Paperless Voter Registration:

Innovations in Three States
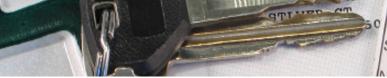
by Steven Rosenfeld

Introduction

The National Voter Registration Act of 1993 (NVRA) requires states to offer citizens the opportunity to register to vote at state motor vehicle and social service agencies.[1] After the NVRA's passage, some state election officials envisioned a "paperless" —or electronic—voter registration process at motor vehicle departments (DMVs), and obtained the needed legislation to accept digitized signatures to do so. However, this modernization initiative was generally postponed until the implementation of the Help America Vote Act of 2002 (HAVA), when a combination of political, fiscal, and technical challenges made modernization more likely in a handful of forward-looking states.

This memo profiles the experiences of election officials in using computer technology to automate voter registration procedures and transactions at motor vehicle agencies in their states. In a forthcoming publication, Project Vote will further analyze the technical issues and cost savings to be gained by extending these initiatives to universities and public assistance agencies. Fully implemented, "paperless" registration will increase the accuracy of registration rolls and help states achieve not just the letter but the spirit of the NVRA to reduce barriers to registration.

South Dakota, Kansas, and Delaware are three states that have instituted a range of automated procedures at state motor vehicle agencies to comply with the NVRA and to streamline election administration.[2] Once election officials in these states convinced DMV agencies to upgrade NVRA compliance procedures, and identified how these upgrades could be built upon existing information systems, improvements

in voter registration application processing time, accuracy of records, and cost savings occurred. The automated steps profiled here are among the most advanced in the country, and are models for other states.

Election officials in these states report that paperless procedures were neither difficult nor costly to implement at DMV agencies. Furthermore, while there are additional political and technical challenges to implementing similar automated voter registration practices at social service agencies, the lessons learned from DMV modernization show how paperless procedures can work in state social service agencies.

Voter Registration Modernization at DMVs

This memo profiles the efforts of state election officials to automate voter registration procedures at DMV offices in South Dakota, which initiated its practices in 2006; Kansas, which started its E-Motor Voter program in 2008; and Delaware, which commenced its E-Signature program in 2009. Senior election officials from these states were the primary sources for the information, descriptions, and analyses that follow.

South Dakota

Registration modernization, or using information technology to improve the voter registration process, is not a new idea. In 1994, one year after the passage of the NVRA, South Dakota Secretary of State Chris Nelson presented an NVRA implementation plan to his state legislature that included electronic delivery of voter registration information and signatures collected at DMVs to the county auditors who administer elections in his state. At that time, however, South Dakota lawmakers did not want to pay for a federal mandate. Nelson says his proposal "went into a file" until HAVA provided $100,000, enabling him to resurrect the initiative in 2004.

Nelson wanted DMV offices to create a portable document file (PDF) for each registrant applying through a DMV that would combine information taken from the driver's license application—which includes voter registration questions—with an image of the registrant's signature.

According to Nelson, the biggest implementation hurdle was determining the least invasive way to obtain and export the digitized image of a registrant's signature. The technical problem stemmed from South Dakota's use of proprietary software that combined an applicant's photograph and signature into a single image for driver's licenses. "We had to contract with that vendor for a module that would literally lift the signature part back out of that, and send it to our outfit," he says. "That was really the only tricky part."

Development and testing took approximately 18 months, and transmission of voter registration applications began in January 2006. The

process is not fully paperless: only the overnight data transmission to the state and county offices is. Driver's license applicants fill out paper forms, where, at the bottom, they are asked if they want to register to vote or update their registration information. The DMV license examiner then manually enters that data into a computer.

"Then on a nightly basis, through a batch process, we extract the appropriate data and create a PDF image of the voter registration card," Nelson says. "That is e-mailed out, or a link is e-mailed out, to the appropriate county election official. And then when they come in the next morning, they print out those PDF images."

County officials then manually input the voter's information into their computers, import the electronic signature image, and use both to generate registration acknowledgement cards and poll books. "They take the PDF and data enter from that," he says, explaining that it was important for county officials to be working from, and retaining, a primary source document compiled by the state containing the voter registration information.

