Electronic Poll Books ("ePB") Background, Laws, Draft Principles and Draft Legislation to Enable a Manchester Ward Pilot

April 13, 2016 Draft

I. Background & Analysis

II. Laws that appear to need changing to enable a pilot

RSA 659:13 – Marks on checklist, ballot clerk procedure, **shall correct the address in red on the paper checklist,** reporting requirements for CVAs and Out-of-state, changes of address. Comprehensive modification enabling marks in computer software instead of marks on physical hard copy of checklist.

Possible new law:

a) Should prevent private company from collecting voters' confidential data from driver's licenses and storing it on non-state proprietary system.

b) Synchronization of data on ePBs in single polling place (or equivalent) during Election Day. Synchronization failures have been an issue in E poll books rollouts.

c) Require at least two ePBs (or equivalent) in each polling place to ensure redundancy of Election Day soft copy data storage reflecting who picked up a ballot, absentee voters, party ballot, CVA, out-of-state drivers' license, and address changes.

III. Laws that deserve attention and bear on pilot

State Law:

RSA 654:25: "The Secretary of State shall issue and distribute guidelines for the composition and style of checklists and for the maintenance of data related to checklists by which the supervisors shall compile and correct the checklist. Such guidelines shall specify the information which will be maintained and updated by the supervisors…"

RSA 654:34: "Change of registration" – Voter's check in ticket must reflect they were "UND" and what party they wished to affiliate with. **Then, how do voters get returned to undeclared using ePB?**

RSA 654:17 "Reports of death" – How are they to be distinguished/marked on the checklist at the beginning of Election Day?

RSA 654:45: - Security obligation of Secretary of State. Addressing concerns about potential disruption of election in the event that town or city (and state) is left without record of who picked up a ballot and

whether individuals voted two times. E poll books vendor must develop protocols using public-private encryption key for any import of data to ElectioNet, FIPS 140-2 encryption for all wireless communications between ePBs (or equivalent) arranged in peer-to-peer network, to prevent attack/disruption of election. Import of data to ElectioNet would be at the State's option and not required in law.

RSA 654:45,V. The Secretary of State shall:

(b) Provide adequate technological security measures to deter unauthorized access to the records contained in the voter database.

RSA 654:45, VI. The Secretary of State is authorized to provide voter database record data to …

RSA 654:31-a – Release of confidential data. Not applicable to SOS-envisioned solution. (See below.) However, the SOS will examine any drafts of proposed legislation that may entail SVRS exports of date-of-birth data.

RSA 659:49 Processing previously received absentee ballots shall begin at 1 PM, unless a different time, that is no earlier than 2 hours after the opening of the polls is posted and announced in accordance with paragraph II.

RSA 659:50, IV: Confidential voter's absentee ballot is announced. How is this handled by ePB?

RSA 659:55 Notwithstanding any other provision of law, if a red A.V. is properly place against the name of a voter who has voted by absentee ballots, that voter against whose name in red ink "A.V." shall... not be allowed to vote in person.

RSA 659:102 – Preservation of checklist (including registered voters who did not vote) must be continued, on similar media that can be photographed/microfilmed for long-term storage, so that investigations of persons who may have voted twice can continue efficiently. Required to be printed from ePB system, including state of out-of-state drivers licenses used in presenting photo ID. Original marked checklist are archived, so the red marks and changes ("A.V" and address changes) may be distinguished.

In general , the NH Department of State applies competitive bid requirements for HAVA vendor contracts, particularly those over $35,000. This entails, for any significant project, planning, establishing specifications, issuing competitive bids, and entering into contracts with Attorney General approval.

RSA 31:59 & RSA 31:59-A – Town/City rules for purchasing. For example, Manchester's Procurement Code, pursuant to above laws, appears below:

Procurement Code

The Procurement Code ⬀ shall promote fair and equitable treatment to all suppliers or prospective suppliers of goods and services, promote effective competition among prospective suppliers of goods and services, make as uniform as possible the procedures among various departments and agencies of the City by the standardization of the procurement process, to prevent abuses and favoritism, and promote the economical, effective, and efficient use of the City's total resources.

