maintaining voter confidence

State of Georgia
Electronic Request for Information
New Voting System
Event Number: 47800-SOS0000035

Original

August 24, 2018, at 2 p.m. EST

Election Systems & Software, LLC
11208 John Galt Boulevard, Omaha, NE 68137

Jeb Cameron, Regional Sales Manager
[redacted]

enhancing the voter experience

Enhancing the State of Georgia Election Process

Event Number: 47800-SOS0000035 – Electronic Request for Information New Voting System

Original

August 24, 2018 at 2:00 P.M. Eastern Time

Jeb Cameron, Georgia Regional Sales Manager
[redacted]

Election Systems & Software, LLC
11208 John Galt Boulevard
Omaha, NE 68137

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ELECTION Systems & Software

August 24, 2018

Verneicher Favors
State of Georgia
Secretary of State
214 State Capitol
Atlanta, Georgia 30334

RE: Electronic Request for Information 47800-SOS0000035 for New Voting System

Dear Ms. Favors:

Thank you for the opportunity to present the State of Georgia this request for information for a new voting system. **Election Systems & Software, LLC ("ES&S")** is pleased to offer our state-of-the-art 2005 VVSG-compliant fully-integrated voting system and elections management solution.

As a current ES&S customer, we have appreciated working with the State of Georgia in conducting secure and accurate elections and we look forward to working with you to implement a new voting system and continue our long-standing strong relationship.

KEY ASPECTS OF OUR SOLUTION FOR STATE OF GEORGIA

The election-proven system we are proposing for the State of Georgia has been used in binding elections throughout the United States.

ES&S proposes the following hardware and software and will perform the accompanying training, maintenance, and election support in a professional and timely manner to meet the objectives and goals detailed in your Request for Information.

- Electionware suite software for reporting
- ExpressVote Universal Voting System
- DS200 precinct scanner and tabulator
- DS450 High-Throughput Central Scanner and Tabulator
- DS850 High-Throughput Central Scanner and Tabulator
- ExpressPoll electronic poll book
- Balotar Ballot on Demand System

WHY CHOOSE ES&S?

ES&S is the largest elections-only company in the world with nearly 40 years of experience supporting elections. For more than 20 years, ES&S has enjoyed the same committed owners. With more than 450 election-focused associates, and ownership that provides solid financial strength, ES&S is well-positioned to continue its long-term commitment to its current and future client base and the entire industry.

Today, not only do we work with many of the same customers we've served for more than three decades, but also our business has grown to serve 42 states and more than 3,300 clients. Nearly 100 million registered voters tabulate with ES&S. Continuing to choose ES&S as your vendor of voting equipment, software, and election services products puts you in good company.

Thank you for considering our proposal. We appreciate the opportunity to present our election-proven voting system to you and look forward to a continued partnership. If you have any questions, please feel free to contact me. We stand ready to move the State of Georgia to the next level of voting technology.

Respectfully yours,

Jeb S. Cameron

Jeb Cameron
Regional Sales Manager
Election Systems & Software, LLC
11208 John Galt Blvd.
Omaha, NE 68137
[redacted]

EXECUTIVE SUMMARY

ENHANCING THE STATE OF GEORGIA VOTING EXPERIENCE

Election Systems & Software, LLC ("ES&S") is excited to present the State of Georgia this proposal for our latest voting system.

To implement new voting technology, Georgia needs a partner with a proven track record of experience, innovation and overall company stability. Our outstanding technology, service and support have made ES&S the election industry leader for approximately 40 years.

UNDERSTANDING THE STATE OF GEORGIA'S NEEDS

We understand the State of Georgia needs a new voting system to replace the election management system, in-person voting machines, precinct scanners and tabulators and a statewide electronic pollbook system for all 159 counties.

Your transition to our leading-edge technology will enhance the entire voting process for your voters, poll workers, and election staff, while you continue to enjoy support and service from a trusted partner. Our more than 450 employees allow us to develop, enhance, and maintain the most relevant, easy-to-use, and dependable equipment and software available for elections.

Working with ES&S will ensure a smooth implementation -- we understand and know how to serve the election process in Georgia.

WHAT THE STATE OF GEORGIA CAN EXPECT

ES&S has been privileged to provide election hardware, software, support, and services to jurisdictions across the State of Georgia for nearly a decade. With approximately 50 full and part-time support personnel in the state, ES&S's local network of experienced and dedicated professionals is unmatched.

ES&S prides itself on providing voting solutions that meet the needs of the State of Georgia. The proposed system will provide the State of Georgia with a *voter-verifiable paper trail* and numerous positive enhancements. It's not only reliable, but is also *uniquely scalable—when it comes to election systems, we know "one size" doesn't always "fit all." Our proposed system provides options for Fannin and Fulton Counties alike while maintaining a unified system across the state.*

LONGEVITY AND STRENGTH

ES&S is the largest and most experienced elections-only company in the world and has provided voting systems for approximately 40 years.

- ES&S has installed more than 200,000 voting units in its history
- ES&S has supported more than 100,000 elections during the past decade alone

ES&S entered the elections industry when the development of the optical mark reader technology was in its infancy. We also were the first company to develop solutions that enable people with disabilities to vote privately and independently.

Today, not only do we work with many of the same customers we've served for nearly four decades, but our business has grown to ***serve 42 states and to include more than 3,300 clients.*** From our humble beginnings supporting a handful of election administrators and voters in 1979, today nearly 100 million registered voters tabulate with ES&S. You can be assured ES&S will be here to support you now and in the future.

Nearly 100 million registered voters tabulate with ES&S.

ES&S provides election systems and services to clients ranging in size from small county governments to state boards of elections. ES&S completed successful installations of statewide voting systems in ***Alabama, Arkansas, Maryland, Maine, Montana, Nebraska, North Carolina, North Dakota, Rhode Island, South Carolina, South Dakota, and West Virginia.***

We provide our gold-standard service to jurisdictions of all sizes, and we value each and every customer, regardless of their size. Managing an election is a great responsibility. ES&S takes the worry out of the process by being a partner and working to make sure every election you run is a success. We are with you every step of the way.

THE ES&S SOLUTION

ELECTIONWARE SUITE SOFTWARE

Electionware® is our election management system (EMS) software solution that provides complete election management. Electionware software allows users to ***create the election information database, format ballots, program ballot scanning equipment, create voice files, count ballots, and generate results reports.*** Electionware is a fully integrated election management software application that will allow State of Georgia to complete election management tasks through a uniform user experience. It has a powerful and intuitive interface and a single, common relational database.

EXPRESSVOTE UNIVERSAL VOTING SYSTEM

The ExpressVote® is a Universal Voting System that ***combines paper-based voting with touch-screen technology*** to create a breakthrough in voting solutions for both early voting and Election Day. It ***produces a paper-based record for subsequent tabulation***. While the ExpressVote provides the best solution to meet the needs for people with disabilities, the ExpressVote was designed for use by all voters. The simplicity and ease of use provide a very intuitive voting session for any voter, but especially those with disabilities. During disability testing campaigns and in live elections nationally, the ExpressVote continues to dominate the competitor's systems, earning high praise and appreciation. ***The ExpressVote is the election industry's Number 1 selling early and Election Day solution.***

DS200 PRECINCT SCANNER AND TABULATOR

The **DS200® precinct digital scanner and tabulator** combines the best attributes of a paper-based system with the flexibility and efficiency of a digital environment. Precise ballot sensors simultaneously scan both sides of a ballot in high resolution. As a result, cast vote records and ballot images can be stored on memory devices and reviewed, as needed, on a standard PC. The DS200 is designed with flexibility to support a wide range of ballot configurations and designs. ***More than 35,000 DS200 tabulators are in use in 24 states.***

DS450 HIGH-THROUGHPUT CENTRAL SCANNER AND TABULATOR

Customizable sorting is now more affordable than ever with the DS450® high-throughput central scanner and tabulator. The DS450 does not stop for overvotes, write-ins, or blank ballots. ***This scanner and tabulator uses our patented technology, which increases the accuracy of tabulation and reducing manual adjudication time.***

The DS450 is a tailor-made solution for counties that process higher volumes of absentee ballots. Its durability eliminates the need to reinvest in equipment over the standard lifespan of election systems, maintaining affordability for all

DS850 HIGH-THROUGHPUT CENTRAL SCANNER AND TABULATOR

The ***DS850® high speed central scanner and tabulator*** is unrivaled in speed, accuracy, and the ability to process folded ballots. Designed specifically with high-volume mail ballot processing in mind, this high-speed central scanner and tabulator offers ***unmatched efficiency.*** Like the DS450, our digital-imaging solution allows for smooth, continuous ballot scanning from start to finish making it an ideal solution for the largest counties in the state.

EXPRESSPOLL ELECTRONIC POLL BOOK

Understanding Georgia's needs for providing the most accurate and cost-effective electronic poll book solution for election officials, poll workers, and voters alike, ES&S offers our industry-leading and proven solution, the ES&S ExpressPoll® tablet system.

The ExpressPoll system has performed with ***unmatched precision in some of the highest voter turnout elections in history, including those in the State of Georgia***. The electronic poll book supplier Georgia selects should have a track record of successful electronic poll book system use during multiple large turnout Presidential Election cycles, not just one. ES&S and the ExpressPoll system uniquely offers this proven performance in conjunction with our proposed tabulation solutions.

BALOTAR BALLOT ON DEMAND SYSTEM

The Balotar Printing System® is an integrated, highly secure printing system specifically ***designed to automatically generate ballots for elections on request, providing the ballot styles that counties need, when they need them.*** Balotar combines commercially available printing components with ES&S proprietary hardware and software modifications, enabling it to meet the demanding printing and audit needs of elections.

The comprehensive Balotar solution automates and streamlines all the facets of ballot production and distribution. It provides election officials scalable and flexible options to address all on-demand ballot printing needs.

WHY ES&S?

WHY SHOULD THE STATE OF GEORGIA CHOOSE ES&S?

ES&S offers the State of Georgia the right solution. In addition, that solution will be implemented, serviced, and supported by the election industry's most experienced and knowledgeable team. We know and understand elections in the Peach State like no other vendor. Above all, we offer the State the promise of our continued outstanding support and customer service. In addition, doing business with ES&S provides the State of Georgia with:

- **A proven, financially stable company.** The State of Georgia has the peace of mind and security of knowing that ES&S is the most experienced, financially sound elections company. ***With approximately 40 years of elections experience and more than 450 employees,*** ES&S is well-positioned to support Georgia and sustain the tabulation system in the State of Georgia for years to come.

- **A high value solution.** ES&S provides Georgia the most cost-effective, efficient, low-risk option available. By selecting ES&S, state election officials are providing Georgia the confidence that its investment is sound and its systems will be sustained by one company for at least 15 years.

- **A truly Universal Voting System.** The ExpressVote Universal Voting System not only wins accolades from disability advocacy groups, but also provides ***auditability and touch-screen voting for any voter***.

- **The most secure and accurate tabulation systems available.** Our digital tabulating equipment is the ***most accurate and secure in the industry.*** With our unique patents, ES&S image recognition technology ensures ballots are read accurately and consistently, protecting voter intent and eliminating manual adjudication time.

- **Proven implementation and in-state service and support.** With over 200,000 system implementations in our history, no other vendor can compete with ES&S voting equipment implementation and support plans.

