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Overview

In **Part-4**, you will be adding the two custom widgets for Google Earth and Pictometry. They have been preconfigured. You do not have to write any code.

You will learn how to configure this Web App for medium and small screen sizes.

Finally, you will download the ZIP file and deploy the web application to your web server.

If you do not have a web server, you will learn how to deploy your app to the GitHub Pages by creating a free account.

Add the two custom widgets

Download Custom.zip from:

<https://github.com/DavidDas2/exb/>

Unzip custom.zip

 custom.zip	9/4/2023 9:15 PM	Compressed (zipped) Folder	43 KB
--	------------------	----------------------------	-------

C:\Users\David.das\Downloads\custom\Custom\

You will get two fully configured custom widgets for Google Maps and Pictometry.

 get-map-coordinates-class	9/4/2023 9:16 PM	File folder	
 get-map-coordinates-class2	9/4/2023 9:16 PM	File folder	
 Logo.png	9/4/2023 9:16 PM	IrfanView PNG File	11 KB

Navigate to the your-extensions folder.

C:\DAVID\EXB\EXB15\client\your-extensions\widgets\

 simple	9/4/2023 5:34 PM	File folder	
 .gitkeep	9/4/2023 5:05 PM	GITKEEP File	0 KB

There is one sample widget in this folder named simple.

Copy the two custom widgets to the your-extensions folder.

C:\DAVID\EXB\EXB15\client\your-extensions\widgets\

 get-map-coordinates-class	9/14/2023 9:17 AM	File folder	
 get-map-coordinates-class2	9/14/2023 9:17 AM	File folder	
 simple	9/4/2023 5:34 PM	File folder	
 .gitkeep	9/4/2023 5:05 PM	GITKEEP File	0 KB

Examine the contents of the **get-map-coordinates-class** folder

C:\DAVID\EXB\EXB15\client\your-extensions\widgets\get-map-coordinates-class\

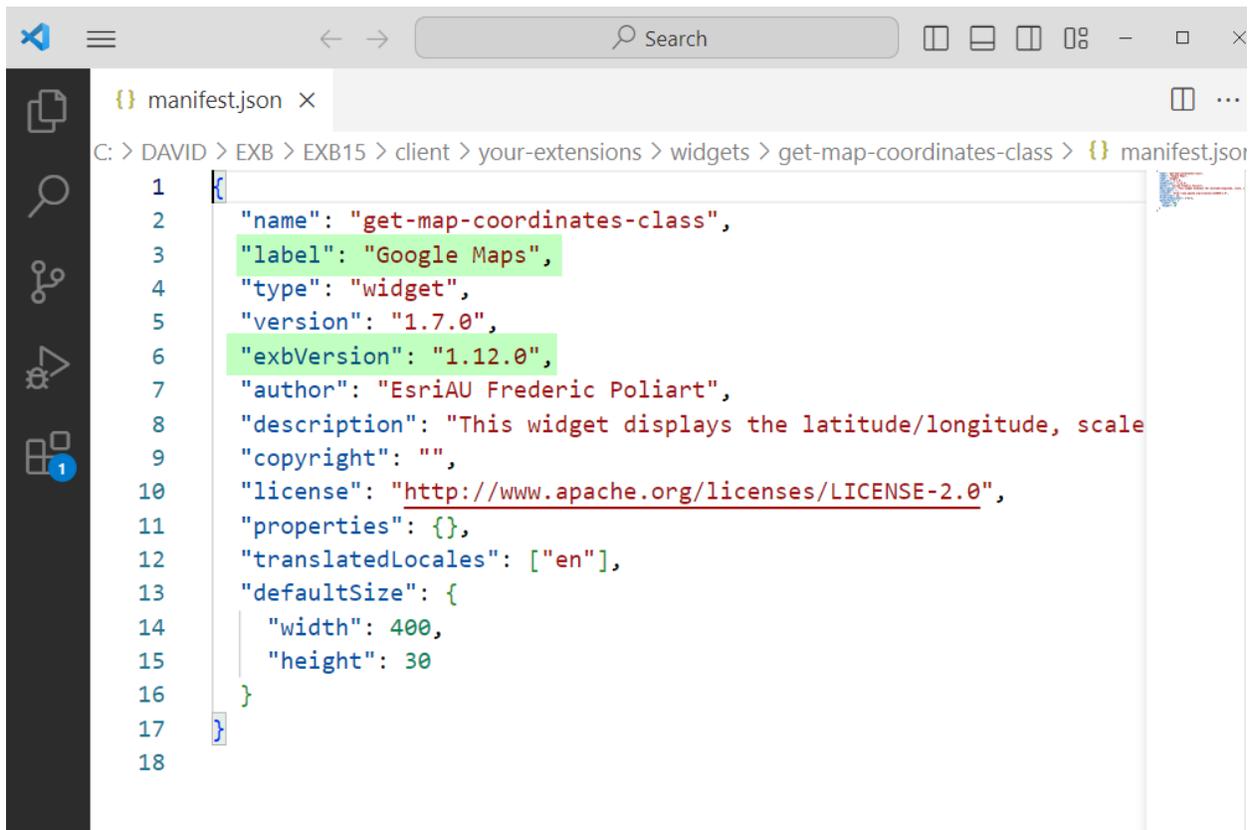
 src	9/14/2023 9:17 AM	File folder	
 _infos.google3d..txt	9/4/2023 9:16 PM	Text Document	1 KB
 config.json	9/4/2023 9:16 PM	JSON File	1 KB
 icon.svg	9/4/2023 9:16 PM	SVG Document	5 KB
 icon2.svg	9/4/2023 9:16 PM	SVG Document	3 KB
 manifest.json	9/4/2023 9:16 PM	JSON File	1 KB
 README.md	9/4/2023 9:16 PM	MD File	1 KB

Open manifest.json in Visual Code.

Notice, the label reads “Google Maps”

It is designed for EXB Dev Edition 1.12.0.

This is your fully configured Google Maps Widget.



The screenshot shows a code editor window with a file named 'manifest.json' open. The file path is 'C: > DAVID > EXB > EXB15 > client > your-extensions > widgets > get-map-coordinates-class > {} manifest.json'. The code is a JSON object defining a widget. The 'label' property is highlighted in green and contains the text 'Google Maps'. Other properties include 'name', 'type', 'version', 'exbVersion', 'author', 'description', 'copyright', 'license', 'properties', 'translatedLocales', and 'defaultSize'.

```
1 [{"name": "get-map-coordinates-class",
2   "label": "Google Maps",
3   "type": "widget",
4   "version": "1.7.0",
5   "exbVersion": "1.12.0",
6   "author": "EsriAU Frederic Poliart",
7   "description": "This widget displays the latitude/longitude, scale
8   "copyright": "",
9   "license": "http://www.apache.org/licenses/LICENSE-2.0",
10  "properties": {},
11  "translatedLocales": ["en"],
12  "defaultSize": {
13    "width": 400,
14    "height": 30
15  }
16 }
17 ]
18 ]
```

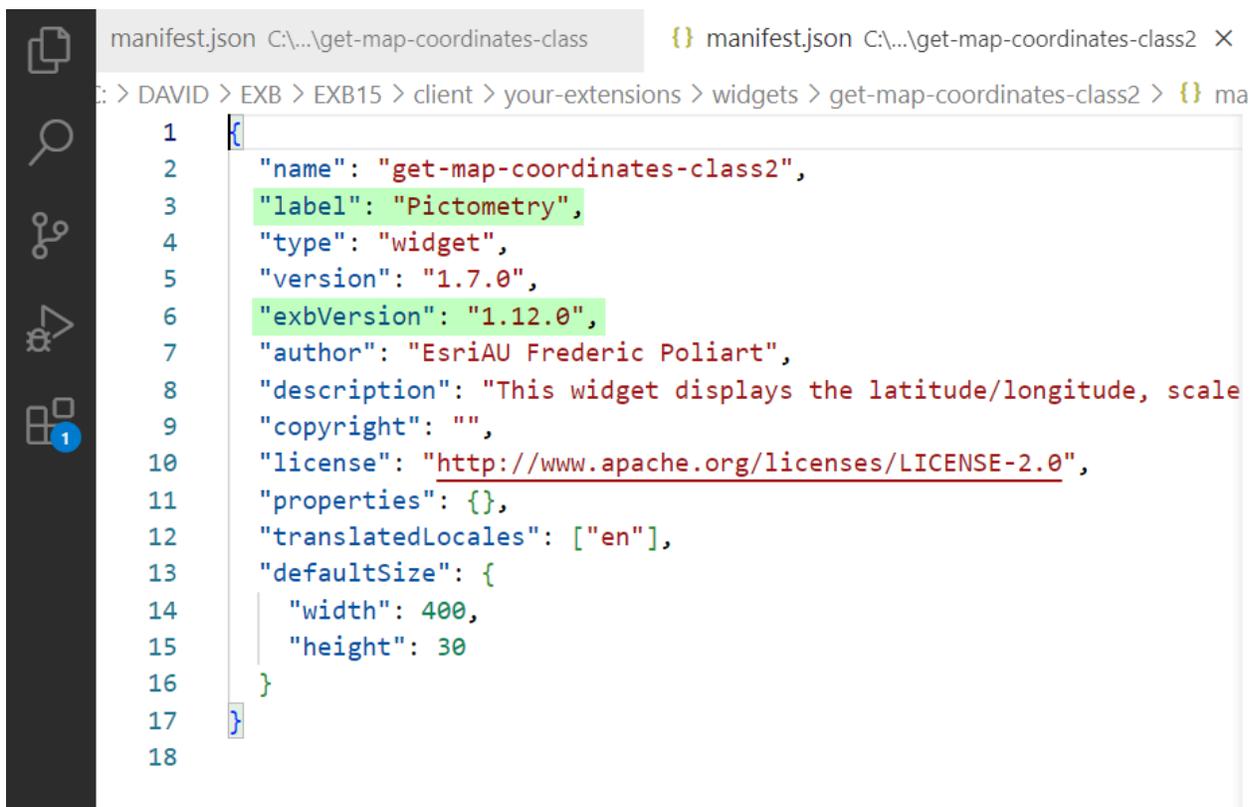
Examine the contents of the **get-map-coordinates-class2** folder

C:\DAVID\EXB\EXB15\client\your-extensions\widgets\get-map-coordinates-class2\

src	9/14/2023 9:17 AM	File folder	
_infos.google3d..txt	9/4/2023 9:16 PM	Text Document	1 KB
config.json	9/4/2023 9:16 PM	JSON File	1 KB
icon.svg	9/4/2023 9:16 PM	SVG Document	3 KB
manifest.json	9/4/2023 9:16 PM	JSON File	1 KB
README.md	9/4/2023 9:16 PM	MD File	1 KB

Open manifest.json in Visual Code

This is your fully configured Pictometry Widget.



```
manifest.json C:\...\get-map-coordinates-class  {} manifest.json C:\...\get-map-coordinates-class2 X
C:\DAVID > EXB > EXB15 > client > your-extensions > widgets > get-map-coordinates-class2 > {} ma
1  {
2    "name": "get-map-coordinates-class2",
3    "label": "Pictometry",
4    "type": "widget",
5    "version": "1.7.0",
6    "exbVersion": "1.12.0",
7    "author": "EsriAU Frederic Poliard",
8    "description": "This widget displays the latitude/longitude, scale
9    "copyright": "",
10   "license": "http://www.apache.org/licenses/LICENSE-2.0",
11   "properties": {},
12   "translatedLocales": ["en"],
13   "defaultSize": {
14     "width": 400,
15     "height": 30
16   }
17 }
18
```

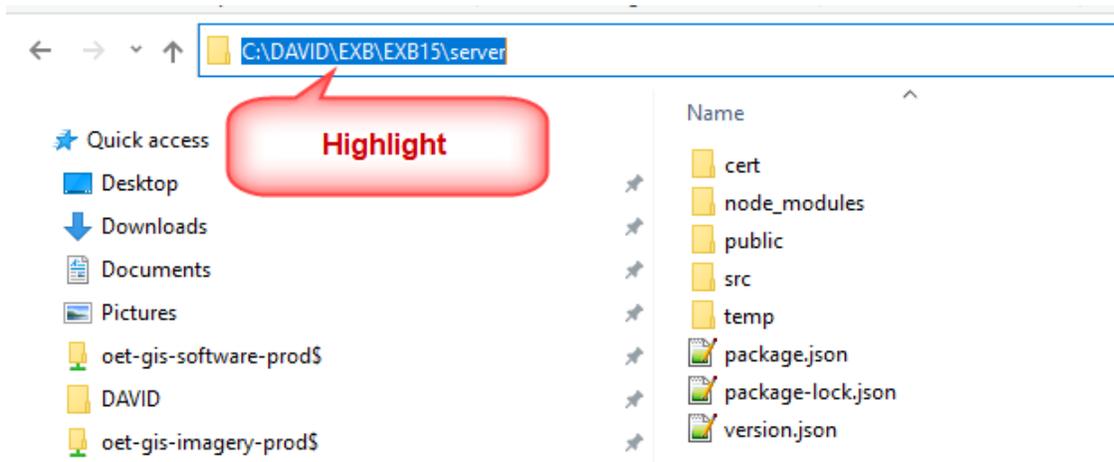
Start a new Experience Builder Session

Navigate to C:\DAVID\EXB\EXB15

client	9/4/2023 6:54 PM	File folder	
server	9/4/2023 7:57 PM	File folder	
3rd-party-license.txt	9/4/2023 4:52 PM	Text Document	68 KB
readme.txt	9/4/2023 4:52 PM	Text Document	1 KB
version.json	9/4/2023 4:52 PM	JSON File	1 KB

Open the server folder.

Highlight the path and enter `cmd`

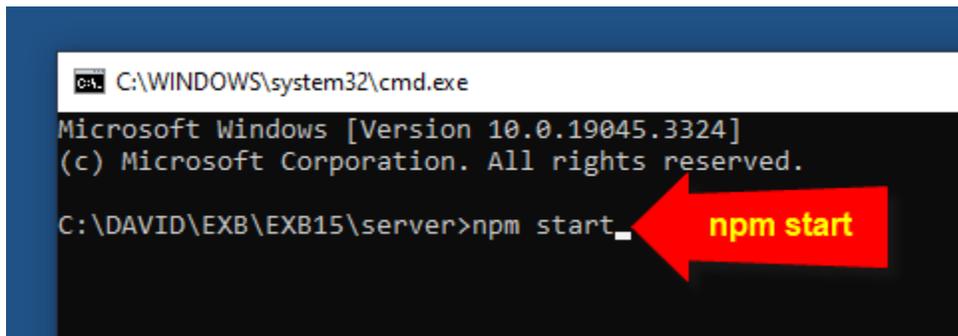


This will open a Command Window with the correct path:

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19045.3324]
(c) Microsoft Corporation. All rights reserved.

C:\DAVID\EXB\EXB15\server>
```

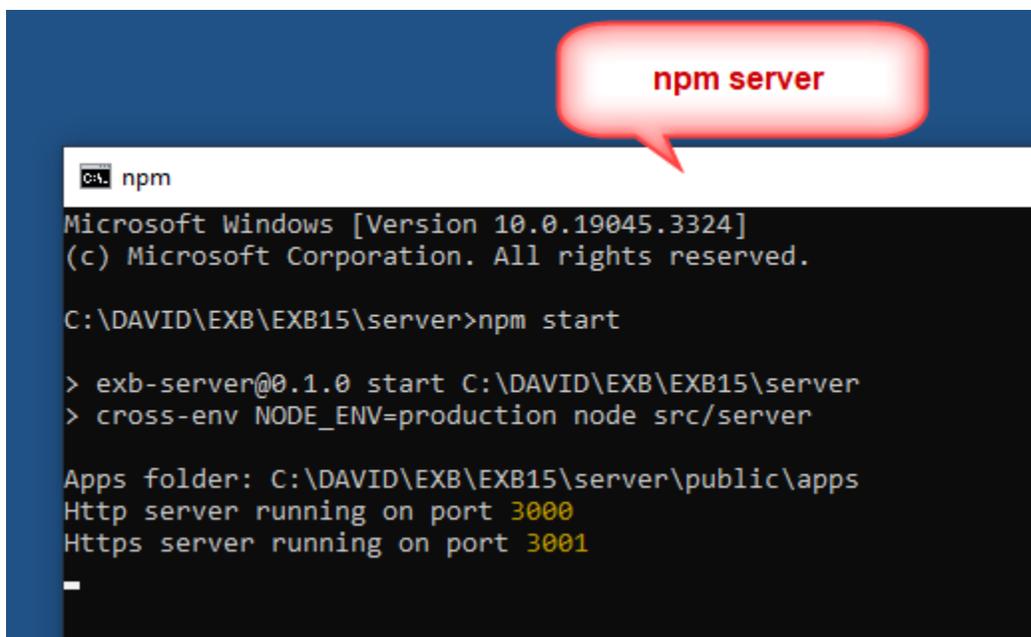
Enter `npm start`



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19045.3324]
(c) Microsoft Corporation. All rights reserved.
C:\DAVID\EXB\EXB15\server>npm start
```

A red arrow points from the text "npm start" to the command in the terminal.

This starts the npm server process.



```
C:\DAVID\EXB\EXB15\server>npm start
> exb-server@0.1.0 start C:\DAVID\EXB\EXB15\server
> cross-env NODE_ENV=production node src/server

Apps folder: C:\DAVID\EXB\EXB15\server\public\apps
Http server running on port 3000
Https server running on port 3001
```

A red speech bubble contains the text "npm server" and points to the output of the command.

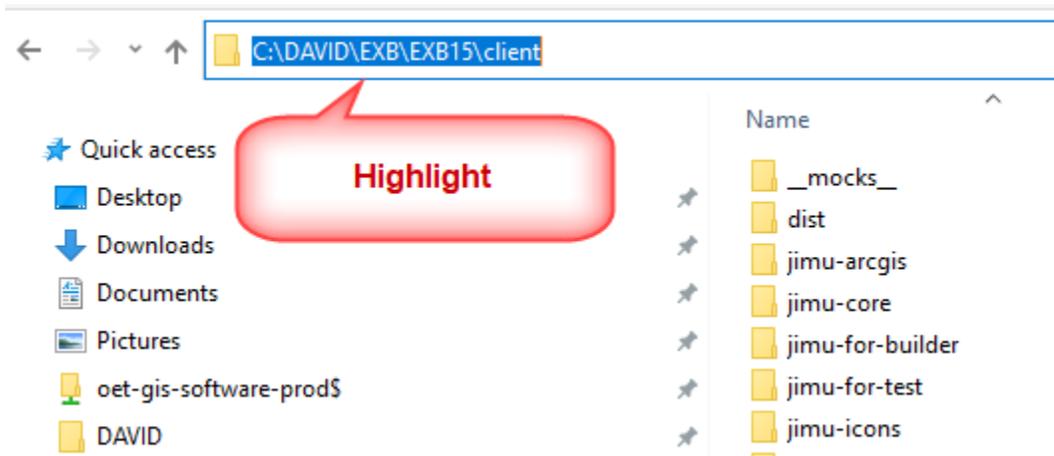
Since you have added custom widgets to the your-extensions folder, you must start the npm client process.

Open the client folder.

C:\DAVID\EXB\EXB15\

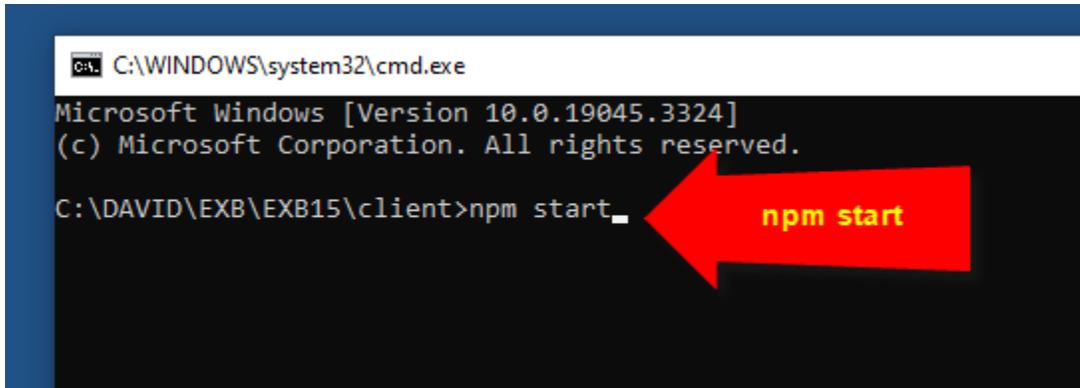
 client	9/4/2023 6:54 PM	File folder	
 server	9/4/2023 7:57 PM	File folder	
 3rd-party-license.txt	9/4/2023 4:52 PM	Text Document	68 KB
 readme.txt	9/4/2023 4:52 PM	Text Document	1 KB
 version.json	9/4/2023 4:52 PM	JSON File	1 KB

Highlight the path and enter `cmd`



This will open a Command Window with the correct path.

Enter **npm start**

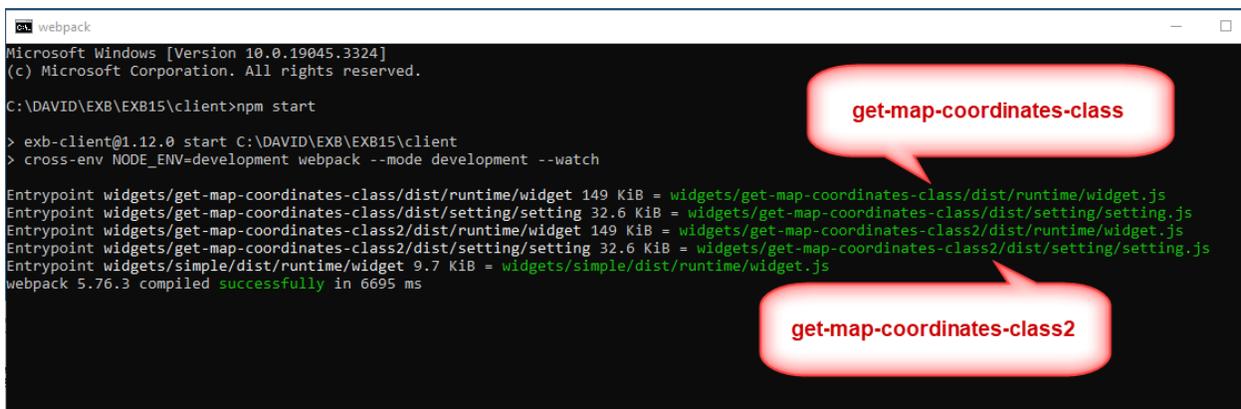


```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19045.3324]
(c) Microsoft Corporation. All rights reserved.

C:\DAVID\EXB\EXB15\client>npm start
```

A red arrow points to the `npm start` command in the terminal.

Notice, how the npm Client process picks up the two custom widgets you have added.



```
webpack
Microsoft Windows [Version 10.0.19045.3324]
(c) Microsoft Corporation. All rights reserved.

C:\DAVID\EXB\EXB15\client>npm start

> exb-client@1.12.0 start C:\DAVID\EXB\EXB15\client
> cross-env NODE_ENV=development webpack --mode development --watch

Entrypoint widgets/get-map-coordinates-class/dist/runtime/widget 149 KiB = widgets/get-map-coordinates-class/dist/runtime/widget.js
Entrypoint widgets/get-map-coordinates-class/dist/setting/setting 32.6 KiB = widgets/get-map-coordinates-class/dist/setting/setting.js
Entrypoint widgets/get-map-coordinates-class2/dist/runtime/widget 149 KiB = widgets/get-map-coordinates-class2/dist/runtime/widget.js
Entrypoint widgets/get-map-coordinates-class2/dist/setting/setting 32.6 KiB = widgets/get-map-coordinates-class2/dist/setting/setting.js
Entrypoint widgets/simple/dist/runtime/widget 9.7 KiB = widgets/simple/dist/runtime/widget.js
webpack 5.76.3 compiled successfully in 6695 ms
```

Two callouts point to the widget entries in the output: `get-map-coordinates-class` and `get-map-coordinates-class2`.



```
ment --watch

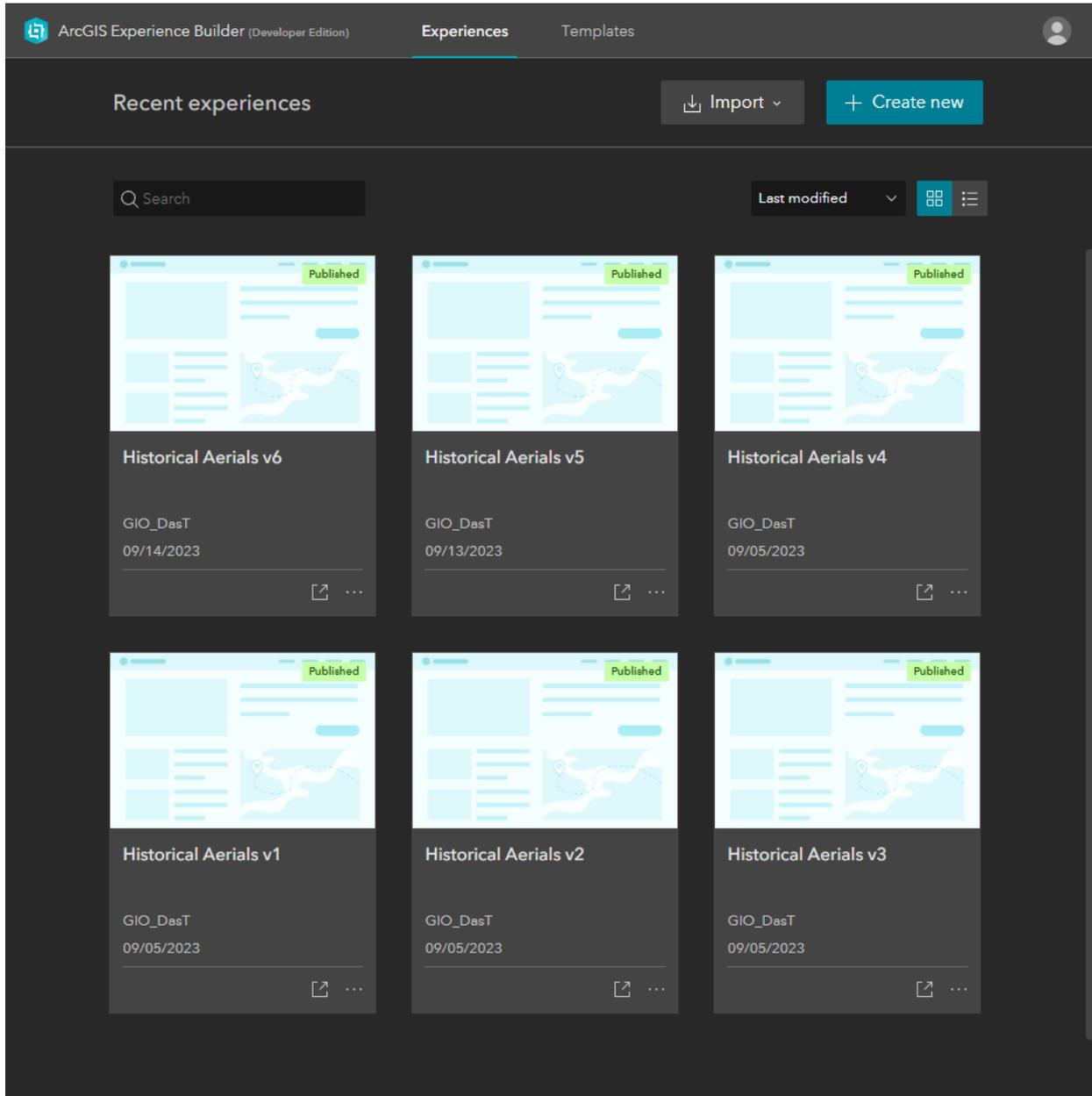
me/widget 149 KiB = widgets/get-map-coordinates-class/dist/runtime/widget.js
ng/setting 32.6 KiB = widgets/get-map-coordinates-class/dist/setting/setting.js
ime/widget 149 KiB = widgets/get-map-coordinates-class2/dist/runtime/widget.js
ing/setting 32.6 KiB = widgets/get-map-coordinates-class2/dist/setting/setting.js
widgets/simple/dist/runtime/widget.js
```

Two callouts point to the widget entries in the output: `get-map-coordinates-class` and `get-map-coordinates-class2`.

Open Chrome and enter:

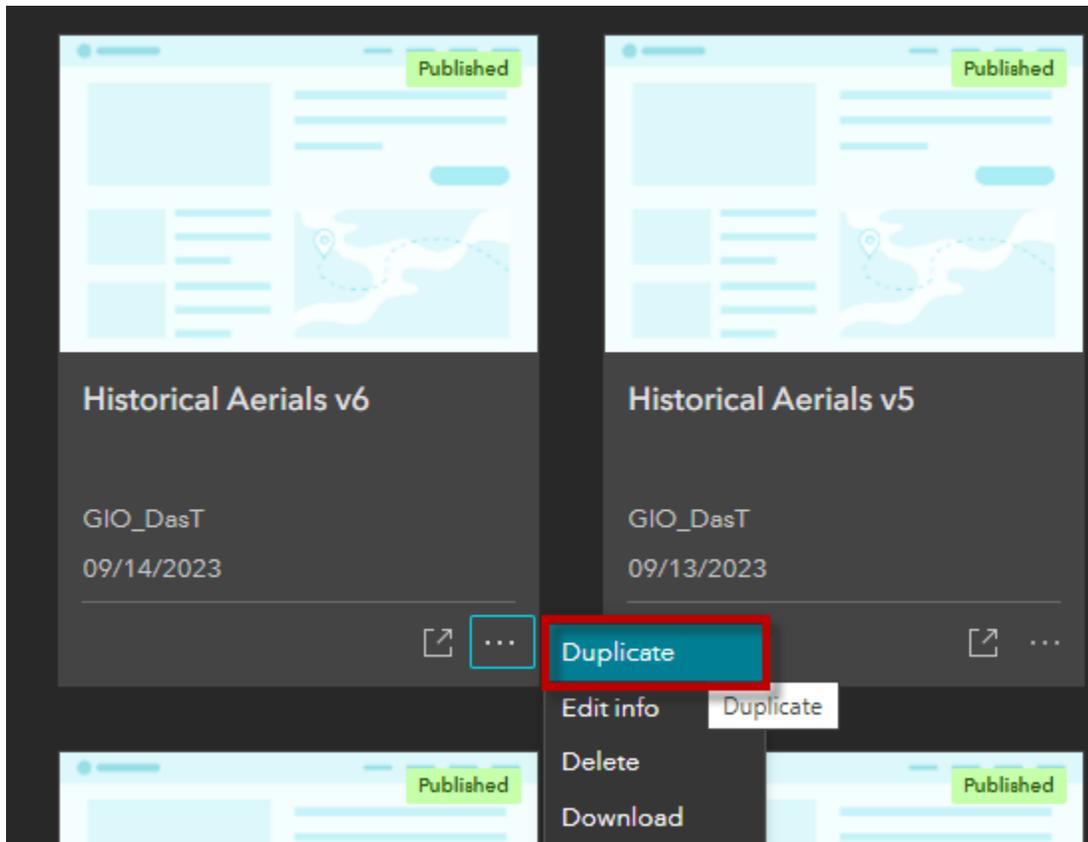
<https://localhost:3001>

This launches the Experience Builder.

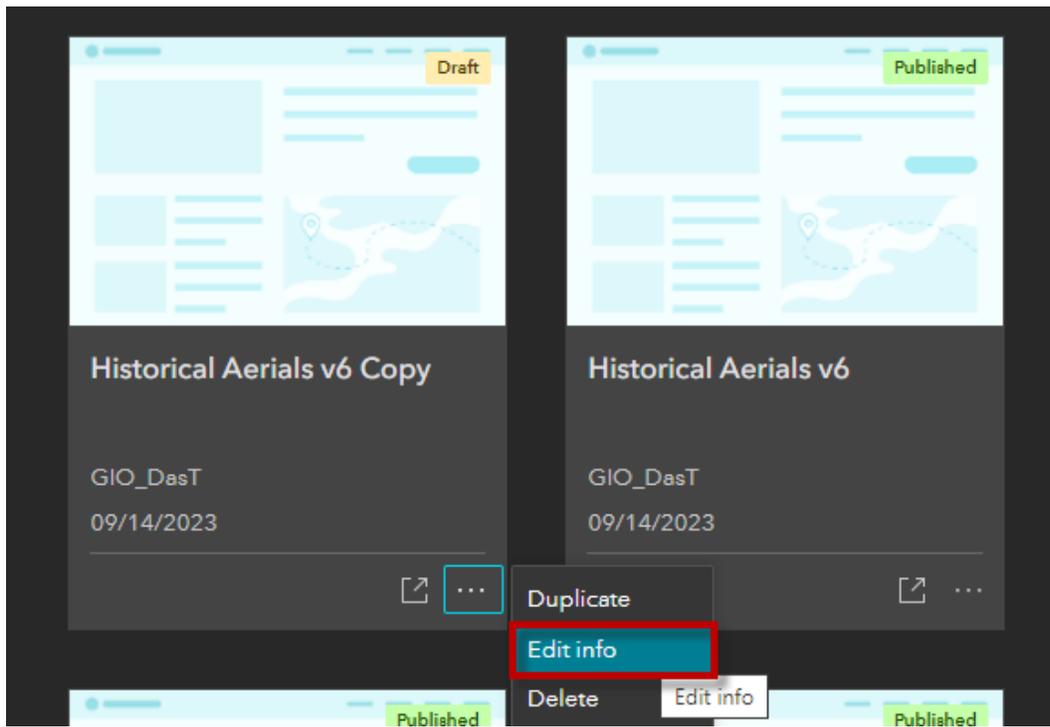


Create Historical Aerials v7

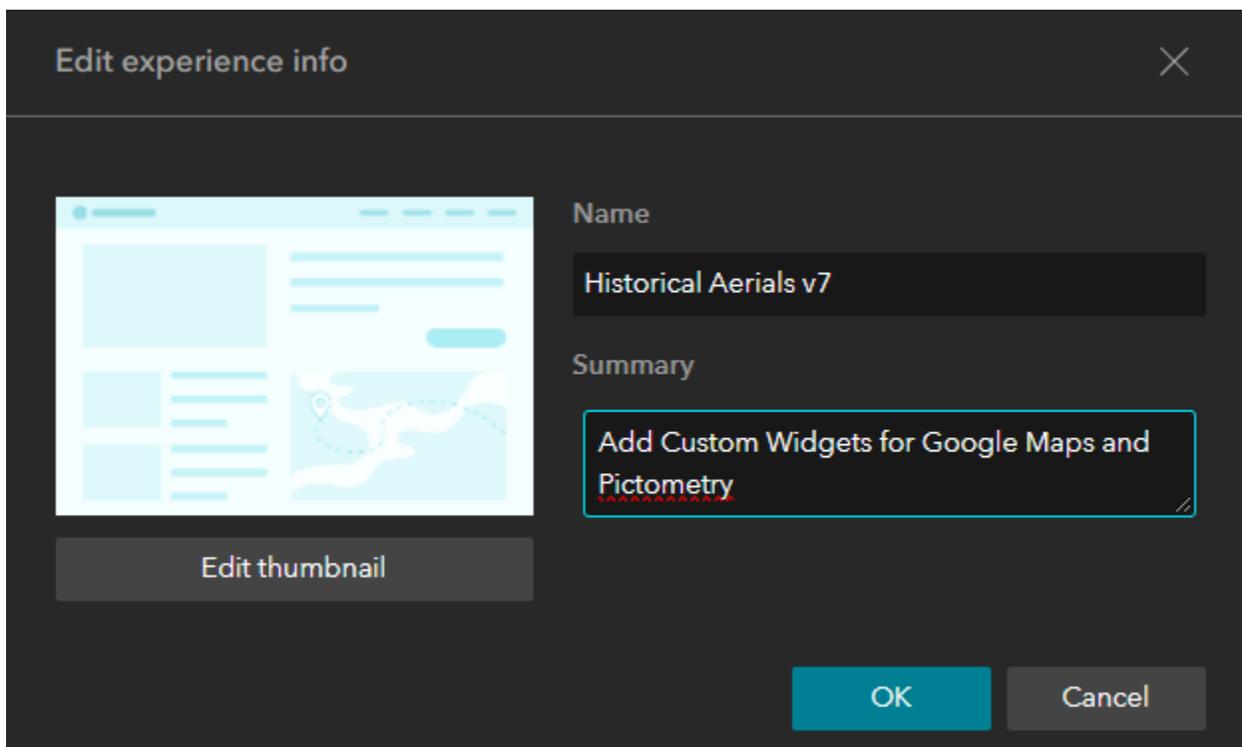
Duplicate Historical Aerials v6 to create Historical Aerials v7



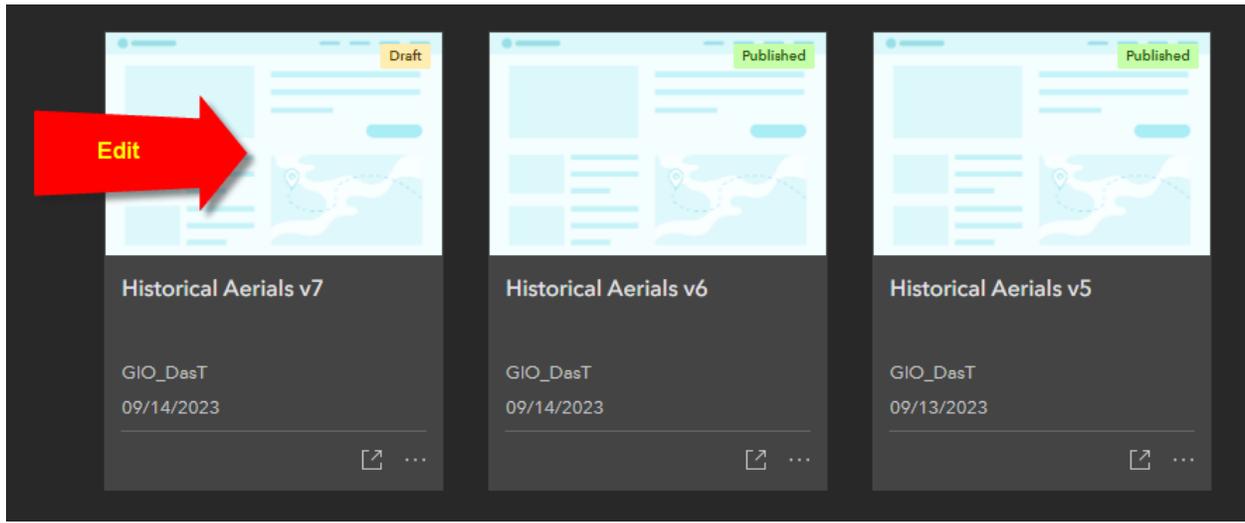
Edit Info



Name = Historical Aerials v7

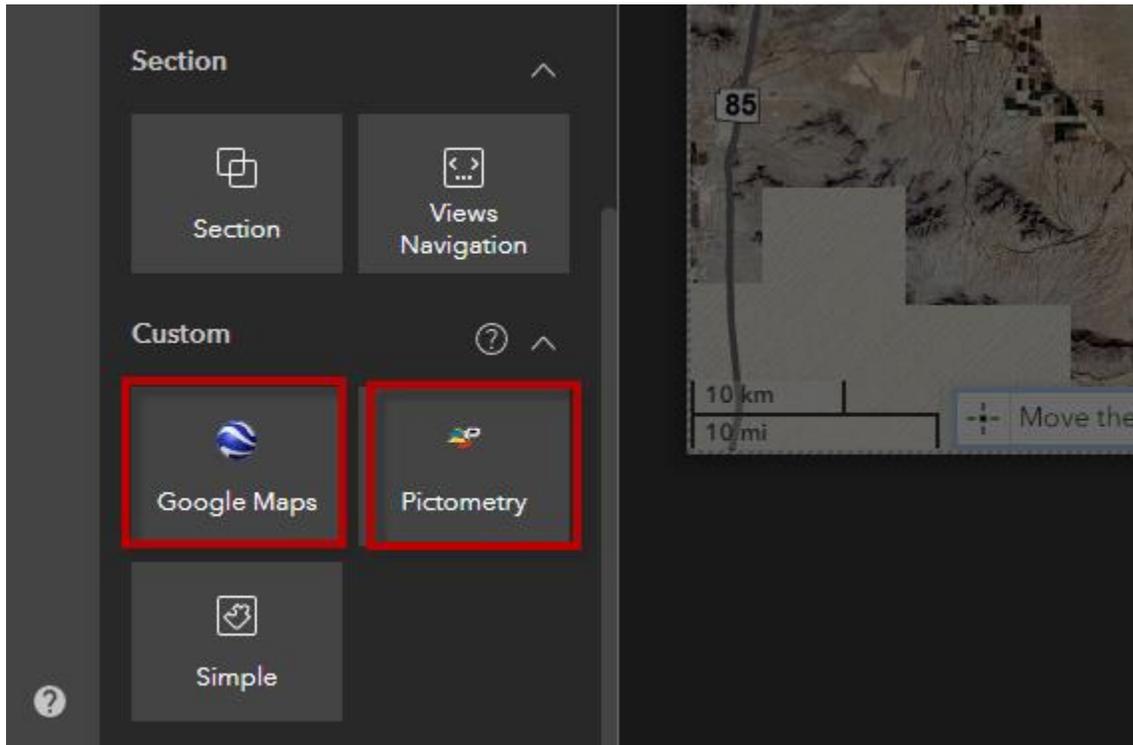


Edit Historical Aerials v7



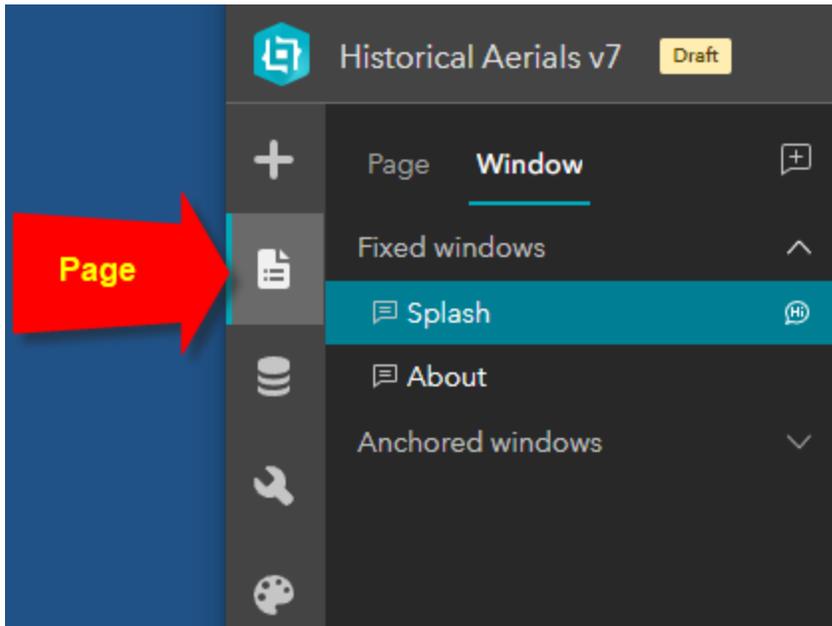
Scroll down.

Your two custom widgets will appear under the Custom Category.

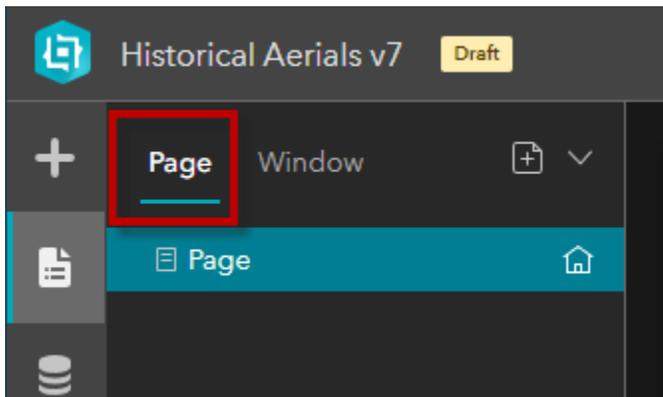


Remember, every time you add Custom Widgets, you must restart the npm Client process.