RSA 659:13, 654:25 and 654:31: To offset lack of physical checklist to mark during Election Day and to still maintain auditable and recoverable records, the town or city must keep all individual printed "voter check-in tickets" containing name, voter ID #, party,party registration for undeclared voters, etc. of those that have used token to pick up ballots.

Require one EPB (or equivalent) per voter line, possibly one for each person registering people to vote, and perhaps one for the "return to undeclared" table.

IV. <u>Federal Law</u>

HAVA Section 101(b)– "A State shall use the funds provided under a payment made this section (Title I) to carry out one or more of the following activities: …

    (B) Improving administration of elections for state office"

HAVA Section 301(a)(3) "Accessibility of individuals with disabilities – The voting system shall –

(A) Be accessible for individuals with disabilities, including nonvisual accessibility for the blind and visually impaired, in a manner that provide the same opportunity for access and participation (including privacy and independence) as for other voters;"

HAVA Section 301(a)(1)(C) "The voting system shall ensure that any notification required under this paragraph preserves the privacy of the voter and the confidentiality of the ballot":

To the extent that the E poll books effort weakens or slows down solutions to the broad challenge in this federal HAVA language, spending HAVA resources on E poll books may be viewed as negatively influencing achievement of main HAVA goals.

Federal audit standards for HAVA funds: State cannot reimburse towns for vendor work not consistent with the HAVA Office's competitive bidding requirements.

Towns with low Election Day Volume: In the event HAVA money is ever spent on E poll books, we must consider how to be fair to small towns who may not choose to use E poll books but will see money spent on other towns and cities anyway.

V. <u>Critique of the way the ePB product has been presented thus far</u>

1. It is unclear from problem statement whether KnowInk addresses the problem or could make it worse. Was the Ward 8 problem in voter registration lines or in voter intake lines? The Union Leader article dated March 16, 2016 reports as follows: "According to Normand, the city registered 5,923 new voters at the polls which, combined with near-record turnout, created long delays in some locations, most noticeably in (Manchester's) Ward 8."

   It is unclear from this statement whether the delays were in voter registration (emphasized in that paragraph) or voter intake lines (not mentioned except in the term "turnout"). Has anyone critically analyzed what happened in Ward 8? Would the extra effort required by voter registrars in voter registration using a KnowInk ePB have slowed down the voter registration line due to a new requirement to enter the voter registration data in the proposed E poll books system and print out a receipt?

2. Would this ePB process add effort for the supervisors of the checklist, particularly if they do not have sufficient ePB/printer stations? What if they do not have a station for "return to undeclared"?

3. There has been no planning effort that is effectively required by HAVA projects.

4. The model of local implementation first (with limited state scrutiny) is arguably the single model most susceptible to failure in ePB implementations elsewhere in the nation.

5. Relies on a vendor obtaining dates of birth for all registered voters in the state and placing them in the cloud without demonstrating security.

6. A user interface applying NH law has not been demonstrated (not even close).

7. In the ballot clerk procedure, there is a risk that voters' dates of birth may be made public or could be recorded and sold, in violation of RSA 654:31-a.

8. Synchronization is a common problem for many ePB implementations. What evidence do we have that a large town can synchronize across many ballot clerk stations? The vendor may have indicated some limitations if voter lines are widely separated. The vendor has indicated that the communication limit between electronic poll book stations is about 60 feet.

9. Has statewide synchronization of voters ever been demonstrated? If so, by what vendor/system?

10. What are the security measures that the product has in place to control access to this data, and what are the dependencies of these measures on AWS services, or put another way,

11. What types of faults of AWS service would cause the E poll books central component to place the data at risk?

12. It has not been demonstrated that the cost/complexity/risk tradeoff of storing elections data in the cloud for live access for an electronic poll book is a good decision. Many E poll books designs do not use this model.

13. I see it as a question of the attack surface for adversaries seeking to undermine the integrity of the election by tampering with E poll books data that records who has checked in to vote in person. There are multiple options, including but not limited to:

   a) If this voter-check-in data stays resident in a ePB while it is in service, and is only offloaded after E poll books return to a controlled environment, the attack surface is mostly limited to the E poll books itself and the procedures for handling it.

   b) If the data is shared among locally networked ePB (e.g. voting center) then the attack surface expands to include the local network (probably including wireless networking), all the devices on it, and the procedures for setting up and managing it, plus possibly some more.

   c) If the data is shared via access to the public network and a common storage service or data-store, then the attack surface expands to the same large surface of any Internet-connected application, a surface that many organizations lack the ability to defend effectively even for short time frames.

