



Do More with Basemaps

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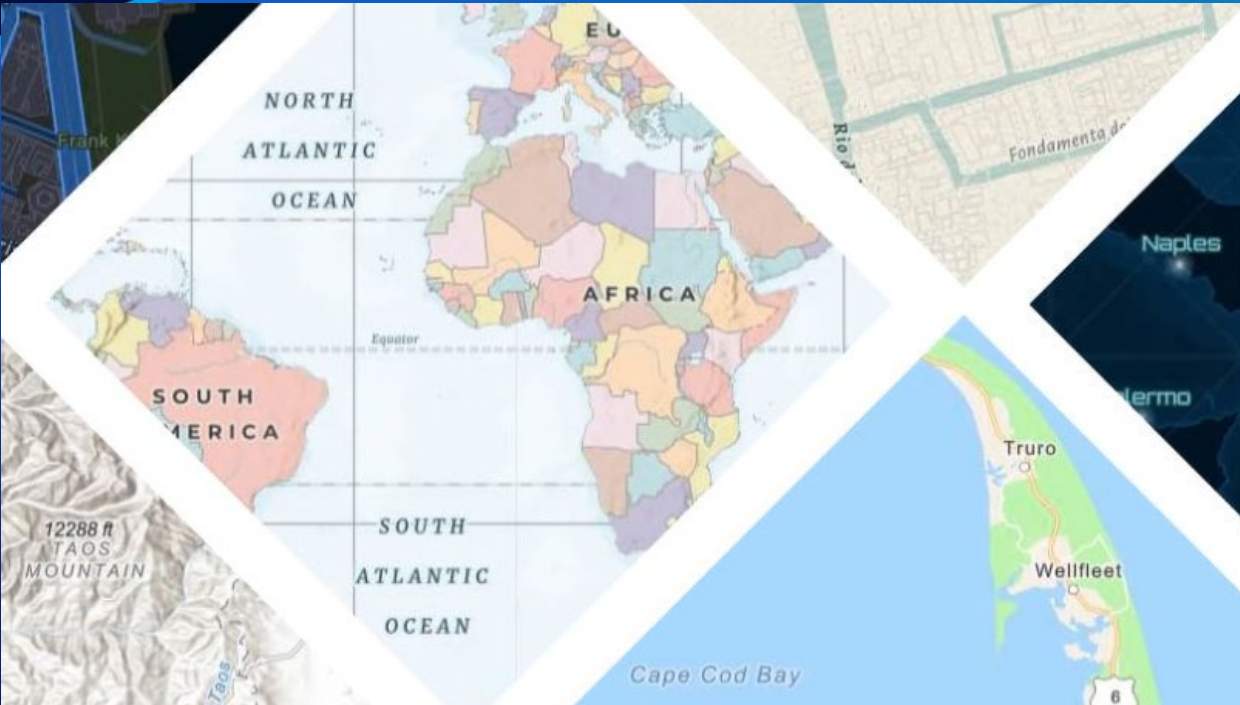
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2021 ESRI
DEVELOPER SUMMIT

Do More with Basemaps

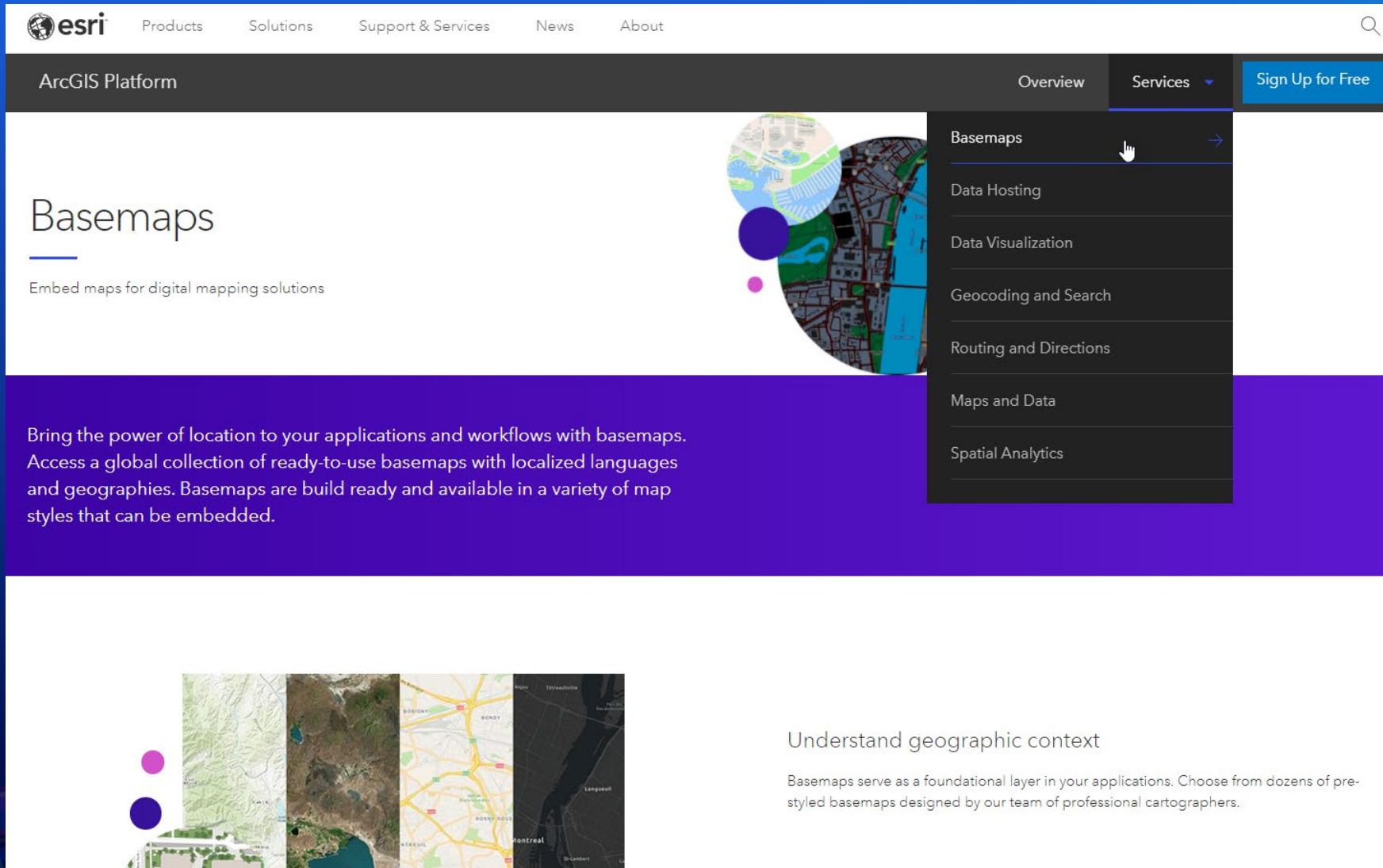
- Basemaps set the stage for your layers. In this session, you will learn about the new tools with basemaps that allow you to change the colors, add layers, and tips on using the vector tile style editor.
- Presentation outline:
 - Esri Vector Basemaps, Localization, OpenStreetMap, Road Ahead
 - Creating & maintaining your own basemap layers
 - Managing your hosted Vector Tile Layer
 - Replace Layer Demo
 - Vector Tile Style Editor Demo
 - Enhance your basemaps with Layer Blending & Demo
 - Suggested links for more information