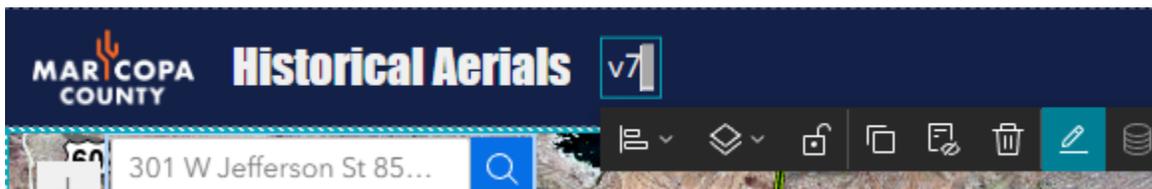
Open the Page Tab



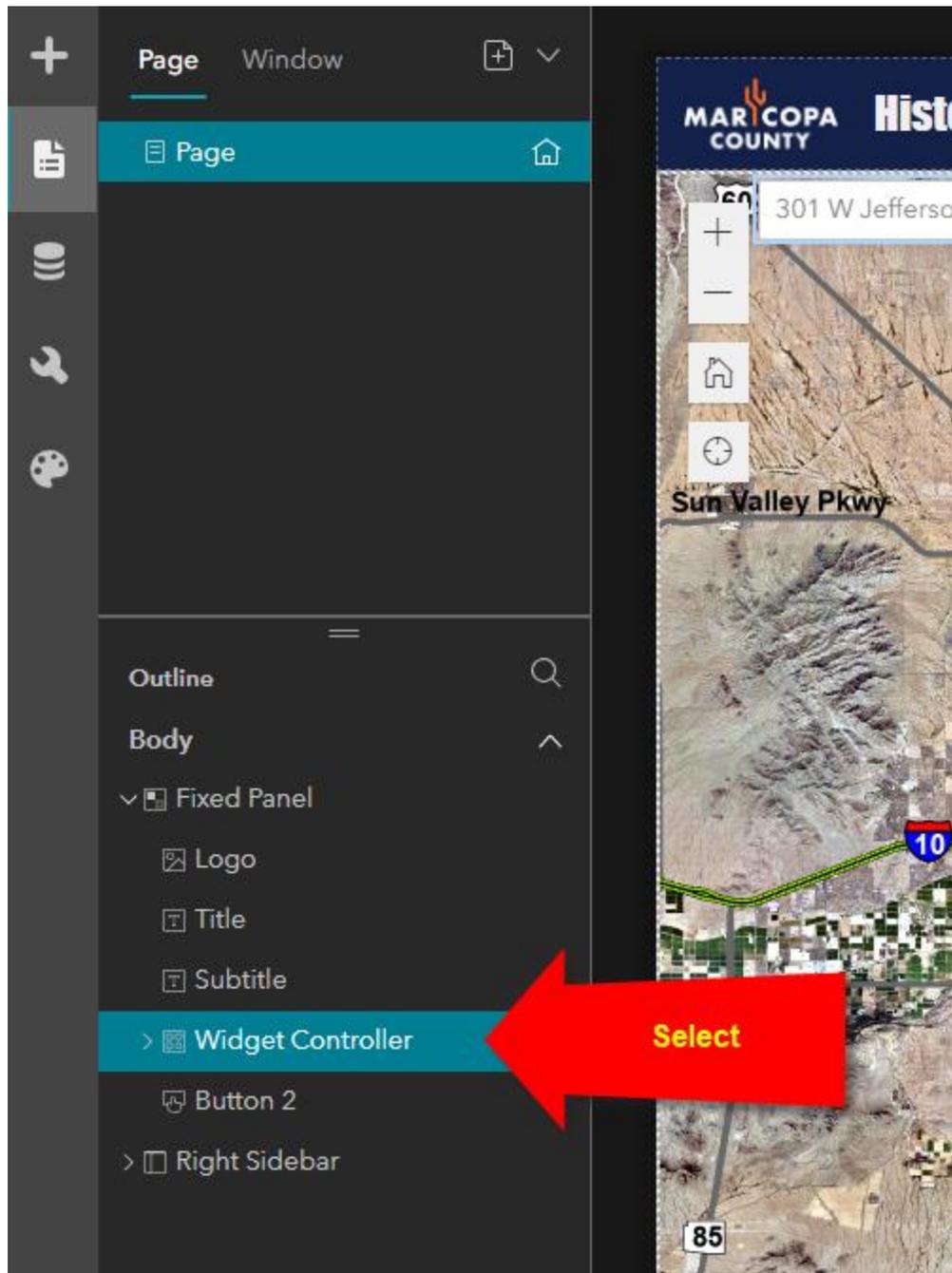
Open Page



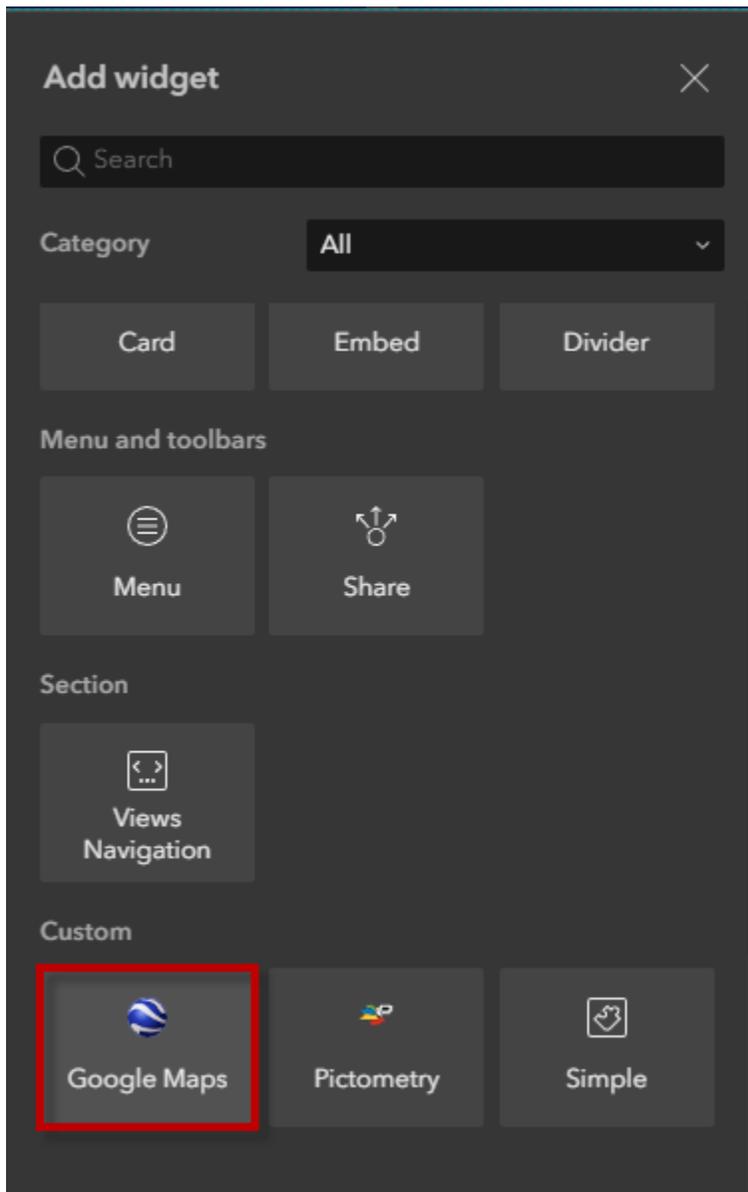
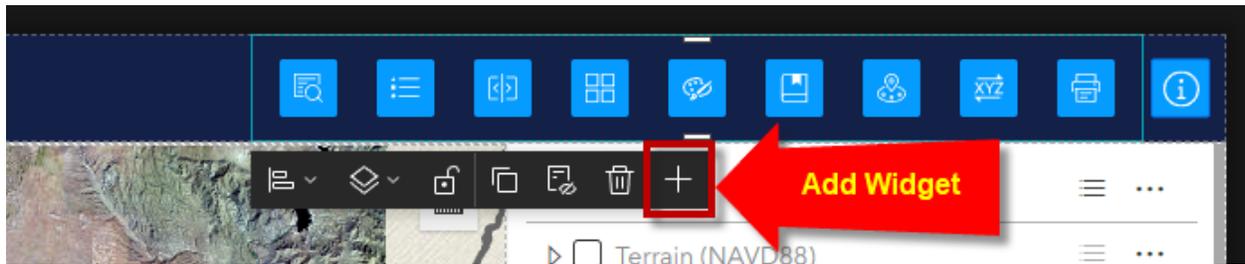
Edit the Subtitle to read v7



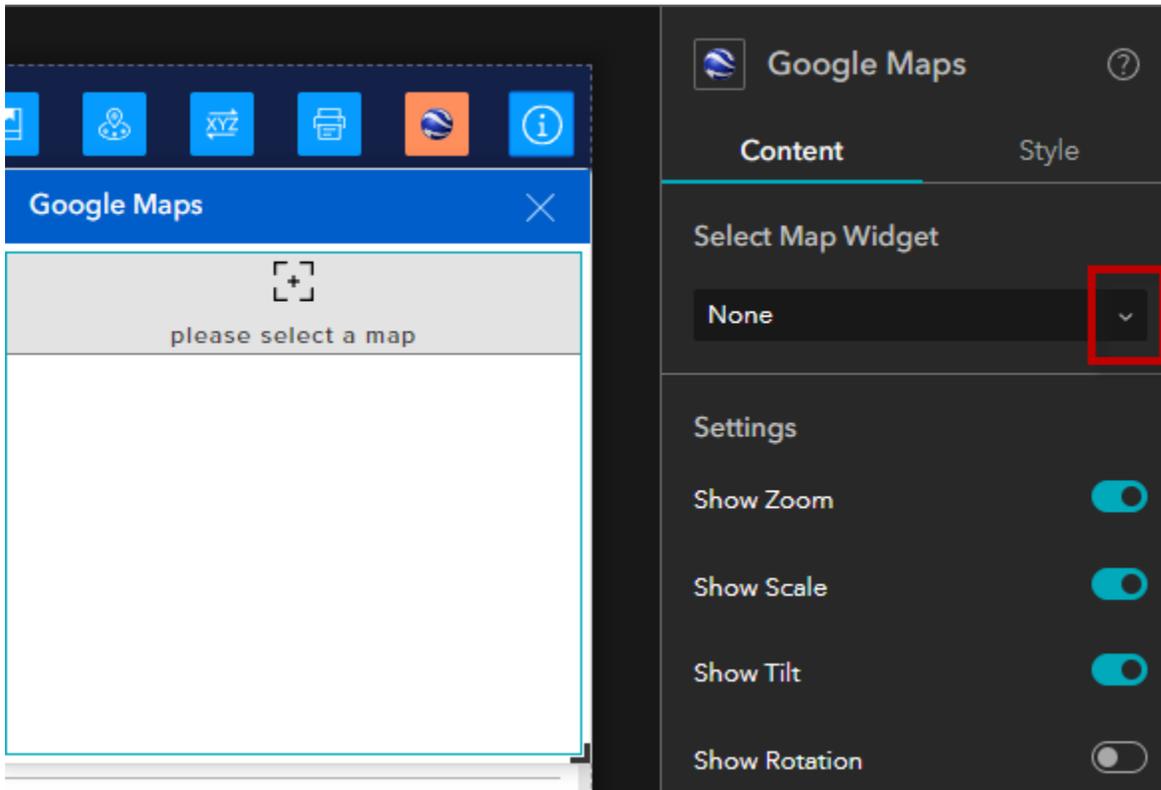
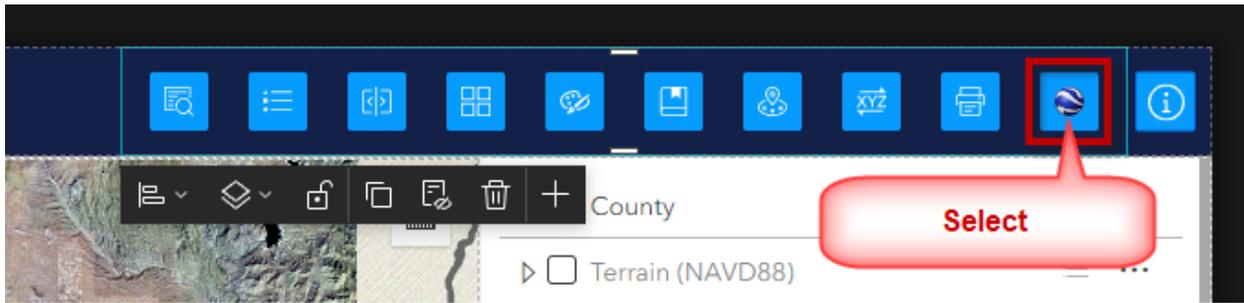
Select the Widget Controller from the Page Outline.



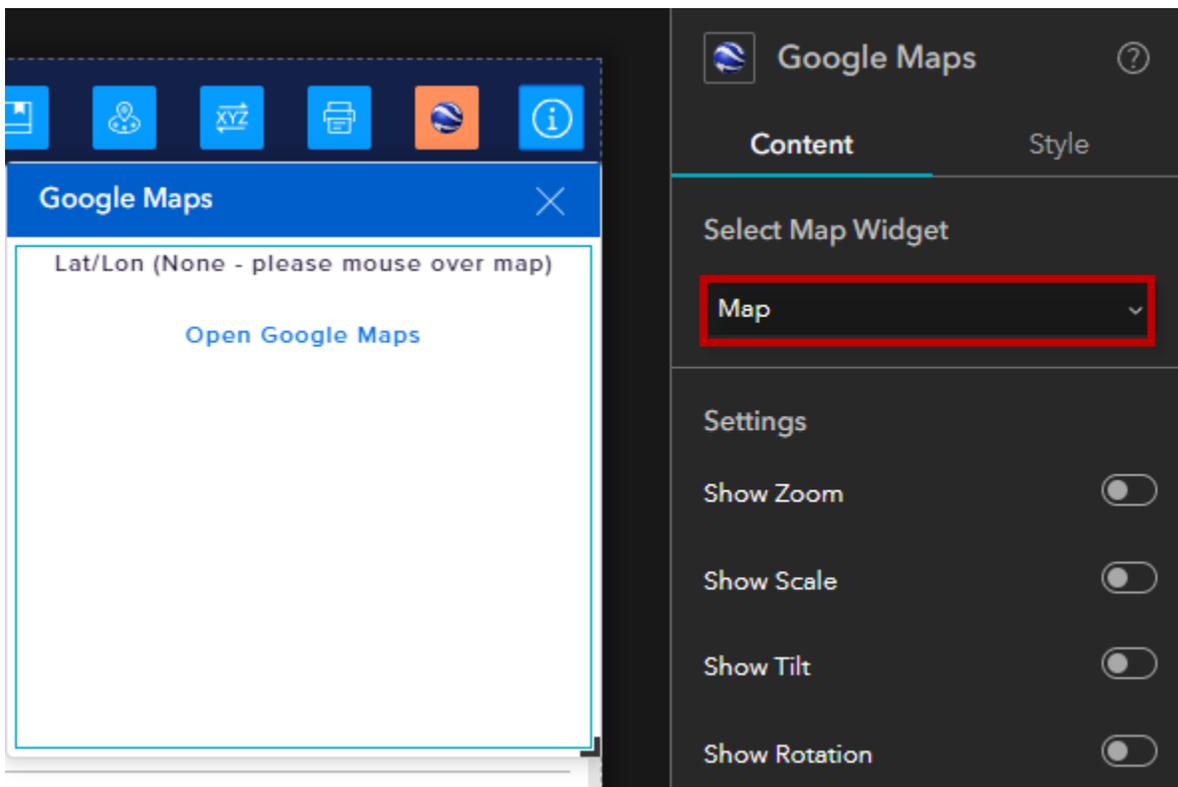
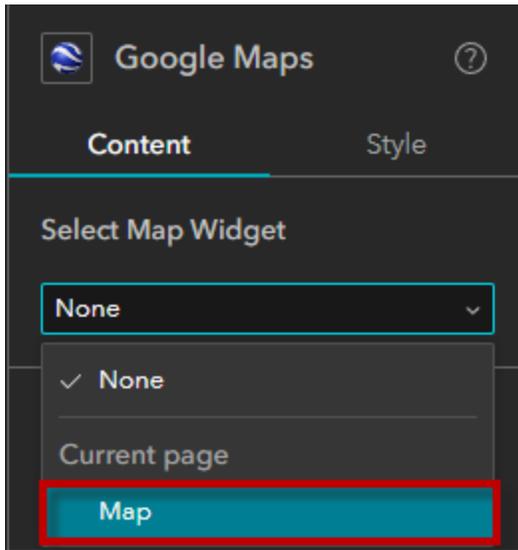
Add the Google Maps Custom Widget



Select the Google Maps Widget



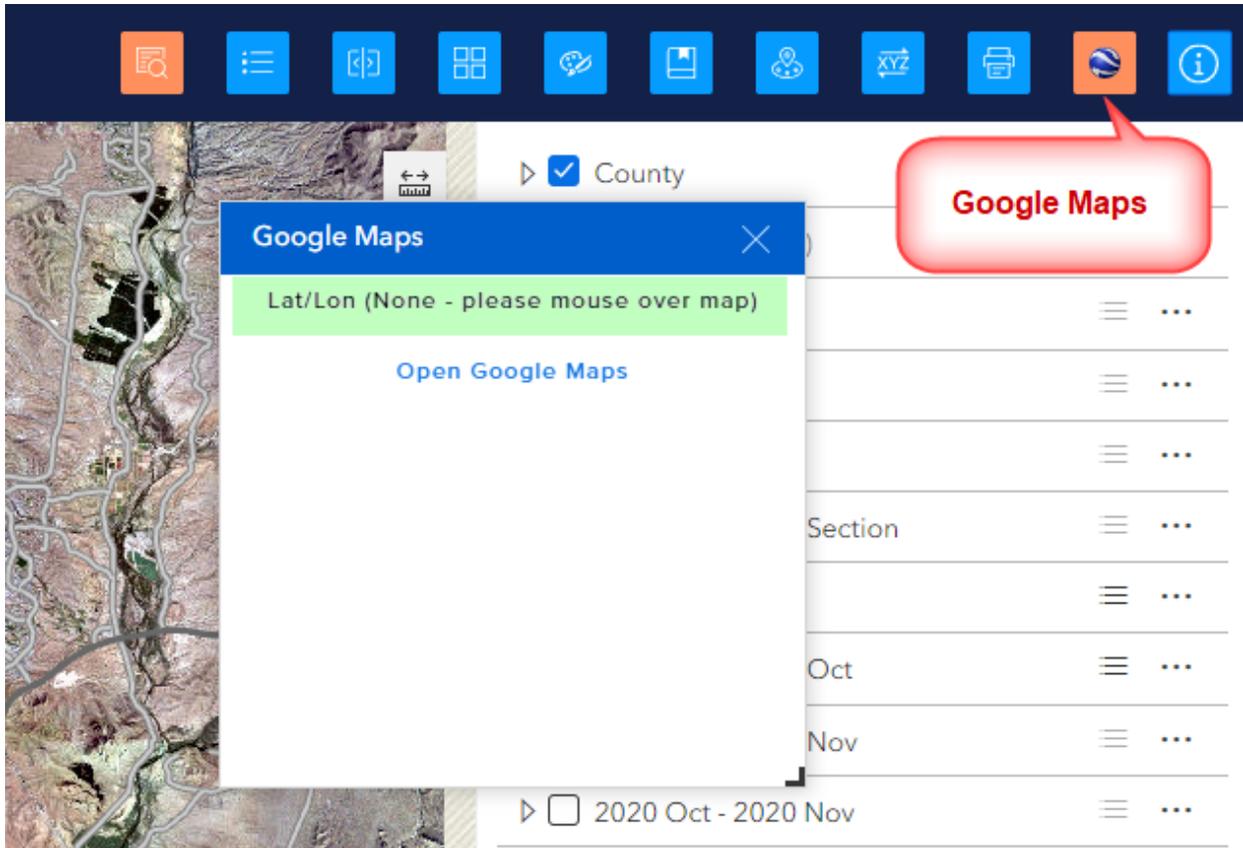
Select Map Widget = Map



Save, Publish, View Published Item

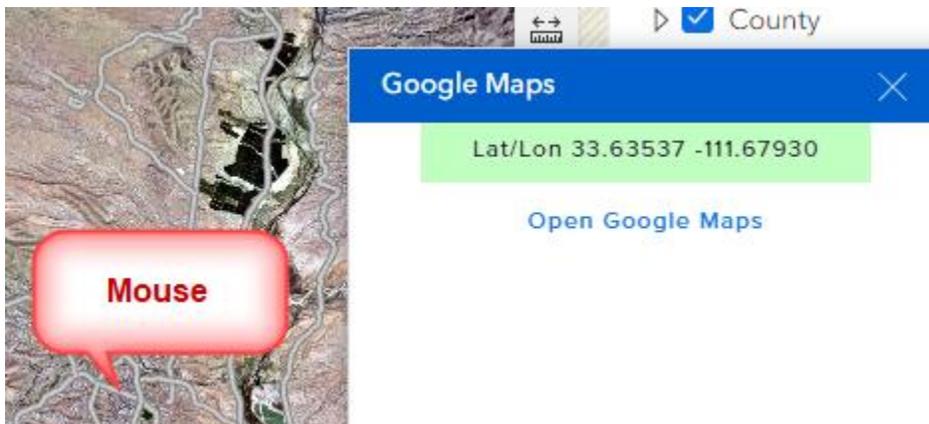
<https://localhost:3001/experience/6/>

Open the Google Maps Widget.

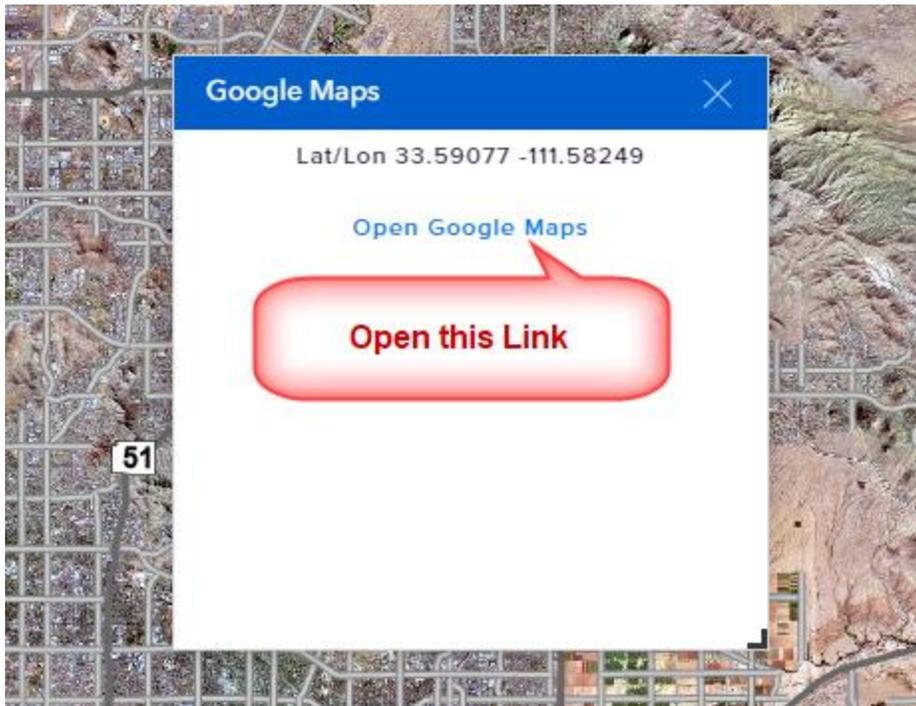


Notice, it has not picked up the Lat/Lon values yet.

Simply move your mouse over the map. The widget will begin to track the map coordinates.



Open the Google Maps Link



This will launch a separate Google Maps window.

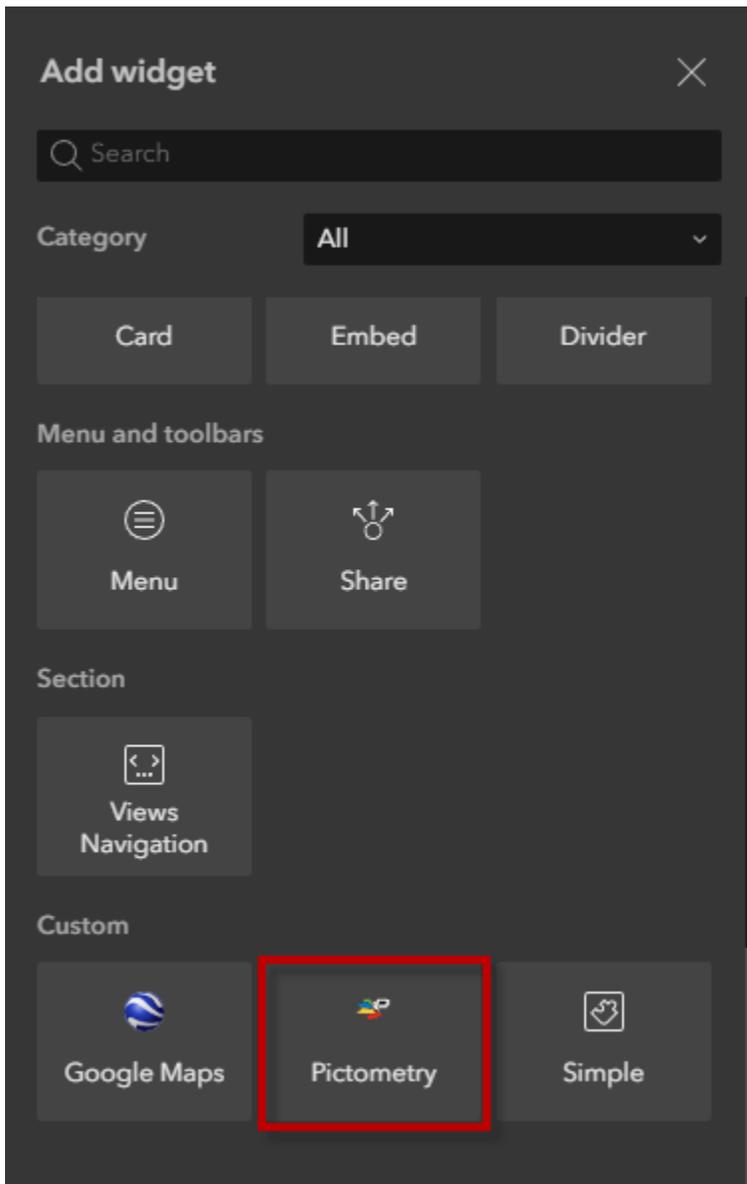
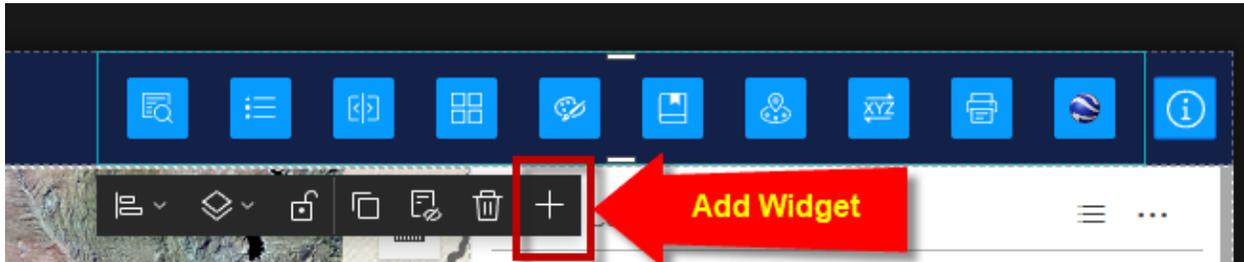
<https://www.google.com/maps/@33.44737,-112.07515,66956m/data=!3m1!1e3?entry=ttu>

To learn how to use the Google Maps Widget, open the User Guide.

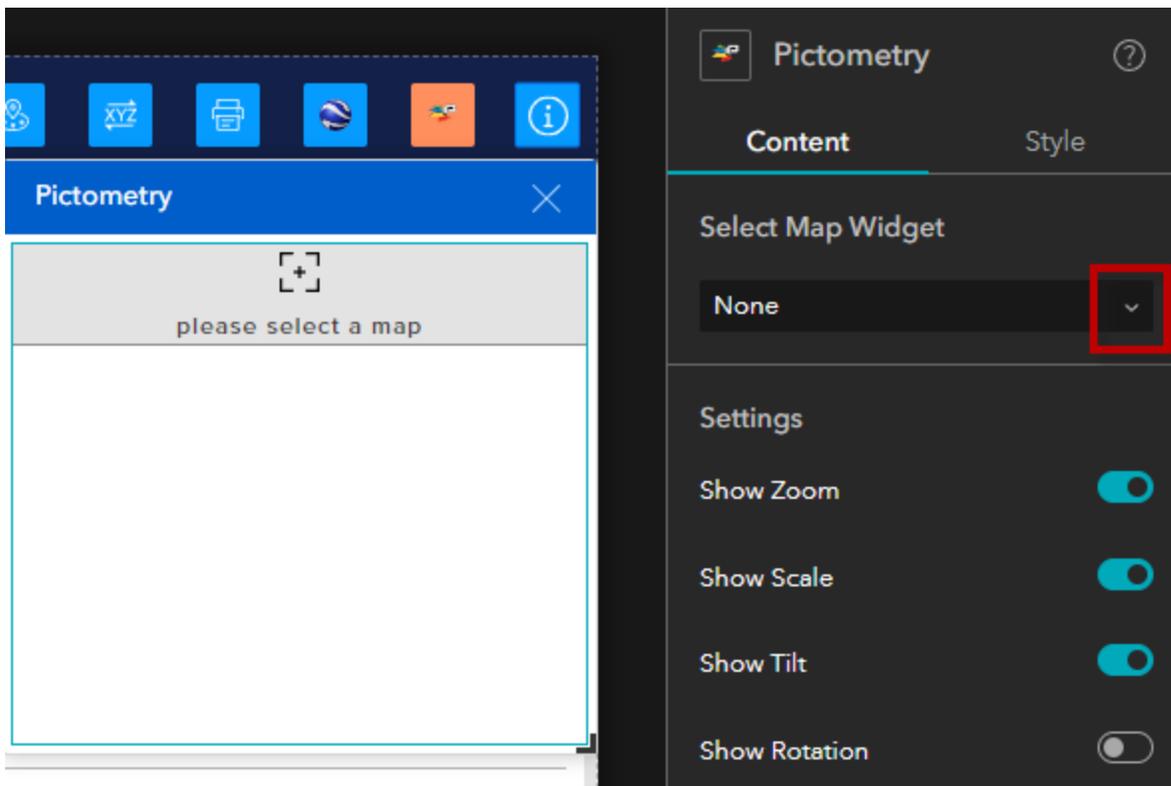
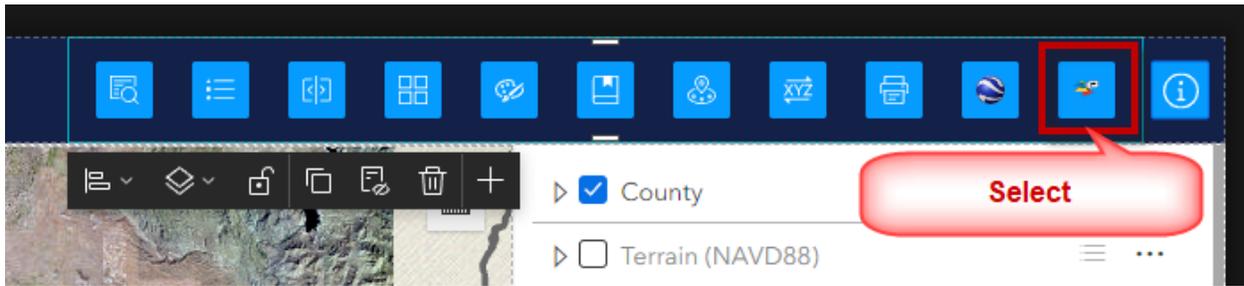
https://daviddas2.github.io/HistoricalAerials/help/google_maps_widget.htm

The screenshot displays the 'Historical Aerial Photography Web Application User Guide'. On the left is a navigation menu with the following items: Overview, Quick Tour, Launching the Web App, List of Widgets and Tools, Navigation Tools (expanded), Graphical Scale Bar, Coordinate Widget, Search Tool, Identify a Parcel, Measure Tool, Draw Widget, Bookmark Widget, Coordinate Conversion Widget, Near Me Widget, Basemap Gallery Widget, Query Widget (expanded), Map Layers Widget, Legend Widget, Attribute Table Widget, Swipe Widget, Google Maps Widget (highlighted), Pictometry Widget, Print Widget, About Widget, Summary, and Contact Us. The main content area is titled 'Google Maps Widget' and contains the following text: 'The Google Maps Widget launches a separate Google Maps window.' and 'Refresh the Web App.' Below this text are two screenshots of the application interface. The top screenshot shows an aerial view of a city with a search bar containing '301 W Jefferson St 85...', a toolbar with various icons, and a layer control panel on the right with 'Street' selected and a date range of '2022 Sep - 2022 Oct'. The bottom screenshot shows the same location but with a basemap view, and the layer control panel has 'Parcel (Current)' selected and the date range set to '2015 Nov - 2016 Feb'.

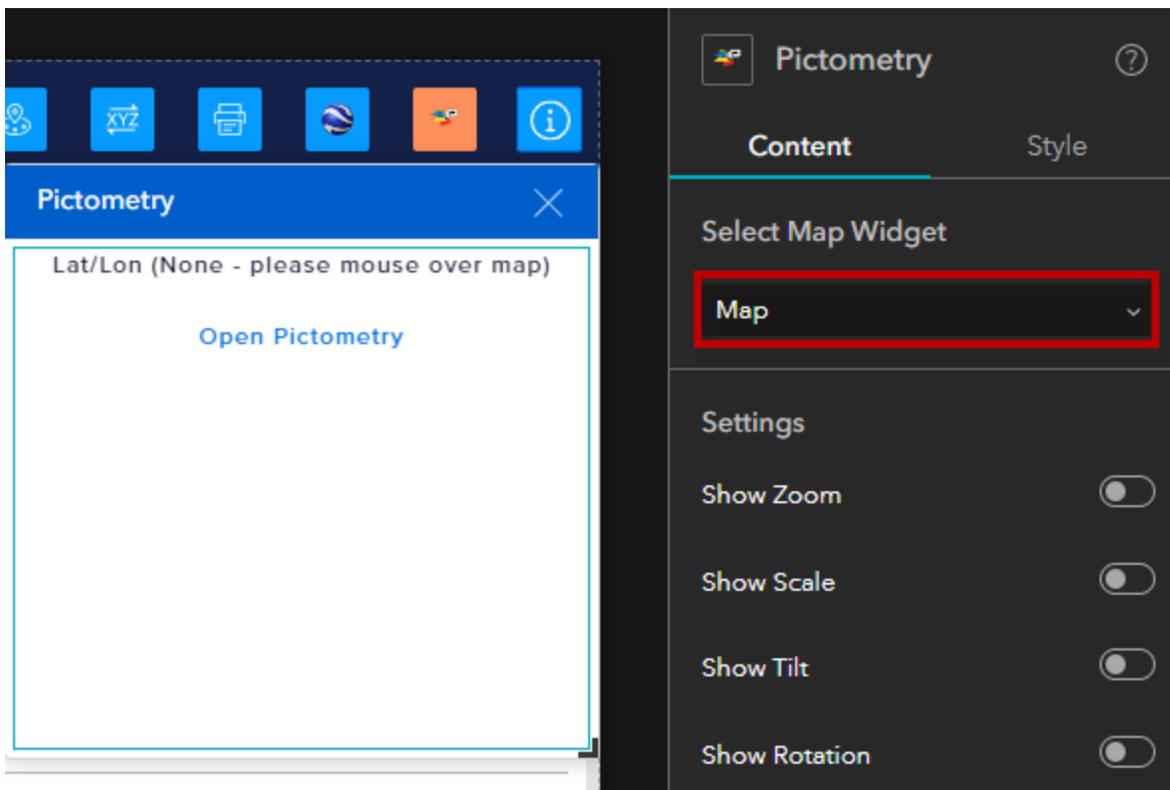
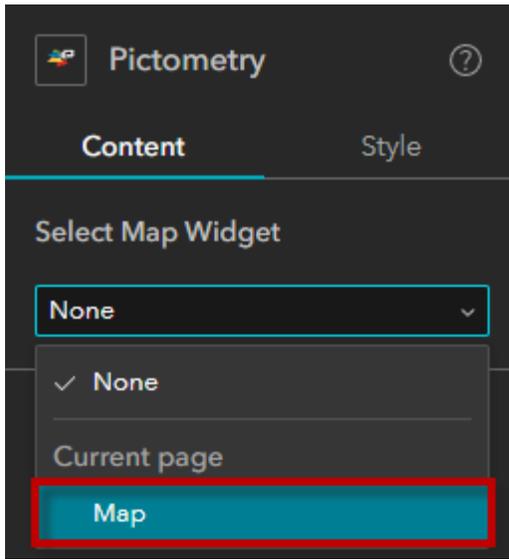
Add the Pictometry Custom Widget



Select the Pictometry Widget.



Select Map Widget = Map



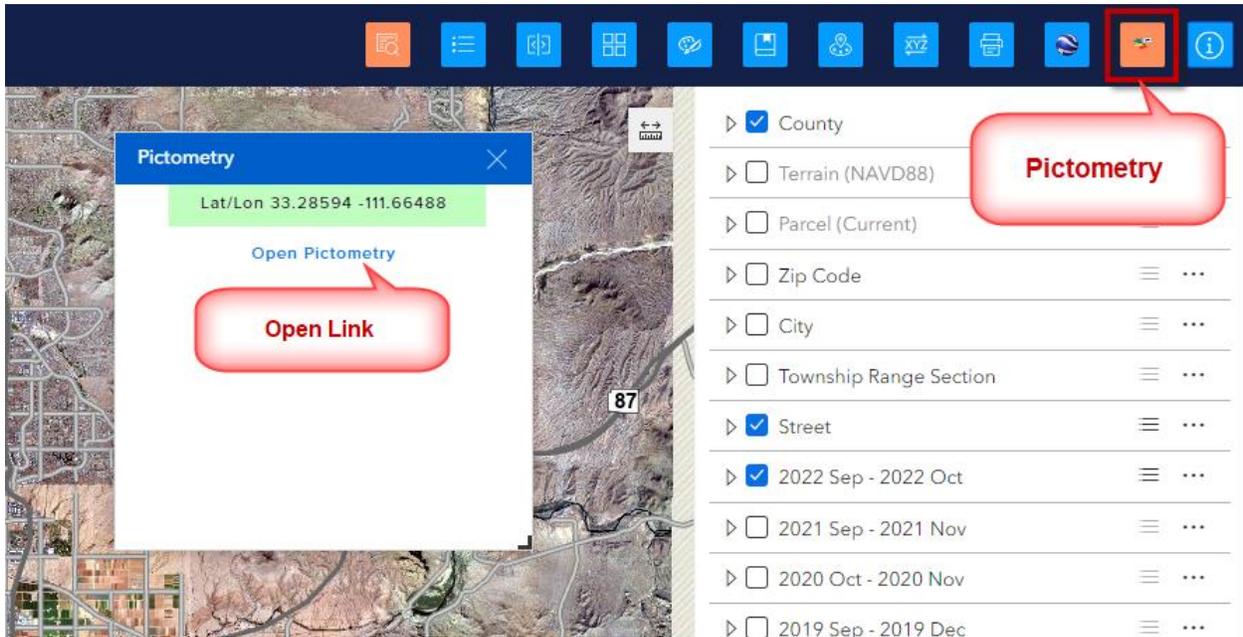
Save, Publish, View Published Item

<https://localhost:3001/experience/6/>

Open the Pictometry Widget.

Move your mouse over the map until you see a Lat/Lon readout.

Open the Pictometry Link.



This will open a separate Pictometry Window.

<https://gis.maricopa.gov/pictometry/default.aspx?&qlat=33.44737&qlong=-112.07515>

To learn how to use the Pictometry Widget, open the User Guide.

https://daviddas2.github.io/HistoricalAerials/help/pictometry_widget.htm

Historical Aerial Photography Web Application
User Guide

Menu Index Search

- Overview
- Quick Tour
- Launching the Web App
- List of Widgets and Tools
- Navigation Tools
 - Graphical Scale Bar
 - Coordinate Widget
 - Search Tool
 - Identify a Parcel
 - Measure Tool
 - Draw Widget
 - Bookmark Widget
 - Coordinate Conversion Widget
 - Near Me Widget
 - Basemap Gallery Widget
- Query Widget
 - Map Layers Widget
 - Legend Widget
 - Attribute Table Widget
 - Swipe Widget
 - Google Maps Widget
 - Pictometry Widget**
 - Print Widget
 - About Widget
 - Summary
 - Contact Us

Pictometry Widget

Pictometry Widget

Close the Google Maps Widget.

Open the **Pictometry Widget**.

You will see this note:

Lat/Lon (None – please mouse over the map).

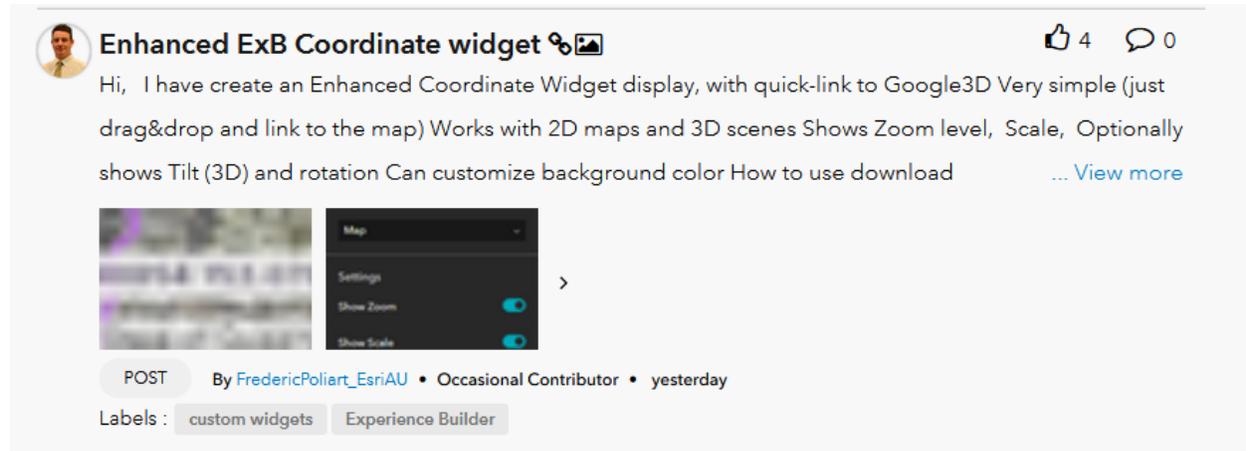
112	112	112	112	112
03	03	03	03	03
059	060	061	062	063

112	02	004
-----	----	-----

Code Changes for the Google Maps Widget

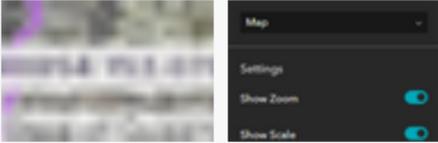
The Google Maps Widget was created from the Enhanced ExB Coordinate Widget authored by Frederic Poliard, ESRI Australia.

<https://community.esri.com/t5/experience-builder-custom-widgets/gh-p/eb-custom-widgets>



Enhanced ExB Coordinate widget   4 0

Hi, I have create an Enhanced Coordinate Widget display, with quick-link to Google3D Very simple (just drag&drop and link to the map) Works with 2D maps and 3D scenes Shows Zoom level, Scale, Optionally shows Tilt (3D) and rotation Can customize background color How to use download ... [View more](#)



POST By [FredericPoliart_EsriAU](#) • Occasional Contributor • yesterday

Labels : [custom widgets](#) [Experience Builder](#)

<https://community.esri.com/t5/experience-builder-custom-widgets/enhanced-exb-coordinate-widget/m-p/1302310>

[Home](#) > [All Communities](#) > [User Groups](#) > [Experience Builder Custom Widgets](#) > [Questions](#)
> [Enhanced ExB Coordinate widget](#)

Enhanced ExB Coordinate widget

 525  2 06-22-2023 05:25 PM

Labels : [custom widgets](#) [Experience Builder](#)



by [FredericPoliart_EsriAU](#)
Occasional Contributor

Post Options ▾

These were the code changes made to create the Google Maps Widget.