14. FIPS 140-2 encryption standard does not address the most common problems with:

   Implementation of encryption or identify current certification, (Most cryptographic systems are cracked because of flaws in their implementations, or flaws in the systems they reside on, or flaws in how encryption keys are managed, and not due to the encryption algorithms themselves.)

15. Identify versions that have been certified –issues which are often the problem. Many vendors claim FIPS certification, even when the approval hasn't been issued, or it applies to a version not being implemented.

16. Address software hardening issues. Software hardening is a method of transforming an executable and associated data into a form that does not easily permit reverse engineering or reconstruction, but has identical execution properties of the original software.

17. <u>Laws that deserve attention and bear on pilot</u>

<u>State Law:</u>

RSA 654:7-c: "When a person registers to vote on election day, the ballot clerk, upon adding the person's name to the checklist at the check-in table, shall publicly announce the person's name two times and shall publicly announce the address the person has registered as his or her domicile one time.

Draft: The pilot ePB shall enable the supervisors at the registration table, upon determining to register the person, to enter the name of the voter into the ePB system, so that the ballot clerk will find the name in an ePB search.

RSA 654:12: "The person entering the voter information into the centralized voter registration database shall determine if the person is listed in the system as having been previously registered in the town or ward reported by the applicant on the voter registration form. If the person is a new applicant for registration who has not been previously registered anywhere in New Hampshire or if the centralized voter registration database does not confirm a previous registration claimed on the voter registration form, the election official shall cause the record created in the centralized voter registration database to indicate that the person is a new applicant in New Hampshire and that no photo identification was presented."   Leave as is.

RSA 654:13 – "If the supervisors of the checklist decide to add the name of the applicant to the checklist, then they shall retain the original of the registration form for their own file, which shall be retained in accordance with RSA 33-A:3-a…Upon entry of the voter record in the statewide centralized voter registration database, the supervisors of the checklist in another New Hampshire city or town will receive notice through the statewide centralized voter registration database that the voter has moved." Leave as is.

RSA 654:25: "The Secretary of State shall issue and distribute guidelines for the composition and style of checklists and for the maintenance of data related to checklists by which the supervisors shall compile and correct the checklist. Such guidelines shall specify the information which will be maintained and updated by the supervisors…" Leave as is.

RSA 654:34: "*Change of registration*" – *Voter's check in ticket must reflect they were "UND" and what party they wished to affiliate with. **<u>Then, how do they return to undeclared?</u>***

RSA 654:37 "*Reports of death*" – *How are death reports confirmed on the morning of the election to be distinguished/marked on the ePB checklist at the beginning of Election Day?*

RSA 654:45: - Security obligation of Secretary of State. Addressing concerns about potential disruption of election in the event that town or city (and state) is left without record of who picked up a ballot and whether individuals voted two times. The ePB vendor must develop protocols using public-private encryption key for any import of data to ElectioNet, FIPS 140-2 encryption for all wireless

communications between ePBs (or equivalent) arranged in peer-to-peer network, to prevent attack/disruption of election. Import of data to ElectioNet would be at the State's option and not required in law.

RSA 654:31-a – Release of confidential data. "Notwithstanding RSA 654:31-a, the Secretary of State shall release years of birth to the City of Manchester for use by a vendor in implementing ePB pilot. "

RSA 659:102 – *Preservation of checklist (including <u>registered </u>voters who did not vote) must be continued, on similar media that can be photographed/microfilmed for long-term storage, so that investigations of persons who may have voted twice can continue efficiently. Required to be printed from E poll books system, including state of out-of-state drivers licenses used in presenting photo ID.*

In general , the NH Department of State applies competitive bid requirements for HAVA vendor contracts, particularly those over $35,000. This entails, for any significant project, planning, establishing specifications, issuing competitive bids, and entering into contracts with Attorney General approval.

