

**Indiana
Electronic Poll Book (ePollBook)
Certification Test Protocol
for the
Voting System Technical Oversight Program (VSTOP)**

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1.0 INTRODUCTION

This document presents the test processes and procedures to be followed during functional certification testing of electronic poll books (hereafter referred to as “ePollBook”). This test protocol includes a description of each stage of the certification process, a description of all relevant test materials, test environmental constraints, test setup, and all test cases that are to be executed during a Voting System Technical Oversight Program (hereafter referred to as “VSTOP”) examination for certification of ePollBooks in the State of Indiana. This includes, but is not limited to, the following:

- *Test Requirements Matrix.*

The Test Requirements Matrix is a descriptive requirement matrix that is used to ensure all applicable requirements are evaluated during an examination for certification in Indiana.

- *Test Cases.*

Test cases are step-by-step procedures that provide test objectives, expected results, and evaluation criteria for pass/fail for all defined requirements. These test cases not only provide positive testing, but also negative testing. Each test case is assigned a unique Test Case Identifier (TCI) to identify the requirement being tested.

- *ePollBook Certification Checklist.*

This checklist is to be used as a guide for certification in Indiana. It includes relevant information about the device being evaluated.

Vendors should follow this guide in preparing materials for submission that will be used in creating a test sequence for certification functional testing to ensure ePollBooks meet or exceed all regulatory and legal requirements for the State of Indiana. An ePollBook may not be used in an election in Indiana until it has achieved successful state certification.

1.1 References

- Indiana Election Code IC 3-11-8-10.3 (hereafter referred to as Section 10.3)

1.2 Terms, Abbreviations, and Definitions

This subsection lists terms and abbreviations relevant to this document.

“ePB” – Electronic Poll Book Solution or ePollBook

“COTS” – Commercial Off-The-Shelf

“SVRS” – Statewide Voter Registration System

“TCI” – Test Case Identifier

“TDP” – Technical Data Package

“VSTOP” – Voting System Technical Oversight Program

As used in Section 10.3:

An **electronic poll list** refers to a poll list that is maintained in a computer database, the Indiana Statewide Voter Registration List (SVRS). The list comprises of the alphabetical listing of registered voters in the state along with other elements required by the Indiana Code.

An **electronic poll book** refers to the combination of mechanical, electromechanical and electronic equipment (including the software, firmware and documentation required to program, control and support the equipment) that is used to access and maintain the electronic poll list.

1.3 Background

As of July 1, 2013, Indiana requires the certification of ePBs in accordance with Section 10.3. The legislation provides that VSTOP will perform or evaluate testing on the electronic poll books which utilize information contained in the SVRS for purposes of conducting elections at precincts and vote centers. The following contains definitions used to implement legislative language for testing purposes, the functional and technical requirements that must be met by electronic poll books for certification, and the testing protocol to be utilized by VSTOP in the certification process.

1.4 Overview of Certification Process

The evaluation of an ePB solution to this test protocol will be performed in a three phase approach 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 to the next phase.

The three phases and the evaluation criteria for completion are as follows:

- **Administrative Review** – To meet the requirements of Section 10.3 (b) (15) and (17), the electronic poll book vendor/manufacture will submit an application to VSTOP for evaluation for completeness and correctness. If the application is deemed sufficient, VSTOP will submit the “ePB Certification Checklist”, presented in Appendix A of this document, to the ePB vendor/manufacture for completion. All required information and documentation must be submitted to VSTOP for evaluation within a period not to exceed 30 days after the initial request. Upon receipt of the checklist and requested documentation, VSTOP will review the checklist and supporting documentation for completeness and correctness. If the application is deemed sufficient, VSTOP will request the ePB be submitted to an EAC accredited testing lab or a testing lab chosen by the vendor and approved by VSTOP for conducting the Functional Configuration Audit and Telecommunication and Compliance Testing.
- **Functional Configuration Audit (FCA)** – After receipt of the ePB solution from the vendor/manufacture, the testing lab will inspect the delivery for damage and catalogue all configuration items. At this time, the lab may request assistance in the initial setup and configuration of the ePB solution from the vendor/manufacture. Once configured, the testing lab will perform test case identifier “TCI: 13 Functional Configuration Audit”, presented in Appendix B of this document. Successfully meeting the “Criteria for Evaluation” for this test case will be considered successful completion.

- **Telecommunications/Compliance Testing** – To meet the telecommunications requirements of Section 10.3, specific test cases have been developed (Appendix C) that will focus on the ability of the ePB to transmit and receive data electronically and communicate with the poll list server. Meeting the remaining test cases in Appendix C will be considered successful completion of compliance testing.

Test Data - Each step of the tests cases in the above three phases contains an expected result to provide objective pass/fail criteria. All test data will be provided to the testing laboratory by VSTOP. There are no dependencies for execution of the test cases. All test cases for each phase of this evaluation will be run independently in the order the assigned testing lab reviewer/examiner determines is the most effective and efficient.

1.5 Acceptance Testing

After certification each county which has contracted for the ePB will conduct an acceptance test at the time of delivery. This acceptance test will focus primarily on the ability of the ePB to communicate with the county server in downloading and uploading appropriate data. Certification of the ePB may be revoked if the ePB fails the acceptance test. See Appendix D for the Acceptance Test Checklist.

1.6 Application Submission Procedures

Prior to functional certification testing, in accordance with the directions in the Indiana Secretary of State APPLICATION FOR ELECTRONIC POLL BOOK CERTIFICATION (presented in Appendix E), the vendor shall submit the Application, complete Technical Data Package (TDP) and ePB Certification Checklist (Appendix A of this Test Protocol) to:

State of Indiana Voting System Technical Oversight Program (VSTOP)
Bowen Center for Public Affairs
Ball State University, Muncie, IN 47306

VSTOP will forward a copy of this material to the Indiana Election Division for the filing as required by IC 3-11-18.1-12(b).

The submitted documentation must adhere to the following guidelines:

- (1) Vendor Name, Product Name and Model Number must be indicated as follows: (See Page 1 of the Application for Certification in Appendix E.)

Vendor/Manufacturer Information:	
Name:	<i>(insert vendor/manufacturer information here)</i>
Address:	
Primary Point of Contact:	
Product Name and Model Number:	<i>(insert product information here)</i>
Date of Submission:	

- (2) Each item in the package must be clearly identified. If the TDP is incomplete or the required items are not clearly identified, the entire package may be returned to the vendor and the evaluation of the voting system rescheduled.
- (3) For each requirement, the vendor must indicate the location in the TDP document(s) in the 'Vendor documentation location' column, and initial and date in the 'Vendor' column to

signify that the vendor has verified the location in their documentation for the requirement. (Section B of the Certification Checklist)

- (4) For each functional requirement, the vendor must initial to indicate the e-poll book supports mandatory functionalities as outlined in Sec. 10.3. (Section C of the Certification Checklist)

Once received, the submitted package will be reviewed to verify the following:

- (1) The ePB Documentation Checklist and entire TDP package have been submitted as indicated by the vendor.
- (2) Whether each requirement has been included and is provided in sufficient detail to adequately meet the requirement set forth in Sec. 10.3 (b).

Once all information has been reviewed, functional certification testing may be performed.

2.0 TEST ITEMS/MATERIALS REQUIRED FOR TESTING

This section contains detailed descriptions of the procedures to be used by vendors in submitting ePBs for required functional configuration testing, items tested during the evaluation, including all software, hardware, and peripherals, both proprietary and COTS, and any test support equipment or materials necessary for test performance.

2.1 Submission of Test Protocols to Testing Laboratories

Vendors seeking to certify ePBs in the state of Indiana must demonstrate that the product meets state requirements by producing evidence that the ePB has passed testing using the protocols developed for the Functional Configuration Audit (Appendix B) and Telecommunications/Compliance Testing (Appendix C). Testing must be performed by a testing lab accredited by the federal Election Assistance Commission or a testing lab approved by the Voting System Technical Oversight Program (VSTOP). The vendor will bear all costs related to these tests. A report, in a format prescribed by VSTOP, from the testing lab shall be presented to VSTOP for its inspection and approval. The tests must demonstrate to the satisfaction of VSTOP that the ePB has successfully performed in all test cases listed in this document.

2.2 Materials Required for Testing

At a minimum, a vendor/manufacturer submitting an ePB solution for evaluation to a testing lab shall be required to provide:

- two (2) polling place devices;
- equipment for the ePB Server;
- all peripheral devices including bar code scanners, digital capture devices, and transport media; and,
- all required documentation.

This will be documented in the following tables: (items taken from Part 2 of State Form 55319 in Appendix E.)

2.2a. Software

Table 2.3a Software

This subsection contains a listing of the software and firmware being evaluated.

Component Name	Version	Unique Identifier (digital signature or hash value)

(Add additional rows as needed)

2.2b. Hardware

This subsection contains a listing of the hardware being evaluated.

Table 2.2b Hardware

Component Name	Model/Version Number	Description

(Add additional rows as needed)

2.2c Peripherals

This subsection contains detailed descriptions of optional equipment used by the system being evaluated.

Table 2.2c Peripherals

Part Name	Model Number	Revision Number	Description

(Add additional rows as needed)

2.2d Test Support Equipment/Materials

This subsection contains detailed descriptions of the test support equipment and materials needed to perform the required testing.

Table 2.2d Test Support Materials

Part Name	Model Number	Revision Number	Description

(Add additional rows as needed)

2.2e Technical Data Package

This subsection lists all manufacturer provided documentation that is relevant to the system being tested.

(List and describe all relevant documentation including document numbers, revisions, and issue dates. This documentation may include, but not be limited to, system overview, software and hardware descriptions, user's guides and technical manuals, and security procedures)

Table 2.2e Documentation

Document Name	Part Number	Revision	Issue Date

(Add additional rows as needed)

2.2f Third Party Test Reports

This subsection lists the reports provided by third party entities that are relevant to the system being evaluated and the test engagement.

(List all relevant third party test reports including report numbers, revisions, and issue dates.)

Table 2.2f Third Party Test Reports

Report Title	Description	Revision	Issue Date

(Add additional rows as needed)

2.2g Previous Test Results

This subsection describes the results of any previous testing performed that is relevant to the system being evaluated.

Table 2.2g Previous Test Results

Report Title	Description	Revision	Issue Date

(Add additional rows as needed)

2.2h Known Fielded Use

This subsection lists other jurisdictions in which the electronic poll book solution has been fielded.

Table 2.2h Known Fielded Use

Jurisdiction	Authorizing Official	Numbers of Years	Known Fielded Issues

(Add additional rows as needed)

3.0 TEST SPECIFICATIONS

This section contains a detailed description of the procedures to be followed during test setup and preparation.

To meet the requirements of Section 10.3, the following two test techniques will be utilized:

- **Administrative Review** – This area of testing will include a review of the documentation provided by the manufacturer.

- **Functional Execution**

Functional Configuration Audit – This area of testing will target the specific functionality claimed by the manufacturer to ensure the product functions as documented. This testing will use both positive and negative test data to test the robustness of the system.

Telecommunications Testing – This area of testing will focus on the system being able to transmit and receive data electronically and communication with the poll list server.

Compliance Testing – This area of testing will focus on the remaining Section 10.3 requirements and will be documented in a step-by-step approach. Requirements will be mapped to either a test case or a single step in a test case for traceability.

Test Data – VSTOP will provide all test data to the labs in a format that conforms to the Indiana SVRS data formats. These data will be used in all test cases for all applicants.

3.1 Test Setup

For this evaluation, the electronic poll book solution will be set up in the manner in which the testing lab examiner deems to most closely replicate the environment for fielded use. Each test case contains sections for test configuration, equipment, special procedural requirements, and assumptions, all of which will be followed prior to execution of the given test case. If a deviation is required, the examiner will document the deviation and provide the engineer logic as to “why” the deviation is required. During the execution of any test case, the examiner may require assistance from ePB vendor/manufacturer. It is expected that the ePB vendor/manufacturer comply with a request in a reasonable amount of time as not to delay the evaluation.

3.2 Test Sequence

The test cases are presented below in a logical order of execution:

Administrative Review:

- TCI: 01 ePB Certification Checklist (See Appendix A)

Functional Configuration Audit:

- TCI: 02 Functional Configuration Audit (See Appendix B)

Telecommunications Testing: (See Appendix C)

- TCI: 03 Transmission Encryption
- TCI: 04 Electronic Poll Book Transmission

- TCI: 05 Loss and Restoration of Connectivity

Compliance Testing: (See Appendix C)

- TCI: 06 Product Safety (Commercial Off the Shelf - COTS)
- TCI: 07 Product Safety (Proprietary)
- TCI: 08 Electronic Poll Book Programming
- TCI: 09 Diagnostic Communications
- TCI: 10 Supported Elections
- TCI: 11 Electronic Poll Book Interface
- TCI: 12 Display of Voter Information and Signature
- TCI: 13 Input of Voter Eligibility
- TCI: 14 Signature Capture
- TCI: 15 Record Retrieval by Bar Code

3.3 Traceability Matrix

The following table maps the test cases to the requirements of Section 10.3 of the Indiana Election Code:

Section 10.3 Statute	Test Case Mapping
(1) An electronic poll book must be programmed so that the coordinated action of two (2) election officers who are not members of the same political party is necessary to access the electronic poll book.	TCI: 08 Electronic Poll Book Programming
(2) An electronic poll book may not be connected to a voting system.	TCI: 11 Electronic Poll Book Interface
(3) An electronic poll book may not permit access to voter information in the electronic poll list other than: (A) information provided on the certified list of voters prepared under IC 3-7-29-1;	TCI: 12 Display of Voter Information and Signature
(3) An electronic poll book may not permit access to voter information in the electronic poll list other than: (B) information concerning any of the following received or issued after the electronic poll list has been downloaded by the county election board under IC 3-7-29-6: (i) The county's receipt of an absentee ballot from the voter. (ii) The county's receipt of additional documentation provided by the voter to the county voter registration office. (iii) The county's issuance of a certificate of error.	TCI: 12 Display of Voter Information and Signature

<p>(4) The information contained on an electronic poll list must be encrypted and placed on a dedicated, private server to secure connectivity between a precinct polling place or satellite absentee office and the county election board. The electronic poll book must have the capability of:</p> <p>(A) storing (in external or internal memory) a local version of the electronic poll list; and</p> <p>(B) producing a list of audit records that reflect all of the idiosyncrasies of the system, including in-process audit records that set forth all transactions.</p>	<p>TCI: 03 Transmission Encryption</p> <p>TCI: 04 Electronic Poll Book Transmission</p>
<p>(5) The electronic poll book must permit a poll clerk to enter information regarding an individual who has appeared to vote to verify whether the individual is eligible to vote, and if so, whether the voter has:</p> <p>(A) already cast a ballot at the election;</p> <p>(B) returned an absentee ballot; or</p> <p>(C) submitted any additional documentation required under IC 3-7-33-4.5.</p>	<p>TCI: 13 Input of Voter Eligibility</p>
<p>(6) After the voter has been provided with a ballot, the electronic poll book must permit a poll clerk to enter information indicating that the voter has voted at the election.</p>	<p>TCI: 13 Input of Voter Eligibility</p>
<p>(7) The electronic poll book must transmit the information in subdivision (6) to the county election board so that the board may transmit the information immediately to every other polling place or satellite absentee office in the county in which an electronic poll list is being used.</p>	<p>TCI: 04 Electronic Poll Book Transmission</p>

<p>(8) The electronic poll book must permit reports to be:</p> <p>(A) generated by a county election board for a watcher appointed under IC 3-6-8 at any time during election day; and</p> <p>(B) electronically transmitted by the county election board to a political party or independent candidate who has appointed a watcher under IC 3-6-8.</p>	<p>*No specific case – the requirement is at any time and the following test cases require reports:</p> <p>TCI: 08 Electronic Poll Book Programming</p> <p>TCI: 12 Display of Voter Information and Signature</p> <p>TCI: 13 Input of Voter Eligibility</p> <p>TCI: 14 Signature Capture</p> <p>TCI: 09 Diagnostic Communications</p> <p>TCI: 05 Loss and Restoration of Connectivity</p>
<p>(9) On each day after absentee ballots are cast before an absentee voter board in the circuit court clerk's office, a satellite office, or a vote center, and after election day, the electronic poll book must permit voter history to be quickly and accurately uploaded into the electronic poll list.</p>	<p>TCI: 04 Electronic Poll Book Transmission</p>
<p>(10) The electronic poll book must be able to display an electronic image of the signature of a voter taken from the voter's registration application, if available.</p>	<p>TCI: 12 Display of Voter Information and Signature</p>
<p>(11) The electronic poll book must be used with a signature pad, tablet, or other signature capturing device that permits the voter to make an electronic signature for comparison with the signature displayed under subdivision (10). An image of the electronic signature made by the voter on the signature pad, tablet, or other signature capturing device must be retained and identified as the signature of the voter for the period required for retention under IC 3-10-1-31.1.</p>	<p>TCI: 14 Signature Capture</p>
<p>(12) The electronic poll book must include a bar code reader or tablet that:</p> <p>(A) permits a voter who presents an Indiana driver's license or a state identification card issued under IC 9-24-16 to scan the license or card through the bar code reader or tablet; and</p> <p>(B) has the capability to display the voter's registration record upon processing the information contained within the bar code on the license or card.</p>	<p>TCI: 15 Record Retrieval by Bar Code</p>

