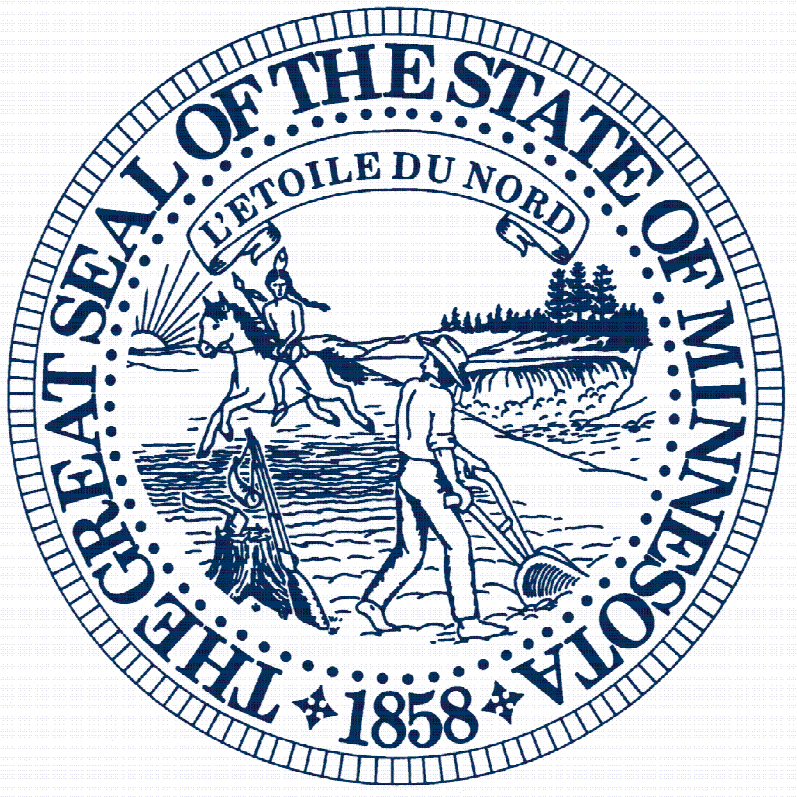
Appendix E



Electronic Roster Pilot Project

Legislative Report and Evaluation

Office of Minnesota Secretary of State

1/31/2014

Report Required by Minnesota Laws, Chapter 131, Article 4, Section 1, Subdivision 7

Table of Contents

I. Introduction 1

II. Enabling Legislation 1

1. Participating Counties and Cities 1
2. Technological Requirements 2
3. Evaluation Requirements 3

III. Pilot Project Development 4

1. Selection of Vendors 4
2. SVRS Programming Development 5
3. Pre-election Approval of Experimental Forms 5
4. Final Approval Checklist 6

IV. Technology Used 6

1. Hart 6
2. Elections Administrators (EA) 6
3. SOE 7
4. KNOWiNK 7
5. ES&S 7

V. Election Judge Training 8

1. Hennepin County (Minnetonka and St. Anthony) 8
2. Ramsey County (St. Paul and St. Anthony) 9
3. Clay County (Moorhead and Dilworth) 10

VI. Hennepin County, Minnetonka, and St. Anthony Feedback and Recommendations 11

1. Feedback on the Technology That Was Used 11
2. The Printed Voter Registration Application 13
3. The Voter Certificate Form 15
4. Updating with Supplemental Absentee Ballot Report 16
5. Experience in the Polling Location 17
6. Security Issues Regarding Electronic Rosters 18
7. Uploading of Post-Election Data into SVRS 19
8. General Comments and Recommendations 21

VII. Ramsey County, St. Paul and St. Anthony Project Feedback and Recommendations 23

1. Feedback on the Technology That Was Used 23
2. The Printed Voter Registration Application 24
3. The Voter Certificate Form 26
4. Updating with Supplemental Absentee Ballot Report 27
5. Experience in the Polling Location 27
6. Security Issues Regarding Electronic Rosters 29
7. Uploading of Post-Election Data into SVRS 30
8. General Comments and Recommendations 31
VIII. Clay County, Moorhead and Dilworth Project Feedback and Recommendations 32
1. Feedback on the Technology That Was Used 33
2. The Printed Voter Registration Application 33
3. The Voter Certificate Form 34
4. Updating with Supplemental Absentee Ballot Report 34
5. Experience in the Polling Location 35
6. Security Issues Regarding Electronic Rosters 35
7. Uploading of Post-Election Data into SVRS 35
8. General Comments and Recommendations 36
IX. Voter Usage 37
X. Cost Associated with Pilot Project by Precinct 38
XI. Secretary of State Feedback and Recommendations 38
1. Selection of Vendors 38
2. SVRS Program Development 38
3. Pre-Election Approval of Experimental Forms 39
4. Feedback on Technology Used 40
5. Security Issues Regarding Electronic Rosters 42
6. General Comments and Recommendations 43
XII. Appendix i
1. Electronic Roster Polling Locations i
2. Experimental Registration Applications v
3. Voter Certificates viii

I. Introduction

The electronic roster pilot project was established to examine and test the use of electronic rosters in Minnesota polling locations. Electronic rosters, also known as "electronic poll books" or "ePollbooks," are an electronic version of the paper polling place roster. This report by the Office of the Secretary of State was prepared using feedback from election judges, cities, and counties participating in the 2013 electronic roster pilot project.

Prior to the 2013 pilot project, the only municipality utilizing electronic roster technology was Minnetonka. May other states have utilized electronic rosters and report election administration benefits from the electronic rosters both on election day and in the post-election processing of data. In order to evaluate the use and potential benefits of electronic rosters in Minnesota elections, the pilot project examined five different types of electronic rosters in five different cities conducting 2013 municipal elections. As reflected in this report, the experiences of the municipalities using the electronic rosters varied greatly based on the type of electronic roster used.

Due to the information learned in the 2013 pilot project, the Office of the Secretary of State recommends an expanded study of electronic rosters in the 2014 general election. This expanded study would provide a test of the electronic rosters in a high-turnout general election, provide an opportunity for vendors and participating municipalities to improve upon the training and the technology using their 2013 pilot project experiences, and would allow additional jurisdictions to participate in the study in order to better examine the potential use of electronic rosters across the state.

II. Enabling Legislation

In the 2013 omnibus elections bill, the legislature established a pilot project to "explore the use of electronic rosters in conducting elections." Jurisdictions participating in the pilot project were permitted to "use electronic rosters to process election day registration, to verify the registration status of preregistered voters, or both." Because the pilot project was for the 2013 election year, the pilot project only applied to general elections for home rule charter or statutory cities. Minnesota Laws, Chapter 131, Article 4, Section 1.

1. Participating Counties and Cities

The legislation specified that the cities participating in the project would be Dilworth (Clay County), Minnetonka (Hennepin County), Moorhead (Clay County), Saint Anthony (Hennepin and Ramsey Counties), and Saint Paul (Ramsey County). The legislation did not require that the

cities use electronic rosters in all precincts, but instead allowed the city election officials to designate specific precincts where the technology would be used.

2. Technological Requirements

The legislation specified the technological requirements for any electronic rosters used in the 2013 pilot project. Specifically, electronic rosters used in the pilot project must:

> (1) be able to be loaded with a data file that includes voter registration data in a file format prescribed by the secretary of state, to the extent feasible;
>
> (2) allow for data to be exported in a file format prescribed by the secretary of state;
>
> (3) allow for data to be entered manually or by scanning a Minnesota driver's license or identification card to populate a voter registration application that would be printed and signed and dated by the voter;
>
> (4) provide for a printed voter's signature certificate, containing the voter's name, address of residence, date of birth, voter identification number, the oath required by Minnesota Statutes, section 204C.10, and a space for the voter's original signature;
>
> (5) immediately alert the election judge if the electronic poll book indicates that a voter has already voted, the voter's registration status is challenged, or it appears the voter resides in a different precinct;
>
> (6) provide immediate instructions on how to resolve a particular type of challenge when a voter's record is challenged; and
>
> (7) perform any other functions necessary for the efficient and secure administration of participating election, as determined by the secretary of state.

Minnesota Laws, Chapter 131, Article 4, Section 1. For those precincts using electronic rosters only for election day registration, the legislation specified that the electronic roster technology need not comply with the requirements set out in clauses (4), (5), or (6). However, if precincts used the electronic rosters to verify registration status of preregistered voters, the legislation

required that the election judges also have the voter sign-in on the paper roster. Minnesota Laws, Chapter 131, Article 4, Section 1.

The legislation required that "[a]ll voter's signature certificates and voter registration applications printed from an electronic poll book shall be retained pursuant to Minnesota Statutes, section 204B.40. Data on election day registrants must be uploaded to the statewide voter registration system for processing by county auditors." Minnesota Laws, Chapter 131, Article 4, Section 1.

3. Evaluation Requirements

The legislation specified the evaluation requirements for the pilot project, requiring that the Office of the Secretary of State evaluate the project and report to the legislative committees with jurisdiction over elections by January 31, 2014. The report must include:

> (1) a description of the technology that was used and explanation of how that technology was selected;
>
> (2) the process used for implementing electronic poll books;
>
> (3) a description of training that was conducted for election judges and other election officials in precincts that used electronic poll books;
>
> (4) the number of voters who voted in each precinct using electronic poll books;
>
> (5) comments, feedback, or recommendations from election judges and others in a precinct using electronic poll books;
>
> (6) the costs associated with the use of electronic poll books, broken down by precinct;
>
> (7) comments, feedback, or recommendations from the participating cities and counties regarding data transfers and other exchanges of information; and
>
> (8) any other feedback or recommendations the secretary of state believes are relevant to evaluating the pilot project.

Minnesota Laws, Chapter 131, Article 4, Section 1. The Office of the Secretary of State submits this report in compliance with the statutory requirements.

III. Pilot Project Development

1. Selection of Vendors

The Office of the Secretary of State met with the participating municipalities and counties on May 29, 2013, and following that meeting sent a notice on June 3, 2013, to potential vendors informing them of their ability to participate in the pilot project. This information was simultaneously posted on the Office's website. In order to evaluate and ensure the functionality of the responding vendor's electronic rosters, the Office of the Secretary of State created a checklist of required and optional functionality for the electronic rosters. To participate in the pre-registered voter portion of the pilot, the Office required that the electronic rosters must:

- Be able to be loaded with a data file that includes voter registration data in a format prescribed by the Secretary of State to the extent feasible;
- Allow for the data to be exported in a file format prescribed by the Secretary of State;
- Allow for voter record to be searched and retrieved by scanning or swiping a Minnesota driver's license or Minnesota identification card;
- Provide for a printed voter's signature certificate, containing the voter's name, address of residence, date of birth, voter identification number, the oath required by Minnesota Statutes, section 204C.10, and a space for the voter's original signature;
- Immediately alert the election judge if the electronic roster indicates that a voter has already voted, the voter's registration status is challenged; and
- Provide immediate instructions on how to resolve a particular type of challenge when a voter's record is challenged.

In order for a vendor to participate in the election day registration portion of the pilot, the electronic roster must:

- Allow for the data to be exported in a file format prescribed by the Secretary of State;
- Allow for data to be entered manually or by scanning a Minnesota driver's license or identification card to populate a voter registration application that would be printed and signed and dated by the voter;
- Must provide for a printed voter's signature certificate, containing the voter's name, address of residence, date of birth, the oath required by Minnesota Statutes, section 204C.10, and a space for the voter's original signature; and
- Must immediately alert the election judge if the electronic roster indicates that a voter has already completed an election day registration and voted in the precinct on election day.

The Office requested that vendors respond to the participation survey by June 28, 2013. Eight vendors responded to the notice, and the vendors were divided among the participating municipalities on July 8, 2013.

The participating jurisdictions worked closely with the vendors in preparing for election day. Throughout this process, three vendors withdrew from the pilot project. The remaining vendors participating in the pilot project were ES&S, KNOWiNK, Hart InterCivic, SOE and Election Administrators.

2. SVRS Programming Development

The funding available for programming updates to SVRS was provided to Office of Secretary of State on July 1, 2013. The Office immediately began the programming for the post-election upload of election day voter registration data in order to ensure that the election day registration information could be queued electronically for post-election processing by the counties. The Office further provided election day registration data-file formats for vendors on July 10, 2013, to assist in the programming of the electronic rosters.

Due to the short timeline between July 1, 2013, and election day, the Office was unable to program SVRS for an electronic upload of the pre-registered voter history data. The Office did provide pre-registered voter data for download into the electronic rosters prior to election day, but the SVRS programming for the electronic upload of pre-registered voter history data will not be completed until the 2014 general election.

