5 Ways Congressional Staffers Use GIS

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Geographic Information Systems (GIS) Enables Staff to:

1. Gauge Constituent Sentiment
2. Collaborate Among Peers
3. Investigate Policy Issues for Effective Policy Making
4. Communicate with Constituents, Press, the Public
5. Brief Decision-Makers
ArcGIS Online for Congress

- Organizational account for each chamber
  - Branding and design

- Pre-populated groups and content
  - Focused demographic maps
  - District maps
Types of Users

Identifying key workflows for Hill staff

Communications Staff  Legislative Policy Staff  Correspondence Staff  System Admins
Gauge Constituent Sentiment
Mapping Constituent Correspondence
In 2014, there were 990 children between the ages of 5 and 17 in this school district. Of those, 244 or **24.60%**, were in families in poverty.
The rate of correspondence about child poverty in this ZIP code is **47.62** per 1,000 people.
Investigate Policy Issues
Congressional Research Service Core Values

Confidential, Non-Partisan, Objective, Authoritative

Confidential: congressional requests held in confidence
Non-partisan & unbiased assistance
Balanced & objective analysis
Recognized experts in their fields
The Scope of CRS GIS Services: Anywhere the action is
Considering Variability in the Data

- Case Study: Migration Data
International Organization for Migration’s Missing Migrants Project

Migrant deaths
Where is the data from?

Missing Migrants Project data are compiled from a variety of sources. Sources vary depending on the region and broadly include data from national authorities, such as Coast Guards and Medical Examiners; media reports; NGOs; and interviews with survivors of shipwrecks. In the Mediterranean region, data are relayed from relevant national authorities to IOM field missions, who then share it with the Missing Migrants Project team. Data are also obtained by IOM and other organizations that receive survivors at landing points in Italy and Greece. In other cases, media reports are used. IOM and UNHCR also regularly coordinate on such data to ensure consistency. Data on the U.S./Mexico border are compiled based on data from U.S. county medical examiners and sheriff’s offices, as well as media reports for deaths occurring on the Mexico side of the border. Estimates within Mexico and Central America are based primarily on media and year-end government reports. Data on the Bay of Bengal are drawn from reports by UNHCR and NGOs. In the Horn of Africa, data are obtained from media and NGOs. Data for other regions is drawn from a combination of sources, including media and grassroots organizations. In all regions, Missing Migrants Project data represents minimum estimates and are potentially lower than in actuality.
DATA CONSIDERATIONS: Case Study – Private School Locations

CRS Analyst works to find authoritative data

Private School Universe Survey (PSS)

Data and Documentation

- For 2001–02 and earlier years, information on the design, data collection methodology, and data processing procedures for each PSS collection is contained in the technical notes section of the PSS report for that respective collection.
- Text files are ASCII files with a minimum of formatting and can be read into statistical processing programs such as SPSS or SAS, or spreadsheet applications such as Excel or Lotus.
- To produce standard errors, the user needs a statistical application capable of estimating standard errors from a complex sample design (e.g., WesVar, version 2.5 or higher; SUDAAN, Version 9.0, or AM statistical software). The ERR method (design) should be used.
- When merging PSS data files from different survey years, "PIN", the Permanent Identification Number, should be used for the merge variable.
- For more information on unzipping files and downloading zip files click here.
- For more information on viewing PDF files click here.
DATA CONSIDERATIONS: Private School Locations

However, some uncertainties about how good the locations are for schools with P.O. Box addresses
DATA CONSIDERATIONS: Private School Locations

So before using the data, we tested the quality of the X-Y point locations against the geocoded Place Addresses.
DATA CONSIDERATIONS: Private School Locations

Then by comparing the offset distances between the geocoded Place Address and the X-Y Point locations, we can assess the usefulness of the data.

