# Introduction to ArcGIS Online (AGOL)

You should have received an invitation to the Brock University AGOL Organization. You will need these credentials to proceed with the tutorial. Download the data from https://github.com/brockmdgl/HIST2p26

If not, submit a request to maplib@brocku.ca to join the Brock University Organizational account for AGOL. Please provide your name, student #, and course affiliation.

Section A. Getting Started

This tutorial was written for the Chrome Internet Browser. Some steps will appear differently when using Microsoft Internet Explorer.

1. Go to https://www.arcgis.com/home/signin.html and sign in with your organizational login.

2. From the links across the top, click "Map". The default map view appears.
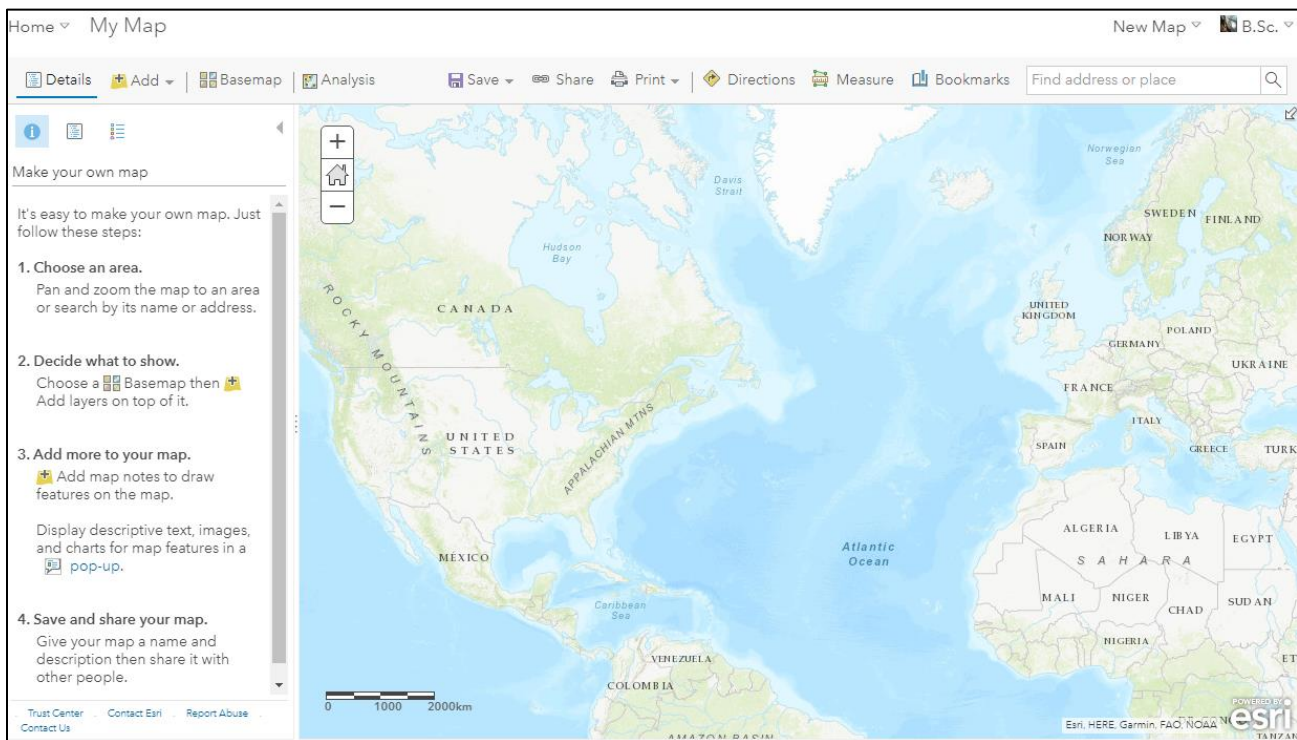
3. In the **Find Address or Place** search box, type "St. Catharines" without the quotations.

