GIS and Policy

Pat Cummens
Components of GIS ……

Data Management  |  Visualization  |  Analysis  |  Dissemination

……..Applied to Policy makers
Types of Users

- Identifying key workflows for Hill staff

Communications  Policy Staff  Committees  System Admins
Geographic Information Systems (GIS)

Allows Policy Makers (staff) to:

- Investigate policy issues
- Understand constituent sentiment
- Communicate with maps
Investigate Policy Issues

- Identify resources across the nation
- Understand how features intersect with proposed policy
- Understand how they intersect with committee members’ states or districts
Understand Constituent Sentiment

- Map outreach events over time
- Measure & map correspondence by issue
- Plan future engagements
- Provide constituent services
Communicate with Maps

- Communicate policy impact by location
- Embed maps or galleries on websites
- Embed maps in press releases
- Share through social media
How the White House uses GIS...

Policy Analysis

Outreach

ONDCP

CEA

DPC

OPE

OSTP

OVP

Office of the First Lady
White House – Story Maps Communicate policy & engaging citizens
Ready To Work
Let's equip our workers with the skills to compete in a 21st-century economy.

TAACCCT Awards by State and Round 4 Projects

Take a closer look at which colleges are using these grants to deliver education and career training that will help job seekers get the skills they need.

Every one of those grantees are partnering with employers within growing industries to train workers for middle-class jobs that will help make sure we stay economically competitive into the 21st century. Here's how that breaks down.
WORKING families

It's time for a 21st-century workplace that works for all Americans.

The modern family looks different than it ever has before. In 63 percent of families with children, all parents work. 32 percent of families with children are single-parent families. And yet, most moms and dads don’t have access to paid leave or flexible workplaces. On average, women who work full-time are still earning just 78 cents for every dollar a man doing the same work earns.

It’s time for workplace policies that give all workers the best chance to succeed at work and at home.

The President is taking action, with a new set of proposals to give working families the flexibility to balance their families and jobs, and giving all Americans the opportunity to earn sick days. Learn more about that set of proposals here.

In the meantime, take a look at the map below to see how many private-sector workers in your state currently lack access to paid sick leave.

This is How Many Workers Across the Country Won’t Go...

[Map showing the number of workers without paid sick leave by state]
White House Science Fair – extend the reach with social media and maps
Helping Citizens Connect

How you can get involved:

https://www.whitehouse.gov/campaign/aidrefugees
White House Partnership – ConnectEd K12 software donation

CONNECTING AMERICA
WHAT HIGH-SPEED INTERNET MEANS IN THE 21ST CENTURY

Sites with GIS from Esri and ConnectED
In support of ConnectED, Esri offers to any US K12 school (public, private, or home school) an ArcGIS Online Organization subscription. Share your story with us. For instructional resources and request form, see www.esri.com/connected.
Office of the First Lady - Let’s Move

What’s going on near me?

Explore the map on the right to find out how your community is participating in Let’s Move programs.

To find what’s going on near you, either:

• Enter your ZIP code or city and state in the search bar on the top left of the map
• Use the GPS button (below the Home button on the map) on your mobile device

Then zoom and pan the map to see who’s participating in Let’s Move programs in your area. Click a point for more information. Where two or more points coincide, use the arrow in the top right corner of the informational...
Introducing the Federal Flood Risk Management Standard
Understanding the Federal Flood Risk Management Standard
Storymap puts it in context and communicates importance of data

From the White House blog: “When Hurricane Sandy hit New York City, the storm sent water cascading into the South Ferry subway station, pouring into the Brooklyn-Battery Tunnel, inundating neighborhoods from Staten Island to Queens. At Battery Park in lower Manhattan, water reached more than 9 feet above the average high-tide line.

That’s why when we invested billions to help communities rebuild from Sandy, we also committed to “build back better” -- to rebuild infrastructure to a higher standard so it can withstand the increased risks posed by sea level rise and other climate impacts.

The White House is building on that experience by releasing a new flood risk management standard for new and rebuilt federally funded structures in and around floodplains. This new resilience standard will help ensure taxpayer dollars are well spent on infrastructure that can better withstand the impacts of flooding.”

http://esrifederal.maps.arcgis.com/apps/MapJournal/index.html?appid=4d74e32de57049bfb92a3dc1a8dd9322
Map locations of federal buildings leased and owned

**Example: Washington, DC**

**Owned and Leased Properties**

There are several hundred federally owned and leased facilities located across the Washington, DC metro area. Will any be affected by the new Executive Order establishing the National Flood Standard? If so, how many? Find out by overlaying the FEMA 100-year floodplain and federal building locations from GSA.

