agrees as follows:

a. ES&S owns the ES&S Software, all Documentation and training materials provided by ES&S, the design and configuration of the ES&S Equipment and the format, layout, measurements, design and all other technical information (except for Customer supplied information such as election information) associated with the ballots to be used with the ES&S Equipment. Customer has the right to use the aforementioned items to the extent specified in this Agreement. ES&S also owns all patents, trademarks, copyrights, trade names and other proprietary or intellectual property in, or used in connection with, the aforementioned items. The aforementioned items also contain confidential and proprietary trade secrets of ES&S that are protected by law and are of substantial value to ES&S.

b. Customer shall not cause or permit the adaptation, conversion, reverse engineering, disassembly or decompilation of any of the ES&S Equipment or ES&S Software.

c. Customer shall keep the ES&S Software and related Documentation free and clear of all claims, liens and encumbrances and shall maintain all copyright, trademark, patent or other intellectual or proprietary rights notices that are set forth on the ES&S Equipment, the ES&S Software, the Documentation, training materials and ballots that are provided, and all permitted copies of the foregoing.

3.7 **Confidentiality.** During the term of this Agreement, each party (the "Disclosing Party") may provide the other (the "Receiving Party") with certain confidential and proprietary information ("Confidential Information"). Confidential Information includes the Documentation, the information imparted during training provided by ES&S, and any other information relating to Customer's or ES&S' operations, financial information, or research and development. "Confidential Information" will not include information that (a) is publicly known at the time of its disclosure; (b) is lawfully received by the Receiving Party from a third party not under an obligation of confidentiality to the Disclosing Party; (c) is published or otherwise made known to the public by the Disclosing Party; (d) was generated independently by the Receiving Party before disclosure by the Disclosing Party; or (e) is required by law to be a "public record". The Receiving Party will refrain from using the Disclosing Party's Confidential Information except to the extent necessary to exercise its rights or perform its obligations under this Agreement. The Receiving Party will likewise restrict its disclosure of the Disclosing Party's Confidential Information to those who have an absolute need to know such Confidential Information in order for the Receiving Party to perform its obligations and enjoy its rights under this Agreement. Such persons will be informed of and will agree to the provisions of this Section 3.7, and the Receiving Party will remain responsible for any unauthorized use or disclosure of the

Confidential Information by any of them. The Receiving Party may also disclose Confidential Information of the Disclosing Party pursuant to the requirement or request of a governmental agency, a court or administrative subpoena, an order or other legal process or requirement of law, or in order to defend its rights hereunder, so long as it shall (x) first notify the Disclosing Party of such request, requirement or proposal for use in defense; (y) in the case of a required disclosure, furnish only such portion of the Confidential Information as it is advised in writing by counsel that it is legally required to disclose; and (z) cooperate with the Disclosing Party in its efforts to obtain an order or other reliable assurance that confidential treatment will be accorded to that portion of the Confidential Information that is required to be disclosed. Upon the termination of this Agreement in its entirety, each Receiving Party shall return all Confidential Information of the Disclosing Party which is in its possession or under its control.

3.8 **Indemnification by ES&S.**

a. **Intellectual Property Infringement.** ES&S will indemnify and hold Customer harmless from and against any and all damages, amounts paid in settlement and reasonable fees and costs (including reasonable attorneys' fees) (collectively "Adverse Consequences") arising out of or relating to a claim that any of the ES&S Equipment or ES&S Software infringes upon any third party's copyright, trademark or patent existing as of the date hereof (a "Third Party Infringement Claim"). Customer shall notify ES&S immediately if it becomes aware of any Third Party Infringement Claim. Customer hereby gives ES&S full and complete authority, and shall provide such information and assistance as is necessary (at ES&S' expense with respect to reasonable out-of-pocket costs), to enable ES&S to defend, compromise or settle a Third Party Infringement Claim. In addition, if Customer is prevented by a Third Party Infringement Claim from using any of the ES&S Equipment or ES&S Software in substantially the manner contemplated by this Agreement, ES&S, at its sole option and expense, shall procure for Customer the right to continue such use or shall replace or modify the infringing item. If neither option is commercially reasonable, ES&S may direct Customer to cease use of the infringing item, and shall refund the depreciated cost for the infringing item (as determined in accordance with GAAP) to Customer, and Customer shall cease and desist from any further use thereof and return the infringing item to ES&S; provided, however, that if loss of the infringing item causes the voter tabulation system to fail to (i) perform in accordance with its Documentation, (ii) be compliant with all applicable federal and state election laws and regulations, or (iii) remain certified by the appropriate state authorities for use in the Jurisdiction, and ES&S is unable, despite commercially reasonable efforts, to modify the voter tabulation system to resolve such failures, then ES&S shall instead refund the depreciated amount paid by Customer for the voter tabulation system under this Agreement (as determined in accordance with GAAP). **THE FOREGOING STATES ES&S' ENTIRE LIABILITY FOR ANY INTELLECTUAL PROPERTY INFRINGEMENT ARISING UNDER THIS AGREEMENT.**

b. **Timely Performance.** If, due to ES&S' negligence, (i) ES&S fails to provide any product or service by a date specified herein, and (ii) such failure has or will result in a material detrimental impact on Customer's ability to define and conduct elections or to tabulate or report election results in the Jurisdiction in a satisfactory manner or on a timely basis, Customer may pass to ES&S the direct and reasonable out-of-pocket expenses incurred by Customer in working with ES&S to cure such failure. Customer will submit to ES&S an itemized statement setting forth the charges for said expenses. Upon ES&S' request, Customer will also provide ES&S with copies of

invoices and other back-up information necessary to confirm the itemized expenses. Customer may, at its option, either accept a credit against future payments to ES&S or accept a cash payment as payment by ES&S under this Section 3.8(b). Customer will take all reasonable steps to mitigate the expenses incurred by Customer hereunder. The remedies set forth in this Section are the full extent of Customer's remedies for the performance failures described in this Section 3.8(b).

3.9 **Indemnification By Customer**. Customer shall indemnify and hold harmless ES&S from and against any and all Adverse Consequences arising out of or relating to the following:

a. Any Third Party Infringement Claim resulting from (i) Customer's failure to timely or properly install and use any Update provided to it by ES&S; (ii) the use of any ES&S Equipment or ES&S Software in combination with other equipment, hardware or software not meeting ES&S' specifications for use with such ES&S Equipment or ES&S Software; or (iii) Customer's modification or alteration of any item of ES&S Equipment or ES&S Software without the prior written consent of ES&S;

b. Any claims by Third Parties arising out of or relating to the use or misuse by Customer, its employees and any other persons under its authority or control ("Customer's Representatives") of any Third Party Items;

c. Personal injury (including death) or property damage that is caused by any negligent or willful act, error or omission of one or more of Customer's Representatives; and

d. Customer's election not to receive, or to terminate, ES&S Hardware Maintenance Services or ES&S Software Maintenance and Support.

ES&S shall notify Customer immediately if it becomes aware of any claim for which it may be entitled to indemnification under this Section 3.9, and hereby gives Customer full and complete authority, and shall provide such information and assistance as is necessary (at Customer's expense with respect to reasonable out-of-pocket costs), to enable Customer to defend, compromise or settle any such claim.

3.10 **Insurance.** Attached to this Agreement as Exhibit H is a certificate of insurance that sets forth ES&S' current insurance coverages. ES&S shall notify Customer at least 30 days before reducing any insurance coverage set forth on such certificate.

3.11 **Excusable Nonperformance**. Except for obligations to make payments hereunder, if either party is delayed or prevented from performing its obligations under this Agreement as a result of any cause beyond its reasonable control, including acts of God, fire, riots, acts of war, terrorism or insurrection, labor disputes, transportation delays, governmental regulations and utility or communication interruptions, the delay shall be excused during the continuance of, and to the extent of, such cause, and the period of performance shall be extended to the extent necessary to allow performance after the cause of delay has been removed. ES&S agrees to work with Customer, at Customer's request, to develop mutually agreeable alternatives in order to minimize the negative impact of any such delay.

3.12 **Term; Termination.** This Agreement shall be effective on the Effective Date. The parties acknowledge and agree that certain of the Exhibits contain separate termination

provisions, and that the termination of any Exhibit shall not constitute a termination of any other Exhibit or of the Agreement as a whole. This Agreement may be terminated, in writing, at any time:

a. By either party if the other party breaches any material provision hereof and does not cure such breach within 30 days after it receives written notification thereof from the non-breaching party; or

b. By either party in the event that funds are not appropriated or otherwise made available to support the continuation of performance by Customer hereunder in any subsequent fiscal period; provided, however, that this Section 3.12(b) shall not be construed so as to permit Customer to terminate this Agreement in order to acquire a voter tabulation system and/or related services from a third party. Either party may notify the other of the termination, which may occur no later than the beginning of the subsequent fiscal period. Upon termination, Customer shall pay ES&S for all services performed pursuant to Exhibit E up to the date of termination and reasonable exit costs incurred by ES&S. The amount of such payment may be paid from any appropriations available for such purposes, and Customer's highest-ranking officer or official shall use his/her best efforts to timely and sufficiently request the appropriation necessary to pay such amount. Customer acknowledges and agrees that sufficient funds to pay for the "Net Sales Amount" listed on Exhibit A are available, and that funds necessary to satisfy Customer's remaining obligations are likely to be available from sources which are identified in writing.

3.13 **Assignment.** Except in the case of a sale, transfer or assignment of all or substantially all of the assets of ES&S to a successor who has asserted its intent to continue the business of ES&S, neither party may assign or transfer this Agreement or assign, subcontract or delegate any of its rights, duties or obligations hereunder without the prior written consent of the other party hereto, such consent not to be unreasonably withheld or conditioned, nor unduly delayed.

