

# Creating thematic maps in ArcGIS Online

In the [previous tutorial](#), we learned how to create an account in ArcGIS Online, and upload a shape file containing City of Toronto neighbourhoods.

In this tutorial, we will learn how to content to those neighbourhoods: COVID-19 infections. We will then create a colour code which helps to visually pinpoint the most vulnerable areas in Toronto.

## What you will learn

1. Label the neighbourhoods in the shape file in ArcGIS.
2. Find the spreadsheet that contains the COVID-19 infection data.
3. Uploading the COVID-19 data to ArcGIS Online.
4. Colour coding our new layer.
5. Obtaining the embed code in order to display your map in a story or blog post.

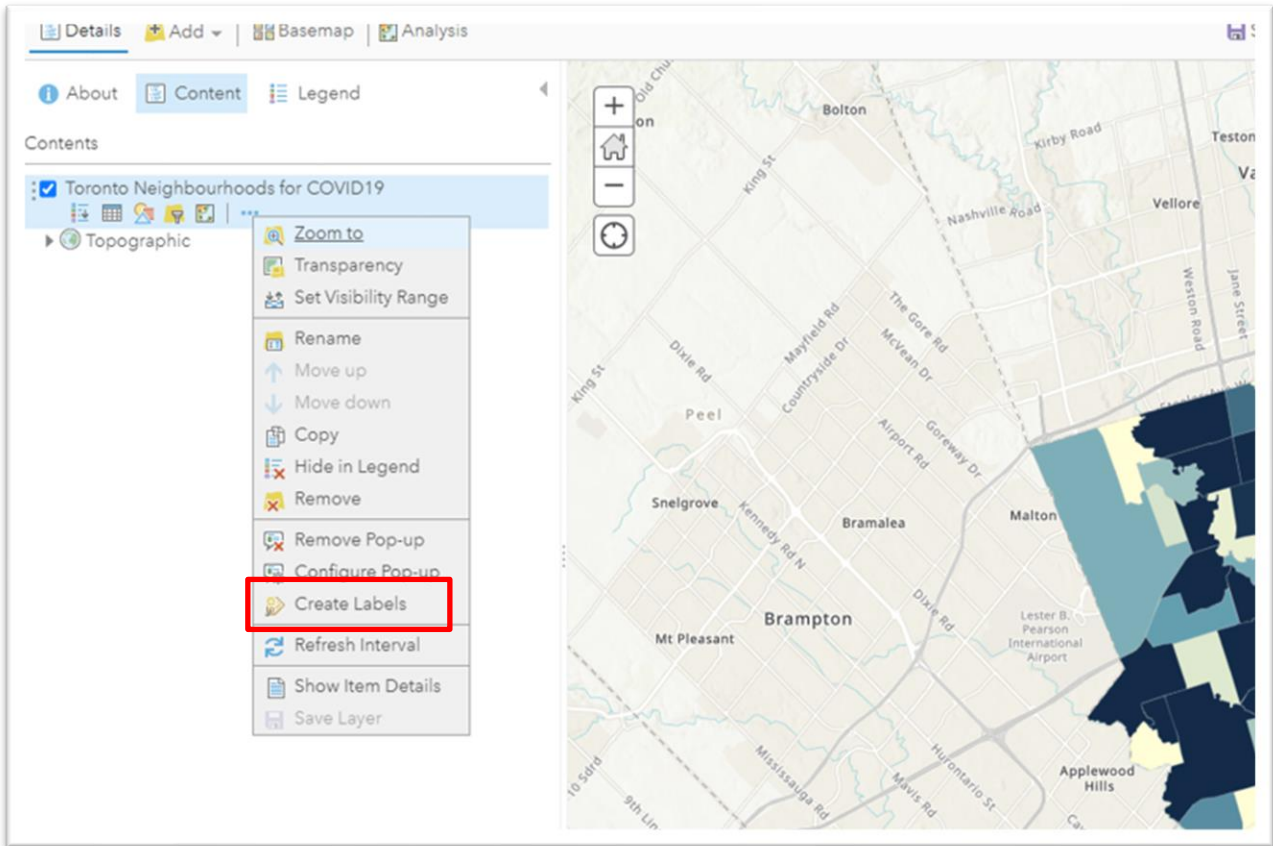
So, lets get started.

## Label the neighbourhoods in the shape file in ArcGIS

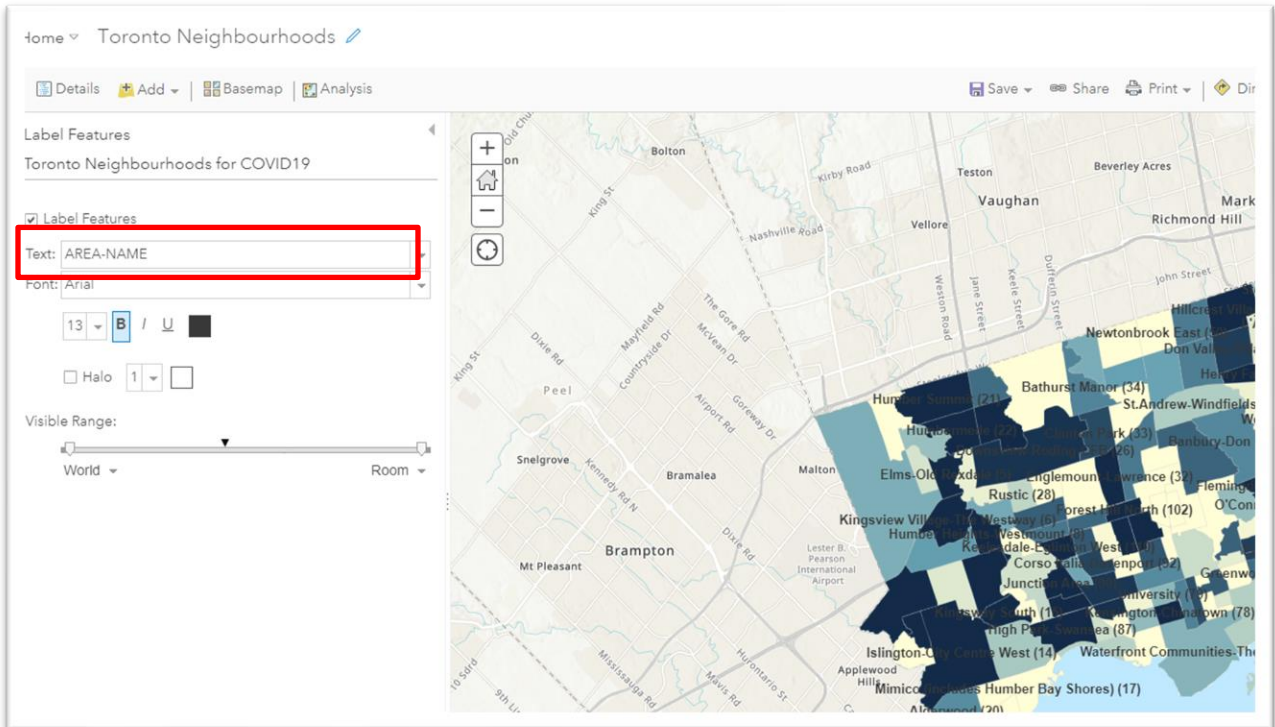
Let us begin by putting labels on the neighbourhoods.

Place your cursor over the layer until the three dots appear to the right.

Click the dots to obtain a drop-down menu.



Select the “Create Labels” option.



In the text box under “Label Features” select the field that contains the neighbourhood names and adjust the font size and type if necessary. If you are unsure of which column title to use, return to your layer, hover the mouse over its name once again and select the “show table” icon.

About
  Content
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Contents

Toronto Neighbourhoods for COVID19

Topographic

Hide Table

Toronto Neighbourhoods for COVID19

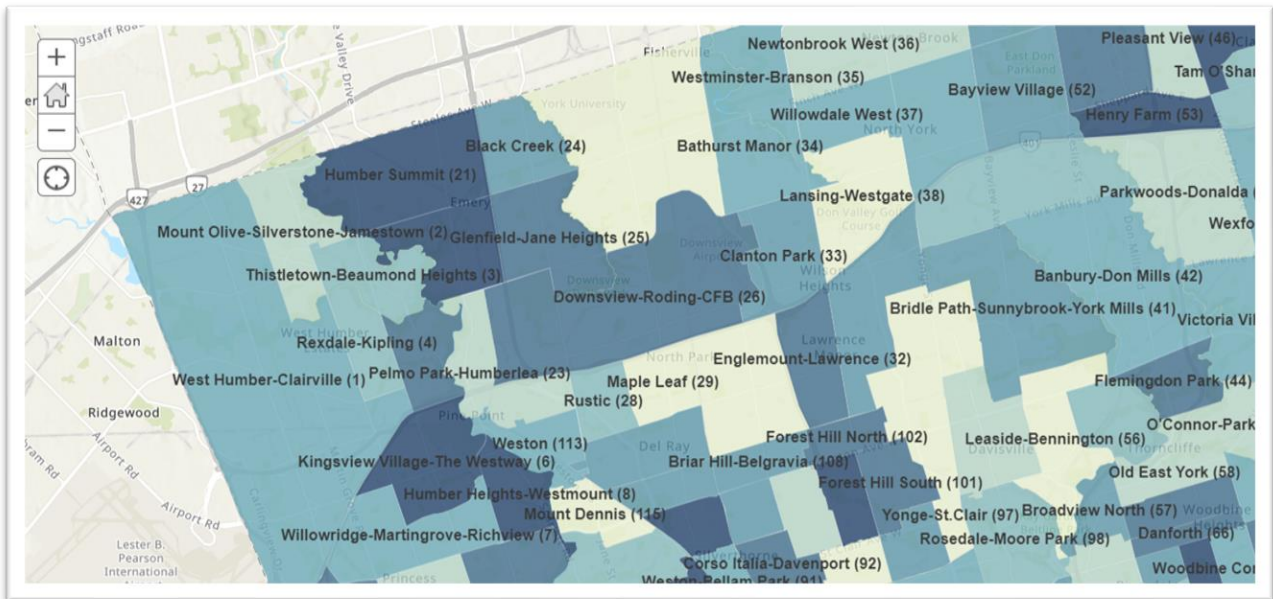
Topographic

Toronto Neighbourhoods for COVID19 (Features: 140, Selected: 0)

