# ArcGIS Experience Builder Developer Edition 1.12 Complete Tutorial – Part3

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## Overview

In **Part-3**, you will be adding the Swipe, Basemap Gallery, Draw, Bookmark, Near Me, Coordinate Conversion, Coordinates, Search and Print Widgets.

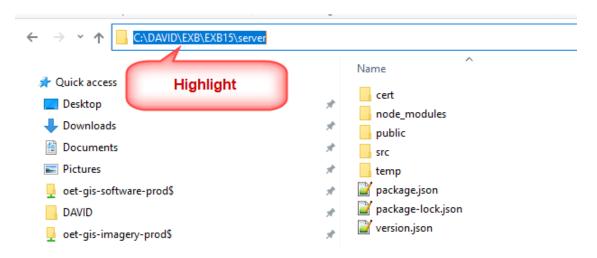
## Start a new Experience Builder Session

## Navigate to C:\DAVID\EXB\EXB15

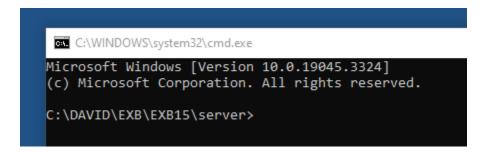
client	9/4/2023 6:54 PM	File folder	
server	9/4/2023 7:57 PM	File folder	
3rd-party-license.txt	9/4/2023 4:52 PM	Text Document	68 KB
readme.txt	9/4/2023 4:52 PM	Text Document	1 KB
🔐 version.json	9/4/2023 4:52 PM	JSON File	1 KB

Open the server folder.

Highlight the path and enter cmd

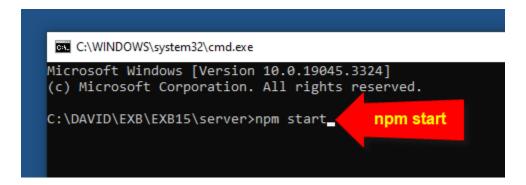


This will open a Command Window with the correct path:

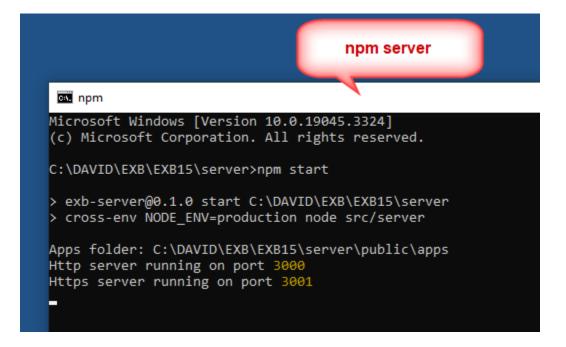


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## Enter npm start



This starts the npm server process.



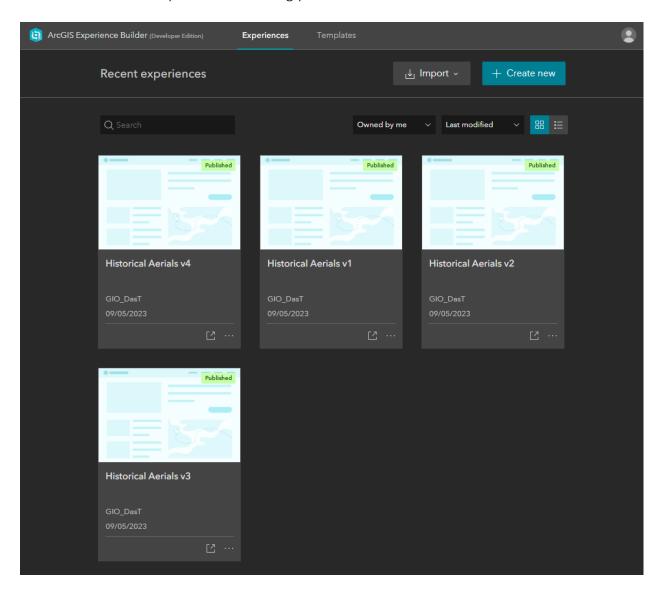
Open Chrome and enter:

## https://localhost:3001

This launches the Experience Builder.

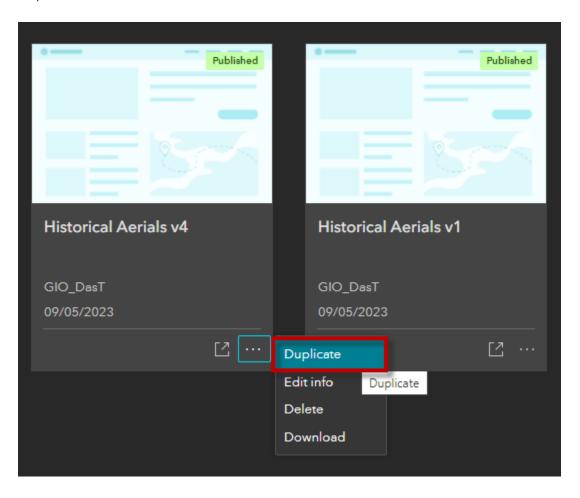
It does not ask you to reenter your credentials.

You are back to where you left after taking your break.

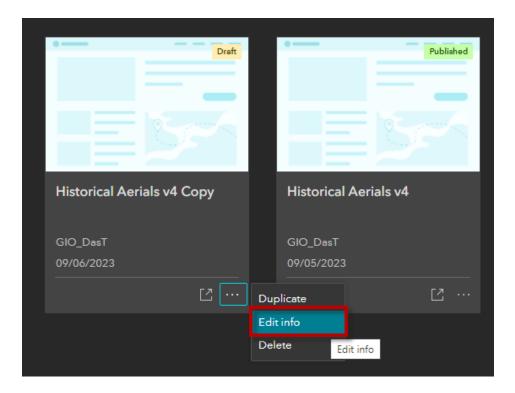


## Create Historical Aerials v5

Duplicate Historical Aerials v4 to create Historical Aerials v5

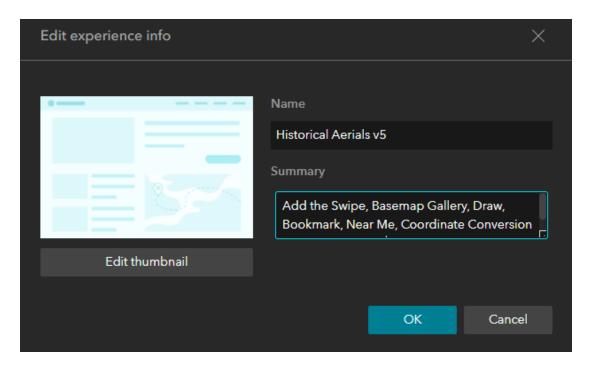


#### Edit Info



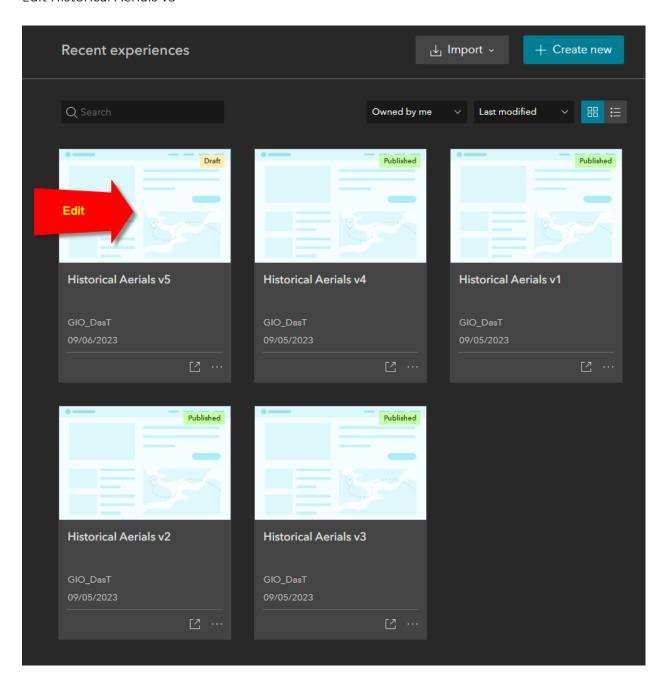
Name = Historical Aerials v5

Summary = Add the Swipe, Basemap Gallery, Draw, Bookmark, Near Me, Coordinate Conversion and Print Widgets.



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## Edit Historical Aerials v5

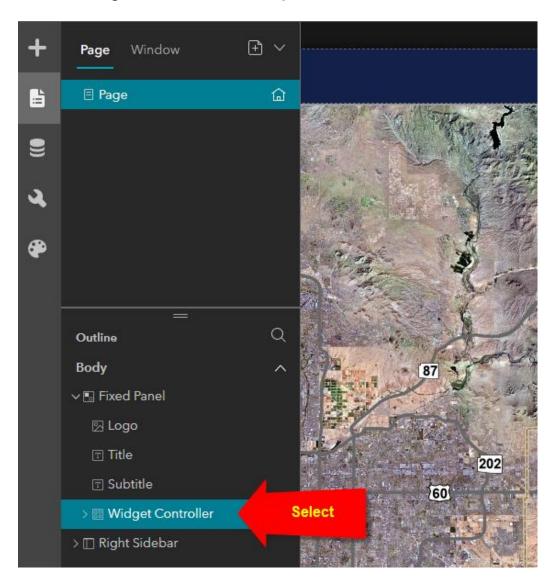


#### Edit the Subtitle to read v5

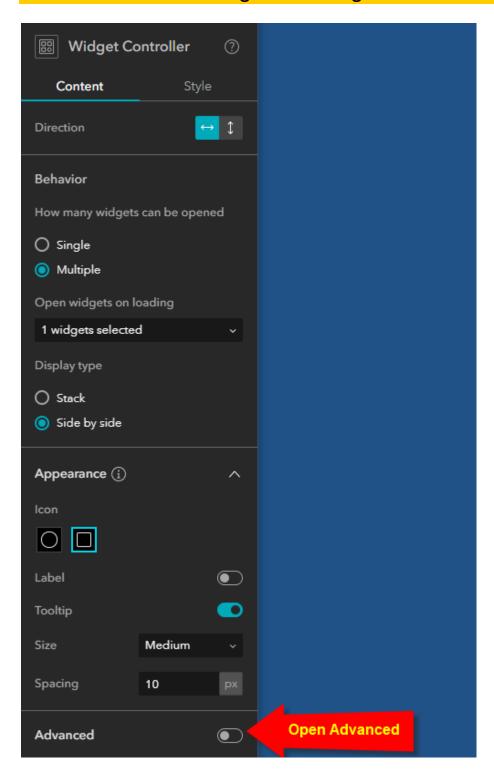


Open the Page Tab.

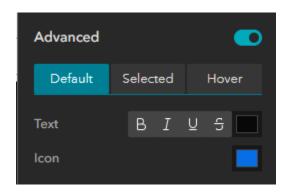
Select the Widget Controller from the Page Outline.



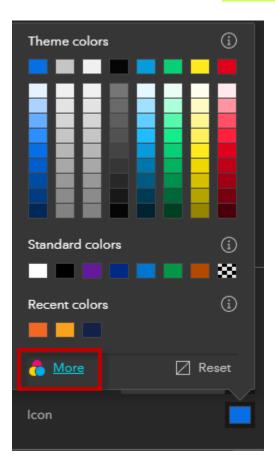
## Configure the Widget Controller



Open the Advanced Option

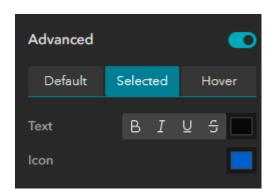


Change the default icon color to #059BFF





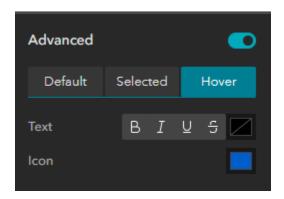
## Change the Selected Icon color to #FF8F5C







Keep the Hover Icon color as a darker shade of blue = #005eca





Change the order of the Widgets in the Widget Controller.

## Before:



## After:

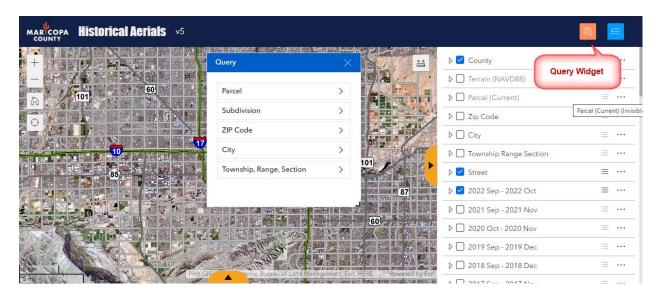


Save, Publish, View Published Item.

## https://localhost:3001/experience/4/

The Query Widget is open by default.

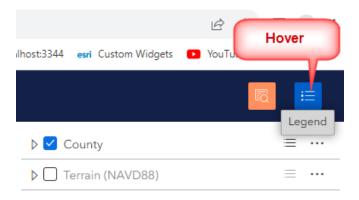
Widgets that have been opened are shown in orange.



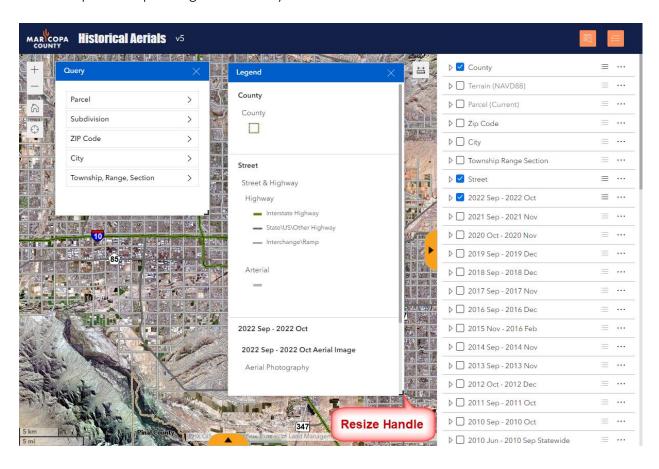
Widgets that are closed appear in blue for example the Legend Widget.



When you hover over a Widget, it turns to a darker shade of blue.



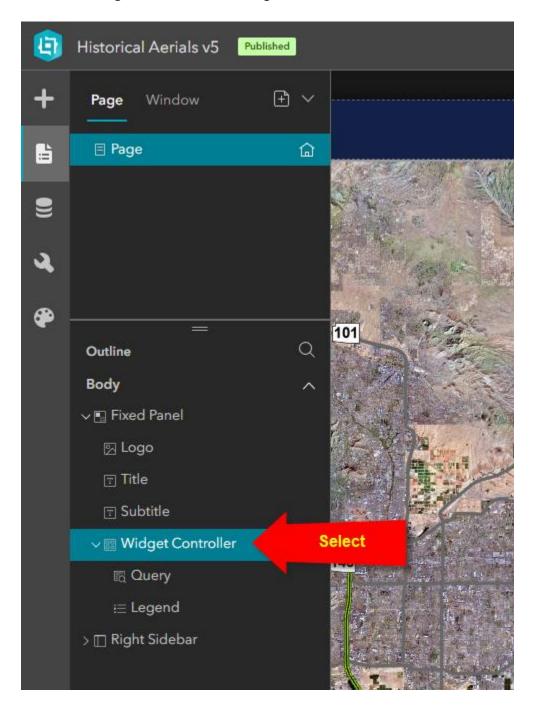
You can open multiple widgets and freely move them around and resize them.



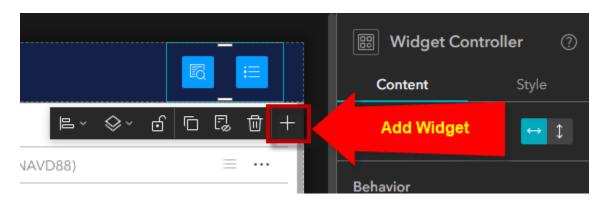
## Add the Swipe Widget

The Swipe Widget is critical to the Historical Aerials Web App. This was added in Experience Builder version 1.12.

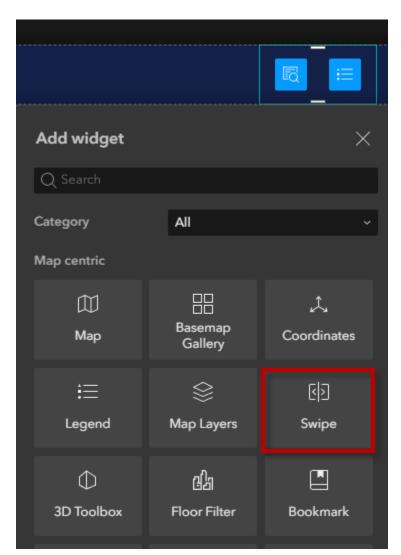
Select the Widget Controller in the Page Outline.



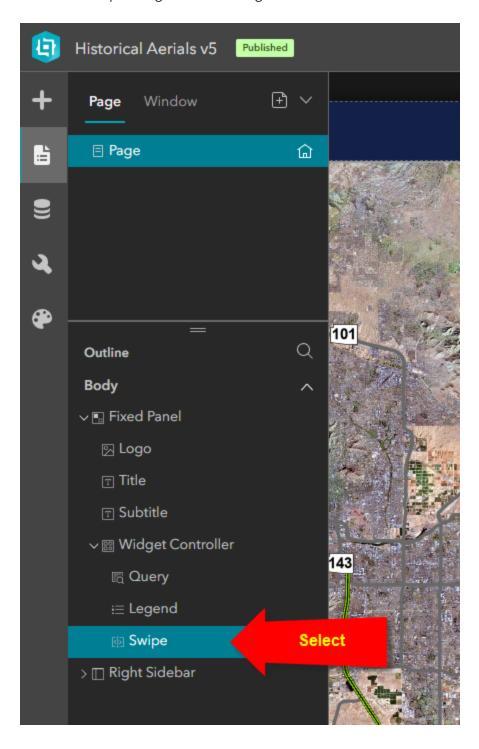
Click on the Add Widget Tool.



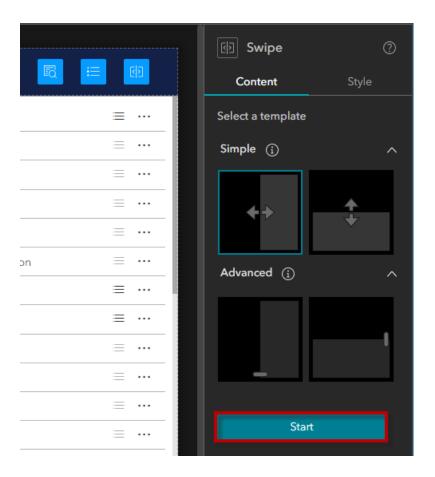
Add the Swipe Widget.



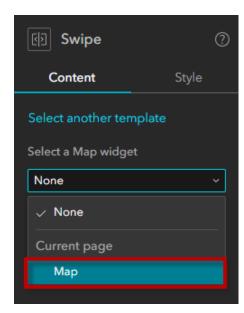
Select the Swipe Widget from the Page Outline.

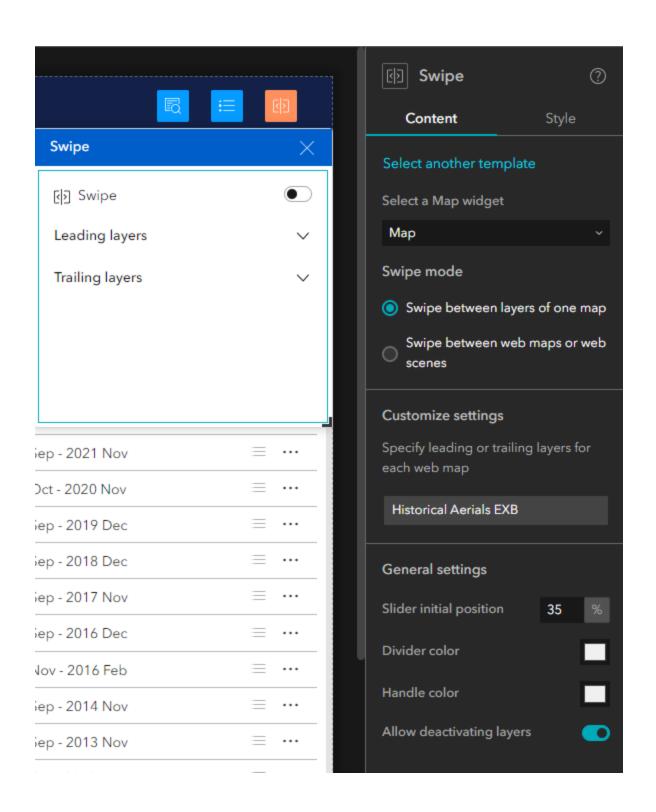


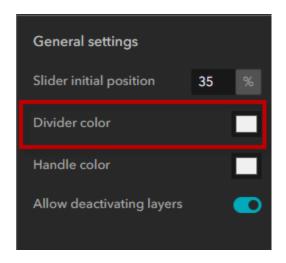
## Start



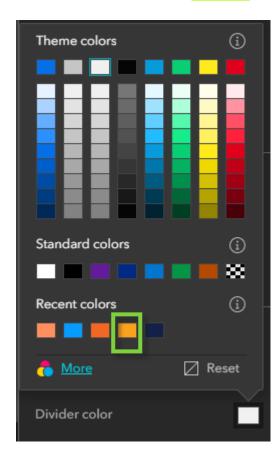
Select a Map Widget = **Map** 

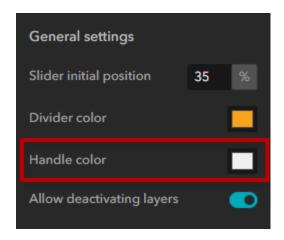




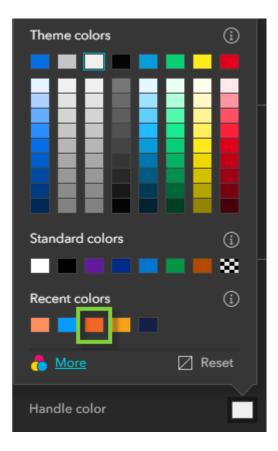


Change the Divider Color = **#FAA21B** 

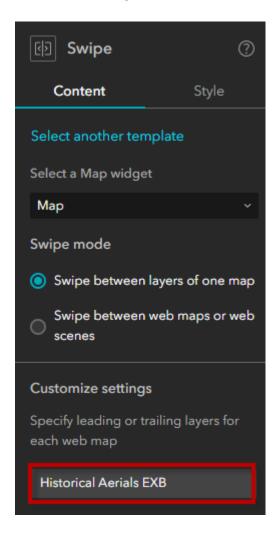




Change the Handle Color = #F26724

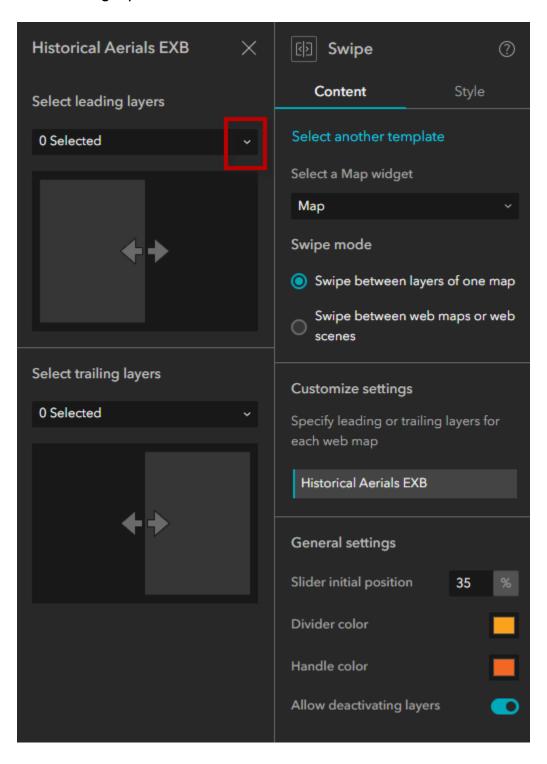


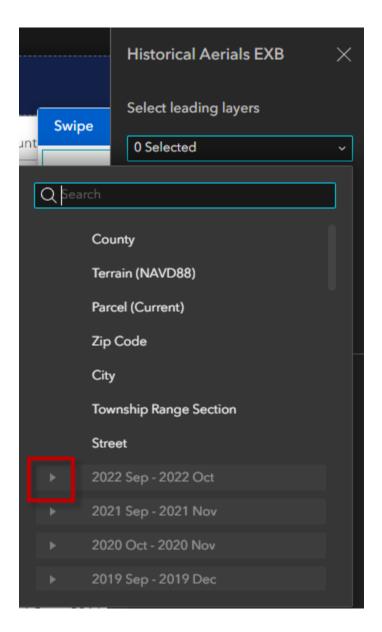
## Customize Settings.