Esri Vector Basemaps

Andy Green

Esri Vector Basemaps



The screenshot shows the Esri ArcGIS Platform website. The top navigation bar includes the Esri logo, 'Products', 'Solutions', 'Support & Services', 'News', and 'About'. A search icon is in the top right. Below the navigation bar, the 'ArcGIS Platform' header is visible. The main content area features a large 'Basemaps' heading with a sub-heading 'Embed maps for digital mapping solutions'. To the right, a 'Services' dropdown menu is open, listing 'Basemaps', 'Data Hosting', 'Data Visualization', 'Geocoding and Search', 'Routing and Directions', 'Maps and Data', and 'Spatial Analytics'. A 'Sign Up for Free' button is also present. Below the main heading, a purple banner contains the text: 'Bring the power of location to your applications and workflows with basemaps. Access a global collection of ready-to-use basemaps with localized languages and geographies. Basemaps are build ready and available in a variety of map styles that can be embedded.' At the bottom, a row of four map style thumbnails is shown, with the text 'Understand geographic context' and a paragraph: 'Basemaps serve as a foundational layer in your applications. Choose from dozens of pre-styled basemaps designed by our team of professional cartographers.'

esri Products Solutions Support & Services News About

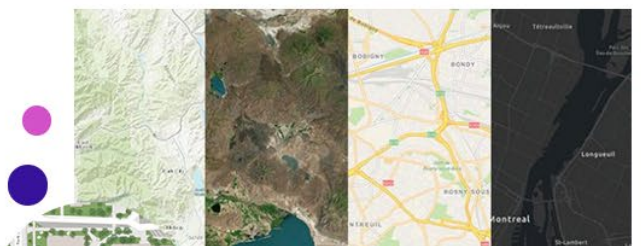
ArcGIS Platform Overview Services Sign Up for Free

Basemaps

Embed maps for digital mapping solutions

- Basemaps
- Data Hosting
- Data Visualization
- Geocoding and Search
- Routing and Directions
- Maps and Data
- Spatial Analytics

Bring the power of location to your applications and workflows with basemaps. Access a global collection of ready-to-use basemaps with localized languages and geographies. Basemaps are build ready and available in a variety of map styles that can be embedded.



Understand geographic context

Basemaps serve as a foundational layer in your applications. Choose from dozens of pre-styled basemaps designed by our team of professional cartographers.

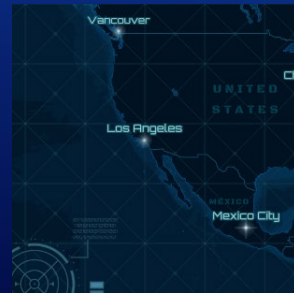
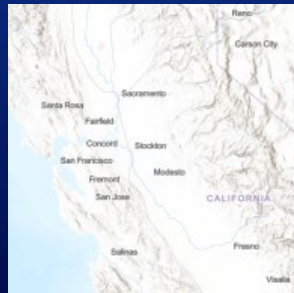
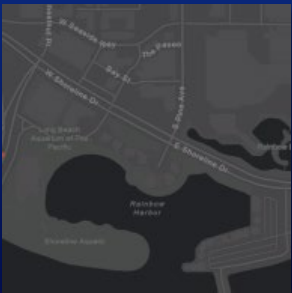
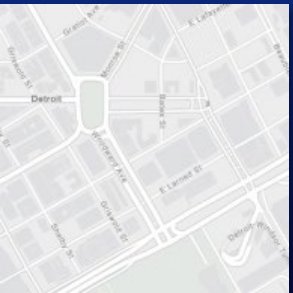
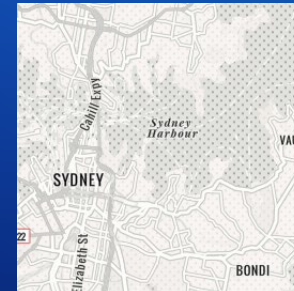
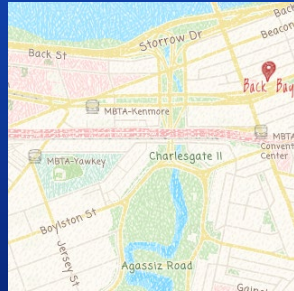
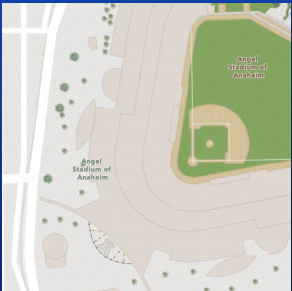
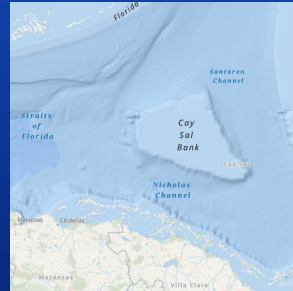
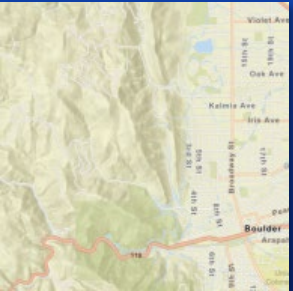
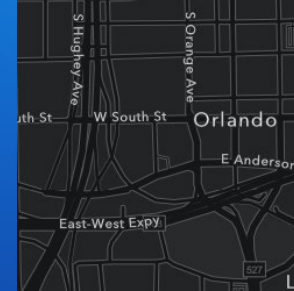
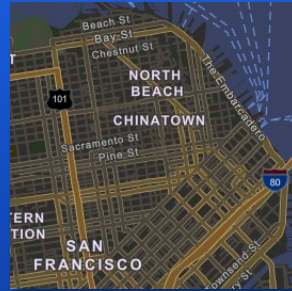
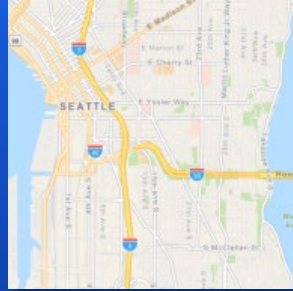
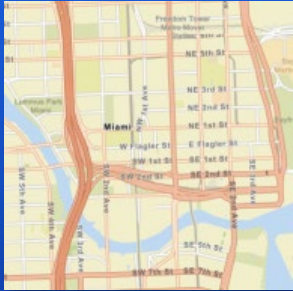
Esri Vector Basemaps

