



Robert Daly / Getty Images

Online Voter Registration

Trends in development and implementation

Overview

States across the country are increasingly adopting online voter registration to reduce costs, enhance government efficiency, and build more complete and accurate voter lists. This expansion has yielded a diverse and growing collection of best practices and problem-solving strategies for electronic systems and their implementation. States continue to improve online registration options for Americans and to see gains well beyond the economic merits.

A recent survey by The Pew Charitable Trusts identifies growing trends and emerging issues in online voter registration. The first part of this brief examines operating procedures, benefits, and innovations, in particular:

- Expanded options for citizens without a driver's license or state-issued ID.
- Optimization for use by voters on their mobile devices.
- Multilingual services and accessibility features for people with disabilities.
- Integration of systems with local election offices.
- Increased convenience and efficiency for voters and administrators.
- Reliable safeguards for protecting personal information and preventing fraud.

The second section highlights the opportunities and challenges that states are navigating, such as:

- Building effective relationships between motor vehicles agencies and election offices.
- Standardizing data and system interoperability between states and local jurisdictions.
- Collecting and tracking performance data, such as measuring usage trends over time.
- Driving a greater share of the voter registration activity online.
- Reducing election offices' reliance on paper in certain administrative functions.

This brief reflects information collected from the 20 states that, as of November 2014, offered voters the opportunity to complete a registration application entirely online: Arizona, California, Colorado, Connecticut, Delaware, Georgia, Illinois, Indiana, Kansas, Louisiana, Maryland, Minnesota, Missouri, Nevada, New York, Oregon, South Carolina, Utah, Virginia, and Washington.¹

Background

Online voter registration was pioneered by Arizona in 2002. Six years later, Washington state launched a similar system. Largely as a result of the successful implementation in those states, the practice has gained momentum. By the end of 2012, 13 states had adopted online voter registration services.² In January 2014, Pew released “Understanding Online Voter Registration,” a survey that was the first to provide comparative information on the implementation of electronic registration and to detail the design, functionality, usage, and achievements of state systems.³

Since then, seven more states have launched online voter registration.⁴ In July 2014, Pew surveyed these new states and followed up with the original 13 for updates on their systems. Pew also asked local election officials in each state to provide context and perspective.

Online voter registration in 2014 and beyond

The states surveyed answered a broad range of questions regarding the design, development, and implementation of their systems, including financial, technical, and operational considerations and benefits. Responses from the survey highlight some key factors and emerging priorities related to online voter registration in 2014.

Expanding access to voters without a state-issued ID

Before 2014, online voter registration typically required an applicant to have a corresponding record in the database of a state’s motor vehicles agency, from which signatures would be electronically transferred to election officials to complete an application. But by the end of 2014, five states offered citizens without a state ID or driver’s license the opportunity to complete a voter registration over the Internet.⁵

Minnesota does not collect signatures for voter registration purposes. Instead, the state accepts and verifies an applicant’s Social Security number to confirm identity and eligibility, and then adds the record to its rolls. Both Delaware and Missouri accept stylus pen or finger-based signatures from touch-screen devices, such as tablets and smartphones, in lieu of a signature transferred from the motor vehicles agency.

Other states are also expanding access to online registration systems. Colorado modified its system to allow voters to update their records by providing their Social Security numbers; driver’s license numbers are not required. Maryland allows military and overseas voters to apply online with just a Social Security number.