3.14 **Remedies.** Except as specifically provided herein, the remedies provided to the parties under this Agreement shall be cumulative and non-exclusive, and the parties shall be entitled to seek any other rights to which they may be entitled at law or in equity, subject to the terms of this Agreement.

3.15 **Entire Agreement.** This Agreement, including all Exhibits hereto and those sections of the RFP that are referenced herein (all of which are incorporated herein by this reference), contains the entire agreement of the parties with respect to the subject matter hereof and shall supersede and replace any and all other prior or contemporaneous discussions, negotiations, agreements or understandings between the parties, whether written or oral, regarding the subject matter hereof. Any provision of any purchase order, form or other agreement that conflicts with or is in addition to the provisions of this Agreement shall be of no force or effect. In the event of any conflict between a provision contained in an Exhibit to this Agreement and these General Terms, the provision contained in the Exhibit shall control. No waiver, amendment or modification of any provision of this Agreement shall be effective unless in writing and signed by the party against whom such waiver, amendment or modification is sought to be enforced. No consent by either party to, or waiver of, a breach by either party shall constitute a consent to or waiver of any other different or subsequent breach by either party.

3.16 **Severability.** If any provision of this Agreement shall be unenforceable or invalid under any applicable law or be so held by applicable court decision, the remaining provisions of this Agreement shall remain in full force and effect. The unenforceable or invalid provision shall be changed and interpreted so as to best accomplish the objectives of such provision within the limits of applicable law or applicable court decisions.

3.17 **Notice.** Any notice or other communication required or permitted hereunder shall be in writing, and will be deemed given when (a) delivered personally, (b) sent by confirmed fax, (c) sent by commercial overnight courier (with written verification of receipt) or (d) sent by registered or certified mail, return receipt requested, postage prepaid, when the return receipt is received. All communications shall be sent to the attention of the persons listed on the signature page to this Agreement and at the addresses or fax numbers set forth on such signature page unless other names, addresses or fax numbers are provided by either or both parties in accordance herewith.

3.18 **Disputes.**

a. **Payment Disputes.**

i. **Payment of Undisputed Amounts.** In the event of a dispute between the parties regarding (1) a product or service for which payment has not yet been made to ES&S, (2) the amount due ES&S for any product or service, or (3) the due date of any payment, Customer shall nevertheless pay to ES&S when due all undisputed amounts. Such payment shall not constitute a waiver by Customer or ES&S of any of its rights and remedies against the other party.

ii. **Remedies for Past Due Undisputed Payments.** If any undisputed payment to ES&S is past due more than 30 days, ES&S may suspend performance under this Agreement until such amount is paid. ES&S hereby reserves a security interest in the Equipment and Third Party Items. Such security interest will not be released until ES&S has been paid for the ES&S Equipment, ES&S Software and Third Party Items. Customer shall, upon request by ES&S, execute financing statements deemed necessary or desirable by ES&S to perfect such security interest. Customer authorizes ES&S to file a copy of this Agreement as a financing statement with the appropriate authorities at any time after the Effective Date in order to perfect ES&S' security interest. A financing statement may be filed by ES&S without Customer's signature on the basis of this Agreement where permitted by law. Customer shall keep the ES&S Equipment and Third Party Items in good working order and repair until it has paid for the ES&S Equipment, ES&S Software and Third Party Items. If Customer's payment is past due for more than 60 days and is undisputed, ES&S may, with or without demand or notice to Customer and as applicable, declare the total amount remaining due under this Agreement to be immediately due and payable, enter the premises where the ES&S Equipment and Third Party Items are located and remove them, and sell any or all of the ES&S Equipment and Third Party Items as permitted under applicable law.

b. **Dispute Resolution Process.** Time is of the essence in resolving disputes. The initiating party shall notify the responding party of any dispute, including all relevant information (e.g., the nature of the dispute, dates, times, persons involved). The responding party shall respond to the notification within 5 business days.

Thereafter, the parties shall use their good faith efforts to resolve the dispute within a reasonable period of time. Notwithstanding anything in this Section 3.18 to the contrary, either party may apply to any court having jurisdiction over the subject matter of the dispute for a temporary restraining order, preliminary injunction, or other appropriate legal remedy at any time.

3.19 **Construction.** As used in this Agreement, "including" means "including without limitation". The words "or" and "nor" are inclusive and include "and". The singular shall include the plural and vice versa. The title of each Article, Section, Exhibit and Schedule is inserted solely for convenience of reference and shall not constitute a part of this Agreement, nor shall they affect the meaning, construction or effect of this Agreement.

3.20 **Counterparts; Execution By Facsimile**. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but which together shall constitute one and the same instrument. The parties may execute this Agreement and exchange counterparts of the signature pages by means of facsimile transmission, and the receipt of such executed counterparts by facsimile transmission shall be binding on the parties. Following such exchange, the parties shall promptly exchange original versions of such signature pages.

3.21 **Affirmative Action**. ES&S represents that it has developed and implemented an Affirmative Action Plan and Equal Employment Opportunity policy in its workplace. ES&S shall provide copies of such documents to Customer upon request.

3.22 **Other.** ES&S is providing Equipment, Software and services to Customer as an independent contractor, and shall not be deemed to be a "state actor" for purposes of 42 U.S.C. § 1983. ES&S may engage subcontractors to provide certain of the Equipment, Software or services, but shall remain fully responsible for such performance. The provisions of Article 2 and Sections 3.2(d), 3.4-3.9, 3.11, 3.12(b), 3.14 and 3.18 of these General Terms shall survive the termination of this Agreement, to the extent applicable.

[END OF GENERAL TERMS]

EXHIBIT A
PRICING SUMMARY

Sale Summary:		
Description	**Refer to**	**Amount**
ES&S Equipment	Exhibit B	
ES&S Software License Fees	Exhibit C	
Third Party Items	Exhibit D	
Election Support Services	Exhibit E	
Shipping and Handling	Note 1	
Total Net Sale		

Terms & Conditions:

Note 1: Any applicable state and local taxes are not included, and are the responsibility of Customer. See Section 3.5. The cost of Shipping and Handling is an estimate; actual costs will be billed.

Note 2: Payment terms are as follows:
Contract Signing: 25% of Total Net Sale
30 Days after Equipment Delivery: 75% of Total Net Sale

Note 3: Services in excess of those set forth in Exhibit E shall be charged at the rate of $1,500 per day, including expenses.

Note 4: ES&S anticipates delivering the Equipment and Software in accordance with Section 3.1 as follows:

Equipment/Software	Estimated Delivery Date
_____	_____
_____	_____
_____	_____

Warranty:

ES&S Equipment and ES&S Software – Warranty Period: Anticipated Warranty Period: _____ 20___ to _____ 20___	1 year	

Ongoing Services:

Description	**Refer to**	**Annual Fee**
Routine Maintenance Services during Warranty Period; Payment is due 30 days after invoice.	Section 3.3	N/A; Per-Unit Fee of $_____
Post Warranty Hardware Maintenance Services	Exhibit F	$_____
Services commence on _____, 20_____. Fees reflect a one-year term. Payment is due at the start of the maintenance period.		
Post Warranty Software Maintenance & Support Services		
- ES&S Firmware	Exhibit F	$_____
- All Other ES&S Software	Exhibit F	$_____
Services commence on _____, 20_____. Fees reflect a one-year term. Payment is due at the start of the maintenance period.		

EXHIBIT B
ES&S EQUIPMENT DESCRIPTION AND PRICING

QUANTITY	DESCRIPTION		TOTAL PRICE
			$

EXHIBIT C
ES&S SOFTWARE DESCRIPTION AND PRICING

DESCRIPTION	NUMBER OF LICENSES
Unity Election System licensed pursuant to Section 2.2(a) of the General Terms (check modules being licensed):	1
Data Manager	
Ballot Image Manager	
Ballot on Demand	
Hardware Programming Manager	
Data Acquisition Manager	
Reporting Manager	
ES&S Firmware Version x.x.x.x. (see Notes 1 and 2 below)	1
Total License Fees (including all applicable Documentation)	$_____

Note 1: ES&S Firmware versions may change between execution of the Agreement and first election usage due to ongoing certification of Updates.

Note 2: ES&S Firmware license fee included in the total cost of the ES&S Equipment.

EXHIBIT D
THIRD PARTY ITEMS

DESCRIPTION:	QUANTITY:

Note 1:
The configuration and specification of Third Party Items as per this Exhibit D are subject to change by the manufacturer. Should the actual configuration and specifications as set by the manufacturer differ from those set forth herein, ES&S agrees to provide, and Customer agrees to accept, Third Party Items that are comparable to those described above.

EXHIBIT E
ELECTION SUPPORT SERVICES

1. **Term.** The services described herein shall be provided for the following elections (the "Elections"):

2. **Services.** The election support services to be provided by ES&S, a description of such services, the concurrent obligations of Customer, and total fees are described below (*insert "N/A" in the "Estimated ES&S Service Days" column if not applicable*). Customer acknowledges that ES&S' fees for election support services are based on the descriptions listed in the table below, and that a change in the descriptions may require ES&S to change the resulting fee charged to Customer. For purposes of ES&S' provision of Election Support Services under this Agreement, a "Service Day" shall mean the performance of any agreed upon Election Support Services by one (1) ES&S employee, contractor or agent on any one (1) calendar day or portion thereof. By way of example, "ten Service Days" could be used by Customer through the provision of Election Support Services by one (1) ES&S employee, contractor or agent on each of ten (10) different calendar days, two (2) ES&S employees, contractors or agents on each of five (5) different calendar days, or ten (10) ES&S employees, contractors or agents on one (1) calendar day.