FIELD_1	FIELD_2	FIELD_3	FIELD_4	FIELD_5	FIELD_6	AREA-NAME
8,541.00	25,886,861.00	25,926,662.00	49,885.00	94.00	94.00	Wychwood (94)
8,542.00	25,886,820.00	25,926,663.00	49,885.00	100.00	100.00	Yonge-Eglinton
8,543.00	25,886,834.00	25,926,664.00	49,885.00	97.00	97.00	Yonge-St.Clair
8,544.00	25,886,593.00	25,926,665.00	49,885.00	27.00	27.00	York University Heights (27)
8,545.00	25,886,688.00	25,926,666.00	49,885.00	31.00	31.00	Yorkdale-Glen

To close the table, click the “X” at its top right-hand corner.

Once you have the correct name, close the label features section from the screen grab in the previous page by clicking the caret at the top right corner.



Now it's time to bring in another layer, this time the csv file that contains the up to date COVID-19 infections broken down by neighbourhood.

**Find the spreadsheet that contains the COVID-19 infection data**

You'll find the data at Toronto Public Health's [COVID-19 website](#).

## COVID-19: Status of Cases in Toronto

If you think you have COVID-19 symptoms or have been in close contact with someone who has it, find out if you should visit an [assessment centre](#) and where to go.

- Summary of COVID-19 Cases in Toronto
- COVID-19 Toronto Neighbourhood Maps
- Toronto COVID-19 Monitoring Dashboard
- Active COVID-19 Outbreaks in Toronto
- Additional Information

When using the charts below, hover over the bars to view numbers (counts) and other relevant information. Please note that the data shown here may differ from other sources, as data are extracted at different times. The data in the charts are subject to change as the public health investigation into reported cases is currently ongoing. Additionally, data definitions are subject to change as the pandemic evolves.

This information is updated three times per week on Monday, Wednesday and Friday.

[View mobile version.](#)

### City of Toronto COVID-19 Summary

Data as of July 05, 2020 03:00 PM  
Data source: Ontario Ministry of Health, Integrated Public Health Information System and CORES

[导出到 PDF](#) [Download Technical Notes](#) [Download Excel Data](#)


Outbreak or Sporadic Cas...  
 (All)  
 Outbreak Associated  
 Sporadic

Cases*	Recovered Cases	Deaths	Cumulative Institutional Outbreaks +
14,678	12,844	1,105	171

Cumulative Cases by Episode Date and Outcome

Episode Date  
 Reported Date

Illnesses that began during this time period may not yet be reported



Select the second tab "COVID-19 Toronto Neighbourhood Maps."



The text above explains the map's content with a few caveats to prevent anyone from jumping to conclusions. So, take the time to read it before going any further.

## COVID-19: Status of Cases in Toronto

If you think you have COVID-19 symptoms or have been in close contact with someone who has it, find out if you should visit an [assessment centre](#) and where to go.

Summary of COVID-19 Cases in Toronto	<b>COVID-19 Toronto Neighbourhood Maps</b>	Toronto COVID-19 Monitoring Dashboard	Active COVID-19 Outbreaks in Toronto	Additional Information
--------------------------------------	--	---------------------------------------	--------------------------------------	------------------------

These maps illustrate the distribution of COVID-19 cases across our city, as suggested by their home address. The maps do not necessarily reflect risk of acquiring COVID-19 nor where cases were exposed to the disease.

These maps are intended to provide information to help prevention strategies reach those people most affected. COVID-19 is circulating in all parts of our city and all residents should follow public health advice to [reduce the spread of this virus](#).

Maps include cases from outbreaks in long-term care and other institutional settings. These can be removed by using the filter on the map (remove the OB Associated cases). When using the maps below, hover over the neighbourhoods to view numbers (counts) and other relevant information. Learn more about [Toronto neighbourhoods](#), including what neighbourhood you live in.

Please note that the data shown here may differ from other sources, as data are extracted at different times. The data in the maps are subject to change as the public health investigation into reported cases is currently ongoing. Additionally, data definitions are subject to change as the pandemic evolves.

This information is updated three times per week on Monday, Wednesday and Friday.

[View the mobile version.](#)

### City of Toronto COVID-19 Summary

Data as of July 05, 2020 03:00 PM  
Data source: Ontario Ministry of Health, Integrated Public Health Information System and CORES

[Export to PDF](#) [Download Technical Notes](#) [Download Excel Data](#)

#### Map of Cumulative COVID Cases by Neighbourhood - January 21, 2020 to July 5, 2020

**Select Map:** Cases

**Outbreak or Sporadic Cases:**

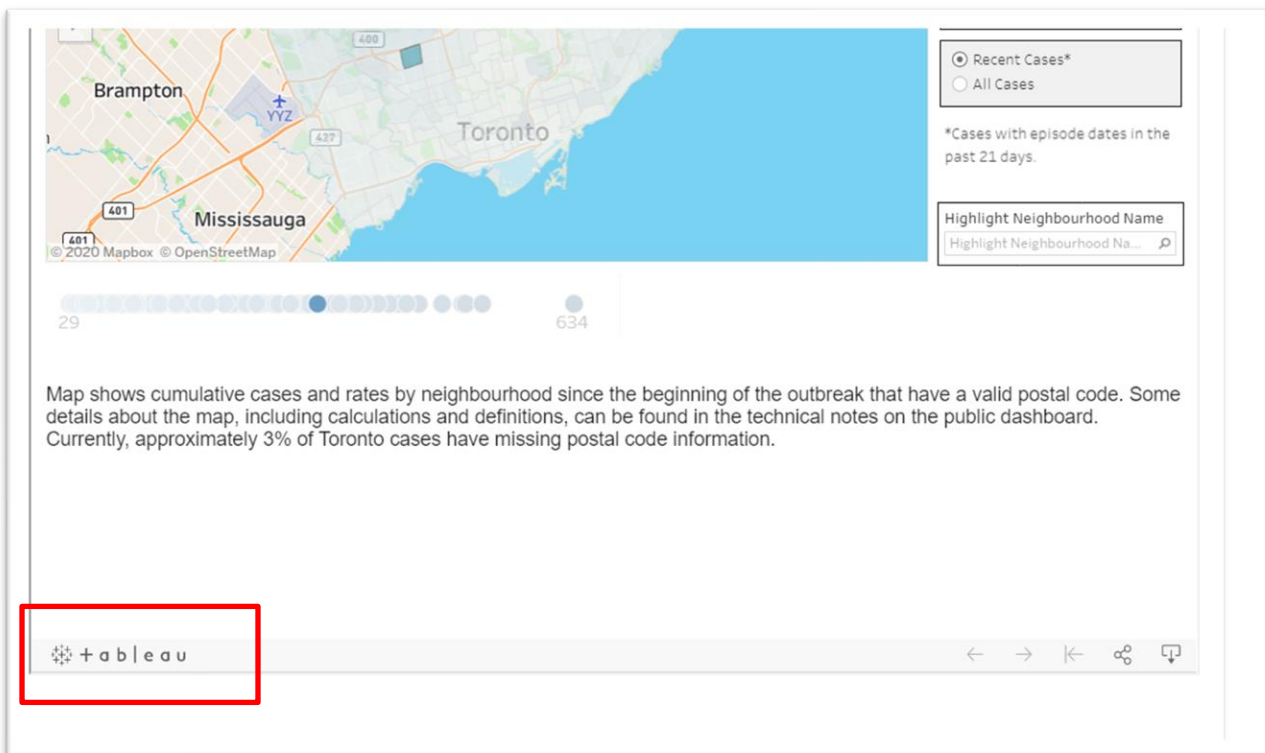
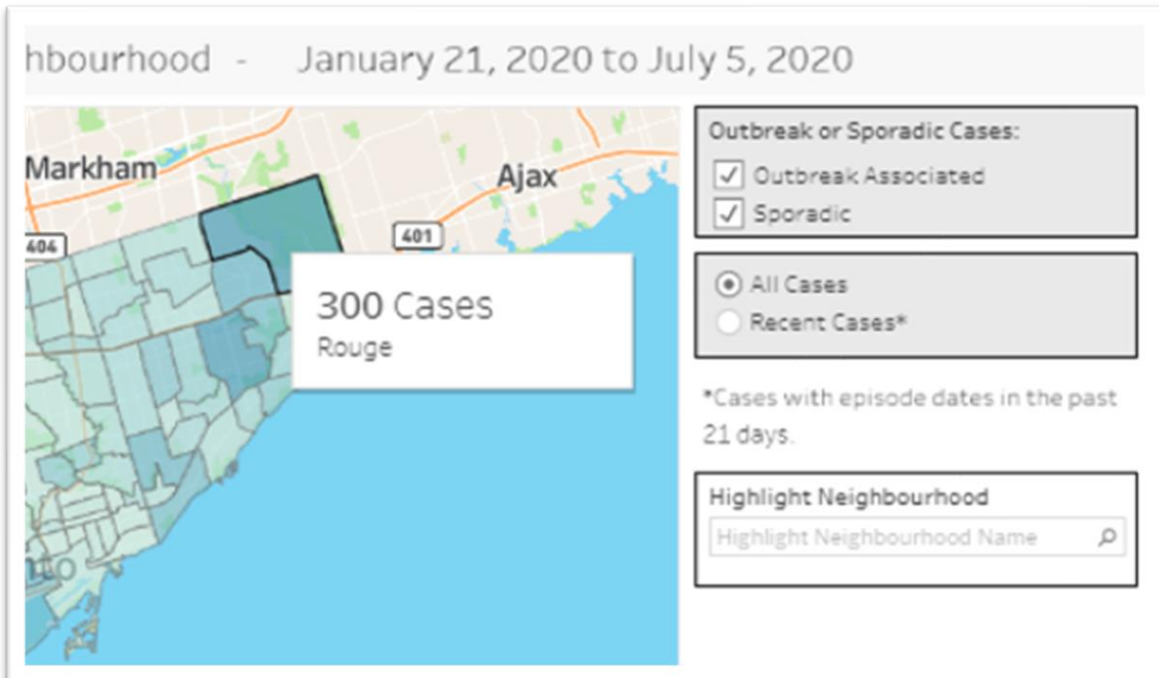
- Outbreak Associated
- Sporadic

