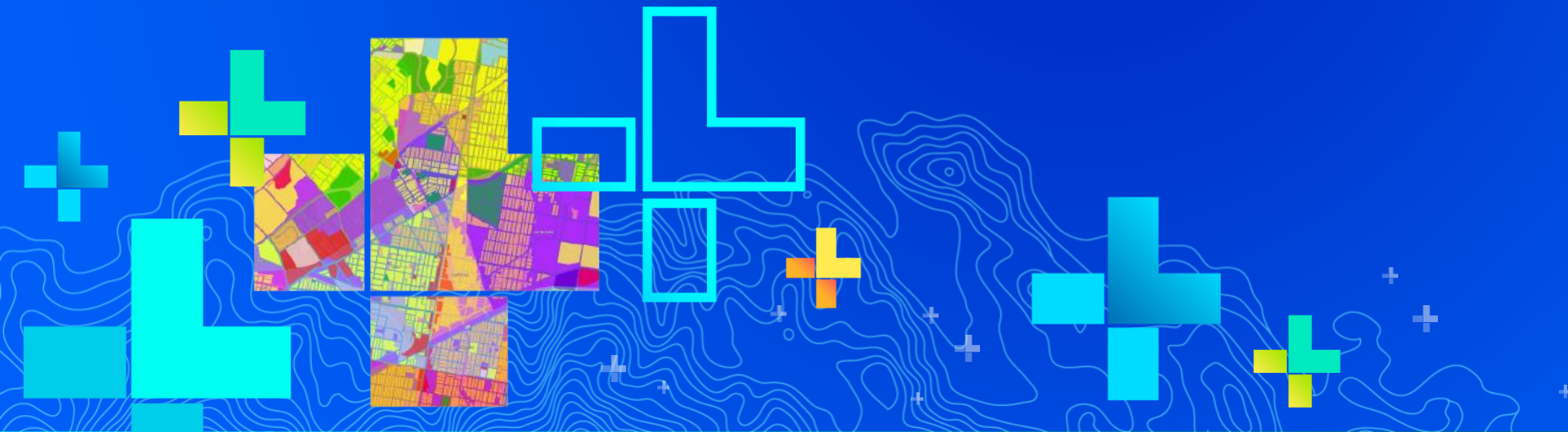



Working with Living Atlas Data - Make a Demographic Map in 5 Minutes

Lisa Berry – Cartographic Product Engineer

 @lisaberry_gis





Many different Methods. Let's see two of them.

ArcGIS Online Enrichment

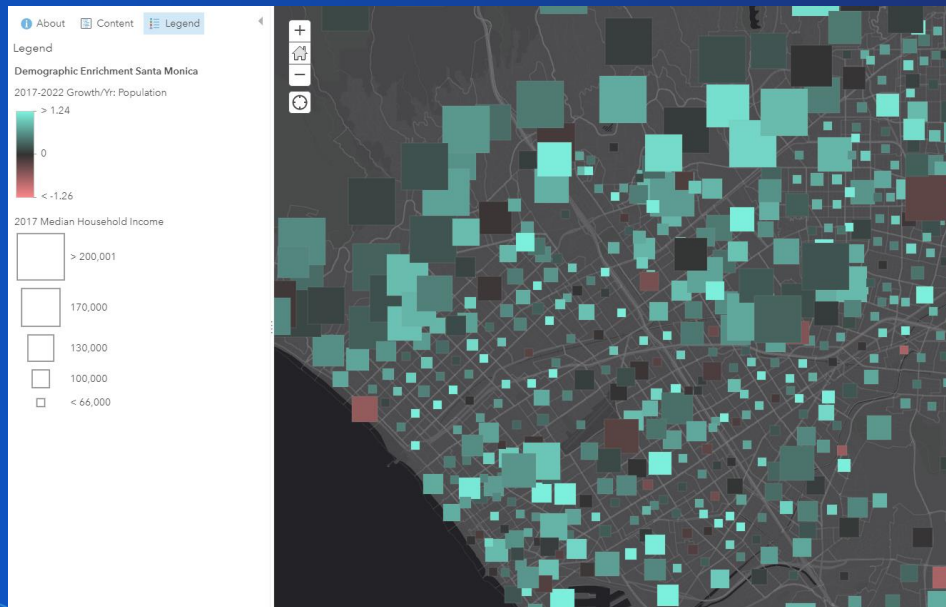
Use Census Data from the Living Atlas of the World

No data? No problem.

Make a demographic map in minutes! (really)

