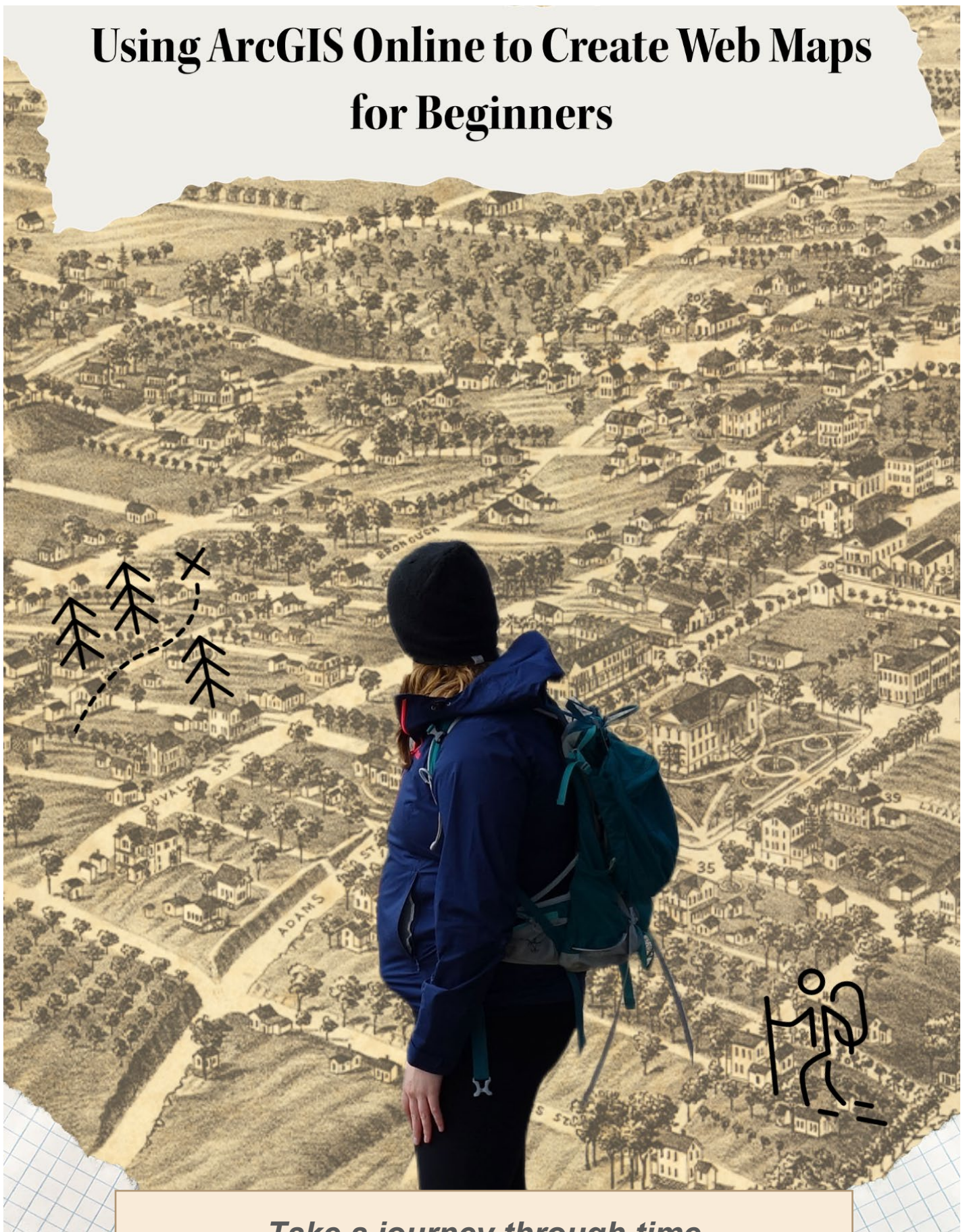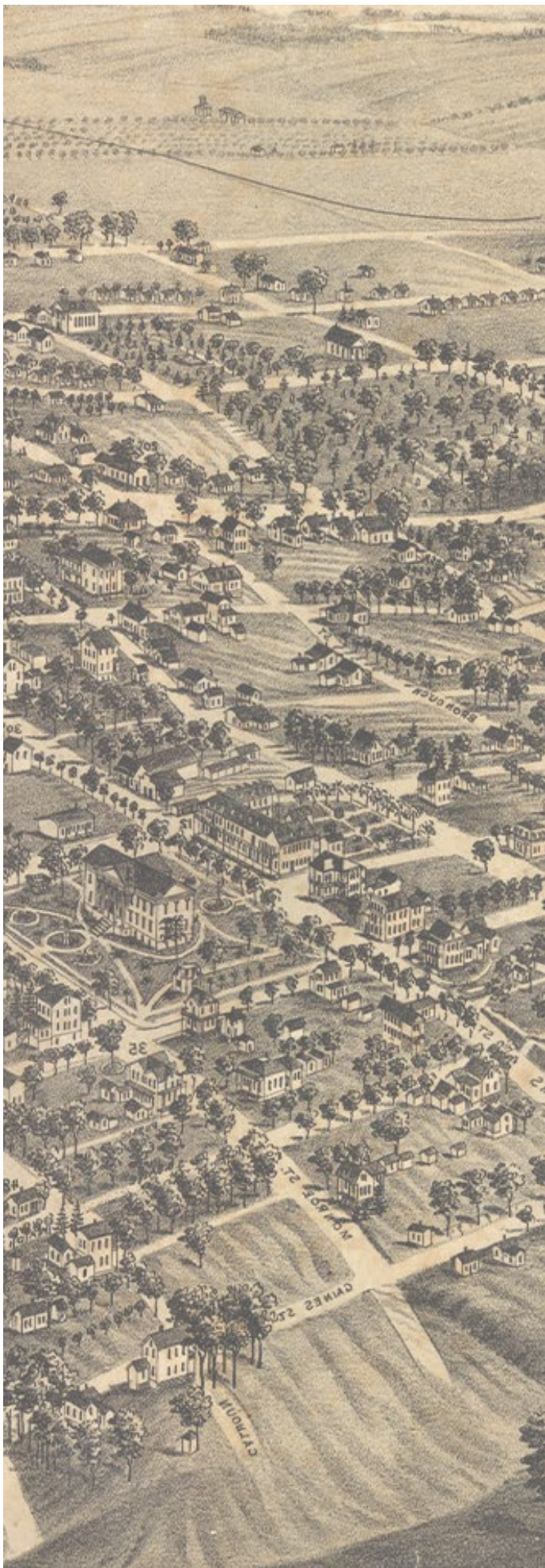# Using ArcGIS Online to Create Web Maps for Beginners