- Basemaps are ready-to-use in a variety of map styles.
- Basemaps serve as a foundational layer in your applications.
- Content is available at multiple scales using authoritative data from commercial, open source and community contributions.

Esri Vector Basemaps

- Customizable by design, select the colors, patterns, and labels that meet your organization's unique needs.
- Quickly add Esri basemaps to your applications.
Maps are optimized for web, mobile, and desktop applications.
- Available with localized content in a number of languages.

Esri Vector Basemaps



Do More with Basemaps | 2021 Esri Developer Summit

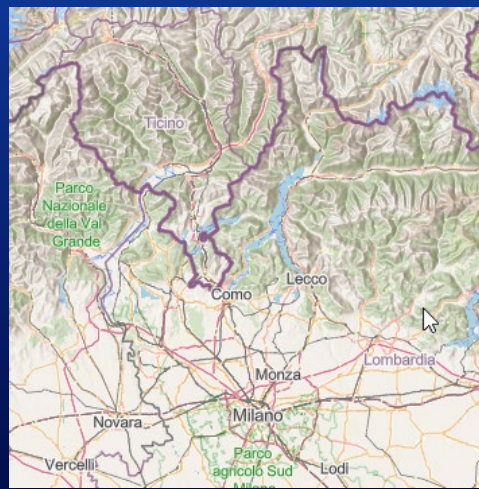
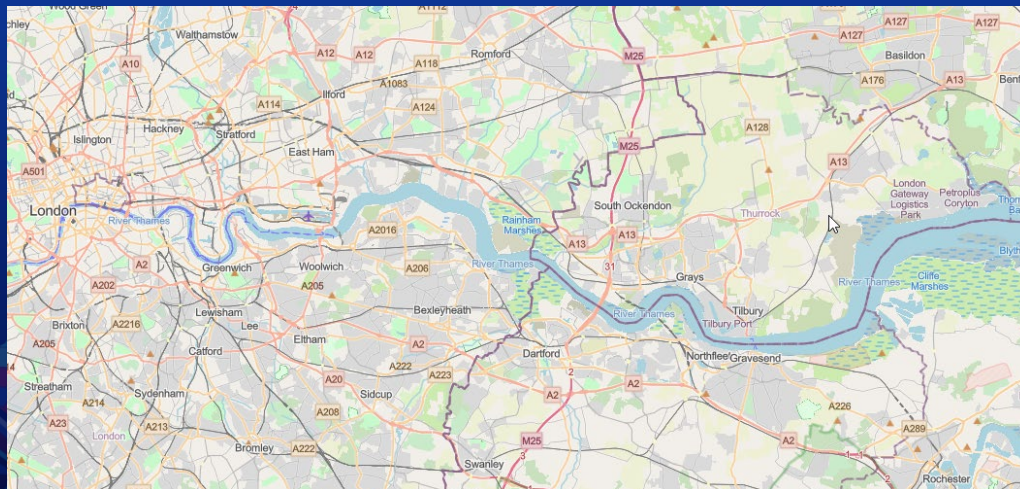
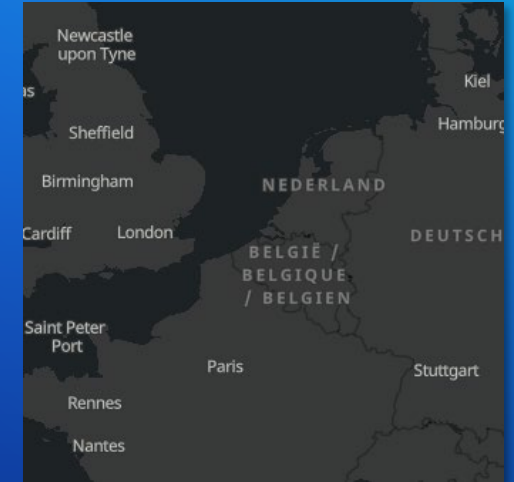
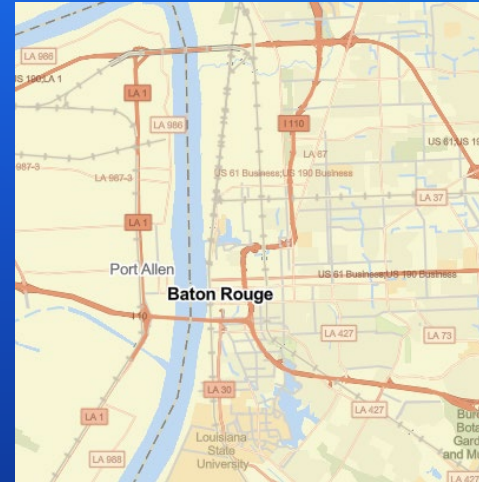
Localization of Esri Vector Basemaps