<p>(13) The electronic poll book must be compatible with:</p> <p>(A) any hardware attached to the poll book, such as signature pads, bar code scanners, and network cards;</p> <p>(B) the statewide voter registration system; and</p> <p>(C) any software system used to prepare voter information to be included on the electronic poll list.</p>	<p>TCI: 02 Functional Configuration Audit</p>
<p>(14) The electronic poll book must have the ability to be used in conformity with this title for:</p> <p>(A) any type of election conducted in Indiana; or</p> <p>(B) any combination of elections held concurrently with a general election, municipal election, primary election, or special election.</p>	<p>TCI: 10 Supported Elections</p>
<p>(15) The procedures for setting up, using, and shutting down an electronic poll book must:</p> <p>(A) be reasonably easy for a precinct election officer to learn, understand, and perform; and</p> <p>(B) not require a significant amount of training in addition to the training required by IC 3-6-6-40.</p>	<p>TCI: 01 ePB Certification Checklist</p>
<p>(16) The electronic poll book must enable a precinct election officer to verify that the electronic poll book:</p> <p>(A) has been set up correctly;</p> <p>(B) is working correctly so as to verify the eligibility of the voter;</p> <p>(C) is correctly recording that a voter has voted; and</p> <p>(D) has been shut down correctly.</p>	<p>TCI: 09 Diagnostic Communications</p>

<p>(17) The electronic poll book must include the following documentation:</p> <p>(A) Plainly worded, complete, and detailed instructions sufficient for a precinct election officer to set up, use, and shut down the electronic poll book.</p> <p>(B) Training materials that:</p> <ul style="list-style-type: none"> (i) may be in written or video form; and (ii) must be in a format suitable for use at a polling place, such as simple "how to" guides. <p>(C) Failsafe data recovery procedures for information included in the electronic poll book.</p> <p>(D) Usability tests:</p> <ul style="list-style-type: none"> (i) that are conducted by the manufacturer of the electronic poll book using individuals who are representative of the general public; (ii) that include the setting up, using, and shutting down of the electronic poll book; and (iii) that report their results using the ANSI/INCITS -354 Common Industry Format (CIF) for Usability Test Reports approved by the American National Standards Institute (ANSI) on December 12, 2001. <p>(E) A clear model of the electronic poll book system architecture and the following documentation:</p> <ul style="list-style-type: none"> (i) End user documentation. (ii) System-level documentation. (iii) Developer documentation. <p>(F) Detailed information concerning:</p> <ul style="list-style-type: none"> (i) electronic poll book consumables; and (ii) the vendor's supply chain for those consumables. <p>(G) Vendor internal quality assurance procedures and any internal or external test data and reports available to the vendor concerning the electronic poll book.</p>	<p>TCI: 01 ePB Certification Checklist</p>
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<p>(H) Repair and maintenance policies for the electronic poll book.</p> <p>(I) As of the date of the vendor's application for approval of the electronic poll book by the secretary of state as required by IC 3-11-18.1-12(2), the following:</p> <ul style="list-style-type: none"> (i) A list of customers who are using or have previously used the vendor's electronic poll book. (ii) A description of any known anomalies involving the functioning of the electronic poll book, including how those anomalies were resolved. 	
<p>(18) The electronic poll book and any hardware attached to the electronic poll book must be designed to prevent injury or damage to any individual or the hardware, including fire and electrical hazards.</p>	<p>TCI: 06 Product Safety (Commercial Off the Shelf - COTS)</p> <p>TCI: 07 Product Safety (Proprietary)</p>
<p>(19) The electronic poll book must demonstrate that it correctly processes all activity regarding each voter registration record included on the electronic poll list, including the use, alteration, storage, and transmittal of information that is part of the record. Compliance with this subdivision requires the mapping of the data life cycle of the voter registration record as processed by the electronic poll book.</p>	<p>TCI: 01 ePB Certification Checklist</p> <p>TCI: 02 Functional Configuration Audit</p>
<p>(20) The electronic poll book must successfully perform in accordance with all representations concerning functionality, usability, security, accessibility, and sustainability made in the vendor's application for approval of the electronic poll book by the secretary of state as required by IC 3-11-18.1-12(2).</p>	<p>TCI: 02 Functional Configuration Audit</p>
<p>(21) The electronic poll book must have the capacity to transmit all information generated by the voter or poll clerk as part of the process of casting a ballot, including the time and date stamp indicating when the voter voted, and the electronic signature of the voter, for retention on the dedicated private server maintained by the county election board for the period required by Indiana and federal law.</p>	<p>TCI: 04 Electronic Poll Book Transmission</p>

<p>(22) The electronic poll book must:</p> <p>(A) permit a voter to sign the poll book even when there is a temporary interruption in connectivity to the Internet; and</p> <p>(B) provide for the uploading of each signature and its assignment to the voter's registration record.</p>	<p>TCI: 05 Loss and Restoration of Connectivity</p>
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4.0 TEST DATA

This section contains a detailed description of the test cases being exercised.

4.1 Test Data Recording

This subsection contains a detailed description of the procedures to be followed during test execution and data collection.

All test data produced by the testing labs during this project will become the property of VSTOP. The output test data from any device will be collected and stored in an appropriate manner as to allow for data analysis. Real-time Test Execution Logs obtained from labs will be maintained by VSTOP.

4.2 Test Data Criteria and Reduction

All test results will be evaluated against the expected results set forth in the test cases. The acceptable range for system performance and the expected results are derived from the test designers' experience and expertise. If an expected result is not achieved, an evaluation will be performed to determine the root cause analysis of the unexpected results. This evaluation will consider tester error, invalid expectations, and system performance. Failure to achieve the expected results does not constitute a test failure. A test failure only occurs when the "Criteria for Evaluation of Test Results," as set forth in the test cases, are not achieved for a specific test.

Following execution of all required test cases, an analysis will be performed on all data collected. All test cases that did not meet the "Test Objective or the "Criteria for Evaluation of Test Results" will be noted in a report submitted by the testing labs to VSTOP. These deficiencies will be detailed in manner that includes the test case identifier, the test step, and the actual results obtained. If the testing labs determine the results violate a specific requirement, the specific requirement will be included in the report with a narrative opinion of why.

5.0 TEST REPORT

At the conclusion of testing, the testing lab will compile a test report, in a format prescribed by VSTOP, that includes all findings of the evaluation effort and deliver a copy to VSTOP at the address listed on cover page of this document and copy to the vendor of the ePB. VSTOP will review the results and will document results of all tests executed in sufficient detail for the Secretary of State to make a determination on the use of the ePB solution being evaluated.

6.0 CHANGES TO A CERTIFIED EPB

Indiana Code 3-11-18.1-12(f) provides that a certification for an ePB expires December 31 of the year following the issuance of the certification (meaning a period of up to two years). If, during that time span, the manufacturer/vendor determines that changes are necessary to the hardware, firmware, software, peripherals, manuals and any other documentation, these changes shall be submitted to VSTOP in a timely manner for approval before they are implemented in the field. VSTOP will determine if further testing is needed before these changes are approved to a certified ePB.

APPENDIX A
ePollBook Certification Checklist

ePollBook Certification Checklist

Section A

Vendor Name: _____

Product Name and Model Number: _____

VENDOR INSTRUCTIONS

In accordance with the directions in the Indiana Secretary of State APPLICATION FOR ELECTRONIC POLL BOOK CERTIFICATION, the vendor shall submit the Application and Technical Data Package (TDP) and this completed checklist to VSTOP, Bowen Center for Public Affairs, Ball State University, Muncie, IN 47306.

- (1) Vendor Name and Product Name and Model Number must be indicated at the top of Section A of the Certification Checklist.
- (2) Each item in the package must be clearly identified. If the TDP is incomplete or the required items are not clearly identified, the entire package may be returned to the vendor and the evaluation of the voting system rescheduled.
- (3) For each requirement, the vendor must indicate the location in the TDP document(s) in the 'Vendor documentation location' column, and initial and date in the 'Vendor' column to signify that the vendor has verified the location in their documentation for the requirement. (Section B)
- (4) For each functional requirement, the vendor must initial to indicate the e-poll book supports mandatory functionalities as outlined in IC 3-11-8-10.3.(Section C)

VSTOP REVIEW

The TDP package must be verified for completeness. VSTOP will:

- (1) Verify that the ePB Documentation Checklist and entire TDP package have been submitted as indicated by the vendor. If not, the package is incomplete.
- (2) Determine whether each requirement has been included and is provided in sufficient detail to adequately meet the requirement set forth in Section 10.3 (b).
- (3) For each requirement, initial and date the 'VSTOP Comments' column.
- (4) If any requirement has not been met by the vendor documentation, the submission is incomplete and will be returned to the vendor.

Section B The table below has been populated as stated in Section 10.3 (b). These requirements are taken directly from the Indiana Code and are listed below.

Requirement	Vendor documentation location	Vendor Comments	VSTOP Comments
(15) The procedures for setting up, using, and shutting down an electronic poll book must: (A) be reasonably easy for a precinct election officer to learn, understand, and perform; and			

<p>(15) The procedures for setting up, using, and shutting down an electronic poll book must:</p> <p>(B) not require a significant amount of training in addition to the training required by IC 3-6-6-40.</p>			
<p>(17) The electronic poll book must include the following documentation:</p> <p>(A) Plainly worded, complete, and detailed instructions sufficient for a precinct election officer to set up, use, and shut down the electronic poll book.</p>			
<p>(17) The electronic poll book must include the following documentation:</p> <p>(B) Training materials that:</p> <p>(i) may be in written or video form; and</p>			
<p>(17) The electronic poll book must include the following documentation:</p> <p>(B) Training materials that:</p> <p>(ii) must be in a format suitable for use at a polling place, such as simple "how to" guides.</p>			
<p>(17) The electronic poll book must include the following documentation:</p> <p>(C) Failsafe data recovery procedures for information included in the electronic poll book.</p>			
<p>(17) The electronic poll book must include the following documentation:</p> <p>(D) Usability tests:</p> <p>(i) that are conducted by the manufacturer of the electronic poll book using individuals who are representative of the general public;</p>			
<p>(17) The electronic poll book must include the following documentation:</p> <p>(D) Usability tests:</p> <p>(ii) that include the setting up, using, and shutting down of the electronic poll book; and</p>			

<p>(17) The electronic poll book must include the following documentation: (D) Usability tests: (iii) that report their results using the ANSI/INCITS -354 Common Industry Format (CIF) for Usability Test Reports approved by the American National Standards Institute (ANSI) on December 12, 2001.</p>			
<p>(17) The electronic poll book must include the following documentation: (E) A clear model of the electronic poll book system architecture and the following documentation: (i) End user documentation.</p>			
<p>(17) The electronic poll book must include the following documentation: (E) A clear model of the electronic poll book system architecture and the following documentation: (ii) System-level documentation.</p>			
<p>(17) The electronic poll book must include the following documentation: (E) A clear model of the electronic poll book system architecture and the following documentation: (iii) Developer documentation</p>			
<p>(17) The electronic poll book must include the following documentation: (F) Detailed information concerning: (i) electronic poll book consumables; and</p>			
<p>(17) The electronic poll book must include the following documentation: (F) Detailed information concerning: (ii) the vendor's supply chain for those consumables.</p>			
<p>(17) The electronic poll book must include the following documentation: (G) Vendor internal quality assurance procedures and any internal or external test data and reports available to the vendor concerning the electronic poll book.</p>			

<p>(17) The electronic poll book must include the following documentation: (H) Repair and maintenance policies for the electronic poll book.</p>			
<p>(17) The electronic poll book must include the following documentation: (I) As of the date of the vendor's application for approval of the electronic poll book by the secretary of state as required by IC 3-11-18.1-12(2), the following: (i) A list of customers who are using or have previously used the vendor's electronic poll book.</p>			
<p>(17) The electronic poll book must include the following documentation: (I) As of the date of the vendor's application for approval of the electronic poll book by the secretary of state as required by IC 3-11-18.1-12(2), the following: (ii) A description of any known anomalies involving the functioning of the electronic poll book, including how those anomalies were resolved.</p>			
<p>(19) The electronic poll book must demonstrate that it correctly processes all activity regarding each voter registration record included on the electronic poll list, including the use, alteration, storage, and transmittal of information that is part of the record. Compliance with this subdivision requires the mapping of the data life cycle of the voter registration record as processed by the electronic poll book.</p>			

Section C: Functionality Conformance The table below has been populated as stated in Section 10.3 (b). These requirements are taken directly from Indiana Code 3-11-8-10.3 and are listed below.

Requirement	Vendor documentation location	Vendor Comments	VSTOP Comments
(3B, 7,21) Supports Telecommunications			
(4) Encrypts data (specify type)			
(4A) Capable of storing local version of poll list on internal or external memory (specify type and recommended size of memory)			
(4B) Produces in-process audit records of all transactions			
(8) Permits generation of real-time reports			
(10) Capable of displaying legible electronic image of voter signature			
(11) Supports Digital Signature Capture Device			
(12) Supports use of a bar code reader			
(13) Implements Client Server Architecture			

Vendor Truth and Accuracy Statement

The individual signing below is the authorized representative of the applicant and states the following:
The information provided in this document and in the Technical Data Packages as well as all Corporate Information provided by the applicant is true and accurate. I understand that if this information is determined by VSTOP to be inaccurate, the Indiana Secretary of State may terminate certification testing of the system herein described.

Name _____ Title _____

Signature _____ Date Submitted _____

Date APPLICATION FOR ELECTRONIC POLL BOOK CERTIFICATION received by VSTOP

Date this Checklist received by VSTOP _____ (if different from above)

Date VSTOP Review of Application and Checklist commenced: _____

Status of Package received: Complete _____ Incomplete _____

Outcome of VSTOP Review Accept Reject

Date of Review _____

Name _____ Signature _____

Date Received by Indiana Secretary of State _____

SECRETARY OF STATE ACTION

- APPLICATION APPROVED
- APPLICATION APPROVED WITH RESTRICTIONS SET FORTH IN REPORT
- APPLICATION REJECTED

Indiana Secretary of State _____ Date _____

APPENDIX B

Functional Configuration Audit (FCA) Test Cases

The tests contained in Appendix B and C must be completed by a testing lab accredited by the federal Election Assistance Commission or otherwise approved by VSTOP. Results will be sent by the testing lab to VSTOP and the vendor.

