WILLIAM M. GARDNER
NEW HAMPSHIRE SECRETARY OF STATE
STATE HOUSE
107 NORTH STATE STREET
CONCORD, NH 03301

New Hampshire Electronic Poll Books

Request for Information 2017 - 002

To Evaluators of Electronic Election Systems

Pursuant to RSA 652:27

Testing and Recommendations

V 5.0

NOTICE TO INDIVIDUALS INVITED TO SUBMIT COMMENTS ON REQUESTS FOR INFORMATION (RFI).

Since the last version (4.1) was released, the vendor conference call has been conducted as planned, comments were received, and changes have been made to pages 1, 2, 3, 4, 10, 16, 17, 19, 21, 23, 25, 26, 30, 32, 42, 45, 48, 49, 73, 77 and 84.

If you believe that someone else should review and be afforded an opportunity to comment on this RFI please contact Assistant Secretary of State Anthony Stevens at Anthony.Stevens@sos.nh.gov or (603) 271-8238. A copy of the current RFI and an opportunity to comment has been provided to appropriate individuals, but it remains an open process.

The policy of the State of New Hampshire is to make most purchases through a competitive response or bidding process. This RFI contemplates a competitive response process for the services of evaluator(s) of electronic election systems that would, upon selection by the NHSOS, ultimately evaluate electronic poll book systems and issue a Recommendation to the New Hampshire Secretary of State (NHSOS) regarding their potential Approval.

Local election officials will be the primary users of the electronic poll books. It is essential that the RFI process involve significant input from local election officials and potential evaluators of electronic election systems. If you are a local election official and wish to provide input into this process, or you have any questions or concerns regarding this RFI, please contact Assistant Secretary of State Anthony Stevens (603) 271-8238 or Assistant Secretary of State Daniel Cloutier at (603)271-0001.

Request for Information

To Evaluators of Electronic Election Systems

Pursuant to RSA 652:27

For Electronic Poll Books Testing and Recommendations

SINGLE POINT OF CONTACT (SPOC):

Anthony Stevens, State House, Room 204, Concord, New Hampshire, 03301-4989

E-mail: Anthony.Stevens@sos.nh.gov

Telephone: (603)271-8238

Fax: (603)271-8242

MAIL RESPONSE TO:

Paula Penney

Secretary of State

State House, Room 204

107 North Main Street

Concord, New Hampshire 03301

ATTENTION

RFI RESPONSE SUBMISSION
REQUIREMENTS FOR EVALUATION VENDORS

This RFI, when issued by the New Hampshire Secretary of State, will contain the RFI response specifications.   This RFI and the contained specifications, when issued, will supersede any previous documentation you may have received from another source or an earlier version (a lower version number, e.g. version 4.1).

For your submission to be considered responsive, the following are required:

- **The Signature Page must be completed and returned, signed in the space provided by a person who is authorized to legally obligate your company.**

- **Your submission must include an "ORIGINAL" and the required number of "COPIES", clearly and permanently marked on the cover.**

- **Printouts of complete original Addenda (if any issued) in numerical sequence, filled out and signed by a person who is authorized to legally obligate your company must be attached to the "ORIGINAL" response submitted.**

Contact: Anthony Stevens at the NHSOS, 603-271-8238, if you need further clarification of these submission instructions.

SIGNATURE PAGE

Date: <DATE>

Response No.: <NUMBER>

Response Date Due: <DATE>

Response Time Due: 2:30 pm

PLEASE DIRECT ANY QUESTIONS REGARDING THIS RFI TO: <NAME>

TEL. NO.: <PHONE NUMBER>

E-MAIL: <EMAIL ADDRESS>

RESPONSE INVITATION FOR: <PROJECT NAME>

OFFER: The undersigned hereby offers to make available to New Hampshire cities and towns and/or the State of New Hampshire the services indicated in the following page(s) of this   RFI at the indicative price(s) quoted, in accordance with conditions of this   RFI. All responses are expected to remain valid for a period of 90 days from the RFI Due Date.

Organization/Company Name:
_____

Address: _____

Tel.: (local)_____

(Toll Free)_____

Fax: _____

Authorized Signature:
_____

(SIGNATURE)

_____

(TYPE OR PRINT NAME)

This document must be signed by a person who is authorized to legally obligate the proposing evaluator of electronic election systems (Evaluation Vendor) The signature also certifies that there have been no alterations or substitutions of any of the RFI documents.

Table of Contents

RFI Response - Checklist

This is a list of activities and requirements Evaluation Vendors commonly forget to include in their RFI response. An incomplete response may be grounds for determining that a response is unable to satisfy the needs of the Secretary of State. You may use this checklist to help prepare your response. If any item below will be sent late, Evaluation Vendor(s) should indicate when the State should expect to receive it.

- [ ] Signature Page – must be signed and included with ORIGINAL Response.

- [ ] Printout of complete Addenda (if any issued), in numerical sequence, filled out by a person who is authorized to legally obligate your company must be included as part of your ORIGINAL response.

- [ ] RFI response packaged and labeled in accordance with RFI Section 1.3: *Response Submission.*

- [ ] Certificate of Good Standing with State of New Hampshire or equivalent, current as of last April 1st.

- [ ] Cover Page should include requirements listed in Section 5.2.2: *Response must contain the following information.*

- [ ] Appendix 1A*: Testing Services Position and Rate Tables* is completed and included.

- [ ] Appendix 1B-1: *Testing Services Activities/Deliverables/Milestones* are completed and included.

- [ ] Appendix 1C: *Staffing Chart Experience and Qualifications* is completed and included.

- [ ] References and Letters of Reference with current contact information.

- [ ] Preparations are made to ensure that the response is delivered prior to the Response Submission due date and time defined in Section 1:13: *Schedule of Events.*

1.0   RFI Purpose and General Instructions

This Request for Information (RFI) for Evaluation Vendor(s) of electronic poll books systems is issued by the New Hampshire Department of State pursuant to RSA 652:27. This RFI solicits expressions of interest from **EVALUATORS OF ELECTRONIC VOTING SYSTEMS** who wish to be considered, in a manner consistent with this Request For Information, including its appendices and exhibits.

High Level Purpose

The New Hampshire Department of State, also known as "NHSOS," is issuing this request soliciting evaluators of electronic election systems ("Evaluation Vendors") to provide a full scope of services, under an indicative pricing mechanism in return for analyzing the Requirements herein, creating test cases, conducting testing and making recommendations regarding electronic poll books systems.

The scope of the electronic poll book testing and recommendations will include:
- Integrity
- Safety and Security
- Performance
- Reliability
- Availability (Scalability)
- Vulnerability
- Auditability
- Documentation

The range of services to be provided include:
- Planning, drafting and refining test assertions and test cases,
- Planning and execution of test procedures to indicated scale in cooperation with New Hampshire cities and towns and NHSOS staff,
- Coordinating state and local staff on the use of vender software in data upload from electronic poll books to the SVRS,
- Project management,
- Recommendations based on execution of test cases, and
- Report writing

General Instructions:

1.1   Evaluation Vendor Conference.
An optional Evaluation Vendor conference call will be held as identified in Section 1.13: *Schedule of Events:*

The purpose of the Evaluation Vendor Conference Call is to:

1.   Request clarification of any section of the RFI.

2.   Request changes to the RFI for EV Requirements considered so restrictive as to prohibit or discourage responses.

3.   Offer suggestions or changes to the RFI that could improve the RFI competition or reduce the indicative cost.

4.   Review any applicable documentation.

All written questions received prior to or at the Evaluation Vendor Conference Call will be read aloud and will receive unofficial oral responses during the Conference Call. Official written answers to these questions will be distributed in accordance with Section 1.2: *Response Inquiries,* of this RFI.

Evaluation vendors are encouraged to submit written questions at least forty-eight (48) hours prior to the conference call in order to enable the NHSOS to formulate better Evaluation Vendor Conference oral responses. No responses will be given prior to the Evaluation Vendor Conference Call.

Evaluation vendors are requested to RSVP via e-mail by the date identified in Section 1.13: *Schedule of Events*, indicating they will participate in the Evaluation Vendor Conference Call.

1.2   Response Inquiries.

All inquiries concerning this RFI shall be made in writing, citing the RFI title, RFI number, page, section, and paragraph, and shall be submitted to:

Anthony Stevens
Department of State
State House, Room 204
107 North Main St.
Concord, New Hampshire 03301-4989
Telephone: (603) 271-8238
E-mail: Anthony.Stevens@sos.nh.gov

Organizations/vendors are encouraged to submit questions via e-mail.

Questions on and clarifications for this RFI and the Memorandum of Understanding, will be addressed until the end of the Evaluation Vendor inquiry period. **Language that conflicts with the RFI may not be accepted.**

Final inquiries must be received no later than the date specified in Section 1.13: *Schedule of Events.* Inquiries received after this date and time will be addressed only if they are deemed by the NHSOS to be critical to the competitive selection process. An official written answer, via email, will be provided to all questions meeting these requirements.

1.3   Response Submission.
All responses in response to this RFI should be submitted as outlined in Section 1.13: *Schedule of Events,* to:

<div align="center">

State of New Hampshire
Department of State
c/o Paula Penney
State House, Room 204
107 North Main St.
Concord, **New Hampshire 03301-4989**
(603) 271-3242

</div>

Evaluators of electronic election systems who wish to be considered should submit one (1) original and preferably two (2) clearly identified copies of their response. The original and all copies should be bound separately, delivered in sealed containers, and permanently marked:

<div align="center">

STATE OF NEW HAMPSHIRE
Department of State
Elections Division

RESPONSE TO SOS RFI 2017-002
Electronic Poll Books Testing and Recommendations

</div>

The Evaluation Vendor's signature on a response submitted in response to this RFI guarantees that the prices quoted have been established without collusion with other eligible Vendors and without effort to preclude the State of New Hampshire from obtaining the best possible competitive response.

Specifications required by the RFI are detailed in Section 3*: Services, Specifications, EV Requirements and Deliverables.* In responding to the RFI, the Evaluation Vendor should address all EV Requirements for information and frame their response in the format outlined in Section 7: *Response Format/Guidelines.* Printouts of complete Addenda (if any issued), in numerical sequence, filled out and signed by a person who is authorized to legally obligate the Evaluation Vendor, must be included as part of your **Original** Response.

All RFI responses are expected to remain valid for a period of ninety (90) days from the Response Due Date.

1.4   Public Disclosure.

All material received in response to this RFI shall become the property of the State and will not be returned to the Evaluation Vendor. Regardless of the Evaluation Vendor(s) selected, the State reserves the right to use any information presented in a response. The content of each Evaluation Vendor's RFI response shall become public information once a memorandum of understanding (MOU) has been signed that ensued from and cites this RFI.

1.5   Oral Presentation.

Prior to the selection of evaluator(s) of electronic election systems under this RFI, an evaluator of electronic election systems may be required to make an oral presentation to clarify any portion of their response or to describe how the EV Requirements will be accomplished. Evaluation Vendor finalists may be asked to conduct the presentation during the period designated in Section 1.13: *Schedule of Events.* More than one Evaluation Vendor may be selected.

1.6   Memorandum of Understanding (MOU) Term Date.

The anticipated *notice to proceed* date is August 20, 2017 or sooner, and services may be required through July, 2022. Additional support may be required, with extensions, for a total of five years, which may extend until July 20, 2027, unless extended.

1.7   Evaluation Vendor(s) Responsibility

Selected Evaluation Vendor(s) shall be solely responsible for meeting all Requirements in the RFI, their response, and any resulting MOU. A Selected Evaluation Vendor may not subcontract any part of the goods or services it agreed to provide without prior written approval from the state.

1.8   Project Budget/Limitation on Price.

The NHSOS makes no representation that EPB Vendors will step forward to make applications for testing and State Approval under the law, or that such EPB Vendors will provide sufficient funds to initiate or cover the cost of testing and making recommendations on the part of Selected Evaluation Vendor(s).

1.9   Response Preparation Costs.

The NHSOS shall not be held liable for any costs incurred by an evaluator of electronic election systems in the preparation of their RFI response or for work performed in connection with signing a memorandum of understanding (MOU) with the Secretary of State.

1.10   Non-Commitment.

The solicitation of the Request for Information shall not commit the NHSOS to select an evaluator of electronic election systems as Evaluation Vendor or ensure that one or more memoranda of understanding (MOU) will be signed.

1.11   RFI Non-Deviation.

Some evaluators of electronic election systems have been provided an electronic version of this RFI. Any alteration to the text or any file associated with this RFI in any way that could be construed to change the intent of the original document is forbidden. Any changes made to the original document may result in your response being considered non-responsive.

The original RFI document is on file with the State of New Hampshire, Secretary of State. This document will serve as the official document for this protocol.

1.12   Evaluation and Memorandum of Understanding

The RFI process is a selection protocol enabling the Secretary of State to establish deliverables, receive input from stakeholders, evaluate responses from multiple entities and ultimately sign an MOU based upon stated criteria or evaluation factors as listed in **Section 8**: *Evaluation Process, Criteria, and Selection,* of this RFI.

As a result of this RFI, the NHSOS expects to sign an MOU with one or more responsive Evaluation Vendors.

1.13 Schedule of Events

Subject to RSA 652:27 (effective August 4, 2017), the new law requires that the Secretary of State shall, within 30 days of the effective date, designate at least one evaluator of electronic voting systems to draft test cases, conduct tests, and make recommendations - no later than 30 days after the effective date. This schedule is established to enable good faith compliance with the law.

EVENT	DATE	TIME
RFI released to evaluators of electronic election systems	06/29/2017	
Evaluation Vendor inquiry period begins (on or about)	07/03/2017	9 A.M.
Optional Pre-response Evaluation Vendor Conference Call	07/17/2017	10:00A.M.
Evaluation Vendor inquiry period ends (Final inquiries due)	07/21/2017	2:30 P.M.
Final State responses to Evaluation Vendor inquiries	07/26/2017	2:30 P.M.
Final date for RFI Response submission	07/31/2017	2:30 P.M.
Invitations for presentations and discussions, if necessary	08/08/2017	2:30 P.M.
Evaluation Vendor presentations/discussion sessions/interviews	08/09/2017 through 8/15/2017	.
MOU Finalization with at least one Evaluation Vendor – target date	08/16/2017	
Anticipated *Notice to Proceed*	08/21/2017	
Availability of Evaluation Vendor staff to	08/21/2017	

develop test cases and conduct testing		
Legal deadline in RSA 652:27 for Secretary of State to select an Evaluation Vendor	09/03/2017	

1.14 Definition of Terms.

Term	**Definition**
Approval	NHSOS Approval of an EPB system, as required by RSA 652:27. The adjective "Approved," when describing an EPB system, refers to the same NHSOS Approval.
Electronic Poll Books Vendor	A vendor that is eligible to submit or submits an application for EPB approval to the NHSOS, pursuant to RSA 652:27. Also referred to as "EPB Vendor."
EPB Requirements	Requirements established by the NHSOS for conducting a trial of EPB systems to comply with RSA 652:27. Selected Evaluation Vendor(s) test EPB systems using these EPB Requirements.
Evaluation Vendor	An evaluator of electronic election systems that is eligible to submit or submits a response in response to this RFI. Refer to RSA 652:27.
EV Requirements	Requirements established by the NHSOS used in its selection process for Evaluation Vendors pursuant to RSA 652:27. EV Requirements apply to Evaluation Vendors.
Mandatory	Products/services that must be provided for the RFI response to be considered.
Normal Business Hours	8:00 a.m. to 4:30 p.m. EST, Monday through

Friday excluding State of New Hampshire holidays. State holidays are: New Year's Day, Martin Luther King Day, President's Day, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, the day after Thanksgiving Day, and Christmas Day. Specific dates will be provided.

Optional	Deliverables that are not mandatory but may be delivered under this RFI.
Preferred	Requirements that are not mandatory but are considered beneficial to the State and its cities and towns, therefore an RFI response meeting these preferred requirements may be selected over one that does not.
Recommendation	EPB system recommendation from a Selected Evaluation Vendor to NHSOS under RSA 652:27. A Recommendation is required prior to NHSOS Approval. It may be positive or negative.
Selected Evaluation Vendor	An Evaluation Vendor that is selected by the NHSOS to conduct tests of EPB systems using NHSOS EV Requirements and to make Recommendations pursuant to RSA 652:27. Evaluators of electronic election systems must submit responses to this RFI in order to be selected by the NHSOS. There may be more than one Selected Evaluation Vendor.

2.0   General Information

2.1 General Overview.

The Secretary of State is seeking responses from evaluators of electronic voting systems to conduct testing of electronic poll book systems and to make recommendations concerning such systems. The Secretary of State will consider all responses that meet the EV Requirements of this RFI.

This evaluation process would be initiated by EPB Vendors who wish to enter into an electronic poll books trial under RSA 652:27. Refer to **Section 2.6.** The EPB system would enable automated voter check-in on Election Day, as well as automated entry of new voter registrations in a manner that would enable such voters to be checked in using an EPB process. The EPB system must allow local election officials with EPB system security clearance to exercise control over the process, to troubleshoot the system, and make decisions at the local level, including such decisions as returning to a manual process quickly. On Election Day, there must be an air gap between the EPB system and the SVRS. Any upload to the SVRS occurring after the Election must be compatible with the SVRS and is subject to EPB Requirements established by the Secretary of State.

It is envisioned that EPB Vendors will initiate this process by submitting an application to a Selected Evaluation Vendor for testing and recommendation under RSA 652:27, with a copy to the NHSOS, as set forth herein.

RSA 652:27 (see **Section 2.6**) states that "no electronic poll book trial may proceed unless the electronic poll books system and application has been recommended for approval by an evaluator of electronic election systems using requirements established by the Secretary of State." It also states that an "electronic poll book trial program must originate with a city or town election before becoming eligible for use at a state election in the same city or town."