- Arabic
- Chinese (Hong Kong)
- Chinese (Simplified)
- Chinese (Taiwan)
- Czech
- Danish
- Dutch
- Estonian
- Finnish
- French
- German
- Greek
- Hebrew
- Italian
- Japanese
- Korean
- Latvian
- Lithuanian
- Norwegian
- Russian
- Polish
- Portuguese (Brazilian)
- Portuguese (Portugal)
- Romanian
- Spanish
- Swedish
- Thai
- Turkish
- Ukrainian
- Vietnamese
- More to be added in 2021
 - Bosnian, Catalan, Croatian, Hungarian, Indonesian, Serbian, Slovak, Slovenian

OpenStreetMap Vector Basemaps

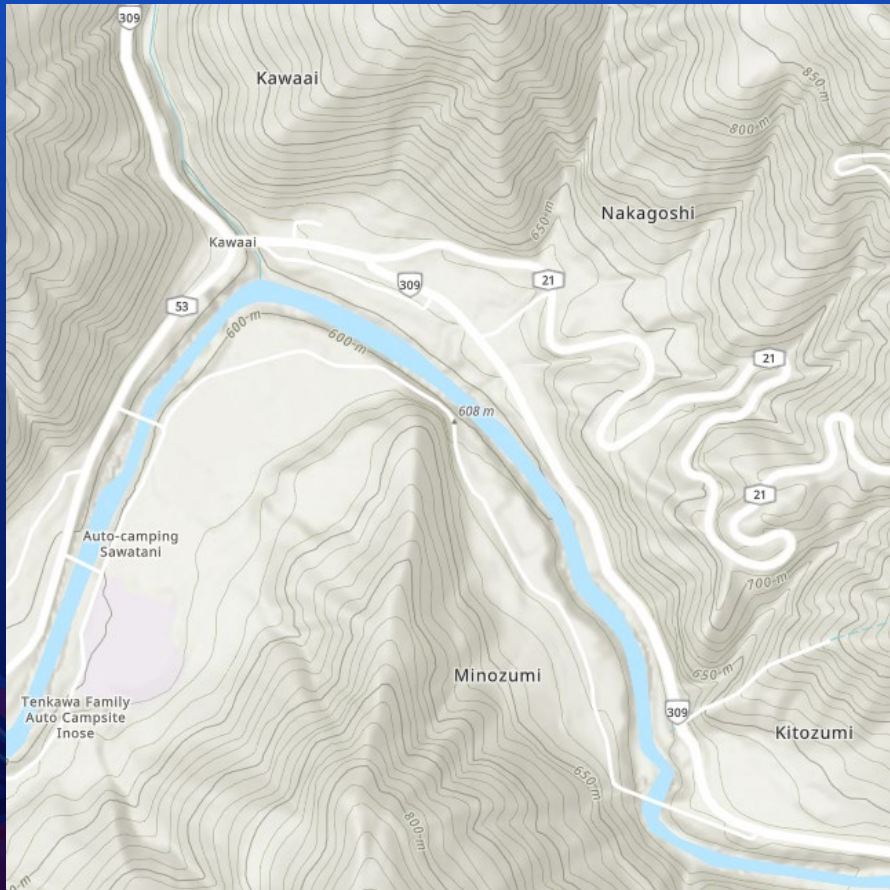
- OpenStreetMap
- OpenStreetMap Daylight (Beta)



Esri Vector Basemaps Road Ahead

Multi-source styles

- Topographic with Contours (Beta)