Role/Function	Area of Work or Description	Primary Responsibility	Estimated ES&S Service Days	Additional Day Bill Rate
Project Management	A project manager (and part-time assistant) appointed by ES&S shall be responsible for the overall planning, communication, management and coordination of ES&S Services and contract adherence. This person shall be the liaison for Customer with ES&S as it pertains to all products, services and obligations set forth in the contract. An example of responsibilities will include: the gathering of Customer requirements, development of a mutual project calendar and statement of work, written and verbal status updates, change order management, training coordination, ES&S staff coordination (including Voter Registration resources), contract milestone achievement and acceptance sign-off, problem escalation and resolution, invoicing and payment issues, etc.	ES&S	___ Days	$ 1,500.00
Warehouse Planning	Conduct warehouse review and provide recommendations to Customer	ES&S		

Role/Function	Area of Work or Description	Primary Responsibility	Estimated ES&S Service Days	Additional Day Bill Rate
Delivery Preparation	Prepare warehouse and Election Central location for delivery of new tabulation equipment and tabulation network. Storage space must provide at least 2000 square feet of staging area for testing of equipment. Storage requirements per warehouse specification sheet (se attached). Storage/warehouse location should be climate controlled to ensure safe working conditions (> 65 degrees and < 75-78 degrees) and ensure storage temperatures that will ensure long-term iVotronic screen and battery life (> 65 degrees and < 75-78 degrees).	Customer		
ES&S iVotronic and M650 hardware Delivery	Unload and open all ES&S tabulation hardware at designated Customer location.	ES&S		
Shipping Material	Dispose of iVotronic shipping materials (boxes, packaging, etc.)	Customer		
Election Central Preparation	Install (or ensure) dedicated electrical and phone connectivity to support five (5) workstations, (2) servers and modems for all incoming regional sending sites. Ensure readiness for use.	Customer		
Third-Party Hardware & Network Delivery (Software and Network Technician)	Deliver and install third party hardware and software. Install Unity software and establish interface with Voter Registration software. Test workstations and modems with Customer phone and electrical lines. Review with Customer staff and deliver written documentation of system requirements and configurations.	ES&S		
ES&S iVotronic Hardware **Tracking system**	Provide staging area in preparation of acceptance testing. Determine the desired data and record keeping format for tracking iVotronic hardware.	Customer Customer		
Acceptance testing	Train Customer staff on acceptance testing procedures. Perform acceptance testing on all iVotronic systems and booths. Perform acceptance testing on all M650 central count tabulators.	ES&S ES&S ES&S		

Role/Function	Area of Work or Description	Primary Responsibility	Estimated ES&S Service Days	Additional Day Bill Rate
	Replace and provide repairs of necessary units to complete acceptance testing.	ES&S	Warranty period	
Ballot Production	Provide sample, test and official ballots to be used during Election. Customer will provide all specifications, including election information, to ES&S. ES&S will provide Customer with a proof of each type of ballot on the date specified in a timetable supplied by Customer, and Customer will approve such proofs in writing within 3 calendar days after delivery. Following Customer's approval, ES&S will print and deliver the ballots on the date specified in Customer's timetable.	Customer		
Ballot Layout/Coding Services	Gather and provide all necessary election data for preparation of new election data files. Assist Customer staff in creating election ballot layouts and coding files using Unity software. [Customer's preference is to become 100% independent in layout and coding following their_____ election.]	Customer ES&S		
Training – VR	Voter Registration (VR) Software training to include the following modules: Mega Profile Overview, Street File Maintenance, Scanned Batch Image Processing, Election Management, and Absentee Voter. Batch Process Administration, Supervisor of Election Reports, Election Worker and Petitions. Text Editor, Image Indexing, Candidate Filing, System Troubleshooting and Maintenance. Customer staff days required for training is 10 days – but these days are bundled in with the initial VR licensing fee.	ES&S		

Role/Function	Area of Work or Description	Primary Responsibility	Estimated ES&S Service Days	Additional Day Bill Rate
Training – Unity	A system overview that covers the following modules: Election Data Manager, Ballot Image Manager, Hardware Programming Manager, Data Acquisition Manager and Election Reporting Manager. Class size is limited to 10 and course participant manuals are included. (Customer will ensure participants have an appropriate level of technical experience – including intermediate skills in relational database administration).	ES&S		

Role/Function	Area of Work or Description	Primary Responsibility	Estimated ES&S Service Days	Additional Day Bill Rate
Training – iVotronic – DRE	ES&S will provide classroom-style training with hands-on practice with the DRE system. General operations, ballot tabulation procedures, log audit capability, reporting, backups and general maintenance procedures will be covered. Duration of class is 1 day. Assume (2) classes will be required. Course participant manuals are included. Class size limited to 20.	ES&S		
Training – M650	ES&S will provide classroom-style training with hands-on practice using the M650 Central Count System. General operations, tabulation procedures, backups and general maintenance procedures are covered. Class duration is 1 day. Assume 2 classes will be required. Course participant manuals are included. Class size is limited to 20.	ES&S		
Public Education	ES&S agrees to work with Customer in the design of a customized approach to introduce the iVotronic system to the public. ES&S and Customer will work together to determine appropriate combination of public demonstration, video, radio, poster, newspaper, etc., best meets the needs of Customer.	ES&S		
Training – Poll Worker Train – The-Trainer	ES&S agrees to conduct Poll Worker "Train the Trainer" classes. Class size is limited to 20. Manuals are provided (up to 20), and a master template for duplication for Poll Workers is included.	ES&S		
Supplies	This Agreement does not include consumable supplies.			
Pre-Election L&A Testing	ES&S will develop logic and accuracy procedures (according to State Elections Code). ES&S will assist in the actual L&A testing procedures in accordance with SOS requirements.	ES&S		

Role/Function	Area of Work or Description	Primary Responsibility	Estimated ES&S Service Days	Additional Day Bill Rate
Early Voting and Election Day Support	Customer will provide staff to assist ES&S in completion of Logic and Accuracy procedures on all iVotronic units prior to contracted elections. Customer is responsible for the delivery and pick up services of iVotronics to all polling location for all elections between _____ and _____. ES&S will provide on-site and roaming support of equipment, regional site testing and transmission, poll worker assistance in the use of ES&S equipment (including resources to help with opening polls, handling unit problems, closing of polls, etc.). Early Voting Days and Election Days for each contracted election between _____ through _____ will be supported. ES&S will provide software accumulation assistance on Election Day/Night of each contracted election.	Customer ES&S ES&S	N/A	
	Total "Exhibit E" Days **____ Days x $_____ =** **$_____**			

2. 3. **Acknowledgements.** The parties acknowledge and agree as follows:

a. Time is of the essence in performing their respective obligations hereunder. Customer's remedy for any failure by ES&S to timely provide election support services is set forth in Section 3.8(b) of the General Terms. Notwithstanding anything in the remainder of the Agreement to the contrary, if ES&S becomes aware of any failure by Customer to timely perform its obligations under this Exhibit E, or reasonably believes that such failure may occur, it will immediately notify Customer. ES&S may refuse to provide any services if Customer fails to timely cure such failure of performance or provide adequate assurances of performance within 3 business days after receiving such notification. Any such refusal by ES&S will not constitute a breach of the Agreement and is in addition to any other remedies that may be available to it at law, in equity or under the Agreement.

b. The Elections will be conducted under Customer's direction and control. ES&S will provide services based on information and instructions provided to it by Customer.

[END OF EXHIBIT E]

EXHIBIT F
MAINTENANCE SERVICES
(POST-WARRANTY PERIOD)

ARTICLE I
HARDWARE

1. **Term; Termination**. This Exhibit F shall be in effect from the date on which the Warranty Period expires until the first anniversary thereof (the "Hardware Maintenance Term"). The Hardware Maintenance Term shall automatically renew for an unlimited number of successive one year periods until this Exhibit F is terminated by the first to occur of (a) Customer's election to terminate it at any time, notice of which election shall be given to ES&S at least 60 days prior to the termination date, (b) the date that is 30 days after either party notifies the other that the other has materially breached this Exhibit F, and the breaching party fails to cure such breach within such 30-day period, or (c) the date that is 30 days after Customer fails to pay any amount due ES&S under this Exhibit F. The termination of this Exhibit F shall not relieve Customer of its liability to pay any amounts due ES&S hereunder.

2. **Fees.** In consideration for ES&S' agreement to provide Hardware Maintenance Services and Software Maintenance and Support under this Exhibit F, Customer shall pay to ES&S the Hardware Maintenance and Software Maintenance Fees set forth on Schedule F1 for the initial Term and each renewal period. The Hardware Maintenance and Software Maintenance Fees for the initial Term are due on the date of the expiration of the Warranty Period. ES&S may increase the Hardware Maintenance and Software Maintenance Fees for a renewal period by not more than 5% of the amount of the most recent Fees paid by Customer. The Hardware Maintenance and Software Maintenance Fees for any renewal period shall be due and payable no later than 30 days prior to the beginning of such renewal period. The Software Maintenance Fee shall be comprised of (i) a fee for the Software Maintenance and Support provided for the ES&S Firmware, and (ii) a fee for the Software Maintenance and Support provided for all other ES&S Software, and shall be in addition to any fees or charges separately referred to in any Section of this Exhibit F or the Agreement. If Customer elects to receive Software Maintenance and Support for an Add-On or New Product during the Term or any renewal thereof, ES&S will charge an incremental Software Maintenance Fee for such services.