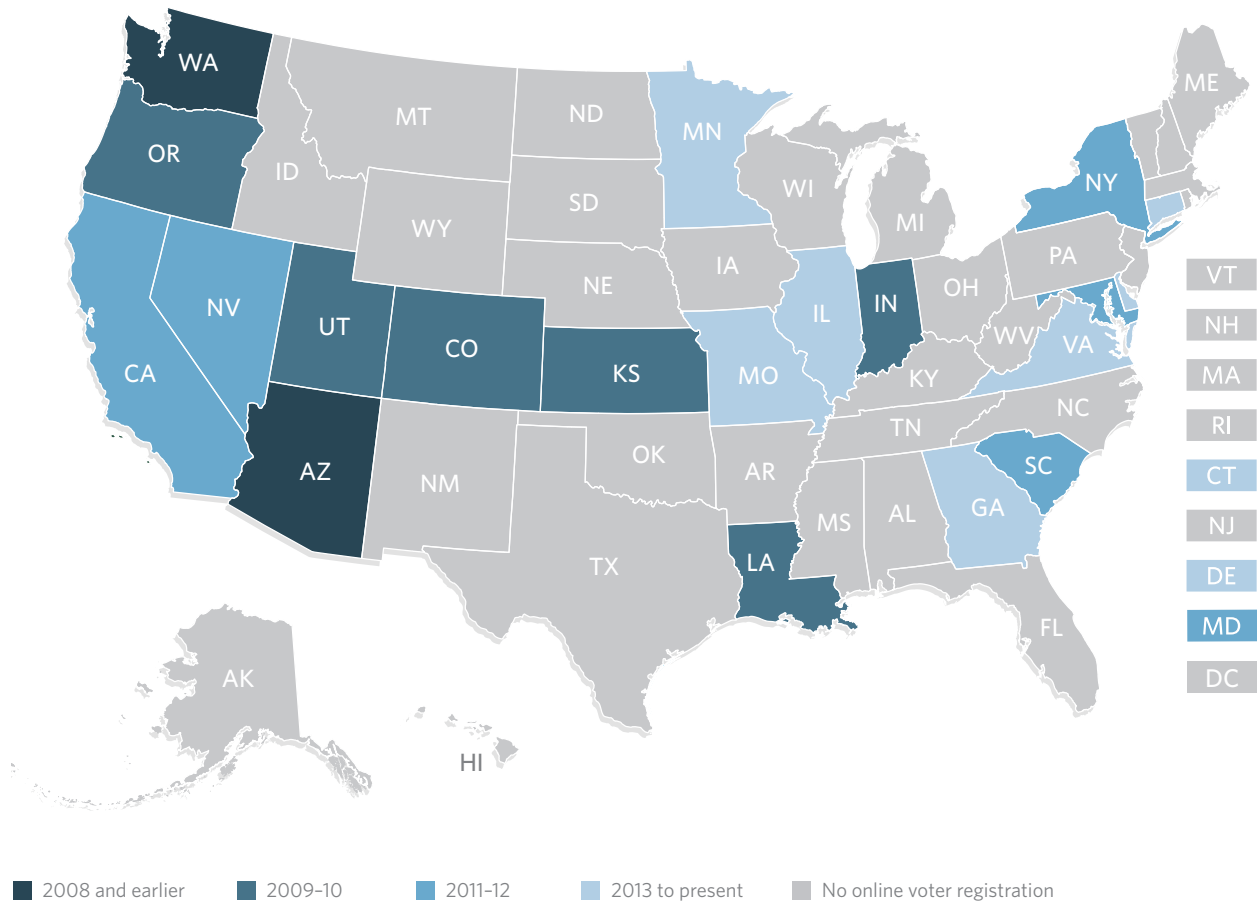
Mobile optimization

Another growing trend is mobile-optimized websites that allow voters to register through their smartphones and other mobile devices. Since 2013, several states either added mobile capabilities to their site functions or launched with a mobile version already in place. Others are developing mobile versions. Ahead of the 2014 election, an average of 15 percent of Colorado’s online registration transactions were submitted via a mobile device. Nine states offer mobile-optimized versions, and four more expect to have such versions available in the near future.⁶

Figure 1

The Availability of Online Voter Registration Increased in 6 Years

States' adoption of electronic systems, 2008-14



Note: Online voter registration was offered in 2 states in 2008; by the end of 2014, it was available to nearly 110 million eligible voters in 20 states.
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Accessibility features and multilingual services

Accessibility support for people with disabilities varies across state registration websites. Some states reported that their sites met basic requirements of the federal Americans with Disabilities Act, but three pursued further access measures. Election officials in California worked closely with the California State University's Accessible Technology Initiative during the design and development phases to increase their system's usability for people with disabilities.⁷ Maryland recently revised its site after working with the University of Baltimore to improve accessibility and usability, and Indiana's site utilizes special text-to-speech software for users with visual impairments or reading challenges.

