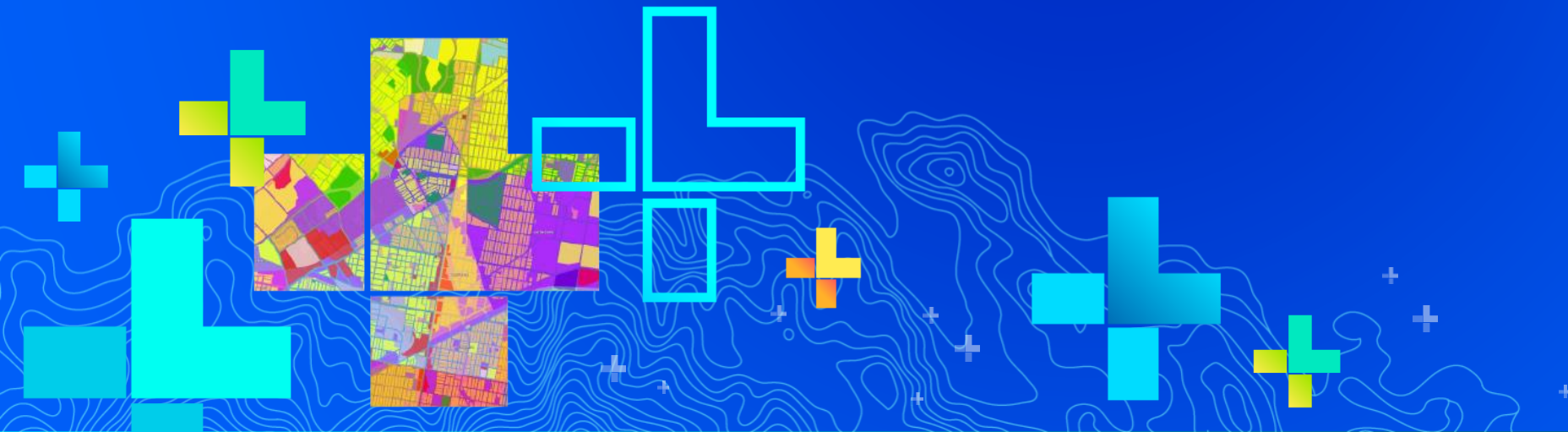



# Working with Living Atlas Data - Make a Demographic Map in 5 Minutes

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

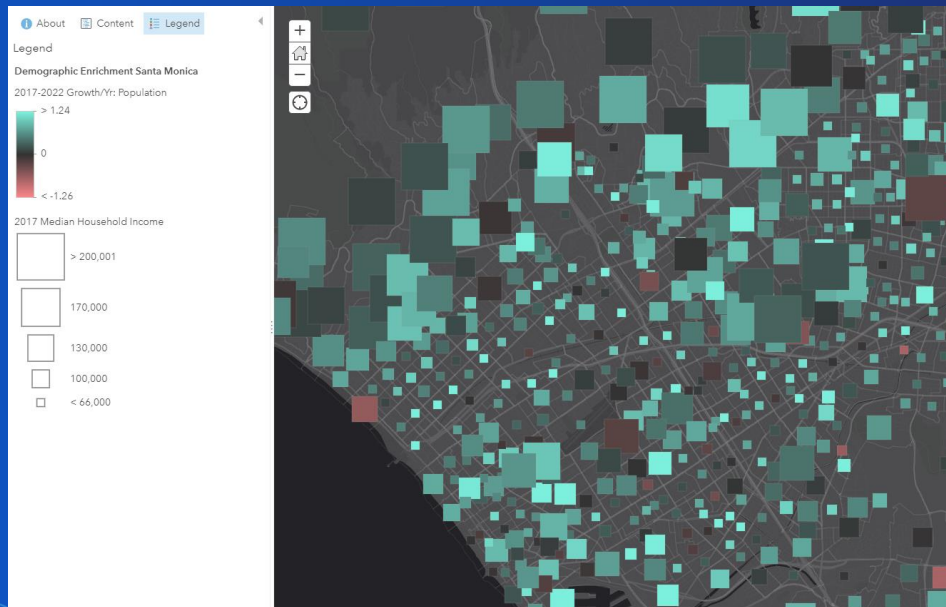


# No data? No problem.

## Make a demographic map in minutes! (really)

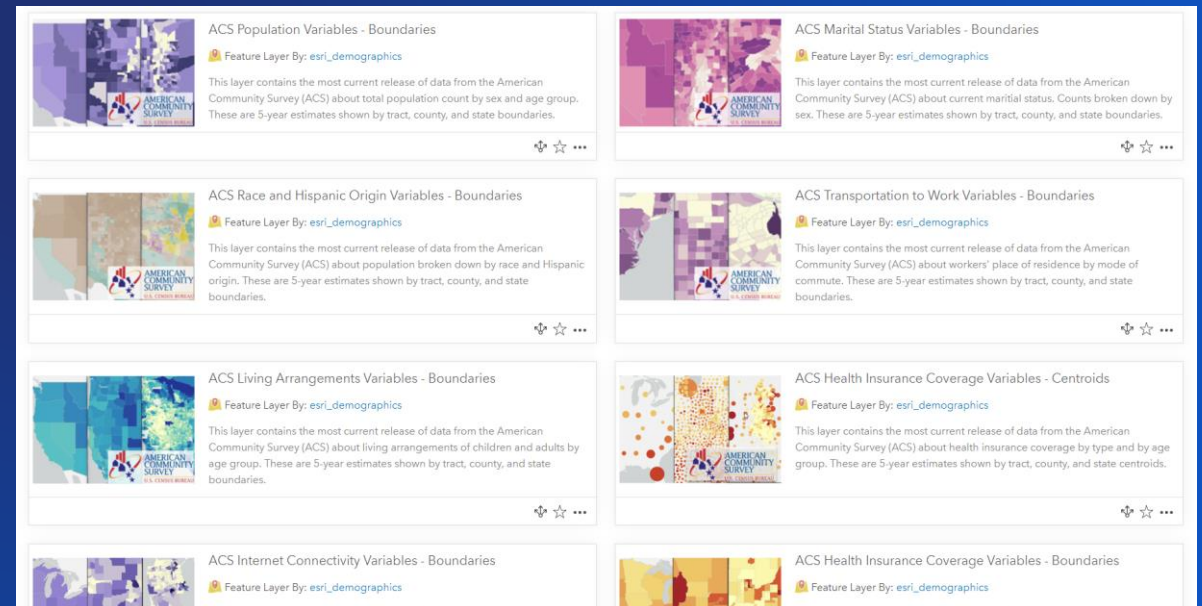
### ArcGIS Online Enrichment method

- 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

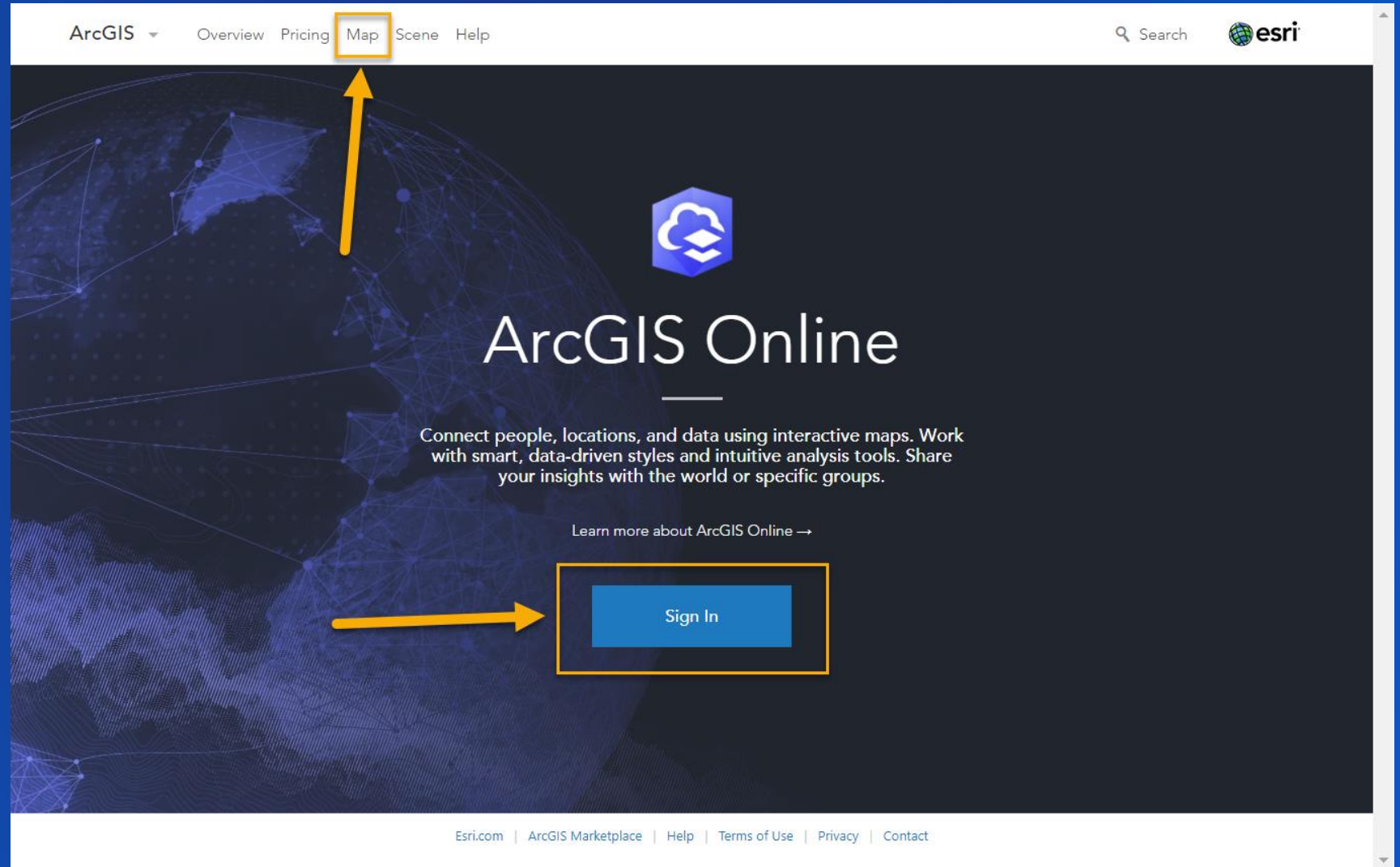
3. Enrich it

4. Smart map it

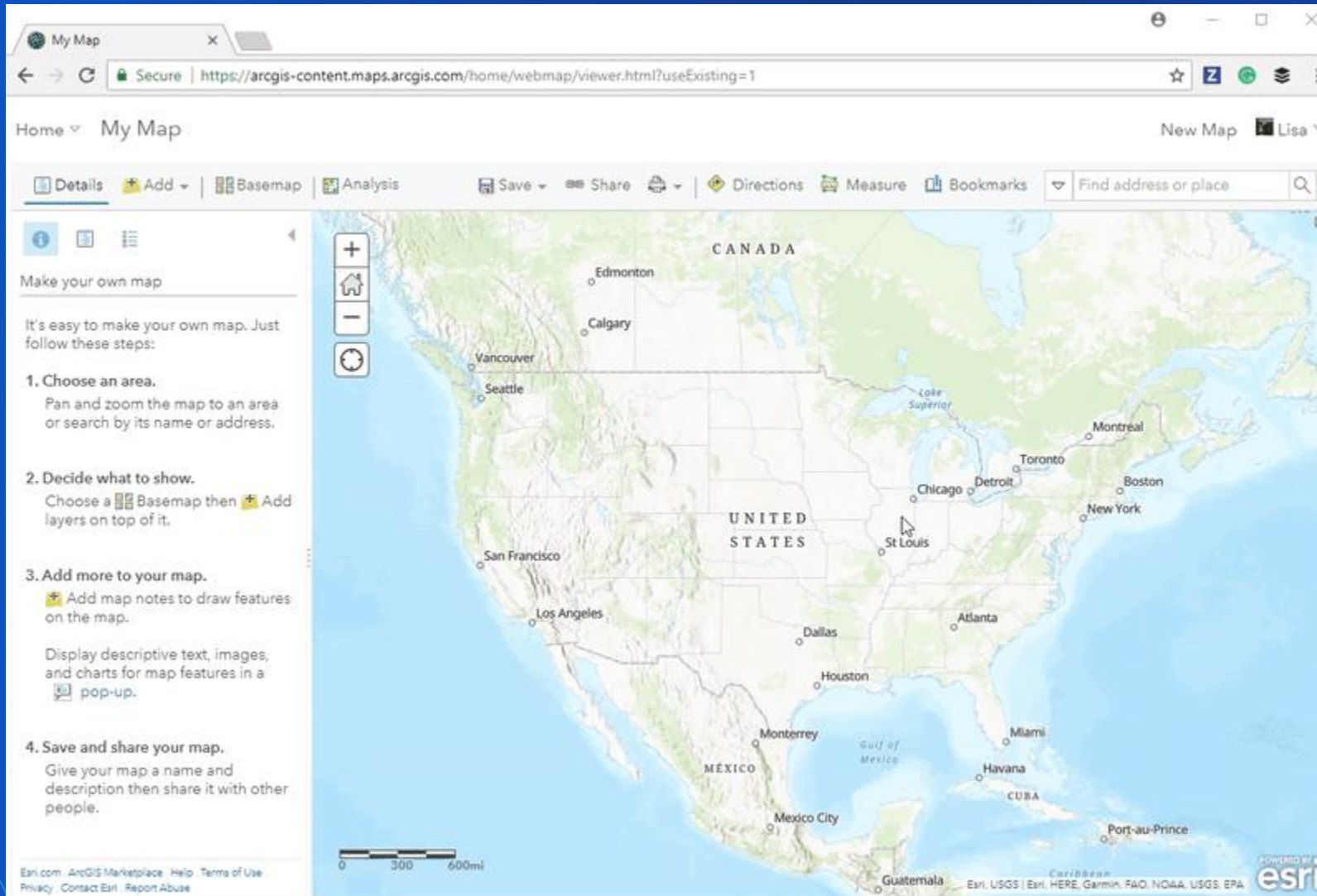
# Step 1: Sign in to ArcGIS Online

Open ArcGIS Online and sign in

Click on “Map” to get started



