

Making a Base Map of the 2nd Indochina War using ArcGIS Online

OVERVIEW: For this activity you will build an interactive map project in ArcGIS Online that helps frame the geography of the 2nd Indochina War. Skills covered include: searching for layers, adding layers, basic symbology, filtering by attribute, adding map notes, making bookmarks, and saving the map.

DATA:

iSTEM_Indochina_Countries – polygon layer that contains information about the country borders for Indochina. Courtesy of Dr. Rex Douglas

iSTEM_Provinces – polygon layer that contains the administrative provinces for Indochina. Courtesy of Dr. Rex Douglas

iSTEM_VNM_MilitaryBases – point layer that contains the military bases of the Vietnam/American War in Southeast Asia. Layer courtesy of Chris Bunin; data courtesy of Wikipedia

iSTEM_SEAsia_MapNotes – csv file containing events pertaining to the 2nd Indochina War.

Optional Layers

iSTEM_Indochina_Ethnolinguistic – tiled tif map of languages spoken in Indochina. Courtesy CIA

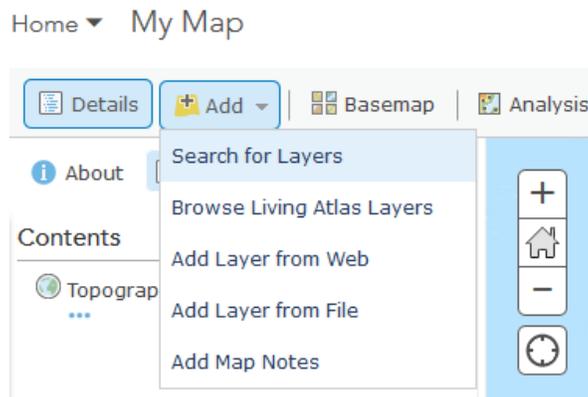
iSTEM_Indochina_Vegetation = tiled tif map of vegetation in Indochina. Courtesy CIA

DIRECTIONS

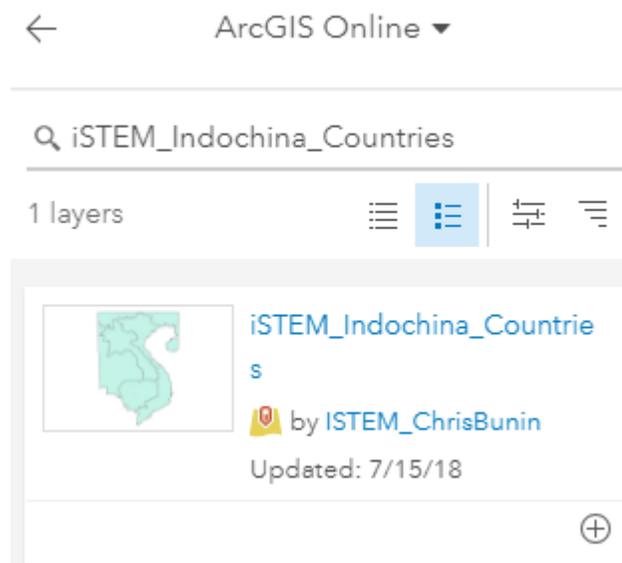
1. Go to www.arcgis.com and sign in using your credentials.
2. Choose **Map** and then Choose **New Map** to verify you are making a new map and don't have lingering data from a previous project.

Add Data

1. Click on **Content** and then click on **Add -> Search for Layers**



2. Add the layer **iSTEM_Indochina_Countries** by searching in **ArcGIS Online**. To do this fill in the search window to match the image below:

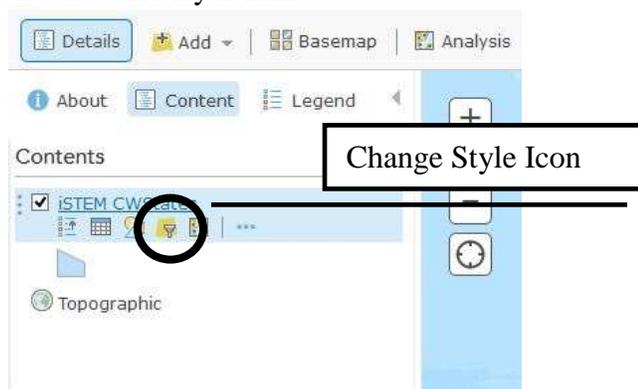


3. Click on the **Add** tab in the bottom right of the **iSTEM_Indochina_Countries** layer that appears.

SYMBOLIZE AND RENAME iSTEM_Indochina_Countries

When layers are added to ArcGIS Online you may wish to change the symbols that were used when the data was added to ArcGIS Online.

1. Click on **Content** and then click on the layer **iSTEM_Indochina_Countries**. Then choose the **Change Style** icon below the layer name.



2. Symbolize each state based on the name of the country. To do this change the **attribute** to **COUNTRY**.

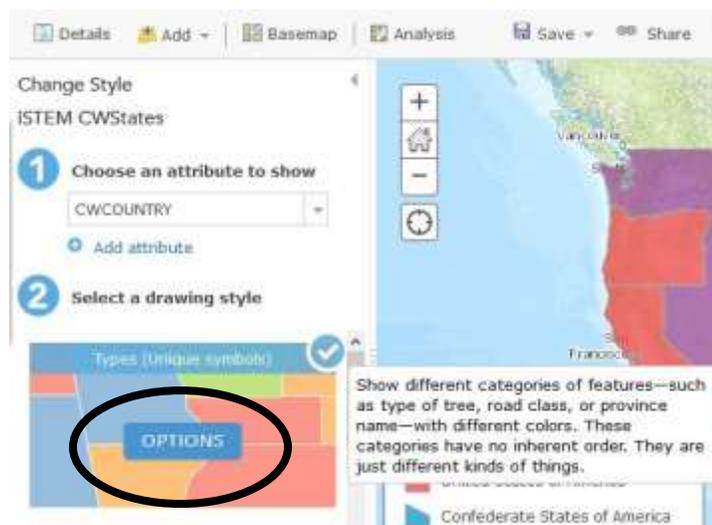


3. Accept the default drawing style for the countries.

- Click **OK** again
- Click **DONE***

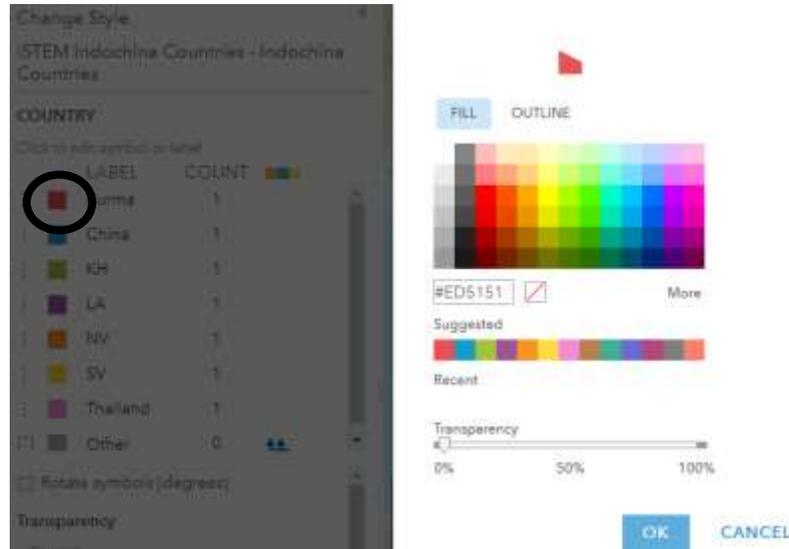
*THIS IS VERY IMPORTANT. If you do not click OK again and then click DONE your color changes **WILL NOT be applied.**

If you would like to change the default colors click on **Options.



Adjust the color of the country to one that you would like for each country.

- Click on the **color box** to the left of the country **LABEL**. Change to **FILL** color to by clicking on the colors you would like for each country.