RSA 31:59 & RSA 31:59-A – Town/City rules for purchasing. For example, Manchester's Procurement Code, pursuant to above laws, appears below:

Procurement Code

The Procurement Code ⬀ shall promote fair and equitable treatment to all suppliers or prospective suppliers of goods and services, promote effective competition among prospective suppliers of goods and services, make as uniform as possible the procedures among various departments and agencies of the City by the standardization of the procurement process, to prevent abuses and favoritism, and promote the economical, effective, and efficient use of the City's total resources.

RSA 659:13, 654:25 and 654:31: To offset lack of physical checklist to mark during Election Day and to still maintain auditable and recoverable records, the town or city must keep all individual printed "voter check-in tickets" containing name, voter ID #, party, party registration for UND, etc. of those that have used token to pick up ballots.

Require one EPB (or equivalent) per voter intake line, possibly as many supervisors of the checklist as are registering voters and perhaps one for the "return to undeclared" line.

18. ## Draft Principles for Secretary of State Solution Enabling a E Poll Books Pilot

   1. Electronic Poll books ("ePB")shall be defined as hardware, software, or a combination of the two that allows elections officials to review and/or process voter information during an election but does not actually count votes. This software or hardware may be used as a partial substitution for paper-based voter checklists, but cannot completely replace a marked voter checklist that is marked to reflect voter activity during election day. The functions of an electronic pollbook may include voter lookup, verification, identification, determination whether a voter's address is within jurisdiction boundaries, address change voter history update (party ballot selection, party status change, absentee voting, signing a challenged voter affidavit, and, when an out-of-state

drivers' license is submitted as identification, identification of the state on the out-of-state drivers license.

2. Allow a Manchester to use an ePB solution in one polling location with a limit of one pilot polling place in state during the 2016 State Primary and the 2016 General Election. Allow a city or ward to elect which vendor it wishes to use for a pilot.

3. Allow Manchester to use their checklist data that they already have access to within their town or city wards, in existing comma separated values (CSV) format currently available to them using ElectioNet. Permit use of year-of-birth of registered voters only within the bounds of the pilot jurisdiction (single town or city ward) from ElectioNet, notwithstanding RSA 654:31-a.

4. After election,the secretary of State is not obligated to import data from external E poll books vendor, unless and until vendor format and security receives clearance from the Secretary of State. The Secretary of State may, on the basis of internal security clearance and sufficient necessary review and testing time, elect to import voter history data from the pilot town or city ward.

5. Physical voter registration forms will continue to be filled out and signed by new applicants for voter registration. The supervisors of the checklist in the pilot town or city may elect to use E poll books ePB(s) (or equivalent) to obtain data (such as name and date of birth) from drivers licenses as an automated aid to determine spelling of names on hand-written voter registration forms, and to enable subsequent processing of newly registered voters in ballot clerk lines, once the individual has been approved by the supervisors as a newly registered voter. Supervisors of the checklist may swipe the drivers' license of an applicant for registration, and print out data obtained and have the applicant for voter registration sign the printed output of the transaction. However, the Secretary of State (will not/is under no obligation to) import voter registration data from E poll books vendor during or following pilot.

6. Require full compliance with RSA 659:102 in format consistent with Division of Records and Archives' need to microfilm marked checklist 8 ½ X 11 inch pages. Marked checklist must reflect the requirements of RSA 659:13 and appear in the general format of existing checklists printed from ElectioNet.

7. Require that standard voter checklist with bar codes be printed out and made available for each voter line at the start of Election Day from ElectioNet, as back-up in the pilot ward. Require that a voter checklist with or without bar codes be printed out and posted in the public area of the pilot polling place so that any member of the public may view the checklist of registered voters as of the start of Election Day.

8. Require careful management and retention of "voter check-in tickets" printed at each ballot clerk station (voter line) to enable restoration of physical marked checklist in the event system ceases to function during Election Day. Town or city must provide adequate trained staff and commit to full restoration of accurate physical marked checklist in the event of an E poll books failure at any time before, during or after Election Day.