Edit manifest.json

C:\DAVID\EXB\Experience Builder Docs\Custom Widgets\Google Maps Widget\get-map-coordinates-class\

src	7/27/2023 1:27 PM	File folder	
_infos.google3d..txt	6/23/2023 10:14 AM	Text Document	1 KB
config.json	6/23/2023 10:14 AM	JSON File	1 KB
icon.svg	7/27/2023 12:24 PM	SVG Document	5 KB
icon2.svg	7/27/2023 12:27 PM	SVG Document	3 KB
manifest.json	6/23/2023 10:14 AM	JSON File	1 KB
README.md	6/23/2023 10:14 AM	MD File	1 KB

Label = Google Maps

Exb Version = 1.12.0

```
1  {
2    "name": "get-map-coordinates-class",
3    "label": "Google Maps",
4    "type": "widget",
5    "version": "1.7.0",
6    "exbVersion": "1.12.0",
7    "author": "EsriAU Frederic Poliart",
8    "description": "This widget displays the latitude/longitude, scale, zoom ,
9    tilt & ink to G0oogle3D.",
10   "copyright": "",
11   "license": "http://www.apache.org/licenses/LICENSE-2.0",
12   "properties": {},
13   "translatedLocales": ["en"],
14   "defaultSize": {
15     "width": 400,
16     "height": 30
17   }
18 }
```

Change icon.svg

 src	7/27/2023 1:27 PM	File folder	
 _infos.google3d..txt	6/23/2023 10:14 AM	Text Document	1 KB
 config.json	6/23/2023 10:14 AM	JSON File	1 KB
 icon.svg	7/27/2023 12:24 PM	SVG Document	5 KB
 icon2.svg	7/27/2023 12:27 PM	SVG Document	3 KB
 manifest.json	7/27/2023 1:48 PM	JSON File	1 KB
 README.md	6/23/2023 10:14 AM	MD File	1 KB



This is icon2.svg



Edit widget.tsx

C:\DAVID\EXB\Experience Builder Docs\Custom Widgets\Google Maps Widget\get-map-coordinates-class\src\runtime

assets	7/27/2023 1:27 PM	File folder	
translations	7/27/2023 1:27 PM	File folder	
widget.tsx	6/23/2023 10:14 AM	TSX File	10 KB

Examine Line 142

```
141 // Altitude will be incorrect/inaccurate
142 Google3dUrl : "https://www.google.com/maps/place/@"+ this.
state.latitude + "," + this.state.longitude + ",251a,35y,"+this.
state.rotation+"h,"+this.state.tilt+"t/data=!3m1!1e3";
143 }
```

This is how the Google3D URL is constructed.

```
Google3dUrl : "https://www.google.com/maps/place/@"+ this.state.latitude + "," +
this.state.longitude + ",251a,35y,"+this.state.rotation+"h,0t/data=!3m1!1e3";
```

This is repeated in Line 148, 199, 207

If you want to change this Widget to make it work for Pictometry, you would have to change these 3 lines as well.

Edit widget.tsx

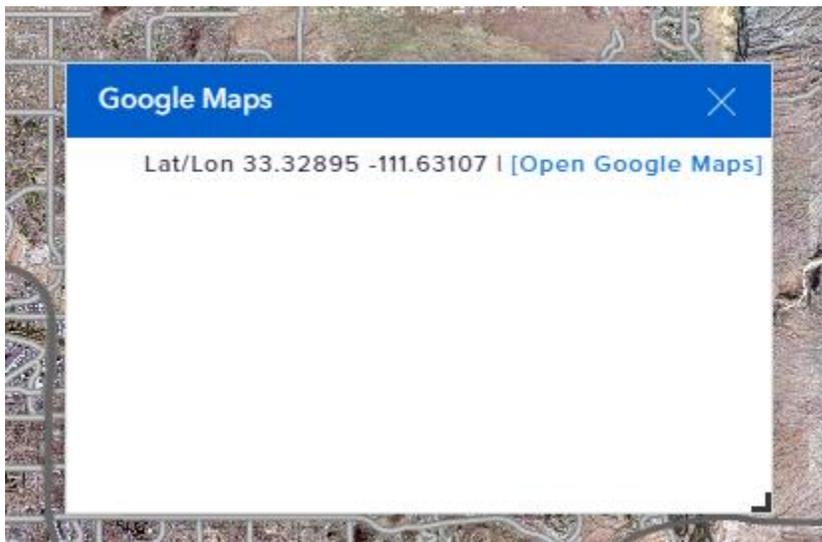
Before:

```
275
276
277     /* Only show the data once the MapView is ready */
278     <p align="right"> {this.state.mapViewReady === true ? allSections : defaultMessages.
279       latLonWillBeHere} | <a href={this.state.Google3dUrl} target="_google3d">[Link]</a></p>
280   </div>
281   )
282   }
283   return (
284     content
285   );
286 }
```



After:

```
275
276
277     /* Only show the data once the MapView is ready */
278     <p align="right"> {this.state.mapViewReady === true ? allSections : defaultMessages.
279       latLonWillBeHere} | <a href={this.state.Google3dUrl} target="_google3d">[Open Google Maps]</a></p>
280   </div>
281   )
282   }
283   return (
284     content
285   );
286 }
```



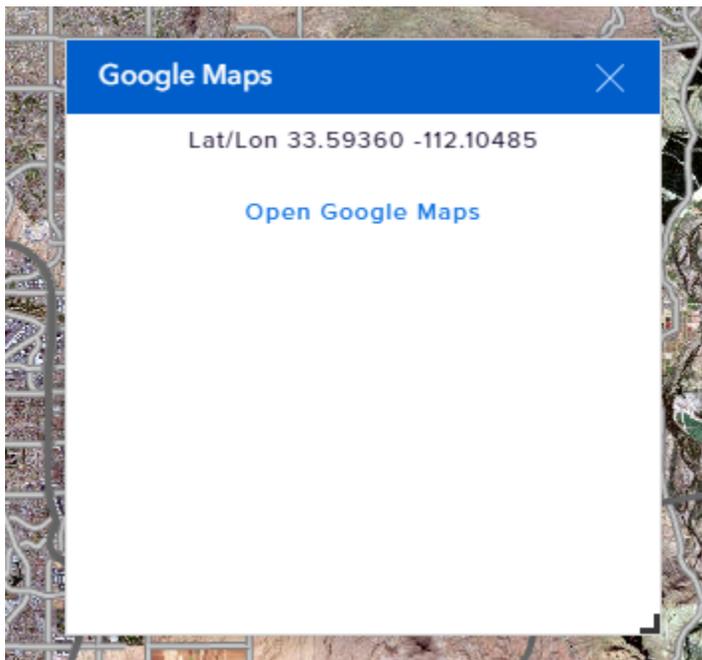
Center the Paragraph.

```
<p align="center">
```

Add 2 line breaks.

```
<br/><br/>
```

```
275
276      { /* Only show the data once the MapView is ready */
277      <p align="center"> {this.state.mapViewReady === true ? allSections :
      defaultMessage.latLonWillBeHere} <br/><br/> <a href={this.state.Google3dUrl}
      target="_google3d">Open Google Maps</a></p>
278      </div>
279    )
280  }
281  return (
282    content
283  );
284  }
285  }
286
```



Edit defaults.ts

C:\DAVID\EXB\Experience Builder Docs\Custom Widgets\Google Maps Widget\get-map-coordinates-class\src\runtime\translations\



Change Widget Label = Google Maps

```
1 export default {  
2   _widgetLabel: "Google Maps",  
3   latLon: "Lat/Lon",  
4   zoom: "Zoom",  
5   latLonWillBeHere: "Lat/Lon (None - please mouse over map)"  
6 };  
7
```

Note: This is just for your reference. You do not have to change any code. This has already been done for you.

Code Changes for the Pictometry Widget

The Pictometry Widget is a copy of the Google Maps Widget with the following changes.

Copy get-map-coordinates-class to create get-map-coordinates-class2

C:\DAVID\EXB\Experience Builder Docs\Custom Widgets\Pictometry Widget\

These are your files:

C:\DAVID\EXB\Experience Builder Docs\Custom Widgets\Pictometry Widget\get-map-coordinates-class2\

 src	7/27/2023 1:27 PM	File folder	
 _infos.google3d..txt	7/26/2023 9:36 AM	Text Document	1 KB
 config.json	7/26/2023 9:36 AM	JSON File	1 KB
 icon.svg	7/27/2023 12:19 PM	SVG Document	3 KB
 manifest.json	7/27/2023 11:52 AM	JSON File	1 KB
 README.md	7/26/2023 9:36 AM	MD File	1 KB

Edit manifest.json

Change the name = get-map-coordinates-class2

Change the label = Pictometry

Exb Version = 1.12.0

```
1  {
2    "name": "get-map-coordinates-class2",
3    "label": "Pictometry",
4    "type": "widget",
5    "version": "1.7.0",
6    "exbVersion": "1.12.0",
7    "author": "EsriAU Frederic Poliard",
8    "description": "This widget displays the latitude/longitude, scale, zoom ,
9    tilt & ink to G0ogle3D.",
10   "copyright": "",
11   "license": "http://www.apache.org/licenses/LICENSE-2.0",
12   "properties": {},
13   "translatedLocales": ["en"],
14   "defaultSize": {
15     "width": 400,
16     "height": 30
17   }
18 }
```

Change the icon.svg

 src	7/27/2023 1:27 PM	File folder	
 _infos.google3d..txt	7/26/2023 9:36 AM	Text Document	1 KB
 config.json	7/26/2023 9:36 AM	JSON File	1 KB
 icon.svg	7/27/2023 12:19 PM	SVG Document	3 KB
 manifest.json	7/27/2023 11:52 AM	JSON File	1 KB
 README.md	7/26/2023 9:36 AM	MD File	1 KB



Edit widget.tsx

C:\DAVID\EXB\Experience Builder Docs\Custom Widgets\Pictometry Widget\get-map-coordinates-class2\src\runtime\

assets	7/27/2023 1:27 PM	File folder	
translations	7/27/2023 1:27 PM	File folder	
widget.tsx	7/27/2023 11:31 AM	TSX File	10 KB

Edit Line 142

```
141 // Altitude will be incorrect/inaccurate
142 Google3dUrl : "//gis.maricopa.gov/pictometry/default.aspx?" +
    "&qlat=" + this.state.centroidlatitude + "&qlong="+ this.state.
    centroidlongitude ;
143 })
```

Google3dUrl : "//gis.maricopa.gov/pictometry/default.aspx?" + "&qlat=" +
this.state.centroidlatitude + "&qlong=" + this.state.centroidlongitude ;

Do the same for Line 149

```
148 // Altitude will be incorrect/inaccurate
149 Google3dUrl : "//gis.maricopa.gov/pictometry/default.aspx?" +
    "&qlat=" + this.state.centroidlatitude + "&qlong="+ this.state.
    centroidlongitude ;
150 })
```

Do the same for Line 199

```
198 |         tilt: jmv.view.viewpoint.camera.tilt.toFixed(0)
199 |         Google3dUrl : "//gis.maricopa.gov/pictometry/default.aspx?" +
    |         "&qlat=" + this.state.centroidlatitude + "&qlong="+ this.state.
    |         centroidlongitude ;
200 |     });
```

Do the same for Line 207

```
206 |         height: this.getAltitude(this.setState.zoom).toString();
207 |         Google3dUrl : "//gis.maricopa.gov/pictometry/default.aspx?" +
    |         "&qlat=" + this.state.centroidlatitude + "&qlong="+ this.state.
    |         centroidlongitude ;
208 |     })
```

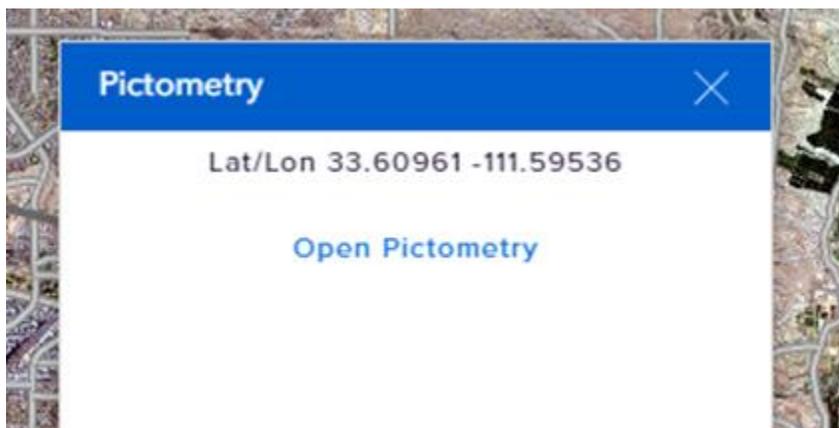
Edit **widet.tsx**

Before:

```
275
276     /* Only show the data once the MapView is ready */
277     <p align="right"> {this.state.mapViewReady === true ? allSections : defaultMessages.
latLonWillBeHere} | <a href={this.state.Google3dUrl} target="_google3d">[Link]</a></p>
278 </div>
279 )
280 }
281 return (
282   content
283 );
284 }
285 }
286
```

After:

```
275
276     /* Only show the data once the MapView is ready */
277     <p align="center"> {this.state.mapViewReady === true ? allSections :
defaultMessages.latLonWillBeHere} <br/><br/> <a href={this.state.Google3dUrl}
target="_google3d">Open Pictometry</a></p>
278 </div>
279 )
280 }
281 return (
282   content
283 );
284 }
285 }
```



Edit default.ts

C:\DAVID\EXB\Experience Builder Docs\Custom Widgets\Pictometry Widget\get-map-coordinates-class2\src\runtime\translations



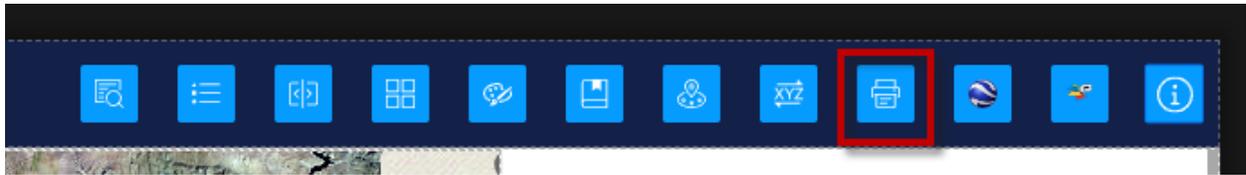
Change Widget Label = Pictometry

```
1  export default {  
2    _widgetLabel: "Pictometry",  
3    latLon: "Lat/Lon",  
4    zoom: "Zoom",  
5    latLonWillBeHere: "Lat/Lon (None - please mouse over map)"  
6  };  
7
```

Note: This is just for your reference. You do not have to change any code. This has already been done for you.

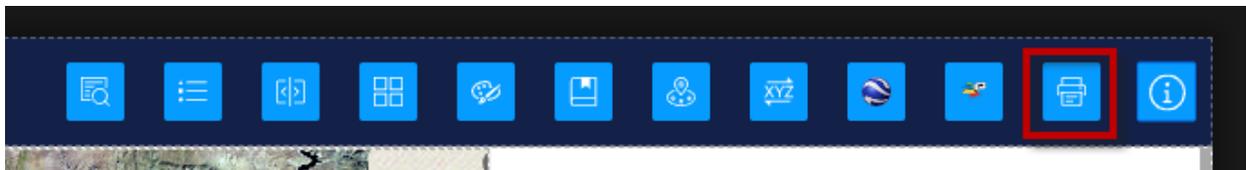
Reorder the Widgets in the Widget Controller

Before:



After:

Drag the Print Widget to the right of the Pictometry Widget.



Save, Publish, View Published Item.

<https://localhost:3001/experience/6/>

MARICOPA COUNTY Historical Aerials v7

301 W Jefferson St 85... 4

Query

- Parcel >
- Subdivision >
- ZIP Code >
- City >
- Township, Range, Section >

Legend

- County
- Terrain (NAVD88)
- Parcel (Current)
- Zip Code
- City
- Township Range Section
- Street
- 2022 Sep - 2022 Oct
- 2021 Sep - 2021 Nov
- 2020 Oct - 2020 Nov
- 2019 Sep - 2019 Dec
- 2018 Sep - 2018 Dec
- 2017 Sep - 2017 Nov
- 2016 Sep - 2016 Dec
- 2015 Nov - 2016 Feb
- 2014 Sep - 2014 Nov
- 2013 Sep - 2013 Nov
- 2012 Oct - 2012 Dec

10 km
10 mi

-111.892507 33.809842 Degrees

Esri, HERE, Garmin, NGA, USGS, NPS, ... Powered by Esri

Go back to the Home Page.

The screenshot displays the ArcGIS Experience Builder (Developer Edition) interface. The top navigation bar includes the ArcGIS logo, the text "ArcGIS Experience Builder (Developer Edition)", and two menu items: "Experiences" (which is highlighted with a red underline) and "Templates". A user profile icon is visible in the top right corner. Below the navigation bar, the main content area is titled "Recent experiences". On the right side of this section, there are two buttons: "Import" with a downward arrow icon and "Create new" with a plus sign icon. Below these buttons is a search bar with a magnifying glass icon and the text "Search". To the right of the search bar is a dropdown menu labeled "Last modified" and two icons for view toggling (a grid icon and a list icon). The main content area displays a grid of six experience cards, arranged in two rows of three. Each card features a thumbnail image of a map interface with a "Published" status indicator in the top right corner. The cards are titled "Historical Aerials v7", "Historical Aerials v6", "Historical Aerials v5", "Historical Aerials v4", "Historical Aerials v1", and "Historical Aerials v2". Below each title, the author "GIO_DasT" and the creation date are listed. At the bottom of each card is a share icon and a three-dot menu icon. The URL "https://localhost:3001/builder/?id=4" is visible at the bottom left of the screenshot.

ArcGIS Experience Builder (Developer Edition)

Experiences Templates

Recent experiences

Import Create new

Search

Last modified

Published

Historical Aerials v7

GIO_DasT

09/14/2023

Historical Aerials v6

GIO_DasT

09/14/2023

Historical Aerials v5

GIO_DasT

09/13/2023

Historical Aerials v4

GIO_DasT

09/05/2023

Historical Aerials v1

GIO_DasT

09/05/2023

Historical Aerials v2

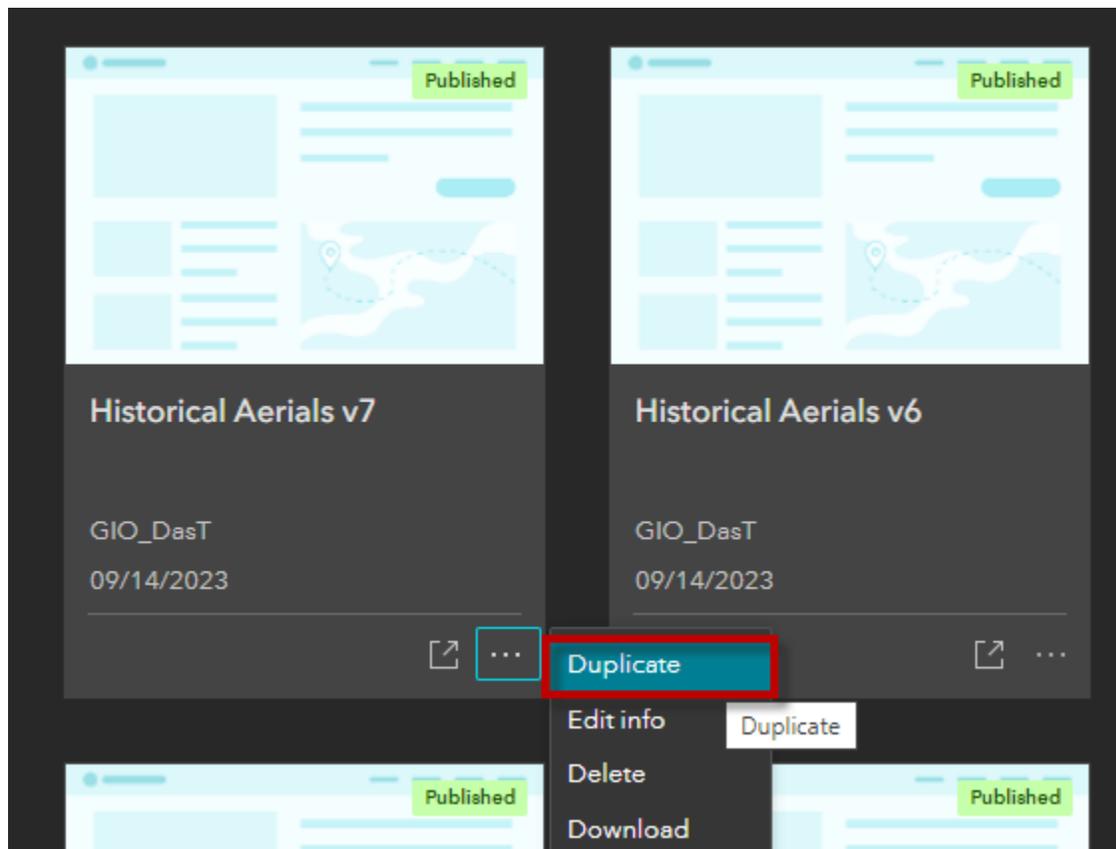
GIO_DasT

09/05/2023

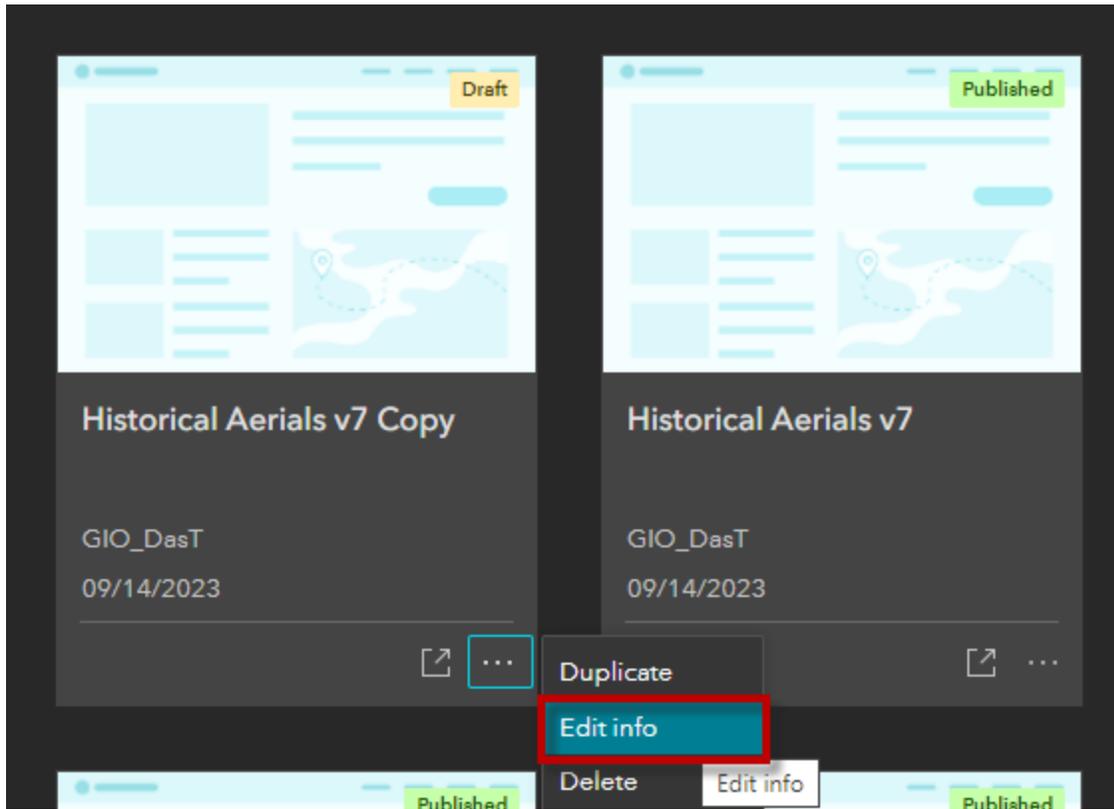
https://localhost:3001/builder/?id=4

Create Historical Aerials v8

Duplicate Historical Aerials v7 to create Historical Aerials

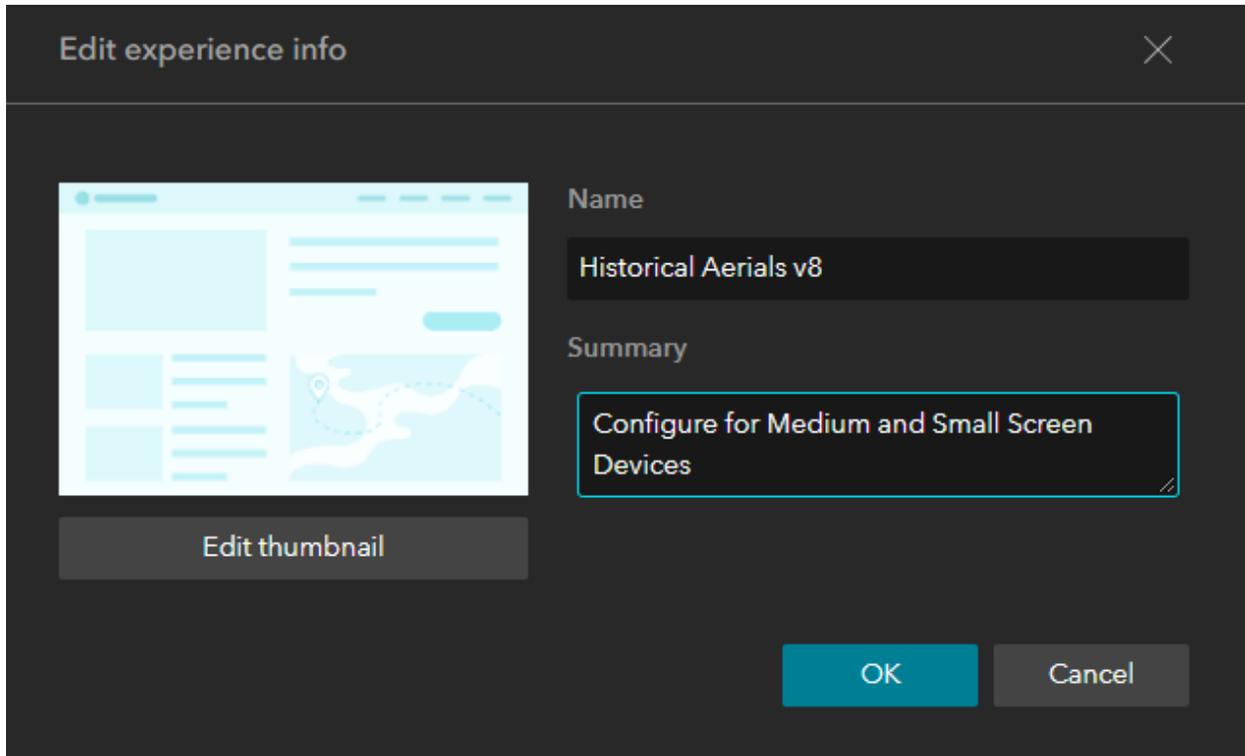


Edit Info

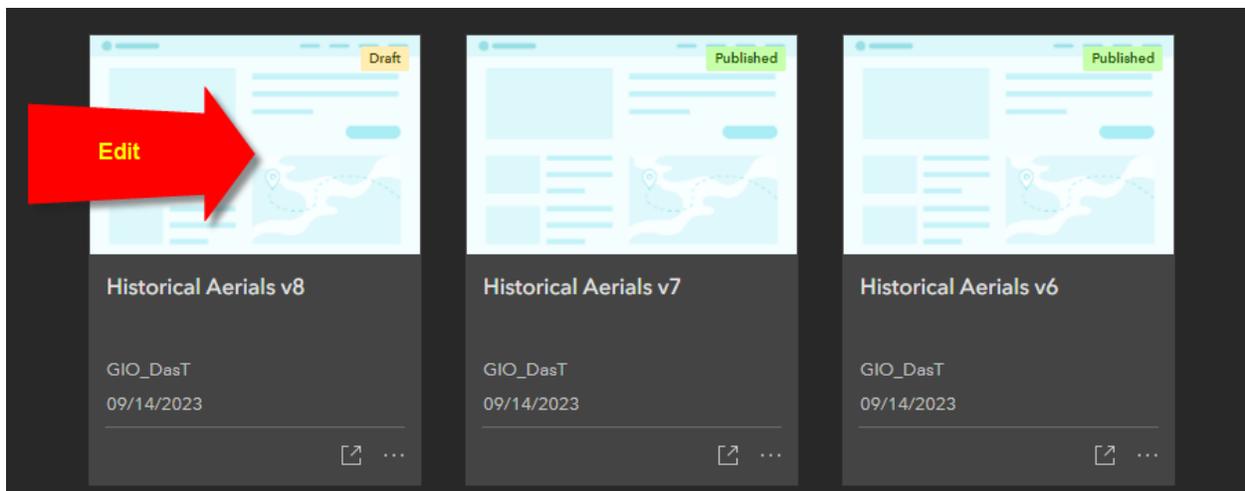


Name = Historical Aerials

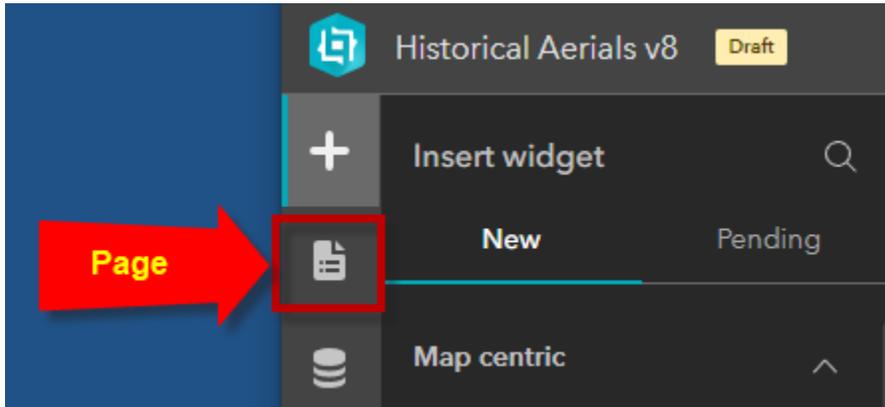
Summary = Configure for Medium and Small Screen Devices



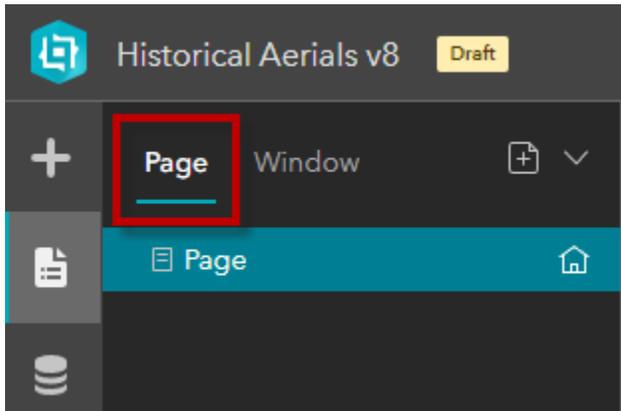
Edit Historical Aerials v8



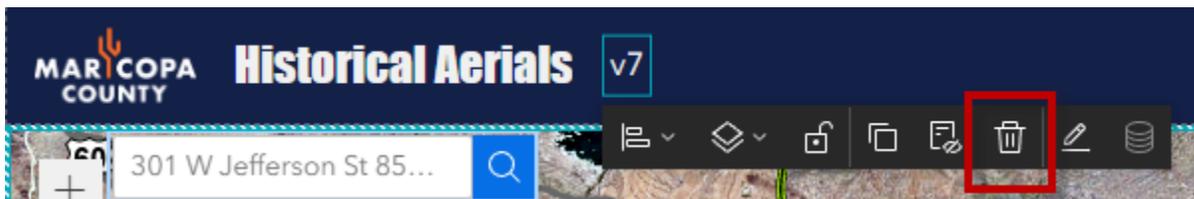
Open the Page Tab



Open Page

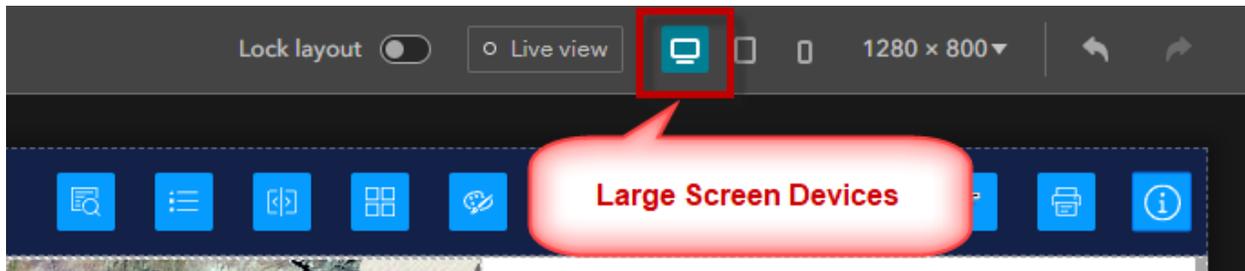


Delete the Subtitle



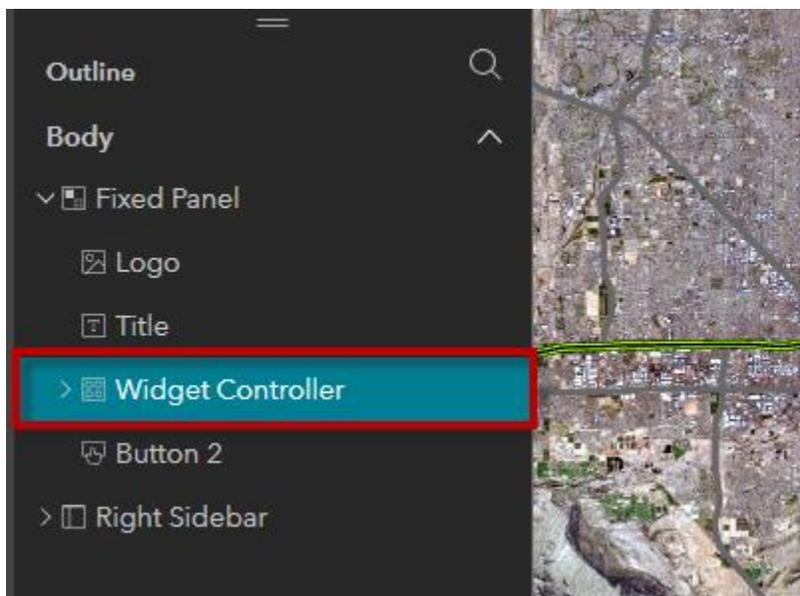
Configure the App for Large Screen Devices.

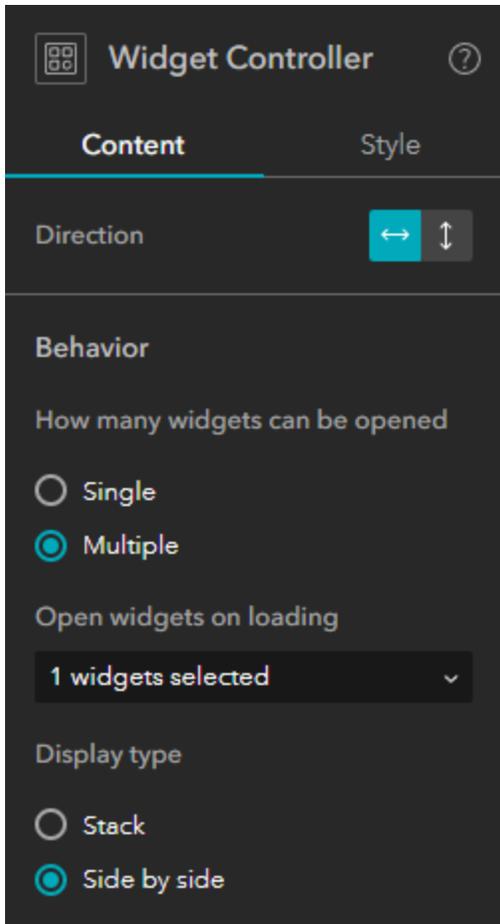
So far, you have configured your app for large screen devices.



The Query Widget is open by default.

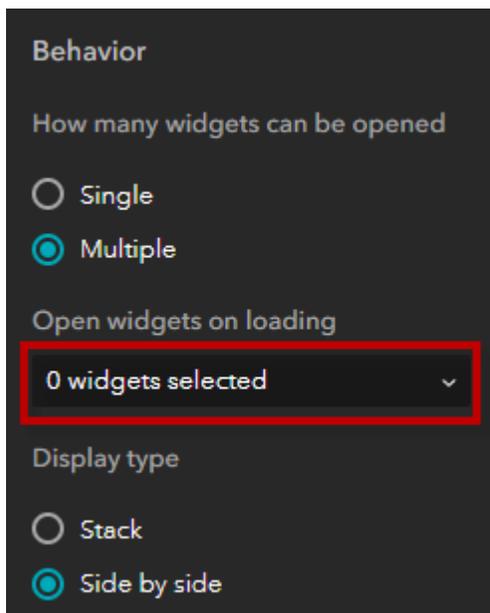
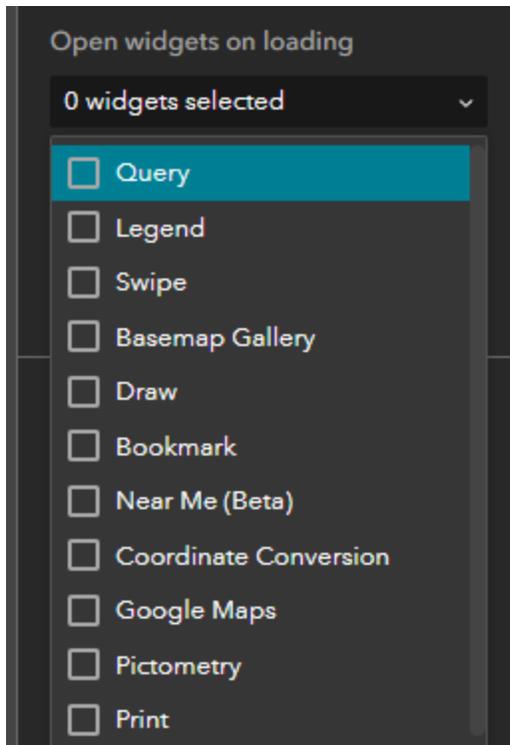
Select the Widget Controller from the Page Outline.



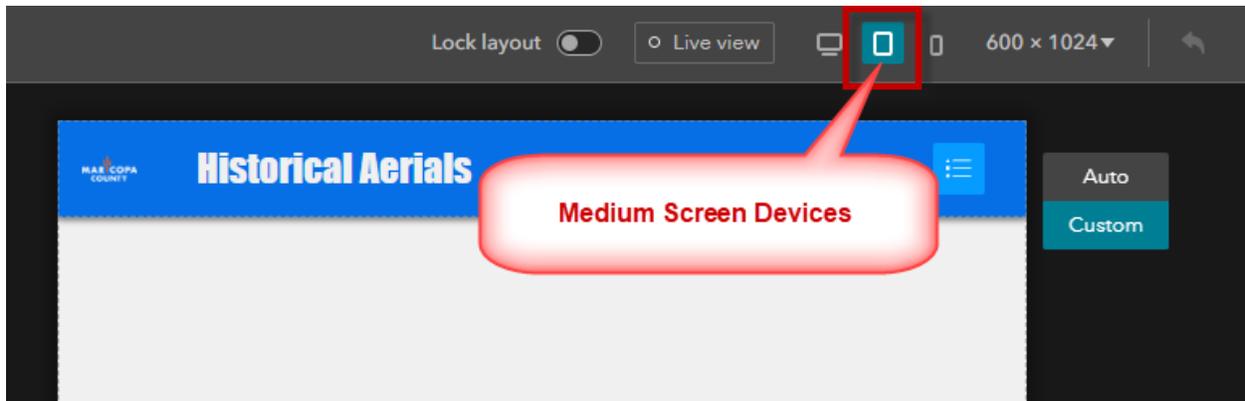


Uncheck Query.

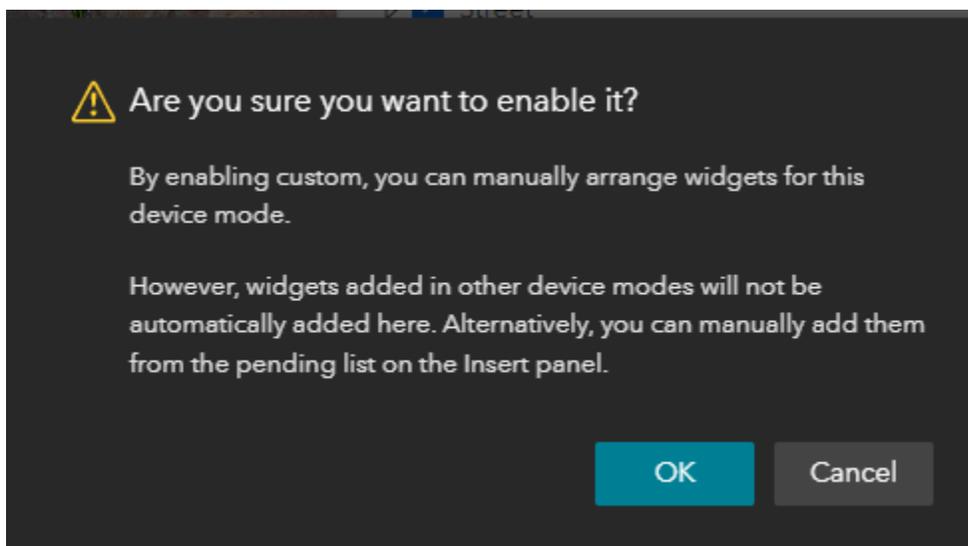
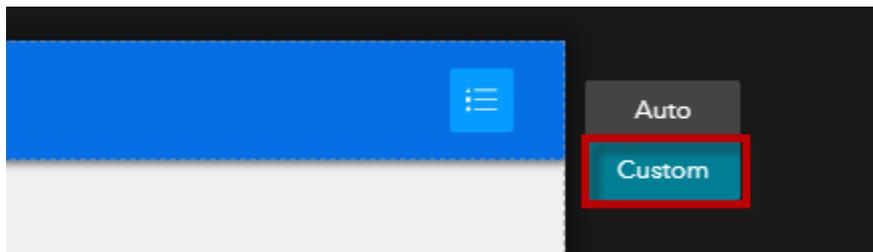
No widget will be open by default.



Configure the App for Medium Screen devices



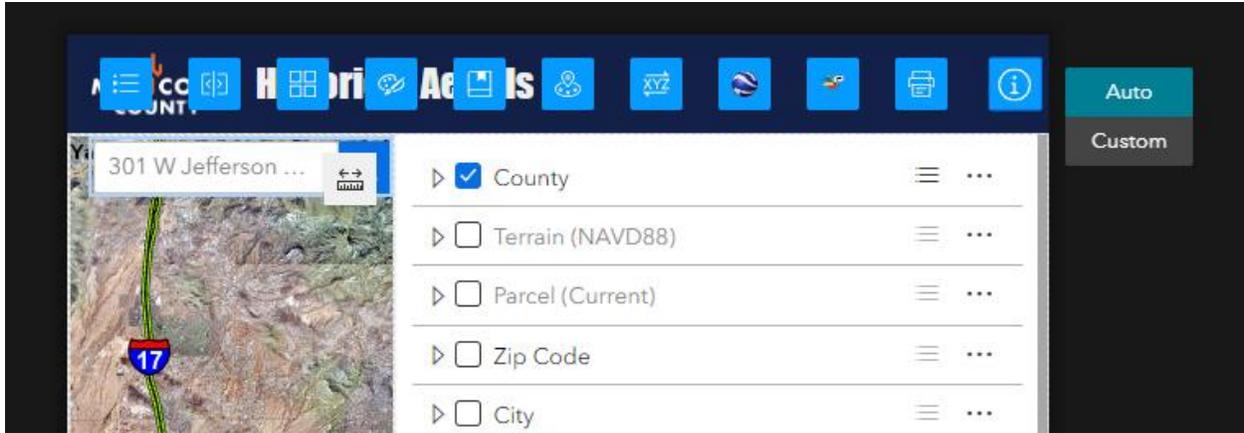
First, click on **Auto**.
Next, click on **Custom**.



OK

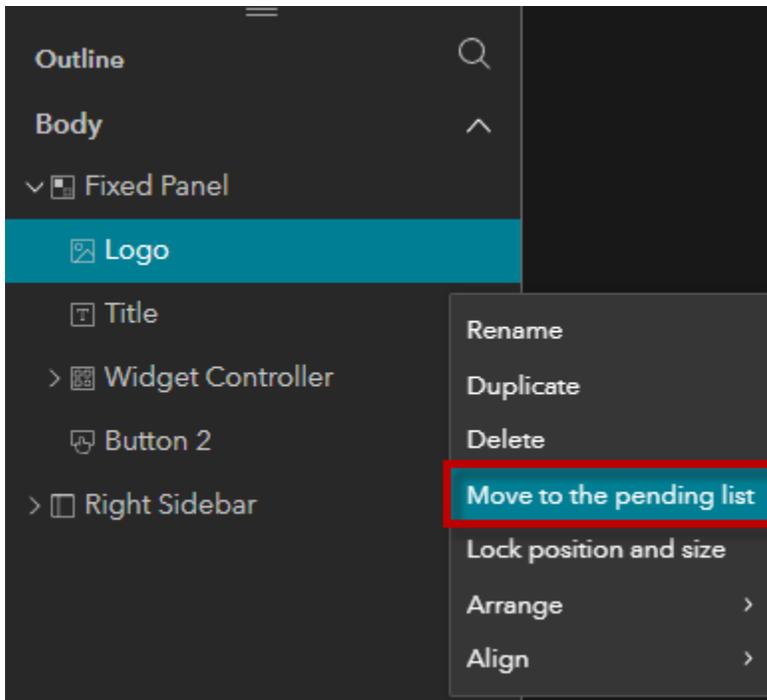
Here is how it looks.