The Office provided a sample file of pre-registered voter data to all vendors participating in the pilot project. Before receiving test-files of pre-registered voters, participating vendors were required to sign a nondisclosure agreement. This allowed vendors to prepare their equipment for the loading and use of the actual pre-registered voter data.

3. Pre-election Approval of Experimental Forms

A. Hart

Hart requested authorization from the Office of the Secretary of State to use an experimental voter registration application consisting of a label that measured 4 x 2 ¾ inches that was then attached to a traditional 8 ½ x 11 inch blank voter registration application. This form contained the same information as the traditional paper voter registration application. The Office approved the use of this experimental form for the purpose of the 2013 pilot project.

In addition to the voter registration form, Hart sought and received approval to use an experimental voter oath sheet and certificate for the purpose of the 2013 pilot project. The

experimental sheet incorporated labels containing the voter's information that were attached to a sheet with an oath that voters then signed.

B. ES&S

ES&S requested authorization from the Office of the Secretary of State to use an experimental election day registration application form consisting of a receipt-like printout measuring 4 x 11 inches. The ES&S application form required the same information as the paper voter registration application, and the office approved the use of this form for the purpose of the 2013 pilot project.

4. Final Approval Checklist

The Office of the Secretary of State requested that by September 1, 2013, the counties determine that each participating vendor had successfully completed all portions of the electronic roster functionality checklist provided by the Office. All participating counties notified the Office by October 17, 2013, that the vendors had satisfactorily completed the checklist items and the counties continued working with the vendors for the pilot. The Office then notified all vendors of their continuing participation in the pilot and their ability to use the electronic roster technology in the selected precincts on election day.

IV. Technology Used

1. Hart

The Hart electronic roster is an off-the-shelf netbook operating on Windows 7. The netbook includes a traditional keyboard, as well as touch screen capabilities. In addition, the Hart electronic roster also contained a pivoting screen that could be flipped to allow voters to review their information.

The Hart electronic roster was delivered as a kit including the electronic roster and all of the peripherals: a printer, card reader, label printer and case. The electronic roster connected to a Brother DK-2205 label printer and a driver's license magnetic strip reader. In the polling place, the electronic rosters were networked together via cable and all of the electronic rosters in the precinct were synced with the same voter data.

2. Elections Administrators (EA)

The Election Administrators electronic roster is a tablet operating on the Asus Android platform. The EA Tablet connected to a HP 120 printer allowing for printing of 8 ½ x 11 election

day voter registration applications and used the onboard camera to scan Minnesota driver's license barcodes. A mobile Bluetooth receipt printer manufactured by Citizen also connected to the EA Tablet and was used to print voter certificates. A custom stand manufactured by the vendor was also provided and included an attached stylus pen. For the pilot project, only one EA Tablet was used per precinct. Because only one EA Tablet electronic roster was used per precinct, networking was not needed.

3. SOE

SOE's electronic roster technology was the Clarity electronic roster program. This electronic roster program is capable of running on any PC hardware. For purposes of the pilot project, SOE provided two Dell HP 4-1105dx laptops per polling place. The laptops could be used as a traditional laptop, but also had touch screen capabilities. Also provided for each electronic roster was a HP Office Jet 100 Mobile printer used to print election day registration applications, a Brother QL- 570 printer used to print voter certificate labels and a Datalogic Gryphon GD4430-BKK1 bar code scanner used to scan Minnesota driver's license or identification cards.

The SOE Clarity electronic rosters were connected wirelessly between units within the precinct and within the City of St. Anthony. AT&T Liberate 4G MiFis were provided by the vendor and used to connect each electronic roster wirelessly.

4. KNOWiNK

The KNOWiNK electronic roster technology was an iPad loaded with the KNOWiNK PollPad application. Each device had a stylus, and a stand to hold the iPad. A Star printer (for voter oath receipts) and an HP LaserJet printer (for voter registration applications) were provided by KNOWiNK for the precinct. The printers were connected via Bluetooth to the iPads. The only cords needed were the printer power cords and the cord connecting to the iPad to the battery power source. There were no other peripherals needed because the iPad camera was used to scan the barcode on the back of the driver's license or identification card. The electronic roster was transported in the iPad box.

At the polling location the electronic rosters were connected through a wireless Bluetooth connection.

5. ES&S

The ES&S electronic roster technology was a proprietary netbook device named the ExpressPoll. Each ExpressPoll had several connected peripherals: a thermal receipt printer, a

driver's license reader, a signature pad, and a USB hub. The electronic roster was stored in a hard case that was similar to a brief case. The peripherals were stored separately.

The ExpressPolls were connected with Ethernet cables. The Ethernet connection ensured that the electronic rosters all had up-to-date voter data.

V. Election Judge Training

1. Hennepin County (Minnetonka and St. Anthony)

A. Hart

The City of Minnetonka worked with Hart to coordinate the needed election judge training. Hart conducted a train-the-trainer session with city and county staff. The Minnetonka city clerk then trained the election judges that would be using the Hart electronic roster. Training was hands-on, using test data from a Minnetonka precinct. The vendor took staff through setting up the unit on election day and preparing it for election day. The training also went through the different voter scenarios election judges were likely to see in the polling place: registered voters, non-registered voters, challenged voters, absentee voters, and voters in the wrong polling place.

Hart also provided a short step-by-step user's guide and Power Point slides that were used to train election judges. Election judges generally reported that the training was adequate.

B. Elections Administrators (EA)

The City of Minnetonka worked with Election Administrators to coordinate the needed training. Election Administrators trained the election judges that would be using the EA Tablet on election day. Election Administrators included printed instructions that were provided to each election judge. At the time election judges were trained, some of the necessary functionality of the EA Tablet was missing. Hennepin County reported that this made training election judges extremely difficult.

Following the election judge training session, a number of concerns were discussed with the vendor. Election Administrators worked to make the necessary changes to the EA Tablet and updated their product to be sure it met the minimum requirements of the pilot project prior to election day. Also, following the training provided by the vendor, Election Administrators modified and corrected the instructions for election judges that were provided. The updated instructions were much more detailed and complete. The City of Minnetonka conducted a

follow up training with election judges after the modifications were made and the new instructions were written. These instructions were available to election judges on election day.

Election judges generally reported that the training was adequate.

C. SOE

SOE trained all of the election judges that would be using the Clarity electronic roster on election day. SOE provided a printed instruction booklet which was available for each election judge. For training, the vendor set up multiple electronic rosters, printers and scanners, and took election judges through opening the application on the laptop, features of the laptop and working with the scanners and printers. Using this equipment, the vendor trained judges by using multiple scenarios election judges would likely see on election day: registered voters, non-registered voters, challenged voters, absentee voters, and voters in the wrong polling place.

2. Ramsey County (St. Paul and St. Anthony)

Ramsey County required training for the head and registration (assistant head) judges in the electronic roster precincts. All other judges who served in the electronic roster precincts were given the opportunity to attend the trainings.

Training was hands-on and covered how to process registered and non-registered voters using the electronic rosters. The trainings walked the election judges through different voter situations, including a challenged voter record, how absentee voters would appear, and how to determine if a voter was the correct polling place.

Ramsey County reported that the pre-registered voter data provided for the training was very confusing for the election judges, since all of the addresses were specific to Minnetonka but the precinct finder that was provided for training was specific to Ramsey County. When practicing the process for a non-registered voter, the judges reported being frustrated due to the differences in the data sets.

Written instructions were also provided to election judges on the electronic roster devices. Ramsey County staff created step-by-step voter check-in instructions, a flow chart showing polling place set up for the electronic roster devices, and surveys for the voters and the election judges to complete. All of the documentation was placed into a transfer case, along with additional electronic roster supplies that included surge protectors and extension cords.

A. Hart

Hart conducted a train the trainer seminar for Ramsey County staff, who then trained the election judges.

B. KNOWiNK

KNOWiNK conducted the training for election judges and Ramsey County staff. During and after the training, programming issues were discussed by Ramsey County staff and the KNOWiNK representative, including ways that the processing of a voter could be changed to make the process easier for the election judges. The suggested changes were available and operational on election day.

C. ES&S

ES&S conducted the training for election judges and Ramsey County staff. Ramsey County reported that ES&S staff were unprepared for training. The equipment needed for the training was delivered late and the trainer did not arrive with adequate time to set up and prepare. As a result the training began late, which created some anxiety amongst the election judges. Several programming issues became apparent during training, which added further stress to the election judges.

3. <u>Clay County (Moorhead and Dilworth)</u>

A. Hart

Hart provided onsite training for election officials and judges. Following this training, additional training was provided to the election judges by the county. All election judges reported that they received adequate training on the use of the Hart electronic roster.

B. ES&S

ES&S provided onsite training for election officials and judges. Election judges reported receiving inadequate training on the use of ES&S electronic roster, and that the electronic roster did not function on election day in the manner in which they were trained.

VI. Hennepin County, Minnetonka, and St. Anthony Feedback and Recommendations

Hennepin County had electronic roster pilot project locations in nine precincts, seven in the city of Minnetonka and two in the city of St. Anthony. Hennepin County piloted electronic rosters from Election Administrators (EA), Hart and SOE.

Precinct	Vendor	Location
Minnetonka W1 PB	EA	Old Apostolic Lutheran Church, 5617 Rowland Rd
Minnetonka W2 PA	EA	Minnetonka Community Center, 14600 Minnetonka Blvd
Minnetonka W2 PB	EA	St. David's Episcopal Church, 13000 St. Davids Rd
Minnetonka W3 PA	EA	Ridgepointe, 12600 Marion Ln W
Minnetonka W3 PD	Hart	St. Luke Presbyterian Church, 3121 Groveland School Rd
Minnetonka W3 PF	EA	Minnetonka United Methodist Church, 17611 Lake St Ext
Minnetonka W4 PF	Hart	The Glenn, 5300 Woodhill Rd
St Anthony P1	SOE	Autumn Woods, 2600 Kenzie Ter
St Anthony P2	SOE	St Anthony Community Center, 3301 Silver Lake Rd

1. Feedback on the Technology That Was Used

A. Hart

Hennepin County and Minnetonka reported that, overall, the Hart electronic roster met the city's needs and generally performed well on election day. Minnetonka noted specifically that Hart engaged in significant preparatory work prior to the election to ensure Hart understood both Minnesota election law and the general process of voting in Minnesota. Despite this, Hennepin County and Minnetonka reported the following issues with the Hart system:

- Election judges could easily search for a voter using their name or address, however, election judges had difficulty using the driver's licenses scanning equipment to search for voters. It was unclear if the issues with the driver's license scanner were a result of election judges not swiping the license correctly or if the software was not programmed correctly to read the information. Minnetonka reported that Hart was able to fix this issue when it was first identified, but that the issue resurfaced later in the day.
- The Hart electronic roster would occasionally freeze. This occurred a few times during training as well as on election day. When the system froze, it required the election judge to reboot the electronic roster, log in to the system again and have the voter start the process from the beginning.
- Although the set up and take down of the Hart electronic roster was done by the vendor, a number of election judges noted the number of cords associated with the

electronic roster and worried they would be unable to set up the equipment on their own.

- If the Hart electronic roster operates too long without a voter, the printer shuts down. Hennepin County reported that this should not be an issue in a large election but election judges needed to be trained on how to handle this when it occurred.
- Finally, Minnetonka reported that the election day registration module prepared by Hart needed additional work in order to be successful. Specifically, the number of election day registrations recorded on the electronic roster were only those new to the precinct. If a voter registering on election day was reregistering because of a change of name or apartment change, that registration was not counted as an election day registration by the electronic roster. Therefore, election judges needed to take additional steps to be sure the number of voters registering and voting on election day balanced at the end of the night.

B. Elections Administrators (EA)

Hennepin County reported that it was neutral on the question of whether the electronic roster provided by EA met the county and city's needs. Although Minnetonka reported that the EA Tablet was easier to learn and use in comparison to touch screen notebooks or laptops, there were several issues with the EA Tablet. The following issues were reported with the EA Tablet electronic roster:

- Hennepin County reported that the largest issue with the EA Tablet was the quality of the HP 120 printer used to print election day registration applications. The printer selected by the vendor took over three minutes to print a registration application once the data had been entered into the electronic roster. This caused delays and frustration in the polling place during a small municipal election, and Hennepin County noted that this is an issue that would only be amplified during a state general election. The delay was disruptive enough that some election judge made the decision to switch to the pen and paper method of registering a voter during the pilot.
- The peripherals used for the EA Tablet were wireless. Although this made the EA Tablet look much cleaner and allowed the election judges and voters to avoid having to deal with cords, the Bluetooth printers created additional issues. Hennepin County reported that the printers and the tablet needed to be turned on in a specific order to function properly. A few election judges also noted some issues with the Bluetooth not connecting to the correct printer when working with election day registration applications.