The schedule should allow for conduct of EPB evaluations in the schedule set forth herein, enabling interested EPB Vendors who can obtain NHSOS Approval under RSA 652:27 the ability to roll out a partial trial (entailing EPB voter intake, and something less than complete new voter registration in EPB) as early as November 2017, and full EPB trials (EPB voter intake and complete EPB new voter registration) in early 2018, including town elections in the second week of March, 2018. It is not clear whether return-to-undeclared capability in EPB would be tested before August, 2018, in time for the September, 2018 State Primary.

This RFI solicits responses from evaluators of electronic election systems so that, if an MOU is signed with the Secretary of State, it would enable Selected Evaluation Vendor(s) to contract with interested EPB vendors for EPB testing and recommendations to the NHSOS. Selected Evaluation Vendor(s) would create EPB test assertions, test scenarios, and test cases pursuant to NHSOS recommendations herein for review by the NHSOS. Upon agreement with the NHSOS, Selected Evaluation Vendor(s) would conduct tests based on the NHSOS EPB Requirements and make recommendations to the NHSOS concerning potential Approval. This document sets forth New Hampshire EPB Requirements that can serve as the basis for test assertions, test scenarios, and test cases for execution by Selected Evaluation Vendor(s).

2.2 Background

Due to interest in electronic poll books demonstrated over the past 16 months, the New Hampshire Secretary of State initiated an E-Poll books Working Group to establish goals, identify advantages and disadvantages and trade-offs, evaluate EPB Vendor capabilities, design EPB Requirements, and address legislation that could help evolve toward trials of electronic poll books.

To begin the conversation with EPB Vendors, an earlier version of indicative EPB Requirements was circulated among potential EPB vendors to provide New Hampshire background, describe potential system EPB Requirements for an electronic poll book solution that might be used by local jurisdictions in the State of New Hampshire. EPB Vendors who attended a March 31, 2017 EPB Vendor Fair were asked to make presentations in light of these draft EPB Requirements.

With the help of vendor responses to such EPB Requirements and vendor appearances at the March 31, 2017 EPB Vendor Fair, the New Hampshire House and Senate adopted legislation that, when effective, would instruct the Secretary of State to select EPB Evaluation Vendor(s) and establish EPB Requirements.

Under Senate Bill 113, the Secretary of State would be directed to select at least one evaluator of electronic election systems within 60 days after the date the law is signed.

Under adopted legislation in **Section 2.6**, RSA 652:27 would require New Hampshire cities and towns "to assume all costs associated with electronic poll books." Interested EPB vendors may elect to pay Selected Evaluation Vendor(s) to undertake testing of their EPB systems based on EPB Requirements adopted by the NHSOS in anticipation of a positive or negative Recommendation. If the NHSOS provides Approval for an EPB system, that would enable trial use of an EPB system by a New Hampshire city or town under the above law if Safe Use Procedures (**EXHIBIT 4**) are followed.

2.3 Strategy to Develop and Implement

As a result, EPB Vendors would have to:

- make a post-election upload of clean voter history data (7 different data fields) to the Statewide Voter Registration System (SVRS);
- for each new voter registration on election day, ensure complete data and avoid creating duplicates (names with the same date of birth) within SVRS; and
- process return-to-undeclared voters in primaries.

New Hampshire has election day registration, and would become one of the only states to require state approval of electronic poll books that integrates election day registration with voter intake in the same electronic poll books system. As such, substantial specification and testing by the State will be necessary to qualify any voter registration software. Roughly 50% of new election day voter registrations are from individuals previously registered elsewhere in New Hampshire. The supervisors of the checklist new voter registration interface in EPB will ultimately include all data fields in the voter registration form, plus qualified voter affidavit and domicile evidence obligation, with a hard warning for required fields.

The pending legislation requires that local jurisdictions use EPBs in a local election before they use EPBs in a state election. The next regularly scheduled state elections occur in September and November of 2018. The next regular local elections are city elections in September and November of 2017 and town elections in March of 2018. If there is sufficient time available for Evaluation Vendors to test EPB systems to state Requirements, sufficient interest and attention on the part of EPB Vendors, Selected Evaluation Vendor(s), and towns and cities, optimistic targets would include:

- An Approved EPB system (voter intake and upload to SVRS only) by November, 2017 and
- An Approved EPB system (voter intake and new voter registration, with uploads to SVRS) available in early 2018.

It is anticipated that an evaluation vendor would travel to at least one New Hampshire location to observe a test at a polling place.

2.4 System Users and Other Stakeholders

New Hampshire voters, moderators, town/city clerks and supervisors of the checklist and the Secretary of State's Elections Division will be the primary users of this system.

2.5 Goals and Objectives

The goals of this project, as set forth in RSA 652:27, are to:

- Enable the cities and towns to conduct trials of electronic poll books, pursuant to RSA 652:27, and
- Enable the NHSOS to file a report with the Speaker of the House of Representatives, the President of the Senate, and the chairpersons of the House and Senate standing committees with jurisdiction over election law, no later than November 1, 2021 that lays out a plan for the implementation of an electronic poll book system based on successful electronic poll book trials conducted under RSA 652:27.

2.6 The System

2.6.1 Following the Law (adopted July 5, 2017, effective August 4, 2017)

RSA 652:27, I states:

- Cities and towns are hereby authorized to conduct a trial of electronic poll book devices for voter registration and check-in for elections.
- The trial shall be compliant with all statutes directly or indirectly related to voter checklists and maintenance of the statewide centralized voter registration database including the processes related to voter registration, voter check-in and check-out, the processing of absentee ballots, the collection of all fields of data required for registration or check-in, and the delivery of that data to the secretary of state in a format compatible with the statewide centralized voter registration database.
- The provisions of RSA 654:34, RSA 659:55, RSA 659:13, RSA 659:14, and RSA 659:23, as they relate to manual entries on a paper checklist, are hereby waived in order to accommodate an electronic poll book, provided the same information required of the voter is obtained and recorded by the electronic poll book, and can be retrieved and printed at any time including during an election.
- In addition, nonpublic data related to individual voter data shall remain confidential, and no voter data shall be released or retained by an electronic poll book vendor, including its agents, or any company or individual that provides software, hardware, or services to the vendor for any purpose.
- An electronic poll book vendor shall not have access to any voter data except as specifically necessary to setup, maintain, or train for an electronic poll book program authorized under RSA 652:27.
- Adequate back-up systems shall be in place as determined by the local election officials for local elections and the secretary of state for all other elections. A back-up system shall include a "real time" download of voters who have checked in or registered on the day of the election.
- The electronic poll book shall have the ability to generate a paper voter checklist completely marked to reflect participation in the election up to the time of any system failure or malfunction.

- A sufficient number of high speed printers shall be available in the polling place to produce a back-up paper checklist for use in the event of a system failure.
- A marked checklist shall be printed upon the completion of every election along with any reports required by statute and shall be retained by the clerk.

RSA 652:27, II states:

- The cities and towns shall assume all costs associated with electronic poll books.
- No electronic poll book trial program may proceed unless the electronic poll books system and application has been recommended for approval by an evaluator of electronic election systems using requirements established by the secretary of state.
- Within 30 days of the effective date of this section, the secretary of state shall designate at least one evaluator of electronic election systems to draft test cases, conduct tests, and make recommendations.
- Recommendations to the secretary of state from an evaluator of electronic election systems shall be conditioned upon safe use procedures.
- The secretary of state may approve electronic poll book systems based on recommendations from an evaluator of electronic election systems.
- No city or town may use an electronic poll book system that has not been approved by the secretary of state.
- The secretary of state, within 30 days of the effective date of this section, shall prepare requirements for conducting a trial of electronic poll book devices that outline specific conditions that must be met for compliance with this section.
- An electronic poll book trial program must originate with a city or town election before becoming eligible for use at a state election in the same city or town.

RSA 652:27, III states:

- The city or town clerk shall file with the secretary of state all documentation that is necessary to show that all requirements in this section have been met no later than 30 days before an electronic poll book trial program shall take place.
- Within 30 days after the initial use of electronic poll books in accordance with this section, the city or town shall submit a report to the secretary of state, who shall review such reports and forward them to the speaker of the house of representatives, the president of the senate, and the chairpersons of the house and senate standing committees with jurisdiction over election law.
- Each report shall describe the outcome of the program, addressing voter experiences, wait times, voter throughput times, personnel costs, hardware and software costs, and the completeness and accuracy of the data recorded, reported, and submitted for import to the statewide centralized voter registration database.

Section 2, entitled "Report," states:

- The secretary of state shall file a report with the speaker of the house of representatives, the president of the senate, and the chairpersons of the house and senate standing committees with jurisdiction over election law, no later than November 1, 2021, that lays out a plan for the implementation of an electronic poll book system based on successful electronic poll book trials conducted under RSA 652:27.

Senate Bill 113, as adopted, is subject to the following:

> 3 Repeal. RSA 652:27, relative to electronic poll books, is repealed.
> 4 Effective Date.
> > I. Section 3 (repeal) of this act shall take effect January 1, 2023.
> > II. The remainder of this act shall take effect 30 days after its passage (August 4, 2017).

2.6.2 Technical Concept

It is anticipated that this electronic poll books project will consider a variety of technical approaches by EPB vendors to deliver EPB services. Some EPB Vendors will be agnostic concerning operating systems and platforms, whereas others may be limited in these respects.

The Selected Evaluation Vendor(s) and cities and towns will review EPB systems to determine if they can quickly transition to manual processes if the communications or other capability fails. Vendors should demonstrate expertise in implementing New Hampshire EPB Requirements, as well as Safe Use Procedures (EXHIBIT 4), industry standards and best practices with their design, development, implementation, and user system documentation.

The EPB system is expected to be easy to use and intuitive. Towns and cities will continue to control and manage data input, deletions and corrections. Minimal training should be required for end users. Uploads to the State's SVRS should be smooth and minimize reliance on EPB Vendor support for all except the most difficult of tasks.

2.6.3 Oversight

NHSOS staff, legislators and election officials have been and will be meeting regularly and will provide input to the Secretary of State. Choice of EPB vendors, payment arrangements, implementation timing, and many related decisions will be made at the local level, subject to NHSOS approval of a EPB Vendor's EPB system, based on an Evaluation Vendor's recommendation.

2.7 Critical Risks

2.7.1 Implementation Issues

Integrating Election Day registration into an EPB system, which entails enabling a smooth upload after an election, will take considerable time and effort to design, specify, program and test.

In the EPB new voter registration interface, mandatory hard warnings would oblige local data entry staff working for the supervisors of the checklist to enter each required voter registration field on the voter registration form (unless it can be scanned from the drivers' license).

In the interim period before a complete new voter registration upload interface can be developed, supervisors of the checklist may enter the new registrant's name, enable this proxy name in the EPB system for each new voter registered on election day, including information fields that should appear on the checklist (name, party, domicile address), so that these newly registered voters can pick up a ballot and vote using the electronic poll books system. These newly registered proxy names would not be uploaded to the SVRS. This half-step would help provide a proof-of-concept for connectivity and insertion in the local voter database used by the EPB system, and it would enable an up-to-the-moment marked checklist to be printed out using the State's format (but without an assigned voter number and bar code).

Using the upload interface, local jurisdictions will be expected to review and submit each new voter registrant individually to ensure that data is complete, addressing is consistent and duplicates of names already in the system are avoided.

2.7.2 Critical Economic Issues

RSA 652:27 requires that "the cities and towns will assume all costs associated with electronic poll books."

The new law would also require that at least one EPB Evaluation Vendor be selected by the Secretary of State within 60 days of its passage. Selected Evaluation Vendor(s) would conduct tests of EPB systems based on EPB Requirements set forth by the Secretary of State.

Progress toward successful EPB trials pursuant to RSA 652:27depends on:

- o Interest of EPB Vendors, who must revamp their voter intake, new voter registration and return-to-undeclared software and hardware capability;
- o Commitment of towns and cities willing to commit resources as needed;
- o Capacity of towns and cities to staff supervisor of the checklist tables and return-to-undeclared tables to enable accurate data entry and processing of voters;
- o Capacity of Selected Evaluation Vendor(s), cities and towns, and NHSOS to test and re-test to Requirements in the event of initial failures; and
- o Capacity of towns and cities to complete voter history and new voter registration uploads after an election.

2.8 Overview of Approval Process

The evaluation of EPB solution to the test protocol herein may be performed in a three-phase approach (voter intake, election day registration, and return-to-undeclared), in which each phase is dependent on successfully completing the previous phase. Without successful completion of the previous phase, the electronic poll book solution will not be evaluated in the next phase. The three phases and the evaluation criteria for completion are as follows:

Administrative Review – To meet the requirements of New Hampshire laws, EPB Vendors will submit applications to a Selected Evaluation Vendor, with a copy to the NHSOS, for evaluation for completeness and correctness. If the application is deemed sufficient, the Selected Evaluation Vendor will proceed based on an agreement with the EPB Vendor. All required information and documentation must be submitted to the Selected Evaluation Vendor, with a copy to the NHSOS, for evaluation. Upon receipt of the checklist and requested documentation, the Evaluation Vendor will review the checklist and supporting documentation for completeness and correctness. If the application is deemed sufficient, the Evaluation Vendor may proceed to conduct its evaluation of the EPB system based on the Deliverables and the EPB Requirements herein.

Test Data – Each step of the test cases contains an expected result to provide objective pass/fail criteria. All test data provided to a Selected Evaluation Vendor will be run independently in the order the Selected Evaluation Vendor determines is the most effective and efficient. Testing methods are expected to be static and dynamic.

2.8.1 Acceptance Test

Acceptance Testing at the local level is an integral part of the overall process of readying a town or city to use EPBs. After there is a Selected Evaluation Vendor's recommendation and the Secretary of State's Approval of an EPB system, each town or city which has a trial arrangement with an EPB Vendor will conduct an acceptance test at the time of delivery, giving 5 days' notice to the Secretary of State. The Secretary of State's Approval of the EPB system may be revoked if the EPB fails the local acceptance test. Acceptance testing shall be used in part to check

- a wider variety of situations based on local experience, and
- EPB system availability (scalability), particularly for larger jurisdictions, across the entire communications range at the polling place.

2.9 Confidential State Information.

The Evaluation Vendor agrees that all discussions, information, or test cases gained during an engagement shall be considered confidential and that no information gathered by Evaluation Vendor(s) or EPB Vendors shall be released without prior consent of the NHSOS.

All data accessed, test scenarios and test cases developed by the Evaluation Vendor are the property of the NHSOS. All data generated by the system is the property of the State. Neither an Evaluation Vendor, nor the EPB Vendor, shall give, sell, or otherwise disclose any information within State databases, public or otherwise, without the expressed written permission of the NHSOS.

Confidential data, such as dates of birth, may be scanned by EPB systems from voters' drivers' licenses. EPB Vendors must not store and/or use this confidential data in a manner that is outside the law. Refer to RSA 260:14, RSA 654:45, and RSA 654:31-a. Evaluation Vendor(s) may recommend the best means of keeping this data confidential.

3 Services, Specifications, EV Requirements, and Deliverables

3.1   Administrative Specifications.

3.1.1 Reasonable Travel Expense

It is anticipated that the Evaluation Vendor(s) would travel to at least one polling place in New Hampshire to observe an on-site test. The Evaluation Vendor should, in their RFI response, specify what party will assume travel expenses including, but not limited to:

- Meals
- Hotel
- Airfare
- Car rentals
- Car mileage
- Out-of-pocket expenses

The State will not pay for any of the above expenses.

3.1.2 Shipping and Delivery Fee Exemption

The State will not pay for any shipping or delivery fees pursuant to this RFI.

3.1.3 Workspace

Subject to agreement with a local jurisdiction, local polling place facilities may be provided by cities and towns that wish to conduct trials under RSA 652:27. The Secretary of State will not provide short term workspace, nor will it be responsible for arranging local polling place facilities for EPB tests. If a Selected Evaluation Vendor has specific needs to fulfill State EV Requirements, such as polling places for performance and availability (scalability) tests, these needs should be included in their RFI response and their independent arrangements with EPB Vendors who make application for Approval.

3.1.4 Access

If appropriate, and subject to the applicable laws, local New Hampshire cities and towns interested in electronic poll books trials under RSA 652:27 will be responsible for providing a Selected Evaluation Vendor with access to all program files, libraries, personal computer-based systems, software packages, network systems, security systems, and hardware as required to complete evaluation services.

3.1.5 State–Owned Documents and Copyright Privileges

During the period of the MOU, Selected Evaluation Vendor(s) shall provide NHSOS access to all State-owned documents, materials, reports and other work in progress relating to this RFI.   Upon expiration or termination of the Memorandum of Understanding with NHSOS, a Selected Evaluation Vendor will turn over all State-owned documents, material, reports, and work in progress relating to this RFI to NHSOS.

3.1.6 Documentation

The NHSOS recognizes that the availability of comprehensive, well-organized, and easy –to-use documentation is critical to both the short and long-range success of any project. Documentation, including test scenarios and test cases, developed by Selected Evaluation Vendor(s) shall be supplied both in printed and electronic format to allow for easier modification in the future.

Documentation shall include one (1) hard copy and one (1) electronic version of every document.

Data shall be provided as required on machine-readable media as mutually agreed to by the Selected Evaluation Vendor(s) and the State Agency project managers.

The NHSOS expects that Selected Evaluation Vendor(s) will supply manuals and/or documentation.

3.2 Project/Status Meetings and Reporting

This section defines the standard State policy regarding meetings and reporting.