## Step 2: Go to an area you are interested in



The screenshot shows a web browser window titled "My Map" with the URL <https://arcgis-content.maps.arcgis.com/home/webmap/viewer.html?useExisting=1>. The interface includes a navigation bar with options like "Details", "Add", "Basemap", "Analysis", "Save", "Share", "Directions", "Measure", and "Bookmarks". A search bar is present with the placeholder text "Find address or place".

On the left side, there is a sidebar titled "Make your own map" with the following instructions:

It's easy to make your own map. Just follow these steps:

- 1. Choose an area.**  
Pan and zoom the map to an area or search by its name or address.
- 2. Decide what to show.**  
Choose a Basemap then Add layers on top of it.
- 3. Add more to your map.**  
Add map notes to draw features on the map.  
Display descriptive text, images, and charts for map features in a pop-up.
- 4. Save and share your map.**  
Give your map a name and description then share it with other people.

The main map area displays a topographic map of North America, including Canada, the United States, and Mexico. Major cities like Vancouver, Seattle, San Francisco, Los Angeles, Dallas, Houston, Chicago, Detroit, Toronto, Montreal, Boston, New York, Miami, and Havana are labeled. A scale bar at the bottom left indicates 0, 300, and 600 miles. The Esri logo is visible in the bottom right corner.