- Election judges reported issues with the license scanning functionality, and reported having to type in each voter's address, even when a voter presented a license for the purpose of election day registration. In addition to the address, election judges had to type in the ward and precinct and proof of residence used.

C. SOE

Hennepin County reported that the hardware provided by SOE worked very well on election day and met the City of St. Anthony's needs. Although there were no major issues reported with the SOE electronic roster, election judges did report that the HP Office Jet printer accompanying the roster would occasionally shut down due to inactivity. Election judges did not immediately know how to turn the printer back on, and recommended that additional training on this issue would be appropriate.

Hennepin county specifically noted that one advantage to the SOE Clarity electronic roster is that it is hardware agnostic with the exception of iPads. In the future, jurisdictions would be able to choose the hardware they would like to use and would not be limited to what the vendor offered.

2. <u>The Printed Voter Registration Application</u>

A. Hart

For voters registering on election day, the Hart electronic roster was able to scan a driver's license and pre-fill some of the information required on the election day registration application. The remaining election day registration information was required to be entered into the Hart electronic roster by the election judge. The electronic roster then printed a 2 ½ x 4 inch label which was then attached to an 8 ½ x 11 voter registration application. The label was an experimental form approved by the Office of the Secretary of State for use during this pilot project.

The experimental form created by Hart eliminated the need for a full 8 ½ x 11 printer in the polling place. However, Hennepin County reported that the printed label did not always print all of the information needed on the election day registration application. Therefore, in some instances, the voter's driver's license numbers needed to be hand written onto the election day registration application.

Hennepin County reported that there were some adjustments that could be made to improve the election day voter registration label. For example, the label used would be improved if the font on the printed label were larger and if the information was more spread out. In particular,

those using the Hart electronic roster reported that when no information is provided for a field, it would be very helpful if blank spaces were inserted between each field type. This would make the data entry of the information easier following the election.

B. Elections Administrators (EA)

The EA Tablet used the onboard camera to scan a Minnesota driver's license and populate the voter's name and date of birth onto the registration application. However, the driver's license scan was unable to capture the voters address information. Election judges manually keyed in the data entry of the required information on the registration application into the EA Tablet and printed the application from the HP printer onto a full-sized voter registration application for the voter to sign.

Because the scan captured only the voter's name and date of birth, election judges manually entered most of the information needed on the election day registration application. To make the voter registration process more efficient, Hennepin County reports that the EA Tablet needed the capability to capture more information from a scan of the voter's driver's license. Minnetonka and Hennepin County reported that the process of registering a voter and the need to hand key a majority of the necessary information took much too long and, with the additional time the printer took to print the application, the registration process was causing delays in the polling place.

C. SOE

The SOE Clarity electronic roster used a scanner to scan a Minnesota driver's license or ID card and populate the voter's name, date of birth and driver's license number into the Personal Data tab of the electronic roster and the voter's address into the Address tab. The election judge completed the entry of the remaining personal information and address information into the electronic roster. The voter was then added into the electronic roster and the election judge printed a voter registration application on a full sized voter registration application for the voter to sign.

By scanning a voter's driver's license or ID card, election judges were able to capture a significant amount of the voter's data without having to manually enter information. Additionally, the Clarity electronic roster captured the voter's school district, county, phone and email address as well as if the voter was a US citizen and if the voter would be 18 years of age on or before the next election.

After printing the voter registration application, election judges also needed to 'post voter' in order for the voter to receive a voter certificate label and for the voter to receive credit for voting on election day. Hennepin County reported that it took election judges several new registrants to get used to this step.

3. The Voter Certificate Form

A. Hart

The Hart voter certificate for pre-registered voters was printed on a 1 ½ x 2 ¾ inch label. The label included the voter's name, address, date of birth, precinct, ballot style and voter identification number. The label was then affixed to the sign-in sheet containing a place for the voter certificate label, the voter's signature and the voter certification oath.

Hennepin county reported that the voter certificate label produced by the Hart electronic roster worked well, and Hart created the sign-in sheet that the label was affixed to. The only negative comment regarding this system was that working with labels was an adjustment for election judges. Some election judges had difficulty peeling the label off, but overall the process was reported as easy to use and understand.

B. Elections Administrators (EA)

The Elections Administrators voter certificate for pre-registered voters was a ticket-type document measuring approximately 2 ¼ x 8 ½ inches. The voter certificate contained the voters name, address, date of birth, precinct, ballot style, voter identification number and polling place information. The voter certificate also contains the voter certification oath required to be on each page of the polling place roster. Voters read the oath on the printed certificate and signed at the bottom of the certificate.

Election judges reported liking the speed of the Citizen printer used for printing the voter certificate and that the voter oath was printed directly on the certificate. However, the certificates were hard for election judges to manage once they had been printed. The printer paper tended to curl and because the paper was so thin, it made counting voter receipts difficult. Election judges reported using a lot of printer paper during election day and needed to change the roll of paper on the Citizen printer often, however judges reported that it was easy to put in a new roll of printer paper.

Election judges also found that some of the pens provided did not work on the voter certificate paper. This issue may be resolved if electronic rosters are allowed to capture an electronic

signature. Elections Administrators' EA Tablet electronic roster has the capacity to capture electronic signatures.

C. SOE

The SOE electronic roster voter certificate was printed on two identical labels that were approximately ½ x 4 inches each. The voter certificate contained the voter's name, address, precinct, date of birth and voter identification number. One of the labels was affixed to a sign-in sheet that contained a location for the voter certificate label, the voter's signature and the voter certification oath. The second label was affixed to the voter's receipt.

Hennepin County reported that a number of vendors produce similar voter certificate labels; however SOE is the only vendor that produces two identical labels. The two label system allowed election judges a second opportunity to reconcile voter counts if necessary. Although it required peeling two labels, election judges reported liking the ability to have the "back up" information.

One issue identified was that the printed voter certificate included the voter's precinct information but it did not include the voter's school district information. While this was not an issue because the City of St. Anthony is only located in one school district, if the SOE Clarity electronic roster were used in other jurisdictions, this information would need to be added to the voter certificate in order for election judges to provide the correct ballot style.

4. Updating with Supplemental Absentee Ballot Report

A. Hart

The Hart vendor representative handled the upload of supplemental absentee ballot information on election day. Under the Hart system, updating a voter's record to reflect an accepted absentee ballot is an administrative function of the electronic roster that could be completed by the vendor, election judge or county staff.

The options for updating the electronic rosters from supplemental absentee reports were not tested during this pilot, but instead were handled by the vendor.

B. Election Administrators

Absentee ballot records were manually updated in each EA Tablet by entering the absentee voter's voter ID number into the Poll Worker module of the EA Tablet. This process was

sufficient for this election; however election judges were not familiar with using voter ID numbers to identify absentee voters and preferred to identify absentee voters by name.

While working with Election Administrators, the capability of the EA Tablet to upload absentee voter information wirelessly was discussed; however this technology was not tested as part of the pilot project.

C. SOE

Absentee ballots records in the SOE electronic roster were updated by the city clerk from city hall. The clerk logged into the Clarity electronic roster system as an administrator and was able to mark voters with accepted absentee ballots as voted. Since the electronic rosters were networked, the electronic rosters in the polling place were updated immediately with the new information. The city clerk was very impressed with this function. St. Anthony reported that this functionality would be a tremendous time saver for clerks on election day.

5. Experience in the Polling Location

A. Hart

Overall, the Hart electronic roster was well received by election judges, though election judges expressed concerns about their ability to set up and take down the electronic roster on their own. This was due primarily to the number of cords required for the peripherals.

Election judges noted how easy it was to search for voters using their name or address, however they were not pleased with the limited success of the driver's license scanner. Additional work needs to be done with this functionality to ensure it is compatible with Minnesota driver's licenses and identification cards.

According to Hennepin County, as election judges became more familiar with the electronic roster and its screens and scenarios, they increasingly became more comfortable with the technology and more optimistic about the positive impact it could have on the election day experience for judges and voters in the future.

B. Election Administrators (EA)

Overall, election judges found the EA Tablet easy to set up and easy to use. Judges commented on how simple it was to search for pre-registered voters and believed searching for a voter on the electronic roster was faster than searching for a voter on the paper roster.

Only one EA Tablet was provided in each precinct, and election judges would have preferred to have more than one EA Tablet in each precinct.

The biggest concerns and issues on election day came with the election day registration module. Election judges noted how long it took to enter all of the required data and, in conjunction with the overarching printer issues, the election day registration process as a whole on the EA Tablet was ineffective – it took far too long and did not make the process more accurate.

In the election judge surveys, judges did note the positive reactions that were received from voters using the EA Tablet.

C. SOE

Overall, election judges found the Clarity electronic roster easy to use. The SOE vendors were on hand throughout election day and performed the actual set up and take down of the units. However, election judges reported that they would be able to do this if and when they needed to and that the directions provided by the vendor were very easy to follow.

Election judges had great success using the electronic roster to search for pre-registered voters using the name search function or the driver's license scan option. Judges felt less comfortable working with voters who needed to register on election day. Election judge comfort level increased significantly after they were able to go through the process multiple times. With additional training prior to election day, election judges reported that they did not feel that this would continue to be an issue.

Election judges and voters agreed that having the option for any voter entering the polling place to be able to be checked in at any electronic roster regardless of their last name or their voter registration status was very helpful.

Since the electronic rosters were networked, election judges were complimentary of the ability to periodically check the voter counts against the ballot counter throughout the day. This added functionality provided another level of confidence in the electronic roster product and the election day process in the polling place.

6. Security Issues Regarding Electronic Rosters

Only voter data for the specific polling location where the electronic roster was used was loaded onto the electronic roster. There were mixed feelings on whether or not it would be better to load voter data for the whole city onto each electronic roster.

For the purpose of helping voters find their correct polling location, a citywide address range file was also provided for the electronic rosters.

A. Hart

The electronic rosters were delivered to Minnetonka directly and returned to the vendor after election day.

The voter data was loaded by the city onto the electronic rosters. While the electronic rosters were at city hall, they were locked in their cases. The locked electronic roster cases were picked up by each head election judge the day before the election and keys to the cases were delivered on election day.

B. Election Administrators (EA)

The electronic rosters were delivered to Minnetonka directly and returned to the vendor after election day. While the electronic rosters were at city hall, they were locked in their cases. The locked electronic roster case was picked up by each head election judge the day before the election and keys to the cases were delivered on election day.

C. SOE

The electronic rosters were delivered to St. Anthony directly and returned to the vendor after election day. The data was loaded by the city onto the electronic rosters which were locked in the city clerk's office until they were set up on election day. The electronic rosters were taken down by the vendor on election night and the vendor took the electronic rosters and peripherals with them following the close of polls.

7. Uploading of Post-Election Data into SVRS

A. Hart

Hennepin County reported that the election day registration files from Hart were easy to upload. In the .txt file that was provided there was initially an extra line of unnecessary information at the top of each file. Once this line was removed, there were no issues with the upload of the file to SVRS. It took Hennepin county approximately one minute per election day paper registration to process and upload the paper election day registration, and approximately thirty seconds to upload and process the electronic election day registrations.

Overall, Hennepin County reported it was faster and easier to process the election day registration applications through the electronic process versus the manual process of searching and entering voter information.

Hennepin County noted that, in addition to the initial line of excess text, there were minor issues with how the data came through to SVRS from the Hart .txt file. For example, in one case a previous Minnesota address was entered as part of the .txt file, but appeared in the fields for an "Out of State Previous Address" in SVRS. In other cases there was data on the election day registration that was not part of the .txt file. For example, apartment numbers were not included in the .txt file, but were on the election day registration and needed to be added during the SVRS pending process. Hennepin County reported that all of these were minor issues that could be easily corrected, and it would have been helpful if pilot participants had an opportunity to test the upload of electronic roster election day registration files prior to election day.

For select pre-registered voters, the electronic roster voter certificate bar codes were scanned to update the voter's history. This process did work for the selected voters. In the future, an electronic upload would be preferred. However, with the Hart electronic roster, pages of bar codes for only voters that voted are produced. Hennepin County reports that having the ability to scan these pages would save some time in the process of posting voter history.

B. Election Administrators (EA)

Overall, Hennepin County reported that it was faster to process the election day registration applications through the electronic process versus the manual process of searching and entering voter information. However, because the file provided by the vendor did not include the voter's address, the benefit reported by Hennepin County was largely diminished.

It took Hennepin County approximately three hours to post the voting history for the five Election Administrator precincts. The EA Tablet does not print a bar code for each voter that is checked in on election day as other vendors had done. The EA Tablet does have the capability to produce a .txt file that includes voter history data for each polling location from election day. In the future, Hennepin County reported that a file of this type should be able to be uploaded into SVRS automatically providing voter history to all voters who voted on election day and eliminating the need to manually post voting history for each voter.