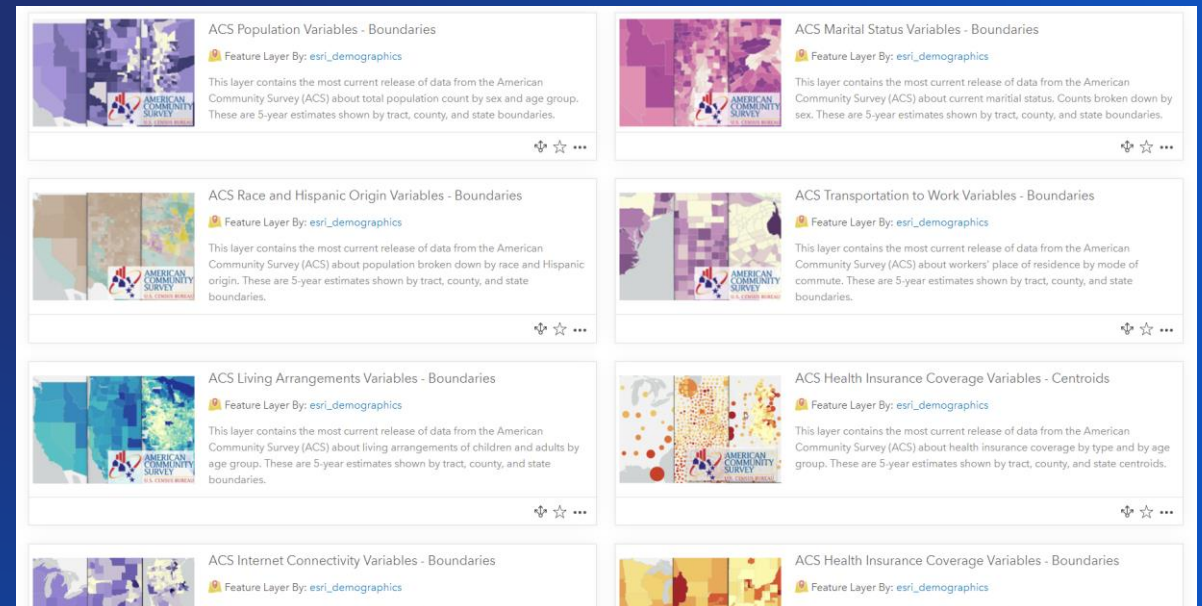
ArcGIS Online Enrichment method

- Learn the 4 easy steps
- Walk-through the 4 steps



Living Atlas method

- Make a map from American Community Survey (ACS) layers



ArcGIS Online Enrichment Method

Use enrichment to quickly learn about the population



4 Easy Steps

1. Sign in to ArcGIS Online

2. Go to an area you are interested in

