

CSG

# INNOVATION CLASSROOM Civic Health — The Role Redistricting Can Play in Building a Better Civic Landscape

Dec. 4 | 1-2 p.m. ET





# Housekeeping

This presentation is being recorded. The recorded presentation will be posted to *web.csg.org/2020* on the Monday following the session. If you have questions, contact **registration@csg.org.** 

To reduce noise during the presentation, all participants will be muted. If you have questions or comments, please utilize the **"Raise Your Hand"** functions or place your question in the **Chat.** Speakers may take questions throughout or at the end.

Captioning is provided during this session. To activate, select the CC option in the Zoom menu below and turn on subtitles.

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**CSG 2020** OCT. 26-DEC. 18 National Conference **REIMAGINED** 

**Richard Leadbeater** 

Global Manager, State and Provincial Governments

Esri

## Introductions

# This session covers the need for openness, citizen engagement, and transparency in the redistricting process.

Forty-two states have incorporated some level of public participation in their redistricting process; most have missed the point. The real driver in this movement is a rather simple desire to be involved. This session will focus on two case studies where civic leaders extend the redistricting data and software tools to the public and discuss the civic health benefits they received.

Richard Leadbeater, Esri

Global Manager; State Government Industry Solutions

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Office:	909-369-4448
Twitter:	@PolicyMapper



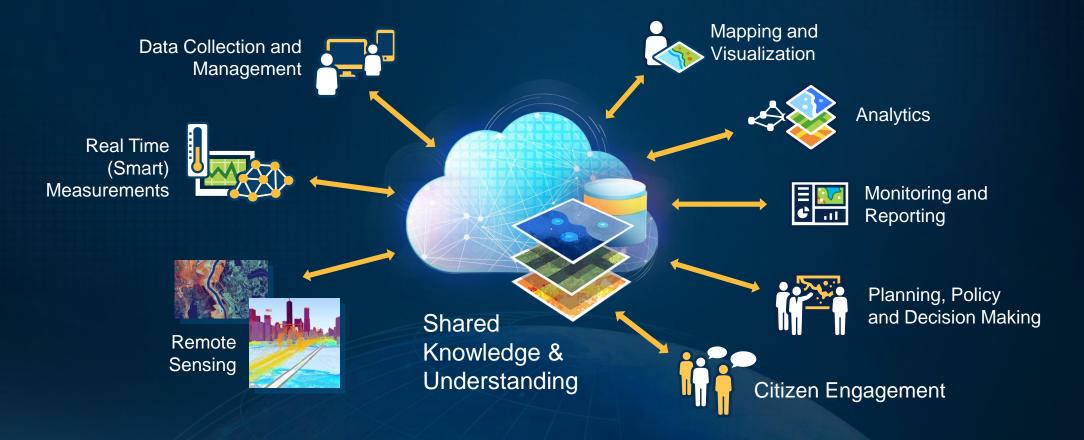


# Civic Health: The role redistricting can play in building a better civic landscape

Bring clarity to the redistricting process

## What is GIS?

## A System for Managing, Sharing, and Applying Geographic Information



Supporting Collaboration and Communication

## GIS Is Advancing

# GIS Maps and Dashboards Are Becoming Pervasive

Opening the World's Eyes to the Power of Real-Time and Data-Driven Visualization



## Apportionment

r		-	
			0
			Gain or
Seat	State	District	Loss by
430	New York	26	233,154
431	Alabama	7	47,980
432	Montana	2	9,204
433	Texas	- 39	222,257
434	Arizona	10	41,971
435	California	52	73,538
436	Minnesota	8	10,687
437	West Virginia	3	6,695
_			