Additionally, 10 states reported that their sites were optimized for non-English languages.⁸ For instance, California offers online voter registration services in Spanish, Chinese, Hindi, Japanese, Khmer, Korean, Tagalog, Thai, and Vietnamese.

Collaboration with local jurisdictions

How effectively state online registration systems interact with local election offices can affect how quickly and efficiently applications are processed and voter rolls are updated. The survey found that only a few states consulted local election officials about the adoption and design of online voter registration. Some states, such as California and Oregon, set up committees to receive feedback on system development from local administrators.

In many states, local election officials are integral to processing online voter registration applications. Seventeen states noted that all registrations had to be reviewed by the appropriate local election office before being entered into the statewide database. Two states (Arizona and South Carolina) automatically upload electronic transactions to their databases, bypassing local verification unless a problem arises with a registration.⁹

Almost all states reported that online registrations were transferred electronically to local jurisdictions, either instantly or in daily batches. However, some states still use paper when processing registration transactions. New York, for example, receives applications electronically but then prints paper forms to send to local administrators. The state has begun rolling out electronic data transfer on a county-by-county basis, with statewide deployment expected to be completed in the near future.

Overall, local election officials expressed strong support for electronic registration processes. Some touted the cost savings from reducing reliance on paper. They also appreciated the improved accuracy associated with removing paper from the process and giving citizens greater control of the information in their voter records.



In addition to the huge amount of labor cost savings, the [online registration] system provides for more efficient, accurate voter registration. The staff isn't trying to decipher handwriting because the applicant is entering their (own) information."

Sherrie Swensen, Salt Lake County clerk

Beyond cost savings: Convenience, accuracy, and efficiency

Most states reported that development and implementation costs for online registration systems were comparatively minimal. In Pew's 2014 survey, states cited an average cost of \$240,000 to build and implement their systems. In this brief, with several more states reporting, the average cost increased by \$9,000 to \$249,000.¹⁰ In addition, a few states reported that building costs also included other online upgrades such as look-up tools and ballot request functions.

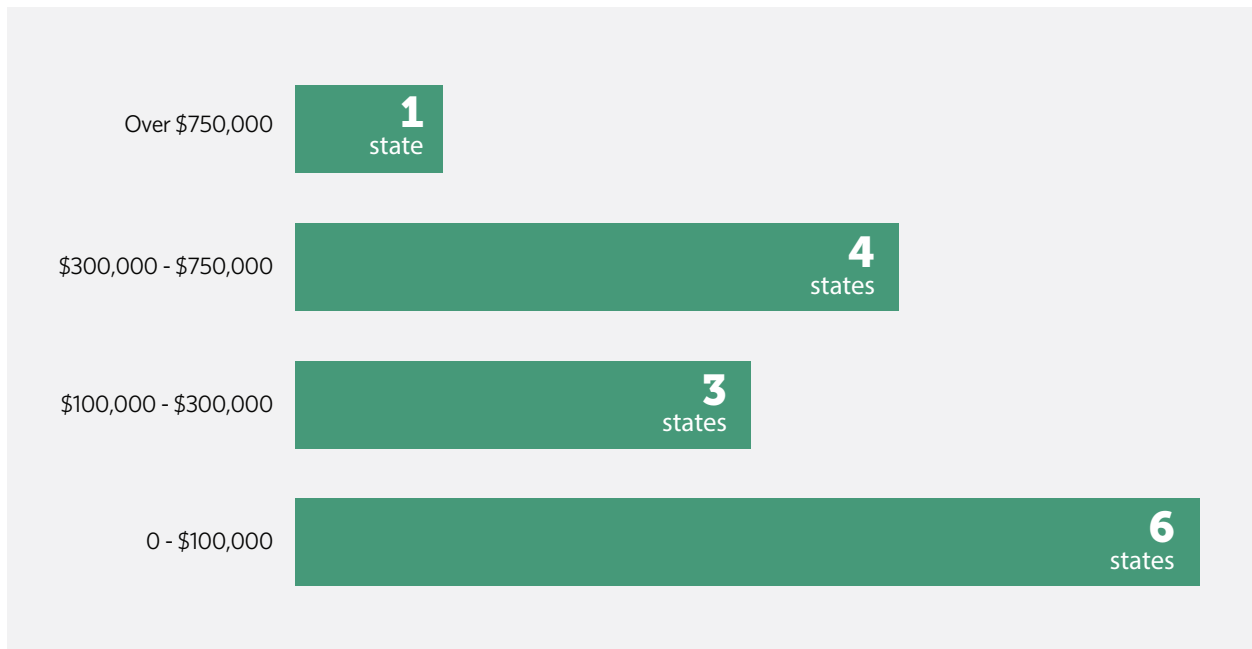
In the previous survey, reducing costs was a prominently touted benefit of online voter registration. States reported spending between \$0.50 and \$2.34 less per electronic transaction compared with paper.¹¹ In 2012, California saved almost \$2 million as a result of implementing online registration, quickly recouping the costs to build the system.¹² The original states continue to see financial benefits from reducing reliance on paper forms. Most of the new states have not yet conducted a comprehensive assessment of cost savings.