ARTICLE II
HARDWARE

1. **Maintenance Services**. The Hardware Maintenance Services to be provided to Customer under this Exhibit F for the ES&S Equipment listed on Schedule F1 (the "Products") shall be subject to the following terms and conditions:

a. **Inspection**. If Customer has elected not to receive Hardware Maintenance Services under this Exhibit F for a period of 12 months or more, ES&S may require Customer to allow it to inspect the Products before it provides any Hardware Maintenance Services. The purpose of such inspection shall be to determine whether or not the Products are fit for the ordinary purposes for which they are to be used, normal wear and tear excepted ("Normal Working Condition"). The cost of such inspection will be at the current published ES&S rate plus ES&S' Out-of-Pocket Expenses, and shall be due from Customer within 30 days of its receipt of ES&S' invoice therefore. If any of the

Products is not in Normal Working Condition, ES&S, at the option of Customer, (i) shall provide such repairs and replacements as ES&S deems reasonable and necessary to restore such Product(s) to Normal Working Condition, at Customer's expense with respect to the cost of any parts used in such repairs or replacements, or (ii) shall not provide any Hardware Maintenance Services with respect to such Product(s). For purposes of this Exhibit F, "Out-Of-Pocket Expenses" shall mean all travel, meal and lodging expenses incurred by ES&S employees or authorized representatives ("ES&S Representatives") who are required to travel to Customer's Designated Location to provide services. Customer's "Designated Location" shall mean Customer's owned or leased facility at which Customer desires ES&S to perform the Hardware Maintenance Services. Customer's Designated Location is specified on Schedule F1.

b. **Routine Maintenance Services**. An ES&S Representative shall provide such services as may be necessary to keep the Products in Normal Working Condition ("Routine Maintenance Services") once each 12 months during the Hardware Maintenance Term or any renewal thereof. Customer may request that Routine Maintenance Services be performed more than once during any such 12-month period. Any such request shall be made at least 60 days before the Routine Maintenance Services are desired. The per-unit fee for such additional Routine Maintenance Services is set forth on Schedule F1 and shall be due within 30 days after invoice. Routine Maintenance Services shall include cleaning, lubrication and calibration services. At the request of Customer, ES&S shall provide a reasonably detailed record of all Routine Maintenance Services performed with respect to one or more Products. The Routine Maintenance Services will be provided either at Customer's Designated Location or at an ES&S-designated depot facility ("Depot"), as elected by Customer on Schedule F1. Customer shall pay all costs associated with shipping Product(s) to a Depot, including insurance.

c. **Remedial Maintenance Services**.

i. **Defects Under Normal Use and Service.** If a defect or malfunction occurs in any Product while it is under normal use and service, Customer shall promptly notify ES&S, and ES&S shall use reasonable efforts to restore the Product to Normal Working Condition as soon as practicable. The services provided by ES&S pursuant to this Subsection 2(c)(i) are referred to herein as "Remedial Maintenance Services". ES&S shall provide the Remedial Maintenance Services at its Depot; provided, however, that if Remedial Maintenance Services are required for 10 or more Products at any given time, Customer may elect to have them provided at its Designated Location; provided, further, that all Remedial Maintenance Services provided for central count equipment shall be provided at Customer's Designated Location. Customer acknowledges that Product(s) identified on Schedule F1 as "depot repair only" may only be repaired at a Depot.

ii. **Defects Due to Customer Actions or Omissions.** If a defect or malfunction occurs in any Product as a result of (1) repairs, changes, modifications or alterations not authorized or approved by ES&S, (2) accident, theft, vandalism, neglect, abuse or use that is not in accordance with instructions or specifications furnished by ES&S or (3) causes beyond the reasonable control of ES&S or Customer, including acts of God, fire, riots, acts of war, terrorism or

insurrection, labor disputes, transportation delays, governmental regulations, and utility or communication interruptions, or if Customer does not notify ES&S within 24 hours after it knows of the defect or malfunction or is otherwise not in compliance with its obligations hereunder, Customer shall pay ES&S for the Remedial Maintenance Services at ES&S' then-current rates, as well as for the cost of all parts used in connection with such Remedial Maintenance Services.

iii. **Timing.** The date(s) on which any Remedial Maintenance Services shall be provided shall be mutually agreed upon by ES&S and Customer. If Customer requires ES&S to provide "emergency" Remedial Maintenance Services (which shall be defined as Remedial Maintenance Services that are provided within 48 hours after Customer notifies ES&S of the need therefore), and such emergency Remedial Maintenance Services are not needed as a result of an action, error or omission by ES&S, Customer shall pay a surcharge, as set forth on Schedule F1.

iv. **Loaner Unit**. At Customer's request, ES&S shall use reasonable efforts to promptly make available to Customer a product that is the same as, or substantially similar to, the Product for which Remedial Maintenance Services are being performed (a "Loaner Unit"). If the Remedial Maintenance Services are being performed pursuant to Subsection 2(c)(ii) above, Customer shall pay ES&S for the use of the Loaner Unit at ES&S' then-current rates including the cost of shipping.

d. **Exclusions.** ES&S has no obligation under this Exhibit F to (i) assume the obligations under any existing or expired warranty for a Third Party Item; (ii) repair or replace Product components that are consumed in the normal course of operating the Product, including printer ribbons, paper rolls, batteries, removable memory packs, cancellation stamps, ink pads or red stripe pens, or (iii) repair any Product from which the serial number has been removed or altered. In addition, ES&S may, at any time in its discretion, determine that any Product is no longer fit for Hardware Maintenance Services because it is in such poor condition that it cannot practically be restored to Normal Working Condition, or cannot be restored to Normal Working Condition at an expense that is less than the then-current value of the Product. If such a determination is made, ES&S shall no longer be required to provide Hardware Maintenance Services for such Product. ES&S shall also refund to Customer an amount equal to (1) that portion of the most recent fee paid for Hardware Maintenance Services that is attributable to such Product, multiplied by (2) a fraction, the numerator of which is the remaining number of days in the Hardware Maintenance Term or renewal period for which such fee was paid and the denominator of which is the total number of days in such Hardware Maintenance Term.

e. **Sole Provider; Access**. Customer shall not permit any individual other than an ES&S Representative to provide maintenance or repairs with respect to the Products for so long as a Hardware Maintenance Term is in effect. Customer shall provide ES&S Representatives with all information necessary to enable them to provide Hardware Maintenance Services. Customer shall likewise provide full access to the Products and adequate working space for all Hardware Maintenance Services performed at its Designated Location, including sufficient heat, lights, ventilation, electric current and outlets.

f. **Storage**. When not in use, Customer shall properly store the Products in accordance with the storage requirements established in the Documentation.

ARTICLE III
SOFTWARE

1. **Services Provided.** ES&S shall provide maintenance and support services for the ES&S Software ("Software Maintenance and Support"), to enable it to perform in accordance with its Documentation in all material respects, and to cure any defect in material or workmanship.

2. **Updates.** During the Software Maintenance Term and any renewals thereof, ES&S shall continue to provide updates in accordance with any update schedule determined by ES&S.

3. **Reinstatement of Software Maintenance and Support.** If the Software Maintenance Term or any renewal thereof expires without being renewed, Customer may thereafter resume receiving Software Maintenance and Support upon (a) notification to ES&S, (b) payment of all fees which would have been due to ES&S had the Software Maintenance Term not expired, and (c) the granting to ES&S of access to the ES&S Software, so that ES&S may analyze it and perform such maintenance as may be necessary before resuming the Software Maintenance and Support.

4. **Conditions.** ES&S shall provide Software Maintenance and Support for any item of ES&S Software if such item requires such services as a result of (a) repairs, changes, modifications or alterations not authorized or approved by ES&S, (b) accident, theft, vandalism, neglect, abuse or use that is not in accordance with instructions or specifications furnished by ES&S, (c) causes beyond the reasonable control of ES&S or Customer, including acts of God, fire, riots, acts of war, terrorism or insurrection, labor disputes, transportation delays, governmental regulations and utility or communication interruptions, (d) Customer's failure to timely and properly install and use the most recent Update, or the second most recent Update, provided to it by ES&S, (e) Customer's failure to notify ES&S within 24 hours after Customer knows of the need for such services, or (f) if Customer is otherwise not in compliance with its obligations under this Agreement. However, such Software Maintenance and Support shall not be provided at the Software Maintenance Fees outlined in Section 5(b), but shall be provided at the fees to be agreed upon by the parties if and when the need for such Software Maintenance and Support arises.

5. **Proprietary Rights**. ES&S shall own the entire right, title and interest in and to all corrections, programs, information and work product conceived, created or developed, alone or with Customer or others, as a result of or related to the performance of this Exhibit F, including all proprietary rights therein or based thereon. Subject to the payment of all Software Maintenance Fees, ES&S hereby grants to Customer a non-exclusive license to use that portion of such corrections, programs, information and work product that ES&S actually delivers to Customer pursuant to this Exhibit F. All licensed items shall be deemed to be ES&S Software for purposes of this Agreement. Except and to the extent expressly provided herein, ES&S does not grant to Customer any right, license, or other proprietary right, express or implied, in or to any corrections, programs, information, or work product covered by this Agreement.