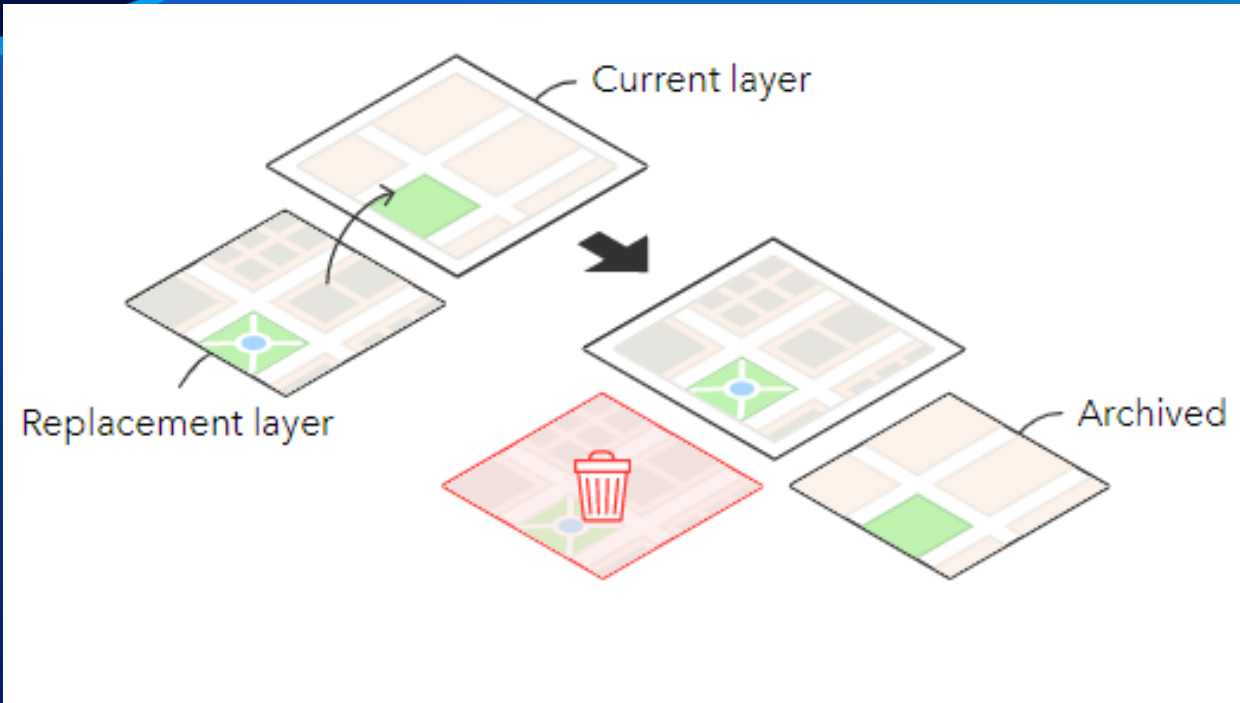
Places/Points of Interest

- Places (Beta)



Creating & maintaining your own basemap layers in ArcGIS Online

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Leveraging ArcGIS Online Tools to Manage & Customize your Basemaps

- Publishing & Managing your own Vector Tile Basemaps in ArcGIS Online
- Layer Blending in Map Viewer

Publishing Vector Tile Layers to ArcGIS Online

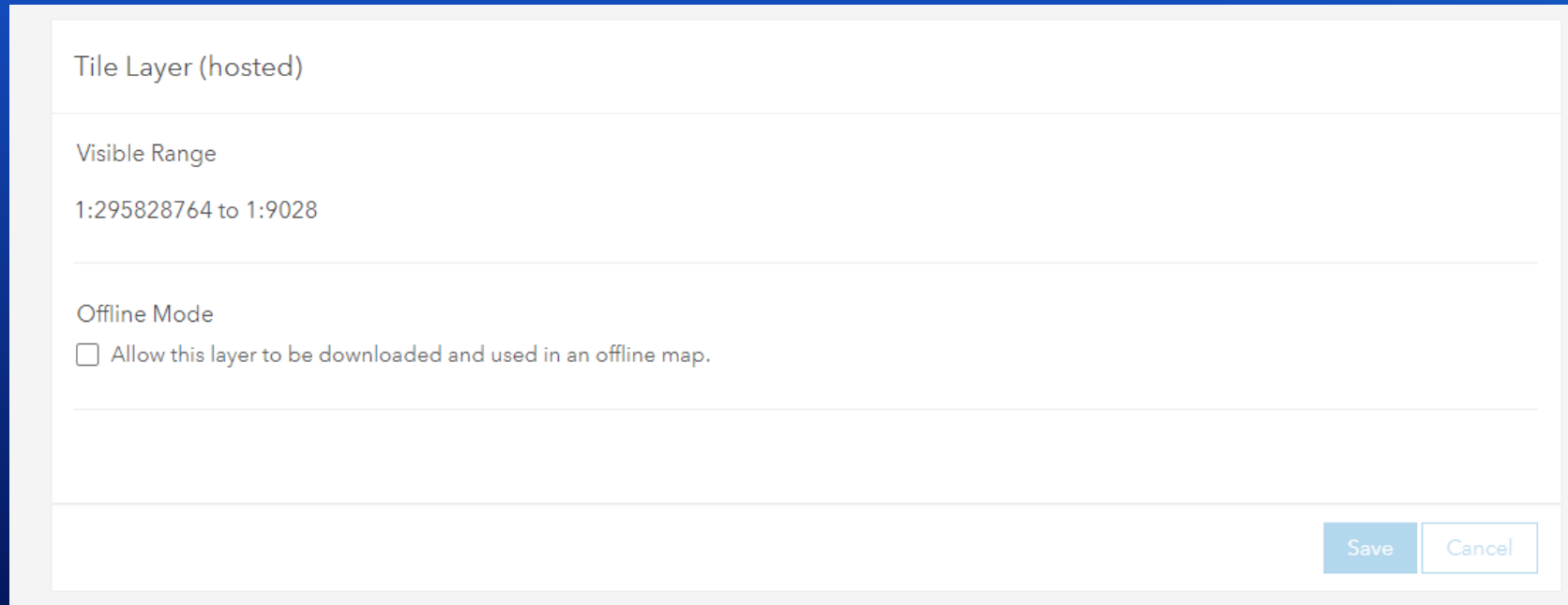
- **Why Vector Basemaps?**
- **Create your own Basemap in ArcGIS Pro and publish to ArcGIS Online as a hosted Vector Tile Layer**

Managing your hosted Vector Tile Layer

- **Enable Offline Mode**
- **Create and Manage Styles**
- **Replace Layer**

Offline Mode

- From the Item Details Settings Page:



Tile Layer (hosted)