Other benefits, however, are accruing to new and old online registration states alike. Thirteen states highlighted "voter satisfaction" and "reduced burdens on election officials" as the major benefits of their systems, followed by cost savings (12 states) and accuracy (11 states). In particular, local election officials praised the improved integrity of the voter rolls that results from reduced dependency on illegible handwritten applications.

Figure 2

Most States Spent Less Than \$300,000 for Online Voter Registration Systems

Reported costs were often below \$100,000



Notes: Participants were asked, "What was the total cost to design, build, and implement online voter registration in your state?" Arizona did not answer the question. Delaware, Kansas, and Missouri said they used only staff time and have not calculated costs. Connecticut and Georgia had not determined total costs at the time of the survey.

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Online platforms remain secure

Studies consistently show that online voter registration systems effectively protect voters' private information. All states employ safeguards meant to thwart cyberattacks, and to date, no state has reported a security breach. Encryption, Captcha and other programs that protect against automated hacking, routine audit logs, secure networks, unique identifiers, and other strategies help impede unauthorized access. None of these security measures can be applied with paper registration forms. Seven states pointed to reduced risk of fraud as a key benefit of online voter registration.

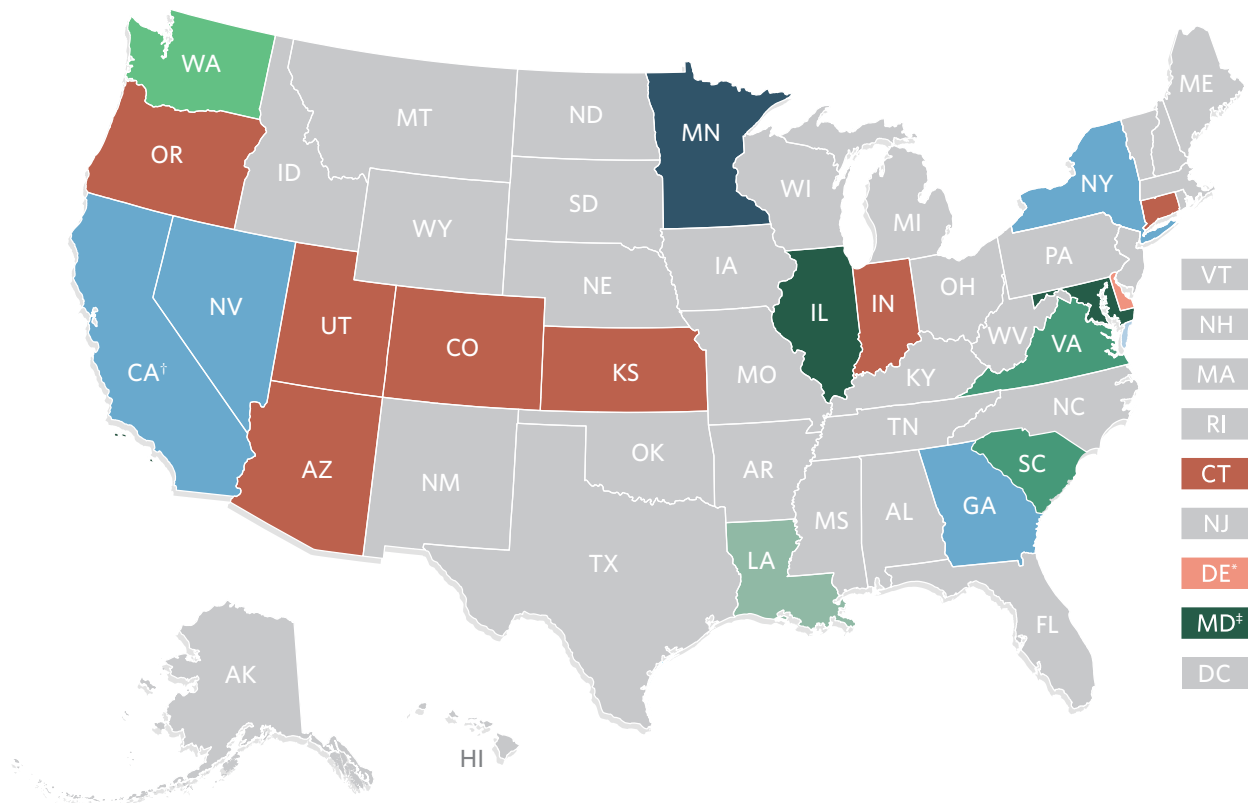
“ There are attempts to breach our system all the time, but we have appropriate firewalls and security measures. As far as we know, Colorado's online voter registration system has never been accessed by unauthorized users.”

Judd Choate, Colorado director of elections

Figure 3

States Accept Various Forms of Identity Verification for Online Voter Registration

Driver's license and state ID numbers are most common



- Date of birth plus ZIP code
- Date of birth plus driver's license or state ID number
- Date of birth plus driver's license or state ID number plus last 4 digits of Social Security number
- Date of birth plus driver's license or state ID number or last 4 digits of Social Security number