C. SOE

Hennepin County reported that the election day registration files from SOE were easy to upload. The name of the file needed to be changed to match the name specified by the Secretary of State, but this was the only adjustment that needed to be made to the file provided by the vendor.

Overall, it was faster and easier to process the election day registration applications through the electronic process versus the manual process of searching and entering voter information.

There were minor issues with how data came through to SVRS from the .txt file. For example, apartment numbers were not included in the .txt file, but were on the election day registration and needed to be added during the pending process or a voter's phone number was included in the .txt file, but did not have the correct number of digits. Both of these examples are minor issues that could easily be corrected. Hennepin County reported that it would have been helpful if pilot participants had an opportunity to test the upload of electronic roster election day registration files prior to election day.

It took approximately thirty minutes to manually post voting history for the two SOE precincts. For select voters, the voter certificate bar codes were scanned to update the voter's history. This process did work for the selected voters. In the future, an electronic upload would be preferred, however with the Clarity electronic roster, pages of bar codes for only voters that voted are produced. Having the ability to scan these pages would save some time in the posting voter history process.

8. General Comments and Recommendations

The Office of the Secretary of State provided test data from a precinct in Minnetonka to allow for training of election judges. Hennepin County reported that, in using this test data, it was difficult to demonstrate various situations that could be expected to come up on election day: challenged voters, absentee voters, address ranges issues, and voters in the wrong polling location. It was also difficult for election judges to practice registering voters since the electronic roster was only loaded with address ranges for the test precinct. In the future, Hennepin County suggests that additional test data should be available, or test data should be created.

Because of the limitations of the electronic roster pilot, Hennepin County reported that on election day it was difficult for voters and election judges to experience the full capability of the electronic rosters. Voters needed to sign in multiple places and election judges needed to keep track of multiple rosters and sign-in sheets. Hennepin County reported that using a paper back up system for the pilot project is understandable, however voters and election judges may have

had a more favorable experience if they were only using the electronic roster instead of the electronic roster and the paper roster.

Hennepin County noted that there was an unaddressed issue regarding unregistered absentee voters in electronic rosters and, if the electronic rosters were to be used in the polling place, a programming solution has to be in place to keep an electronic record of the non-registered absentee ballots to be compared to the registration activity prior to election day and on election day.

A. Hart

Hennepin County noted that it would have been beneficial with the Hart electronic roster to be able to test the election day registration file upload from the vendor to SVRS. Once the data was available following the election, adjustments needed to be made to the Hart .txt files in order for them to be compatible with SVRS.

Hennepin County noted that Hart did a lot of preparation to learn and understand the election process in Minnesota. Their extra effort was noticeable and appreciated.

B. Election Administrators (EA)

As with Hart, Hennepin County noted that it would have been helpful with the Elections Administrators roster to be able to test the election day registration file upload from the Elections administrators to SVRS. Once the election day registration data was available following the election, major adjustments needed to be made to the files provided by Elections Administrators in order for them to be compatible with SVRS.

Hennepin County also noted that the EA Tablet had significant functionality that was not used as part of this pilot project. Hennepin County believes that a future pilot or mock election that would be able to demonstrate these additional features would be beneficial.

C. SOE

In addition to the two units in each precinct, the SOE vendor also provided a Clarity electronic roster for the city clerk that was located at city hall. This electronic roster allowed the city clerk to monitor activity in the polling place and update voter files with absentee voter information through the administrator module on the Clarity electronic roster.

The capability to network the electronic rosters within the precinct allowed election judges to easily check the voter counts against the ballot counter periodically throughout the day. This provided an added layer of assurance to election judges.

Hennepin County reported that SOE did a lot of preparation to learn and understand the election process in Minnesota, that their extra effort was noticeable and appreciated, and that they were a pleasure to work with.

VII. Ramsey County, St. Paul and St. Anthony Project Feedback and Recommendations

Ramsey County had electronic roster pilot project locations in nine precincts, eight in the city of St. Paul and one in the city of St. Anthony. Ramsey County piloted electronic rosters from KNOWiNK, Hart and ES&S.

Precinct	Vendor	Location
St Paul W 1 P 2	Hart	Jimmy Lee Recreation Center, 270 Lexington Parkway N
St Paul W 2 P 2	KNOWiNK	Linwood Recreation Center, 860 St Clair Ave
St Paul W 3 P 5	ES&S	Graham Place, 1745 Graham Ave
St Paul W 4 P10	ES&S	St Paul Council of Churches, 1671 Summit Ave
St Paul W 5 P1	KNOWiNK	North Dale Recreation Center, 1414 St. Albans St N
St Paul W 6 P 4	ES&S	Farnsworth School, 1290 Arcade St
St Paul W 6 P 5	Hart	Arlington Hills Presbyterian Church, 1275 Magnolia Ave E
St Paul W 7 P 12	KNOWiNK	Battle Creek Recreation Center, 75 Winthrop St S
St Anthony P-1	ES&S	Chandler Place – Community Room, 3701 Chandler Dr.

1. Feedback on the Technology That Was Used

A. Hart

Ramsey County reported that the Hart electronic roster was easy to set up and to use, and met the city's needs. The one significant issue that occurred in the polling place was that the operating system would sometimes freeze, and the election judges had to re-boot the electronic roster. As a result, the election judge and the voter had to go through the entire sign in process again once the system was reloaded. Ramsey County identified this as a major issue in a busy election and could potentially cause long voter lines and inaccurate statistics.

Election judges indicated that the electronic roster was easy to use, and that processing a voter – registered or non-registered – was intuitive. Election judges also reported that the set up was easy and that the cords needed to connect the devices were minimal.

B. KNOWiNK

Ramsey County reported that the KNOWiNK Poll Pad was easy to set up and easy to use, and met the city's needs. The only issue that occurred in the polling location was a slow Bluetooth connection between the iPads and printers. The printer's response time lagged toward the end of election day. Resetting the Bluetooth connection corrected this problem.

Feedback from the election judges indicated that the Poll Pad was easy to use, and that processing a voter, registered or non-registered, was simple. Election judges reported that the set up was easy due to the fact that there were no cords needed to network the devices: the iPad worked as the barcode scanner, signature pad and the electronic roster.

C. ES&S

Ramsey County reported that the ES&S ExpressPoll requires a high number of peripherals compared to other electronic roster products, which results in a high number of cords. Ramsey County had to purchase additional extension and surge protectors to ensure that all of the ExpressPoll devices and peripherals would have power. Ramsey County reported that the extension cords had to be taped down to prevent tripping. The cords became easily tangled and, due to the high number of cords, Ramsey County stated that it would be very confusing for election judges to set up the units on their own. The number of cords and peripherals also meant that the devices could not turn so that the voters could view their records, which was a feature available on other vendor's electronic rosters.

Election judges expressed frustration on the number of screens and steps it took to process a voter, regardless if they were registered or non-registered. The election judges reported difficulty with the signature pad, and difficulty in allowing the voter to review the data entry screen due to the number of cords. Because the voter could not view the electronic roster, the voter had to trust that the election judge has selected the correct voter record and was processing the voter properly. Some concern was expressed that a voter could only verify that the election judge selected the proper record when the voter was signing the voter certificate.

2. <u>The Printed Voter Registration Application</u>

A. Hart

Hart was authorized by the Secretary of State to use an experimental voter registration label that measured 4 x 2 ¾ inches, that attached to a full sized blank voter registration application form. If the voter registering on election day had a current up to date Minnesota driver's license or identification card, the election judge could scan the driver's license or identification

card and have the voter registration application label pre-populate with the voter's information. If the voter did not have a current Minnesota ID, the election judge manually entered the voter information into the electronic roster.

Ramsey County recommends that the use of experimental voter registration applications and labels be continued, since Ramsey County believes it results in cost savings and increased accuracy of the voter records. In addition, Ramsey County recommends exploring a different size form on which the voter registration label could be affixed, or a pad of pre-printed forms with space for a signature and the voucher form on the back, or optimally, the use of an electronic signature pad.

B. KNOWiNK

KNOWiNK programmed the PollPad election day voter registration application to print the standard 8 ½ x 11 inch voter registration application on the HP printer. The election judge manually entered the voter registration information into the iPad. The front side of the application was printed once the voter or election judge completed the required fields in the electronic roster. The voter registration application had the voucher form pre-printed on the backside. If a voucher was needed, the voucher had to manually write-in his or her information.

Ramsey County recommends that an experimental form be researched using the Poll Pad, in order to require only one printer in the polling place. Two printers had to be deployed with the Poll Pad - one printer for printing non-registered materials (the combined voter registration application and non- registered oath form) and one printer for printing the registered oath forms. One printer would require less supplies and less election judge time for set-up and maintenance.

C. ES&S

ES&S received authorization by the Office of the Secretary of State to use an experimental voter registration form, but following the election Ramsey County reported that the text on the voter registration application needed to be in a larger font size. Ramsey County further reported that ExpressPoll should have had the ability to print the type of acceptable election day registration documentation that was shown to the election judges.

Ramsey County reported that a key ExpressPoll feature that was not working was the barcode scanner that was used to scan in a Minnesota driver's license or identification card. If the voter had a current license or identification card, the ExpressPoll should have pre-populated the voter's information onto the printed voter registration application. However, the feature was

not working properly on election day, and required the election judge to manually enter all of the data for the voter registration application.

3. The Voter Certificate Form

A. Hart

The Hart voter certificate printed on a Brother label. The label included the voter's name, address, date of birth, and polling location. The label was then attached to a registered or non-registered oath sheet and the voter signed his or her signature beneath the label. The printed voter information label measured 2 ¾ x 1 ½ inches and each oath sheet could fit 12 labels.

On election day the voters and election judges reported that the use of voter certificate labels was an easy process to follow. The Ramsey County elections office found that it was a unique and successful way of incorporating electronic roster technology with the wet ink signature requirement.

B. KNOWiNK

The KNOWiNK voter certificate for pre-registered voters printed on thermal paper that measured 3 x 5 ¾ inches. The certificates included the voter's name, address, date of birth, polling location, the voter oath, and space for the voter's signature. After the voter signed, the completed voter certificates were placed in an envelope containing registered voter certificates.

For non-registered voters, the oath was attached (by perforation) to the bottom of the voter registration application. The voter oath was yellow and measured 8 ½ x3 inches. The voter oaths were able to be removed (at the perforated edge) from the voter registration application once they were completed, and were placed in an envelope containing non-registered viter certificates.

Ramsey County reported that this form was sufficient on election day.

C. ES&S

The ES&S voter certificate (for both registered and non-registered voters) printed on white thermal paper that measured 4 ½ x 6 ½ inches. It included the voter's name, address, date of birth, polling location, the voter oath, and a space for the voter's signature. Once the voter signed the voter certificate form, the judges placed them into either an envelope containing registered or non-registered voter certificates.

Ramsey County reported that this form was sufficient, but that it could be improved by making the font size larger.

4. Updating with Supplemental Absentee Ballot Report

In Ramsey county, as absentee ballots were returned and accepted on election day, each vendor updated the electronic rosters in the polling places. A password was required to access the voter record update function. Once the password was entered, a screen with multiple selections appeared. The vendor searched for the voter, and selected 'AB.'

Ramsey County recommends that an internet connection be piloted to update absentees and to resolve election day issues remotely.

5. Experience in the Polling Location

Prior to election day, Ramsey County reached out to the voters to educate them on the electronic roster pilot through a postcard mailing. The postcard alerted the voters that there would be a new piece of equipment in the polling place, and they would sign-in or register on election day using the new electronic roster technology.

On election day, Ramsey County provided extra election judges for the polling places with the electronic rosters. Two election judges were assigned to each electronic roster unit. One judge guided the voter through the electronic roster process, while the other judge helped the voter with the paper process. The electronic roster pilot process for a registered voter required two signatures. The paper process for a registered voter required one signature. In total, three signatures were required for a registered voter.