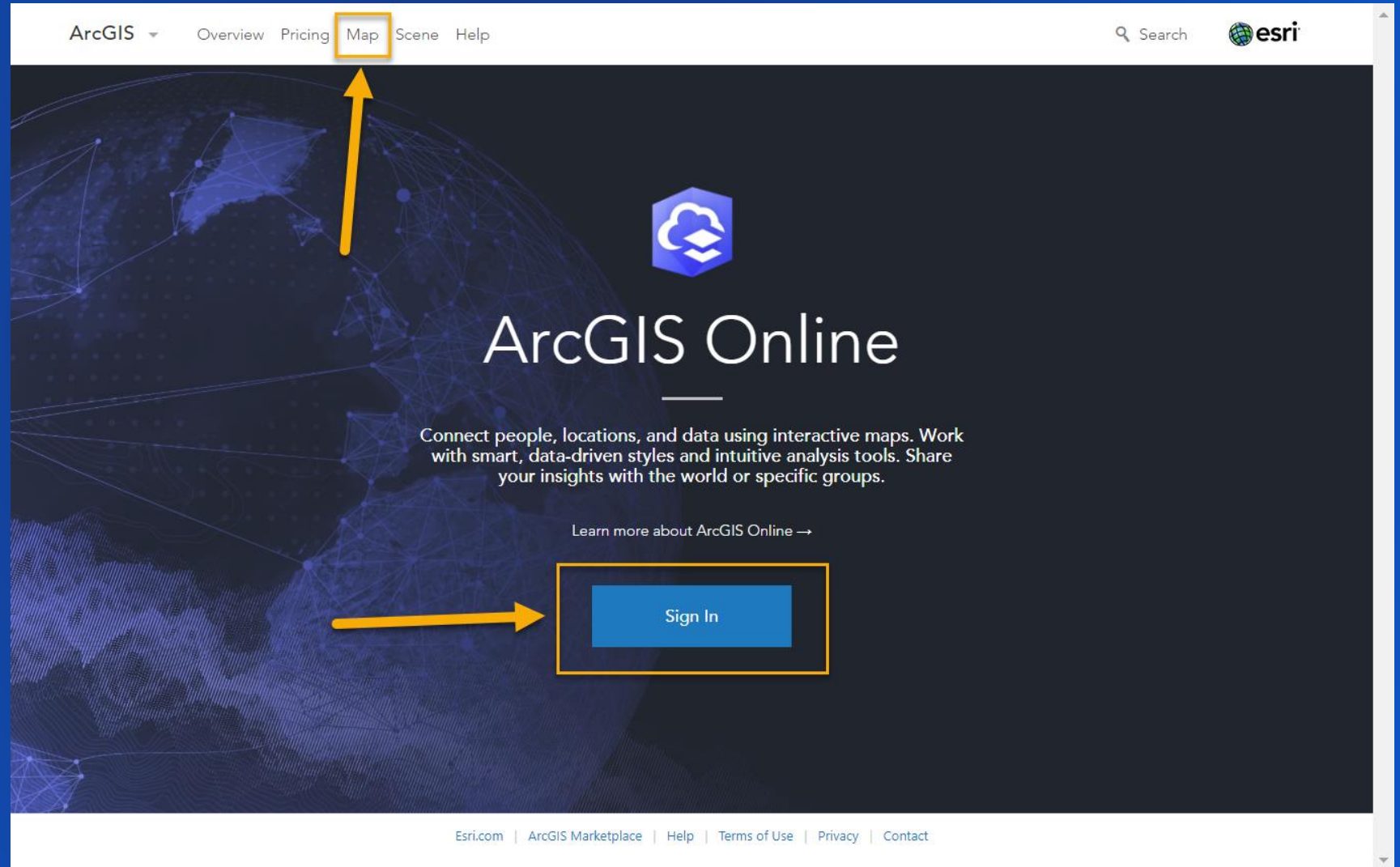
3. Enrich it

4. Smart map it

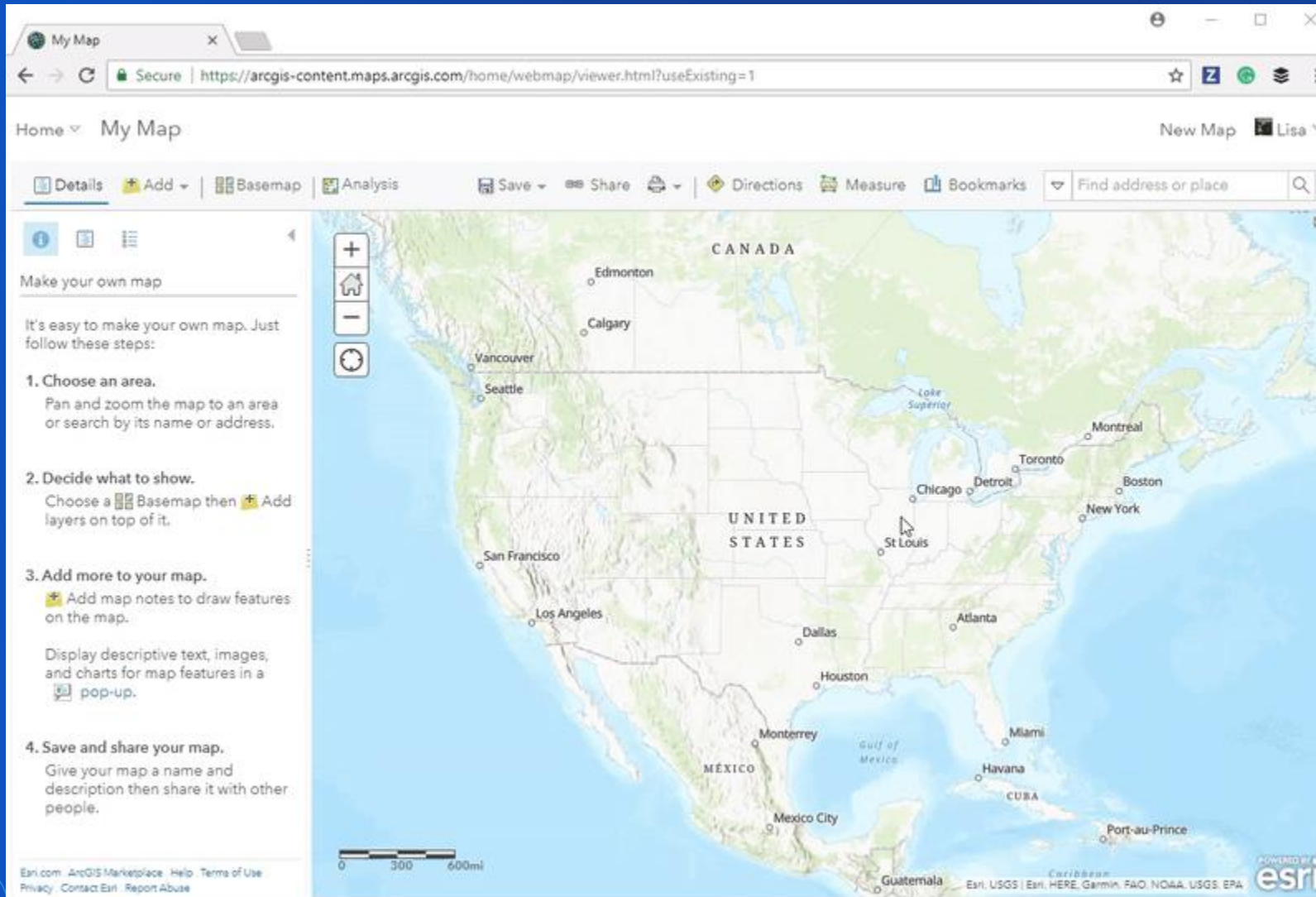
Step 1: Sign in to ArcGIS Online

Open ArcGIS Online and sign in

Click on “Map” to get started



Step 2: Go to an area you are interested in



Zoom to the area
you want to explore

Consider extent

Step 3: Enrich it

Two ways to start:

Start
with
data

Add to
map

Go to
“Analysis”