- Date of birth plus driver's license or state ID number plus full Social Security number
- Date of birth plus driver's license or state ID number plus issuance date plus last 4 digits of Social Security number
- Date of birth plus driver's license or state ID number plus audit code
- Date of birth plus driver's license or state ID number plus issuance date

Notes: Missouri did not provide data on required identifiers.

*Driver's license or state identification numbers can be used as an alternate login.

† Voters without a California driver's license or identification number can enter their information online, and the website will generate pre-filled voter registration applications that the users can print, sign, and mail.

‡ Voters covered by the Uniformed and Overseas Citizens Absentee Voting Act need only a date of birth and the last four digits of their Social Security numbers.

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Challenges and opportunities in online voter registration

Strategies are still needed for collecting and managing registration data, promoting online registration, and reducing reliance on paper. These policies could encourage stronger data integration and standardization among agencies and jurisdictions and, in particular, expand real-time verification of data and streamlined information transfers.

Online registration and motor vehicles agencies

Most state election offices had to work closely with their motor vehicles agencies to create the link to driver's license and state identification records. A real-time connection between the motor vehicles agency's database and the voter registration system can help reduce problems by alerting applicants immediately during a registration transaction if a discrepancy exists between the information they are submitting and the information on file with the state. Fifteen states reported having a real-time connection with their motor vehicle database.

Collaboration between election officials and motor vehicles agencies can improve and streamline processes and may especially help enhance voter registration services at motor vehicles agencies, commonly known as Motor Voter. In Washington, applications submitted at the state's motor vehicles agency, the Department of Licensing, are automatically uploaded to the online voter registration database every day, significantly expediting the processing of Motor Voter transactions.

