



Category: Digital Government: Government to Citizen

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## Executive Summary

Pennsylvania recently improved its government-citizen customer service in the elections arena by launching an online voter registration system that is open to all eligible Pennsylvania voters. The Pennsylvania Department of State (DOS) wanted to create an application that was easy to use, contained all legally required information, included measures to reduce errors and did not exclude any voters, regardless of whether the applicant had a driver's license or state photo ID. Moreover, the department wanted the data submitted through the application to seamlessly integrate with the counties' existing system for processing electronic voter registrations from the Pennsylvania Department of Transportation. (PennDOT).

Pennsylvania currently has a voter registration gap of approximately 1.5 million voters. The Pennsylvania Department of State is aiming to close that gap through various initiatives that make it easier for voters to register and streamline the process that counties use to approve registrations. High volume elections like the presidential election generate hundreds of thousands of paper voter registration forms. Pennsylvania's 67 counties must convert those paper forms to electronic records - a process that is time-consuming and expensive. Often, handwritten paper forms are incomplete or contain errors that prevent otherwise eligible voters from becoming registered or create delays in the voter registration process.

The team actively engaged election stakeholders outside of DOS, such as county election directors, the elections advocacy community and Pennsylvania citizens. In an effort to ensure that the final product would be universally useable, DOS engaged the Center for Civic Design to review the text and the logical flow of information. The Center also field tested the application in an urban and a rural community and provided additional feedback that informed the end product. This highly interactive development process engaged stakeholders outside of the agency and tested the final product with end users before it was launched, resulting in a better product overall and one that has been embraced by Pennsylvania voters in overwhelming numbers.

Pennsylvania's online voter registration system launched in August 2015. As of May 2016, total online voter registrations (both new and change applications) are 392,363. For calendar year 2016, total online voter registrations are 335,509. By contrast, paper applications in 2016 are 149,564 and PennDOT electronic applications are 332,376. In this short time frame, the online voter registration application is on track to reduce the number of paper transactions and provide a smoother, more accurate method of registering voters.

## Concept

### The business problem

According to the most recent U.S. Census Bureau estimates, Pennsylvania has an eligible voter population of 9,676,900 but currently only has 8,273,703 registered voters. These numbers represent a voter registration gap of approximately 1.5 million residents. Starting in 2015, the Pennsylvania Department of State (DOS) began working on several initiatives to improve civic engagement and increase voter participation with the goal of narrowing the registration gap. Before August 2015, voters had two primary methods to register to vote: 1) fill out a paper form and deliver it in-person or by mail to their county voter registration office; or 2) register electronically when they update or obtain a driver's license at one of Pennsylvania's Department of Transportation driver's licensing or photo license centers.

Paper voter registration forms, especially in high volume election cycles such as presidential elections, are time-consuming and expensive to process. Under the Help America Vote Act (HAVA), states are required to establish a statewide electronic voter registration database. As a consequence, all paper transactions must be converted into electronic format and must be incorporated into the statewide database. Pennsylvania has a "bottom up" system, meaning that voter registration is the province of the counties, and each of Pennsylvania's 67 counties must add, modify or cancel registrations for voters residing in the county.

Often, handwritten paper forms are incomplete or contain errors that prevent otherwise eligible voters from becoming registered. In many cases, submission of a paper form causes the counties to do additional investigation or mail correspondence to the voter to obtain missing information or clarify illegible requirements. Moreover, filling out a paper form generally requires the voter to mail the form with postage. Responding to correspondence from the county to correct errors generally would require additional mail and postage.

### The Solution

The department wanted to improve customer service both by making it easier for citizens to register and streamlining the processing of registrations for Pennsylvania's 67 counties. In April of 2015, DOS began to develop an Online Voter Registration application for the residents of Pennsylvania. The Bureau of Management Information Systems (BMIS) within DOS began developing the online voter registration application using the SCRUM method of software development. Drawing on the Agile principles of SCRUM, the team actively engaged county election directors, the elections advocacy community and the residents of Pennsylvania in a highly interactive development process.

From an applicant's perspective, the goals of the development process were to create an application that was easy to use, contained all legally required information, included measures to reduce errors and did not exclude any voters, regardless of whether the applicant has a driver's license or state photo ID. DOS consulted the Center for Civic Design, a nationally-recognized organization that reviews government forms to ensure that they are universally useable and compliant with assistive devices for users with disabilities.

If the information entered in the online voter registration application does not match the record on file at PennDOT or if the voter has no record, the applicant can print, sign, and mail his or her registration using the application. DOS took this opportunity to redesign its cumbersome paper voter registration form so that both the paper and the online form used identical language. The Center reviewed the text of the application and provided recommendations to simplify and organize the information logically. As part of its review, the Center conducted focus groups to test in an urban and a rural setting and recommended additional modifications to improve usability. DOS also solicited feedback from advocacy groups and county election directors on the text.