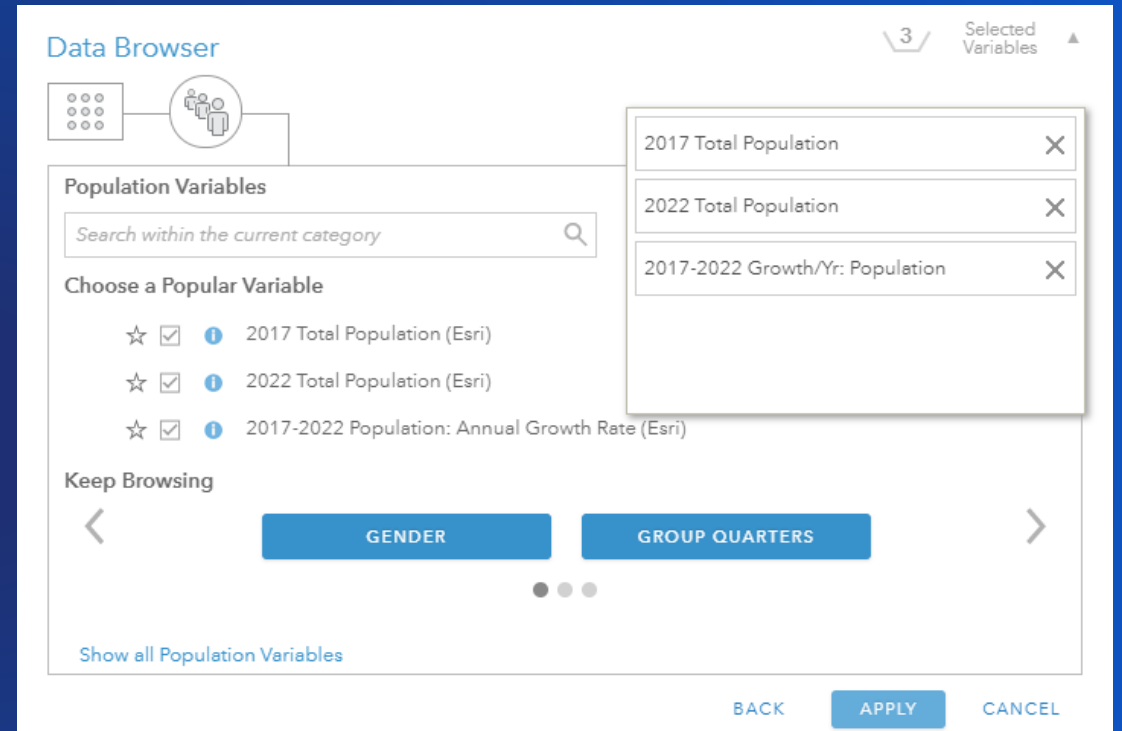
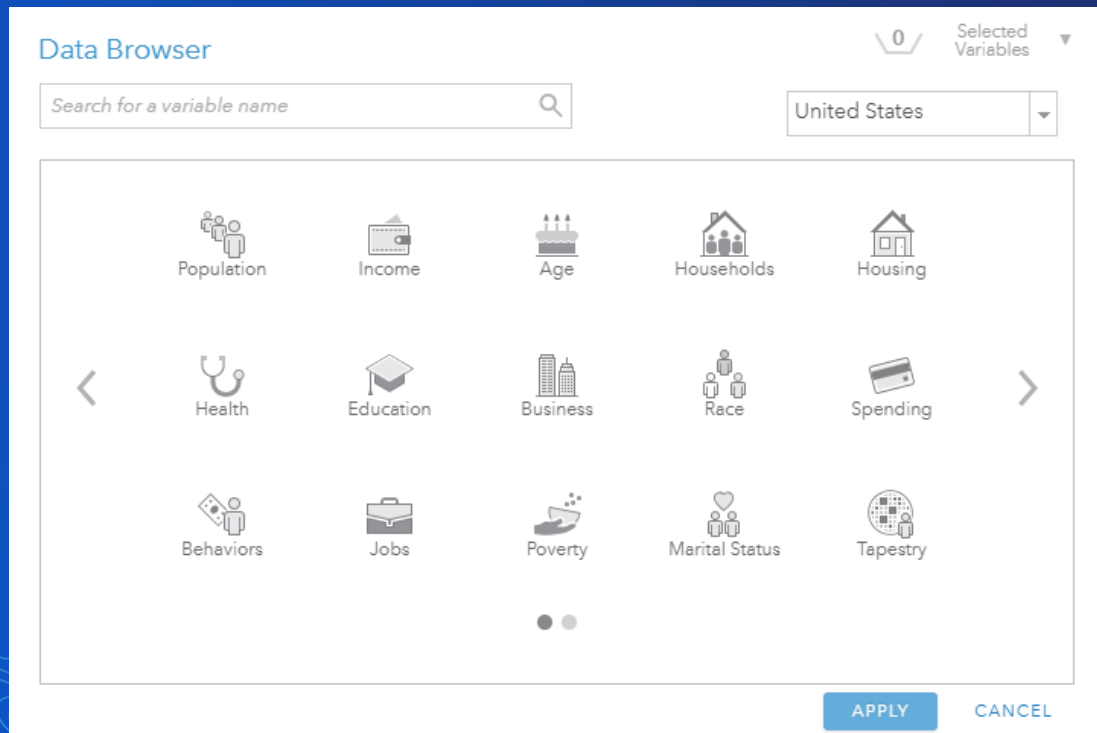
Start
without
data

Go to
“Analysis”

Select a
Living Atlas
Layer

Step 3: Enrich it

- Select Variables
 - Categorized for browsing or by “search”



Step 3: Enrich it

- If enriching points, define the area to enrich
- Name layer
 - Tool creates new layer to your My Content
- Define extent
 - Use current map extent or full data extent
- Check credits
- Run Analysis

Home My Map New Map Lisa

Details Add Basemap Analysis Save Share Print Directions Measure Bookmarks Los Angeles, CA, USA

Enrich Layer

- 1 Choose layer to enrich with new data
USA Census BlockGroup Areas
- 2
2017 Total Population ×
2022 Total Population ×
2017-2022 Growth/Yr: Population ×
2017 Median Household Income ×
- 3 Define areas to enrich
Line distance
1 Miles
 Return result as bounding areas
- 4 Result layer name
Demographic Enrichment - Santa Monica
Save result in: lisa_berry
 Use current map extent Show credits
RUN ANALYSIS