Introductory **Meeting**	A Selected Evaluation Vendor is expected to participate in an introductory meeting with the program and NHSOS staffs.
Kickoff **Meeting**	Initial project meeting between a Selected Evaluation Vendor's personnel and the State program and information technology personnel to review the project intent.
Status **Meetings**	• Selected Evaluation Vendor(s) must participate in project and/or status meetings, either in person or via conference calls, with the program and the information technology professionals from the NHSOS during the term of the MOU as required by the NHSOS. It is anticipated that the beginning of the project will require, at a minimum, bi-weekly project/status meetings. • Project/status meetings will cover the technical, schedule, and resource aspects of the project as well as the details of the percent complete status of required activities. Emphasis should be placed on the accomplishments for the concluded reporting period, the planned activity for the future reporting period, and identification and resolution of all issues and problems. • The agenda, reports, and minutes of each meeting shall be produced and distributed as mutually agreed by the NHSOS and a Selected Evaluation Vendor's project manager.

3.3 Scope of Services

This RFI addresses project management, planning, creation of test cases and the testing of EPB systems as specified in the Deliverables and EV Requirements in this RFI.

Selected Evaluation Vendor(s) will be responsible for working in partnership with the NHSOS's technical and non-technical staff and cities and towns to provide all EV Requirements and deliverables defined in Section 3.3.1: *Project Deliverables.*

3.3.1 Deliverables

Mandatory Deliverables are listed below.

Project Deliverables (Mandatory) for each segment
1. Final Project Work Plan including milestones, agreement on test cases and strategy, evaluation testing, recommendation

2. Status Meetings:
      a. Project Kick-off meeting and minutes.
      b. During test engagement, bi-weekly meetings and minutes, including bi-weekly updates to the Project Work Plan.

3. Report of the analysis of business requirements.
4. Analysis of existing test cases that have been completed by EPB Vendors at test facilities.
5. Test Assertions, Test Cases and Test Scenarios Finalized for anticipated phases and agreed to by Secretary of State, reflecting mechanisms to test EPB Vendor's compliance with all EPB Requirements set forth in Appendices and Exhibits, including Configuration, Performance, Availability, Reliability, Safety and Security, Auditability, Documentation and Usability. May be done by phases. (See below.)
6.   System Test Plan and test scenarios
7. Report of the testing results and a log of problems and resolutions at midpoint and at the end.

| **IT SERVICES – ACTIVITIES/** |
| **DELIVERABLES/MILESTONES** |
| **PHASE ONE** |
| 1.1 Application received |
| 1.2 Completed test cases and scenarios, approved by NHSOS |
| 1.3 Voter Intake: Configuration, performance, reliability, auditability, documentation |
| 1.4 Voter intake: Availability (Scalability), safety and security |
| 1.5 Voter Intake: Completion |
| **PHASE TWO** |
| 2.1 New Voter Registration: Configuration, performance, reliability, auditability, and documentation |
| 2.2 New Voter Registration: Availability (Scalability), safety and security |
| 2.3 New Voter Registration: Completion |
| **PHASE THREE** |
| 3.1 Return to Undeclared: Configuration performance, reliability, auditability, and documentation |
| 3.2 Return to undeclared: Availability (Scalability), safety and security |
| 3.6 Return to undeclared: Completion |

4   **Introduction to EPB Vendor Approval** Process

4.1 Purpose of Procedures

These procedures have been developed and approved as part of a formal and organized process for EPB Vendors to follow when seeking NHSOS Approval for an electronic poll book system or a significant improvement or modification to an existing electronic poll book system currently approved for use in New Hampshire. To this end, these test procedures are designed to:

1. Ensure conformity with New Hampshire election laws relating to the acquisition and use of electronic poll book systems and equipment.
2. Provide an organized and consistent means of evaluating and recommending Approval of electronic poll book systems and equipment marketed for use in New Hampshire;
3. Provide an organized and consistent means of evaluating and re-approving additional capabilities and changes in the method of operation for electronic poll book systems previously Approved for use in New Hampshire;
4. Determine whether electronic poll book systems operate properly and are installed and tested in compliance with the NHSOS's approved procedures; and
5. Provide for the accurate recording of data and reporting of voters who participated in an election for any jurisdiction in which each Approved system is used.

4.2   Authority

New Hampshire RSA 652:27 requires that electronic poll book (EPB) systems be Approved for use in elections by the NHSOS. Each EPB system submitted for Approval in New Hampshire shall undergo the NHSOS's Approval process. State Approval and local Acceptance Testing is intended to verify that the design and performance of the electronic poll book complies with all applicable New Hampshire laws and that it provides the functionality required by the New Hampshire Secretary of State (NHSOS).

According to RSA 652:27, "(a)n electronic poll book trial program must originate with a city or town election before becoming eligible for use at a state election in the same city or town."

4.3   Scope of EV Requirements

1. The electronic poll book system and equipment must comply with the provisions of New Hampshire laws relating to voter registration, absentee ballots, ballot clerk procedures, and election reporting.
2. The electronic poll book system or equipment must comply with the provisions of RSA 652:27.

4.4   Applicability

1. The procedures outlined in this document are applicable to all electronic poll book systems in the State of New Hampshire under the provisions of RSA 652:27.
2. These procedures are intended to assist local jurisdictions in identifying EPB systems that meet State EPB Requirements (Refer to **EXHIBIT 3)** and are available for purchase based on any individual locality's needs, e.g. variations in communications distances.
3. Any modification to the hardware, firmware, or software of an existing system that has previously been Approved by the New Hampshire Secretary of State in accordance with these procedures will, in general, invalidate the NHSOS Approval unless it can be determined by the New Hampshire Secretary of State that its impact will be minimal.
4. The intent of these procedures is to test EPB systems for configuration, performance, reliability, availability (scalability), safety and security, auditability and capacity to revert to manual methods in event of failure before they can be used on trial basis in the State of New Hampshire.
5. Re-approval shall be required when an Approved EPB Vendor makes significant changes or enhancements to its electronic poll book system.
6. An Approved EPB Vendor may submit an EPB System Feature Enhancement Review & Re-approval Waiver Request to a Selected Evaluation Vendor, with a copy to the NHSOS, when the EPB vendor believes that an enhancement to its currently approved EPB software does not warrant the necessity of a full approval review of the EPB system. The Selected Evaluation Vendor will prepare a Recommendation for the NHSOS commenting on whether it believes the request should receive Approval. EPB Vendors may submit a maximum of one such request per system within a six month period.
7. These procedures are designed to enable the NHSOS to make a report no later than November 1, 2021 that lays out a plan for the implementation of an EPB system based on successful EPB trials conducted under RSA 652:27.

4.5   Withdrawal of Approval and Suspension

The NHSOS reserves the right to reexamine and reevaluate any previously any previously approved EPB system for any reason at any time. Any previously approved EPB system that does not pass the re-approval testing will have its approval withdrawn. An EPB system that has had its Approval withdrawn by NHSOS may not be used in elections in the State, unless it is in parallel with a paper system that is completely compliant with the law and does not rely on RSA 652:27.

When sufficient evidence is provided to indicate that vulnerability is present in an Approved EPB system, NHSOS may suspend the usage of an EPB system pending the results of its re-approval.

5 Review and Approval Process

5.1 Summary of Process

These procedures are limited to those systems and equipment that are in production and available for installation and use. In certain cases, software modifications may still be needed to enable the system to comply with New Hampshire law, e.g.:

(a)   uploading New Voter Registration data, and

(b)   enabling New Hampshire's "return-to-undeclared" process during party primaries by creating a separate set of records that are not synchronized with the marked checklist data on election day and are instead submitted as an independent data set to the SVRS after an election, pursuant to RSA 654:34.

Since the above software changes may require considerable programming and testing, EPB Vendors may elect to obtain the State's Approval in phases.

The following steps have been established to carry out the Review and Approval Process. These steps are designed so that the NHSOS can, at any point, with input from a Selected Evaluation Vendor, make a determination to continue the evaluation.

5.2 Procedure for Approval

The evaluation of the EPB Vendor's system will proceed in the following steps.

5.3 Submit Letter of Request for Approval &Approval Fee (Step 1)

The approval evaluation procedure shall be initiated by a letter from an EPB Vendor to a Selected Evaluation Vendor, with a copy to the NHSOS, requesting initiation of the Approval protocol for either a specific EPB system or for a software, firmware, or hardware modification to an Approved EPB system.

EPB Vendors are expected to arrange independently with a Selected Evaluation Vendor for these services.

To facilitate the trial process envisioned in RSA 652:27, EPB Vendors may, in their request for Approval, specify their intent to test in phases, focusing first on the voter intake portion of EPB Requirements, then new voter registration, and later "return-to-undeclared". Before implementing a set of EPB Requirements in a state election, local officials must have experience with using that set in a local election, and that phase must have been tested by a Selected Evaluation Vendor and Approved by the Secretary of State.

A Selected Evaluation Vendor will notify the EPB Vendor, with a copy to the NHSOS, of the earliest date after which the requested approval evaluation can begin.

If the NHSOS finds any reason to deny the EPB Vendor's application following a recommendation from a Selected Evaluation Vendor, the Selected Evaluation Vendor will notify the EPB Vendor in writing, with a copy to the NHSOS.

5.3.1 Letter of Request for Approval Components

The request to begin the approval process for an EPB system shall be a written letter addressed to Selected Evaluation Vendor, with a copy to:

<div align="center">
New Hampshire Secretary of State
State House, Room 204
107 North Main Street
New Hampshire 03304
</div>

- The request shall be signed by a company officer and contain the following information:

- Identification of the specific EPB system and phases (e.g. voter intake, election day registration, return-to-undeclared) to be evaluated for approval.

Each EPB system or version of an EPB system requires a separate request for approval. Each component of the hardware, firmware, and software must be identified by version number.

- Copies of documents substantiating completion of certification or approval by any other state.

- Whether the proposed EPB system has ever been denied state certification or state approval or had state certification or state approval withdrawn in any other state.

- A brief overview description of the EPB system. Typical marketing brochures are usually sufficient for this description.

- Any agreed-to payments required to an Evaluation Vendor to initiate the EPB Approval process.

5.4 Submit a Technical Data Package and Corporate Information (Step 2)

An EPB Vendor shall submit a Technical Data Package, Corporate Information, and other material described within this section of the document.

A Selected Evaluation Vendor will review the Technical Data Package, Corporate information, and other materials provided and notify the vendor of any deficiencies, with a copy to the NHSOS. The Approval process for the electronic poll book system will not proceed beyond this step until the Technical Data Package and Corporate information are completely submitted.

5.4.1   Technical Data Package (TDP) Components

Each item in the package must be clearly identified; if the TDP is incomplete or the items in the package are not clearly identified, the entire package may be returned to the EPB Vendor and the evaluation of the EPB system rescheduled.

Customer Maintenance Documentation.   Documentation describing any maintenance that the EPB Vendor recommends can be performed by a customer with minimal knowledge of the system.

Operations Manual: Operations documentation that is normally supplied to the customer for use by the person(s) who will operate the equipment.

Recommended Use Procedures. Specific election administration procedures recommended for use with the EPB Vendor's system.

Software License Agreement. The EPB Vendor's software license agreement must be perpetual. An annual renewable support fee may be included as an option.

Customer Documentation. A complete set of all documentation which is available to the purchaser/user of the EPB Vendor's electronic poll book system. Clearly identify the documentation that is included in the cost of the system and the documentation.

Standard Contract. Statement of deliverables to include: verification statement that equipment purchased will be identical to equipment approved by the NHSOS, software licenses, warranties, support services provided, etc. and associated cost of each.

Test cases. A matrix of tests performed by electronic poll books Selected Evaluation Vendors, identifying test cases, the hardware and software versions tested, states conducted for, and test dates.

Warranty: The period and extent of the warranty and the method of repair/replacement for all hardware items; the circumstances under which equipment is replaced rather than repaired and the method by which a user requests such replacement; additional warranties that are available over and above the standard warranty, what these warranties cover, and their costs; the period and extent of warranty and the method of correction or replacement for all software provided as part of the EPB Vendor's electronic poll book system; and the technical documentation provided with all hardware and software that is used to certify that the individual component will perform in the manner and for the specified time.

6   Staffing

Using all information contained in or referenced in this RFI and its prior experience, the Evaluation Vendor must propose to provide a baseline complement of staff to create test cases, achieve agreement with the NHSOS on test cases, conduct tests, and make recommendations. The Evaluation Vendor must also propose to provide these functions outside of normal business hours, if necessary. (Reference Use of Appendix 1C: *Staffing Chart*)

6.1   Key Personnel

6.1.1 Department of State.

The New Hampshire Secretary of State has assigned four individuals, a Deputy Secretary of State, a project manager, a chief information officer, and subject matter expert devoted to this project.

6.1.2 Project Team Members:

Name	Role	NHSOS Project Team	Responsibility
William M. Gardner	Elected New Hampshire Secretary of State	Actively engaged	Ultimately responsible for the successful compliance with RSA 652:27.
Dave Scanlan	SOS Executive	Yes	Project Executive. Chair of EPB Working Group. Primary contact for changes to scope.
Anthony Stevens	Project Manager	Yes	Project Administrator. Project planning and control. Professional Services oversight and primary contact. MOU Administrator. Stakeholder liaison. Monitors MOU terms and compliance. Monitors project payments.
Daniel Cloutier	NHSOS CIO	Yes	Technical advisor
Colleen McCormack	Subject Matter Expert	Yes	Examine detail of procedures and legal compliance.

6.1.3   Evaluation Vendor.

Qualifications of Evaluation Vendor Personnel.

Evaluation Vendor personnel are defined as proposed:

Minimum requirements for proposed project manager. Project manager has overall project responsibility for all Evaluation Vendor proposed staff and activities.

- At least 3 years of information technology experience.
- Experience is the use of project management tools and

       techniques
- Excellent communication and writing skills
- Provide resume, detailing educational and professional credentials.
- Provide at least 2 references.

6.2 Staff Retention/Performance.

NHSOS reserves the right to interview anyone proposed for work on this MOU.

During the life of the MOU, Selected Evaluation Vendor(s) shall confirm that all personnel assigned to the project shall be qualified to perform responsibilities and services as indicated in the Appendix 1D: *Staffing Reference Chart*.

7 Response Format/Guidelines

7.1 General Information

Interested Evaluation Vendors should respond to this RFI according to the format specified below, including the use of attached appendix forms that will be utilized as a base for evaluation. All responses should be concise, well organized, and provide sufficient detail, where appropriate, to allow the evaluators to clearly determine the benefit of the organization's/vendor's offering.

The NHSOS encourages free and open competition among Evaluation Vendors. Specifications, responses, and conditions are designed to accomplish this objective, consistent with NHSOS's needs and guidelines.

7.2 Response Outline.

Responding Evaluation Vendors, when presenting their responses, are expected to use the following outline:

- Cover Page
- Signature Page and any Addenda, if issued
- Table of Contents
- Glossary of Terms and Abbreviations
- Section I: Executive Summary
- Section II: Evaluation Vendor Profile

- Section III: Sub-Contracted Evaluation Vendor Profiles
- Section IV: Experience and Staffing Chart (Appendix 1C)
- Section V: Personnel Resumes and Staffing Reference Chart (Appendix 1D)
- Section VI: Detailed Response/ Evaluation Vendor Response Template (Appendix 1E)
- Section VII: Cost Response (Appendix 1A and 1B)
- Section VIII: New Hampshire Certificate of Authority (Appendix 4)

7.3   Proposal Description.

Cover Page.

The first page of the Evaluation Vendor's proposal should be a cover page containing:

<div align="center">

STATE OF NEW HAMPSHIRE
Department of State
Elections Division
HAVA Office

RESPONSE TO SOS
RFI SOS 2017 - 002

</div>

The cover page should include the Evaluation Vendor's name, contact person, contact telephone number, address, city, state, zip code, fax number, and e-mail address. All subsequent pages must be numbered.

Signature Page and Addenda

A responding Evaluation Vendors is expected to sign and return the Signature Page; thereby acknowledging that the respondent has read the Appendices and Exhibits with this RFI, understands them, and agrees to the conditions set forth herein, stating any exceptions.

Printouts of complete Addenda (if any issued), in numerical sequence, filled out and signed by a person who is authorized to

legally obligate the Evaluation Vendor company must be included as part of the ORIGINAL response.

Table of Contents

The Evaluation Vendor should provide a table of contents with corresponding page numbers relating to their response.

Glossary of Terms and Abbreviations

The Evaluation Vendor should provide a glossary of all terms and/or abbreviations used throughout their response.

Section I: Executive Summary

The executive summary should summarize the Evaluation Vendor's proposed services to be performed, and the price structure of the project. The Evaluation Vendor should clearly identify its qualifications to meet the EV Requirements defined in the RFI, pages 18 and 19, and offer an approach that reveals a clear understanding of the EV Requirements in this RFI.

This summary provides Evaluation Vendors the opportunity to describe those factors that they believe distinguish them from other Evaluation Vendors.

Section II: Evaluation Vendor Profile

The Evaluation Vendor is expected to provide, at a minimum, the following information:

- General entity overview, background, number of employees, current project commitment, other (number, length of time, resources committed).

- Information demonstrating their staff is of sufficient size and experience to complete the EV Requirements outlined in this RFI.

- Any litigation, previous or currently outstanding, relating to the Evaluation Vendor and any proposed sub-contractors' performance on information technology projects.

Section III: Sub-Contracted Evaluation Vendor Profile

- General entity overview, background, number of employees, current project commitment, other (number, length of time, resources committed).

- Contractual relationship between companies. The Evaluation Vendor is responsible for all deliverables and schedule deadlines, set forth herein.

Section IV: Experience.

Distinguishing public and private sector work, describe experience with similar project activity.

Previous Test Engagements - Overview:

Evaluation Vendors are expected to include the length of time for each related previous test engagement, dollar value of each project, project description, scope, and state whether or not the project was completed on time and within the contracted dollar amount.