- Click **OK** again
- Click **DONE***

***THIS IS VERY IMPORTANT. If you do not click OK again and then click DONE your color changes WILL NOT be applied.**

RENAME iSTEM_Indochina_Countries

1. Click on the layer **iSTEM_Indochina_Countries**. Then choose the **More Options** icon below the layer name.



2. Choose the option to **Rename** the layer and change it to **Indochina, 1955 - 1975**.
3. Click **OK**

SAVE EARLY & SAVE OFTEN

Like any computer document –it is wise to save your work early and often in ArcGIS Online.

1. Click on **Save** and give your map a name, tags, summary and provide a destination to save your project. For this assignment save your map with the following details while changing the initials. See screen capture below.

Save Map

Title: JCB - Indochina Basemap, 1955 - 1975

Tags: NHC x Indochina x Add tag(s)

Summary: Basemap of Indochina, 1955 - 1975

Save in folder: iSTEM_ChrisBunin

SAVE MAP CANCEL

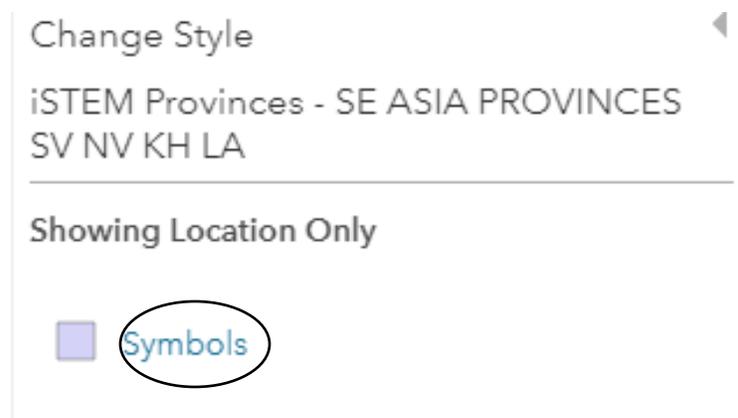
2. Click on **Save Map**

ADD & SYMBOLIZE MORE DATA

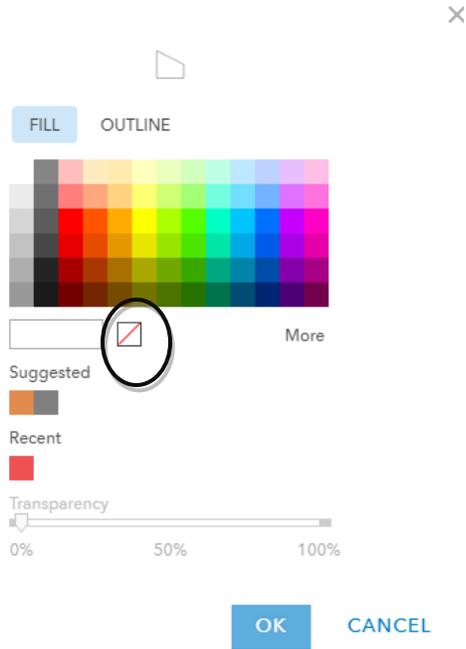
1. Click on **Content** and then click on **Add -> Search for Layers**

2. Add the layer **iSTEM_Provinces** by searching in **ArcGIS Online**.

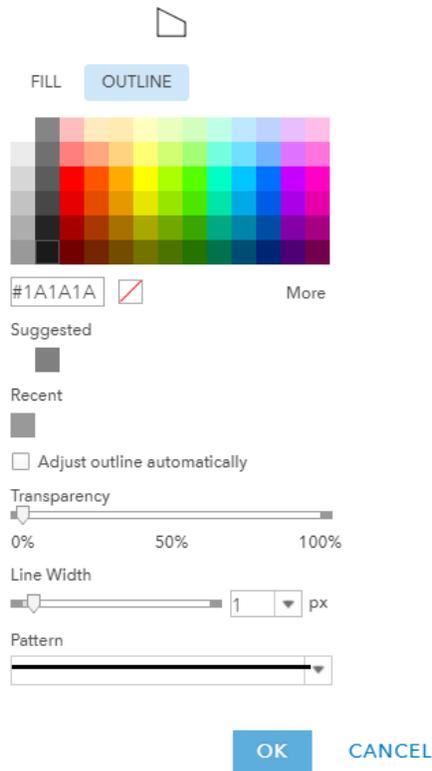
3. Click on the **iSTEM_Provinces** layer name and choose **Change Style**. Choose the option for “Showing Location Only” and **choose options**. Click on the hyperlinked text, **Symbols**.