The steps that the election judges followed for a registered voter in Ramsey County using an electronic roster are generally outlined below:

E-Roster process for pre-registered voters

- Search and find the voter in the electronic roster
- Select the voter record, ensure the information is correct
- Click "issue standard ballot"
- Voter signs on signature pad
- Click "accept signature"
- Print voter receipt
- Sign voter oath receipt
- Place voter receipt on sheet or in envelope

Paper process for pre-registered voters

- Looks up voter in paper roster
- Confirm the voters name and address, checks record for challenge
- Ask the voter to sign the pre-registered roster
- Initial and issue a blue voting receipt
- Direct voter to ballot judge table

The unregistered process required a total of four signatures for a voter, (one on the electronic roster, one under the voter oath label, one on the voter registration application, and one on the paper non-registered roster). The steps that the election judge followed to register a voter using the electronic roster are generally outlined below:

<u>E-Roster process for unregistered voters</u>

- Attempt to search for voter
- If voter not found, click on "voter not found issue ballot" button
- If voter is found, select record
- Follow prompts to register the voter
- E-roster will print the voter registration application (with the voter receipt at the bottom)
- Voter signs the voter registration application
- Voter signs oath
- Voter completes one line of the non-registered paper roster
- Initial and issue traditional yellow voter receipt to voter
- Direct voter to ballot judge table

The feedback received from election judges and voters was that the number of signatures required by the parallel registered voter processes created a large number steps to complete, and that, if it were a busier election year, the process would not work. To accurately test the functionality of the electronic rosters, Ramsey County recommends that the parallel paper process be eliminated. Further, Ramsey County reported that, as a result of the large number of steps, a few of the registered voters did not sign the paper roster. However, signatures were found with the voter oath labels and then matched to the registered rosters.

Ramsey County reported that the non-registered voter process in an even year election would have to have additional election judges to process the voters. In Ramsey County, election judges and voters expressed concern regarding the length of time the electronic rosters would take to process a voter. Ramsey County indicated it would be helpful to have all of the electronic roster units deployed in a polling location be able to process both registered and non-registered voters.

6. Security Issues Regarding Electronic Rosters

In Ramsey County, during the period between acquisition and election day, the electronic rosters were stored in the Ramsey County Elections office. The elections office can only be accessed by key cards possessed by Elections office staff.

Ramsey County worked with the election judges and vendor to ensure that the devices would remain secure. Ramsey County noted that, if electronic rosters are to be implemented in a broader scale, it would not be feasible to set up the devices prior to election day. In broad scale deployment security is a concern, and Ramsey County recommends that a process be developed to ensure data security. If possible, Ramsey County recommends deployment on election day morning to ensure that the electronic rosters are loaded with the most current version of data, or that the county has the ability to update electronic rosters remotely through a secure connection. Ramsey County also recommend that the counties have the ability to produce and upload reports from the devices on election night, which would eliminate the need for the vendor to do this function on the counties behalf.

A. Hart

Ramsey County took possession of the Hart electronic rosters on October 24th. Hart loaded the data onto the devices on the Monday before election day. The electronic rosters were stored in secured polling places between the Monday night before the election and election day morning. At the close of the polls, the Hart representative retrieved the electronic rosters, and returned to the election office on election night. The vendor sent the reports (election day registrants, electronic roster log and total voting) and took over custody of the electronic rosters on election night.

B. KNOWiNK

Ramsey County took possession of the KNOWiNK electronic rosters on October 29th. KNOWiNK loaded the data onto the devices on the Monday before election day. The electronic rosters were stored in secured polling places between Monday night before the election and election day morning. Upon the return of the electronic rosters, the vendor sent the reports (election day registrants, electronic roster log and total voting) to Ramsey County, re-packaged the electronic roster devices, and took over custody of the devices.

C. ES&S

Ramsey County took possession of the ES&S electronic rosters on October 28th. New memory cards were delivered to the polling places on election day by the vendor. At the close of the polls the head election judge packed the electronic rosters and returned them to the elections office. Upon the return of the electronic rosters, Ramsey County staff removed the memory devices and uploaded the data to SVRS. The devices were returned to ES&S after election day.

7. Uploading of Post-Election Data into SVRS

Overall, Ramsey County reported that the processing of the voter registration applications was simple and accurate. However, Ramsey County would like a test environment in SVRS using Ramsey County data, in order for vendors to be fully prepared for election day registration file upload. When Ramsey County worked with the files that were uploaded into SVRS, the printed voter registration was compared to the pending file to ensure the accuracy and completeness of the data.

It took Ramsey County approximately one minute per election day paper registration to process and upload the paper election day registration, and approximately thirty seconds to upload and process the electronic election day registrations.

Ramsey County posted the voter history manually from the paper rosters and reported that this paper-roster history matched the electronic roster history reports. Ramsey County noted that voter and election judge error likely caused a few signatures to be missed on the paper roster, but this error-rate was likely enhanced by the number of signatures required in the parallel paper and electronic registration system.

A. Hart

After the pilot, Hart was able to provide a file to be uploaded into SVRS, but an issue occurred with having excess data fields in the .txt files. After contacting the vendor, the election day registration upload files were provided without the additional data fields, which were then easy to upload into SVRS. Ramsey County noted that the availability of a test environment prior to election day would have been very helpful to the vendor.

B. KNOWiNK

After the pilot, KNOWiNK was able to provide a file to be uploaded into SVRS. However, Ramsey County reported that an issue occurred when the barcode of the Minnesota driver's license was scanned and a programming error caused the date of birth to populate incorrectly

on the voter registration application. The printed voter registration application had the correct date of birth printed, and that information was then manually entered into SVRS.

C. ES&S

Because the ExpressPoll did not print the type of proof for election day registration at the bottom of the voter registration, this information was not exported for SVRS upload. Ramsey County manipulated the reports to successfully upload the data. In addition, there were some issues importing the manipulated data, particularly if the voter had changed his or her name. If the ExpressPoll was able to export a SVRS compatible file, uploading the election day registration data to SVRS would save a large amount of time.

8. General Comments and Recommendations

Ramsey County recommends permitting experimental use of electronic rosters to occur in certain polling locations in 2014. This would allow counties and cities to continue working with vendors toward a solution that would fully comply with election laws, and provide better customer service to voters.

If electronic roster testing is to continue, Ramsey County recommends that an extensive voter outreach program be implemented in order for voters and election judges to be aware of the use of electronic rosters, and to proactively answer questions on electronic roster use. For the 2013 pilot, Ramsey County sent out a postcard to each household residing in an electronic roster pilot precinct, but a more extensive voter outreach plan would have helped the public understand the new technology.

Ramsey County offered the following recommendations for the registered voter process using an electronic roster:

- The paper roster should be eliminated in electronic roster precincts, or should be available as only a back- up.
    - Electronic signature should be permitted in lieu of a wet signature, OR
    - The electronic roster should print a voter oath receipt or label that the voter signs.
- The electronic roster should export a report that is uploaded directly SVRS in order to post voting history.
- The electronic roster should have the capability to record data from many documents, including driver's licenses, state ID cards, and student ID cards.

Ramsey County recommends the following steps for non-registered voter processing using the electronic roster:

- To complete the voter's information in the election day registration application:
    - The ability for voter information to be pre-populated by swiping a Minnesota driver's license or ID, or
    - Allowing the voter to complete the voter registration application on the electronic roster, if they wish.

- To sign the voter registration application:
    - The voter signs the voter registration application electronically by signature capture, or
    - The completed voter registration application is printed and the voter completes the signature section.

- To complete the voter oath form:
    - Electronic signature should be permitted in lieu of a wet signature, or
    - The electronic roster should print a voter oath receipt or label, eliminating the need for a non-registered roster signature.

Finally, Ramsey County asked that this report recognize all three of the vendors Ramsey County worked with for the free hardware, software, time, and effort that was provided in order to help Ramsey County successfully participate in the electronic roster pilot project.

VIII. Clay County, Moorhead and Dilworth Project Feedback and Recommendations

Clay County had electronic roster pilot project locations in four precincts, one in the city of Dilworth and three in the city of Moorhead. Clay County piloted electronic rosters from Hart and ES&S.

Precinct	**Vendor**	**Location**
Dilworth	Hart	Dilworth Community Center, 709 1st Ave NW
Moorhead W1 P1	ES&S	St. Francis De Sales Church, 601 15th Ave N
Moorhead W4 P10	ES&S	Brookdale Baptist Church, 1401 40th Ave S
Moorhead W4 P11	Hart	Brookdale Baptist Church, 1401 40th Ave S

1. Feedback on the Technology That Was Used

A. Hart

Clay County reported that the electronic roster provided by Hart generally met the County and cities' needs. Issues with the electronic roster included that the school district on printed labels was not correct despite being correct on the display, and the city information on the address labels were not always correct.

Dilworth reported that, for unknown reasons, one of the two electronic rosters provided by Hart would not load. This resulted in Dilworth using only one electronic roster. Election judges in Dilworth reported that the remaining electronic roster occasionally froze up on when scanning a license, and had to then be restarted.

The precinct using the Hart electronic roster in Moorhead did not report issues with the license scanner because Moorhead choose not to use this functionality. Moorhead reported additional problems with the roster technology, including the electronic roster randomly shutting down and issues with the electronic roster sending voters to different precincts, even though election judges reported that the voter was in the correct precinct.

B. ES&S

Clay County reported that it was neutral on whether the electronic roster provided by ES&S met its needs. Clay County and Moorhead reported that the identification card reader did not work properly (it did not link to the voter), and that the set up of the system was cumbersome and very confusing. Further, Moorhead reported that the number of cords required was a hazard. Because the electronic roster equipment was not functioning properly, Moorhead reported occasional lines at the ES&S pilot project polling locations.

Election judges reported being unable to edit the apartment field in the electronic roster, and that at the time the polling location opened the electronic roster was not functioning and had to be rebooted. Moorhead reported that election judges generally had many complaints about the ES&S electronic roster equipment.

2. The Printed Voter Registration Application

A. Hart

Clay County as well as Dilworth and Moorhead all expressed approval of the Hart election day voter registration application form.

B. ES&S

Clay County did not agree that the experimental voter registration application used by ES&S was sufficient to meet the county's needs. While the form was sufficient according to Moorhead, election judges reported that the electronic roster did not populate the form as intended, requiring significant manual data entry.

3. The Voter Certificate Form

A. Hart

Clay County reported that the voter certificate system used by Hart was sufficient to meet the county and cities' needs, and was easy to use. Clay County noted that in posting voter history, the scanning of the labels produced by the electronic roster was less likely to result in a miss-scan, which can easily occur when scanning in paper rosters (scanning the wrong line, for example). Although Moorhead did not provide feedback on the voter certificate form, Dilworth noted that the form was very easy to read and sufficiently met the city's needs.

B. ES&S

Clay County and Moorhead reported that the voter certificate was sufficient to met the county and city's needs.

4. Updating with Supplemental Absentee Ballot Report

A. Hart

Clay County reported that it was easy to update the Hart electronic rosters from the supplemental absentee ballot report. Hart helped the precincts with this task resulting in no issues.

B. ES&S

Clay County reported that it was unable to add new absentee ballot reports under the ES&S system and that support staff was unable to assist in this process.

5. Experience in the Polling Location

A. Hart

Other than the technical issues mentioned above, the reports form Clay County as well as Moorhead and Dilworth were positive regarding the Hart system. It was uniformly reported that more electronic rosters would be needed for an even-year general election, and many election judges suggested having one electronic roster dedicated solely to new voter registrations.

B. ES&S

The reports regarding the ES&S experience in the polling location were generally negative. Technological issues were reported to cause lines in an otherwise low-turnout election.

6. Security Issues Regarding Electronic Rosters

Clay County reported that at all times the electronic rosters were either in the presence of elections staff or in a locked room.

A. Hart

At the precincts with Hart technology, a Hart representative was on hand to make sure that the electronic rosters were unpacked at the beginning of the day and then repacked at the end of the day. The election judges never left the electronic rosters unattended.

B. ES&S

Although the physical security of the ES&S electronic roster was not questioned, one election judge expressed concerns over the security of voter data with the ES&S electronic roster because all voter data had to be verified orally. This meant that personal information could be overheard by anyone in the vicinity of the voter.

7. Uploading of Post-Election Data into SVRS

Clay County reported that it was easy to upload the election day registrations into SVRS using both the Hart and ES&S electronic rosters. Clay County further noted that the system ensures that proper information is obtained when the voter is processed so there is less pending or illegible data.

A. Hart

Clay County noted that in posting voter history, the scanning of the labels produced by the electronic roster was less likely to result in a miss-scan as can easily occur when scanning in paper rosters (scanning the wrong line, for example).

B. ES&S

With the ES&S electronic rosters, Clay County decided not to use the electronic rosters for posting the voter history data and instead used the paper rosters. Therefore Clay County had no feedback on the posting of voter history through the ES&S electronic roster system.

8. General Comments and Recommendations

A. Hart

Election judges generally reported enjoying the new process, and that the electronic roster reduced the labor involved with flipping through paper rosters. Election judges reported that, though some of the older generation in the community may have been overwhelmed when they first saw the electronic roster, they were generally accepting of the process once they had first-hand experience.

Dilworth noted that, though most of the city's election judges are retirees that may have less experience with the technology used, the system was very easy to learn and the election judges enjoyed the new system.