- **Ballot-on-demand options.** Both the ExpressVote and Balotar products offer ballot-on-demand functionality to save time and money.

SUMMARY

Our solution will provide the State of Georgia with a ***reliable, cost-effective, state-of-the-art voting tabulation system*** that will continue to meet the needs of Georgia voters well into the future. Staff and poll workers will find our equipment ***easy to move and set up*** on Election Day and ***convenient to store and maintain*** when the election is over. And, as always, our ***team of local customer service and technical support experts*** will be available to assist with any questions or concerns that arise.

Thank you for this opportunity to present this information. We look forward to future successes as we continue to provide State of Georgia with unparalleled election technology, service and support.

RFX Addendum Form

RFX Number: 47800-SOS0000035	RFX Title: New Voting System
Requesting State Entity: Secretary of State	
Issuing Officer: **Verneicher Favors**	RFX Initially Posted to Internet: See GPR
eMail Address: vfavors@sos.ga.gov	Telephone: 404-656-0998
Addendum Number: 1	Date: 08/20/2018

The purpose of this addendum is to post the responses to questions.

All other information remains the same.

Note: In the event of a conflict between previously released information and the information contained herein, the latter shall control.

A signed acknowledgment of this addendum (this page) should be attached to your RFX response.

Election Systems & Software, LLC
Supplier's Name

Richard J. Jablonski
Signature

Richard J. Jablonski, Vice President of Finance
Printed Name and Title

Supplier Q & A Template

RFX Number: 47800-SOS0000035	RFX Title: New Voting System
Requesting State Entity: Secretary of State	Date: August 20, 2018
Issuing Officer: Verneicher Favors	RFX Initially Posted to Internet: 08/08/18
eMail Address: vfavors@sos.ga.gov	Telephone: 404-656-0998

Note: This document is intended for informational purposes only. Any changes to the RFX must occur through a published addendum (or through publication of a new version of the RFX in Team Georgia Marketplace™). If multiple Q & A documents are posted, the most recent Q & A shall govern in the event of a conflict.

QUESTIONS AND ANSWERS

#	Questions	Referenced RFX Section	Answers
1.	Looking at the current "GEMS" Election Management System, is ES&S the contracted vendor and what is the associated contract number? As far as getting a copy of the contract, would I be able to get that from you or need to place a formal open records request?	3.1	Any vendor seeking a copy of any contracts related to the current Voting System should place a formal open records request with the appropriate party. openrecords@sos.ga.gov
2.	If the state were to decide after RFI responses to move forward with a solicitation, do you have any rough estimate of when that might be expected to follow?	1.3	If the State decides to move forward with the solicitation after the RFI, it anticipates that the solicitation will be released in early 2019.
3.	What is the estimated cost of the New Voting System?	N/a	The purpose of this RFI is to gather information related to a potential replacement for the current Voting System including estimated costs.
4.	Has the Department allocated funding for the New Voting System, yet? If so, through which source (budget, CIP, state/federal grant, etc.)? If no funding is secured, which	N/a	The sources and amount of funding will be decided based on the scope of the project.

#	Questions	Referenced RFX Section	Answers
	sources will be sought and when? If utilizing a grant, would you be able to specify which one?		
5.	If a subsequent RFP is released, when does the Department anticipate releasing the solicitation?	N/a	If the State decides to move forward with the solicitation after the RFI, it anticipates that the solicitation will be released in early 2019.
6.	When does the Department want this solution to be implemented by?	N/a	Georgia plans to begin using the new voting system by the 2020 Presidential Preference Primary.
7.	Does the Department desire that the New Voting System is in place for elections in 2018 or 2020?	3.3	Georgia plans to begin using the new voting system by the 2020 Presidential Preference Primary.
8.	If the Department doesn't need the System until the 2020 elections, will any interim solutions or services be procured in order to have a fully operational system in 2018 elections? If so, what will be procured?	3.3	This is not within the scope of this RFI. The purpose of this RFI is to gather information related to a potential replacement for the current Voting System.
9.	What other systems will have to integrate or interface with the New Voting System, and what vendor provides each system?	N/a	The Voter Registration System and Election Night Reporting System will have to interface with the New Voting System.
10.	Does the Department need to replace or upgrade any of the integrated systems in the next 5 years? If so, which system and when?		This is outside the scope of this RFI. The purpose of this RFI is to gather information related to a potential replacement for the current Voting System
11.	What vendor provides the current Voting System? When does the contract expire?	3.1	This is outside the scope of this RFI. Please submit a formal open records request with the appropriate party. openrecords@sos.ga.gov.
12.	Who is the technical contact and/or project manager for the Voting System effort?	N/a	Verneicher Favors is the contact for the RFI. Her contact information is in Section 1.4 of the RFI. There is no technical contact or project manager. We are only gathering information at this time.
13.	Does the Department anticipate any professional or consulting services maybe needed through separate procurements to accomplish this	N/a	At this time, the Department does not anticipate any additional professional or consulting services through separate procurements. This decision will be

#	Questions	Referenced RFX Section	Answers
	effort? (i.e. project planning/oversight, PM, QA, IV&V, staff augmentation, implementation services etc.)? If so, what services does the Department desire and how do they anticipate to procure?		contingent on the scope of the project.
14.	Does a voting system need to be EAC certified to respond to the RFI and potential RFP? We are entering the EAC testing process in September. We know Georgia requires EAC certification and will have it – VVSG 1.1. We have been selected by Los Angeles County's to provide their new voting system (31,500 units / 5.2M registered voters) which is being tested against California's voting system standards. We believe this solution, more than achieves the requirements for Georgia. Our plan was to present this platform at the SAFE Commission meeting August 30th.	Section 3.5 – Basic Requirements	The purpose of this RFI is to gather information related to a potential replacement for the current Voting System. It is not intended to qualify or disqualify any solution. All solutions for information purposes are welcome.
15.	Are you open to bidders providing services related to security and resiliency of the State's utilization of grant money to improve the election system/technology infrastructure; even if not providing information on the total voting system replacement?	3.5; 3.6	This is outside the scope of this RFI. The purpose of this RFI is to gather information related to a potential replacement for the current Voting System.
16.	Are you open to bidders, providing security and resilient services to potential team with voter technology system replacement providers?	3.6 #12	This is outside the scope of this RFI. The purpose of this RFI is to gather information related to a potential replacement for the current Voting System.
17.	Can you provide a list of the number of polling locations by county?		Yes, please see the attached document Anticipated Polling Places by County for November 2018 General Election.

Anticipated Polling Places by County for November 2018 General Election

APPLING	9
ATKINSON	4
BACON	1
BAKER	5
BALDWIN	14
BANKS	13
BARROW	16
BARTOW	16
BEN HILL	2
BERRIEN	5
BIBB	30
BLECKLEY	1
BRANTLEY	3
BROOKS	7
BRYAN	10
BULLOCH	7
BURKE	16
BUTTS	1
CALHOUN	5
CAMDEN	13
CANDLER	1
CARROLL	28
CATOOSA	11
CHARLTON	8
CHATHAM	90
CHATTAHOOCHEE	1
CHATTOOGA	13
CHEROKEE	42
CLARKE	20
CLAY	1
CLAYTON	58

CLINCH	5
COBB	140
COFFEE	6
COLQUITT	19
COLUMBIA	46
COOK	8
COWETA	27
CRAWFORD	6
CRISP	5
DADE	7
DAWSON	3
DECATUR	9
DEKALB	174
DODGE	16
DOOLY	5
DOUGHERTY	28
DOUGLAS	25
EARLY	5
ECHOLS	1
EFFINGHAM	17
ELBERT	11
EMANUEL	11
EVANS	1
FANNIN	12
FAYETTE	36
FLOYD	25
FORSYTH	15
FRANKLIN	7
FULTON	186
GILMER	13
GLASCOCK	4
GLYNN	19
GORDON	12
GRADY	13
GREENE	4
GWINNETT	156
HABERSHAM	7
HALL	31

HANCOCK	10
HARALSON	12
HARRIS	12
HART	7
HEARD	6
HENRY	37
HOUSTON	16
IRWIN	3
JACKSON	4
JASPER	3
JEFF DAVIS	4
JEFFERSON	8
JENKINS	3
JOHNSON	4
JONES	10
LAMAR	6
LANIER	1
LAURENS	16
LEE	10
LIBERTY	13
LINCOLN	7
LONG	7
LOWNDES	9
LUMPKIN	1
MACON	5
MADISON	12
MARION	5
MCDUFFIE	2
MCINTOSH	6
MERIWETHER	14
MILLER	1
MITCHELL	11
MONROE	14
MONTGOMERY	7
MORGAN	7
MURRAY	7
MUSCOGEE	25
NEWTON	22

OCONEE	13
OGLETHORPE	3
PAULDING	12
PEACH	7
PICKENS	12
PIERCE	2
PIKE	8
POLK	7
PULASKI	1
PUTNAM	5
QUITMAN	2
RABUN	1
RANDOLPH	9
RICHMOND	42
ROCKDALE	16
SCHLEY	1
SCREVEN	12
SEMINOLE	5
SPALDING	18
STEPHENS	1
STEWART	4
SUMTER	11
TALBOT	7
TALIAFERRO	2
TATTNALL	8
TAYLOR	3
TELFAIR	6
TERRELL	6
THOMAS	20
TIFT	12
TOOMBS	5
TOWNS	4
TREUTLEN	1
TROUP	15
TURNER	3
TWIGGS	5
UNION	11
UPSON	4

WALKER	11
WALTON	21
WARE	12
WARREN	1
WASHINGTON	8
WAYNE	7
WEBSTER	1
WHEELER	2
WHITE	11
WHITFIELD	23
WILCOX	6
WILKES	7
WILKINSON	9
WORTH	15
Grand Total	**2351**

QUESTIONS

1. Explain how your solution meets our needs for the following voting system components:

Election Management System

ES&S RESPONSE

Electionware® is our election management system (EMS) software solution that provides complete election management. The State of Georgia will be able to use Electionware software to ***create the election information database, format ballots, program ballot scanning equipment, create voice files, count ballots, and generate results reports.*** Electionware is a fully integrated election management software application that will allow the State to complete election management tasks through a uniform user experience. It has a powerful and intuitive interface and a single, common relational database.

ELECTIONWARE: KEY FEATURES & BENEFITS

- **Ease of use.** Electionware is an easy-to-use EMS software application that eliminates wasted effort on unnecessary tasks. This allows users to program elections and create and lay out ballots much faster.
- **Security.** Electionware incorporates the very latest in election security, including heightened audit controls and change management processes that are built-in to make sure State of Georgia election data is safe and secure.
- **Single user interface.** Electionware comprises several modules, each one representing a stage of the election creation process. Stepping through each module allows the user to systematically proceed with election creation free from worry that key steps have been overlooked.
- **Integrated help system.** Electionware contains an interactive, comprehensive help system.
- **Multi-user support.** Electionware's multiple user support allows the State to simultaneously enter information and prepare data from several workstations. Each user is assigned their own login credentials and level of access while the system tracks all actions in its robust Events Log.
- **Election results reporting.** Electionware's results reporting program can generate paper and electronic reports for election officials, candidates, and the media. Reporting features enable the user to read data from the tabulators, customize report formats, and accumulate accurate election results.

