GEO-ENABLED ELECTIONS PHASE ONE/YEAR TWO

Phase One Report

The National States Geographic Information Council (NSGIC) launched the first phase of the Geo-Enabled Elections project on October 1, 2017. The first phase concluded on September 30, 2019.

The purpose of the Geo-Enabled Elections project is to facilitate the adoption of geographic information systems (GIS) and related processes to enhance election management and citizen engagement across the United States. For this project, NSGIC developed and promoted best practices for replacing the current street file precinct tables with a more precise, accurate, and accessible GIS-based approach to better manage all facets of elections.

Introduction

An electoral system with integrity - enhanced by accurate, authoritative geographic data and presented clearly and transparently - has never been more important. NSGIC's Geo-Enabled Elections project is encouraging state governments to replace non-spatial 'address file' tables with the visual and analytical advantages of election precinct and voter data in a natively geographic information systems format. The project leverages the strong working relationships NSGIC has with state geospatial information officers and coordinators and national nonprofits in the technology and elections spaces.

> *"Having been involved with GIS and election administration for over four decades, it's great to see NSGIC take up the mantle and move the conversation forward. The benefits to election officials at state and local levels are enormous as they stare at the next round of redistricting and the resulting turmoil that will impact their offices. I'm grateful to have more people on the bandwagon."*
> *- Kim Brace*

Eight of these senior state geographic information systems managers make up the project's steering group:

Bert Granberg - Chair
Director of Analytics, Modeling, and
Data Services
Wasatch Front Regional Council

Neil MacGaffey
Director of Mass GIS, Executive
Office of Technology and
Security Services

Erin Fashoway
GIS Coordinator
State of Montana

Ken Nelson
Geospatial Information Officer
State of Kansas

Ekaterina Fitos
Former Geospatial Information Officer
State of Florida

Dan Ross
Chief Geographic Information
Officer
State of Minnesota

Shelby Johnson
Geographic Information Officer
State of Arkansas

Josh Tanner
GIS Analyst/Web Administrator
State of Oregon

Ten individuals advise the project on matters of election processes and policies:

Kimball Brace
Election Data Services

Michael McDonald
University of Florida

Veronica Degraffenreid
North Carolina Elections Operations

Jennifer Morrell
Consultant

John Dziurlaj
Hilton Roscoe

Tammy Patrick
Democracy Fund Voice

Greg Grube
Wisconsin Elections Commission

Paul Stenbjorn
Election Information Services

Royce Jones
GDSI

Sarah Whitt
Formerly with Wisconsin Elections
Commission

The project brings election actors together in cross-agency collaboration to use GIS to strengthen elections systems in municipalities, counties, and states across the country.

Collaboratively, these groups and actors are gathering, reporting, and publishing new data and guidance, all to assist states in moving their needle to increased GIS use in elections.

In its first two years of the project, an inventory of state implementations of GIS-based elections systems was developed, workshops and presentations were given at national conferences, and reports sharing the state of GIS in elections from the perspective of election officials and state GIS leaders were published. In addition, five pilot studies and case studies were created, a best practices guide (both in detail and brief versions) was developed, and a new website to house all of the resources was launched. Finally, in August 2019, an Elections GeoSummit convened stakeholders from the national, state, and local levels to discuss best practices for geo-enabling elections in the United States.

This project is built on strong, representative leadership and collaboration across government agencies and disciplines. Geographic information systems, technology, and products are increasingly understood by most government agencies as critical components of serving the public. But at the onset of this project, GIS technology, in most cases, was relatively new to state elections. A digital framework for collecting, managing, visualizing, and analyzing data, GIS provides the answer to one of the most crucial questions in making policy decisions and providing public services and products: Where?

In its next phase, this project will continue as a national effort by state government geospatial information officers and coordinators to work with other state agencies, local elections officials and state elections offices, national GIS and elections organizations, and federal partners to identify opportunities to leverage this powerful technology to strengthen elections management and citizen engagement.