Visible Range

1:295828764 to 1:9028

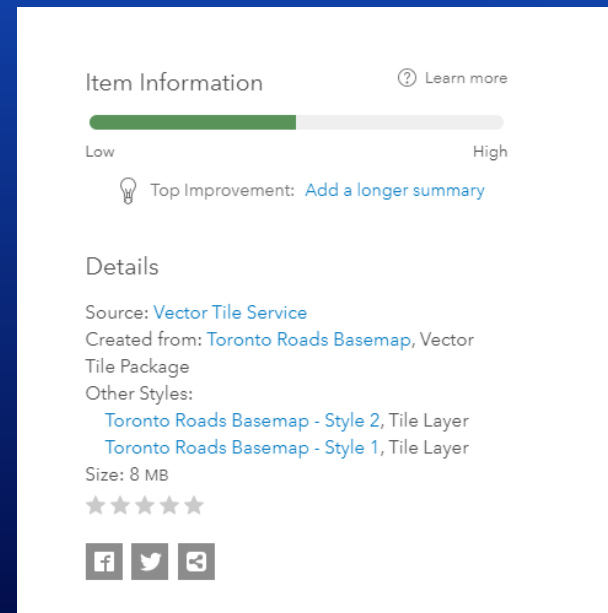
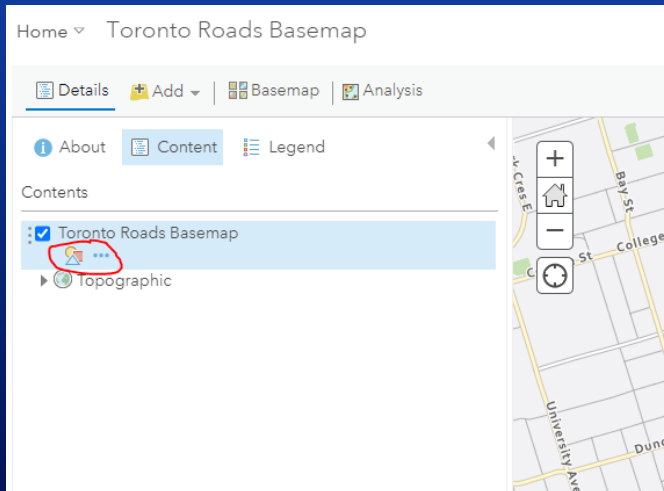
Offline Mode

Allow this layer to be downloaded and used in an offline map.

Save Cancel

Create and Manage Styles

- Create new styles from your hosted Vector Basemap by accessing the Vector Tile Style Editor in Map Viewer Classic
- You can view the styles created from your hosted layer from its Item Details Page




Replace Layer

- What is Replace Layer?
- Archive Options
- Things to keep in mind

What is Replace Layer?

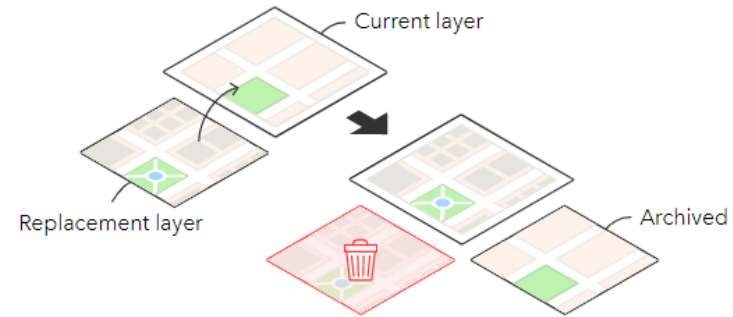
- **Allows you to replace a hosted vector tile layer with content from a different hosted vector tile layer**
- **The content is replaced, but the item ID and URL of the layer remain the same so maps and applications do not need to be updated to reference a new layer**
- **Allows you to preview how different styles associated with your layer will look with the replacement layer**

Archive Options

Archive the current layer as [Toronto Roads Basemap_2021_02_07_08_47](#) 

The content of the current layer is archived. A new layer is created to archive the current layer. The replacement layer is deleted afterwards.

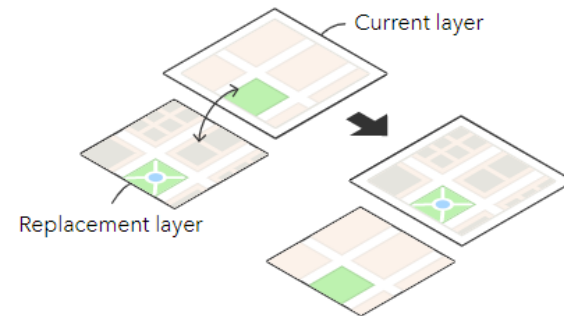
- The item id and URL of the current layer is retained so that apps and styles referencing the layer continue to work.
- The content of the current layer is archived as a new layer.
- The replacement layer is deleted after the current layer is replaced.
- Ideal for creating designated layers for archives.



Use the replacement layer as the archive

The content of the current layer is swapped with the content of the replacement layer.

- No new layers are created. The item id and URL of both the current layer and replacement layer are retained so that apps and styles referencing the layers continue to work.
- Ideal for environments that do not want to create a designated layer for archiving.



Replace Layer

Select replacement layer Choose archive option

Replacement layer

No Layer Selected

Select layer

Requirements

The current layer and replacement layer should have the same:

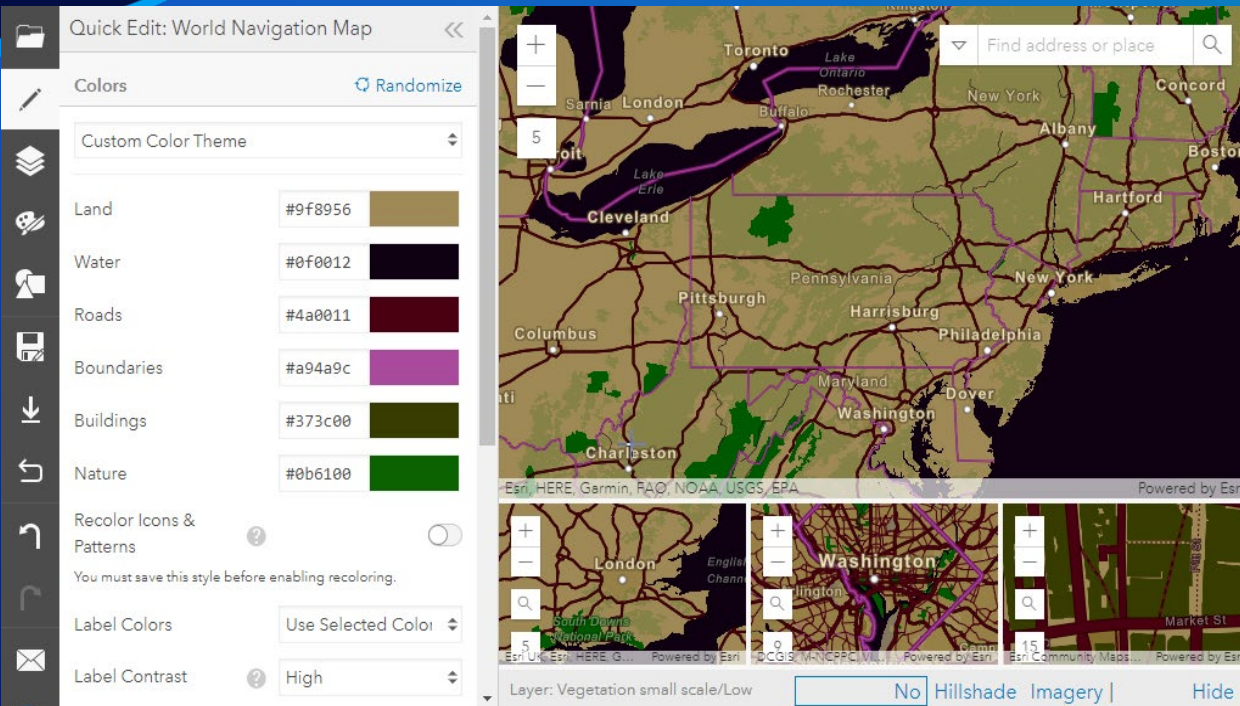
- Coordinate system and tiling scheme.
- Layers included in the replacement layer should match the current layer.