4. **Choose No Color** for the Fill Color



5. Click on Outline and choose black and set the line width to 1.0



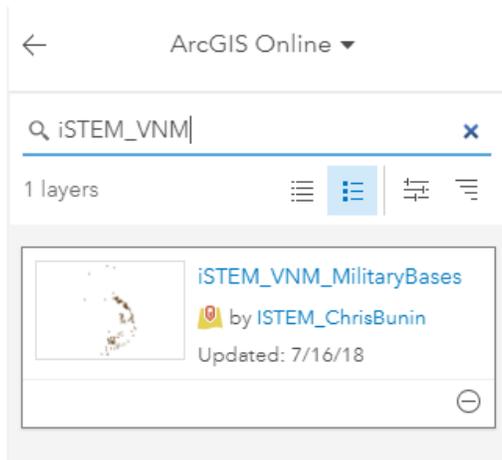
6. **Rename** the layer **Provinces** (click on more options, choose rename)

7. Click on **SAVE** to save your work.

ADD & SYMBOLIZE iSTEM_VNM_MilitaryBases

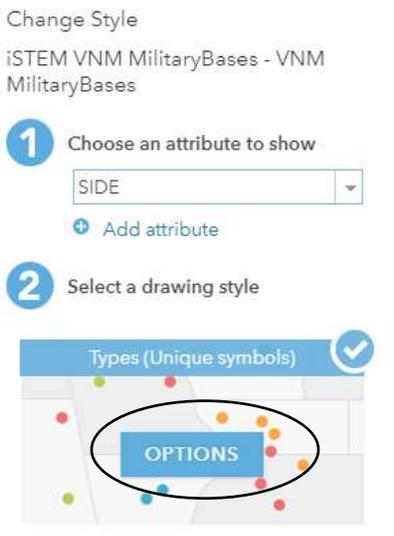
1. Click on **Content** and then click on **Add -> Search for Layers**

2. Add the layer **iSTEM_VNM_MilitaryBases** by searching in **ArcGIS Online**

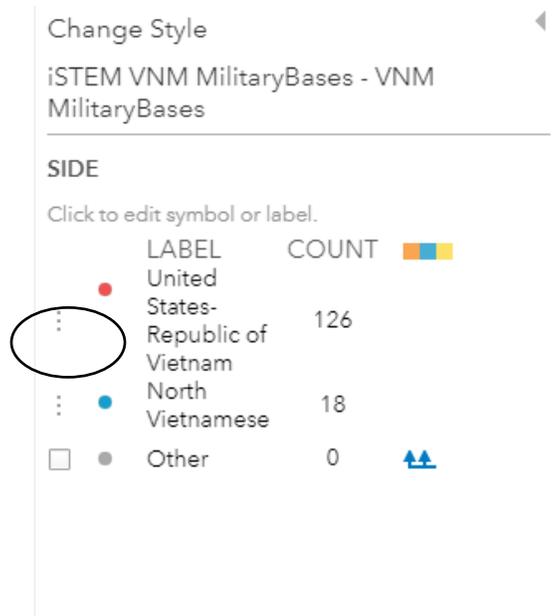


3. Click on the **iSTEM_VNMMilitaryBases** layer name and choose **Change Style**.

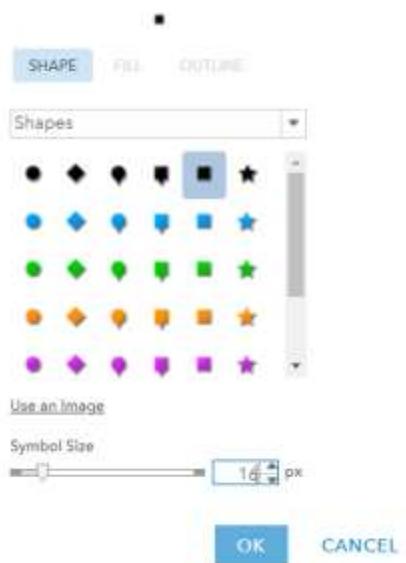
Choose the option for “SIDE”, choose **Options**



- Click on the symbol **next to label “United States – Republic of Vietnam”**



- Click on “Shape” and choose the black square and set the size to 16.