Schedule F1

DESCRIPTION OF PRODUCTS

HARDWARE

Quantity	Description (Note: *** indicates Depot Repair Only Products)	Initial Maintenance Fee Per Unit	Initial Maintenance Fee In Total
	Total Hardware Maintenance Fees Due for the Initial Hardware Maintenance Term	[redacted]	

Per-Unit Fees if Customer requests more than one Routine Maintenance visit in a 12-month period: $

Surcharge for Emergency Remedial Maintenance Services: $

Customer's Designated Location:

Location of Services

☐ **Customer's Designated Location**

☐ **Depot**

SOFTWARE

Years	First Month Applicable	Fee –ES&S Firmware	Fee- All Other ES&S Software

EXHIBIT G
ACCEPTANCE CRITERIA

12.1" & 15" iVOTRONIC VOTER TERMINAL WITHOUT SOUND

Inspector:_____

Serial Number:_____ **Date:**_____

Acceptance Q.C. Testing:

☐ Connect Battery to terminal. Connect wall adapter

☐ Insert PEB while holding down Vote button for 1-2 seconds and Calibrate Touchscreen

☐ Enter Service Menu. Verify Serial Number displayed on screen and on front of unit match

☐ Verify Firmware: _____

☐ Clear and Test Terminal. EQC Code: _____

☐ Check/Set Time and Date. Time Zone: _____

☐ Connect Comm Pak to Terminal. Select *Printer* on Comm Pak switchbox. Select *Print test message* in Service Menu

☐ Re-insert PEB and *Open* Terminal. Enter Vote Mode, Vote One Ballot

☐ Enter Service Menu. Clear and Test Terminal

☐ Re-insert PEB. Check Public Count __, Protective Count ____

☐ Remove A/C, Check Battery Voltage _____V

☐ Remove PEB. Disconnect battery connection for shipping.

☐ Verify Warranty Label is affixed over the lower right screw hole.

☐ Cover Touchscreen with Protective Film Sheet. Place end caps on unit and re-insert into box.

EXHIBIT G
ACCEPTANCE CRITERIA

12.1" & 15" iVOTRONIC VOTER TERMINAL WITH SOUND

Inspector:_____

Serial Number:_____ **Date:**_____

Acceptance Q.C. Testing:

☐ Connect Battery to terminal. Connect wall adapter

☐ Insert PEB while holding down Vote button for 1-2 seconds and Calibrate Touchscreen

☐ Enter Service Menu. Verify Serial Number displayed on screen and on front of unit match

☐ Verify Firmware: _____

☐ Clear and Test Terminal. EQC Code: _____

☐ Check/Set Time and Date

☐ Connect Comm Pak to Terminal. Select *Printer* on Comm Pak switchbox. Select *Print test message* in Service Menu

☐ Re-insert PEB and *Open* Terminal. Enter Vote Mode, Vote One Ballot

☐ Insert Compact flash w/sound files, connect headphones, insert PEB and vote one ballot in ADA mode

☐ Enter Service Menu. Clear and Test Terminal

☐ Re-insert PEB. Check Public Count 0, Protective Count ____

☐ Remove A/C, Check Battery Voltage _____V

☐ Cover Touchscreen with Protective Film Sheet. Place end caps on unit and re-insert into box.

M100 - SYSTEM ACCEPTANCE TESTING

Inspector:_____
Serial Number:_____ **Date:**_____

- ☐ Plug in unit and insert Demo Card
- ☐ Turn Key to Open/Close Polls
- ☐ When the question 'Election Card Inserted Open Polls Now?' appears DO NOT press Yes. Press the 1 &3 keys simultaneously.
- ☐ Select System Settings
- ☐ Select Date Time
- ☐ Select Set Date. Verify the date and change accordingly using the select and plus or minus keys.
- ☐ Press Previous to return to the Date Time Menu
- ☐ Select Set Time. Verify the date and change accordingly using the select and plus or minus keys.
- ☐ Press Previous to return to the Date Time Menu
- ☐ Select Set Zone. Verify the zone and change accordingly using the select and plus or minus keys.
- ☐ Press Previous to return to the Date Time Menu
- ☐ When the Date Time function is complete – select Previous Menu
- ☐ Select Calibrate DACs
- ☐ Select Set DACs
- ☐ Run Ballots in all 4 orientations. Verify that the DAC Values are all accounted for and do not exceed 5. Make adjustments accordingly.
- ☐ When the ballot has been run in all 4 orientations and the DACs are set correctly select Previous.
- ☐ Select Previous again
- ☐ Select Factory Defaults
- ☐ Select Save Factory Defaults

☐ Select Yes

M100 - SYSTEM ACCEPTANCE TESTING cont.

☐ Select OK

☐ Select Previous Menu

☐ Select Previous Menu again

☐ Question appears 'Mode lock out calibration menu?' Answer NO

☐ Select Previous

☐ Question appears 'Mode lock out system settings?' Answer NO

☐ Select Diags

☐ Select Ballot Diags

☐ Select Feed Ballots

☐ Insert 2 Ballots – should receive error (127) Multiple Ballots detected

☐ Remove ballots and select OK

☐ Select Previous Menu

☐ Select Recycle Set

☐ Set Cycles for 5 using the Select Digit & Plus/Minus Key

☐ Select Previous Menu

☐ Select Feed Ballots

☐ Insert the Blank Ballot in all 4 orientations, 5 times each orientation.

☐ Insert the ALL FILL Ballot in all 4 orientations, 5 times each orientation.

☐ When ballots are at 40 Select Marks Table. All marks should be 020.

☐ If okay, select Previous Menu

☐ Select Previous Menu again

☐ Select Previous Menu again

☐ When you get back to Open Polls Now? Turn Key of off – remove card and unplug.

EXHIBIT H
CERTIFICATE OF INSURANCE

Appendix

D

In this section:

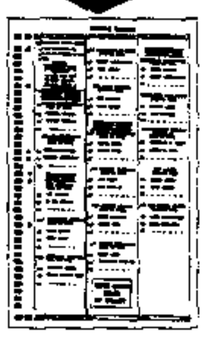
- ES&S Workflow Diagram

Workflow Diagram

unity®
ELECTION SYSTEM

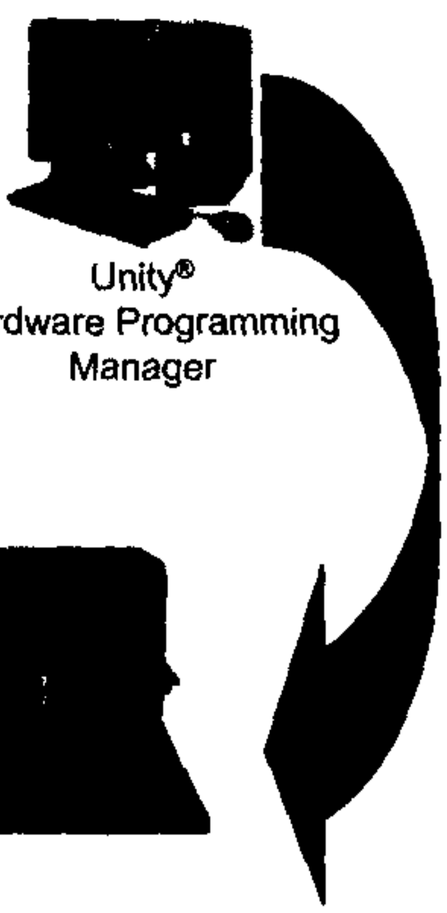
Enter County
Election Definition
Data

Unity®
Election Data Manager



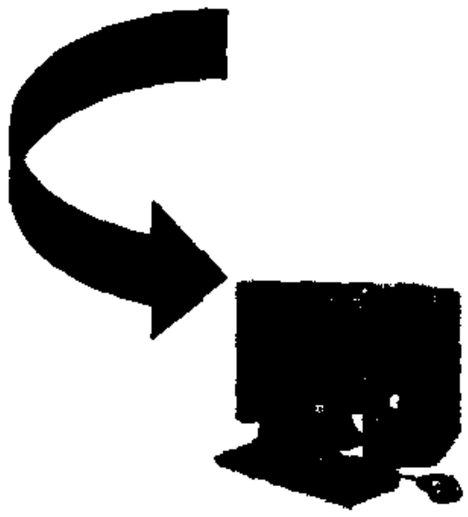
Unity®
Ballot Image Manager

Unity®
Ballot on Demand

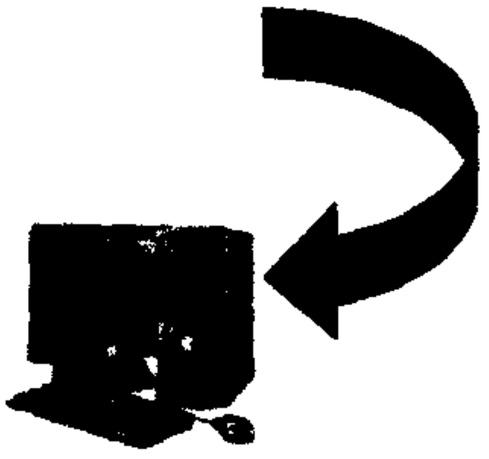


Unity®
Hardware Programming
Manager

Williamson County, Texas Voting Systems
iVotronic (ADA) and Model 100 for Election Day
iVotronic for In-person Early Ballot Processing and Provisional Ballots
and Model 150 for Early Ballot Processing by Mail



Unity® Data Acquisition Manager
Server Application collects data from the Absentee Mail, Early Voting In-Person Systems, the Election Day polls and the Regional Sites, and transmits the data to the host election server for accumulation of results