Esrri.com ArcGIS Marketplace Help Terms of Use Privacy Contact Esri Report Abuse

Esrri

Step 4: Smart map it

Creates new layer within your My Content (added to the map automatically)

Explore the attributes and the data patterns by letting the map do the work for you

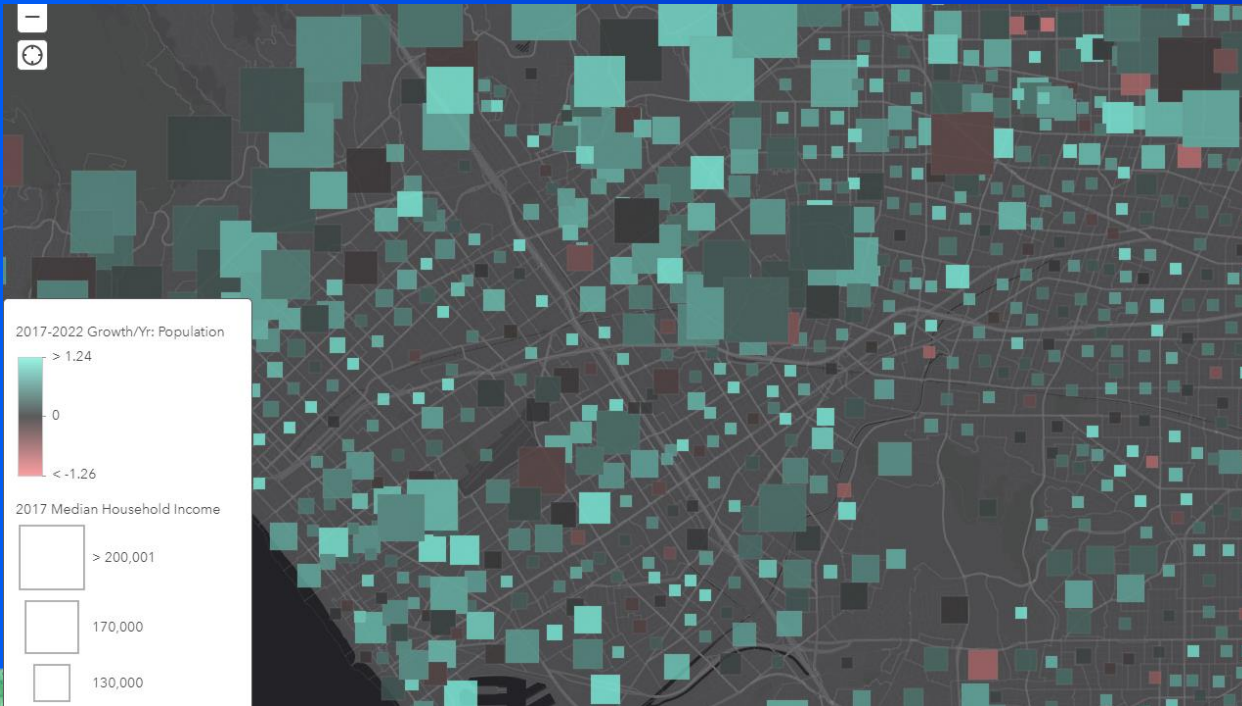
The image displays three sequential screenshots of the ArcGIS web interface, illustrating the process of configuring a smart map layer for demographic data in West Los Angeles.

Screenshot 1: Attribute Selection
The 'Change Style' dialog is open for the layer 'West Los Angeles Demographics - West LA Demographics'. Step 1, 'Choose an attribute to show', has a dropdown menu open showing options: 'Show location only', '2015 Median Disposable Income', '2015 Median Household Income', '2015 Total Population', '2015-2020 Population Growth Rate (%)', '2020 Total Population', 'aggregationMethod', 'Annual Budget Exp', and 'Apparel & Services'.

Screenshot 2: Style Selection
Step 2, 'Select a drawing style', is active. The 'Counts and Amounts (Color)' style is selected. A legend for '2015 Median Disposable Income' is visible, with a color scale ranging from light yellow (< 19,158) to dark blue (> 79,780).

Screenshot 3: Final Map View
The final map view shows the '2015 Total Population' layer. The legend indicates a color scale from light yellow (< 711) to dark blue (> 2,096). The map displays a grid of colored polygons representing population density across the West Los Angeles area.

Implement the 4 Steps



Make a Demographic Map from Living Atlas data

Map with the most current American Community Survey (ACS) data



American Community Survey (ACS) in the Living Atlas

- The most current data from ACS
- No credits required
- State, County, and Census Tracts on the appropriate TIGER boundaries

The screenshot shows the ArcGIS Living Atlas of the World search results page. The search query is "current year acs". The results are filtered by "All content types", "All time", and "All regions", with "Esri-only content" checked. The results are sorted by "Relevance" and show 113 results. The first six results are displayed as cards, each with a thumbnail map and a description:

- ACS Population Variables - Boundaries**: This layer contains the most current release of data from the American Community Survey (ACS) about total population count by sex and age group. These are 5-year estimates shown by tract, county, and state boundaries.
- ACS Marital Status Variables - Boundaries**: This layer contains the most current release of data from the American Community Survey (ACS) about current marital status. Counts broken down by sex. These are 5-year estimates shown by tract, county, and state boundaries.
- ACS Race and Hispanic Origin Variables - Boundaries**: This layer contains the most current release of data from the American Community Survey (ACS) about population broken down by race and Hispanic origin. These are 5-year estimates shown by tract, county, and state boundaries.
- ACS Transportation to Work Variables - Boundaries**: This layer contains the most current release of data from the American Community Survey (ACS) about workers' place of residence by mode of commute. These are 5-year estimates shown by tract, county, and state boundaries.
- ACS Living Arrangements Variables - Boundaries**: This layer contains the most current release of data from the American Community Survey (ACS) about living arrangements of children and adults by...
- ACS Health Insurance Coverage Variables - Centroids**: This layer contains the most current release of data from the American Community Survey (ACS) about health insurance coverage by type and by age.