References (minimum of three)

Responding Evaluation Vendors are expected to provide a minimum of three (3) references, preferably to projects described herein:

For public sector, including State agencies and the federal or other state government, and other references for projects of similar scope, provide the following contact information:

> Name
> Title
> Organization name
> Address
> Phone/fax numbers
> E-mail address
> Dates of project/contract

Section V: Personnel Resumes

Responding Evaluation Vendors are expected to confirm that all personnel to be assigned to this project shall be qualified to perform such services as indicated in the chart in Appendix 1D: *Staffing Reference Chart*. Each resume must clearly indicate the qualifications and responsibilities to be assigned to the individuals identified.

Resumes, which include name, experience, education, and training, must be included.

Section VI: Detailed Response/Response Template

Responding Evaluation Vendors are expected to confirm that their proposed solution will meet or exceed the EV Requirements as outlined in the RFI and must clearly describe how the Evaluation Vendor's proposed solution will accomplish this.   Evaluation Vendors should, in this section, provide a comprehensive and detailed description of the services to be provided in response to the EV Requirements described in Section 3: *Services, Specifications, EV Requirements, and Deliverables* of the RFI. An

explanation of how each requirement can or cannot be met must be included. Responses to the State EV Requirements must be presented on the Appendix 1E: *Deliverables Approach and Services Chart*, attached.

With reference to Definitions on RFI Pages 18 and 19, note that Evaluation Vendor (EV) Requirements are not the same as Electronic Poll Books (EPB) Requirements in RFI Section 3.7 on Pages 75 – 109 herein. Evaluation vendors will be testing against the EPB Requirements and, in their RFI response, should comment on how they would accomplish such testing in this RFI response, focusing particularly on those areas that may distinguish themselves from other Evaluation Vendors.

Responding Evaluation Vendors are expected to provide a preliminary schedule and indicative pricing plan to accomplish the services, activities, and tasks to produce the deliverables required. (See Appendix 1A: *IT Services-Activities/Deliverables/ Milestones).*

Overview:

Provide an overview of the Evaluation Vendor's understanding of NHSOS's EV Requirements as identified in the RFI.

Project Approach and Technical Response

Describe in detail the Evaluation Vendor's current expertise in the following areas*:*
- Description of the method(s) and/or services to be used.
- Description of tools, including automated tools, and skills to match the State's EV Requirements.
- Description of the management of these services.
- Using the Evaluation Vendor Response form (Appendix 1E), provide a description of the approach and services to be provided to fulfill detailed EV Requirements and deliverables as listed in: *Project Deliverables.*

Deliverables.

Responding Evaluation Vendors are expected to provide the time frame for completion of the activities and deliverables described in Section 3: Services, Specifications, EV Requirements, and Deliverables of this RFI.

Section VII: Indicative Cost Proposal

This section describes the EV Requirements to be addressed by Evaluation Vendors in preparing the indicative cost proposal. The indicative cost proposal must be submitted according to the requirements presented in Appendix 1A and 1B: *IT Services.* The State reserves the right to review all aspects of the indicative cost proposal and to request clarification of any proposal where the cost component shows significant and unsupported deviation from the Evaluation Vendor's response, industry norms, or in areas where detailed pricing is required.

NHSOS recognizes there are certain industry practices for electronic election system evaluators.   However, the State encourages respondents, in their responses to the RFI, to be as creative as possible regarding costs that may be charged to the EPB Vendors.

Indicative costs must be detailed on the forms in the Appendix Section of this Request for Information document.

INDICATIVE QUOTES

IT Services- Activities/Deliverables/Milestones (APPENDIX 1A) Deliverables Pricing. The Evaluation Vendor must include, within the indicative price for service activities, tasks and preparation of required deliverables, indicative pricing for the deliverables required based on the proposed approach, and methodology and tools.

Term of Rates. The Evaluation Vendor's indicative quote should be for the amount for the term of each test engagement, unless otherwise amended.

Position and Resource Hours Tables- (APPENDIX 1B-2) Proposed Evaluation Vendor Staff Resource Hours Table. For the Proposed Evaluation Vendor Staff Resource Table, indicate the specific individuals you plan to assign to the project along with project roles. If individuals cannot be identified at this time, identify, at a minimum, the project roles.

Proposed State Staff Resource Hours Table. (APPENDIX 1B-2) For the Proposed State Staff Resource Table, indicate the project roles that State staff must fill and their associated hours. State teams are defined as the State staff needed to be devoted to the project for a substantial amount of time, or that could significantly contribute to this effort.

INDICATIVE QUOTES - HOURLY RATES – Cost basis and *Future* Work.

IT Services - Position and Resource Table. (APPENDIX 1B-1) The Evaluation Vendor shall list the position title, number of personnel, number of hours per test engagement, and indicative price per hour (rate) for each project team member included in the Evaluation Vendor's offer.

Hourly Rates- (Future Engagements). (APPENDIX 1B-1) Future hourly rates may change, usually in line with cost of living adjustments.

8   Evaluation Process, Criteria, and Selection

The State will select a group to act as an evaluation team.

The NHSOS is interested in receiving the best quality product or service. Indicative costs will be used as background criteria and not as a basis for evaluation. See Section 6: *Evaluation Process, Criteria, and Selection*.

8.1   Response Receipt and Review.

Responses will be reviewed to initially determine if minimum submission EV Requirements have been met. The review will verify that:

a. The response was received before the date and time specified in Section 1.15: *Schedule of Events.*
b. The response contained all required signatures.
c. The correct number of copies was submitted.

Failure to meet minimum submission EV Requirements could result in the response being rejected and not included in the evaluation process.

Upon receipt, the response information will be disclosed to the evaluation team members only. The response will not be publicly opened. The possible need for clarifications necessitates the need for privacy.

The NHSOS may determine, if it is in the best interest of the State, to seek additional responses from Evaluation Vendors submitting acceptable and/or potentially acceptable responses. These additional responses would provide an Evaluation Vendor the opportunity to amend or change their original response to make it more acceptable to the NHSOS. The NHSOS reserves the right whether or not to exercise this option.

8.2   Response Evaluation.

Scoring will be based on information including, but not limited to, the Evaluation Vendor's response documents, references, and interviews. The evaluation team shall be under no obligation to contact Evaluation Vendors for clarification of responses, but it shall reserve the right to do so at any time prior to MOU signature.

Based on the results of the evaluation, the responses determined to be most advantageous to the State, taking into account all of the evaluation factors, may be selected by the State for further action.

Evaluation Criteria

Qualified responses will be evaluated on the basis of the criteria below and the ability of the respondent to satisfy the EV Requirements and Deliverables of this request in a cost-effective manner. Specific criteria are:

8.2.1	Project understanding and technical approach defining the ability to deliver quality technical <resources, services, products>	<35%>

8.2.2	**COMPANY MANAGEMENT, CAPACITY AND PROJECT MANAGEMENT ABILITY**	**<10%>**
8.2.3	**Experience in providing similar services**	**<20%>**
8.2.4	**Personnel resumes**	**<35%>**
	TOTAL:	**<100%>**

8.3 Response Rejection.

NHSOS reserves the right to reject any and all responses.

8.4 Selection, Notification, and Memorandum of Understanding (MOU)

Discussions with responding Evaluation Vendors will usually be limited to all acceptable responses, but may also be extended to the potentially acceptable responses. Evaluation Vendors shall be prepared to send qualified personnel to discuss technical and legal aspects of the response.

Exhibit A: *Statement of Work,* and Exhibit B: *Indicative Payment Schedule* of the Memorandum of Understanding with the Secretary of State shall incorporate in its provisions this RFI, the successful Evaluation Vendor's response, and any other pertinent documents.   Notification to the Evaluation Vendor from the NHSOS will serve as a notice to proceed and begin work activity upon application for approval and agreement with an EPB Vendor.

Public announcements or news releases pertaining to any MOU signed in connection with this RFI response shall not be made without the written permission of NHSOS.

9 Indicative Price, Indicative Payment Schedule, and MOU Term

9.1 Deliverables/Schedules/Payments.

9.1.1 *Project Deliverables***:**

The schedule below includes the cost of finalizing the suite of test cases, NHSOS approval of a testing strategy, and completing one full test suite for one EPB vendor, without regression testing of tests failed initially, and a full report to the NHSOS. Because of the dynamic nature of testing, evaluation vendors may not be held to these estimates. These figures will be used as a baseline estimate.

DELIVERABLE	ANTICIPATED DUE DATE	PROPOSED PAYMENT PERCENT of PHASE ONE
1. Project work plan	8/23/17	
2. Status meetings	Ongoing	
3. Report: Analysis of EPB Requirements	8/25/17	
4. Initial test plan, test assertions, test scenarios, test cases presented by Evaluation Vendor(s)	8/28/17	
5. Initial test plan, test assertions, test scenarios, test cases completed and approved by NH SOS, with prospect for iterative changes in the future	8/31/17	
6. Start test suite for EPB Vendor(s)	9/1/17	
7. Complete test suite for EPB Vendor(s)	Ongoing	
8. Regression testing of tests initially failed by EPB Vendor(s)	Uncertain	Rates provided in Chart ___ herein

9.2 Indicative Pricing

9.2.1   The Selected Evaluation Vendor will notify the EPB Vendor and the NHSOS of the earliest date after which the requested evaluation for Approval recommendation can begin.

9.2.2   **Dates and Schedules.**
Terms and indicative hourly pricing support will be broken out by deliverable, date and amount as outlined in Appendix 1A – *IT Activities/Deliverables/Milestones* and 1B: *IT Services Position and Rate tables.*

Rates for second round (regression) testing of initially failed tests, as well as other subsequent tests, are included in the chart below. Evaluation vendors should define these positions carefully and commit to these rates, since much of the engagement may be based on these rates.

Staff Position	Hours	Rate	Cost

9.2.3   **Invoicing.**
Selected Evaluation Vendor(s) shall maintain documentation for all invoices submitted to EPB Vendor(s). The books, records, and documents of an Evaluation Vendor, insofar as they relate to work performed or money received in connection with this MOU, shall be maintained for a period of five (5) full years from the date of the final payment and shall be subject to audit at any reasonable time and upon reasonable notice by the State or any town or city engaged in an EPB trial or their duly appointed representatives. The records shall be maintained in accordance with Generally Accepted Accounting Principles (GAAP).

9.3   MOU Term
The Memorandum of Understanding (MOU) will become effective upon signature by the Secretary of State and a Selected Evaluation Vendor. The MOU will last five years through December, 2022. The Evaluation

Vendor's RFI response should include annual options to extend for up to 10 additional years, not to extend beyond November 1, 2032.

Specific due dates for the various products and services to be delivered under any resulting MOU will be set by mutual agreement between the Evaluation Vendor, NHSOS, interested cities and towns, and EPB Vendors.

The Department of State is under no obligation to reimburse an Evaluation Vendor for any work undertaken by the Evaluation Vendor in connection with this RFI and an associated MOU.

10 APPENDIX 1A *IT SERVICES ACTIVITIES/DELIVERABLES/MILESTONES*

Instructions for Appendix 1A *IT Services Activities/Deliverables/Milestones.*

Deliverables – Indicative Pricing

Evaluation Vendor(s) should include, within the indicative price for IT service activities, tasks and preparation of required deliverables, indicative pricing for the deliverables required based on the proposed approach, and methodology and tools.

Evaluation Vendor(s), in cooperation with NHSOS, will start by analyzing test cases already completed on identical hardware and software, and agree on what test cases need to be completed to achieve NHSOS goals.

IT SERVICES – ACTIVITIES/ DELIVERABLES/MILESTONES	DATE	PERCENT / PAYMENT
PHASE ONE		
1.1 Application received		% / $0.00
1.2 Analyze matrix of completed test cases on same hardware and software; complete test cases and		% / $0.00

scenarios, approved by NHSOS		
1.3 Voter intake: Configuration, performance, reliability, auditability, documentation		% / $0.00
1.4 Voter intake: Availability (Scalability), safety and security		% / $0.00
1.5 Voter intake: Completion		% / $0.00
1.6 Voter intake: Total		% / $0.00
PHASE TWO		
2.1 New Voter Registration: Configuration, performance, reliability, auditability, documentation		% / $0.00
2.2 New Voter Registration: Availability(scalability), Safety, and Security		% / $0.00
2.3 New Voter Registration: Completion		% / $0.00
2.4 New Voter Registration: Total		% / $0.00
PHASE THREE		
3.1 Return to Undeclared: Configuration, performance, reliability, auditability and documentation		% / $0.00
3.2 Return to undeclared: availability (scalability), safety		% / $0.00

and security		
3.3 Return-to undeclared: Completion.		% / $0.00
3.4 Return-to-undeclared: Total		% / $0.00
Totals		% / $0.00

In their RFI response, Evaluation Vendors are encouraged to offer recommendations to minimize costs and obtain the best possible deal to achieve the goals set forth and implied herein.

11 APPENDIX 1B-1 *IT SERVICES POSITION AND RATE TABLES*

Instructions for Appendix 1B-1 *IT Services – Position and Rate Table*.

Proposed Evaluation Vendor Staff. The Evaluation Vendor shall list the position title, number of personnel, number of hours, and indicative price per hour (rate) for each project team member included in the Evaluation Vendor's offer.

Term of Rates. The Evaluation Vendor's quoted hours and indicative hourly rates for an engagement should be for the term of the engagement, unless otherwise amended.

(Please detail the rates used to calculate the response amount)

**IT Services- Indicative Hourly Rates
(Initial Engagement (2017 - 2022)**

IT SERVICES - Position Title*	Number of Personnel	Number of Hours	Rate	Totals
Project Manager			$0.00	
Senior Software Analyst			$0.00	
			$0.00	
			$0.00	
*Other Positions			$0.00	
Totals				

**IT Services- Hourly Rates
(Future Engagements)**

IT SERVICES- Position Title	SFY Rate- 2017	SFY Rate- 2018	SFY Rate- 2019	SFY Rate- 2020
Project Manager	$0.00			
	$0.00			
	$0.00			
	$0.00			
	$0.00			

SFY = State Fiscal Year

*Evaluation Vendors should add other positions as deemed appropriate.

12 APPENDIX 1B-2 *IT SERVICES*
   POSITION AND RESOURCE HOURS TABLES

Instructions for Appendix 1B-2 *IT Services – Position and Resource Table.*

Proposed Evaluation Vendor Staff Resource Hours Table. For the Proposed Evaluation Vendor Staff Position and Resource Table, indicate the specific individuals you plan to assign to the project along with project roles. If individuals cannot be identified at this time, identify, at a minimum, the project roles. A breakdown of the hours by on and off site is also desired.

Proposed State Staff Resource Hours Table. For the Proposed State Staff Resource Table, indicate the project roles that State staff must fill and their associated hours. State teams are defined as the State staff needed to be devoted to the project for a substantial amount of time or that could significantly contribute to this effort.

Proposed Evaluation Vendor Staff Resource Hours Table

Project Roles /Names	Project Phase	Project Phase	Project Phase	Project Phase	Project Phase	Project Phase	Totals
Project Mgr.							
Project Coordinator							
Senior Steering Team							
Other							
Other							
Totals							

Proposed State and Local Staff Resource Hours Table

Project Roles	Project Phase	Project Phase	Project Phase	Project Phase	Project Phase	Project Phase	Totals
Project Mgr.							
Project Coordinator							
Senior Steering Team							
Other							
Other							
Totals							

13 APPENDIX 1C
STAFFING CHART

For the Evaluation Vendor's proposed positions, chart the details of the required experience and skills, as well as related experience of the proposed individuals.

EVALUATION VENDOR ROLE	RESPONSIBILITIES	SKILLS	RELATED EXPERIENCE
<Project Manager>			
<Senior Developer>			
<Business Analyst>			

14 APPENDIX 1D
STAFFING REFERENCE CHART

For the Evaluation Vendor's proposed individuals, chart the details of the responsibilities and qualifications of the individuals in relation to this project.

	<INDIVIDUAL>	<INDIVIDUAL>	<INDIVIDUAL>
ROLE			
RESPONSIBILITIES			

QUALIFICATIONS			

15 APPENDIX 1E *EVALUATION VENDOR RESPONSE TEMPLATE DELIVERABLES APPROACH AND SERVICES CHART*

Define the ability of the Evaluation Vendor to meet or not meet the deliverables requested. If the deliverable can be met, also note the approach or other comments.

DELIVERABLE	MEET Y/N	APPROACH/COMMENTS

EXHIBIT 1: IT Required Work Procedures

1. **All products developed (requirements, specifications, documentation, program code, other) are work for hire and ownership is in accordance with the MOU, as signed by the qualified Evaluation Vendor.**

2. **Any technical education needed by the Evaluation Vendor to successfully complete the assumed assignment will be at the sole expense of the Evaluation Vendor and provided by the Evaluation Vendor.**

3. **Evaluation Vendor should be willing to work overtime at a quoted hourly rate upon a one week (40) business hours' advance notice. If this is impossible, the Evaluation Vendor should identify a work around in the event of a sudden need for capacity.**

4. **Evaluation Vendor shall submit a resume for each individual expected to be assigned to State projects. The resumes must be comprehensive and include educational background, work experience, length of service with the firm, and significant projects on which the individual has worked.**

5. **Evaluation Vendor must agree to provide an "equal or better" replacement for any personnel who leave employment of the Evaluation Vendor during the course of the MOU.**

6. **Evaluation Vendor must make the individuals available to be interviewed by the State prior to the project assignment.**

EXHIBIT 2: NEW HAMPSHIRE CERTIFICATE OF AUTHORITY
or CERTIFICATE OF GOOD STANDING

(EVALUATION VENDORS NEED TO SUBMIT)

As a condition of any MOU signed in connection with this RFI, the Evaluation Vendor must furnish a Certificate of Authority/Good Standing dated **after April 1, 2017,** from the Office of the Secretary of State of New Hampshire. If your entity is not registered, an application form may be obtained from:

Secretary of State
State House Annex
25 Capitol Street
Concord, New Hampshire 03301
603-271-3244

If your entity is registered, a certification thereof may be obtained from the Secretary of State.