Additionally, DOS incorporated the USPS address validator web service to ensure the accuracy of the address entered by the applicant. When the applicant enters his/her address(es), the Online Voter Registration system calls the USPS address validator web service and presents the validated address(es) back to the user to select. This assists the county election directors and the applicant by guaranteeing that USPS is able to deliver communications in a timely manner. The end users of the backend processing (the counties) participated in several user review sessions and provided valuable information to the developers before the final product was launched.

From a county election director perspective, the goals of the development process included having the application seamlessly integrate with the counties' existing voter registration processing of electronic registrations from the Pennsylvania Department of Transportation. The online voter registration application leverages a web service to access PennDOT's system to validate the voter's information. This real-time interaction provides the county elections staff with a copy of the digitized signature on file for the registrant along with the rest of the application. To ensure the security of the transaction and the Statewide Uniform Register of Elections (SURE) system, the transaction is provided to the county staff through a one-way replication called the Dynamics Import Process. A successful match will result in the voter's signature being transferred to DOS and attached to the voter's record.

The project team addressed data and web security from the first planning meetings and incorporated it into the system design. A layered approach to security was implemented including taking steps to leverage the Commonwealth's enterprise security tools and security code reviews. The team built anti-fraud measures into the application, and ultimately all applications are reviewed for integrity by county election offices before approval. The

application was built to be compatible with screen readers and assistive devices used by voters with disabilities. It is also mobile adaptive for smart phones or tablet use.

## Significance

As the nation's 6<sup>th</sup> largest state, voter registration in Pennsylvania is a high-volume, mission critical service because all citizens must be registered before they are permitted to vote. Pennsylvania experiences a significant volume of voter registrations each year, but presidential election cycles are by far the most voluminous. For example, in 2012, 710,225 voters submitted paper registration forms either in person, through the mail or through voter registration drives. In 2014, paper registrations through these means totaled 167,732. In the absence of an electronic option, counties must individually data-enter all of those registrations to process them.

The target audience for the use of the online voter registration application includes not only those who are not registered, but also currently registered voters who wish to update their information including changing their name, address or party affiliation.

Pennsylvania's online voter registration system launched on August 27, 2015. As of May 2016, total online voter registrations since launch date, both new and change applications are 392,363. For calendar year 2016, total online voter registrations are 335,509. By contrast, paper applications in 2016 are 149,564 and PennDOT electronic applications are 332,376. With projections for 2016 to total 1,980,808 registrations this would represent 110% of the highest registration numbers over the past five years. Thus, online voter registration is outpacing other forms of voter registration. The system has been widely adopted as residents of all age groups, counties, and political parties have registered or changed their registration online. On March 21, 2016, Facebook promoted voter registration and DOS received 37,358 applications in a 24-hour period and 16,517 the next day. On March 28, 2016, the deadline to register to vote before the April 26, 2016 primary, DOS received 56,275 applications.

DOS embarked on a coordinated earned media and social media campaign to publicize the new voter registration application and encourage use. The department did not have any budget funds set aside for a communications plan. Media coverage of the launch included 699 print and online news stories and 65 radio and television segments. Digital messages were designed and promoted on Facebook and Twitter. The department issued a series of press releases when certain user milestones were reached, e.g 5,000, 50,000, 100,000 users and periodic updates on social media were issued. On National Voter Registration Day, September 22, 2015, the department hosted a Twitter town hall to promote the use of the online voter registration system. More than 20 users participated in the Twitter town hall. The department received more than 50 mentions and gained 30 new followers.

## Impact

Pennsylvania's online voter registration system provides an easy and convenient way for eligible voters to register or update their registrations. Online voter registration also improves efficiencies and timeliness of voter registration processing, reduces errors on voter registrations and saves time and money for the county election offices processing the ballots. The Pew Charitable Trusts estimated, per a study in 2015, that the average cost savings per application is between \$0.50 and \$2.30 for an online registration versus paper. Thus, Pennsylvania's savings in the first seven months are estimated to fall between \$158,137 and \$727,430 for a project that cost \$200,000 to develop. The bulk of those costs savings are realized by Pennsylvania's counties.

The process that engaged stakeholders outside of the agency during development and tested the final product with end users before launch resulted in a better product overall and one that has been embraced by Pennsylvania voters in overwhelming numbers.

The statistics provided for 2016 usage demonstrate the value of the application and its ease, convenience and usability. We anticipate that it will increase voter participation as well.

Pennsylvania's Online Voter Registration Application can be accessed at [register.votespa.com](http://register.votespa.com). The improved customer service is part of Governor Tom Wolf's "Government That Works" initiative. In 2015, the project team received a Pennsylvania Excellence in Technology Award for the Online Voter Registration system.