

# ArcGIS Online Exercise

*Mapping COVID-19 Cases in Hamilton*

## Overview and Learning Objectives

This exercise will introduce the ArcGIS Online platform through the creation of a simple map showing COVID-19 cases in Hamilton by Census Tract.

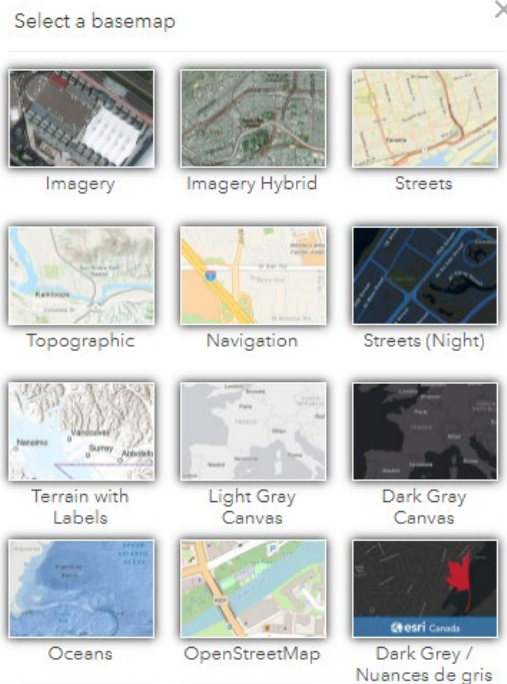
The data used is available through the City of Hamilton's open data portal (<https://open.hamilton.ca/>).

## Intro to Map Viewer

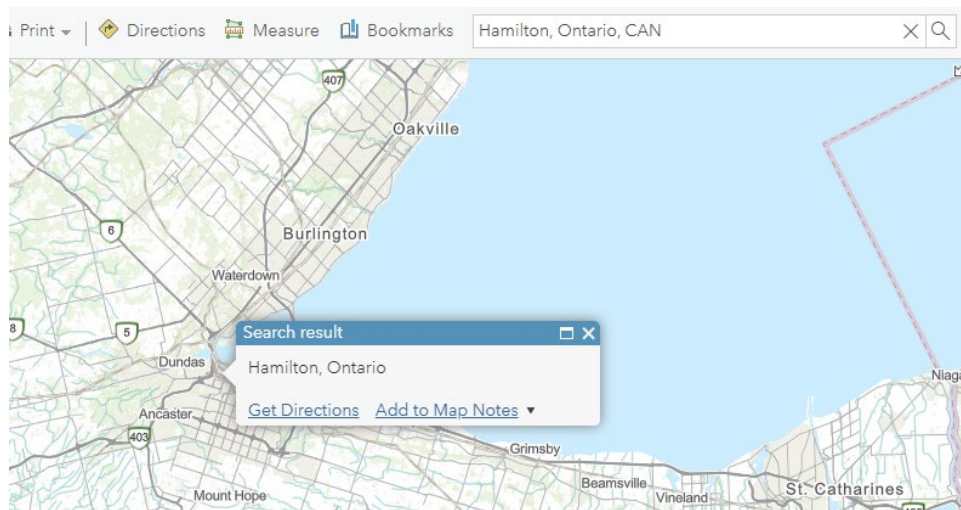
1. Sign into ArcGIS Online - <https://www.arcgis.com/index.html>.
2. Click the "Map" button in the menu along the top.

Home   Gallery   **Map**   Scene   Notebook   Groups   Content

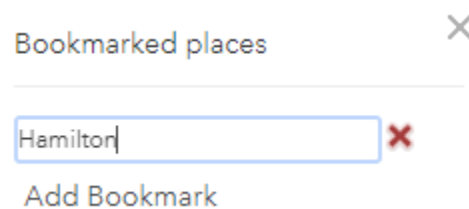
3. If prompted, select the "Classic" map viewer.
4. Select a basemap from the Basemap Gallery.



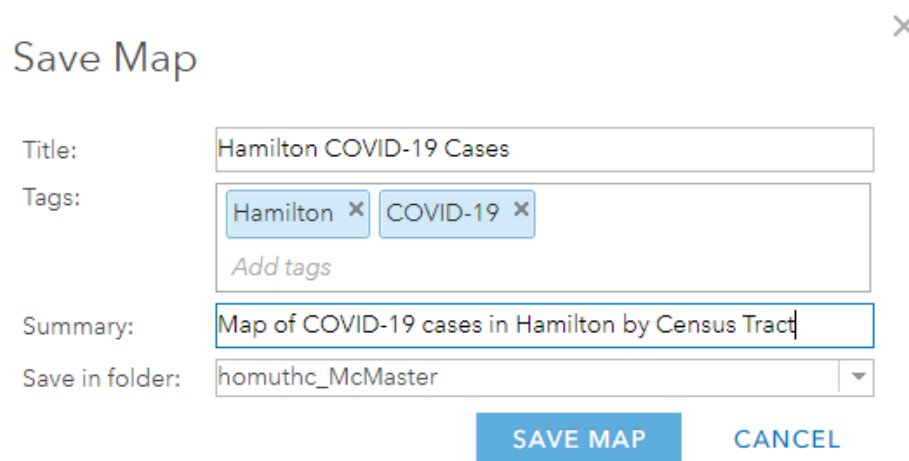
5. Search for Hamilton, Ontario using the search box or zoom to the area.