Domestic: RSA 293-A:3.01, "(a) Every corporation incorporated under this chapter has the purpose of engaging in any lawful business unless a more limited purpose is set forth in the articles of incorporation.

   (b) A corporation engaging in a business that is subject to regulation under another statute of this state may incorporate under this chapter only if permitted by, and subject to all limitations of, the other statute."

Foreign: RSA 293-A:15.01(a), "A foreign corporation may not transact business in this state until it obtains a certificate of authority from the secretary of state."

Limited Liability Company: RSA 304-C

Domestic: RSA 304-C:21, I, "A limited liability company may be organized under this act for any lawful purpose except carrying on the business of banking, the construction and maintenance of railroads, the business of making contracts for the payment of money at a fixed date or upon the happening of some contingency, or the business of a trust, surety, indemnity, or safe deposit company."

Foreign: RSA 304-C:175, "Before doing business in New Hampshire, a foreign limited liability company shall register with the secretary of state. In order to register, a foreign limited liability company shall pay the fee required by RSA 304-C:191, II(h) and shall file an application for registration as a foreign limited liability company, setting forth:

I. The name of the foreign limited liability company and, if different, the name under which it proposes to register and do business in New Hampshire;

II. The state, territory, possession, or other jurisdiction or country where formed, and the date of its formation;

III. The nature of the business or purposes to be conducted or promoted in New Hampshire;

IV. The address of the registered office and name and address of the registered agent for service of process required to be maintained under RSA 304-C:177, IV; and

V. The name and address of any manager or member signing the application."

EXHIBIT 3: EPB Vendor Requirements

3.1   Document Structure

This document defines the NHSOS EPB Requirements as set forth in RSA 652:27. It is structured as follows:

The **Introduction** section states the purpose of this document, provides a list of references to external material, and outlines document structure.

Following the Introduction section, the **Overall Description** section specifies document semantics and gives an overview of the possible use of electronic poll books in the State of New Hampshire. It is divided into four subsections: **Section 3.1 Electronic Poll Books**, **Section 3.2 Definitions**, **Section 3.3 User Characteristics**, and **Section 3.4 Requirement Format Specification**.

- **Section 3.1: Electronic Poll Book** introduces electronic poll books and elaborates on their possible use.
- **Section 3.2: Definitions** defines key terms used throughout this document.
- **Section 3.3: User Characteristics** explains anticipated user characteristics.
- **Section 3.4: Requirement Format Specification** section explains how Requirements are to be read and how Requirement dependencies are expressed.

As the core of the document, **Section 4: System EPB Requirements** provides the collection of all EPB Requirements that EPB Vendor solutions will be evaluated against. It is divided into four subsections:

- **Section 4.1: Procedural EPB Requirements**
- **Section 4.2: External Interface EPB Requirements**
- **Section 4.3: Functional EPB Requirements**
- **Section 4.4: Non-functional EPB Requirements**

Section 5: Provides a cross-reference that gives page numbers for all named EPB Requirements and columns to insert compliance and comments.

3.2   E-Poll Books Working Group

The ePoll Books Working Group has held meetings about once a month from August, 2016 through June 26, 2017. Membership includes the following:

Clerks:

Kerri Parker – Meredith
Lori Radke – Bedford
Denise Gonyer – Gilford
Dianne Trippett – Merrimack
Tricia Piecuch – Nashua
Sue McKinnon – Newfields
Kathy Valliere – Greenville
Betty Ramspot – Sunapee
Kathy Seaver – Farmington
Mary Reynolds – Laconia
Todd Ranier – Hooksett

Legislators:

Sen. Regina Birdsell
Sen. Donna Soucy
Sen. Betty Lasky
Sen. James Gray
Rep. Kathy Hoelzel
Rep. David Cote
Rep. Daniel Eaton
Rep. Neil Kurk
Rep. Wayne Moynihan
Rep. David Bates
Rep. Jim Belanger

Moderators:

Chris Goodnow – Salem
James Garrity – Atkinson
Peter Imse – Bow
Lynn Christenson – Merrimack
Paul Kelley – Seabrook
John Williams – Concord
Jae Whitelaw – Concord
Rodney Stark – Goffstown
Chris Messier – Manchester

State Election Officials:

William Gardner, Secretary of State
David Scanlan. Deputy Secretary of State
Anthony Stevens, Assistant Secretary of State
Dan Cloutier, Chief Information Officer
Colleen McCormack, Subject Matter Expert

3.3   Electronic Poll Books

An electronic poll book provides a means for inserting new voter records, and checking and managing all voter registration records at a polling place on Election Day.

The existing process for generating and printing the voter list is as follows:

- The supervisors of the checklist or town or city clerk downloads the checklist of registered voters from New Hampshire's Statewide Voter Registration System (considered a top-down system), and provides it to the clerk for use on Election Day.

- The clerk receives the checklist of registered voters in a PDF file. If the clerk receives a PDF file, it is then printed for use during Election Day and manually marked to reflect voter activity according to the law.

- When a registered voter states that they still live in the same voting precinct but their address has changed, the ballot clerk will strike the old address and correct the address on the marked checklist.

- If the election is a primary, voters registered as "Undeclared" can declare a party, vote using that party's ballot, and then, after casting the ballot, indicate to the supervisors of the checklist that they wish to return to "Undeclared" status after the election. The marked checklist data set and the "Return-to-Undeclared" records are maintained separately as separate sets of official election records. After a primary, marked checklist and, separately, the "Return to Undeclared" records, are scanned into SVRS using a bar code scanner. The SVRS does not conflate the two records. The marked checklist remains a discrete data record that can be retrieved and stored.

- When an election is complete, voter information is entered from the marked checklist data into the Statewide Voter Registration System (SVRS) using a bar code scanner to identify the voter, with election official(s) entering options to record hand-marked information opposite each voter name, including data from the *Voter Activity Record,* except currently a) whether a voter was given a ballot (b) whether an absentee ballot was cast by the voter, (c) whether a challenged voter affidavit was completed in lieu of presentation of an approved photo ID, and (d) the 2-character state abbreviation of an out-of-state driver's license. The latter information is now tracked manually. However, legislation adopted in 2017 requires the 2-character state information in an out-of-state driver's license to be recorded in SVRS.

- On election day, voters can become registered by approaching the supervisors of the checklist, completing a paper registration form and showing proof of domicile, identification, age, and citizenship.

- When an election is complete (and sometimes on election day), supervisors of the checklist enter data into SVRS for new registrants reflecting election day registrations. Following this step, these new registrants who voted are scanned as having voted, and an election official records hand-marked information opposite each voter name on the marked checklist.

Refer to: RSA 654:7-a; RSA 654:25; RSA 654:31-a; RSA 654:34; RSA 654:45; RSA 654:8; RSA 659:13; and RSA 659:14

> Ballot Clerk Procedure - Primary http://sos.nh.gov/ElecOff.aspx
>
> Ballot Clerk Procedure - General http://sos.nh.gov/ElecOff.aspx
>
> SB 113, pending Governor's signature (**Section 2.6)**
>
> Marked checklist in NHSOS format (RSA 654:25)

Upon implementation of an EPB system, the download and upload process will involve the following: the *administrator* or *supervisor of the checklist* for a town or city requests the registered voter list from the New Hampshire Statewide Voter Registration System (SVRS). The *administrator* or *supervisor of the checklist* receives the voter list in electronic form and stores it in a USB drive or equivalent. The *local voter database* is then loaded into the EPB system through its USB drive or equivalent. When the election is complete, the updated *voter list* (*local voter database* plus the *voter activity record*) is stored on a USB drive or the equivalent. The resulting file(s) are then uploaded into SVRS by an election official.

This EPB export to SVRS includes all the information on a marked checklist (that can be printed out at any time on election day in a format approved by the NHSOS) except (a) whether a voter initiated the check-in process to obtain a ballot.

A marked checklist, in the format prescribed by the NHSOS, can be printed out at any time during election day. It includes (a) above – whether a person initiated the check-in process to obtain a ballot.

The upload to SVRS will ultimately (after 2017) include all information on the new voter registration forms that is applicable to fields in SVRS.

The *voter list (*containing *the local voter database* and v*oter activity record)*, with exception (a) described above, includes the data that must be securely uploaded to the SVRS after an election. SVRS will need new software (a) to individually process each new voter registration imported from the EPB system, (b) to search for duplicate names and dates of birth within SVRS and pull names from other towns and cities as needed, and (c) to separately process each address for inconsistencies with the E-911 street

addresses and address ranges in SVRS. This new software will require substantial time and effort to design, specify, program, test and re-test.

3.1.1 New Hampshire Background and Process Characteristics

New Hampshire has many of the nation's largest polling places in which all voters vote the same ballot(s). The New Hampshire EPB system should accommodate a substantial number of EPBs, including one for each voter intake line and at least one for each supervisor of the checklist (and assistant) in order to add new voters' names to the EPB system.

Large towns using the same ballot(s) reported the following voter statistics in the 2016 General Election:

Large NH Towns with a Single Polling Place			
Towns with One Polling Place	Registered Voters	Election Day Registrations Nov. 8, 2016	General Election Turnout Nov. 8, 2016
Bedford	16,733	821	13,657
Durham	16,443	3,121	9.721
Exeter	13,109	772	9,551
Hampton	14,197	725	10,419
Hanover	11,736	1,235	7,930
Hudson	18,560	1,223	13,535
Londonderry	18,632	1,158	14,416
Milford	11,329	875	8,378
Windham	10,094	596	9,024

Since some larger towns have expressed interest in being the early users of EPBs, we are contemplating EPB systems that use at least 10 EPB stations for voter check-in and election day registrations up to a maximum of roughly 40 EPB stations that might demand communications of 200 feet or more. (Some of the demand for expanded communications needed by larger polling places may be addressed by Safe Use Procedures for local acceptance testing following NHSOS Approval.)

New Hampshire is an election day registration state. Supervisors of the checklist may be able to add to EPB new voters who register on election day, so that they can be automatically processed in the check-in lines. If EPB communications are disrupted, this process must revert to marked paper checklists within 15 minutes. This only allows for about 5 minutes to troubleshoot, pull the thumb drive from the EPB and insert it in a booted computer, five (5) minutes to print out the entire checklist, and five minutes to distribute the checklist among voter intake lines - hence the need for (sometimes multiple) laser printers and high quality paper (so the bar codes can be read by a scanner).

For security reasons (to avoid a single point of failure), there must be an air gap between the EPB system and SVRS, so that:

> (a) the two systems are never linked in real time, and

> (b) the EPB system does not search for voters on SVRS or enter new voter registrations directly.

Importing voter history from the marked checklist in EPB is a separate process from adding new voter registrations. When new voters from election day registrations are added to EPB, supervisors are expected to manually enter new election day voter registrations in SVRS, with the help of an EPB prompt that submits all fields on the voter registration form.

EPB Vendors are expected to specify how they would add new voters to EPB to reflect election day registrations so that newly registered voters can check-in using EPB to obtain a ballot, relying on a temporary "voter ID" assigned by the EPB system that is unique for each voter but does not conflict with the voter ID number in SVRS.

EPB Vendors should be clear what fields from the *voter activity record* would be included in:

> (a) the marked checklist that could be printed at any time during election day,

> (b) the voter list that would be uploaded to SVRS, and

> (c) election night reporting data.

EPB systems should be able to turn on (for a primary) or off (for a general election) an automated "Return-to-Undeclared" process. Until this new EPB software and SVRS software has been specified, programmed and tested, this process will continue as a manual process and a manual upload to SVRS. This is a separate process that will occur after the supervisors of the checklist reconcile all *voter activity records* that were imported into SVRS.

As an election day registration state, New Hampshire is exempt from the National Voter Registration Act (Motor Voter). To protect citizens' privacy, legislation has ensured that data at the Department of Motor Vehicles and SVRS remain in separate information silos. There is currently no provision for State DMV information to be used by EPB on election day. To comply with RSA 654:31-a and RSA 260:14 (DMV privacy law), EPB products that rely on cameras that photograph the entire driver's license should demonstrate that they do not store information that is confidential under the law. According to the NH DMV, the EPB system is not permitted to use the drivers' license to pre-populate the voter's name on the new voter registration form in the EPB system.

In the statewide voter registration system, voters' driver's license numbers and dates-of-birth are not public information. (RSA 654:31-a) Under the law, this information cannot be transferred to and stored in the EPB system.

3.4   Definitions - Electronic Poll Books Systems

Electronic poll book system (EPBS) – A collection of hardware and software including at least one *configured electronic poll book* and aiming to implement electronic poll book functionality that satisfies the EPB Requirements stated in this document.

Electronic poll book (EPB) – A component of the *electronic poll book system* that includes a user interface device and that is to be used by an authorized EPBS user to view and update voter registration records.

Configured Electronic Poll Book System (CEPBS) – A physical instance of an *electronic poll book system* with all its components configured for use. A *configured electronic poll book system* consists of peripherals (e.g., printers, scanners, etc.) and a set of configured, networked *electronic poll books*.

Voter registration record – A record containing at minimum a registered voter's name, voter ID number, party affiliation, domicile address, mailing address, and town/city ward.

Voter activity record – An archive of a voter's activity within the current election. This archive includes updatable, time-stamped records of the following events (at a minimum):

1. The voter appeared at the polling place and offered his/her name to obtain a ballot;
2. (If the voter did not present approved photo identification), whether a challenged voter affidavit was presented;
3. If an out-of-state driver's license was presented as identification, which state mail abbreviation is applicable to the state that issued the drivers' license presented by the voter;
4. The voter has returned an absentee ballot that was counted;
5. The voter has presented a change of address within the same jurisdiction and change of address was entered in the EPB –using street names and street ranges from SVRS (with override capability);
6. The voter was given a ballot;
7. If a primary, what ballot was provided: and
8. If the election is a state primary and the individual was undeclared or a member of the Democratic, Republican, or Libertarian Party, what party ballot was provided to the voter; System should provide a hard warning that denies a registered Republican from obtaining a Democratic or Libertarian ballot and vice versa.

Voter record – The *voter registration record* and *voter activity record* of a voter.

Local voter database – A collection of all *voter records* specific to a jurisdiction (e.g., a ward, precinct or district). The initial state of the *local voter database* is compiled and certified by the relevant authority. Authorized EPBS users make updates to the *local voter database* throughout the election by using the *electronic poll book system* to reflect ongoing voter activity and new voter registrations within the jurisdiction.

Voter list - A printable, exportable, and human-readable representation of the *local voter database*. The voter list is updated throughout election day to reflect *voter activity*. The voter list accurately reflects all eligible voters, including new voter registrations on election day. The voter list must, at any time during election day, be printable in a format prescribed by the Secretary of State (RSA 654:25) and appear functionally similar to the physical checklist, with markings, that exists today. Refer to Marked Checklist Primary Example in Appendices.

Voter history – A voter's activity in an election, including address changes in the voter's voter registration record.

Audit log – An electronic record documenting the actions, by user, performed on or by the *electronic poll book system*.

Completed update – An update to a *voter registration record* is *completed* if a query for said *voter registration record* on any active *electronic poll book* within the *electronic poll book system* returns the same data.

Quiescent - The *electronic poll book system* is *quiescent* if all user-initiated updates have completed at all *electronic poll books*.

Statewide Voter Registration System (SVRS) – A collection of hardware and software, sometimes referred to as SVRS, that is dedicated to storing and providing authorized access to the *voter registration records* and *voter history* of all registered voters in the State of New Hampshire.

Supplemental local voter database – A collection of changes to *voter registration records* and *voter history* in the *SVRS* that have occurred between the time the *local voter database* was compiled and the start of the election. It is assumed that, while a *supplemental local voter database* may be used in other states, it will not be used in the State of New Hampshire, except that supervisors of the checklist may, at the beginning of election day, record on the checklist, and in EPBS, that:

- the voter is no longer eligible to vote due to death, and
- the voter is a numbered confidential voter, and tracked in EPB as such

Set up EPBS – Bringing the *electronic poll book system* into an initial, functional state. This includes configuring all peripherals for use, setting up all communication networks, and configuring the initial set of *electronic poll books.* After an *EPBS* has been set up, it and all of its components are ready for use. A set up *EPBS* is a *configured electronic poll book system (CEPBS).*

Reconfigure CEPBS – Configuring, adding, or removing any of the *configured electronic poll book's* peripherals, *electronic poll books*, or auxiliary servers.

Ballot Clerk role – A user account type with user access privileges enabling the account holder to perform ballot clerk duties (e.g., verifying voter eligibility, checking in voters, etc.) outlined in this document, including audit tracking by user.

Supervisor of the Checklist role - A user account type with user access privileges enabling the account holder to perform supervisors of the checklist duties (e.g.,

registering voters, maintaining voter checklist, etc.) outlined in this document, including audit tracking by user.

Administrator role - A user account type with user access privileges enabling the account holder to perform system and account administrator duties (e.g., managing user accounts, performing system diagnostics, system event confirmation, troubleshooting, monitoring, etc.) outlined in this document, including audit tracking by user. A town or city clerk, moderator or other election official, might be able to satisfy this role, and it may require an ongoing monitoring effort to confirm good performance and avoid failure.

User Interface – A graphical user interface (GUI) enabling user input to the *electronic poll book system* through keyboard, touch screen, or similar means.

Invariant data – Data that is part of the *voter record* but not related to the registration disposition of the voter (e.g. voter ID number from Statewide Voter Registration System).

3.5   User Characteristics

Voter: An individual who appears on the checklist at a particular voting polling pace (normally a precinct) in a particular election.