**All Cases:**

- All Cases
- Recent Cases\*

\*Cases with episode dates in the past 21 days.

Hovering your mouse over a neighbourhood boundary produces a pop-up box with COVID-19 cases.




Since we already have the neighbourhood shape file in ArcGIS Online, we only need the COVID-19 data, which we will download from this site as an Excel file.

To do this scroll to the top of the page and select the “Download Excel Data” tab.



### COVID-19 Neighbourhood Cases and Rates

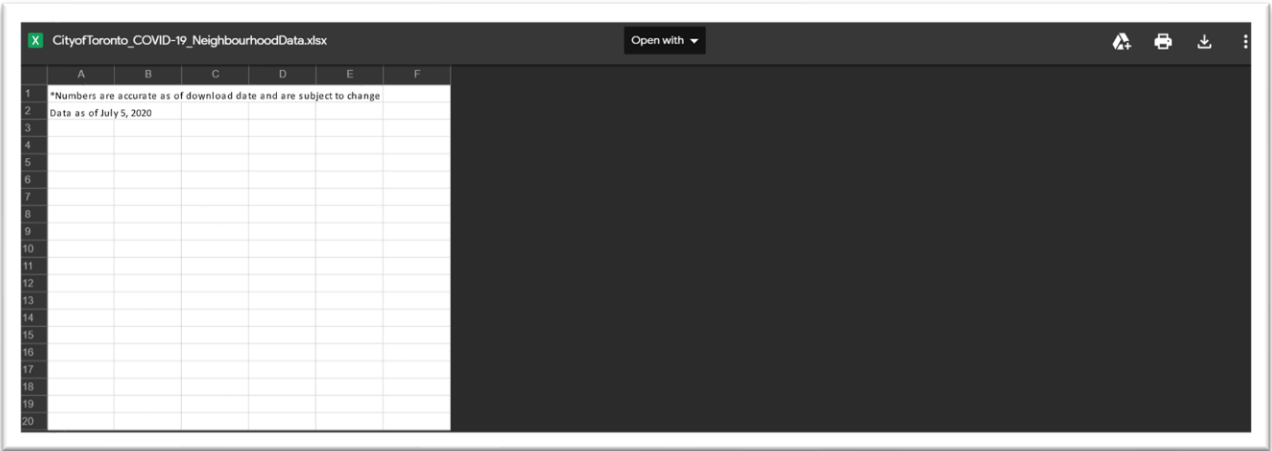
Data as of November 03, 2020 02:00 PM  
 Data source: Ontario Ministry of Health,  
 Integrated Public Health Information System and CORES  
 \*Map reports on confirmed and probable cases of COVID-19

 Technical Notes
  Excel
  PDF


[Case/Rate Maps](#)  
[Testing Maps](#)

**Note:** As of November 4th, the dashboard has been updated to show the most recent 3 week case rates as the standard view. Cumulative case rates and case counts are still available through the filters on the right side of the map.

This change was made to allow users to more readily view the recent spread of COVID-19 in the city, while maintaining the option to view the impact of COVID-19 since the start of the pandemic.



Download the Excel workbook to this tutorial's hard drive folder.

Name	Date modified	Type	Size
 CityofToronto_COVID-19_NeighbourhoodData.xlsx	2020-11-05 10:43 PM	Microsoft Excel W...	34 KB

Open the file and go to the second tab.

	A	B	C	D	E
1	Neighbourhood ID	Neighbourhood Name	Rate per 1	Case Count	
2	137	Woburn	366.4579	196	
3	2	Mount Olive-Silverstone-Jamestown	503.7325	166	
4	132	Malvern	351.6463	154	
5	131	Rouge	324.7591	151	
6	26	Downsview-Roding-CFB	382.2892	134	
7	126	Dorset Park	523.9371	131	
8	27	York University Heights	424.0206	117	
9	1	West Humber-Clairville	315.2017	105	
10	25	Glenfield-Jane Heights	341.0843	104	
11		Missing Address/Postal Code		103	
12	113	Weston	500.2223	90	
13	127	Bendale	293.725	88	
14	55	Thornciffe Park	393.2158	83	
15	24	Black Creek	372.6365	81	
16	136	West Hill	273.8026	75	
17	71	Cabbagetown-South St. James Town	634.1589	74	
18	62	East End-Danforth	346.1017	74	
19	117	L'Amoreaux	159.1162	70	
20	139	Scarborough Village	412.5807	69	
21	85	South Parkdale	306.6502	67	
22	6	Kingsview Village-The Westway	300	66	
23	120	Clairlea-Birchmount	240.8835	65	
24	35	Westminster-Branson	239.7808	63	
25	22	Humbermede	398.8421	62	
26	135	Morningside	343.741	60	
27	121	Oakridge	433.3694	60	
28	129	Agincourt North	195.7888	57	
29	17	Mimico (includes Humber Bay Shores)	167.8248	57	
30	111	Rockcliffe-Smythe	251.7306	56	
31	34	Bathurst Manor	352.8004	56	
32	14	Islington-City Centre West	125.0995	55	
33	107	Oakwood Village	259.3116	55	
34	124	Kennedy Park	315.3653	54	
35	118	Tam O'Shanter-Sullivan	189.4629	52	
36	119	Wexford/Maryvale	186.2664	52	
37	32	Englemount-Lawrence	223.4937	50	
38	39	Bedford Park-Nortown	215.1833	50	

Data Note: **Recent Cases and Rates by Neigh** | Recent Sporadic Cases and Rates | All

As we do with any file opened in a spreadsheet, take a few minutes to study the contents. The first column contains the “Neighbourhood ID”, which is important because it will be joined to the column in our shape file in ArcGIS with the generic title of “Field 5” or “Field 6”, which you may have renamed in the previous tutorial.

AREA_ID	FIELD_2	FIELD_3	FIELD_4	FIELD_5	FIELD_6	
6,089.00	25,886,590.00	25,926,730.00	49,885.00	51.00	51.00	A
6,060.00	25,886,929.00	25,926,701.00	49,885.00	72.00	72.00	V
6,071.00	25,886,620.00	25,926,712.00	49,885.00	40.00	40.00	R
6,067.00	25,886,704.00	25,926,708.00	49,885.00	28.00	28.00	S (
6,043.00	25,886,818.00	25,926,684.00	49,885.00	104.00	104.00	R
6,155.00	25,886,386.00	25,926,796.00	49,885.00	110.00	110.00	N ( K

You’ll notice the numbers in the Excel file are right justified, whereas the numbers in our shape file are left-justified. Under normally circumstances, columns with differently formatted numbers can not be joined. ArcGIS allows you to bypass this problem, though the discrepancy is still worth noting.

You’ll also notice that the neighbourhood ID numbers above have two decimal places, whereas the ID numbers in our Excel file do not have decimal places. Again, the difference is worth noting, but will not affect the join.

As we have noted several times during this tutorial, it’s important to pay attention to seemingly small details like formatting when working with data.

Copy the table on the “All Cases and Rates by Neighbourhood” worksheet paste it into a new file.