Notice, the widgets are overflowing the space for the Logo and Title.

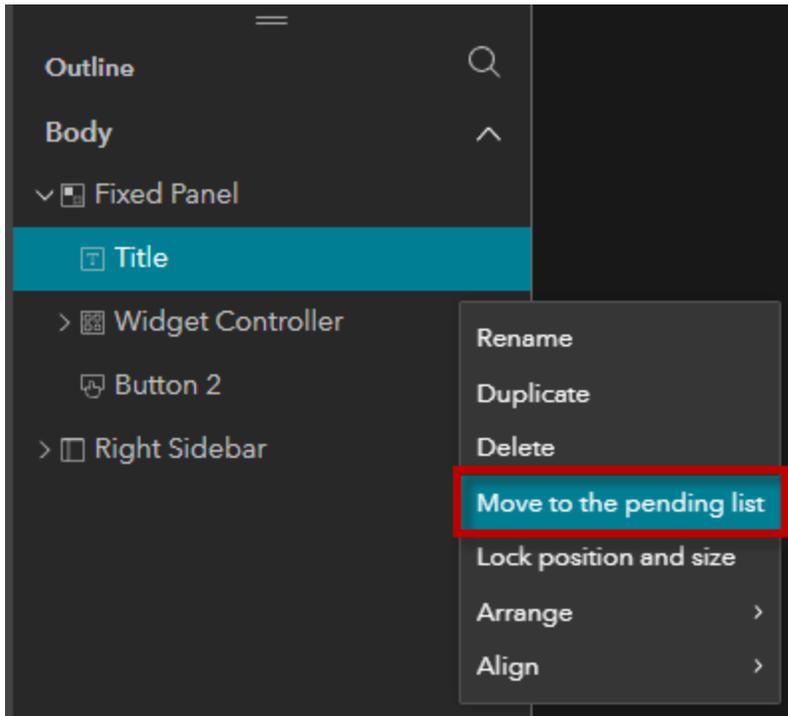


The easiest way to fix this is not to show the Logo and Title for medium screen devices. This applies to tablets in Portrait Mode.

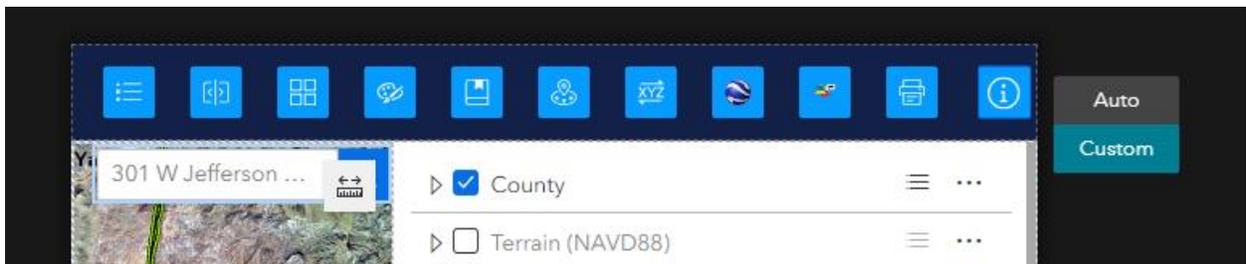
Move the Logo to the Pending List.



Move the Title to the Pending List.



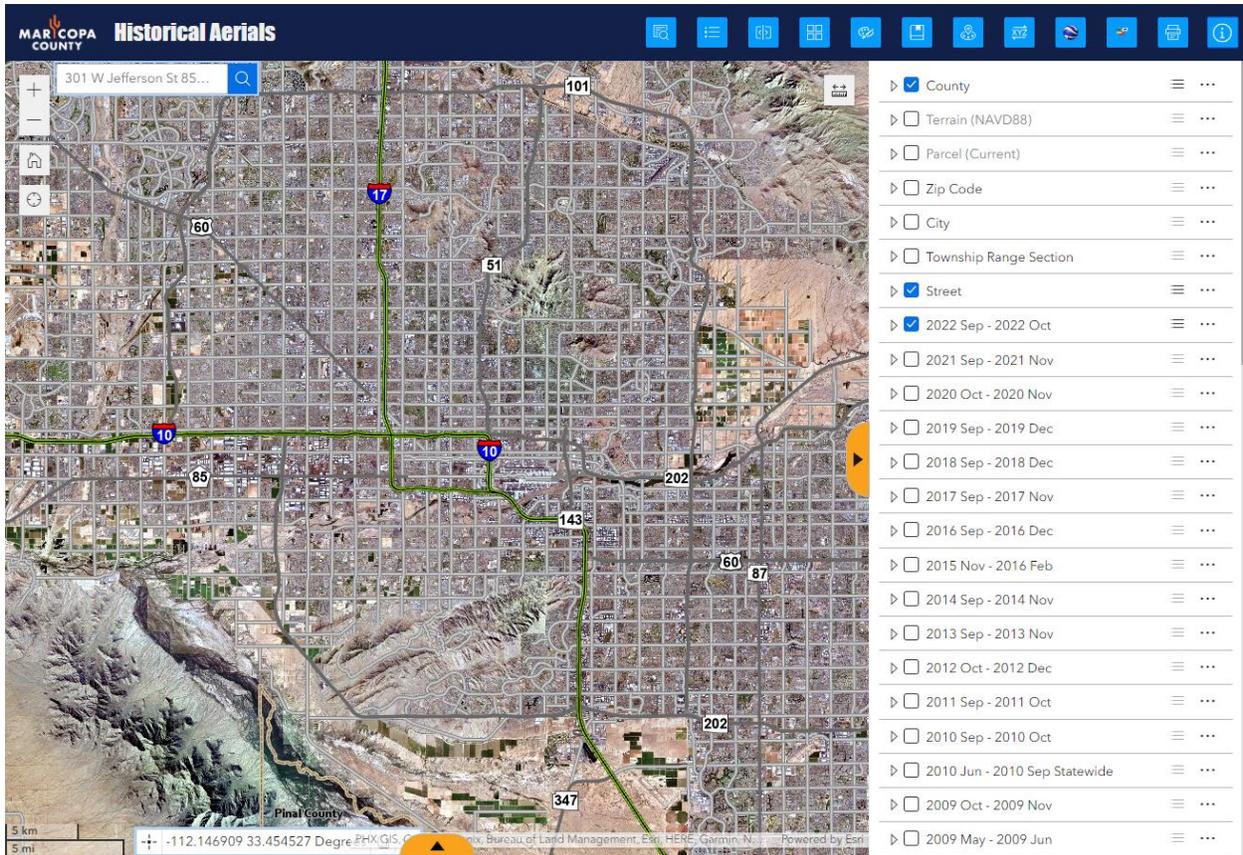
This gives you a cleaner look.



Save, Publish, View Published Item.

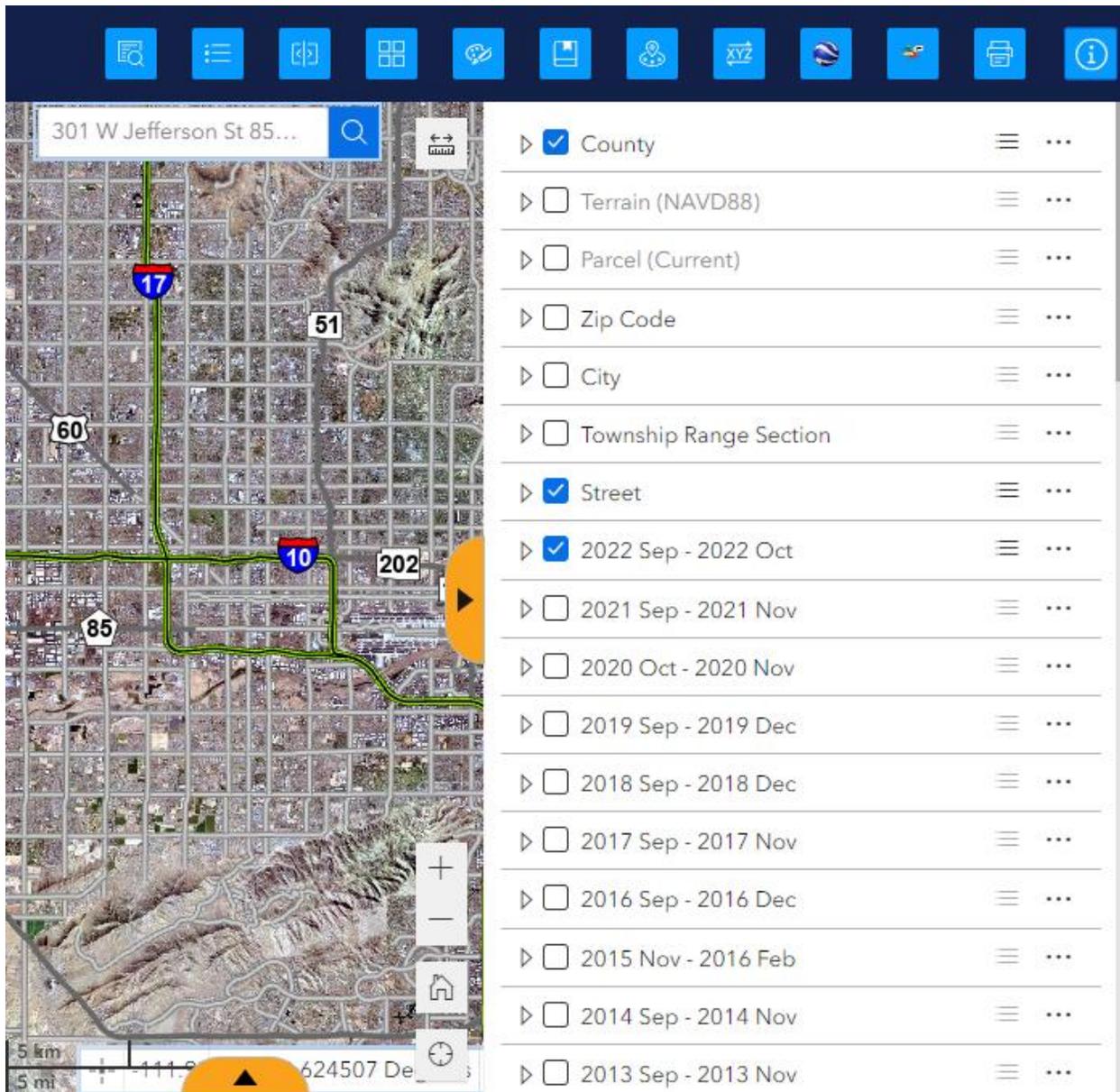
<https://localhost:3001/experience/7/>

On large screens, you get to see the Fixed Panel with the Logo and Title.

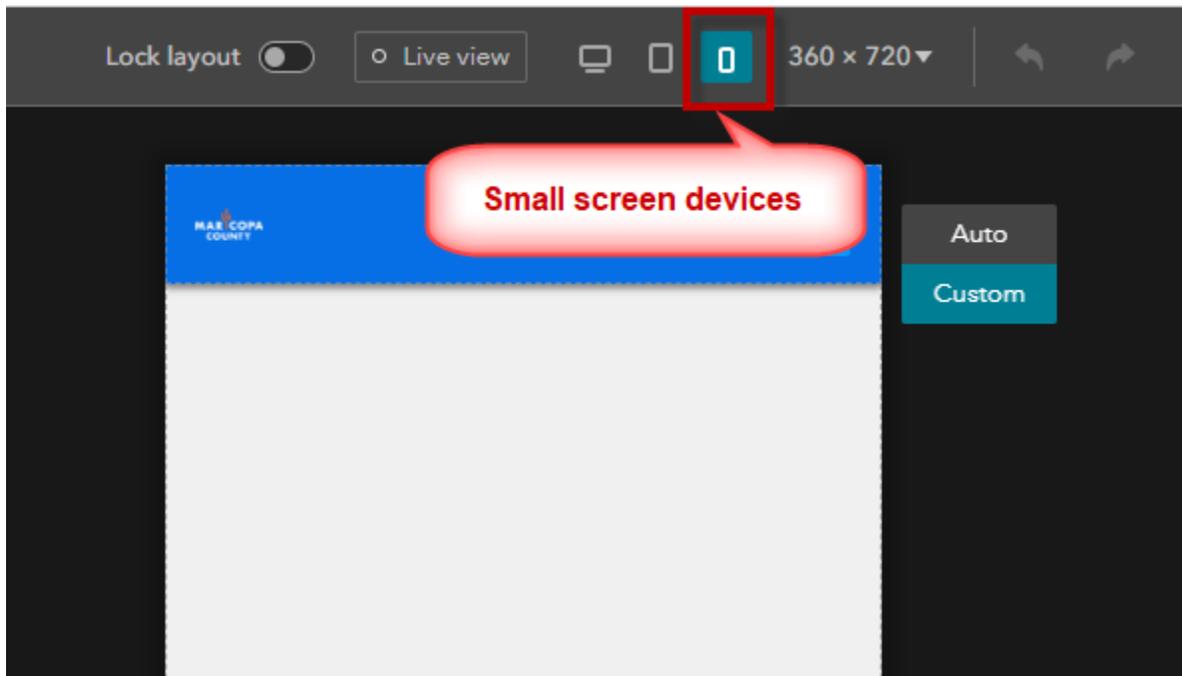


Reduce the width.

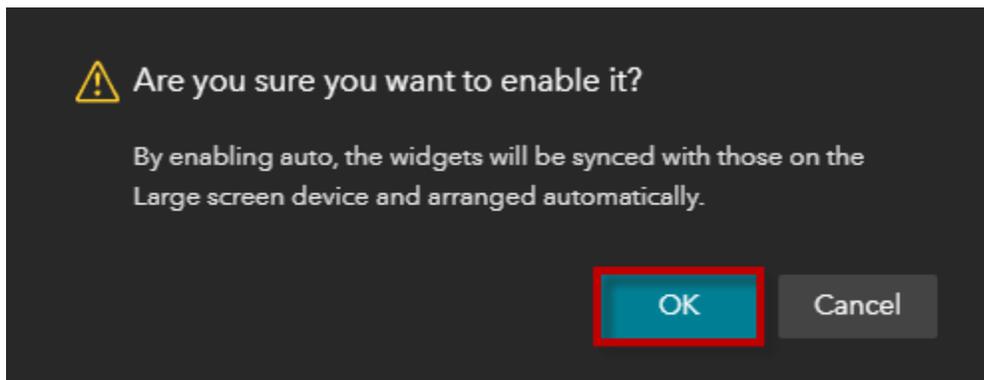
On medium screen devices, the Logo and Title are dropped.



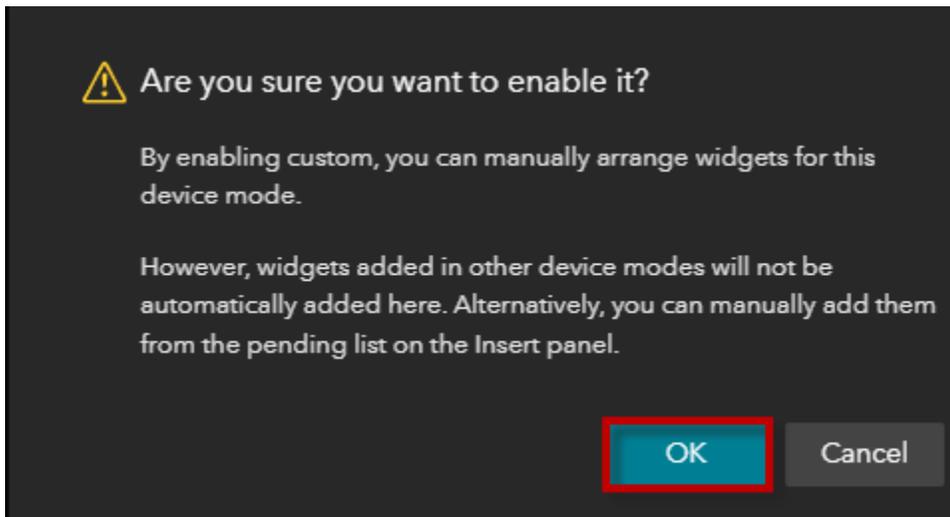
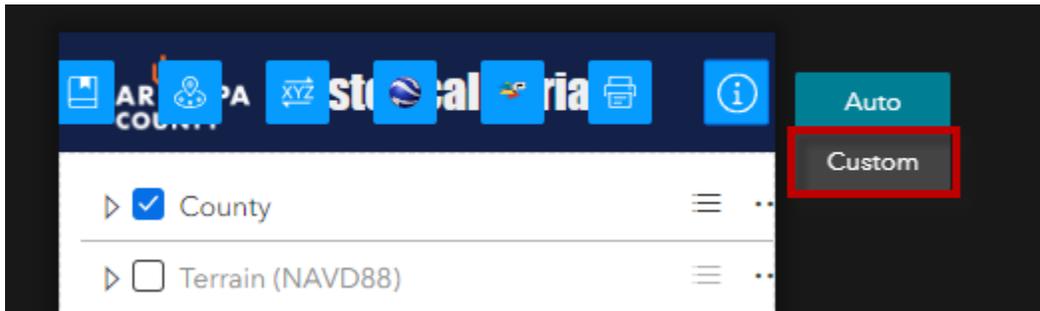
Configure the App for Small Screen Devices



First, click on **Auto**.

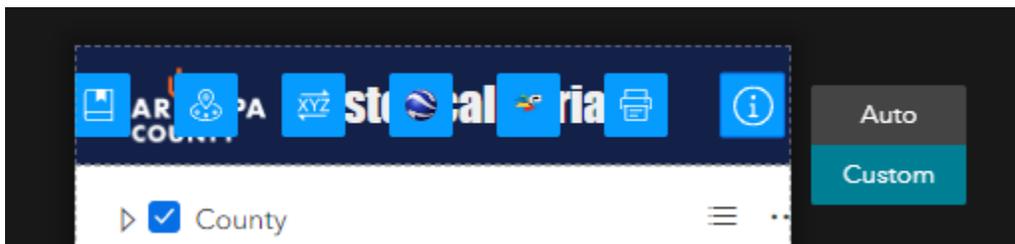


Next, click on **Custom**.

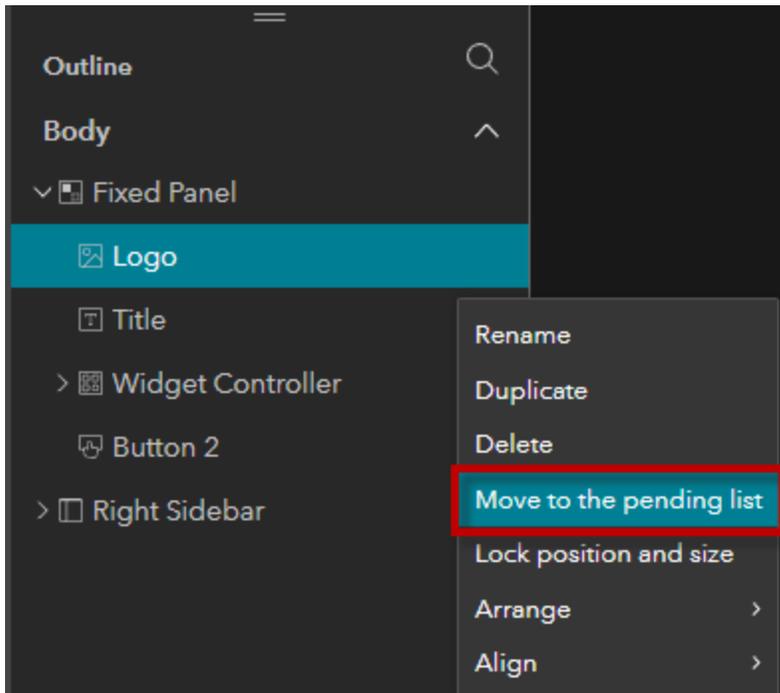


OK

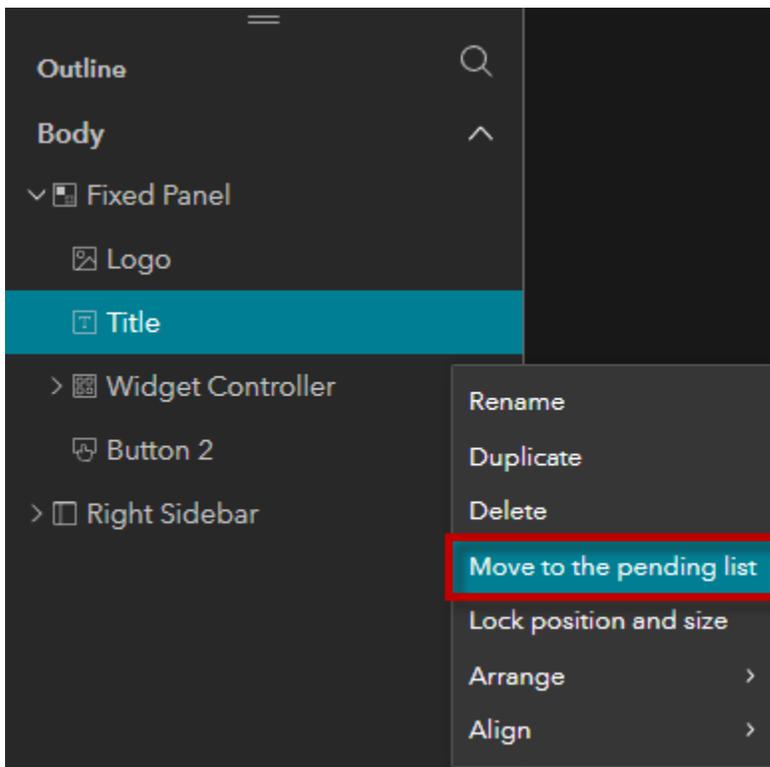
Notice, there is not enough space for the Logo, Title and all the widgets.



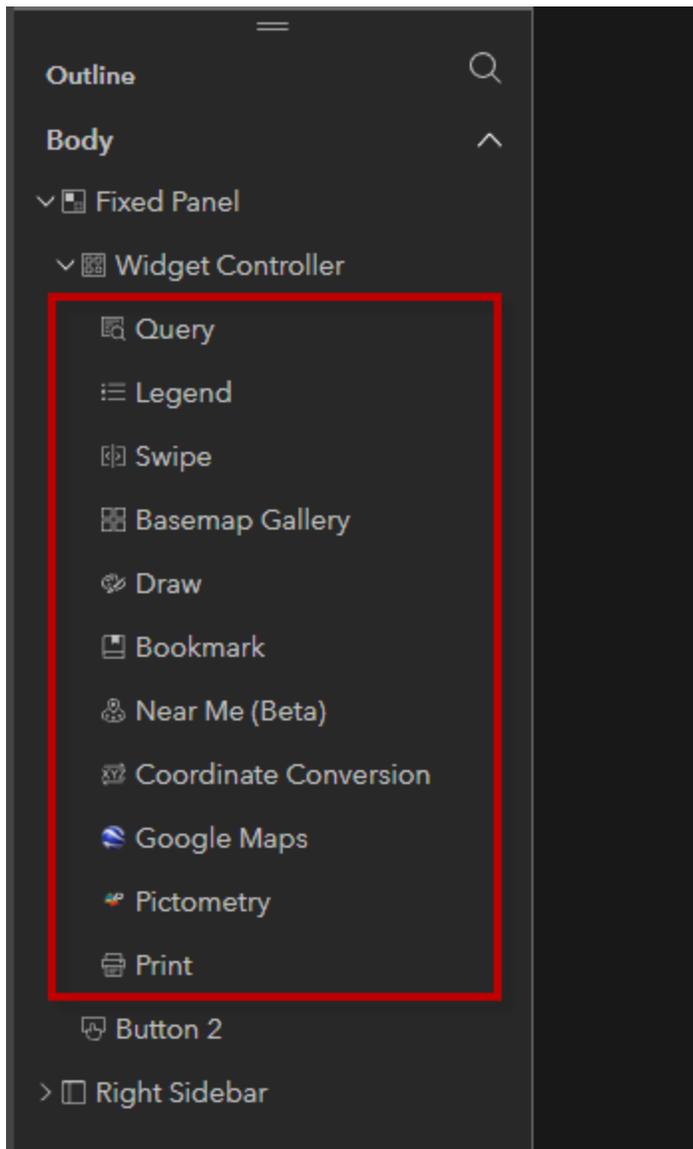
Move the Logo to the Pending List.



Move the Title to the Pending List.

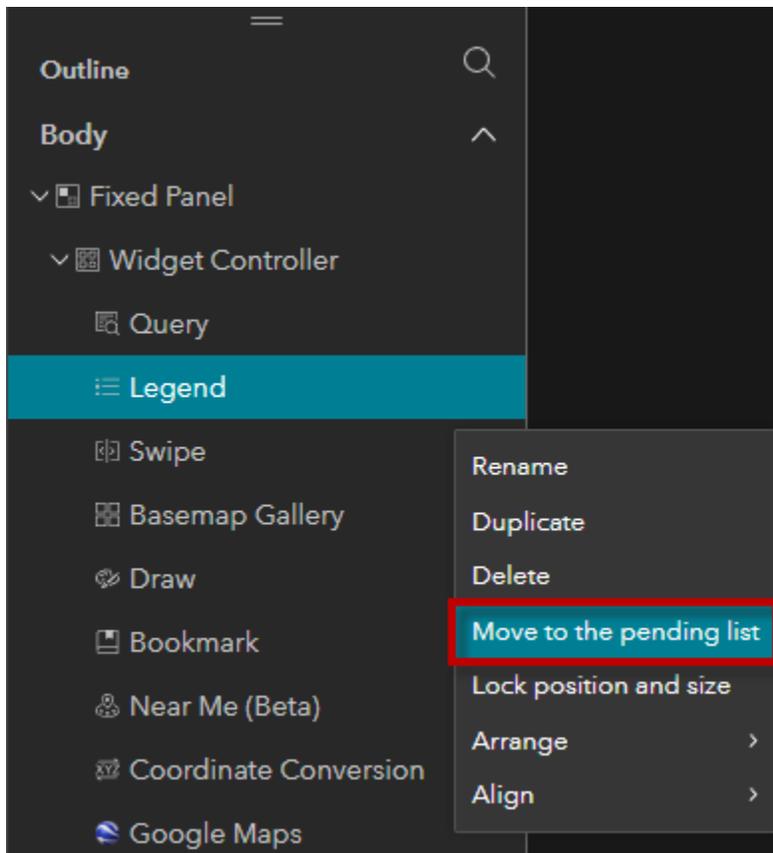


Expand the Outline for the Widget Controller.

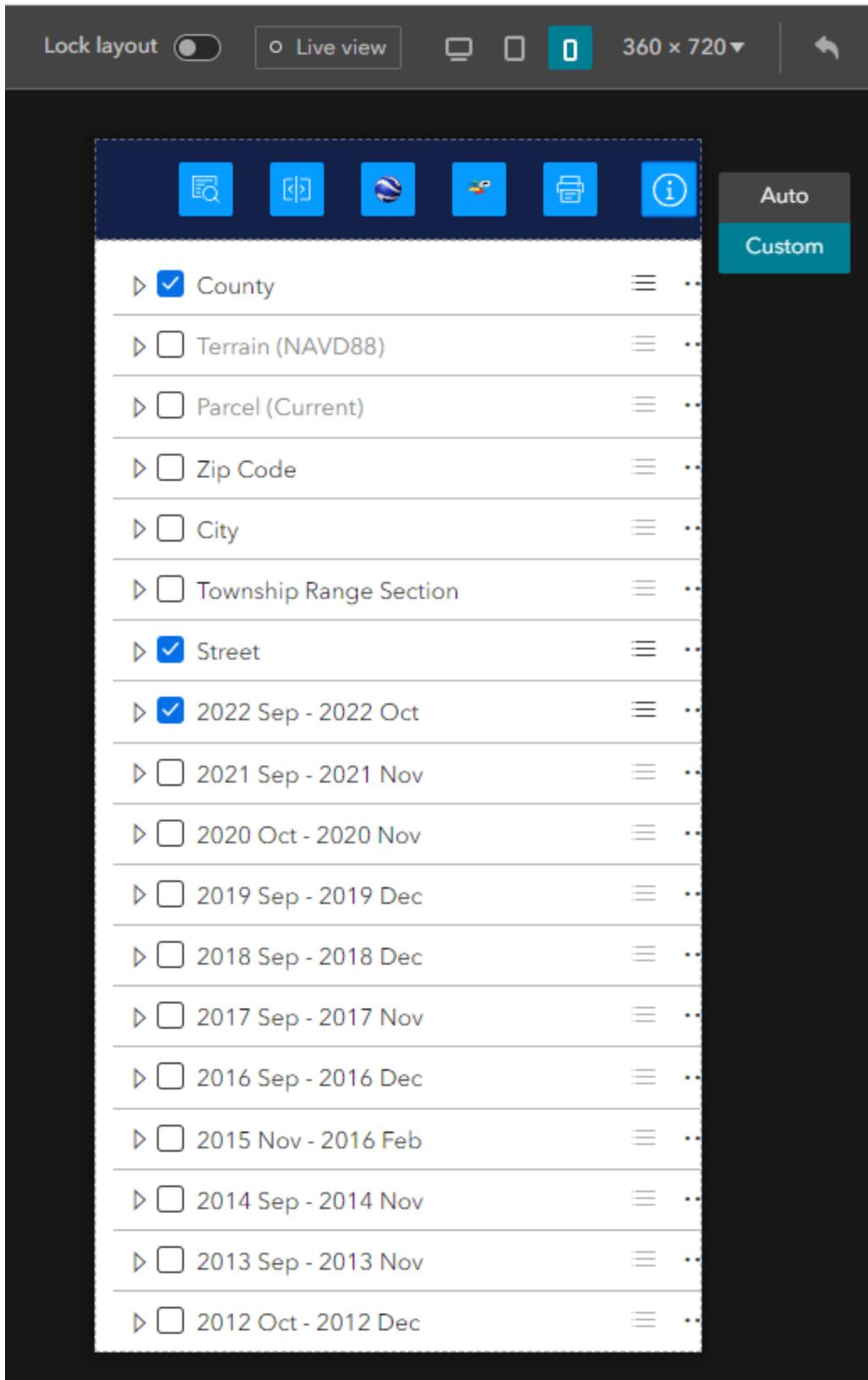


Move the following widgets to the Pending List.

- Legend
- Basemap Gallery
- Draw
- Bookmark
- Near Me
- Coordinate Conversion



This will leave you with these 6 important widgets on the fixed panel in small screen mode.

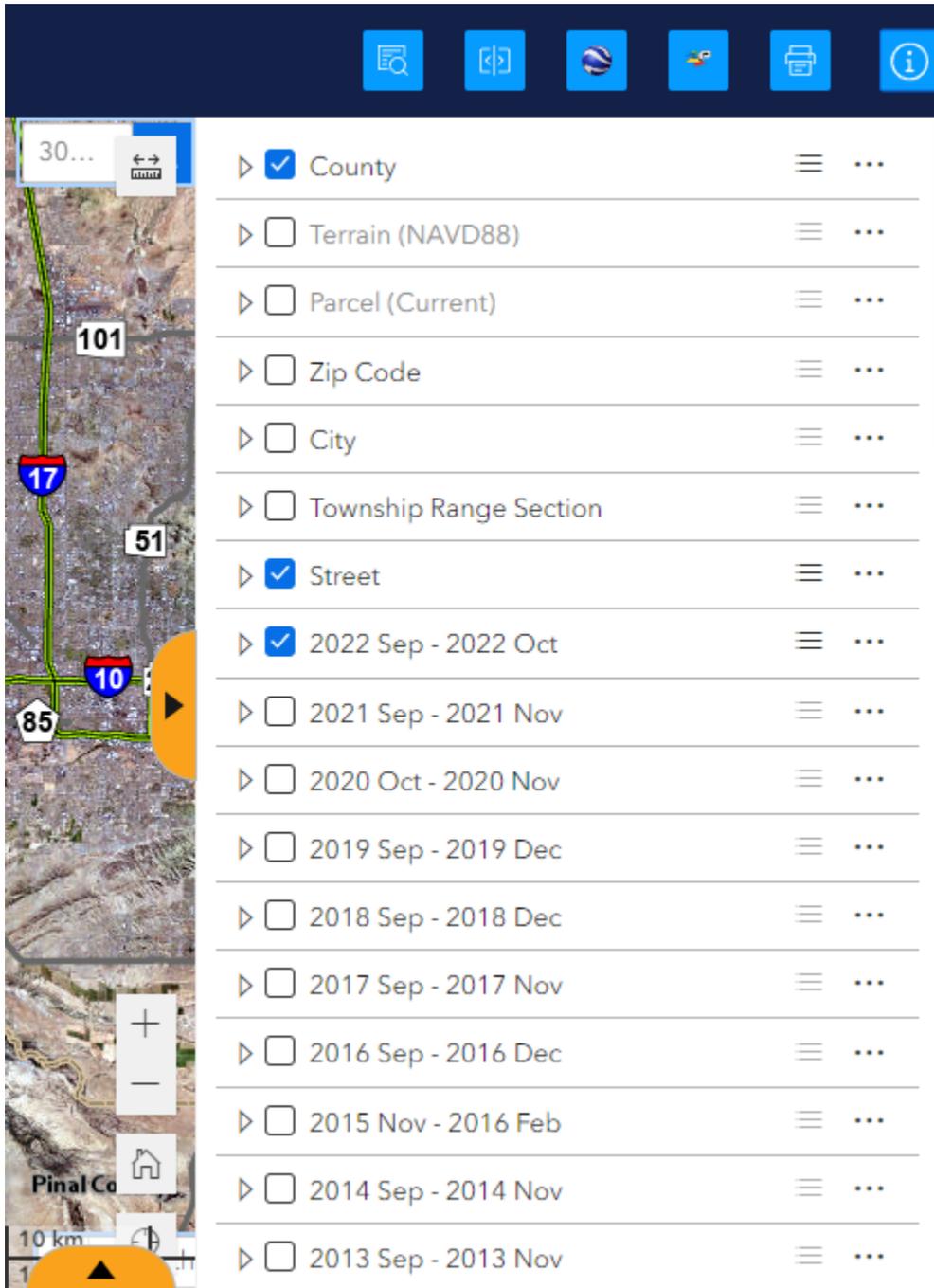


Save, Publish, View Published Item.

<https://localhost:3001/experience/7/>

Make the window narrow.

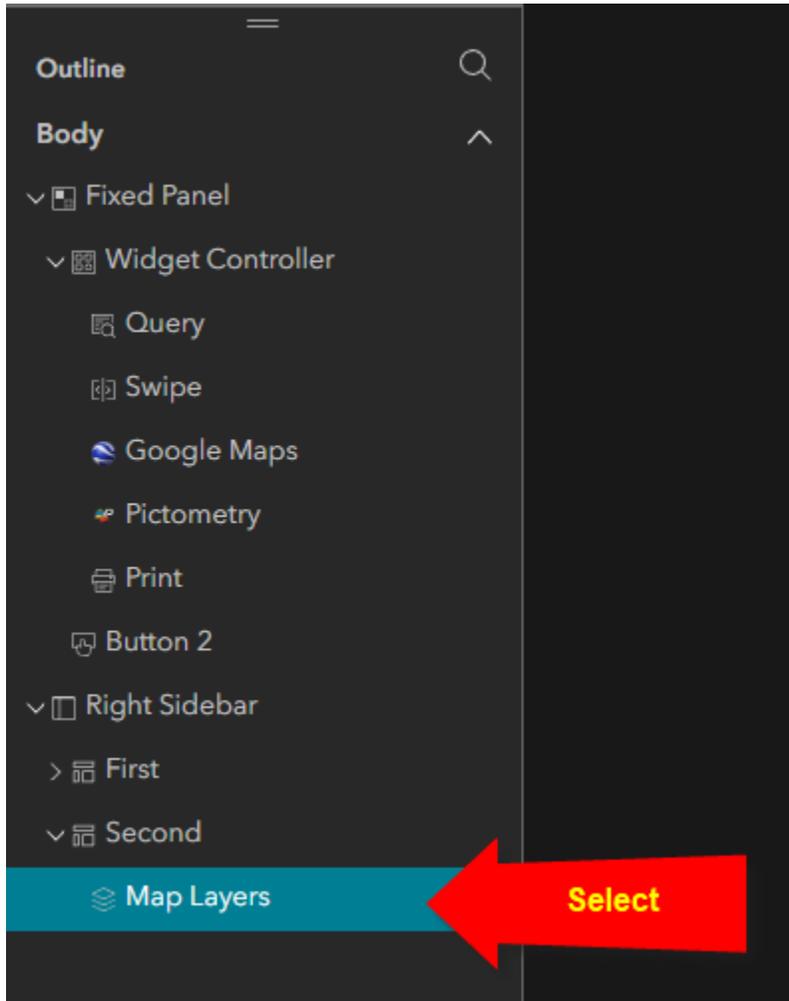
This is what you will see.



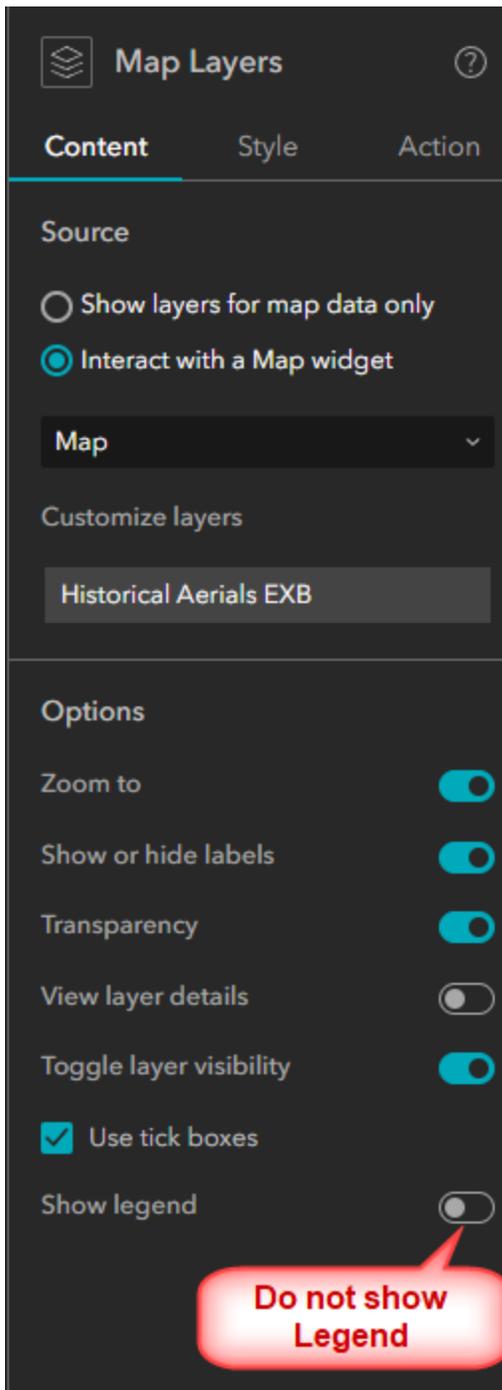
Can the Right Sidebar be made narrower to show more of the map?

Yes, you can do that by not showing the Legend Icon.

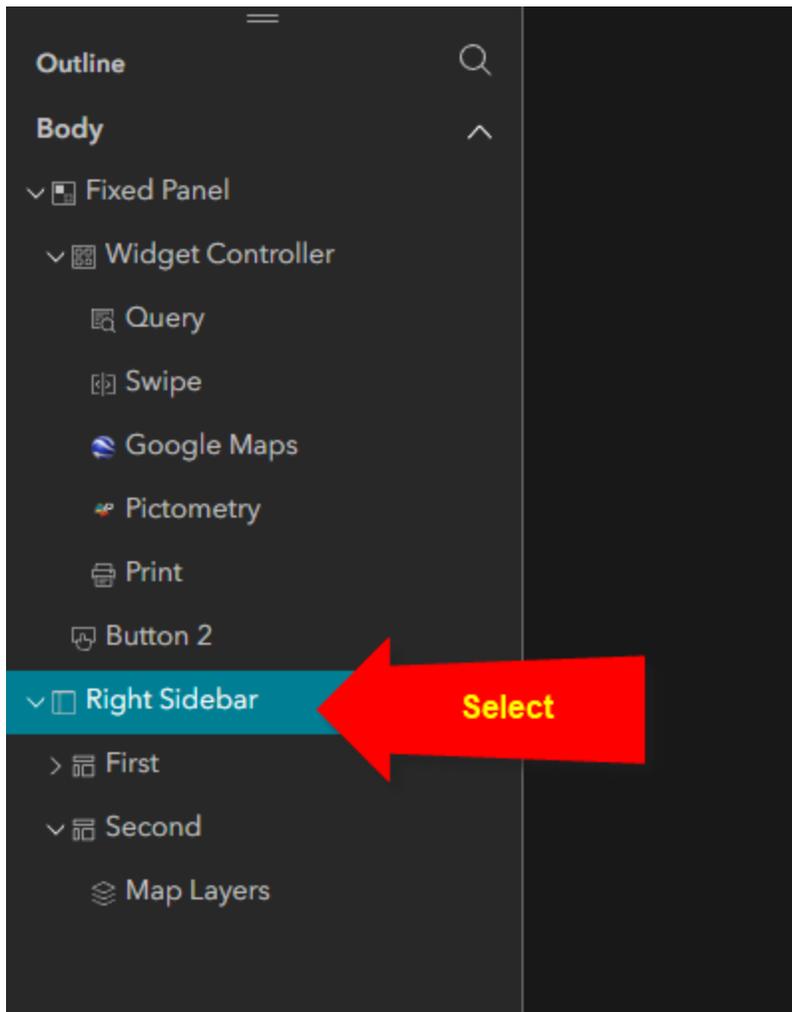
Select **Map Layers** from the Page Outline.



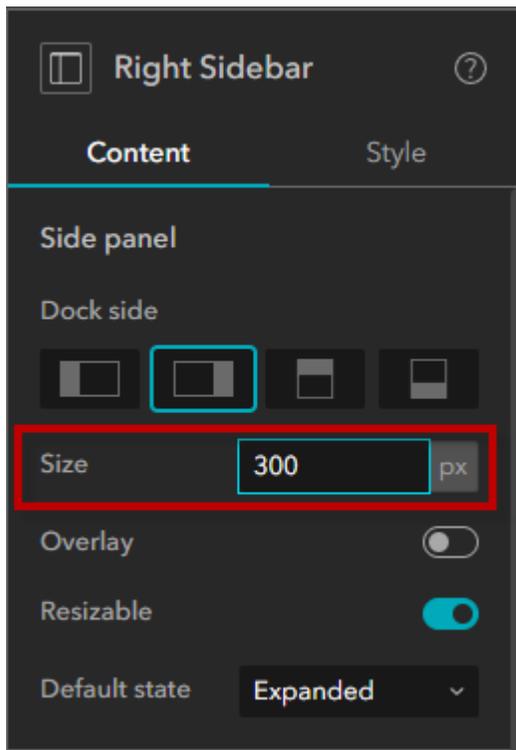
Do not show the Legend.



