NSGIC
GEO-ENABLED ELECTIONS

CASE STUDY #3

WASHINGTON

Washington State Director of Elections, Lori Angino, shares the why and who, as well as successes and challenges of the state's process for geo-enabling their elections system.

WHY?

In April 2014, Secretary of State Kim Wyman convened a group of IT professionals, Election Administrators, and County Auditors with the purpose of reviewing the system we had at that time. Knowing what we did that day, no one in the room would have built what we had. It was at that meeting that we decided to undertake an Elections Modernization Project that would later result in the issuance of an RFP for VoteWA, which utilizes GIS data to assign voters to their precincts.

Currently, each county maintains a street file for precinct assignment. These street files are prone to human error and often are outdated due to the need for them to be manually updated as precinct boundaries change, and new streets and developments are constructed.

We are collecting address point data from each county so that we can initialize our system with their most recent data. We intend to build an automated process that will import each county's latest data as they publish it to their data portal.

A GIS allows us to identify mis-precincted voters much more quickly than before. We previously relied on street lines and address ranges to place voters, which can be much less accurate than placing voters inside of precinct polygons. By creating a much better (and automated) method to identify these issues, we can prevent the issue from ever reaching the voter.

We can identify errors in our current system, but not without several data file exchanges or extracts out of the election management system and into GIS software. Additionally, not every county has the same level of resources to devote to such an undertaking.

Any errors that are found are corrected either manually in an individual voter's record or through a correction to the county's street file.

A GIS allows for relationships between a voter's location and the precinct assignment to be updated much more easily and without as much user intervention. The user can simply update the boundaries and update all impacted points - rather than updating each address point precinct assignment or each street range's precinct assignment.

It also allows for analysis based on an area that the user is interested in even if that area isn't directly related to elections or voting. As long as the user has the boundaries of that area identified, the points within that boundary can be selected and analyzed (for instance,

an analysis could look at voter turnout across a neighborhood whose boundary does not follow precinct or city lines).

WHO?

It is not productive to reinvent the wheel. Implementing an election system that is integrated with GIS takes time, resources, and will. The State of Washington has a Geospatial Program Office that provides several geospatial tools, including the Washington Master Address System (WAMAS). Utilizing the tools and data from the Geospatial Program Office, and collaborating with them was essential to this process.

We collected our County Auditors' data. If they didn't have the data, they usually have a relationship with their county leadership to get that data for improving election administration.

IMPROVEMENTS

We believe that using GIS will assist us in providing automatic and same-day registration for voters in Washington State. It will allow us to immediately know the exact location of that voter and assign them to the correct precinct. Additionally, if the voter provides an unknown address or has a non-traditional address, GIS will allow us to 'drop a pin' on a map so that the voter can find out about and vote on the issues they are eligible for. Previously, a non-traditional address would require manual entry, which could result in incorrect precincting.

CHALLENGES

As with almost all projects, financial limitations are a prime factor in decision making with this project. More staff could be hired, more time could be spent working on the project, and more hardware resources could improve the quality of the project, deliver it quicker, and create better training for its use.

Small counties tend to have fewer resources. That also means they have fewer GIS resources and existing data. Additionally, their data refresh rates often vary.

Tribal lands also tend to have more approximate locations. We have several counties that have large areas of tribal lands. However, we are currently creating new relationships to improve elections for those living on tribal lands.

Additionally, with 40 stakeholders all contributing their own datasets, data standardization has become an issue. In particular, we have noted that each county tends to use its own rendition of its boundaries, and they do not always line up exactly with the boundaries mapped by the neighboring counties. We created a workgroup specifically to identify and rectify every possible source of variation in the coding of the data. While this work is not complete, the work is progressing smoothly.

SUCCESSES

Washington has had many successes, and we can offer some advice to other states interested in a similar endeavor. Usually, localities know their land the best. Leverage cities and counties to provide the data they use for emergency management or tax collection to help get you started.

As we went down this road, we did not think about the non-election benefits in creating election geospatial data layers. Our focus has been completely on elections and redistricting.

Please do feel free to contact Stuart Holmes, one of our staff from the Washington team if you have any questions. Thank you.

Stuart Holmes| VoteWA Support Manager
Office of the Secretary of State
(360) 725-5794 | www.vote.wa.gov