Take a journey through time

TABLE OF CONTENTS

INTRODUCTION

Tell stories, answer questions, and make informed decisions with an ArcGIS web map. GIS (geographic information system software) is used to create interactive web maps that analyze and visualize geographic data, making it easy to explore the past and present in many ways.

1. What is GIS?

   GIS stands for Geographic Information Systems. GIS systems create, manage, analyze, and map all kinds of data. In GIS, data is connected to a map, combining location data (where things are) with descriptive information (what things are like). In almost every industry and science, this forms the basis of mapping and analysis. Users benefit from GIS by understanding patterns, relationships, and geographic context. Communication and efficiency will be improved, as well as management and decision-making.

2. What we will be creating

   This document will demonstrate how to create a professional web map. We will start by walking through how to create a **free** ArcGIS Online account. We will then add our data to the map and share it with others creating a finished project.

1. SIGN UP FOR A FREE PUBLIC ACCOUNT

Sign up for a **free public account** so you can save your maps in and upload data into Esri's cloud.

- **Visit the site:** Visit arcgis.com/home

- **Select sign in:** You will be taken to the sign in page. Choose Create an account.

- **Create public account:** Choose Create a public account and fill in the information below.

- **Next:** Once you have finished select the next button. An activation link will be sent to your email.

Figure 1: Create an ArcGIS Public Account- Step 1

- **Activate your account:** Once you have activated your account by clicking the link in your email you may proceed to setting up your account.