Review the 4 Easy Steps

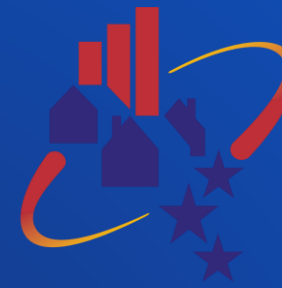
1. Find a topic of interest

2. Filter to your area

3. Map a new variable

4. Finalize and save

Step 1 – Find a topic of interest



AMERICAN
COMMUNITY
SURVEY
U.S. CENSUS BUREAU

ACS covers many demographic topics

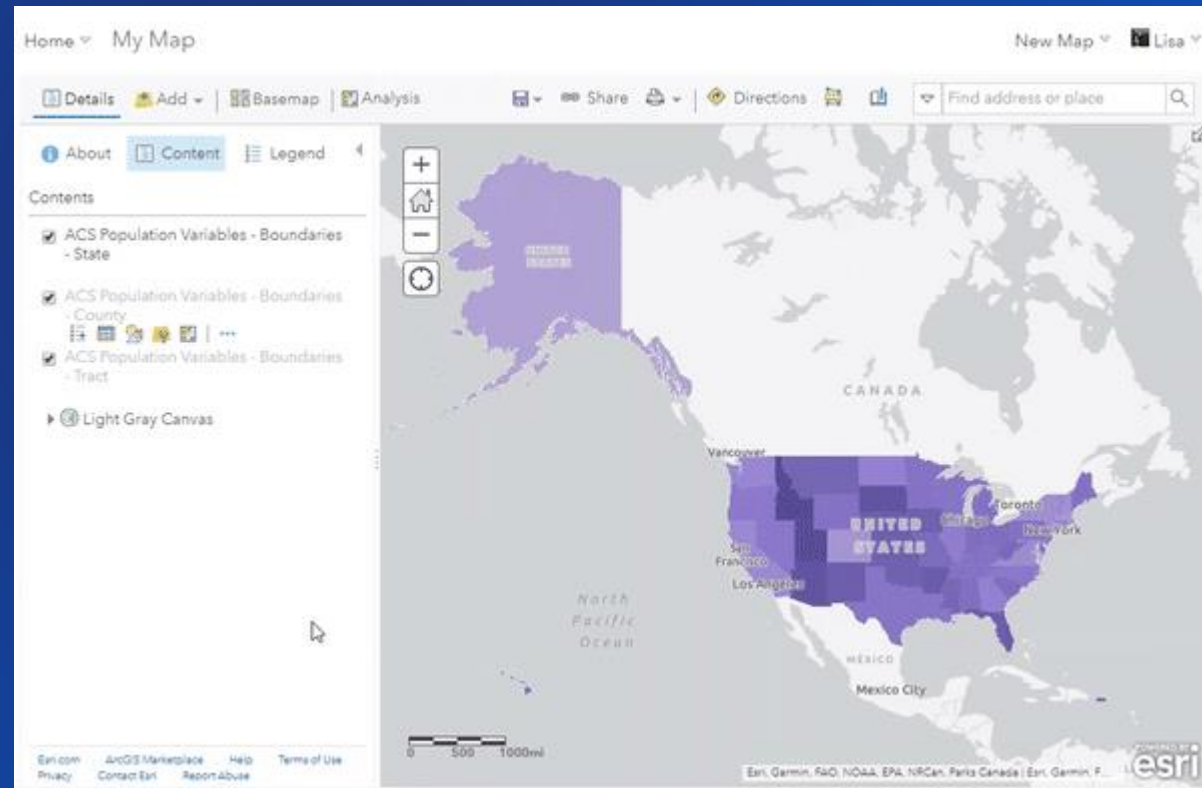
- Population 
- Home Ownership 
- Housing 
- Journey to Work 
- Income \$ 
- Employment 
- Education 
- Earnings 
- Poverty 
- Veterans 
- Computer & Internet 