Select Historical Aerials EXB

## Select **Leading Layers**.

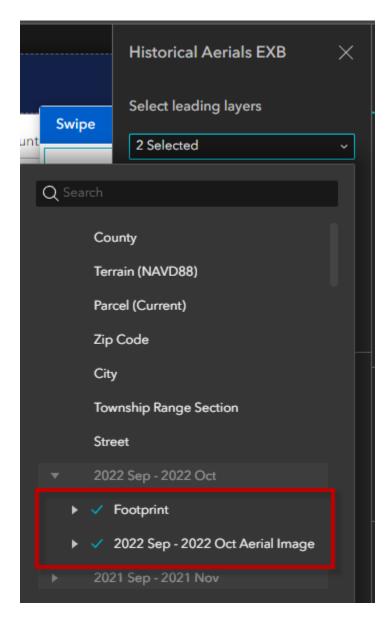




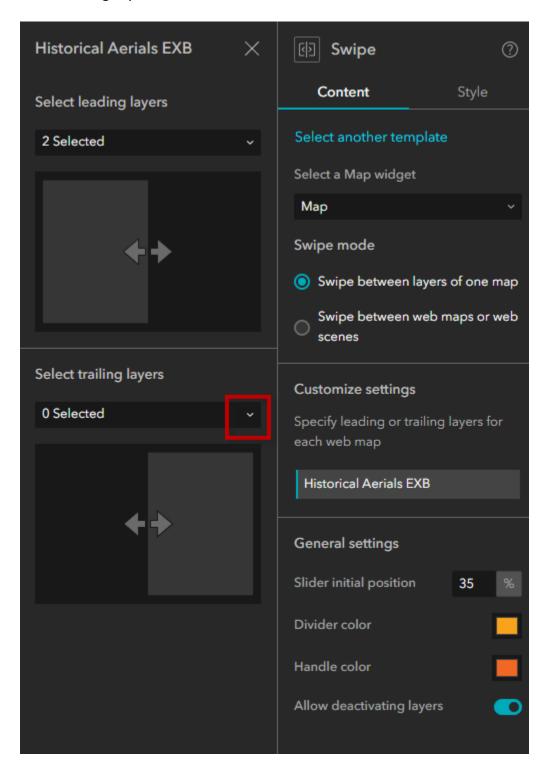
**Expand** 2022 Sep – 2022 Oct

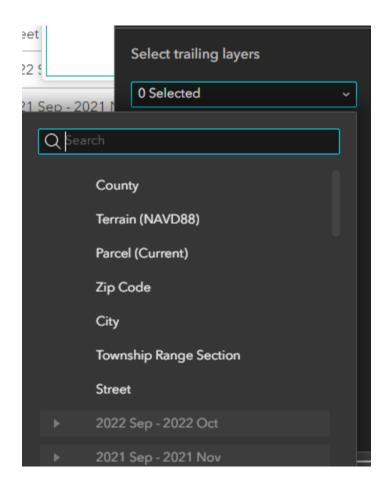
Check these two Leading Layers from the 2022 Sep – 2022 Oct Layer Group

- Footprint
- 2022 Sep 2022 Oct Aerial Image



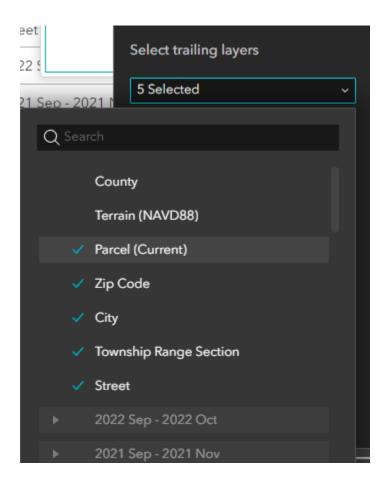
## Select Trailing Layers





Check these 5 Trailing Layers.

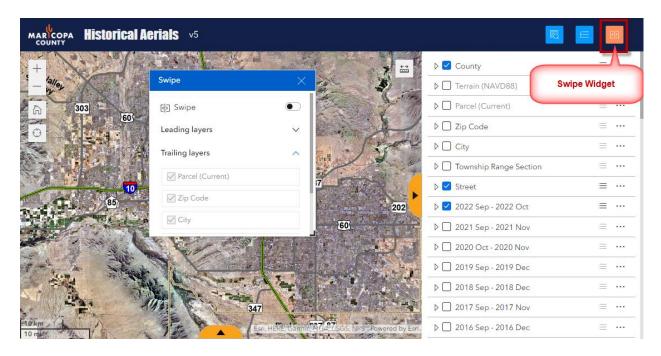
- Parcel (Current)
- City
- Township Range Section
- Street



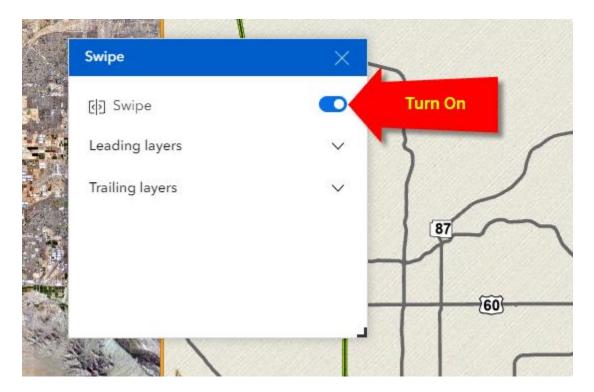
Save, Publish, View Published Item.

## https://localhost:3001/experience/4/

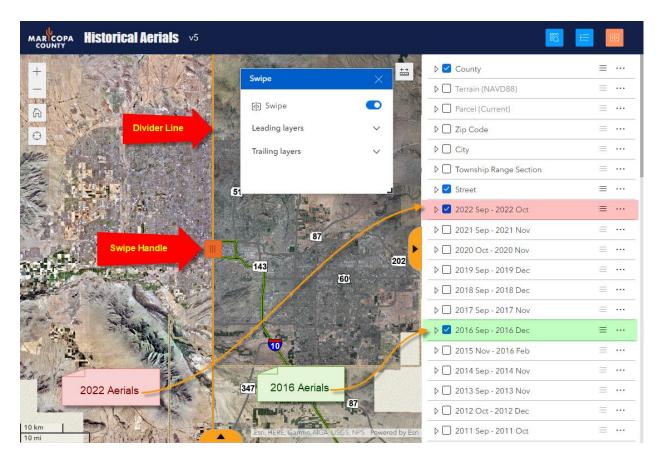
Open the Swipe Widget.



Turn on the Swipe Tool.



Turn on the 2016 Aerials.

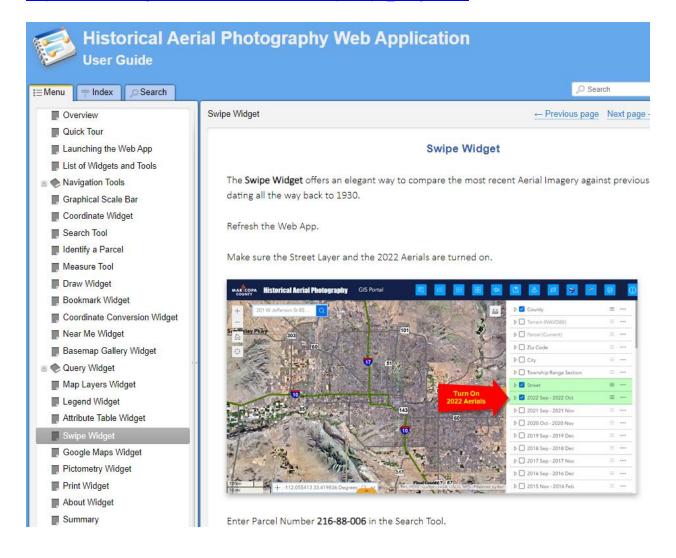


The 2022 Aerials will appear on the Left.

The 2016 Aerials will appear on the Right.

To learn more on how to use the Swipe Widget, open the User Guide.

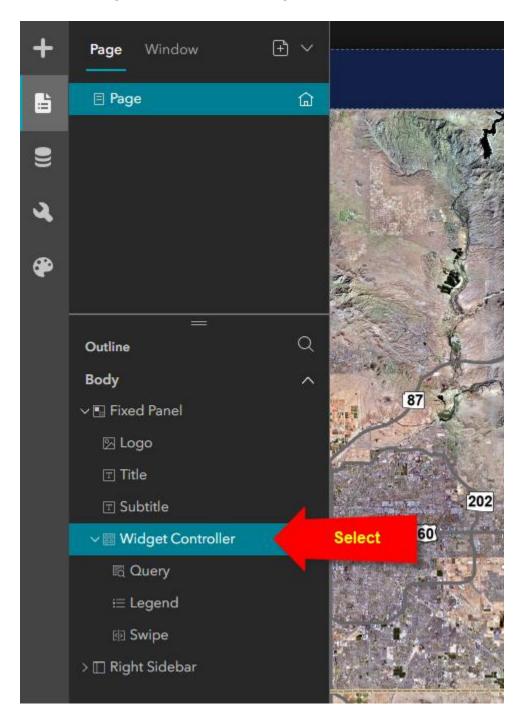
https://daviddas2.github.io/HistoricalAerials/help/swipe\_widget.htm



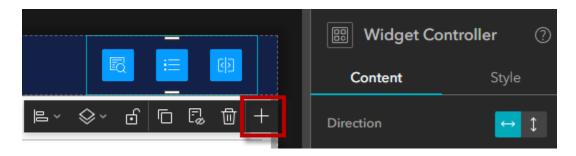
## Add the Basemap Gallery Widget

This is an important widget. This was added in EXB 1.12.

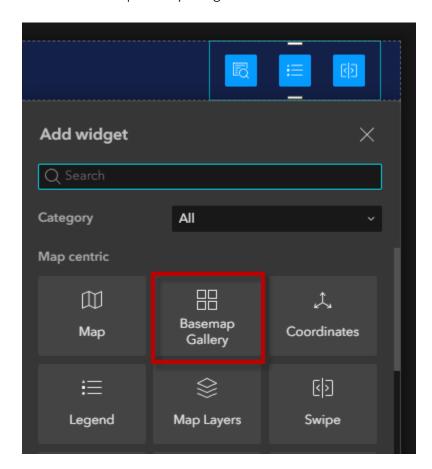
Select the Widget Controller from the Page Outline.



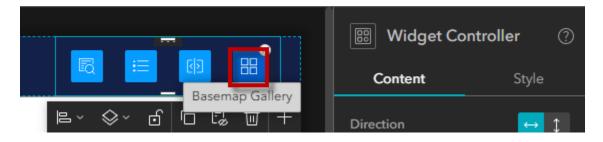
Click on the Add Widget Tool.



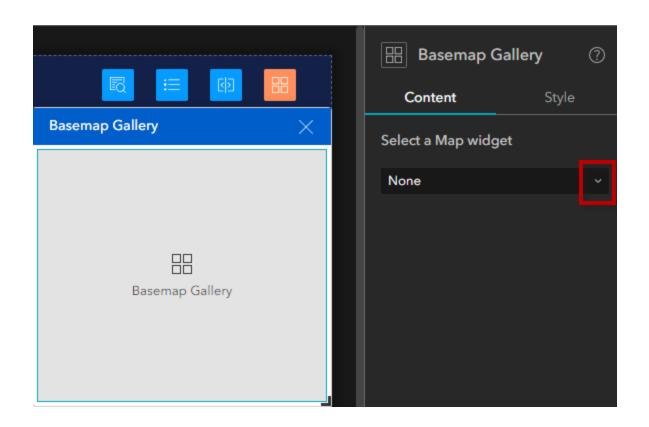
Add the Basemap Gallery Widget



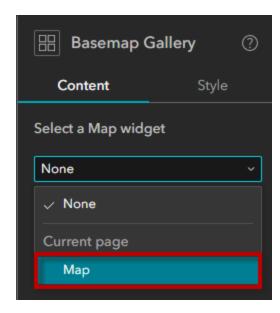
Select the Basemap Gallery Widget that you added to the Widget Controller.



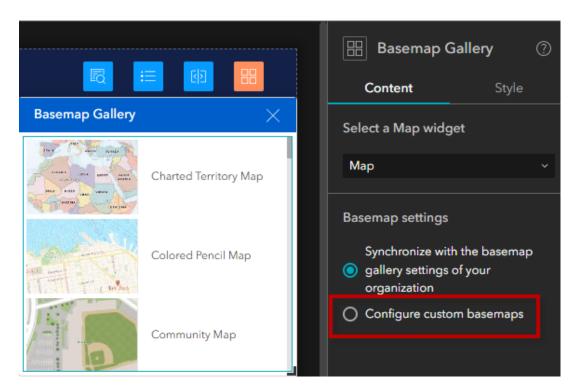
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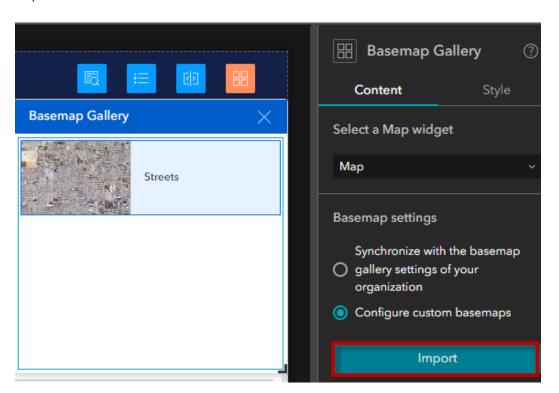
Select a Map Widget = Map



### Configure custom basemaps

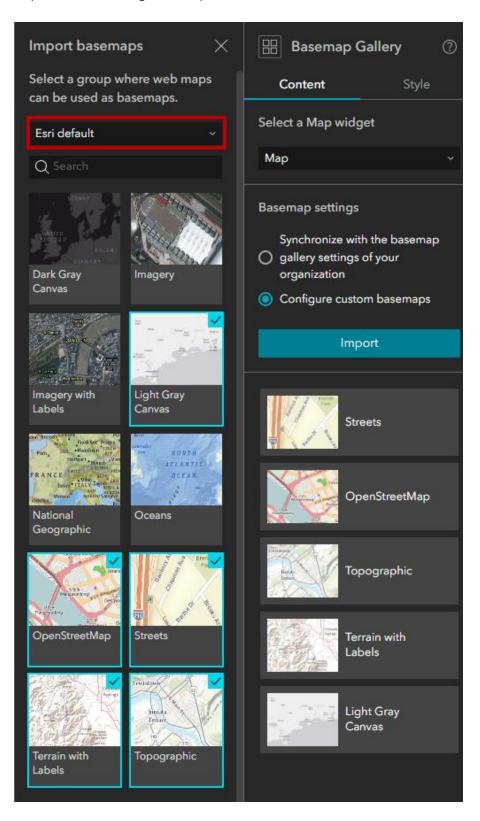


#### Import

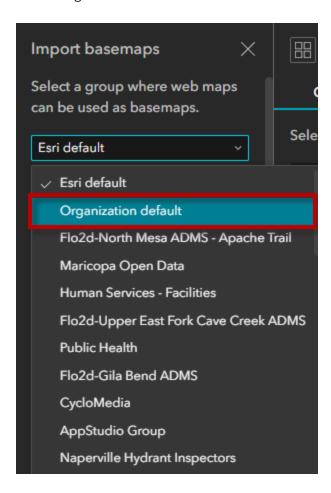


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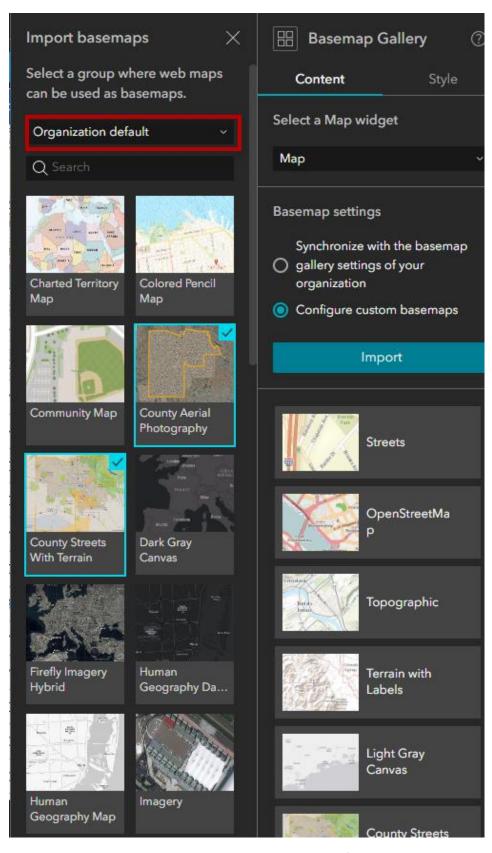
Import the following basemaps from ESRI Default.



## Select Organization Default.



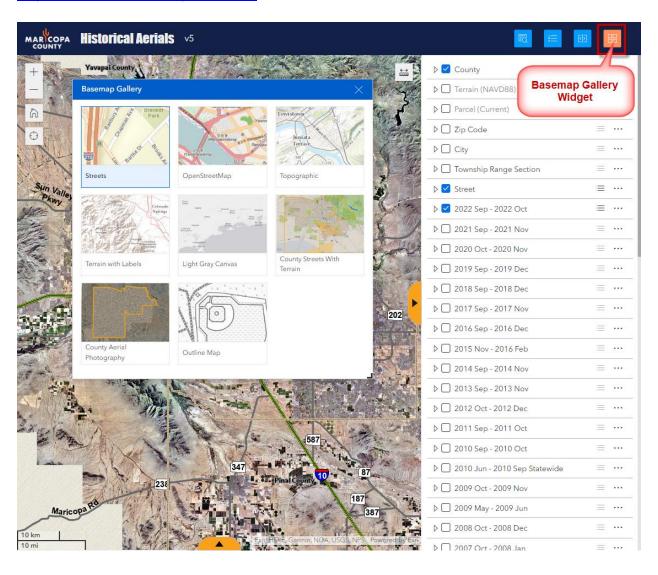
Import the following basemaps.



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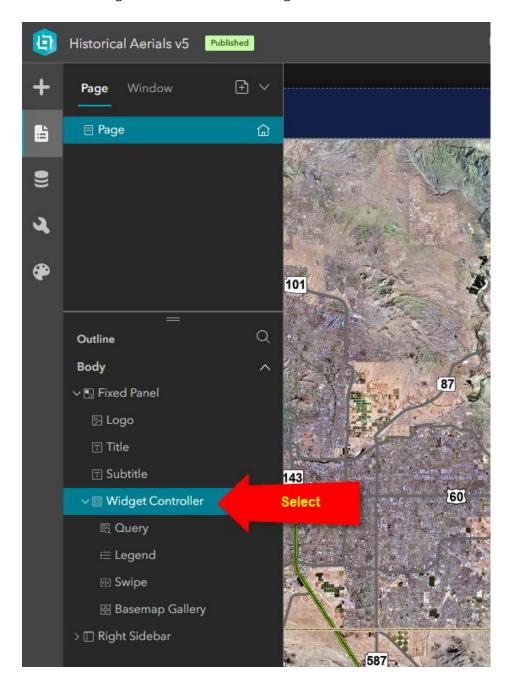
Save, Publish, View Published Item.

## https://localhost:3001/experience/4/

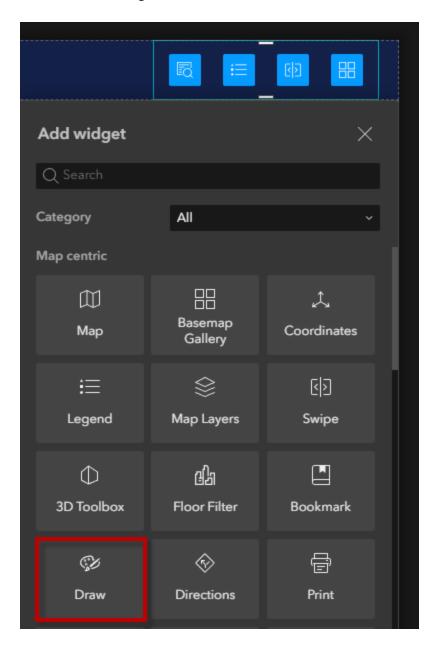


# Add the Draw Widget

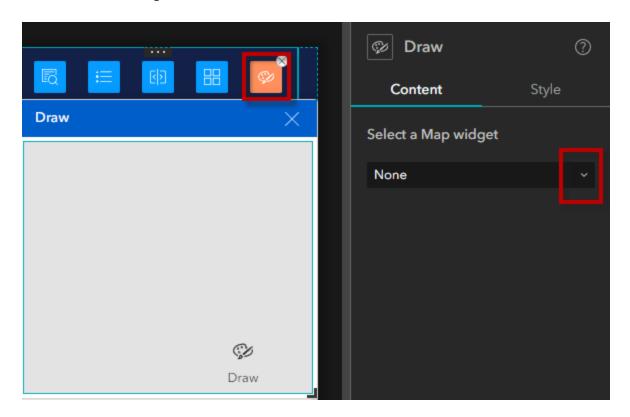
Select the Widget Controller from the Page Outline.



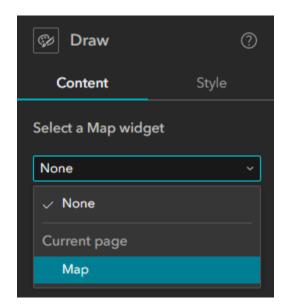
## Add the Draw Widget



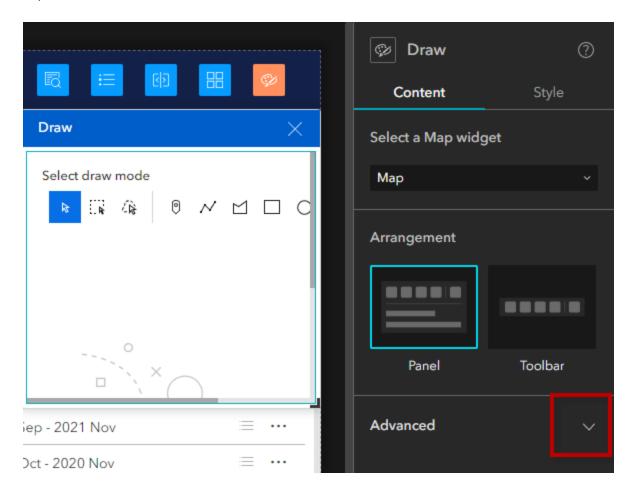
Select the Draw Widget.



