Feature Highlight: 8 Ways GIS Prevents Districting Distress

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Imagine discovering that a city council member's home address was listed in the wrong district, and she has been serving the wrong constituents for years. Or, a tight race is decided by 57 votes...and an investigation reveals that 150 new addresses were accidentally incorrectly assigned to that jurisdiction when the homes were built. Untangling this type of mess could mean a public relations nightmare and loss of confidence by voters.

The simplest solution is to keep those problems from happening in the first place by removing manual districting and integrating Geographic Information System (GIS) data into your Voter Registration/Election Management System. GIS instantly and automatically pinpoints latitude and longitude coordinates for any address entered in the VR/EMS. The system then overlays these coordinates onto a map layer to visually and precisely identify relevant voting districts (such as legislative, congressional, fire, school, and even the smallest precinct splits). Election officials using integrated GIS no longer have the burden of manually maintaining an accurate street index or trying to looking at a street range and making a best guess as to where the boundaries fall.

In addition to saving time and ensuring accuracy of data, here are eight ways integrated GIS avoids districting distress:

1. Easy updates after redistricting

Managing addresses with GIS virtually eliminates the massive burden of redistricting. SImply upload new district map shapefiles, and a voter record is instantly updated with their new districts. Elections offices who incorporate GIS before the 2020 census will get to see this magic first hand!

2. Effortlessly manage constant change

People move and change their addresses, and new voters register everyday, so boundary management is always in need of a response. With integrated GIS, voters are automatically assigned to the correct voting place when they change their address or register as a new voter.

3. Add new addresses & alternate domiciles quickly

If a voter moves into a new housing development not yet validated by USPS, the address can be added quickly by dropping a pin on a map, and the system will continually query an external 3rd party address database until the address can be officially validated. Then, when the address is identified in the database, the system can provide a notification to validate the address and inform the voter and administrator.

Likewise, a voter experiencing homelessness can have their non-standard address registered with a drop of a pin and it will be added as an "alternate domicile non-residential."

4. Overall Accuracy

GIS tools provide additional validation, such as ensuring that no points on a map are outside of a district boundary. Districts can be visualized in real time with overlays showing different locations and other valuable data.

5. Detailed data to better serve voters

A VRS using GIS can create reports on voting location statistics such as number of voters served, list of voters served, and average/min/max distance from voters to voting locations. This data helps election officials plan polling locations to best serve voters.

6. Quickly identify voters in case of emergency

In the case of a natural disaster or a last minute change to a polling location, election administrators can easily view a list of voters who reside on a specified street or in a municipality and arrange to call or text them with updated alternate voting information

7. Voters can find their polling places easier

Voters can enter their information into the public-facing portion of the VRS and map their correct polling place information. This not only creates convenience and a sense of engagement for voters, but voting at their correct polling location means less provisional ballots to validate later.

8. Simple managing of addresses in rural communities

Often times, homes in rural areas don't have street numbers and are registered as approximations of where an address is located, such as "15 miles east of the intersection between first and main." Like with alternate domiciles, this problem is solved simply by dropping a pin at the right point on the map and the voters will be registered in the correct district.

There you have it, 8 ways how integrated GIS will improve not only your district management duties, but how you serve voters. Got any we missed, or any favorites from this list? Drop us a line and let us know!