Functional Configuration Audit (FCA) Test Cases

TCI: 02 Functional Configuration Audit	
IN § 10.3 (b) Requirements: (13) (19) (20)	(13) <i>The electronic poll book must be compatible with:</i> (A) <i>any hardware attached to the poll book, such as signature pads, bar code scanners, and network cards;</i> (B) <i>the statewide voter registration system; and</i> (C) <i>any software system used to prepare voter information to be included on the electronic poll list.</i> (19) <i>The electronic poll book must demonstrate that it correctly processes all activity regarding each voter registration record included on the electronic poll list, including the use, alteration, storage, and transmittal of information that is part of the record. Compliance with this subdivision requires the mapping of the data life cycle of the voter registration record as processed by the electronic poll book.</i> (20) <i>The electronic poll book must successfully perform in accordance with all representations concerning functionality, usability, security, accessibility, and sustainability made in the vendor's application for approval of the electronic poll book by the secretary of state as required by IC 3-11-18.1-12(2).</i>
Test Objective: To determine if the electronic poll book functions in accordance with all representations including attached peripherals, statewide voter registration system and any software system used to prepare the electronic poll list.	Test Configuration: None
Equipment:	All system documentation submitted as part of the application.
Special Procedural Requirements:	The electronic poll book <i>SYSTEM</i> will be configured per the system documentation submitted by the electronic poll book manufacturer. The electronic poll book firmware will be loaded by the examiner from a trusted source.
Assumptions:	This test is a system level test that requires all equipment and software that is being considered for certification.
Test Approach:	Below are three definitions of a functional configuration audit: <i>The formal examination of functional characteristics of a configuration item, or system to verify that the item has achieved the requirements specified in its functional and/or allocated configuration documentation. [MIL-HDBK-61A]</i> <i>Functional Configuration Audit (FCA): For each configuration item, the formal examination of its functional characteristics to verify that it has achieved the requirements in its allocated baseline. For a system, the formal examination of its functional characteristics to verify that it has achieved the requirements in the functional baseline. [SMC Systems Engineering Primer & Handbook, Jan 2004]</i>

	<p><i>Functional Configuration Audit (FCA) examines the functional characteristics of the configured product and verifies that the product has met, via test results, the requirements specified in its functional baseline documentation approved at the PDR and CDR. FCAs will be conducted on both hardware- or software-configured products and will precede the PCA of the configured product. [NASA Systems Engineering Handbook, NASA/SP-2007-6105, Rev1.]</i></p> <p>During the performance of the functional configuration audit (FCA) each component and subcomponent of the electronic poll book will be functionally evaluated as designed and documented. The FCA will depend heavily on black box testing techniques for the individual software components. The examiner will use “equivalence partitioning” and “boundary value testing” to evaluate the robustness and stability of the software submitted for evaluation.</p> <p>“Equivalence partitioning” will be used to evaluate specific software functions and data entry points. For software functions and data entry points, an entry will be made for valid data requirement and at least one invalid data requirement to test for normal and abnormal conditions. This can include the input of numeric values and special characters for alphabetic and text fields and may also include alphabetic and special characters for numeric fields.</p> <p>“Boundary value testing” will be used to evaluate specific software functions and data entry points for minimums and maximums. For software functions and data entry points an entry will be made for all minimum and all maximum documented requirements to test for normal and abnormal conditions. This can include numeric ranges as well as non-numeric ranges.</p>
<p>Test Method: The method for testing these requirements is execution. The FCA will evaluate the electronic poll book solution including all hardware, software, and peripherals. The examiner will utilize the User’s Manual provided to perform documented functions. If the User’s Manual is deemed incomplete or insufficient the examiner will note this as a deficiency, but will still subject the electronic poll book solution to the following functional testing:</p> <ul style="list-style-type: none"> • The ability to interface with the county database containing the voter registration system • The ability to program poll place devices with an electronic poll list for all supported Indiana election types • Hardware compatibility • Administrative functionality • User management including adding users, deleting users, and updating users • Access controls management • All data entry points • All voter registration retrieval methods. • All digital signature capture methods • Editing voter registration records • Interfacing components • Data transmission • Database management, including backing up and restoring • Audit log retrieval and maintenance • Reporting 	

During performance of the FCA, the examiner will input both positive and negative test data to trigger normal and abnormal conditions. If negative test data is allowed to be input, the examiner will continue the process of the data flow as document in the "mapping of the data life cycle" to ensure the negative testing data does not have an effect on downstream processes.

Criteria for Evaluation of the Test Results: At the conclusion of the FCA, the examiner will analyze all deficiencies and make a determination on the electronic poll book solutions ability to perform in accordance with all representations concerning functionality, usability, security, accessibility, and sustainability.

APPENDIX C
Telecommunications/Compliance Testing

Telecommunications/Compliance Test Cases

TCI: 08 Electronic Poll Book Programming	
IN § 10.3 (b) Requirements: (1)	<i>(1) An electronic poll book must be programmed so that the coordinated action of two (2) election officers who are not members of the same political party is necessary to access the electronic poll book.</i>
Test Objective: To determine if the electronic poll book requires the coordinated action of two officers of different political parties to access the electronic poll book information.	Test Configuration: An electronic poll book loaded with the proper version of firmware and configured with voter information in a pre-election state.
Equipment:	None
Special Procedural Requirements:	None
Assumptions:	The electronic poll book is loaded with voter information, but is not in an "Election" state. This test case assumes that the Criteria for Evaluation are not satisfied procedurally.
Step	Procedure
1000	<p>Ensure the electronic poll book is in a "Pre-Election" state and not activated to an "Election" state.</p> <p><i>Expected:</i> The electronic poll book is loaded with voter information and is in a "Pre-Election" state.</p> <p><i>Actual:</i></p>
1010 (1010 to 1030 are designed to validate the first user inputs)	<p>Attempt to access the electronic poll book using the designated method of data input without inputting proper credentials. Repeat this step 11 times documenting each method and credential used or until the electronic poll book "locks out" attempts.</p> <p><i>Expected:</i> The electronic poll book will not switch into an "Election" state or provide access to voter information.</p> <p><i>Actual:</i></p>
1020	<p>Ensure the electronic poll book is returned to a "Pre-Election" state.</p> <p><i>Expected:</i> The electronic poll book is loaded with voter information and is in a "Pre-Election" state.</p> <p><i>Actual:</i></p>
1030	<p>Use the designated method to input valid user credentials to the electronic poll book for Party 1.</p> <p><i>Expected:</i> The information for Party 1 can be input into the electronic poll book.</p> <p><i>Actual:</i></p>
1040 (1040 to 1060 are designed to validate the second user inputs)	<p>Attempt to access the electronic poll book using the designated method of data input for invalid user credentials for Party 2. Repeat this step 11 times documenting each method and credential used or until the electronic poll book "locks out" attempts.</p> <p><i>Expected:</i> The electronic poll book will not switch into an "Election" state or provide access to voter information.</p> <p><i>Actual:</i></p>

1050	<p>Ensure the electronic poll book is returned to a "Pre-Election" state.</p> <p><i>Expected: The electronic poll book is loaded with voter information and is in a "Pre-Election" state.</i></p> <p><i>Actual:</i></p>
1060	<p>Use the designated method to input valid user credentials for access to the electronic poll book for Party 2.</p> <p><i>Expected: The information for Party 2 can be input into the electronic poll book.</i></p> <p><i>Actual:</i></p>
1070	<p>Attempt to access the electronic poll book using the designated method of data input without inputting proper credentials for Party 1 and invalid credentials for Party 2. Repeat this step 11 times documenting each method and credential used or until the electronic poll book "locks out" attempts.</p> <p><i>Expected: The electronic poll book will not switch into an "Election" state or provide access to voter information.</i></p> <p><i>Actual:</i></p>
1080	<p>Ensure the electronic poll book is returned to a "Pre-Election" state.</p> <p><i>Expected: The electronic poll book is loaded with voter information and is in a "Pre-Election" state.</i></p> <p><i>Actual:</i></p>
1090	<p>Use the designated method to input information necessary for access to the electronic poll book for Party 1. Use the designated method to input information necessary for access to the electronic poll book for Party 2.</p> <p><i>Expected: The electronic poll book is activated to an "Election" state with the coordinated action of Party 1 and Party 2.</i></p> <p><i>Actual:</i></p>
1100	<p>Use the designated method to input information necessary for access to the electronic poll book for two separate individuals of the same Party.</p> <p><i>Expected: The electronic poll book will not allow for activation to an "Election" state.</i></p> <p><i>Actual:</i></p>
1110	<p>Input the voter information for any known voter to retrieve the voter registration. Analyze the record for known information to ensure the electronic poll book has retrieved the proper information.</p> <p><i>Expected: The electronic poll book retrieves the proper voter information.</i></p> <p><i>Actual:</i></p>

1120	<p>Use the designated method to generate a report.</p> <p><i>Expected: A report is produced.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: The electronic poll book does not allow access to the voter information without a coordinated action of two separate election officers from different political parties. The electronic poll book does allow access to the voter information with the coordinated action of two separate election officers from different political parties.</p>	

TCI: 11 Electronic Poll Book Interface	
IN § 10.3 (b) Requirements: (2)	<i>(2) An electronic poll book may not be connected to a voting system.</i>
Test Objective: To determine if the electronic poll book is connected to the voting system.	Test Configuration: An electronic poll book configured for election day.
Equipment:	COTS device for reading interfacing component
Special Procedural Requirements:	None
Assumptions:	The electronic poll book is configured with all connections, cable and transport media.
Step	Procedure
1000	<p>Inspect the electronic poll book for cables, connections and transport media to the voting system. Any interfacing component must have an "air gap" solution between the electronic poll book and the voting system. This inspection should take into account radio frequency connections such as Bluetooth, Wi-Fi, and Cellular connections.</p> <p><i>Expected: The electronic poll book does not connect to the voting system.</i></p> <p><i>Actual:</i></p>
1010	<p>(*Optional for interfacing components)</p> <p>For interfacing components with an "air gap" solution, this interface should be a one way interface from the electronic poll book to the voting system. Use the designated method of interfacing from the electronic poll book to the voting system. Use the designated method of the voting system to interface with the information provided by the electronic poll book. Return the interfacing component to the electronic poll book. Use the designated method to examine the interfacing component to ensure the voting system does not provide any information to the electronic poll book.</p> <p><i>Expected: The voting system does not provide any information to the electronic poll book.</i></p> <p><i>Actual:</i></p>
Criteria for Evaluation of the Test Results: The electronic poll book is not connected in any manner to the voting system. If there is an interfacing component to the voting system, this interface must be a one way interface.	

TCI: 12 Display of Voter Information and Signature	
IN § 10.3 (b) Requirements: (3) (10)	<p>(3) An electronic poll book may not permit access to voter information in the electronic poll list other than:</p> <p>(A) information provided on the certified list of voters prepared under IC 3-7-29-1; or</p> <p>(B) information concerning any of the following received or issued after the electronic poll list has been downloaded by the county election board under IC 3-7-29-6:</p> <p>(i) The county's receipt of an absentee ballot from the voter.</p> <p>(ii) The county's receipt of additional documentation provided by the voter to the county voter registration office.</p> <p>(iii) The county's issuance of a certificate of error.</p> <p>(10) The electronic poll book must be able to display an electronic image of the signature of a voter taken from the voter's registration application, if available.</p>
Test Objective: Ensure all the voter information from IC 3-7-29-1 described in (A) and supplemental information described in (B) of this requirement is accessible including the voter's signature record and other information is not accessible.	Test Configuration: An electronic poll book configured for election day.
Equipment:	None
Special Procedural Requirements:	<p>The voter information to retrieve (5) known voter registration records will be selected prior test execution to meet the following requirements:</p> <ul style="list-style-type: none"> • An eligible voter • An ineligible voter • A voter who has cast an absentee ballot • A voter flagged to provide additional documentation • A voter with a county issued certificate of error
Assumptions:	It is assumed examples of the five known voter registration records will be provided in the data to execute these five steps below.
Step	Procedure
1000	<p>Use the designated method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
1010	<p>Inspect the retrieved record for the following information:</p> <p>___ (1) The full name of the voter.</p> <p>___ (2) The address of the voter.</p> <p>___ (3) The assigned voter identification number.</p>

	<p>___ (4) Whether the voter is required to provide additional identification before voting either in person or by absentee ballot.</p> <p>___ (5) The date of birth of the voter, including an indication whether the voter is less than eighteen (18) years of age for a poll list used in a primary election</p> <p>___ (6) The scanned signature of the voter.</p> <p>___ (7) Whether the voter is required to provide an affirmation of the voter's residence.</p> <p>___ (8) A bar code that allows the county voter registration office to efficiently record whether the voter has signed the poll list.</p> <p>___ (9) For a poll list used in a primary election, a letter abbreviation of the name of the major political party whose ballot the voter has requested.</p> <p>___ (10) A space for a poll clerk to indicate when a voter has cast an absentee ballot.</p> <p>___ (11) A space for a poll clerk to indicate when a voter has cast a provisional ballot.</p> <p>___ (12) For a voter required to submit additional documentation required under IC 3-7-33-4.5, a space for a poll clerk to insert letters serving as an abbreviation for the type of documentation provided by the voter.</p> <p><i>Expected: Items 1-12 are displayed and the signature is adequately legible to make a signature comparison and no other voter information is provided.</i></p> <p><i>Actual:</i></p>
1020	<p>Use the designed method to input the voter information to retrieve the voter registration record for an ineligible voter. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
1030	<p>Inspect the retrieved record for the following information:</p> <p>___ (1) The full name of the voter.</p> <p>___ (2) The address of the voter.</p> <p>___ (3) The assigned voter identification number.</p> <p>___ (4) Whether the voter is required to provide additional identification before voting either in person or by absentee ballot.</p> <p>___ (5) The date of birth of the voter, including an indication whether the voter is less than eighteen (18) years of age for a poll list used in a primary election</p> <p>___ (6) The scanned signature of the voter.</p> <p>___ (7) Whether the voter is required to provide an affirmation of the voter's residence.</p> <p>___ (8) A bar code that allows the county voter registration office to efficiently record whether the voter has signed the poll list.</p> <p>___ (9) For a poll list used in a primary election, a letter abbreviation of the name of the major political party whose ballot the voter has requested.</p> <p>___ (10) A space for a poll clerk to indicate when a voter has cast an absentee ballot.</p> <p>___ (11) A space for a poll clerk to indicate when a voter has cast a provisional ballot.</p> <p>___ (12) For a voter required to submit additional documentation required under IC 3-7-33-4.5, a space for a poll clerk to insert letters serving as an abbreviation for the type of documentation provided by the voter.</p> <p><i>Expected: Items 1-12 are displayed and the signature is adequately legible to make a signature comparison and no other voter information is provided.</i></p> <p><i>Actual:</i></p>

<p>1040</p>	<p>Use the designed method to input the voter information to retrieve the voter registration record for a voter who has cast an absentee ballot. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
<p>1050</p>	<p>Inspect the retrieved record for the following information:</p> <p>___ (1) The full name of the voter.</p> <p>___ (2) The address of the voter.</p> <p>___ (3) The assigned voter identification number.</p> <p>___ (4) Whether the voter is required to provide additional identification before voting either in person or by absentee ballot.</p> <p>___ (5) The date of birth of the voter, including an indication whether the voter is less than eighteen (18) years of age for a poll list used in a primary election</p> <p>___ (6) The scanned signature of the voter.</p> <p>___ (7) Whether the voter is required to provide an affirmation of the voter's residence.</p> <p>___ (8) A bar code that allows the county voter registration office to efficiently record whether the voter has signed the poll list.</p> <p>___ (9) For a poll list used in a primary election, a letter abbreviation of the name of the major political party whose ballot the voter has requested.</p> <p>___ (10) A space for a poll clerk to indicate when a voter has cast an absentee ballot.</p> <p>___ (11) A space for a poll clerk to indicate when a voter has cast a provisional ballot.</p> <p>___ (12) For a voter required to submit additional documentation required under IC 3-7-33-4.5, a space for a poll clerk to insert letters serving as an abbreviation for the type of documentation provided by the voter.</p> <p><i>Expected: Items 1-12 are displayed and the signature is legible enough to make a signature comparison and no other voter information is provided.</i></p> <p><i>Actual:</i></p>
<p>1060</p>	<p>Use the designed method to input the voter information to retrieve the voter registration record for a voter who has been flagged for additional documentation. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
<p>1070</p>	<p>Inspect the retrieved record for the following information:</p> <p>___ (1) The full name of the voter.</p> <p>___ (2) The address of the voter.</p> <p>___ (3) The assigned voter identification number.</p> <p>___ (4) Whether the voter is required to provide additional identification before voting either in person or by absentee ballot.</p> <p>___ (5) The date of birth of the voter, including an indication whether the voter is less than eighteen (18) years of age for a poll list used in a primary election</p> <p>___ (6) The scanned signature of the voter.</p> <p>___ (7) Whether the voter is required to provide an affirmation of the voter's residence.</p> <p>___ (8) A bar code that allows the county voter registration office to efficiently record whether the voter has signed the poll list.</p>

	<p>___ (9) For a poll list used in a primary election, a letter abbreviation of the name of the major political party whose ballot the voter has requested.</p> <p>___ (10) A space for a poll clerk to indicate when a voter has cast an absentee ballot.</p> <p>___ (11) A space for a poll clerk to indicate when a voter has cast a provisional ballot.</p> <p>___ (12) For a voter required to submit additional documentation required under IC 3-7-33-4.5, a space for a poll clerk to insert letters serving as an abbreviation for the type of documentation provided by the voter.</p> <p><i>Expected: Items 1-12 are displayed and the signature is adequately legible to make a signature comparison and no other voter information is provided.</i></p> <p><i>Actual:</i></p>
1080	<p>Use the designated method to input the voter information to retrieve the voter registration record for a voter with a county issued certificate of error. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
1090	<p>Inspect the retrieved record for the following information:</p> <p>___ (1) The full name of the voter.</p> <p>___ (2) The address of the voter.</p> <p>___ (3) The assigned voter identification number.</p> <p>___ (4) Whether the voter is required to provide additional identification before voting either in person or by absentee ballot.</p> <p>___ (5) The date of birth of the voter, including an indication whether the voter is less than eighteen (18) years of age for a poll list used in a primary election</p> <p>___ (6) The scanned signature of the voter.</p> <p>___ (7) Whether the voter is required to provide an affirmation of the voter's residence.</p> <p>___ (8) A bar code that allows the county voter registration office to efficiently record whether the voter has signed the poll list.</p> <p>___ (9) For a poll list used in a primary election, a letter abbreviation of the name of the major political party whose ballot the voter has requested.</p> <p>___ (10) A space for a poll clerk to indicate when a voter has cast an absentee ballot.</p> <p>___ (11) A space for a poll clerk to indicate when a voter has cast a provisional ballot.</p> <p>___ (12) For a voter required to submit additional documentation required under IC 3-7-33-4.5, a space for a poll clerk to insert letters serving as an abbreviation for the type of documentation provided by the voter.</p> <p><i>Expected: Items 1-12 are displayed and the signature is adequately legible to make a signature comparison and no other voter information is provided.</i></p> <p><i>Actual:</i></p>
1100	<p>Use the designated method to generate a report.</p> <p><i>Expected: A report is produced.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: All voter records can be retrieved and accurately displayed with the required information for expected data and no additional information is displayed.</p>	

TCI: 03 Transmission Encryption	
IN § 10.3 (b) Requirements: (4)	(4) <i>The information contained on an electronic poll list must be encrypted and placed on a dedicated, private server to secure connectivity between a precinct polling place or satellite absentee office and the county election board. The electronic poll book must have the capability of:</i> <i>(A) storing (in external or internal memory) a local version of the electronic poll list; and</i> <i>(B) producing a list of audit records that reflect all of the idiosyncrasies of the system, including in-process audit records that set forth all transactions.</i>
Test Objective: To determine if the electronic poll book employs encryption.	Test Configuration: An electronic poll book connected to a network interface.
Equipment:	Network protocol analyzer, network interface
Special Procedural Requirements:	A network connection between the network analyzer, network interface and the electronic poll book must be established. The network protocol analyzer must be fully functioning. The network protocol analyzer must be configured in promiscuous mode to capture all packets traversing the network.
Assumptions:	The electronic poll book is configured to the point of transmission.
Step	Procedure
1000	Examine the electronic poll book and ensure it is in a state ready to transmit. <i>Expected: The electronic poll book is ready to transmit an updated poll list.</i> <i>Actual:</i>
1010	Use the designated method to initialize the network protocol analyzer to start a "capture" from the network interface. <i>Expected: The network protocol analyzer is actively capturing network packet.</i> <i>Actual:</i>
1020	Use the designated method to transmit the updated poll list from the ePB to the poll list server. <i>Expected: The ePB will start to transmit data to the network interface.</i> <i>Actual:</i>
1030	Use the designated method to browse the "captured" packets on the network protocol analyzer, ensure the network packets are encrypted. <i>Expected: A determination can be made that the electronic poll book uses employs encryption.</i> <i>Actual:</i>
Criteria for Evaluation of the Test Results: The electronic poll transmits data that is encrypted.	