Select a Map Widget = Map

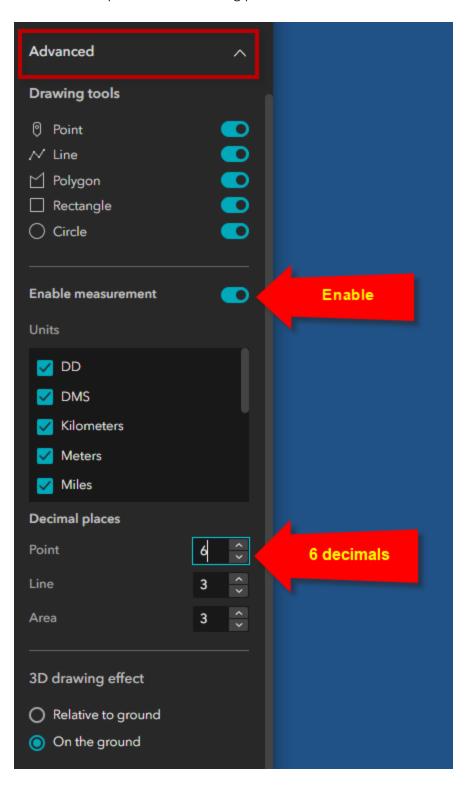


## Expand the Advanced Section



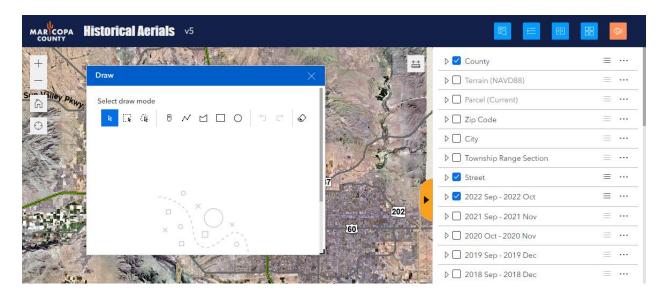
Enable Measurement.

Use 6 decimal places for measuring points.

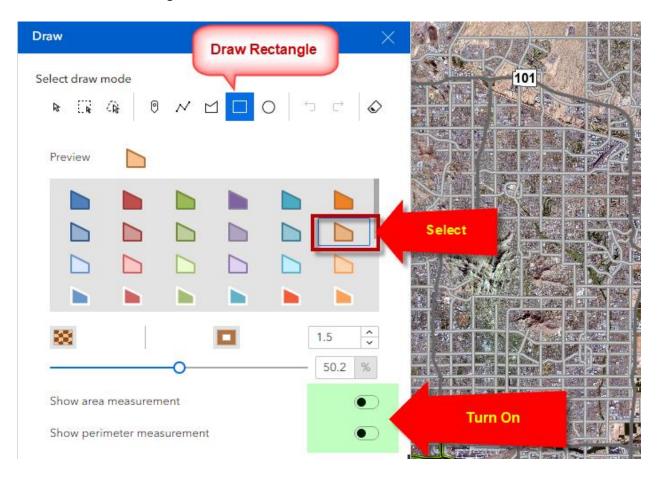


Save, Publish, View Published Item.

## https://localhost:3001/experience/4/



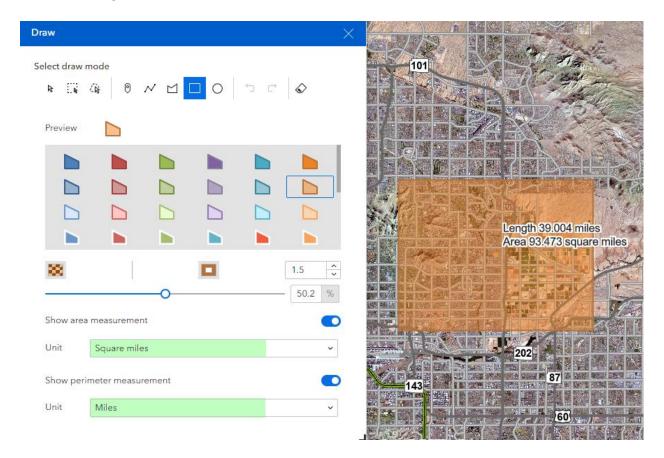
Select the Draw Rectangle Tool.



Set Area Measurement to Square Miles

Set Perimeter Measurement to Miles

Draw a rectangle.

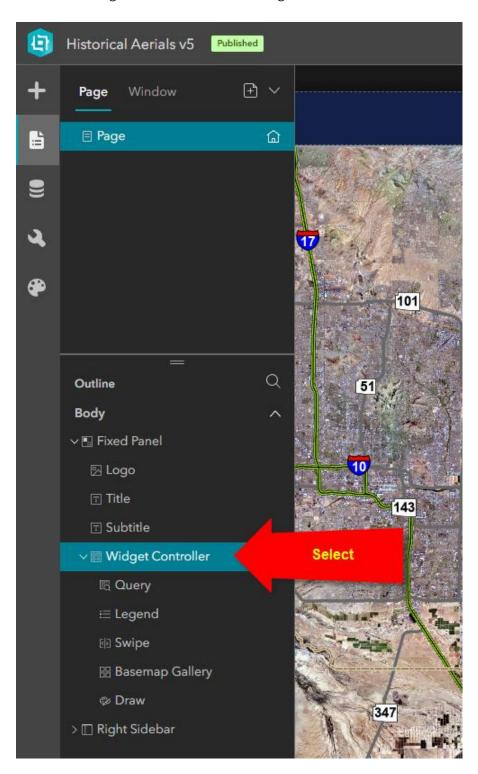


For more examples, open:

https://daviddas2.github.io/HistoricalAerials/help/draw\_widget.htm

# Add the Bookmark Widget

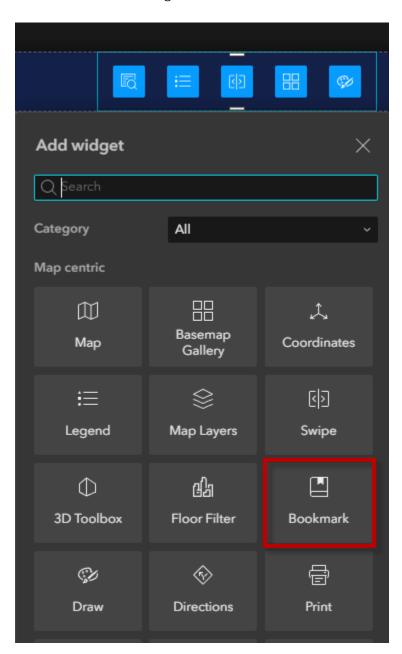
Select the Widget Controller from the Page Outline.



Click on the Add Widget Tool.



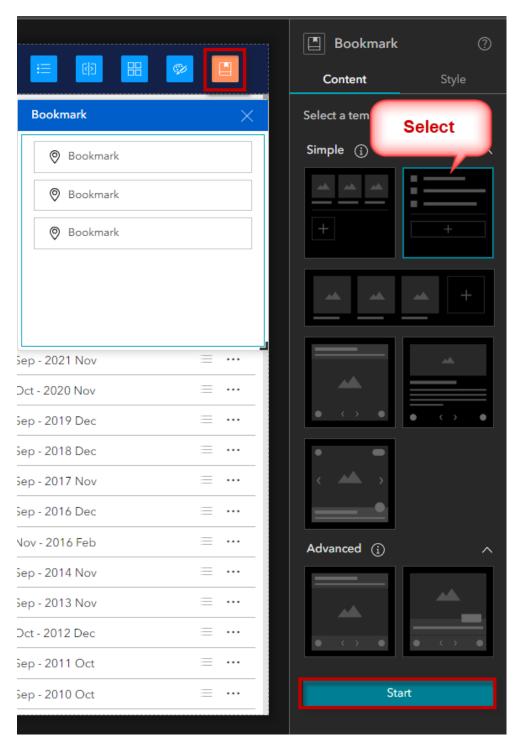
Add the Bookmark Widget.



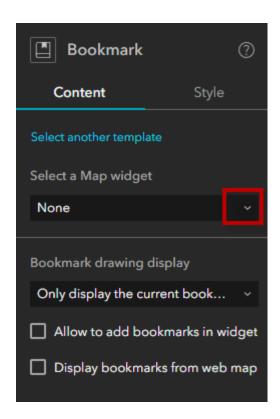
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Select the Bookmark Widget from the Widget Controller.

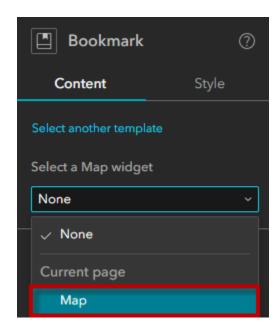
Select the Simple template on the top right.

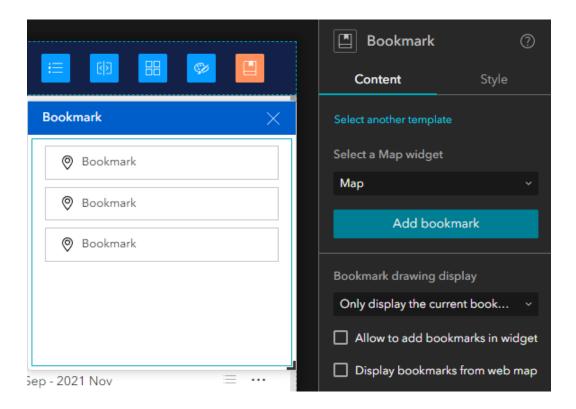


#### Start

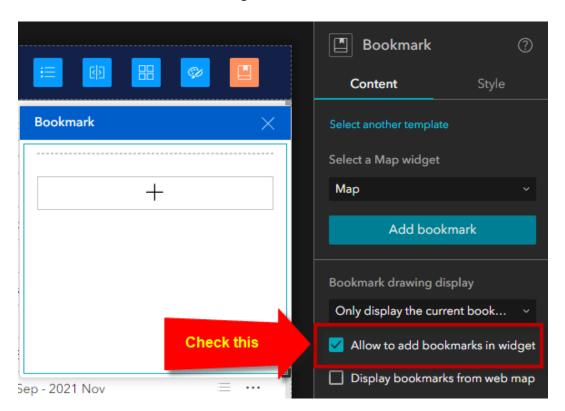


Select a Map Widget = Map





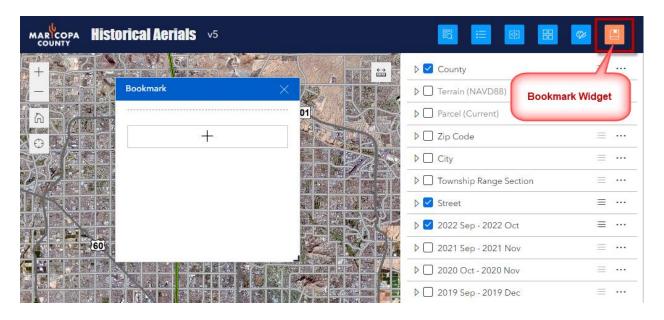
Allow to add bookmarks in the widget



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Save, Publish, View Published Item.

## https://localhost:3001/experience/4/

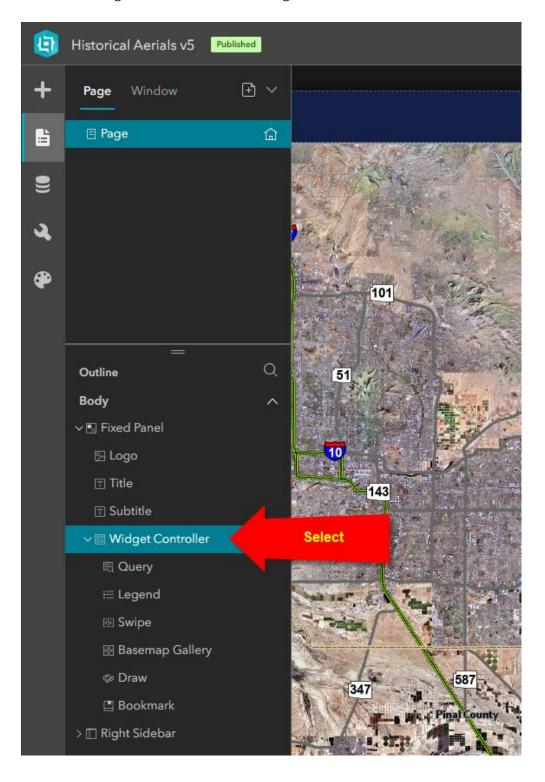


View the User Guide to see how this works.

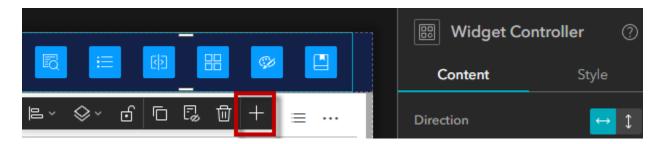
https://daviddas2.github.io/HistoricalAerials/help/bookmark\_widget.htm

# Add the Near Me Widget

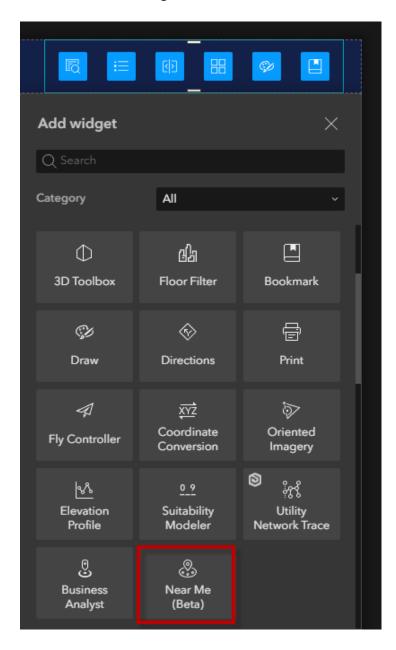
Select the Widget Controller from the Page Outline.



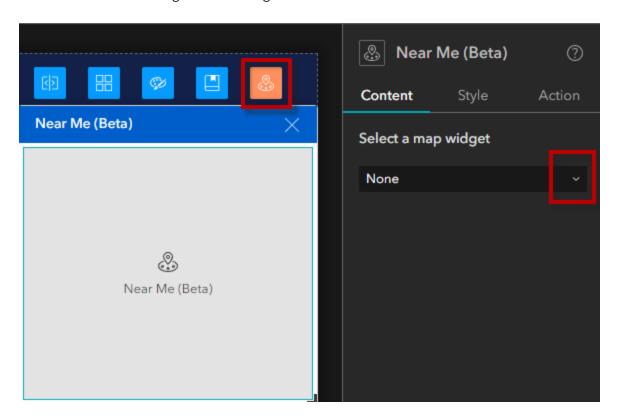
Click on the Add Widget Tool.



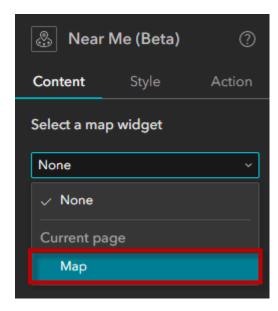
Add the Near Me Widget.



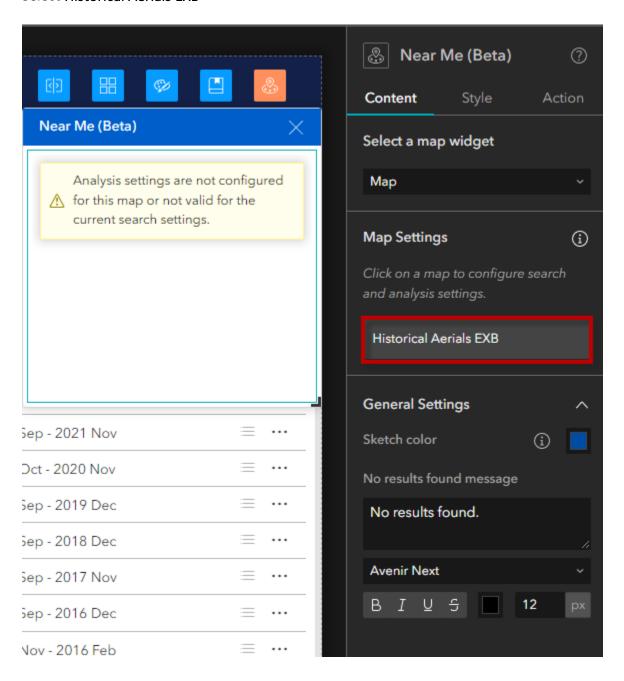
Select the Near Me Widget in the Widget Controller.



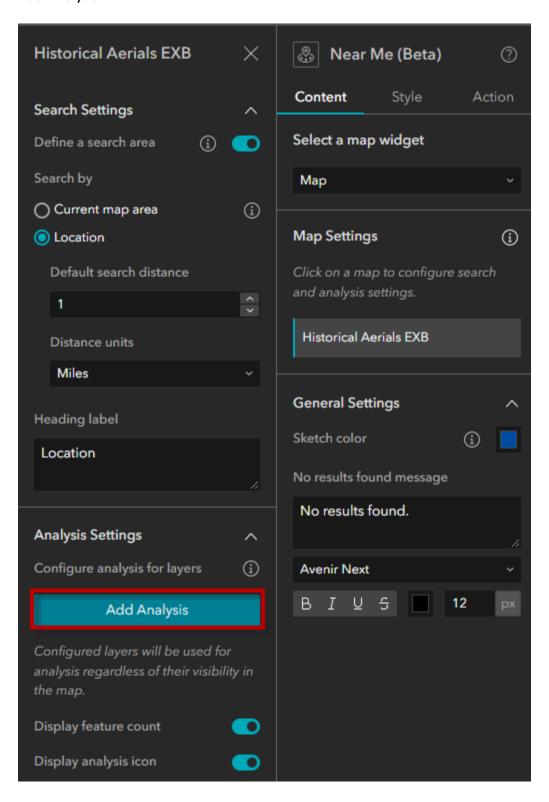
Select a Map Widget = Map



#### Select Historical Aerials EXB

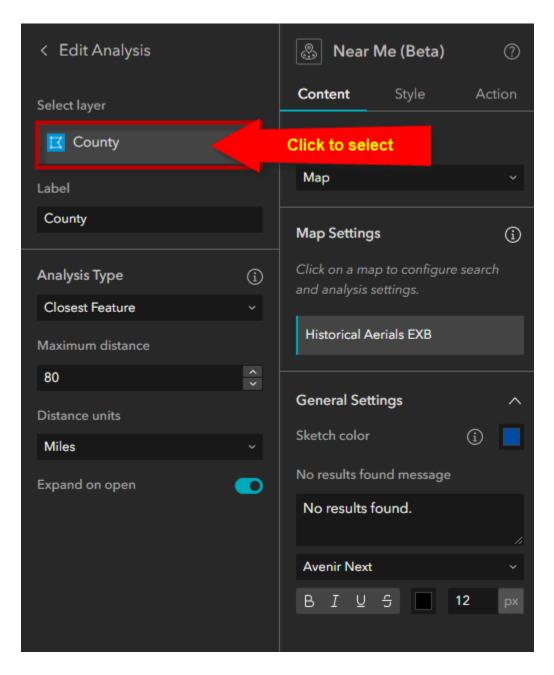


### Add Analysis

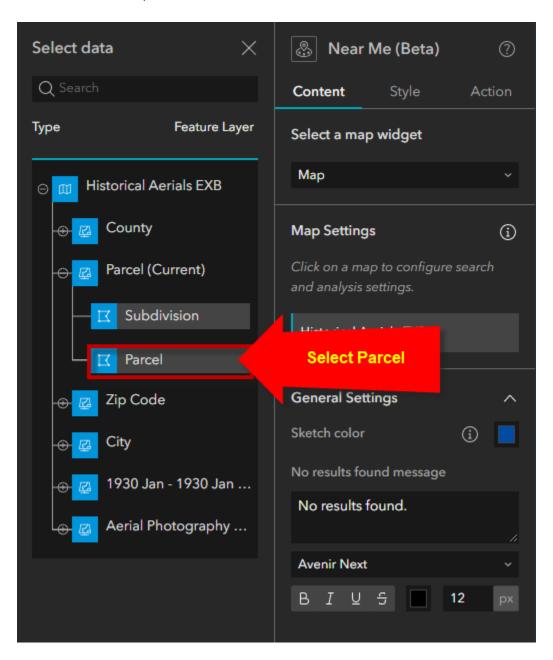


The default selected layer is County.

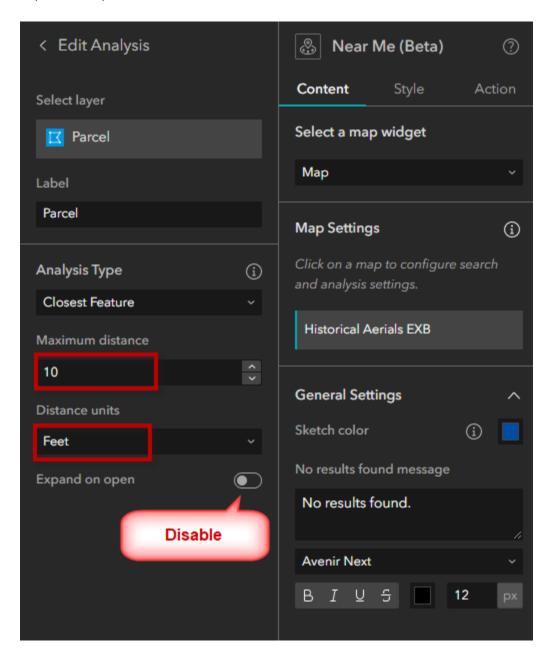
Click to select a different one.



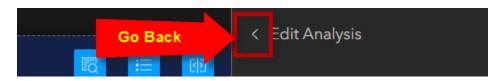
#### Select the **Parcel** Layer.



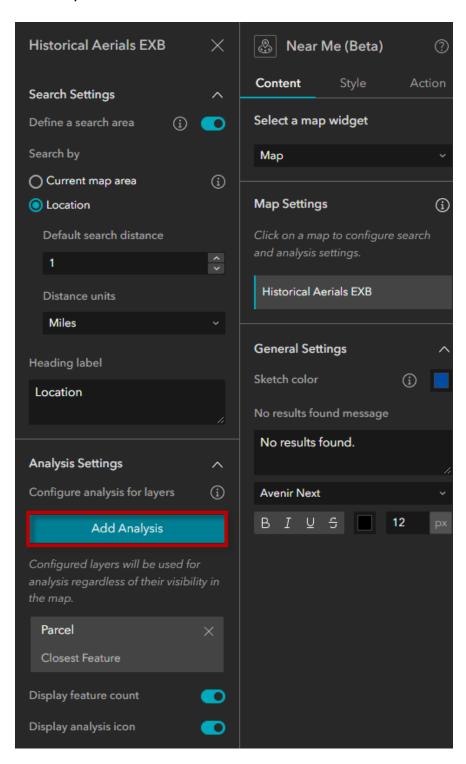
Analysis Type = Closest Feature Minimum Distance = 10 Distance Unit = Feet Expand on Open = Disable

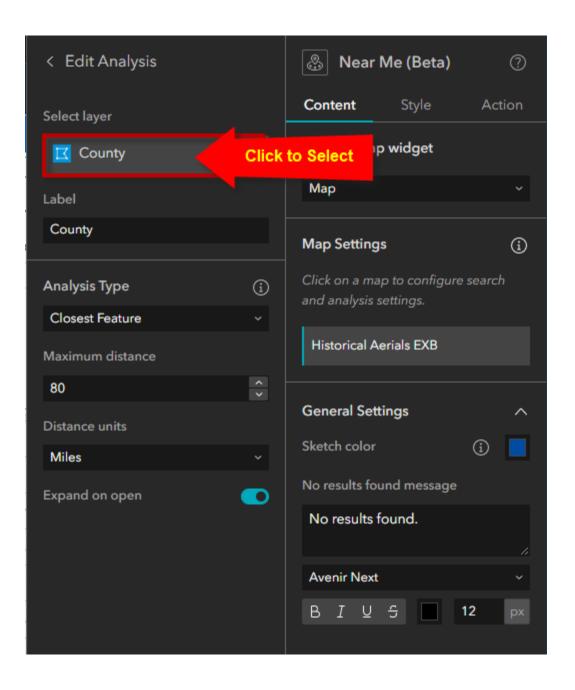


Go back to the Edit Analysis Page.