Ballot Clerk: An individual appointed by the relevant state authorities to operate the *electronic poll book system* for voter intake purposes during an election at a particular polling place. The individual may also perform other election duties. For each individual aiming to vote at said polling place in said election, a ballot clerk will use the *EPBS* to verify said individual's voting eligibility (establish if the individual is a voter) and update the individual's *voter registration record* in the *voter list* if the individual is issued a ballot. A *ballot clerk* may occupy a *ballot clerk role.*

Supervisors of the Checklist: As provided by law, the Supervisors of the Checklist maintain the voter registration records for a particular jurisdiction. The duties of the Supervisors of the Checklist include:

1. Conducting ongoing reviews of registered voters to ensure records are accurate and complete
2. Producing checklists for use in elections and meetings
3. Locating and training assistants to the supervisors of the checklist
4. Handling requests for voter registration
5. Processing voter registrations on election day and on other days of the year
6. Recording voter history in the Statewide Voter Registration System
7. Removing voters from the checklist on election day in the event of a death.
8. Managing and adding confidential voters on election day.

Supervisors of the checklist are elected by their constituents in the same town or city ward where they serve. (City Registrars may constitute a roughly comparable role to Supervisors of the Checklist, with significant variations among the cities.) EPBS may be used to add new voters to the *local voter list* reflecting election day registrations. *Ballot clerks* may check off new voters on an EPB to enable such newly added voters to pick up ballots as and when they present their identification in the voter intake line*.* A *supervisor of the checklist* may occupy a *supervisor of the checklist role.*

PCC Technology Group (PCC): The technology vendor currently tasked with maintaining the integration layer of the *SVRS*.

3.6   Requirement Format Specification

This section specifies the format of all EPB Requirements in this document. An example Requirement is provided in subsection 3.6.2.

The purpose of a Requirement is to capture a specific property—functional or non-functional—that an *electronic poll book system* must possess.

EPB Requirements are either stand-alone Requirements, or cross-referencing Requirements. A stand-alone Requirement does not depend on any other Requirements, and no other Requirements depend on it. Cross-referencing Requirements are tied together with other Requirements. An example of a cross-referencing Requirement is a user interface Requirement that is related to a security Requirement outlining access control to the interface.

3.6.1 EPB Requirement Specification

Each EPB Requirement has a *unique identifier*, a *title*, a *description*, a *reference section*, and a *requirement type*.

The **unique identifier** is used to identify a Requirement. Whenever a Requirement is referenced by another Requirement, its unique identifier is used.

The **title** serves as a brief summary of the Requirement.

The **description** is a detailed specification of the Requirement. The description text may contain references to other related Requirements (referred to by their unique identifiers).

The **reference** section gives a list of unique identifiers of all Requirements that the Requirement is contingent upon (e.g., a user interface Requirement could be related to a

corresponding security Requirement outlining access control to the interface). The reference section also contains all references to external documents (e.g., statutes) that are relevant to the Requirement. Stand-alone Requirements may have an empty reference section.

The ***requirement type*** states how crucial the Requirement is. The requirement type has three possible values: *mandatory* (*M*), *preferred* (*P*), and *advisable* (*A*). Since this Exhibit constitutes an early-stage Request For Information (RFI), EPB Vendors and members of the Working Group are encouraged to make recommendations in the space allocated to **"Comments on Potential Requirement"** in the **Cross Reference Table** as to whether the future Requirement should be *mandatory* (*M*), *preferred* (*P*), and *advisable* (*A*). Please contact Anthony Stevens to obtain a Cross-Reference Table for this purpose.

Requirement Type	Explanation
Mandatory	*Mandatory* Requirements define properties necessary to any *electronic poll book system*. If a EPB Vendor solution does not fulfill a *mandatory* Requirement, the entire solution would receive a failing score and be rejected. In other words, *mandatory* Requirements describe the baseline for a passing electronic poll book solution. Solutions that only fulfill *mandatory* Requirements may require substantial technical oversight if used in actual elections.
Preferred	*Preferred* Requirements define a satisfactory *electronic poll book system*. If an EPB Vendor solution does not fulfill a *preferred* Requirement, the solution can be expected to have deficiencies. Solutions that fulfill all *mandatory*, and *preferred* Requirements meet the functional baseline and provide a satisfactory level of security, reliability, performance, availability, and usability.
Advisable	*Advisable* Requirements define a strong *electronic poll book system.* A solution fulfilling all *mandatory*, *preferred*, and *advisable* Requirements can be recommended without reservation.

3.6.2 Requirement Example

The below requirement specifies the structure of all requirements by example.

ER-1: An example requirement.
{Requirement Type: ***mandatory***}

Description: This is an example requirement. It is subject to example requirement **ER-2**.

Ref: ER-2.

For the example requirement above, **ER-1** is its unique identifier, and "An example requirement" is the title. **ER-1** is *mandatory (M)* and has a dependency on requirement **ER-2**.

3.6.3 EPB Requirements

Operating systems may be subject to changes that are out of the control of the EPB Vendor, which may affect the period that a requirements approval can be valid for an EPB Vendor's system. In their responses to these EPB Requirements, EPB Vendors should address the anticipated impact that future changes to the underlying operating system would have.

3.7   System EPB Requirements

3.7.1 Procedural EPB Requirements (PROCR)

PROCR-1: EPB Vendor to provide ten *electronic poll books.*
{Requirement Type: ***mandatory***}

Description: As of the date of the EPB Vendor's application for approval of the *electronic poll book system* by the secretary of the state, the EPB Vendor must provide at least 10 complete working *electronic poll books* to the Selected Evaluation Vendor for evaluation against the EPB Requirements of the New Hampshire Secretary of State.

Ref: None

PROCR-2: EPB Vendor to provide list of customers.
{Requirement Type: ***mandatory***}

Description: The EPB Vendor must provide a list of customers who are using, or have previously used, the EPB Vendor's *electronic poll book system*. This list

must be current as of the date of the EPB Vendor's application for approval of the *electronic poll book system* by the Secretary of the State.

Ref: REF-2

PROCR-3: EPB Vendor to provide list of known anomalies.
{Requirement Type: **mandatory**}

Description: The EPB Vendor must provide a description of any known anomalies in the function of the *electronic poll book system* as well as a description of the method for resolving those anomalies. This list should be current as of the date of the EPB Vendor's response to the EPB Requirements. It must be compliant with RSA 659:13, RSA 659:14, RSA 659:102 and the Ballot Clerk Procedures for the State Primary and the General Election.

Ref: REF-2

PROCR-4: Compiling, importing, and exporting *local voter database*.
{Requirement Type: **mandatory**}

Description: Compiling the *local voter database*, importing it into the *electronic poll book system* from the SVRS, and exporting it from the *electronic poll book system* must not require EPB Vendor involvement.

Ref: None

PROCR-5: EPB Vendor to provide a pre-use fitness test for the *electronic poll book system.*
{Requirement Type: **mandatory**}

Description: The EPB Vendor shall provide instructions and materials sufficient to carry out a fitness test of the *electronic poll book system* and *electronic poll books* before their use in an election. The test should be thorough enough to demonstrate that the subject is in basic working order. Every test shall include demonstration of the ability to rapidly generate a marked up-to-the moment checklist in the Secretary of State's format. (See appendices.)

Ref: None

PROCR – 6: EPB Vendor to suggest trial format that enables check of EPB accuracy against paper checklist.
{Requirement Type: ***mandatory}***

Description: The EPB Vendor shall provide instructions and materials sufficient to carry out an accuracy test of the *electronic poll book system* and *electronic poll books* before their use in an election. The test should be thorough enough to demonstrate that the subject operates when tested against a marked paper checklist.

Ref: None

_____

PROCR – 7: EPB Vendor to provide pre-use fitness test that demonstrates what happens if and when Wi-Fi or other electronic capability become inoperative during election day.
{Requirement Type: ***mandatory}***

Description: The EPB Vendor shall provide instructions and materials sufficient to carry out a test of the *electronic poll book system* and *electronic poll books* in which various electronic components fail to function as expected. The test should be thorough enough to demonstrate that the subject EPBS recovers after electronic components fail.

Ref: None

_____

PROCR – 8: EPB Vendor to provide a chart of test cases already performed by an evaluator of electronic election systems
{Requirement Type: ***mandatory}***

Description: The EPB Vendor shall provide a chart in excel that identifies test cases that have been performed on the identical software and hardware, naming the test lab or equivalent and the state whose requirement was being satisfied.

_____

PROCR – 9: EPB Vendor to provide cryptographic authentication of the EPB system for authentication
{Requirement Type: ***mandatory}***

Description: The EPB Vendor shall provide the EPB system to the Selected Evaluation Vendor with cryptographic authentication, enabling the Evaluation Vendor to authenticate the version of the system.

_____

PROCR – 10: EPB Vendor demonstrates that its system does not interface with the Internet.
{*Requirement Type*: **mandatory**}

Description: The EPB Vendor shall ensure that no component of the EPB system is connected to the Internet.

_____

PROCR – 11: EPB Vendor must provide sufficient number of laser printers to demonstrate that the system can print a marked checklist within 10 minutes.
{*Requirement Type*: **mandatory**}

Description: The number of laser printers needed for the test will depend on the size of the polling place being tested.

3.7.2   External Interface EPB Requirements

3.7.2.1   User Interface EPB Requirements (UIR**)**

UIR-1.1: Ballot clerk interface.
{*Requirement Type*: **mandatory**}

Description: An *electronic poll book* must provide a *user interface* through which authorized users can verify an individual's voting eligibility and document the voter's election related activity. This interface must enable authorized users to perform updates to, and lookups of, *voter registration records* and *voter activity records* included in the *local voter database*. Specifically, the interface must allow a *ballot clerk* to access all functionality outlined in the following EPB Requirements: **FR-7, FR-8, FR-9, FR-11,** and **FR-14**. This interface is subject to the following security access management EPB Requirements: **SR-14.**

Ref: FR-7, FR-8, FR-9, FR-11, FR-14, SR-14

UIR-1.2 SR-15
{Requirement Type: ***mandatory*}*

Description: An *electronic poll book* must provide a *user interface* through which authorized users can enable authorized users to enter new voter registrations to satisfy Election Day registration requirements. Using this interface, supervisors of the checklist must be able to enter all fields on the voter registration form, any affidavits pertaining to voter registration (e.g. qualified voter affidavit, domicile evidence obligation form information, including age, citizenship and identity), and fulfill process requirements to permit the smoothest possible upload to SVRS after an election. This interface must include hard warnings for each required field, as specified by the NHSOS. This interface is subject to the following security access management EPB Requirements: **SR-14.**

Ref: RSA Chapter 654.

_____

UIR-2: Configuration interface.
{Requirement Type: ***mandatory*}*

Description: The *electronic poll book system* must provide a *user interface* through which authorized users can configure the system. This includes the initial setup of the system, reconfiguration, viewing the current configuration, as well as adding or removing *electronic poll books*. Specifically, the interface must allow authorized users to access all functionality outlined in the following EPB Requirements: **FR-1**, and **FR-2.** This interface is subject to the following security access management EPB Requirements: **SR-15.**

Ref: FR-1, FR-2, SR-15

UIR-3: Diagnostic interface.
{Requirement Type: ***mandatory*}*

Description: The *electronic poll book system* must provide a *user interface* through which authorized users can perform system diagnostics and validation by viewing, printing, and exporting the *audit log* of the system. Specifically, the interface must allow authorized users to access all functionality outlined in the

following EPB Requirements: **FR-15.** This interface is subject to the following security access management EPB Requirements: **SR-16.**

Ref: FR-15, SR-16

UIR-4: Administrative interface.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must provide a *user interface* through which authorized users can manage user accounts within an *electronic poll book system.* This includes adding and removing users and managing their access privileges, disabling users after shifts as needed. This interface is subject to the following security access management EPB Requirements: **SR-17.**

Ref: SR-17

UIR-5: Local voter database interface.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must provide a *user interface* through which authorized users can import and export the *local voter database*, view and print the *voter list*, and update *local voter databases*, e.g. to remove those voters with valid evidence of death. Specifically, the interface must allow authorized users to access all functionality outlined in the following EPB Requirements: **FR-17**, and **FR-19**. This interface is subject to the following security access management EPB Requirements: **SR-18.**

Ref: SR-18, FR-17, FR-19

_____

UIR-6: Interface with Statewide Voter Registration System
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must provide a *user interface* through which authorized users can export the *voter list (local voter database and voter activity record*.)

Ref: Safe Use Procedures 4.4

3.7.2.2   Hardware Interfaces (HIR)

HIR-1: USB port.
*{Requirement Type: **mandatory**}*

Description: The *electronic poll book system* must have a USB port through which the *local voter database* can be imported into the system. This interface is the only system end point through which data can be imported into the *electronic poll book system*, as specified in **SR-7**. Data imported through this interface must fulfill security EPB Requirements specified in **SR-8**.

Ref: SR-7, SR-8

HIR-2: Card reader.
*{Requirement Type: **advisable**}*

Description: The *electronic poll book system* shall include one camera and/or a bar code reader per active *electronic poll book*. Each EPB station must:

1. Permit a voter who presents a New Hampshire driver's or non-driver's license scan the license or card using a camera or bar code reader;
2. Display the voter's *voter activity record (whether they already voted in the election)* upon processing the information contained within the bar code on the license or identification.

Ref: RSA 654:45; RSA 654:31-a

HIR-3: Interface to printers
*{Requirement Type: **mandatory}***

Description: The electronic poll book system shall include specifications for printers that would enable the printing of an up-to-the-moment marked checklist either during or after the polls close on Election Day.

3.7.3 Functional EPB Requirements (FR)

FR-1: Adding a new *EPB* to the *EPBS*.
*{Requirement Type: **mandatory**}*

Description: The *electronic poll book system* must provide means for the integration of an additional *electronic poll book* into its configuration at any point throughout the election without requiring a shutdown or a restart of the *electronic poll book system*. The coordinated action of at least two authorized EPBS users is required to perform this action. This system event must be documented in the *audit log*.

Ref: UIR-2

FR-2: Removing an *EPB* from the *EPBS*.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must provide means for the exclusion of an existing *electronic poll book* from its configuration at any point throughout the election without requiring a shutdown, or restart of the *electronic poll book system*. The coordinated action of two authorized EBPS users is required to perform this action. This action does not require physical access to the *electronic poll book* that is to be excluded. This system event must be documented in the *audit log*.

Ref: UIR-2

FR-3: Identifying an *EPB.*
{Requirement Type: **mandatory**}

Description: Each *electronic poll book* within a *configured electronic poll book system* must have a unique identifier. Any component within a *configured electronic poll book system* must be able to uniquely identify said *electronic poll book* by its identifier.

Ref: None

FR-4: Restricted access to voter information.
{Requirement Type: **mandatory**}

Description: An *electronic poll book system* must not permit access to voter information other than information included in the *local voter database*.

Ref: RSA 654:45; RSA 654:31-a

FR-5: Constrained data storage.
{Requirement Type: **mandatory}**

Description: The *electronic poll book system* may not permit the storage of data other than that outlined in **DOCR-15** (voter information), **DOCR-11** (programs), and **DOCR-12** (system configuration data), e.g. dates of birth obtained using a camera on a voter's driver's license.

Ref: FR-4, DOCR-11, DOCR-12

FR-6: *Voter list* storage*.*
{Requirement Type: **mandatory}**

Description: The *electronic poll book system* must have the capability of storing (in external or internal memory) a copy of the *voter list (voter registration records and voter activity records)* in at least two separate locations.

Ref: None

FR-7: Voter information lookup.
{Requirement Type: **mandatory}**

Description: The *electronic poll book system* must permit a *ballot clerk* or *supervisor of the checklist* to verify whether an individual is eligible to vote and look up the voter's activity within the election. Specifically, the *electronic poll book system* must permit an authorized EPBS user to look up the voter's *voter record* as it appears in the *local voter database* on election day.

Ref: REF-2 Sec. 23-c

FR-8: Voter information updates.
{Requirement Type: **mandatory}**

Description: The *electronic poll book system* must permit a *ballot clerk* to update a voter's *voter record* in the *local voter database.* These updates must include, but are not limited to, the recording of:

> a. Whether a voter gave his or her name to initiate the voter check-in process. (This variable would be stored so that it could be printed

out on a marked checklist; however, it would not be uploaded to SVRS after the election.)

b. The casting of an absentee ballot from the voter.

c. Address change information provided by the voter when submitted to the ballot clerks and within the jurisdiction – recorded in a manner consistent with the street names and ranges in SVRS.

d. The receipt of a challenged voter affidavit (CVA) from the voter.

e. The 2-character state abbreviation of an out-of-state driver's license when presented as a photo ID by a voter.

f. (Optional) Whether a voter had checked out with the town or ward clerk after casting a ballot.

g. Whether a voter was given a ballot at the end of the check-in process.

h. In a party primary, what party ballot was provided to the voter.

The *electronic poll book system* must permit a *supervisor of the checklist* to update a voter's *voter record* in the *local voter database* on election day by noting that the person has been removed due to death.

The *electronic poll book system* must permit a *supervisor of the checklist* to add a *voter record* in the *local voter database* on election day that corresponds the Confidential voter #1, #2, #3, #4, #5, #6 by noting that the person has been removed due to death.

The EPBS must enable recordation of election day registration and tracking of such voters in the EPBS.

Ref: RSA 659:13; RSA 659:14; Ballot Clerk Procedures for Primary & General Election

---

FR-9: Generating and printing reports.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must provide the means for an authorized EPBS user to generate and print reports at any time during the election. The list of supported reports must include but not be limited to: the *voter list* in a format substantially identical in appearance to the existing paper checklist printed from SVRS, including marks (in required color) and data that reflects

voter activity records current as of that moment in time on election day, the *audit log,* and voter turnout reports.

