

Section 1

Video: Web Map Overview with Timothy



Time	Caption
0:00	♪ [music] ♪
0:08	Hi, I'm Timothy Kinlaw, and I'm an instructor here at Esri.
0:12	I went to Appalachian State University
0:14	for my undergraduate degree and stayed
0:16	to get a Master of Arts in Geography
0:18	I didn't know much about ArcGIS or the capabilities of web maps at first.
0:24	After starting at Esri, I learned that a web map is the place to
0:27	display and work with your data.
0:30	You can configure layers, create stunning visualizations,
0:33	and configure the way you want others to interact with your map.
0:37	Web maps are powerful. People can interact with your map and get immediate feedback.
0:42	So the web map is the building block for geo apps and the ArcGIS geoinformation model.
0:49	Map Viewer is where you create your web maps.
0:53	You can set a variety of basemaps for geographic context.
0:56	You can also configure your layers and design your pop-up features,
1:00	which are how people interact with your maps.
1:03	I'll open Map Viewer, and then we'll look at it together.
1:08	On the home page of your organization, navigate to the app launcher
1:11	and select Map Viewer.
1:15	Here we have a new web map that shows only the basemap.
1:18	We can choose from many basemaps. Let's use Dark Gray Canvas.
1:25	Next, let's pull in a dataset of US Census Tracts
1:28	that has been enriched with Esri-forecasted 2020 population data.
1:50	Zooming into Los Angeles,
1:52	we can begin exploring the diverse communities in the city by using styling options.

2:00 To start, we'll add in the Hispanic Or Latino Population attribute.

2:13 The map automatically updates with a high-to-low color scheme

2:16 But to heighten the visualization,

2:18 we'll change the theme to Above And Below so that the data centers around the average.

2:31 Map Viewer offers a rich and sophisticated series of

2:34 color ramps to visualize your data.

2:37 We can quickly try out different options and see the results.

2:44 And there also are predefined categories of styles,

2:48 like this one for dark backgrounds,

2:51 and colorblind-friendly options for a more accessible map.

3:03 Dragging the slider on the histogram

3:06 changes how the color maps to your data and produces immediate feedback in the map,

3:11 highlighting the Hispanic or Latino population throughout LA with a bright blue.

3:20 As a majority-minority city,

3:22 LA is home to people of all backgrounds.

3:24 So let's add in new attributes, including the Asian-American population,

3:29 Black population, and more.

3:42 Map Viewer uses Smart Mapping

3:44 to automatically select a predominant drawing style.

3:48 This type of symbology uses color to show which attribute

3:52 is predominant and transparency to show

3:55 how much that attribute is predominant compared to the other attributes.

4:01 In our web map, the color indicates the predominant race or ethnicity in the tract

4:07 and the transparency shows the strength of its predominance.

4:14 You can also visualize your data in Map Viewer using dot density.

4:20 Here, one dot represents 135 people,

4:24 and we can modify that number by shifting the slider.

4:32 Now we have a clear, visually appealing map that illustrates

4:35 the rich tapestry of diversity in the greater Los Angeles area.

4:42 Let me show you more with another web map.

4:45 Here we have more than 140,000 points

4:48 showing property sales from 2016 to 2020 in Philadelphia, Pennsylvania.

4:54 The points are symbolized by the average sale price,

4:57 with olive green indicating higher sale prices

5:00 and turquoise indicating lower sale prices.

5:04 We can also use clustering to visualize the data.

5:07 In the cluster pane, we can control how the cluster appears on the map.

5:16 Here we can go in and change the label attribute to the average sale price

5:26 and use an Arcade expression

5:28 to make the number meaningful by adding a dollar sign.

5:40 We can use the filter capability to only display

5:44 properties that are for single families.

5:58 Notice that the map quickly updates

6:01 as I select a filtering option.

6:05 Lastly, we can customize the pop-ups so that our web map,

6:08 and geo app, is more useful for users.

6:22 The last feature I want to show you

6:24 is cartographic blending.

6:25 We'll walk through two examples, starting with this bright, colorful basemap.

6:30 To better understand the landscape, we'll add World Hillshade.

6:34 This web layer is available through ArcGIS Living Atlas of the World,

6:45 There are a few ways we could visualize the terrain in the basemap.

6:50 With cartographic blending, we can make sure

6:52 that the intensity of the map with the terrain shines through

6:55 while creating an attractive textured map in seconds.

7:03 There are so many ways that you can take advantage of this feature.

7:06 Let me show you another example.

7:15 Here we have layers with population density

7:18 showing various communities,

7:20 and we want to know what the people who live there do for work.

7:25 With cartographic blending, we can take the layer that shows

7:28 the predominant industry at the county level

7:31 and blend it into a map that shows

7:34 the specific characteristics of the people in these communities.

7:48 This technique puts the emphasis on the people

7:51 rather than the administrative county boundaries

7:53 and gives us a completely new view of the data.

7:57 Here we see agricultural communities

8:00 in the Central Valley of California in green.

8:02 And Las Vegas is lighting up with pink for tourism.

8:07 These are a few of the capabilities of Map Viewer.

8:10 We can't wait to see the beautiful maps you create.

8:15

8:20