



# Understanding Online Voter Registration

## Overview

Online voter registration saves taxpayer dollars, increases the accuracy of voter rolls, and provides a convenient option for Americans who wish to register or update their information.<sup>1</sup> Online voter registration was first offered in Arizona in 2002. Six years passed before the next state, Washington, implemented an Internet-based system, but since then the pace of adoption has accelerated. As of 2013, 15 states have online voter registration, and five others are in the process of building systems.<sup>2</sup> These 20 states account for approximately 104 million eligible voters, or about 47 percent of all eligible voters in the nation.<sup>3</sup>

Despite the proven benefits and rapid expansion of online voter registration over the past five years, data on the design and operation of these systems are limited. To address this research gap, The Pew Charitable Trusts in June 2013 conducted a survey of the 13 states that had online registration at that time: Arizona, California, Colorado, Indiana, Kansas, Louisiana, Maryland, Nevada, New York,<sup>4</sup> Oregon, South Carolina, Utah, and Washington.<sup>5</sup>

This brief provides a summary of the survey's major findings in five areas—cost, implementation, voter convenience, system management, and online security—and then examines ways in which these states would like to improve online voter registration. Overall, the responses indicate that the registration systems are cost-effective for states, convenient for voters, and secure because they reduce the potential for fraud while improving the accuracy of voter rolls.

## Cost

Although creation of an online voter registration system involves some initial expenditures, they are modest and are quickly surpassed by the savings generated. In fact, 12 of the 13 states surveyed reported that cost cutting is one of the greatest benefits of these systems.

- In 11 of the 13 states, the average cost to build a system was \$240,000. Two states were notable exceptions: Kansas reported no expense, and California estimated its cost at \$1.8 million.
- California's online system launched slightly more than a month before the registration deadline for the 2012 general election. During that short time, nearly 900,000 Californians conducted online registration transactions and the secretary of state's office estimated savings of \$2.34 per online registration—or about \$2 million—compared with paper processing costs. In addition, state printing and postage costs fell approximately \$500,000 due to fewer registration-related mailings. These total savings of \$2.5 million exceed the \$1.8 million cost of implementing the system, and the state expects similar outcomes in 2014.<sup>6</sup>
- Maricopa County, AZ (home to Phoenix), reported almost \$1.4 million in savings from online voter registration during the four-year period from 2008 to 2012.<sup>7</sup>

“ Election officials can process online registrations in a matter of seconds, saving taxpayers tens of thousands of dollars each election cycle, while reducing errors and cleaning up the voter registration database. Having an online voter registration system is a no-brainer—users love it, election officials love it, and taxpayers love it.

—Mark J. Thomas, *Utah chief deputy and director of elections*

## Implementation

A majority of the states surveyed sought legislative approval before implementing online voter registration, and most built their systems internally.

- Ten states passed legislation before building online registration systems.<sup>8</sup>
- Seven states had their information technology staffs design and build their systems, three used outside vendors, and three used a combination.
- In nine states, online registration systems are housed with the chief state election official (typically the secretary of state or lieutenant governor). In the remaining four states, two systems are based in motor vehicle agencies, one operates from the Department of Information Technology, and one is managed by the chief election official but housed with a vendor.

“ It fits with the expectations of the modern voting public, especially young voters, that they should be able to conduct government transactions online.

—Brad Bryant, *Kansas state election director*

## Voter convenience

States employ a variety of tools to make online registration as convenient as possible, such as using multiple languages, optimizing systems for mobile devices, and providing confirmation after an application has been submitted.

- Eight states make online voter registration available in Spanish; Washington also provides Chinese and Vietnamese language options.
- Four states optimize their systems for use with mobile devices, and another plans to add this feature in 2014. Two additional states cite mobile optimization as a primary goal for future upgrades to their systems.
- All states conclude their online voter registration applications with confirmation that the application has been submitted. Eight states include a confirmation number that the voter can use to verify the status of the application, and six states send an email confirming that the application has been submitted.
- Voters in five states are notified in real time if they submit online registration applications but are determined to already be registered.
- Ten states give online registrants the option of providing email addresses. Seven of those states protect those addresses from public disclosure.



Online voter registration is convenient, easy, and secure. Nevada doubled its new registrations prior to the 2012 election when online voter registration became available statewide for the first time.

—Scott F. Gilles, Nevada deputy secretary for elections

## System management

States vary in how they manage their systems, including how online applications are reviewed and approved, how information is transmitted between agencies, and how electronic applications are tracked and recorded.

### Application review

- Eleven states have an election official—typically at the county or local level—review all online voter registration applications.
- In two states, an election official reviews only those applications flagged by the system as problematic.