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

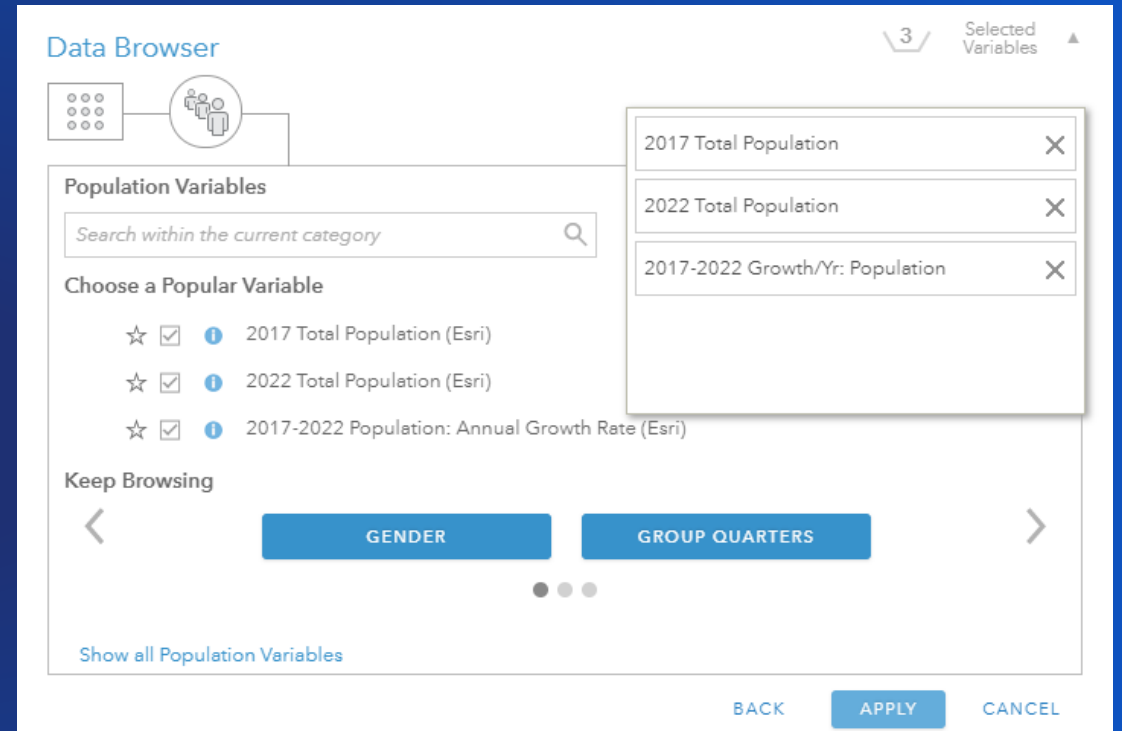
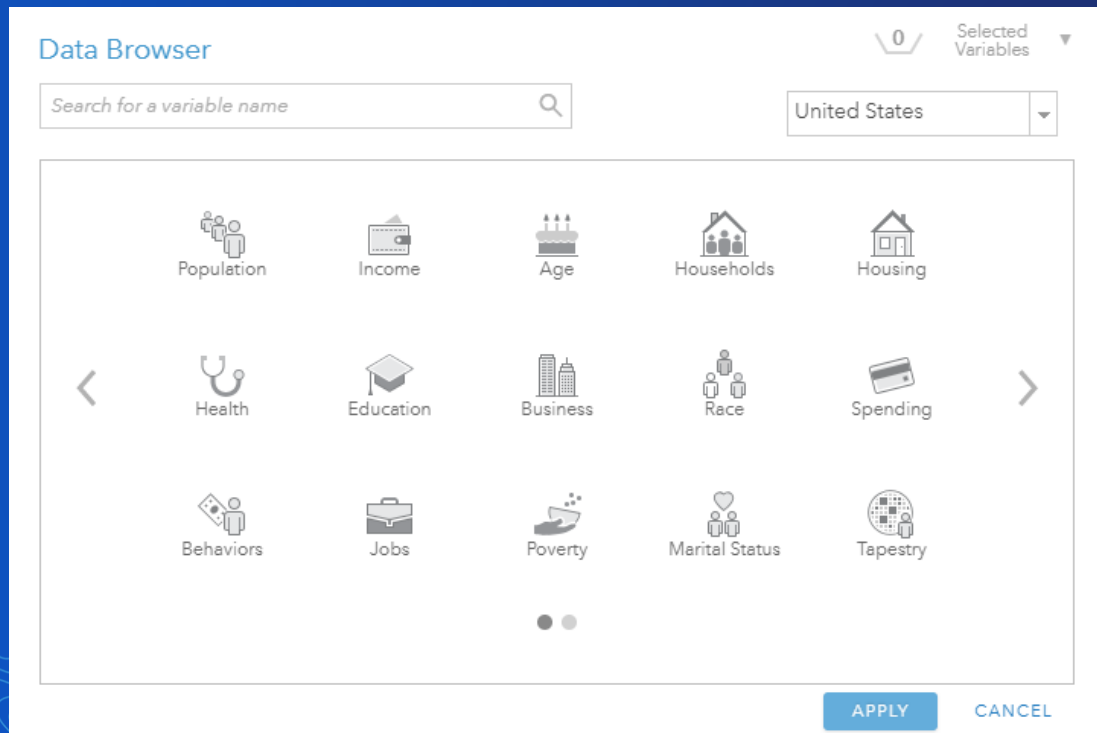
Go to  
“Analysis”