Ref: RSA 654:25; RSA 654:31; RSA 654:45; RSA 659:13; RSA 657:15; RSA 659:14; RSA 659:102

FR-10: The *electronic poll book* must maintain a printable format of the *voter list (*voter *registration record and plus voter activity record)*
{Requirement Type: **mandatory***}*

Description: It must be possible to continue with an election should the *electronic poll book system* become inoperable. To that end, the *electronic poll book* must maintain a printable checklist format of the *voter list* on removable storage, reflecting *voter activity record* to that moment. The list must include all marks (in color as required) set forth in the Ballot Clerk Procedure for a Primary and a General Election. This up-to-date marked checklist, with readable bar codes, must be available in PDF and functional in the event that electronic poll books become unavailable for any reason, including loss of power or wireless. This is to ensure that elections can continue without double voting whether or not electronic poll books are operational, resulting in no more than a 15-minute delay in voter intake process. Sufficient printers (supplied by the EPB Vendor) and high quality paper shall be available to enable the election to continue using marked paper checklists for all ballot clerk stations within 15 minutes of failure. (Five minutes to troubleshoot and pull the thumb drive and insert it in a booted computer, 5 minutes to print (on multiple printers as needed), and 5 minutes to distribute printed paper checklist among voter intake lines.)

Ref: New Hampshire RSA 654:25, RSA 659:13, RSA 659:14, RSA 659:102; RSA 652:27;

FR-11: The electronic poll book must function if the communications system becomes inoperable. *{Requirement Type*: **mandatory***}*

Description: It must be possible to continue with an election should the *electronic poll book* communications system become inoperable. To that end, the *electronic poll book* must maintain a format of the *voter list (*voter *registration record and plus voter activity record)* that enables the voter intake process to continue using lines that are distributed according to discrete letters of the

alphabet, so that if wi-fi/bluetooth communications are down, the EPB system can work, and, if wi-fi communications are restored, the system continues in a fully integrated manner as if the wi-fi cummunications had not been interrupted. This would result in no more than 5 minutes' delay in the process of voter intake, during which time the moderator would set up alphabetical letters for each voter intake line and direct voters to line up opposite the letters corresponding to the first letter of their last name. EPB stations would continue to be used as before.

Ref: RSA 654:25, RSA 659:13, RSA 659:14, RSA 659:102; RSA 652:27;

_____

FR-12: User accounts.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must permit an *administrator* to manage user accounts within its *configuration*. This includes adding and disabling user accounts, and setting user roles for existing accounts.

Ref: None

FR-13: RSA Chapter 654 and 659 requirements.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must have the ability to be used in conformity with election laws in the Revised Statutes Annotated (RSAs) of the State of New Hampshire, which includes at least:

1. The support of any type of election conducted in New Hampshire;
2. The proper treatment of unaffiliated voters allowed to vote in a party primary;
3. The ability to accommodate additional lines of voters after the polls have opened;
4. The ability to produce a hard copy of the *voter list* complete with all (heretofore manual) checklist marks within 10 minutes during election day or after the election that will allow election officials to transition to the use of a manual checklist on election day, to check the accuracy of the *voter list* as needed*,* and to maintain required records following the election; and
5. The ability to incorporate changes to election laws going forward.

Ref: RSA Chapters 654 and 659, at a minimum. Specifically RSA 659:102

FR-14: System event confirmation.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must indicate that

1. The *electronic poll book system* has been set up for use in the election;
2. An *electronic poll book* has been set up for use in the election;
3. A *voter registration record* has changed;
4. A *voter activity record* has changed;
5. The *local voter database* has been imported into the *electronic poll book system*;
6. A system error or deviation has been detected, along with a description of the system error or deviation;
7. An *electronic poll book* is shutting down or reflects limited battery life remaining;
8. Packet transmission rates to 2 decimal points.
9. More to come…

Ref: RSA 654:45; Administrator role

FR-15: Diagnostics mode, with automated warnings.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must provide a diagnostics mode that

1. Allows the *administrator* to view and print the *audit log;*
2. Allows the *administrator* to verify that all events required to set up the system have been recorded in the audit log;
3. Allows the *administrator* to check any *voter registration record* and *voter activity record* at any time during the election;
4. Allows the *administrator* to view all system errors and deviations that have been recorded in the audit log;
5. Allows the *administrator* to verify the time stamp and polling place of the imported *local voter database*;

6. Provides an automated email, text message or other appropriate alarm to signal local election officials that a danger threshold has been crossed, e.g. decline in packet transmissions, an EPB station going off-line.

Ref: UIR-3; RSA 654:45; Administrator role

FR-16: Program execution.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must prevent any program that is not listed in **DOCR-11** from being executed within the *EPBS*.

Ref: DOCR-11; RSA 654:25; RSA 654:31-a; RSA 654:45; RSA 659:13; RSA 659:14; RSA 659:102

FR-17: Printing *voter list*.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must allow *supervisors of the checklist or clerks* to print the *voter list* used in the system in paper format. The format of the printed-paper record is to be specified and approved by the New Hampshire Secretary of State.

Ref: RSA 654: 25; RSA 654:31**;** RSA 652:27

FR-18: Retaining voter information.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must permit authorized EPBS users to extract all voter information as it appears in the *electronic poll book system*, for retention on the distinct storage components maintained for the period required by New Hampshire and federal laws.

Ref: RSA 659:13; RSA 659:14; RSA 659:102; RSA 652:27

FR-19: Compatibility with SVRS.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must be compatible with New Hampshire's *Statewide Voter Registration System* and compliant with the security requirements thereof.

Ref: FR-22, FR-23; RSA 654:45; RSA 652:27

FR-20: As a part of the *local voter database* import, the *electronic poll book system* must require the user to confirm that they are importing the intended *local voter database*.
{Requirement Type: **mandatory**}

Description: When the user imports the *local voter database*, they must take some action to verify that they are importing the *local voter database* for the correct election and for the correct polling place.

Ref: None

FR-21: One voter/ one vote within *EPBS*.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must ensure that within a *configured electronic poll book system* a voter can be checked in at most once during normal connectivity.

Ref: None

FR-22: *Local voter database* import.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must enable an *administrator, ballot clerk*, or *supervisor of the checklist* to import the *local voter database* through hardware interface **HIR-1**.

Ref: HIR-1, UIR-5,

FR-23: *Local voter database* export.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must enable an *administrator, ballot clerk,* or *supervisor of the checklist* to export the *local voter database* through hardware interface **HIR-1.**

Ref: HIR-1, UIR-5

FR-24: No s*upplemental local voter database.*
{Requirement Type: **mandatory***}*

Description: Although many EPBS in many states may have implemented this functionality as standard, **t**he *electronic poll book system* must **<u>not</u>** enable an *administrator, ballot clerk,* or *supervisor of the checklist* to import a *supplemental local voter database* through hardware interface **HIR-1**. Importing a complete and comprehensive *local voter database* must be the only option.

Ref: None

FR-25: Deliberately left blank

Ref: None

FR-26: The *electronic poll book* must not change *invariant data.*
{Requirement Type: **mandatory***}*

Description: The *electronic poll book* must not modify *invariant data* in the voter record during normal operation, *local voter database* import, or *local voter database* export. The New Hampshire Secretary of State will, consistent with New Hampshire laws, specify what *invariant data*, if any, may be used in EPBS.

Ref: RSA 654:45

FR-27: As a part of the *local voter database* export, the *electronic poll book system* must require the user to confirm that they are exporting the intended *voter list* after the election.
{Requirement Type: **mandatory***}*

Description: When the authorized EPBS user exports the *voter records (except voter activity records #1 and #3)* after the election, they must take some action to

verify that they are exporting the *voter list* for the correct election and for the correct polling place.

Ref: RSA 654:45**;** RSA 659:13; RSA 659:14

3.7.4 Non-Functional EPB Requirements

3.7.4.1   Performance (PR)

PR-1: *Electronic poll book* capacity during peak usage.
{Requirement Type: **mandatory***}*

Description: The *electronic poll book system* must accommodate at least (10) ten *electronic poll books* operating together within a single *configured electronic poll books* implementation during peak usage. More poll books may be required in larger towns.

Ref: None

PR-2: Voter throughput per *EPB.*
{Requirement Type: **mandatory***}*

Description: The *electronic poll book system should* allow for voter throughput of sixty (60) voters per hour within a *configured electronic poll book system* incorporating new voter registration.

Ref: None

PR-3: *Voter list* export.
{Requirement Type: **mandatory***}*

Description: Exporting the *voter list* using **UI-5** (voter list import and export) may take no longer than three (3) minutes. It is understood that, in the case of larger towns, printing the voter list may present printing challenges that must be fully anticipated and addressed. EPB Vendors shall specify anticipated printing time frames with various types of printers and various town sizes.

Ref: RSA 652:27

PR-4: *Voter list* import.
{Requirement Type: **mandatory***}*

Description: Importing the *local voter database* using **UI-5** (voter list import and export) may take no longer than five (5) minutes.

Ref: None

PR-5: *Electronic poll book system* setup.
{Requirement Type: **mandatory**}

Description: Setting up an *electronic poll book system* with ten (10) active *electronic poll books,* including new voter registration capability, should not take longer than 45 minutes.

Ref: None

PR-6: *Electronic poll book* boot up and configuration.
{Requirement Type: **mandatory**}

Description: Booting up an *electronic poll book* and adding it to a *configured electronic poll book system* should not take longer than three (3) minutes.

Ref: None

3.7.4.2   Reliability (RR)

RR-1.1: Voter check-in during interruption of connectivity.
{Requirement Type: **mandatory**}

Description: In the event of a temporary interruption of connectivity within an *electronic poll book system*, the *electronic poll book system* must permit a voter to check-in.

Ref: None

RR-1.2: Upon restoration of connectivity.
{Requirement Type: **mandatory**}

Description: In the event of a temporary interruption of connectivity within an *electronic poll book system*, the *electronic poll book system* must automatically restore *voter list* consistency across the *electronic poll books* after connectivity is restored.

Ref: None

RR-1.3: Identify double voting.
*{Requirement Type: **advisable**}*

Description: In the event of a temporary interruption of connectivity within an *electronic poll book system*, the *electronic poll book system* must identify voters that have been checked in at two or more different *electronic poll books* during the interruption of connectivity.

Ref: None

RR-1.4: Indicate interruption of connectivity.
*{Requirement Type: **mandatory**}*

Description: In the event of a temporary interruption of connectivity within an *electronic poll book system*, the *electronic poll book system* must indicate that there has been an interruption of connectivity by signaling and entering relevant event information into the *audit log*.

Ref: None

RR-2: Loss of power.
*{Requirement Type: **mandatory**}*

Description: In the event of a temporary loss of power, the *electronic poll book system* must permit a voter to check-in. The *electronic poll book system's* battery supply must allow for at least four (4) hours of operation without external power supply.

Ref: None

RR-3: Data recovery.
*{Requirement Type: **mandatory**}*

Description: The *electronic poll book system* must provide means for *local voter database* data recovery, should one of the physical memory storage components fail.

Ref: None

RR-4: Simultaneous data storage.
*{Requirement Type: **mandatory**}*

Description: Each *electronic poll book* must provide at least two methods for simultaneous data storage in distinct physical storage components to prevent the loss of data.

Ref: None

RR-5: *Local voter database* replicas.
{Requirement Type: **mandatory**}

Description: Within the *electronic poll book system* there must exist at least two replicas (logical or physical) of the *local voter database.* These replicas must be stored in distinct physical storage components.

Ref: None

RR-6: *Local voter database* replica consistency.
{Requirement Type: **mandatory**}

Description: If the *electronic poll book system* is in a *quiescent* state, all replicas of the *local voter database* must be logically consistent.

Ref: None

RR-7: Operational consistency.
{Requirement Type: **mandatory**}

Description: Any update to a *voter record* or to any other data pertaining to the election completed on one *electronic poll book* must be seen as *complete* on all other *electronic poll books*.

Ref: None

RR-8: Environmental robustness.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must be usable within a standard office environment and with temperature ranging at from 50°F (or higher) to 90°F (or lower).

Ref: None

3.7.4.3   Availability/Scalability (AR)

Some of the following Requirements may be satisfied using local Acceptance Testing. Acceptance Testing Requirements will be finalized after consultation with the Selected Evaluation Vendor, and will be iterative over time.

AR-1.1 Extend simultaneous electronic poll books processes for voter intake over a distance of 50 feet. *{Requirement Type*: **mandatory**}

Description: This connectivity range is considered a minimum needed to successfully implement any EPBS in New Hampshire. Most large towns would need considerably wider connectivity area. **Before a town with larger communications distance needs uses EPBs in an election, the evaluator must have tested the system to determine if the technology extends over the required distance. Hence, the term "preferred" may be interpreted as "mandatory" as the wider ranges of connectivity apply to these larger towns.**

AR-1.2: Extend simultaneous electronic poll books processes for voter intake over a distance of 100 feet. *{Requirement Type*: **preferred**}

Ref: Bedford parallel trial

_____

AR-1.3: Extend simultaneous electronic poll books processes for voter intake over a distance of 150 feet . *{Requirement Type*: **preferred**}

Ref: Bedford parallel trial

_____

AR-1.4: Extend simultaneous electronic poll books processes for voter intake over a distance of 200 feet. *{Requirement Type*: **preferred**}

Ref: Bedford parallel trial

_____

AR-2.1:   Extend electronic poll books processes to include voter registration. Add 30 feet to the above distances. *{Requirement Type*: **mandatory**}

Description: Election Day registration is an integral part of voter intake, since individuals who register on Election Day also normally wish to vote on Election Day. The EPB Working Group wanted to integrate this process into any EPB system. Much of the complexity and work required to implement EPBs appears to be associated with this part of the process. More staff under the supervisors of the checklist will likely be required on Election Day in order to handle the added work load required for EPBs. **Before a town with larger communications distance needs uses EPBs in an election, the evaluator must have tested the system to determine if the technology extends over the extended distance needed in that town. Hence, the term "preferred" may be interpreted as "mandatory" as the wider ranges of connectivity apply to these larger towns.**

Ref: Bedford parallel trial. EPB Working Group.

_____

AR-2.2:   Extend electronic poll books processes to include voter registration. Add 70 feet to the above distances. *{Requirement Type*: **preferred**}

Ref: Bedford parallel trial. EPB Working Group.

_____

AR-2.3:   Extend electronic poll books processes to include voter registration. Add 100 feet to the above distances. *{Requirement Type*: **preferred***}*

Ref: Bedford parallel trial. EPB Working Group.

_____

AR-3.1: Integrate return-to-undeclared activity in State Primaries: Add 30 feet to the above distances. **{***Requirement Type*: **mandatory***}*

Description: RSA 654:34 allows for return to undeclared process to be initiated on Election Day in a primary. The EPB Working Group expressed a desire to enable this process in EPBS. **Before a town with larger communications distance needs uses EPBs in an election, the evaluator must have tested the system to determine if the technology extends over the extended distance needed in that town. Hence, the term "preferred" may be interpreted as "mandatory" as the wider ranges of connectivity apply to these larger towns.**

Ref: RSA 654:34. Electronic Poll Books Working Group

_____

AR-3.2: Integrate return-to-undeclared activity in State Primaries: Add 50 feet to the above distances. *{Requirement Type*: **preferred***}*

Ref: Electronic Poll Books Working Group

AR-3.3: Integrate return-to-undeclared activity in State Primaries: Add 70 feet to the above distances. *{Requirement Type*: **preferred***}*

Ref: Electronic Poll Books Working Group. Bedford parallel trial.

Ref: New Hampshire Constitution, Part 1, Article 11

_____

AR-4.1: At least ten (10) *EPBs* in an *EPBS*.
{Requirement Type: **mandatory***}*

Description: An *electronic poll book system* must support at least ten (10) *electronic poll books* in a single polling location. Each of the *electronic poll books* must be usable concurrently. Should one of the *electronic poll books* become inoperable, the operation of the remaining *electronic poll book* or *electronic poll books* must not be affected. **Before a town with larger EPB Requirements uses EPBs in an election, the evaluator must have tested the system to determine if the technology works for the required number of EPBs in that town or ward. Hence, the term "preferred" may be interpreted as "mandatory" as the wider ranges of connectivity apply to**

these larger towns and wards. The NHSOS reserves the option to satisfy this Requirement by relying on Acceptance Testing.

Ref: New Hampshire Constitution, Part 1, Article 11

AR-4.2: At least twenty (20) *EPBs* in an *EPBS*.
{Requirement Type: ***preferred***}

Description: See 4.1 above.

Ref: Bedford parallel trial

AR-4.3: At least twenty-five (25) *EPBs* in an *EPBS*.
{Requirement Type: ***preferred***}

Ref: Bedford parallel trial

AR-4.4: At least thirty (30) *EPBs* in an *EPBS*.
{Requirement Type: ***preferred***}

Ref: Bedford parallel trial

AR-4.5: At least thirty-five (35) *EPBs* in an *EPBS*.
{Requirement Type: **preferred}**

Ref: Bedford parallel trial

AR-4.6: At least forty (40) *EPBs* in an *EPBS*.
{Requirement Type: ***preferred***}

Ref: Bedford parallel trial

AR-5: No single point of failure.
{Requirement Type: ***mandatory***}

Description: The *electronic poll book system* must be designed to tolerate any single point of failure scenarios.

Ref: None

3.7.4.4　Safety and Security (SR)

SR-1: *EPBS* must prevent injury or damage.
{Requirement Type: **mandatory***}*

Description: The *electronic poll book system* must be designed to prevent injury or damage to any individual or the hardware, including fire and electrical hazards.

Ref: None

SR-2: Isolation from other electronic election systems.
{Requirement Type: **mandatory***}*

Description: An *electronic poll book system* may not be connected to any other electronic election system on election day.

Ref: None

SR-3: Restricted access and communications.
{Requirement Type: **mandatory***}*

Description: The *electronic poll book* must prevent access to the system and its components by Internet or wireless method. The only exception is secure, reliable, dedicated, local-area communication limited to the system's components that is designed and required for correct system operation.