Esri Demographics

#### AutoSave ( Off) 🔄 🍤 🗸 Copy of apportionment exercise sept 2017 (jh) - Excel Richard Leadbeater 19 📼 Formulas Data Review View Help ArcGIS Man Cut $\mathcal{O}$ A<sup>\*</sup> A<sup>\*</sup> ≡ = → <sup>⊗</sup> → <sup>ab</sup> Wrap Tex Calib Find & BIU~ Clear Sermat Painter - 1 × ~ fr L M ADC ADD ADE ADF D April 1, 2010 2010 Census 2020 Estimate (Esri otal Por 309 183 463 329 937 680 1 per state 329,937,680 37,341,989 39,802,811 1 28,144,838 25,268,418 29,078,165 1 20,561,368 op divided by 435 Florida 19.421.055 20.654.191 1 14.604.719 758,477 New York 18,900,773 20,119,871 1 14,226,897 Illinoi 12,864,380 13,054,000 1 9,230,572 17 12,734,905 12,992,578 1 9,187,140 nnsvlvani Bubble state Ohic 11 732 43 11 568 499 North Carolina Georgi

Michigan

Arizona Massachusetta Tennessee Indiana Missour Maryland Wisconsir Colorado Minnesota South Carolina Alabam

Louisiana

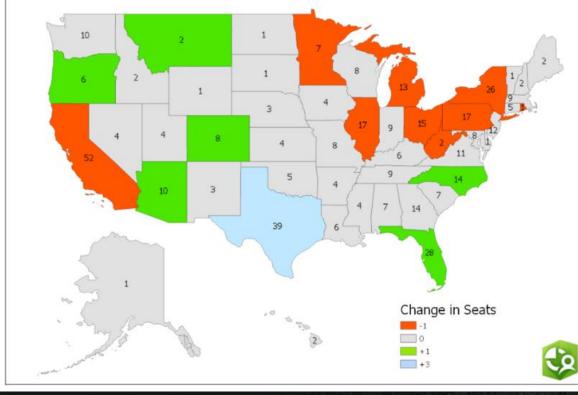
KY Kentucky CAlc 2 CAlc 3 scratch

LA

New Jersey Virginia Washington

#### Projections for 2020 Congressional Apportionment

Change in Seats based on ESRI 2020 Population Projections



Reapportionment Projections and the Potential Impact of New States

> State and Provincial Government July 26, 2019



On April 1<sup>st</sup>, 2020 the decennial census will attempt to "*count everyone once, only once, and in the right place.*" Much is at stake in terms of divvying up federal dollars and political clout. States that are on the cusp of gaining or losing one of the 435 House of Representative seats are paying particular attention to the count, with many forming Complete Count Committees to ensure they have the most accurate count possible. In anticipation of Census 2020, Esri's 2019 Time Series population estimates are used to forecast the winners and losers in the next round of reapportionment. We extend the analysis to explore some potential reapportionment scenarios based on changes in statehood for Puerto Rico and the District of Columbia (DC).

https://www.esri.com/arcgis-blog/products/esri-demographics/state-government/reapportionment-projections/

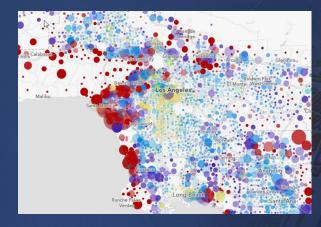
## Esri Policy Maps

# esri.com/policymaps

Job Accessibility by

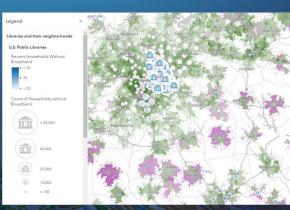
Walking and Transit

#### Household Income



Social Vulnerability Index





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Walking Distance to a Library & Broadband Rating **Opioid Mapping** 