Select a  
Living Atlas  
Layer



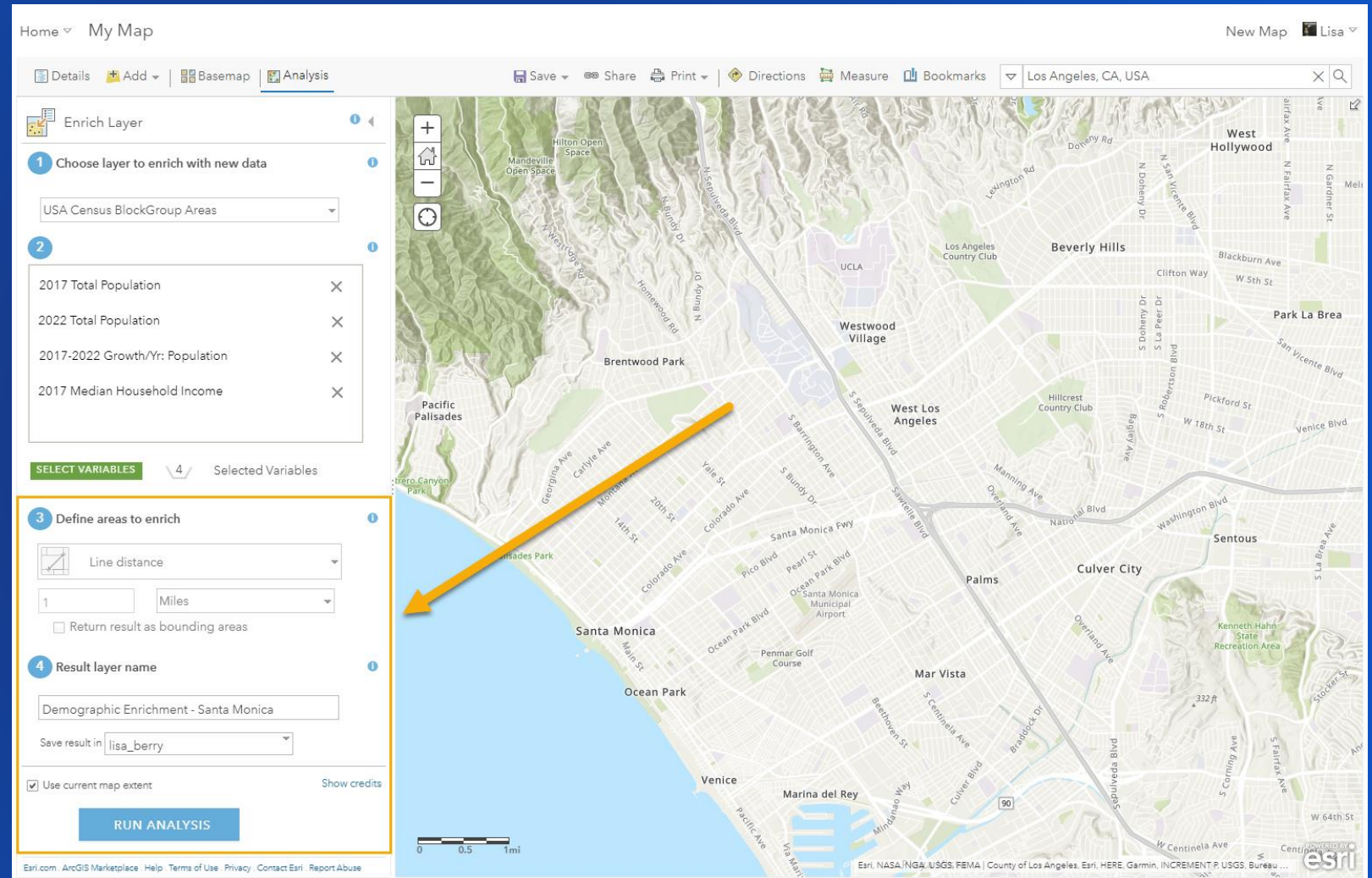
# Step 3: Enrich it

- 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



# 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

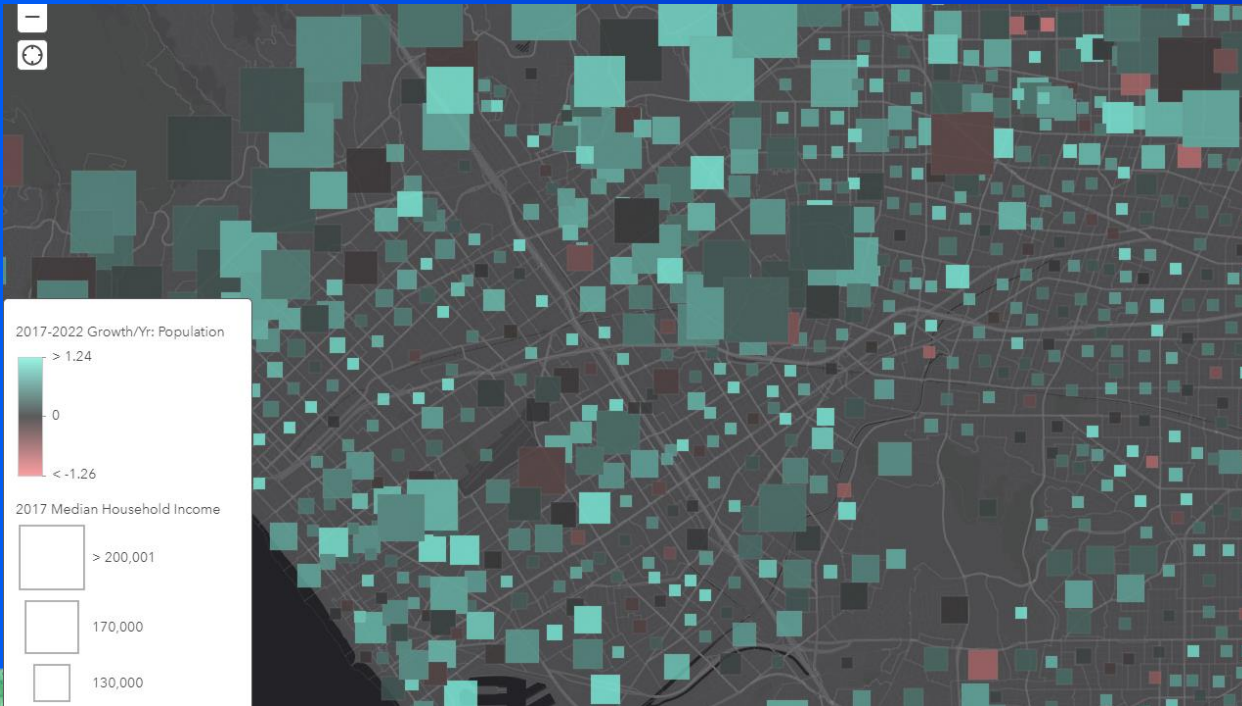
The image displays three sequential screenshots of the Esri Smart Map interface, illustrating the process of creating a new layer for demographic data.

**Left Screenshot:** The 'Change Style' panel is open for 'West Los Angeles Demographics - West LA Demographics'. Step 1, 'Choose an attribute to show', is active. The 'Show location only' dropdown is selected, and a list of attributes is shown, including '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'. Step 2, 'Select a drawing style', is also visible, showing options for 'Counts and Amounts (Color)', 'Counts and Amounts (Size)', and 'Location (Single symbol)'. The 'DONE' button is highlighted.