TCI: 04 Electronic Poll Book Transmission	
IN § 10.3 (b) Requirements: (4) (7) (9) (21)	<p>(4) <i>The information contained on an electronic poll list must be encrypted and placed on a dedicated, private server to secure connectivity between a precinct polling place or satellite absentee office and the county election board. The electronic poll book must have the capability of:</i></p> <p style="padding-left: 40px;">(A) <i>storing (in external or internal memory) a local version of the electronic poll list; and</i></p> <p style="padding-left: 40px;">(B) <i>producing a list of audit records that reflect all of the idiosyncrasies of the system, including in-process audit records that set forth all transactions.</i></p> <p>(7) <i>The electronic poll book must transmit the information in subdivision (6) to the county election board so that the board may transmit the information immediately to every other polling place or satellite absentee office in the county in which an electronic poll list is being used.</i></p> <p>(9) <i>On each day after absentee ballots are cast before an absentee voter board in the circuit court clerk's office, a satellite office, or a vote center, and after election day, the electronic poll book must permit voter history to be quickly and accurately uploaded into the electronic poll list.</i></p> <p>(21) <i>The electronic poll book must have the capacity to transmit all information generated by the voter or poll clerk as part of the process of casting a ballot, including the time and date stamp indicating when the voter voted, and the electronic signature of the voter, for retention on the dedicated private server maintained by the county election board for the period required by Indiana and federal law.</i></p>
Test Objective: To determine if the electronic poll book transmits and can receive an indication that a voter has received a ballot, the time and date of the occurrence, and the electronic signature and records audit details.	Test Configuration: Two electronic poll books (ePB-1 & ePB-2) configured with the same voter registration data and the ability to connect to a dedicated private server.
Equipment:	Time keeping device
Special Procedural Requirements:	The voter information to retrieve (2) known eligible voter registration records.
Assumptions:	The electronic poll book is loaded with poll list, but no connections are established to a network.
Step	Procedure
1000 ePB -1	Examine the electronic poll book and identify the designated method of data transmission. Ensure the electronic poll book has no connectivity. <i>Expected: The electronic poll book has no connectivity.</i> <i>Actual:</i>

<p>1010 ePB -1</p>	<p>Use the designated method to browse through the poll list. Retrieve and examine five (5) voter registration records to ensure the poll list is stored locally and is not dependent on connectivity.</p> <p><i>Expected: The poll list is stored locally and can be browsed with no connectivity.</i></p> <p><i>Actual:</i></p>
<p>1020 ePB -1</p>	<p>Use the designated method to establish connectivity and configure the electronic poll book for an "Election" state.</p> <p><i>Expected: The electronic poll book is activated to an "Election" state and has connectivity.</i></p> <p><i>Actual:</i></p>
<p>1030 ePB -1</p>	<p>Use the designed method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
<p>1040 ePB -1</p>	<p>Use the designated method to digitally input the voter's signature. Use the designated method to save the signature.</p> <p><i>Expected: The voter's signature can be input and saved to a voter registration record.</i></p> <p><i>Actual:</i></p>
<p>1050 ePB -1</p>	<p>Use the designated method to edit the voter registration record. Use the designated method to update the voter registration record to indicate the voter as having received a ballot. Save the update.</p> <p><i>Expected: The voter registration record can be edited and the update can be saved.</i></p> <p><i>Actual:</i></p>
<p>1060 ePB -1</p>	<p>Use the time keeping device to record the time: _____</p> <p>Use the designated method to transmit the updated poll list to the poll list server. Look for an indication of a successful transfer.</p> <p>Use the time keeping device to record the time: _____</p> <p><i>Expected: The updated voter registration record can be successfully transmitted.</i></p> <p><i>Actual:</i></p>

<p>1070 Server</p>	<p>On the server, use the designated method to retrieve the transmitted poll list from ePB-1. Examine the voter registration record for the voter information input in step 1030. Ensure the voter registration contains the following:</p> <p>_____ An indication of receiving a ballot</p> <p>_____ Time and date stamp of receiving a ballot</p> <p>_____ A legible digital signature</p> <p><i>Expected: The updated voter registration record can be successfully retrieved and contains the required information.</i></p> <p><i>Actual:</i></p>
<p>1080 Server</p>	<p>Use the designated method to use this poll list as the "new" updated poll list to distribute to all electronic poll books.</p> <p><i>Expected: The poll list can be updated to use the poll list transmitted from 1060.</i></p> <p><i>Actual:</i></p>
<p>1090 ePB-2</p>	<p>Use the designated method to browse through the poll list.</p> <p><i>Expected: The poll list is unchanged from the original information.</i></p> <p><i>Actual:</i></p>
<p>1100 ePB-2</p>	<p>Use the designated method to establish connectivity and configure the electronic poll book to receive an updated poll list.</p> <p><i>Expected: The connectivity is established and the electronic poll book is ready to receive an updated poll list.</i></p> <p><i>Actual:</i></p>
<p>1110 ePB-2</p>	<p>Use the designated method to update the poll list.</p> <p><i>Expected: The poll list is updated with the poll list from step 1060.</i></p> <p><i>Actual:</i></p>
<p>1120 ePB-2</p>	<p>Use the designated method to configure the electronic poll book for an "Election" state.</p> <p><i>Expected: The electronic poll book is activated to an "Election" state.</i></p> <p><i>Actual:</i></p>

<p>1130 ePB-2</p>	<p>Use the designated method to input the voter information to retrieve the voter registration record for the voter used in step 1030. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
<p>1140 ePB-2</p>	<p>Examine the voter registration record to ensure it contains a digital signature and an indication that the voter has received a ballot.</p> <p><i>Expected: The voter registration record reflects the changes input in step 1050.</i></p> <p><i>Actual:</i></p>
<p>1150 ePB-2</p>	<p>Use the designated method to input the voter information to retrieve the voter registration record for an eligible voter (not used in step 1030). Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
<p>1160 ePB-2</p>	<p>Use the designated method to digitally input the voter's signature. Use the designated method to save the signature.</p> <p><i>Expected: The voter's signature can be input and saved to a voter registration record.</i></p> <p><i>Actual:</i></p>
<p>1170 ePB-2</p>	<p>Use the designated method to edit the voter registration record. Use the designated method to update the voter registration record to indicate the voter as having received a ballot. Save the update.</p> <p><i>Expected: The voter registration record can be edited and the update can be saved.</i></p> <p><i>Actual:</i></p>
<p>1180 ePB-2</p>	<p>Use the time keeping device to record the time: _____</p> <p>Use the designated method to transmit the updated poll list to the poll list server. Look for an indication of a successful transfer.</p> <p>Use the time keeping device to record the time: _____</p> <p><i>Expected: The updated voter registration record can be successfully transmitted.</i></p> <p><i>Actual:</i></p>

<p>1190 Server</p>	<p>On the server, use the designated method to retrieve the transmitted poll list from ePB-2. Examine the voter registration record for the voter information input in step 1150. Ensure the voter registration contains the following:</p> <p>_____ An indication of receiving a ballot</p> <p>_____ Time and date stamp of receiving a ballot</p> <p>_____ A legible digital signature</p> <p><i>Expected: The updated voter registration record can be successfully retrieved and contains the required information.</i></p> <p><i>Actual:</i></p>
<p>1200</p>	<p>Use the designated method to retrieve the audit records for ePB-1, ePB-2 and the server. If the ability to print the audit records is available print the audit records. Examine the audit records and verify that it contains the transactions that occurred during this test. Also, examine other records looking for indications of the idiosyncrasies of the system.</p> <p><i>Expected: The audit records can be successfully retrieved and contains the required information.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: The electronic poll book is capable of transmitting the required information quickly and accurately to the server and retrieve updates from the server.</p>	

TCI: 13 Input of Voter Eligibility	
IN § 10.3 (b) Requirements: (5) (6)	(5) <i>The electronic poll book must permit a poll clerk to enter information regarding an individual who has appeared to vote to verify whether the individual is eligible to vote, and if so, whether the voter has:</i> (A) <i>already cast a ballot at the election;</i> (B) <i>returned an absentee ballot; or</i> (C) <i>submitted any additional documentation required under IC 3-7-33-4.5.</i> (6) <i>After the voter has been provided with a ballot, the electronic poll book must permit a poll clerk to enter information indicating that the voter has voted at the election.</i>
Test Objective: To determine if the electronic poll book can be updated for voter eligibility.	Test Configuration: An electronic poll book configured for election day.
Equipment:	None
Special Procedural Requirements:	The voter information to retrieve (3) known eligible voter registration records.
Assumptions:	It is assumed (3) eligible voter registration records exist in the data provided for this test.
Step	Procedure
1000	Use the designed method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record. <i>Expected: The voter information is able to be input and the correct record is retrieved.</i> <i>Actual:</i>
1010	Use the designated method to edit the voter registration record. Use the designated method to update the voter registration record to indicate the voter as having received a ballot. Save the update. <i>Expected: The voter registration record can be edited and the update can be saved.</i> <i>Actual:</i>
1020	Input the information from step 1000 to retrieve the updated voter registration record. <i>Expected: The voter registration record can be retrieved</i> <i>Actual:</i>
1030	Examine the voter registration record for an indication that the voter has been given a ballot. <i>Expected: The voter registration record has been updated to indicate the voter has previously received a ballot.</i> <i>Actual:</i>
1040	Use the designed method to input the voter information (not previously used in step 1000) to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record. <i>Expected: The voter information is able to be input and the correct record is retrieved.</i> <i>Actual:</i>

1050	<p>Use the designated method to edit the voter registration record. Use the designated method to update the voter registration record to indicate the voter as having returned an absentee ballot. Save the update.</p> <p><i>Expected: The voter registration record can be edited and the update can be saved.</i></p> <p><i>Actual:</i></p>
1060	<p>Input the information from step 1040 to retrieve the updated voter registration record.</p> <p><i>Expected: The voter registration record can be retrieved</i></p> <p><i>Actual:</i></p>
1070	<p>Examine the voter registration record for an indication that the voter has returned an absentee ballot.</p> <p><i>Expected: The voter registration record has been updated to indicate the voter returned an absentee ballot.</i></p> <p><i>Actual:</i></p>
1080	<p>Use the designed method to input the voter information (not previously used in step 1000 or 1040) to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
1090	<p>Use the designated method to edit the voter registration record. Use the designated method to update the voter registration record to indicate the voter has submitted additional documentation. Save the update.</p> <p><i>Expected: The voter registration record can be edited and the update can be saved.</i></p> <p><i>Actual:</i></p>
1100	<p>Input the information from step 1080 to retrieve the updated voter registration record.</p> <p><i>Expected: The voter registration record can be retrieved</i></p> <p><i>Actual:</i></p>
1110	<p>Examine the voter registration record for an indication that the voter has returned an absentee ballot.</p> <p><i>Expected: The voter registration record has been updated to indicate the voter returned an absentee ballot.</i></p> <p><i>Actual:</i></p>
1120	<p>Use the designated method to generate a report.</p> <p><i>Expected: A report is produced.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: The electronic poll book must be able to update the indication for already received a ballot, returned and absentee ballot, and submitted additional documentation.</p>	

TCI: 14 Signature Capture	
IN § 10.3 (b) Requirements: (11)	(11) The electronic poll book must be used with a signature pad, tablet, or other signature capturing device that permits the voter to make an electronic signature for comparison with the signature displayed under subdivision (10). An image of the electronic signature made by the voter on the signature pad, tablet, or other signature capturing device must be retained and identified as the signature of the voter for the period required for retention under IC 3-10-1-31.1.
Test Objective: To determine if the electronic poll book can capture and retain a voter's signature legible enough for comparison with the signature record on file.	Test Configuration: An electronic poll book configured for election day.
Equipment:	None
Special Procedural Requirements:	The voter information to retrieve (2) known eligible voter registration records.
Assumptions:	It is assumed 2 eligible voter registration records exist in the data provided for this test.
Step	Procedure
1000	Use the designed method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record. <i>Expected: The voter information is able to be input and the correct record is retrieved.</i> <i>Actual:</i>
1010	Use the designated method to digitally input the voter's signature. Use the designated method to save the signature. <i>Expected: The voter's signature can be input and saved to a voter registration record.</i> <i>Actual:</i>
1020	Use the designated method to examine the signature to determine if it is legible enough for comparison. <i>Expected: The input digital signature is captured in a manner that allows for comparison</i> <i>Actual:</i>
1030	Use the designed method to input the voter information (not previously used in step 1000) to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record. <i>Expected: The voter information is able to be input and the correct record is retrieved.</i> <i>Actual:</i>
1040	Use the designated method to digitally input the voter's signature. Use the designated method to save the signature. <i>Expected: The voter's signature can be input and saved to a voter registration record.</i> <i>Actual:</i>

1050	<p>Use the designated method to examine the signature to determine if it is legible enough for comparison.</p> <p><i>Expected: The input digital signature is captured in a manner that allows for comparison</i></p> <p><i>Actual:</i></p>
1060	<p>Use the designed method to input the voter information to retrieve the voter registration record for the voter in step 1000. Inspect this record to see that the captured digital signature remain with the voter registration record.</p> <p><i>Expected: The voter registration record is retrieved along with the digital signature that was input.</i></p> <p><i>Actual:</i></p>
1070	<p>Use the designed method to input the voter information to retrieve the voter registration record for the voter in step 1030. Inspect this record to see that the captured digital signature remain with the voter registration record.</p> <p><i>Expected: The voter registration record is retrieved along with the digital signature that was input.</i></p> <p><i>Actual:</i></p>
1080	<p>Use the designated method to generate a report.</p> <p><i>Expected: A report is produced.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: The electronic poll book must digitally capture the voter's signature in a legible manner and retain the digital signature with the voter's registration record.</p>	

TCI: 15 Record Retrieval by Bar Code	
IN § 10.3 (b) Requirements: (12)	(12) The electronic poll book must include a bar code reader or tablet that: (A) permits a voter who presents an Indiana driver's license or a state identification card issued under IC 9-24-16 to scan the license or card through the bar code reader or tablet; and (B) has the capability to display the voter's registration record upon processing the information contained within the bar code on the license or card.
Test Objective: To determine if the electronic poll book can retrieve and display the voter registration record by a bar code on an Indiana driver's license or state identification card.	Test Configuration: An electronic poll book configured for election day.
Equipment:	(2) Valid Indiana driver's license with corresponding voter registration records (2) Valid state issued identification cards with corresponding voter registration records
Special Procedural Requirements:	None
Assumptions:	The data used in test execution will contain voter registration records for the identifications being tested.
Step	Procedure
1000	Use the designated method to read the bar code provided on the source media. Use the designated method to retrieve the voter registration record. <i>Expected: The voter registration record can be displayed by bar code input.</i> <i>Actual:</i>
1010	Examine the voter registration record retrieved in step 1000. Compare the voter registration record to the source media to determine if the retrieved information matches the information provide on the source media. <i>Expected: The information provided by the electronic poll book matches the information provided by the bar code on the source media.</i> <i>Actual:</i>
1020	Repeat step 1000 and 1010 three additional times until all source media has been scanned ___ Second source media ___ Third source media ___ Fourth source media <i>Expected: The electronic poll book can successfully retrieve corresponding records using a bar code input.</i> <i>Actual:</i>
Criteria for Evaluation of the Test Results: The electronic poll book can accurately retrieve and display voter registration records using bar codes from both an Indiana driver license and state issued identification card.	