- Click **OK**

- Change the symbol for North Vietnamese to become a **red square** and set the **size to 16**.

- **Click OK, and Click Done**

4. Rename the layer **Military Bases**

5. Save the Map

CONFIGURE THE POP-UP INFORMATION FOR THE BASES

1. Click on the layer **Military Bases** -> **More Options** -> **Configure Pop-Up**
2. Remove the text **VNM_MilitaryBases** from the Pop-Up Title so that it matches the screen capture below.
3. Click on the hyperlink text **configure attributes**.

Military Bases

Show Pop-ups

Pop-up Title

{NAME}

Pop-up Contents

Display: A list of field attributes

These field attributes will display:

TYPE {TYPE}

OPEN {OPEN_}

WikiSite {WikiSite}

[Configure Attributes](#)

4. Uncheck all attributes except for TYPE, OPEN, and WikiSite.
5. Click on the attribute **OPEN** and **change the number of decimal points to 0** and **uncheck “Use the 1000 Separator.”**
6. Click **OK**

7. Save the map. Click on any of the military bases and notice that the information in the pop-up only shows NAME, TYPE, OPEN, WikiSite

CREATE A LAYER OF BASES OPENED in 1965 BETWEEN 1966 & 1968

1. Click on the **Military Bases** -> click on **More Options** -> **Copy**

2. Rename the **Military Bases** to read **Military Bases – 1966 - 1968**

3. Filter the layer, Military Bases – 1966 - 1968 to just show the military bases that were opened between 1966 – 1968..

To do this:

➔ Click on the layer, Military Bases – 1966 - 1968

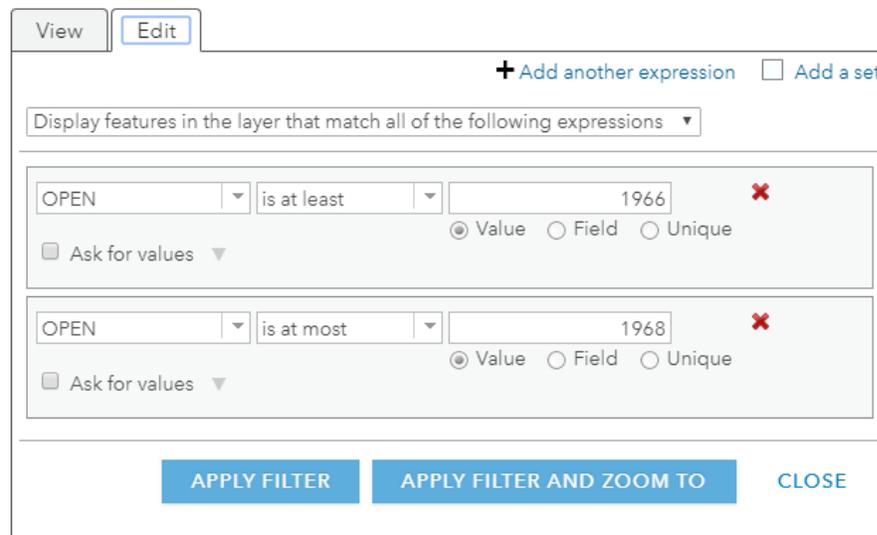
➔ **Click on the Filter icon**



➔ Click on **Add Another Expression** so there are **two (2) Filter Options**

➔ **Create a Filter that selects the military bases that were open between 1966 – 1968..**