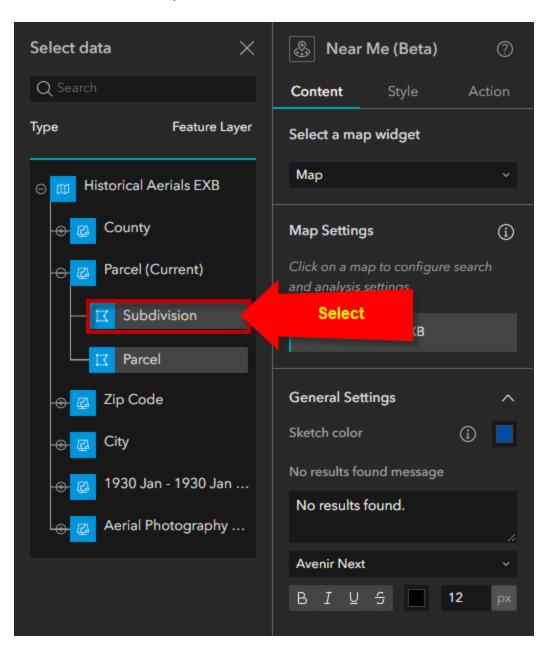


#### Add Analysis

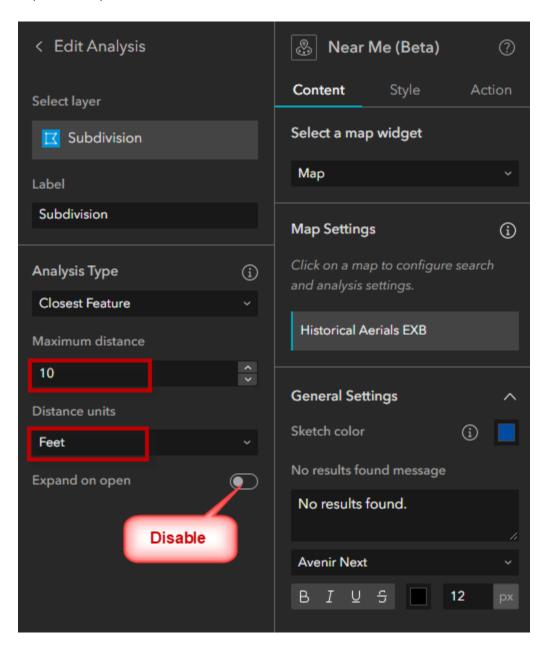




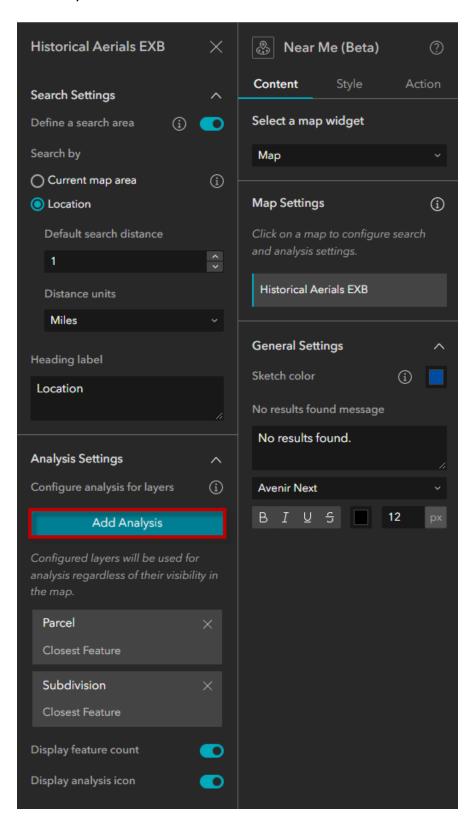
Select the **Subdivision** Layer.



Analysis Type = Closest Feature Minimum Distance = 10 Distance Unit = Feet Expand on Open = Disable

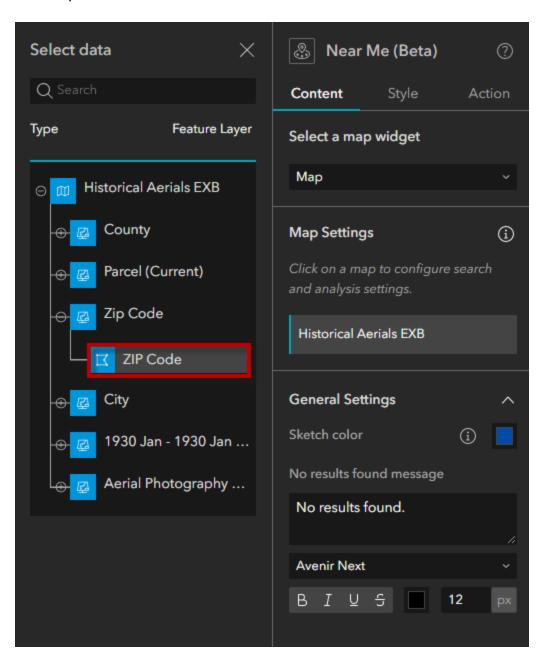


#### Add Analysis

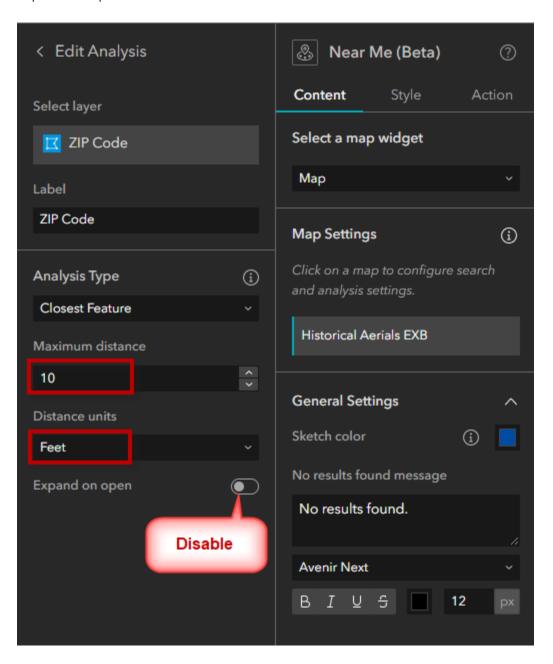


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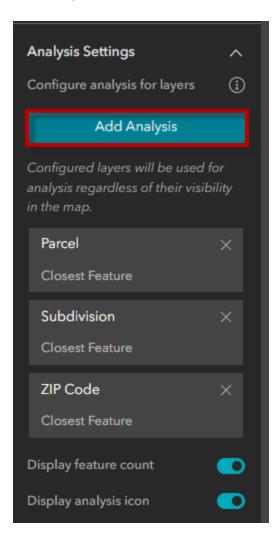
## Select **Zip Code**



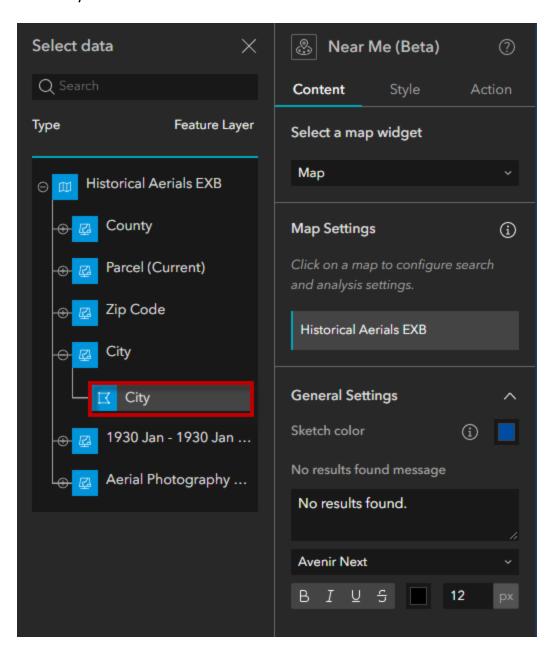
Analysis Type = Closest Feature Minimum Distance = 10 Distance Unit = Feet Expand on Open = Disable



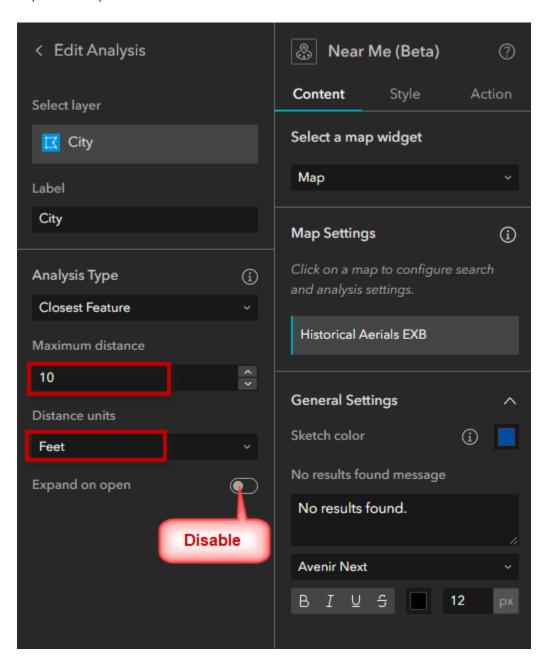
## Add Analysis



## Select City



Analysis Type = Closest Feature Minimum Distance = 10 Distance Unit = Feet Expand on Open = Disable



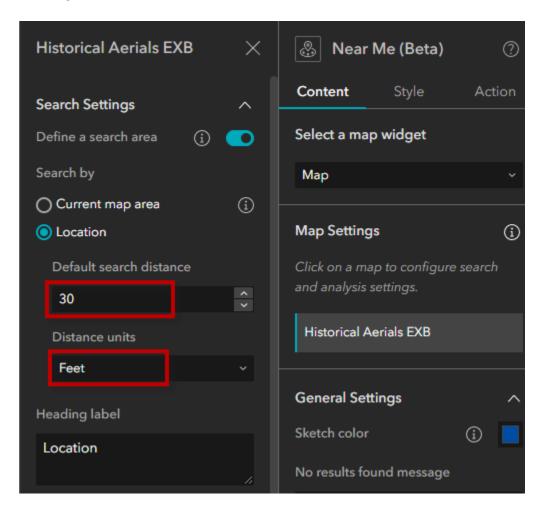
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Search by Location

Default Search Distance = 30

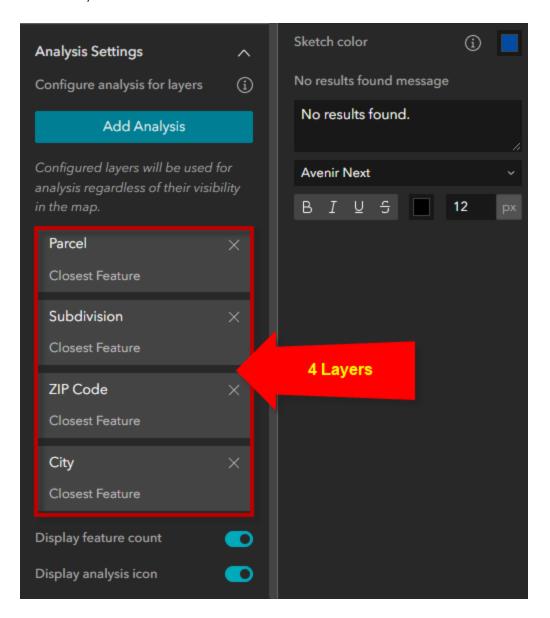
Distance Units = Feel

Heading Label = Location



You have configured the Near Me Widget to search for 4 layers:

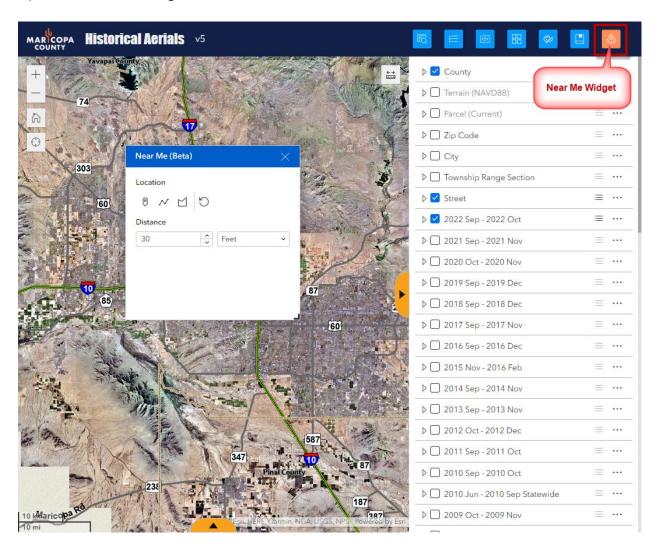
- Parcel
- Subdivision
- ZIP Code
- City



Save, Publish, View Published Item.

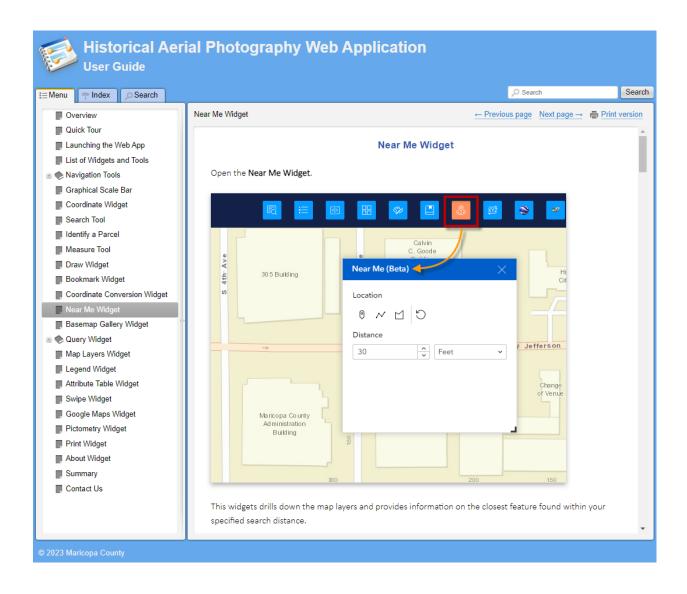
# https://localhost:3001/experience/4/

Open the Near Me Widget.



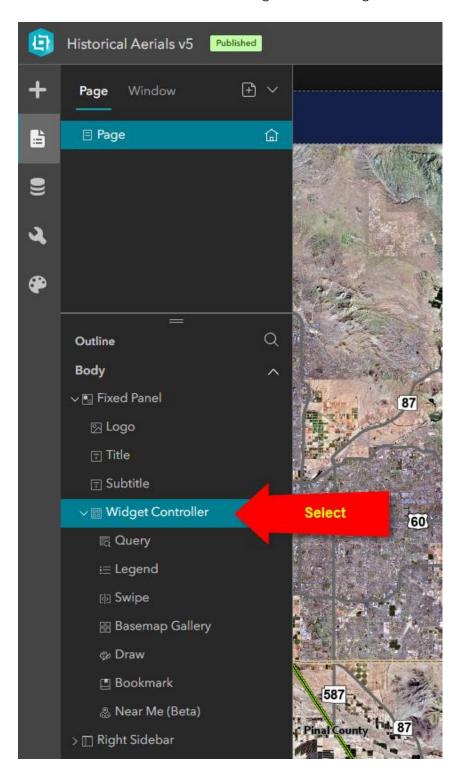
To see how the Near Me Widget works, follow the User Guide.

https://daviddas2.github.io/HistoricalAerials/help/near\_me\_widget.htm



# Add the Coordinate Conversion Widget

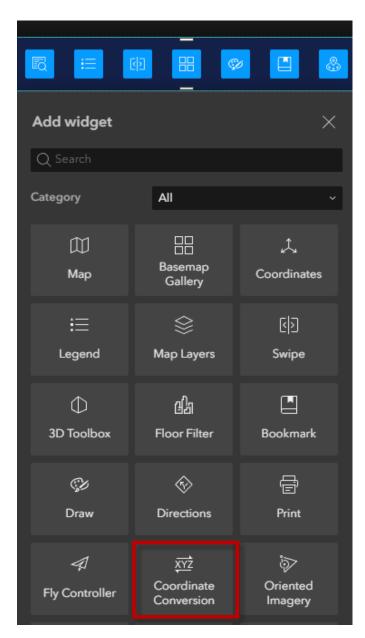
Select the Coordinate Conversion Widget from the Page Outline.

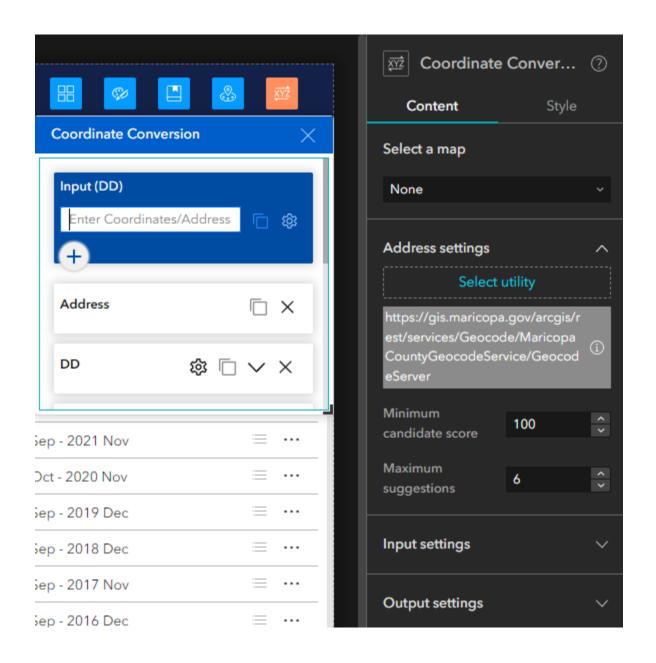


Click on the Add Widget Tool.

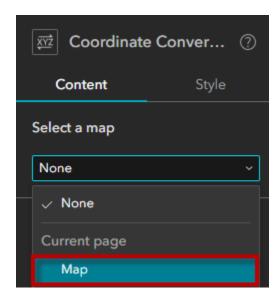


Add the Coordinate Conversion Widget.

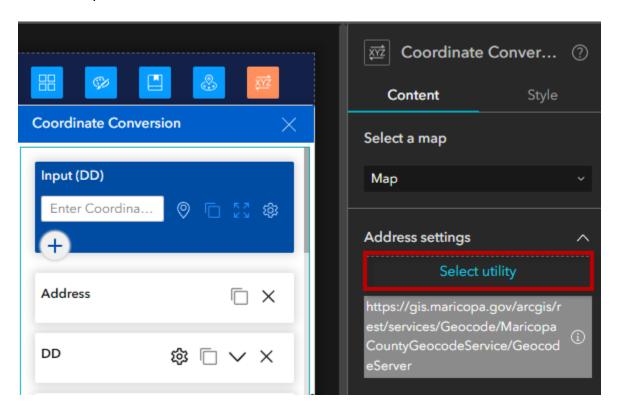




### Select a map = Map

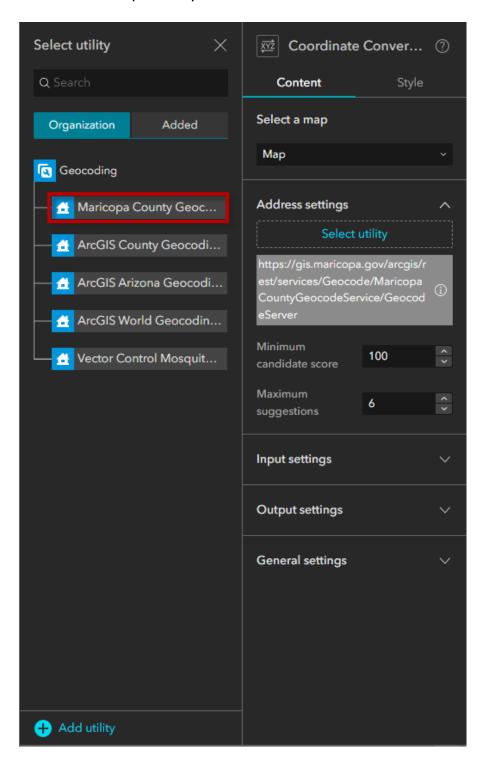


## **Select Utility**



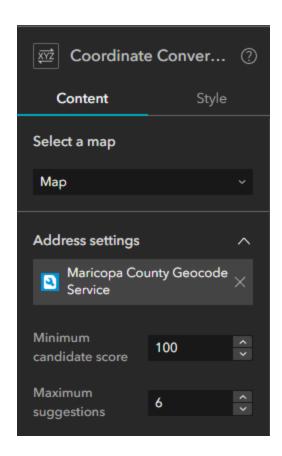
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#### Select the Maricopa County Geocoder

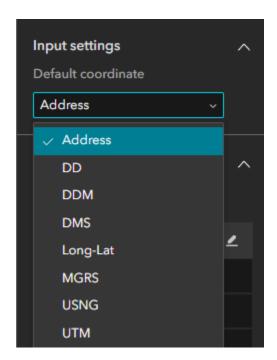


This is the URL for the Maricopa County Geocoder:

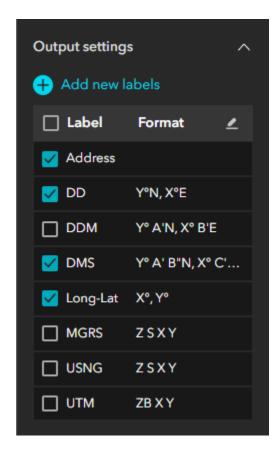
 $\underline{https://gis.maricopa.gov/arcgis/rest/services/Geocode/MaricopaCountyGeocodeService/GeocodeSe$ 



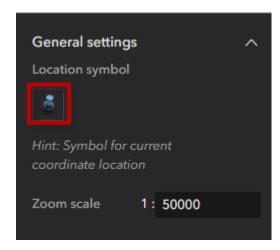
Input Settings = Address



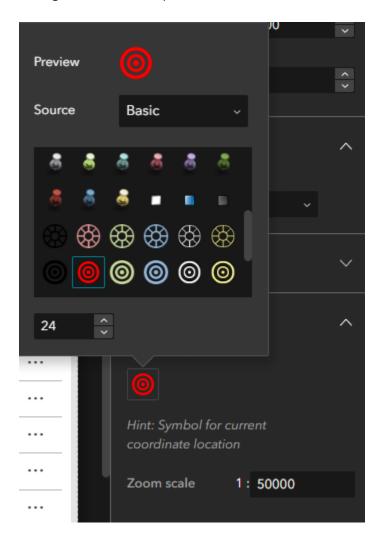
## Output Settings:



## **General Settings**

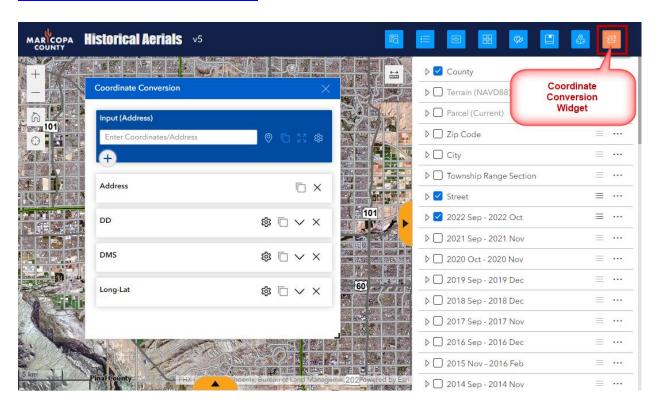


# Change the Location Symbol



Save, Publish, View Published Item.