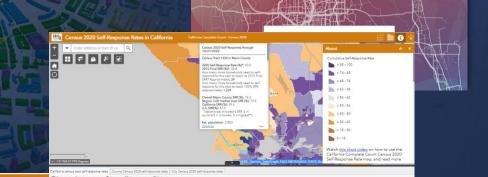
**Emerging Questions & Approa** 

tacking today's community challenges





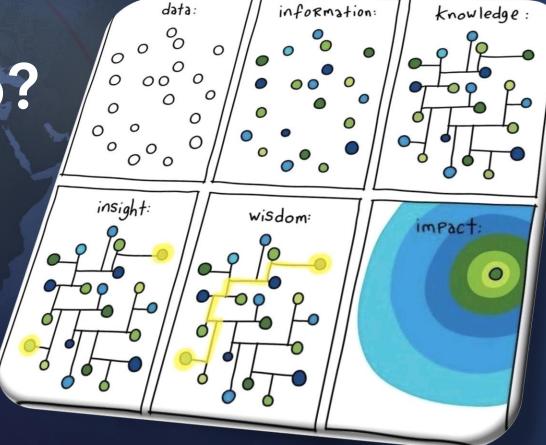
Four of Traffic Counts in the The geogra s app shows are fulfic counts many prohaming areas in several citize and the several citize many several citize and their helfs several citize and their helfs tens. tion City of Philadelphia (stress Index and the Stress Index concines a sample of man man man and the stress of the stress index of the stress man man man and the stress of the stress of the stress on at all three effects.



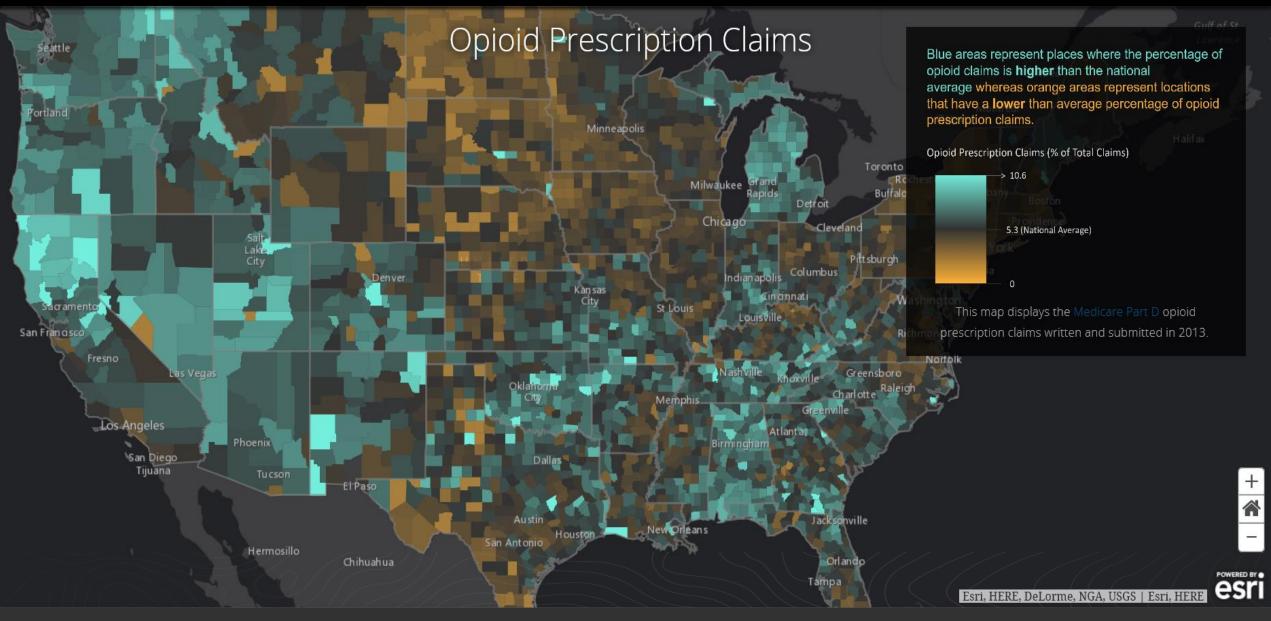
Census 2020 Self-Response Rates in California

# What is a Policy Map?

A Map that shows you *where* to intercede.