Ballot Marking Devices

ES&S RESPONSE

The ExpressVote® Universal Voting System as a ballot marking device ***combines paper-based voting with touch-screen technology***. Voters use the ExpressVote Universal Voting System to mark their ballots, which the voter then carries to and inserts in the DS200 tabulator to be counted. The ExpressVote BMD has a 15-inch color screen, and voters can easily page through separate screens to vote each election contest.

Paired with the DS200, the ExpressVote Universal Voting System has created a breakthrough in voting solutions on Election Day in precincts. It produces a paper-based record for subsequent tabulation. While the ExpressVote provides the best solution to meet the needs for people with disabilities, the ExpressVote was designed for use by all voters.

The simplicity and ease of use provide a very intuitive voting session for any voter, but especially those with disabilities. During disability testing campaigns and in live elections nationally, the ExpressVote continues to dominate the competitor's systems, earning high praise and appreciation. ***The ExpressVote is the election industry's number 1 selling early and Election Day precinct solution.***

EXPRESSVOTE: KEY FEATURES & BENEFITS

- **Ease of use & setup.** The intuitive design offers streamlined simplicity for both election officials and voters alike. For election officials, setup and shutdown is as simple as turning the machine on and off. For the voter, the ExpressVote provides an intuitive voting session and multiple opportunities to review vote choices – including via the interface and on the printed card.

- **Touch-screen interface.** The interconnected touch screen and tactical navigational keypad buttons provide complete independence for the voter as they cast a ballot. The official ballot is provided simultaneously in both audio and visual formats. The ExpressVote automatically protects against overvotes and can alert the voter to undervotes.

- **Controlled & reduced costs.** The ExpressVote uses an internal thermal printer to print vote selections, eliminating the need to replace costly consumables like ink, toner, or drums that will need to be replaced on Election Day. Unused cards can be used in future elections, ***which eliminates waste.*** Reducing the need and expense for pre-printed paper ballots cuts traditional ballot-printing costs significantly. ExpressVote makes budgeting for recurring expenses easy and accurate.

- **Accessibility Compliant.** ExpressVote meets and exceeds the most rigorous 2005 Voluntary Voting Systems Guidelines and HAVA section 301 accessibility requirements providing the industry-leading universal voting system for all eligible voters without discrimination of voters with disabilities.

"I just had the most WONDERFUL experience. I am totally blind and I voted myself in the November general election! I tested/voted on the new accessible voting machines during the primary – but that feeling cannot even begin to compare with how I feel this morning. I was in tears by the time I left the polling station – for the first time in years I VOTED without assistance.

To the manufacturers and trainers of the accessible voting machines, THANK YOU! Because of you I have the capability of exercising my rights as a US Citizen. To the poll workers in Franklin, Virginia, THANK YOU! Because of you, I can vote right along my sighted peers without feeling "frowned" upon. I am now an equal.

Thank you, Franklin, Virginia!

(Note: My husband said I was "skipping" down the sidewalk this morning with my Guide Dog, Hannah – I was so excited!)."

Digital Scanners & Tabulators

ES&S RESPONSE

The DS200® precinct scanner and tabulator pairs with the ExpressVote ballot marking device (BMD) to meet the State of Georgia's precinct vote marking and tabulation needs. It combines the best attributes of a paper-based system with the flexibility and efficiency of a digital environment. Precise ballot sensors simultaneously scan both sides of a ballot in high resolution. Thus, cast vote records and ballot images can be stored on memory devices and reviewed, as needed, on a standard PC. The DS200 is designed with flexibility to support a wide range of ballot configurations and designs. It's the easiest, most accurate and user-friendly scanner in the market today which is why ***more than 35,000 DS200 tabulators are in use in 24 states.***

DS200: KEY FEATURES & BENEFITS

- **Completes the ExpressVote Precinct solution.** Pairs with the ExpressVote BMD as part of a complete solution.
- **Unique user-friendly design.** The DS200 tabulator was designed for easy setup – opening the lid powers on the unit in one simple step. The paper path, scanner bars, and other key maintenance components can easily be accessed in seconds. The closing process is as simple as touching the "close polls" button with the rest of the process being automated.
- **Patented technology.** The DS200 features advanced technology to enhance voting system accuracy and enable instant voter verification. The DS200 can be set to query voters about overvotes,

undervotes, blank ballots, and other situations. Voters can verify on-the-spot that their votes will be counted as they intended.

- **Large display.** Our **12-inch display**, the largest in the market today, enhances voter, election staff, and poll worker interfaces and usability. It provides immediate feedback and instructions to the voter in the language he or she selects.
- **Internal battery backup.** The DS200 has a built-in internal battery backup designed to meet the EAC 2005 VVSG certification standards. No external UPS (uninterruptible power supply) is necessary.
- **Integrated thermal printer.** In response to customer input, the DS200 tabulator's printer eliminates the need for a spool or ink cartridge. Simply remove the used plastic core and drop in a new roll of thermal paper and the tabulator is ready to go – it's that easy.

High Speed Scanners and Tabulators

ES&S RESPONSE

DS850 CENTRAL SCANNER AND TABULATOR

The ***DS850® high-speed central scanner and tabulator*** is unmatched in speed, accuracy, and the ability to process folded ballots. Our digital-imaging solution allows for smooth, continuous ballot scanning from start to finish.

Designed specifically for high volume mail ballot tabulation, its rapid and accurate processing of mail in ballots make it a perfect solution for the state's largest counties such as Fulton, DeKalb, Gwinnett, and Cobb.

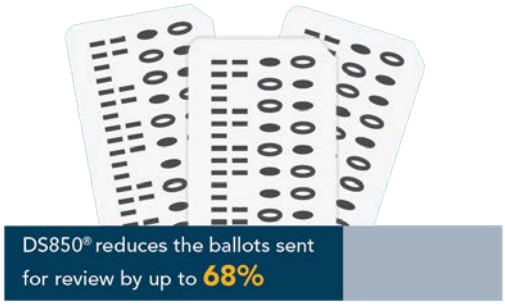
DS850: KEY FEATURES & BENEFITS

- **Mail ballot processing.** The DS850 was designed specifically for mail ballot processing. Its industry-leading speed, ease of use, and outstacking capabilities make it ideal for rapidly and accurately processing mailed-in, folded ballots. Processing time is greatly reduced with less equipment due to the sheer output speed of the machine.
- **Accuracy.** ES&S' ***patented*** image recognition technology ensures ballots are read accurately and consistently, protecting voter intent and eliminating manual adjudication time, making ***our technology the most accurate in the industry.*** Like other ES&S tabulators, the DS850 recognizes common voter marks and is not fooled by stray marks or smudges.
- **High-speed auto-adjudication and sorting.** The DS850 is the only high-speed vote scanner in the marketplace that can sort ballots at full speed. It can scan, tabulate, adjudicate and sort 300 ballots per minute. The DS850 adjudicates at approximately three times the speed of competing devices because the machine does the thinking for you. ***When it comes to unreadable or defective ballots, the ability to sort allows you to run much larger batches than with a COTS scanner because the DS850 will outstack them for you. Now, there's no need to stop scanning and search for the defective ballot(s).***

- **User-friendly design and operation.** The durable 15-inch color touch screen and user-friendly interface walk election workers through every step of the process. It is as simple as placing an unsorted stack of ballots on the scanner and pressing the Start button – the machine does the rest.

- **Folded ballot processing.** The DS850 was designed with a series of patent-pending TruGrip™ composite rollers that apply constant pressure to folded ballots throughout the entire tabulating process without losing speed.

- **Flexibility.** You can customize which specific ballots are sent to three separate sorting bins. The DS850 can separate ballots for a variety of reasons – like write-in votes, over-votes, or blank ballots – without losing speed.



- **Auto Adjudication.** The DS850 central count tabulator saves you time and money by adjudicating ballots for you.

  Its patented auto-adjudication intelligently recognizes common voter marks automatically as the ballots are scanned, reducing the number sent for review by up to 68 percent. Out of 1,000 ballots our competitors' systems send for manual review, the DS850 will automatically and accurately adjudicate up to 680, leaving only about 320 ballots for review. The DS850 was purpose-built *by* election professionals *for* election professionals to securely and accurately scan and tabulate ballots.

- **Recounts.** In case of a recount, the DS850 can be used to rapidly perform a recount of paper ballots and ExpressVote vote summary cards. Electionware can restrict the election definition to a subset of contests or precincts designated for a specific recount.

DS450 CENTRAL SCANNER AND TABULATOR

Like the DS850, the ***DS450® high-throughput central scanner and tabulator*** is designed specifically for mail ballot processing. Our digital-imaging solution allows for smooth, continuous ballot scanning from start to finish.

The DS450 is a tailor-made solution for medium-sized counties, such as Chatham, Clayton, Muscogee, and Richmond.

DS450: KEY FEATURES & BENEFITS

- **Mail ballot processing.** The DS450 was designed for mail ballot processing. Its speed, ease of use, and outstacking capabilities make it ideal for rapidly and accurately processing mailed-in, folded ballots. Processing time is greatly reduced with less equipment due to the sheer output speed of the machine.

- **Accuracy.** ES&S' *patented* image recognition technology ensures ballots are read accurately and consistently, protecting voter intent and eliminating manual adjudication time. making ***our technology the most accurate in the industry.*** The DS450 recognizes common voter marks and is not fooled by stray marks or smudges.

- **Speed.** Troublesome folded ballots are no longer difficult to handle with the DS450 tabulator's TruGrip technology. The DS450 can scan, tabulate, adjudicate and sort ballots at the rate of 90 ballots per minute, eliminating the need to hand-feed ballots one-by-one.

- **User-friendly design and operation.** The durable 15-inch color touch screen and user-friendly interface walk election workers through every step of the process. It is as simple as placing an unsorted stack of ballots on the scanner and pressing the Start button – the machine does the rest.

- **Folded ballot processing.** The DS450 was designed with a series of patent-pending TruGrip™ composite rollers that apply constant pressure to folded ballots throughout the entire tabulating process without losing speed.

- **Flexibility.** You can customize which specific ballots are sent to three separate sorting bins. The DS450 can separate ballots for a variety of reasons – like write-in votes, over-votes, or blank ballots – without losing speed.

- **Auto adjudication.** The DS450 central count tabulator saves time and money by adjudicating ballots for you.

  Its patented auto-adjudication intelligently recognizes common voter marks automatically as the ballots are scanned, reducing the number of ballots subject to review by up to 68 percent. Out of 1,000 ballots our competitors' systems send for manual review, the DS450 will automatically and accurately adjudicate up to 680, leaving only about 320 ballots for review. The DS450 was purpose-built by election professionals for election professionals to securely and accurately scan and tabulate ballots.

- **Recounts.** In case of a recount, the DS450 can be used to rapidly perform a recount of paper ballots and vote summary cards. Electionware can restrict the election definition to a subset of contests or precincts designated for a specific recount.

Statewide Electronic Pollbook System

ES&S RESPONSE

ES&S is offering our industry-leading durable and proven electronic poll book solution, the ES&S ExpressPoll® tablet system.