**Middle Screenshot:** The 'Change Style' panel is open for 'West Los Angeles Demographics - West LA Demographics'. Step 1, 'Choose an attribute to show', is active. The '2015 Median Disposable Inc...' dropdown is selected. 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, showing a color scale from light yellow (< 19,158) to dark blue (> 79,780). The 'DONE' button is highlighted.

**Right Screenshot:** The 'Change Style' panel is open for 'West Los Angeles Demographics - West LA Demographics'. Step 1, 'Choose an attribute to show', is active. The '2015 Total Population' dropdown is selected. Step 2, 'Select a drawing style', is active. The 'Counts and Amounts (Color)' style is selected. A legend for '2015 Total Population' is visible, showing a color scale from light yellow (< 711) to dark blue (> 2,096). The map shows the resulting visualization of the data, with a legend for '2015 Total Population' visible on the right side of the map. The 'DONE' button is highlighted.

# Implement the 4 Steps





# Make a Demographic Map from Living Atlas data

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

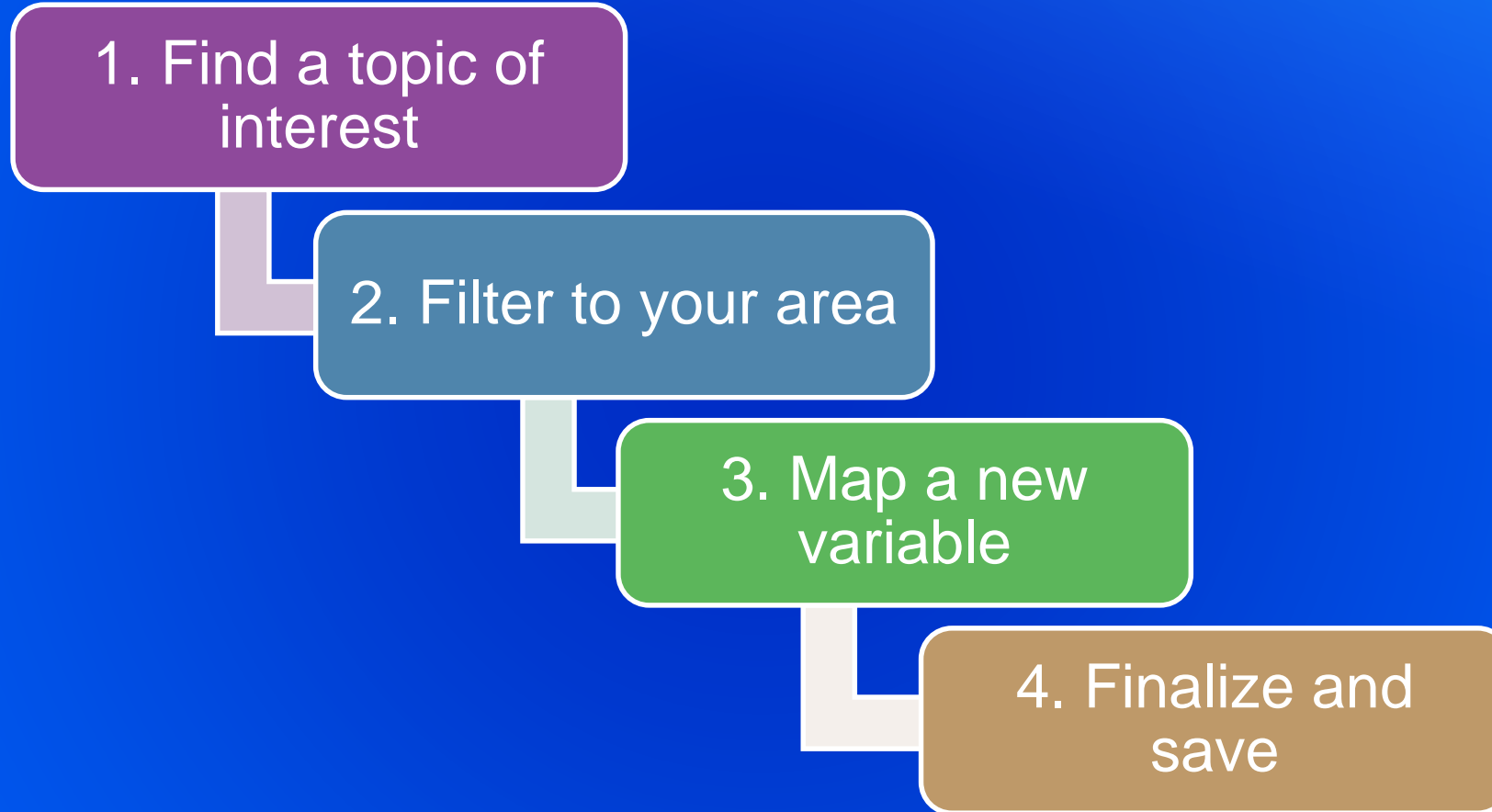
# American Community Survey (ACS) in the Living Atlas

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

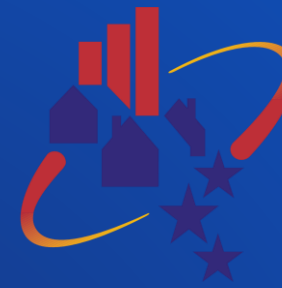
The screenshot shows the ArcGIS Living Atlas of the World search results page. The search query is "current year acs". The results are filtered by "All content types", "All time", and "All regions", with "Esri-only content" checked. The results are sorted by "Relevance". There are 113 results displayed.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