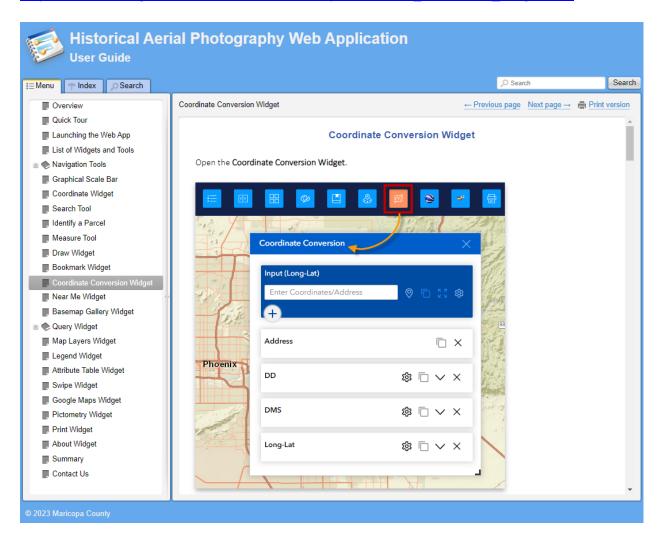
## https://localhost:3001/experience/4/



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To see how this widget works, follow the User Guide.

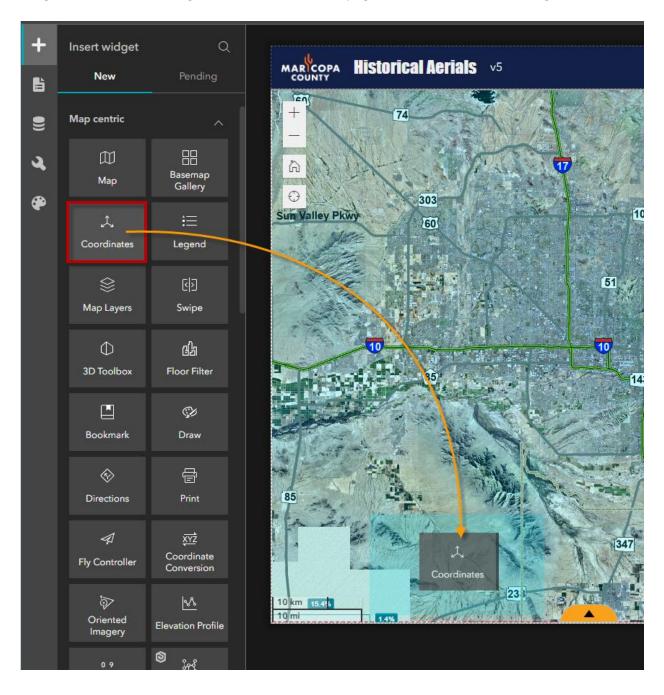
https://daviddas2.github.io/HistoricalAerials/help/coordinate conversion widget.htm

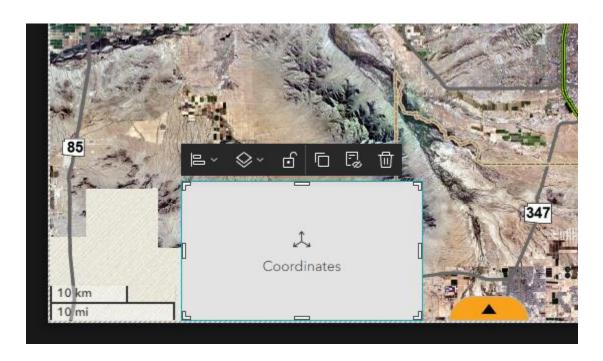


# Add the Coordinates Widget

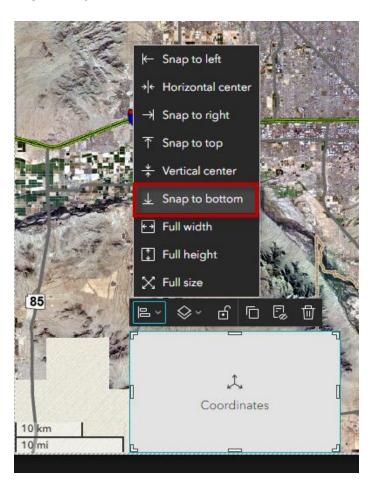
Open the Insert Page.

Drag the Coordinates Widget to the bottom of the page next to the Scale Bar Widget

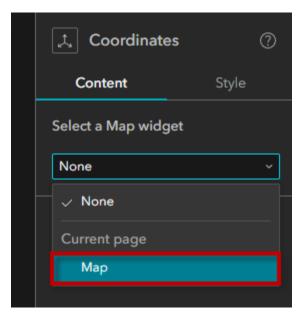


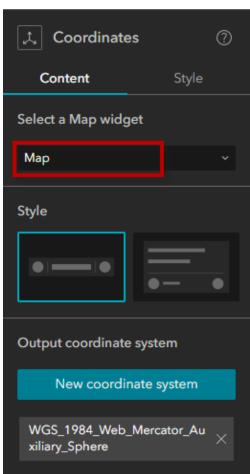


Align = **Snap to Bottom** 

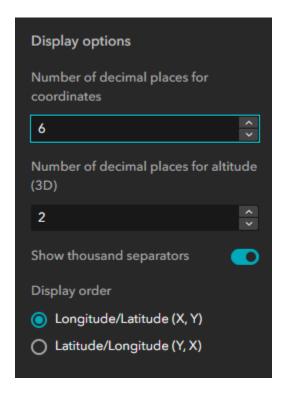


### Select a Map Widget = Map

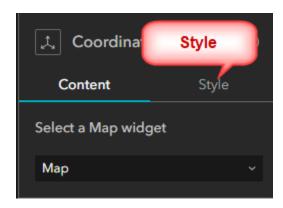




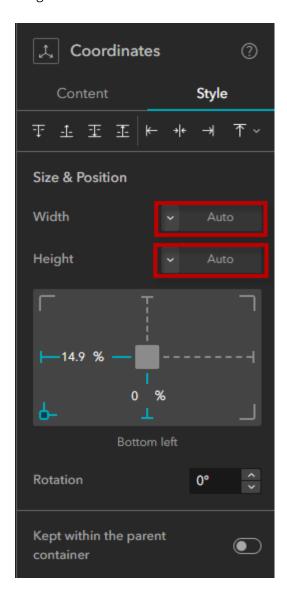
# Set number of decimal places for coordinates = 6

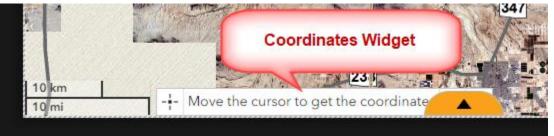


# Open the Style Tab

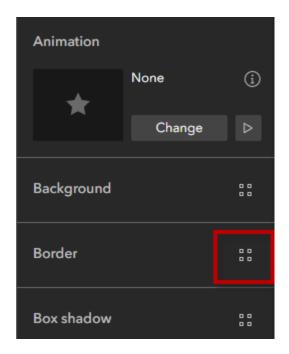


Width = Auto Height = Auto

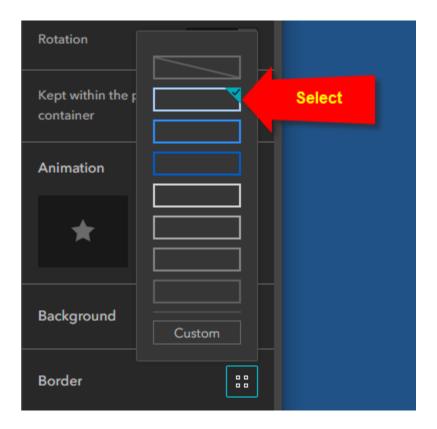




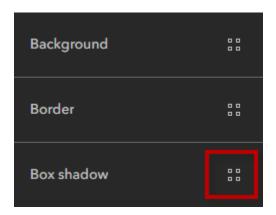
#### Select a Border



Select the  $2^{nd}$  border from the top.



#### Select a Box Shadow



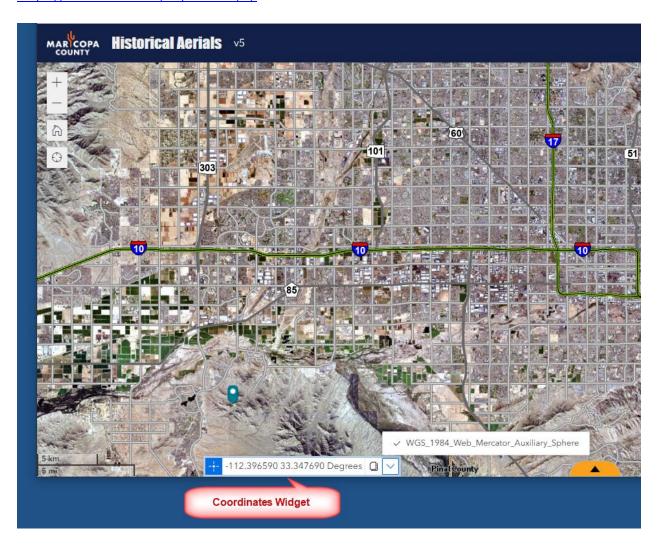
#### Select Small





Save, Publish, View Published Item

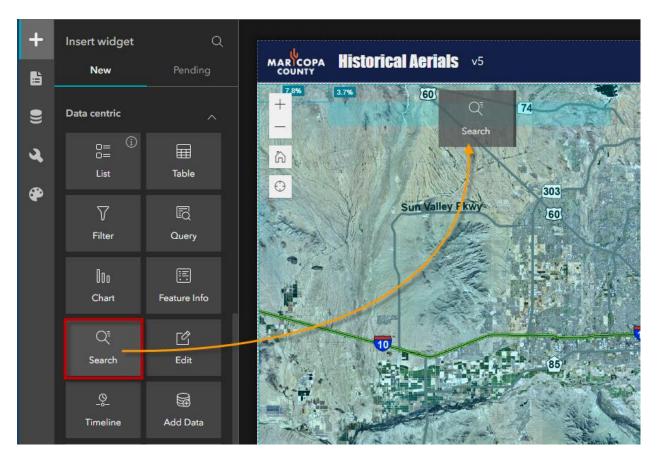
# https://localhost:3001/experience/4/

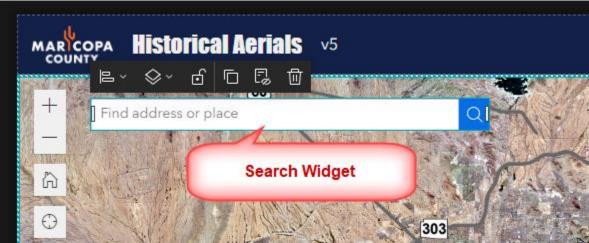


# Add the Search Widget

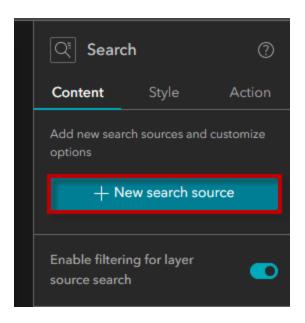
Open the Insert Widget Tab.

Drag the Search Widget to the top left of the Map.

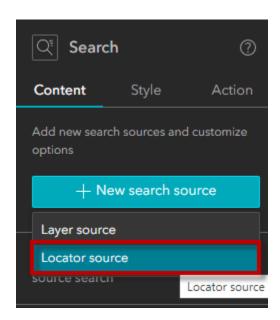




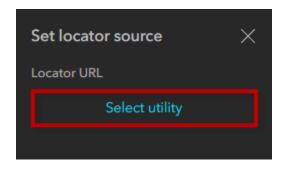
### Add New Search Source



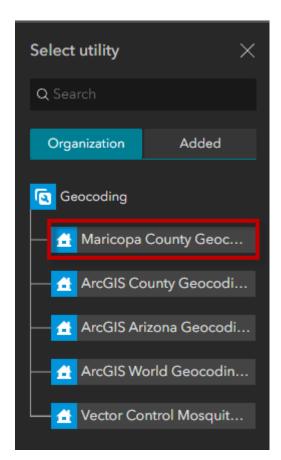
#### Select Locator Source



#### Select Utility



Select Maricopa County Geocoder

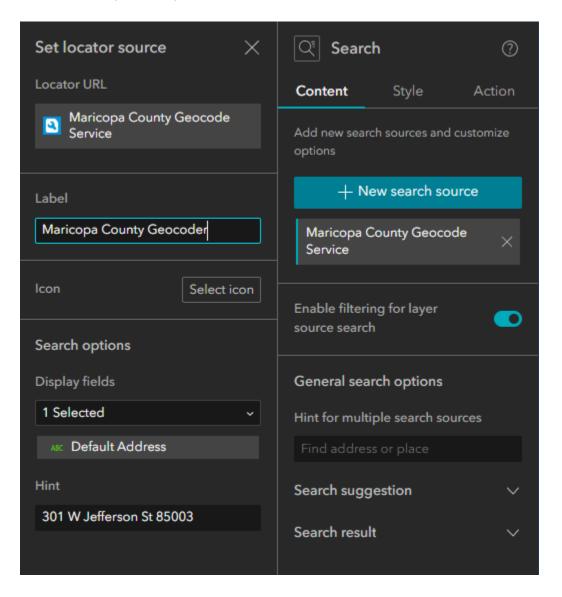


This is the URL for the Maricopa County Geocoder:

 $\underline{https://gis.maricopa.gov/arcgis/rest/services/Geocode/MaricopaCountyGeocodeService/GeocodeSe$ 

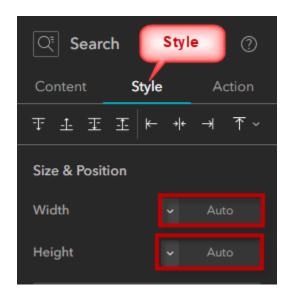
You can add this as a Utility.

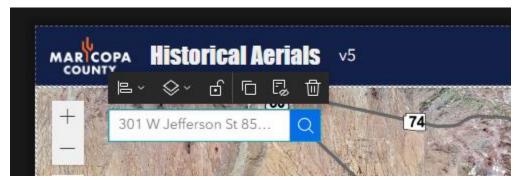
Label = Maricopa County Geocoder



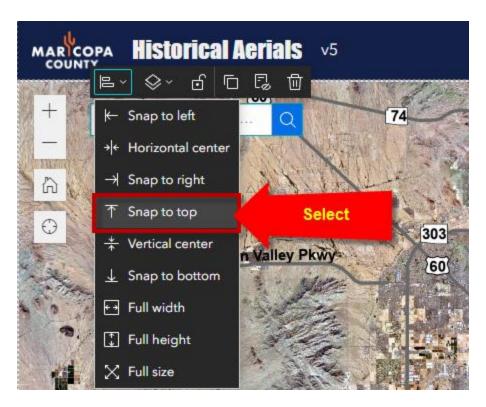
### Open the **Style Tab**

Width = Auto Height = Auto



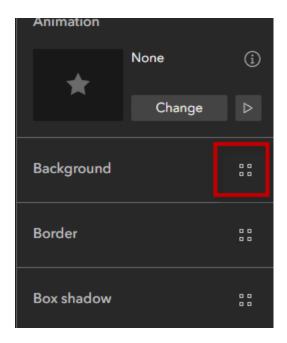


Align = Snap to Top

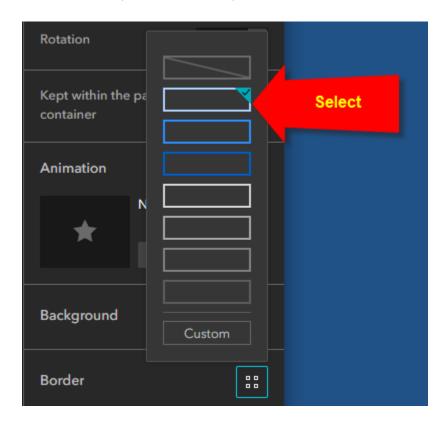




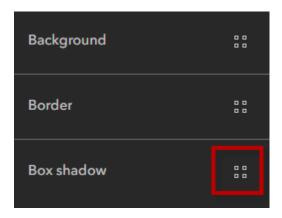
## Select a Border



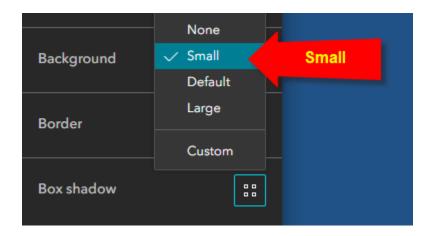
Select the  $2^{nd}$  option from the top.



### Select a Box Shadow



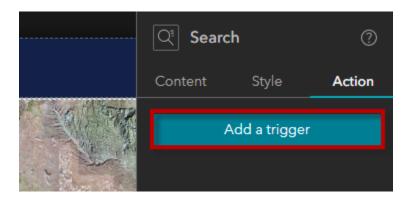
# Select Small



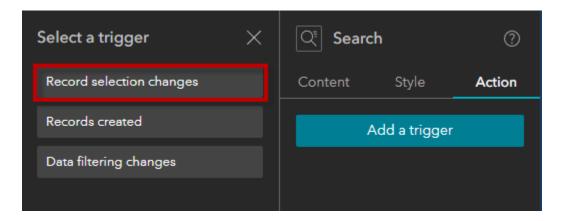
# Add Action to the Search Widget

### Open the Action Tab

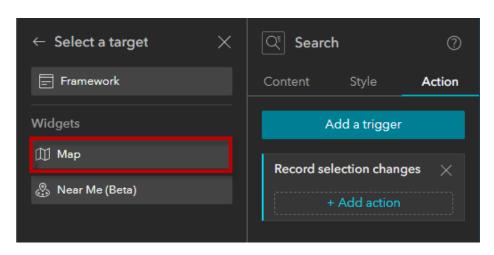
# Add a Trigger.



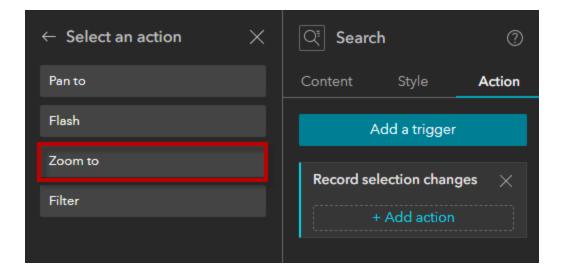
## Record selection changes



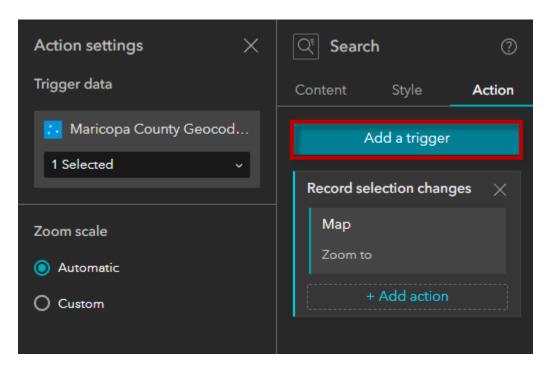
#### Мар



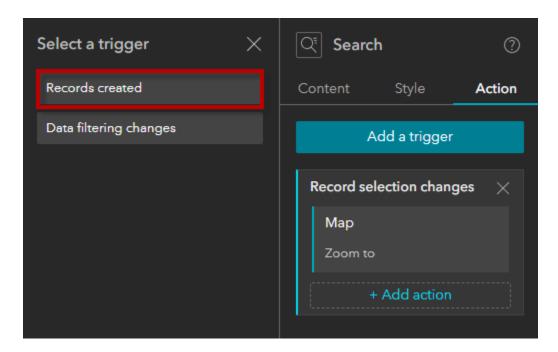
#### Zoom to



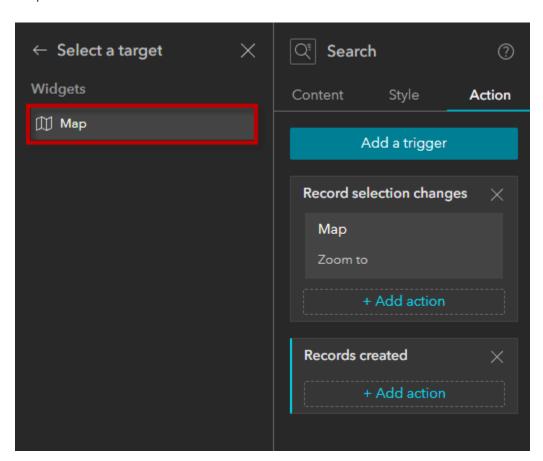
### Add a Trigger



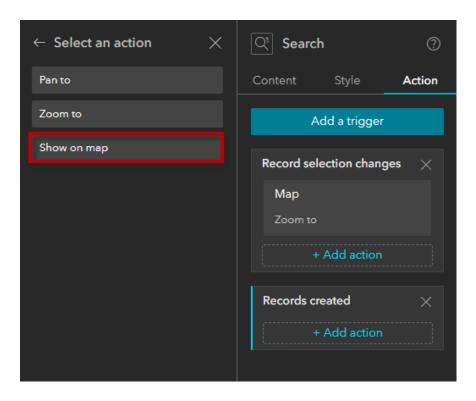
#### Records created



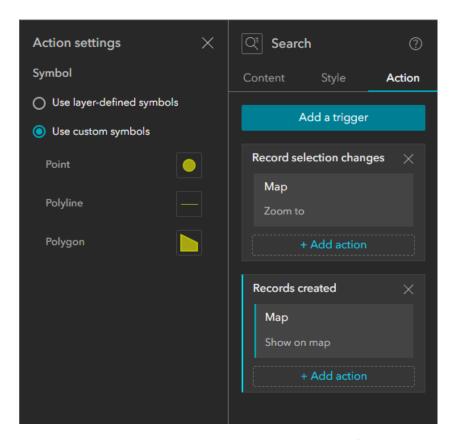
#### Мар



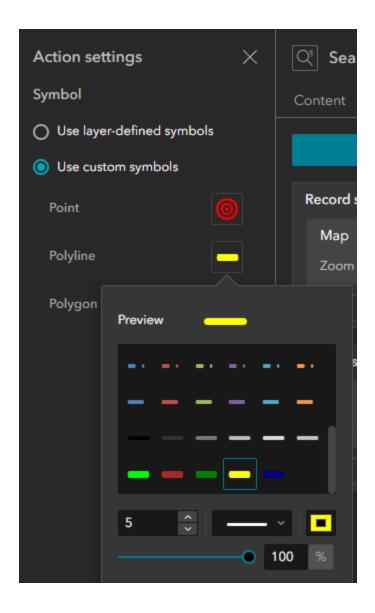
#### Show on Map

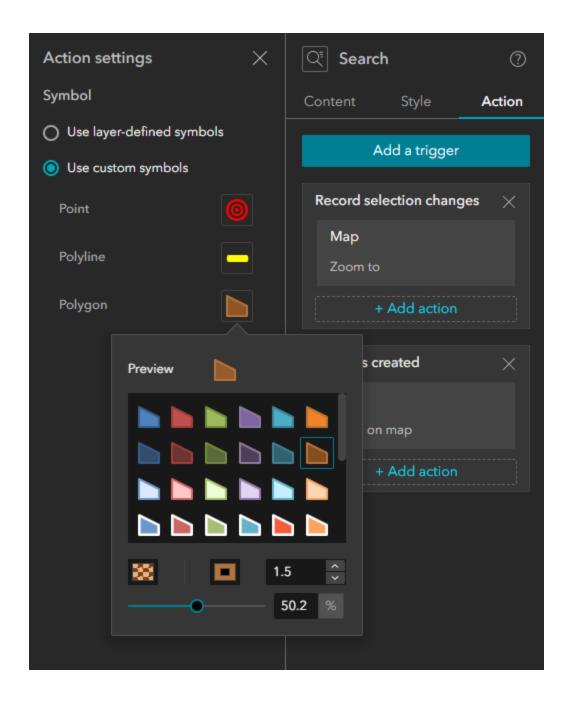


Change the default Point, Polyline and Polygon symbols.