EXPRESSPOLL: KEY FEATURES & BENEFITS

- **Proven electronic poll book experience.** ES&S has been successfully implementing electronic poll book systems for over 15 years. System installations include the largest system implementations in the United States, including statewide implementations in Georgia, Maryland and Arkansas (in process).
- **Automated, accurate ballot style delivery.** The ExpressPoll electronic poll book also interfaces directly with the ExpressVote product family. It can automatically print the correct ballot style bar code for each voter on the ExpressVote activation card. This automated process virtually eliminates the risk of a poll worker providing an incorrect ballot style to a voter. Each voter takes only one document, the Voter Activation Card containing the ballot style bar code, to the ExpressVote to activate their voting experience.
- **Redundant data storage.** Voter validation data is redundantly stored in the ExpressPoll tablet, providing assurance that voter history data will be available post-election.
- **Tablet data loading.** Provides for a one-step secure tablet data loading process for all ballot styles and screen information.
- **Detailed audit trail.** The ExpressPoll system audit trail information contains the name(s) of the poll workers that completed each task, providing precinct level accountability.
- **Stable operating system.** Microsoft Windows has guaranteed in writing that they will continue to provide security updates for the Microsoft Windows 10 operating system through at least October 2026. This written guarantee far surpasses any guarantee provided by any other operating system provider used in the electronic poll book industry.

2. Describe how your solution would accommodate each of the proposed methods of in-person voting described in Section 3.4. Discuss the pros and cons of each method as it relates to your solution.

Method 1: *In-person (early and election day) voting is primarily conducted with optical scan paper ballots marked by hand. Ballot-marking devices are available to be used as needed. Ballots (hand-marked and marked using ballot-marking devices) are scanned by digital scanners and deposited into a secure ballot box.*

Method 2: *In-person (early and election day) voting is conducted solely with ballot-marking devices. Ballots marked using ballot-marking devices are scanned by digital scanners and deposited into a secure ballot box.*

Method 3: *Absentee in-person (early) voting is conducted solely with ballot-marking devices. Election day voting is primarily conducted with optical scan paper ballots marked by hand. Ballot-marking devices are available to be*

used as needed. Ballots (hand-marked and marked using ballot marking devices) are scanned by digital scanners and deposited into a secure ballot box.

ES&S RESPONSE

METHOD 1

ES&S offers the DS200 and ExpressVote for Method 1. Hand-marked ballots and vote summary cards marked via the ExpressVote are tabulated on the DS200 precinct tabulator and deposited into the secure ballot box.

The ExpressVote allows blind, low-vision, and limited-dexterity voters to privately listen to instructions and selections at a volume, tone, and speed that will meet their unique needs. They cast their votes unassisted, thereby maintaining their privacy and anonymity. Multiple user interfaces include touch screen, Braille-embossed keypad, sip and puff tube, and foot pedal or another two-way switch.

- Audio voting session via text-to-speech or .wav files.
- Ability for voter to select speed, tone, and volume.
- High-visibility on-screen ballots.
- Voter-selected font size and contrast settings.

Any of these features can be used simultaneously by any voter without poll worker assistance. Furthermore, voters can verify the printed paper record using the same accessible devices they used when marking the ballot.

METHOD 2

ES&S offers the DS200 and ExpressVote for Method 2. Vote summary cards marked via the ExpressVote are tabulated on the DS200 precinct tabulator and deposited into the secure ballot box.

The ExpressVote Universal Voting System serves every eligible voter, including those with physical limitations as detailed in Method 1.

The ExpressVote can display any appropriate ballot style, eliminating the need to print ballots. The ExpressVote uses an internal thermal printer to print vote selections, eliminating the need to replace ink, toner, or drums – there are no consumables. Unused cards can be used in future elections. Reducing the need and expense for pre-printed paper ballots cuts traditional ballot printing costs significantly. The ExpressVote makes budgeting for recurring expenses easy.

METHOD 3

ES&S offers the DS200 and ExpressVote for Method 3. Hand-marked ballots and vote summary cards marked via the ExpressVote are tabulated on the DS200 precinct tabulator and deposited into the secure ballot box.

As a universal voting system, the ExpressVote is the perfect ballot marking device for both early voting and Election Day. The versatility of the ExpressVote as an ADA device and its ability to produce any ballot style needed makes it ideal for this hybrid method of voting.

3. Describe the paper stocks associated with your proposed solution. What are its storage requirements in regards to climate and space?

ES&S RESPONSE

ES&S recommends that all printers use ES&S CountRight™ ballot stock, which has been specially engineered to run on ES&S tabulators and meets all ES&S specifications for the equipment. As the manufacturer of the scanning equipment, ES&S understands the critical synergy required between the ballot paper, the ink on the paper, and the tabulator logic.

Following are the ballot specifications:

BALLOT INK:

ES&S recommends jurisdictions print all machine-readable components with commercially available black ink. However, there are no limitations on color applied and any commercial ink may be used. Ink density must remain between a minimum of 0.95 and a maximum of 1.5. For best results, a density of 1.15 should be used. Flat ink should always be used, and powder or varnish should not be used when printing. Following these guidelines will ensure that the ink will not rub off during ballot tabulation or fade, smear or otherwise degrade and obscure or obliterate the paper record over time.

The following colored inks are approved only for creating screens on ballots: • Red PMS Warm Red • Orange Pantone 151 • Brown Pantone 472 • Yellow Pantone 107 • Purple Pantone 252 • Green Pantone 344

Paper: ES&S recommends the 80 lb. ES&S CountRight Ballot Stock used in our testing and certification process.

BALLOT SPECIFICATIONS:

- Grain direction on finished ballot: Long
- Basis weight: 80 lb. text weight (36.2874 kg)
- Thickness: 0.0061 in. (0.015494 cm)
- Smoothness: 130 Sheffields
- Moisture: 5.5 percent
- Opacity: 97.0
- Brightness: 96
- PPI: 338

BALLOT SIZES:

- Ballot width: 8.50 in. + 0.027 in. or - 0.020 in. (21.59 cm + 0.0762 cm or - .0508 cm)
- Ballot height: 11 in., 14 in., 17 in. or 19 in. + 0.030 in. (27.94 cm, 35.56 cm, 43.18 cm or 48.26 +.0762 cm)

Note: The ballot heights above are finished size lengths and do not include ballot stubs.

ES&S recommends storing ES&S CountRight Ballot Stock paper ballots at a temperature of 68°F/20°C to 76°F/24.4°C and a relative humidity of 35 to 55%.

4. Please provide a number of scanners and ballot-marking devices that Georgia would need for each proposed method of in-person voting described in Section 3.4, keeping in mind that currently voters are allowed to vote at any early voting location in the county during absentee in-person voting.

ES&S RESPONSE

METHOD 1

DS200 precinct scanner – 2,735

ExpressVote BMD – 2,735

METHOD 2

DS200 precinct scanner – 2,735

ExpressVote BMD – 27,000

METHOD 3

DS200 precinct scanner – 2,735

ExpressVote BMD – 5,300

Please see attached **Pricing Response.**

5. Depending on the method of in-person voting described in Section 3.4 that Georgia adopts, it may have a need for ballot-on-demand printing capability. Please describe your solution to our potential need for ballot-on-demand printing.

ES&S RESPONSE

The Balotar is a comprehensive, integrated solution to automate and streamline all the facets of ballot production and distribution. This integrated set of products and services provide election officials scalable and flexible options to address all their on-demand ballot printing needs. Our comprehensive solutions include:

AUTOMATED BALLOT PRINTING SOFTWARE:

- In Person Absentee Voting
- Absentee Mail Ballots
- Ballot Duplication
- Provisional Ballots

BALOTAR PRINTING PLATFORM

The Balotar is the flagship Ballot on Demand (BOD) product for Election Systems & Software and the State of Georgia, currently in use in 54 counties. It is an integrated, portable, highly secure printing system specifically designed to generate ballots-on-demand for elections, eliminating the pre-printed ballot waste that typically occurs with absentee and early voting. The Balotar combines commercially available printing components that are integrated with proprietary hardware and software modifications that enable it to meet the demanding printing and audit needs of our election customers.

EVOLUTION PRINTER

The Evolution Printer utilizes a C500 series color print engine from OKIData. The Evolution printer uses specialized firmware and a proprietary extension tray for the specific purpose of accurately duplex printing ballots up to 19 inches in length within tolerance specifications needed for ES&S DS200, DS450, and DS850 scanners. Its small size and lighter weight make it an ideal solution for early voting.

Balotar can provide in-person and absentee ballot-on-demand printing. The Balotar Evolution is our current product line. As ES&S improves upon our products, a different make or model may be proposed based on the specific needs of the State of Georgia.

6. Explain how your solution meets each of the basic requirements in Section 3.5.

Solution must have been deployed successfully in another state.

ES&S RESPONSE

ES&S is the largest and most experienced elections-only company in the world and has provided voting systems for over four decades.

Today, not only do we work with many of the same customers we've served for nearly 40 years, but our business has grown to serve 42 states and to include more than 95,955 supported precincts.

ES&S provides election systems and services to clients ranging in size from small county governments to state boards of elections. ES&S completed successful installations of statewide voting systems in *Alabama, Arkansas, Maryland, Maine, Montana, Nebraska, North Carolina, North Dakota, Rhode Island, South Carolina, South Dakota, and West Virginia.*

Solution must have functionality to quickly and accurately audit voting records.

ES&S RESPONSE

The ES&S system will allow the State of Georgia to effectively and efficiently audit election results while maintaining the secrecy of the ballot.

The ES&S system meets stringent requirements for system audits to provide the supporting documentation for verifying the accuracy of reported election results. The DS450/DS850 central tabulator can be used to rapidly perform recounts. Our system includes detailed audit logs, digital images of the ballots or vote summary cards with electronically linked Cast Vote Records (CVRs), paper records, and central tabulator batch/bin reports.

DS450/DS850 AND RECOUNTS

The DS450/DS850 central tabulator can be used to rapidly perform a recount of paper ballots and vote summary cards.

If a subset of ballots needs to be counted, the Electionware election management system can quickly identify the precincts and ballot styles associated with the recounted contest. Electionware software provides a powerful means for restricting the election definition to a subset of contests or precincts specified for a specified recount.

This definition can be loaded on the DS450/DS850, allowing for sorting and/or recounting of the ballots in question as permitted under a jurisdiction's election law.

AUDIT LOGS

The ES&S voting solution contains audit logs with sufficient information to allow the auditing of all operations related to election and ballot setup, ballot tabulation, results consolidation and report generation. The system audit logs are created and maintained by the system in the sequence in which operations were performed.

All audit logs contain an identification of the program and version being run, identification of the election file being used, record of all operator entries, record of all actions performed by the system or subsystems, record of all tabulation and consolidation input and a record of all ballot or system overrides performed. Only an authorized system administrator can locate, read and print the system audit logs.

The machine audit logs for all proposed voting machines list every event that occurs from the time you load your election definition via the USB media drive until you remove the media after the election is complete. These events, which are tagged with time and date, include election-related events, errors and user interactions.

The machine audit logs retain entries from all internal components capable of producing an audit log entry, such as the power management board, the hardware board and the election processing firmware. The audit logs from every unit used in the election can also be centrally viewed or printed in Electionware.

The Electionware election management system itself creates an audit log that includes all logins and actions performed by each user while logged into the application, including all results database creations, file exports and imports, report printing and results updating processes.