4. Select the **St. Catharines, Ontario** option. The map zooms to the city of St. Catharines. Close the results box.

5. To save this zoom extent, select **Bookmarks > Add Bookmark** and provide a suitable name (i.e. St. Catharines). Close the box by clicking the X in the top right corner of the pop-up.

6. To zoom in and out, use the mouse scroll wheel or the zoom tools at the top left of the map window. Pan the map by clicking and dragging the map window.

7. Click **Basemap** and explore the options available. Select **Streets** before continuing.
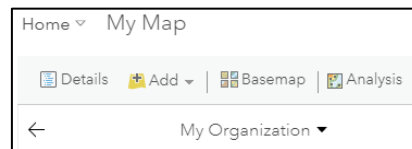
Section B. Adding Layers

There are many data layers available through the AGOL portal. The MDG Library has digitized and georeferenced many historical maps and air photos that are accessible in AGOL. We will explore some of these resources now.
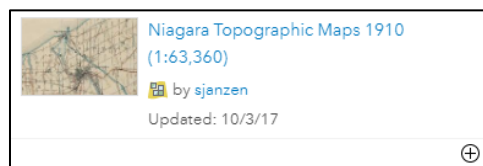
1. Click **Add > Search for Layers**
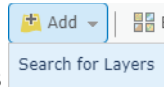
2. Click the dropdown for **My Content** and select **My Organization**.

3. In the **Search for layers** box, type *Niagara Topographic Maps*. From the resulting list, click the plus sign beside **"Niagara Topographic Maps 1910 (1:63,360)"** to add it to your map.

4. In the **Search for layers** box, type *St. Catharines*. From the resulting list, click the plus sign beside **"St. Catharines Fire Insurance Plans (1913)"** to add it to the map.

5. Click the back arrow beside **My Organization**
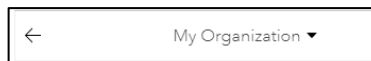
6. Click [Content] to see the list of layers added to the map.

The Fire Insurance Plans are very detailed and don't offer much to a map of the scale that we'll be looking at today so let's turn it off for now….

7. To turn a layer on or off, check and uncheck the box beside the layer name in the **Contents** list.

8. To zoom to the extent of a specific layer, click [⋯] beside a layer options and select **Zoom to**. For example, zoom to the full extent of the **Niagara Topographic Maps 1910**.

9. Add a Bookmark for this location – named "Region".

10. Zoom back to St. Catharines using the **Bookmark > St. Catharines** link.

Section C. Adding Layers from a File

An Excel file or CSV with some sort of location information can easily be mapped using ArcGIS Online.

1. Click **Add > Layer from File**.
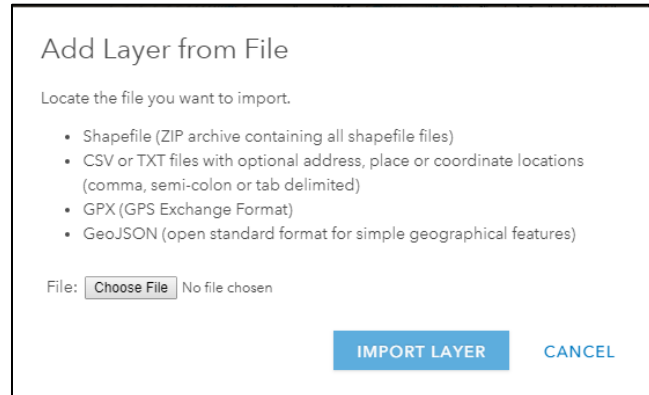
2. Click Choose File and navigate to the CSV downloaded at the beginning of this tutorial. "StCatharinesCensus1900_CSV"