Replace Layer Demo

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Things to keep in mind

- **Replacement layer & current layer must both use the same coordinate system and tiling scheme**
- **Both layers must be owned by the same portal member**
- **Certain changes can affect the layer you replace**
 - **Removing or adding a layer to the map before publishing the replacement layer**
 - **Renaming layers**
 - **Changing symbology**

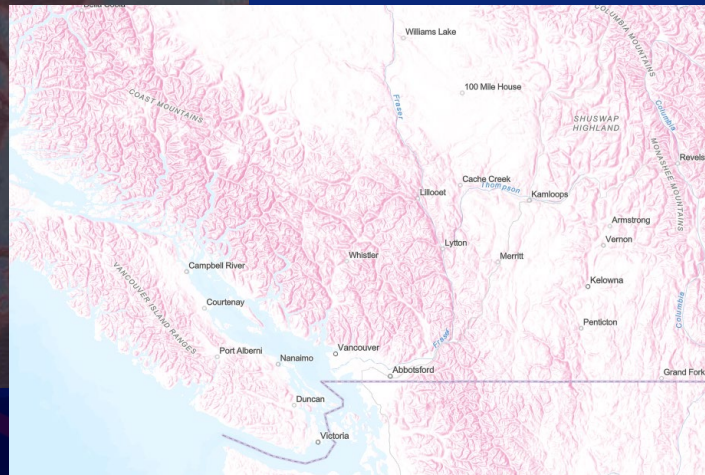


Vector Tile Style Editor Demo

Andy Green

Enhance your basemaps with Layer Blending

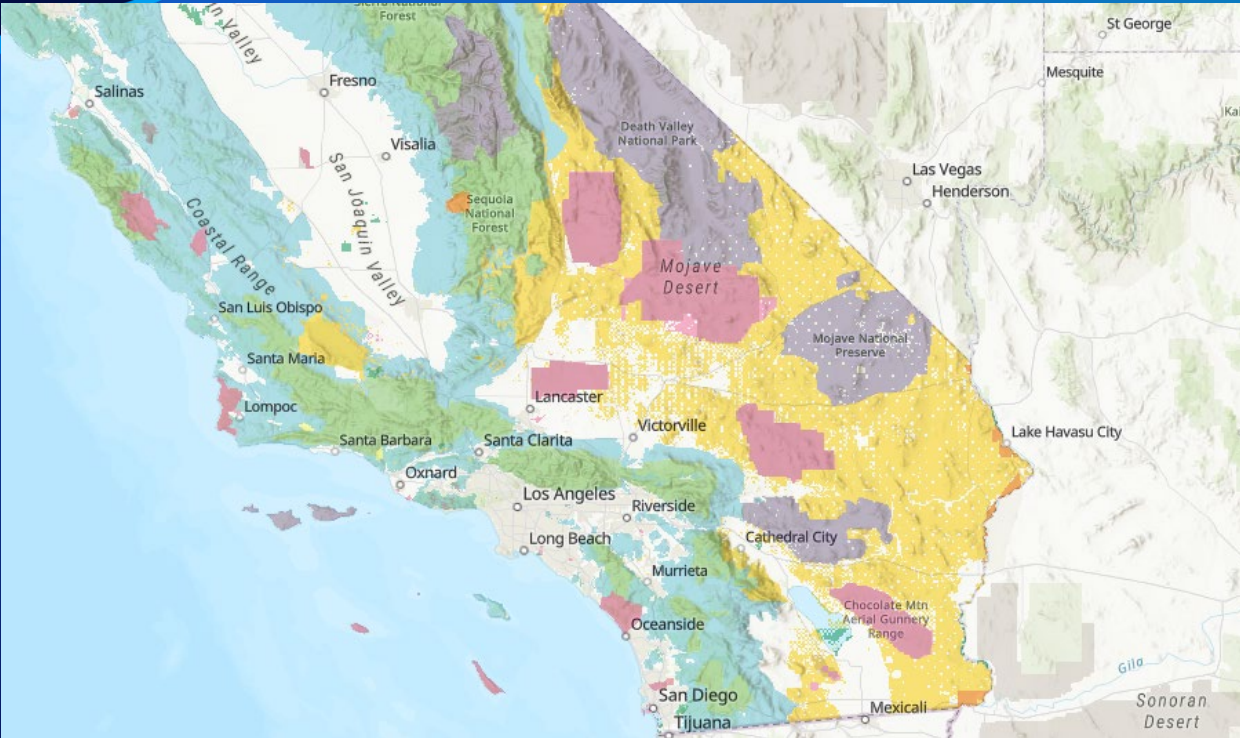
- **What are Blend Modes?**
 - A property setting applied to a layer that blends the pixels of two or more layers to achieve a special effect
 - 30+ different blend modes are now included in the Map Viewer



