

ArcGIS Online Exercise

Mapping Average Market Rent in Hamilton over time

Overview and Learning Objectives

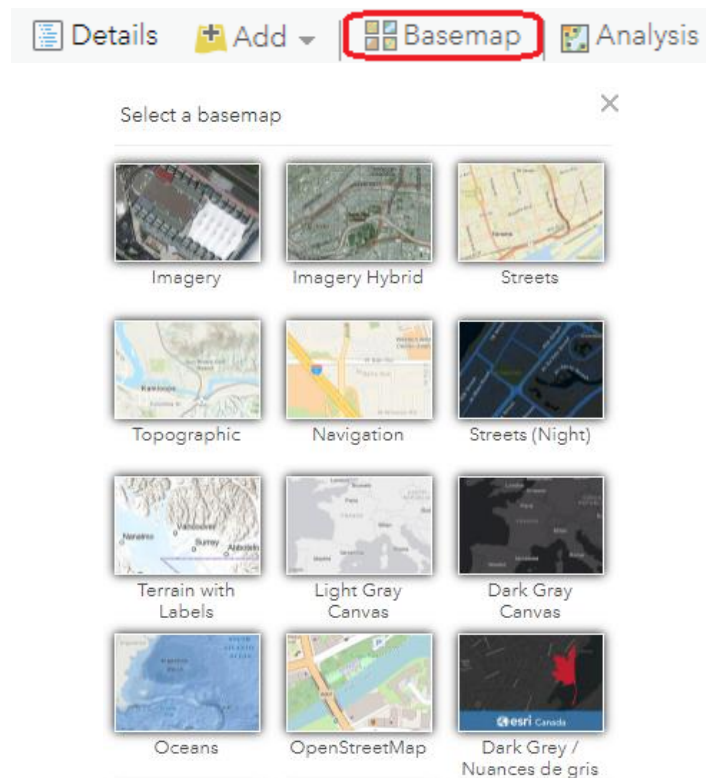
This exercise will introduce the ArcGIS Online platform through the creation of a simple map showing Average Market Rent in Hamilton between 2014 and 2018.

Intro to Map Viewer

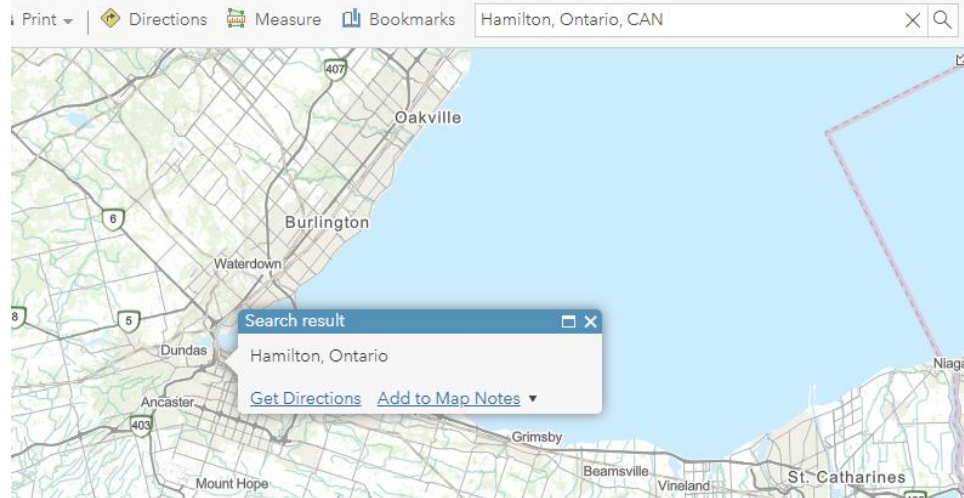
1. Sign into ArcGIS Online - <https://www.arcgis.com/index.html>.
2. Click the “Map” button in the menu along the top.

Home Gallery **Map** Scene Notebook Groups Content

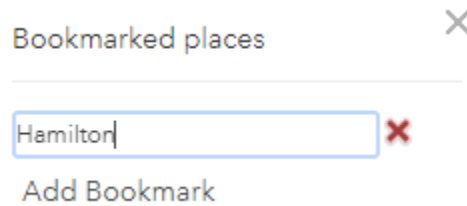
3. If prompted, select the “Classic” map viewer.
4. Select a basemap from the Basemap Gallery.