3. Click **IMPORT LAYER**. The **Add CSV Layer** dialogue box appears.
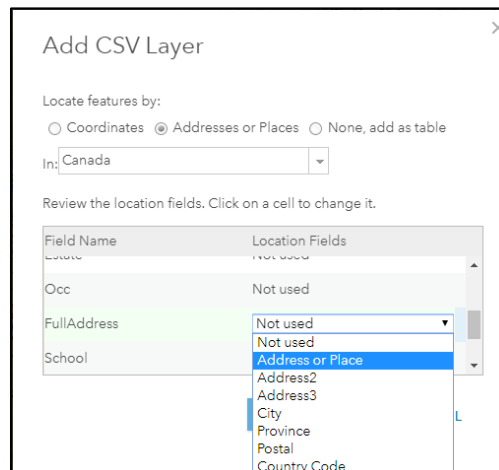
4. Select the radial select button beside **Locate Features by: Addresses or Places**

5. Scroll down through the fields and beside the **Field Name** "FullAddress" click **Not used** and select **Address or Place.**

6. Click **ADD LAYER**. This process is called 'geocoding'. The software matches addresses from your table to known locations on the earth's surface.

7. Click OK when prompted with a warning. This data is a bit 'dirty' but will suffice for this demonstration.

8. The map is zoomed out to the extent of the addresses found by the geocoding process. Go to Bookmarks and click St. Catharines to zoom in.

9. The **Change Style** dialogue box appears to the left of the map window.

10. From **Step 1: Choose an attribute to show**, select **Occupation** from the dropdown.
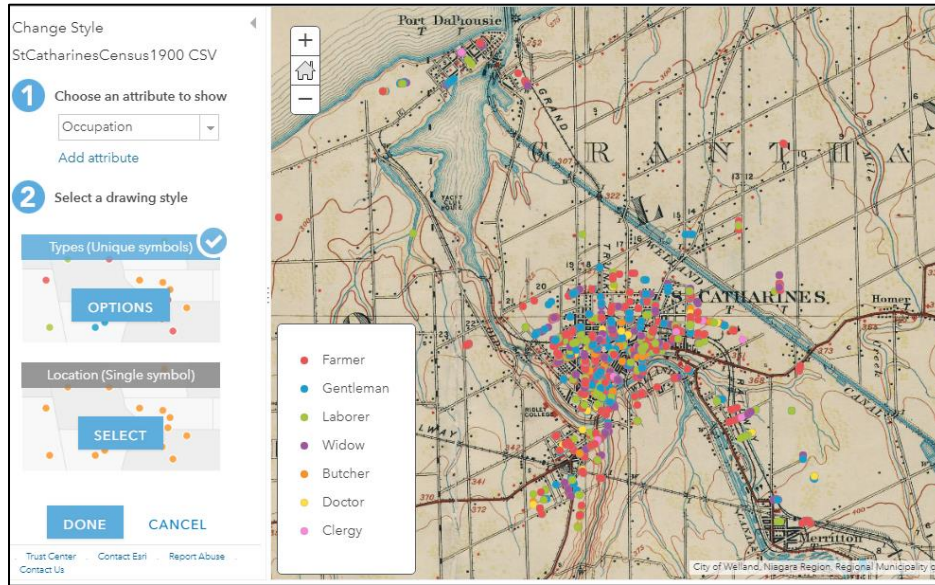
11. Click **DONE**.

12. To save the CSV as a Layer, click the three dots below the layer name and select **Save Layer**.

13. Fill in the dialogue box with a **Title, Tags and Summary (optional)** and click **CREATE ITEM**.

Section D: Saving your map

1. Click **Save** (top middle of the screen) and select **Save as…** Enter a **Title**, **Tags** and **Summary** (optional) then click **SAVE MAP.**

