Explore a map | Learn ArcGIS

In this lesson, you'll open a web map and learn how to navigate and work with it using map tools as you explore Farmer Markets in the Louisville Area.

1. **Go** to www.arcgis.com and in the **Search** icon (upper right corner) [search icon] enter "**LOJIC Training Map**". **Click** the thumbnail of the Farmers Market map called LOJIC Training map to open it.

When the map opens, you see Farmers Markets and ZIP Codes.
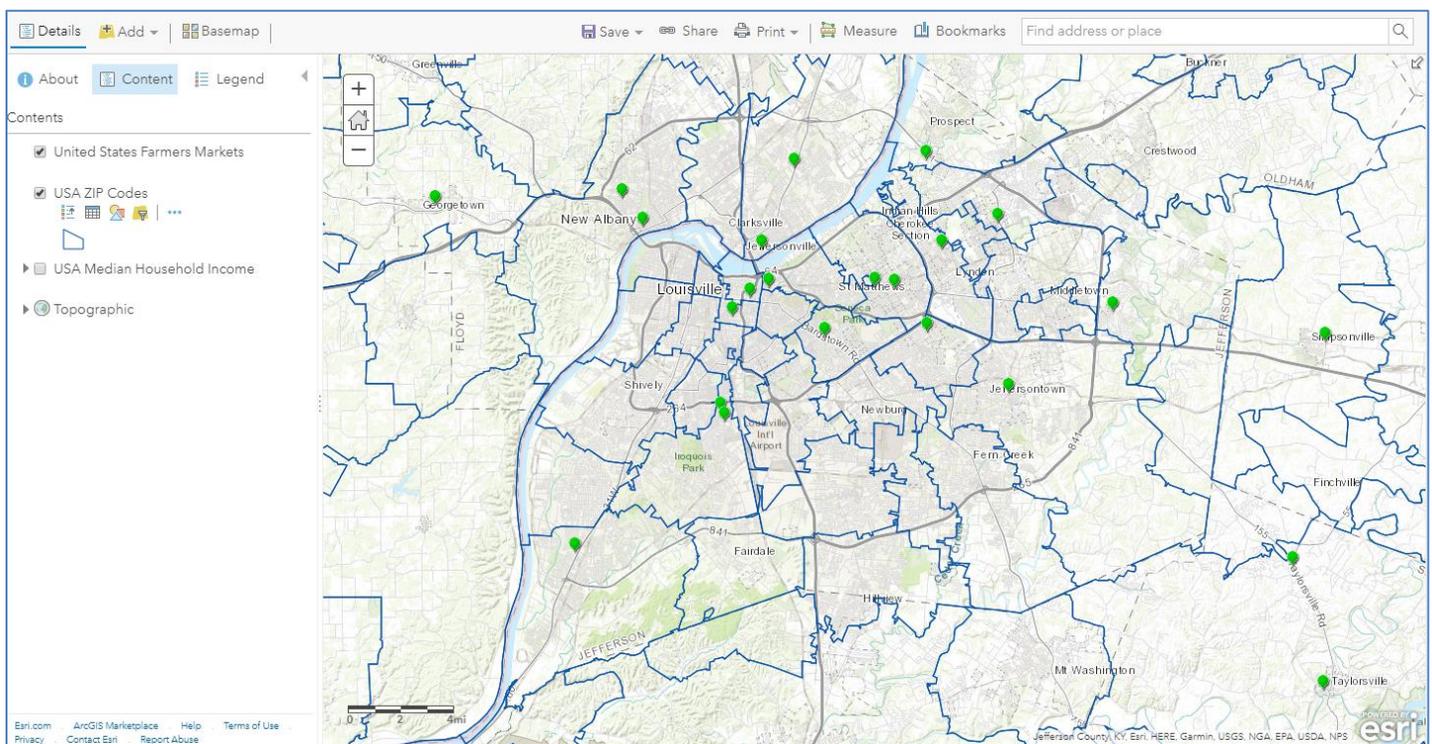
Explore the map

The map contains layers, and layers contain features. For example, each farmers market is a feature in the United States Farmers Markets. In this section, you'll get information about features and navigate the map.

1. **Click** a farmers market on the map.