Ref: None

SR-4: Eavesdropping attack prevention.
{Requirement Type: **mandatory***}*

Description: The *electronic poll book system* must be protected against eavesdropping attacks.

Ref: None

SR-5: Man-in-the-middle attack prevention.
{Requirement Type: **mandatory***}*

Description: The *electronic poll book system* must be protected against man-in-the-middle attacks.

Ref: None

SR-6: Replay attack prevention.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must be protected against replay attacks. A replay attack is carried out either by the originator or by an attacker who intercepts the data and re-transmits it, possibly as part of a masquerade attack by IP packet substitution.

Ref: None

SR-7: Imports restricted to **HIR-1** (USB port).
{Requirement Type: **mandatory**}

Description: A file can only be imported into the *electronic poll book system* through **HIR-1**. No other interfaces may be used to import files into the *electronic poll book system.*

Ref: HIR-1

SR-8: HIR-1 (USB port) restrictions.
{Requirement Type: **mandatory}**

Description: The *electronic poll book system* must preclude all files--other than those specified in **DOCR-15** (voter information), **DOCR-11** (programs), and **DOCR-12** (system configuration data)--from being imported into the system through **HIR-1** (USB port)*.*

Ref: HIR-1, DOCR-11, DOCR-12, DOCR-15

SR-9: File format verification.
{Requirement Type: **mandatory**}

Description: A file can only be imported into the *electronic poll book system* if it complies with its file format specification provided in **DOCR-16**.

Ref: DOCR-16

SR-10: File authenticity verification.
{Requirement Type: **mandatory**}

Description: A file can only be imported into the *electronic poll book system* if it passes file authenticity verification. This verification must prove that the file originates from a trusted source, by validating the digital signature of the file.

Ref: None

SR-11: Signed exports.
{Requirement Type: **preferred**}

Description: Any file to be used in the electoral process, e.g., for information exchange with other election systems, audit purposes, etc., must be cryptographically signed before it is exported from the *electronic poll book system*. Digital signatures must be compliant with a standard, such as the Digital Signature Standard (DSS) specified in external document **REF-1**.

Ref: REF-1

SR-12: Use by account holders only.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* must restrict its use to individuals holding an official role/account created, e.g. after 3 attempts, users are locked out.

Ref: FR-20

SR-13: User roles.
{Requirement Type: **preferred**}

Description: Within the *electronic poll book system* there must only be three authorized EPBS user roles: *ballot clerk, supervisor of the checklist,* and *administrator.* Any account created as part must be assigned one of these three roles.

Ref: FR-20

SR-14: Access to **UI-1** (authorized EPBS user interface).
{Requirement Type: **mandatory**}

Description: Access to **UI-1** and all underlying functionality is restricted to account holders of authorized EPBS user role accounts. Password authentication is required to validate the account holder's access privileges. *Supervisor of the checklist* cannot log in as a *ballot clerk* and vice versa.

Ref: UI-1

SR-15: Access to **UI-2** (configuration interface).
{Requirement Type: **mandatory**}

Description: Access to **UI-2** and all underlying functionality is restricted to account holders of authorized EPBS accounts. The coordinated actions of two (2) authorized EPBS users are required to validate the account holder's access privileges.

Ref: UI-2

SR-16: Access to **UI-3** (diagnostic interface).
{Requirement Type: **mandatory**}

Description: Access to **UI-3** and all underlying functionality is restricted to account holders of *administrator role* accounts. Password authentication is required to validate the account holder's access privileges, e.g. after 3 attempts, user is locked out.

Ref: UI-3

SR-17: Access to **UI-4** (administrative interface).
{Requirement Type: **mandatory**}

Description: Access to **UI-4** and all underlying functionality is restricted to account holders of *administrator role* accounts. Password authentication is required to validate the account holder's access privileges.

Ref: UI-4

SR-18: Access to **UI-5** (*local voter database*).
{Requirement Type: **mandatory**}

Description: Access to **UI-5** and all underlying functionality is restricted to account holders of authorized EPBS user role accounts. Password authentication is required to validate the account holder's access privileges.

Ref: UI-5

SR-19: File integrity verification.
{Requirement Type: **mandatory**}

Description: A file can only be imported into the *electronic poll book system* if it passes file integrity verification. This verification must prove that the file has not been tampered with between the time that it was signed and the time of the import.

Ref: None

SR-20: Tamper evident cases.
{Requirement Type: **mandatory***}*

Description: All *electronic poll book* hardware interfaces must be sealable with tamper-evident seals. This includes HIR-1 (USB port).

Ref: HIR-1

_____

SR-21: All data must be encrypted at rest.
{Requirement Type: **mandatory***}*

Description: If device is stolen, data cannot be recovered without encryption password phrase.

Ref: SR-23

_____

SR-22: Decryption occurs on the fly through the software.
{Requirement Type: **mandatory***}*

Description: Refer to SR-23

Ref: SR-4, SR-5, SR-6

SR-23: All communications packets are encrypted prior to transmission and remain encrypted during transmission. *{Requirement Type*: **mandatory***}*

Description: On-the-fly encryption is a method of securing data on a computer storage device in a way that allows the information to remain accessible to a verified user but protected on the drive itself. The hallmark of an on-the-fly encryption scheme is that information is read and written while encoded, so at no point is any information that is stored on the drive not protected and encrypted. The encryption methods and algorithms used for on-the-fly encryption must be very fast and completely automatic so a user does not need to do anything more than provide some type of authentication to use the encrypted drive and files.

Ref: SR-4, SR-5, SR-6

3.7.4.5   Auditability (AUR)

AUR-1: Audit log.
{Requirement Type: **mandatory***}*

Description: The *electronic poll book system* must be auditable. To that end, the system must maintain an *audit log*.

Ref: None

AUR-2: Log voter registration record queries and updates.
{Requirement Type: **mandatory**}

Description: The *audit log* must retain time-stamped records of any query of, or update to, a *voter record* by any user of the *electronic poll book system*.

Ref: None

AUR-3: Log user actions.
{Requirement Type: **mandatory**}

Description: The *audit log* must retain time-stamped records of any actions performed by any user on the *electronic poll book system*, including but not limited to:

1. Starting up the system.
2. Shutting down the system.
3. Switching user accounts.
4. Creating/ modifying user accounts.
5. Switching to diagnostic/ administrative mode.
6. Printing.
7. Exporting.
8. Importing. (One import. If another import is needed, special code to overwrite existing data)
9. Adding/ removing an *electronic poll book.*
10. Resetting passwords.
11. Removing dead voters.
12. Adding confidential voters.
13. Process is iterative. There will be more actions identified as time goes on.

Ref: RSA 659:14; RSA 659:102; RSA 652:27

AUR-4: Log system deviations.
{Requirement type**: mandatory}**

Description: The *audit log* must retain time-stamped records of:

---

1. Any interruption in connectivity (between the components of *electronic poll book system*) or loss of power;

104

2. Any detected system error or deviation from expected system behavior;

Ref: None

AUR-5: Printable audit log.
{Requirement Type: **mandatory**}

Description: The *audit log* must be printable.

Ref: None

AUR-6: Exportable audit log.
{Requirement Type: **mandatory**}

Description: The *audit log* must be exportable to an external, removable storage device.

Ref: None

AUR-7: No *audit log* encryption.
{Requirement Type: **mandatory**}

Description: The audit log must **not** be encrypted.

Ref: None

AUR-8: Audit log format compliance.
{Requirement Type: **mandatory**}

Description: The *audit log* must be compliant with the format specified in **DOCR-9**.

Ref: DOCR-9

3.7.4.6   Usability (UR)

UR-1: Ease of use.
{Requirement Type: **mandatory**}

Description: The vendor of an *electronic poll book system* must provide procedures for setting up, using, and shutting down an *electronic poll book system* that are reasonably easy for *a ballot clerk, supervisor of the checklist* or town or city clerk to learn, understand, and perform. The procedures for setting up, using, and shutting down an *electronic poll book system* must not require a significant amount of training in addition

to the initial training required when a purchase of the equipment is made. The EPB Vendor must also make available additional training in the setup, use, and shutdown of the system.

Ref: None

3.7.4.7   Documentation (DOCR)

DOCR-1: Set up, use, and shutdown instructions.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include well-written, complete instructions sufficient for a *ballot clerk, supervisor of the checklist*, or town or city clerk to set up, use, configure, reconfigure, and shut down the *electronic poll book system*.

Ref: None

DOCR-2: Functionality specification.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include detailed specification of all implemented functionality of the system.

Ref: None

DOCR-3: Training materials.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include training materials that:

 1. May be in written or video form;
 2. Must be in a format suitable for use at a polling place, such as simple "how to" guides;

Ref: None

DOCR-4: Data recovery procedures.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include data recovery procedures for information included in the *electronic poll book system*.

106

Ref: RSA 659:13; RSA 659:14, RSA 659:102

DOCR-5.1: System architecture.
{Requirement Type: **mandatory***}*

Description: The *electronic poll book system* documentation must include an architecture model of the *electronic poll book system*.

Ref: None

DOCR-5.2: End user documentation.
{Requirement Type: **mandatory***}*

Description: The *electronic poll book system* documentation must include end-user documentation.

Ref: None

DOCR-5.3: System level documentation.
{Requirement Type: **mandatory***}*

Description: The *electronic poll book system* documentation must include system level documentation.

Ref: None

DOCR-5.4: Developer documentation.
{Requirement Type: **preferred***}*

Description: The *electronic poll book system* documentation must include developer documentation.

Ref: None

DOCR-6: Consumables documentation.
{Requirement Type: **mandatory***}*

Description: The *electronic poll book system* documentation must include detailed information concerning:

1. Electronic poll book system consumables; and
2. The EPB Vendor's supply chain for those consumables.

Ref: None

DOCR-7: Quality assurance procedures, test data, and reports.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include EPB Vendor internal quality assurance procedures and any internal or external test data and reports available to the EPB Vendor concerning the electronic poll book system.

Ref: None

DOCR-8: Repair and maintenance policies.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include repair and maintenance policies for the electronic poll book system.

Ref: None

DOCR-9: Audit log specification.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include detailed specification of the system's *audit log*, including but not limited to:

1. A complete definition of the audit log format; and
2. For each audit log entry, a precise statement regarding the system event that causes said entry to be generated.

Ref: None

DOCR-10: Usability tests.
{Requirement Type: **preferred**}

Description: The *electronic poll book system* documentation must include usability tests that address all user-facing features of the system, including but not limited to: the setting up, configuring, reconfiguring, using, and shutting down of the *electronic poll book system*. These are to be conducted by the manufacturer of the *electronic poll book system* using individuals who are representative of the general public.

Ref: None

DOCR-11: List of all *EPBS* programs.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include a list of all programs that will be executed during the use of the system, as well as a list of all files storing program data. For each program in the list, the intended function of the program must be identified. For each file storing program data the associated program must be identified.

Ref: None

DOCR-12: List of system configuration data.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include a list of all system configuration data required for proper system function. For each configuration data file in the list, the intended function of the configuration data must be identified. For each configuration data file in the list, the hardware and/ or software component to which the configuration data is applied must be identified.

Ref: None

DOCR-13: User interfaces.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include a list of all user interfaces, including but not limited to the interfaces outlined in **UI-1, UI-2, UI-3, UI-4,** and **UI-5**. For each user interface in the list a description must be provided, as well as information on what user roles are authorized to access said interface.

Ref: UI-1, UI-2, UI-3, UI-4, UI-5.

DOCR-14: Non-functional EPB Requirements documentation.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include documentation on the system's non-functional qualities, including but not limited to Performance, Availability, Reliability, Safety, Security, and Auditability.

Ref: None

DOCR-15: List of files containing voter information.
{Requirement Type: **mandatory**}

Description: The *electronic poll book system* documentation must include a list of all files containing information that is part of the *local voter database*.

Ref: None

DOCR-16: File format specification.
{Requirement Type: {**mandatory**}

Description: The *electronic poll book system* documentation must include a file format specification for each file or program listed in **DOCR-11, DOCR-12,** and **DOCR-15**.

Ref: DOCR-11, DOCR-12, DOCR-15

Ref: None

DOCR-17: EPB Reports.
{Requirement Type: {**mandatory**}

Description: The *electronic poll book system* documentation must include the following reports:

> All voters for whom ballot clerks reported in EPB an address change, but who stayed within the same ward or town

> All voters for whom ballot clerks reported in EPB a name change

Ref: RSA 654:36.

EXHIBIT 4: Safe Use Procedures for Electronic Poll Books

The following is a partial list of Safe Use Procedures required by RSA 652:27, upon which proper functioning of EPB system depends. The development of these procedures is iterative and will be completed over time, with input from election officials, EPB Vendors and Selected Evaluation Vendor(s):

4.1 Acceptance Testing: Conduct acceptance tests using the same scale as the election anticipated. As a minimum, conduct tests set forth by the Secretary of State. Test the anticipated maximum EPBs to cover expected volume and uses in the forthcoming election e.g. voter intake, new voter registration, and/or return-to-undeclared.

4.2 Pursuant to RSA 652:27, each city or town must conduct a local election using EPBs before they use EPBs in a state election. All EPB uses must be tested in advance in a local election, including voter intake, new voter registration, and/or Return-to Undeclared" before these capabilities are used in a state election.

4.3 Open polling place providing sufficient extra time to obtain the correct local file, start up EPBs, and troubleshoot all monitored variables.

4.4 Import correct local voter (checklist) file with up-to-date address data, downloading the local voter checklist file from SVRS to a flash drive that is maintained securely. After importing the local voter checklist file, election officials must check the number of voters in EPB against the number in SVRS and confirm they match.

4.5 Troubleshoot wireless and all variables available to administrative role.

4.6 If Internet connection is available at polling place, establish live SVRS connection (air-gapped with EPB system) so that supervisors of the checklist who are registering new voters can determine whether these individuals are already registered in New Hampshire and appear in SVRS, avoiding duplicates and speeding the upload to SVRS after the election. Applicants for registration with the same first name, last name, no middle name/middle initial conflict, and date of birth can be moved to that town or city ward, if the applicant for registration acknowledges he or she is the same individual and their application is valid.

4.7 Test onsite printer(s) before polls open by simultaneously printing portions of unmarked checklist. Refer to RSA 652:27.

4.8 Confirm availability of sufficient quantities of high quality paper to enable printing entire marked checklist in event of EPB failure.

4.9 Shortly after opening of polls, practice printing portion of marked checklist in event of loss of functionality on each printer, using already booted up computer and printers.

4.10 During the morning on Election Day, moderator must practice loss of EPB connectivity, switching to manual alphabet for voter check-in, and continuing to use EPBs without communication between stations. Voter registration must transition to manual process. When connectivity is reestablished, voter activity record must fully synchronize with other EPBs to achieve consistency of data throughout the polling place.

4.11 Towns that use EPBs with election day voter registration must successfully upload election history data and new voters to SVRS within one week after each election.

4.12 Upload *voter list (local voter database* plus *voter activity record)* to SVRS within one week after each election day.

4.13 if voters are being turned away as being unregistered or as having already voted, when they state otherwise, determine in advance what threshold will induce the moderator to revert to printing and using marked paper checklist on the fly.

4.14 If there are two ballots in an election, voters shall be provided both ballots and be marked once in the EPB system as having voted. If voter chooses not to mark one or both ballots, the voter shall nonetheless place both ballots in the ballot box or vote counting device.

EXHIBIT 5: Acknowledgements & Sources

Substantial portions of this document were inspired by documents produced from the following sources:

I.   EPB Vendor responses to Request for Information issued in March, 2017. http://sos.nh.gov/epoll.aspx

II.   Bedford, NH Town Election EPB trial using paper checklist in parallel, March 16, 2017.

III.   Input from New Hampshire Secretary of State's ePoll Books Working Group meetings, August, 2016 – June, 2017, including:

May, 2016 - Presentation by Alexander Schwarzmann, Professor and Department Head, Computer Science and Engineering; Director, VoTeR Center, University of Connecticut

February 6, 2017 – Presentation by Harri Hursti, security expert and entrepreneur

March 31, 2017 - Trade Show and EPB Vendor Interviews.

IV.   Connecticut Secretary of The State by the University of Connecticut's VoTeR Center, issued March 6, 2015:

http://www.sots.ct.gov/sots/lib/sots/ElectionServices/Handbooks/e-poll-book-system- requirements-1_0c_(2).pdf

V.   Indiana Secretary of State, in association with the Voting System Technical Oversight Program at Ball State University, with January 13, 2016 updates:

http://www.in.gov/sos/elections/4059.htm

VI.   Rhode Island Secretary of State's Request for Proposal for Electronic Poll Books issued Jan. 19, 2016 at http://www.bidprime.com/bid/10180461/RFI+-+Electronic+Poll+Books

VII.   Colorado Secretary of State's Request for Proposal for Electronic Poll Books and Ballot-on-Demand

http://www.sos.state.co.us/pubs/elections/VotingSystems/RFI/Robis%20Elections-UVS-RFIresponse.pdf, and

VIII. Wisconsin's Government Accountability Board's Electronic Poll Book Research – Final Report, issued March 19, 2014:

http://elections.wi.gov/sites/default/files/memo/20/electronic_poll_book_research_recommendations__17865.pdf

IX. Minnesota Secretary of State's Electronic Roster Task Force, Findings and Recommendations, issued January 31, 2014:

http://www.lcc.leg.mn/ertf/ElectronicRosterTaskForceFinalReport.pdf

X. Virginia State Board of Elections, Electronic Pollbook Certification, Procedures & System Requirements Rev-0515 Approved 05/13/2015

XI. National Conference of State Legislatures – Electronic Poll Books Research:

http://www.ncsl.org/research/elections-and-campaigns/electronic-poll books.aspx

XII. Additionally, this document relies on press reports involving electronic poll books.