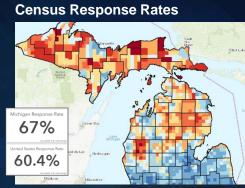
## 🏽 🏟 esri The Opioid Epidemic



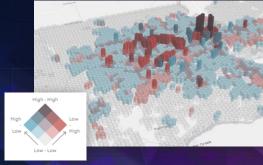
## The System of Record

# A Map that shows you *where* to intercede.

#### **Census, Demographics and Statistics**



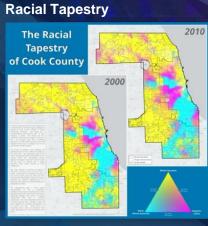
University of Michigan Michigan **Population & Employment** 



MAPA Nebraska | Iowa

#### Disadvantaged Neighborhood Survey





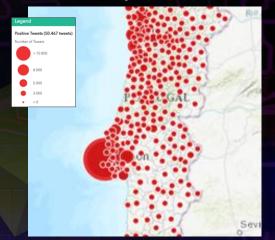
Cook County Government Illinois



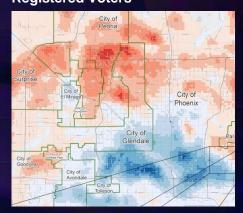
**Unemployment Claims** 

Texas Workforce Commission Texas

#### **Sediment Analysis**



#### **Registered Voters**



Maricopa County Recorder's Office Arizona

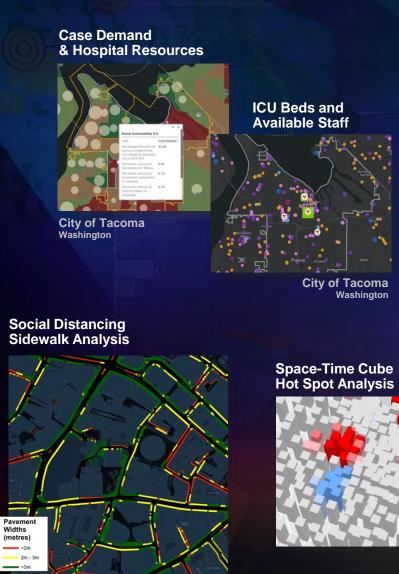
#### **COVID-19 Dashboards**

#### **Executive Decision Support** ₫ 35,390 ♥15,977 Mayor-Presid 27 Code -₩1,750 **Pandemic and Civil Unrest** \* 18,440 Cases, Deaths and Recovered 973 5,673 58,999 Contact Vulnerable Tracing tal Tests May 7 2020 12:00PM Populations -----Texas A&M () th University Texas City of Baton Rouge and **Mike Vatter** 874,314 Parish of East Baton Rouge Michigan 206,280 Louisiana 29.5% **Potential Impacts on Operations University of Eastern Finland** Finland talles) (CA) (manufrancias) (Manufal) (Manufr ت ف 🗍 ف -----**Hospital Admissions and Patient Status Firefighters Impacted** 5,051 120,647 Seguimiento de Pacientes aeroterra (i) IAFF Member COVID-19 Tracking 3204 Census 973 11 736 Planning **Statewide Awareness** .552.594 US COVID-71,141 81.575 20,056 6,432 Coronavirus COVID-19 in Western Australia COUNTY COVID-19 IMPACT PLANNING REPORT 18,218 8,132 Been Quaranter D Total tests 0 107,811 v 1 ^ 5,720 USACE 596 30 4,456 Census 1,437,872 499,728 2.79 Southwestern US 77 18,199 O ÷. 266,075 \$12,126,908 IAFF 264 @ -----Edad 36 ₩ 0 and a \$3,699,807 117.005 292,462 6 Department of Health, Western Australia 58.313 57,031 Australia

US Census New York

**Cases and Deaths** 

#### **COVID-19** Response





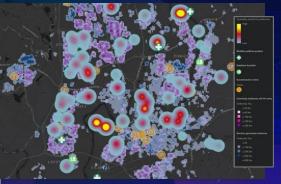


American Red Cross

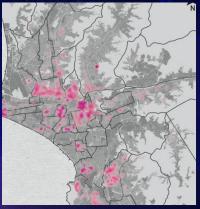
Statistical Analysis of Space-Time Clusters

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#### **Coordinated Response Map**