2. At the bottom of the pop-up, **click Zoom to**. The map zooms in on the feature.

3. Close the pop-up by clicking the **X** in its title bar.

4. **Click** the **Default extent button** in the upper left corner of the map. (It is the House icon between the Zoom out and Zoom in icons.)

Now that you know something about how the map works, you'll look at how it's put together.

View the map contents

To work directly with the map layers, you need to be in the **Contents** view of the map.

At the top of the Details pane on the left, **click** the **Content** button.

The order of layers on the Contents pane is the order in which they are drawn on the map. At the bottom, every map has a basemap layer. Every layer, except the basemap, can be turned on or off.

On the Contents pane, **click** the check box next to **USA ZIP Codes** layer to turn the layer off.

Turn **on** the **USA Median Household Income** layer.

Let's adjust the transparency of the Median Household Income layer.

In the Contents pane, **point** to the Median Household Income layer. **Click** the **More Options** button (3 blue dots in a row) and choose **Transparency**.

6. **Move** the **Transparency** slider back and forth. When the layer is completely opaque, the basemap is obscured.

7. **Move** the **Transparency** slider to a position you like. **Move** the mouse pointer over some white space on the **Contents** pane, and **click** if necessary, to close the layer properties.
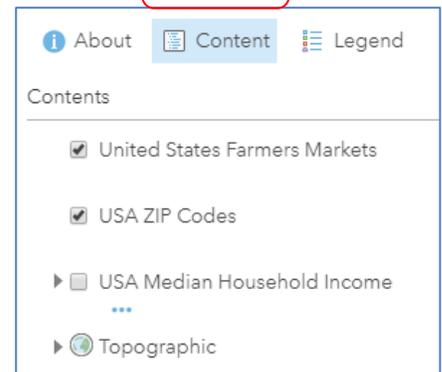
Use map tools

You can also work with the map using tools on the ribbon.

1. On the ribbon along the top of the map, **click** the **Measure** button and **click** the **Distance** tool.
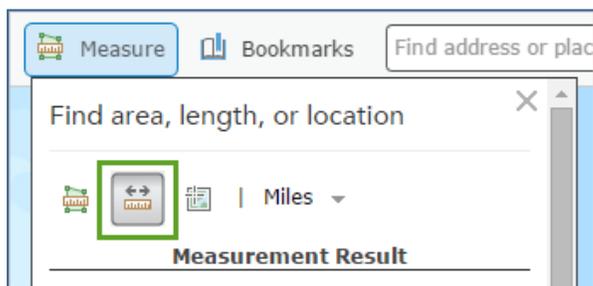
2. On the map, **click** the farmers market in **Jeffersontown** to start a measurement.

3. **Move** the mouse pointer to another farmers market **double-click** to end the measurement.

4. On the ribbon, click the **Basemap** button to open the Basemap Gallery. **Click Imagery Hybrid** or another basemap.

5. **Change** the basemap back to the **Topographic** basemap.
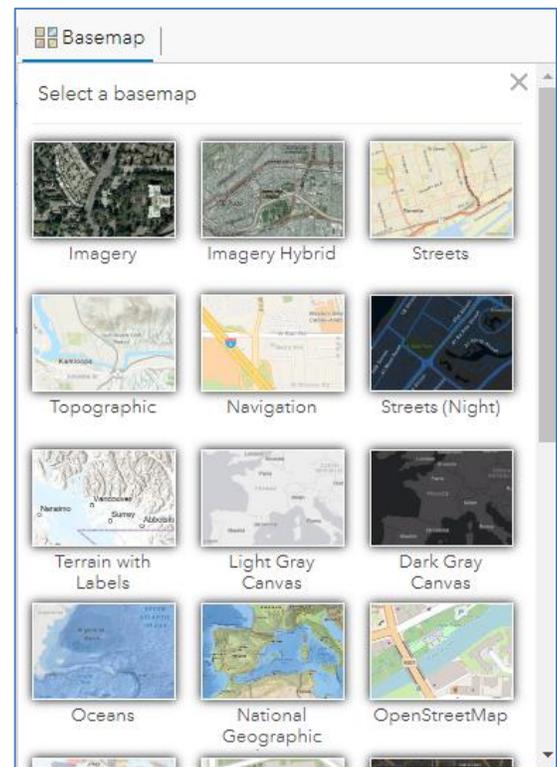
You can't save changes to a map that is owned by someone else. You can, however, save a new version of the map as your own (as long as this property is enabled by the map owner). You could do that with this map, but it will be more fun to rebuild the map entirely from the basemap up. That's what you'll do in the next lesson.