Filter: Military Bases - 1966 - 1968

A screenshot of the QGIS Filter dialog box. The title is 'Filter: Military Bases - 1966 - 1968'. At the top, there are 'View' and 'Edit' tabs. Below the tabs, there are two buttons: '+ Add another expression' and 'Add a set'. A dropdown menu shows 'Display features in the layer that match all of the following expressions'. There are two filter expressions: 1. 'OPEN' is at least '1966'. 2. 'OPEN' is at most '1968'. Each expression has a red 'X' icon to its right. Below each expression are radio buttons for 'Value', 'Field', and 'Unique', and a checkbox for 'Ask for values'. At the bottom, there are three buttons: 'APPLY FILTER', 'APPLY FILTER AND ZOOM TO', and 'CLOSE'.

➔ **Click on the Apply Filter**

**Notice only the military bases opened between 1966 - 1968 are visible.

ADD & SYMBOLIZE THE LAYER iSTEM_HoChiMinh_Trail

1. Click on **Content** and then click on **Add -> Search for Layers**
2. Add the layer **iSTEM_HoChiMinh_Trail** by searching in **ArcGIS Online**
3. Click on the **iSTEM_HoChiMinh_Trail** layer name and choose **Change Style**.

To do this:

➔ Click on the layer, **iSTEM_HoChiMinh_Trail**

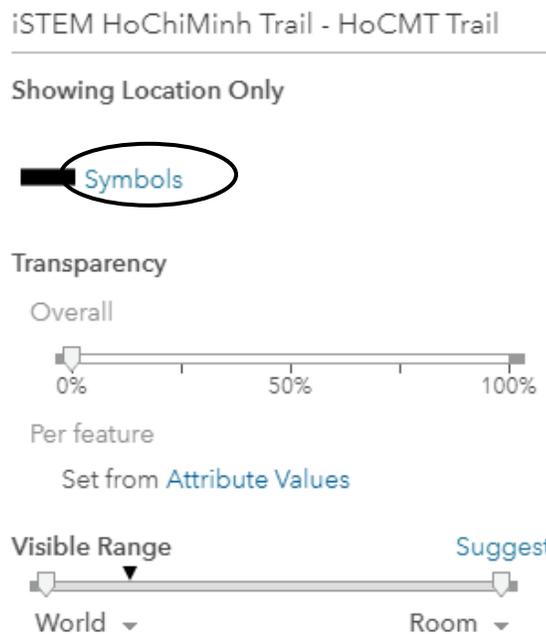
➔ Click on the **Change Style** icon



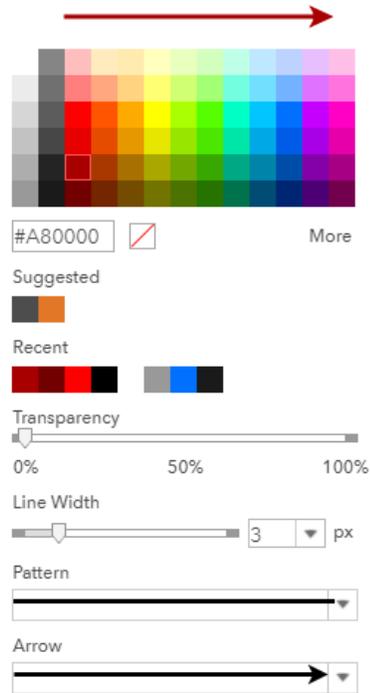
➔ Choose an attribute to **Show Location Only**

➔ Click on **Options**

➔ Click on the **hyperlinked** word **symbols**



➔ Choose a shade of Brown and change the style of the line to match the screen capture on the next page. You want the line width to be 3 and the line to be an arrow.



- 4. Click **OK** -> **OK** -> **DONE**
- 5. Rename the layer **Ho Chi Minh Trail**
- 6. Click **Save** to save your work.

ADD A SIMPLE MAP NOTE

- 1. Click on **Content** and then click on **Add** -> **Add Map Notes**
- 2. Search for Dien Bien Phu
- 3. Click on the Pin Map Note
- 4. Click on the Stick Pin Map Note

5. Fill in the map note information as shown below.



Image Link:

https://upload.wikimedia.org/wikipedia/commons/a/ae/Victory_in_Battle_of_Dien_Bien_Phu.jpg

****TECHNOLOGY TIP:** When you link to images from Wikipedia you have to right click and open the image in a new window twice.