B. ES&S

Election judges reported that the electronic roster did not function as it was intended, and one election judge said specifically that the ES&S electronic roster was not ready for a live Minnesota election. Although some election judges reported that voters understood that the paper system may have to change, some expressed frustration and questioned the ethics and security of electronic rosters.

Moorhead reported that it would not recommend the use of ES&S electronic rosters in the future.

IX. Voter Usage

In all, 6,827 voters voted in-person in precincts using the electronic rosters. Below is a breakdown of in-person voters by precinct (and corresponding in-person election day registrants):

Hennepin

Precinct	Vendor	Voters Using eRoster (election day registrants)
Minnetonka W1 PB	EA	131 (0)
Minnetonka W2 PA	EA	137 (1)
Minnetonka W2 PB	EA	379 (14)
Minnetonka W3 PA	EA	114 (15)
Minnetonka W3 PD	Hart	196 (4)
Minnetonka W3 PF	EA	313 (8)
Minnetonka W4 PF	Hart	386 (5)
St Anthony P1	SOE	145 (10)
St Anthony P2	SOE	284 (8)

Ramsey County

Precinct	Vendor	Voters Using eRoster (election day registrants)
St Paul W 1 P 2	Hart	496 (32)
St Paul W 2 P 2	KNOWiNK	460 (24)
St Paul W 3 P 5	ES&S	363 (26)
St Paul W 4 P10	ES&S	499 (25)
St Paul W 5 P1	KNOWiNK	366 (11)
St Paul W 6 P 4	ES&S	314 (5)
St Paul W 6 P 5	Hart	281 (7)
St Paul W 7 P 12	KNOWiNK	414 (16)
St Anthony P-1	ES&S	113 (11)

Clay County

Precinct	Vendor	Voters Using eRoster (election day registrants)
Dilworth	Hart	433 (16)
Moorhead W1 P1	ES&S	640 (12)
Moorhead W4 P10	ES&S	138 (15)
Moorhead W4 P11	Hart	225 (18)

X. Cost Associated with Pilot Project by Precinct

Because vendors provided the necessary programming and equipment for free, most cities and counties reported no costs associated with the pilot project other than the costs associated with the staff and election judge training time. Although most cities did not estimate the cost train election judges, Minnetonka estimated that it cost $306 to train the election judges in the seven Minnetonka precincts.

A few participating cities purchased additional equipment to facilitate the study. In order to use the Elections Administrator's equipment, Minnetonka purchased five HP Bluetooth Printers at a cost of $227.13 each (one per precinct), for a total of $1,135.66.

Ramsey County reported additional costs. First, Ramsey County sent a mailing to all households that would have an electronic roster in their polling place. The mailing for a total cost of $735.04. Because Ramsey County administers the St. Paul elections, Ramsey County also had direct costs associated with the St. Paul locations, including the acquisition of two additional electronic rosters from Hart for $1,000 per roster ($2,000 total). Ramsey County also had to purchase additional extension cords and surge protectors for the ES&S equipment in St. Paul for a total cost of $92.30.

XI. Secretary of State Feedback and Recommendations

1. Selection of Vendors

The Office of the Secretary of State reports that the initial solicitation of vendors was successful, but the timeline for implementation limited the number of vendors that ultimately participated in the 2014 pilot.

The Office solicited vendors for the pilot project through several mechanisms and eight vendors responded to the solicitation expressing interest in participating in the pilot project. Notably, three vendors chose to withdraw from the pilot for various reasons, including capacity issues and the time required to program their electronic rosters to comply with Minnesota law and pilot's software requirements. This meant that the pilot did not include the full scope of interested vendors, including the vendor that Minnetonka had been using since 2009 for electronic rosters: Datacard.

2. SVRS Program Development

The Office of Secretary of State was able to complete the programming of SVRS for the upload of election day registrations, and that functionality was released in SVRS version 5.1 on

November 12, 2013. This functionality was successful if the vendors provided the election day registration file in the format prescribed by the Office. The Office provided vendors with file specifications and an opportunity to submit a test file prior to election day in order to ensure that the file would comply with the SVRS election day registration upload requirements. Not all vendors chose to resubmit their test data files to verify that the discovered issues had been corrected. With the functionality released in SVRS 5.1, counties now have the ability to upload future test files in a practice mode.

The only issue identified by the Office regarding the SVRS upload function that was unrelated to the vendor file formatting was issues with respect to name suffixes (JR, SR, IV, etc.). If the vendor file contained a name suffix and that name suffix not in capital letters, the suffix would not pre-populate when processing the record under pending applications in SVRS. The counties were then required to manually insert that information. While the Office specified that vendor files contain the name suffix in capital letters, the Office intends to address this issue in SVRS prior to the 2014 election.

Finally, the Office notes that post-election processing of data will be greatly improved by the ability of counties to directly load the voter history file from the electronic roster into SVRS. The Office is in the process of completing the programming necessary to allow SVRS to download pre-registered voter data and upload the post-election voter history data from electronic rosters. The Office intends to complete the programming for this functionality by the 2014 state general election.

3. Pre-Election Approval of Experimental Forms

A. Voter Registration Applications

Although the Office approved two experimental election day registration forms, it is the opinion of the Office that the Hart form did not actually require approval. The final Hart form was a label that was applied to a full size paper voter registration card. Because the label was applied to a full size card and contained all of the information required by statute, the Office does not consider this to be an experimental form and instead in compliance with the statutory requirements.

The Office agrees with the feedback from Ramsey County that the ES&S form would have to be reworked prior to the Office considering authorizing it for additional experimental use. Further, the Office notes that, though Minnesota Statues permit the use of experimental forms if approved by the Office, Minnesota law would need to be changed to allow these experimental

forms on a permanent basis. Municipalities considering the purchase or rental of electronic roster equipment should consider this when selecting a vendor.

B. Voter Certificate Forms

Hart requested the use of alternative voter certificate forms. The use of labels affixed to a sheet of paper with the oath appears to be an easy, logical and convenient way to manage these certificates as opposed to many loose pieces of paper.

The only disadvantage that this Office notes with the label system is related to privacy. Voters signing the label after it is affixed to a sheet containing the oath also see the personal information of other voters who have already signed their certificate. These certificates contain the voter's full name, address, voter identification number and date of birth. Although this is no different than the information that voters can see when they sign a paper roster, if one of the intended benefits of the electronic rosters is to reduce the exposure of personal information this is something jurisdictions may wish to consider.

4. Feedback on Technology Used

As reported by the counties and participating cities, the technology used had varying degrees of success in the precincts. The Office required that each participating county certify to the Office by September 1, 2013, that the electronic roster technology developed by each vendor met a specific set of test requirements. For pre-registered voters the checklist contained the following among its requirements:

- Voter record can be searched and retrieved by scanning or swiping a Minnesota driver's license or Minnesota ID card;
- Alerts election judge if address on DL/ID is different than address on voter record but allows election judge to override the alert (i.e. DL may use AV instead of AVE);
- Provides a printed voter's signature certificate, containing the voter's name, address of residence, date of birth, voter identification number, Minn. Stat § 204C.10 oath, and space for the voter's original signature;
- Immediately alerts election judge if pre-registered voter has already voted by absentee ballot;
- Immediately alerts election judge if pre-registered voter has already voted in the polling place;

- Immediately alerts election judge if pre-registered voter has already voted as an election day registrant in the precinct;
- Provides immediate instructions for resolving each of the types of challenges listed above;
- Allows for election judge to manually add AB for a pre-registered voter (simulated AB process for ABs accepted after rosters printed);
- Allow for the data to be exported in a file format prescribed by the Secretary of State;

For election day registrants, the checklist contained the following among its requirements:

- Allow for Election day registrant data to be entered manually;
- Allow for Election day registrant data to be entered by scanning a Minnesota driver's license or identification card to populate the data in a Minnesota voter registration application. Cues election judge to ask for and input non-populated data from voter;
- Allows for election judge to edit data that was populated by a scanned driver's license (i.e. input an address different from what is on the DL/ID card);
- Allows for each of the valid proofs of residence to be selected:
    - Minnesota Driver's License or Minnesota ID or Receipt
    - Prior Registration in Precinct
    - Notice of Late Registration
    - Tribal ID
    - Student ID; Name on Housing List
    - Bill with Photo ID
    - Witness/Voucher
    - Bill with Minnesota Driver's License or Minnesota ID
    - Bill with Passport
    - Bill with Military ID
    - Bill with Student ID
    - Bill with Tribal ID
- Provides for the Minnesota voter registration application to be printed and signed and dated by voter. Printed application data must match the data input and be in the proper field on the form, and must print the back side or the county must provide paper with back side pre-printed;

- Provides a printed voter's signature certificate, containing the voter's name, address of residence, date of birth, Minn. Stat. § 204C.10 oath, and space for the voter's original signature;
- Immediately alerts election judge if the election day registrant has already completed an election day registration in the polling place and voted;
- Immediately alerts election judge if the election day registrant has already voted as a pre-registered voter in the precinct either as an absentee ballot or in the polling place;
- Immediately alerts election judge if the residence address provided is not within the precinct, but allows election judge to override the alert (i.e. precinct finder range needs to be expanded);
- Immediately alerts election judge cannot proceed if U.S. Citizen or the at least 18 questions marked as "No";
- Immediately alerts election judge if date of birth provided is less than 18; and
- Allow for the data to be exported in a file format prescribed by the Secretary of State.

Although all counties reported by October 17, 2013, that the vendors had satisfactorily completed this checklist, the post-election reports from participating cities and counties indicate that some of the electronic rosters did not contain the full functionality or it did not operate properly on election day.

5. Security Issues Regarding Electronic Rosters

Because of the sensitive data that is contained in the election rosters, the Office recommends that only that voter data on pre-registered voters in the specific precinct be loaded into the electronic rosters in each precinct. Rosters contain sensitive information including full name, address, date of birth, and any challenge notations (felony, guardianship, etc.) for each voter in the precinct. Rosters in the precincts include this information even for those voters who have requested their information be removed from the public list due to safety concerns of the voter or the voter's family. Because of thr sensitive information contained in the rosters, the Office recommends that – like the paper rosters – the voter information in electronic rosters be limited to information on the preregistered voters within the precinct.

The Office recommends that any future use of electronic rosters limit the networking of electronic rosters to those rosters within the polling location. The counties and municipalities participating in the 2013 pilot project noted that the lack of outside networking prevented their ability to use some select functionality of the electronic rosters (such as remote absentee ballot

report updating), and several expressed a desire to network the electronic rosters outside of the polling location via the internet (assuming reliable internet connectivity in the polling place). The Office believes that the security concerns associated with connecting the electronic rosters to the internet during voting hours outweigh any potential benefits.

Further, though the limitation on networking would prevent the use of the remote absentee ballot update features, the counties and municipalities can still gain efficiencies in the supplemental absentee ballot report upload by using the electronic rosters without an internet connection. For example, counties can provide supplemental absentee ballot data files on a USB flash drive. Unlike the paper rosters, this file could then be quickly uploaded into the electronic rosters and the ability to network within the polling location would allow simultaneous uploading of the supplemental absentee ballot report to all electronic rosters within the polling location.

6. General Comments and Recommendations

The Office of the Secretary of State recommends an expanded study of electronic rosters for the 2014 general election. The Office makes this recommendation because the 2013 pilot project was limited in scale, required a time-consuming duplicative sign-in process for voters, reported many issues with the technology used, and occurred only in low-turnout municipal elections.

Due to the feedback from participating municipalities and voters regarding the burdensome dual registration process, the Office recommends that the 2014 study not include the dual registration process and allow voters to register only on the electronic roster. Participating municipalities would then use a paper back-up system only if the electronic roster technology failed.

Additional information can be gained from a 2014 study that would help inform counties and municipalities about the potential benefits of electronic rosters. If the 2014 study included those jurisdictions participating in the 2013 pilot, jurisdictions would have the ability to learn from their experiences in the 2013 election and build best practices for electronic roster use. Further, the 2014 study would allow counties to test both the upload and download of preregister voters and voter history using the electronic roster technology. This was reported by 2013 participating jurisdictions as a functionality that could provide significant cost and time savings for counties.

Testing the electronic roster technology in a general election year will allow participating jurisdictions to test the functionality of the electronic rosters in a high volume election. The information gained will allow other jurisdictions to better gauge the cost effectiveness of

electronic rosters, the desired functionality of electronic rosters, and the number of electronic rosters that would be needed for each precinct in a general election.