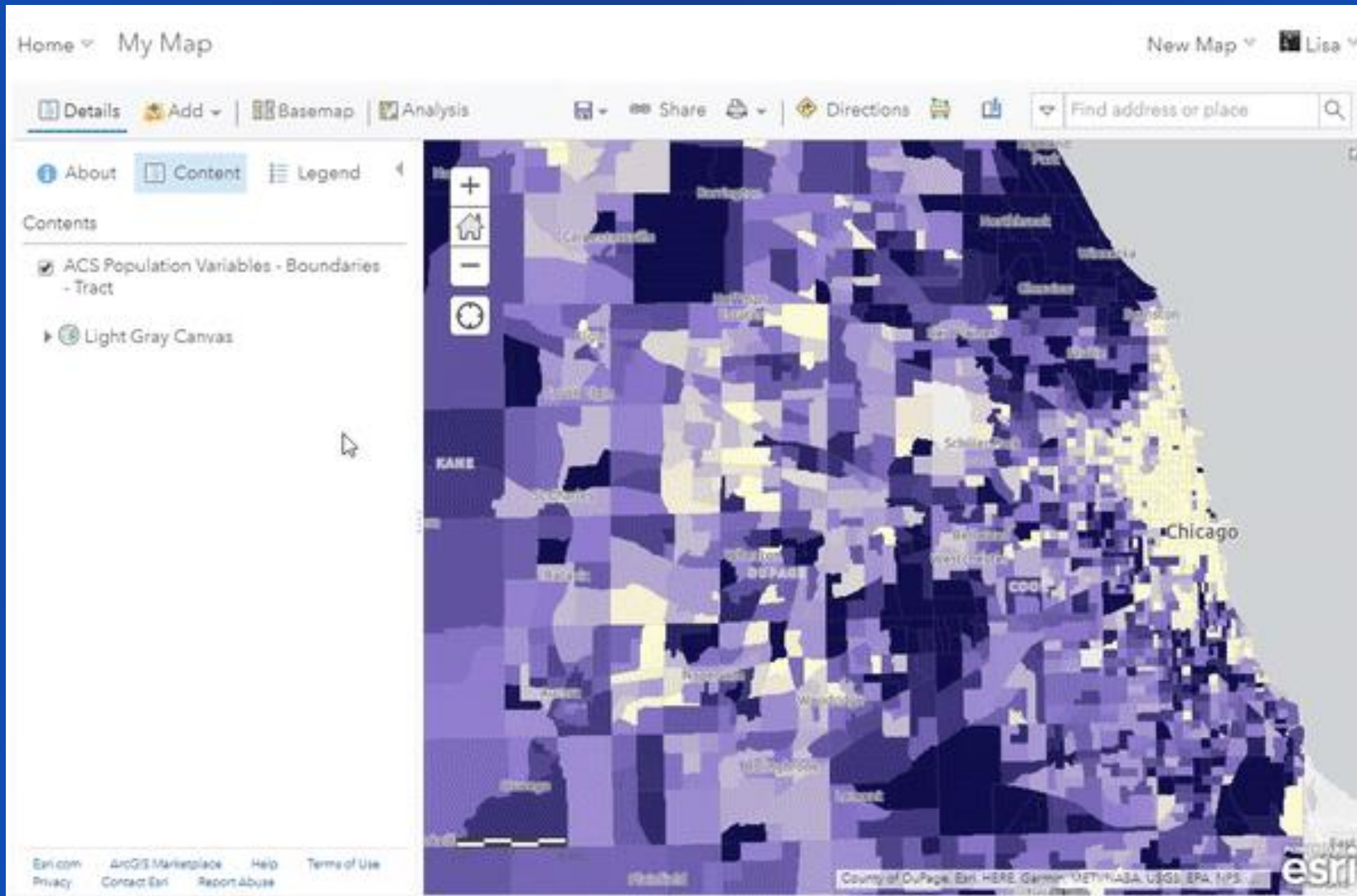
Step 2 – Filter to your area

Make the map specific to your area

- Choose a geography
- Filter



Step 3 – Map a new variable



Step 4 – Finalize and Save

Home ▾ Child Population in Chicago (Under 18) ✎

New Map ▾ Create Presentation Lisa ▾

Details Add ▾ Basemap Analysis Save ▾ Share Print ▾ Directions Measure Bookmarks Find address or place

Configure Pop-up

Child Population by Census Tract

Show Pop-ups

Pop-up Title
{NAME}

Pop-up Contents

Display: A custom attribute display

CONFIGURE

Configure Attributes

Attribute Expressions

Adding expressions allows you to create new information from existing fields for use in pop-ups.

ADD

No expressions.
Click 'Add' to add one.

Pop-up Media

Display images and charts in the pop-up:

ADD ▾

No images or charts.
Click 'Add' to add one.
Use the arrows to order.

OK CANCEL

Trust Center Contact Esri Report Abuse

(1 of 5)