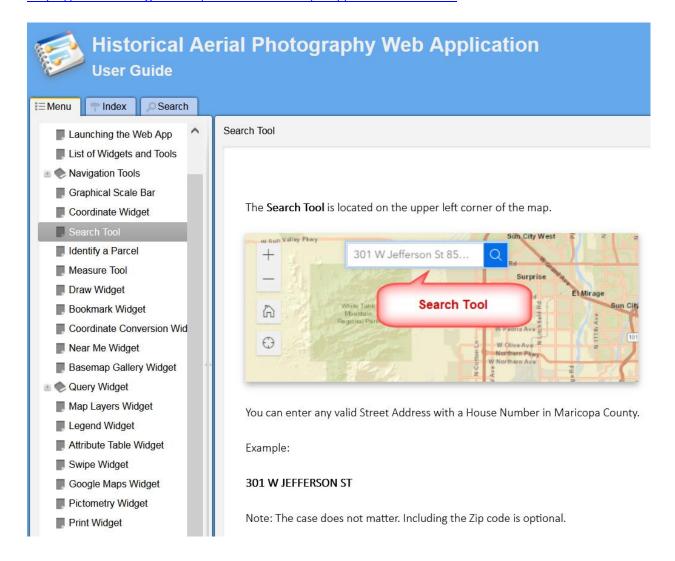
Save, Publish, View Published Item.

# https://localhost:3001/experience/4/



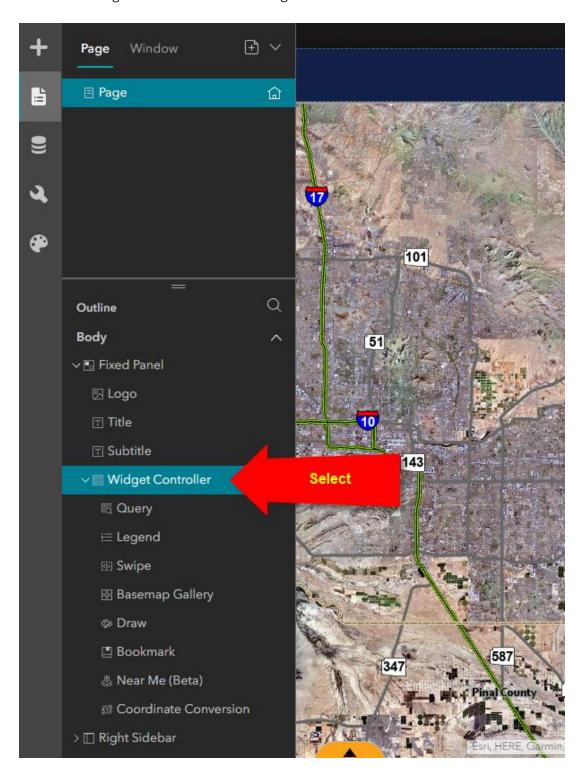
Try out the example searches in the User Guide:

https://daviddas2.github.io/HistoricalAerials/help/search tool.htm



# Add the Print Widget

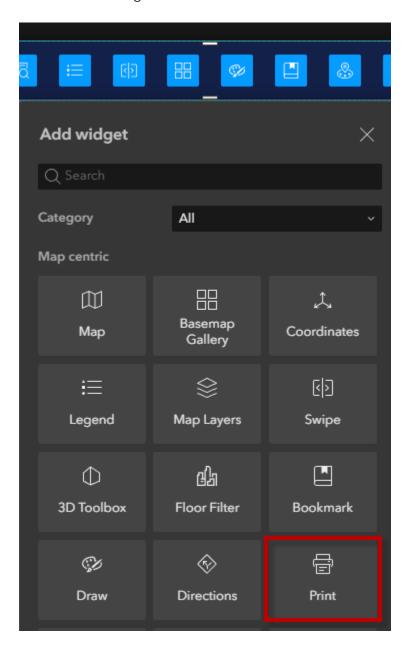
Select the Widget Controller from the Page Outline.



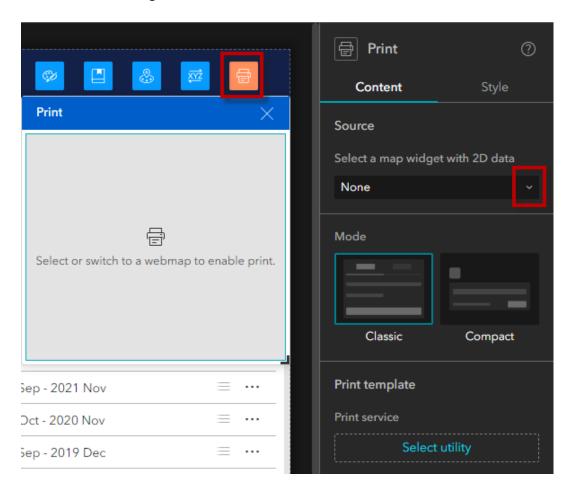
Click on the Add Widget Tool.



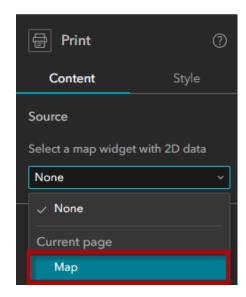
Add the Print Widget.



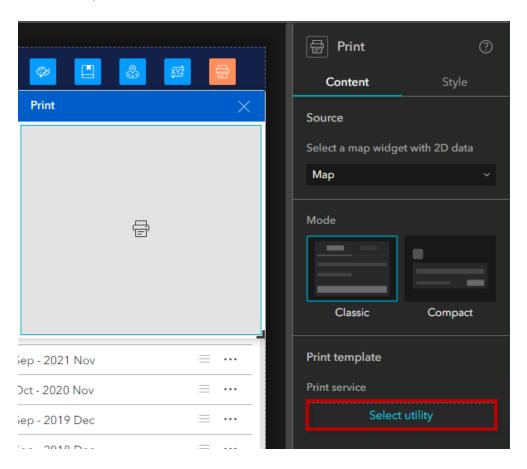
Select the Print Widget.



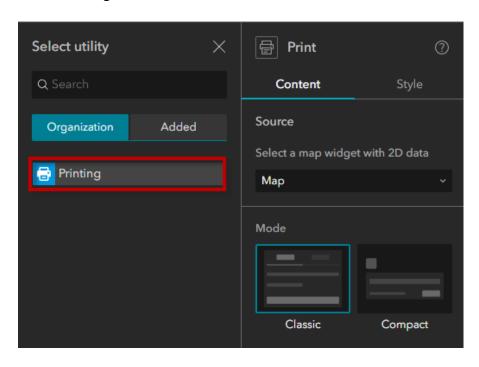
Select a map with 2D data = Map

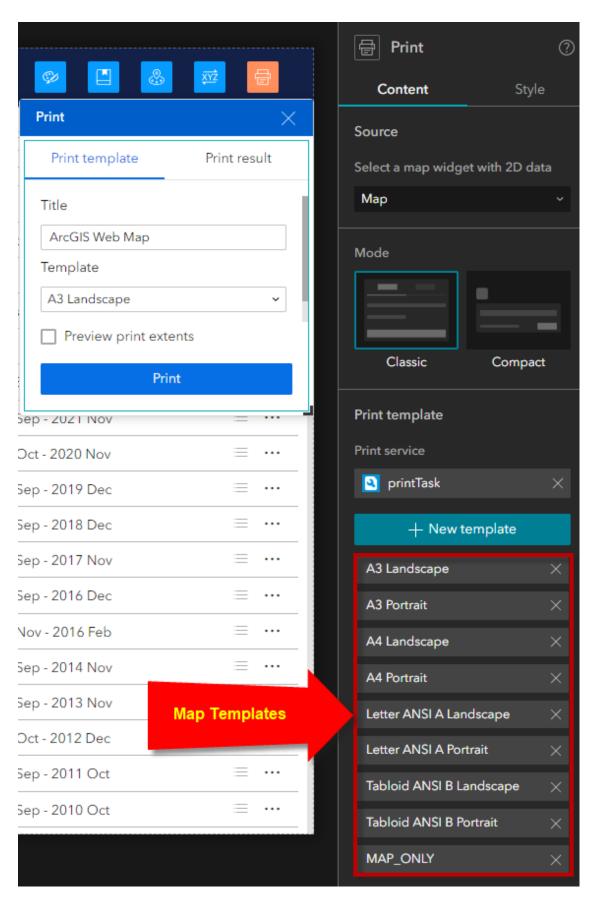


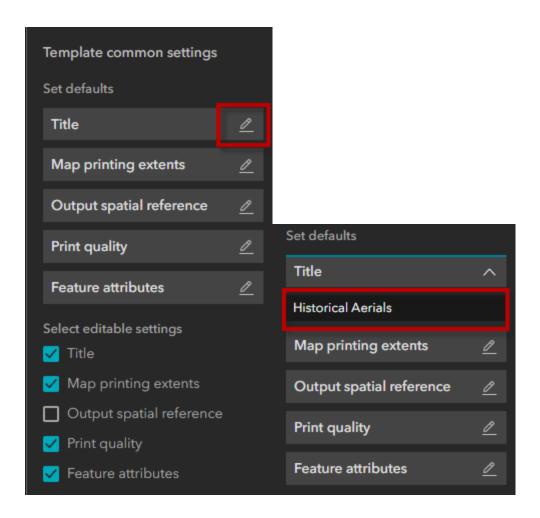
# **Select Utility**



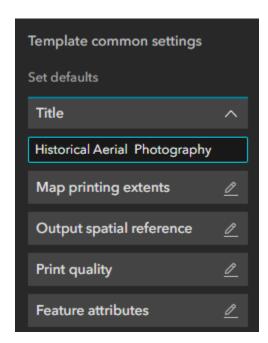
### Select **Printing**





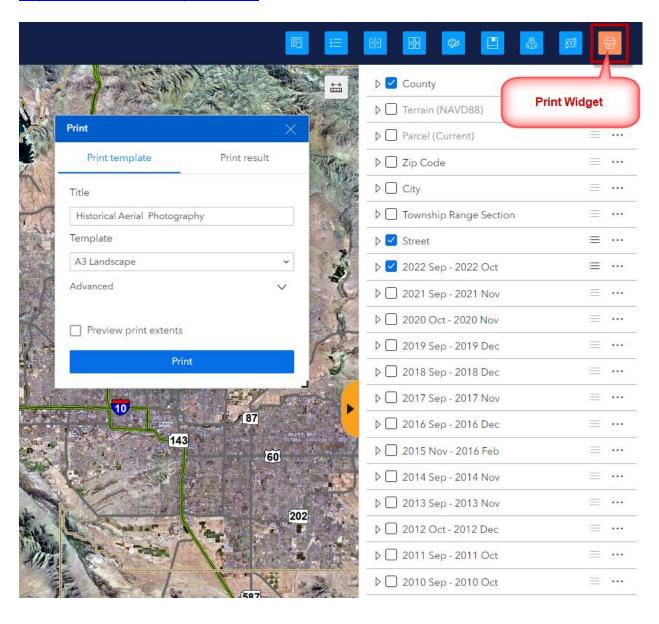


Set the default Map Title = Historical Aerial Photography



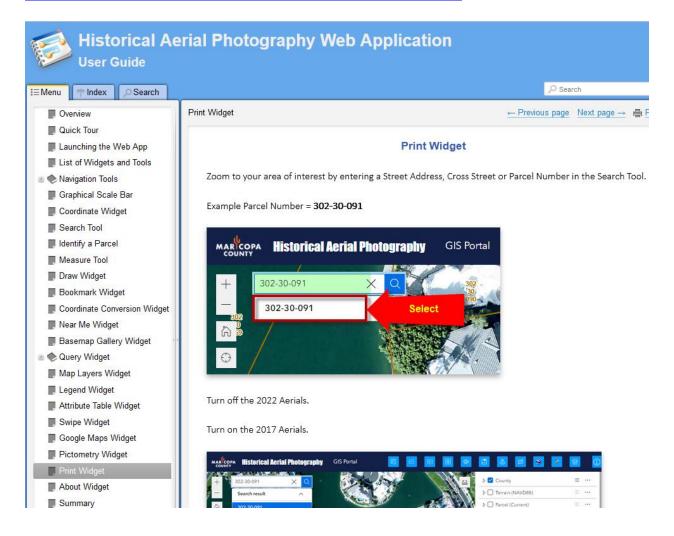
Save, Publish, View Published Item.

# https://localhost:3001/experience/4/

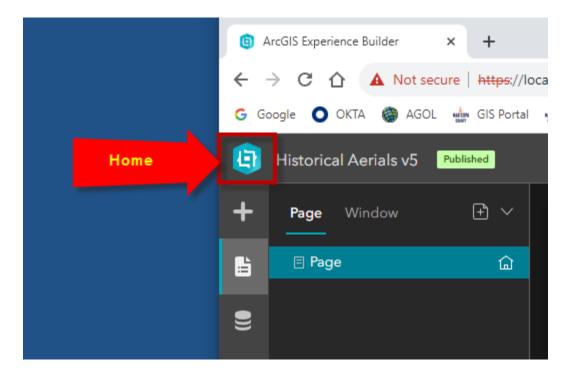


Follow the steps in the User Guide to create your own PDF Map.

https://daviddas2.github.io/HistoricalAerials/help/print\_widget.htm

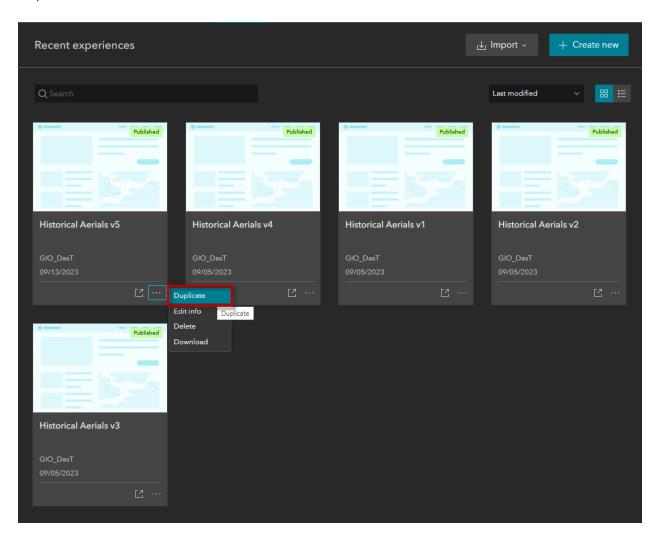


# Go back to the Home Page

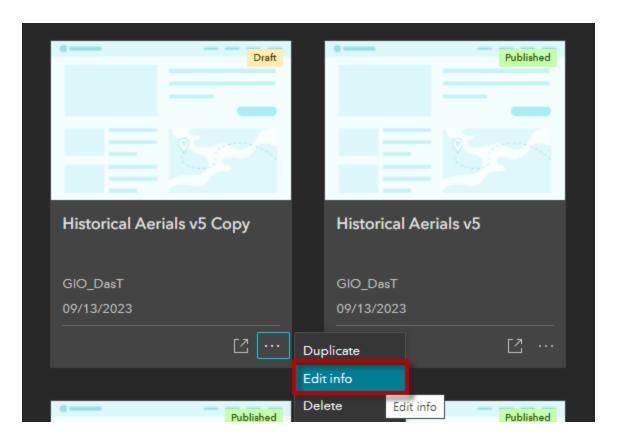


# Create Historical Aerials v6

Duplicate Historical Aerials v5 to create Historical Aerials v6

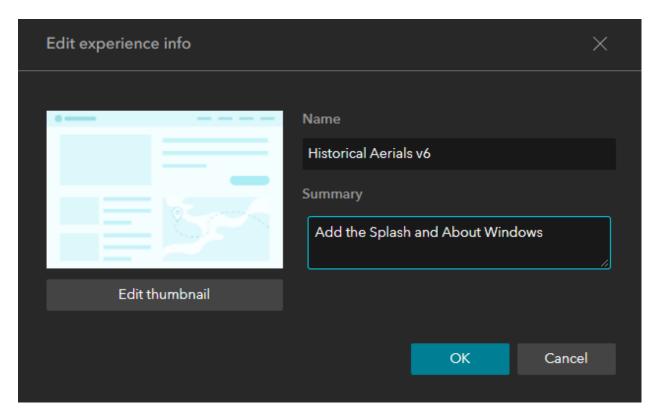


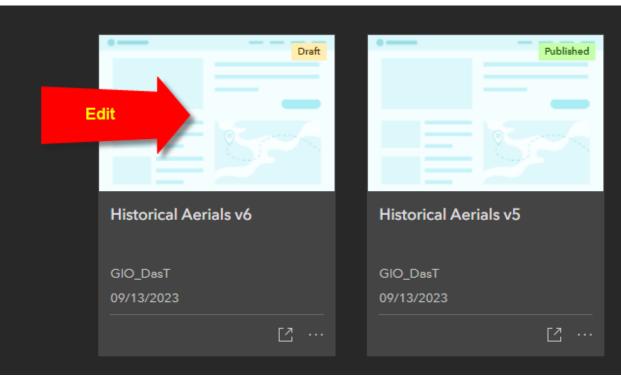
# Edit Info



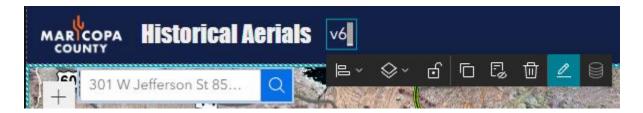
### Name = Historical Aerials v6

### Summary = Add the Splash and About Windows

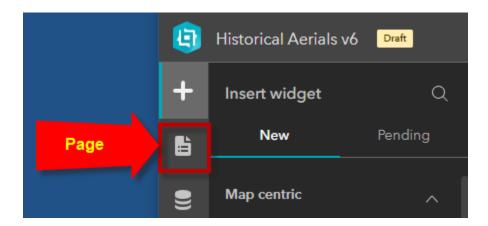




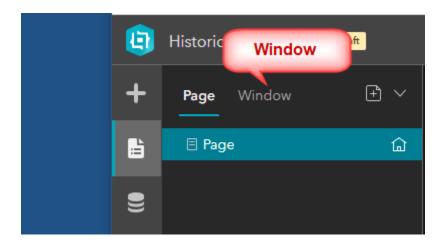
### Edit the Subtitle to read v6



# Open the Page Tab

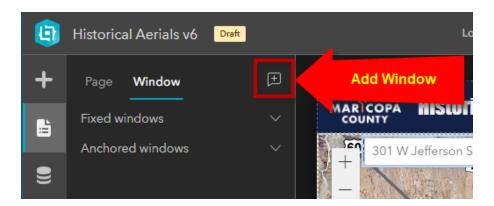


# Open the Window Tab

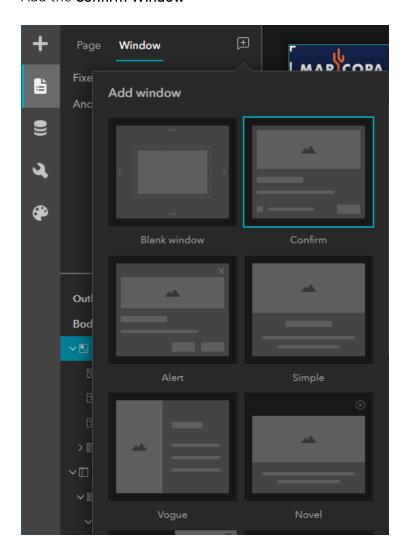


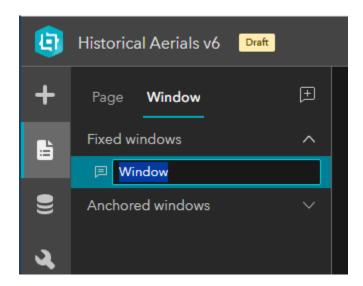
# Add a Splash Window

Click on the Add Window button.

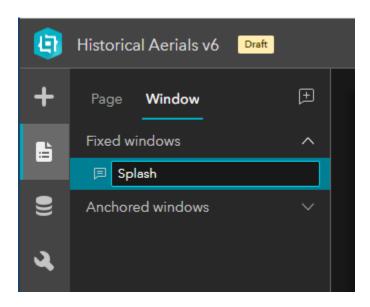


### Add the Confirm Window

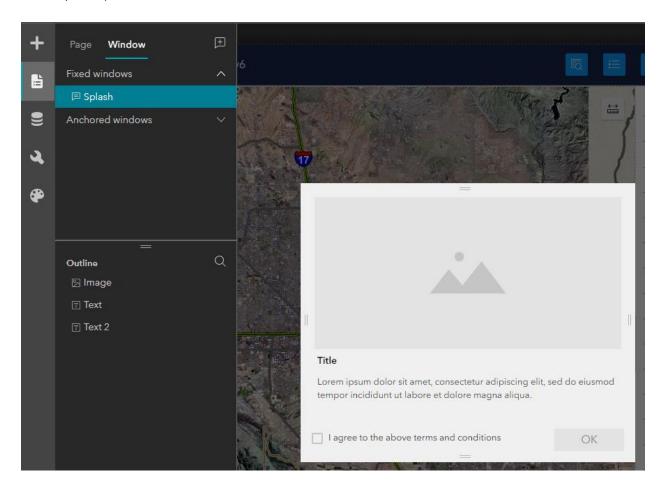




Rename this Window to Splash



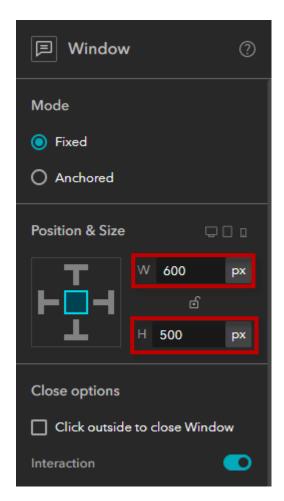
# This is your Splash Window

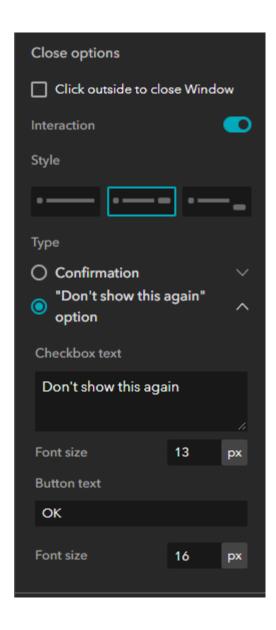


# Change the size of the Splash Window

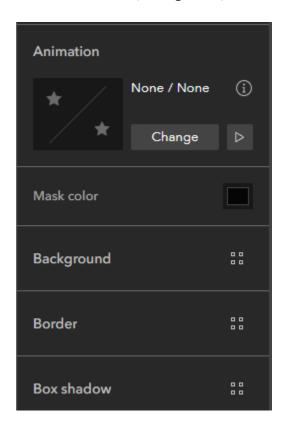
Width = 600

Height = 500

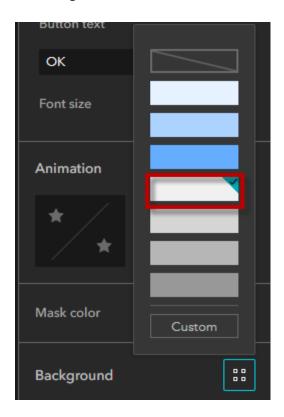




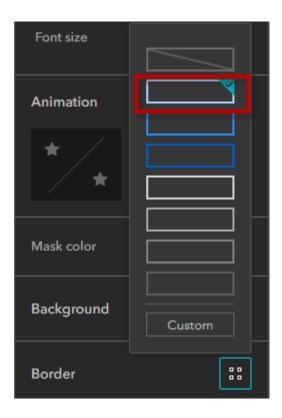
Set the Mask Color, Background, Border and Box Shadow for the Splash Window.