9. Require full software compliance with RSA 659:13, so that a record may be kept of:

   a. Whether a voter picked up a ballot

   b. If a primary, what party was on the token printed by the ePB/printer station and provided to the voter to pick up a ballot.

   c. If a primary, which voter appearing with an undeclared party affiliation selected which party ballot.

   d. Whether the voter voted using an absentee ballot

   e. Whether the voter signed a challenged voter affidavit.

   f. Whether the voter provided an out-of-state drivers' license, and, if so, what state issued the drivers' license. This data would not be imported in ElectioNet, but would be printed out on the marked checklist, reflecting current law and practice.

   g. If the voter provided a change of address within the town or city ward, record the content of that address change in computerized (soft) copy.

10. It shall be unlawful for a vendor to store voters' names and dates-of-birth information; (if possible, require transparent demonstration of non-storage of private data.)

11. If the E poll books vendor's file appears corrupted or is otherwise unreadable (e.g. voter information has been lost or changed without legal authorization), the local government conducting the E poll books pilot must resolve the problem at its expense and produce a record of who obtained a ballot, who signed challenged voter affidavits, who voted absentee, who showed an out-of-state drivers' license to pick up a ballot, and who changed their domicile address.

12. HAVA funds shall not be used for any ePB pilot that has not been competitively bid.

13. Ensure that voter's date-of-birth does not appear on the ePB (or equivalent) ePB user interface screen after the drivers' license has been swiped. What should appear is whether or not the year of birth matched the year of birth in the record of the voter applying to obtain a ballot.

14. Require that pilot town or city conduct comprehensive testing and regression testing following each software release of vendor's ePB software such that the Secretary of State is asked to examine only what the pilot town or city considers a completed and fully tested product.

15. It shall be the responsibility of the pilot town or city to manage voter lines so that voter wait times do not exceed 15 minutes in the voter intake line(s) and 20 minutes in the voter registration line(s).

Other requirements to be set forth upon full implementation of statewide ePB:

16. Require at least two ePBs (or equivalent) in each polling place to ensure redundancy of Election Day soft copy data storage reflecting who picked up a ballot, absentee voters, party ballot, CVA, out-of-state drivers' license, and address changes.

17. Require sufficient ePBs (or equivalent) to accommodate each voter line that may be needed.

18. Require that ePBs (or equivalent) in each polling place fully update and synchronize data between ePBs (or equivalent)/ voter lines, so that no voter can vote twice, and no registered voter is denied the opportunity to vote.

Draft laws for single Manchester ward pilot in 2016 State Primary and General Election

2016 Session Law enabling ePB: **In the 2016 State Primary and 2016 General Election, the City of Manchester is authorized to carry out a pilot test in a single ward of an ePB application to enable registered voters to check in using a computerized voter look-up, computer verification, identification, and determination whether the photo identification of the individual applying for a ballot who presents photo identification or otherwise qualified to vote is on the checklist. This ePB system will enable the ballot clerk to indicate whether an individual on the checklist checked in, whether they picked up a ballot, whether they voted absentee, whether they completed a challenged voter affidavit in order to vote, whether they used an out-of-state drivers' license as a photo identification, and if so, indicate in the computer device what state it was issued from.**

Within one month after the 2016 State Primary, and again, within one month after the 2016 General Election, the City of Manchester shall submit a report to the Secretary of State, who shall review such reports and forward them to the Speaker of the House, the President of the Senate, the Chair of the House Election Law Committee, and the Chair of the Senate Internal Affairs Committee. Each report shall describe the outcome of the pilot, addressing voter experiences, wait times, voter throughput times, personnel costs, and hardware and software costs, the completeness and accuracy of the data recorded, reported and submitted for import to the centralized voter registration database of the Secretary of State.

The City of Manchester shall draft the specifications for the user interface of ePB, submit the specifications to the Secretary of State for review and approval, conduct user testing and regression testing, and pay for software and hardware as required to implement this pilot.

The City of Manchester shall conduct comprehensive testing and regression testing following each software release of vendor's ePB software such that the Secretary of State is asked to examine only what the City considers a completed and fully tested product that fully complies with applicable law and specifications agreed to with the Secretary of State.

The City of Manchester shall supply sufficient hardware and software and manage voter lines so that voter wait times do not exceed 15 minutes in the voter intake line(s) and 20 minutes in the voter registration line(s).