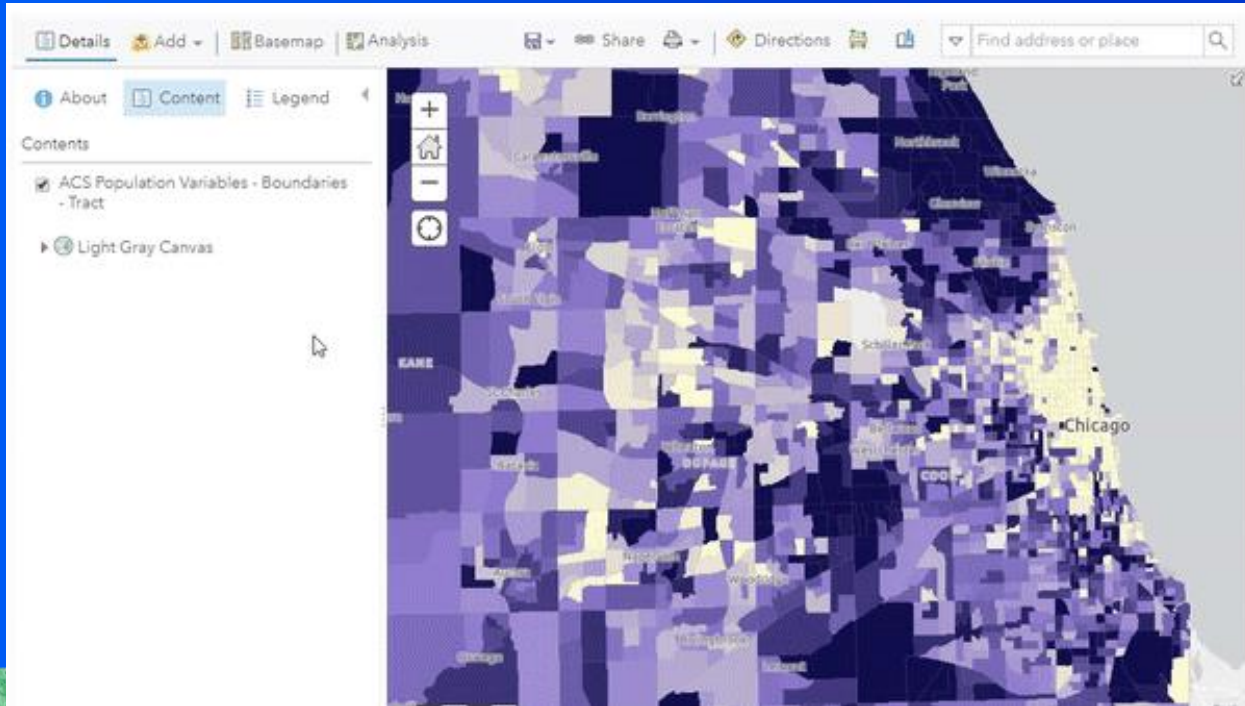
Census Tract 8360

According to the American Community Survey, 2,685 people live in this area.

Of those, 777 are less than 18 years old (28.9%)

[Zoom to](#) [Get Directions](#)

- Change the pop-up
- Choose a new basemap
- Make the map yours!



Make a Map of Your Community in 3 Easy Steps



Tips and Resources

- Don't be afraid to try new things
 - (explore the data, find new patterns)

Enrichment method as a blog:

<https://go.esri.com/5minutemap>

ACS Living Atlas method as a blog:

<http://esriurl.com/EasyACSMap>

Workflow is similar using ArcGIS Pro

You can enrich tables within Maps for Office



ArcGIS Living Atlas

Make a Demographic Map in 5 Minutes

by Lisa Berry | Data Management | April 26, 2016

No data? No problem.

You can use Esri's demographics to add valuable context to your GIS analyses. Learn more about the people, housing, and businesses in your area of interest, see patterns of income, or understand how a population is changing in the next 5 years.

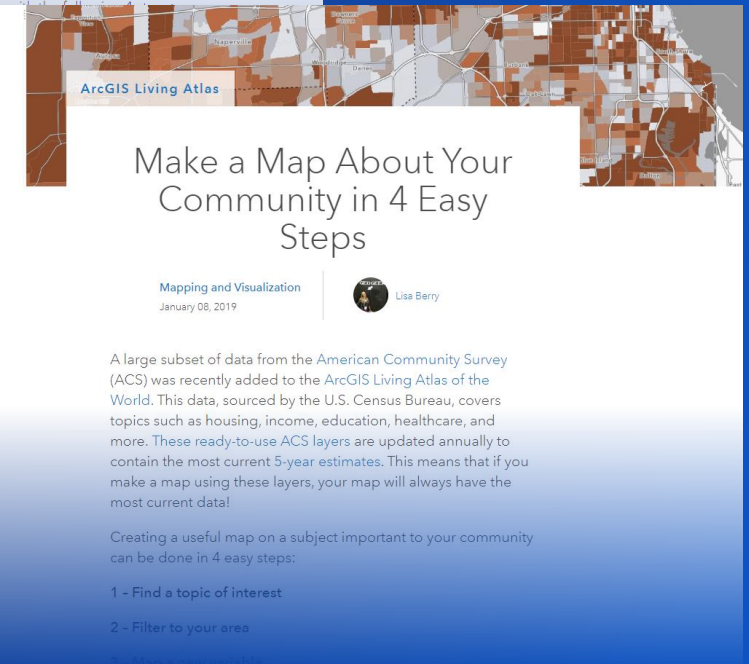
To see demographics on your map, use the Enrich Layer tool in ArcGIS Online, which adds demographics to any map. It results with a layer in your "My Content" which can be used throughout the platform for analysis and visualization.

In 5 minutes, you can explore the demographics

1. Sign in to ArcGIS Online
2. Go to an area you are interested in
3. Enrich it
4. Smart map it

Step 1: Sign in to ArcGIS Online

Sign in to ArcGIS Online and click on "Map"



ArcGIS Living Atlas

Make a Map About Your Community in 4 Easy Steps

Mapping and Visualization | January 08, 2019 | Lisa Berry

A large subset of data from the American Community Survey (ACS) was recently added to the ArcGIS Living Atlas of the World. This data, sourced by the U.S. Census Bureau, covers topics such as housing, income, education, healthcare, and more. These ready-to-use ACS layers are updated annually to contain the most current 5-year estimates. This means that if you make a map using these layers, your map will always have the most current data!

Creating a useful map on a subject important to your community can be done in 4 easy steps:

- 1 - Find a topic of interest
- 2 - Filter to your area
- 3 - Map your variables