This audit log is maintained intact from the initial start of the election cycle to the reporting of official results. In addition to the main audit log, two additional audit logs are maintained for the logging and tracking of results entered via the provided manual entry feature and when last-minute changes are made to contest and or candidate names within the module.

Electionware audit logs are maintained as an archive with every election backup. They include entries that identify the exact change, the date and time of the change, the user ID, and the module impacted.

BALLOT IMAGES/CAST VOTE RECORDS

The units providing tabulation functionality can also capture digital images of each ballot or vote summary card cast and associated Cast Vote Record (CVR), which also can be used for recounts and adjudication.

To ensure security and protect voter anonymity, the ballot images and CVRs are stored with random names assigned to each ballot image file and have their file timestamps obfuscated.

Electionware provides online adjudication that retains both the CVR as initially tabulated and the adjudication board's modified CVR. The ballot image, the machine-generated original CVR, and the review board-modified CVR can be reviewed alongside each other.

PAPER TRAIL

The paper ballot or vote summary card also provides an audit trail that is available to jurisdictions in the event a recount, including manual recount, is required.

CENTRAL TABULATOR BATCH/BIN REPORTS

The DS450/DS850 central tabulator provides batch/bin reports with information about the ballots in each output bin at the time a batch is saved. The batch/bin reports contain ballot totals for a sort bin for the last batch saved. If ballots have been outstacked to the not-processed bin, the user can view or print the corresponding bin report on demand, which indicates why each ballot in the bin was outstacked. A user can manually print reports on demand or set batch/bin reports to print automatically when a scanned batch of ballots is saved. These reports can be maintained with the physical ballot batch to speed identification and retrieval for audits and recounts.

Solution must support overlapping and concurrent elections.

ES&S RESPONSE

Electionware can accommodate multiple elections simultaneously.

For example, if running two elections simultaneously on one PC, the user can easily switch between elections to perform the required actions. Additionally, in a networked environment, one workstation could manage one election, while another workstation is administering a separate election.

Solution must have write-in candidate capability.

ES&S RESPONSE

The ExpressVote enables the voter to select a write-in candidate and enter the letters of the candidate's name to print it on the vote summary card. The write-in names can be entered on the touch screen on-screen keypad or with any of the assistive devices.

When ballots are scanned, the DS200 can store a graphic image of every scanned ballot, including write-in text, on the system's USB memory device. When the scanner detects a write-in vote, the system stores the write-in ballot image under a special file name to identify the image as a write-in ballot. Write-in images can be reviewed on the DS200 touch screen.

The DS200 tracks and reports the number of ballots with write-ins cast on the Voting Results report.

The DS200 can also print a Write-In Review report that prints a graphic image of every write-in vote cast at the polling place. The images are listed in a contest-by-contest format for ease of review.

After the polls close, write-in ballots may be removed from the ballot box following jurisdictional procedures with the other ballots. The DS200 has an optional stamper that can be configured during election programming that will visibly mark only the ballots containing write-ins to aid in separating the physical ballots.

The DS450/DS850 central tabulator can scan, tabulate and sort ballots containing write-in votes to a designated output bin during scanning.

The total number of write-in votes cast in each contest can be returned immediately on tabulator reports and reports generated using Electionware reporting module. Counts of the number of write-in votes are included in all election reports by contest.

Election officials can use Electionware EMS to view each ballot image as scanned by a tabulator. The files can then be sorted by write-in and by precinct to allow for easy and efficient retrieval and recording of write-ins and subsequent review and adjudication by the write-in resolution board.

The names of write-in candidates can be reviewed, assigned and tallied after uploading election results into Electionware. Users can sort write-in images by precinct, poll, contest, batch, machines or ballot styles. Each write-in snippet captured by the precinct and central count tabulators can be assigned to a write-in candidate name. The Reporting module will tally these names and offers many ways to customize reporting of the write-in names.

Solution must incorporate encryption and digital signatures as security measures.

ES&S RESPONSE

The ES&S system employs security in depth, meaning multiple layers of complementing measures. Security measures include integrated warning and alerts, user roles, data encryption, digital signatures, and physical security. No voter information is stored to the voting system software, ensuring voter privacy and security.

7. Describe how your proposed solution provides unofficial results on Election Night at the polling place.

ES&S RESPONSE

When polls are closed, the DS200 automatically prints a Results Report. This alphanumeric report contains the number of ballots cast, the office titles and questions, candidate names, area for election official signatures, and vote totals for each candidate and question. When polls close, results tabulated on the DS200 are written to the USB memory media.

Results can be transmitted from the tabulators using manual transfer. The tabulators write encrypted, digitally signed data to a USB memory device. The memory device is manually transferred to the PC with Electionware via the USB memory device.

8. Describe how your proposed solution transfers data collected from Ballot Marking Devices, Digital Scanners, High Speed Scanners, and Tabulators to the Election Management System and vice versa.

a. Include a description of the essential peripherals that are used in the data transfer process (i.e. flash drives, memory cards, and other items that will have to be replaced periodically). Are these items proprietary and are replacements purchased directly from the vendor or are they commercially available?

ES&S RESPONSE

Electionware allows the user to configure parameters and security settings and create election media for the ExpressVote universal voting system, the DS200, and the DS450/DS850 central scanner and tabulator.

Electionware packages all needed data elements, including the election configuration, onto portable USB memory devices used to transfer the data to the voting devices and central tabulators.

The tabulators write encrypted, digitally signed data to a USB memory device. The memory device is manually transferred to the PC with Electionware via the USB memory device.

ES&S uses Delkin USB 2.0 flash drives for the DS200/DS450/DS850/ExpressVote. These drives are modified-COTS and proprietary and are purchased directly from ES&S. Our manufacturer registers each drive with the USB Consortium for added security, allowing the Vendor Identification (VID) and Product Identification (PID) to be coded into our firmware.

The Delkin drives selected are certified as industrial-grade memory devices using Single Level Cell (SLC) flash technology. SLC devices operate at faster speeds with 10 times the reliability of standard consumer grade devices.

9. Does your solution include Election Night Reporting capabilities? If so, please describe your Election Night Reporting solution, including security features.

ES&S RESPONSE

After the election, the Reporting module in Electionware is used to import tabulated results, machine logs, cast vote records, and ballot images by reading the election media from the ES&S election equipment USB flash drives/networked results; review, export, and report election results and media device-related data; and review/adjudicate ballot images.

The Election Results workflow is used to generate paper and electronic tabulated results reports and exports. The Reporting module can produce summary and custom table reports, as well as exports, each of which can be adjusted to fit your needs:

- Summary Results: By election, precinct, or precinct/split
- Custom Table Results (Canvass-style report): By precinct, precinct/split, poll, ballot style, or district
- Plain Text (similar to the ASCII export from Election Reporting Manager software): Summary or Precinct Detail
- XML: Enhanced, Standard, or Custom
- CSV: Precinct Detail

With the Electionware reporting module, the State of Georgia can export various reports in multiple formats, including HTML, which can be posted to election night reporting websites at both the state and county level.

10. Georgia plans to begin using the new voting system by the 2020 Presidential Preference Primary, which was last held in March. Please provide an approximate timeline to implement your proposed solution.

ES&S RESPONSE

Please see **Appendix A – Implementation Timeline.**

11. Georgia has a fairly centralized election creation process where the state builds the ballots for the counties. How does your election management system work efficiently in this state-centered model? Describe how your proposed solution transfers election data and ballot information created at a state level to local jurisdictions for execution, including security features.

ES&S RESPONSE

Electionware works in a state-centered model by creating individual County databases at the State level. Each County database, as well as matching ballots and tabulator media, can be backed up as an encrypted password protected file and sent to the County via State approved file transfer methods. The County would restore the encrypted password protected database onto their secured local EMS system, which would be configured to only allow access to the media burning and reporting modules within Electionware. The County would use the State created database to burn all media and test all ballot marking devices and tabulators prior to Election

Day. After the close of polls, the County would load all results from the election tabulation media and to create election night reports on the County's secured local EMS system.

The State may set up and update election templates to ensure that similar offices, candidates, settings and data from various counties is consistent. The use of election templates significantly decreases the time to set up similar elections.

Electionware also supports Data Imports, allowing the state to import some or all of the election data for each election if needed.

Electionware also supports multiple options for election night reporting to the State with the use of export files. Electionware support several export formats including HTML, PDF, plain text, XML, enhanced XML and custom exports.

Electionware incorporates the very latest in election security, including heightened audit controls and change management processes that are built in to make sure your election data is safe and secure. Electionware requires users to enter a valid username and password prior to gaining access to the application. The passwords are stored as MD5 hashes so that they are unreadable. The system requires that Electionware passwords be strong.

The system administrator creates unique user IDs for each user allowed to log onto election management system (EMS) workstations. Election personnel that are allowed access to the shared folder on the server receive a second unique shared user ID and password. Users are assigned to roles, including: Election administrators, election personnel responsible for coding the elections, election personnel responsible for election results processing, election personnel allowed to access the shared folder on the server, and election administrators allowed to shut down the system.

Depending on a user's access rights, Electionware limits selections. Unavailable selections do not appear in the application interface. Electionware saves a record of all user actions with a username to the system audit log. System security for Electionware limits casual access to system files, but security also depends on sound practices at the election office. Officials should implement a strong physical and procedural security plan that limits access to Electionware to authorized personnel only.

A complete security hardening process is provided for the computer platform of the EMS as a security measure. This process hardens the basic input/output system (BIOS), the operating system, and the User Access Controls so data cannot be modified outside the intended flow of the application or by a malicious hacker. Additionally, unauthorized applications cannot be executed on the EMS workstations. Electionware does not offer any data entry feature that can be used to alter programming.

Furthermore, the EMS system is closed (air-gapped) and therefore has no connection to the internet.

12. Describe the security features of your proposed solution including, but not limited to, cyber security; physical security; and data integrity verification and validation.

ES&S RESPONSE

- **Standalone hardened system that is not connected to the Internet or any other network -** Election Management System (EMS) Standalone, Server and Client Workstation environments are hardened and use the built-in Microsoft Windows Firewall to protect against

network-based threats; it is configured to only allow network traffic required for system functionality. Additionally, through Group Policy, these systems are configured in such a way that only secure transmission protocols are utilized and all non-secure protocols are disabled.

- **Access controls and/or authentication –** The Electionware election management system (EMS) Configure module is used to administer access codes that the precinct and central tabulator hardware use to control access. The access codes can be changed for each election. Four access codes are used for administering the election, which are detailed here:

  Election Qualification Code (EQC) access code – This access code is used for the process to clear equipment of the previous election's data and load election-specific encryption keys necessary to validate and unencrypt the election definition package, as well as to encrypt and digitally sign data for transport back to the EMS reporting software.

  Election access code – This access code is used for poll worker access to equipment and basic functions. In the case of the central tabulator, it is used for scanning operator access to the equipment and basic functions.

  Override access code – This access code is used for functions that are generally considered beyond what a typical poll worker would be authorized to do and for which the jurisdiction may wish to have only designated officials perform, such as re-opening polls and clearing data. In the case of the central tabulator, it is used for functions generally considered beyond what a typical scan operator would be authorized to do.

  Administrative password – This access code is for administrative functions typically accessed by central administrator- or technician-level personnel.

  The Electionware database data directory is only accessible by the operating system administrator group and not by the regular user role. The data is accessed by the database server through a service account, thereby protecting the data files from being directly accessed. The EMS is isolated from any connection to the internet or other networks.