When asked if it was redundant for both DMV examiners and county election employees to be entering the same voter registration information,

Since the program began in 2006, Nelson says, the number of residents who register or update their records at DMVs has grown seven-fold, from five percent to more than 35 percent of South Dakota's registered voters

Nelson says, "We could send them a data file along with that, but the volumes [of new registrants and registration updates] aren't great enough that any of them have really wanted that."

Creating a PDF at the DMV and sending it overnight has streamlined the process. On January 1, 2010, Nelson said, the state stopped sending cancelled registration paperwork between counties and began using this system to send paperless cancellation cards. (South Dakota voters who update their registrations after moving authorize the state to remove their previous registration records.)

The electronic transmission of voter registration applications from the DMV to county election officials has resulted in improved processing times and eliminated the need for the DMV to package the registration forms and mail or deliver them to county offices. Since the program began in 2006, Nelson says, the number of residents who register or update their records at DMVs has grown seven-fold, from five percent to more than 35 percent of South Dakota's registered voters. (Eighty-seven percent of the state's eligible voters are registered.) "The big advantage is usage," says Nelson. "As far as costs, I don't know if DMV is saving anything. But it is easier for them because it is a seamless solution."

Kansas

Kansas, like South Dakota, also envisioned the paperless processing of voter registration applications at DMVs in the early 1990s when it became clear that the NVRA would become law, says Kansas State Election Director Brad Bryant. At that time, the state was already eliminating paper at its DMVs and turning to digitized photographs and signatures. "We said, 'This would be great, we are going to be doing registrations through Motor Voter, so let's get rid of the voter registration paper, too,'" Bryant recalls. "But [the DMV] said, 'No. We're going to hand out paper registration cards,' because they did not want to slow down their driver's license process."

The DMV's position did not change for a dozen years—until after HAVA passed. In 2005 Bryant, who had been working with other state agencies to electronically obtain voter data under HAVA, brought up the topic with a new state motor vehicle director. "She jumped on it," he says. "My jaw dropped. She said, 'Let's just do a MOU [memorandum of understanding] and we'll build that program and get it going.'"

As in South Dakota, no new legislative approval was needed for Kansas' E-Motor Voter program because authority to accept a digitized signature from DMV had already been approved by legislators a decade earlier. But, unlike South Dakota, Kansas did not need to turn to HAVA or their legislature for line-item funding.

"This is one thing that surprises people," Bryant says. "We did it in-house with IT staff at the

Department of Revenue [which oversees motor vehicles], and some involvement from IT staff and a few of us in the election office and the secretary of state." Because Kansas had wanted to automate the processing of motor voter registrations, Bryant says he made sure the contract with its statewide voter database vendor included features that would make this possible. "We paid for it that way," he says.

As mentioned, Kansas' DMV had transitioned to a paperless driver's application process a decade before, positioning the agency to expand that process to voter registration. Driver applicants give their information to DMV examiners who manually enter the data into a computer following a series of prompts. Thus, to complete the voter registration process, Kansas' DMV only had to add four questions—about citizenship, age, political party affiliation, and phone number—to the driver's license application. Residents sign their name on a digital signature pad. The system is programmed to then compose an electronic registration record that is transmitted to local election offices.

Kansas' DMV collects the new and updated registration applications nightly and electronically sends them as a batch file (both text and image files) to the state election department's IT office and to its statewide database vendor (ES&S). The statewide system sorts registrations by county and that information "goes out the next morning," Bryant says. On the receiving end, county officials log on to the statewide database (called the Election Voter Information System or ELVIS) and go to a screen called

"agency central," where state agencies, including the DMV, report changes in the voter list such as new registrants, address updates, deaths and felonies. "Agency central is where it brings all these kinds of records up on the screen for the person in the county, and then they [the county election officials] have to process them," says Bryant. "They have to review each one, and [electronically] accept or reject it, or sometimes transfer it to another county."

Kansas went live with E-Motor Voter in August 2008. According to Bryant, it was not technically difficult to implement this program once DMV officials decided to participate. "We had a series of meetings," he says. "You design the thing. You write up a spec [specification]. Our vendor had to write up a spec on their end of it...You have them program the screens."

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Once the programming was completed, the system was tested. In the beginning there were some glitches, such as occasional new files or updates not being properly transmitted from the DMV. However, the DMV system is designed with a date-stamped audit trail that enables election officials to reconstruct a registration transaction sufficient to validate provisional ballots should an error not be corrected by Election Day. In July 2009 the state added online registration, which allows any Kansas driver's license holder to register or update information.