 *Figure 2: Create an ArcGIS Public Account Step 2*

- **Create Account:** Once you click the create account button, you will be taken to a welcome page. This page will give you a brief overview of how GIS works and provide links to other resources that can help you get started.: https://www.arcgis.com/home/index.html

2. FAMILIARIZE YOURSELF

Take a moment to explore the web catalog of ArcGIS Online for content that's relevant to your needs. You can even connect to it! You can find applications and services shared by other users. You can also publish your own information and applications for others to use.

- **Living Atlas:** Click on the Go to Living Atlas button (mid page) to browse featured maps, web mapping applications, and mobile applications shared by the ArcGIS Online community.

Figure 3: Living Atlas
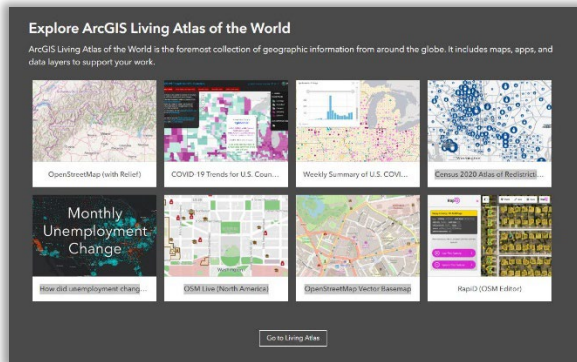
- **Select Map:** Click on the Map option to build interactive web maps and share them with others.
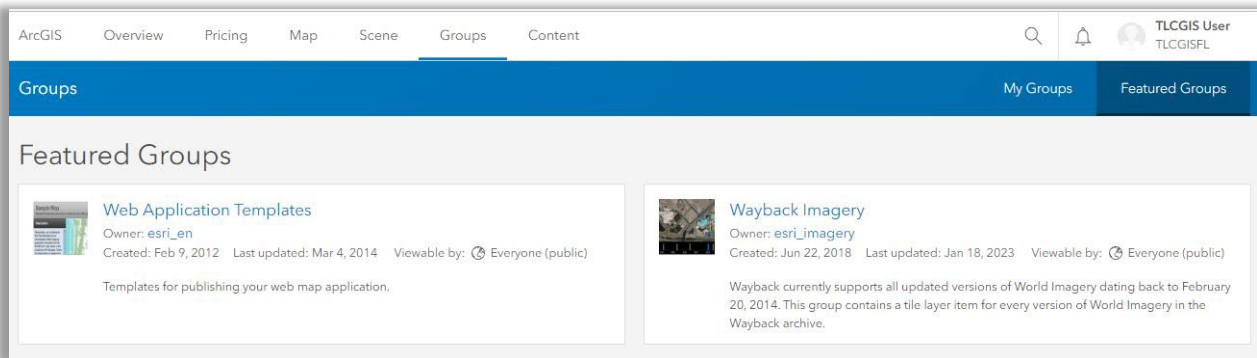
Figure 4: The option ribbon

- **Groups:** Select Groups and then Featured Groups to search for topical content.

Figure 5: Groups

- **Content:** Once you begin creating content in ArcGIS Online, it will be saved in the Content section. This allows you to access it from anywhere and share with others.

- **Search:** Looking for something specific? Search ArcGIS Online using the bar in the top right. For example, type "Historical Tallahassee" and press Enter. You will be presented with over 400 pieces of content related to Historical Tallahassee.
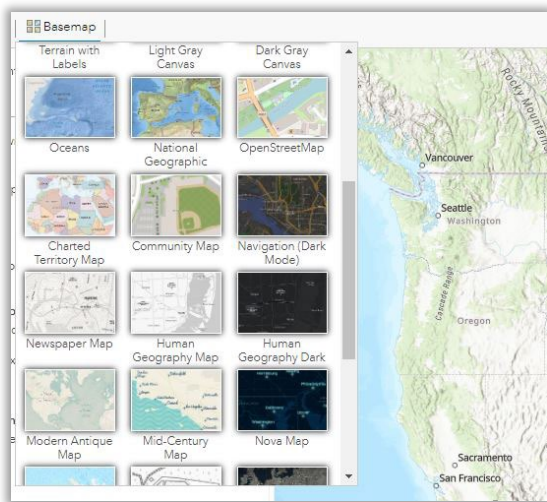
Figure 6: Search
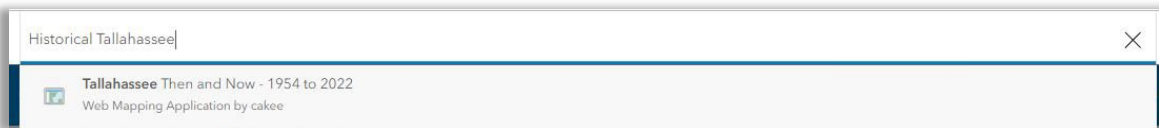
3. CREATE AND SHARE A MAP