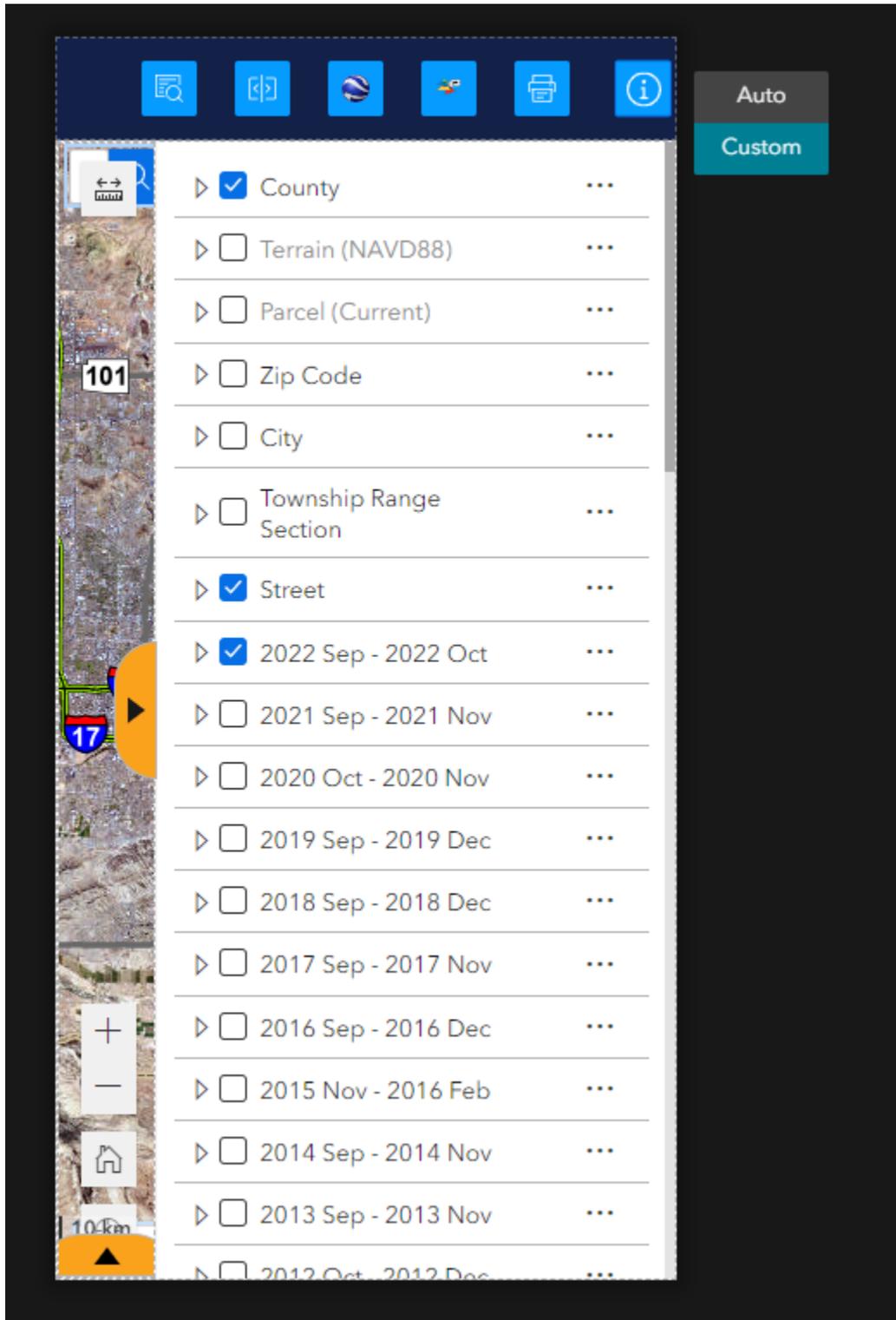
Select the Right Sidebar from the Page Outline.



Reduce the width of the Right Sidebar to 300 pixels.



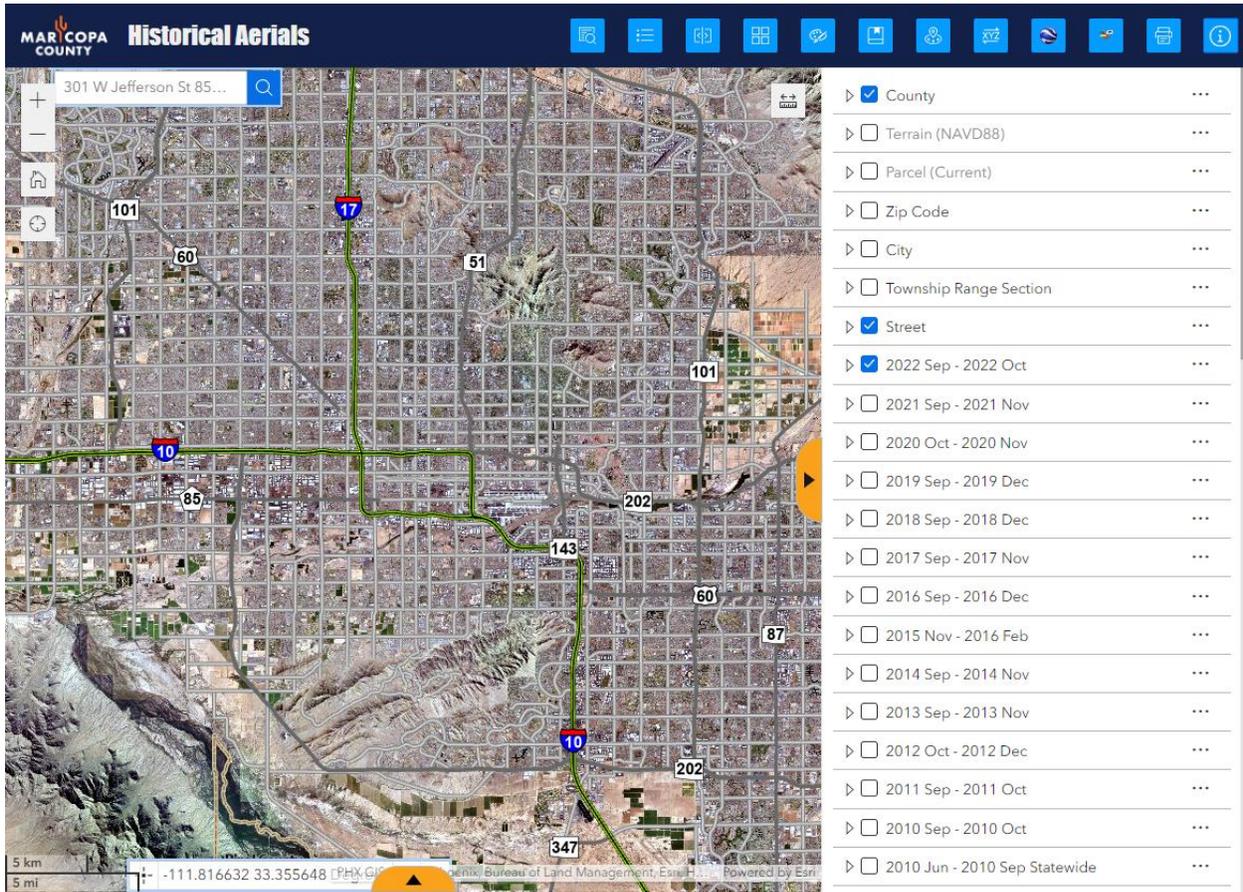
This looks better.



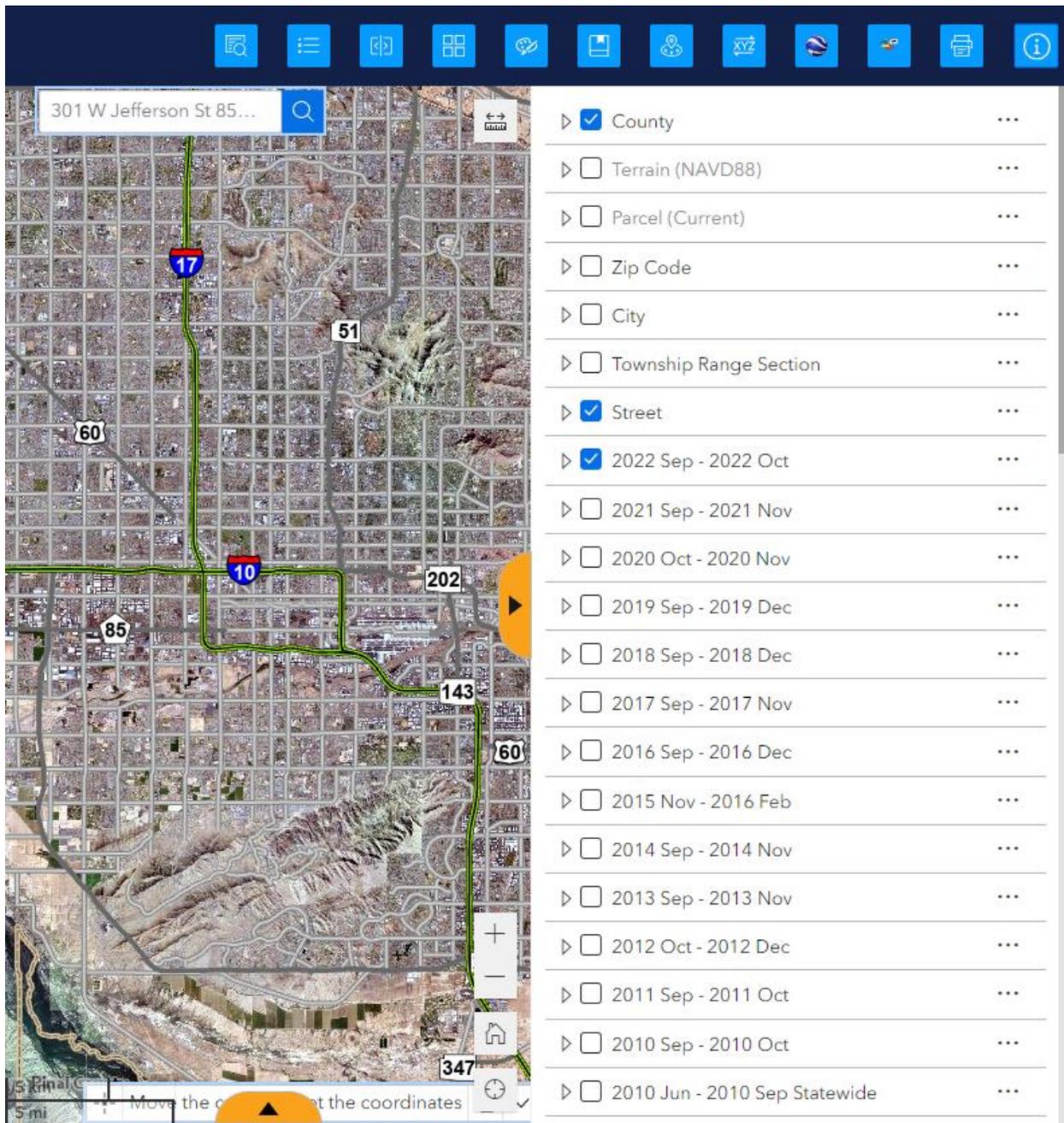
Save, Publish, View Published Item.

<https://localhost:3001/experience/7/>

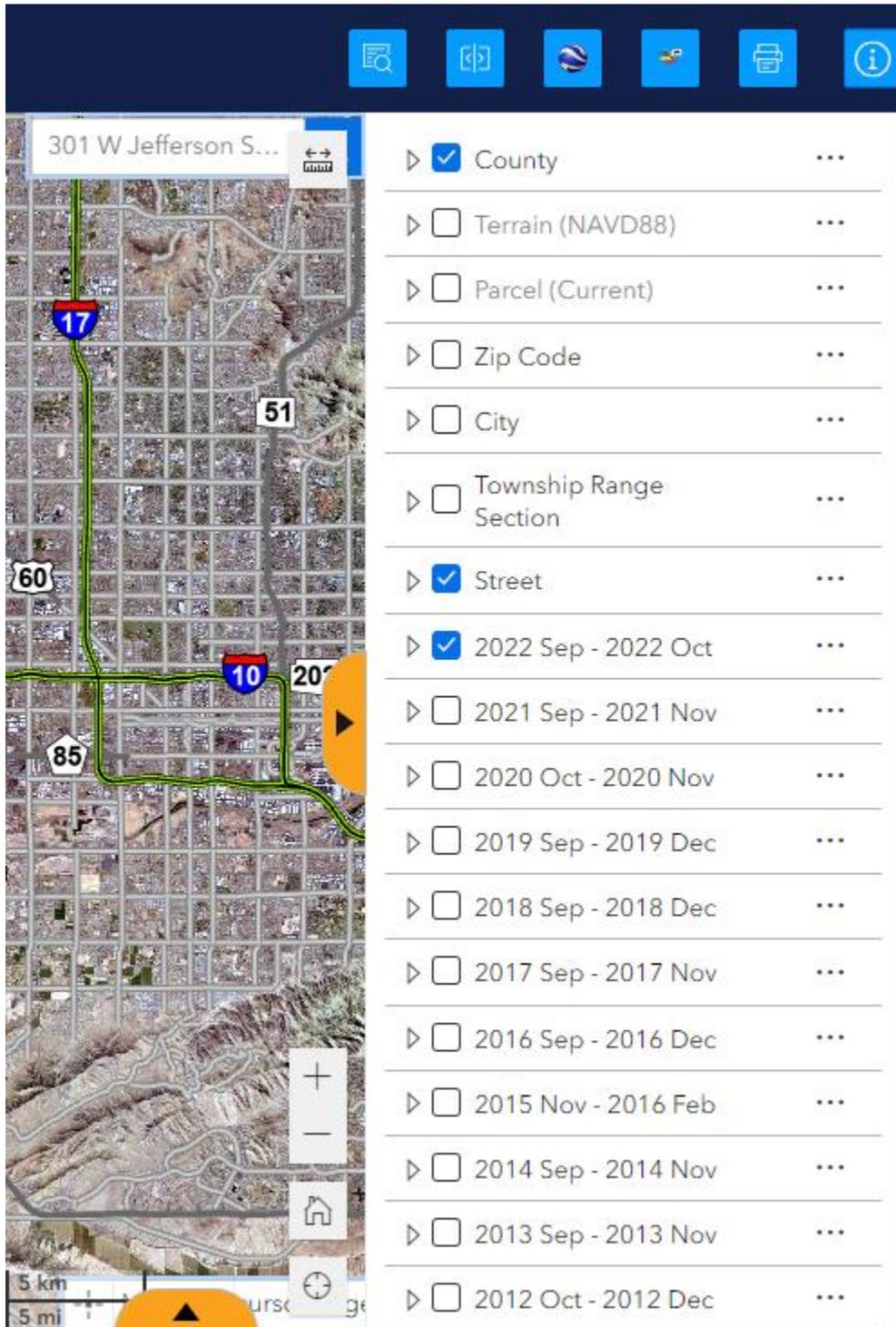
Here is how your app will appear on large screen devices.



Here is how your app will appear on medium screen devices.



Here is how your app will appear on small screen devices.

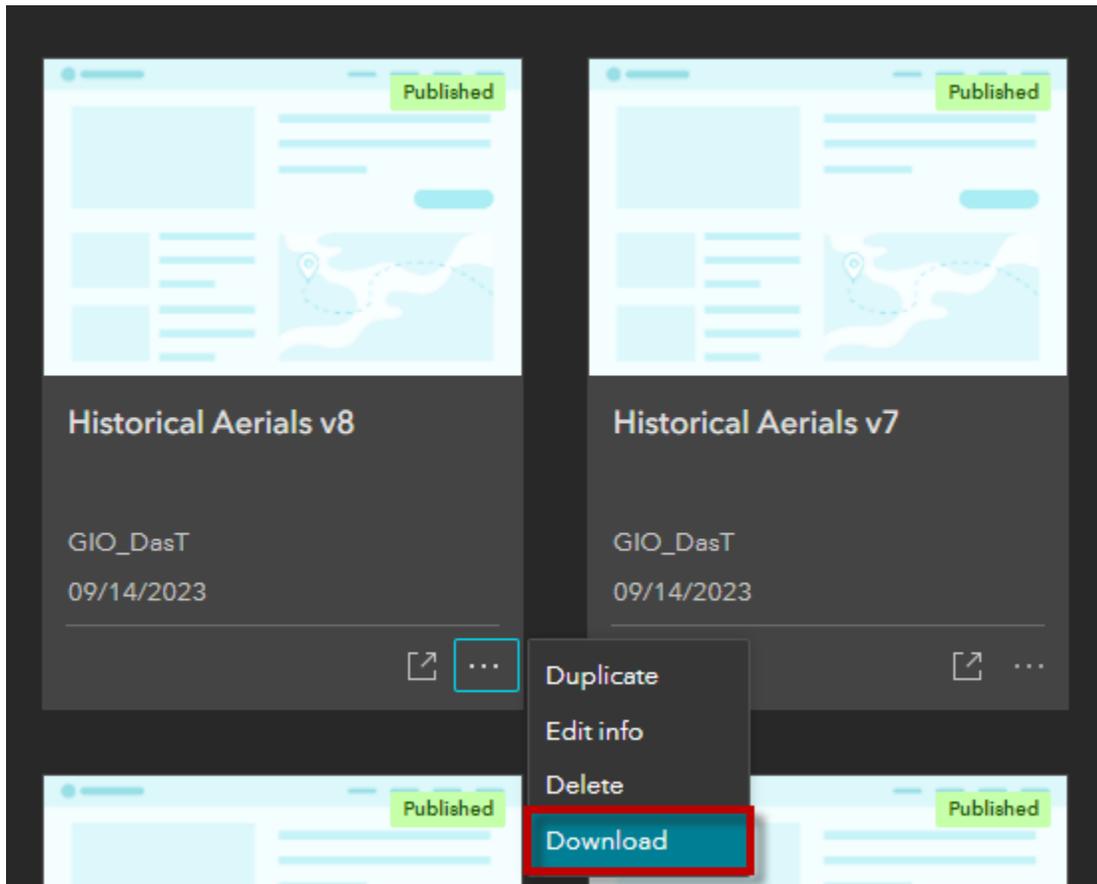


You are ready to download the ZIP file of your EXB project.

Download the ZIP file of your EXB Project

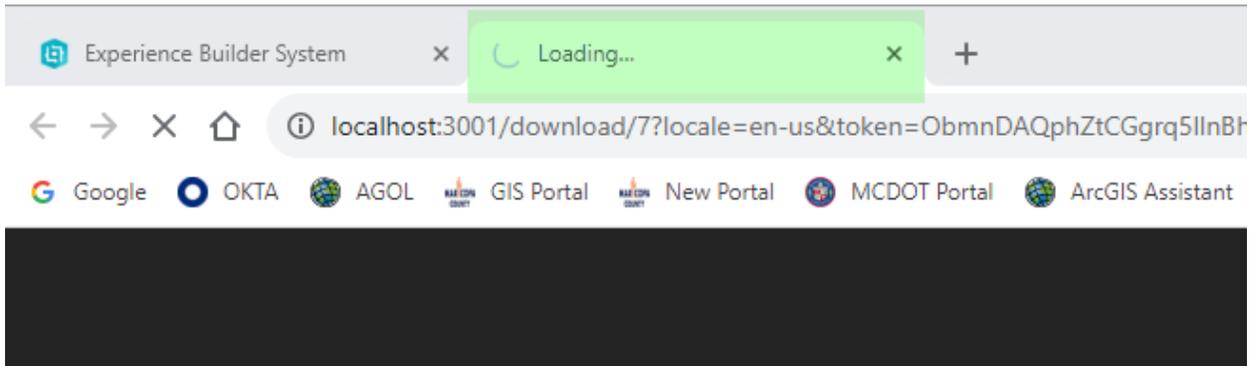
Go back to the Home Page.

Download the ZIP File for Historical Aerials v8



https://localhost:3001/download/7?locale=en-us&token=ObmnDAQphZtCGgrq5llnBhg2L6sAibCBsCD1N5BtKRvijK7g5D7CpBu7xXiHyZrW8kLjN_jBTrZQVdKc6sGCQ_d_x_6i0xM1qvQrcA7-oAAPDE3KoP7MBE8dqabcaLRvM30s1Y2yt_PfaGyCptsat25_gVejxildawEFJsWs4rHlo29ljaqLqFIF6_ONi6gp1SdKG4_8loawlt1YgnBIXDHZyAWGdMoeMPObVE_t9LI

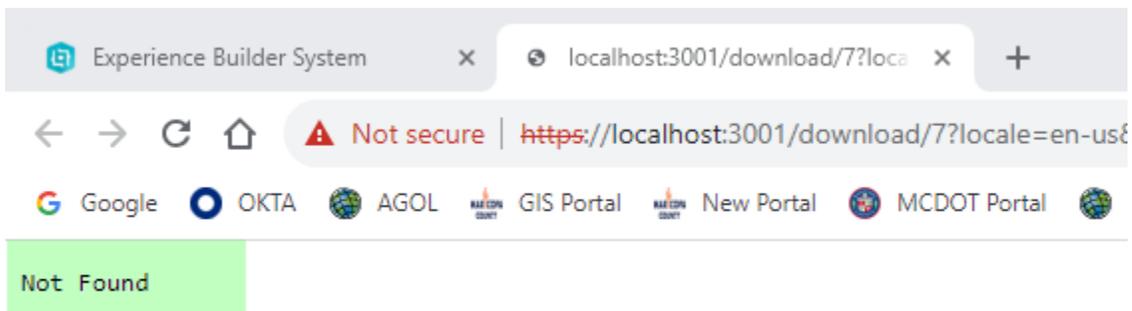
This will open a tab saying Loading...



If you are lucky, you will get a ZIP file in your downloads folder.

However, you are most likely to get this error message:

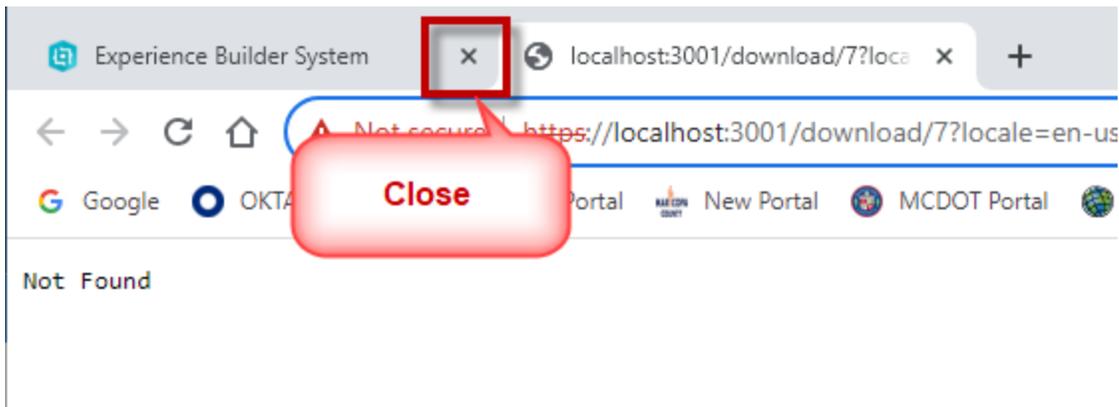
Not found.



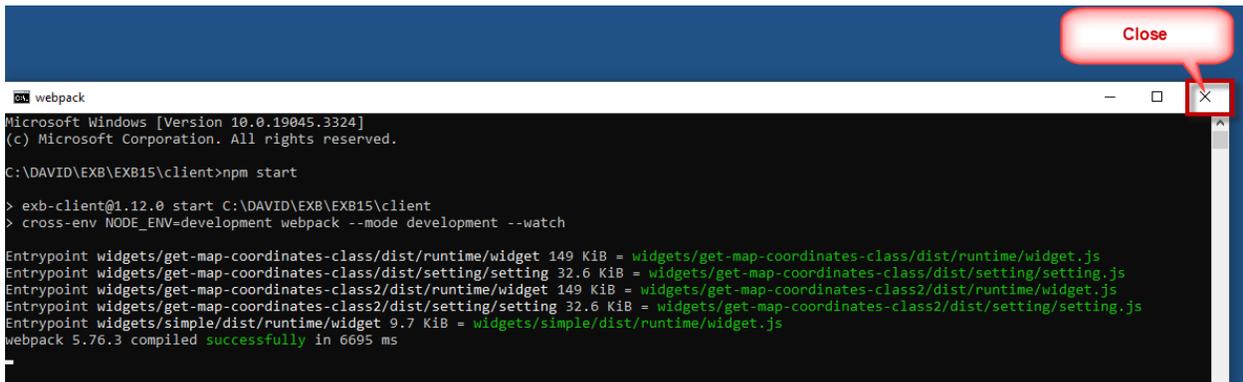
Do not panic!

Next, you will learn how to manually assemble the necessary files to deploy your Web app.

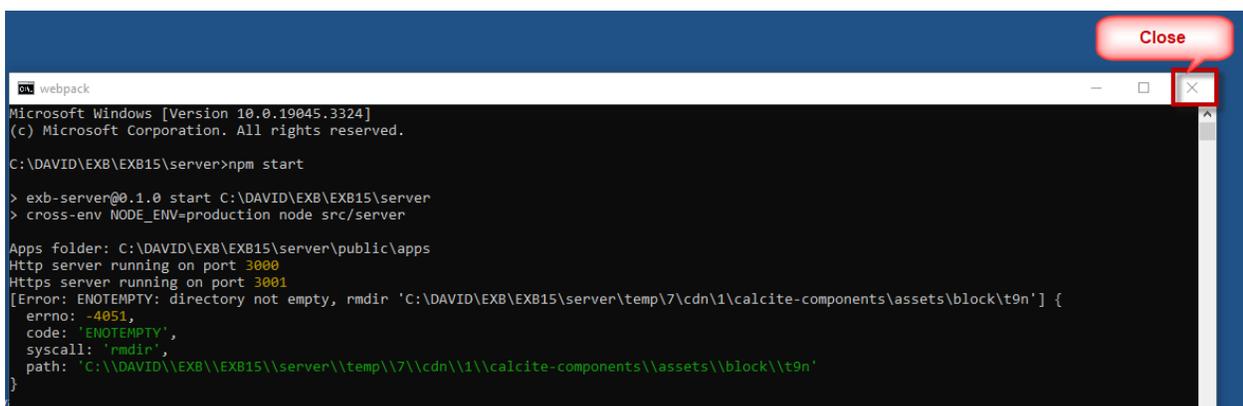
Close the Experience Builder System Tab.



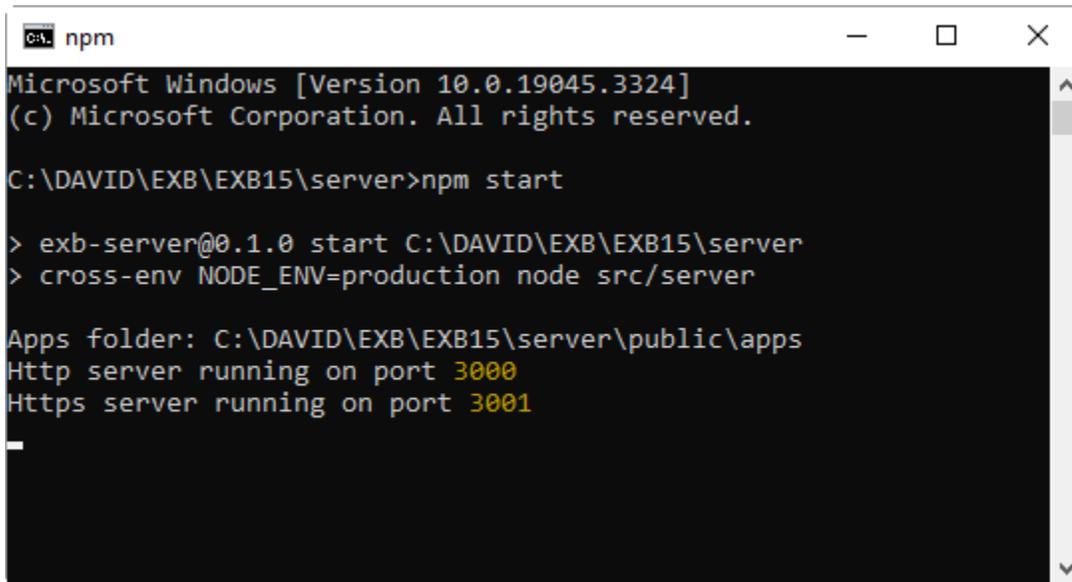
Close the Command Window running the npm Client.



Close the Command Window running the npm Server.



Restart the npm Server process.



```
Microsoft Windows [Version 10.0.19045.3324]
(c) Microsoft Corporation. All rights reserved.

C:\DAVID\EXB\EXB15\server>npm start

> exb-server@0.1.0 start C:\DAVID\EXB\EXB15\server
> cross-env NODE_ENV=production node src/server

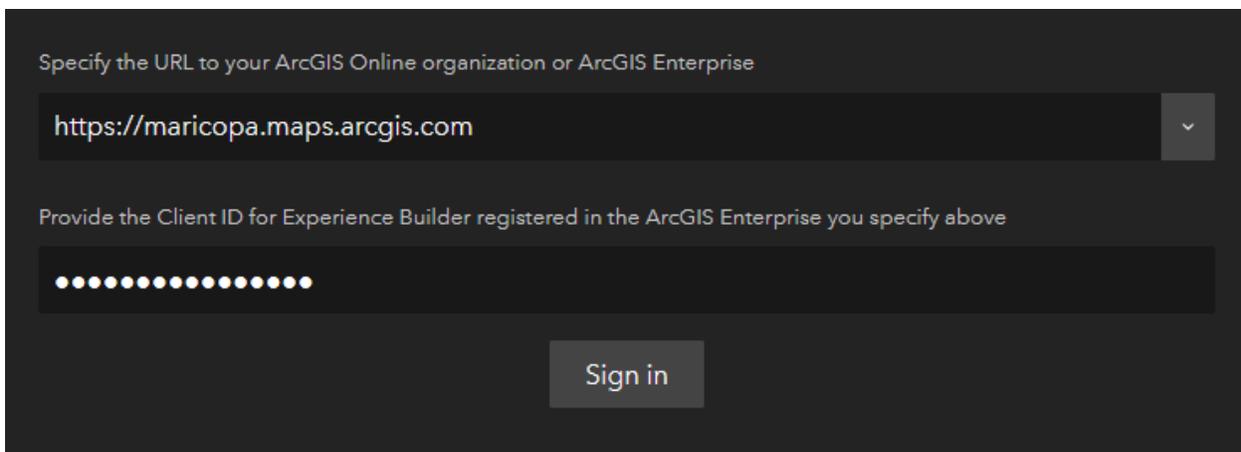
Apps folder: C:\DAVID\EXB\EXB15\server\public\apps
Http server running on port 3000
Https server running on port 3001
```

There is no need to restart the npm Client process.

Launch **Firefox**.

Note: Do not use Chrome.

<https://localhost:3001>



Specify the URL to your ArcGIS Online organization or ArcGIS Enterprise

Provide the Client ID for Experience Builder registered in the ArcGIS Enterprise you specify above

Sign in

Sign In

EXB Client ID wants to access your ArcGIS Online account information [?](#)

Sign in to Maricopa County Enterprise GIS



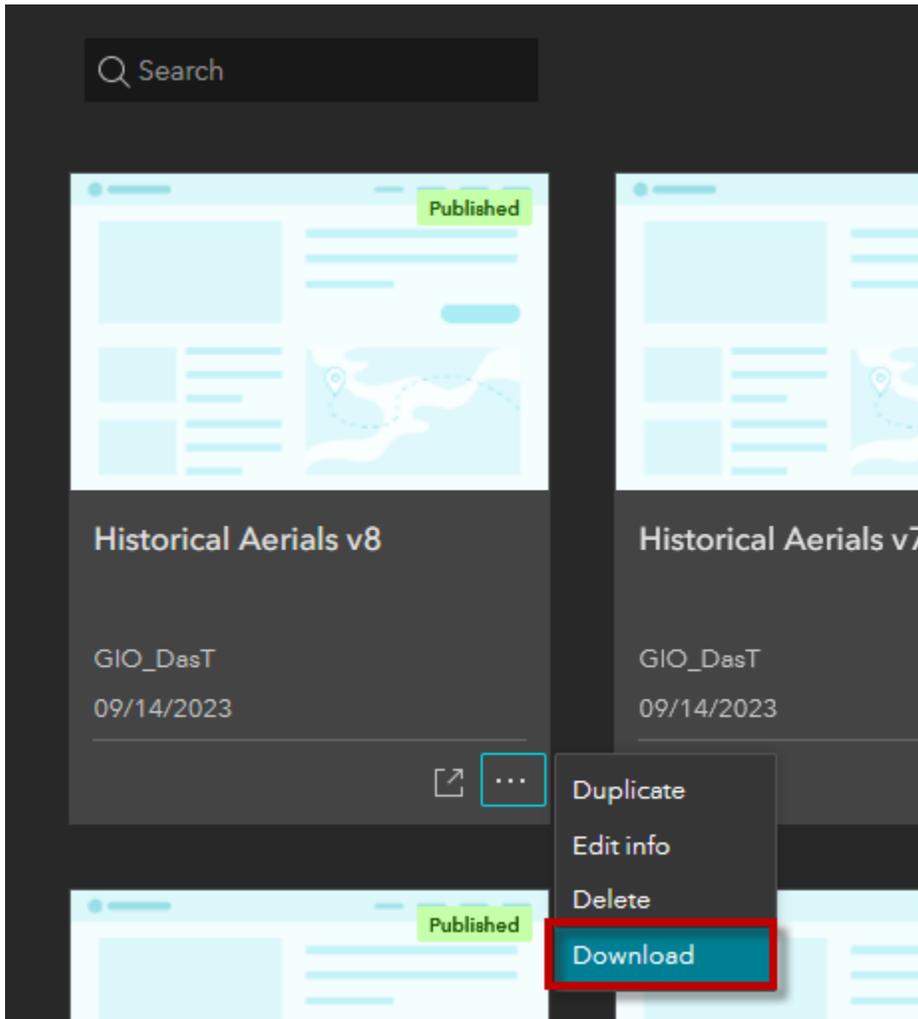
ArcGIS login

Keep me signed in

[Forgot username?](#) or [Forgot password?](#)

[Privacy](#)

Do not start the download yet!



Navigate to the apps folder.

C:\DAVID\EXB\EXB15\server\public\apps\

 0	9/4/2023 7:26 PM	File folder	
 1	9/4/2023 8:52 PM	File folder	
 2	9/4/2023 11:27 PM	File folder	
 3	9/5/2023 10:51 AM	File folder	
 4	9/6/2023 9:27 AM	File folder	
 5	9/13/2023 8:38 PM	File folder	
 6	9/14/2023 9:49 AM	File folder	
 7	9/14/2023 12:32 PM	File folder	

These are the 8 iterations of your Historical Aerials App counting from 0 through 7.

Navigate to:

C:\DAVID\EXB\EXB15\server\public\apps\7

Delete download-times.json

 resources	9/14/2023 11:14 AM	File folder	
 config.json	9/14/2023 12:19 PM	JSON File	203 KB
 download-times.json	9/14/2023 12:32 PM	JSON File	1 KB
 info.json	9/14/2023 12:19 PM	JSON File	1 KB

Navigate to the temp folder.

C:\DAVID\EXB\EXB15\server\temp

 0	9/4/2023 7:59 PM	File folder
 7	9/14/2023 12:31 PM	File folder

This is where all the temporary files are written before the final ZIP file can be created.

Examine the files that were written before the download process failed in your first attempt.

C:\DAVID\EXB\EXB15\server\temp\7

 cdn	9/14/2023 12:29 PM	File folder
---	--------------------	-------------

C:\DAVID\EXB\EXB15\server\temp\7\cdn\

 1	9/14/2023 12:31 PM	File folder
---	--------------------	-------------

C:\DAVID\EXB\EXB15\server\temp\7\cdn\1\

 arcgis-charts	9/14/2023 12:31 PM	File folder	
 calcite-components	9/14/2023 12:31 PM	File folder	
 resources	9/14/2023 12:31 PM	File folder	
 themes	9/14/2023 12:31 PM	File folder	
 widgets	9/14/2023 12:31 PM	File folder	
 config.json	9/14/2023 12:31 PM	JSON File	203 KB

Notice, there is a config.json file here.

Navigate to:

C:\DAVID\EXB\EXB15\server\temp\7\cdn\1\resources\config

 config.json	9/14/2023 12:19 PM	JSON File	204 KB
---	--------------------	-----------	--------

There is a second config.json file here.

Why does the Experience Builder have 2 config.json files?

Jianxia Song was kind enough to explain the reason.

The ArcGIS Experience Builder supports [draft and published status](#) so you can test changes in the app without affecting the published live app. As such, two config JSON files are available.

<https://doc.arcgis.com/en/experience-builder/latest/build-apps/save-preview-publish.htm>

As you noticed, one is under the **resources** folder while the other is under the **data** folder. The published config.json is under the data folder while the draft config.json is under the resources folder.

If you want to see the changes in the live app, update the published config.json file under the data folder.

If you want to see the changes in the builder, update the draft config.json file under the resources folder.

For web experience items created in ArcGIS Online and ArcGIS Enterprise, the published config json is stored in the data folder. However, for the app created with the developer edition, the published config file is in the cdn/[app number] directly.

Hope this helps.

Jianxia

You have a partial download in the temp folder.

C:\DAVID\EXB\EXB15\server\temp\7

 cdn	9/14/2023 12:29 PM	File folder
--	--------------------	-------------

Make a new folder named **HistoricalAerials8**

C:\DAVID\PROJECTS\HistoricalAerials8

Copy the cdn folder here.

 cdn	9/14/2023 1:19 PM	File folder
--	-------------------	-------------

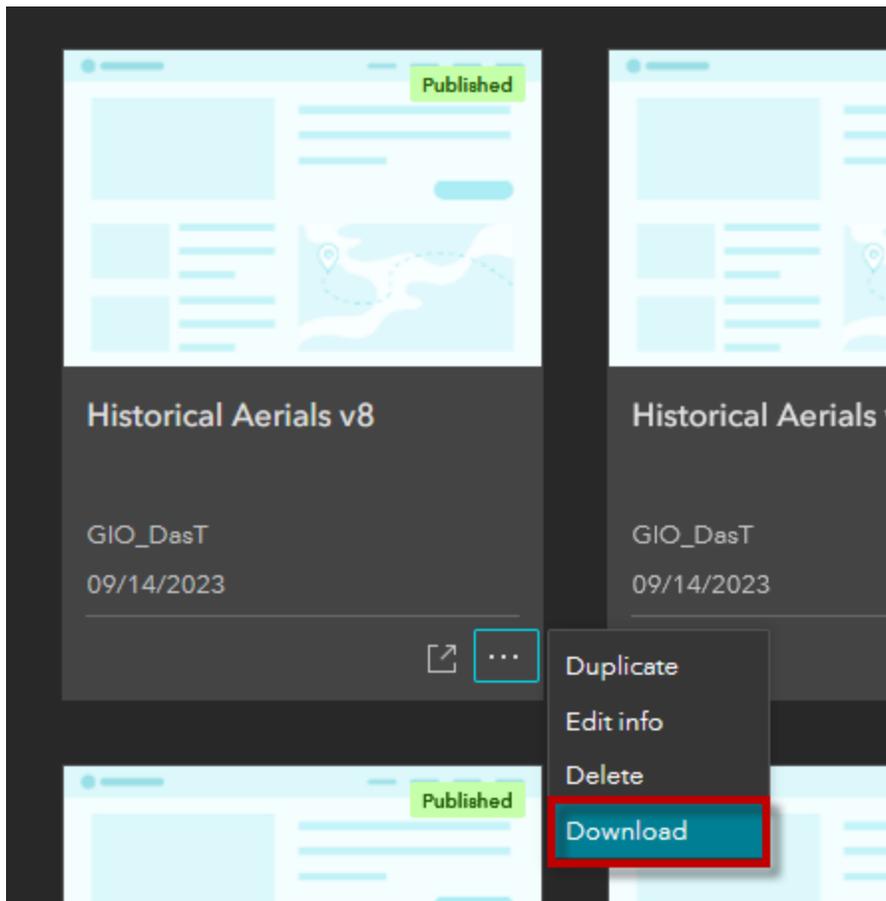
Delete this folder.

C:\DAVID\EXB\EXB15\server\temp\

 0	9/4/2023 7:59 PM	File folder
 7	9/14/2023 12:31 PM	File folder



Start the Download Process.



Monitor the temporary files being writing to:

C:\DAVID\EXB\EXB15\server\temp\

C:\DAVID\EXB\EXB15\server\temp\7

 cdn	9/14/2023 1:23 PM	File folder	
 index.html	9/14/2023 1:23 PM	Firefox HTML Doc...	5 KB
 service-worker.js	9/4/2023 4:52 PM	JavaScript Source ...	10 KB
 web.config	9/4/2023 4:57 PM	Configuration Sou...	2 KB

C:\DAVID\EXB\EXB15\server\temp\7\cdn\1

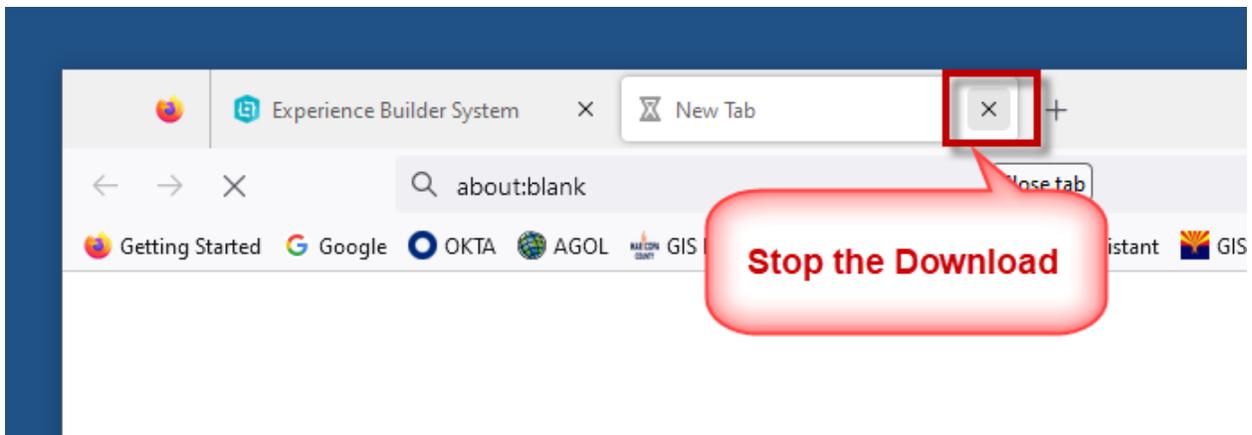
 assets	9/14/2023 1:23 PM	File folder	
 calcite-components	9/14/2023 1:23 PM	File folder	
 jimu-arcgis	9/14/2023 1:23 PM	File folder	
 jimu-core	9/14/2023 1:23 PM	File folder	
 jimu-for-builder	9/14/2023 1:23 PM	File folder	
 jimu-layouts	9/14/2023 1:23 PM	File folder	
 jimu-theme	9/14/2023 1:23 PM	File folder	
 jimu-ui	9/14/2023 1:23 PM	File folder	
 index.js	9/4/2023 4:57 PM	JavaScript Source ...	41 KB
 service-worker-registration.js	9/14/2023 1:23 PM	JavaScript Source ...	1 KB

Keep refreshing this folder.

Stop the download process the moment the **widgets** folder gets written.

C:\DAVID\EXB\EXB15\server\temp\7\cdn\1\

arcgis-charts	9/14/2023 1:25 PM	File folder	
assets	9/14/2023 1:23 PM	File folder	
calcite-components	9/14/2023 1:23 PM	File folder	
jimu-arcgis	9/14/2023 1:23 PM	File folder	
jimu-core	9/14/2023 1:23 PM	File folder	
jimu-for-builder	9/14/2023 1:23 PM	File folder	
jimu-layouts	9/14/2023 1:23 PM	File folder	
jimu-theme	9/14/2023 1:23 PM	File folder	
jimu-ui	9/14/2023 1:23 PM	File folder	
themes	9/14/2023 1:24 PM	File folder	
widgets	9/14/2023 1:25 PM	File folder	
index.js	9/4/2023 4:57 PM	JavaScript Source ...	41 KB
service-worker-registration.js	9/14/2023 1:23 PM	JavaScript Source ...	1 KB



Note: If you wait too long, the process will fail and most of your temporary files will begin to get deleted.

Examine the temporary files under:

C:\DAVID\EXB\EXB15\server\temp\7\

cdn	9/14/2023 1:23 PM	File folder	
index.html	9/14/2023 1:23 PM	Firefox HTML Doc...	5 KB
service-worker.js	9/4/2023 4:52 PM	JavaScript Source ...	10 KB
web.config	9/4/2023 4:57 PM	Configuration Sou...	2 KB

Copy the highlighted files to:

C:\DAVID\PROJECTS\HistoricalAerials8\

cdn	9/14/2023 1:19 PM	File folder	
index.html	9/14/2023 1:23 PM	Firefox HTML Doc...	5 KB
service-worker.js	9/4/2023 4:52 PM	JavaScript Source ...	10 KB
web.config	9/4/2023 4:57 PM	Configuration Sou...	2 KB

Open the cdn\1 folder.