- Of 2341 “POBox” location addresses 84% or 1971 geocoded successfully using the pl-add field – generally anything over 80% is good
- I then “selected” the original lat-long points for those POBox records using distance buffers to capture them as follows:
  - 0.1 mi – 1519/1971 selected
  - 0.25 mi – 1803/1971
  - 0.5 mi – 1886/1971
  - 1.0 mi – 1948/1971
- This doesn’t necessarily mean there was a one-to-one match – for example, one geocoded point buffered 1 mile could select two close-by lat-long points. But I think this would be rather rare. Maybe more common in city areas.
DATA CONSIDERATIONS: Data Currentness

Is newer data available?
DATA CONSIDERATIONS: Data Sources

Knowing the appropriate data for each level of analysis
DATA CONSIDERATIONS: Political Ramifications

The importance of names... political boundaries... disputed areas
CRS Expertise

Subject Matter Experts

- Agriculture & Food
- Appropriations
- Banking & Finance
- Commerce & Small Business
- Congressional Process
- Defense and Intelligence
- Education
- Energy & Natural Resources
- Environmental Policy
- Foreign Affairs
- Health Care
- Homeland Security & Immigration
- Justice & Law Enforcement
- Science & Technology
- Social Security and Social Insurance
- Social Welfare & Housing
- Taxes, The Budget, & the Economy
- Trade & International Finance
- Transportation
- Veterans
- Workforce & Labor

Interaction With Congressional Staff

- Confidential Memo
- In Person Briefing
- Telephone/Email Correspondence
CRS GIS Product Types:

- MAP / PDF
- SPREADSHEET / TABLE
- GIS DATA
- INTERACTIVE MAPS
Resources at the Congressional Research Service

• CRS at CRS.gov

• The CRS GIS Team – GIS-Team@crs.loc.gov
Communicate with Constituents, Press, the Public
Examples from Sen. Wyden’s Office

AUTHORITATIVE DATA FROM AGENCIES

INFORMATION GATHERED BY STAFF
Reclamation’s SECURE Water Act Report highlights accomplishments in implementing Reclamation’s Climate Change Adaptation Strategy. Relevant examples are included to summarize coordination activities conducted by Reclamation with fellow Federal agencies, State water resource agencies, and other Western stakeholders.

Reclamation has made significant progress in assessing the impacts of climate change to water resources and implementing on-the-ground actions to mitigate impacts.

- View examples of projected impacts of climate change

In November 2014, Reclamation published its regional Climate Change Adaptation Plan (CCAP), which is now being implemented at the river basin and field levels:

- Basin Study
- Impact Assessment

Study Locations:
- Location of Basin Studies and Impact Assessments
- Basin Study
- Impact Assessment
- SECURE Water Act Basins
- Colorado
Taxation in Alaska

Introduction to Alaska Taxable

Articles IX and X of the Alaska Constitution and Title 29 of the Alaska Statues establish the legal framework for municipal taxation in Alaska. The Office of the State Assessor annually compiles and publishes the reported figures from the various municipal taxation laws in the Alaska Taxable. This map breaks down the Municipal tax types and reported revenue.

Classification of Municipalities

All political subdivisions within the State of Alaska are termed “municipalities.” The taxation powers and limitations of each municipality depend upon its classification. There are five categories of municipalities:

1. Home Rule City
2. Home Rule Borough
3. General Law City (1st and 2nd Class Cities)
4. General Law Borough
5. Incorporated Municipalities
   - Home Rule City
   - 1st Class City
   - 2nd Class City

Boroughs Boundaries

- Unified Home Rule Borough
- Non-Unified Home Rule Borough
- First Class Borough
- Second Class Borough
- Unorganized
Winter Cost Calculator

- Total Cost ($): 667,525
- Material Cost ($): 357,630
- Labor Cost ($): 167,062
- Equipment Cost ($): 142,033

Time: 48 Hours
Please Take Our Survey on the Esri Events App!

Download the Esri Events app and find your event

Select the session you attended

Scroll down to find the survey

Complete Answers and Select “Submit”
# Print Your Certificate of Attendance

Print stations located in the 140 Concourse

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
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<tr>
<td>12:30 PM – 6:30 PM</td>
<td>10:45 AM – 5:15 PM</td>
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<tr>
<td><strong>GIS Solutions Expo, Hall B</strong></td>
<td><strong>GIS Solutions Expo, Hall B</strong></td>
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<tr>
<td>5:15 PM – 6:30 PM</td>
<td>6:30 PM – 9:30 PM</td>
</tr>
<tr>
<td><strong>Expo Social, Hall B</strong></td>
<td><strong>Networking Reception, Smithsonian National Air and Space Museum</strong></td>
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