**Vulnerable Urban Population** 

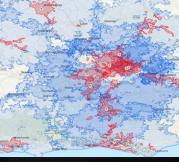


Emergency Food Distribution



City Harvest New York

oomberg ic Health US Testing Sites and Travel Time



## **Data-Driven Decisions and Policymaking**



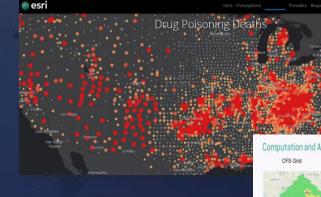
Washington, DC

#### **Gentrification and Displacement Indicators**



#### **City of Austin Texas**

#### **NLC and NACo Opioid Taskforce**



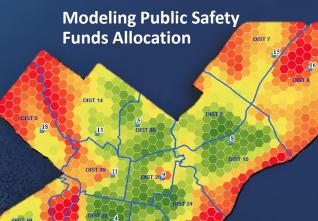


Narcan Grid

#### Computation and Analyses: EDA







City of Philadelphia Pennsylvania

## **Traffic Safety**

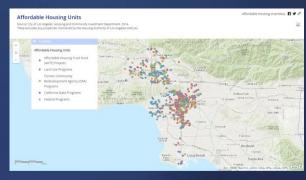




#### City of Oak Hill West Virginia

**Kansas** City Kansas

#### Affordable Housing Units



**City of Los Angeles** California

#### Washington, DC

#### Citizen Engagement, Open Data, and Collaboration

#### **City Event Promotion**





City of Philadelphia Pennsylvania

#### Amazon HQ2 Response

311 Report<u>er</u>



**Citizen Problem** 

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Reporting

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Clear own 3-1 Qu Reporter

Pennsylvania

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# Johns Creek DataHub City of Johns Creek Georgia **City of Philadelphia** Pennsylvania Adopt-A-Storm Drain

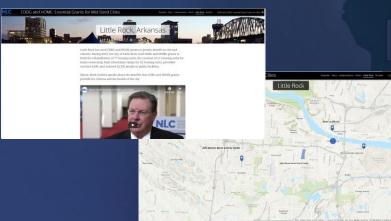
**Smart Device Integration** 

California

Zoning Comment



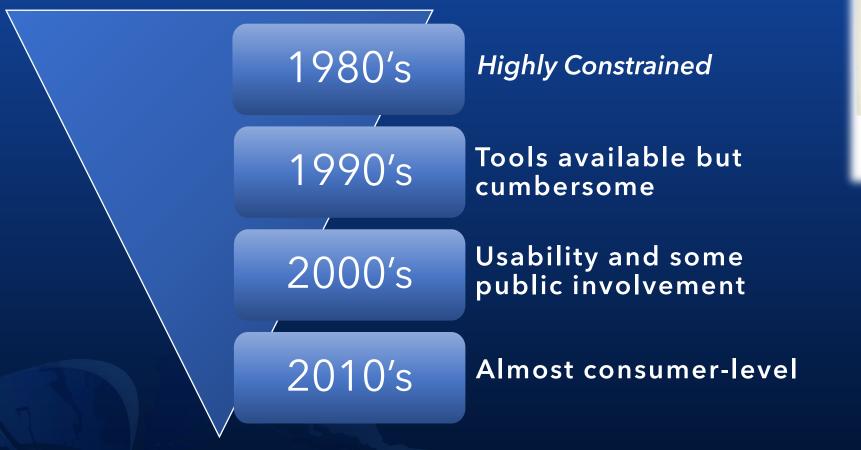
NLC Advocacy Story Maps Why CDBG & HOME Grants Matter