In light of the additional information that can be gained from a testing of electronic rosters in the 2014 election, and in light of the issues with the electronic rosters in 2013, the Office recommends that the state continue to study the use of electronic rosters in Minnesota and not engage in a full-scale deployment of electronic rosters at this time. Further, in light of the discrepancy in the strengths and weaknesses of the vendors used in 2013, the Office recommends that the participating jurisdictions in 2014 be able to select the vendors that will operate in their precincts, and that legislature offset any costs associated with the 2014 study. This would allow those municipalities participating in the 2014 study to purchase or rent additional equipment if needed. Because this study would be conducted in a high-volume general election year, the Office wishes to ensure that the 2014 study participants are not limited to what the vendors can offer without cost.

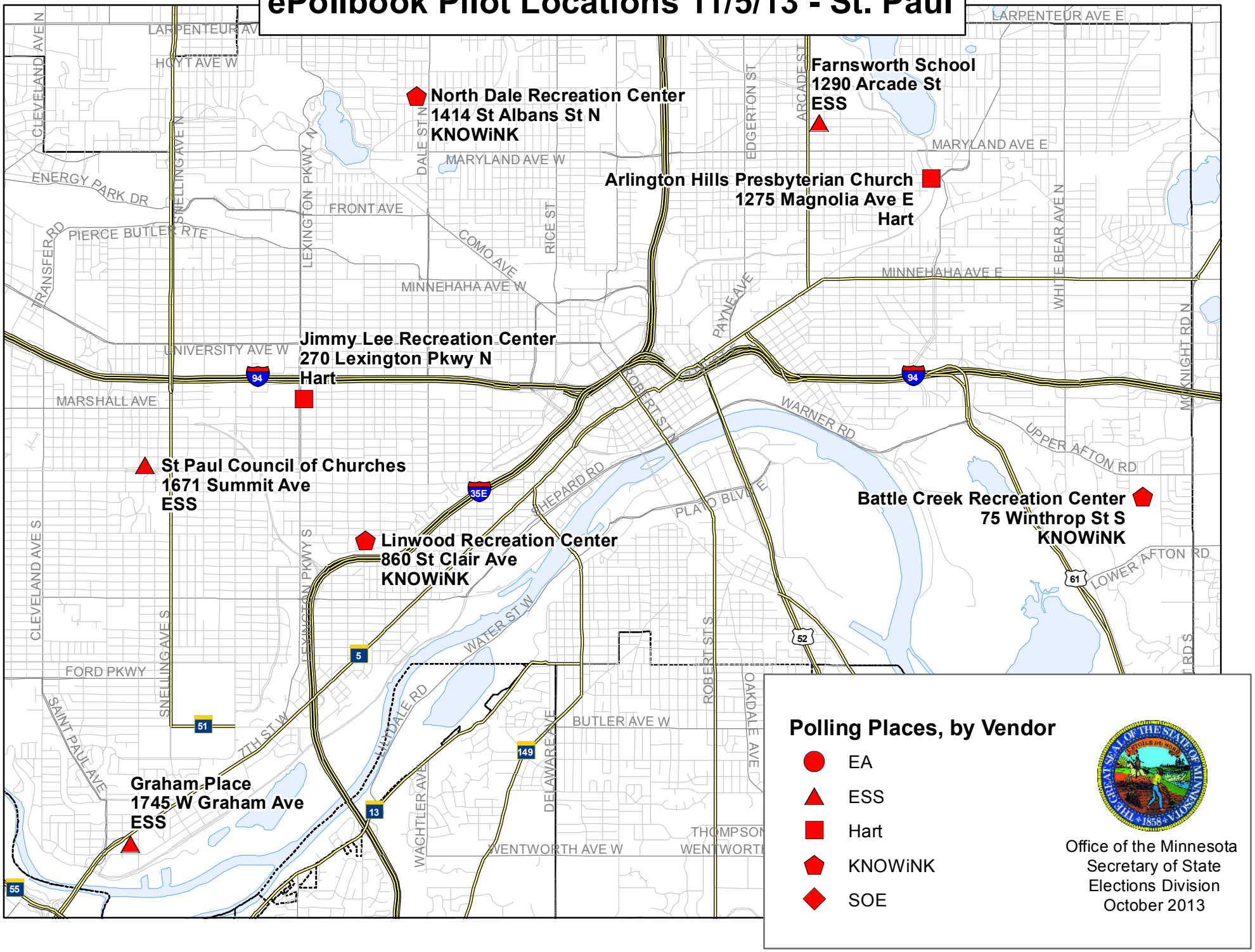
The Office is currently programming SVRS to utilize the upload and download of preregistered voter data features of electronic rosters, and this functionality will be ready to be used by the 2014 general election. A 2014 electronic roster study will allow counties to explore the use of this new feature and to examine the cost and time-savings associated with an automatic upload of voter history data.

Finally, the Office recommends that the legislature appropriate funds for a formal evaluation of the 2014 electronic roster study. A formal study could include empirical data regarding the time spent by pre-registered voters and same-day registrants using the electronic roster on election day and gather data regarding the time spent by municipalities processing voter data post-election. This would provide valuable information to municipalities considering implementing electronic rosters in the future.

XII. Appendix

1. Electronic Roster Polling Locations

ePollbook Pilot Locations 11/5/13 - St. Paul



ePollbook Pilot Locations 11/5/13

Moorhead/Dilworth

St Francis De Sales Church
601 15th Ave N
ESS

Dilworth Community Center
709 1st Ave NW
Hart

Brookdale Baptist Church
1401 40th Ave S
ESS & Hart

15TH AVE N
11TH ST N
40TH ST N
MAIN AVE SE
12TH AVE S
14TH ST S
40TH AVE S
10
94
75

St. Anthony

Chandler Place
3701 Chandler Dr
ESS

St Anthony Community Center
3301 Silver Lake Rd
SOE

Autumn Woods
2600 Kenzie Ter
SOE

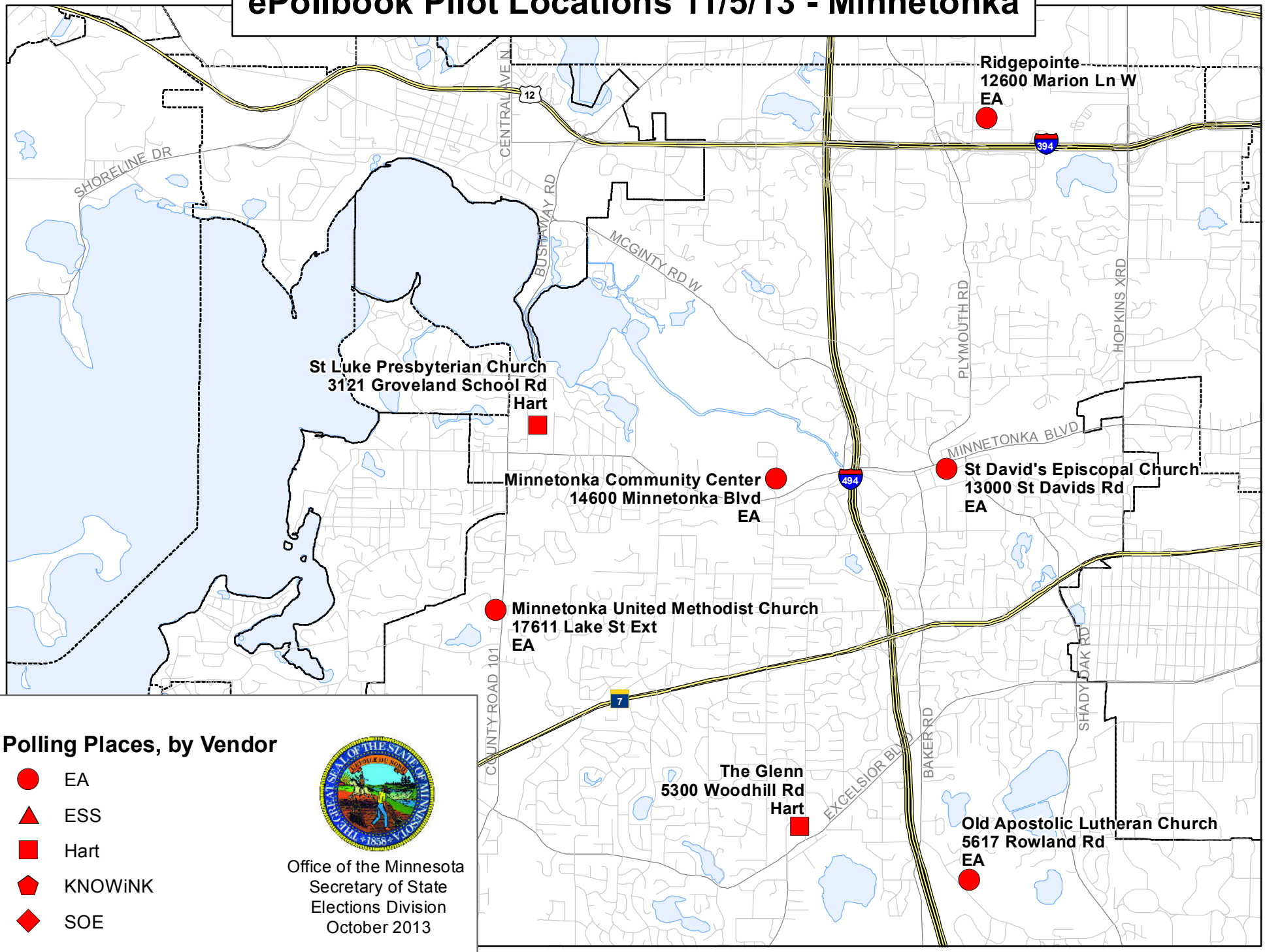
SILVER LAKE RD
37TH AVE NE
STINSON BLVD NE
SILVER LAKE RD NE
NEW BRIGHTON BLVD
29TH AVE NE
LOWRY AVE NE
35W
280

Polling Places, by Vendor

- EA
- ESS
- Hart
- KNOWiNK
- SOE

Office of the Minnesota
Secretary of State
Elections Division
October 2013

ePollbook Pilot Locations 11/5/13 - Minnetonka



2. Experimental Registration Applications

Hart Voter Registration Application

Minnesota Voter Registration Application

Complete lines 1 through 8. Please print clearly.

Personal Information & Qualifications

1. Are you a U.S. citizen? Yes ☐ No ☐

2. Will

If y ... **this form.**

IP
M
AB
election office use only

Will you be at least 18 on or before the next election? YES
Are you a US Citizen? YES
[redacted] ZAHRA IBRAHIM
[redacted] ST ANTHONY AVE #207
ST PAUL, MN 55104
VUID: SD006162659
Other Address
DOB: [redacted]/1983 SD:625 County:Ramsey
Phone: EMail:
I have a MN-issued driver's license or MN ID card number: [redacted]
Previous Name: ,
Previous Address:

Proof of Residence: MN Driver's License or ID
Record Number: **000060030**

3. last ... middle name ... suffix (Jr., Sr., II, III)

4. add ... city ... zip code

5. if n ... city ... zip code

6. date of birth (not today's date) ___ – ___ – 19___ ... county where you live

phone number ___ – ___ – ___ ... email address

7. mark one box and provide the number that applies to you:

- ☐ I have a MN-issued driver's license or MN ID card number: ☐☐☐☐☐☐☐☐☐☐☐☐☐
- ☐ I do not have a MN-issued driver's license or MN ID card.
  The last four digits of my Social Security Number are: XXX-XX- ☐☐☐☐
- ☐ I do not have a MN-issued driver's license, a MN-issued ID card, or a Social Security Number.

Registration Updates - Are you currently registered under a different name or address?

previous last name | previous first name | previous middle name

previous address where you were last registered | city | state | zip code

Read And Sign Only If All Parts Apply To You.

8. I certify that I:

- will be at least 18 years old on election day;
- am a citizen of the United States;
- will have resided in Minnesota for 20 days immediately preceding election day;
- maintain residence at the address given on the registration form;
- am not under court-ordered guardianship in which the court order revokes my right to vote;
- have not been found by a court to be legally incompetent to vote;
- have the right to vote because, if I have been convicted of a felony, my felony sentence has expired (been completed) or I have been discharged from my sentence; and
- have read and understand this statement, that giving false information is a felony punishable by not more than 5 years imp[redacted]00, or both.

sign here X[redacted] date: 11-5-2013

[redacted]ficial Use Only

W_____
P_____
SD_____
Initials_____

ID With Current Address
ID Number: _____
☐ MN Drivers License, Learners Permit, MN ID Card, or Receipt
☐ Tribal ID

Photo ID With Utility Bill or Fee Statement
Student Fee Statement or Utility Bill (type)_____
ID Number: _____
☐ MN Drivers License ☐ MN ID Card
☐ U.S. Passport ☐ U.S. Military ID
☐ Tribal ID ☐ Student ID

Other
☐ Vouched For
☐ Late Notice
☐ Previous Registration in Same Precinct
☐ Student ID With College List
ID Number: _____

ES&S Voter Registration Application

****
MINNESOTA VOTER REGISTRATION APPLICATION
****

Are you a U.S. citizen? YES
Will you be at least 18 on or before the next election? YES

[redacted] JASMINE S
[redacted]ORANGE AVE E
ST PAUL 55106

Mailing address:
DOB: [redacted]1990
School district (if known):
County: Ramsey County
Phone number:
Email address:_____

Mark one choice and provide the number that applies to you:

* I have a MN-issued driver's license or MN ID card number:
[redacted]

* I do not have a MN-issued driver's license or MN ID card.
The last four digits of my Social Security Number are:
XXX-XX-

* I do not have a MN-issued driver's license,
a MN-issued ID card, or a Social Security Number.