C:\DAVID\PROJECTS\HistoricalAerials8\cdn\1\

Delete everything except config.json

arcgis-charts	9/14/2023 1:19 PM	File folder	
calcite-components	9/14/2023 1:19 PM	File folder	
resources	9/14/2023 1:19 PM	File folder	
themes	9/14/2023 1:19 PM	File folder	
widgets	9/14/2023 1:20 PM	File folder	
config.json	9/14/2023 1:20 PM	JSON File	203 KB

Delete everything except config.json

Copy these files from:

C:\DAVID\EXB\EXB15\server\temp\7\cdn\1

 arcgis-charts	9/14/2023 1:25 PM	File folder	
 assets	9/14/2023 1:23 PM	File folder	
 calcite-components	9/14/2023 1:23 PM	File folder	
 jimui-arcgis	9/14/2023 1:23 PM	File folder	
 jimui-core	9/14/2023 1:23 PM	File folder	
 jimui-for-builder	9/14/2023 1:23 PM	File folder	
 jimui-layouts	9/14/2023 1:23 PM	File folder	
 jimui-theme	9/14/2023 1:23 PM	File folder	
 jimui-ui	9/14/2023 1:23 PM	File folder	
 themes	9/14/2023 1:24 PM	File folder	
 widgets	9/14/2023 1:25 PM	File folder	
 index.js	9/4/2023 4:57 PM	JavaScript Source ...	41 KB
 service-worker-registration.js	9/14/2023 1:23 PM	JavaScript Source ...	1 KB

To:

C:\DAVID\PROJECTS\HistoricalAerials8\cdn\1

 arcgis-charts	9/14/2023 1:38 PM	File folder	
 assets	9/14/2023 1:38 PM	File folder	
 calcite-components	9/14/2023 1:40 PM	File folder	
 jimmu-arcgis	9/14/2023 1:40 PM	File folder	
 jimmu-core	9/14/2023 1:40 PM	File folder	
 jimmu-for-builder	9/14/2023 1:40 PM	File folder	
 jimmu-layouts	9/14/2023 1:40 PM	File folder	
 jimmu-theme	9/14/2023 1:40 PM	File folder	
 jimmu-ui	9/14/2023 1:40 PM	File folder	
 themes	9/14/2023 1:40 PM	File folder	
 widgets	9/14/2023 1:40 PM	File folder	
 config.json	9/14/2023 1:25 PM	JSON File	203 KB
 index.js	9/4/2023 4:57 PM	JavaScript Source ...	41 KB
 service-worker-registration.js	9/14/2023 1:23 PM	JavaScript Source ...	1 KB

Examine the widgets folder:

C:\DAVID\PROJECTS\HistoricalAerials8\cdn\1\widgets\

It has both your Custom Widgets.

 arcgis	9/14/2023 1:40 PM	File folder	
 chunks	9/14/2023 1:40 PM	File folder	
 common	9/14/2023 1:40 PM	File folder	
 get-map-coordinates-class	9/14/2023 1:40 PM	File folder	
 get-map-coordinates-class2	9/14/2023 1:40 PM	File folder	
 layout	9/14/2023 1:40 PM	File folder	
 widgets-info.json	9/14/2023 12:29 PM	JSON File	176 KB

The only folder you are missing is the resources folder under:

C:\DAVID\PROJECTS\HistoricalAerials8\cdn\1

Copy the resources folder from:

C:\DAVID\EXB\EXB15\server\public\apps\7

 resources	9/14/2023 11:14 AM	File folder	
 config.json	9/14/2023 12:19 PM	JSON File	203 KB
 download-times.json	9/14/2023 1:26 PM	JSON File	1 KB
 info.json	9/14/2023 12:19 PM	JSON File	1 KB

To:

C:\DAVID\PROJECTS\HistoricalAerials8\cdn\1\

 arcgis-charts	9/14/2023 1:38 PM	File folder	
 assets	9/14/2023 1:38 PM	File folder	
 calcite-components	9/14/2023 1:40 PM	File folder	
 jimu-arcgis	9/14/2023 1:40 PM	File folder	
 jimu-core	9/14/2023 1:40 PM	File folder	
 jimu-for-builder	9/14/2023 1:40 PM	File folder	
 jimu-layouts	9/14/2023 1:40 PM	File folder	
 jimu-theme	9/14/2023 1:40 PM	File folder	
 jimu-ui	9/14/2023 1:40 PM	File folder	
 resources	9/14/2023 1:46 PM	File folder	
 themes	9/14/2023 1:40 PM	File folder	
 widgets	9/14/2023 1:40 PM	File folder	
 config.json	9/14/2023 1:25 PM	JSON File	203 KB
 index.js	9/4/2023 4:57 PM	JavaScript Source ...	41 KB
 service-worker-registration.js	9/14/2023 1:23 PM	JavaScript Source ...	1 KB

These are all the files and folders you need to deploy your web app.

Deploy to a Web Server

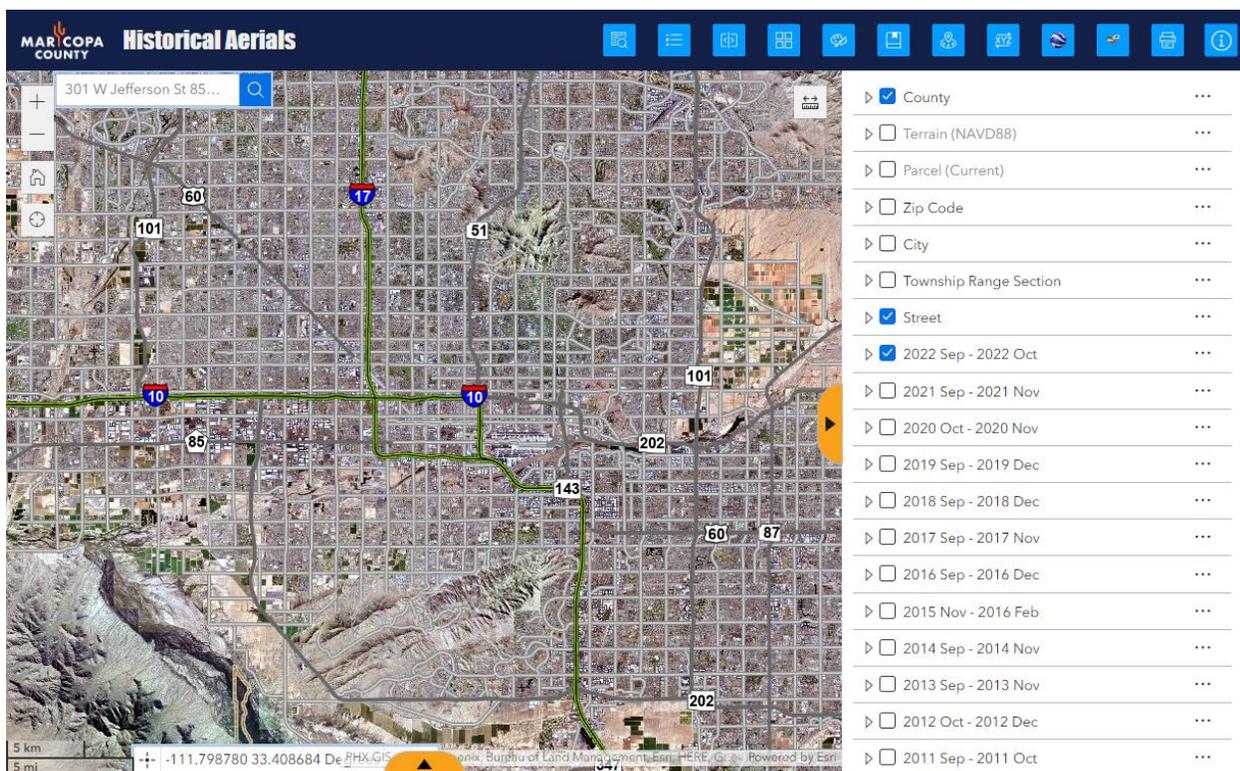
Move the HistoricalAerials8 folder to your Web Server.

C:\inetpub\wwwroot\maps\HistoricalAerials8\

cdn	9/14/2023 1:54 PM	File folder	
index.html	9/14/2023 1:23 PM	HTML Document	5 KB
service-worker.js	9/4/2023 4:52 PM	JavaScript File	10 KB
web.config	9/4/2023 4:57 PM	CONFIG File	2 KB

Launch your Web App:

<https://gisdevweb.maricopa.gov/maps/HistoricalAerials8/>



How to Publish a Website on GitHub Pages

If you do not have ready access to a Web Server, there is yet another way to test your website and verify if everything is working properly under different browsers and screen sizes.

You can publish your website to GitHub pages by creating a free account.

As an added bonus, the SSL Certificate for your website comes for free.

First, you must install Git on your PC.

Install Git on your PC

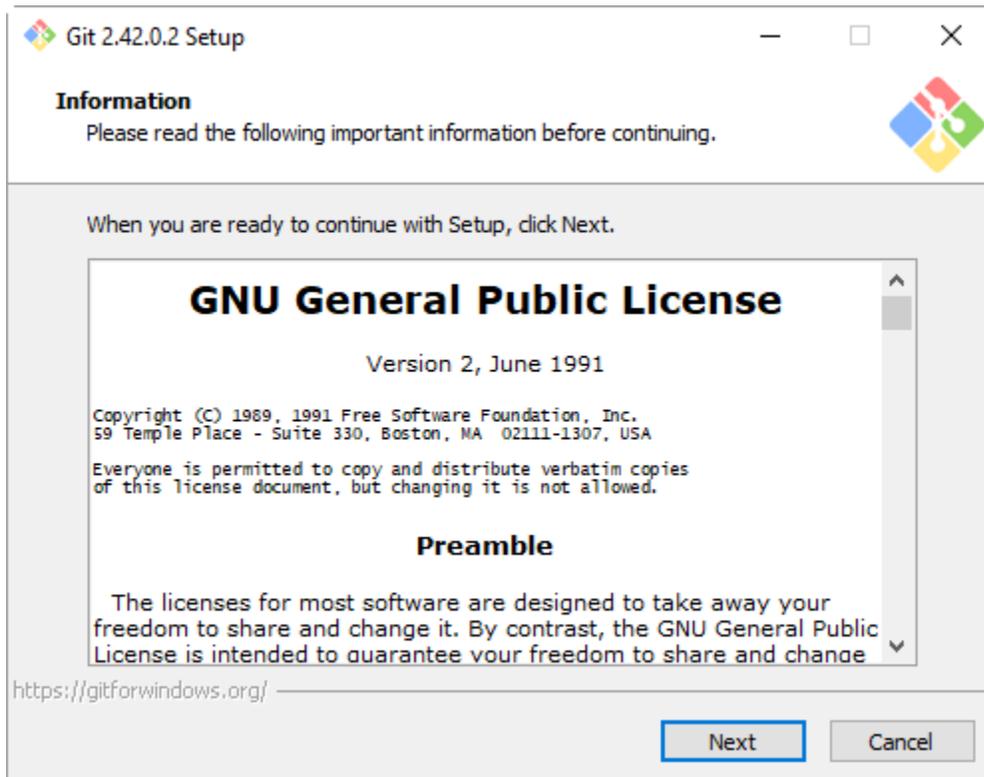
Important: Before you install Git, make sure you have Microsoft .NET Framework 4.8 installed. The Git Credential Manager needs Microsoft .NET Framework 4.76 or higher.

Download Git version 2.42 for Windows 64-bit:

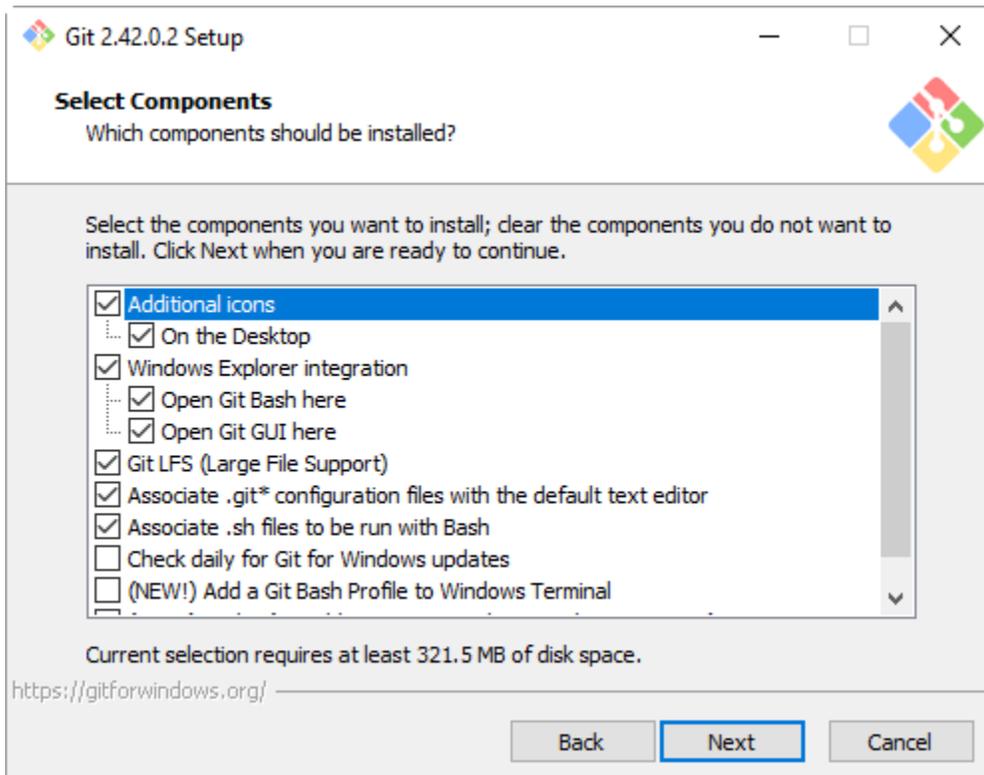
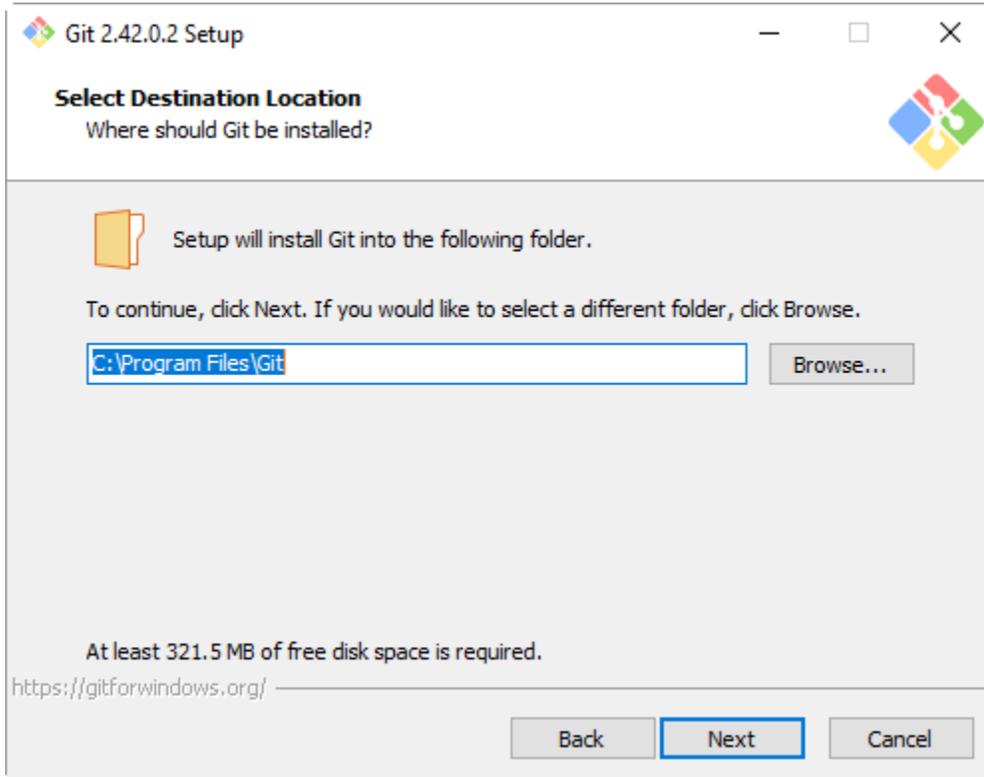
<https://github.com/git-for-windows/git/releases/download/v2.42.0.windows.2/Git-2.42.0.2-64-bit.exe>

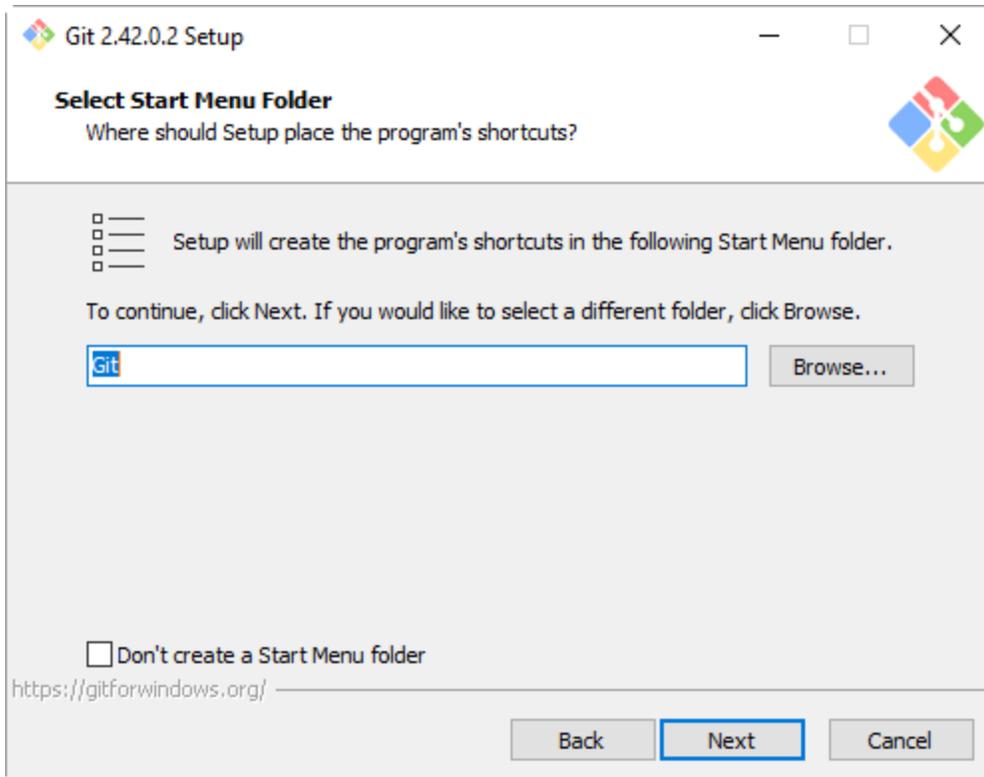
 Git-2.42.0.2-64-bit.exe	9/2/2023 1:09 PM	Application	59,829 KB
---	------------------	-------------	-----------

Install Git

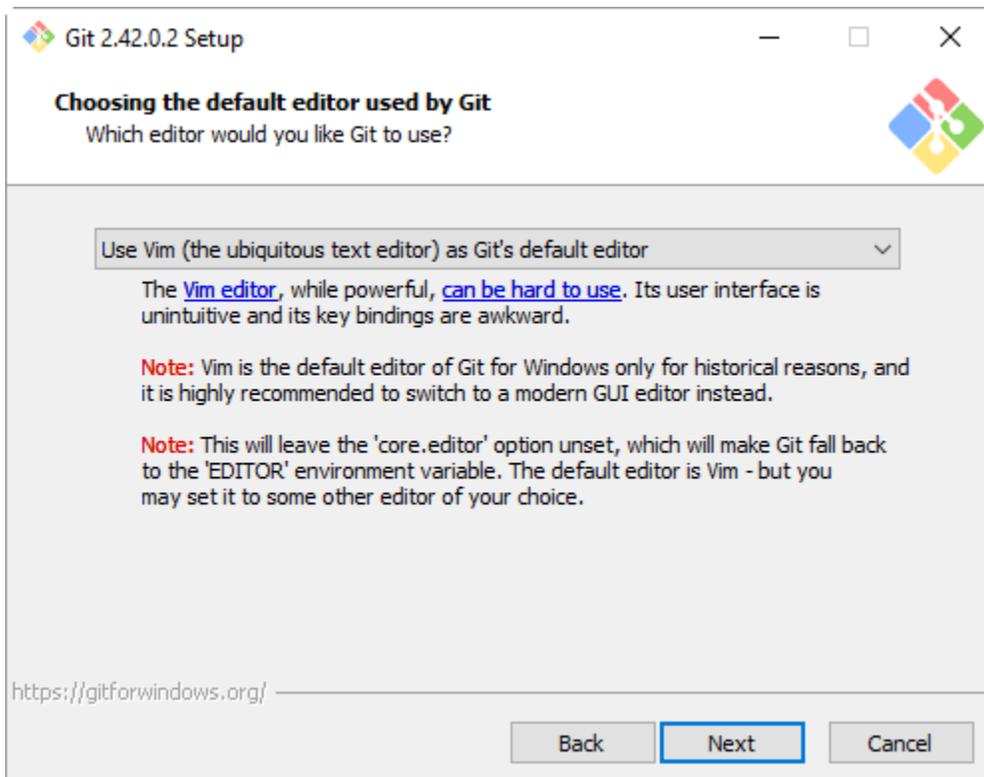


Install Folder = C:\Program Files\Git

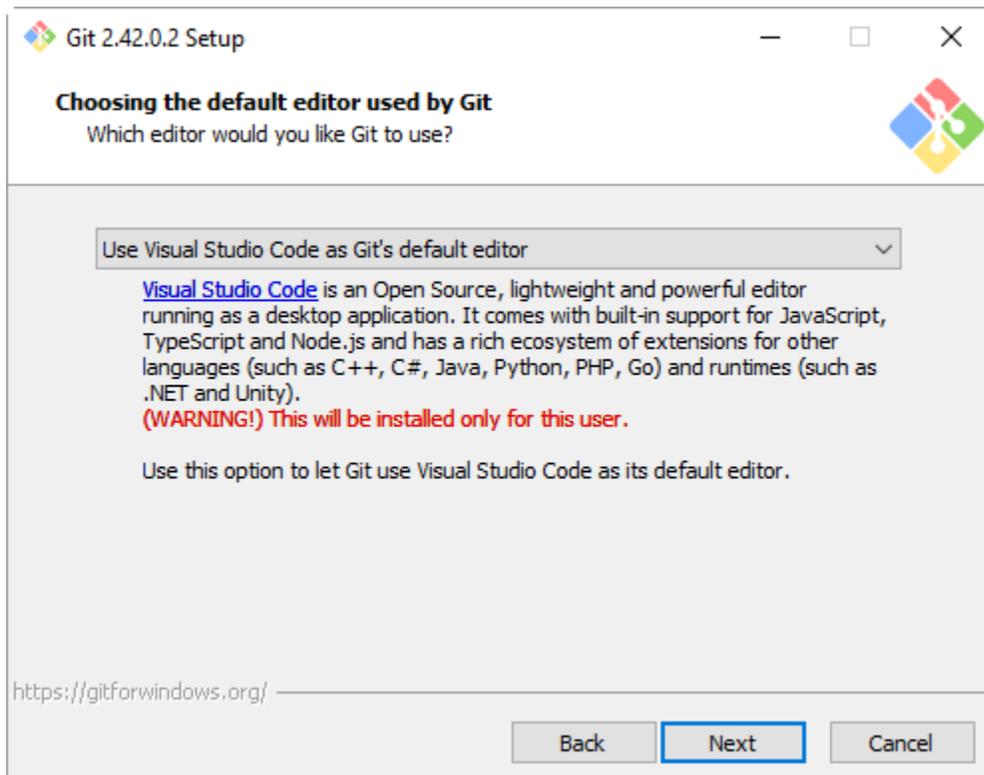
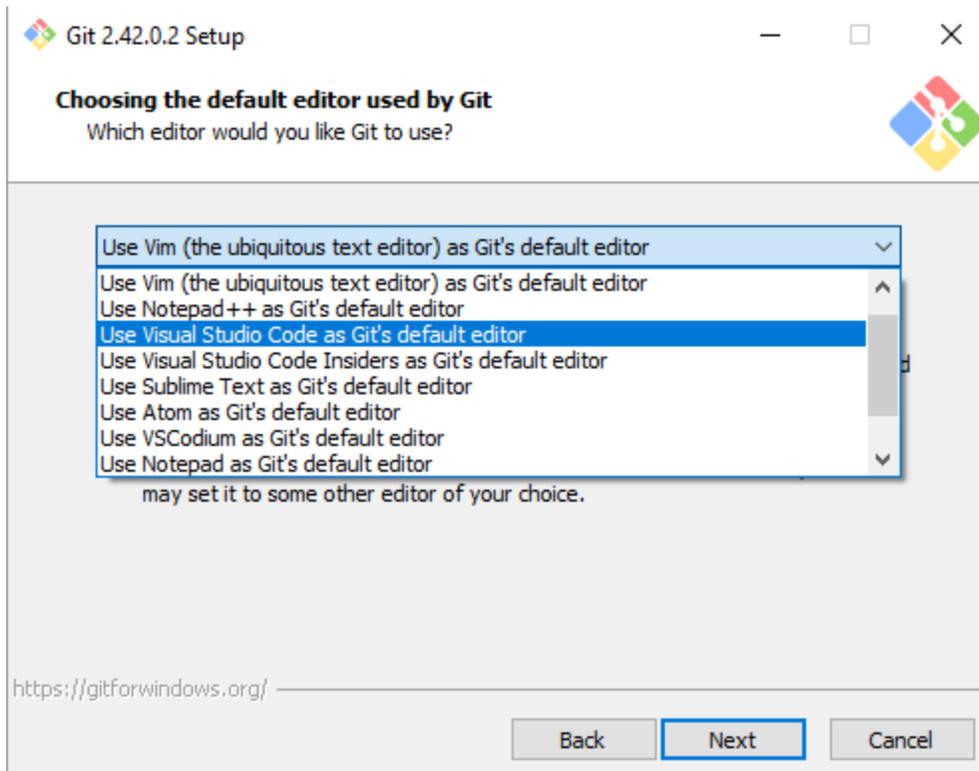


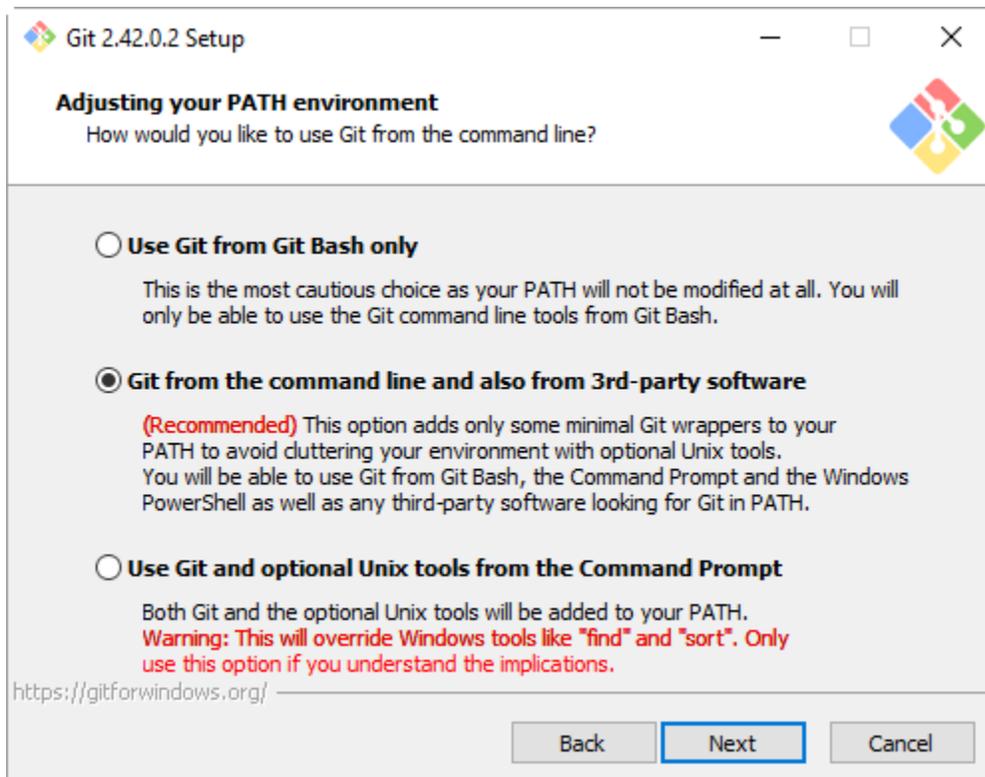
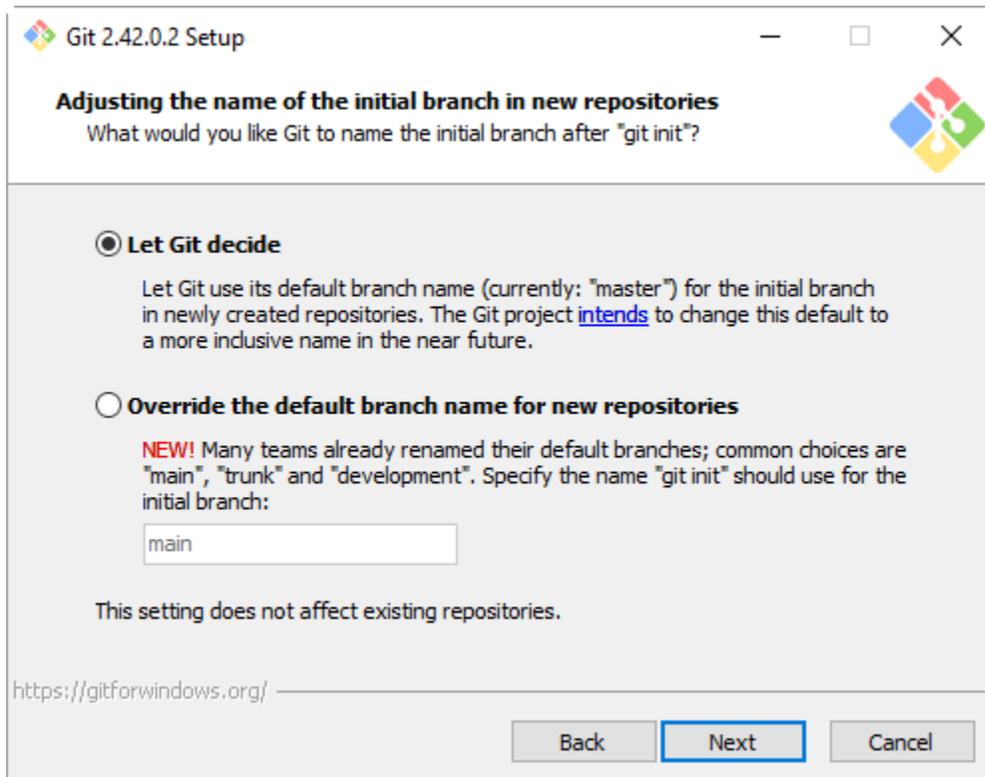


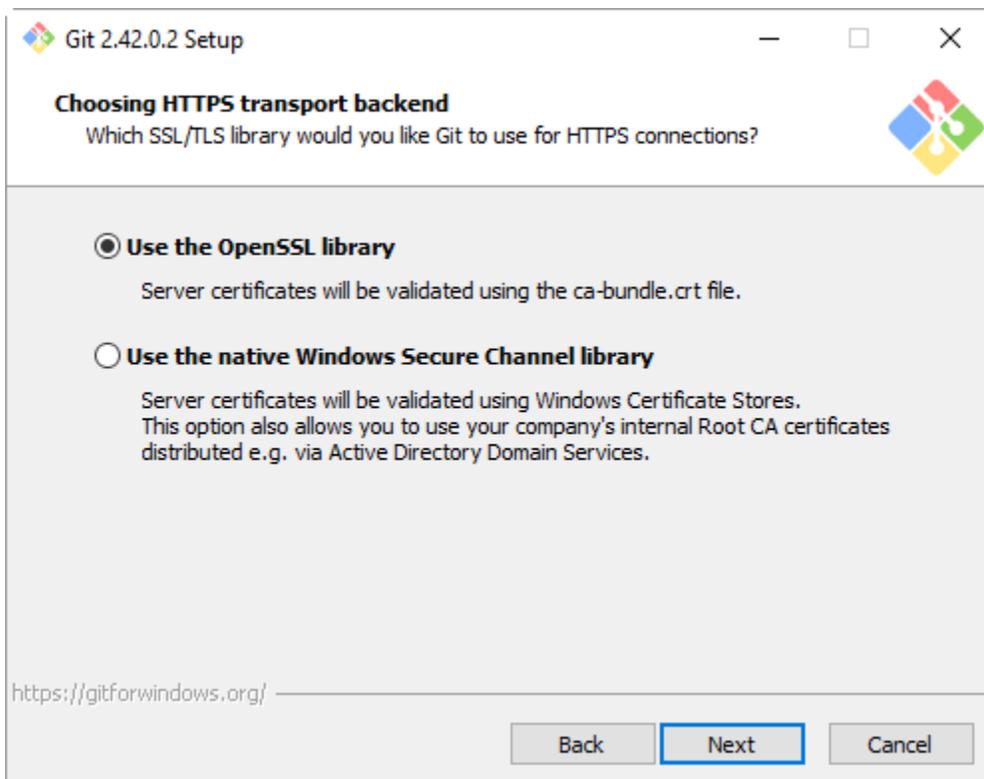
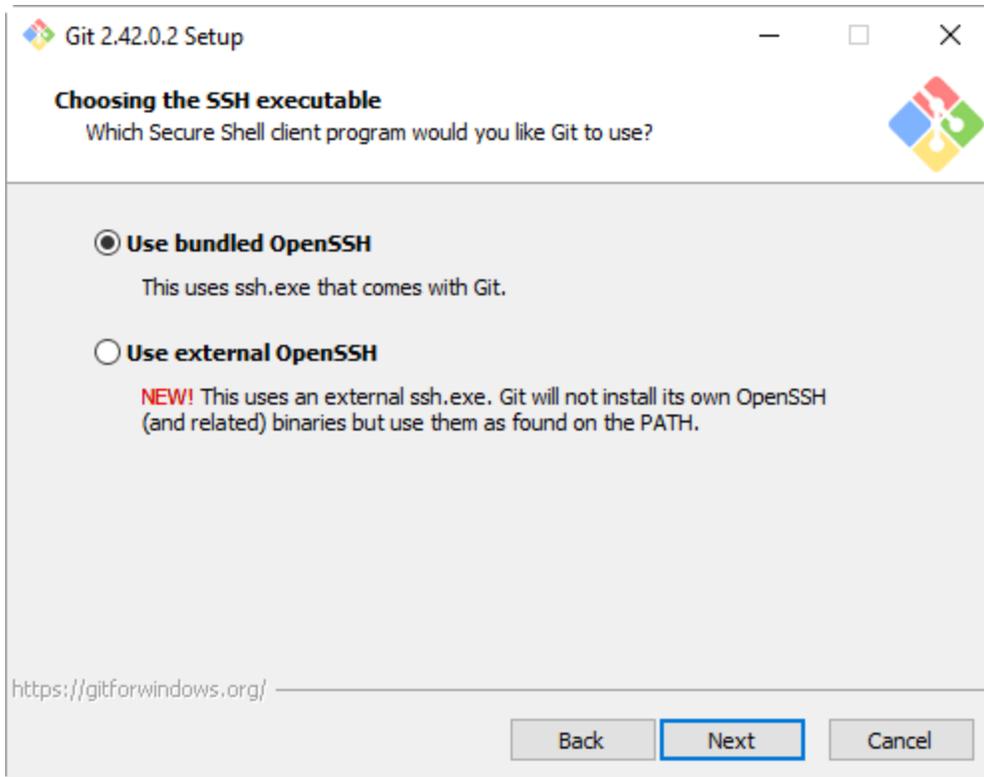
Note: Do not use the default Vim Editor!

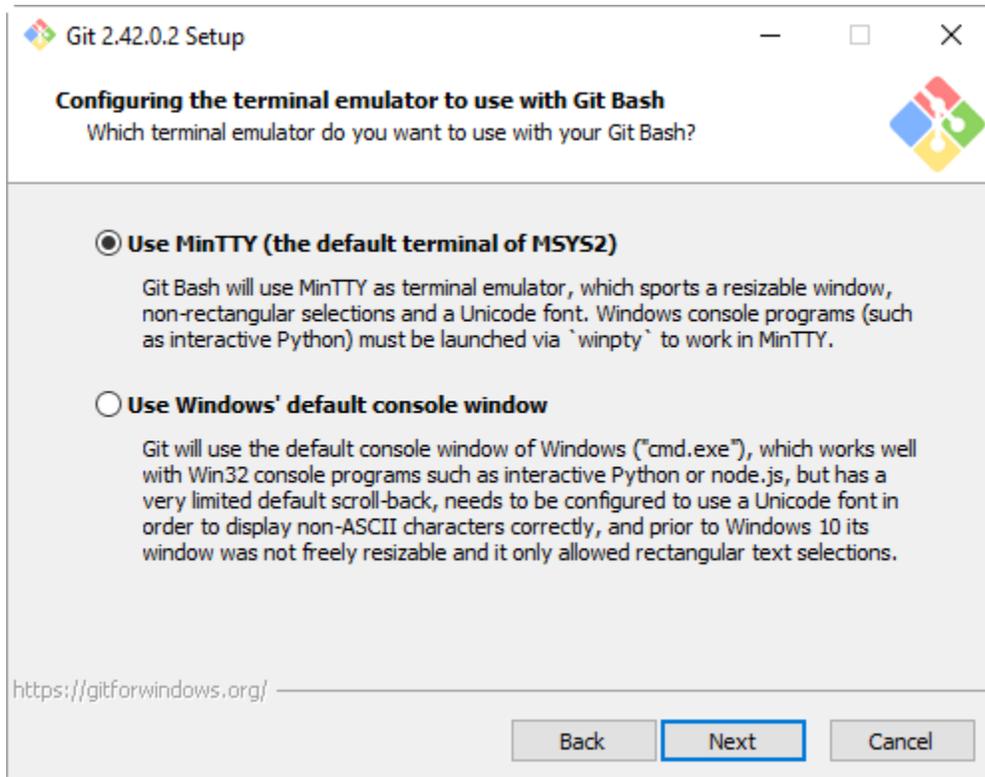
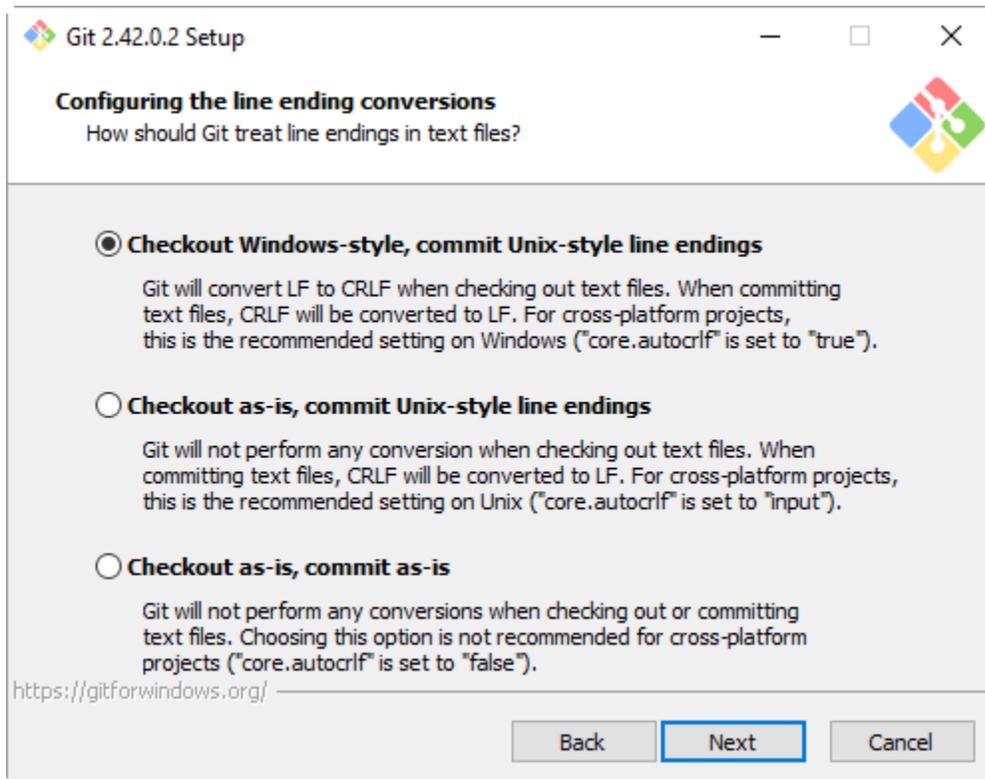


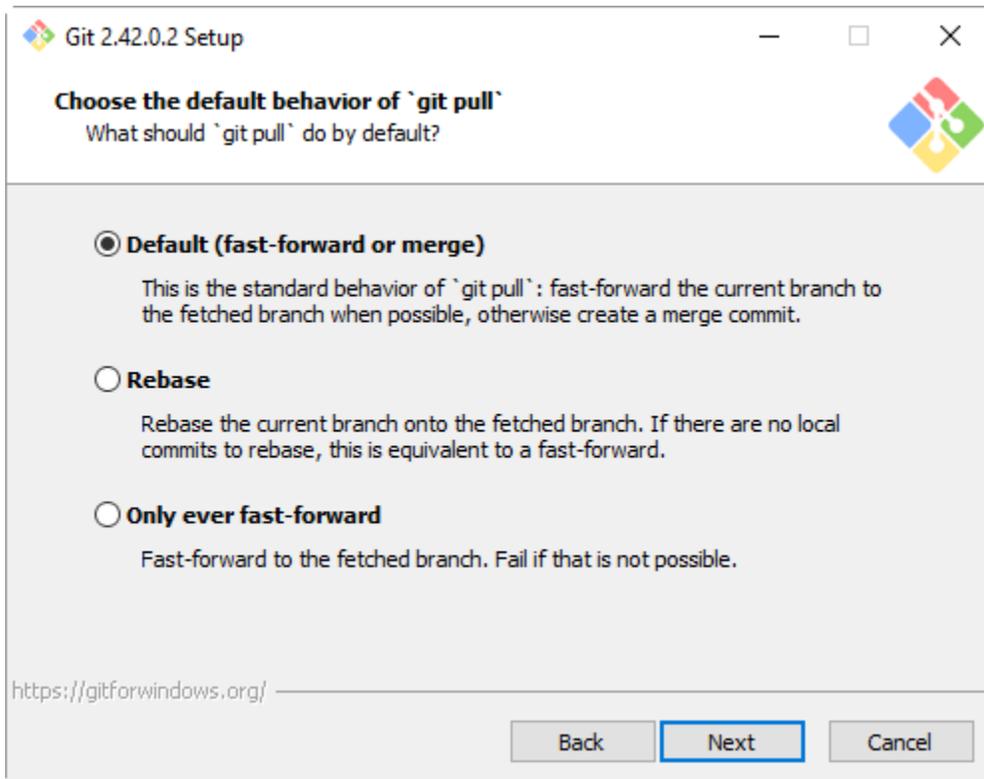
Use **Visual Studio Code** as Git's default editor.



