

Presentation to:
City of Ft. Worth
September 2020

EXECUTIVE BRIEFINGS
Esri Redistricting

Esri Redistricting

Bring clarity to the redistricting process



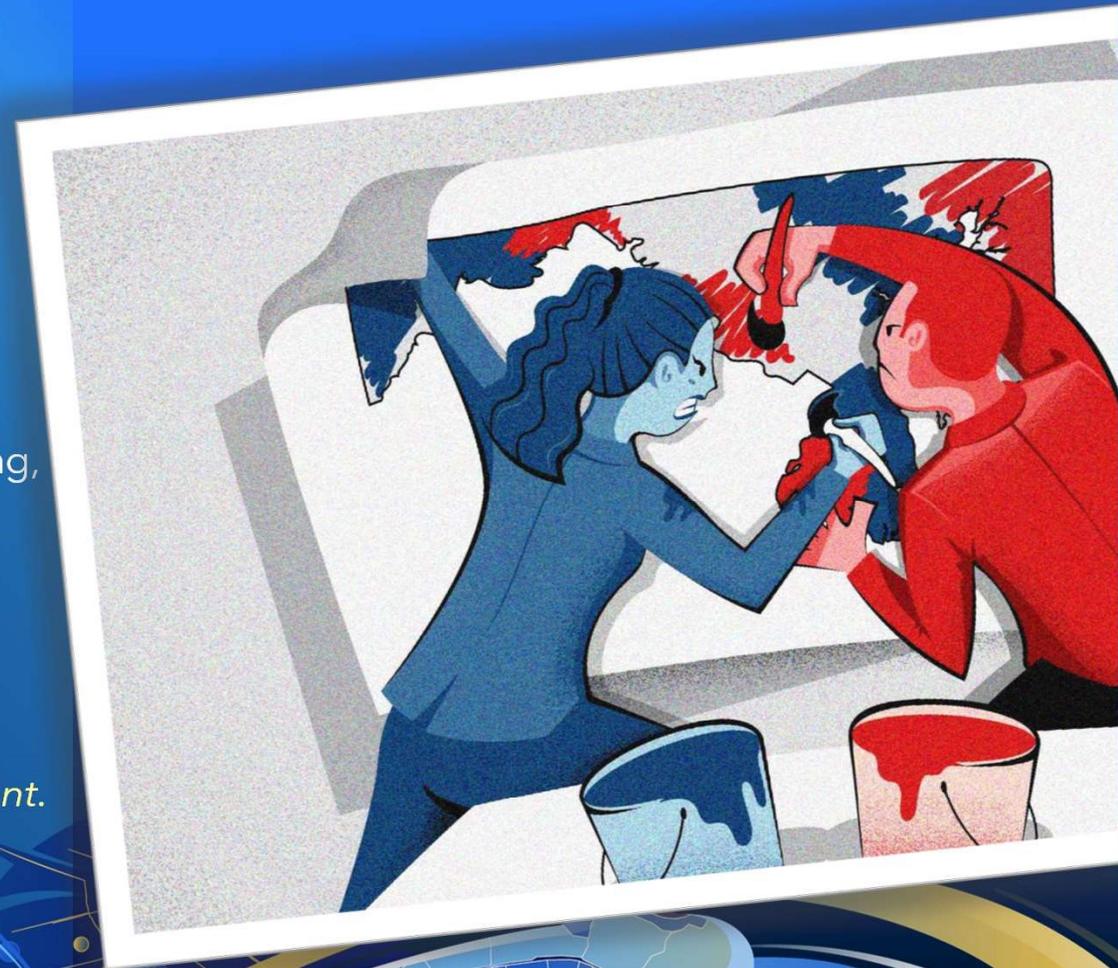


Esri Redistricting is a web-based solution that enables governments, advocates, and citizens to complete and securely share compliant redistricting plans.