Create a map | Learn ArcGIS

In this lesson, you will recreate the map you explored in the previous lesson. You will start a new map and add the layers you need.

Every new map starts with a basemap. This lesson assumes that your default basemap is the Topographic basemap and that its default extent is the contiguous United States. If your settings are different, you will make changes as needed in the first section.

Create a new map

1. If a map is already open in your browser**, click New Map** in the **upper right corner** of the page. If necessary, choose **Create New Map**. On the Open map prompt, click **Yes** to open the map.

2. The new map opens to the United States.

3. On the ribbon, in the **Find address or place** box, type **Jefferson County, KY**. In the list of suggested locations, choose Jefferson County, Kentucky, United States. The map zooms to Jefferson County.

4. **Close** the Location pop-up.
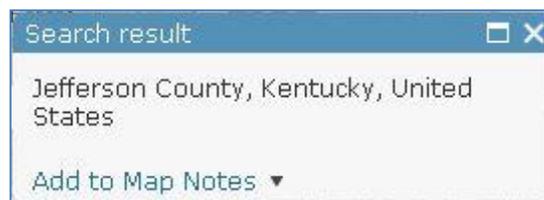
5. If necessary, pan (drag) the map to center Jefferson County in the view.

When you save the map later in this lesson, the map extent at the time of saving will become the extent used by the Default extent button. It can also be useful to add spatial bookmarks to navigate to particular map locations.

6. On the ribbon, **click** the **Bookmarks** button. In the Bookmarked places list, **click Add Bookmark**.

7. Type **Jefferson County** and press Enter.

8. Close the list of bookmarked places.

9. At the top of the Details pane, click the Content button.
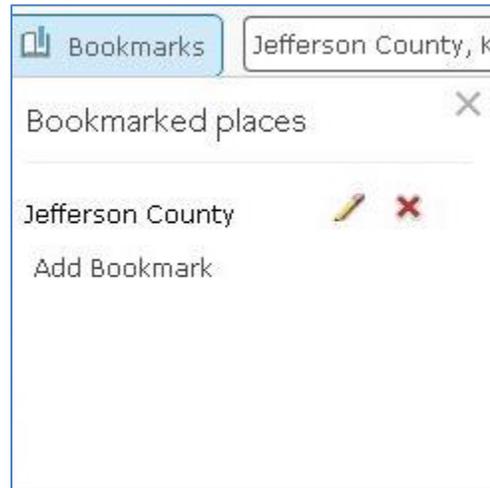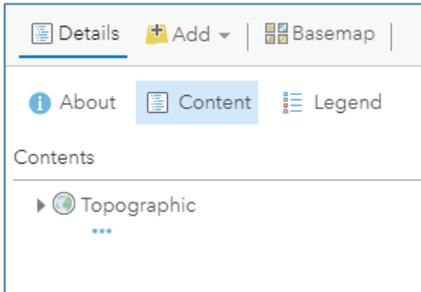
10. If necessary, **click** the **Basemap** button on the ribbon and choose Topographic.
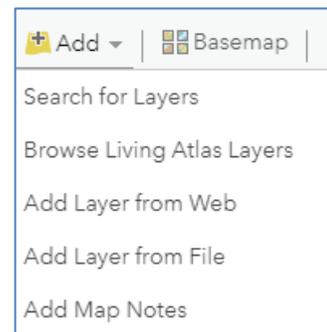
Add layers to the map

You are ready to start adding layers to the basemap.

1. On the ribbon, click the **Add button** and choose **Search for Layers**.

In the **Search for Layers** pane, a default list of search results appears. You see layers that are shared with the organization and that have some geography in common with your map view.

2. Click the down arrow next to **My Contents** and choose **ArcGIS Online**.

3. In the Search for Layers entry field (Search for layers), type **United States Farmers Markets owner:StoryMaps**. (Adding **owner:StoryMaps** filters to the StoryMaps owner.)

4. In the list of results, locate Unites **States Farmers Markets - by StoryMaps**. Click **Add** (⊕) to add the layer to the map.