TCI: 10 Supported Elections	
IN § 10.3 (b) Requirements: (14)	(14) The electronic poll book must have the ability to be used in conformity with this title for: (A) any type of election conducted in Indiana; or (B) any combination of elections held concurrently with a general election, municipal election, primary election, or special election.
Test Objective: To determine if the electronic poll book supports a general election, municipal election, primary election, or a special election as well as any combination of concurrent elections.	Test Configuration: An electronic poll book without any voter registration data loaded but configured to support an election on election day.
Equipment:	None
Special Procedural Requirements:	Prior to test execution the electronic poll book manufacturer will create voter registration data to support the following types of elections: <ul style="list-style-type: none"> • General election • Municipal election • Primary election • Special election • Special election in conjunction with either a General or a Primary election
Assumptions:	Since the voter registration data is not specific to the type of election, but to the eligibility and ineligibility of voters the voter registration data provide may be the same for all types of elections. The voter information to retrieve a known eligible voter's registration records for each type of election.
Step	Procedure
1000	Use the designated method to program the electronic poll book with the voter registration information to support a general election. <i>Expected: The electronic poll book is able to be programmed to support a general election.</i> <i>Actual:</i>
1010	Use the designated method to activate the electronic poll book to an "Election" state. <i>Expected: The electronic poll book is activated and in a "Ready for Use" state.</i> <i>Actual:</i>
1020	Use the designed method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record. <i>Expected: The voter information is able to be input and the correct record is retrieved.</i> <i>Actual:</i>

1030	<p>Use the designated method to program the electronic poll book with the voter registration information to support a municipal election.</p> <p><i>Expected: The electronic poll book is able to be programmed to support a municipal election.</i></p> <p><i>Actual:</i></p>
1040	<p>Use the designated method to activate the electronic poll book to an "Election" state.</p> <p><i>Expected: The electronic poll book is activated and in a "Ready for Use" state.</i></p> <p><i>Actual:</i></p>
1050	<p>Use the designed method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
1060	<p>Use the designated method to program the electronic poll book with the voter registration information to support a primary election.</p> <p><i>Expected: The electronic poll book is able to be programmed to support a primary election.</i></p> <p><i>Actual:</i></p>
1070	<p>Use the designated method to activate the electronic poll book to an "Election" state.</p> <p><i>Expected: The electronic poll book is activated and in a "Ready for Use" state.</i></p> <p><i>Actual:</i></p>
1080	<p>Use the designed method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
1090	<p>Use the designated method to program the electronic poll book with the voter registration information to support a special election.</p> <p><i>Expected: The electronic poll book is able to be programmed to support a special election.</i></p> <p><i>Actual:</i></p>
1100	<p>Use the designated method to activate the electronic poll book to an "Election" state.</p> <p><i>Expected: The electronic poll book is activated and in a "Ready for Use" state.</i></p> <p><i>Actual:</i></p>

1110	Use the designated method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record. <i>Expected: The voter information is able to be input and the correct record is retrieved.</i> <i>Actual:</i>
Criteria for Evaluation of the Test Results: The electronic poll book can be programmed for each type of election and retrieve voter registration records in support of each type of election.	

TCI: 09 Diagnostic Communications	
IN § 10.3 (b) Requirements: (16)	(16) The electronic poll book must enable a precinct election officer to verify that the electronic poll book: (A) has been set up correctly; (B) is working correctly so as to verify the eligibility of the voter; (C) is correctly recording that a voter has voted; and (D) has been shut down correctly.
Test Objective: To determine that the electronic book poll provides diagnostic communication to verify the device is set up correctly, working correctly, correctly recording a voter has been given a ballot, and has been shut down correctly.	Test Configuration: An electronic poll book loaded with the proper version of firmware and configured with voter information in a pre-election state.
Equipment:	None
Special Procedural Requirements:	The voter information to retrieve (2) known eligible voter registration records.
Assumptions:	The electronic poll book is loaded with voter information, but is not in an "Election" state. It is assumed (2) eligible voter registration records exist in the data provided for this test.
Step	Procedure
1000	Ensure the electronic poll book is in a "Pre-Election" state and not activated to an "Election" state. <i>Expected:</i> The electronic poll book is loaded with voter information and is in a "Pre-Election" state. <i>Actual:</i>
1010	Use the designated method to input information necessary for access to the electronic poll book for Party 1. Use the designated method to input information necessary for access to the electronic poll book for Party 2. <i>Expected:</i> The electronic poll book is activated to an "Election" state with the coordinated action of Party 1 and Party 2. <i>Actual:</i>
1020	After activation to an "Election" state, use the designated method to verify the electronic poll book is set up correctly and properly working to verify the eligibility of voters. <i>Expected:</i> The electronic poll book will provide an indication or notification that the configuration is correctly set up and in a "Ready for Use" state. <i>Actual:</i>
1030	Use the designed method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record. <i>Expected:</i> The voter information is able to be input and the correct record is retrieved. <i>Actual:</i>

1040	<p>Use the designated method to digitally input the voter's signature. Use the designated method to save the signature.</p> <p><i>Expected: The voter's signature can be input and saved to a voter registration record.</i></p> <p><i>Actual:</i></p>
1050	<p>Use the designated method to examine the signature to determine if it is legible enough for comparison.</p> <p><i>Expected: The input digital signature is captured in a manner that allows for comparison</i></p> <p><i>Actual:</i></p>
1060	<p>Use the designated method to edit the voter registration record. Use the designated method to update the voter registration record to indicate the voter as having received a ballot. Save the update. Look for an indication or notification that the record correctly recorded this update.</p> <p><i>Expected: The electronic poll book provides an indication or notification that the voter registration record was correctly saved when an update is made to the status of the voter.</i></p> <p><i>Actual:</i></p>
1070	<p>Use the designated method to input the voter information from step 1030 to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
1080	<p>Examine the voter registration record for an indication that the voter has been given a ballot.</p> <p><i>Expected: The voter registration record has been updated to indicate the voter has previously received a ballot.</i></p> <p><i>Actual:</i></p>
1090	<p>Use the designated method to generate a report.</p> <p><i>Expected: A report is produced.</i></p> <p><i>Actual:</i></p>
1100	<p>Use the designated method to shut down the electronic poll book.</p> <p><i>Expected: The electronic poll book displays an indication that the electronic poll book has been shut down correctly and shuts down.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: The electronic poll book provides verification that the device is set up correctly, working correctly, correctly recording that a voter has been given a ballot, and has been shut down correctly.</p>	

TCI: 06 Product Safety (Commercial Off the Shelf - COTS)

<p>IN § 10.3 (b) Requirements: (18)</p>	<p>(18) <i>The electronic poll book and any hardware attached to the electronic poll book must be designed to prevent injury or damage to any individual or the hardware, including fire and electrical hazards.</i></p>
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Test Objective: To determine if the electronic poll book and peripheral are designed to prevent injury and can be safely operated.

Test Configuration: The electronic poll book configured for election day including all peripherals

Test Method:
The method for testing this requirement will be inspection. For COTS equipment, the examiner will examine the device for product labeling. This labeling is usually around the area of the power supply, the rear of the device, or on the bottom of the device. The labels needed to meet this requirement will be an NRTL accredited test laboratory label, the most common of which is the UL label (depicted below). The examiner will inspect for the following product labels.

Conformité Européenne "European Conformity"	Underwriters Laboratories	Canadian Standards Association	Geprüfte Sicherheit "Tested Safety"
			

If the device contains any of these product labels the conformance claim should be accepted.

If the device does not contain any of these product labels, but does have product labeling the examiner will photographically document the labeling and research whether the conformance claim is self-declared or independently tested and to what standard.

If the conformance claim is independently tested to an industry accepted standard, the conformance claim should be accepted.

If the conformance claim is self-declared or not to an industry accepted standard, the electronic poll book manufacturer will be asked to research and provide the data upon which the device manufacturer basis their claim for further review by the examiner.

Criteria for Evaluation of the Test Results: A verifiable conformance claim of product safety can be established.

Comments:

Examiner Approval: _____ Date: _____

TCI: 07 Product Safety (Proprietary)	
IN § 10.3 (b) Requirements: (18)	<i>(18) The electronic poll book and any hardware attached to the electronic poll book must be designed to prevent injury or damage to any individual or the hardware, including fire and electrical hazards.</i>
Test Objective: To determine if the electronic poll book and peripheral are designed to prevent injury and can be safely operated.	
Test Configuration: The electronic poll book configured for election day including all peripherals	
Test Method: The method for testing this requirement will be review. For proprietary equipment, the examiner will review all submitted third party test reports from a National Recognized Testing Laboratory (NRTL). If the device has not been tested, the electronic poll book manufacturer must provide two documented references to proven field use for five years. The documented references shall contain the following: <p style="margin-left: 40px;"> Customer Name: Customer Address: Customer Telephone Number: Product Purchased: Date of Purchase: Known Field Issues: </p> The examiner will review the documented references and contact each reference. The examiner will document the discussion about the product and present the finding as part of the final report. If the device has not been fielded for a period of five years or does not have two documented references, the examiner will present these findings as part of the final report.	
Criteria for Evaluation of the Test Results: A verifiable conformance claim of product safety can be established.	
Comments: 	
Examiner Approval: _____ Date: _____	

TCI: 05 Loss and Restoration of Connectivity	
IN § 10.3 (b) Requirements: (22)	(22) <i>The electronic poll book must:</i> (A) <i>permit a voter to sign the poll book even when there is a temporary interruption in connectivity to the Internet; and</i> (B) <i>provide for the uploading of each signature and its assignment to the voter's registration record.</i>
Test Objective: To determine if the electronic poll book will capture a digital signature with a disruption of connectivity and upload the signatures to the voter registration record once connectivity is restored.	Test Configuration: An electronic poll book configured for election day.
Equipment:	None
Special Procedural Requirements:	The voter information to retrieve (3) known eligible voter registration records.
Assumptions:	It is assumed 3 eligible voter registration records exist in the data provided for this test.
Step	Procedure
1000	Use the designated method to disconnect connectivity of the electronic poll book. <i>Expected: The connectivity of the electronic poll book can be disconnected.</i> <i>Actual:</i>
1010	Use the designed method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record. <i>Expected: The voter information is able to be input and the correct record is retrieved.</i> <i>Actual:</i>
1020	While connectivity is disrupted, use the designated method to digitally input the voter's signature. Use the designed method to save the signature. <i>Expected: The voter's signature can be input and saved to a voter registration record.</i> <i>Actual:</i>
1030	Use the designed method to input the voter information (not previously used in step 1010) to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record. <i>Expected: The voter information is able to be input and the correct record is retrieved.</i> <i>Actual:</i>
1040	While connectivity is disrupted, use the designated method to digitally input the voter's signature. Use the designed method to save the signature. <i>Expected: The voter's signature can be input and saved to a voter registration record.</i> <i>Actual:</i>

1050	<p>Use the designed method to input the voter information (not previously used in step 1010 or 1030) to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
1060	<p>While connectivity is disrupted, use the designated method to digitally input the voter's signature. Use the designated method to save the signature.</p> <p><i>Expected: The voter's signature can be input and saved to a voter registration record.</i></p> <p><i>Actual:</i></p>
1070	<p>Use the designated method to restore connectivity. Ensure there is an indication that the electronic poll book is working correctly and connectivity has been restored (IN §10.3 (b) (16) (B))</p> <p><i>Expected: Connectivity can be restored and there is an indication the electronic poll book is working correctly.</i></p> <p><i>Actual:</i></p>
1080	<p>Use the designated method to upload/update the information processed while there was disruption connectivity.</p> <p><i>Expected: The voter information that was processed by the electronic poll book can be uploaded / updated.</i></p> <p><i>Actual:</i></p>
1090	<p>Use the designed method to input the voter information to retrieve the voter registration record for the eligible voter input in step 1000. Input the voter information and retrieve the voter record. Verify the digital signature input during disruption of connectivity is retained with the voter registration record and is legible.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved. The digital signature input during disruption of connectivity is retrieved and is legible.</i></p> <p><i>Actual:</i></p>
1100	<p>Use the designed method to input the voter information to retrieve the voter registration record for the eligible voter input in step 1030. Input the voter information and retrieve the voter record. Verify the digital signature input during disruption of connectivity is retained with the voter registration record and is legible.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved. The digital signature input during disruption of connectivity is retrieved and is legible.</i></p> <p><i>Actual:</i></p>
1110	<p>Use the designed method to input the voter information to retrieve the voter registration record for the eligible voter input in step 1050. Input the voter information and retrieve the voter record. Verify the digital signature input during disruption of connectivity is retained with the voter registration record and is legible.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved. The digital signature input during disruption of connectivity is retrieved and is legible.</i></p> <p><i>Actual:</i></p>

1120	Use the designated method to generate a report. <i>Expected:</i> A report is produced. <i>Actual:</i>
Criteria for Evaluation of the Test Results: The electronic poll book must permit a voter to digitally sign the poll book with a disruption in connectivity and upload / update this information once connectivity is restored. The updated / uploaded information must be retained with the voter registration record and the digital signature must be legible.	

APPENDIX D
Acceptance Test Checklist

ACCEPTANCE TEST CHECKLIST

Vendor Name: _____

Product Name and Model Number: _____

County Name: _____

After certification, each county which has contracted for the ePB will conduct an acceptance test at the time of delivery. This acceptance test will focus primarily on the ability of the ePB to communicate with the Statewide Voter Registration System (SVRS) in downloading and uploading appropriate data. Certification of the ePB may be revoked if the ePB fails the acceptance test.

REVIEW INSTRUCTIONS

The electronic poll book solution must be able to communicate successfully with the SVRS. For each requirement, the authorized county official must initial and date the 'Comments' column and sign below.

Requirement	Reviewer Initial	Comments
The voter registration data from SVRS was loaded successfully on to the electronic poll book solution.		
Once loaded, the electronic poll book solution successfully retrieved the voter registration data.		
The electronic poll book solution was able successfully to update the voter registration data.		
The electronic poll book solution successfully uploaded the voter registration data to SVRS.		
The electronic poll book solution successfully retrieved the updated database from SVRS.		

Outcome of review: Accept Reject

Date of Review _____

(Title of Authorized County Official)

Signature _____

Name of Authorized County Official

APPENDIX E
Application for Electronic Poll Book Certification

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APPLICATION FOR ELECTRONIC POLL BOOK CERTIFICATION

State Form 55319 (6/13)
Indiana Secretary Of State

APPLICANT INFORMATION	
Name of Vendor	Telephone Number
Address of Vendor (<i>Number, Street or Rural Route</i>)	Fax Number
City, State, ZIP Code	E-mail Address
Name of contact person for the vendor	Contact Person's Telephone Number
Product Name	Model Number
General description of system and the functionality of each component: <hr/> <hr/> <hr/> <hr/>	
Hardware (including version numbers): <hr/>	
Firmware (including version numbers): <hr/>	
Software (including version numbers): <hr/> <hr/> <hr/>	

↓ Please complete reverse of form ↓

This application must include the following: (Please check the box if material is included with this application or indicate N/A, if not applicable. If not included with this application, material must be supplied before the application will be presented to the Indiana Secretary of State)

1. Technical documentation including:

- Executable image and source code escrowed with the Office of Indiana Secretary of State or its approved agent.
- User manuals.
- Operator and system manuals (including developer documentation).
- Troubleshooting and training manuals.
- Fall-safe and emergency backup information.
- Equipment reliability estimate.
- Environmental requirements for storage, transportation, and operation.
- 2. Photographs of the system; functional description of software components.
- 3. Engineering drawings
- 4. Schematics or flowcharts identifying software and data file relationships.
- 5. Type of repair and maintenance offered by vendor.
- 6. Name and addresses of repair and maintenance providers.
- 7. Description of training courses (including both on-and off-site offerings).
- 8. A statement of the current and future interchangeability of all subcomponents.
- 9. Documentation of all testing performed on this system (internal or external sources).
- 10. Documentation of all internal quality assurance procedures.
- 11. Documentation of all usability testing.
- 12. Documentation from election jurisdictions using or previously having used the system or component.
- 13. Detailed information concerning electronic poll list consumables and the vendor's supply chain for those consumables.
- 14. Description of accessibility features and any testing performed.
- 15. Description of any known anomalies, including a description of how those were resolved.