"It was a privilege to participate in a project that exemplifies the commitment and professionalism that drives election administrators each day. We are all tasked with the critical mission of ensuring fairness and integrity in the elections process across our individual jurisdictions. Outside of the election's world, everyday citizens hold us accountable for ensuring that the votes of qualified voters are accurately counted and there are safeguards in place to prevent ineligible persons from voting. As an industry, we are equally mindful that qualified voters must receive a ballot for contests for which they are eligible. Historically, the jurisdictional assignment has been a tedious election task that is understandably fraught with human error. Thus, not only has my participation in the Geo-Enabled Elections project strengthened my resolve to continue leveraging GIS technology in elections administration, but GIS modernization efforts can also help reinforce dynamic relationships with other government stakeholders who directly and indirectly impact elections administration."
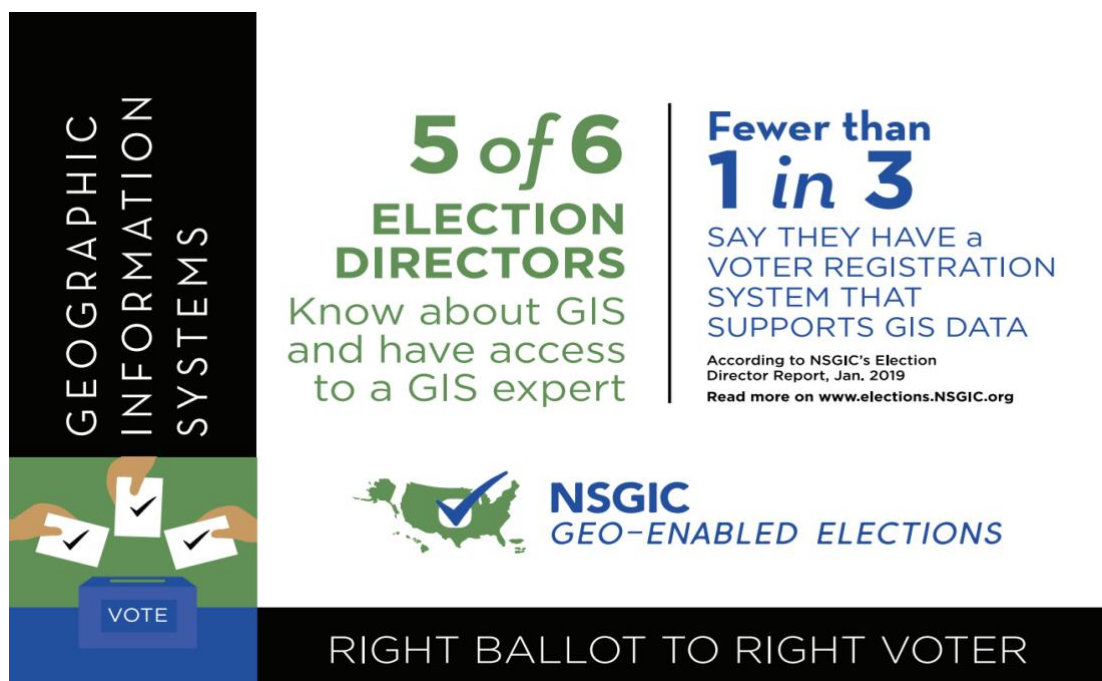*- Veronica Degraffenreid*

Principal Activities in Project Period

Election Director Interviews

From late August through early November 2018, through informal interviews, NSGIC listened to state election directors describe the state of the practice and their aspiration for improvement within the GIS landscape. Nearly 42% of state election directors replied to our requests.

Election Director Report

In January 2019, NSGIC released the findings from the first-ever survey of the nation's election directors sharing the current status of the implementation of GIS in elections.

elections.nsgic.org

A micro-website was launched within the NSGIC site to help state elections administrators begin to implement GIS in elections.