5. Click Close and then Close the Map Note Window

6. Click on the simple Map Note you created.

ADD & SYMBOLIZE SEAsia_MapNotes

1. Click on **Content** and then click on **Add -> Add Layer from File**

2. Add the file **SEAsia_MapNotes.csv**

3. Change they symbology to a Map Note Icon. Click on **Show Location Only -> Click on Options -> Click on the hyperlinked symbol text.**

- ➔ Click on Shape -> Choose the People/Places Template
- ➔ Click on the “information” Icon and change the size to 24

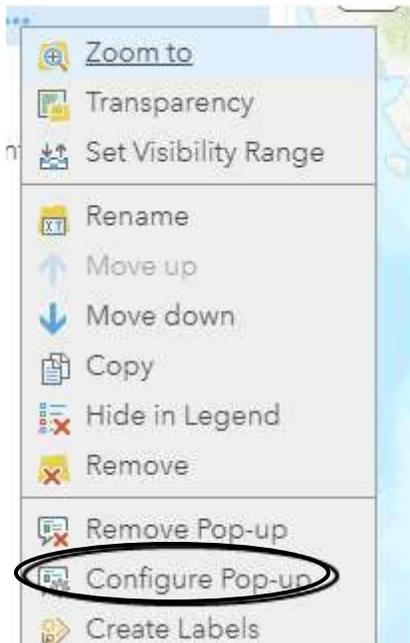


4. Click OK -> OK -> Click DONE

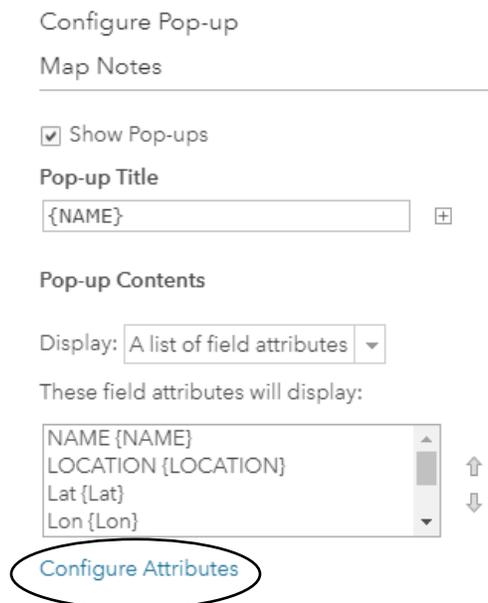
CONFIGURE THE POP-UP INFORMATION FOR THE MAP NOTES

1. Rename the SEAsia_MapNotes layer to read Map Notes.

2. Click on the layer Map Notes -> More Options -> Configure Pop-Ups



3. Set your **Pop-up Title** to be based on the **NAME** field -> Click on **Configure Attributes**



- ➔ **Uncheck** all display boxes **except for LOCATION**
- ➔ Click **OK**
- ➔ Scroll down and click on **Add Pop-Up Media** ->

Attribute Expressions

Adding expressions allows you to create new information from existing fields for use in pop-ups.

ADD



Pop-up Media

Display images and charts in the pop-up:

ADD ▾

Image

Pie Chart

Bar Chart

Column Chart

Line Chart

OK

CANCEL

➔ Configure the Pop-Up to match the settings to in the image below.



Configure Image

Specify the title, caption and URL for this image. Insert field names to derive the display from attribute values.

Title:

Caption:

URL:

Link (optional):

Refresh Interval
 Refresh image every minutes.

OK CANCEL

➔ Click OK -> Click OK

→ Click on any of the map notes and notice that you have configured the pop-up to be more interactive and user-friendly.

→ Save your Map

Congratulations! You have successfully created an interactive base of map Indochina that you can use in the classroom.