Unity® Election Reporting Manager

Provides:
- Public Displays
- Printed Reports
- Links to Media

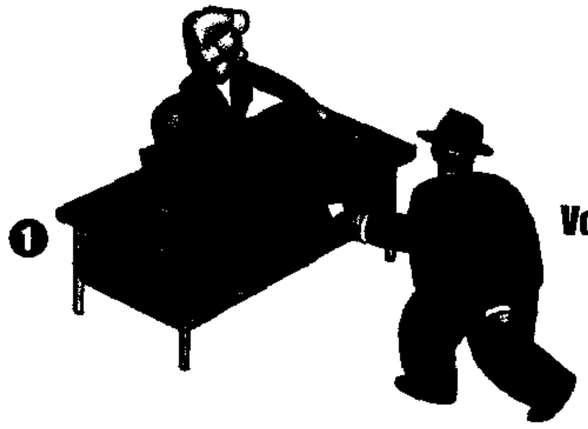
Display Program:
- Scrolls through live results
- Prints or displays reports

Provide Results On:
- Multiple Freestanding PCs
- Overhead displays
- Large screen video monitors attached to PCs
- Post Results to Internet

iVotronic™ System Overview
Poll Official Activated Unit

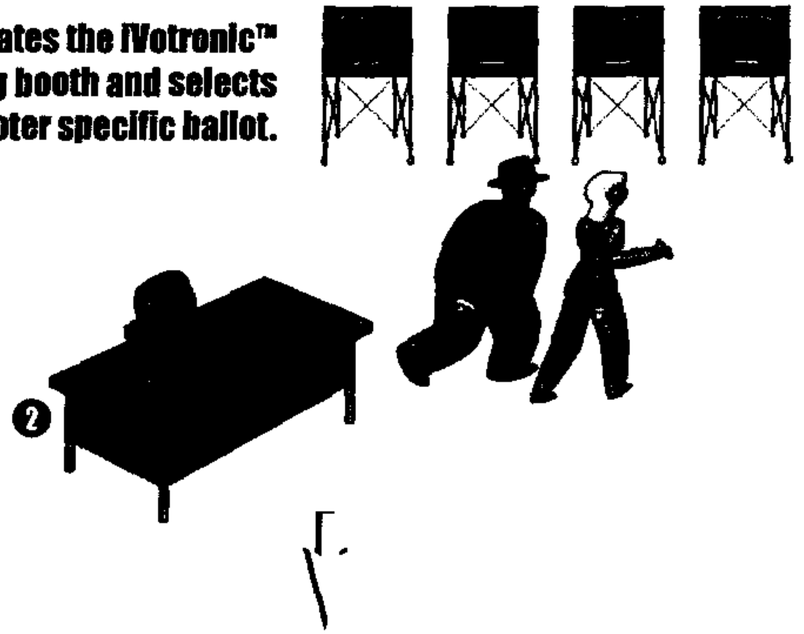
01/06/2004

Voter Enters Polling Station



Voter registers with poll official.

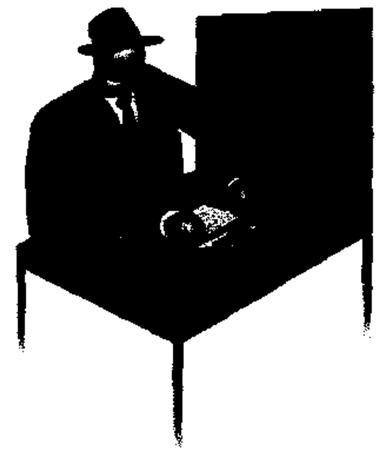
Poll official activates the iVotronic™ in the voting booth and selects voter specific ballot.



Voter votes in privacy.

Voter makes his/her selections, and presses the "VOTE" button.

The iVotronic™ will automatically shut off.



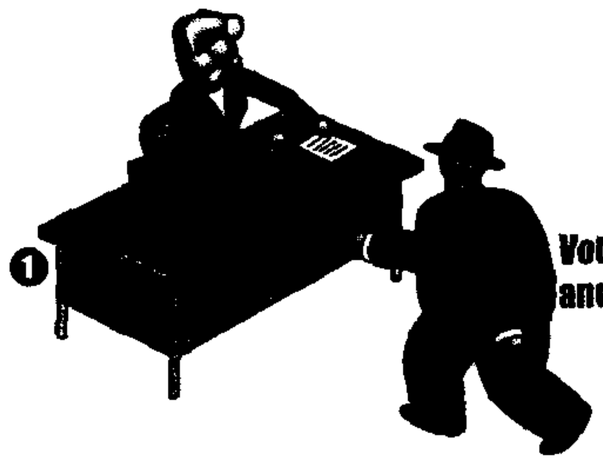
Voter Exits Polling Station

ELECTION
SYSTEMS & SOFTWARE

Ideal Polling Location Setup
Using The Model 100 OMR Voting System.

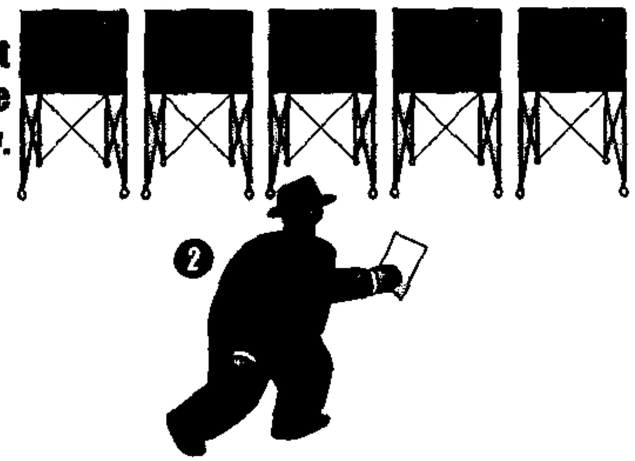
01/06/2004

Voter Enters Polling Station



Voter registers with poll official and receives paper ballot.

Voter takes his/her ballot to voting booth, to vote in privacy.



Voter exits Polling Station

Voter inserts voted paper ballot into the Model 100. Ballot is counted automatically, and polling location results are transmitted to election central immediately upon poll closing.

3

ELECTION

Appendix

E

In this section:

- The ES&S Training Approach
- The ES&S Training Course Descriptions

The ES&S Training Plan

The following training information is a brief description of ES&S' complete training approach. This training material will be modified to develop a training approach to meet your specific training requirements.

Chapter

1

In this chapter:

- The ES&S Training Approach
- Election Staff Training
- Poll Worker Training

The ES&S Training Approach

ES&S knows that the successful implementation and continuous operation of any new voting system directly hinges on an effective training program for election staff and poll workers, as well as the voters themselves. Knowing that training stands as the *most* critical component of any installation and support plan for the election system, ES&S takes great pride in providing our customers extensive, world-class voter system training programs.

Election Staff Training

ES&S trainers work closely with ES&S Project Managers and election officials to review existing procedures and assist in developing reference manuals. This material coupled with the ES&S approach to training provides a very effective means of introducing election staff to the new system, and instructing them on the required system operations. Presently, ES&S certified instructors provide training in a traditional classroom, instructor-led format. However, in the near future, ES&S customers, with access to the Internet, will also be able to attend virtual instructor-led training seminars and/or access and complete self-paced ES&S training courses.

ES&S's comprehensive approach to voting system training encompasses pre-election, Election Day, and post-election processes, procedures, system operations and troubleshooting.

Individuals attending the training sessions should know their roles and responsibilities and have a general and basic understanding of the election process. Election staff responsible for the operation of the Unity® system should have a basic knowledge of computer operations and Microsoft Windows applications. All individuals should possess the ability to read and understand training manuals and follow the required procedures and checklists provided in the manuals.

ES&S training is designed to provide hands-on instruction to Election Staff responsible for the administration and management of the proposed system. ES&S recommends conducting training in a facility that allows attendees access to the system for hands-on instruction.

Attendees should dedicate enough time to attend classes with minimal interruption.

Class size for voting hardware training should be limited to no more than 20 attendees while class size for Unity training is limited to 10 attendees.

In addition to traditional instructor-led, student-centered training, ES&S would strongly encourage serious consideration be given to the integration of technology–based, eLearning. This methodology permits the provision of initial and refresher training for election staff and poll workers using customized eLearning courses available via the Internet, through your Intranet, or by CD-ROM. The format is easily updated to reflect changes to procedure or law and is far superior to the static content of videotape.

If the decision is made to include eLearning in the training mix, ES&S training professionals will work with the customer to convert traditional curriculum items into eLearning solutions. These highly interactive Internet, Intranet, or CD-ROM training courses will provide participants the opportunity to fine-tune previously learned voting system skills. eLearning can supplement hands-on training conducted by a qualified instructor. eLearning instruction can focus solely on the voting system or be expanded to include customer procedures.

Poll Worker Training

ES&S has found the most effective approach to training poll workers is to provide the customer with the knowledge, skills, and abilities needed to train poll workers. This approach takes full advantage of the close relationships the customer has established with the poll workers, facilitates combining equipment training with customer-specific requirements, and speeds the customer to autonomy. To support this approach, ES&S has developed a dynamic, comprehensive *Train the Trainer* course for both the Model 100 and iVotronic™ voting systems designed to help the customer's trainers prepare to train poll workers as well as conduct the training itself.

Before the *Train the Trainer* course begins, the ES&S Operations Training team will work with the customer to design poll worker training, which will meet the customer's needs and requirements.

During the multi-day *Train the Trainer* course, participants are exposed to the basic concepts of adult learning theory and training preparation and logistics. They play the role of a poll worker during a simulated poll worker-training course facilitated by a certified ES&S instructor.