Congratulations, you have an ArcGIS Online account and now can begin creating your own map using data in ArcGIS Online! The following pages will explain how to create a new map layer from ArcGIS Online, symbolize the data, and then share it with others.

Add data from ArcGIS Online to your map

- **Map Button:** From the ArcGIS Online home page (arcgis.com/home), click Map to open the built-in map viewer (you must be logged in). From there, you can access your organization's content and map inventory, create new maps and apps, and share them with others for collaboration, use as part of a map gallery or embed into your website.

- **Map Viewer:** Once the map viewer is displayed your first step will be to select a basemap. The basemap is the geographical context for your map. By default, the basemap is the World Topographic Map from Esri. To choose another map, click Basemap and select a map of your choice (Imagery, Streets, National Geographic, etc.). For this example, we will choose the Mid-Century Basemap.
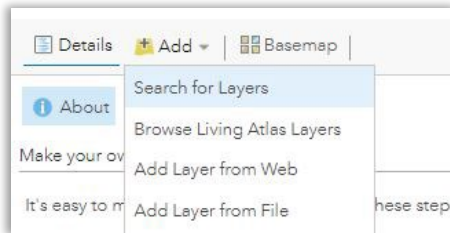
Figure 7: Basemaps

- **Add Data:** To add data, click Add and choose Search for Layers.
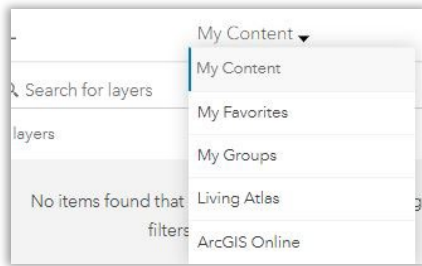
Figure 8: Layers

- **ArcGIS Online Content:** For new users that do not have any saved content change the My Content toggle to ArcGIS Online.

Figure 9: Content

- **Search for Layers:** As you begin to create a map, you will have to find layers that are relevant to the topic of your map. For this example, we will search for historical Tallahassee to see if there is publicly shared data relevant to the map we want to create.
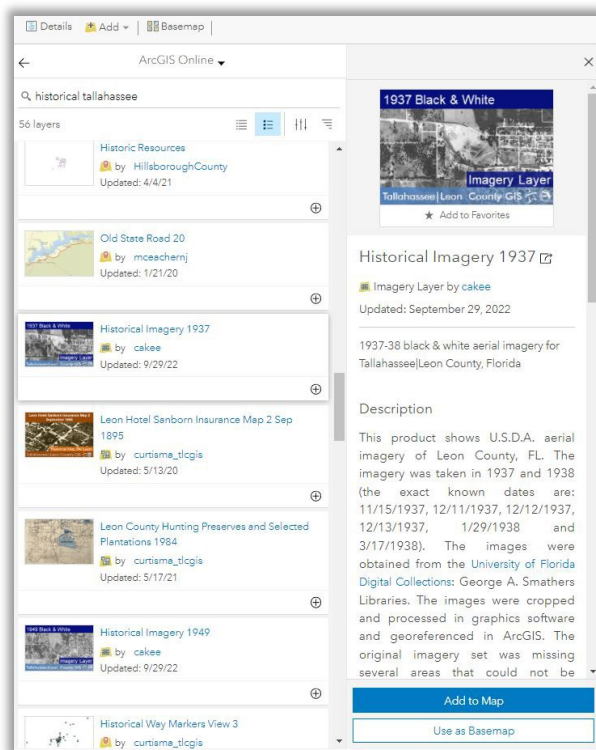
Figure 10: Layers
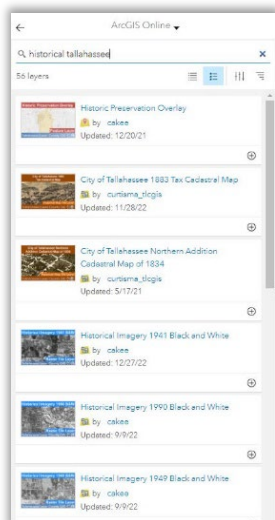
- **Adding Data:** In the search we can see there is historical imagery. Historical imagery is a great resource for anyone interested in researching an area. We will upload aerial imagery of Leon County from 1937 and use this on the map.