Enhance your basemaps with Layer Blending

- Access Layer Blending from the Properties Tab of any Layer in Map Viewer

The screenshot displays the ArcGIS Map Viewer interface. On the left is a dark sidebar with navigation options: Add data, Layers, Tables, Basemap, Legend, Bookmarks, Save, Create new map, Open existing map, Map properties, Share map, Print, Feedback, What's next?, and Collapse. The main map area shows a topographic map of Southern California, with labels for cities like San Diego, San Jose, and San Bernardino, and geographical features like the San Bernardino Mountains and San Jacinto Mountains. On the right, the 'Properties' panel is open for the 'World Topographic Map' layer. It includes sections for Symbology (No legend), Transparency (0% to 75% slider), and Blending. The 'Blending' dropdown is set to 'Normal'. A 'Blending' dialog box is overlaid on the Properties panel, showing a list of blend modes: Normal (selected), Lighten, and Lighten. The dialog also includes a search bar, a 'Filter results' button, and a link to 'Learn how to use blend modes'. The bottom of the map shows attribution for Esri, CGIAR, USGS, and other data sources.



Layer Blending Demo

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Suggested links for more information on Esri Vector Basemaps

- ArcGIS Living Atlas of the World: <https://tinyurl.com/livingatlasbasemaps>
- Community Maps Program: <https://communitymaps.arcgis.com>
- Reference Document: <https://tinyurl.com/basemapreferencedoc>
- Feedback Map: <https://tinyurl.com/basemapfeedback>
- Blogs: <https://www.esri.com/arcgis-blog/?s=#&tag=vector-basemaps>
- Esri Vector Style Tile Editor (Developers site): <https://developers.arcgis.com/vector-tile-style-editor/>

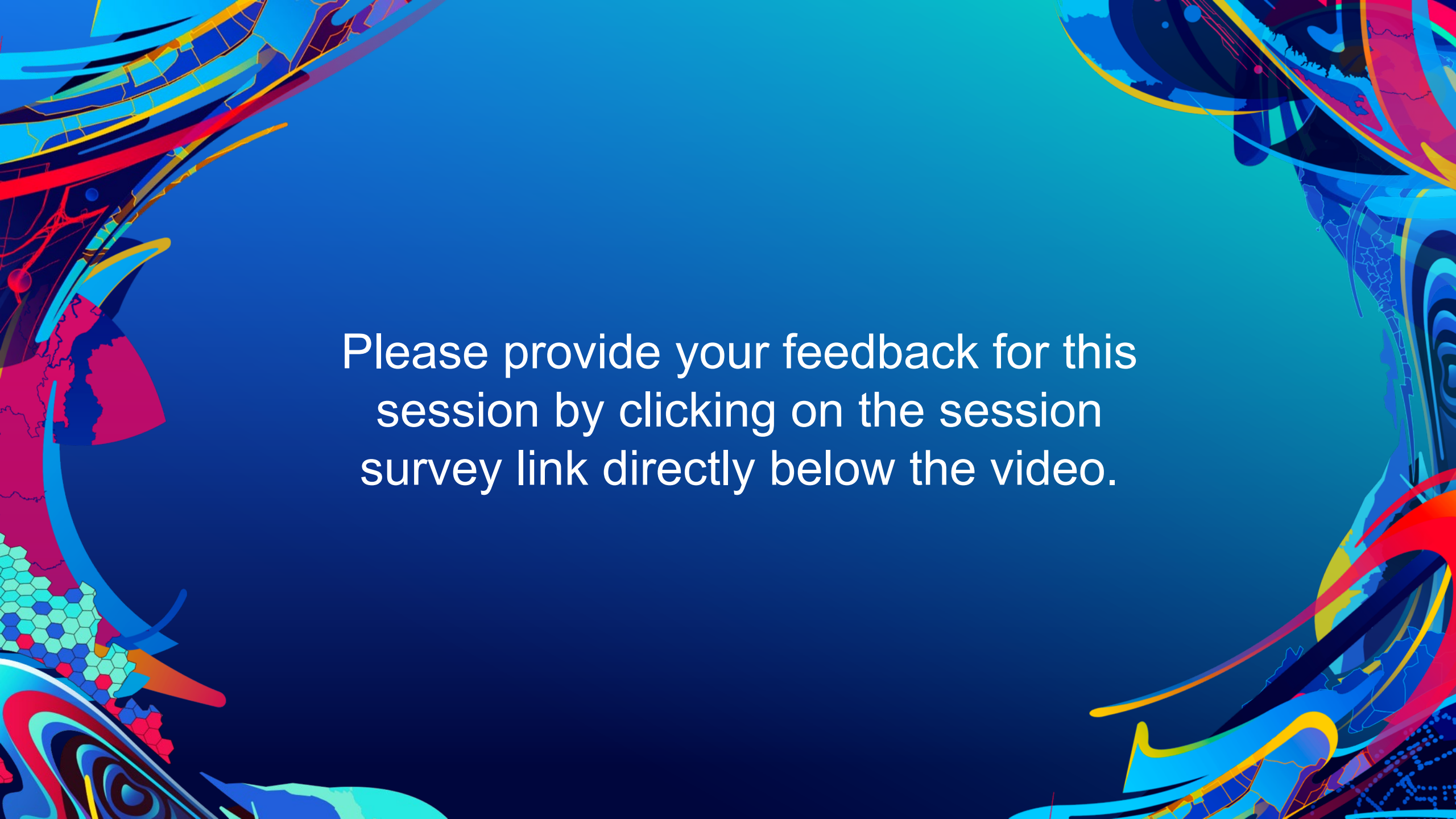
Suggested links for more information on creating & maintaining basemaps and blending

- Authoring vector maps: <https://tinyurl.com/authoringmaps>
- Manage hosted layers: <https://tinyurl.com/managelayers>
- Layer Blending: <https://links.esri.com/agol/new-mv-layer-blending>



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