	A	B	C	D	E
1	Neighbourhood ID	Neighbourhood Name	Rate per 1	Case Count	
2	137	Woburn	366.4579	196	
3	2	Mount Olive-Silverstone-Jamestown	503.7325	166	
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10	25	Glenfield-Jane Heights	341.0843	104	
11		Missing Address/Postal Code		103	
12	113	Weston	500.2223	90	
13	127	Bendale	293.725	88	
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31	34	Bathurst Manor	352.8004	56	
32	14	Islington-City Centre West	125.0995	55	
33	107	Oakwood Village	259.3116	55	
34	124	Kennedy Park	315.3653	54	
35	118	Tam O'Shanter-Sullivan	189.4629	52	
36	119	Wexford/Maryvale	186.2664	52	
37	32	Englemount-Lawrence	223.4937	50	
38	39	Bedford Park-Nortown	215.1833	50	

Data Note | 
 [Recent Cases and Rates by Neigh](#) | 
 Recent Sporadic Cases and Rates | 
 All

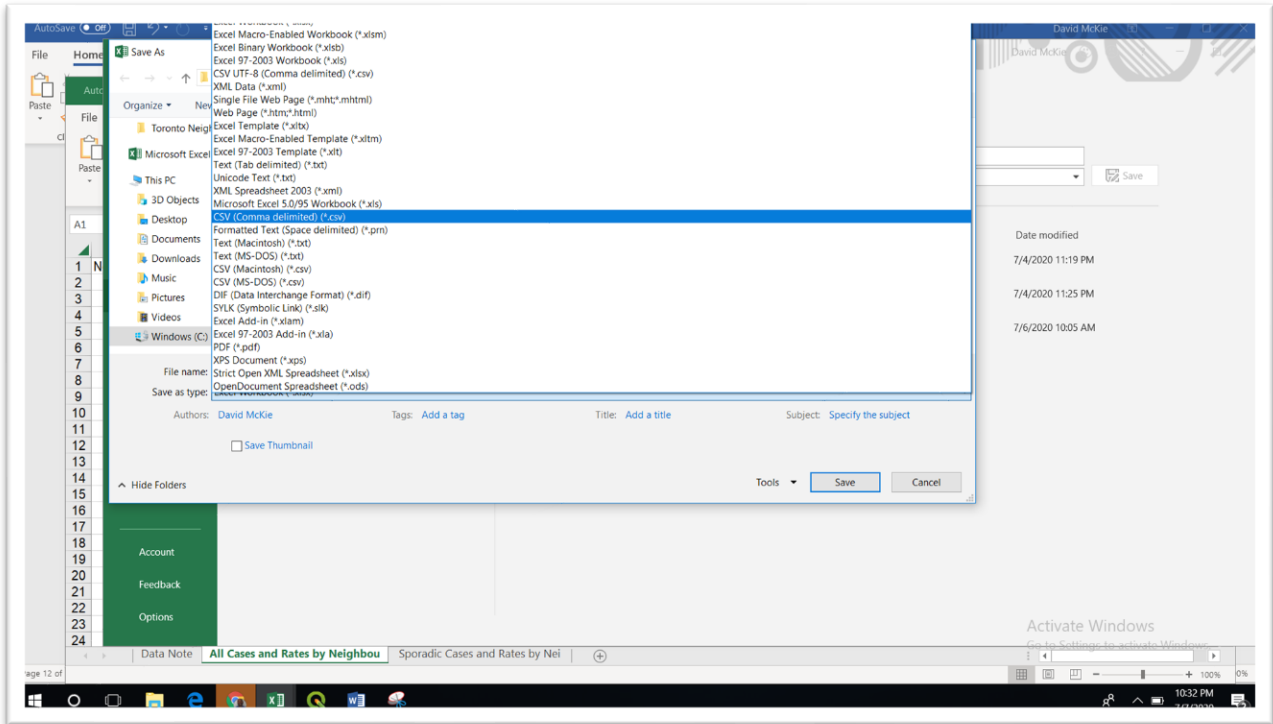
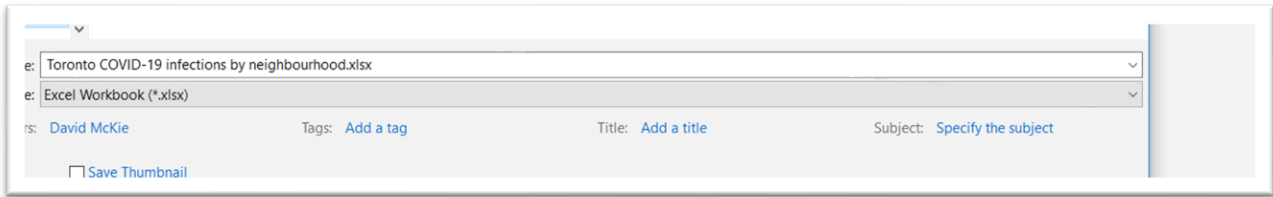


Clipboard		Font		Alignment		Number	
A1		Neighbourhood ID					
A	B	C	D	E	F	G	H
Neighbourhood ID	Neighbourhood Name	Rate per 1	Case Count				
137	Woburn	366.4579	196				
2	Mount Olive-Silverstone-Jamestown	503.7325	166				
132	Malvern	351.6463	154				
131	Rouge	324.7591	151				
26	Downsview-Roding-CFB	382.2892	134				
126	Dorset Park	523.9371	131				
27	York University Heights	424.0206	117				
1	West Humber-Clairville	315.2017	105				
25	Glenfield-Jane Heights	341.0843	104				
	Missing Address/Postal Code		103				
113	Weston	500.2223	90				
127	Bendale	293.725	88				
55	Thornccliffe Park	393.2158	83				
24	Black Creek	372.6365	81				
136	West Hill	273.8026	75				
71	Cabbagetown-South St. James Town	634.1589	74				
62	East End-Danforth	346.1017	74				
117	L'Amoreaux	159.1162	70				
139	Scarborough Village	412.5807	69				
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120	Clairlea-Birchmount	240.8835	65				
35	Westminster-Branson	239.7808	63				
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14	Islington-City Centre West	125.0995	55				
107	Oakwood Village	259.3116	55				
124	Kennedy Park	315.3653	54				
118	Tam O'Shanter-Sullivan	189.4629	52				
119	Wexford/Maryvale	186.2664	52				
32	Englemount-Lawrence	223.4937	50				
39	Bedford Park-Nortown	215.1833	50				

Sheet1

eady

Save this table as a csv file.





Neighbourhood ID	Neighbourhood Name	Case Count	Rate per 100,000 people
129	Agincourt North	79	271.3564387
128	Agincourt South-Malvern West	51	214.6735699
20	Alderwood	38	315.2480504
95	Annex	85	278.4511564
42	Banbury-Don Mills	35	126.3766023
34	Bathurst Manor	125	787.5007875
76	Bay Street Corridor	51	197.6974067
52	Bayview Village	32	149.5606655
49	Bayview Woods-Steeles	116	881.8610309
39	Bedford Park-Nortown	81	348.5970046
112	Beechborough-Greenbrook	90	1368.405048
127	Bendale	116	387.1829105
122	Birchcliffe-Cliffside	181	811.9869005
24	Black Creek	290	1334.130745
69	Blake-Jones	11	142.3579656
108	Briar Hill-Belgravia	90	631.2688504
41	Bridle Path-Sunnybrook-York Mills	21	226.6350097
57	Broadview North	27	234.8030264
30	Brookhaven-Amesbury	146	822.2109591
71	Cabbagetown-South St. James Town	37	317.0794413
109	Caledonia-Fairbank	33	331.4917127
96	Casa Loma	27	246.1706783
133	Centennial Scarborough	34	254.4529262
75	Church-Yonge Corridor	88	280.791321

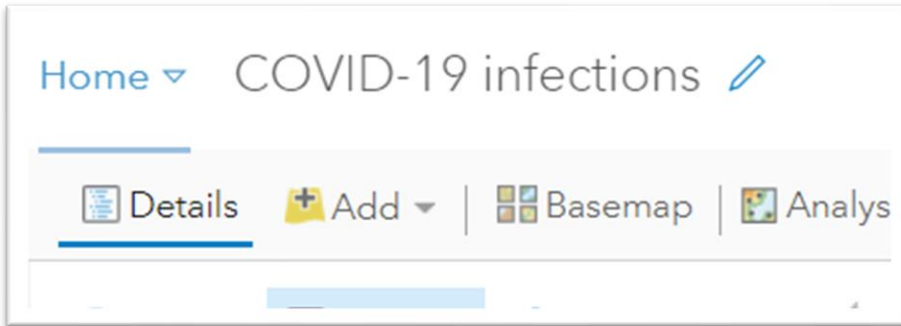
Now we're ready to bring this csv file into ArcGIS Online.