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

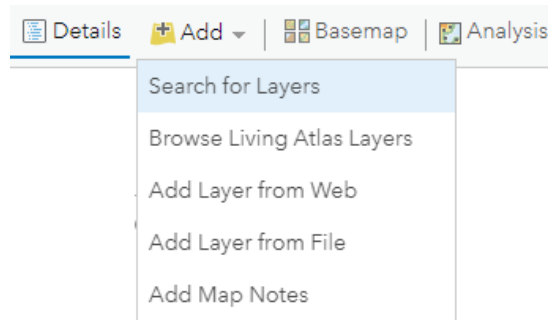


7. Save your map (tags and summary are required).

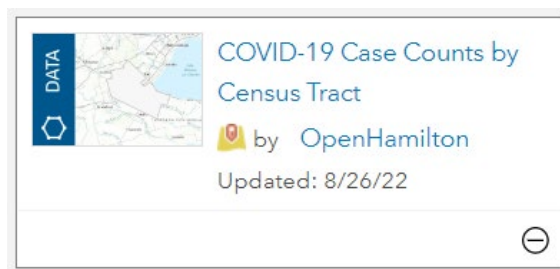


## Search and Add Data Layers

8. Search for COVID-19 case counts in Hamilton.
- Add > Search for layers.



- Switch from My Content to ArcGIS Online.
  - Search for “COVID-19 Case Counts Hamilton” and hit Enter.
    - o To learn more about a particular dataset (author, description, etc.) click on the dataset title.
9. Add (+) the “COVID-19 Case Counts by Census Tract” dataset by “Open Hamilton”.

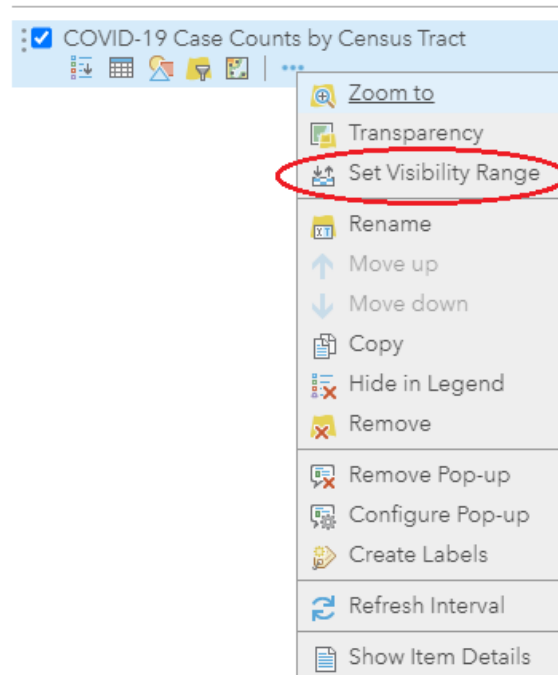


10. Return to the Details tab.

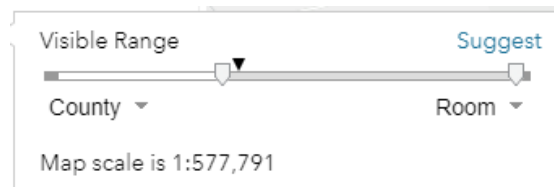
*Unable to see the data? Try zooming in to different areas of the city.*

11. The visibility range defines at which zoom levels you can see the data. To change the visibility range:
- Click the three dots (⋮) next to the dataset under Contents and select “Set Visibility Range”.

## Contents



- Adjust the slider so the dataset is visible starting at the County level.



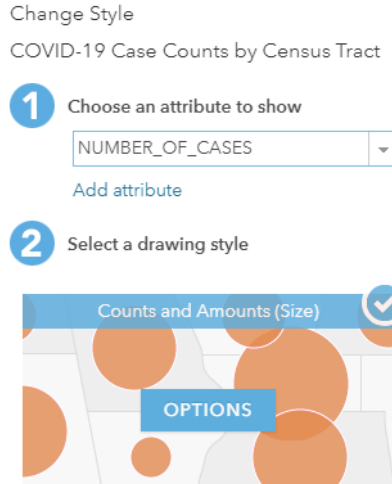
- Try adjusting the other end of the slider so the data as well.
12. Zoom in and out to see the impact of changing the visibility range.
  13. Explore the attribute data by clicking on different Census Tracts.
  14. Select an area of focus and create a new bookmark.
  15. Save your map.

## Symbolizing Features

16. The data is currently a uniform colour. To change the symbology (appearance) of the data:
  - Click on the Change Style button.




- Choose to display the Number of Cases attribute (NUMBER\_OF\_CASES) as Counts and Amounts (Size).



17. Try exploring some of the options within the Change Style menu, such as dividing the case counts by the population.
18. Click “OK”, followed by “Done”.
19. Explore the data and patterns displayed through this symbolization.
20. Save your map.

## Configure Pop-Ups

21. 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: *COVID-19 Case Counts by Census Tract*
  - Under Pop-up Contents, choose “A custom attribute display” and click “Configure”.


Configure Pop-up

COVID-19 Case Counts by Census Tract


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☒ 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.

Font  Size x-small

Census Tract: {CTNAME}  
COVID-19 Cases: {NUMBER\_OF\_CASES}  
Population: {POPULATION}

OBJECTID {OBJECTID}  
CTNAME {CTNAME}  
NUMBER\_OF\_CASES {NUMBER\_OF\_CASES}  
POPULATION {POPULATION}

OK CANCEL

- Once complete, click OK twice to return to the Contents.

## Save and Share Your Map

22. Save your map!
23. 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.

## Additional Resources

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

McMaster University Library GIS Services - <https://library.mcmaster.ca/services/gis>

## Sources

This exercise is inspired by the Introduction to ArcGIS Online Tutorial, available online at:  
<https://hed.esri.ca/resourcefinder/data/files/IntroAGOL.pdf>