State Pilot Program Kickoff Workshop

In early March 2019, NSGIC launched five state-wide pilot studies across the nation. State geographic information officers (GIOs) and election directors came together - for most, the first time ever - to develop plans for their respective three-month pilot projects. The states were Minnesota, Nebraska, Pennsylvania, West Virginia, and Kentucky.

State Pilot Program Plans

By late April, all pilot project states had completed their plans and had begun this important work. Over the three-month pilot, teams came together with the project team monthly to check-in sharing and processing information to move the work forward.

State Case Studies

In January 2019, NSGIC solicited case studies from a handful of states that pioneered the integration of GIS with election data management systems. These case studies have served as an inspiration for states considering undertaking this effort and provided them points of contact of experienced professionals.

State Pilot Project Summaries

The five pilot project states diligently worked their plans over the summer of 2019. These groups represented their states, sharing their experiences and knowledge gained on the stage at the Elections GeoSummit held in Washington, D.C. in August 2019.

> *"The work I did in reviewing the answers in the earlier surveys helped me realize how far Hawaii has come compared to other states/locals, but also how, in hindsight, we might have done some things differently. Hindsight is 20/20. You've put together a set of valuable resources that will help states/locals better understand how GIS can help them manage election information. It'll still be a big job for them to switch off their legacy systems, but geo-enabled elections gives them a huge advantage."*
> *- Royce Jones*

Geo-Enabled Elections Workshops

NSGIC Annual Conference | Duluth, MN | October 2018
> A steering group workshop explored the need for a best practice guidance in verification of voter addresses, statewide voting precinct data, and other GIS data layers, especially city, county, school, and special district boundaries. Findings from the workshop contributed to the refinement of the draft of the best practices guidance.

NSGIC Midyear Meeting | Louisville, KY | March 2019
> The NSGIC Midyear Meeting was the official kickoff for the Geo-Enabled Elections Pilot Program. Every pilot state (Nebraska, Minnesota, Pennsylvania, West Virginia, and Kentucky) was represented during the workshop, and members from each pilot state participated in the sharing of information, discussing possible pilot project scenarios, and their plan development.

Geo-Enabled Elections Presentations

NSGIC Annual Conference | Duluth, MN | October 2018
> Audience: Senior state and federal government representatives, private sector partners
> Topics: Election data management and modeling process; GIS applications of data built for elections; 2020 Census; Solicitation of outreach to state elections officials

NASED Winter Meeting | Philadelphia, PA | February 2019
> Audience: US Election Directors, nonprofits, academia, federal government representatives
> Topics: Election data management, GIS applications for election data management and redistricting, redistricting timeline and process

NSGIC Midyear Meeting | Louisville, KY | March 2019
> Audience: Senior state and federal government representatives, private sector partners
> Topics: GIS integration in elections; Election Director Report; GIS and redistricting

Center for Technology in Civic Life (CTCL) Data Convening | Washington, DC | April 2019
> Audience: Election administrators, nonprofits, academia, private sector, federal, state, and local government representatives
> Topics: 2020 Election; Ballot data and information and opportunities

US Election Assistance Commission (EAC) | Washington, DC | June 2019
> Audience: Election administrators, nonprofits, academia, federal, state, and local government representatives
> Topics: Statewide voter registration systems; election data management; spatial data auditing; GIS in elections

Nevada Secretary of State Election Workshop | Reno, NV | July 2019
> Audience: Election officials from the state of Nevada
> Topics: registered voter systems; GIS; GIS integration with elections

National Conference of State Legislatures (NCSL) Annual Conference | Nashville, TN | August 2019
> Audience: State Legislators
> Topics: Geo-enabled elections; GIS technology; Geo-enabled elections best practices

NSGIC Elections GeoSummit | Washington, D.C. | August 2019
    Audience: Leaders in elections management and GIS
    Topics: Geo-enabled elections; GIS technology; Geo-enabled elections best practices;
    Election systems

Election Center Annual Conference | Orlando, FL | August 2019
    Audience: Local election officials, academia, nonprofits, private sector
    Topics: Geo-enabled elections; GIS technology; Geo-enabled elections best practices;
    case studies; pilot projects

Communications

Publications

elections.nsgic.org

elections.nsgic.org is the one-stop-shop for resources to inform and assist election administrators on the implementation of GIS in elections.