A purpose of the pilot is to gather information and refine these specifications in the event that a statewide ePB project is determined worthy of initiation. HAVA funds shall not be used for any ePB project unless the Secretary of State has reviewed and agreed to specifications prior to issuance of a request for proposal, the Secretary of State has confirmed has been competitively bid according to state standards, the contract is awarded using state contract documents or their equivalent and the Secretary of State confirms it is within the available budget and compliant with RSA 5-6.

It shall be unlawful for a vendor to store voters' names and dates-of-birth information.

The City of Manchester shall ensure that voter's date-of-birth does not appear on the ePB check-in station's user interface screen after the drivers' license has been swiped. The user interface will reflect whether or not the year of birth matched the year of birth in the record of the voter applying to obtain a ballot. It shall be unlawful for a vendor to store voters' names and dates-of-birth information; (if possible, require transparent demonstration of non-storage of private data.)

If the ePB vendor's file appears corrupted or is otherwise unreadable (e.g. voter information has been lost or changed without legal authorization), the City of Manchester shall resolve the problem at its expense and produce a record of who obtained a ballot, (if a primary) which party ballot was provided to the voter, which voters signed challenged voter affidavits, which voters voted using an absentee ballot, which voter showed an out-of-state drivers' license to pick up a ballot (and, if so, which state issued such out-of-state drivers' license), and, if the voter changed their domicile address, what that change is. The Secretary of State is not obligated to import ePB data that is inconsistent with its data dictionary or its security standards.

The City of Manchester shall manage and retain the "voter check-in tickets" printed at each ballot clerk station (voter line) to enable restoration of a physical marked checklist in the event the ePB application becomes impaired or ceases to function during or after Election Day. Town or city must provide adequate trained staff and commit to full restoration of accurate physical marked checklist in the event of an E poll books failure at any time before, during or after Election Day.

The City of Manchester is hereby permitted to use its city's checklist data that the city has access to in existing comma separated values (CSV) format currently available to them using the statewide centralized voter registration database. Manchester is permitted to use of year-of-birth of registered voters from within the bounds of the City of Manchester, notwithstanding RSA 654:31-a.

Pursuant to 654:45, ballot clerks are permitted access to the Manchester checklist information set forth in RSA 654:25 using the ePB application. Years of birth or dates of birth of Manchester residents shall not be available to ballot clerks from the statewide centralized voter registration database, except that years of birth may be used by the ePB application so that these years of birth can be matched against the same information in photo identification cards presented to ballot clerks pursuant to RSA 659:13.

Implementation of pilot shall not be permitted to impair state efforts to comply with state laws, federal Help America Vote Act (HAVA), and the federal Military and Overseas Voting Empowerment (MOVE). In the event that the Manchester pilot begins to interfere with the State's or the City's

compliance with state and/or federal election law, the Secretary of State shall inform the City of Manchester and ask them to forthwith propose, agree to and execute an alternate protocol to enable the State and City of Manchester to comply with existing election laws and complete the requirements of the election..

The Manchester pilot ward shall fully comply with RSA 654:25, 654:34, 654:37, 659:49, 659:55, 659:102, and Manchester will cooperate with the Secretary of State to achieve compliance with security requirements in RSA 654:45.

The Manchester pilot ward shall make available to every voter intake line a paper checklist pursuant to RSA 654:25. If there is an ePB failure, this paper checklist shall be the checklist used in place of ePB, with the City of Manchester relying on information compliant with RSA 659:13 and _____ printed on voter check-in tickets, and their local personnel resources identified in advance to recover the information, restore it to a paper checklist, and complete the election without violating state of federal law.

Require that ePB stations in each polling place fully update and synchronize data between voter lines, so that no voter can vote twice, and no registered voter is denied the opportunity to vote.

RSA 652:17 Definition of EPB ("ePB"). EPB means hardware, software, or a combination of the two that allows elections officials to review and/or process voter information during an election but does not actually count votes. This software or hardware may be used as a partial substitution for paper-based voter checklists, but cannot completely replace a marked voter checklist that is marked to reflect voter activity during election day. The functions of an electronic poll book may include voter lookup, verification, identification, determination whether a voter's address is within jurisdiction boundaries, address change voter history update (party ballot selection, party status change, absentee voting, signing a challenged voter affidavit, and, when an out-of-state drivers' license is submitted as identification, identification of the state on the out-of-state drivers' license.

