Esri Redistricting
Bring clarity to the redistricting process
Esri Redistricting is a web-based solution that enables governments, advocates, and citizens to complete and securely share compliant redistricting plans.

Esri Redistricting provides comprehensive tools for plan creation, management, visualization, editing, and collaboration.

Built-in tools check for common compliance blunders.

Online functionality allows Openness, Transparency, and Citizen Engagement.
Introductions

Richard Leadbeater
Global Manager; State Government Industry Solutions
Email: rleadbeater@esri.com
Office: 909-793-2853, 1, 4448
Twitter: @PolicyMapper

Aaron Hrenak
Professional Services: Redistricting Support
Email: ahrenak@esri.com
Office: (636) 949-6620 1, 8518
Redistricting Background  -- Apportionment

State priority value to gain next seat = \( \frac{\text{State population}}{\sqrt{\# \text{ of current seats held} \times (\# \text{ of current seats held} + 1)}} \)

<table>
<thead>
<tr>
<th>Seat</th>
<th>State</th>
<th>District</th>
<th>Gain or Loss by</th>
</tr>
</thead>
<tbody>
<tr>
<td>432</td>
<td>Texas</td>
<td>39</td>
<td>145,623</td>
</tr>
<tr>
<td>433</td>
<td>Montana</td>
<td>2</td>
<td>5,286</td>
</tr>
<tr>
<td>434</td>
<td>Arizona</td>
<td>10</td>
<td>5,139</td>
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<tr>
<td>435</td>
<td>California</td>
<td>52</td>
<td>68,191</td>
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<tr>
<td>436</td>
<td>Minnesota</td>
<td>8</td>
<td>24,308</td>
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<tr>
<td>437</td>
<td>Ohio</td>
<td>16</td>
<td>148,371</td>
</tr>
</tbody>
</table>
Redistricting Background

Some History:

1980’s: Highly Constrained
1990’s: Tools available but cumbersome
2000’s: Usability and some public involvement
2010’s: Almost consumer-level
Our 2005 Story

Legislators

Professionals

Public
Our 2010 Story
• 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
Features Overview

- Data Sources
- Plan Management
- Collaboration
Data Sources

- **Demographic Data** (Census PL 94-171)
  - 2000, 2010
  - 2020 (as soon as it’s available)

- **Geographic Data** (TIGER/Line shapefiles)
  - County-Tract-Block Group-Block
  - County-Voting Districts (VTD)-Block
  - Place-Block

- **Overlay Data**
  - ArcGIS Online
  - Customer Data
Plan Management

• **Creation**
  - Import block-level plans from all standard GIS and Redistricting applications
  - Build from seed plans or start from scratch
  - Build plans at the State, County or City level

• **Editing and Review**
  - Automatically test for common pitfalls or legislative requirements
  - Compare plan to existing and alternative plans
  - Interact with live charts showing plan and district distribution

• **Publishing and Use**
  - Generate reports based on your plan
  - Publish plans into common file formats
  - Export block-level plans from all standard GIS and Redistricting applications
**Collaboration**

- Users with custom roles and groups (Citizens, Special Interest Groups, and Legislators)
- Share plans between groups
- Custom roles based on personas provides different UI/UX experience
- Submit finalized plans to group of final reviewers
- Markup and comment on plans
- See ‘Access Log’ to see who’s changed or viewed plans
Managed Cloud Services

- Configured instance for organization
- Custom data packs + integrated customer data
- Add content from external ArcGIS services
- *All hosting components managed by Esri*
- Unlimited registered users

+ Public Participation

On-Premise

- Configured and installed behind firewall
- Custom data packs + integrated customer data
- Add content from external ArcGIS services
- *All hosting components managed by you*
- Unlimited registered users

+ Public Participation
Learn ArcGIS
Guided lessons based on real-world problems

Redraw Political Boundaries with Public Participation
Draw Congressional Districts for the Next Election (2 hours)

Overview

Advances in GIS technology, and the improved transparency it brings, has opened the backrooms where politicians once picked their voters by drawing districts enhancing their re-election chances. Now, the public gets a say in redistricting. In this lesson, you’re an analyst dividing Maryland’s 24 counties (including one equivalent) into seven congressional districts. You’ll create a majority-minority district that complies with federal election mandates. And you’ll share your proposals with coworkers before they’re released for public comment. (Before starting, you may want to review an accompanying story map explaining redistricting.)

Esri Redistricting: Case Study

Utah State Legislature Adds Citizen Input

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

Case Study Link
Key take-aways...

- **Why Utah chose Esri Redistricting**
  - Public engagement
  - Online interaction
  - Customizable
  - Cumbersome process

- **Utah implemented 3-pronged approach**
  - Esri Redistricting
  - Autobound extension for ArcGIS Desktop
  - Companion website

- **Utah guaranteed full transparency by:**
  - Media participation
  - Multiple public meetings
  - Software interaction during meetings

- **Utah’s redistricting totals:**
  - Citizens registered = 1000
  - Submitted plans = 323
  - Met criteria = 271
Esri Redistricting -- Demonstration
Esri Redistricting is built on ArcGIS:

- Provides a web-based environment for creating and sharing plans
- Collaborate on plans and engage your communities
- Provide clarity in the redistricting process
- Try it today: learn how to create plans now to get ready for next year
How can our citizens engage in our Redistricting deployment?

- Directly access Esri Redistricting app
- Gain access via ArcGIS Hub
- Host custom website landing page