OATH OR AFFIRMATION

In making application for the certification of the electronic poll book or components listed above, I swear or affirm under the penalty for perjury that to the best of my knowledge and belief all the information contained in this application is true and the electronic poll book satisfies all functional and technical specifications as described in IC 3-11-8-10.3.

Signature	Title	Date

(NAME OF LAB)

CERTIFICATION TEST REPORT
FOR
EXAMINATION OF ELECTRONIC POLL BOOK (ePollBook)
FOR THE
VOTING SYSTEM TECHNICAL OVERSIGHT PROGRAM (VSTOP)
STATE OF INDIANA

Prepared by: _____

Authorized Laboratory Official

Date: _____

(ADDRESS AND CONTACT INFORMATION FOR LAB)

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1.0 INTRODUCTION

An examination was performed to confirm that the submitted electronic Poll Book (hereafter referred to as “ePollBook”) meets the functional certification requirements for use in the State of Indiana. This examination was performed per the guidelines set forth by the Voting System Technical Oversight Program (hereafter referred to as “VSTOP”) for the certification of ePollBooks. This Test Report documents the procedures followed, the results obtained, and the conclusions drawn from that examination.

1.1 References

The documents listed below were utilized in the development of the Test Report.

- Indiana Election Code IC 3-11-8-10.3 (hereafter referred to as Section 10.3)
- Indiana Electronic Poll Book (ePollBook) Certification Test Protocol for the Voting System Technical Oversight Program (VSTOP)

1.2 Terms and Abbreviation

This subsection lists terms and abbreviations relevant to this examination

“ePB” – Electronic Poll Book Solution or ePollBook

“COTS” – Commercial Off-The-Shelf

“SVRS” – Statewide Voter Registration System

“TCP” – Test Case Identifier

“TDP” – Technical Data Package

“VSTOP” – Voting System Technical Oversight Program

As used in Section 10.3:

An **electronic poll list** refers to a poll list that is maintained in a computer database, the Indiana Statewide Voter Registration List (SVRS). The list is comprised of the alphabetical listing of registered voters in the state along with other elements required by the Indiana Code.

An **electronic poll book** refers to the combination of mechanical, electromechanical and electronic equipment (including the software, firmware and documentation required to program, control and support the equipment) that is used to access and maintain the electronic poll list.

1.3 Background

As of July 1, 2013, Indiana required the certification of ePBs in accordance with Section 10.3.

The legislation provides that VSTOP will perform or evaluate testing on the electronic poll books which utilize information contained in the SVRS for purposes of conducting elections at precincts and vote centers.

2.0 TEST ITEMS

This section contains detailed descriptions of the submitted electronic poll book solution including: ePBs for required functional configuration testing, items tested during the evaluation (including all software, hardware, and peripherals, both proprietary and COTS), and any test support equipment or materials necessary for test performance. The information provided below is taken directly from the Test Protocol.

Vendor Name and Product Name and Model Number:

Vendor/Manufacturer Information:	
Name:	<i>(insert vendor/manufacturer information here)</i>
Address:	
Primary Point of Contact:	
Product Name and Model Number:	<i>(insert product information here)</i>
Date of Submission:	

2.0a Software

The software listed in Table 2.0a was used during the examination of the ePollBook. Table 2.0a provides the component name, software/firmware version and a SHA-1 Hash, if calculated, during the examination.

Table 2.0a Software

This subsection contains a listing of the software and firmware being evaluated.

Component Name	Version	Unique Identifier (digital signature or hash value)

(Add additional rows as needed)

2.0b Hardware

Table 2.0b provides hardware component name, description, model number, and the serial number for the units that were examined.

Table 2.0b Hardware

Component Name	Model/Version Number	Description

(Add additional rows as needed)

2.0c Peripherals

Table 2.0c provides the information for the peripheral components used during the examination.

Table 2.0c Peripherals

Part Name	Model Number	Revision Number	Description

(Add additional rows as needed)

2.0d Test Support Equipment/Materials

The test materials listed in Table 2.0d were used during the examination.

Table 2.0d Test Support Materials

Part Name	Quantity	Model/Serial Number	Description

(Add additional rows as needed)

2.0e Technical Data Package

All relevant manufacturer-provided documentation that was provided during the examination is listed in the table below.

Table 2.0e Documentation

Document Name	Part Number	Revision	Issue Date

(Add additional rows as needed)

2.0f Third Party Test Reports

All relevant third party test reports including report numbers, revisions, and issue dates are included in the table below.

Table 2.0f Third Party Test Reports

Report Title	Description	Revision	Issue Date

(Add additional rows as needed)

2.0g Previous Test Results

Any previous testing performed that is relevant to the examination and the ePollBook being evaluated is listed in the table below.

Table 2.0g Previous Test Results

Report Title	Description	Revision	Issue Date

(Add additional rows as needed)

2.0h Known Fielded Use

Other jurisdictions in which the electronic poll book solution has been fielded are identified in the table below.

Table 2.0h Known Fielded Use

Jurisdiction	Point of Contact	Numbers of Years	Known Fielded Issues

(Add additional rows as needed)

3.0 TEST PROCESS

3.1 General Information

The examination of the previously identified electronic pollbook solution was performed by the following laboratory:

Laboratory Name:	<i>(insert information here)</i>
Address:	
Primary Point of Contact:	<i>(Name)</i>
	<i>(Title)</i>

3.2 Test Approach

To meet the 22 requirements of Section 10.3, the following two test techniques were utilized:

- **Review**

Administrative Review – This area of testing included a review of the documentation provided by the manufacturer.

- **Functional Execution**

Functional Configuration Audit – This area of testing targeted the specific functionality claimed by the manufacturer to ensure the product functions as documented. This testing used both positive and negative test data to test the robustness of the system.

Telecommunications/Compliance Testing – This area of testing focused on the system being able to transmit and receive data electronically and communication with the poll list server as well as the ability of the ePB to meet the remaining Section 10.3 requirements.

For evaluation purposes, VSTOP provided all required test data in a format that conformed to the Indiana SVRS data structures.

3.3 Test Cases

The test cases for functional certification testing are identified below. Each test case was assigned a unique Test Case Identifier (TCI) to identify the requirement being tested. All steps of the tests cases contained an expected result to provide objective pass/fail criteria. There were no dependencies for execution of the test cases.

Functional Configuration Audit:

- TCI: 02 Functional Configuration Audit (See Appendix B)

Telecommunications Testing: (See Appendix C)

- TCI: 03 Transmission Encryption
- TCI: 04 Electronic Poll Book Transmission
- TCI: 05 Loss and Restoration of Connectivity

Compliance Testing: (See Appendix C)

- TCI: 06 Product Safety (Commercial Off the Shelf - COTS)
- TCI: 07 Product Safety (Proprietary)
- TCI: 08 Electronic Poll Book Programming
- TCI: 09 Diagnostic Communications
- TCI: 10 Supported Elections
- TCI: 11 Electronic Poll Book Interface
- TCI: 12 Display of Voter Information and Signature
- TCI: 13 Input of Voter Eligibility
- TCI: 14 Signature Capture
- TCI: 15 Record Retrieval by Bar Code

The following table maps the test cases to the requirements of Section 10.3 of the Indiana Election Code:

Section 10.3 Statute	Test Case Mapping
(1) An electronic poll book must be programmed so that the coordinated action of two (2) election officers who are not members of the same political party is necessary to access the electronic poll book.	TCI: 08 Electronic Poll Book Programming
(2) An electronic poll book may not be connected to a voting system.	TCI: 11 Electronic Poll Book Interface
(3) An electronic poll book may not permit access to voter information in the electronic poll list other than: (A) information provided on the certified list of voters prepared under IC 3-7-29-1;	TCI: 12 Display of Voter Information and Signature

<p>(3) An electronic poll book may not permit access to voter information in the electronic poll list other than:</p> <p>(B) information concerning any of the following received or issued after the electronic poll list has been downloaded by the county election board under IC 3-7-29-6:</p> <ul style="list-style-type: none"> (i) The county's receipt of an absentee ballot from the voter. (ii) The county's receipt of additional documentation provided by the voter to the county voter registration office. (iii) The county's issuance of a certificate of error. 	<p>TCI: 12 Display of Voter Information and Signature</p>
<p>(4) The information contained on an electronic poll list must be encrypted and placed on a dedicated, private server to secure connectivity between a precinct polling place or satellite absentee office and the county election board. The electronic poll book must have the capability of:</p> <p>(A) storing (in external or internal memory) a local version of the electronic poll list; and</p> <p>(B) producing a list of audit records that reflect all of the idiosyncrasies of the system, including in-process audit records that set forth all transactions.</p>	<p>TCI: 03 Transmission Encryption</p> <p>TCI: 04 Electronic Poll Book Transmission</p>
<p>(5) The electronic poll book must permit a poll clerk to enter information regarding an individual who has appeared to vote to verify whether the individual is eligible to vote, and if so, whether the voter has:</p> <p>(A) already cast a ballot at the election;</p> <p>(B) returned an absentee ballot; or</p> <p>(C) submitted any additional documentation required under IC 3-7-33-4.5.</p>	<p>TCI: 13 Input of Voter Eligibility</p>
<p>(6) After the voter has been provided with a ballot, the electronic poll book must permit a poll clerk to enter information indicating that the voter has voted at the election.</p>	<p>TCI: 13 Input of Voter Eligibility</p>
<p>(7) The electronic poll book must transmit the information in subdivision (6) to the county election board so that the board may transmit the information immediately to every other polling place or satellite absentee office in the county in which an electronic poll list is being used.</p>	<p>TCI: 04 Electronic Poll Book Transmission</p>

<p>(8) The electronic poll book must permit reports to be:</p> <p>(A) generated by a county election board for a watcher appointed under IC 3-6-8 at any time during election day; and</p> <p>(B) electronically transmitted by the county election board to a political party or independent candidate who has appointed a watcher under IC 3-6-8.</p>	<p>*No specific case – the requirement is at any time and the following test cases require reports:</p> <p>TCI: 08 Electronic Poll Book Programming</p> <p>TCI: 12 Display of Voter Information and Signature</p> <p>TCI: 13 Input of Voter Eligibility</p> <p>TCI: 14 Signature Capture</p> <p>TCI: 09 Diagnostic Communications</p> <p>TCI: 05 Loss and Restoration of Connectivity</p>
<p>(9) On each day after absentee ballots are cast before an absentee voter board in the circuit court clerk's office, a satellite office, or a vote center, and after election day, the electronic poll book must permit voter history to be quickly and accurately uploaded into the electronic poll list.</p>	<p>TCI: 04 Electronic Poll Book Transmission</p>
<p>(10) The electronic poll book must be able to display an electronic image of the signature of a voter taken from the voter's registration application, if available.</p>	<p>TCI: 12 Display of Voter Information and Signature</p>
<p>(11) The electronic poll book must be used with a signature pad, tablet, or other signature capturing device that permits the voter to make an electronic signature for comparison with the signature displayed under subdivision (10). An image of the electronic signature made by the voter on the signature pad, tablet, or other signature capturing device must be retained and identified as the signature of the voter for the period required for retention under IC 3-10-1-31.1.</p>	<p>TCI: 14 Signature Capture</p>
<p>(12) The electronic poll book must include a bar code reader or tablet that:</p> <p>(A) permits a voter who presents an Indiana driver's license or a state identification card issued under IC 9-24-16 to scan the license or card through the bar code reader or tablet; and</p>	<p>TCI: 15 Record Retrieval by Bar Code</p>

<p>(B) has the capability to display the voter's registration record upon processing the information contained within the bar code on the license or card.</p>	
<p>(13) The electronic poll book must be compatible with:</p> <p>(A) any hardware attached to the poll book, such as signature pads, bar code scanners, and network cards;</p> <p>(B) the statewide voter registration system; and</p> <p>(C) any software system used to prepare voter information to be included on the electronic poll list.</p>	<p>TCI: 02 Functional Configuration Audit</p>
<p>(14) The electronic poll book must have the ability to be used in conformity with this title for:</p> <p>(A) any type of election conducted in Indiana; or</p> <p>(B) any combination of elections held concurrently with a general election, municipal election, primary election, or special election.</p>	<p>TCI: 10 Supported Elections</p>
<p>(15) The procedures for setting up, using, and shutting down an electronic poll book must:</p> <p>(A) be reasonably easy for a precinct election officer to learn, understand, and perform; and</p> <p>(B) not require a significant amount of training in addition to the training required by IC 3-6-6-40.</p>	<p>TCI: 01 ePB Certification Checklist</p>
<p>(16) The electronic poll book must enable a precinct election officer to verify that the electronic poll book:</p> <p>(A) has been set up correctly;</p> <p>(B) is working correctly so as to verify the eligibility of the voter;</p> <p>(C) is correctly recording that a voter has voted; and</p> <p>(D) has been shut down correctly.</p>	<p>TCI: 09 Diagnostic Communications</p>

<p>(17) The electronic poll book must include the following documentation:</p> <p>(A) Plainly worded, complete, and detailed instructions sufficient for a precinct election officer to set up, use, and shut down the electronic poll book.</p> <p>(B) Training materials that:</p> <ul style="list-style-type: none"> (i) may be in written or video form; and (ii) must be in a format suitable for use at a polling place, such as simple "how to" guides. <p>(C) Failsafe data recovery procedures for information included in the electronic poll book.</p> <p>(D) Usability tests:</p> <ul style="list-style-type: none"> (i) that are conducted by the manufacturer of the electronic poll book using individuals who are representative of the general public; (ii) that include the setting up, using, and shutting down of the electronic poll book; and (iii) that report their results using the ANSI/INCITS -354 Common Industry Format (CIF) for Usability Test Reports approved by the American National Standards Institute (ANSI) on December 12, 2001. <p>(E) A clear model of the electronic poll book system architecture and the following documentation:</p> <ul style="list-style-type: none"> (i) End user documentation. (ii) System-level documentation. (iii) Developer documentation. <p>(F) Detailed information concerning:</p> <ul style="list-style-type: none"> (i) electronic poll book consumables; and (ii) the vendor's supply chain for those consumables. <p>(G) Vendor internal quality assurance procedures and any internal or external test data and reports available to the vendor concerning the electronic poll book.</p>	<p>TCI: 01 ePB Certification Checklist</p>
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<p>(H) Repair and maintenance policies for the electronic poll book.</p> <p>(I) As of the date of the vendor's application for approval of the electronic poll book by the secretary of state as required by IC 3-11-18.1-12(2), the following:</p> <ul style="list-style-type: none"> (i) A list of customers who are using or have previously used the vendor's electronic poll book. (ii) A description of any known anomalies involving the functioning of the electronic poll book, including how those anomalies were resolved. 	
<p>(18) The electronic poll book and any hardware attached to the electronic poll book must be designed to prevent injury or damage to any individual or the hardware, including fire and electrical hazards.</p>	<p>TCI: 06 Product Safety (Commercial Off the Shelf - COTS)</p> <p>TCI: 07 Product Safety (Proprietary)</p>
<p>(19) The electronic poll book must demonstrate that it correctly processes all activity regarding each voter registration record included on the electronic poll list, including the use, alteration, storage, and transmittal of information that is part of the record. Compliance with this subdivision requires the mapping of the data life cycle of the voter registration record as processed by the electronic poll book.</p>	<p>TCI: 01 ePB Certification Checklist</p> <p>TCI: 02 Functional Configuration Audit</p>
<p>(20) The electronic poll book must successfully perform in accordance with all representations concerning functionality, usability, security, accessibility, and sustainability made in the vendor's application for approval of the electronic poll book by the secretary of state as required by IC 3-11-18.1-12(2).</p>	<p>TCI: 02 Functional Configuration Audit</p>
<p>(21) The electronic poll book must have the capacity to transmit all information generated by the voter or poll clerk as part of the process of casting a ballot, including the time and date stamp indicating when the voter voted, and the electronic signature of the voter, for retention on the dedicated private server maintained by the county election board for the period required by Indiana and federal law.</p>	<p>TCI: 04 Electronic Poll Book Transmission</p>

<p>(22) The electronic poll book must:</p> <p>(A) permit a voter to sign the poll book even when there is a temporary interruption in connectivity to the Internet; and</p> <p>(B) provide for the uploading of each signature and its assignment to the voter's registration record.</p>	<p>TCI: 05 Loss and Restoration of Connectivity</p>
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4.0 TEST FINDINGS AND RECOMMENDATIONS

TCI: 02 Functional Configuration Audit

The objective of this test case is to determine if the electronic poll book functions in accordance with all representations including attached peripherals, statewide voter registration system and any software system used to prepare the electronic poll list.