**Show 100-Year Floodplain**

As you can see, a handful of these buildings are located within the 100-year floodplain, including this 1.8 million sq ft facility on Pennsylvania Avenue that is completely occupied. Retrofitting large occupied facilities such as this one will require significant resources and planning.

**Show properties by total rentable space**

**Data sources:** [FEMA](https://www.fema.gov), [GSA](https://www.gsa.gov)

**Example: Washington, DC**

**Floodplain Analysis Results**

Visual inspection is good for exploring this information, but the logical next step is to definitively determine which facilities are in the floodplain using GIS analysis tools.
Overlay floodplain - GIS analysis determines which buildings in floodplain

Example: Washington, DC
Floodplain Analysis Results

Visual inspection is good for exploring this information, but the logical next step is to definitively determine which facilities are in the floodplain using GIS analysis tools.

In this case, it was determined that in Washington, DC, there are seven federally-owned buildings in the floodplain and three buildings with federal leases.

Explore federal buildings in your city

Use the location search at the top right to zoom to other cities to explore the federally owned and leased buildings in your area (or try Boston, MA, or Sunnyvale, CA).

For more information, read the Executive Order that establishes the National Flood Standard and the accompanying Fact Sheet.
National data sets enable search anywhere in US

Explore federal buildings in your city

Use the location search at the top right to zoom to other cities to explore the federally owned and leased buildings in your area (or try Boston, MA, or Sunnyvale, CA).

For more information, read the Executive Order that establishes the National Flood Standard and the accompanying Fact Sheet.
FACT SHEET: President Obama Announces New Investments to Combat Climate Change and Assist Remote Alaskan Communities

President will announce a Federal coordinator for building climate resilience in Alaska, launch a remote Alaskan Communities Energy Efficiency Competition, and announce a city-led public-private partnership to achieve 99.7 percent clean energy on Kodiak Island.

Climate change is real, it is being driven by human activity, and it is happening right now—not anywhere is that more apparent than in Alaska.
Storymaps reinforce the announcement & showcase the new High Res Elevation Data in an interactive way

http://story.maps.arcgis.com/apps/MapSeries/?appid=4608165489764f10b75f946e1b7cdc8c
U.S. Senate & House of Representatives
How Congress uses GIS ...

Policy Impacts/
Public Dissemination

Constituent
Understanding &
Engagement
ArcGIS Online for Congress

- Organizational account for each chamber
  - Branding and design

- Pre-populated groups and content
  - Focused demographic maps
ArcGIS Online for Congress

- Connecting Member offices to state GIS offices through private groups
Get started! Learn how to...

- Map data in Microsoft Excel
- Make a web application with a template
- Add authoritative content to a map
- Create a group for sharing maps
- Embed a map in a public website
- Explore more useful maps

Click [here](#) to access resources used in the GIS Working Group training sessions.

Click [here](#) to see how other congressional offices are using maps.
My Groups

CREATE A GROUP

Show

<table>
<thead>
<tr>
<th>All My Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owned by Me</td>
</tr>
<tr>
<td>Owned by Others</td>
</tr>
<tr>
<td>With New Membership Requests</td>
</tr>
</tbody>
</table>

You are a member of 147 groups

Find...

The organization's groups

The organization's groups that are public

Featured Groups

- National Maps for USA
- Earl Maps and Data
- Office of Senator James Risch
- Committee on Energy & Natural Resources
- HSIP Layers
- SAM5 Featured Content

ArcGIS Marketplace Free Apps and Services

There are many free apps and services available for ArcGIS Online subscribers on the ArcGIS Marketplace.

- Created by SenateAdmin on February 13, 2014

Committee on Indian Affairs

Content focused on the business of the United States Senate Committee on Indian Affairs.

- Created by SenateAdmin on August 20, 2013

Committee on Rules and Administration

Content focused on the business of the United States Senate Committee on Rules and Administration.

- Created by SenateAdmin on March 12, 2013

Committee on Agriculture, Nutrition, and Forestry

Content focused on the business of the United States Senate Committee on Agriculture, Nutrition, and Forestry.