Section E: Sharing and Printing

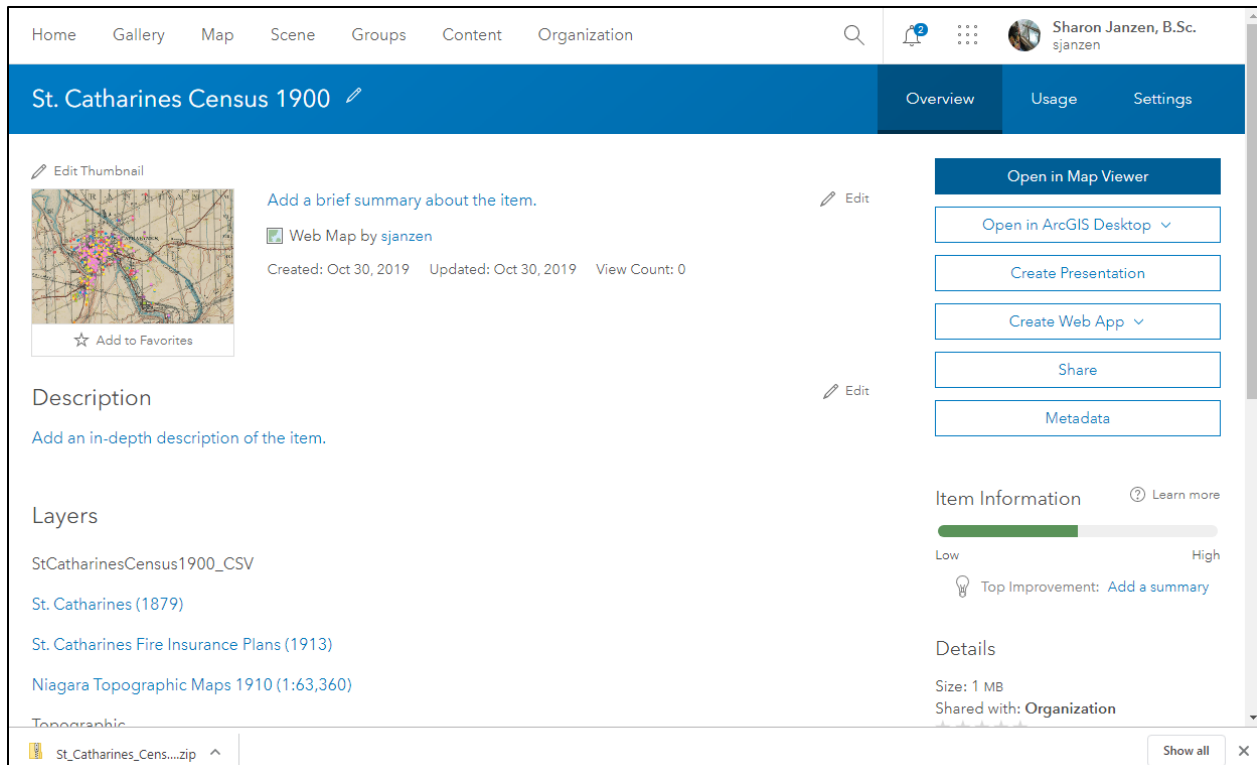Maps and layers you create in AGOL are deemed *private* unless you specify otherwise.

1. To change these settings, click 🔗 Share
2. From the options, click **Brock University**. This will allow other members of the **Brock AGOL Organization** to view your data and maps.
3. Click **Done**.
4. To print the map, click 🖨 Print ▾ and select the option you require.

Section F: How do I access my map in the future?

1. Close Google Chrome and re-open it.
2. Navigate to **Arcgis.com** and sign in.
3. From the options at the top of the page, click **CONTENT**. You will see the layers and maps listed that you have created in this workshop.

☐ Title			Modified ▼
☐ 📍 Census 1900 - sj	Feature Layer	🔒 ☆ ⋯	Oct 30, 2019
☐ 🗺 St. Catharines Census 1900	Web Map	🏢 ☆ ⋯	Oct 30, 2019