In contrast to South Dakota, where officials at the DMV and county election offices both still manually input voter registration information into their computers, in Kansas, data entry only occurs at the DMV. The process does lengthen the transaction for the DMV, Bryant says, "but they say their examiners like it [the on-screen template] because it is easier for them."
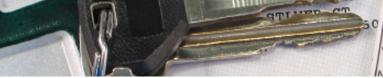
County election officials report that the paperless process has eased registration-related workloads and freed them to focus on other tasks. "I have had various counties tell me that it has cut the time that they have devoted to data entry for voter registration in half," says Bryant, who added that registration information now coming from the DMV tends to be more accurate than when the agency was handling the paper applications.

"This just goes into our file exactly as it comes from DMV," he says. "If there's a typo made by a driver's license examiner, then that comes in. But there is less of it than in the old days. You don't have to decipher handwriting on cards. It saves time for data entry by counties. It removes from the process one stage or opportunity for errors to be made."

Delaware

Like Kansas, Delaware election officials had wanted to implement fully-paperless registration at motor vehicle offices for many years, but had been prevented from doing so until a new DMV division director supported the project and HAVA funds became available to develop and implement it, says State Election Commissioner Elaine Manlove.

Curiously, Delaware's DMV had been sending *both* paper registration forms (new registrants and updates) and duplicate voter information in electronic formats to Delaware's counties for many years. Manlove explains that county officials would then collate, compare, and verify the paper and electronic information before adding registrants as active voters to official rolls. The problem, she says—and the impetus to seek a fully electronic process—was bottlenecks caused when the DMV did not provide all voter records.

"When I came to Elections, DMV was doing the data entry," she says. The biggest problem was DMV's paper registration forms went missing. "Their printers went down and they couldn't print the hard copy," she says, "or the voter left without signing, because clerks physically had to leave their station and go back to the printer and pick it up—it's a three-part form on an impact printer...Anything that could have gone wrong, went wrong."

Manlove first noticed the problem of missing DMV voter files in 2000, when, as election director of Newcastle County, 50 people won court

orders allowing them to cast ballots after they claimed they had registered at DMVs but their names were not in poll books. "I was stunned," she says, "because if 50 people waited to get a court order, then 500 people went home."

Manlove says she began talking to the state's Department of Technology and Information about improving the DMV process in 2001. The Transportation agency officials who oversee the DMV, however, resisted, saying changes in the registration procedures "would slow their line." That stance changed with the 2007 appointment of a new DMV division director who "got it," says Manlove. "She saw that it was not only going to not hurt her. It was going to help her."

Like her counterparts in Kansas and South Dakota, Manlove needed to understand DMV's technical landscape to identify the simplest way to electronically collect applicant signatures. The DMV's introduction of digital signature pads for credit cards provided that opening. "They did not want to give us real estate on their counter," notes Manlove. "But once they had the credit card device it made it easier for us to build on."

First, the DMV clerk manually enters into a computer the information from a driver's license application, including the NVRA voter registration questions. Then, if a resident is registering for the first time, or updating his or her information, the electronic signature touch-pad device lights up. This device—similar to a supermarket credit or debit card terminal—asks

registrants to: affirm their citizenship; choose or change political parties; sign (verifying the registration information), and accept the changes.

Delaware's system, called "E-Signature," removed the paper application from the DMV process. "The new system is data entry into an online system," Manlove says. "It's real time. The applications come across to us as soon as they are entered at DMV. We have their signature. It comes electronically, so staff at the election office can just process them online. There is never paper."

The E-Signature project took about a year to develop and implement, using approximately $600,000 in HAVA funds for programmers, computer hardware, and software. The project went "live" in February 2009, and in its first year generated notable efficiencies and cost savings.

"The first goal was to get all the [voter] applications from DMV, and we are [doing that]," Manlove says. "The fact that we save money, we save work, it is more accurate, and there are cost savings, were unintended consequences."

In a time of shrinking state revenues, the Delaware Election Department has been able to cut $200,000 from its budget by giving back vacant positions to the state, Manlove says. The DMV also cut its next proposed budget by

$50,000, citing savings from E-Signature. Because clerks no longer have to print and retrieve paper forms and have registrants sign them, the average DMV client transaction time fell from 90 seconds to 30 seconds.