- Created by SenateAdmin on March 12, 2013

Committee on Appropriations

Content focused on the business of the United States Senate Committee on Appropriations.

- Created by SenateAdmin on March 12, 2013
Office of Senator Al Franken
A collection of content focused on the state of Minnesota.
created by FrankenOffice on April 23, 2013

Office of Senator Amy Klobuchar
A collection of content focused on the state of Minnesota.
created by SenateAdmin on March 12, 2013

Office of Senator Angus King
A collection of content focused on the state of Maine.
created by SenateAdmin on March 12, 2013

Office of Senator Barbara Boxer
A collection of content focused on the state of California.
created by SenateAdmin on March 12, 2013

Office of Senator Barbara Mikulski
A collection of content focused on the state of Maryland.
created by SenateAdmin on March 12, 2013

Office of Senator Benjamin Cardin
A collection of content focused on the state of Maryland.
created by SenateAdmin on March 12, 2013

Office of Senator Bernard Sanders
A collection of content focused on the state of Vermont.
created by SenateAdmin on March 12, 2013

Office of Senator Bill Nelson
A collection of content focused on the state of Florida.
created by SenateAdmin on March 12, 2013
A collection of content focused on the state of Idaho.

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<th>All Results</th>
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<tbody>
<tr>
<td>Maps</td>
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<td>Layers</td>
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<td>Tools</td>
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<td>Files</td>
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</tbody>
</table>

### Idaho Active Wildfires

- **Title**: Idaho Active Wildfires
- **Owner**: RischOffice
- **Rating**: 5 stars (0 ratings, 0 comments, 931 views)
- **Last Modified**: October 17, 2014
- **Description**: This map presents the locations of active wildfires in the United States from the United States Geological Survey’s (USGS) Natural Hazards Support System.
- **Web Map by RischOffice**

### Idaho Drought Areas

- **Title**: Idaho Drought Areas
- **Owner**: RischOffice
- **Rating**: 5 stars (0 ratings, 0 comments, 931 views)
- **Last Modified**: July 2, 2014
- **Description**: This map shows areas of Idaho which are currently under drought conditions.
- **Web Mapping Application by mfooshee_senate**

### Wildland Fire Potential

- **Title**: Wildland Fire Potential
- **Owner**: RischOffice
- **Rating**: 5 stars (0 ratings, 0 comments, 931 views)
- **Last Modified**: October 17, 2014
- **Description**: Wildland Fire Potential was developed to delineate and prioritize the wildland fire potential for the United States. The data is based on three primary sub-products: fuel potential, fire weather potential, fire occurrence potential.
- **Web Map by RischOffice**
Maps from the State of Idaho
Maps created by the Idaho Geospatial Office for congressional members and staff.
created by SenateAdmin on October 30, 2013
Internal Maps for Members

- Where has the Member been in their district or state?

- Where is constituent mail coming from? What issues are important where? What issues have been important here recently?
Internal or External – mapping constituent visits

Ron’s March in Oregon
Senator Wyden held town halls in Union, Wallowa, Baker, Malheur, Lincoln & Tillamook Counties. Click a location on the map or the thumbnails to see photos & find out more.

Listening to the Future Tour

Meeting with citizens – in-person virtual
Constituent Correspondence
IQ Data - Gun Control Over Time

Legend

IQ Data - Gun Control Over Time
Gun Control: January
2012-February 2013
- 64 - 131
- 38 - 63
- 19 - 37
- 7 - 18
- 1 - 6
Idaho Zip Codes

December 31, 2012 to January 31, 2013
Committees

- Where are resources, assets, incidents, etc. across the nation?

- How do they intersect with proposed policy?

- How do they intersect with committee members’ states or districts?
Senate Energy & Natural Resources committee
Communications

- Embedding maps or galleries on websites
- Embedding maps in press releases
- Sharing through social media
Maps for the Public

Access to Public Transit in the 41st District

Which populations are underserved by public transit?

In this map, the green dots represent Census block groups that are within one mile of a public transit hub (bus stop or rail station). Red dots are block groups that are further than one mile from public transit. Based on 2000 Census figures, the red dots represent about 25,000 households with a population of almost 75,000 people.

The walkability analysis takes into consideration the street network of the area, so some public transit hubs may be accessible by non-road pathways.

Zoom into an area to see where bus stops are located.

Transit data provided by Riverside Transit Agency.

Congressman Takano - Transit Access
Thank you

cpycummens@esri.com