Election Director Report

In January 2019, NSGIC released the findings from the first-ever survey of the nation's election directors sharing the current status of the implementation of GIS in elections.

Raising Election Accuracy and Efficiency with GIS

In September 2019, NSGIC released "Raising Election Accuracy and Efficiency with GIS." This eight-page summary report identifies five best practices for implementing GIS in elections.

Best Practices for Geo-Enabling Elections

In addition to the brief version of the best practices, NSGIC also released a detailed guidance for implementing GIS in elections. The guidance document includes more detail about the five best practices, while also providing policy and technical considerations.

> *"I really enjoyed working on this project. Working with a group of smart, talented individuals reminded me of how great GIS professionals are at collaboration and sharing their expertise. Hopefully, this effort continues to move the cause of geo-enabled elections forward!"*
> *- Greg Grube*

State Pilot Project Summaries

To assist states embarking on the journey of integrating GIS in elections, NSGIC provides five State Pilot Program summaries. Kentucky, Minnesota, Nebraska, Pennsylvania, and West Virginia participated in the three-month pilot program to move the needle forward for GIS integration in elections within their states.

Public Relations

Throughout the project, the team has spent significant effort to build relationships and facilitate dialogue between GIS and elections experts both at the national and local levels.

Media relations efforts conducted in year two resulted in earned media coverage by both geospatial and elections publications:

- NSGIC Releases First-Year Report for Geo-Enabled Elections Project | electionline Weekly | December 2018
- Researchers are Trying to Make U.S. Elections More Reliable - Using Maps | State Scoop | December 2018
- NSGIC Releases First-Year Report for Geo-Enabled Elections Project | Directions Magazine | January 2019
- NSGIC Releases Survey of Election Directors in Terms of Implementing GIS in Elections | Geospatial World | January 2019
- NSGIC Releases Groundbreaking Survey of Election Directors' Take on Their Progress Towards Implementing GIS in Elections | GIS Cafe | January 2019
- Survey Looks at How Geo-Enabled State Elections Are | GIS Lounge | January 2019

- [NSGIC Launches New Site; Site Offers Education About Why GIS is so Important to Elections](#) | electionline Weekly | January 2019
- [State Integration of GIS Into Elections is Slow Going](#) | Nextgov | February 2019
- [State Election Officials Interested, But Slow to Adopt Geospatial Data](#) | State Scoop | February 2019
- [State Integration of GIS Into Elections is Slow Going](#) | Route Fifty | February 2019
- [Electionline Weekly on New NSGIC Election Project, Survey](#) | Election Academy | February 2019
- [Could GIS Help Smooth the Process of Redistricting? NSGIC Thinks So.](#) | electionline Weekly | May 2019
- [Election Accuracy and Efficiency: State GIOs Hold the Key to GIS Implementation](#) | MIT Election Lab Medium Blog | May 2019
- [As Census Deadline Looms, GIS Leaders Seek Elections Systems Upgrades](#) | State Scoop - Podcast | June 2019
- [Annexed Boise Neighborhood Left Out of Voting Rolls For Almost Five Years](#) | Election Academy | August 2019
- [Geo-Enabled Elections Event to Bridge Mapping, Election Disciplines](#) | State Scoop | August 2019
- [NSGIC Releases Best Practices for Improving America's Elections](#) | GIS User | October 2019
- [NSGIC Releases Best Practices for Improving America's Elections](#) | GIS Cafe | October 2019
- [NSGIC Releases Best Practices for GIS in Elections](#) | Election Academy | October 2019
- [NSGIC Releases Best Practices for Improving America's Elections](#) | Directions Magazine | October 2019
- [NSGIC Releases Best Practices for Improving America's Elections](#) | Geospatial World | October 2019
- [NSGIC Releases Best Practices for Improving America's Elections](#) | GIS and You | October 2019