  The precinct tabulator utilizes all four access code roles in executing an election. In addition to the ability to use Electionware election management system (EMS) to program new access codes for each election, there are additional options for choosing whether access code challenges are required at certain steps. This allows jurisdictions the ability to choose whether to control access using physical controls such as locks and seals, access codes in the user interface, or both.

  The election management system is protected both with use of Microsoft Windows credentials and managed user roles in the Electionware software.

  The system administrator will create Windows user accounts on the EMS PCs as requested by the Election Administrator. Each user is assigned to the appropriate role(s). Each user must have a unique user account; accounts must never be shared. In addition, if the jurisdiction uses a networked EMS, a separate Share User account is required on the Server for each remote user account allowed to access a shared folder on the Server.

The jurisdiction's Election Administrator utilizes the user management tools available in Electionware to assign individual user accounts. The Add User option of the Manage module enables the election administrator to add new users to Electionware.

- **Strong encryption and digital signing –** All vote data exported from ES&S tabulators is encrypted and digitally signed.

  ES&S software digitally signs every cast vote record and its corresponding image files when they are created. Additionally, ES&S application software exceeds Election Assistance Commission (EAC) VVSG (Voluntary Voting System Guidelines) requirements by encrypting all vote data sent from the tabulators to the election management system (EMS) computer that hosts the software that aggregates results. The EMS validates the signatures when reading the vote data to ensure no tampering has occurred.

  Data is encrypted using Federal Information Processing Systems (FIPS)-compliant Advanced Encryption Standard (AES) encryption using a certified library from RSA. ES&S employs strong AES-256 encryption to FIPS 140-2 standards using the RSA BSAFE Library with ECDSA (Certificate 1058). The results remain encrypted until imported into the EMS for results accumulation.

  In addition, the election definition provided from the EMS to the voting equipment cannot be modified once it is transferred to the proper system media. ES&S systems do not offer any data entry feature that can be used to alter programming.

  Election definition files on removable USB memory devices are also encrypted using strong encryption: FIPS-compliant Advanced Encryption Standard (AES) encryption using a certified library from RSA. ES&S employs strong AES-256 encryption to FIPS 140-2 standards using the RSA BSAFE Library with ECDSA (Certificate 1058).

  The vote marking/accessible device's election definition is protected with the same strong encryption used for the tabulators

- **Physical security –** All ES&S election devices contain provisions for use of locks and seals. The tabulation equipment used for a jurisdiction's election should be protected from access by unauthorized users by using a combination of equipment locks and seals. Election definition media should be removed from equipment and stored in a separate, secure area when the tabulators are not in use. During tabulation, election officials or poll workers should monitor system use to ensure that no unauthorized personnel tamper with the equipment. Keys for the devices themselves should be strictly controlled by the election superintendent.

  ES&S recommends that the jurisdiction's election administrator include provisions in their security plan for physically securing all computer systems that contains ballot definition files, data acquisition software, or reporting software. The room where systems are stored should be locked when the systems are not in use. Keys or combinations for these rooms should be strictly controlled by the election superintendent.

- **Logging –** The ES&S voting solution contains audit logs that contain sufficient information to allow the auditing of all system operations. The system audit logs are created and maintained by the system in the sequence in which operations were performed and are time-stamped. Only an authorized system administrator can locate, read and print the system audit logs.

  Logs are recorded within the system and can be transferred via USB memory devices to secondary secured central storage not within the system whose logs are being recorded.

  The ES&S EMS provides detailed audit capabilities at all stages of the election, from ballot preparation to election results consolidation. EMS log entries include the user, date/timestamp, event type, a detailed description of the event, and the module where the event occurred. Log reports are available to administrative level users. A special Microsoft Windows system log tracks all application-level events.

  The precinct tabulator audit log report lists all events that can occur on the system (errors, alarm conditions, ballot handling exceptions, and user-initiated functions) with a date and time stamp. The log reports from all internal components that can produce an audit log entry, including the power management board, scanner hardware board, and election processing firmware. The precinct tabulator audit logs also can be viewed and printed from the election management system (EMS) database.

  The vote marking/accessible device records errors and major events with the date and time each occurred based on the unit's real-time clock. Audit logs are constantly updated in the system background and saved to the inserted ES&S USB flash drive in a circular buffer. Each log entry is numbered and includes event details to facilitate recognition, segregation, and retention.

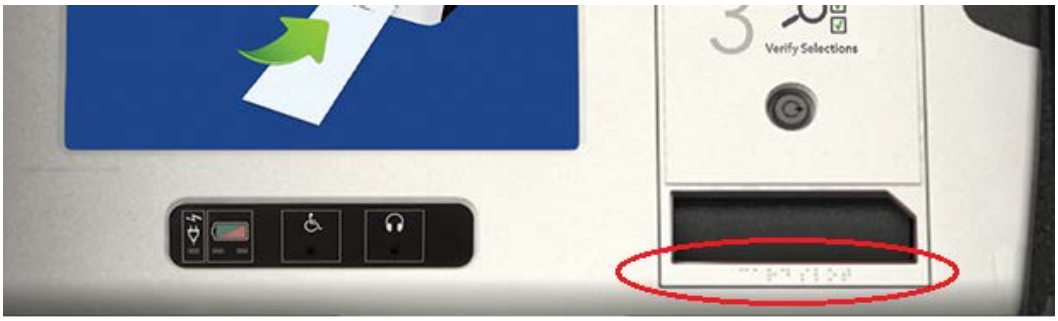
  The central tabulator records errors and events and with the date and time each occurred based on the unit's real-time clock. Audit log information can be exported to USB flash drive. The DS450/DS850 prints the contents of the audit log to the attached dot matrix printer. Electionware provides the settings that enable audit log printing and that prevent the user from disabling it.

13. Describe the accessibility features of your proposed solution for voters with disabilities.

ES&S RESPONSE

The ExpressVote allows voters to cast their votes unassisted, thereby maintaining their privacy and anonymity. Every ExpressVote is fully accessible, allowing any voter to select any ExpressVote without the need to declare a disability or be relegated to certain devices.

Most voters, even those with visual impairments or who are blind, can use the corner cut tactile indicator to properly orient the card and insert the cards into the machine. Braille on the face of the ExpressVote indicates where to insert the activation card.

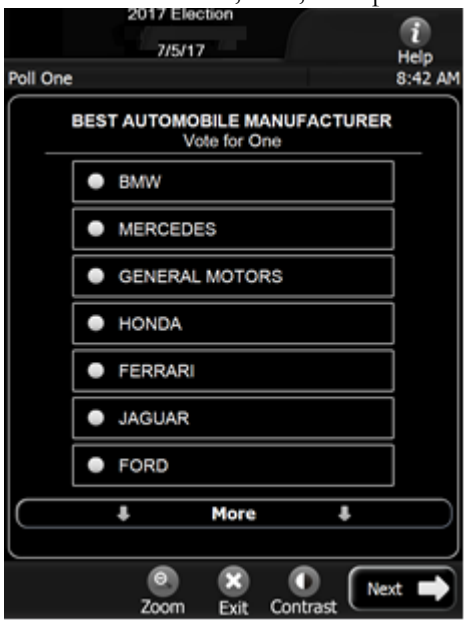


Braille on ExpressVote Face Instructs Voter

Each ExpressVote includes the following functionality:

Keypad with Shaped Buttons and Braille

- Touch screen with colors and accessibility-enhancing effects, including voter-selected font size and contrast settings
- Interconnected navigational keypad buttons with both Braille and printed text labels designed to indicate function and a related shape to help the voter determine its use
- Port for a sip-and-puff device, foot pedal, or other two-way switch
- Audio voting session via text-to-speech or .wav files. Voters can privately listen to instructions and selections at a volume, tone, and speed that will meet their unique needs.
- High-visibility on-screen ballots with options for Zoom and Contrast



Sip & Puff

High-Contrast Zoomed-In Text Option

The ExpressVote uses electronic technology based on input from election officials and disability organizations. It integrates components such as a digital scanner, printer, touch screen, and a navigational audio-tactile keypad.

Key features of the ExpressVote include:

Paddle

- Multiple ballot navigation and selection methods that can be used simultaneously at any time during the voting process
- Audio presentation created by either real voice files or through the voice file generator in Electionware Toolbox. Voters privately listen to instructions and selections at their chosen volume and speed. The automated languages are easy to understand for audio-ballot users who tend to significantly increase their speed.
- Ballot and voter instruction/message presentation in the language selected by the voter both in audio and visual formats. Voting choices and instructions can be displayed in large text on a high contrast background on the touch screen display, as well as played by the audio system in the voter's preferred language.
- Allows voter to select a black privacy screen during an audio presentation
- Tempo and volume controls for adjusting audio ballot presentation
- Pause/resume audio capabilities

14. Have any third party groups vetted the accessibility and/or security features of your proposed solution? If so, please provide their assessments.

ES&S RESPONSE

ACCESSIBILITY

Voters with disabilities laud the ES&S ExpressVote for allowing them to vote privately and independently.

Following is a quote from the website "Blindbargains.com" after the author tested accessible voting devices from Hart Intercivic, Dominion Voting Systems, and Election Systems & Software: "With my faith in modern voting technology quickly running out, I moved to the last of the machines, The ExpressVote from Election Systems & Software…I walked up to the machine and inserted my paper ballot into the reader, which immediately caused speech feedback to begin. No intervention was necessary from the election workers…. Overall, I completed my 23-question ballot in about 5 minutes. Of the three systems tested, the ExpressVote is the only one I am comfortable recommending in its current form. Set-up was achieved independently by the voter, prompts were spoken efficiently, and a ballot could be completed using the fewest number of key presses."

The full blog post can be found at: http://www.blindbargains.com/bargains.php?m=15315

SECURITY FEATURES

ES&S systems and software are designed and built to exacting industry standards established by the US Government Election Assistance Commission, then rigorously tested by independent third-party voting systems test laboratories, before being delivered in certified and hardened configurations to the customer. In addition, ES&S has subjected our design, manufacturing, testing and quality assurance processes to the new Center for Internet Security Handbook for Elections Infrastructure Security Assessment, and we continually evaluate our products to incorporate security improvements.

15. Does your solution include decommissioning of the existing voting system, including DREs, optical scanners, and electronic pollbooks? If so, please describe your decommissioning process.

ES&S RESPONSE

If required, ES&S is willing to work with State in decommissioning current equipment.

16. Provide a recommendation for a training plan that takes into account all stakeholders, which includes – at the minimum – state users, county election officials, voters, and voter advocacy entities.

ES&S RESPONSE

THE ES&S APPROACH TO ON-SITE TRAINING

Election Systems & Software understands that a successful transition to new election technology depends on more than executing a logistics plan. A key element to success is ensuring that Georgia is empowered with the knowledge to administer the new system and carry out a trouble-free election. To make this transition

successful, we emphasize training as a critical component of our overall implementation plan. Our training goal is to ensure a strong level of comfort and competency for Georgia's election staff and workers. ES&S is committed to maintaining our flexible approach in tailoring the right mix of products, training, support and service to the State of Georgia, which includes delivery of new election system information to voters and voter advocacy entities.