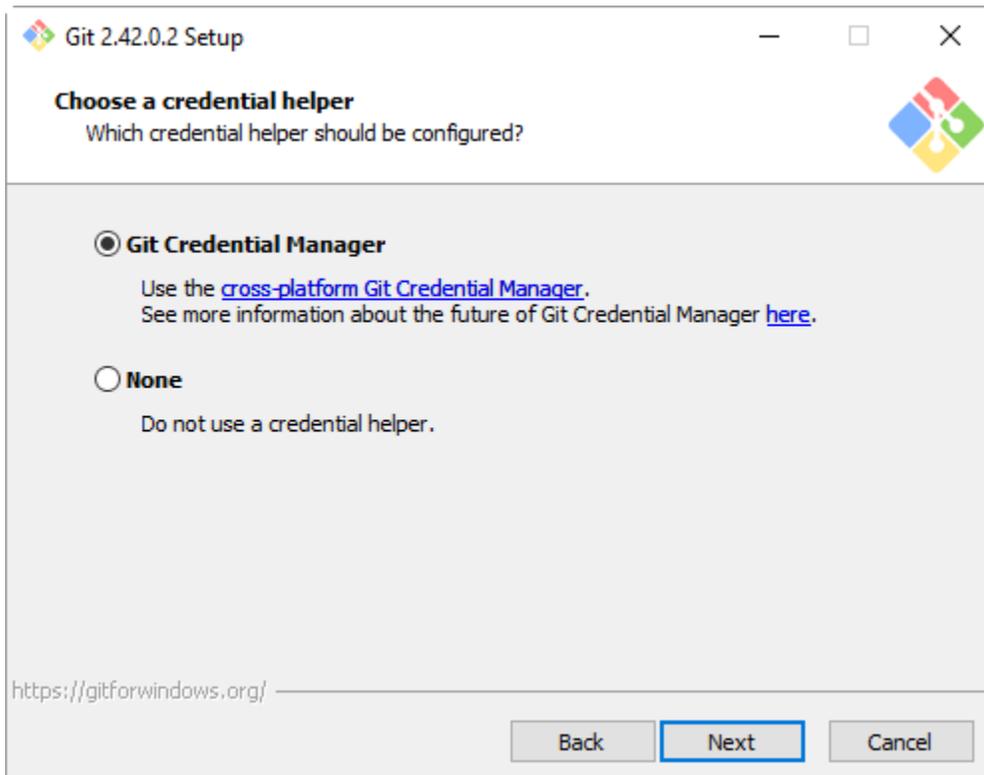


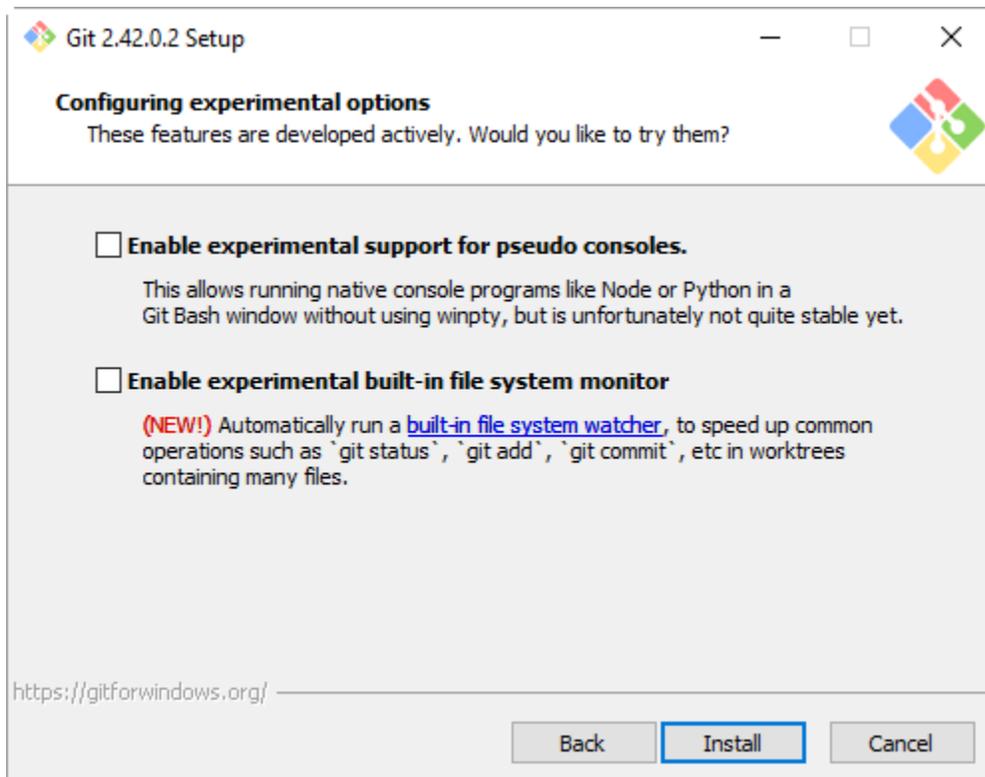
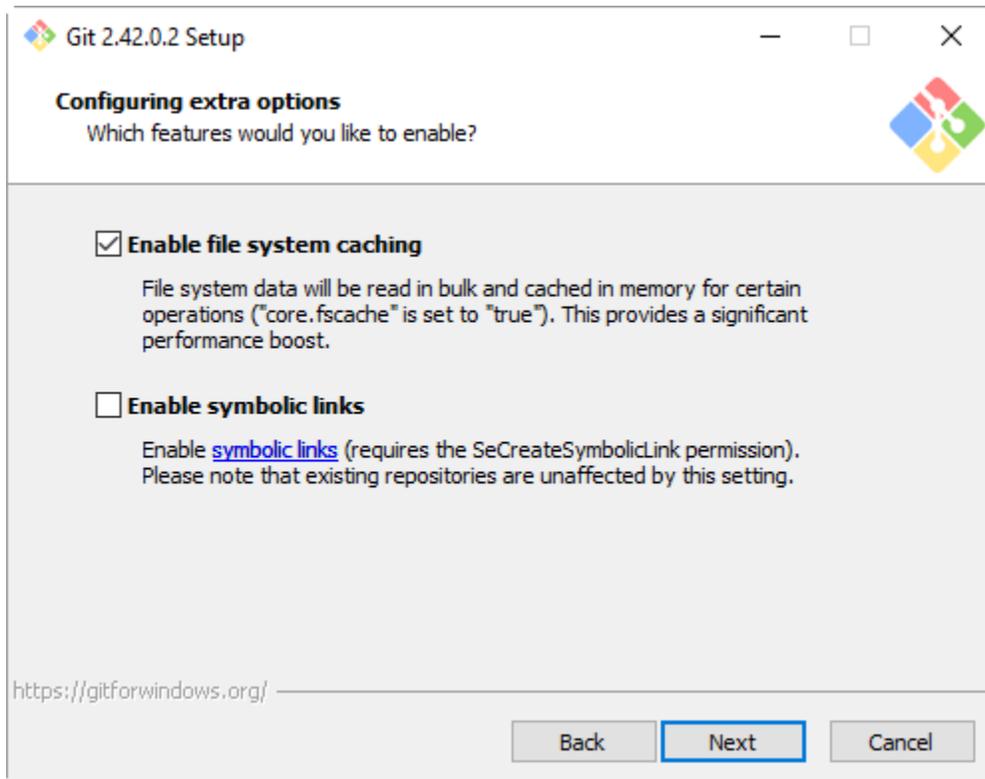


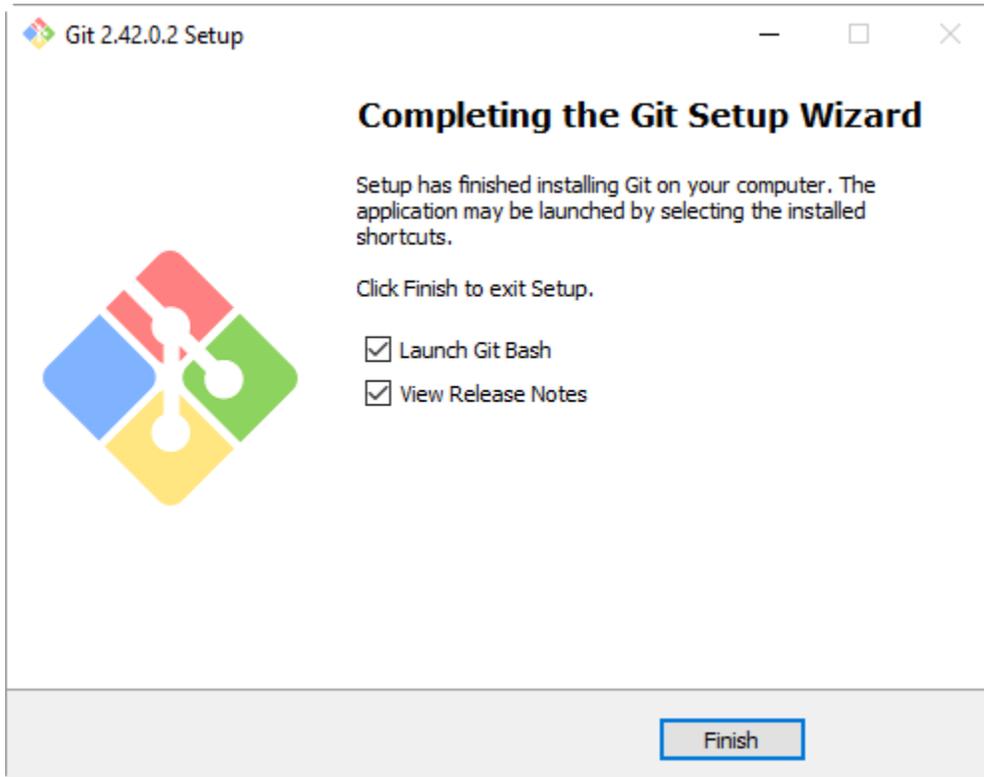




You must use the Git Credential Manager.







Create a Free Account on GitHub

<https://github.com/>

Sign Up

Product ▾ Solutions ▾ Open Source ▾ Pricing

Search or jump to... / Sign in Sign up

GitHub Universe: Dive in to AI, security, and DevEx
Get your tickets now to join us on Nov. 8-9.

Let's build from here

The AI-powered developer platform to build, scale,
and deliver secure software.

Email = david.das@maricopa.gov

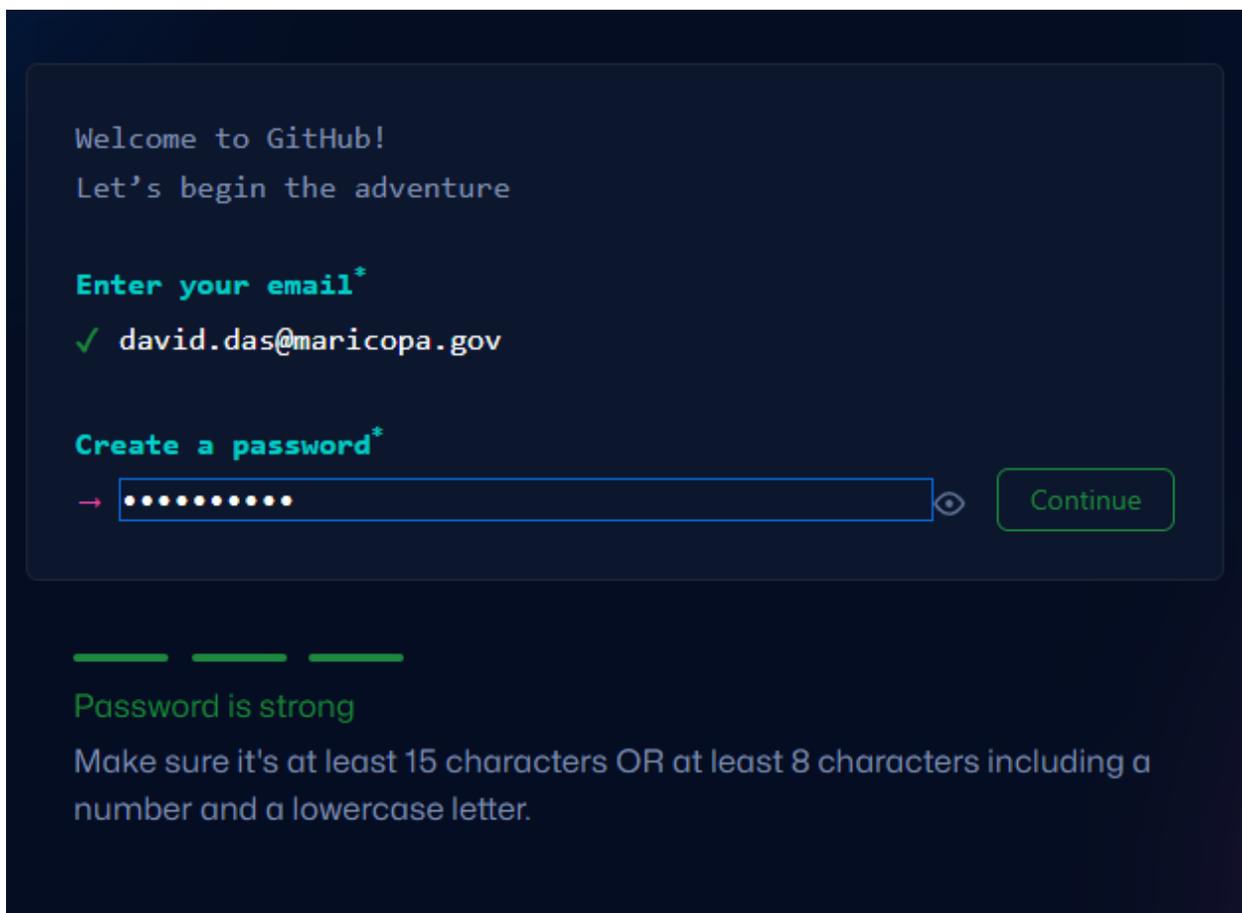


Welcome to GitHub!
Let's begin the adventure

Enter your email*

→

Password =



Welcome to GitHub!
Let's begin the adventure

Enter your email*

✓ david.das@maricopa.gov

Create a password*

→

Password is strong

Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter.

Enter a Username = **DavidDas2**

Note: Make this Username as short as possible. It will become a part of the path to your website.



Welcome to GitHub!
Let's begin the adventure

Enter your email*
✓ david.das@maricopa.gov

Create a password*
✓ ●●●●●●●●

Enter a username*
→ DavidDas2

[Continue](#)

DavidDas2 is available.

Welcome to GitHub!
Let's begin the adventure

Enter your email*

✓ david.das@maricopa.gov

Create a password*

✓ ●●●●●●●●

Enter a username*

✓ DavidDas2

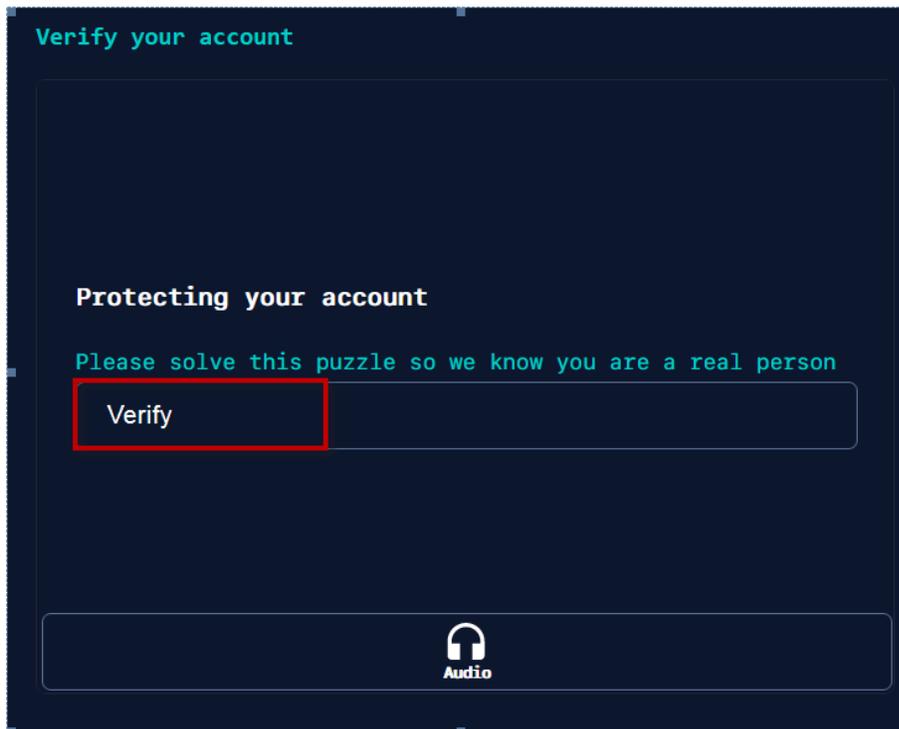
Would you like to receive product updates and announcements via email?

Type "y" for yes or "n" for no

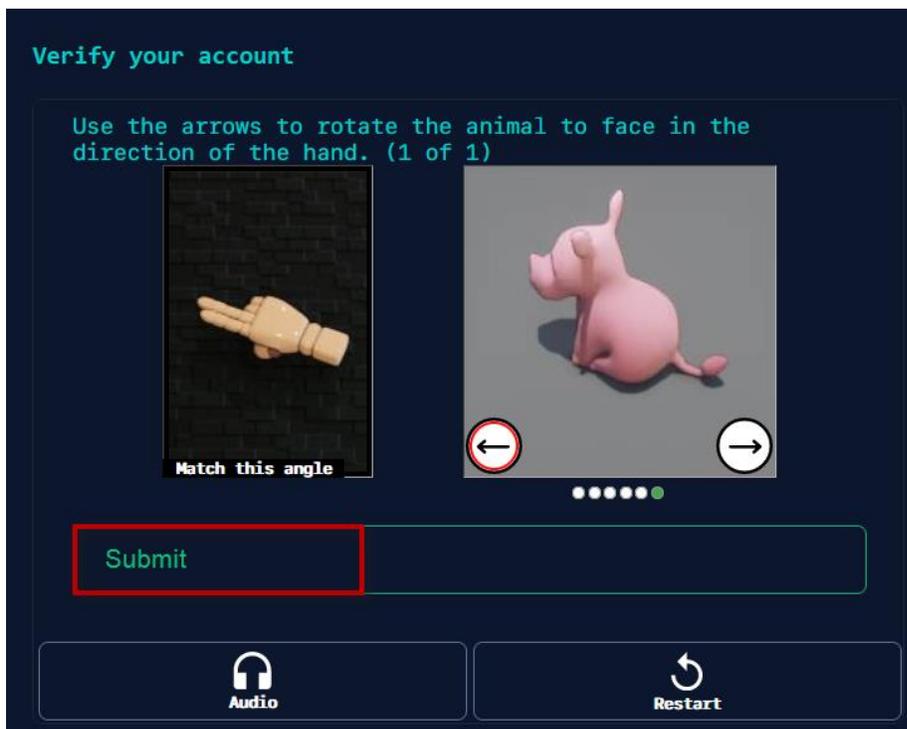
→ n

Continue

Verify your Account



Submit



The GitHub Launch Code will be emailed to you.

Here's your GitHub launch code, @DavidDas2!

Right-click or

Continue signing up for GitHub by entering the code below:

96496266

Open GitHub




Welcome to GitHub

We are glad you're here.

This will help us guide you to the tools that are best suited for your projects.

How many team members will be working with you?

Just me 2-5 5-10

10-20 20-50 50+

Are you a student or teacher?

N/A Student Teacher

Continue

Select the Free Option.

Free

- > Unlimited public/private repositories
- > 2,000 CI/CD minutes/month
Free for public repositories
- > 500MB of Packages storage
Free for public repositories
- > 120 core-hours of Codespaces compute
- > 15GB of Codespaces storage
- > Community support

Get additional student benefits

GitHub Pro

-  **Protect your branches**
Ensure that collaborators on your repository cannot make irrevocable changes to branches.
- > Draft pull requests
- > Pages and Wikis
- > 3,000 CI/CD minutes/month
Free for public repositories
- > 2GB of Packages storage
Free for public repositories
- > 180 core-hours of Codespaces compute
- > 20GB of Codespaces storage
- > Web-based support

GitHub Student Developer Pack

-  **Free access to the industry's best developer tools**
Hundreds of offers, including Digital Ocean, Microsoft Azure, Heroku, MongoDB, DataDog, Twilio, and Stripe.

GitHub Campus Expert training

-  **Enrich your college technical community**
Learn the skills to build diverse tech communities on campus with training, mentorship, and support from GitHub.

Continue for free

Apply for your GitHub student benefits

Select the Free Option

Create a new Public Repository

<https://github.com/dashboard>

Create a new Public Repository = **HistoricalAerials**

Check the Public option.

Start a new repository

A repository contains all of your project's files, revision history, and collaborator discussion.

DavidDas2 / **HistoricalAerials**

 **Public**
Anyone on the internet can see this repository

 **Private**
You choose who can see and commit to this repository

Create a new repository

Create a new repository.

<https://github.com/DavidDas2/HistoricalAerials>

DavidDas2 / HistoricalAerials

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

HistoricalAerials Public Pin Unwatch 1 Fork 0 Star 0

Set up GitHub Copilot
Use GitHub's AI pair programmer to autocomplete suggestions as you code.
Get started with GitHub Copilot

Add collaborators to this repository
Search for people using their GitHub username or email address.
Invite collaborators

Quick setup — if you've done this kind of thing before

Set up in Desktop or HTTPS SSH <https://github.com/DavidDas2/HistoricalAerials.git>

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# HistoricalAerials" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/DavidDas2/HistoricalAerials.git
git push -u origin main
```

Copy this command

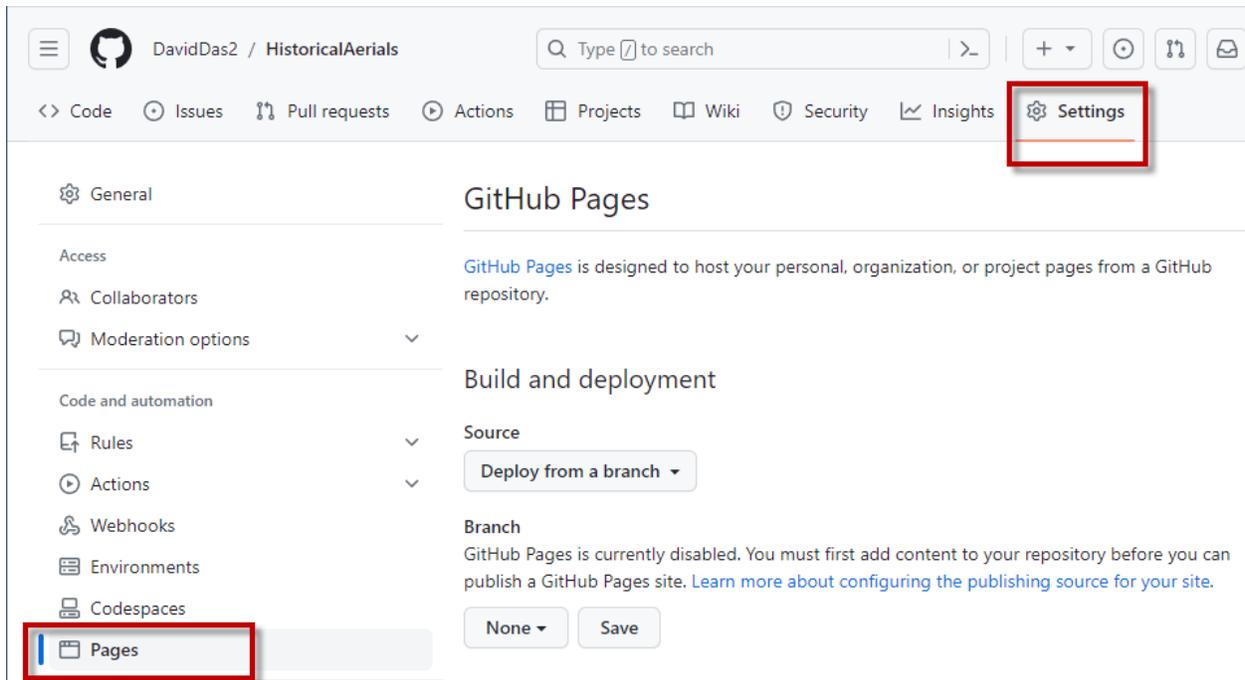
Make a note of this command:

```
git remote add origin https://github.com/DavidDas2/HistoricalAerials.git
```

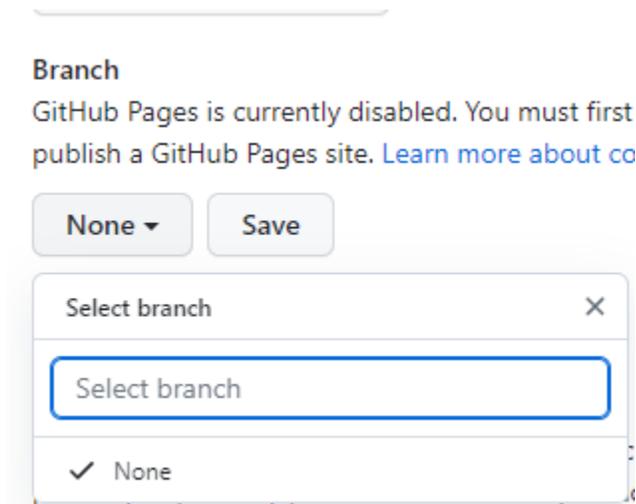
You will use this later.

Open Settings | Pages

<https://github.com/DavidDas2/HistoricalAerials/settings/pages>



At the moment, there is no content.



Expand Branch.

There are no branches at present.

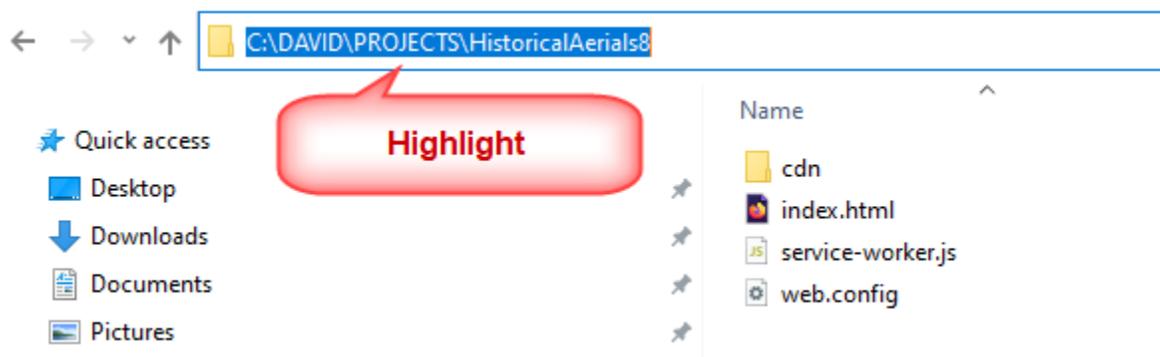
The master branch will show up here once you upload content.

This local folder on your PC contains all the necessary files for your website.

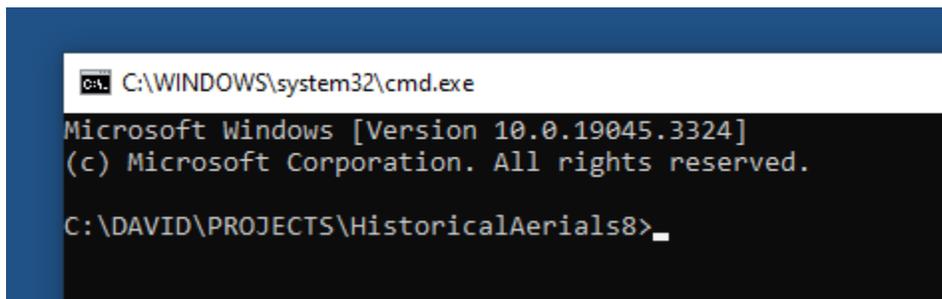
C:\DAVID\PROJECTS\HistoricalAerials8\

	cdn	9/14/2023 1:19 PM	File folder	
	index.html	9/14/2023 1:23 PM	Firefox HTML Doc...	5 KB
	service-worker.js	9/4/2023 4:52 PM	JavaScript Source ...	10 KB
	web.config	9/4/2023 4:57 PM	Configuration Sou...	2 KB

Highlight the folder path and type **cmd**

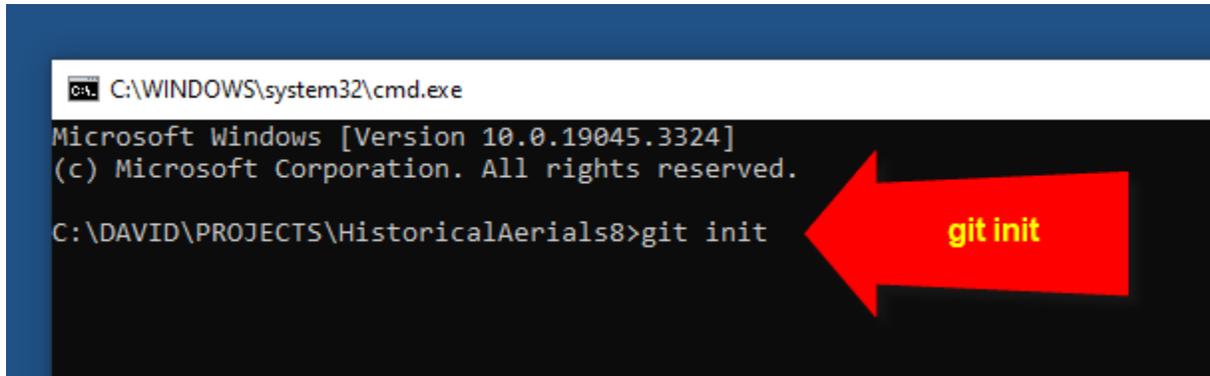


This opens a command window with the path set to C:\DAVID\PROJECTS\HistoricalAerials8



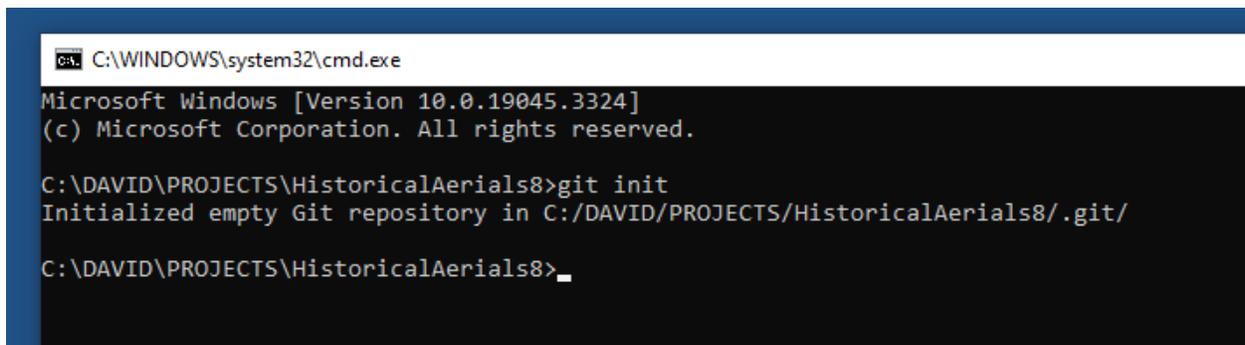
Enter the following 7 commands highlighted in green in the following order:

`git init`



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19045.3324]
(c) Microsoft Corporation. All rights reserved.

C:\DAVID\PROJECTS\HistoricalAerials8>git init
```



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19045.3324]
(c) Microsoft Corporation. All rights reserved.

C:\DAVID\PROJECTS\HistoricalAerials8>git init
Initialized empty Git repository in C:/DAVID/PROJECTS/HistoricalAerials8/.git/

C:\DAVID\PROJECTS\HistoricalAerials8>_
```

This creates the `.git` folder

C:\DAVID\PROJECTS\HistoricalAerials8\

 <code>.git</code>	9/14/2023 3:34 PM	File folder	
 <code>cdn</code>	9/14/2023 1:19 PM	File folder	
 <code>index.html</code>	9/14/2023 1:23 PM	Firefox HTML Doc...	5 KB
 <code>service-worker.js</code>	9/4/2023 4:52 PM	JavaScript Source ...	10 KB
 <code>web.config</code>	9/4/2023 4:57 PM	Configuration Sou...	2 KB

```
git add -A
```

Be patient! It may take a while to add all the files.

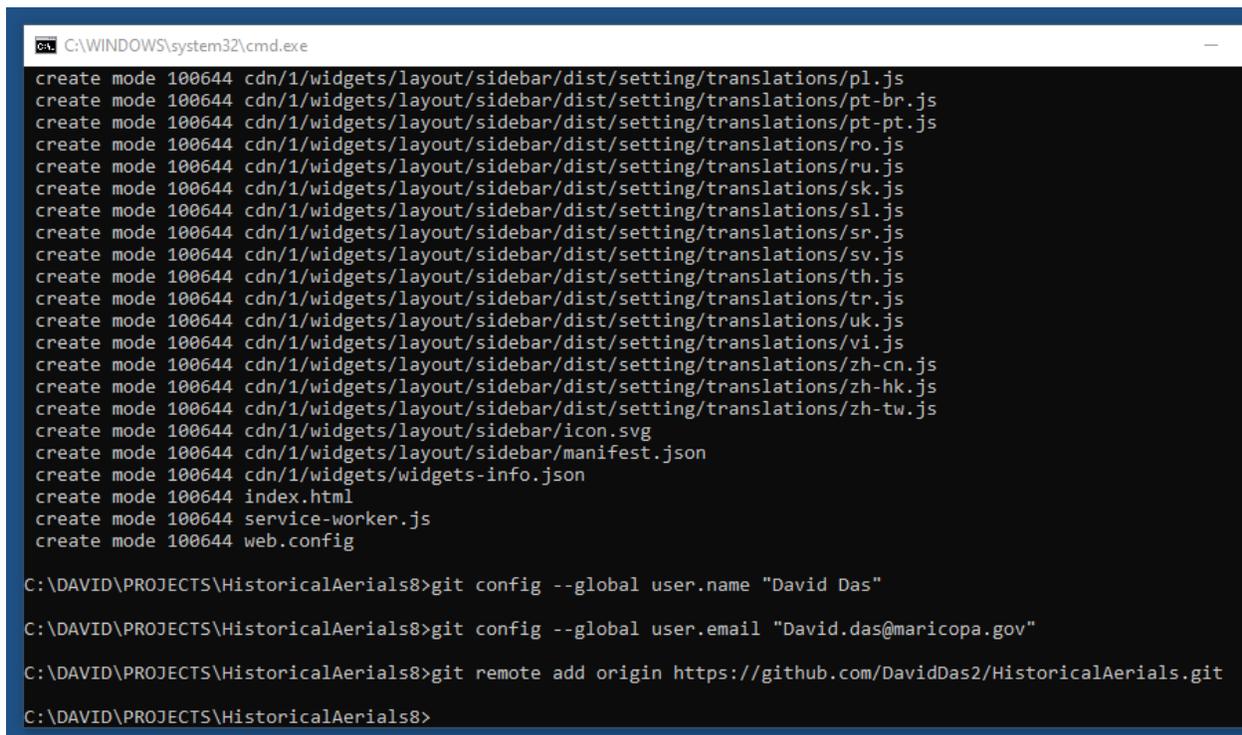
```
git commit -m "Initial Commit"
```

```
git config --global user.name "David Das"
```

```
git config --global user.email "David.das@maricopa.gov"
```

```
git remote add origin https://github.com/DavidDas2/HistoricalAerials.git
```

Note: You had copied this command earlier.



```
C:\WINDOWS\system32\cmd.exe
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/pl.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/pt-br.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/pt-pt.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/ro.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/ru.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/sk.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/sl.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/sr.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/sv.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/th.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/tr.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/uk.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/vi.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/zh-cn.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/zh-hk.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/zh-tw.js
create mode 100644 cdn/1/widgets/layout/sidebar/icon.svg
create mode 100644 cdn/1/widgets/layout/sidebar/manifest.json
create mode 100644 cdn/1/widgets/widgets-info.json
create mode 100644 index.html
create mode 100644 service-worker.js
create mode 100644 web.config

C:\DAVID\PROJECTS\HistoricalAerials8>git config --global user.name "David Das"

C:\DAVID\PROJECTS\HistoricalAerials8>git config --global user.email "David.das@maricopa.gov"

C:\DAVID\PROJECTS\HistoricalAerials8>git remote add origin https://github.com/DavidDas2/HistoricalAerials.git

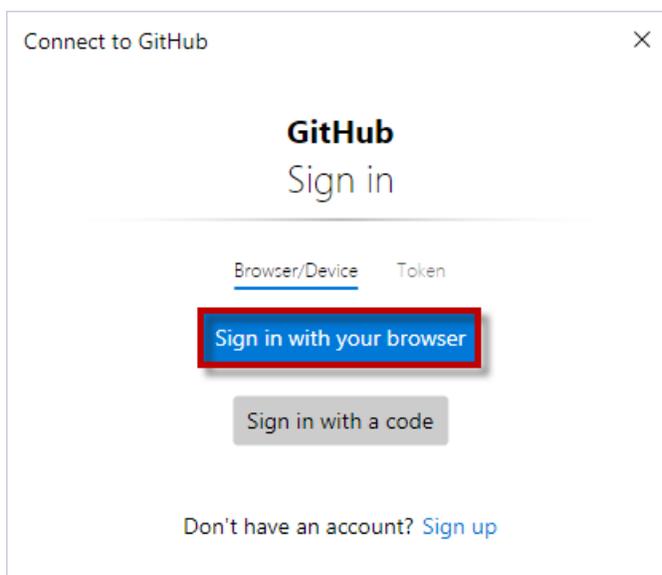
C:\DAVID\PROJECTS\HistoricalAerials8>
```

`git push origin master`

```
C:\WINDOWS\system32\cmd.exe
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/pl.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/pt-br.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/pt-pt.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/ro.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/ru.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/sk.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/sl.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/sr.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/sv.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/th.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/tr.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/uk.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/vi.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/zh-cn.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/zh-hk.js
create mode 100644 cdn/1/widgets/layout/sidebar/dist/setting/translations/zh-tw.js
create mode 100644 cdn/1/widgets/layout/sidebar/icon.svg
create mode 100644 cdn/1/widgets/layout/sidebar/manifest.json
create mode 100644 cdn/1/widgets/widgets-info.json
create mode 100644 index.html
create mode 100644 service-worker.js
create mode 100644 web.config

C:\DAVID\PROJECTS\HistoricalAerials8>git config --global user.name "David Das"
C:\DAVID\PROJECTS\HistoricalAerials8>git config --global user.email "David.das@maricopa.gov"
C:\DAVID\PROJECTS\HistoricalAerials8>git remote add origin https://github.com/DavidDas2/HistoricalAerials.git
C:\DAVID\PROJECTS\HistoricalAerials8>git push origin master
```

Note: The very first time you enter this command, the Git Credential Manager will ask you to enter your Username and Password to your GitHub Account.





Sign in to **GitHub**
to continue to **Git Credential Manager**

Username or email address

Password [Forgot password?](#)

Sign in

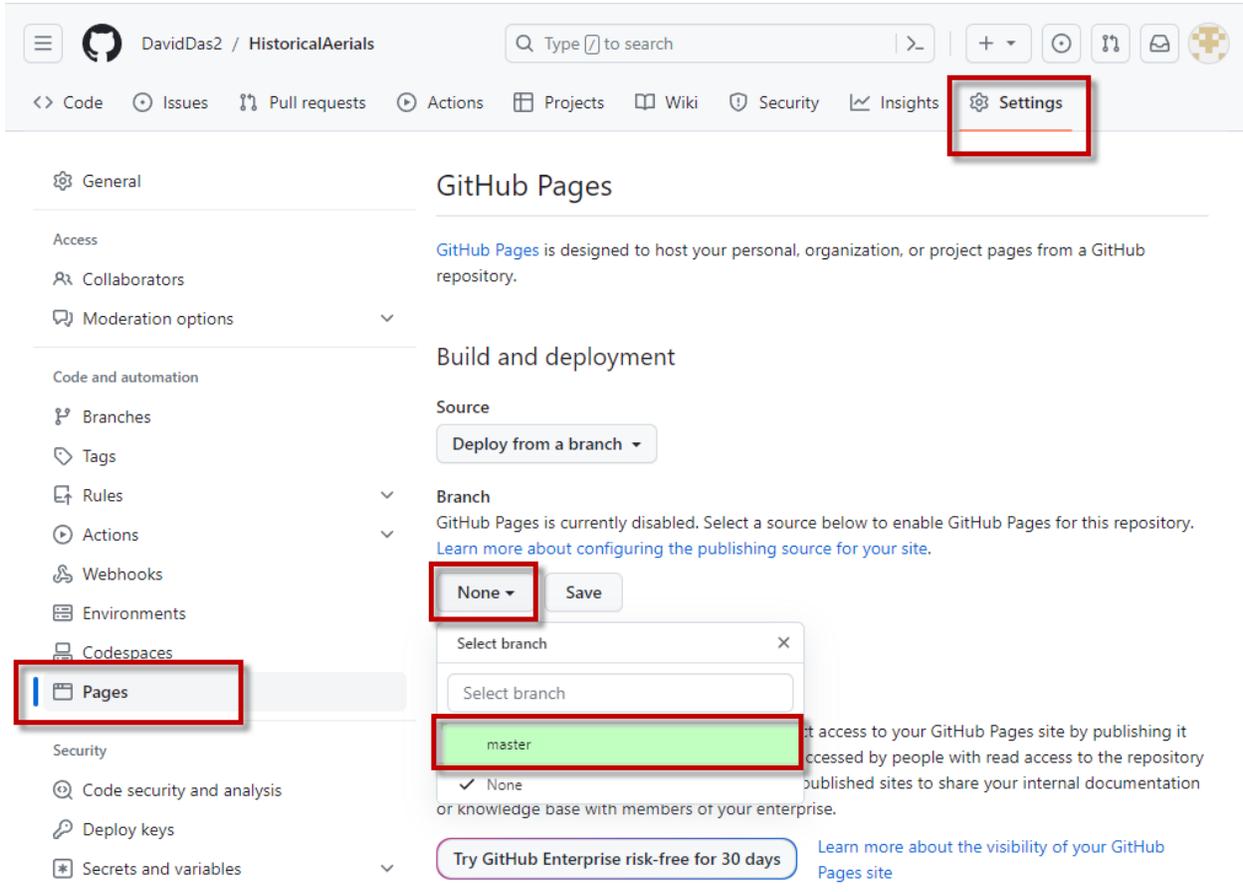
Once the Git Credential Manager is successful in verifying your credentials, you will not be challenged again on this device.