### Signature verification

- All states surveyed require a citizen to have a record and, importantly, a signature on file with the motor vehicle agency (or equivalent licensing and identification agency) in order to register to vote online.
- Twelve states have a real-time connection with the motor vehicle agency through which the applicants' identities are verified.<sup>9</sup> In one state—Kansas—records are sent and verified in batches.

## Unique identifiers

- All states surveyed require citizens to submit unique identifiers linking the applicant to his or her motor vehicles record in order to access the online registration system.
- All states require a voter to submit a date of birth and driver's license or state ID number.
- Four states also require the last four digits of the registrants' Social Security numbers, and one requires a full Social Security number.
- Two states require the issue date of the license or state ID card.

## Information verification

- In two states, Arizona and New York, if a voter's address does not match the address on file with the motor vehicle agency, the applicant can submit a current address through the online voter registration system, which will automatically update the motor vehicle agency record.

## Linking online voter registration to local jurisdictions

- Eight states transmit online registrations electronically to local election officials in real time.
- Five states send the information periodically in batches. Four do this electronically, and one—New York—sends paper forms.

## Data tracking

- Five states can differentiate between new and updated registrations in online transactions.
- Twelve states can break down total registration activity between online and paper applications.



Online voter registration has been a terrific improvement for Washington state voters. It improves access to and accuracy of the voter rolls, saves precious time for our elections administrators, and saves money.

—Lori Augino, *Washington state director of elections*

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## Online security

All states have security procedures and protocols in place, including data encryption and tracking, while limiting those who have access to their system internally. No state has reported a security breach, including Arizona, where voters have been registering online for more than a decade.<sup>10</sup>

- Seven states highlighted reduced opportunities for fraud as a major benefit of online voter registration.
- Eleven states confirmed that they run their online registration systems through secure networks.
- Eleven states confirmed that they use audit logs to track and record any activity in the system.
- Ten states confirmed that they warn online applicants that fraudulent registration is a criminal act.
- Nine states confirmed that they employ encryption and/or anonymization tools to protect data transmitted electronically.



Online voter registration has saved Colorado counties millions of dollars since April 2010, and has provided our citizens with a level of customer services they would expect from a for-profit provider. As an added bonus, Coloradans don't have to give their confidential information to strangers on street corners.

—Judd Choate, *director of Elections Division, Colorado State Department*

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## Improving online voter registration

There is always room for improvement in the evolution of technical systems. Several states shared lessons from their implementation experiences as well as future aspirations for online voter registration.

- Four states expressed interest in optimizing their online voter registration systems for use on mobile devices.
- Two states highlighted the need to optimize their systems for a variety of Web browsers.
- Two states hope to add more language options.
- Four states experienced some challenges coordinating with their motor vehicle agencies and stressed the importance of clear communication between agencies.
- One state—Colorado—recommends building in extra prelaunch testing to an implementation timeline.

## Conclusion

Eleven of 13 states surveyed reported greater voter satisfaction and reduced burdens for election officials as a result of online voter registration.<sup>11</sup> At the same time, voters' impressions of these online systems have improved. Recent polling data show 65 percent of registered voters support allowing online voter registration.<sup>12</sup> As more states allow online registration, Pew will continue to track and document state differences in implementing and managing the systems, and the general impressions of the election officials who use them.

Those interested in implementing or improving online voter registration systems may contact The Pew Charitable Trusts' election initiatives for more information. Visit our website at [pewstates.org/elections](http://pewstates.org/elections). Follow us on Twitter using #electiondata and get the latest data dispatches, research, and news by subscribing today.

Pew is committed to working with states and other partners to achieve the highest standards of accuracy, cost-effectiveness, convenience, and security in America's system of election administration.

Appendix

Survey Summary: State Online Voter Registration Systems

	AZ	CA	CO	IN	KS	LA	MD	NV	NY	OR	SC	UT	WA
Legislation passed	✓	✓	✓	✓		✓	✓			✓	✓	✓	✓
Built by state IT staff	✓		✓		✓			✓	✓	✓		✓	
Built by vendor				✓							✓		✓
Built both by state IT staff and by vendor		✓				✓	✓						
Resides with chief election official	✓	✓	✓	✓		✓		✓		✓		✓	✓
Resides with motor vehicle agency					✓				✓				
Resides with state Dept. of Information Technology											✓		
Managed by chief state election official but resides with vendor							✓						
Available in language other than English	✓	✓	✓				✓	✓	✓	✓			✓
Optimized for mobile device	✓		✓	✓								✓	
Confirmation screen when application is complete	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Confirmation number provided when application is complete	✓	✓		✓	✓		✓	✓		✓			✓
Email confirmation sent when application is complete	✓	✓				✓		✓				✓	✓
Applicant notified in real time when already registered			✓					✓		✓	✓		✓
Option to provide email	✓	✓	✓	✓		✓	✓	✓		✓		✓	✓
Email remains confidential		✓	✓	✓		✓	✓					✓	✓
Official reviews all applications		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
System flags applications for review	✓										✓		
Real-time connection with DMV	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓

	AZ	CA	CO	IN	KS	LA	MD	NV	NY	OR	SC	UT	WA
Date of birth must be submitted when applying	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Driver's license or state ID number must be submitted when applying	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Last four digits of SSN must be submitted when applying		✓					✓	✓	✓				
Full SSN must be submitted when applying											✓		
Address updated at DMV when voter registration updated	✓								✓				
Registrations transmitted in real time to local election officials	✓	✓	✓			✓		✓			✓	✓	✓
Registrations transmitted to local election officials in batches				✓	✓		✓		✓	✓			
State can differentiate new vs. updated registrations	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
State can differentiate online vs. paper registrations			✓	✓	✓		✓					✓	
Run system through secure networks	✓	NR	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓
Use audit logs	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Use warning screen about fraudulent activity	NR	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓	NR	✓
Use encryption to protect data	✓	NR	✓	NR	✓	✓	✓	NR	✓	✓	✓	✓	NR

Note: This survey was conducted May-June 2013 using surveymonkey.com. Thirteen states were surveyed: Arizona, California, Colorado, Indiana, Kansas, Louisiana, Maryland, Nevada, New York, Oregon, South Carolina, Utah, and Washington. "NR" means no response. States did not respond to these questions.

Source: The Pew Charitable Trusts, Survey of Online Voter Registration States, June 2013.

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## Endnotes

- 1 Matt Barreto, Bonnie Glaser, and Karin MacDonald, "Online Voter Registration (OLVR) Systems in Arizona and Washington: Evaluating Public Usage, Public Confidence and Implementation Processes," a report for the Pew center on the states (2010), [http://www.pewstates.org/uploadedFiles/PCS\\_Assets/2010/online\\_voter\\_reg.pdf](http://www.pewstates.org/uploadedFiles/PCS_Assets/2010/online_voter_reg.pdf); and Christopher Ponoroff, "Voter Registration in a Digital Age," Brennan Center for Justice, New York University School of Law (2010), [http://brennan.3cdn.net/806ab5ea23fde7c261\\_n1m6b1s4z.pdf](http://brennan.3cdn.net/806ab5ea23fde7c261_n1m6b1s4z.pdf).
- 2 Connecticut, Georgia, Hawaii, Illinois, and West Virginia have passed legislation authorizing online registration and are in the process of building their systems.
- 3 2012 eligible voter data are from the United States Election Project: [http://elections.gmu.edu/voter\\_turnout.htm](http://elections.gmu.edu/voter_turnout.htm). A few states allow existing voters to update their registrations electronically but have not yet authorized new registrations.
- 4 In New York, the system allows an online voter registration process through the Department of Motor Vehicles. Although this process is entirely online for the user, paper is still involved because the applicants' forms are then printed out by the DMV and mailed to local boards of election for processing. The state plans to end this practice soon in favor of an electronic connection. By early 2014, the DMV will begin transmitting applications electronically to the county boards for their review and approval.
- 5 Minnesota and Virginia implemented online voter registration after the survey was completed in June 2013.
- 6 "NASCIO 2013 State IT Recognition Award Nomination," Information Technology Division, California Secretary of State's Office, <http://www.nascio.org/awards/nominations2013/2013/2013CA1-CA%20COVR%20NASCIO%202013.pdf>.
- 7 See "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>.
- 8 Online voter registration bill language varied from state to state. Two of the most common issues addressed in legislation were authority to transfer and use signatures on file with state motor vehicle agencies for voter registration purposes and authority to eschew paper applications (which are written into law in some states) and conduct a voter registration transaction entirely electronically.
- 9 A real-time connection between the online voter registration system and the state motor vehicle database can allow for instant confirmation that a voter meets the requirements to register electronically. If the voter does not have a record with the state's motor vehicle agency, he or she can be directed to a paper application.
- 10 Several states chose not to respond to certain security questions in the survey: New York did not respond to the question regarding secure networks; Arizona did not respond to the question on audit logs; and Indiana, Nevada, and Washington did not respond to the question on the use of encryption and anonymization tools. California officials did not respond to any of these questions and stated they preferred to not discuss security in a public survey. Additionally, Arizona, Indiana, and Utah did not respond to the question about warning online applicants that fraudulent registration is a criminal act.
- 11 Indiana and New York did not respond to the question about voter satisfaction. New York and Utah did not respond to the question about reduced burdens for election officials.
- 12 "Public Attitudes on Upgrading Voter Registration," The Pew Charitable Trusts, forthcoming.

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## For further information, please visit:

[pewstates.org/elections](http://pewstates.org/elections)

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