RSA 654:7-c: "When a person registers to vote on election day, the ballot clerk, upon adding the person's name to the checklist at the check-in table, shall publicly announce the person's name two times and shall publicly announce the address the person has registered as his or her domicile one time."

With respect to RSA 654:7-c, the pilot ePB user interface shall enable the supervisors of the checklist at the voter registration table, upon deciding to accept a new voter registration, to enter the name of the new voter into the ePB, so that the ballot clerks will find a registered voter (without a voter identification number, unles the individual had been registered in another Manchester ward) when looking for a newly registered voter. The Secretary of State shall, if time permits and to the extent practicable, enable the names of newly registered voters to be imported into the voter registration module, so that election officials may complete entry of information in each voter registration form. If the City of Manchester and the Secretary of State are unable to test the user interface for registration of new voters in the statewide centralized voter registration database, the City of Manchester will separately enter the names of voters in the statewide centralized voter registration

database, and may utilize the printed name of a newly registered voter from ePB to assist in entering the correct name in the statewide centralized voter registration database.

RSA 654:12: "The person entering the voter information into the centralized voter registration database shall determine if the person is listed in the system as having been previously registered in the town or ward reported by the applicant on the voter registration form. If the person is a new applicant for registration who has not been previously registered anywhere in New Hampshire or if the centralized voter registration database does not confirm a previous registration claimed on the voter registration form, the election official shall cause the record created in the centralized voter registration database to indicate that the person is a new applicant in New Hampshire and that no photo identification was presented."

With regard to RSA 654:12, the plan is not to modify this law in the pilot ePB implementation. EPB will not identify applicants for voter registration from outside of Manchester who are already registered in New Hampshire but have recently moved into Manchester and wish to register to vote. Hence, an effort to import into ElectioNet newly registered voter in Manchester will need to consider that New Hampshire registered voters from outside Manchester will already have voter data and history that must be integrated with any interface. This factor will necessarily add to the complexity of any ElectioNet voter registration interface with the ePB software and raise questions as to whether such an interface can be specified, created, tested, regression tested, and implemented within the time frame of this pilot.

RSA 654:25 Posting Checklist.

Notwithstanding RSA 654:25, the City of Manchester, may elect to pilot ePB in one ward during the 2016 State Primary and the 2016 General Election. Said ward shall rely on the computerized version of the checklist for ballot clerks to mark the checklist as voters arrive to obtain a ballot in compliance with RSA 659:13. The data used will be the same checklist data that is available to the City of Manchester for its checklist, plus year-of-birth for each Manchester voter, notwithstanding RSA 654:31-a. While voter's year of birth may be used by the City of Manchester in the ePB application, the voter's year of birth shall not be made public, and shall remain encrypted when not being accessed by an ePB station.

The City of Manchester may select a single ward to use Manchester voter information that appears in comma separated values (CSV) format currently available from the centralized statewide centralized voter registration database. The City of Manchester may use year-of-birth of Manchester's registered voters for the ePB pilot, notwithstanding RSA 654:31-a. Year of birth data shall not be treated as publicly available data. In the event the pilot ward finds more than one voter in the same ward with the same name, the year of birth may be used to discern which individual and corresponding voter identification number is applicable from the year of birth on the voter's drivers' license without ePB disclosure to the ballot clerk the year of birth from the statewide centralized voter registration database.

RSA 654:31-a – Release of confidential data. **"Notwithstanding RSA 654:31-a, the City of Manchester may shall release Manchester voters' year of birth to the ePB vendor to implement ePB pilot. This year of birth information shall not be released to the ballot clerks or to the general public, but shall reside encrypted in the ePB vendors' dataset. The City of Manchester and its vendor shall ensure that voter's year-of-birth information does not appear on the ePB station's user interface screen after the drivers' license has been swiped. What should appear is whether or not the year of birth matched the year of birth in the record of the voter applying to obtain a ballot.**

RSA 654:34: "*Change of registration*" – *Voter check-in ticket must reflect the voter's party affiliation was undeclared and what party they wished to affiliate with. Then, how do they return to undeclared? Is there another ePB/printer station for this? If not, how does this information get uploaded into the statewide voter registration system?* (Method not demonstrated by vendor.)