More efficient data exchange between state elections and motor vehicles agencies can also improve identification of duplicate records and address changes, helping to keep voter lists up-to-date and accurate. Many states have viewed online voter registration as the first step toward more sophisticated information management across government systems.



(Online voter registration) improved the processes for other agencies, such as changes to the digital driver's license software."

Mary C. Fontes, Help America Vote Act business analyst, Arizona secretary of state's office, elections division

System compatibility with local jurisdictions

Decentralized administrative structures—those in which counties maintain significant autonomy from the state—can create challenges in implementing electronic registration processes. If counties and jurisdictions within a state use different vendors or data standards, coordinating a single, statewide system can take extra time and testing and can affect how data are transferred between state and local officials.

Illinois reported that the use of real-time, electronic data transfer varied by county depending on the county's level of integration with the state system. Washington state overcame the challenge of multiple local voter registration vendors by developing an information protocol well before implementation and detailing the fields and formats in which voter data were to be delivered to their system for all vendors. According to the state's election officials, working through the data transfer process in advance was crucial to ensuring seamless management of information from the state system to local vendors.

Tracking system performance

To better understand who is using online registration and how well the systems are working, many states are making data collection a priority, tracking metrics such as new registrations versus updates, the use of mobile versions, and cost savings. Colorado, for instance, compiles comprehensive online registration information, including new registrations; updates; and mobile, desktop computer, and total transactions on a daily basis. This allows the state to identify trends in online registration leading up to Election Day.

Some states, however, are still struggling to collect and manage such data. A handful of states reported that they could not differentiate between updates and new registrations that occurred online. In addition, many could not distinguish usage data between the mobile and regular websites, limiting their ability to measure how voters access their information online.

Online voter registration across states

In some jurisdictions, including Arizona and California, a high percentage—more than 50 percent in some instances—of voter registration applications have been submitted electronically.¹³ However, among other states that provided data to answer this survey question, online transactions accounted for between 5 and 30 percent of their total registration activity. States that recently introduced online registration had lower initial numbers—unlike some of the states that adopted online registration early, which had high usage from the outset—but those figures steadily increased over time. For instance, Minnesota saw 4 percent of new registration applications come in electronically after the state’s system launched in September 2013, but by February 2014 that amount had increased to 12 percent.

Some local administrators expressed the need for better promotion of online registration systems. One factor that may hinder adoption by voters is third-party registration drives, particularly by political campaigns and advocacy groups, which sometimes do not coordinate with state systems. To address this, Nevada and Washington worked with groups, including Rock the Vote, to direct their outreach efforts through online systems. Rock the Vote built tools that allow third-party organizations to gather enough information to contact voters and encourage them to vote while keeping personal data that are not relevant to voter drives, such as driver’s license numbers, private.¹⁴ Groups can integrate a state’s online registration service into their interfaces and use tablets in the field and unique URLs to track the progress of registration drives. All of these steps help direct third-party activity to an official government portal and dissuade the use of paper forms.

“ I am really looking forward to this year’s election to see how much this will reduce [Election Day registration]. We are going to really push with the colleges to remind students to go online to save time.”

Patty O’Connor, Blue Earth County, Minnesota, director of taxpayer services

Reliance on paper

The pervasive use of paper in the registration process can be costly and inefficient compared with paperless alternatives. Online voter registration reduces the use of paper and printing but in some cases does not eliminate it entirely, often because of current government policies, data integration challenges, or administrative tradition.¹⁵

Most local administrators said they continue to print out voters' applications for filing even if the registration process is conducted completely online. Some believed that a hard copy file was still a required legal record, discouraging more efficient electronic means of data management. Elsewhere, as in Missouri, voters submit their applications through the online system, but then the state sends paper copies to counties.

Conclusion

Online voter registration is becoming an ever more efficient, convenient, and popular tool for voters and election officials as states develop increasingly effective and inclusive processes. But states are still confronting some shortcomings and challenges as they upgrade and expand their systems. As more states adopt online registration, Pew will continue to research and document emerging best practices for design and implementation.