### Uploading the COVID-19 data to ArcGIS Online

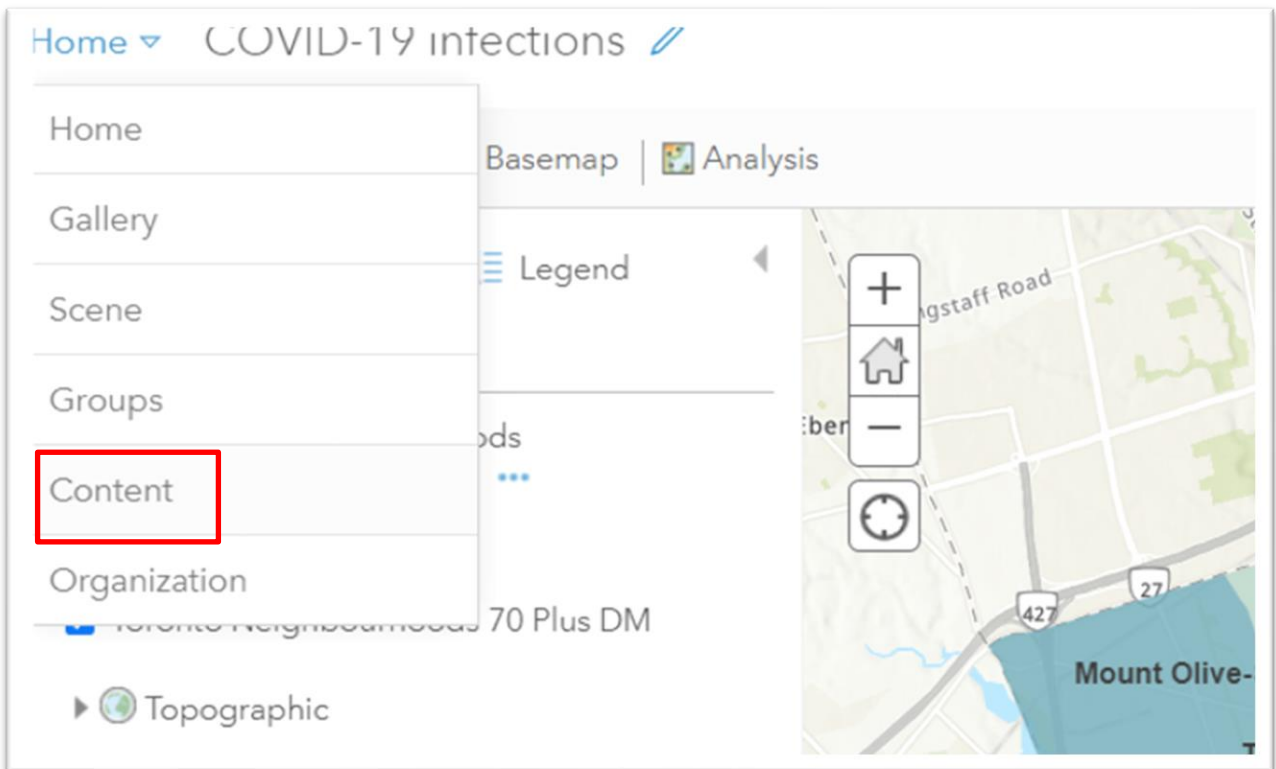
We will NOT import the data using the "Add" icon, because doing so will not actually save the layer in the cloud, which is a step that must be fulfilled before



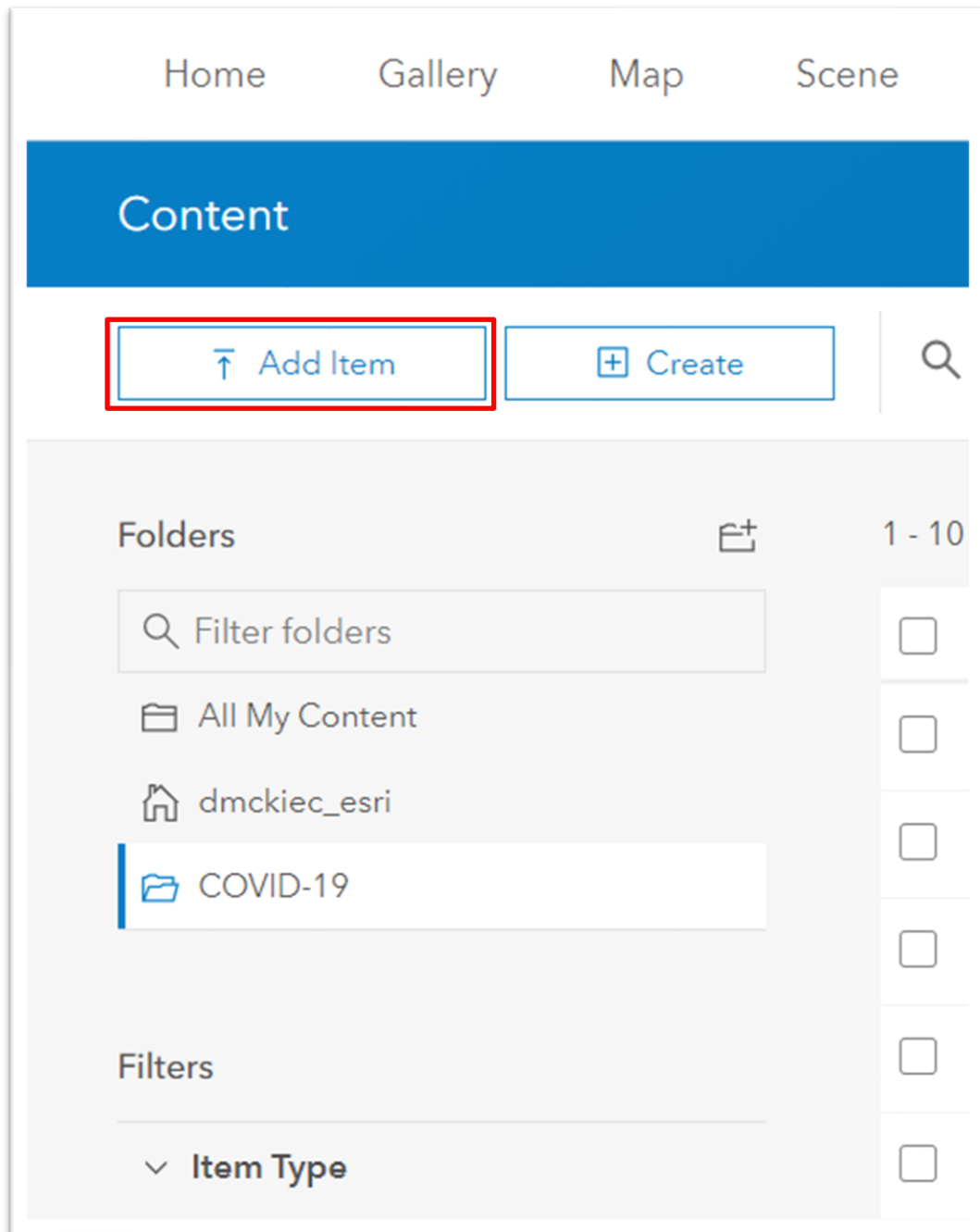
executing our join.



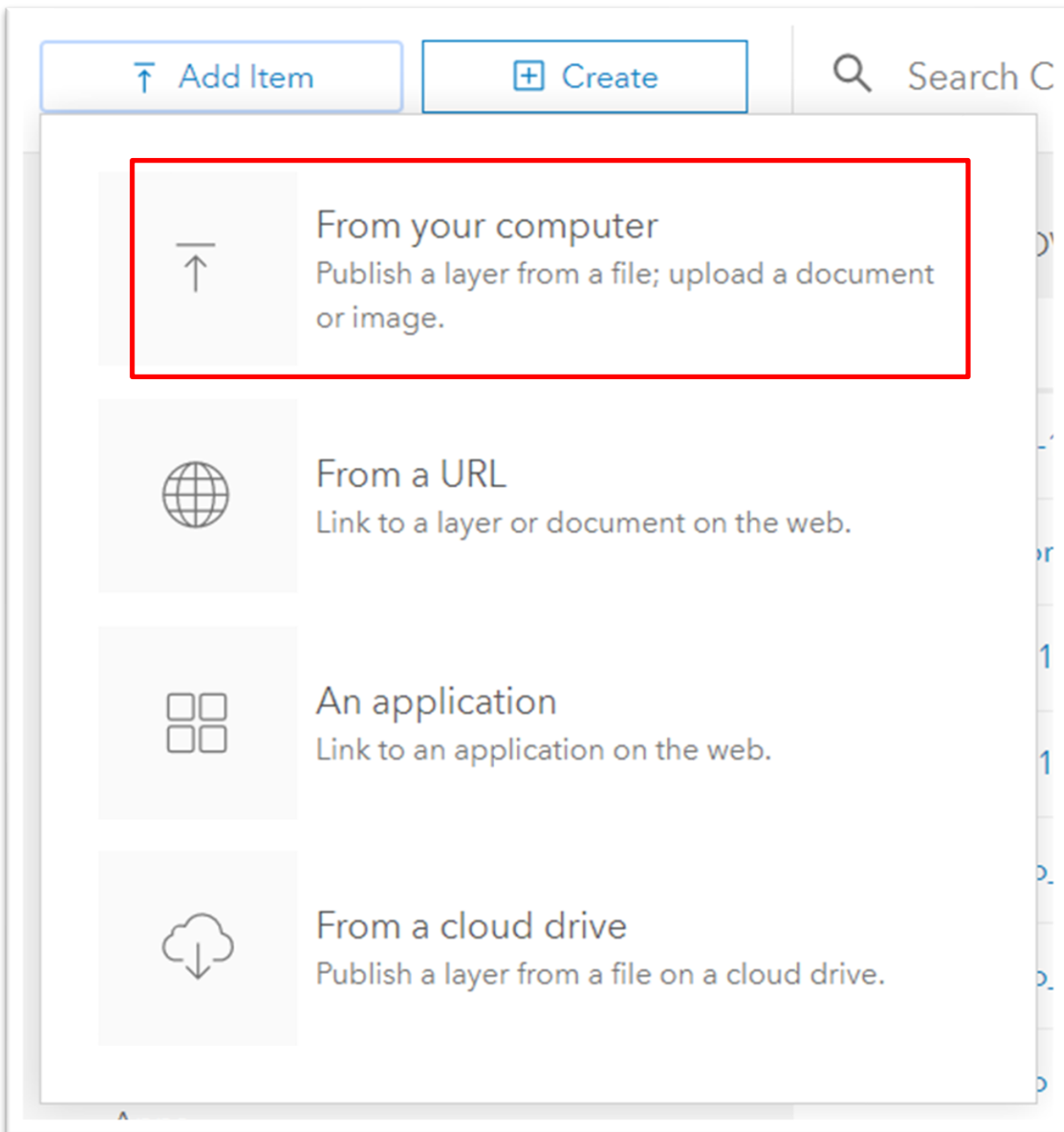
Instead, we will perform the import through the “Content” section, which we can obtain from the menu to your left.