NSGIC.org

The NSGIC website is the leading online source for information about state GIS issues. Search engine optimization, content marketing, social media efforts, frequent push communications, and industry media partnerships are utilized to drive traffic to the site. With the integration of My.NSGIC, an online platform for building community, encouraging discussion, and fostering collaboration, the nsgic.org website will be increasingly utilized for the purposes of information sharing and discussions on a variety of topics, including geo-enabling elections.

> *"I gained a deeper awareness of other geospatial technologists' perspective on geo-enabled elections that caused me to reevaluate some assumptions I had about data management, data flow, and the needed human touchpoints."*
> *- Paul Stenbjorn*

elections.nsgic.org is positioned to effectively serve as the auxiliary center for authoritative information about the status, benefits and challenges, and best practices guidance for geo-enabling elections. NSGIC engaged the services of a communications firm specializing in website development and campaign design to raise awareness of social issues. Development of the enhanced website was completed in January 2019. As additional resources and guidance are developed, elections.nsgic.org will grow for the continual education and engagement of our GIS and election leaders.

Phase Two

NSGIC has identified several major opportunities to impact geo-enabling elections for phase two of the project.

Expand the Pilot Program

In addition to providing ongoing support to the five phase one pilot program states to implement the Geo-Enabled Elections best practices, the project will select up to ten new states and/or counties to enroll in the pilot program in two phases of six-month programming designed to put the best practices for geo-enabling elections into action. These states will receive structured coaching and mentoring, peer support, and online and in-person workshops. Beyond the initial piloting of the five Geo-Enabled Elections best practices, participating states will have the opportunity to continue in the structured pilot program if desired and explore a systematic approach to GIS data auditing, validation, and management currently under development.

Pilot program experiences and learnings will be leveraged through a variety of NSGIC communications channels, including online communities, media outreach, conference presentations, and the second Elections GeoSummit, tentatively scheduled for summer 2020.

Inspire & Train

During the first phase of the Geo-Enabled Elections project, significant resources were expended on outreach to national audiences including representation by NSGIC staff, Steering Group members, and individuals serving on the Circle of Advisors. In phase two, the project team expects to continue to participate in relevant conferences and meetings as part of an effort to educate elections leaders and increase the visibility of the project and its resources.

A key activity in phase two will be the development of a foundational online training program on GIS concepts and technology. This training will be built around the established Geo-Enabled Elections best practices and include both soft-skill and technical skill development. NSGIC expects to develop and deliver this training as part of a collaboration with one or more nonprofit organizations operating in the elections education space to take advantage of existing platforms and networks.

"I loved being part of the Geo-Enabled Elections Project! It really illustrated the value of looking to outside systems, expertise, and technology as we work to find solutions to the challenges of election administration and reinforced my mantra that we are at our best when we face challenges together. Seeing election officials collaborate with their GIS partners and produce a tangible program was so inspiring!"
- Jennifer Morrell

Ignite Advocacy

In the second phase of the project, NSGIC will work with state GIS officers, election directors, and legislatures to build advocacy tools to support the pursuit of funding to geo-enable elections. Each of the established best practices includes policy considerations. In the next two years, model language and further guidance will be developed and disseminated. Implementation by pilot program participants will be actively supported by the project team.

"I think the two biggest things I gained from this project were relationships and knowledge. The connections with the GIS community are tremendous, getting to know those folks and establishing those relationships is of tremendous value to me. And as far as knowledge, learning how different states do things was so fascinating. Some states have centralized GIS but decentralized elections, and vice versa! Everyone has their own unique needs and challenges. There is no cookie cutter approach for this."
- Sarah Whitt