Registration Updates

Previous Name and Address (if applicable):

Yes

READ AND SIGN ONLY IF ALL PARTS APPLY TO YOU

I certify that I:
-will be at least 18 years old on election day;
-am a citizen of the United States;
-will have resided in Minnesota for 20 days
immediately preceding election day;
-maintain residence at the address given
on the registration form;
-am not under court-ordered guardianship in which the court
order revokes my right to vote;
-have not been found by a court to be legally
incompetent to vote;
-have the right to vote because, if I have been convicted
of a felony, my felony sentence has expired (been
completed) or I have been discharged from my sentence; and
-have read and understand this statement, that giving false
information is a felony punishable by not more than 5 years
imprisonment or a fine of not more than $10, 000, or both.

Signature:
[redacted]

Date: 11/05/2013

ELECTION JUDGE OFFICIAL USE ONLY

W/P/SD: W5 P4
Initials: [illegible]

3. Voter Certificates

SOE Voter Certificate Lables and Sheet

Election Date:	Election Name:	Precinct:

I certify that I am at least 18 years of age and a citizen of the United States; that I reside at the address shown and have resided in Minnesota for 20 days immediately preceding this election; that I am not under guardianship of the person in which the court order revokes my right to vote; have not been found by a court to be legally incompetent to vote, and have the right to vote because, if convicted of felony, my felony sentence has expired (been completed) or I have been discharged from my sentence; and that I am registered and will be voting in this precinct. I understand that giving false information is a felony punishable by not more than five years imprisonment and a fine of not more than $10,000, or both.

Voter Information	Voter Signature
1.	
2.	
3.	
4.	
5.	

KNOWiNK Non-Registered Voter Certificate

Non-Registered Voter's Signature Certificate

RAMSEY COUNTY

Oath of Minnesota Voter: I certify that I am at least 18 years of age and a citizen of the United States; that I reside at the address shown and have resided in Minnesota for 20 days immediately preceding this election; that I am not under guardianship in which the court order revokes my right to vote; have not been found by a court to be legally incompetent to vote, and that I have the right to vote because, if convicted of a felony, my felony sentence has expired (been completed) or I have been discharged from my sentence; and that I am registered and will be voting only in this precinct. I understand that giving false information is a felony punishable by not more than five years imprisonment and a fine of not more than $10,000, or both.

Voter Signature [redacted]

KNOWiNK Registered Voter Certificate

Voter Signature Certificate

2270869 - [redacted]1971
PETER THOMAS [redacted]
[redacted] HOYT AVE W

Oath of Minnesota Voter

I certify that I am at least 18 years of age and a citizen of the United States; that I reside at the address shown and have resided in Minnesota for 20 days immediately preceding this election; that I am not under guardianship in which the court order revokes my right to vote; have not been found by a court to be legally incompetent to vote, and that I have the right to vote because, if convicted of a felony, my felony sentence has expired (been completed) or I have been discharged from my sentence; and that I am registered and will be voting only in this precinct. I understand that giving false information is a felony punishable by not more than five years imprisonment and a fine of not more than $10,000, or both.

[redacted]

Hart Non-Registered Voter Certificate

11/05/2013 GENERAL ELECTION

SAINT PAUL W-1 P-2 (Jimmy Lee Rec Center)

NON - REGISTERED

I certify that I am at least 18 years of age and a citizen of the United States; that I reside at the address shown and have resided in Minnesota for 20 days immediately preceding this election; that I am not under guardianship of the person in which the court order revokes my right to vote; have not been found by a court to be legally incompetent to vote, and that I have the right to vote because, if convicted of a felony, my felony sentence has expired (been completed) or I have been discharged from my sentence; and that I am registered and will be voting only in this precinct. I understand that giving false information is a felony punishable by not more than five years imprisonment and a fine of not more than $10,000, or both.

[redacted] DANA CARRIE
[redacted] DUNLAP ST N
0550-SD-625
ST. PAUL W-1 P-02
SD006073714
[redacted]/1978
Voter Signature: [redacted]

[redacted] NICOLE SOONJA
1[redacted] DAYTON AVE
0550-SD-625
ST. PAUL W-1 P-02
SD006081827
[redacted]1978
Voter Signature: [redacted]

[redacted], MEGAN MARIE BOLDT
[redacted] HAGUE AVE
0550-SD-625
ST. PAUL W-1 P-02
SD006090007
[redacted]/1979
Voter Signature: [redacted]

[redacted] JOE OLIVER
1[redacted] DAYTON AVE
0550-SD-625
ST. PAUL W-1 P-02
SD006091054
[redacted]1994
Voter Signature: [redacted]

[redacted], WYRENE
[redacted] DUNLAP ST N #309
0550-SD-625
ST. PAUL W-1 P-02
SD006092956
[redacted]1941
Voter Signature: [redacted]

[redacted] HASSAN
[redacted] ST ANTHONY AVE #2107
0550-SD-625
ST. PAUL W-1 P-02
SD006094334
[redacted]/1988
Voter Signature: [redacted]

[redacted] MICAELA LYNN
[redacted] SELBY AVE
0550-SD-625
ST. PAUL W-1 P-02
SD006095206
[redacted]/1994
Voter Signature: [redacted]

[redacted] VICTORIA ANN
[redacted] HAGUE AVE
0550-SD-625
ST. PAUL W-1 P-02
SD006101232
[redacted]/1961
Voter Signature: [redacted]

[redacted] MONICKA DAWN
[redacted] SELBY AVE
0550-SD-625
ST. PAUL W-1 P-02
SD006101557
[redacted]1980
Voter Signature: [redacted]

Apt #2

[redacted] ANDREW GARLAND
[redacted] SELBY AVE #1ST
0550-SD-625
ST. PAUL W-1 P-02
SD006112917
[redacted]/1992
Voter Signature: [redacted]

[redacted] PATRICIA MARIE
[redacted] SELBY AVE
0550-SD-625
ST. PAUL W-1 P-02
SD006134304
[redacted]1954
Voter Signature: [redacted]

[redacted] DAVID ALLEN
1[redacted] IGLEHART AVE #3
0550-SD-625
ST. PAUL W-1 P-02
SD006155349
[redacted]/1959
Voter Signature: [redacted]

Hart Registered Voter Certificate

11/05/2013 GENERAL ELECTION

SAINT PAUL W-1 P-2 (Jimmy Lee Rec Center)

REGISTERED

I certify that I am at least 18 years of age and a citizen of the United States; that I reside at the address shown and have resided in Minnesota for 20 days immediately preceding this election; that I am not under guardianship of the person in which the court order revokes my right to vote; have not been found by a court to be legally incompetent to vote, and that I have the right to vote because, if convicted of a felony, my felony sentence has expired (been completed) or I have been discharged from my sentence; and that I am registered and will be voting only in this precinct. I understand that giving false information is a felony punishable by not more than five years imprisonment and a fine of not more than $10,000, or both.

[redacted] LUIS
[redacted] SELBY AVE
0550-SD-625
ST. PAUL W-1 P-02
2206561
[redacted]1963
2206561
Voter Signature: [redacted]

[redacted] JEFFREY M
[redacted] CARROLL AVE
0550-SD-625
ST. PAUL W-1 P-02
2252011
[redacted]1959
2252011
Voter Signature: [redacted]

[redacted] ELIZABETH ANNE
[redacted] SELBY AVE
0550-SD-625
ST. PAUL W-1 P-02
2228447
[redacted]1958
2228447
Voter Signature: [redacted]

[redacted] SUSAN KAY
[redacted] LAUREL AVE
0550-SD-625
ST. PAUL W-1 P-02
2337675
[redacted]1956
2337675
Voter Signature: [redacted]

[redacted] WAYNE G
[redacted] GRIGGS ST N
0550-SD-625
ST. PAUL W-1 P-02
2258693
[redacted]1957
2258693
Voter Signat[redacted]

[redacted] MARILYN JEAN
[redacted] LAUREL AVE
0550-SD-625
ST. PAUL W-1 P-02
2185993
[redacted]1945
2185993
Voter Signature: [redacted]

[redacted] DEBORAH ANN
[redacted] ASHLAND AVE
0550-SD-625
ST. PAUL W-1 P-02
2182036
[redacted]1948
2182036
Voter Signature: [redacted]

[redacted] JOHN JAMES
[redacted] HAGUE AVE
0550-SD-625
ST. PAUL W-1 P-02
2171613
[redacted]1950
2171613
Voter Signature: [redacted]

[redacted] WILLIAM MICHAEL
[redacted] HAGUE AVE
0550-SD-625
ST. PAUL W-1 P-02
2134759
[redacted]/1938
2134759
Voter Signature: [redacted]

[redacted] SARA ANN
[redacted] LAUREL AVE
0550-SD-625
ST. PAUL W-1 P-02
1324785
[redacted]1969
1324785
Voter Signature: [redacted]

[redacted] HEIDI MARIE
[redacted] HAGUE AVE
0550-SD-625
ST. PAUL W-1 P-02
2277628
[redacted]1973
2277628
Voter Signature: [redacted]

[redacted] LISA M
[redacted] HAGUE AVE
0550-SD-625
ST. PAUL W-1 P-02
2256247
[redacted]1963
2256247
[redacted]

ES&S Non-Registered Voter Certifiate

Voter's Signature Certificate

Name: [redacted] JASMINE S
ID: [redacted]
Address: [redacted] ORANGE AVE E
ST PAUL 55106
DOB: [redacted] 1990
Precinct: ST. PAUL W-6 P-04

Oath of Minnesota Voter
I certify that I am at least 18 years of age and a citizen o f the United States; that I reside at the address shown and have resided in Minnesota for 20 days immediately preceding this election; that I am not under guardianship in which the court order revokes my right to vote; have not been found b y a court to be legally incompetent to vote, and that I have the right to vote because, if convicted of a felony, my fel ony sentence has expired (been completed) or I have been dis charged from my sentence; and that I am registered and will be voting only in this precinct. I understand that giving fa lse information is a felony punishable by not more than five years imprisonment and a fine of not more than $10,000, or both.

[redacted]
Voter Signature

ES&S Registered Voter Certificate

Voter's Signature Certificate

Name: [redacted] LEE
ID: [redacted]
Address: [redacted] HAWTHORNE AVE E

DOB: [redacted] 1959
Precinct: ST. PAUL W-6 P-04

Oath of Minnesota Voter
I certify that I am at least 18 years of age and a citizen of the United States; that I reside at the address shown and have resided in Minnesota for 20 days immediately preceding this election; that I am not under guardianship in which the court order revokes my right to vote; have not been found by a court to be legally incompetent to vote, and that I have the right to vote because, if convicted of a felony, my felony sentence has expired (been completed) or I have been discharged from my sentence; and that I am registered and will be voting only in this precinct. I understand that giving false information is a felony punishable by not more than five years imprisonment and a fine of not more than $10,000, or both.

[redacted]

Voter Signature

Election Administrators Voter Certificate

Voter Roster

ANDERSON [redacted]
Address: [redacted] MAYFLOWER PL
Mailing Address:
DOB: Sep 15, [redacted]
Party:
Status:
Precinct:
MINNETONKA W-2 P-B-Q
Ballot Style: HOPKINS 270
voter ID: 11336[redacted]

Poll Location:
ISD 270 - ST DAVID'S EPISCOPAL C
HURCH

I certify that I am at least 18 years of age and a citizen of the United States; that I reside at the address shown and have resided in Minnesota for 20 days immediately preceding this election; that I am not under guardianship of the person in which the court order revokes my right to vote; have not been found by a court to be legally incompetent to vote, and that I have the right to vote because, if convicted of a felony, my felony sentence has expired (been completed) or I have been discharged from my sentence; and that I am registered and will be voting only in this precinct. I understand that giving false information is a felony punishable by not more than five years imprisonment and a fine of not more than $10,000, or both.

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