Select "Content".



We'll use the "Add Item" tab to import our data.





Import from your computer.

Add an item from your computer

File:

Choose File No file chosen

Title:

Enter a title for this item

Tags:

Add tags

Add Item Cancel

Choose the csv file we have just created.

Name	Date modified	Type	Size
Toronto COVID-19 infections by neighbourhood.csv	2020-11-05 10:50 PM	Microsoft Excel C...	6 KB

Click the “Open” tab at the bottom right.

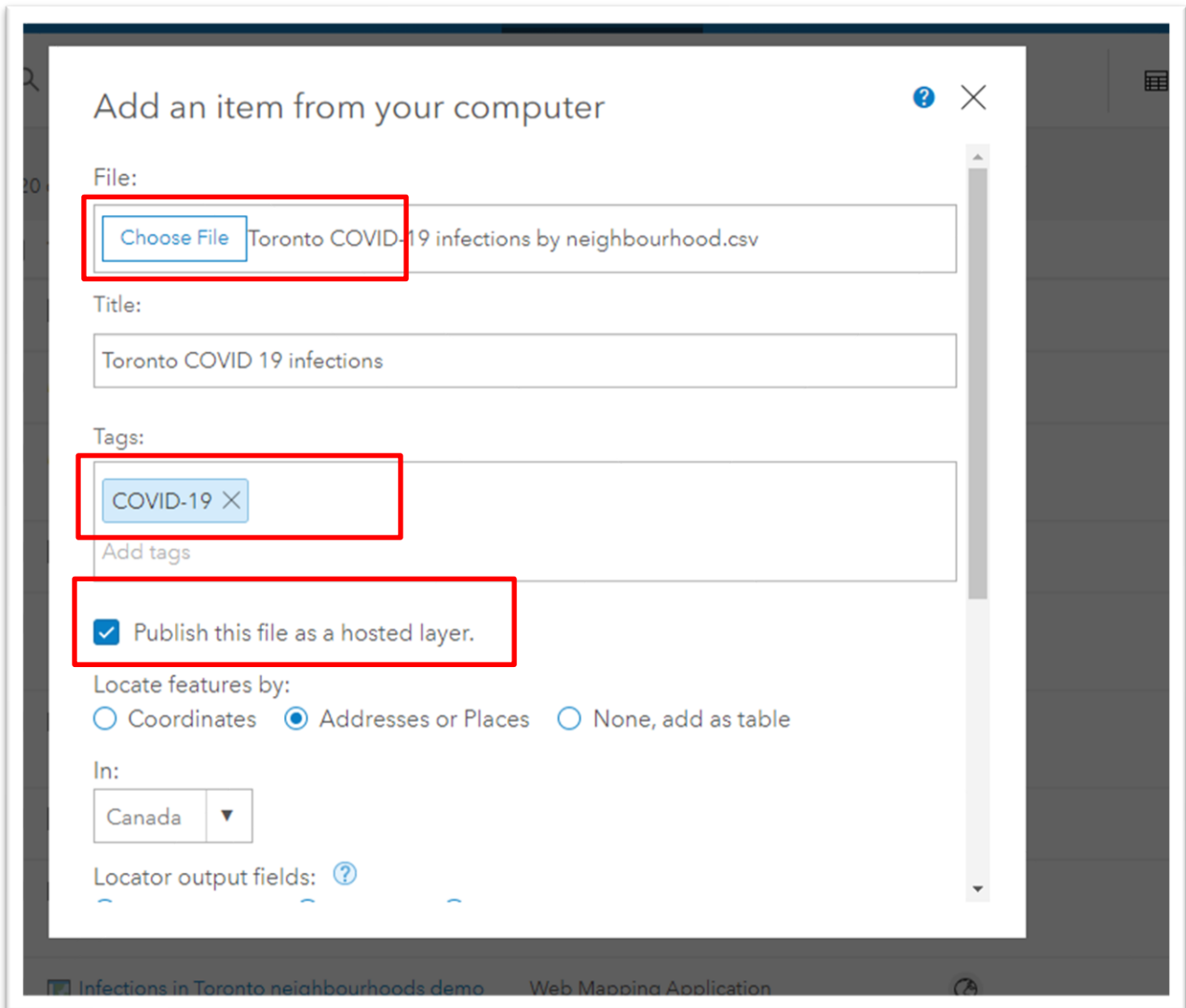
File name: Toronto COVID-19 infections by neighbourhood.csv

All Files (\*.\*)

Open Cancel

I have written a shorter title without the hyphen between “COVID” and “19”, provided a tag, and specified that this file is to be added as a table (“None, add as table”) Importing the csv file this way ensures it goes to the cloud (“Publish this

file as a hosted layer”), a criterion that MUST be fulfilled before we can execute the join.



Use the vertical scroll bar on the right to get to the “Add item” tab.

## Add an item from your computer



Publish this tile as a hosted layer. (Adds a hosted layer item with the same name.)

Locate features by:

Coordinates  Addresses or Places  None, add as table

Review the field types. Click on a cell to change it.


Field Name	Field Type
Neighbourhood_ID	Integer
Neighbourhood_Name	String

Time Zone: (UTC) Coordinated Universal Time ▼

Add Item

Cancel



Before selecting the “Add Item” tab, make sure your selections are the same in the screen grabs above.

Locator output fields. 

Location only  Minimal  All

Review the field types and location fields. Click on a cell to change it.



Field Name	Field Type	Location Fields
Neighbourhood_ID	Integer	Not used
Neighbourhood_Name	String	Not used



Time Zone:   


It is also possible to reformat the values in the “Field Type” column by clicking inside the cells under the title to obtain a drop-down menu.

Location only  Minimal  All

Review the field types and location fields. Click on a cell to change it.

Field Name	Field Type	Location Fields
Neighbourhood_ID		Not used
Neighbourhood_Name		Not used

Time Zone:   

Infections in Toronto neighbourhoods demo Web Mapping Application 

We will not worry about formatting in this tutorial. However, it is handy to know how to perform the task when importing data.

Before importing the data, select the “None, add as table” option under the “Locate features by” title.

Add an item from your computer

COVID-19 X  
Add tags

Publish this file as a hosted layer.

Locate features by:

Coordinates  Addresses or Places  None, add as table

Review the field types. Click on a cell to change it.

Field Name	Field Type
Neighbourhood_ID	Integer
Neighbourhood_Name	String

Time Zone: (UTC) Coordinated Universal Time

Add Item Cancel

Select the “Add Item” tab.

Your csv file will be added as a new layer.

## Toronto COVID 19 infections [✎](#)

Overview

[✎ Edit Thumbnail](#)



[☆ Add to Favorites](#)

Add a brief summary about the item.

[✎ Edit](#)

 Table (hosted) by dmckiec\_esri

Created: Nov 5, 2020 Updated: Nov 5, 2020 View Count: 1

### Description

[✎ Edit](#)

Add an in-depth description of the item.

### Tables


 Toronto\_COVID\_19\_infections  
Table

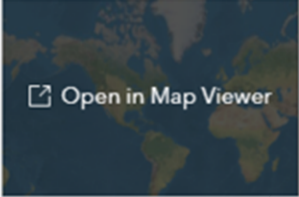
[>](#)





Select the map thumbnail.

## Toronto COVID 19 infections


 Edit Thumbnail



 Open in Map Viewer

 Add to Favorites

Add a brief summary about the item.

 Table (hosted) by [dmckiec\\_esri](#)


Created: Nov 5, 2020 Updated: Nov 5, 2020 View Count: 1


### Description


Add an in-depth description of the item.

### Tables


Toronto COVID 19 infections

 Edit Thumbnail



 Add to Favorites

Add a brief summary about the item.