State election officials who are interested in implementing or improving online voter registration systems may visit pewtrusts.org/elections for more information.



Endnotes

- 1 This brief defines online voter registration as any Web-based system through which a voter can complete the registration process without having to fill out any paper forms. If such forms are printed and processed by state or local election officials after the voter has completed the online application, the system still qualifies.
- 2 Arizona, California, Colorado, Indiana, Kansas, Louisiana, Maryland, Nevada, New York, Oregon, South Carolina, Utah, and Washington.
- 3 The Pew Charitable Trusts, "Understanding Online Voter Registration" (January 2014). http://www.pewtrusts.org/-/media/Assets/2014/01/28/Understanding_Online_Voter_Registration.pdf?la=en.
- 4 Connecticut, Delaware, Georgia, Illinois, Minnesota, Missouri, and Virginia.
- 5 California, Delaware, Minnesota, Missouri, and Virginia
- 6 Arizona, California, Colorado, Connecticut, Delaware, Georgia, Illinois, Indiana, and Utah offered mobile-optimized registration sites by October 2014. Louisiana, Maryland, Minnesota, and New York reported that mobile versions were being built.
- 7 Office of the California Secretary of State, "Bowen Upgrades Award-Winning Online Voter Registration Application, Adds 8 More Languages," news release, April 21, 2014, <http://www.sos.ca.gov/administration/news-releases-and-advisories/2014-news-releases-and-advisories/db14-041>.
- 8 Arizona, California, Colorado, Connecticut, Illinois, Maryland, Nevada, New York, Oregon, and Washington offer online registration services in at least one other language besides English. As of December 2014, Delaware, Georgia, Indiana, Kansas, Louisiana, Missouri, Minnesota, South Carolina, Utah, and Virginia do not have this capability.
- 9 Missouri did not provide data on coordination with local jurisdictions.
- 10 Of the states that were able to calculate and report cost data, the average cost to build a system was \$249,005. Three states were notable exceptions: Kansas and Missouri reported no expenses, and California estimated its cost as \$1.8 million.
- 11 A Joint Research Project of the Washington Institute on the Study of Ethnicity and Race (WISER), University of Washington, Seattle, and the Election Administration Research Center (EARC), University of California, Berkeley, "Online Voter Registration Systems in Arizona and Washington: Evaluating Usage, Public Confidence and Implementation Processes," April 1, 2010. http://www.pewtrusts.org/-/media/legacy/uploadedfiles/pes_assets/2010/onlinevoterregpdf.pdf.
- 12 The Pew Charitable Trusts, "Understanding Online Voter Registration."
- 13 Ahead of the 2012 election in California, more than 50 percent of new voter registration applications were received online. See more details at <http://www.nascio.org/awards/nominations2013/2013/2013CA1-CA%20COVR%20NASCIO%202013.pdf>. Election officials in Maricopa County, Arizona, have reported that more than 70 percent of all registration activity is conducted electronically each year. Maricopa County Elections Department, "Arizona Online Voter Registration" (PowerPoint presentation to the National Conference of State Legislators, Chicago, Aug. 6, 2012, <http://recorder.maricopa.gov/voteroutreach/pdf/english/NCSL%20%20Online%20Voter%20Registration.pdf>).
- 14 Rock the Vote, "Rock the Vote Debuts Direct Online Voter Registration Submission With Washington State," news release, July 16, 2012, <http://www.rockthevote.com/get-informed/press/releases/rock-the-vote-debuts-direct-online-voter-submission.html>; and Adam Mazmanian, "Washington State Ramps Up Voter Registration With Facebook Push," *National Journal*, July 16, 2012, <http://www.nationaljournal.com/tech/washington-state-ramps-up-voter-registration-with-facebook-push-20120716>.
- 15 The California secretary of state's office estimated savings of \$2.34 per online registration compared with paper processing costs before the 2012 general election.

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External reviewers

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