During execution of this test case, that electronic poll book solution being evaluated, as configured per the provided technical documentation, was subjected to the following functional testing:

- The ability to interface with the county database containing the voter registration system
- The ability to program poll place devices with an electronic poll list for all supported Indiana election types
- Hardware compatibility
- Administrative functionality
- User management including adding users, deleting users, and updating users
- Access controls management
- All data entry points
- All voter registration retrieval methods.
- All digital signature capture methods
- Editing voter registration records
- Interfacing components
- Data transmission
- Database management, including backing up and restoring
- Audit log retrieval and maintenance
- Reporting

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 03 Transmission Encryption

The objective of this test case is to determine if the electronic poll book employs encryption.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 04 Electronic Poll Book Transmission

The objective of this test case is to determine if the electronic poll book transmits and can receive an indication that a voter has received a ballot, the time and date of the occurrence, and the electronic signature and records audit details.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 05 Loss and Restoration of Connectivity

The objective of this test case is to determine if the electronic poll book will capture a digital signature with a disruption of connectivity and upload the signatures to the voter registration record once connectivity is restored.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 06 Product Safety (Commercial Off the Shelf - COTS)

The objective of this test case is to determine if the electronic poll book and peripheral are designed to prevent injury and can be safely operated.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 07 Product Safety (Proprietary)

The objective of this test case is to determine if the electronic poll book and peripheral are designed to prevent injury and can be safely operated.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 08 Electronic Poll Book Programming

The objective of this test case is to determine if the electronic poll book requires the coordinated action of two officers of different political parties to access the electronic poll book information.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 09 Diagnostic Communications

The objective of this test case is to determine that the electronic book poll provides diagnostic communication to verify the device is set up correctly, working correctly, correctly recording a voter has been given a ballot, and has been shut down correctly

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 10 Supported Elections

The objective of this test case is to determine if the electronic poll book supports a general election, municipal election, primary election, or a special election as well as any combination of concurrent elections.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 11 Electronic Poll Book Interface

The objective of this test case is to determine if the electronic poll book is connected to the voting system.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 12 Display of Voter Information and Signature

The objective of this test case is ensure all the voter information from IC 3-7-29-1(A) and (B) of this requirement is accessible including the voter's signature record and other information is not accessible.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 13 Input of Voter Eligibility

The objective of this test case is to determine if the electronic poll book can be updated for voter eligibility.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 14 Signature Capture

The objective of this test case is to determine if the electronic poll book can capture and retain a voter's signature legible enough for comparison with the signature record on file.

Summary Findings: *<Please complete this section with your summary findings>*

TCI: 15 Record Retrieval by Bar Code

The objective of this test case is to determine if the electronic poll book can retrieve and display the voter registration record be a bar code on an Indiana driver's license or state identification card.

Summary Findings: *<Please complete this section with your summary findings>*

5.0 CERTIFICATION FOR USE

Based on the testing performed and the results obtained, the electronic poll book solution identified in this report meets the requirements set forth in Indiana Statute Section 10.3 and is recommended for use in the State of Indiana.

- Yes
- No

ATTACTMENT A
TEST CASES

Functional Configuration Audit (FCA) Test Cases

TCI: 02 Functional Configuration Audit	
<p>IN § 10.3 (b) Requirements:</p> <p>(13) (19) (20)</p>	<p><i>(13) The electronic poll book must be compatible with:</i></p> <p><i>(A) any hardware attached to the poll book, such as signature pads, bar code scanners, and network cards;</i></p> <p><i>(B) the statewide voter registration system; and</i></p> <p><i>(C) any software system used to prepare voter information to be included on the electronic poll list.</i></p> <p><i>(19) The electronic poll book must demonstrate that it correctly processes all activity regarding each voter registration record included on the electronic poll list, including the use, alteration, storage, and transmittal of information that is part of the record. Compliance with this subdivision requires the mapping of the data life cycle of the voter registration record as processed by the electronic poll book.</i></p> <p><i>(20) The electronic poll book must successfully perform in accordance with all representations concerning functionality, usability, security, accessibility, and sustainability made in the vendor's application for approval of the electronic poll book by the secretary of state as required by IC 3-11-18.1-12(2).</i></p>
<p>Test Objective: To determine if the electronic poll book functions in accordance with all representations including attached peripherals, statewide voter registration system and any software system used to prepare the electronic poll list.</p>	<p>Test Configuration: None</p>
<p>Equipment:</p>	<p>All system documentation submitted as part of the application.</p>
<p>Special Procedural Requirements:</p>	<p>The electronic poll book <i>SYSTEM</i> will configured per the system documentation submitted by the electronic poll book manufacturer. The electronic poll book firmware will be loaded by the examiner from a trusted source.</p>

<p>Assumptions:</p>	<p>This test is a system level test that requires all equipment and software that is being considered for certification.</p>
<p>Test Approach:</p>	<p>Below are three definitions of a functional configuration audit:</p> <p><i>The formal examination of functional characteristics of a configuration item, or system to verify that the item has achieved the requirements specified in its functional and/or allocated configuration documentation. [MIL-HDBK-61A]</i></p> <p><i>Functional Configuration Audit (FCA): For each configuration item, the formal examination of its functional characteristics to verify that it has achieved the requirements in its allocated baseline. For a system, the formal examination of its functional characteristics to verify that it has achieved the requirements in the functional baseline. [SMC Systems Engineering Primer & Handbook, Jan 2004]</i></p> <p><i>Functional Configuration Audit (FCA) examines the functional characteristics of the configured product and verifies that the product has met, via test results, the requirements specified in its functional baseline documentation approved at the PDR and CDR. FCAs will be conducted on both hardware- or software-configured products and will precede the PCA of the configured product. [NASA Systems Engineering Handbook, NASA/SP-2007-6105, Rev1.]</i></p> <p>During the performance of the functional configuration audit (FCA) each component and subcomponent of the electronic poll book will be functionally evaluated as designed and documented. The FCA will depend heavily on black box testing techniques for the individual software components. The examiner will use “equivalence partitioning” and “boundary value testing” to evaluate the robustness and stability of the software submitted for evaluation.</p> <p>“Equivalence partitioning” will be used to evaluate specific software functions and data entry points. For software functions and data entry points, an entry will be made for valid data requirement and at least one invalid data requirement to test for normal and abnormal conditions. This can include the input of numeric values and special characters for alphabetic and text fields and may also include alphabetic and special characters for numeric fields.</p>

	<p>“Boundary value testing” will be used to evaluate specific software functions and data entry points for minimums and maximums. For software functions and data entry points an entry will be made for all minimum and all maximum documented requirements to test for normal and abnormal conditions. This can include numeric ranges as well as non-numeric ranges.</p>
<p>Test Method:</p> <p>The method for testing these requirements is execution. The FCA will evaluate the electronic poll book solution including all hardware, software, and peripherals. The examiner will utilize the User’s Manual provided to perform documented functions. If the User’s Manual is deemed incomplete or insufficient the examiner will note this as a deficiency, but will still subject the electronic poll book solution to the following functional testing:</p> <ul style="list-style-type: none"> • The ability to interface with the county database containing the voter registration system • The ability to program poll place devices with an electronic poll list for all supported Indiana election types • Hardware compatibility • Administrative functionality • User management including adding users, deleting users, and updating users • Access controls management • All data entry points • All voter registration retrieval methods. • All digital signature capture methods • Editing voter registration records • Interfacing components • Data transmission • Database management, including backing up and restoring • Audit log retrieval and maintenance • Reporting <p>During performance of the FCA, the examiner will input both positive and negative test data to trigger normal and abnormal conditions. If negative test data is allowed to be input, the examiner will continue the process of the data flow as document in the “mapping of the data life cycle” to ensure the negative testing data does not have an effect on downstream processes.</p>	
<p>Criteria for Evaluation of the Test Results: At the conclusion of the FCA, the examiner will analyze all deficiencies and make a determination on the electronic poll book solutions ability to perform in accordance with all representations concerning functionality, usability, security, accessibility, and sustainability.</p>	

Telecommunications/Compliance Test Cases

TCI: 08 Electronic Poll Book Programming	
IN § 10.3 (b) Requirements: (1)	<i>(1) An electronic poll book must be programmed so that the coordinated action of two (2) election officers who are not members of the same political party is necessary to access the electronic poll book.</i>
Test Objective: To determine if the electronic poll book requires the coordinated action of two officers of different political parties to access the electronic poll book information.	Test Configuration: An electronic poll book loaded with the proper version of firmware and configured with voter information in a pre-election state.
Equipment:	None
Special Procedural Requirements:	None
Assumptions:	The electronic poll book is loaded with voter information, but is not in an "Election" state. This test case assumes that the Criteria for Evaluation are not satisfied procedurally.
Step	Procedure
1000	Ensure the electronic poll book is in a "Pre-Election" state and not activated to an "Election" state. <i>Expected:</i> The electronic poll book is loaded with voter information and is in a "Pre-Election" state. <i>Actual:</i>
1010 (1010 to 1030 are designed to validate the first user inputs)	Attempt to access the electronic poll book using the designated method of data input without inputting proper credentials. Repeat this step 11 times documenting each method and credential used or until the electronic poll book "locks out" attempts. <i>Expected:</i> The electronic poll book will not switch into an "Election" state or provide access to voter information. <i>Actual:</i>
1020	Ensure the electronic poll book is returned to a "Pre-Election" state. <i>Expected:</i> The electronic poll book is loaded with voter information and is in a "Pre-Election" state. <i>Actual:</i>
1030	Use the designated method to input valid user credentials to the electronic poll book for Party 1. <i>Expected:</i> The information for Party 1 can be input into the electronic poll book. <i>Actual:</i>

<p>1040 (1040 to 1060 are designed to validate the second user inputs)</p>	<p>Attempt to access the electronic poll book using the designated method of data input for invalid user credentials for Party 2. Repeat this step 11 times documenting each method and credential used or until the electronic poll book “locks out” attempts.</p> <p><i>Expected: The electronic poll book will not switch into an “Election” state or provide access to voter information.</i></p> <p><i>Actual:</i></p>
<p>1050</p>	<p>Ensure the electronic poll book is returned to a “Pre-Election” state.</p> <p><i>Expected: The electronic poll book is loaded with voter information and is in a “Pre-Election” state.</i></p> <p><i>Actual:</i></p>
<p>1060</p>	<p>Use the designated method to input valid user credentials for access to the electronic poll book for Party 2.</p> <p><i>Expected: The information for Party 2 can be input into the electronic poll book.</i></p> <p><i>Actual:</i></p>
<p>1070</p>	<p>Attempt to access the electronic poll book using the designated method of data input without inputting proper credentials for Party 1 and invalid credentials for Party 2. Repeat this step 11 times documenting each method and credential used or until the electronic poll book “locks out” attempts.</p> <p><i>Expected: The electronic poll book will not switch into an “Election” state or provide access to voter information.</i></p> <p><i>Actual:</i></p>
<p>1080</p>	<p>Ensure the electronic poll book is returned to a “Pre-Election” state.</p> <p><i>Expected: The electronic poll book is loaded with voter information and is in a “Pre-Election” state.</i></p> <p><i>Actual:</i></p>
<p>1090</p>	<p>Use the designated method to input information necessary for access to the electronic poll book for Party 1. Use the designated method to input information necessary for access to the electronic poll book for Party 2.</p> <p><i>Expected: The electronic poll book is activated to an “Election” state with the coordinated action of Party 1 and Party 2.</i></p> <p><i>Actual:</i></p>
<p>1100</p>	<p>Use the designated method to input information necessary for access to the electronic poll book for two separate individuals of the same Party.</p> <p><i>Expected: The electronic poll book will not allow for activation to an “Election” state.</i></p> <p><i>Actual:</i></p>

1110	<p>Input the voter information for any known voter to retrieve the voter registration. Analyze the record for known information to ensure the electronic poll book has retrieved the proper information.</p> <p><i>Expected: The electronic poll book retrieves the proper voter information.</i></p> <p><i>Actual:</i></p>
1120	<p>Use the designated method to generate a report.</p> <p><i>Expected: A report is produced.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: The electronic poll book does not allow access to the voter information without a coordinated action of two separate election officers from different political parties. The electronic poll book does allow access to the voter information with the coordinated action of two separate election officers from different political parties.</p>	

TCI: 11 Electronic Poll Book Interface	
IN § 10.3 (b) Requirements: (2)	(2) <i>An electronic poll book may not be connected to a voting system.</i>
Test Objective: To determine if the electronic poll book is connected to the voting system.	Test Configuration: An electronic poll book configured for election day.
Equipment:	COTS device for reading interfacing component
Special Procedural Requirements:	None
Assumptions:	The electronic poll book is configured with all connections, cable and transport media.
Step	Procedure
1000	<p>Inspect the electronic poll book for cables, connections and transport media to the voting system. Any interfacing component must have an "air gap" solution between the electronic poll book and the voting system. This inspection should take into account radio frequency connections such as Bluetooth, Wi-Fi, and Cellular connections.</p> <p><i>Expected: The electronic poll book does not connect to the voting system.</i></p> <p><i>Actual:</i></p>
1010	<p>(*Optional for interfacing components)</p> <p>For interfacing components with an "air gap" solution, this interface should be a one way interface from the electronic poll book to the voting system. Use the designated method of interfacing from the electronic poll book to the voting system. Use the designated method of the voting system to interface with the information provided by the electronic poll book. Return the interfacing component to the electronic poll book. Use the designated method to examine the interfacing component to ensure the voting system does not provide any information to the electronic poll book.</p> <p><i>Expected: The voting system does not provide any information to the electronic poll book.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: The electronic poll book is not connected in any manner to the voting system. If there is an interfacing component to the voting system, this interface must be a one way interface.</p>	

TCI: 12 Display of Voter Information and Signature	
<p>IN § 10.3 (b) Requirements:</p> <p>(3) (10)</p>	<p><i>(3) An electronic poll book may not permit access to voter information in the electronic poll list other than:</i></p> <p><i>(A) information provided on the certified list of voters prepared under IC 3-7-29-1; or</i></p> <p><i>(B) information concerning any of the following received or issued after the electronic poll list has been downloaded by the county election board under IC 3-7-29-6:</i></p> <p><i>(i) The county's receipt of an absentee ballot from the voter.</i></p> <p><i>(ii) The county's receipt of additional documentation provided by the voter to the county voter registration office.</i></p> <p><i>(iii) The county's issuance of a certificate of error.</i></p> <p><i>(10) The electronic poll book must be able to display an electronic image of the signature of a voter taken from the voter's registration application, if available.</i></p>
<p>Test Objective: Ensure all the voter information from IC 3-7-29-1 described in (A) and supplemental information described in (B) of this requirement is accessible including the voter's signature record and other information is not accessible.</p>	<p>Test Configuration: An electronic poll book configured for election day.</p>
<p>Equipment:</p>	<p>None</p>
<p>Special Procedural Requirements:</p>	<p>The voter information to retrieve (5) known voter registration records will be selected prior test execution to meet the following requirements:</p> <ul style="list-style-type: none"> • An eligible voter • An ineligible voter • A voter who has cast an absentee ballot • A voter flagged to provide additional documentation • A voter with a county issued certificate of error

Assumptions:	It is assumed examples of the five known voter registration records will be provided in the data to execute these five steps below.
Step	Procedure
1000	<p>Use the designated method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
1010	<p>Inspect the retrieved record for the following information:</p> <ul style="list-style-type: none"> ___ (1) The full name of the voter. ___ (2) The address of the voter. ___ (3) The assigned voter identification number. ___ (4) Whether the voter is required to provide additional identification before voting either in person or by absentee ballot. ___ (5) The date of birth of the voter, including an indication whether the voter is less than eighteen (18) years of age for a poll list used in a primary election ___ (6) The scanned signature of the voter. ___ (7) Whether the voter is required to provide an affirmation of the voter's residence. ___ (8) A bar code that allows the county voter registration office to efficiently record whether the voter has signed the poll list. ___ (9) For a poll list used in a primary election, a letter abbreviation of the name of the major political party whose ballot the voter has requested. ___ (10) A space for a poll clerk to indicate when a voter has cast an absentee ballot. ___ (11) A space for a poll clerk to indicate when a voter has cast a provisional ballot. ___ (12) For a voter required to submit additional documentation required under IC 3-7-33-4.5, a space for a poll clerk to insert letters serving as an abbreviation for the type of documentation provided by the voter. <p><i>Expected: Items 1-12 are displayed and the signature is adequately legible to make a signature comparison and no other voter information is provided.</i></p> <p><i>Actual:</i></p>
1020	<p>Use the designated method to input the voter information to retrieve the voter registration record for an ineligible voter. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>

<p>1030</p>	<p>Inspect the retrieved record for the following information:</p> <ul style="list-style-type: none"> ___ (1) The full name of the voter. ___ (2) The address of the voter. ___ (3) The assigned voter identification number. ___ (4) Whether the voter is required to provide additional identification before voting either in person or by absentee ballot. ___ (5) The date of birth of the voter, including an indication whether the voter is less than eighteen (18) years of age for a poll list used in a primary election ___ (6) The scanned signature of the voter. ___ (7) Whether the voter is required to provide an affirmation of the voter's residence. ___ (8) A bar code that allows the county voter registration office to efficiently record whether the voter has signed the poll list. ___ (9) For a poll list used in a primary election, a letter abbreviation of the name of the major political party whose ballot the voter has requested. ___ (10) A space for a poll clerk to indicate when a voter has cast an absentee ballot. ___ (11) A space for a poll clerk to indicate when a voter has cast a provisional ballot. ___ (12) For a voter required to submit additional documentation required under IC 3-7-33-4.5, a space for a poll clerk to insert letters serving as an abbreviation for the type of documentation provided by the voter. <p><i>Expected: Items 1-12 are displayed and the signature is adequately legible to make a signature comparison and no other voter information is provided.</i></p> <p><i>Actual:</i></p>
<p>1040</p>	<p>Use the designed method to input the voter information to retrieve the voter registration record for a voter who has cast an absentee ballot. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
<p>1050</p>	<p>Inspect the retrieved record for the following information:</p> <ul style="list-style-type: none"> ___ (1) The full name of the voter. ___ (2) The address of the voter. ___ (3) The assigned voter identification number. ___ (4) Whether the voter is required to provide additional identification before voting either in person or by absentee ballot. ___ (5) The date of birth of the voter, including an indication whether the voter is less than eighteen (18) years of age for a poll list used in a primary election ___ (6) The scanned signature of the voter. ___ (7) Whether the voter is required to provide an affirmation of the voter's residence. ___ (8) A bar code that allows the county voter registration office to efficiently record whether the voter has signed the poll list. ___ (9) For a poll list used in a primary election, a letter abbreviation of the name of the major political party whose ballot the voter has requested. ___ (10) A space for a poll clerk to indicate when a voter has cast an absentee ballot. ___ (11) A space for a poll clerk to indicate when a voter has cast a provisional ballot. ___ (12) For a voter required to submit additional documentation required under IC 3-7-33-4.5, a space for a poll clerk to insert letters serving as an abbreviation for the type of documentation provided by the voter.