 Table (hosted) by [dmckiec\\_esri](#)

Created: Nov 5, 2020 Updated: Nov 5, 2020 View Count: 1

### Description

Add an in-depth description of the item.

### Tables


 Toronto\_COVID\_19\_infections  
Table

#### Open map

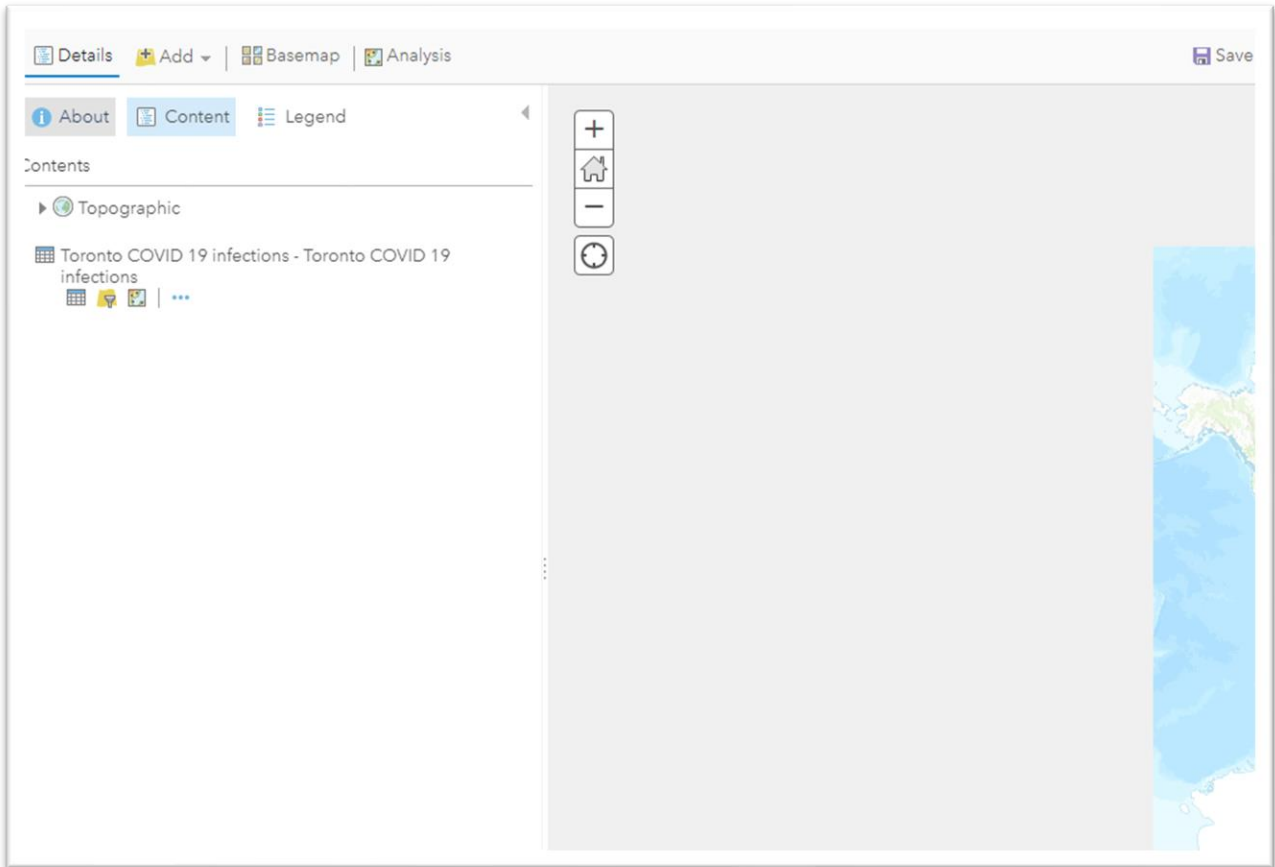
The current map has unsaved changes.

Title: Toronto Neighbourhoods  
Layer: Toronto Neighbourhoods for COVID19

Are you sure you want to open another map and lose your changes?

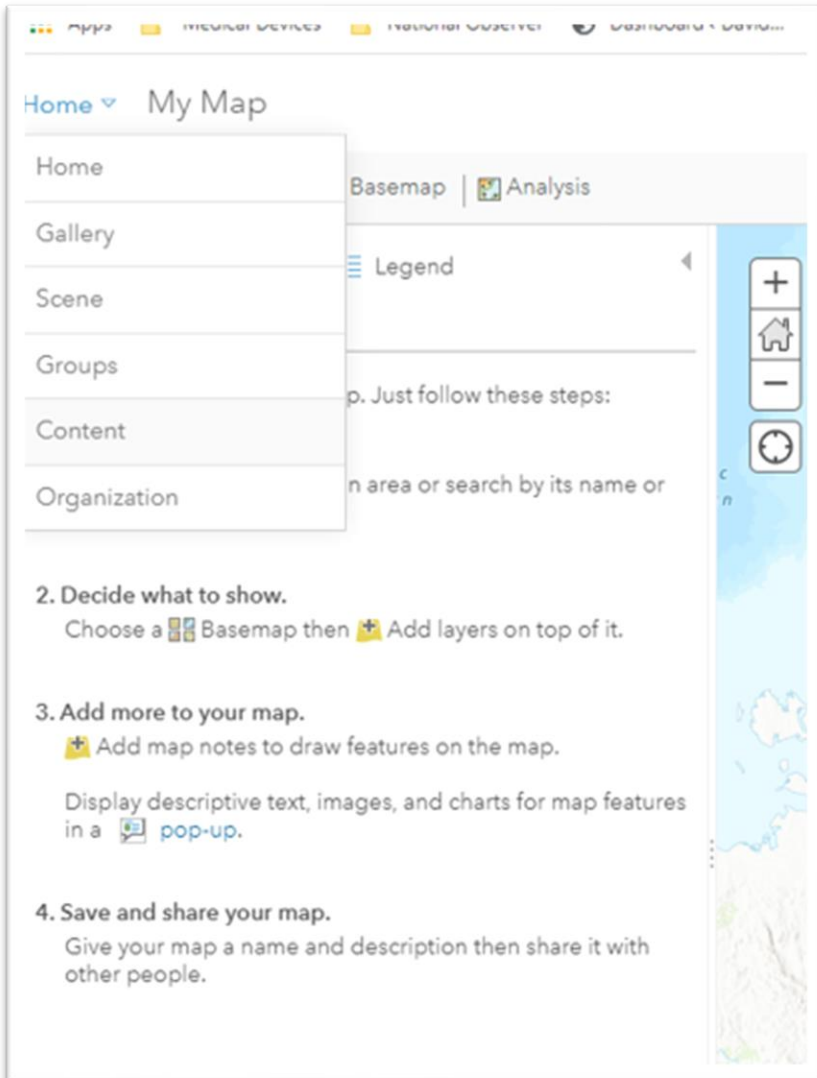
Terms of Use 

Select the “Yes, open the map” tab.

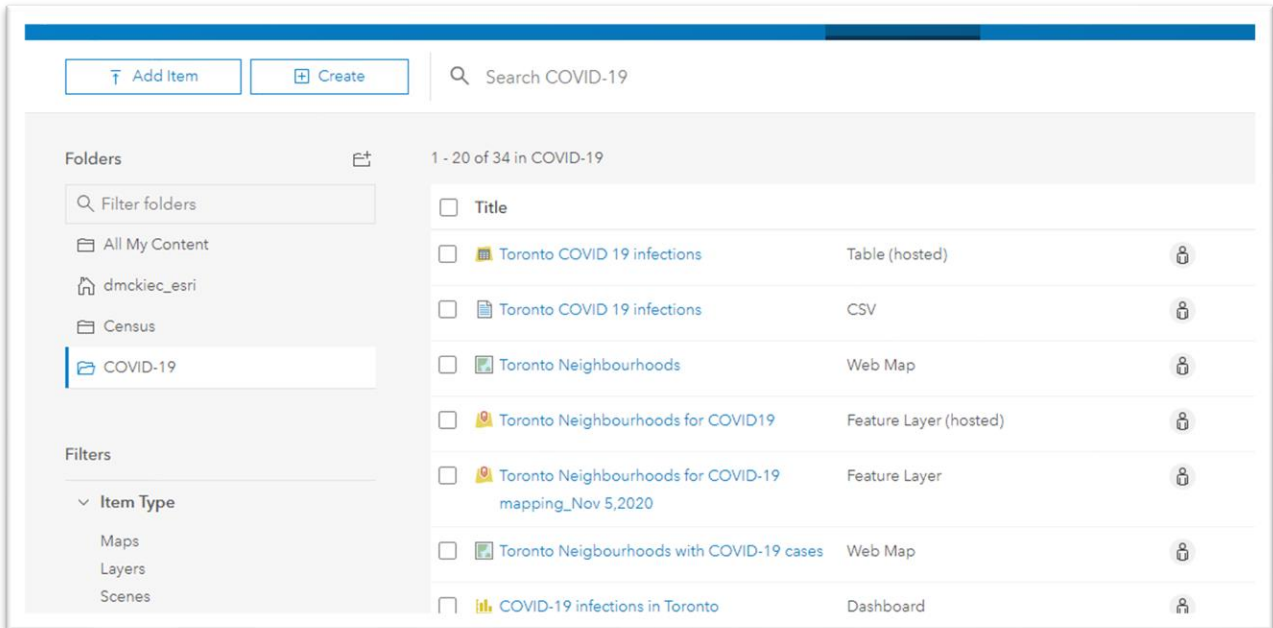


We have created a layer for COVID-19 infections by neighbourhoods. Now we will join it to the neighbourhood shape file we created in the previous tutorial.