The participants then assume the role of the trainer and teach the ES&S instructor how to use the voting equipment. Before departing, the ES&S instructor will give the customer feedback concerning the participants' performance during all aspects of the course and discuss the possible need for ES&S follow-up observation.

ES&S will provide you with proven documentation that is designed to not only instruct users, but is written in such a manner that references to unfamiliar processes are easy to locate and understand. The ES&S Professional Services Team will meet with the appropriate Election Department officials to review the Project Implementation Plan and finalize the training and staffing requirements. The ES&S Training Approach and Training Materials provided as part the proposed system implementation are confidential and proprietary and will be used by the customer for internal purposes only.

ES&S will assist you in the development of step-by-step materials for Election poll workers. The Project Managers assigned to the project will meet with key staff to review existing procedures and assist in developing reference manuals.

Previous Quick Operations Guides, checklists, and other materials developed by ES&S in conjunction with other customers have included the use of digital photos of the equipment and specifically the components referred to in the step-by-step instructions. ES&S has also assisted other customers in developing a Microsoft PowerPoint presentation inclusive of digital photos in the same step-by-step format as the written manual. These training materials coupled with a hands-on training session provide a very effective means of introducing election officials to the new system and instructing them on the required system operations.

Should the customer choose not pursue ES&S's proven *Train the Trainer* approach, ES&S can provide any required poll worker training. ES&S training professionals will work closely with the customer to develop this customized, joint ES&S-customer project.

Chapter

2

In this chapter:

- ES&S Training Course Descriptions
- iVotronic Direct Election Reporting Voting System
- Model 100 Precinct Ballot Counter Voting System
- Model 150 Central Ballot Scanner
- Model 550 Central Ballot Scanner
- Model 650 Central Ballot Scanner
- Unity Election system

ES&S Training Course Descriptions

The following section provides training course descriptions for ES&S's DRE, precinct counter, and central counter systems and Unity Election System software.

iVotronic™ Direct Election Reporting Voting System

ES&S offers two courses for new iVotronic customers. Each of these courses provides participants in-depth, hands-on instruction with the iVotronic system.

iVotronic Operations Course

This course of training will introduce **Customer Representatives** to the iVotronic voting system. The participant will gain the knowledge, skills, and abilities to operate Election Systems and Software's iVotronic Touch Screen voting system.

Topics include:

- An in-depth overview of the iVotronic system
- Pre-Election Day preparation requirements
- Election Day operations and troubleshooting

Course Length: One day

Maximum class size: 20 participants

iVotronic Train the Trainer Course

This course of training will introduce **Customer Representatives** to the training techniques surrounding the iVotronic voting system. The participant will gain the knowledge, skills, and abilities to train others on operating Election Systems and Software's iVotronic Touch Screen voting system. Topics include:

- How to Best Train Adults
- Pre-training preparations
- An overview of the iVotronic system
- Election Day operations including poll opening and closing and voting procedures
- Troubleshooting procedures
- Practice training

Pre-requisite: iVotronic Operations Course

Course Length: To be determined based on customer requirements

Maximum class size: 20 participants

iVotronic Poll Worker Training

This course of training will introduce **Customer poll workers** to the iVotronic voting system. The participant will gain the knowledge, skills, and the abilities to operate Election Systems and Software's iVotronic Touch Screen voting system. Topics include:

- An overview of the iVotronic system
- Election Day operations including poll opening and closing and voting procedures
- Troubleshooting procedures

Course Length: To be determined based on customer requirements

Maximum class size: To be determined based on customer requirements

Model 100 Precinct Ballot Counter Voting System

ES&S offers two courses for new Model 100 system customers. Each of these courses provides participants in-depth, hands-on instruction with the Model 100 system.

Model 100 Operations Course

This course of training will introduce **Customer Representatives** to the Model 100 voting system. The participant will gain the knowledge, skills, and abilities to operate Election Systems and Software's Model 100 voting system.

Topics include:

- An in-depth overview of the Model 100 system
- Pre-election preparation requirements
- Election Day operations and troubleshooting

Course Length: One day

Maximum class size: 20 participants

Model 100 Train the Trainer Course

This course of training will introduce **Customer Representatives** to the training techniques surrounding the Model 100 voting system. The participant will gain the knowledge, skills, and abilities to train others on operating Election Systems and Software's Model 100 Touch Screen voting system. Topics include:

- How to Best Train Adults
- Pre-training preparations
- An in-depth overview of the Model 100 system
- Election Day operations including poll opening and closing and voting procedures
- Troubleshooting procedures
- Practice training

Pre-requisite: Model 100 Operations Course

Course Length: To be determined based on customer requirements

Maximum class size: 20 participants

Model 100 Poll Worker Training

This course of training will introduce **Customer poll workers** to the Model 100 voting system. The participant will gain the knowledge, skills, and abilities to operate Election Systems and Software's Model 100 voting system. Topics include:

- An in-depth overview of the Model 100 system
- Election Day operations including poll opening and closing and voting procedures
- Troubleshooting procedures

Course Length: To be determined based on customer requirements

Maximum class size: To be determined based on customer requirements

Model 150 Central Ballot Scanner

ES&S offers one course to new Model 150 voting system customers. This course provides participants in-depth, hands-on instruction with the Model 150 system.

Model 150 Operations Course

This course of training will introduce **Customer Representatives** to the Model 150 voting system. The participant will gain the knowledge, skills, and abilities to operate Election Systems and Software's Model 150 voting system.

Topics include:

- An in-depth overview of the scanner
- Pre-Election Day preparation requirements
- Election Day operations and troubleshooting

Course Length: One day

Maximum class size: 20 participants

Model 550 Central Ballot Scanner

ES&S offers one course to new Model 550 voting system customers. This course provides participants in-depth, hands-on instruction with the Model 550 system.

Model 550 Operations Course

This course of training will introduce **Customer Representatives** to the Model 550 voting system. The participant will gain the knowledge, skills, and abilities to operate Election Systems and Software's Model 550 voting system. Topics include:

- An in-depth overview of the scanner
- Pre-Election Day preparation requirements,
- Election Day operations and troubleshooting.

Course Length: One day

Maximum class size: 20 participants

Model 650 Central Ballot Scanner

ES&S offers one course to new Model 650 voting system customers. This course provides participants in-depth, hands-on instruction with the Model 650 system.

Model 650 Operations Course

This course of training will introduce **Customer Representatives** to the Model 650 voting system. The participant will gain the knowledge, skills, and abilities to operate Election Systems and Software's Model 650 voting system.

Topics include:

- An in-depth overview of the scanner itself
- Pre-Election Day preparation requirements
- Election Day operations and troubleshooting

Course Length: One day

Maximum class size: 20 participants

Unity® Election System

ES&S offers courses to new Unity election system customers. These courses provide participants in-depth, hands-on instruction for the proposed Unity modules.

Basics of Election Data Manager Course

This course of training will introduce **Customer Representatives** to Election Data Manager (EDM), a module within Election Systems & Software's Unity Election System. The participant will gain the knowledge, skills, and abilities to perform basic system functions and to build, maintain, and store all election-related information (i.e., precincts, districts, offices, candidates, referenda) in one database.

Course Length: Two days
Maximum class size: 10 participants

Basics of Ballot Image Manager Course

This course of training will introduce **Customer Representatives** to Ballot Image Manager (BIM), a module within Election Systems & Software's Unity Election System. The participant will gain the knowledge, skills, and abilities to perform basic system functions and to create an election ballot.

Course Length: One day
Maximum class size: 10 participants

Basics of iVotronic Image Manager Course

This course of training will introduce **Customer Representatives** to iVotronic Image Manager (iVIM), a module within Election Systems & Software's Unity Election System.

The participant will gain the knowledge, skills, and abilities to perform basic system functions and to create an iVotronic bitmap election ballot. Procedures for creating iVotronic text ballots are covered in the Basics of Election Data Manager course.

Course Length: One day
Maximum class size: 10 participants

Basics of Hardware Programming Manager Course

This course of training will introduce **Customer Representatives** to Hardware Programming Manager (HPM), a module within Election Systems & Software's Unity Election System. The participant will gain the knowledge, skills, and abilities to perform basic system functions and to program the election tabulation hardware with election-specific information from the Unity Election Data Manager.

Course Length: One day
Maximum class size: 10 participants

Basics of Data Acquisition Manager Course

This course of training will introduce **Customer Representatives** to Data Acquisition Manager (DAM), a module within Election Systems & Software's Unity Election System.

The participant will gain the knowledge, skills, and abilities to perform basic system functions and to transmit election results from precincts or regional locations to election central.

Course Length: Four Hours
Maximum class size: 10 participants

Basics of Election Reporting Manager Course

This course of training will introduce **Customer Representatives** to Election Reporting Manager (ERM), a module within Election System & Software's Unity Election System. The participant will gain the knowledge, skills, and abilities to perform basic system functions and to generate and display customized election reports in either paper or electronic formats. This course is also offered in the WebEx format to those customers only needing training in this specific Unity module.

Course Length: One day
Maximum class size: 10 participants

ES&S Connect™ Voter Education and Voter Outreach Program

In this section is a brief description of ES&S Connect™ Voter Education and Voter Outreach Program.

Appendix

F

In this section:

- ES&S Connect Services Overview
- Voter Education and Voter Outreach Action Planning
- DemoConnect™
- MediaConnect™
- CallConnect™
- WebConnect™
- ES&S Connect Service Levels

ES&S Connect™ Voter Education and Voter Outreach Program

The ES&S Connect™ Voter Education and Voter Outreach Program provides comprehensive information to election officials, poll workers, and the public to assist jurisdictions with the critical task of raising voter awareness.