Moving from DMVs to Public Assistance Agencies and Achieving the NVRA's Mandate

The efforts in South Dakota, Kansas, and Delaware to modernize voter registration procedures at state motor vehicle agencies is instructive in identifying how similar streamlined procedures could be implemented at DMVs in other states, as well as at state agencies required by the NVRA to offer voter registration to public benefit recipients.
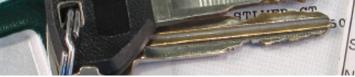
The experience in the three states highlights that leadership at the partner agencies, whether DMV or social services, must support modernization as a goal to help their staffs more efficiently administer the voter registration process.

Once that political hurdle has been cleared, state election officials should identify where in each agency's application or intake process the NVRA-re-

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quired questions about voter registration can be asked, and how technically to capture the information needed for voter registration, including a signature.

Minimizing manual data entry, so that it occurs only once per registrant, also appears to be an important step in cutting administrative costs and in improving the accuracy of registration information.

On the technical side, the election officials interviewed emphasize the importance of housing all voter registration data—both text and images—in a centralized location, as opposed to having data elements reside in various agency computer systems. HAVA's mandate that the states implement "a uniform, official, centralized, interactive, computerized statewide voter registration list," has created new opportunities for the states to develop an election systems infrastructure that facilitates this goal.

The progress made at DMVs in these states illuminates the challenges in bringing more automated registration processes to social welfare agencies. Election officials will need to analyze the application process for differing social welfare programs to determine where in their intake process voter registration

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information can be uniformly and efficiently collected.

South Dakota's Secretary of State Chris Nelson believes "it would be difficult" to expand the process developed at the DMV to the state's social agencies. Unlike the DMV, social service agencies have various assistance programs, each with different application forms and computer programs. "I don't know how defined their computer systems are," he says. "At the driver's agency, there is one application form. It doesn't matter what you are applying for: there is one form. That is pretty easy to deal with. At social service agencies there are a whole lot of different kinds of forms. So that is going to be a hiccup."

Nelson highlights a concern that has been echoed by other state election officials. However, if the experiments in automating voter registration at the DMV detailed here are any indication of the positive improvements in complying with the NVRA, and of the cost savings that can be achieved through paperless procedures and transactions, there is much to gain in making these improvements at other state agencies.

State election officials must also analyze the data systems used to support public assis-

tance programs to identify how registration information can be electronically compiled, formatted, stored, and sent to state and county election officials. Currently, Kansas' social service agencies rely on paper voter registration forms. But Kansas State Elections Director Brad Bryant said he would support instituting a paperless process there, as at the DMV, if those agencies were interested and had an information infrastructure in place to build on.

"I'd like to [try to do that]" says Bryant. "Then you are back to that step one: getting administrative approval for it. The last time I talked to our social service agencies about this, their application process was not electronic. So they were not ready to do it. I would like to have that discussion again… As soon as they are ready to move toward paperless application and renewal processes in those offices, I am ready to set them up."

On the front-end of the registration process, Delaware State Election Commissioner Elaine Manlove said automating registration at the social agencies meant analyzing their application procedures. "What we really need to do is find out, at what stage in the intake does this fit?" she says. "You have to integrate what you need into their business. That is the part we are trying to research right now."

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But the experience of creating a paperless process at the DMV suggests the way forward for these NVRA agencies, Manlove says. "I really want to be able to do it. I want them to understand that we are going to make their jobs easier. That is the way I want to sell it. Because it worked that way at DMV."

Notes

[1] Pub. L. 103-31, Sec. 2, May 20, 1993, 107 Stat. 77; see U. S. Department of Justice, "About the National Voter Registration Act," especially Section 5, available online: http://www.justice.gov/crt/voting/nvra/activ_nvra.php#1993.

[2] Nine states reportedly have electronically automated aspects of voter registration practices at state DMVs, according to a survey by the Brennan Center for Justice. See: http://www.brennancenter.org/content/pages/voter_registration_modernization_states.

About the Author

Steven Rosenfeld is a consultant who has written about elections and voting rights for many years. He is author of *Count My Vote: A Citizens Guide to Voting* (AlterNet Books, 2008), and has contributed to many publications, national news outlets, and websites.

About Project Vote

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