5. In the same way, add the following layers from the search results to the map:
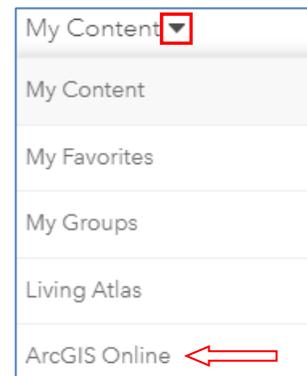
Enter: USA ZIP Code Areas owner:esri_dm   Select: USA ZIP Code Areas by esri_dm
Enter: 2016 USA Median Household Income owner:esri   Select: 2016 USA Median Household Income by esri

6. Click the Back arrow in the left corner of the frame to go back to the Contents pane.

The layers are drawn, with their default symbols, in the order in which they were loaded into the map.

Set layer properties

In this section, you'll change some of the properties of the layers. You will give them shorter names, change their position in the list of layers, add labels, and adjust transparency. Layer properties are always accessed in the same way: by pointing to the layer name and clicking an appropriate button or clicking the More Options button and choosing the property you want to change.

1. In the Contents pane, point to the **USA ZIP Code Areas layer**. Click the More **Options** button and choose **Rename**.

2. In the Rename window, change the layer name to **USA ZIP Codes** and **click OK**.

3. Rename the **United States Farmers Markets** layer to **Farmers Markets**.

4. In the Contents pane, point to the **Farmers Markets** layer. Click the **More Options** button and **click Move up**.

The layer moves up one position, above the **USA ZIP Codes** layer. The Farmers Markets points are now more visible on the map. The usual practice is to put points (such as Farmers Markets) above lines, and lines above polygons. Points, lines, and polygons are all feature layers: they usually represent discrete geographic objects that have more or less precise locations and boundaries.

The Topographic basemap is a tile layer. Tile layers are images and cannot be manipulated in the same ways as feature layers. They typically represent large, continuous surfaces rather than discrete objects. Tile layers cannot be moved above feature layers in a map.

5. In the Contents pane, point to the **Farmers Markets** layer. Click the **More Options button** and choose **Create Labels**. Each market is labeled with its name.

6. In the Label Features pane, **change the label size to 11** and **check on Halo**. Click **OK**.

7. Scroll over the **USA ZIP Codes** layer and click on the **Change Style button** to change the layer symbology.

8. **Click** on **Options** icon below the Select a drawing style. Click on **Symbols**.

9. Change the **Fill** to **No Color** and the **Outline** to **Dark Blue.**
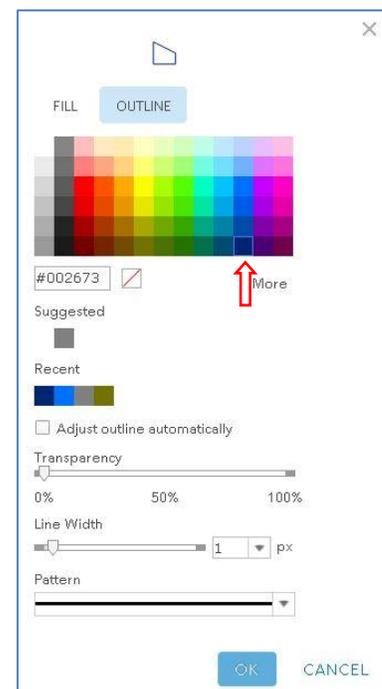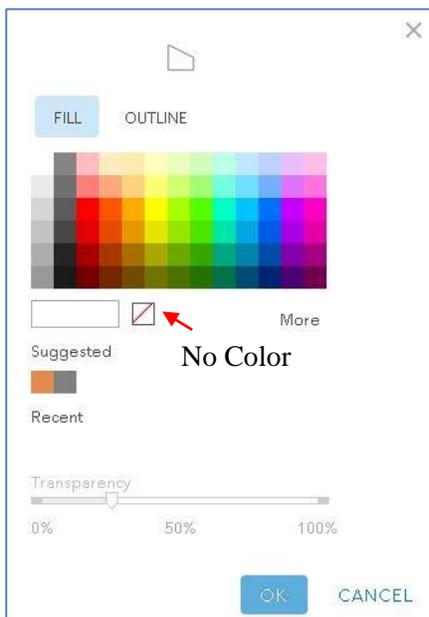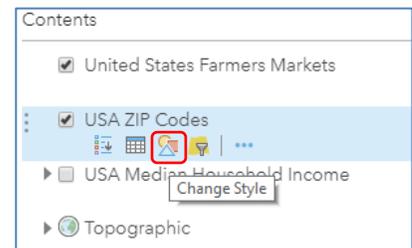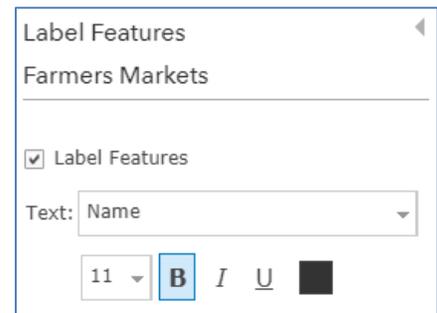
Click OK. **Click Ok** in the Change Style window. **Click Done**.