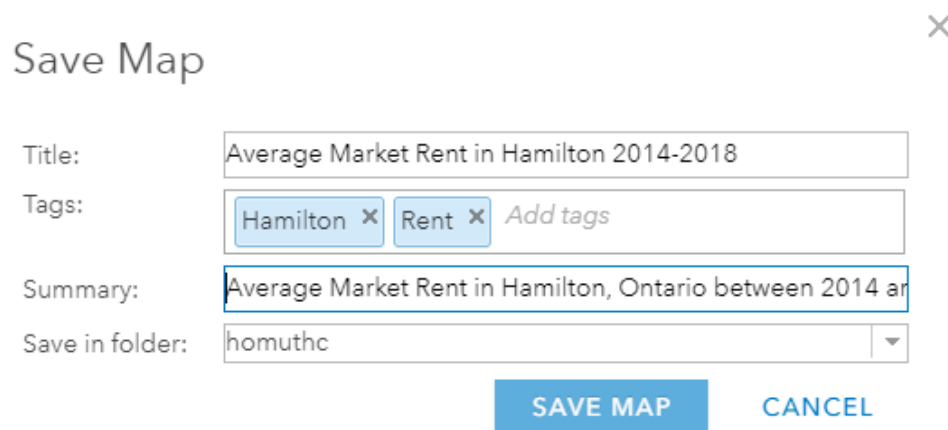
5. Search for Hamilton, Ontario using the search box or zoom to the area.



6. Save this view by creating a new bookmark.
 - Bookmarks > Add Bookmark > Type in name > Enter.

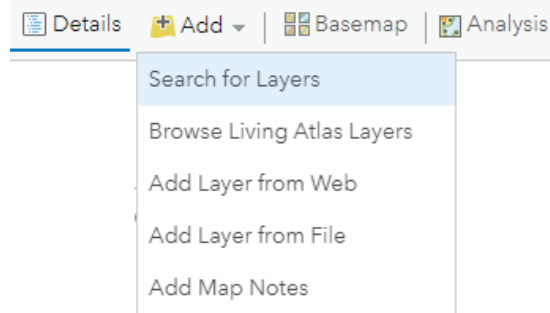


7. Save your map (tags and summary are required).



Search and Add Data Layers

8. Search for average market rent in Hamilton.
 - Add > Search for layers.



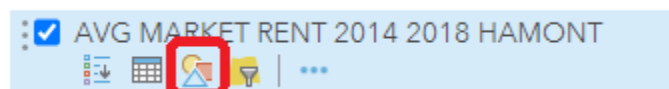
- Switch from My Content to ArcGIS Online.
- Search for “AVG_MARKET_RENT” and hit Enter.
 - To learn more about a particular dataset (author, description, etc.) click on the dataset title.
- Add (+) the “AVG_MARKET_RENT_2014_2018_HAMONT” dataset by “homuthc_McMaster”.



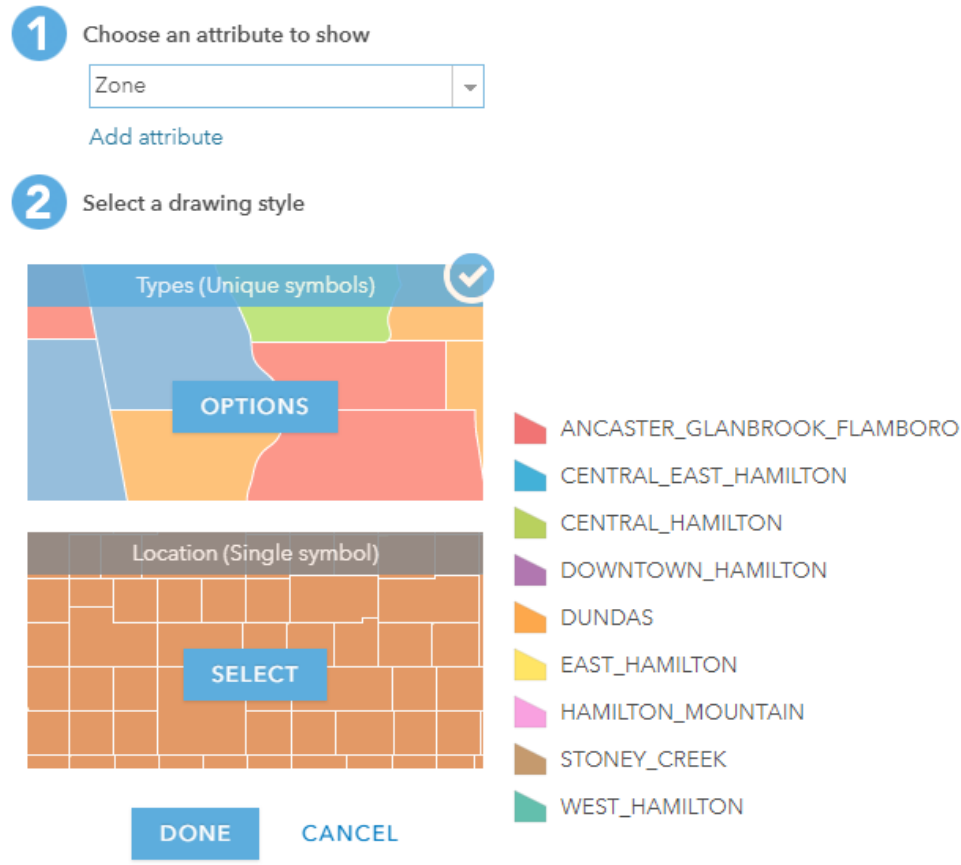
9. Return to the Details tab.
10. Explore the attribute data by clicking on different areas.
11. Save your map.