RSA 654:37: "**Reports of death shall be recorded at the outset of Election Day in ePB.**

RSA 654:45,V: "Provide adequate technological security measures to deter unauthorized access to the records contained in the voter database, **except that the Manchester ward pilot of ePB will assist the Secretary of State, the City of Manchester, and the ePB vendor to identify methods and resources needed to:**

VI.   to examine potential security vulnerabilities and work to prevent them in future situations, assess the procedures for setting up and managing security on the ePB devices used by ballot clerks;

VII. Ascertain the potential for establishing a trusted build to ensure effective installation of encryption technology by the vendor;

VIII.   Determine whether the software version installed by the vendor satisfies FIPS 140-2 certification; and

IX. Address the potential need for vendor software hardening.

RSA 654:45, VI. The Secretary of State is authorized to provide voter database record data to an entity that is cooperating in a Manchester ward pilot of an ePB system in the 2016 State Primary and 2016 General Election.

RSA 659:13 – In order to implement a pilot ePB in the 2016 State Primary and General Election, ballots clerks may enter information in computer interface to mark the checklist, so long as the marked checklist is printed in compliance with RSA 659:102.

The Manchester pilot shall achieve full compliance with RSA 659:13, except that the paper record may be kept in computerized copy in addition to printed voter check-in tickets. The system shall record in computer and incorporate the following on the printed voter check-in tickets from each ePB station:

   a.   Name of voter as it appears in the statewide voter registration system, if said voter had been registered to vote before Election Day;
   b.   Voter ID;

14

c.   Whether a voter received a ballot;

d.   If a primary, what party was on the voter check-in ticket printed by the ePB/printer station and provided to the voter to pick up a ballot;

e.   If a primary, which voter (including newly registered voters) that appeared on the checklist with an undeclared party affiliation selected which party ballot;

f.   Whether the voter voted using an absentee ballot;

g.   Whether the voter signed a challenged voter affidavit;

h.   Whether the voter provided an out-of-state drivers' license, and, if so, what state issued the drivers' license. This data will not be imported in ElectioNet, but would be printed out on the marked checklist, reflecting current law and practice;

i.   If the voter provided a change of address within the town or city ward, record the content of that address change in computerized copy;

Voter check-in tickets shall contain the above required information that would otherwise appear on a marked checklist and that would permit full restoration of a marked checklist in the event of a failure of the system. The City of Manchester shall receive, store, manage and retain the "voter check-in tickets" printed at each ballot clerk station (voter line) to enable restoration of a physical marked checklist in the event the ePB application becomes impaired or ceases to function during or after Election Day. The City of Manchester must have available adequate trained staff and commit to full restoration of accurate physical marked checklist in the event of an E poll books failure at any time before, during or after Election Day.

Failure of ePB shall be defined as:

The inability to find registered voters that appear on the ward's checklist,

The inability of stations within the pilot ward to synchronize, exchange data, and update information accurately between each other, or

The inability to record marks, changes and voter information required in RSA 654:34 & RSA 659:13.

RSA 659:50,IV: When a confidential absentee voter is announced (not by name), such voters shall be processed in ePB.

RSA 659:55 Notwithstanding any other provisions of law, if a red A.V. is properly placed against the name of a voter who has voted by absentee ballot, that voter against whose name in red ink "A.V." shall… not be allowed to vote in person.

RSA 659:102 – Preservation of checklist (including registered voters who did not vote) shall be continued in the Manchester ward pilot, on similar media that can be photographed/microfilmed for long term storage. (Original marked checklists have red marked absentee voter indicated as "A.V." and address changes that can be distinguished.)

The City of Manchester shall fully comply with RSA 659:102 in a format consistent with the New Hampshire Division of Records and Archives' requirements to microfilm a marked checklist from 8 ½ X 11 inch pages. Marked checklist must reflect the marking directions in RSA 659:13 and appear in the general format of existing checklists printed from the statewide centralized voter registration database, including all registered voters in the ward in alphabetical order.

Should the law require one ePB/printer per voter intake line, possibly as many supervisors of the checklist as are registering voters and perhaps one for the "return to undeclared" line?