Figure 11: Add a layer to the map – Pt. 1

For our project we are going to continue adding data to our map to create our own mashup. We already have imagery from the 1930's. This reminds me that there was a rail line that ran through Wadesboro on the Eastern side of the County: Wadesboro, Florida - Wikipedia For this exercise, we are going to add data from the Historical Railroad layer to see if we can identify the railroad in the imagery.

- **Adding Layers:** We will select and add to map the Historic Railroad layer in the same way we added the 1937 imagery.

Figure 12: Add a layer to the map – Pt. 2
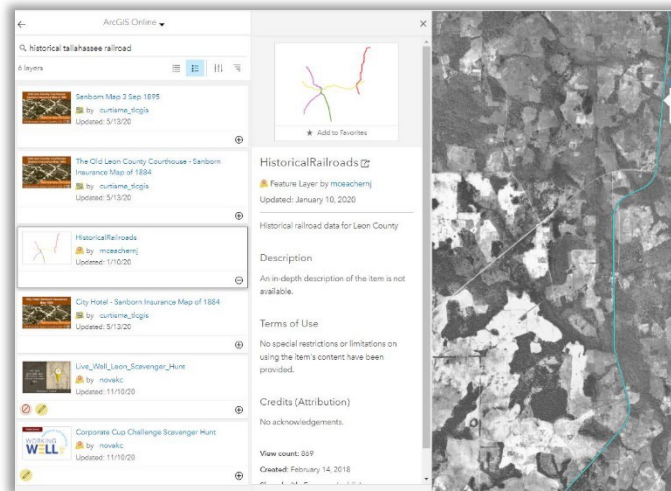
For our project we are going to continue adding data to our map to create our own mashup.

If the Historical Railroad layer did not exist we would still be able to find the historic rail line by comparing the imagery in our map to the 1940 map drawing of Wadesboro:
https://fcit.usf.edu/florida/maps/local/leon/leon/Wadesboro.htm

The last layer I will add to this map is the Leon County Boundary Line to give some polish. The jagged lines of the historical imagery have a place on the map, but I want to add something more visually appealing. Please keep in mind that the boundary line is from present day Leon County so your image may have more or less of the County within the boundary depending on the year you have chosen.

*Figure 13: Add a layer to the map – Pt. 3*
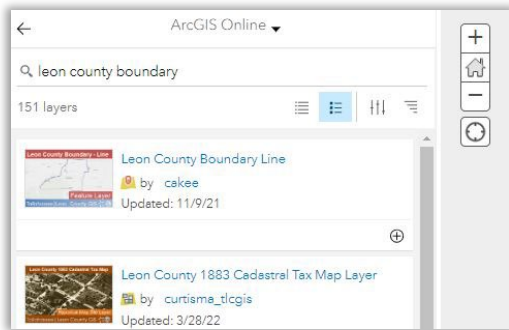
Symbolize your Data

You can now customize how features are displayed on a map. For example, you might want highlighted streets on the map to show distances between locations.

- **Change Style:** For this example, we will change the color of the boundary line and make it thicker, so it is easier to see. Start by hovering over the Leon County Boundary Line from the contents pane and choose change style.