The program offers the ***"election connection"*** between election offices and voters to ensure successful elections. The customizable program addresses your essential election management goals, including:

- ❑ Educating voters on the use of your new ES&S voting systems
- ❑ Training election staff and poll workers on your new ES&S system operation

ES&S Connect Services Overview

ES&S Connect offers a wide variety of services to assist you with creating public awareness to improve voter turnout. Our services include:

- ❑ Building an **Action Plan** to inform voters of your new ES&S voting systems and the latest election processes
- ❑ Demonstrating your new ES&S voting systems to the public with **DemoConnect™**
- ❑ Designing media campaigns aimed at improving voter consciousness and raising voter interest with **MediaConnect™**
- ❑ Revolutionizing your telephone campaigns with **CallConnect™**
- ❑ Ensuring web-enabled voters are provided with current election and voting system information over the internet with **WebConnect™**

Voter Education and Voter Outreach Action Planning

The first and most important step in any Voter Education and Voter Outreach Program is a thorough and organized Action Plan. A well-coordinated public information program that recognizes the diversity of your jurisdiction is a *must*, therefore ES&S will partner with local Public Relations firms to tailor a program that fits the needs of your unique electorate.

The ES&S Action Plan is specifically created to reach and educate *all* voters, including first-time voters, non-English speaking citizens, senior citizens and voters with disabilities. The Plan focuses on communicating with media, elected and appointed officials, civic organizations, community groups and clubs, large employers, schools, and churches.

DemoConnect

The world of elections is getting more complex every day. As a result, ES&S custom-designs a large variety of education tools intended to demonstrate ES&S voting technology to voters. Some examples of the support tools we provide are as follows:

- **"Welcome To Touch Screen Voting" iVotronic Video/DVD**

Content is easily viewed by voters in the polling site or public venues, and can be repeated with just the press of a TV remote button.

Our "Welcome to Touch Screen Voting" iVotronic Video/DVD is produced to meet your specific iVotronic solution. The video includes instructional topics such as how to operate the iVotronic in Poll Worker Activated mode and Voter Activated mode, and the differences between Text Ballot and Bit Map Ballot applications.

The video may be further customized to incorporate multiple languages. Supported languages include Spanish, Vietnamese, Chinese, Japanese, Creole, Tagalog, Llocano, Korean, and Russian. A traditional VHS format version is available, in addition to the DVD that enables you to place all languages on a single disk.

- **"1,2,3,Vote!" Poster**

Our 23" x 35" full color Touch Screen Voting Voter Education Poster and Mini-Poster easily walks the voter through the four simple steps of voting on the ES&S iVotronic Touch Screen Voting System:

1. Activate Ballot
2. Select Candidate
3. Review Ballot
4. Vote

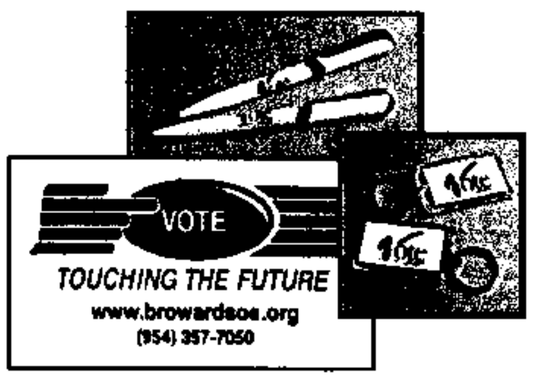
The Optical Scan Ballot Voting Voter Education Poster and Mini-Poster version guides the voter through the steps in paper ballot voting.

The posters are available in both Text Ballot and Bit Map Ballot versions, and in a variety of languages.

- **"1,2,3,Vote!" Palm Cards**

  The 4" x 6" laminated "1,2,3,Vote!" Palm Cards provide a quick and handy reference tool that can be placed in voting booths for quick access by the voter. The four voting steps are summarized and illustrated in a variety of languages.

- **Voter Outreach Demonstration Invitation Flyer**



With your education tools ready and your Action Plan in place, your next step is to invite the voter to see just how simple the ES&S voting system can be! We create the right Voter Outreach Flyers and Demonstration Invitations to assist you in reaching both individuals and community groups.

- **Voter Outreach Promo Items**

  As part of your Voter Outreach initiative, promotional items such as pens, stickers, and door magnets are provided to help reinforce key program themes and encourage voter participation. We design item logos and arrange the production and distribution of the items you choose.

MediaConnect

Motivate all demographic segments through eye-catching television ads and dynamic media campaigns .

Key to large voter turnouts is awareness of registration deadlines and election dates. With MediaConnect™ you are able to communicate all relevant election information to the public, professionally and effectively.

- **"Register and Vote" 30-Second TV Public Service Announcement (PSA)**

  In our 30-second Public Service Announcement, voters travel through a colorful time-line of important events in American history. The PSA reinforces how essential it is to register to vote because "Your Future Depends On It." The closing slides are personalized to present your registration deadline and election dates. Local jurisdiction and election official names can also be added to the closing PSA acknowledgement. If desired, a multilingual 30-second TV PSA version may be created to meet media market needs.

- **Voter Outreach Print & Venue Ads**

  Whether it is a reminder to "Register & Vote" or an invitation to public voting equipment demonstrations, ES&S works with you to create the perfect message and select the ideal venues to increase voter turnout and awareness. Our custom-designed Print Ads are tailored to deliver the desired message to the right voter segment.

- **Voter Outreach Direct Mail Pieces**

  Direct Mail pieces are one of the most effective means of educating voters on new voting systems, and a useful tool in reaching new and non-registered voters. ES&S works with you to build custom mail pieces and coordinate their distribution.

- **Media Kit**

  ES&S works with you to develop Media Kits that include such items as boilerplate media releases, basic information on voting equipment, an election events calendar, key contacts, and the importance of voter participation in the election process.

- **Video News Release**

  Video News Releases are an invaluable source of providing visual support for your Voter Outreach efforts. Video News Releases may be used as a collateral presentation tool for community and event outreach initiatives, and have been very effectively used in a TV media format.

CallConnect

Innovative election solutions are just a phone call away with CallConnect!

The ES&S CallConnect service allows you to customize each and every Voter Outreach telephone campaign for maximum impact. Whether you need to contact one hundred people or one million, CallConnect delivers results – quickly and consistently.

CallConnect helps you achieve a level of efficiency and versatility that traditional call-campaigns cannot provide, including the ability to deliver a consistent message with every call, receive immediate feedback from recipients, monitor results, and edit calling programs over the Internet.

The system is capable of recognizing the difference between live recipients and answering machines, and it delivers the appropriate message accordingly. It also schedules future calls for those that could not be reached.

With CallConnect, you increase your call volume and achieve higher response rates. In addition, customers have the ability to transfer to a live operator should they have questions or need assistance.

Key system features include:

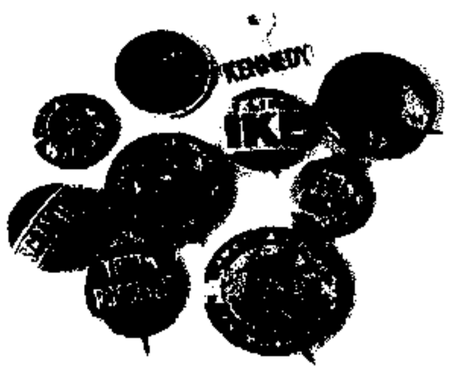
- ❑ Automated messaging with fully interactive options, customized for your jurisdiction
- ❑ Web-based tools for scheduling calls and loading broadcast call lists
- ❑ Web-based tools for editing program features and viewing reports
- ❑ Delivery window scheduling by destination time zone
- ❑ Ten easy-to-configure menu options

WebConnect

To ensure that web-enabled voters are provided with the latest election process and voting system information, ES&S creates your own unique web-link that may be posted on your jurisdiction web-site. This custom URL instantly connects your voters to an ES&S-hosted web-site that provides the visitor with an interactive "How-to-Vote on the iVotronic" Demonstration, as well other registration and voting information that you would like to share with voters.

You are given secure username and password access to the web-link's Content Management System (CMS), enabling you to add, delete, and revise the content of your custom WebConnect web-link at any time.

ES&S Connect Service Levels



Three levels of ES&S Connect Voter Education and Voter Outreach Program services are available.

Level I Services

The ES&S Level I services are provided to our clients free of charge. They include a standard Voter Education and Voter Outreach Action Plan, as well as samples of our service items to reference should you wish to locally create, produce, and print their own solutions. Samples are provided from DemoConnect, MediaConnect, CallConnect and WebConnect .

Level II Services

The Level II Service offering provides *full* Voter Education and Voter Outreach support on a fee basis. Key benefits of this offering include:

- Multiple language support, as required
- Customized design and production of any Level I Voter Education and Voter Outreach media items (listed in the previous section of this document)
- Voter Education and Voter Outreach Action Planning
- Voter Outreach Event Planning and Coordination, to include services such as public demonstrations, event presence, and youth vote sessions
- PR/Media Relations training for election officials
- Media Planning/Placement coordination

Level III Services

Should you desire to locally outsource a limited production of Level I service items, ES&S provides generic audio, video and print content to your local marketing firm for customization and editing activities. This service is available on a fee basis.

Our Vision

Our Vision is to continuously improve and grow our integrates total election solutions that provide *"Better Elections Every Day."* We will accomplish this vision with an uncompromising commitment to customer satisfaction and integrity within the election process.

Our Mission

Our Mission is to support democracy worldwide by providing proven, accurate, and innovative election systems and services to voters and election officials.

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