GEO-ENABLED ELECTIONS

GEOGRAPHIC INFORMATION SYSTEMS IN ELECTION ADMINISTRATION
How do I find these residents???
GEO-ENABLED ELECTIONS

- Marriage of rich location based data built for other purposes such as NG-911, Tax Administration, routing, & services
- Combined with voter registration
Fort Smith, Greenwood school voting districts spark confusion - Jim Bolin of Fort Smith thought he would get a chance to vote for the Fort Smith School District millage increase last month, but something odd to him popped up at the end of his ballot: The Greenwood School District.

Primary election reveals old zoning mistake, county clerk works to fix issue - A one-vote difference had people looking at a school board race more closely and it brought to light a zoning issue from years back.

Ballot errors among glitches in Pulaski County's voting - Pulaski County faced numerous problems on Election Day, including handing out about 250 wrong ballots to Sherwood voters.
Road’s name changes cause controversy - Problems include deliveries, map apps, homeowners say finding a house on what was formerly Haxton Road isn’t as easy as punching in an address into a map app. Haxton Road touches four different governmental jurisdictions — Rogers, Cave Springs, Benton County and Bentonville — in a mile and a half. The Rogers City Council renamed the sections of Haxton Road that touched its city limits to West Pleasant Grove Road in August. Voter registration records are out of sync.

Vote plan prompts discord in Jefferson County - Efforts by the Jefferson County Election Commission to merge some polling sites to save on election costs were stymied by disagreements between the two Republican commissioners and the lone Democratic commissioner.
Hearing set on Arkansas House candidate's residency - Lawsuit aims to remove Democrat from District 18 A Pulaski County circuit judge has set a hearing for this afternoon to hear evidence in a lawsuit asking to remove a Democratic candidate from an election ballot because, the Republican Party claims, the candidate doesn't live in the state House district he wants to represent.

Voted out, JP files suit to keep seat - Official left district, Quorum Court says. A Desha County justice of the peace is not living in the district she represents, according to county officials and documents, but will remain on the Quorum Court until a federal judge or jury decides her fate.
SYSTEMS AND TECHNOLOGY HAVE DRAMATICALLY IMPROVED
### HOW ELECTION SYSTEMS WORK IN STATES

<table>
<thead>
<tr>
<th>VOTER ADDRESSES</th>
<th>ELECTION PRECINCTS</th>
<th>OTHER DATA</th>
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<tbody>
<tr>
<td>55% of responding states verify voter registration address against a database of known addresses like a driver’s license, state ID database, a statewide address point set used for 911 call routing, or a commercially available address database.</td>
<td>50% of states indicated they maintain statewide mapping of precincts. Within this group, 40% also maintain a GIS layer of sub-precincts.</td>
<td>82% of responding states keep up-to-date GIS layers of city and county boundaries, essential for computer-based mapping of precincts.</td>
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- **A voter’s physical address determines their voting precinct, where their vote will be tallied, the candidates they can elect and the questions they can decide.**
- **Statewide voting precinct information in a GIS format is essential to geo-enabling elections. It is noteworthy that the majority of states do not have a content standard for attributes of statewide voting precincts.**
- **Statewide GIS data layers especially city, county, school and special district boundaries are essential to map precinct boundaries.**
Geo-enabling elections requires collaboration at a high level between leaders in elections, information technology and database administration, and geospatial information technology. Working together, these officials should identify key elements of the geo-enabling process: project goals; requirements; schedule; budget; and governance.
A voting unit GIS layer must include the precinct tabulation areas, as well as ballot area boundaries (‘splits’ and ‘subs’). A simple data model should be adopted and shared.

It is also critical to identify at which point updates can be made to data during the elections schedule.

Finally, a web map should be created for stakeholder and public viewing of the most current voting unit data.
ADOPT AND IMPLEMENT A STATEWIDE GEOCODING STRATEGY

- A strategy should include a method for assigning geographic coordinates for each residential address using state, local, and/or commercial GIS reference data. It should also include a method for manually placing or assigning geographic coordinates for geocoding correction or omission. A complete lineage, or, at minimum, basic record-level metadata should be kept, describing how, when, and by whom geographic coordinates were updated.
GEOCODING VALIDATES PRECINCT ASSIGNMENTS

Voter Registration

Street Map

Geocoding Software

Map of Voter
Layers should include: state office boundaries; corporate boundaries for cities, towns, school districts and service districts; and aerial photography, base maps, parcels, and address points. In future versions, each layer should be defined and described in more detail.
DEFINE AND IMPLEMENT DATA VALIDATION PROCESSES

- Continual Audits of Election Boundaries
  - Precincts
  - Municipal Boundaries
Auditing the Voter Registration Precinct Code Corresponds to the Correct Geography

Right Ballot to the Right Voter
Auditing the Voter Registration Precinct Code Corresponds to the Correct Geography

Road Name Change?

Precinct Split?

Right Ballot to the Right Voter
Collin County, Texas
Vote center location for early voting
Directions and routing to poll sites, desktop OR mobile
OUTREACH – MONITORING EFFICIENCY

- Wait Times at Poll Sites

Scan the QR Code for other Polling Locations and Wait Times

Escanee el Codigo QR para otros Centros de Votacion y Tiempos de Espera

http://electionmaps.collincountytx.gov
Yolo County Elections Map - November 6, 2018 Statewide Direct Election - West Sacramento Area C

A series of maps to view local election results interactively. Final results updated November 30, 2018, 3:08 PM.

Washington Unified School District, Governing Board Member, Full Term - Total Votes

The map shows voting precincts by which response has the most votes. Click on a precinct to see the top responses for that precinct only.

Note: If a precinct is grayed out, the popup will not have any data loaded.
QUESTIONS

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https://elections.nsgic.org/