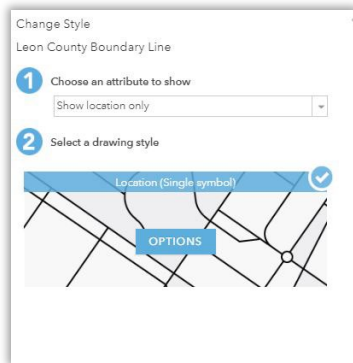*Figure 14: Change Symbology – Pt. 1*
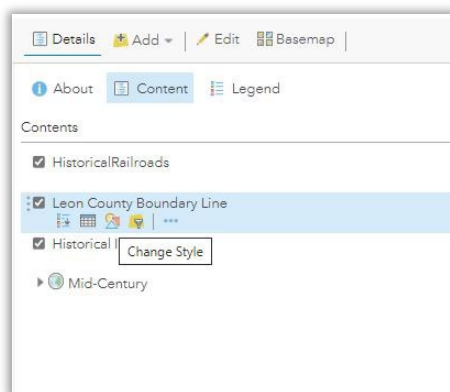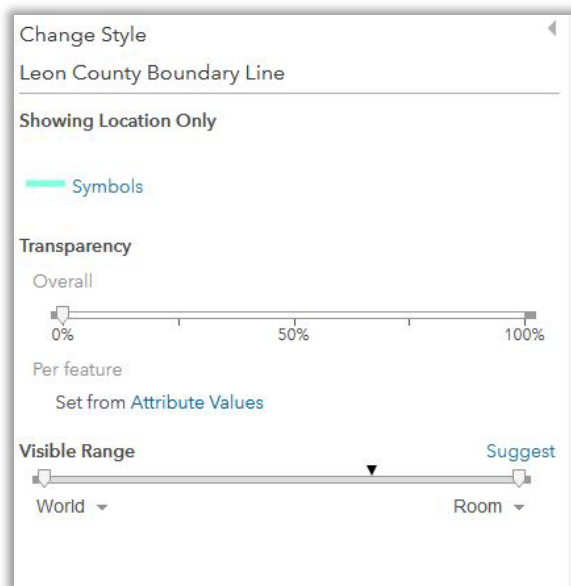

- **Options:** Select option in Select a Drawing Style.

Figure 15: Change Symbology – Pt. 2

- **Symbology Options:** from here you can

  o   change the color of the line by selecting Symbols

  o   change the transparency

  o   change at what visibility (zoomed in or out) the boundary line can be viewed

Figure 16: Change Symbology – Pt. 3
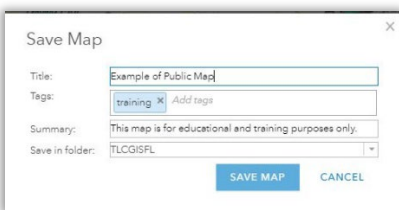

Save your map to My Content

Once you are satisfied with the map, you can save it in My Content so that only you can see it and use it later.

- **Save:** Click Save, at the top right section of the map, to save the map.

- **Title:** Title your map to help yourself and others know what it is about.

- **Tags:** Enter relevant tags or keywords to help search for your map.

- **Summary:** Enter a summary explaining what the map is trying to convey.

- **Folder:** Choose a folder in My Content to save the map.

Figure 17: Save to My Content
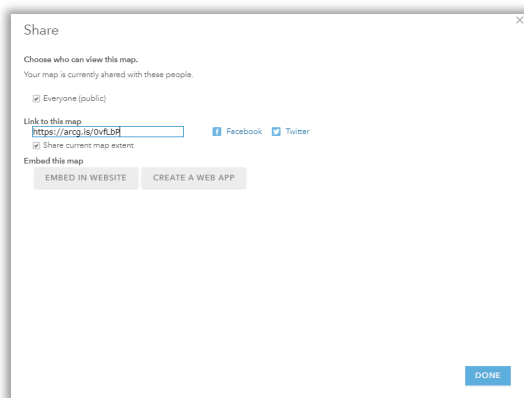
Share your Map

The first step to sharing your map is to go to the "Share" tab. Here you will find options for creating a link that can be embedded in a website or blog, generating html code that can be embedded in a website or blog, as well as sharing to Facebook or Twitter.

- **Public:** When sharing the map make sure the Everyone (public) box is checked.

- **Link:** Copy the link given in the Link to this map box to share the map. For the practice map created in this document it can be accessed by the following link: https://arcg.is/0vfLbP

- **Embed this map:** In Part 2 of this document, Using ArcGIS Online to Create Maps Intermediate, we will review how to embed a map and how to create a web application.

Figure 18: Share

Final Product

Congratulations! You have created your first web map.

Figure 19: Completed Project