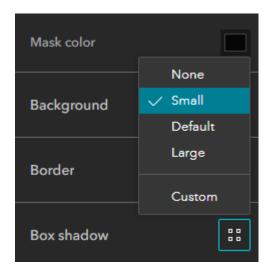
# Set Background



# Set Border

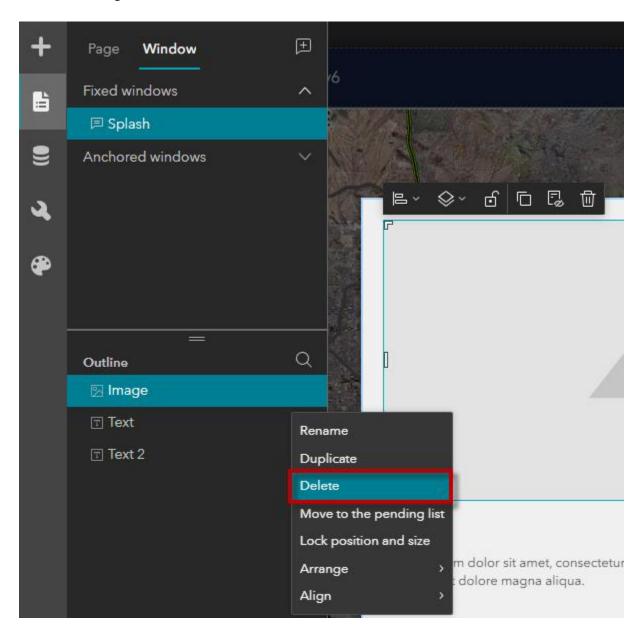


# Set Box Shadow = Small

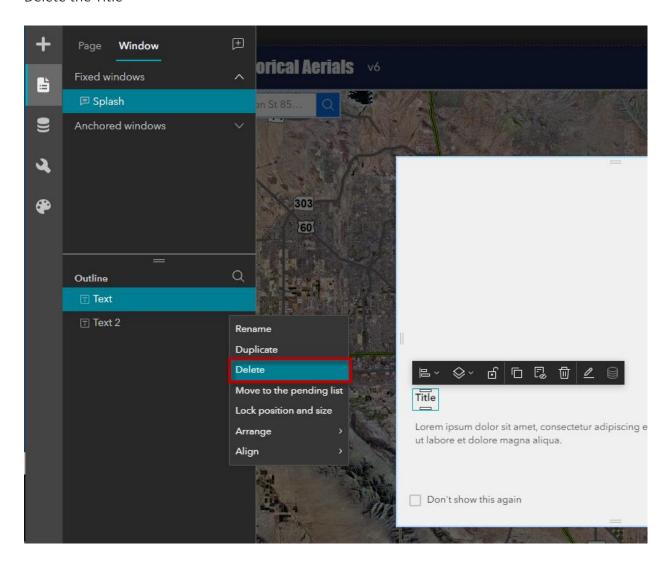


### Examine the Splash Window Outline

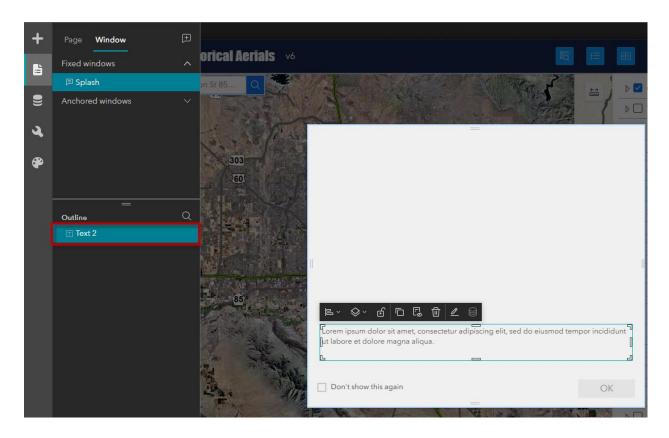
# Delete the Image



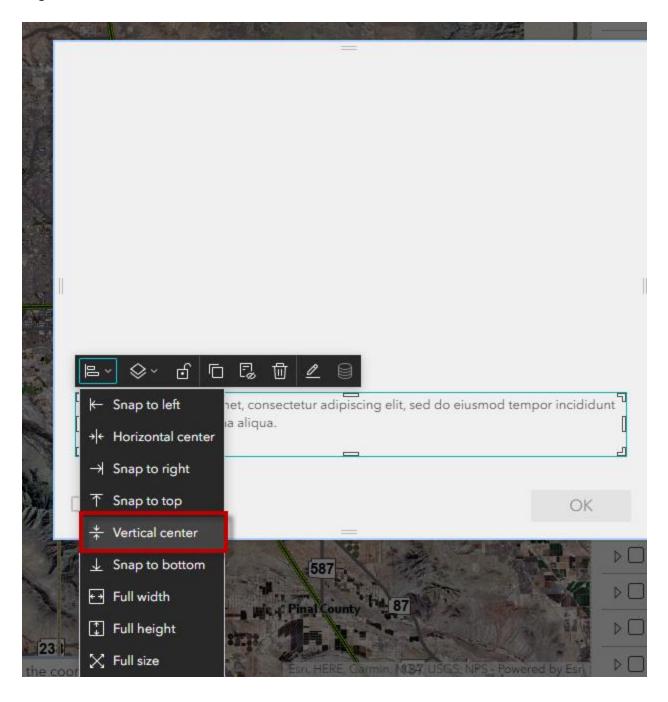
### Delete the Title



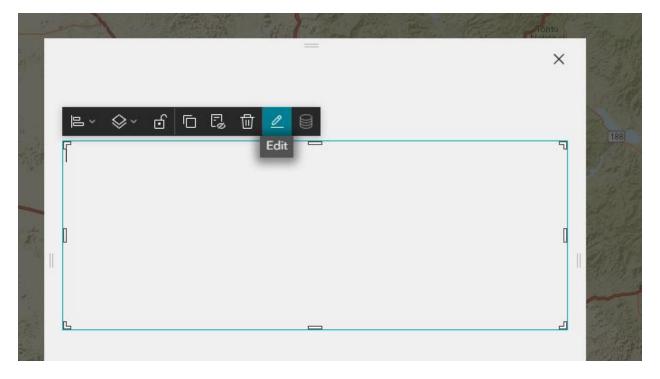
# Select Text2



# Align = Vertical Center



# Edit the Text



Note: You can also double click inside the text box to enter Edit Mode.

### Enter this Splash Screen Text

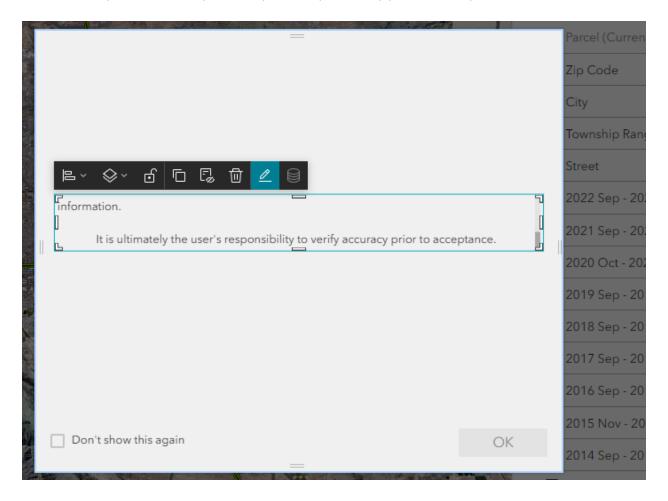
This Web App was last updated 7/20/2023

Please clear your browser cache before first use.

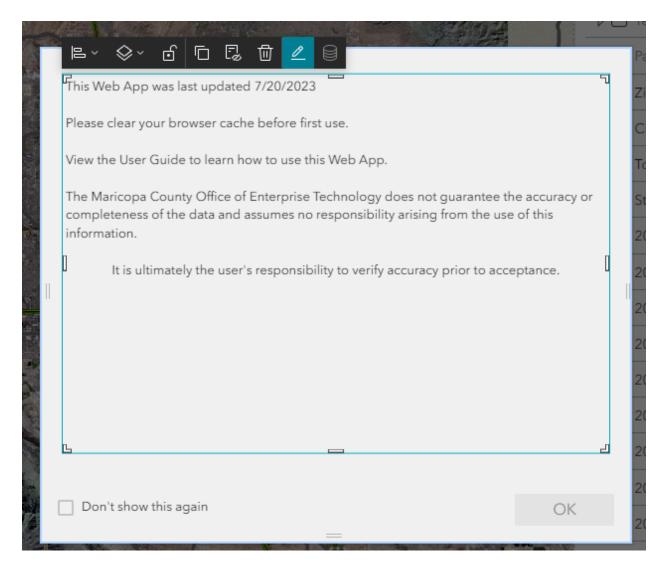
View the User Guide to learn how to use this Web App.

The Maricopa County Office of Enterprise Technology does not guarantee the accuracy or completeness of the data and assumes no responsibility arising from the use of this information.

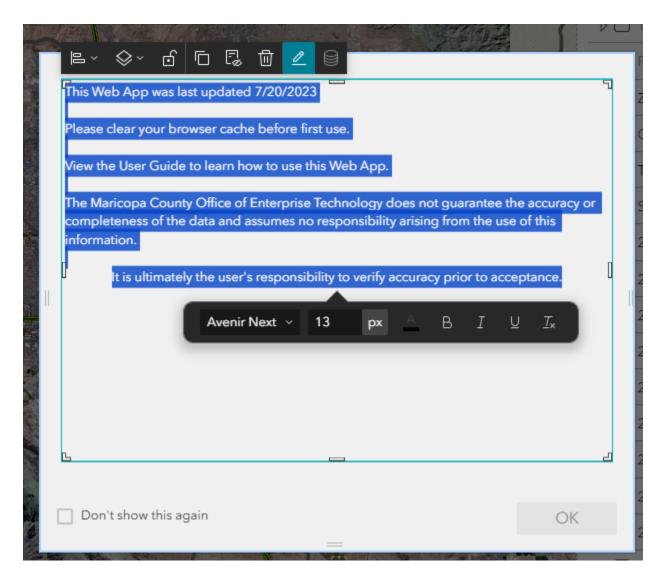
It is ultimately the user's responsibility to verify accuracy prior to acceptance.



# Expand the height of the text box.



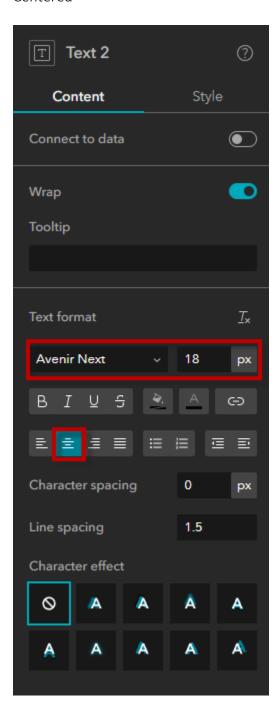
Select the entire text.



### Text Font = **Avenir Next**

### Text Size = 18

#### Centered



This Web App was last updated 7/20/2023

Please clear your browser cache before first use.

View the User Guide to learn how to use this Web App.

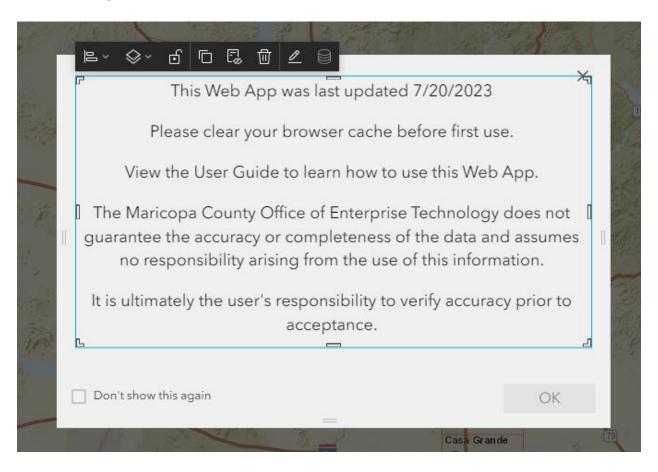
The Maricopa County Office of Enterprise Technology does not guarantee the accuracy or completeness of the data and assumes no responsibility arising from the use of this information.

It is ultimately the user's responsibility to verify accuracy prior to acceptance.

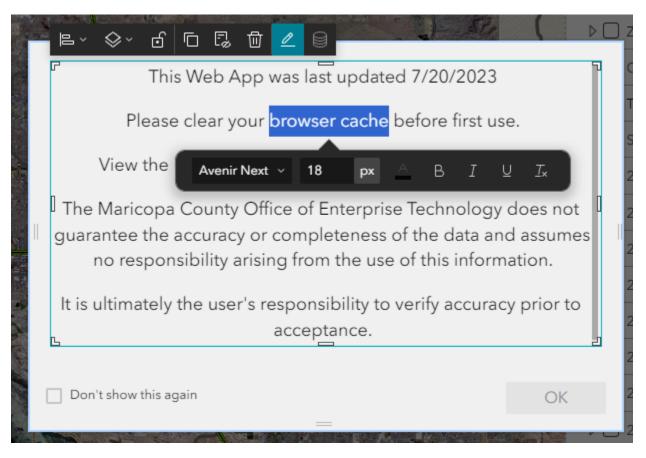
Don't show this again

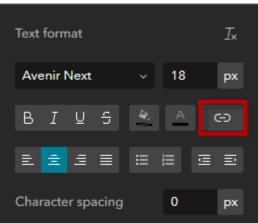
OK

Resize the height of the Window to make the Text Fit

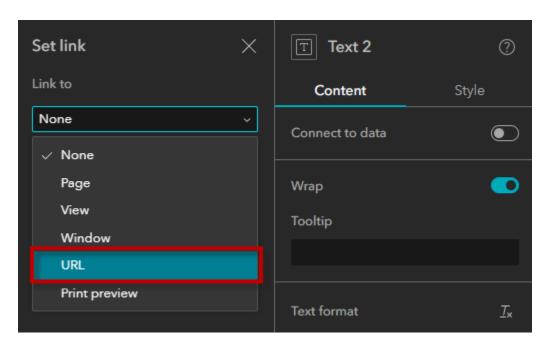


#### Add a link to **Browser Cache**

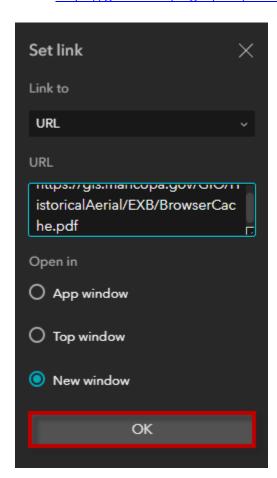




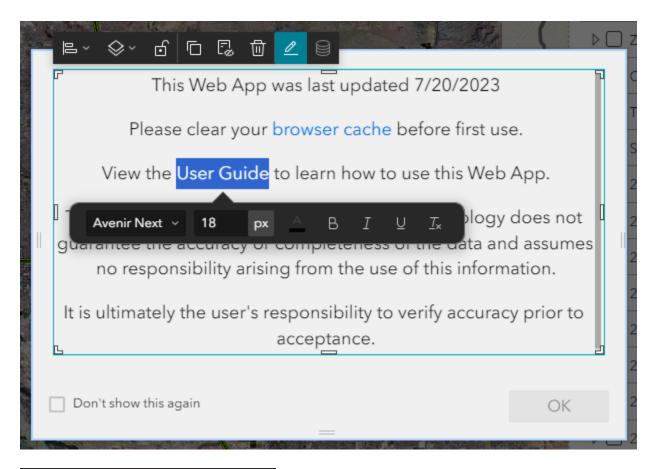
#### Link to **URL**

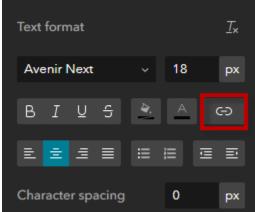


URL = https://gis.maricopa.gov/GIO/HistoricalAerial/EXB/BrowserCache.pdf

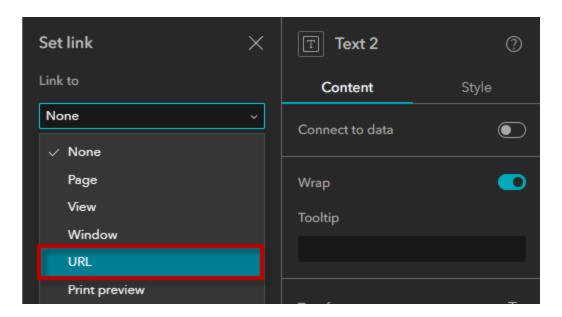


#### Add a link to the User Guide

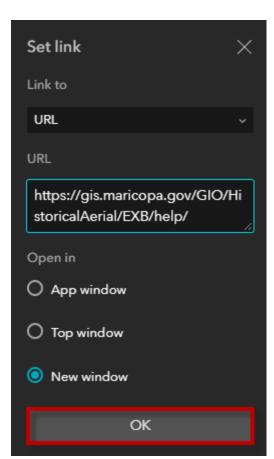




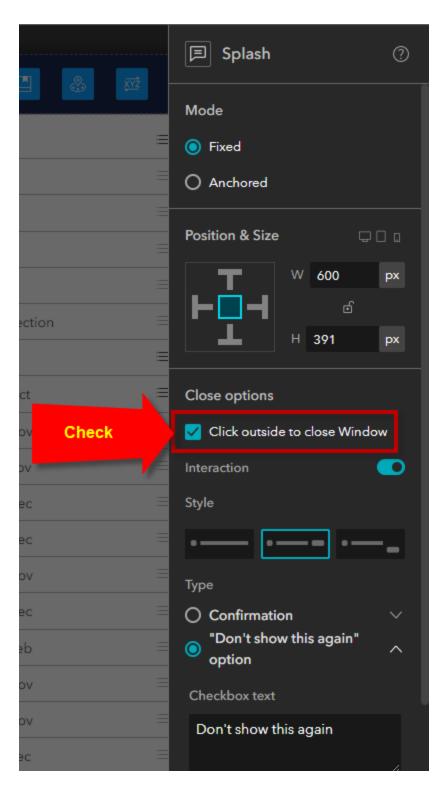
#### Link to **URL**



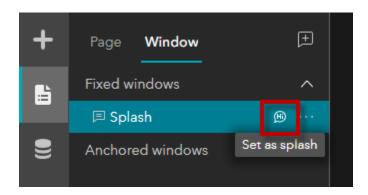
URL = https://gis.maricopa.gov/GIO/HistoricalAerial/EXB/help/

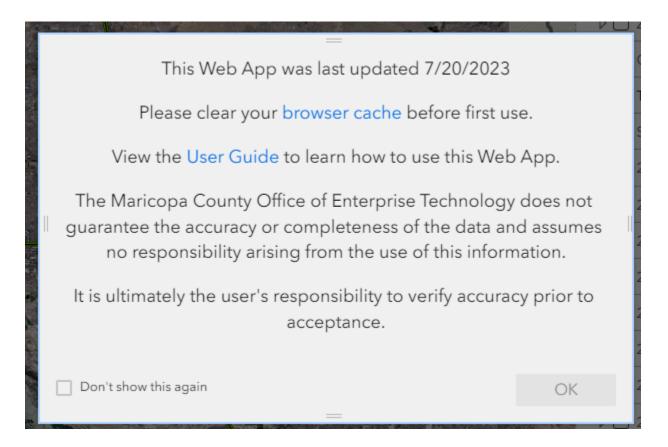


Check = Click outside to close window



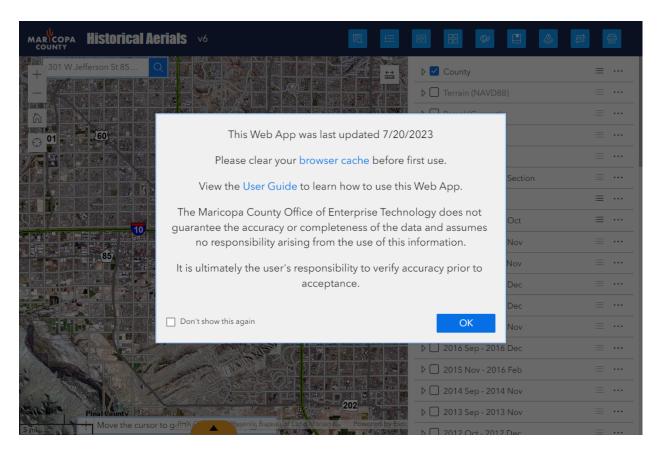
### Set the Window as **Splash**





Save, Publish, View Published Item

# https://localhost:3001/experience/5/



Click on the browser cache link.

https://daviddas2.github.io/HistoricalAerials/BrowserCache.pdf

# Web App has been updated

Remember to Clear your Browser Cache before first use!

#### Important!

If you are opening this Web App the very first time since the last update, you would need to clear your browser cache.

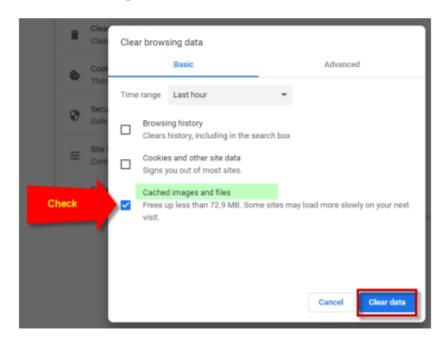
This would prevent the contents of your stored local browser cache from conflicting with the new updates thereby causing the Web App to hang and/or behave erratically.

Follow these steps depending on your browser.

# Google Chrome

Press <Shift><Ctrl><Del> to open the Clear browsing data dialog box.

Check Cached images and files.

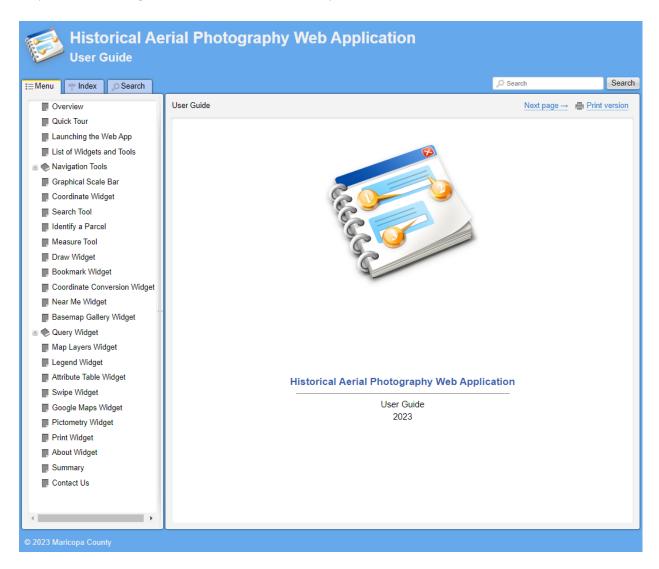


Press Clear data.

Reload the Web App.

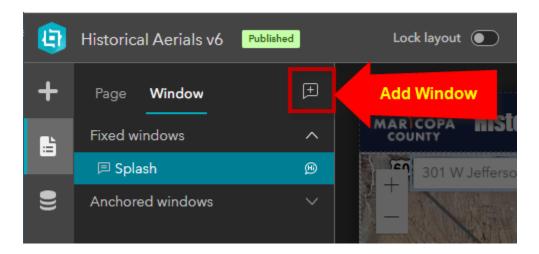
Click on the User Guide link.