Symbolizing Features by Category

12. The data is currently a uniform colour. To change the symbology (appearance) of the data:
 - In the content menu, click on the Change Style button.



- Choose to display the Zone attribute as Types (Unique symbols).



- Select “Options” to change the labels, symbol, and transparency.
- Once finished, click “OK”, followed by “Done”.

13. Save your map.


Symbolizing Features by Value

14. Return to the Change Style menu.
15. Choose to display the Rent attribute as Counts and Amounts (Colour).
16. Select “Options” to change the colour ramp, classification, and transparency.
17. Once finished, click “OK”, followed by “Done”.
18. Save your map.

What are some advantages and disadvantages of displaying the data in this way?

What other information might be useful?

Configure Pop-Ups

19. The pop-up windows display a default list of attributes. To change the pop-up content:
 - Click the three dots  next to the dataset, followed by “Configure Pop-up”.

- Enter a Pop-Up Title: *Average Market Rent*
- Under Pop-up Contents, choose “A custom attribute display” and click “Configure”.

Configure Pop-up

AVG_MARKET_RENT_2014_2018_HAMONT

Show Pop-ups

Pop-up Title

+

Pop-up Contents

Display: ▼

CONFIGURE

- By clicking the + symbol in the Custom Attribute Display box, you can add fields from the attribute table. Labels or headings can be typed in.

How items appear in the Custom Attribute Display window is how they will appear in the pop-up window.

Custom Attribute Display

Use the area below to define, format, and lay out the information you want to display.

B I U |

Font Size +

{Zone}: {Rent}

OK **CANCEL**

- Click “Ok”.

Save and Share Your Map

20. Save your map!

21. Click the Share button to view the available sharing options.

- Choose how widely the map is to be shared.
- Copy the URL to the map to share with others.
- From here you can also choose to copy the code to embed the map in a website or Storymap or create a web app incorporating this map.

Part 2. Create a Web App Showing Changes in Rent Over Time

Time Settings

The Average Market Rent data is time-enabled and includes a column for the year. To create a simple web app showing changes in rent over time, first configure the time settings.

1. In the time slider:
 2. Click the configure button.



2. Choose the desired Playback Speed.
2. Click show advanced options and select the time span and time display.

This data includes annual values for 5 years, starting at the beginning of 2014 and ending in 2018.

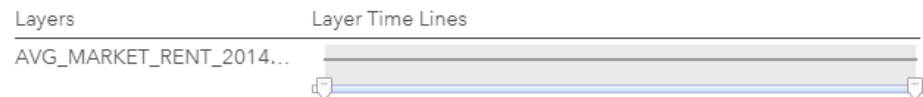
Time Settings ?

Playback Speed



Time Span

Drag the slider handles or click a layer time line to set the Start and End time.



Start Time: 1/31/2014 7:00 PM

End Time: 1/31/2018 11:45 PM

Time Display

Specify the amount of data to display at one time.

- Length of one time interval.

Count: 1 Units: Year

- Total time divided into equal steps.

Count: 5

As time passes only display the data in the current time interval.

progressively display all the data.

Start playback at start time.

playback position saved with map.

OK

CANCEL

- Click "Ok".
2. Save your map and test out the time slider using the controls.

Create a Web Application

3. Click "Share", followed by "Create a Web App" to see the available options.
4. Select the Slider Instant App and choose "Create Web App".



Slider

Visualize and interact with temporal and numeric data using animation tools

CREATE WEB APP

PREVIEW

CLOSE

5. Enter a title, tags, and summary and click Done
6. Follow steps in express editor.
7. Publish map.
8. Launch, review, and make any necessary edits.

Additional Resources

Learn ArcGIS - <https://learn-arcgis-learn.org/hub.arcgis.com/>

ArcGIS Online documentation - <https://www.esri.com/en-us/arcgis/products/arcgis-online/resources>

Data Analysis Support Hub (DASH) - <https://library.mcmaster.ca/services/dash#tab-dash-resources>

Sources

Open Hamilton – Average Market Rent dataset

https://open.hamilton.ca/datasets/98824662da7a45c3b855de914702b48c_3