TRAINING THE ES&S WAY

The ES&S curriculum is based on our decades of experience in implementing new voting systems. Our customized approach to training Georgia's election team anticipates the wide range of skills needed to carry out a successful election. Our courses are tailored to specific audiences and incorporate a high degree of hands-on instruction and simulations, increasing the relevancy of every minute Georgia election workers spend in the classroom.

ES&S TRAINERS: EXPERIENCE THAT MATTERS

ES&S has carefully selected our training staff to provide the very best training experience for Georgia's poll workers. We require all our personnel to be certified ES&S trainers, beginning with at least two years of experience as an instructor and continuing with customized product certification. Additionally, each of our training staff members has personally supported elections using ES&S voting equipment. Our trainers have first-hand knowledge of the challenges Georgia poll workers could face with their new equipment. We can anticipate staff concerns and appreciate the challenges of using a new voting system.

ES&S' TRAINING PLAN

Introducing new technology presents unique challenges. Training is our primary concern in implementing a new elections systems solution. ES&S measures the success of new equipment installations by the quantifiable way in which our clients can manage their unique election processes while using the ES&S system. Our comprehensive, classroom-based training program promotes a strong level of competency for all intended users through training modules developed to provide Georgia's election team with the skills to perform necessary operations.

Course Description	Course pre-requisite(s) and audience
DS200 Operations Course	
Course Length – ½ Day	
This course introduces **election personnel** to the DS200 precinct scanner and tabulator. Successful participants gain the knowledge, skills, and abilities to operate the ES&S DS200 precinct ballot tabulation system. Covered topics include:	Pre-Requisite(s): • None Audience:

- In-depth overview of the DS200 tabulator, including hardware components, ballot boxes, setup, battery, and charging.
- Pre-election preparation requirements.
- Election Day operations, including opening and closing the polls for Early Voting and Election Day, scanning voted ballots, and transmission of election results.
- Troubleshooting procedures.

- Election staff

Number of Participants:

- 1 - 20

ExpressVote Operations Course

Course Length – ½ Day

This course introduces **election personnel** to the ES&S ExpressVote Universal Voting System that is used to mark ballots. Successful participants gain the knowledge, skills and abilities to operate the ExpressVote system.

Covered topics include:

- In-depth overview of the ExpressVote, including hardware components, setup, battery, and charging.
- Pre-election preparation requirements.
- Election Day operations including marking the vote summary card and how the device meets usability and disability standards.
- Troubleshooting procedures.

Pre-Requisite(s):

- None

Audience:

- Election staff

Number of Participants:

- 1 - 20

DS450 Operations Course

Course Length – 1 Day

This course gives **election personnel** a nut and bolts introduction to the ES&S DS450 mid-range central scanner and tabulator.

Covered topics include:

- Overview of the machine
- Cleaning the machine
- Scanner setup and pre-Election Day preparation
- Printing reports
- Election Day preparation
- Scanning ballots

Pre-Requisite(s):

- None

Audience:

- Election staff

Number of Participants:

- 1 - 10

DS850 Operations Course
Course Length – 1 Day

The ES&S DS850 course gives **election personnel** a nut and bolts introduction to the high-speed central scanner and tabulator. Covered topics include:

- Overview of the machine
- Cleaning the machine
- Scanner setup and pre-Election Day testing
- Printing reports
- Election Day preparation
- Scanning ballots

Pre-Requisite(s):

- None

Audience:

- County staff

Number of Participants:

- 1 - 10

ExpressPoll Operations Course
Course Length – ½ Day

This course introduces **election personnel** with information needed to administer the ES&S ExpressPoll electronic poll book used to look up voters and issue ballots.

- In-depth overview of the ExpressPoll tablet's features and functions
- Set up and selection of precincts
- Selecting and updating voter records
- Reporting
- Election Day operations
- Storage of the equipment

Pre-Requisite(s):

- None

Audience:

- Election staff

Number of Participants:

- 1 - 20

Electionware Course
Course Length – 4½ Days

This course of training will provide **election personnel** general knowledge of the ES&S Electionware election management system. The participant will be able to design ballots, program election hardware and produce general election reports for a basic election.

Pre-Requisite(s):

- None

Audience:

In these Electionware modules, the participant will gain the following knowledge, skills, and abilities: • Define – Build, maintain, and store all election-related information (i.e., precincts, districts, offices, candidates, referenda) in one database. • Design – Create an election ballot in both electronic and paper format. • Deliver – Program the election tabulation hardware with election-specific information. • Results – Generate and display customized election reports in paper or electronic formats, as well as view and manage ballot images captured from ES&S tabulation hardware. • Manage – Manage user account and security access for the Electionware software.	• Coding staff Number of Participants: • 1 - 10
Electionware (Results Only) Course	
Course Length – 1 Day (Results Only)	
This course of training will provide **election personnel** general knowledge of ES&S Electionware software. The participant will be able to produce general election reports for a basic election. In these Electionware modules, the participant will gain the following knowledge, skills, and abilities: • Define - Open and restore elections. • Results - Generate and display customized election reports in paper or electronic formats, as well as view and manage ballot images captured from ES&S tabulation hardware. • Manage - Manage user account and security access for the Electionware software. • Media Burn	Pre-Requisite(s): • None Audience: • Coding staff Number of Participants: • 1 - 10

ES&S CONTINUING EDUCATION & SUPPORT

The ES&S method aims at fully preparing election staff to ensure autonomy in election operations while using our equipment. We understand long-term needs may require a combination of continuing education courses and/or on-site support. These continuing education and site support needs from our experienced training team can be coordinated and tailored to meet Georgia's unique requirements.

17. Describe the useable components (e.g., paper and ink) of your voting system solution, including whether or not they are proprietary, have to be replaced by purchasing directly from you, or can be replaced commercially through other vendors?

ES&S RESPONSE

EXPRESSVOTE BMD

- Thermal Activation Cards. Proprietary. May be sourced elsewhere as long as ES&S specifications are met.
- Headphones: As needed if lost or broken. (Avid) Commercially available.
- Headphones sanitary ear cover: (Avid) Commercially available.
- 4 GB thumb drive (SLC), (Delkin Devices 4GB SLC, ES&S #2396), Not commercially available - custom VID/PID embedded by manufacturer for security purposes.
- ADA Stylus-Ball Gripper w/tip. Optional, not commercially available.
- Coin Cell Battery: (CR 2032 Motherboard Battery – Energizer) Replace every four (4) to five (5) years. Commercially available.
- Backup battery: Replace every five (5) years. Not commercially available.

DS200 PRECINCT TABULATOR

- Thermal Reverse Wound Paper Roll, (NCNR 9078-1514, ES&S #2320), not commercially available.
- 4GB Flash Drive (SLC), (Delkin Devices 4GB SLC, ES&S #2396), Not commercially available - custom VID/PID embedded by manufacturer for security purposes.
- Ballot Marking Device Pen, (BIC Grip Roller Ball Pen, 0.7mm, Black, ES&S #6100), Commercially available. BIC – ES&S purchases through a company that brands the ballot marking device pens.
- DS200 Coin Cell Battery, (Energizer Coin Cell; CR 2032, ES&S #2283). Can last up to five (5) years before replacement is required if the battery has been properly maintained and stored. Commercially available.
- DS200 Internal Rechargeable Lithium Ion Backup Battery. The DS200 internal battery can last up to five (5) years before replacement is required if the battery has been properly maintained and stored. Not commercially available.
- Ballot Box Key: As needed if lost or broken. Not commercially available.
- Unit Key: As needed if lost or broken. Not commercially available.
- AC Power Cord: As needed if lost or broken. Not commercially available.

- Tamper-Evident Seals (Intab; Tamper Evident Seal/Label: 100 Label Roll, Barcode 1" x 3-3/8" Non-Residue Tamper Evident Labels – Blue (Item #800-0084). Similar seals are commercially available.
- 8.4-inch Numbered Pull-Tite Seal-Blue (Rifkin; Item # RINS2). Similar seals are commercially available.

DS850/DS450 CENTRAL COUNT TABULATOR

- 8GB Flash Drive (SLC), (Delkin Devices 8GB SLC, ES&S #2397). Not commercially available - custom VID/PID embedded by manufacturer for security purposes.
- 1 Part Printer Paper (500 sheets), [Printer Paper (1-Part), ES&S #ES-PP1], commercially available. ES&S purchases through a distributor, available anywhere office paper is sold.
- 8 ½" x 11" Standard Printer Paper (500 sheets), commercially available. ES&S purchases through a distributor, available anywhere office paper is sold.
- Touch Screen Cleaning Kit, (KINETRONICS Corp., ES&S #6500). Similar kits are commercially available.
- Isopropyl Alcohol, (Uline; Omaha, NE, ES&S #ES-AL), commercially available.
- Cleaning Cloth, (Payless Office Supply, ES&S #ES-CLOTH), commercially available.
- Canned Air, (Payless Office Supply; Omaha, NE, ES&S #ES-AR), commercially available.
- Audit Printer Ribbon, (ML420 Printer Ribbon, ES&S #RI-420), commercially available. ES&S purchases through a distributor, available anywhere office supplies are sold.
- Reports Printer Toner, (Okidata B431dn Toner, ES&S #6962), commercially available. ES&S purchases through a distributor, available anywhere office supplies are sold.
- DS850/DS450 Coin Cell Battery, (Energizer Coin Cell Battery CR 2032, ES&S #2283), Commercially available.

18. For budget purposes, please provide an estimated cost of your voting system solution, including hardware, software, any necessary licenses, peripherals, implementation, decommissioning, training, and maintenance.

ES&S RESPONSE

Please see attached **Pricing Response** for an estimated cost of the voting system.

19. For budget purposes, is there an option to lease equipment instead of purchasing equipment under your solution? If so, please provide an estimated cost to lease each component of your proposed solution where leasing is an option and whether the leasing option includes updates to the software.

ES&S RESPONSE

ES&S is able to provide lease financing for the total purchase solutions through its affiliate, Nationwide Capital. Payment terms are negotiable between the parties.

20. Describe your proposed solution's technical support system, including, but not limited to, how it will provide ongoing software and system support; conduct regular source code auditing and analysis; escrow source code; share information about source code auditing and reviews; share information about each code release; and offer security enhancements for state and local officials.

ES&S RESPONSE

TECHNICAL SUPPORT

The ES&S Help Desk offers multiple support channels to assist customers with issues and concerns ranging from simple "how-to" questions to complex functional inquiries.

Your call to the Help Desk during our hours of operation will immediately be answered by a fully trained technician who will answer your questions and/or begin resolution of your issue. We track all questions or concerns and their resolution to provide continuity of service.

ISSUE RESOLUTION

- During **Election Day activities**, our Help Desk is staffed on its extended-hour schedule (for a 24-hour period beginning at 5 a.m. Eastern) to meet the various poll open and closing times for our customers across the United States. During any General Election, ES&S augments our technical support team to further ensure that your issue will receive an immediate response when you contact the Help Desk.
- During **non-election periods**, the ES&S Help Desk can be reached on weekdays between 8 a.m. to 8 p.m. Eastern Time. After hours, a representative will return your call as soon as possible depending on urgency, but no later than the next business day.
- When a planned system maintenance event is scheduled on evenings, weekends, or holidays, ES&S recommends that municipalities notify their account manager, who can inform the Help Desk to expect potential service calls, ensuring the most rapid response possible.