### https://daviddas2.github.io/HistoricalAerials/help/

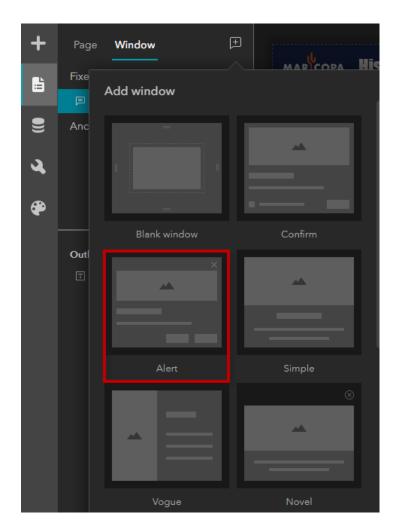


Next, you will add the About Window.

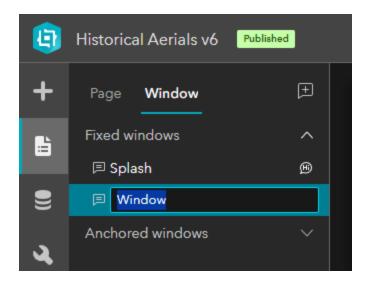
# Add an About Window

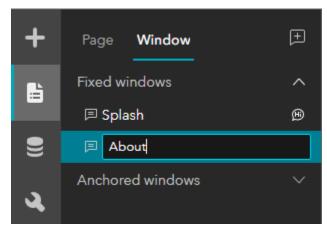


Select the Alert Window.



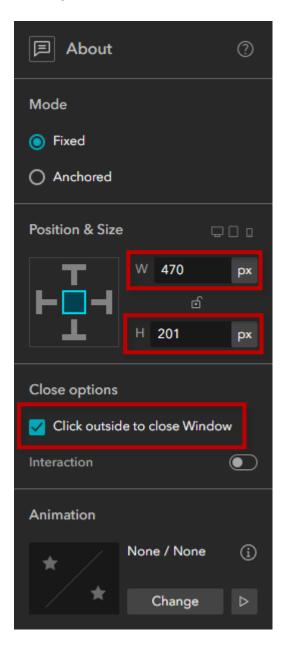
### Rename this Window to About





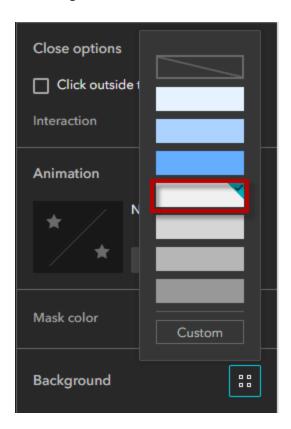
Set Width = 470

# Set Height = 260

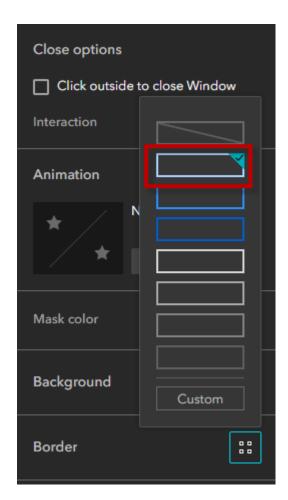


Check = Click outside to close Window.

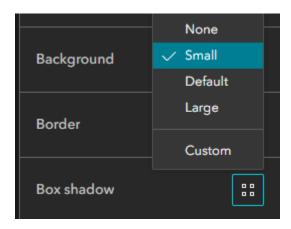
# Set Background Color



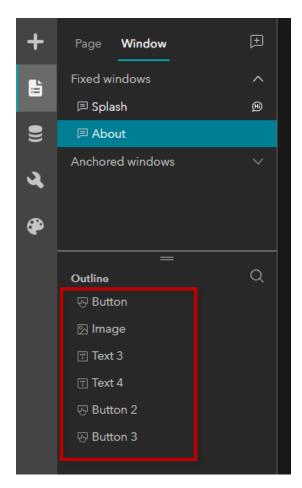
### Set Border Color

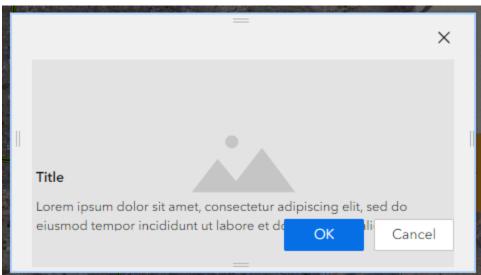


Set Box Shadow = Small

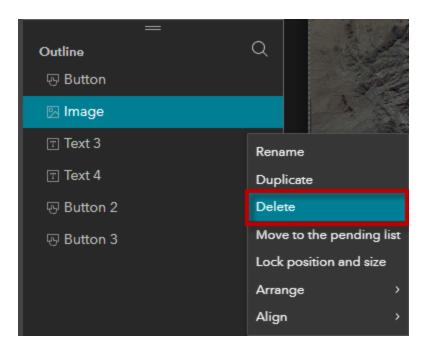


### Examine the About Window Outline.

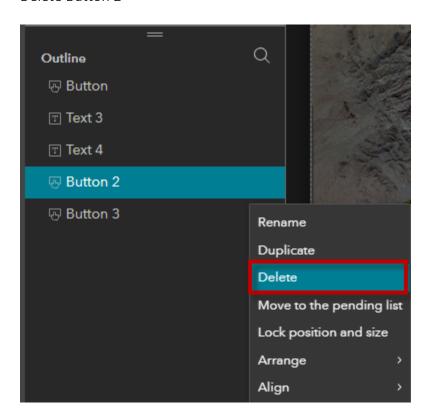




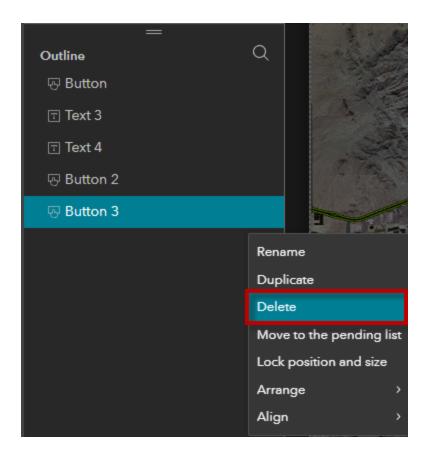
### Delete the Image



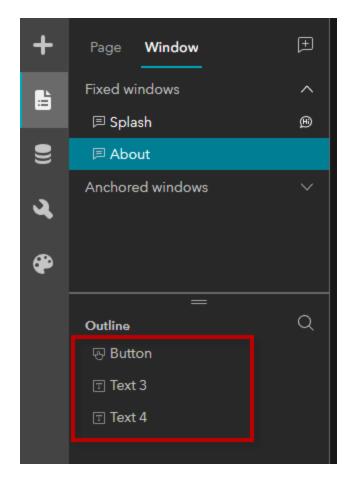
#### Delete Button 2



### Delete Button 3



You are left with 3 widgets inside the About Window.

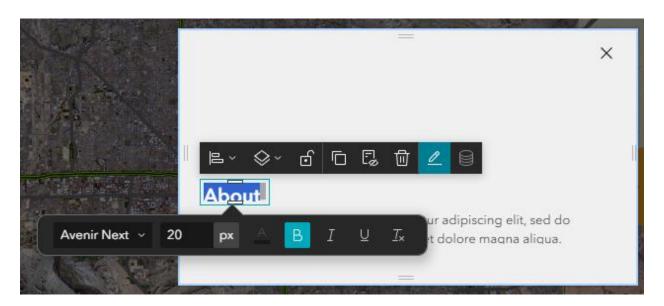


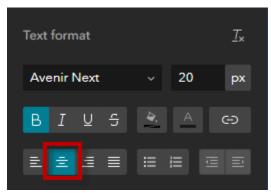


### Rename the Title to **About**

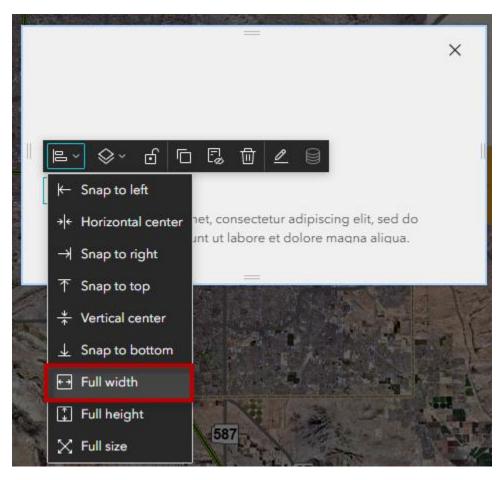
Highlight the text.

Font = Avernir Next Font Size = 20 Bold Centered



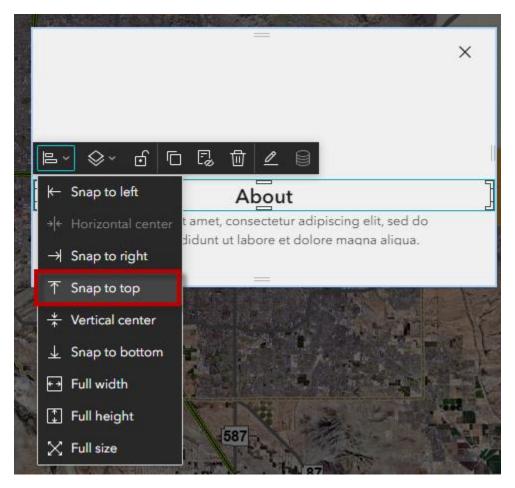


### Align = Full Width



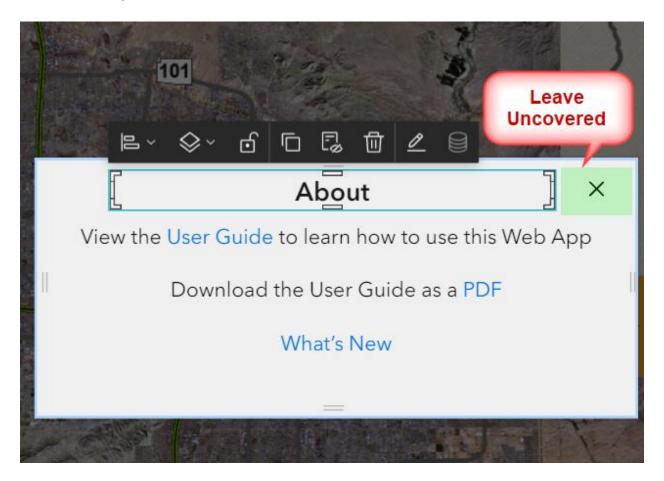


### Align = Snap to Top



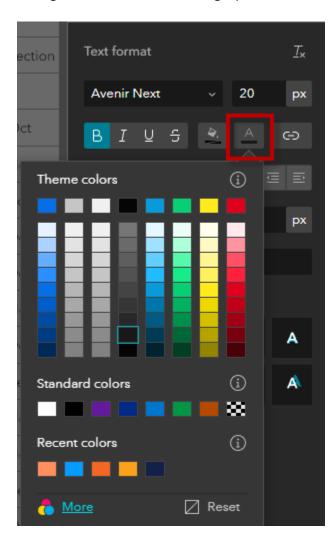


Reduce the widget so that it does not cover the X.

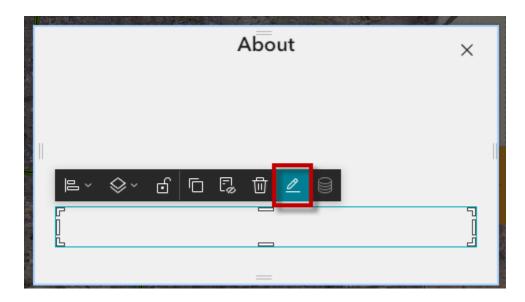


The X Tool is for closing the widget.

# Change the Font Color to dark gray.



Edit the Text Box.



#### Enter this text:

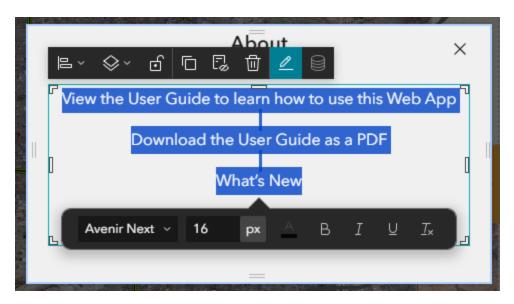
View the User Guide to learn how to use this Web App

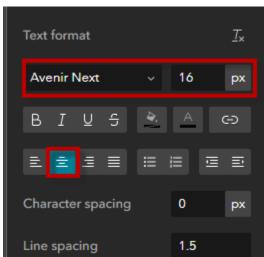
Download the User Guide as a PDF

What's New



Font = Avernir Next Font Size = 16 Centered



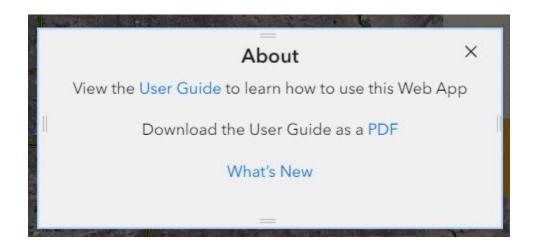


### Add Hyperlinks:

User Guide = <a href="https://daviddas2.github.io/HistoricalAerials/help/">https://daviddas2.github.io/HistoricalAerials/help/</a>

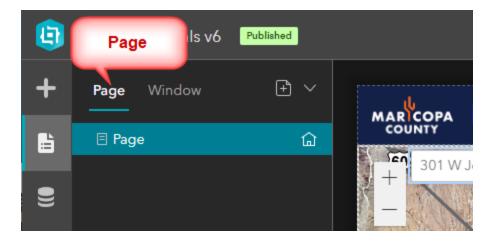
PDF = https://daviddas2.github.io/HistoricalAerials/UserGuide.pdf

What's New = https://daviddas2.github.io/HistoricalAerials/WhatsNew.pdf

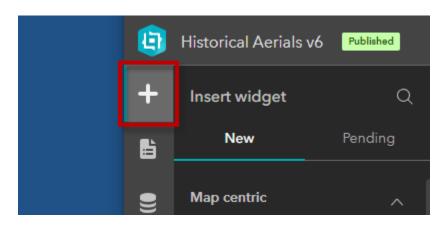


Next, you will add a button to open the About Window.

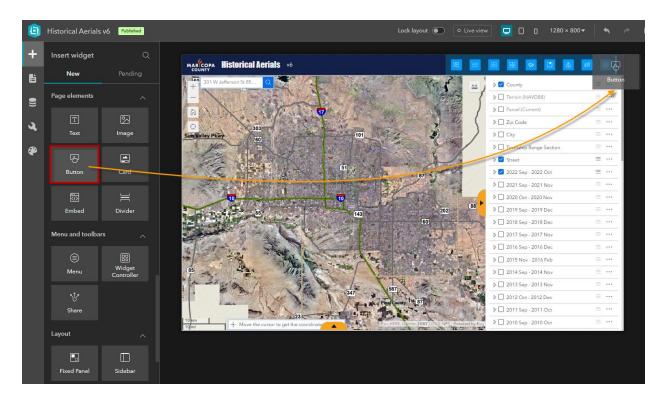
# Open the Page Tab.

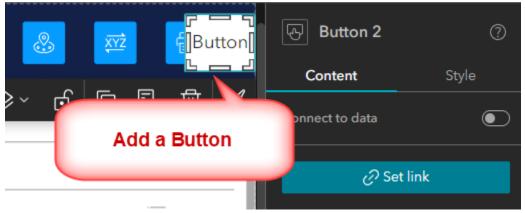


### Open the Insert Tab



Add a Button to the right of the Widget Controller.



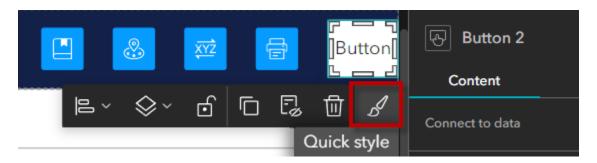


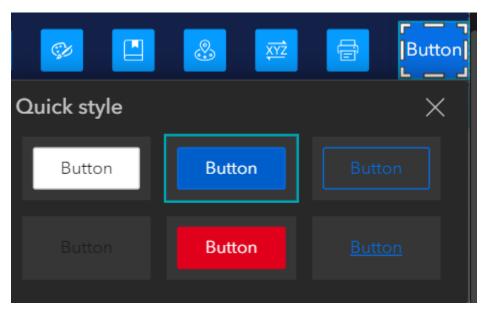
Nudge the Widget Controller to the left so that you can see the Print widget.



Select the Button Widget.

# Change the Button Style

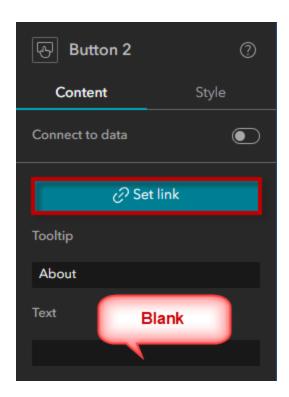




Tooltip = About

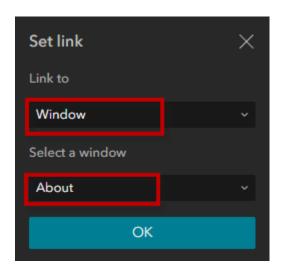
Text = blank

Set Link



Link to Window

Select Window = About



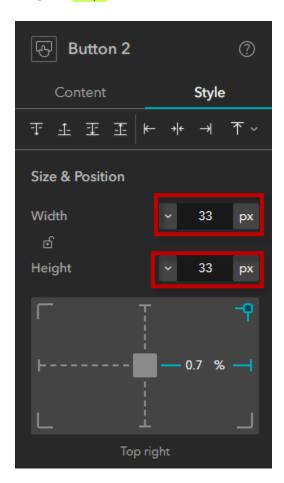
Open the Style Tab of the Button Widget.

Resize the button to match the Print Widget.

Change the units from % to pixels

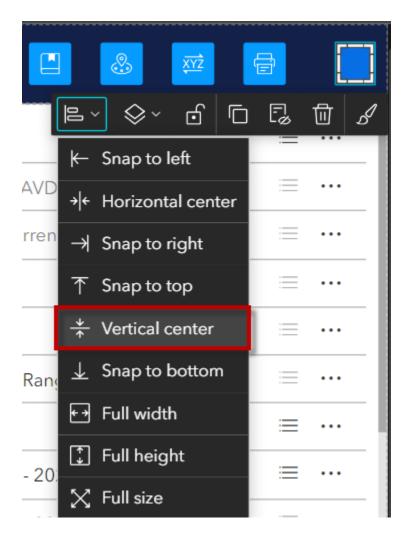
Width = 33 px

Height = 33 px

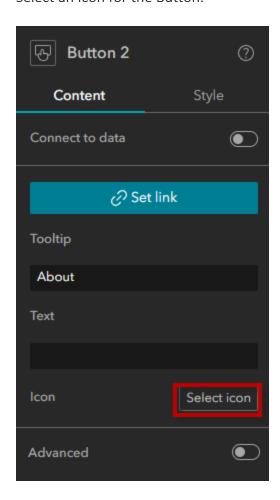




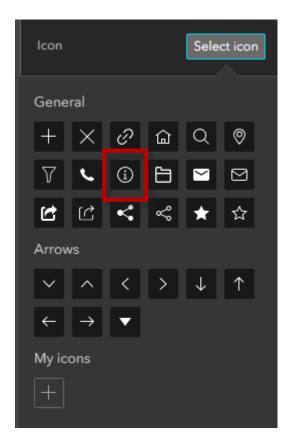
# Align = Vertical Center



Select an Icon for the Button.

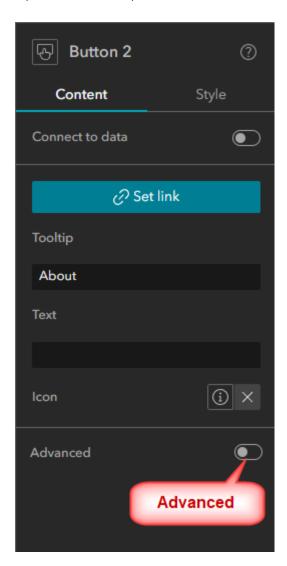


### Select the Info Icon.





# Open Advanced Options



### Advanced

# Default

Icon Size = 20 px

Fill Color = #059bff

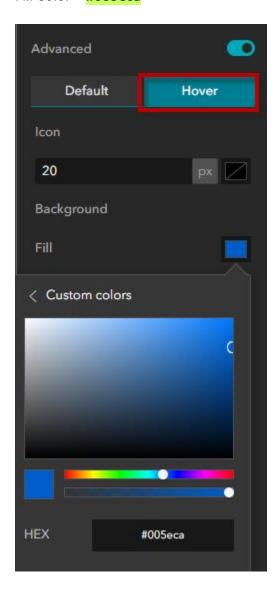


### Advanced

### Hover

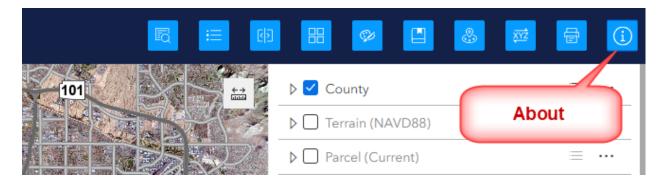
Icon Size = 20 px

Fill Color = #005eca

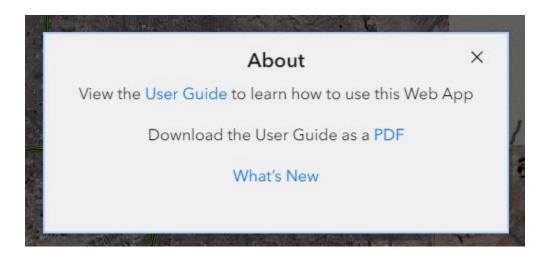


Save, Publish, View Published Item.

# https://localhost:3001/experience/5/



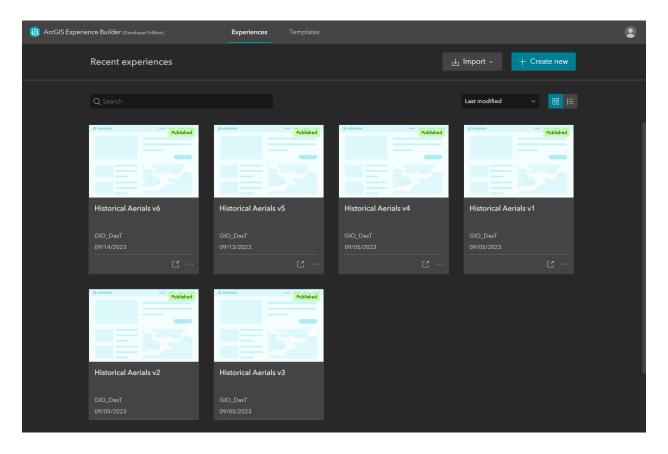
This opens the About Window.



There are 3 ways to close this window.

- Click on the X
- Click anywhere outside the About Window
- Click on the About Button on the Fixed Panel.

Go back to the Home Page.



You have created 6 iterations of the Historical Aerials Web App.

Everything that you have done so far on the Developer Edition 1.12 of EXB can also be done using the ArcGIS Online Edition of EXB.

You have created this Experience without writing a single line of code.

It is time to take another break!

Close this Tab.

Close the Command Window running the npm Server process.

This concludes Part-3 of this tutorial.

In Part-4 of this tutorial you will learn how to add the two Custom Widgets for **Google Maps** and **Pictometry**. They have been fully configured for you. You do not have to code a single line.

Custom widgets cannot be added to the AGOL Edition of EXB.