GIS and SBE Relationships with Federal, State and County Agencies

NC State Board of Elections

www.ncsbe.gov

Outline

- SBE Audits

- CBE Responsibilities

- Issues/Challenges

- The Future

SBE Audits

SBE is responsible for the proper voter placement within statewide jurisdictions, but not the creation of those jurisdictions.

SBE conducts an electronic audit every weekend and makes those results available on every Monday morning for use by CBE election officials.

SBE can run the audits "On Demand" if requested by a CBE.

SBE Audits

The following are jurisdictions audited by SBE:

- NC Senate District
- NC House District
- Congressional District
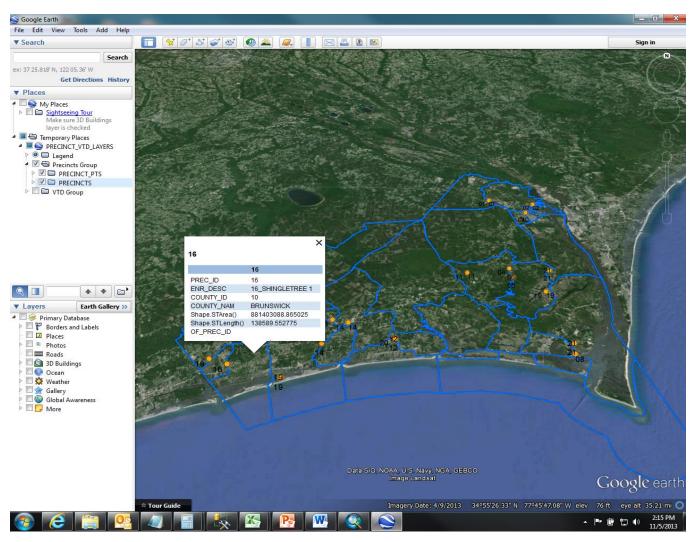- Judicial Districts
- Precinct
- VTD
- County Boundaries

SBE Audits

What is an SBE jurisdictional audit?

An SBE jurisdictional audit is:

1) SBE imports all voter addresses into SBE GIS system.
2) SBE maintains all voter addresses in separate database.
3) Audit is performed in SQL Server database using stored procedures.
4) Stored procedure uses SQL 'STIntersects' and several joins to overlay addresses, jurisdictions to identify mismatches.
5) Exceptions such as voters not in the correct jurisdiction and addresses not found are identified for the county in shapefiles, dbf and kmz file formats.

Sample Jurisdictional Audit

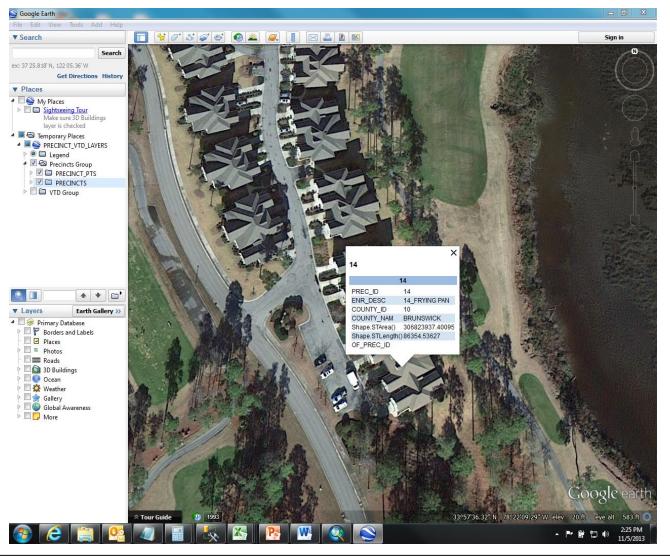Using SEIMS GIS Audit Files and Google Earth

Sample Jurisdictional Audit

GIS Shapefile (.DBF) – Unmatched Records

Sample Jurisdictional Audit

Satellite View

CBE Responsibilities

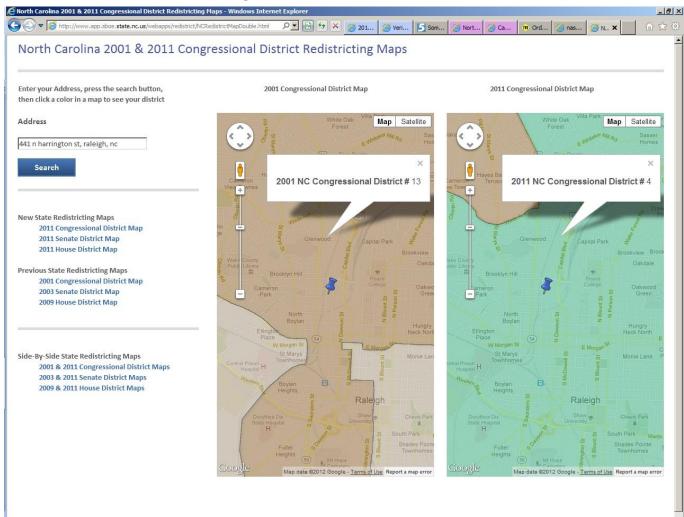County Board of Elections will be responsible for making all of the necessary changes due to redistricting updates and audits.

CBEs will utilize the SEIMS Geocode application to make updates to correct street ranges in the incorrect jurisdictions. Counties can use the assistance of their county GIS or Mapping Department.

Sample Jurisdictional Tools

NC Congressional Current & Previous

Sample Jurisdictional Tools

FRANKLIN COUNTY
North Carolina State Board of Elections
2010 Census Voting District Suggestion Project
Post Census Review

03 / 15

BAS update to the Franklinton Municipal did not occur therefore, the VTD was not corrected.

Update State Precinct and State VTD line to correct municipal location (corresponds to CBE Precinct represented by the orange line

Franklinton town

tl_2010_37069_vtd10
COUNTY PRECINCT
PRECINCT_2011

Date Created: 5/13/2011

tl_2010_37069_vtd10 = FINAL CENSUS VTD
rdp_pvs_vtd2000_37069 = Verification Version of VTD
rdp_2010_vtd2000_37069 = Original Version of VTD

PRECINCT_2011 = Census Verification Version of VTD
+ corrections submitted to the Census to be included in final VTD
+ post Jan 1, 2008 precinct changes

***NOTE: BAS corrections that were not incorporated in the Verification Version or were not sent to the State may not be included

The Future?

➢ SBE is continuing to work with the counties, the state, census, and private entities to ensure the most accurate assignment of address points.

➢ Utilize a web interface to allow counties to view audits and correct individual address points.

➢ Looking into a mechanism to allow counties to run audits "On Demand." This will allow counties to upload local jurisdictions and audit anytime.

➢ Looking to integrate SEIMS Geocode and GIS to utilize jurisdictional boundaries and address points rather than street segment assignment in the SEIMS Geocode application.

Thank You

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