Esri Redistricting

Bring clarity to the redistricting process

Creating Transparency, Openness and Trust: A Modern Approach to Redistricting

SDCC - Demo Theater 15
Esri Redistricting

Agenda

• Overview
• Deployment Options
• The Application
  • What’s Included
  • Key Functions
  • Road Map
• A User Story
Esri Redistricting is a web-based solution that enables governments, advocates, and citizens to complete and share regulation-compliant redistricting plans. Based on Esri’s proven ArcGIS software platform and dataset components, Esri Redistricting provides comprehensive tools for plan creation, management, visualization, editing, and collaboration.

**Overview**

**Legislative requirements & judicial audits**
- Avoid common pitfalls.
- Use built-in tools to check compactness and allowable population deviation.
- Share pre-defined reports that meet legislative requirements.

**Secure sharing & collaboration**
- Engage citizen participation via online maps.
- Use out-of-the-box redistricting and spatial analysis functions, sophisticated geocoding, and plan management tools.

**Leverage existing GIS investments**
- No need to train your staff on a new system.
- Rely on the trusted and stable ArcGIS platform from Esri, the GIS market leader for more than 45 years.
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Deployment Options

**Software as a Service (SaaS) subscription model**
- Per user pricing
- No custom features or data

**Managed Services Offering**
- Configured for organization
- Custom data packs
- All hosting components managed by ESRI

**On-Premises Offering**
- Installed behind organizations firewall
- Custom data packs
- Hosting components managed by organization
Increasing collaboration between government and citizens

- Provided via web browser
- Facilitates collaboration, sharing, and community building
- Easy to use interface reduces costs associated with training
- Minimal GIS experience required
- Centralized IT
- Cost effective way to provide access to citizens

Increasing collaboration between government and citizens
What’s Included?

**Software**
- ArcGIS Server
- Workflow Manager
- Flex-based Application
  - soon to be JavaScript

**Data**
- ArcGIS Online Basemap Data & Esri Demographic Data
- U.S. Census Data (2000, 2010 TIGER, PL 94-171)
  - 2020 data as soon as it’s released
- Custom Data (polling places, historical voting statistics, etc.)
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What’s Included?

Deployment Support
• Software-as-a-Service (SaaS)
• Esri Managed Cloud Services
• On-Premises Deployment

Resources & Community
• ArcGIS Online
• GeoNet (blogs, FAQ, forums)
• 15-day Demo available on ArcGIS Marketplace
Key Features

Reporting
Key Features

Plan Creation & Editing
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Key Features

Integrity Checks

- Dual Assignment Check
- Population Summary Check
- District Count Check
- Null Assignment Check
- Connectivity Check
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Key Features

Plan Management
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Key Features

Thematic Mapping
**Product Roadmap**

**Flex to JavaScript**
Converting the Esri Redistricting application from Flex to JavaScript

**2020 Census Updates**
Utilizing client feedback for Feature additions & updates for a more complete solution for 2020 Redistricting efforts

**Platform Integrations**
Further integrating Esri Redistricting with Portal and ArcGIS Online environments
Our Customers

Who is using Esri Redistricting?
Utah Adds Citizen Input

Utah State Legislature successfully implements Esri Redistricting for citizen involvement and draws districts based on constituent-made district maps.

The last time Utah needed to redraw its congressional district boundaries, technology was just beginning to catch up to a need that had existed since the redistricting process first started. Utah was a pioneer in the use of the web to open a process that had repeatedly bred mistrust.

The Challenge

Redrawing representative districts is a contentious process fraught with political acrimony. Nevertheless, U.S. states must examine and potentially redraw their congressional districts after each U.S. census. Because of the political stakes, the process regularly leads to allegations of unfairness. For the latest redistricting, the State Legislature of Utah Joint Redistricting Committee took a novel step toward mitigating such criticism through education by increasing the visibility of the process and raising awareness among its citizens. The redistricting process would reveal the intricacies involved and the genuine obstacles to finding a satisfactory solution for everyone.

REDISTRICT UTAH

Redistricting Committee

- 20 legislators appointed by President and Speaker
- Adopted principles and guidelines
- 28 meetings; including 17 public hearings across state
<table>
<thead>
<tr>
<th>Districts to be:</th>
<th>Acceptable Deviations:</th>
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<tbody>
<tr>
<td>Single Member;</td>
<td>Congressional ± 0.1%</td>
</tr>
<tr>
<td>Contiguous; and</td>
<td>Legislative ± 3.5%</td>
</tr>
<tr>
<td>Compact</td>
<td>School Board ± 3.5%</td>
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PUBLIC PARTICIPATION ENCOURAGED: ONLINE TOOL DEVELOPED

• Contracted with ESRI to Create Online Tool
• Any Registered User May Submit a Plan
• Public Plans Required to Comply with Redistricting Principles
  - Single Member Districts
  - Compact and Contiguous
  - Meet Deviation Standards
  - Complete
REDISTRICT UTAH

• Staff used ArcGIS and autoBound

• Public used an ESRI web-based redistricting tool
ESRI Tool Permitted the Public to:

• Create Groups, Share, and Modify Plans prior to Submission; and

• Submit Public Plans to the Redistricting Committee for Discussion at Public Meetings
• 5 tabs assist users draw maps
• Each tab has a ribbon of tools and information
PUBLIC USE OF ESRI TOOL

1,000 Registered Users

323 Plans Submitted

271 Met Criteria

198 Congress Plans
• Transparency Improved Public Relations
• Public Participation Reduced Criticism
• Public Participants Were Thoughtful and Knowledgeable
• A *Universal Truth*: Districts Drawn in Isolation are Easy, Complete Plans are Not
PUBLIC PARTICIPATION WAS SUCCESSFUL

• Citizen Plan Adopted!
• Headlines:
  - “Lawmakers endorse citizen map for new school board boundaries”
  - “Lawmakers endorse Logan resident's map for school board boundaries”
We did not anticipate the public’s desire to:

- explain in writing the merits of their plans; and
- comment on other public plans.
GIS PROVIDES THE PLATFORM
For Managing, Analyzing, and Applying Geographic Information

Integrating People, Processes, Things, and Data About Them
INSIGHTS
Exploratory Analysis and Visualization
A New App
Visual, Intuitive, Responsive
Dynamic Spatial Analytics and Visualizations
Very Fast
Integrated Spatial and Tabular Analysis

Linked and Responsive Charts and Maps
On-the-Fly Visual Models
WEB GIS IS THE MODERN GIS ARCHITECTURE

Helping Everyone Do Their Work Better

Growing Exponentially

Sharing Knowledge

Collaboration

Leveraging Web Services

Improving Productivity and Efficiency
Esri Redistricting

Demonstration
<table>
<thead>
<tr>
<th>WORKSHOP</th>
<th>LOCATION</th>
<th>TIME FRAME</th>
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<tbody>
<tr>
<td>Esri Redistricting: An Introduction</td>
<td>• SDCC - Ballroom 06 C</td>
<td>• Tuesday</td>
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<tr>
<td></td>
<td>• SDCC - Room 32 A/B</td>
<td>- 1:00 – 2:00</td>
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<tr>
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<td>• Tuesday</td>
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Please take our survey on the app.

1. Download the Esri Events app and find your event.
2. Select the session you attended.
3. Scroll down to find the feedback section.
4. Complete answers and select “Submit.”
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