- 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



# 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 

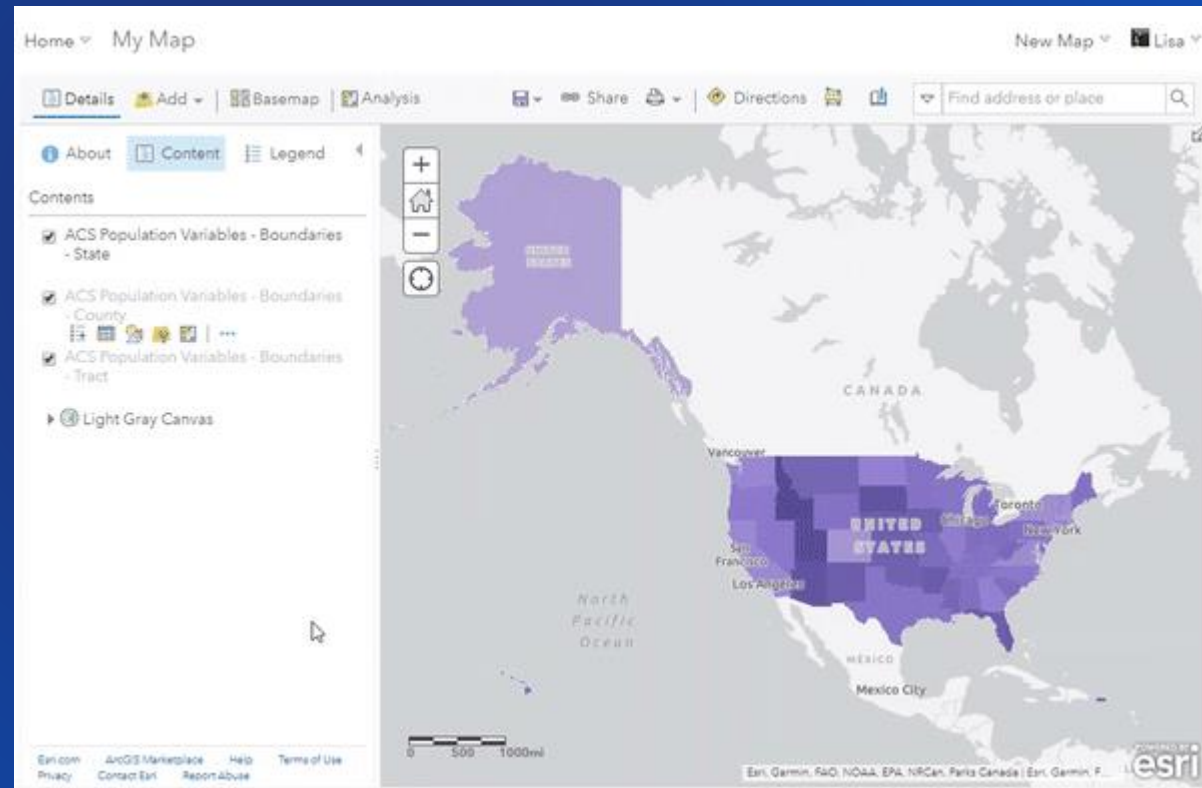




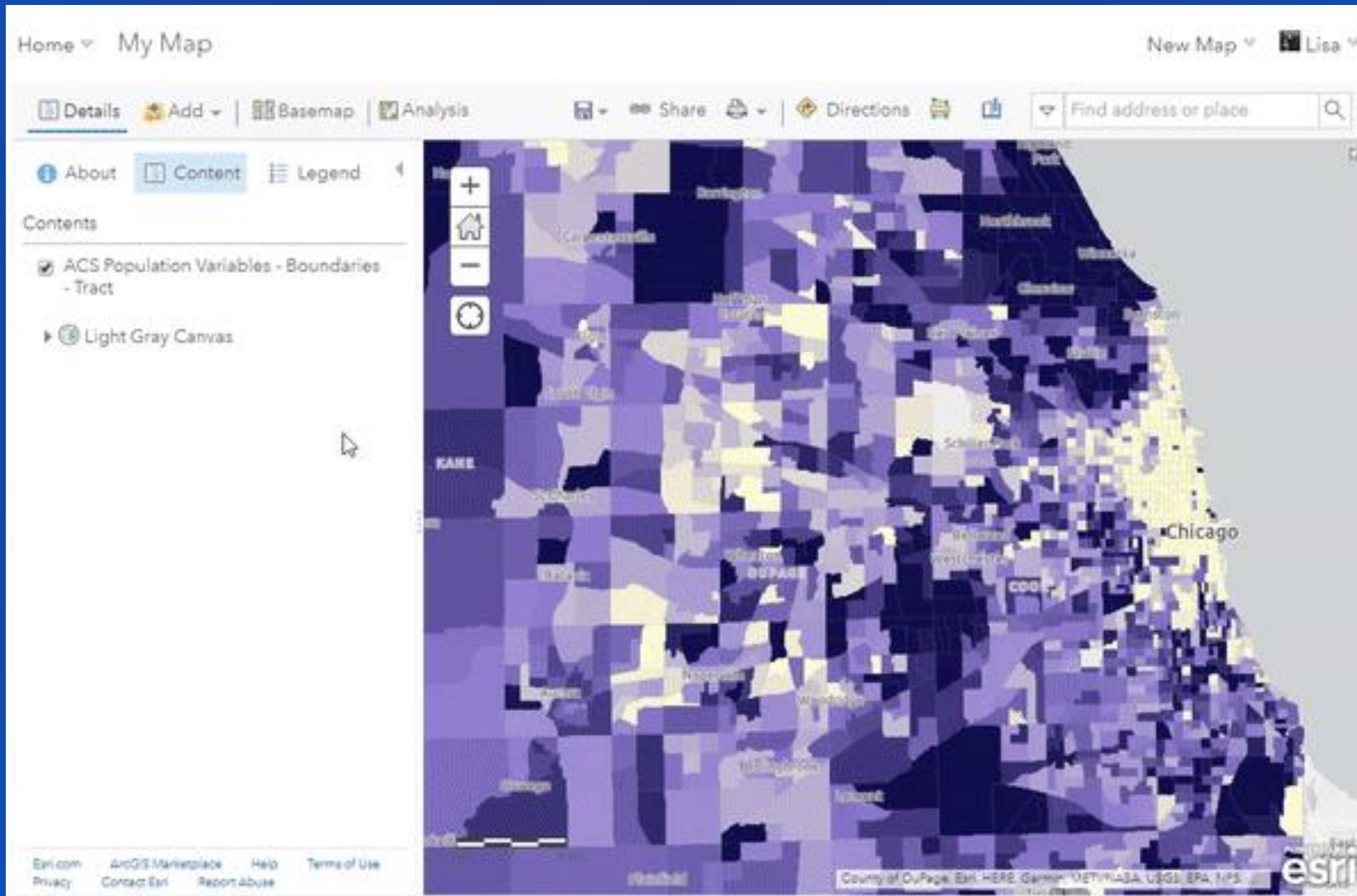
## Step 2 – Filter to your area

# 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)

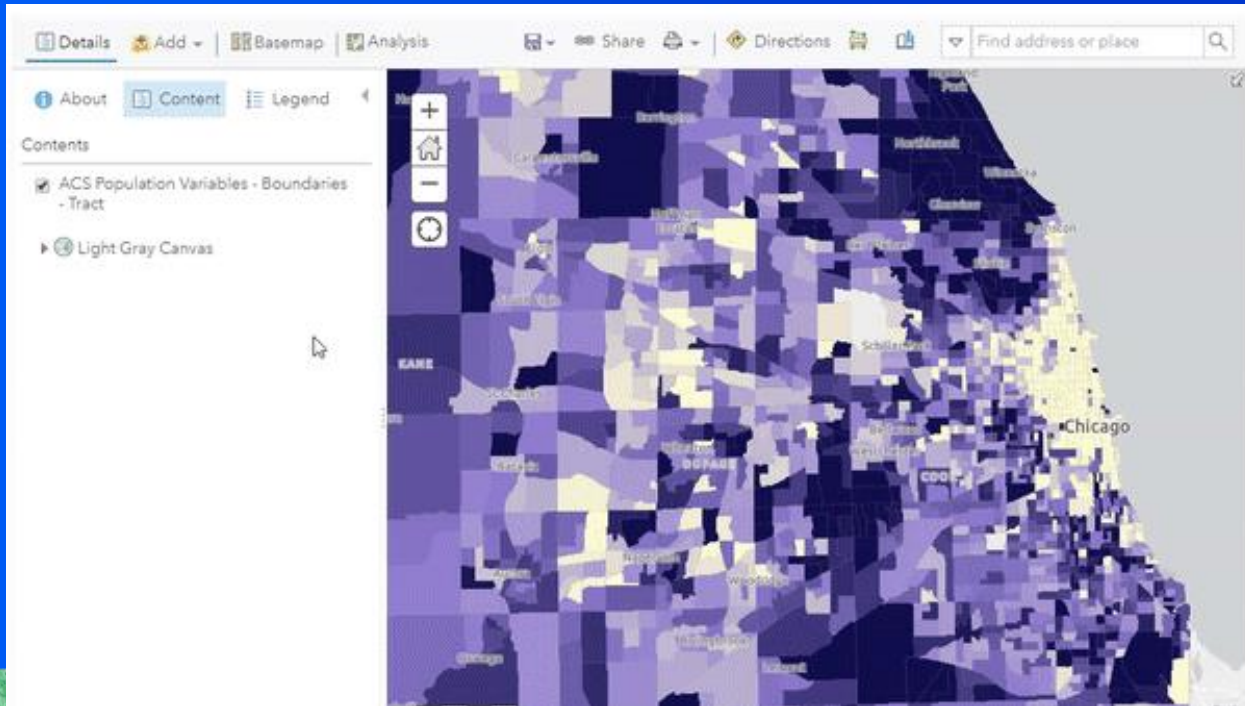
Census Tract 8360