4. Click the title of a **Web Map** and the **Item Description** page appears.
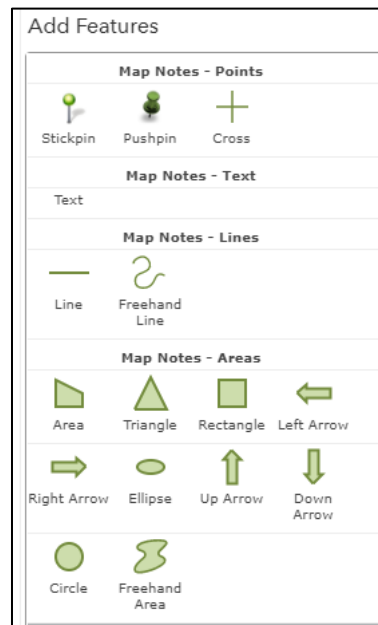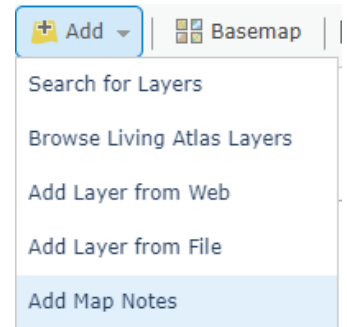5. From the right side of the window, click **Open in Map Viewer**.

Optional: Adding Map Notes

The following steps outline a technique for 'marking up' your map.

1. Click **Add > Add Map Notes**. The graphics you draw will be saved in a layer. Provide a useful Name for the layer and click **Create**.

2. The Add Features panel offers a variety of tools including points, text, lines and areas.
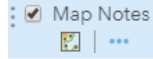

3. Select the **Pushpin** feature and click anywhere on the map. The Points options dialogue box appears. Enter a title and description. You can also add an image via a URL link.

4. To select a different symbol click **CHANGE SYMBOL**.

5. Select a new symbol and click OK.
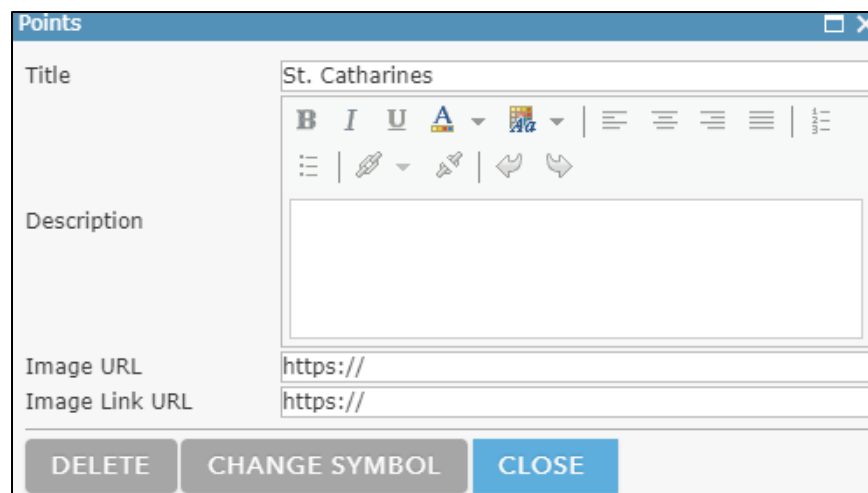
6. Click CLOSE.

7. Add more map notes as needed.

8. To stop adding map notes and return to the **Table of Contents** view, click the arrow beside the **Add Features** panel heading.
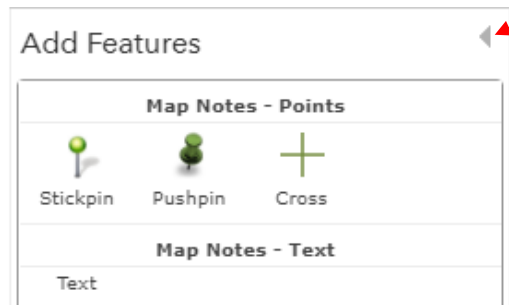
9. To continue adding map notes, click the **Edit** button. The **Add Features** panel is once again activated.

10. Click the 3 dots below the **Map Notes** layer in the **Contents** panel and select **Save Layer**.

11. Provide a title, tags and summary then click Create Item. The new layer is created under your account in ArcGIS Online.

12. Save your map!

Additional Learning Resources from Esri

Getting Started with AGOL https://learn.arcgis.com/en/projects/get-started-with-arcgis-online/

Getting to Know Web GIS (book), chapter 1 MapBk G 70.212 F79 2015