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



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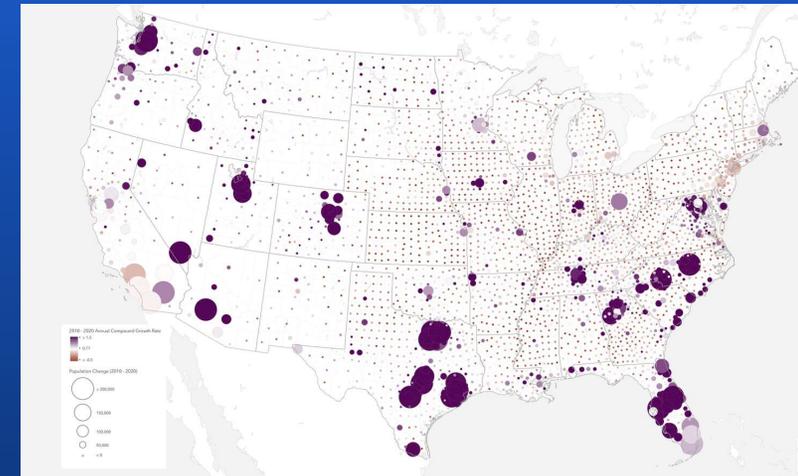
Professional Services: Redistricting Support

Email: ahrenak@esri.com

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Redistricting Background --Apportionment

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



Population Estimates 2020 Esri Demographics

Seat	State	District	Gain or Loss by
432	Texas	39	145,623
433	Montana	2	5,286
434	Arizona	10	5,139
435	California	52	68,191
436	Minnesota	8	24,308
437	Ohio	16	148,371

Reapportionment Calculation
2020 Esri Demographics

Redistricting Background

Some History:

1980's

Highly Constrained

1990's

Tools available but cumbersome

2000's

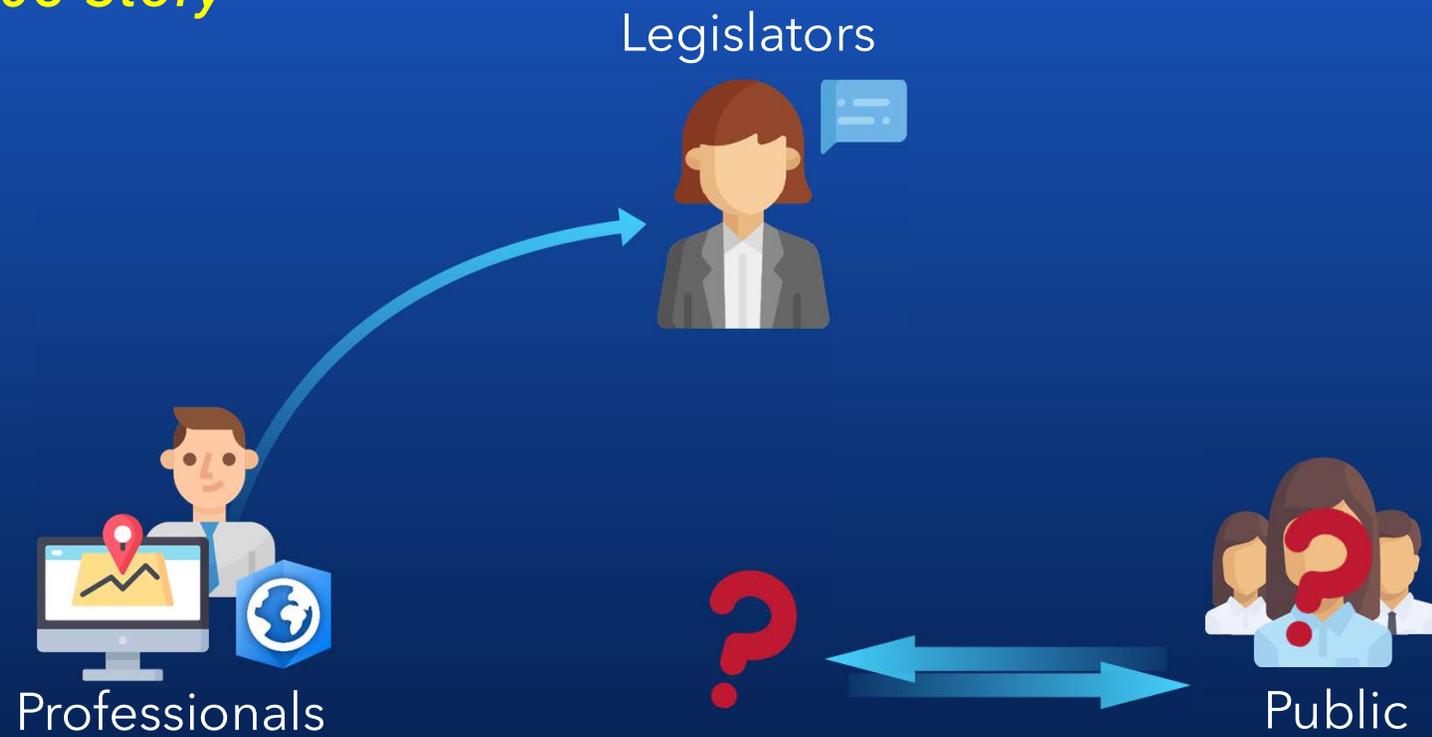
Usability and some public involvement

2010's

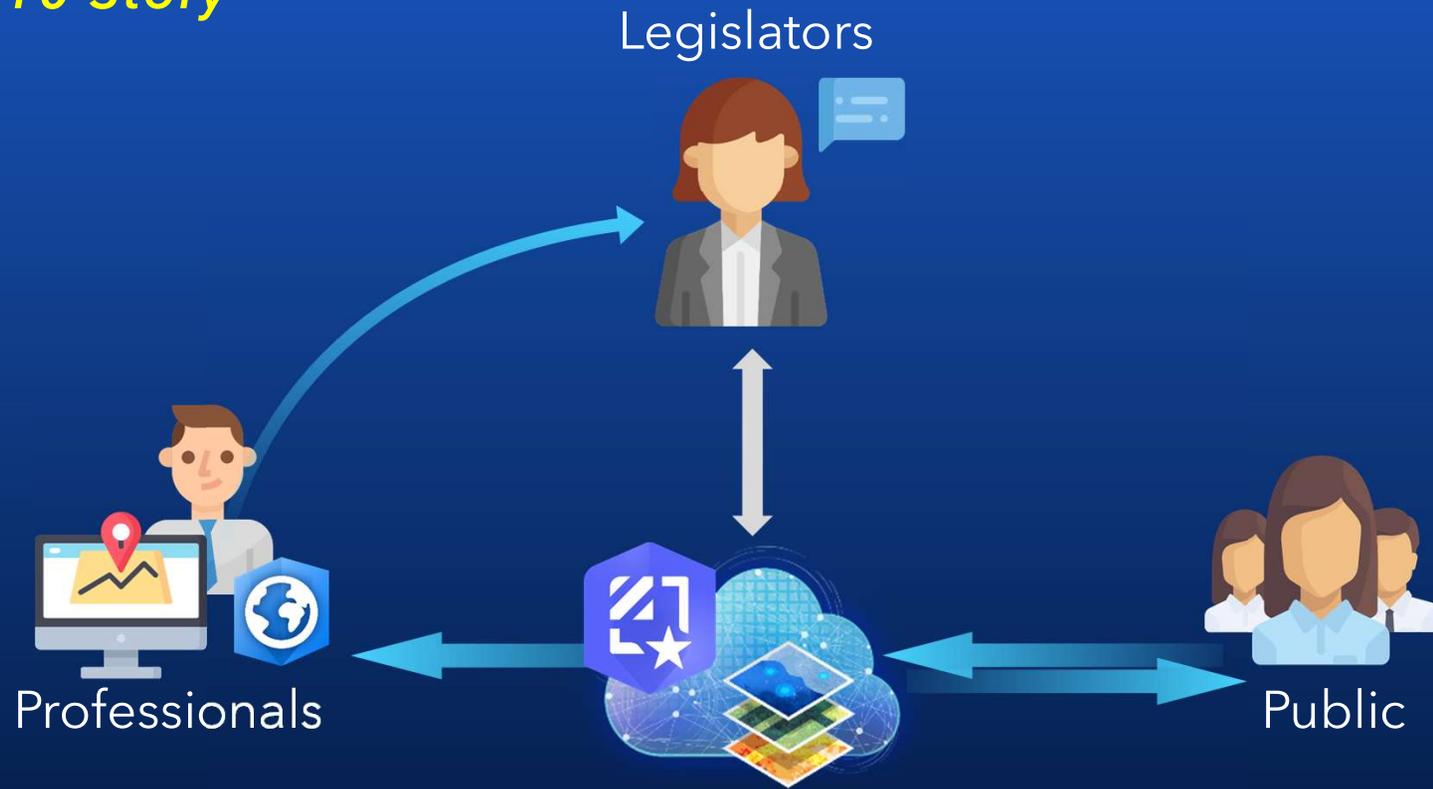
Almost consumer-level



Our 2005 Story



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

Esri Redistricting

Increasing collaboration between government and citizens

Features Overview



Data
Sources