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.

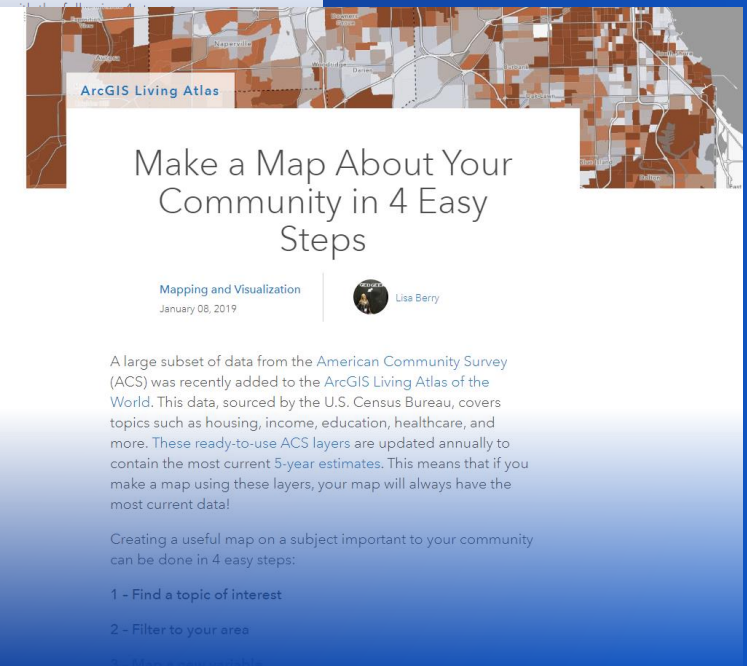
To see demographics on your map, use the Enrich Layer tool in ArcGIS Online, which adds demographics to any map. It results with a layer in your "My Content" which can be used throughout the platform for analysis and visualization.

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