	<p><i>Expected: Items 1-12 are displayed and the signature is legible enough to make a signature comparison and no other voter information is provided.</i></p> <p><i>Actual:</i></p>
1060	<p>Use the designed method to input the voter information to retrieve the voter registration record for a voter who has been flagged for additional documentation. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
1070	<p>Inspect the retrieved record for the following information:</p> <ul style="list-style-type: none"> ___ (1) The full name of the voter. ___ (2) The address of the voter. ___ (3) The assigned voter identification number. ___ (4) Whether the voter is required to provide additional identification before voting either in person or by absentee ballot. ___ (5) The date of birth of the voter, including an indication whether the voter is less than eighteen (18) years of age for a poll list used in a primary election ___ (6) The scanned signature of the voter. ___ (7) Whether the voter is required to provide an affirmation of the voter's residence. ___ (8) A bar code that allows the county voter registration office to efficiently record whether the voter has signed the poll list. ___ (9) For a poll list used in a primary election, a letter abbreviation of the name of the major political party whose ballot the voter has requested. ___ (10) A space for a poll clerk to indicate when a voter has cast an absentee ballot. ___ (11) A space for a poll clerk to indicate when a voter has cast a provisional ballot. ___ (12) For a voter required to submit additional documentation required under IC 3-7-33-4.5, a space for a poll clerk to insert letters serving as an abbreviation for the type of documentation provided by the voter. <p><i>Expected: Items 1-12 are displayed and the signature is adequately legible to make a signature comparison and no other voter information is provided.</i></p> <p><i>Actual:</i></p>
1080	<p>Use the designated method to input the voter information to retrieve the voter registration record for a voter with a county issued certificate of error. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>

1090	<p>Inspect the retrieved record for the following information:</p> <ul style="list-style-type: none"> ___ (1) The full name of the voter. ___ (2) The address of the voter. ___ (3) The assigned voter identification number. ___ (4) Whether the voter is required to provide additional identification before voting either in person or by absentee ballot. ___ (5) The date of birth of the voter, including an indication whether the voter is less than eighteen (18) years of age for a poll list used in a primary election ___ (6) The scanned signature of the voter. ___ (7) Whether the voter is required to provide an affirmation of the voter's residence. ___ (8) A bar code that allows the county voter registration office to efficiently record whether the voter has signed the poll list. ___ (9) For a poll list used in a primary election, a letter abbreviation of the name of the major political party whose ballot the voter has requested. ___ (10) A space for a poll clerk to indicate when a voter has cast an absentee ballot. ___ (11) A space for a poll clerk to indicate when a voter has cast a provisional ballot. ___ (12) For a voter required to submit additional documentation required under IC 3-7-33-4.5, a space for a poll clerk to insert letters serving as an abbreviation for the type of documentation provided by the voter. <p><i>Expected: Items 1-12 are displayed and the signature is adequately legible to make a signature comparison and no other voter information is provided.</i></p> <p><i>Actual:</i></p>
1100	<p>Use the designated method to generate a report.</p> <p><i>Expected: A report is produced.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: All voter records can be retrieved and accurately displayed with the required information for expected data and no additional information is displayed.</p>	

TCI: 03 Transmission Encryption	
IN § 10.3 (b) Requirements: (4)	<p><i>(4) The information contained on an electronic poll list must be encrypted and placed on a dedicated, private server to secure connectivity between a precinct polling place or satellite absentee office and the county election board. The electronic poll book must have the capability of:</i></p> <p><i>(A) storing (in external or internal memory) a local version of the electronic poll list; and</i></p> <p><i>(B) producing a list of audit records that reflect all of the idiosyncrasies of the system, including in-process audit records that set forth all transactions.</i></p>
Test Objective: To determine if the electronic poll book employs encryption.	Test Configuration: An electronic poll book connected to a network interface.
Equipment:	Network protocol analyzer, network interface
Special Procedural Requirements:	A network connection between the network analyzer, network interface and the electronic poll book must be established. The network protocol analyzer must be fully functioning. The network protocol analyzer must be configured in promiscuous mode to capture all packets traversing the network.
Assumptions:	The electronic poll book is configured to the point of transmission.
Step	Procedure
1000	Examine the electronic poll book and ensure it is in a state ready to transmit. <i>Expected: The electronic poll book is ready to transmit an updated poll list.</i> <i>Actual:</i>
1010	Use the designated method to initialize the network protocol analyzer to start a "capture" from the network interface. <i>Expected: The network protocol analyzer is actively capturing network packet.</i> <i>Actual:</i>

<p>1020</p>	<p>Use the designated method to transmit the updated poll list from the ePB to the poll list server.</p> <p><i>Expected: The ePB will start to transmit data to the network interface.</i></p> <p><i>Actual:</i></p>
<p>1030</p>	<p>Use the designated method to browse the “captured” packets on the network protocol analyzer, ensure the network packets are encrypted.</p> <p><i>Expected: A determination can be made that the electronic poll book uses employs encryption.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: The electronic poll transmits data that is encrypted.</p>	

TCI: 04 Electronic Poll Book Transmission

IN § 10.3 (b) Requirements:

(4) (7) (9) (21)

(4) The information contained on an electronic poll list must be encrypted and placed on a dedicated, private server to secure connectivity between a precinct polling place or satellite absentee office and the county election board. The electronic poll book must have the capability of:

(A) storing (in external or internal memory) a local version of the electronic poll list; and

(B) producing a list of audit records that reflect all of the idiosyncrasies of the system, including in-process audit records that set forth all transactions.

(7) The electronic poll book must transmit the information in subdivision (6) to the county election board so that the board may transmit the information immediately to every other polling place or satellite absentee office in the county in which an electronic poll list is being used.

(9) On each day after absentee ballots are cast before an absentee voter board in the circuit court clerk's office, a satellite office, or a vote center, and after election day, the electronic poll book must permit voter history to be quickly and accurately uploaded into the electronic poll list.

(21) The electronic poll book must have the capacity to transmit all information generated by the voter or poll clerk as part of the process of casting a ballot, including the time and date stamp indicating when the voter voted, and the electronic signature of the voter, for retention on the dedicated private server maintained by the county election board for the period required by Indiana and federal law.

Test Objective: To determine if the electronic poll book transmits and can receive an indication that a voter has received a ballot, the time and date of the occurrence, and the electronic signature and records audit details.	Test Configuration: Two electronic poll books (ePB-1 & ePB-2) configured with the same voter registration data and the ability to connect to a dedicated private server.
Equipment:	Time keeping device
Special Procedural Requirements:	The voter information to retrieve (2) known eligible voter registration records.
Assumptions:	The electronic poll book is loaded with poll list, but no connections are established to a network.
Step	Procedure
1000 ePB -1	Examine the electronic poll book and identify the designated method of data transmission. Ensure the electronic poll book has no connectivity. <i>Expected: The electronic poll book has no connectivity.</i> <i>Actual:</i>
1010 ePB -1	Use the designated method to browse through the poll list. Retrieve and examine five (5) voter registration records to ensure the poll list is stored locally and is not dependent on connectivity. <i>Expected: The poll list is stored locally and can be browsed with no connectivity.</i> <i>Actual:</i>
1020 ePB -1	Use the designated method to establish connectivity and configure the electronic poll book for an "Election" state. <i>Expected: The electronic poll book is activated to an "Election" state and has connectivity.</i> <i>Actual:</i>
1030 ePB -1	Use the designated method to input the voter information to retrieve the voter registration record for an eligible voter. Input the voter information and retrieve the voter record. <i>Expected: The voter information is able to be input and the correct record is retrieved.</i> <i>Actual:</i>
1040 ePB -1	Use the designated method to digitally input the voter's signature. Use the designated method to save the signature. <i>Expected: The voter's signature can be input and saved to a voter registration record.</i> <i>Actual:</i>

<p>1050 ePB -1</p>	<p>Use the designated method to edit the voter registration record. Use the designated method to update the voter registration record to indicate the voter as having received a ballot. Save the update.</p> <p><i>Expected: The voter registration record can be edited and the update can be saved.</i></p> <p><i>Actual:</i></p>
<p>1060 ePB -1</p>	<p>Use the time keeping device to record the time: _____</p> <p>Use the designated method to transmit the updated poll list to the poll list server. Look for an indication of a successful transfer.</p> <p>Use the time keeping device to record the time: _____</p> <p><i>Expected: The updated voter registration record can be successfully transmitted.</i></p> <p><i>Actual:</i></p>
<p>1070 Server</p>	<p>On the server, use the designated method to retrieve the transmitted poll list from ePB-1. Examine the voter registration record for the voter information input in step 1030. Ensure the voter registration contains the following:</p> <p>_____ An indication of receiving a ballot</p> <p>_____ Time and date stamp of receiving a ballot</p> <p>_____ A legible digital signature</p> <p><i>Expected: The updated voter registration record can be successfully retrieved and contains the required information.</i></p> <p><i>Actual:</i></p>
<p>1080 Server</p>	<p>Use the designated method to use this poll list as the "new" updated poll list to distribute to all electronic poll books.</p> <p><i>Expected: The poll list can be updated to use the poll list transmitted from 1060.</i></p> <p><i>Actual:</i></p>
<p>1090 ePB-2</p>	<p>Use the designated method to browse through the poll list.</p> <p><i>Expected: The poll list is unchanged from the original information.</i></p> <p><i>Actual:</i></p>
<p>1100 ePB-2</p>	<p>Use the designated method to establish connectivity and configure the electronic poll book to receive an updated poll list.</p> <p><i>Expected: The connectivity is established and the electronic poll book is ready to receive an updated poll list.</i></p> <p><i>Actual:</i></p>

<p>1110</p> <p>ePB-2</p>	<p>Use the designated method to update the poll list.</p> <p><i>Expected: The poll list is updated with the poll list from step 1060.</i></p> <p><i>Actual:</i></p>
<p>1120</p> <p>ePB-2</p>	<p>Use the designated method to configure the electronic poll book for an "Election" state.</p> <p><i>Expected: The electronic poll book is activated to an "Election" state.</i></p> <p><i>Actual:</i></p>
<p>1130</p> <p>ePB-2</p>	<p>Use the designated method to input the voter information to retrieve the voter registration record for the voter used in step 1030. Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
<p>1140</p> <p>ePB-2</p>	<p>Examine the voter registration record to ensure it contains a digital signature and an indication that the voter has received a ballot.</p> <p><i>Expected: The voter registration record reflects the changes input in step 1050.</i></p> <p><i>Actual:</i></p>
<p>1150</p> <p>ePB-2</p>	<p>Use the designated method to input the voter information to retrieve the voter registration record for an eligible voter (not used in step 1030). Input the voter information and retrieve the voter record.</p> <p><i>Expected: The voter information is able to be input and the correct record is retrieved.</i></p> <p><i>Actual:</i></p>
<p>1160</p> <p>ePB-2</p>	<p>Use the designated method to digitally input the voter's signature. Use the designated method to save the signature.</p> <p><i>Expected: The voter's signature can be input and saved to a voter registration record.</i></p> <p><i>Actual:</i></p>
<p>1170</p> <p>ePB-2</p>	<p>Use the designated method to edit the voter registration record. Use the designated method to update the voter registration record to indicate the voter as having received a ballot. Save the update.</p> <p><i>Expected: The voter registration record can be edited and the update can be saved.</i></p> <p><i>Actual:</i></p>
<p>1180</p> <p>ePB-2</p>	<p>Use the time keeping device to record the time: _____</p> <p>Use the designated method to transmit the updated poll list to the poll list server. Look for an indication of a successful transfer.</p> <p>Use the time keeping device to record the time: _____</p> <p><i>Expected: The updated voter registration record can be successfully transmitted.</i></p> <p><i>Actual:</i></p>

<p>1190 Server</p>	<p>On the server, use the designated method to retrieve the transmitted poll list from ePB-2. Examine the voter registration record for the voter information input in step 1150. Ensure the voter registration contains the following:</p> <p>_____ An indication of receiving a ballot</p> <p>_____ Time and date stamp of receiving a ballot</p> <p>_____ A legible digital signature</p> <p><i>Expected: The updated voter registration record can be successfully retrieved and contains the required information.</i></p> <p><i>Actual:</i></p>
<p>1200</p>	<p>Use the designated method to retrieve the audit records for ePB-1, ePB-2 and the server. If the ability to print the audit records is available print the audit records. Examine the audit records and verify that it contains the transactions that occurred during this test. Also, examine other records looking for indications of the idiosyncrasies of the system.</p> <p><i>Expected: The audit records can be successfully retrieved and contains the required information.</i></p> <p><i>Actual:</i></p>
<p>Criteria for Evaluation of the Test Results: The electronic poll book is capable of transmitting the required information quickly and accurately to the server and retrieve updates from the server.</p>	



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October 30, 2013

The Honorable Connie Lawson
Secretary of State of Indiana
201 State House
302 West Washington Street
Indianapolis, IN 46204

Dear Secretary Lawson:

The Voting System Technical Oversight Program (VSTOP) is pleased to present the enclosed documents for your review and approval.

These documents, **Indiana Electronic Poll Book Certification Test Protocol for the Voting System Technical Oversight Program** and **CERTIFICATION TEST REPORT FOR EXAMINATION OF ELECTRONIC POLL BOOK FOR THE VOTING SYSTEM TECHNICAL OVERSIGHT PROGRAM**, have been developed following extensive consultation with nationally accredited testing laboratories and electronic pollbook vendors. We believe that these documents have been significantly improved by the comments and suggestions we have received from the laboratories, vendors, and members of the Election Division staff.

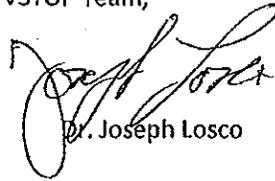
The development of these protocols has also helped us identify further practical issues in the implementation of the new technology employed in electronic poll books. Resolving some of these issues may require legislation for the 2014 session (such as refining our terminology to distinguish between "electronic poll lists" and "electronic poll books", or in clarifying how counties using electronic pollbooks should implement existing laws permitting a voter to indicate a change of name or change of address within a precinct by "writing on the poll list"). Other issues and our experiences in implementing these protocols may require future revisions to the documents, which we will submit to you for further consideration.

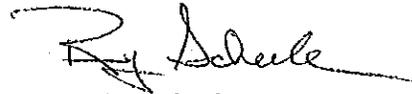
We are eager to proceed with testing and certification process regarding the pending applications from five ePollBook vendors, and expect to receive additional applications after these documents are approved.

We join with you in celebrating in achieving this milestone in Indiana's groundbreaking implementation of the electronic pollbook certification process. VSTOP is confident that these documents will be useful to other states that consider undertaking this important process.

Respectfully submitted by the VSTOP Team,


Dr. Jay Bagga


Dr. Joseph Losco


Dr. Ray Scheele

Attachments:

1. Indiana Electronic Poll Book Certification Test Protocol for the Voting System Technical Oversight Program
2. CERTIFICATION TEST REPORT FOR EXAMINATION OF ELECTRONIC POLL BOOK FOR THE VOTING SYSTEM TECHNICAL OVERSIGHT PROGRAM