OPTIONS FOR SHARING YOUR MAP

Option #1 – Share your map via a web link. To do this:

→ Click on Share

→ Check the groups you want to share with. In this case click on Organization

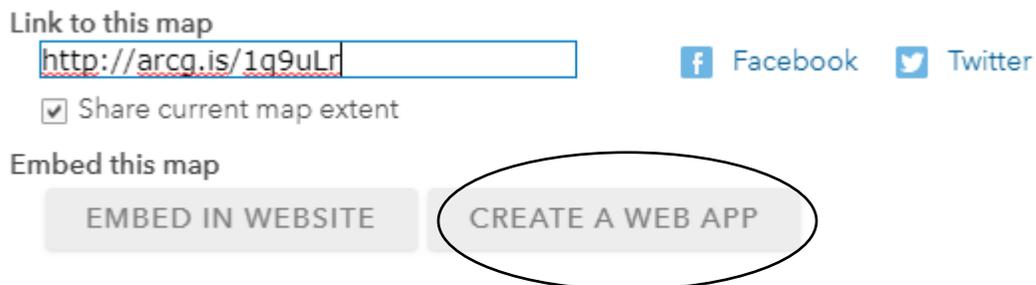
→ Cut, paste, and share the link with folks.

Option #2 – Share your map as a simple “Basic Viewer” App. To do this:

→ Click on Share

→ Click on CREATE A WEB APP

SHOW



ALL

→ Click on ->**BASIC VIEWER -> CREATE WEB APP**

→ Accept the default settings -> Click **DONE**

→ Configure the **General Settings, the Theme Settings, and Options**. The most important in my opinion are your map **OPTIONS**.

→ Click on **Options** and add the **legend and measuring tool** to the map options.

→ Click Save -> Click Launch

→ To share your map click on the share icon  to get the Basic Viewer weblink.

Option #3 – Create a Story Map

A.

→ Go to storymaps.arcgis.com – **IF PROMPTED SIGN IN USING CREDENTIALS**

→ Click on New Story -> Start from Scratch

→ Title the Map -> Geography of Southeast Asia

B.

- ➔ Click on **Add Content Block -> Map**
- ➔ Choose the map, Indochina Base map, 1955 – 1975
- ➔ On the left hand side turn off all layers except for Indochina Countries and Provinces.
- ➔ Place your map by zooming in or out to an extent you like.
- ➔ Change the name beneath the map to read, Indochina Countries and Provinces
- ➔ Click on Add Content Block and add the text -> Explore the map above. “What patterns do you notice? What you find surprising or interesting?”

C.

- ➔ Click on **Add Content Block -> Map**
- ➔ Choose the map, Indochina Base map, 1955 – 1975
- ➔ On the left hand side turn off all layers except for Indochina Countries, Provinces, Military Bases 1966-1968
- ➔ Change the name beneath the map to read, Vietnam Military Bases, 1966 - 1968
- ➔ Click on Add Content Block and add the text -> “Explore the map above. What patterns do you notice? What you find surprising or interesting?”

D.

- ➔ Click on **Add Content Block -> Map**
- ➔ Choose the map, Indochina Base map, 1955 – 1975
- ➔ On the left hand side turn off all layers except for Indochina Countries, Provinces, HoChiMinh Trail and Map Notes.
- ➔ Change the name beneath the map to read, Ho Chi Minh Trail and Map Notes
- ➔ Click on **Add Content Block** and add the text -> “Explore the map and the sources in the map notes. Conduct a 3-2 S.I.T. What are three things you find surprising/interesting? What two things you find troubling?”

You have made a very simple story map that can be used for classroom instruction.

PREVIEW AND PUBLISH YOUR MAP. TO DO THIS:

1. Click on the Preview Tab
2. Click on Publish -> Publish with Everyone

*If prompted you may need to share your Indochina map with everyone to make the story accessible to everyone.

REMEMBER

Layers make Maps...Maps make Apps

If you need to make changes to the map you need to go to your ArcGIS Online content folder and make changes to your map. Once you make changes to your map these changes will be made to your story map.

Making changes to you map may require you to re-format some of your story map maps.