Plan
Management



Collaboration

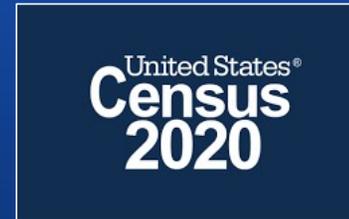


Data Sources



Esri Redistricting

- **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



Esri Redistricting

• Creation

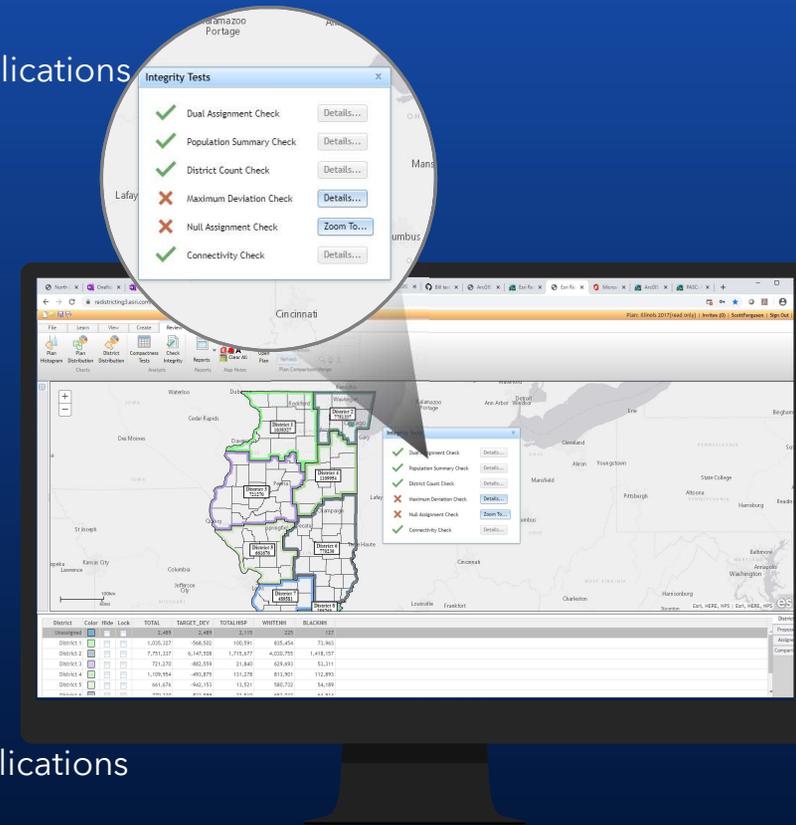
- Import block-level plans from all standard GIS and Redistricting applications
- Build from seed plans or start from scratch
- Build plans at the State, County or City level