City of Little Rock Arkansas

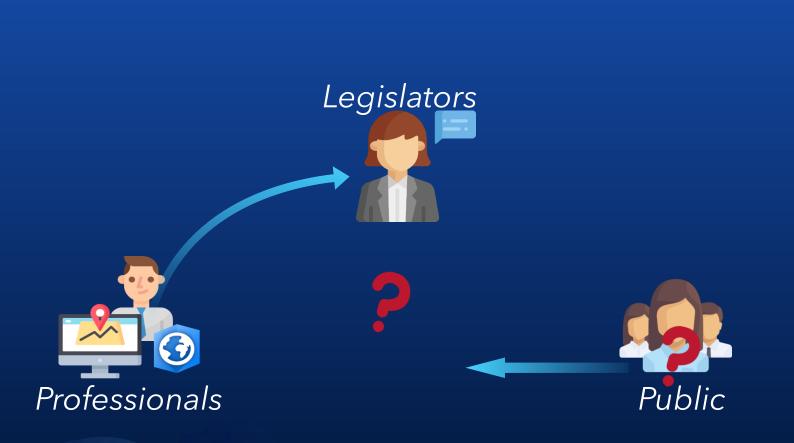
# Technology in Redistricting

# Some History:

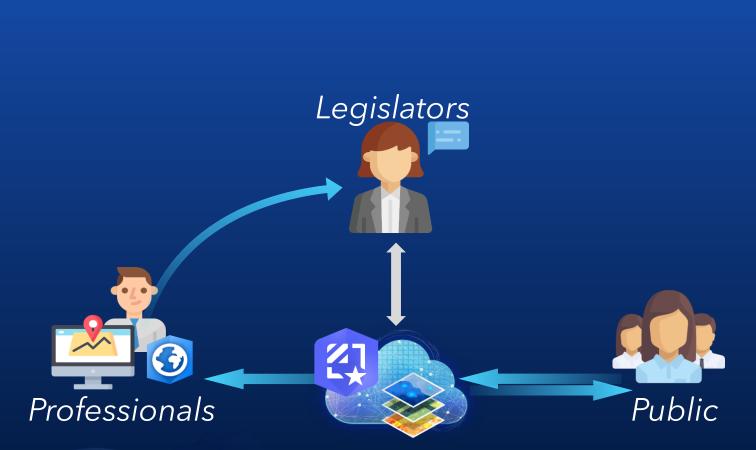




# The 2005 Redistricting Story



# A vision for 2010



# 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



*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.







# State of Utah 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 ٠
- 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•



## 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

# **REDISTRICTUTAH.COM**

# **Redistrict Utah**

Online Home of Utah's 2011 Redistricting Effort

Basics **Bills: Passed Maps Bills: Special Session Maps** Your Map Maps 🔻 Meetings Perspective CHACHESIN **Featured Articles** UINTAH **JUAB** Legislative Enrolled Maps MILLARD Manh. SAMPELE **Redistricting 101** GRAND diald When, what and why. EMER

Draw Your Map

< >

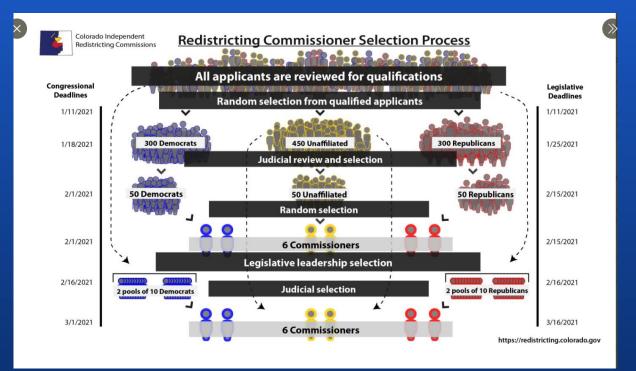
Online redistricting program

## Legislative Enrolled Maps

After months of hard work, the redistricting process came to a close during the legislative special session, held in October. The Legislature approved the final maps, and Governor Herbert signed them into law. Each of the maps can be found below:

# State of Colorado take-aways...

# Map Consideration and Public Involvement *Preliminary Map*



- Nonpartisan commission staff creates a preliminary redistricting map, but can consider public comments while developing the map.
- Members of the public may also present proposed redistricting maps and written comments for the commission's consideration.
- The commission must hold at least 3 public hearings in each current congressional district before approving a redistricting map, for a minimum of 21 public hearings throughout the state.
- At least 10 commissioners must attend each hearing, either in person or electronically.
- Commission hearings must be broadcast online.
- The commission website will allow a way for Colorado residents to submit maps or written comments.
- All written comments pertaining to redistricting will be published on the website.