```
C:\DAVID\PROJECTS\HistoricalAerials8>git config --global user.name "David Das"
C:\DAVID\PROJECTS\HistoricalAerials8>git config --global user.email "David.das@maricopa.gov"
C:\DAVID\PROJECTS\HistoricalAerials8>git remote add origin https://github.com/DavidDas2/HistoricalAerials.git
C:\DAVID\PROJECTS\HistoricalAerials8>git push origin master
Enumerating objects: 7403, done.
Counting objects: 100% (7403/7403), done.
Delta compression using up to 20 threads
Compressing objects: 100% (6365/6365), done.
Writing objects: 100% (7403/7403), 13.56 MiB | 4.08 MiB/s, done.
Total 7403 (delta 467), reused 7403 (delta 467), pack-reused 0
remote: Resolving deltas: 100% (467/467), done.
To https://github.com/DavidDas2/HistoricalAerials.git
 * [new branch]      master -> master
C:\DAVID\PROJECTS\HistoricalAerials8>
```

The master branch has been created.

<https://github.com/DavidDas2/HistoricalAerials>

Open Settings | Pages



Expand Branch.

Notice, now you have a master branch.

Select **master**.

<https://github.com/DavidDas2/HistoricalAerials/settings/pages>

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Build and deployment

Source

Deploy from a branch ▾

Branch

GitHub Pages is currently disabled. Select a source below to enable GitHub Pages for this repository.

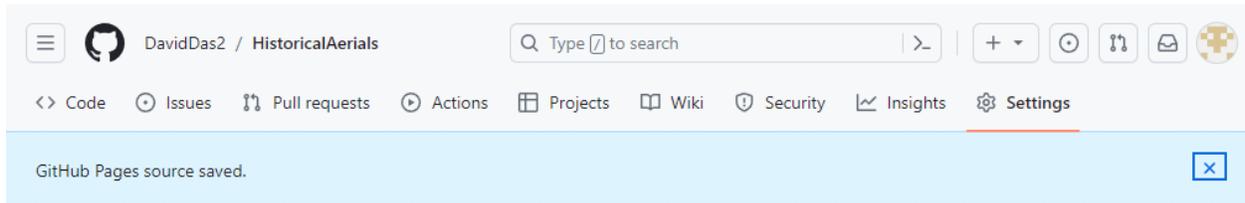
[Learn more about configuring the publishing source for your site.](#)

🔑 master ▾

📁 / (root) ▾

Save

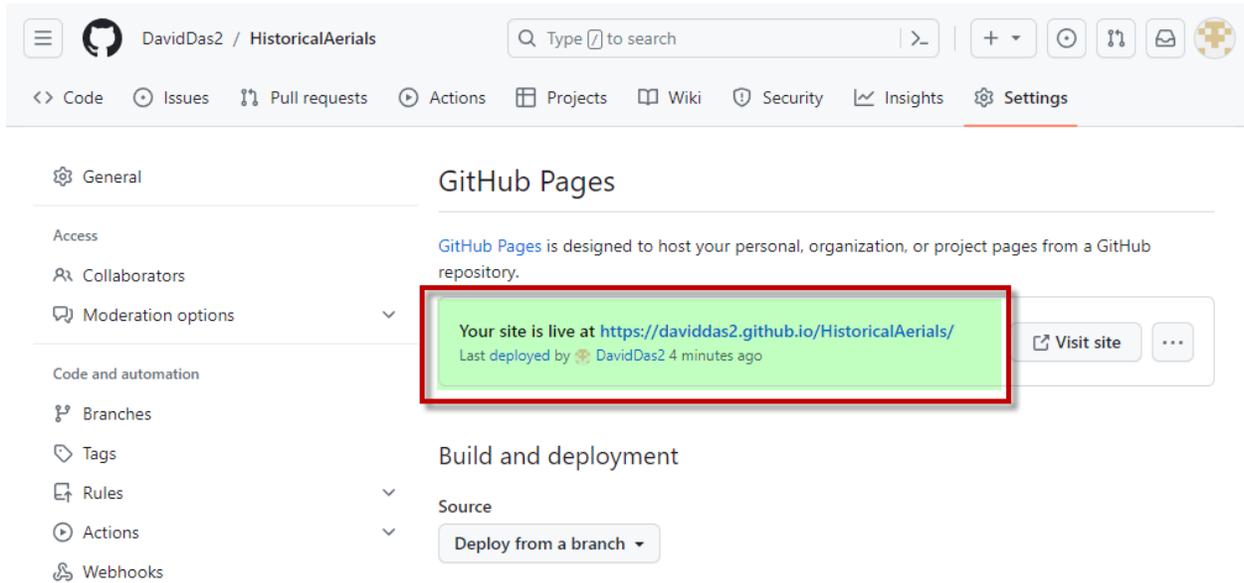
Save



Refresh this page.

After about 10 minutes, your site will go live.

<https://github.com/DavidDas2/HistoricalAerials/settings/pages>

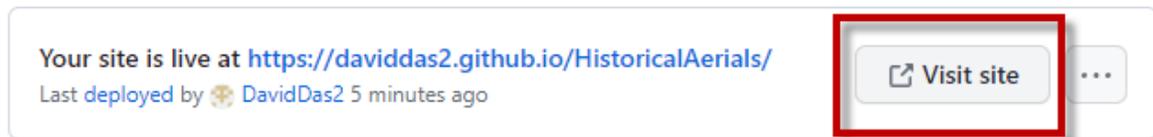


The screenshot shows the GitHub Pages settings page for the repository 'DavidDas2 / HistoricalAerials'. The 'General' tab is selected. A green notification box is highlighted with a red border, containing the text: 'Your site is live at <https://daviddas2.github.io/HistoricalAerials/> Last deployed by  DavidDas2 4 minutes ago'. To the right of the notification is a 'Visit site' button and a three-dot menu icon. Below the notification, the 'Build and deployment' section is visible, with a 'Source' dropdown menu set to 'Deploy from a branch'.

Visit Site

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

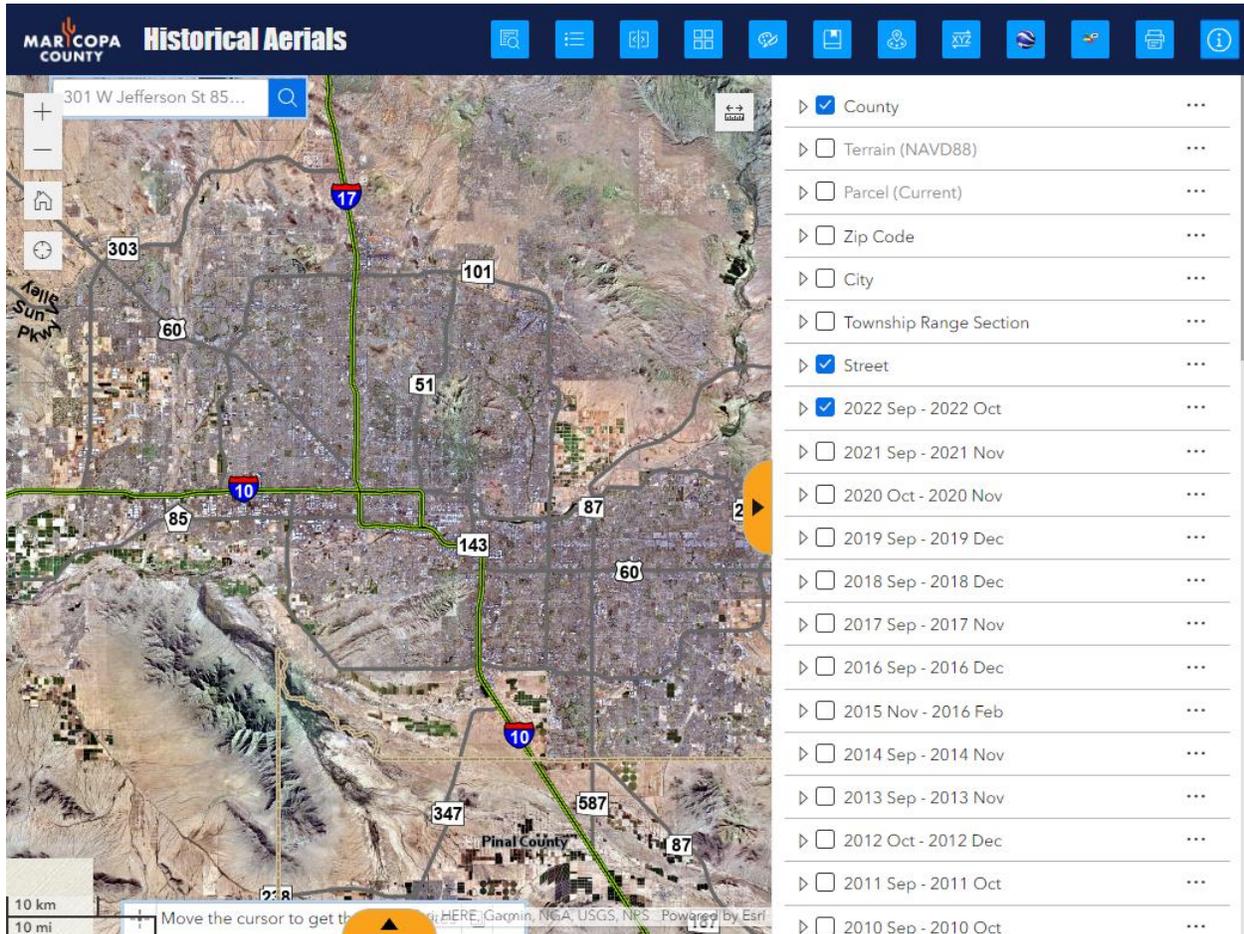


This is a close-up of the notification box from the previous screenshot. The text reads: 'Your site is live at <https://daviddas2.github.io/HistoricalAerials/> Last deployed by  DavidDas2 5 minutes ago'. The 'Visit site' button is highlighted with a red border.

This is your website deployed on GitHub Pages.

Notice the https in the URL. You get to enjoy a free SSL certificate.

<https://daviddas2.github.io/HistoricalAerials/>



You can open this link on your Tablet or Smartphone and test to see if your web app works for all devices and web browsers in portrait and landscape mode.

Making changes to your code

Examine your HistoricalAerials8 folder:

C:\DAVID\PROJECTS\HistoricalAerials8\

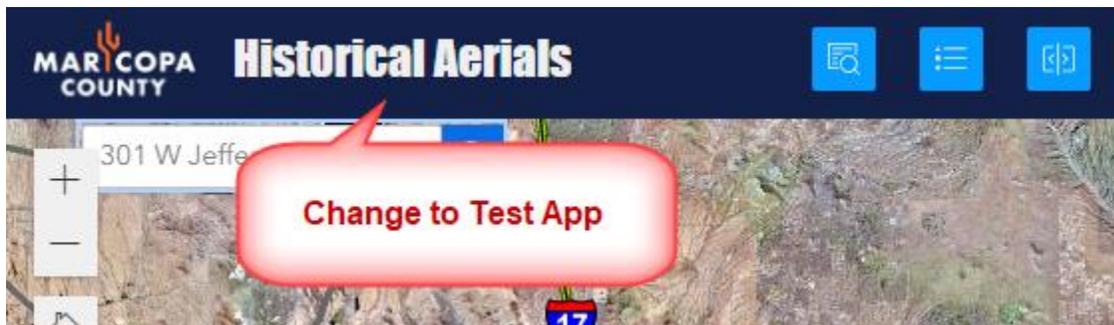
Notice the **.git** folder that was created.

All the files and folders are under Git control.

Any changes that you make to a file or folder are being tracked.

 .git	9/14/2023 3:38 PM	File folder	
 cdn	9/14/2023 1:19 PM	File folder	
 index.html	9/14/2023 1:23 PM	Firefox HTML Doc...	5 KB
 service-worker.js	9/4/2023 4:52 PM	JavaScript Source ...	10 KB
 web.config	9/4/2023 4:57 PM	Configuration Sou...	2 KB

Let's say you want to change the Title from Historical Aerials to **Test App**.



Edit the config.json file under:

C:\DAVID\PROJECTS\HistoricalAerials8\cdn\1\

 arcgis-charts	9/14/2023 1:38 PM	File folder	
 assets	9/14/2023 1:38 PM	File folder	
 calcite-components	9/14/2023 1:40 PM	File folder	
 jimui-arcgis	9/14/2023 1:40 PM	File folder	
 jimui-core	9/14/2023 1:40 PM	File folder	
 jimui-for-builder	9/14/2023 1:40 PM	File folder	
 jimui-layouts	9/14/2023 1:40 PM	File folder	
 jimui-theme	9/14/2023 1:40 PM	File folder	
 jimui-ui	9/14/2023 1:40 PM	File folder	
 resources	9/14/2023 1:46 PM	File folder	
 themes	9/14/2023 1:40 PM	File folder	
 widgets	9/14/2023 1:40 PM	File folder	
 config.json	9/14/2023 1:25 PM	JSON File	203 KB
 index.js	9/4/2023 4:57 PM	JavaScript Source ...	41 KB
 service-worker-registration.js	9/14/2023 1:23 PM	JavaScript Source ...	1 KB

Search for the string "Historical Aerials"

```
config.json
1719 },
1720 "widget_3": {
1721   "id": "widget_3",
1722   "uri": "widgets/common/text/",
1723   "config": {
1724     "text": "<p><span style=\"color: var(--light); font-size: 24px;
           font-family: Impact;\">Historical Aerials</span></p>",
1725     "style": {
1726       "verticalAlign": "center",
1727       "wrap": true,
1728       "overflow": "scroll",
1729       "padding": "p-1"
1730     }
1731   },
1732   "version": "1.12.0",
1733   "label": "Title"
1734 },
```



Replace with "Test App"

```
config.json
1719 },
1720 "widget_3": {
1721   "id": "widget_3",
1722   "uri": "widgets/common/text/",
1723   "config": {
1724     "text": "<p><span style=\"color: var(--light); font-size: 24px;
           font-family: Impact;\">Test App</span></p>",
1725     "style": {
1726       "verticalAlign": "center",
1727       "wrap": true,
1728       "overflow": "scroll",
1729       "padding": "p-1"
1730     }
1731   },
1732   "version": "1.12.0",
1733   "label": "Title"
1734 },
```



Save your edits.

To push these changes to your remote website, enter these 3 commands highlighted in green.

Enter:

```
git add -A
```

Enter:

```
git commit -m "Changed Title to Test App"
```

```
1 file changed, 1 insertion(+), 1 deletion(-)
C:\DAVID\PROJECTS\HistoricalAerials8>_
```

Notice, Git recognizes that 1 file was changed.

It is always a good practice to add a short message indicated by the `-m` flag.

In this example, the message is “Changed Title to Test App.”

This allows anyone to follow the changes while going through the history of commits.

<https://www.freecodecamp.org/news/how-to-write-better-git-commit-messages>

Enter:

```
git push origin master
```

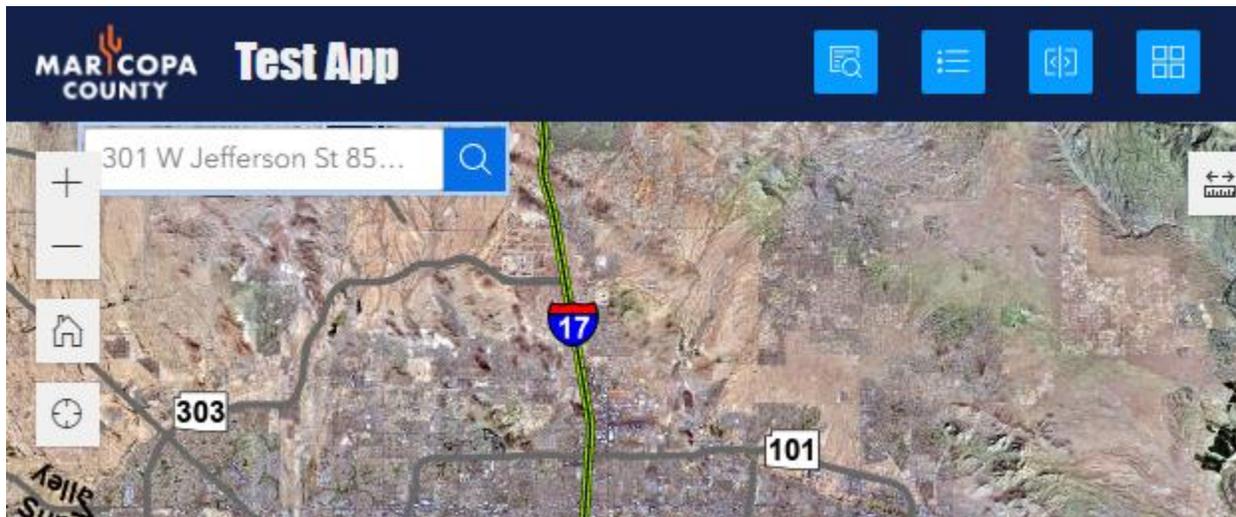
```
C:\DAVID\PROJECTS\HistoricalAerials8>git push origin master
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 20 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (5/5), 425 bytes | 212.00 KiB/s, done.
Total 5 (delta 3), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (3/3), completed with 3 local objects.
To https://github.com/DavidDas2/HistoricalAerials.git
 224e483..02e2ca4 master -> master
C:\DAVID\PROJECTS\HistoricalAerials8>
```

This pushes the local changes that you made to your GitHub Repository.

Clear your browser cache and reopen your website.

<https://daviddas2.github.io/HistoricalAerials/>

You have successfully changed the Title to **Test App**.



As you can see, GitHub is a powerful tool to test your changes on the fly and have them reflected instantly on your remote website.

Best of all, this is a free resource.

How to create the HTML5 User Guide

Examine this mobile friendly HTML5 User Guide for the Historical Aerials.

<https://daviddas2.github.io/HistoricalAerials/help/>

Historical Aerial Photography Web Application User Guide

Menu Index Search Search

- Overview
 - Quick Tour
 - Launching the Web App
 - List of Widgets and Tools
 - Navigation Tools
 - Graphical Scale Bar
 - Coordinate Widget
 - Search Tool
 - Identify a Parcel
 - Measure Tool
 - Draw Widget
 - Bookmark Widget
 - Coordinate Conversion Widget
 - Near Me Widget
 - Basemap Gallery Widget
 - Query Widget
 - Map Layers Widget
 - Legend Widget
 - Attribute Table Widget
 - Swipe Widget
 - Google Maps Widget
 - Pictometry Widget
 - Print Widget
 - About Widget
 - Summary
 - Contact Us

Overview ← Previous page Next page → Print version

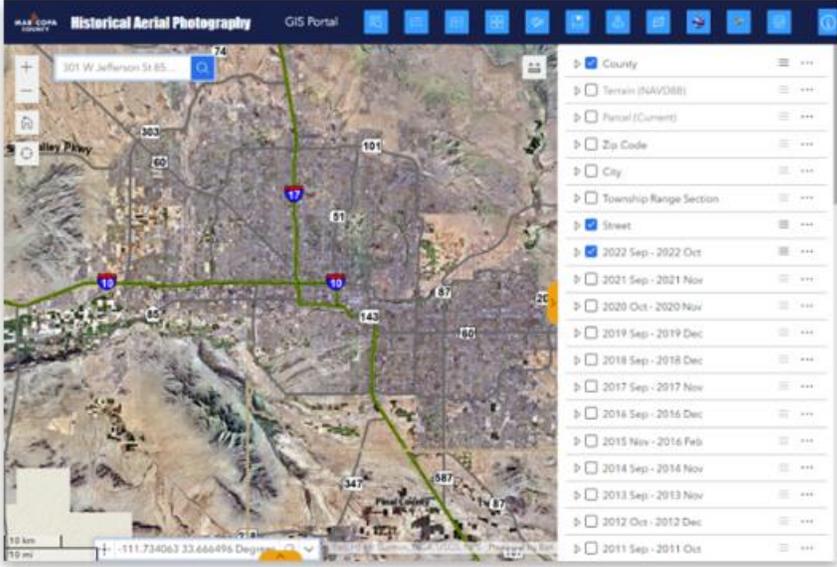
Overview

Welcome to the new Maricopa County Historical Aerial Photography Web Application.

This Web Application offers a simple interface to zoom to your area of interest and compare the latest Aerial Images with those taken one, two, five, ten years dating all the way back to 1930.

© 2023 Maricopa County

It collapses gracefully to fit smaller windows.

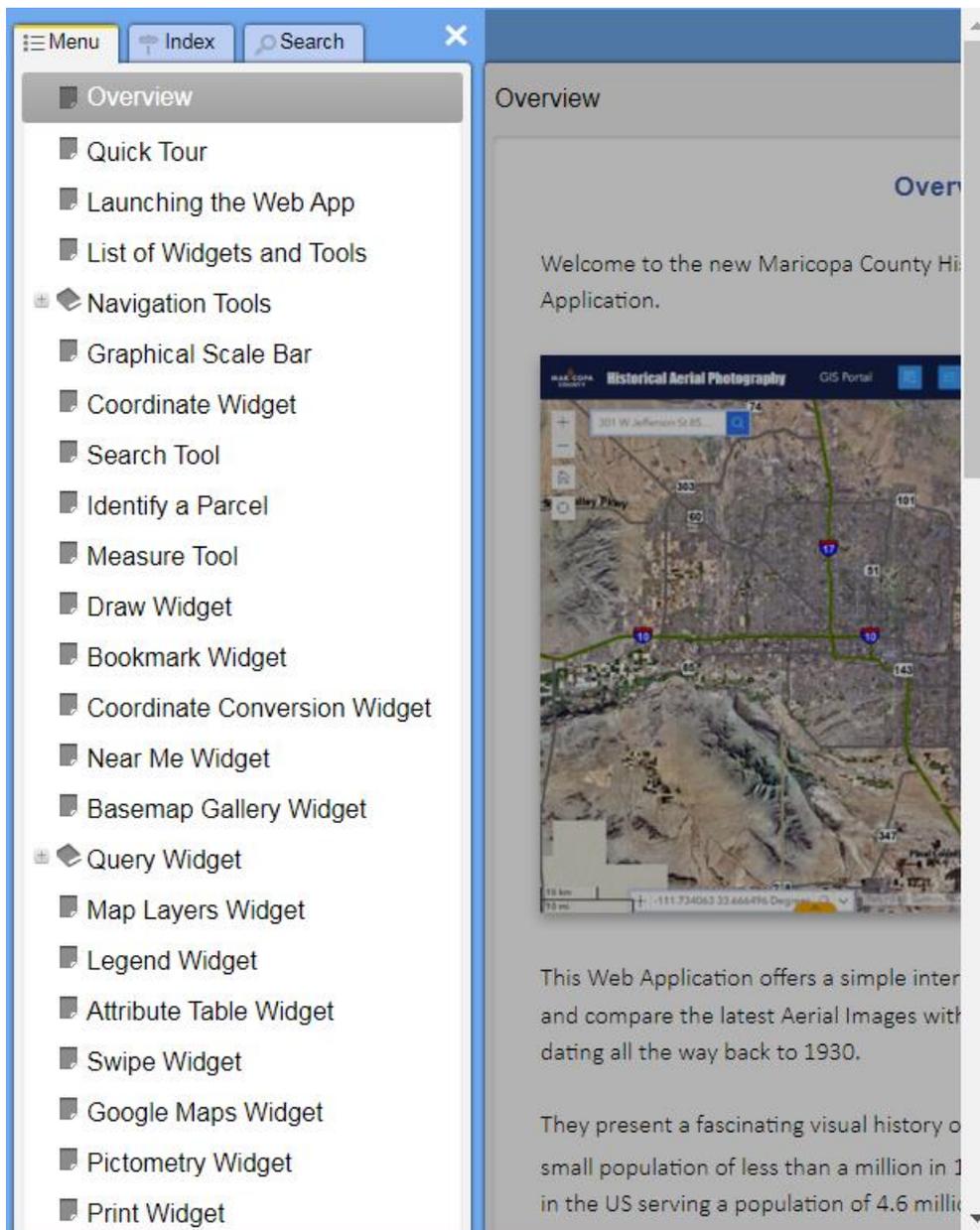


The screenshot displays the 'Overview' page of the Maricopa County Historical Aerial Photography Web Application. The page features a central map showing historical aerial imagery of Maricopa County. The map is overlaid with a grid and various geographical features. A search bar at the top left of the map area shows the address '301 W Jefferson St. 85...'. The map interface includes a scale bar at the bottom left, showing 10 km and 10 mi, and a coordinate display at the bottom center showing the coordinates -111.734063, 33.666496. On the right side of the map, there is a layer control panel with the following options: County, Terrain (NAVD88), Parcel (Current), Zip Code, City, Township-Range Section, Street, and a timeline of historical aerial photography from 2011 to 2022. The timeline is currently set to '2022 Sep - 2022 Oct'. The page title 'Overview' is displayed at the top center of the application window.

Welcome to the new Maricopa County Historical Aerial Photography Web Application.

This Web Application offers a simple interface to zoom to your area of interest and compare the latest Aerial Images with those taken one, two, five, ten years dating all the way back to 1930.

They present a fascinating visual history of how Maricopa County grew from a small population of less than a million in 1970 to become the 4th largest County in the US serving a population of 4.6 million.



This was created using a popular help authoring tool named **Dr. Explain**.

Here is a Tutorial on using Dr. Explain.

It shows you how to convert any Word Document into an HTML5 Help System.

<http://davidapps.net/DrExplain/Tutorial>

The screenshot shows the 'Dr. Explain User Guide' interface. The header includes the product name and a search bar. A navigation menu on the left lists various topics, with 'Overview' selected. The main content area, titled 'Overview', contains the following text:

Overview

This Tutorial shows how to convert a Word Document into a fully responsive HTML5 Web Help *without writing a single line of code.*

Dr. Explain is a popular Help Authoring Tool that imports Word Documents and creates HTML5 Web Help files that can be readily published as an Online User Guide.

It has advanced functions to capture screen shots of menus and automatically annotate the elements that are hyperlinked to descriptive text.

You will begin with a Microsoft Word Document named **Sample.doc** by downloading this Zip File:

<http://www.davidapps.net/DrExplain/Sample.zip>

This is how your Web Help will look like after the conversion:

<http://www.davidapps.net/DrExplain/help/>

Let's begin!

© 2019 Maricopa County

Brief history of ESRI's Web Mapping Technology

Jay Theodore kick started the era of Web Mapping at ESRI with the introduction of ArcIMS. We started using ArcIMS 3.0 in 2000. It gave us a simple and reliable way to share our data on the web. This product served us well for 10 years.

ESRI released 3 APIs for JavaScript, Flex and Silverlight for building web applications.

None were getting much traction as they required you to learn programming.

Moxie Zhang changed all of that with his introduction of the Flex Viewer 2.0 in 2010.

Moxie came up with the brilliant concept of encapsulating large chunks of code into configurable widgets which can then be arranged within a viewer.

This opened the floodgates. All of a sudden anybody could publish fully functional and visually attractive web applications featuring a simple GUI *without having to write a single line of code!*

Robert Scheitlin, the Flex Guru, stepped in and created dozens of custom widgets and shared them for free on the ESRI Community Forums. Robert's most popular custom widget was the Enhanced Search Widget. It combined an Attribute Search, Graphical Search and Spatial Search under a single interface that was intuitive for beginners.

This was a powerful tool. It was a masterpiece. It had 50,000 lines of code.

We used Robert's custom widgets to design our Arizona Broadband Map.

Here are some video tutorials showing how this application worked.

<https://www.youtube.com/user/ArizonaBroadband/videos>

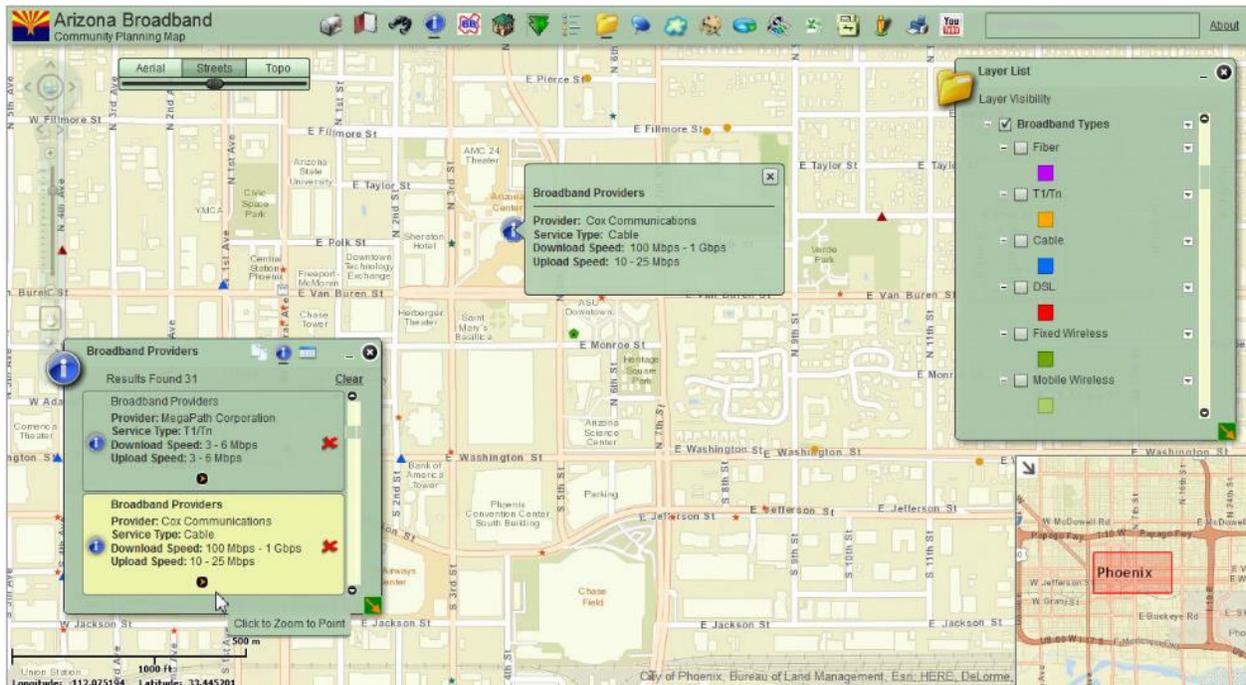


ArizonaBroadband

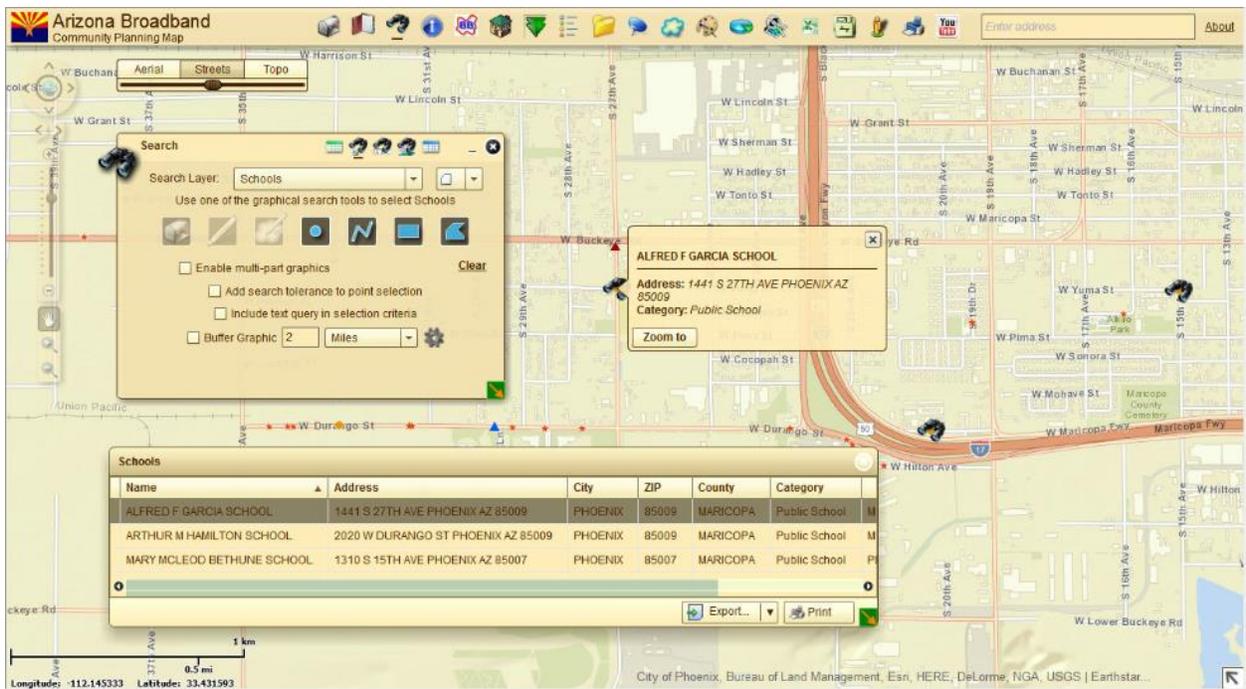
@ArizonaBroadband 18 subscribers 24 videos

The Arizona Broadband Community Planning Map is a free interactive Web... >

This is a screenshot of the application.



It was possible to change the Theme from Sage Green to Desert Sand with one line of code.



ArcGIS Online was released in 2012. This was the brainchild of **Sud Menon** to create a simple online interface to collect, organize, manage, share, map, visualize and analyze all forms of Geospatial Data. This was a smashing success. In a few short years it has become the world's largest mapping platform.

After Steve Jobs banned the use of Flash on mobile devices and Microsoft dropped support for Silverlight, JavaScript was the only pathway moving forward. JavaScript was supported natively on all modern browsers. JavaScript Apps could run on these browsers without having to download a plugin.

All Flex Apps needed to be retooled using JavaScript.

Moxie once again came to the rescue. Retaining the same concept as the Flex Viewer, Moxie released the **Web AppBuilder** in 2014. This product revolutionized the world of Web Mapping.

This product allowed any GIS Analyst to convert a Web Map on ArcGIS Online into a mobile friendly Web Application featuring a rich collection of widgets with just a few mouse clicks. The developer edition allowed you to add custom widgets further extending the capabilities.

There are over half a million Web AppBuilder Applications on ArcGIS Online alone with thousands more created with the Developer Edition.

Robert Scheitlin took the time to learn the JavaScript 3.x API and ported all his custom widgets from Flex to JavaScript. We shall always remain thankful to Robert for his generosity. His Enhanced Search Widget is the centerpiece of all our Web Apps.

While the Web AppBuilder became a runaway success and the default platform for designing responsive web apps, Moxie had a grander vision to take Web Mapping Technology to the next level.

Moxie released the **ArcGIS Experience Builder** in 2020. One could now apply the concept of widgets and themes to build complete websites with multiple pages rather than being limited to a single web app.

The Experience Builder Framework supports true drag & drop functionality offering complete flexibility on how you design the layout of each page supporting dynamic charts, tables, images and lists that update as the user interacts with the various elements.

It is built upon JavaScript SDK 4.x and supports seamless switching between 2D and 3D datasets.

The Experience Builder interface is deceptively simple. It hides all the complex programming that happens behind the scenes. It took a team of 40 developers toiling for 3 years to make this magic happen.

What is the future of Web Mapping?

With every iteration starting with ArcIMS, the technology has become simpler and more powerful.

The Experience Builder platform will carry us through 2030 as more widgets are added. It will soon reach parity with the Web AppBuilder and eventually eclipse it.

There is a high probability the successor to the Experience Builder may include an AI component.

Imagine this.

All Experience Builder projects require you to start by selecting a Template. There are over 60. What if the AI driven technology becomes smart enough to examine your map services and decide what is the best way to present your data on the web and create a fully configured website for you?

What if you could say, “Build me a website that allows me to compare all the historical aerials with tools to zoom to a specific address or parcel and display all the relevant details.”

The possibilities with AI are tantalizing.

Should you transition from WAB to EXB?

The ArcGIS Experience Builder is ESRI's next generation Web Mapping Platform.

It is the successor to ESRI's Web AppBuilder for ArcGIS.

All development on the WAB Developer Edition will stop in July 2024. There would be no more bug fixes.

All development on the WAB ArcGIS Online Edition will stop in the 4th quarter of 2025.

Do not be alarmed!

All your existing WAB apps on AGOL will continue to work after the end of 2025. You just would not be able to update them as the WAB AGOL Edition would be retired at the end of 2025.

What would happen to the over half a million WAB Apps on AGOL?

If they are running fine and you have no need to update them, you have nothing to worry about.

However, if you foresee the need to make changes to your existing WAB Apps on AGOL you should move to the Developer Edition of WAB. It supports the same collection of standard widgets as the AGOL edition with the additional advantage of allowing custom widgets.

The final version of the WAB Developer Edition after July 2024 will always be available for download at:

<https://developers.arcgis.com/web-appbuilder/>

You can keep using the Developer Edition of WAB indefinitely.

The Developer Edition of WAB depends on the JavaScript 3.x API. It does not contain a copy.

You can use the JavaScript 3.x API hosted on ArcGIS Online or ArcGIS Enterprise. You can even host this on your own server.

ESRI has no plans to shut down the JavaScript 3.x API Servers on ArcGIS Online. In fact, previous versions of the JavaScript API 2.x and 1.x are still available on ArcGIS Online.

You can keep using the Enterprise Edition of WAB till 2030.

The final version of the Enterprise Edition of WAB will be released in the first half of 2025. After that ESRI will continue to offer 5 years of product support until 2030.

To further put your mind at ease, here are the responses from **Jianxia**:

“As I understand, these WAB Developer Apps will continue to work indefinitely, until a point in time where a future browser update may cause issues.”

Correct.

“Hypothetically speaking, let’s say we run our existing WAB Developer Apps till 2027. Let’s also assume there are no browser updates that break the applications.”

Yes, your existing apps built with developer edition will continue running under that assumption.

Will ESRI shut down their JavaScript 3.x API servers at some point in time?

I am not aware of any plans to shut down JavaScript 3.x API in ArcGIS Online. In fact, previous versions of JavaScript API like 2.x and 1.x are still available in ArcGIS Online. I would worry more about the browser updates in the future than availability of JavaScript 3.x API in ArcGIS Online

Does this even matter for the WAB Developer Apps? Are they fully self-contained? Or do they depend on the ESRI JavaScript 3.x servers to function?

It matters. WAB developer edition does not contain a copy of JavaScript API and depends on the JavaScript API to work properly. However, you can use developer edition connecting to JavaScript 3.x API hosted in ArcGIS Online, ArcGIS Enterprise, or your own server.

Hope this helps. Have a good weekend.

Jianxia

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THE SCIENCE OF WHERE™

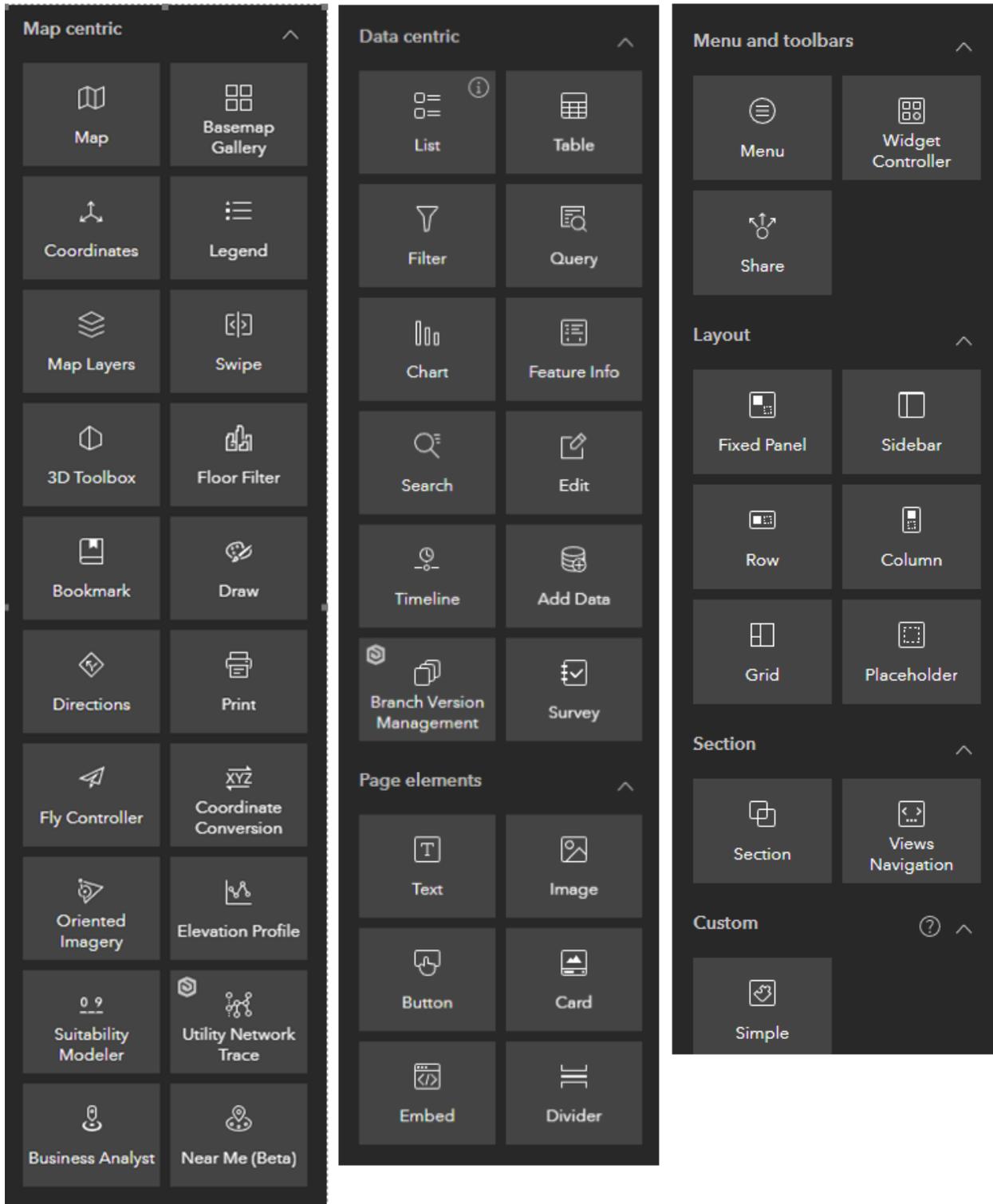
Should you transition your existing WAB apps to EXB?

The Web AppBuilder for ArcGIS was released in 2010. It is a mature and stable product. It has gone through numerous bug fixes and enhancements. The current version is 2.28.

You are free to leverage the functionality of over 60 Standard Widgets plus dozens of Custom Widgets designed by third party developers.



Contrast this with the widgets available for EXB version 1.12



The choice of using **WAB** or **EXB** should be carefully evaluated on a case by case basis.

If your objective is to build a *single* Web Mapping Application that utilizes the full functionality of existing WAB custom widgets like Robert Scheitlin's Enhanced Search Widget and the Identify Widget, then the Developer Edition of the Web AppBuilder is your best choice.

WAB is a mature and stable platform. If you have existing WAB apps built with the Developer Edition of WAB, keep them. They should run indefinitely until a browser update breaks them.

Although you are limited to creating single Web Apps you can still embed them within a multi-page website.

Here is a tutorial on how to create a website using **Mobirise**, the world's number one Website Builder.

<http://davidapps.net/mobirise/help>

Mobirise
User Guide

Menu Index Search

Overview

- View a Demo
- Install Mobirise
- Launch Mobirise 4
- Create New Site
 - Add a Menu
 - Add the Full Screen Intro Header
 - Congratulations! You have created a Responsive Website
 - Preview the Website
 - Preview your website in a browser
- Publish your Website
 - View your Website in Chrome
 - Change the Page Title
 - Inspect your Published Website
 - Export your Website
- Configure the Menu
- Configure the Full Screen Intro Page
- Test your Intro Page
 - Add a Map Gallery
 - Save to User Block
 - Add a second Page
 - Add Intro with Background Video
 - Set the link to your GEOCORTEX page

Overview

← Previous page Next page → Print version

Overview

Mobirise is a free Website Builder.

You can make attractive responsive websites in a matter of minutes that are mobile friendly, *without having to write a single line of code!*

Mobirise is based on the popular Bootstrap framework (to make your site responsive), and the jQuery Library (for all the animation).

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If on the other hand, your goal is to build a complete *multi-page* website with interactive charts, tables, lists, images with seamless switching between 2D and 3D maps with the freedom to create your own page layouts, menus with easy integration with other ESRI mapping apps like Story Maps and Survey 123, then you should use the the Experience Builder. If you wish to add Custom Widgets, you would need to use the Developer Edition of the Experience Builder.

The EXB platform was launched in 2020. It is still in its infancy going through 4 updates each year. New widgets are being added while existing widgets are being enhanced with new functionality with every release. It is in a constant state of flux. It will likely reach parity with the WAB platform within a year or two and then eclipse it to become the new standard for Web Mapping.

EXB utilizes all the new capabilities of the new Map Viewer in ArcGIS Online. If you need to group layers, EXB is the way to go.

Personally, I love the Experience Builder!

The Experience Builder Platform is the next milestone in Moxie’s grand vision to bring Web Mapping to the masses. The User Interface is more intuitive and elegant than the Web AppBuilder featuring over 60 templates plus offering you the capability to design the layout of every page and window.

I did not realize the true power of the Experience Builder until I took the **Building Web Apps with ArcGIS Experience Builder** class from Rudy Prosser, Senior Instructor at ESRI.

<https://www.esri.com/training/catalog/63dd4da15b71755a052729f8/building-web-apps-with-arcgis-experience-builder/>



The screenshot shows the Esri Academy website interface. At the top, there is a navigation bar with a home icon, 'Esri Academy', 'About', 'Catalog' (which is highlighted with a blue underline), 'Certification', 'My Academy', and 'Help'. Below this is a secondary navigation bar with 'Course Catalog' (underlined), 'Courses by Schedule', 'Courses by Location', 'New and Retired Training', and 'Learning Plans'. The main content area features a dark blue background with white text. It starts with 'Instructor-Led' followed by a horizontal line and the course title 'Building Web Apps with ArcGIS Experience Builder'. Below the title is a blue 'Register' button, a row of five globe icons with '(208)' next to them, and three icons: a heart, a plus sign, and a share icon. At the bottom left of the main area, it says 'Next class starts Sep 12' and '2 Days (16 Hours)'.

For anyone getting started on the Experience Builder, this 2-day virtual training course is an absolute must.

A lot of design thought went behind the Experience Builder. You can make an attractive, interactive, mobile friendly website in a matter of hours without writing a single line of code.

Although the EXB Interface appears very simple with its modest collection of drag & drop widgets, a lot of fancy code gets created behind the scenes. It took a team of 40 developers working for 3 years to make this magic happen.

For someone seeking to develop Custom Widgets for EXB, there is a steep learning curve. You have to learn the following programming languages:

- JavaScript
- TypeScript
- CSS
- HTML

You have to learn the following frameworks:

- ArcGIS Map SDK for JavaScript 4.x (Core GIS Application Functionality)
- React Framework (Application and Widget Logic)
- Redux Framework (State Management)
- Bootstrap 4 (User Interface)

It can get expensive for small organizations to retain full time programmers on their staff for the sake of building custom widgets. A cheaper alternative may be to contact ESRI Professional Services to have them build these Custom Widgets for you.

<https://www.esri.com/en-us/arcgis/services/overview>

On behalf of our Experience Builder Community I would like to thank Moxie Zhang, Jianxia Song and the entire WAB/EXB development team for all their hard work and programming wizardry in making these magical tools for us.

They are a joy to use!

Best regards,

David Das, GISP
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Resources

Download ArcGIS Experience Builder, Developer Edition

<https://developers.arcgis.com/experience-builder/>

ArcGIS Experience Builder Community

<https://community.esri.com/t5/arcgis-experience-builder/ct-p/arcgis-experience-builder>

ArcGIS Experience Builder Custom Widgets by Robert Scheitlin

<https://community.esri.com/t5/experience-builder-custom-widgets/tkb-p/eb-custom-widgetstkb-board>

ArcGIS Experience Builder Custom Widgets

<https://community.esri.com/t5/experience-builder-custom-widgets/gh-p/eb-custom-widgets>

ArcGIS Experience Builder SDK Resources

<https://github.com/Esri/arcgis-experience-builder-sdk-resources>

Download Node.js

<https://nodejs.org/en/download>

Download Microsoft Visual Studio Code

<https://code.visualstudio.com/download>

Download Notepad++

<https://notepad-plus-plus.org/downloads/>

GitHub – Create an Account

<https://github.com/>

Download Git for Windows

<https://github.com/git-for-windows/git/releases/download/v2.42.0.windows.2/Git-2.42.0.2-64-bit.exe>