• 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



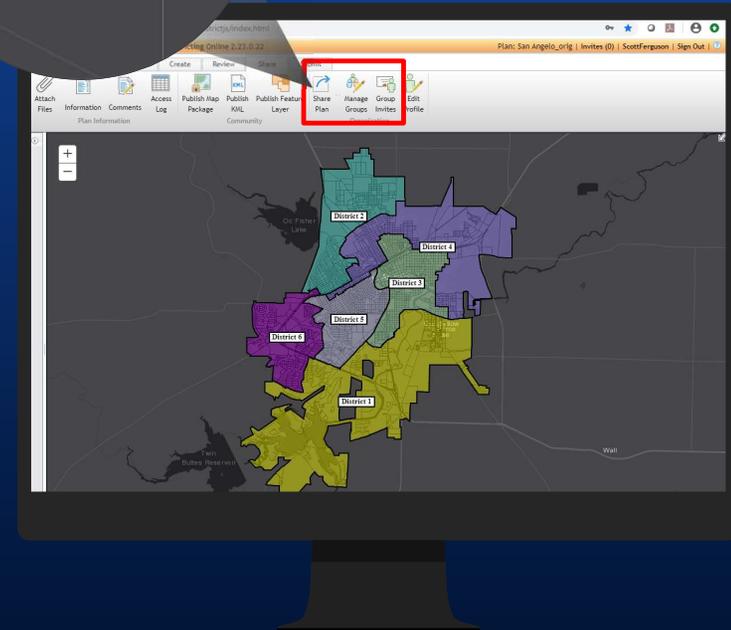


Collaboration



Esri Redistricting

- 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

Esri-hosted redistricting



- ✓ 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

1

On-Premise

Deployed on-site

- ✓ 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

2

Learn ArcGIS

Guided lessons based on real-world problems

New Lessons



Redraw Political Boundaries with Public Participation

Draw Congressional Districts for the Next Election ⌚ 2 hours

Start lesson

Overview

Lessons

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](#).)

Builds skills in
Mapping & Visualization

Focus industry

Government

<https://learn.arcgis.com/en/projects/redraw-political-boundaries-with-public-participation/>

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**



The screenshot shows the Esri Newsroom website. The top navigation bar includes 'esri', 'Products', 'Industries', 'About', 'Support', 'Newsroom', 'Overview', 'WhereNext Magazine', 'Podcasts', 'Publications', 'Blog', 'News', and 'Media Relations'. The main content area features a large image of a natural rock arch in a desert landscape. Below the image is a blue 'ARCNEWS' tag and the article title 'Utah Involves Public in Redistricting' with a sub-headline 'Redistricting | Summer 2018'. The article text begins with 'With the Esri Redistricting Solution, the State Increased Transparency of Revising Legislative Boundaries' and discusses the contentious nature of redistricting in the US and Utah's approach to transparency.

esri Products Industries About Support

Newsroom Overview WhereNext Magazine Podcasts Publications Blog News Media Relations

ARCNEWS

Utah Involves Public in Redistricting

Redistricting | Summer 2018

With the Esri Redistricting Solution, the State Increased Transparency of Revising Legislative Boundaries

Redrawing representative districts in the United States is a contentious process fraught with acrimony. Because of the political influence at stake, the exercise regularly leads to allegations of unfairness. Nevertheless, after each US Census is taken, states must examine—and potentially redraw—their congressional districts.

For the last round of redistricting in 2011, the State of Utah took a novel step toward mitigating criticism: its Redistricting Committee made the process much more transparent to better educate citizens about how it works. Using the Esri Redistricting solution, the committee opened up the proceedings to the public, revealing all the intricacies involved in redistricting and displaying the many genuine obstacles to formulating a solution that

Esri Redistricting -- Demonstration



Redistricting Online-RC 1.38 Plan: Unnamed Plan | Invites (0) | nick_admin | Sign Out

File Learn Create Review Share Submit

Scale 1: 4.6M Layer: County

Demographics Selection Redistricting Tools Block/Block Group/Tract/County District Display

Esri, HERE, Garmin, NGA, USGS, NPS

District	Color	Hide	Lock	TOTAL	TARGET_DEV	TOTAL18	TOTALNH	WHITENH	BLACKNH	AIANNH_P
Unassigned				1,032,805	1,032,805	817,552	1,018,735	972,926	16,911	
District 1	Green			69,763	-25,120	55,222	69,185	67,330	395	
District 2	Light Green			71,870	-23,013	57,486	71,203	68,341	572	
District 3	Blue			153,923	59,040	123,568	152,303	145,700	1,557	
District 4	Light Blue			0	-94,883	0	0	0	0	
District 5	Light Blue			0	-94,883	0	0	0	0	

Number of Districts: 14
Target Mean: 94883
 Show Target Values
Snap
Modify

Districts
Proposed
Assigned
Comparison

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***

Our Customers

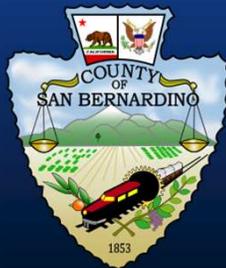
States



Cities



Counties



Who is using Esri Redistricting?



esri®

THE
SCIENCE
OF
WHERE®



How can our citizens engage in our Redistricting deployment?

Directly access Esri Redistricting app

Gain access via ArcGIS Hub

Host custom website landing page