# State of Montana take-aways...

This story map will take you through the redistricting process in Montana from start to finish. You'll learn about:

- •What redistricting is and why it happens
- •Who is in charge of redistricting and how they got there
- •The legal standards used to develop districts
- •The challenges of redistricting in a large, rural state
- •How to get involved

A story map	
Guide to State Legislative	Redistricting in
Montana	

#### Montana's Numbers

A similar process happens in Montana for the state legislative districts. Montana is divided into 100 state districts and 50 senate districts. One legislator is elected from each of those districts for a total of 150 legislators in the Montana Legislature.

After the 2010 Census, Montana's population was 989,415. That means each state house district needs approximately 9,894 people and each state senate district needs approximately 19,788 people.

Pretty simple, right? Just divide up those people into 100 districts and we are done here.

# Moose Jaw Regina Medicine H Lethbridg Spokan ennewick Guide to State Legislative Redistricting in Montana (arcgis.com)

#### vear from census day **MONTANA** Five phases of the Redistricting Data Program: Phase 1: Block Boundary Suggestion Project (BBSP) Initial Identification of Updates - December 2015 - May 2016 census 2020 | Make it count Verification of Updates - December 2016 - May 2017 Phase 2: Voting District Project (VTD) December 2017 through May 2019 Initial Identification of Updates - December 2017 - May 2018 /erification of Updates - December 2018 - May 2019 Verification of Updates II - December 2019 - March 2020 Phase 3: Delivery of the 2020 P.L. 94-171 Redistricting Data Files and Geography Products - April 1, 2021 Phase 4: Collection of Post-2020 Redistricting Plans Phase 5: Review of 2020 Census Redistricting Data Program and ions for Census 2030

Census 2020: Montana Redistricting Program

Census 2020: Montana Redistricting Program

Block Boundary Suggestion Voting District Project

Montana Department of Commerce 📑 🎔 🖉



Census 2020: Montana Redistricting Program

Redistricting Block Boundary Suggestion Voting District Project

#### Montana Department of Commerce 🖪 💆 🖉

#### Voting District Project

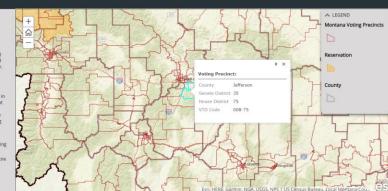
Montana.

Block Boundaries

The Census & Economic Information Center (CEIC) and the Montana State Library (MSL) have teamed up to develop a Montana Voting District map layer is layer has been submitted to the U.S. Census Bureau for use in the upcoming 2020 Census.

oting Districts are referred to as voting precincts in the State of Montana. This project was a significant ndertaking required close collaboration with counties throughout the state. The Montana State ibrary will maintain this layer for public use going

Burgundy lines represent the boundary of the voting districts established for the 2020 Census. Zoom and pan around the map to explore the entire



Montana Department of Commerce 🛛 🕤 🤗

# Key Takeaways

# Esri Redistricting

# **Open and Transparent should provide;**

- a web-based environment for creating and sharing plans,
- the ability to collaborate on plans and engage your communities,
- **clarity into the redistricting process**

# What You Need to Know About Redistricting

Government October 12, 2020

Richard Leadbeater

## Geography is Destiny

I recently listened to a series of podcasts about the upcoming redistricting process. The host of the podcasts reviewed a collection of stories examining the many legal battles concerning redistricting over the past several years. Eventually, the host used a phrase that grabbed my attention. While describing the winners and losers in redistricting, he said, "Geography is destiny." Isn't that fitting? Credited to Napoleon and his geopolitics theories,

Openness, Transparency, and Citizen Engagement





# **Upcoming Innovation Classrooms**

# Advanced Recycling as a Pathway to Plastics Circularity

Presented by The American Chemistry Council | Dec. 14 | 1 p.m. ET

# Anti-obesity Medication as a COVID-19 Management Tool and for Future Public Health Emergencies

Presented by Novo Nordisk, Inc. | Dec. 16 | 1 p.m. ET





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