10. Open the properties (3 blue dots) for the 2016 **USA Median Household Income** layer and choose **Transparency**. Make the layer about 50 percent transparent, or whatever looks good to you.

Save the map

11. On the ribbon, click the **Save button** and choose **Save**.

12. In the Save Map window, type **Farmers Markets Map** in the Title box.

13. For the tags, type words that will help people find the map through searches. After each tag, press **Enter**.

14. For the summary, type a brief description of the map's content.

15. **Click Save Map**.

The map is saved to your My Content page in the organization.

In this lesson, you added several layers to the map and changed their properties. You've almost recreated the appearance of the map you explored in the first lesson. In the next lesson, you'll complete that work by adding a layer of Kroger Stores.

Add and Symbolize the Kroger Stores Layer

1. **Open** the Farmers Markets Map by **double clicking** the map name on the **My Contents** page and click **Open (in Map Viewer)**.

2. Click on **Add** to add a new layer and switch to search **ArcGIS Online** and **Search** for the Kroger Grocery Stores in Jefferson County, KY by entering **Kroger Jefferson County** in the Search. **Add** the layer to your map and **close** the Add Layers pane.

3. In the Contents pane, point to the Kroger Stores layer and click the Change Style button.

4. Click **Options** for the Location (Single symbol) drawing style.
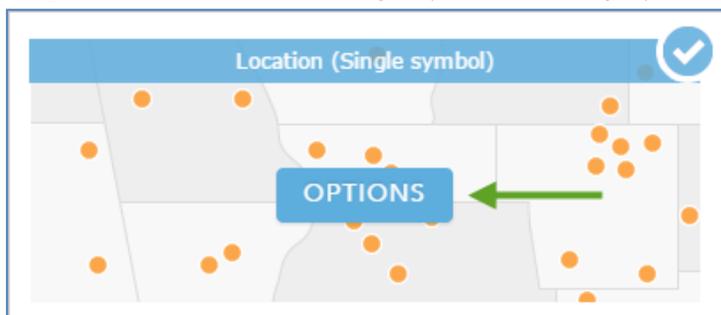
5. Under Showing Location Only, click **Symbols** to change the symbol.

6. A symbol palette opens, showing a variety of symbols that belong to the default Shapes category of symbols. ArcGIS Online also has many other symbol categories.
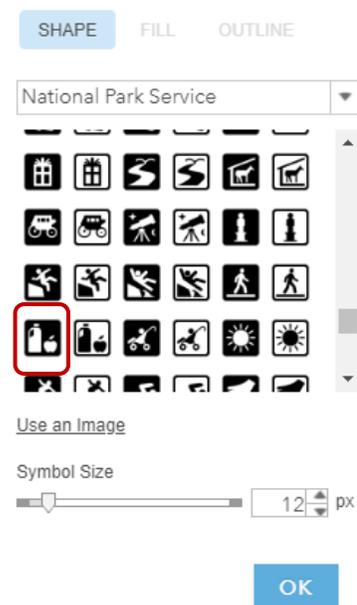
7. **Click** the down arrow next to **Shapes** and choose the **National Park Service** category.

8. In the National Park Service category, find the symbol with a **bottle of milk and an apple** on a black background and click it to select it.

9. Change the symbol size to **12** px (pixels) and click **OK**.

10. The symbols are updated on the map.

11. In the Change Style pane, click **OK** and click **Done**.

12. **Save the map**.

The new symbols are intuitively recognizable as Grocery Stores. Their strong black and white colors help them stand out.