TOLL-FREE PHONE SUPPORT

Our dedicated toll-free customer support telephone number is 877-ESS-VOTE (877-377-8683). The support line is open 24 hours a day and, outside election-critical periods when times are extended, is monitored from 8 a.m. to 8 p.m. (Eastern Time), Monday through Friday. Municipalities can leave a message 24/7 and a representative will return their call as soon as possible, and no later than the next business day.

Furthermore, your account manager and regional sales manager are on call 24 x 7 x 365 and may be contacted on their mobile phones. These on-call individuals will provide municipalities with redundant sources to help you resolve any issue you may have during after hours, weekends, and holidays.

EMAIL SUPPORT

Customers can communicate directly with specialized ES&S support and technical representatives.

ES&S CUSTOMER PORTAL

Customers will receive login credentials to the ES&S customer portal. The portal contains copies of all user documentation, including administrator and operator manuals and product advisories. The portal also provides access to request forms and a link to the ES&S supply store website.

MAINTENANCE

ES&S will provide hardware maintenance and support services to the state upon the expiration of the warranty. ES&S offers two types of hardware maintenance and support services. ES&S' hardware maintenance and support services coverage plans are set forth below:

- **Silver Maintenance Program:** Under the Silver Maintenance Program, ES&S provides a routine preventative maintenance service event **every other year on the DS450 and DS850 central scanners**. This **on-site** event includes the inspection, cleaning, calibration, and testing of covered equipment and all labor and parts, except for consumable items. Our ES&S technicians carry the diagnostic programs, specialized tools, certified spare parts, and test ballots needed to service and test the product per hardware specifications and the maintenance agreement. Under this maintenance program, hardware repairs are covered when failures are system-related.

- **Bronze Maintenance Program:** Provides for repair and maintenance services that are performed at ES&S' designated depot location. While the program does not include routine preventative maintenance service events, any time remedial maintenance is provided, a technician will conduct a hardware preventative maintenance inspection.

The maintenance programs include use of certified replacement parts, repairs by certified technicians, priority status for repair services, technical Help Desk support, and one annual invoice for budgeting peace of mind.

SOURCE CODE

All source code is reviewed internally after written and prior to QA and certification testing. Furthermore, all ES&S-written code is reviewed by a third party during the Voting System Test Lab (VSTL) process. Any discrepancies found must be addressed prior to certification or issuance of a VSTL test report.

ES&S' trained engineers have access to the source code they develop and continually make changes as required by law.

ES&S owns its proprietary software and firmware. In addition, and as a standard practice, ES&S maintains in escrow with Iron Mountain Intellectual Property Management, Inc., 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.

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 State shall have the right to obtain the source code to the extent necessary to enable the State to use ES&S' proprietary software and firmware in accordance with the terms of the final agreement.

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 state. Further, the source code will remain the property of ES&S and may not otherwise be used by the State except as set forth in the escrow agreement.

Documentation for initial implementation and future updates and releases can be provided in printed format or downloaded as PDF files from the ES&S customer portal.

Enhancements are included in each software release. Some enhancements are included as 'upgrades' to system functionality that already exists while other enhancements are new functionality. If an enhancement is specific to a single user, i.e. would not be beneficial to other customers, if is generally delivered a custom development that it only available to that user (i.e. custom roster formats, processes that are specific to an individual state's laws).

If an enhancement could potentially be useful to multiple customers, it either delivered with an associated parameter value (where it can be enabled/disabled), or with a security role (so that it is only available to users with specific security clearance). Enhancements of this type are 'shared' with the user community so that users can benefit from the advantages of being on a single software package.

21. Describe the physical and power attributes of your Ballot Marking Devices, Digital Scanners & Tabulators, High Speed Scanners and Tabulators, and Statewide Electronic Pollbook System, including but not limited to:

Dimensions;

Weight;

Battery backup system capabilities; and

Power needs and ability to daisy chain equipment to a power source.

ES&S RESPONSE

EXPRESSVOTE

DIMENSIONS

16" H x 20" W x 13" D (Operation)

17" H x 20" W x 5" D (Storage)

WEIGHT

The ExpressVote weighs 20.5 pounds.

BATTERY BACKUP

ExpressVote ballot marking device (BMD) has a built-in lithium-ion 18V, 4300mAh battery pack that provides power if AC power is lost. If external power is lost, the ExpressVote seamlessly reverts to a backup battery that allows it to operate normally for at least 2-4 hours. This battery backup is fully integrated into the unit. When the battery gets low, the system will initiate a graceful shutdown before the battery is fully exhausted to ensure no ballots are being scanned or data is being written to the USB flash drive during shutdown of the unit. When power returns, a recovery procedure allows voting to continue where it left off.

POWER NEEDS

The ExpressVote plugs into a standard 110-volt AC. Its electrical rating is 120V ~ 60 Hz 1.5A.

DS200

DIMENSIONS

13" H x14" W x 16" D (Operation)

5" H x14" W x16" D (Storage)

WEIGHT

The DS200 weighs 23 pounds.

BATTERY BACKUP

The DS200 contains an internal backup battery that maintains the system in the case of a power failure during the election process. The battery is a 21-volt, 10 cell lithium-ion battery that needs no special maintenance. The battery obtains its charge automatically from the system power supply any time the unit is plugged in – a separate charging device isn't required. It ensures complete protection from power failure and provides a minimum of three to four (3-4) hours of normal operation in the event of a power failure.

The battery is floating on the system, meaning the battery kicks in immediately without system impact. When the battery gets low, the system will have a graceful shutdown to ensure no ballots are being scanned or data is being written to the USB memory device when it loses power completely. When power returns, a recovery procedure allows voting to continue where it left off.

POWER NEEDS

Many DS200 units can be connected to a single 20-amp breaker via power strips because the current draw is very low. The DS200 operates on standard 110-volt AC electrical services and plug into a standard three-prong grounded electrical outlet. The input to the DS200 cord's power brick is 120V~50/60 Hz 2A. The output from the power brick to the DS200 is 24V/3.34 amps, 80w max.

DS450/DS850

DIMENSIONS

DS850 unit: 37" H x 41" W x 18" D

DS850 cart: 30" H x 48" W x 23" D

DS450 unit: 32" H x 45" W x 20" D

DS450 cart: 30" H x 48" W x 26" D

WEIGHT

DS850 unit: 200 pounds

DS850 cart: 200 pounds

DS850 cart fully loaded with DS850 unit, UPS, log printer, and report printer: 284 pounds

DS450 unit: 137 pounds

DS450 cart: 178 pounds

DS450 cart fully loaded with DS450 unit, UPS, log printer, and report printer: 262 pounds

BATTERY BACKUP

The DS450/DS850 is certified with a COTS UPS (Uninterruptible Power Supply), which is included with the price proposal. In the event of external power failure, the DS450/DS850 automatically transitions to being powered by the UPS. When running on UPS power, the tabulator will complete any ballot scanning that is taking place at the time of power transition. From there, the operator can save the current results and print any desired reports. The operator can then shut the unit down manually, or the unit will automatically and gracefully shut down when the UPS battery is exhausted.

POWER NEEDS

A standard 110V outlet must exist in the facility for power cord plug in. The DS450/DS850's input rating is 120V~50/60 Hz 8.0A single phase or 240V~50/60 Hz 8.0A dual phase.

To ensure 2 hours of uninterruptible power you must use an Uninterruptible Power Supply (UPS) with the DS450/DS850. The UPS additional handles temporary brownouts or spikes and provides conditioned power for reliable operation of the DS450/DS850.

EXPRESSPOLL

DIMENSIONS

10.2" W x 6.9" H x .35" D

WEIGHT

The ExpressPoll tablet is an extremely lightweight solution, weighing in at 1 pound, 3.4 ounces.

BATTERY BACKUP/POWER NEEDS

The ExpressPoll tablet features a quick charging, lithium-ion battery that provides up to 11 hours of use, when fully charged. The tablet's on-screen display provides a visual indication of the current battery charge, as well as if the tablet is connected to AC power and charging. When the remaining battery charge becomes

depleted, the tablet will present low-battery alerts, allowing pollworkers to avoid power-supply issues on Election Day.

22. Describe any special storage requirements associated with the components of your proposed solution including climate control specifications and stacking restrictions.

ES&S RESPONSE

EXPRESSVOTE

The ExpressVote comes with a soft-sided carrying case and may be stacked eight (8) units high in storage.

The ExpressVote does not need to be powered during storage. However, if the unit is plugged in during storage, the rechargeable battery will charge.

The ExpressVote can be successfully stored in areas with temperatures ranging from -4 to +140 degrees Fahrenheit and humidity levels ranging from 10 percent to 85 percent relative humidity.

DS200

Between elections, different storage options are available for the DS200. The clamshell carrying case, which serves as the top of the ballot box during operation, can be closed, and the tabulator, carrying case, and ballot box base can be stored together. Alternatively, the tabulator and carrying case can be removed from the ballot box base, and up to five (5) ballot box bases can be stacked together. Power is not required for storage; however, if the storage period exceeds eight (8) months, it is recommended to plug the DS200s into standard outlets for 24 hours to recharge the battery prior to use.

The DS200 is not required to be plugged in during storage; however, if the unit is plugged in, the backup battery will charge.

The DS200 can be successfully stored in areas with temperatures ranging from -4 to +140 degrees Fahrenheit and humidity levels ranging from 10 percent to 85 percent relative humidity.

DS450/DS850

The central scanner is designed to remain in a central location. Election officials need only shut down the unit, unplug it, and place the cover over the unit. The unit can be easily rolled to a storage location until it is needed.

Nonetheless, when the DS850/DS450 needs to be moved, it is constructed using rugged, durable materials designed for transport to and from storage and operating locations without damaging the internal circuitry.

The unit rests on a wheeled steel cart that stores all system components, including the scanner and tabulator unit, printers, backup UPS power supply and supplies drawer. The wheels lock during operation.

The DS850/DS450 can be successfully stored in areas with temperatures ranging from -4 to +140 degrees Fahrenheit and humidity levels ranging from 10 percent to 88 percent relative humidity.

EXPRESSPOLL

The ExpressPoll components are transported using the included durable hard-sided storage case. This storage case provides excellent protection for the ExpressPoll components. The storage cases can be stacked, effectively utilizing your vertical storage space.

Storage cases can be stacked up to five cases high, so vertical space is utilized instead of valuable horizontal storage space. Each storage case includes an easy-to-grip handle, and a security audit tag can be placed on each case.

The ExpressPoll can be successfully stored in areas with temperatures ranging from -4 to +140 degrees Fahrenheit and humidity levels ranging from 10 percent to 90 percent relative humidity.

23. In what states and jurisdictions therein, has your proposed solution been installed?

ES&S RESPONSE

Please see **Appendix B – Client List** for a confidential list of all jurisdictions using the ExpressVote, DS200, DS450 and DS850.

EVS 6.0.0.0 is implemented in the State of Utah in 19 counties. The counties include: Box Elder County, Cache County, Daggett County, Davis County, Duchesne County, Garfield County, Grand County, Iron County, Kane County, Millard County, Rich County, Sanpete County, Sevier County, Summit County, Tooele County, Uintah County, Wasatch County, Wayne County and Weber County. EVS 6.0.0.0 is also implemented in Johnson County, Kansas.