Click the arrow to the right of the “Home” tab.

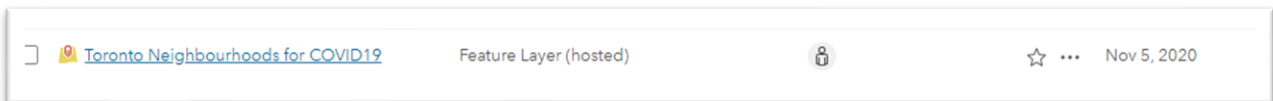


Select “Content.”



The layer we just created is should be at the top, identified as a “Table (hosted)”, which means it is in the cloud and can now be joined to the Toronto neighbourhood shape file.


That neighbourhood shape file should also be in your content section.





Select it.

## Toronto Neighbourhoods for COVID19


Overview

 Edit Thumbnail



 Add to Favorites

[Add a brief summary about the item.](#)

 Feature Layer (hosted) by [dmckiec\\_esri](#)

Created: Nov 5, 2020   Updated: Nov 5, 2020   View Count: 14

### Description

This laver will contain the distribution of COVID-19 cases across Toronto neighbourhoods.

Select the shape file thumbnail.

Home ▾ Toronto Neighbourhoods for COVID19

Details **Add** ▾ Basemap | Analysis Save

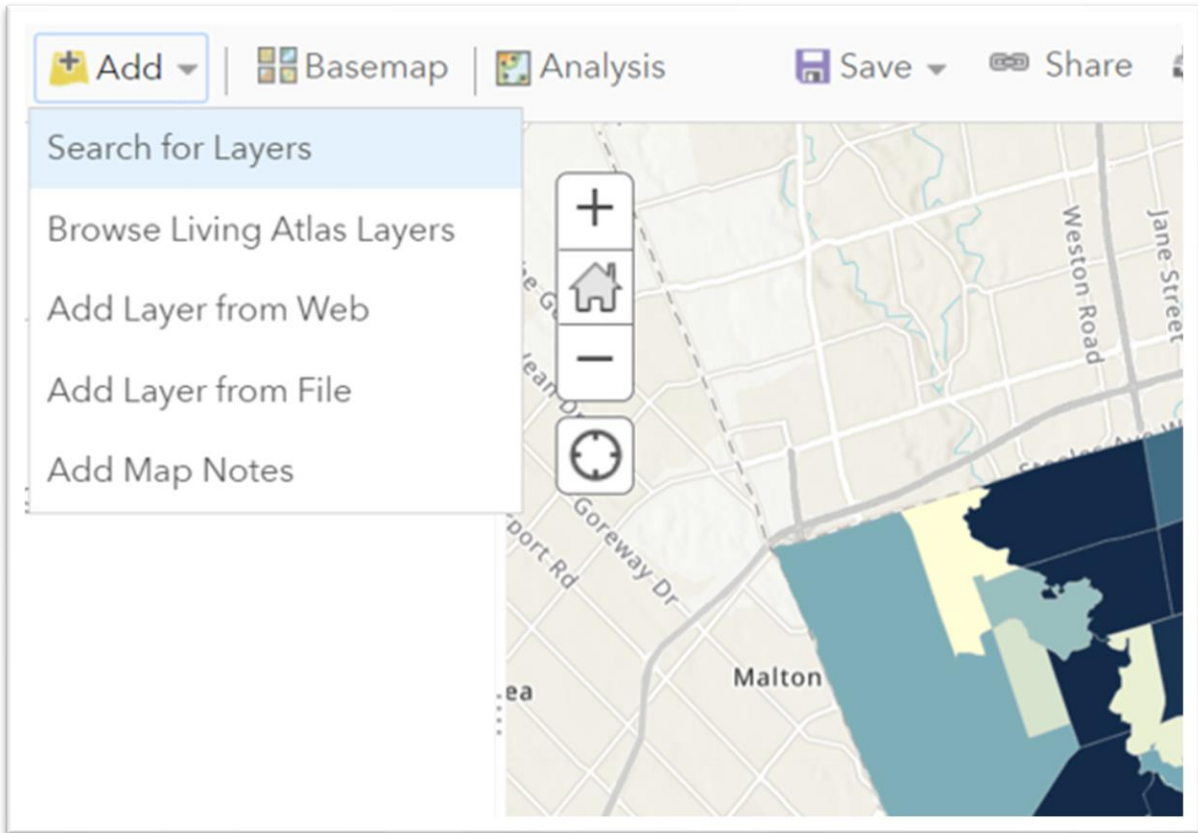
Contents

- Toronto Neighbourhoods for COVID19
  - Thumbnail icons: list, table, map, funnel, globe, and more options
- ▶  Topographic

Map controls: +, Home, -, Rotate

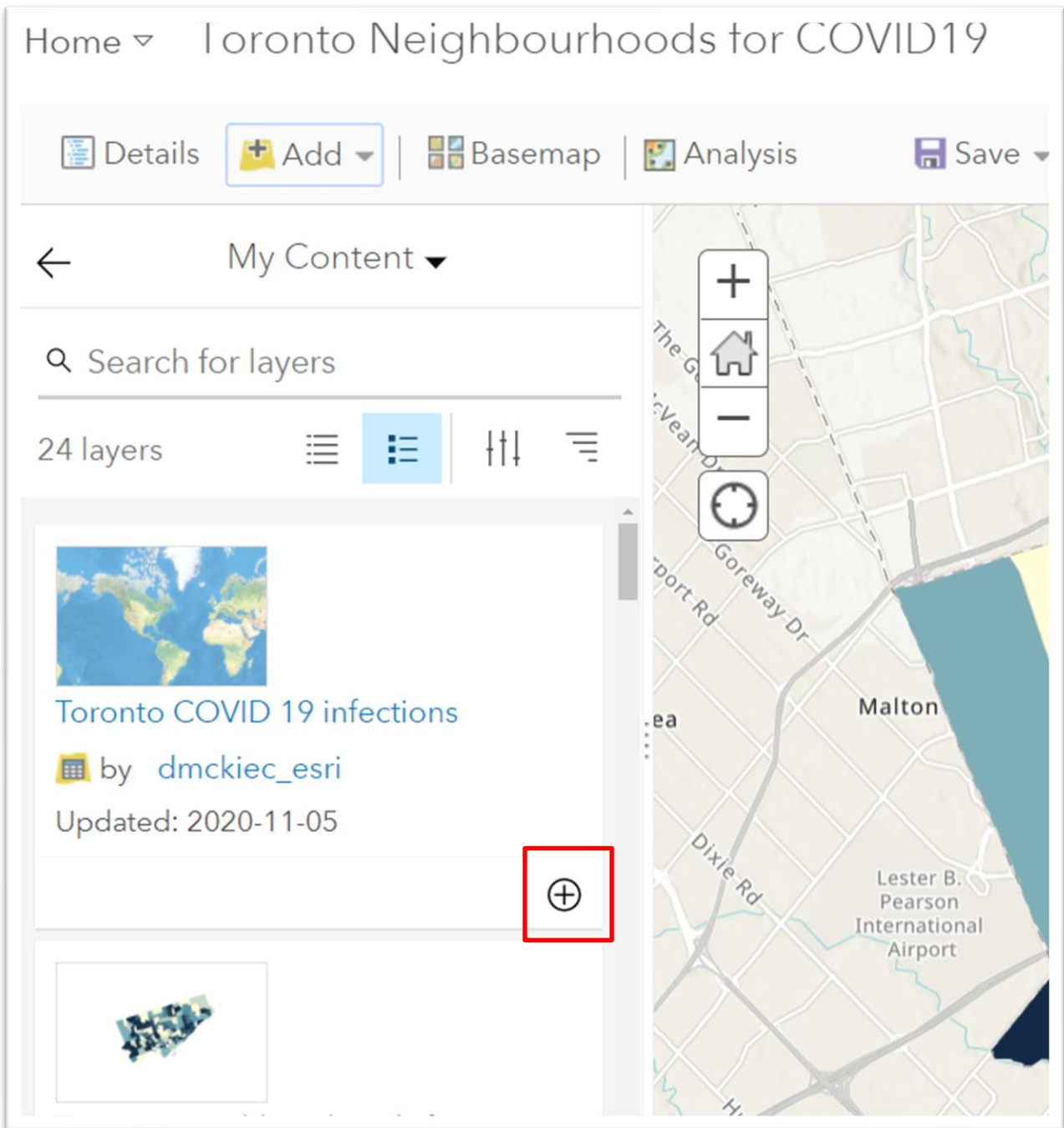
Map labels: Malton, Goreway Dr, Dixie Rd, Lester B. Pearson International

Select the arrow to the right of the “Add” icon.



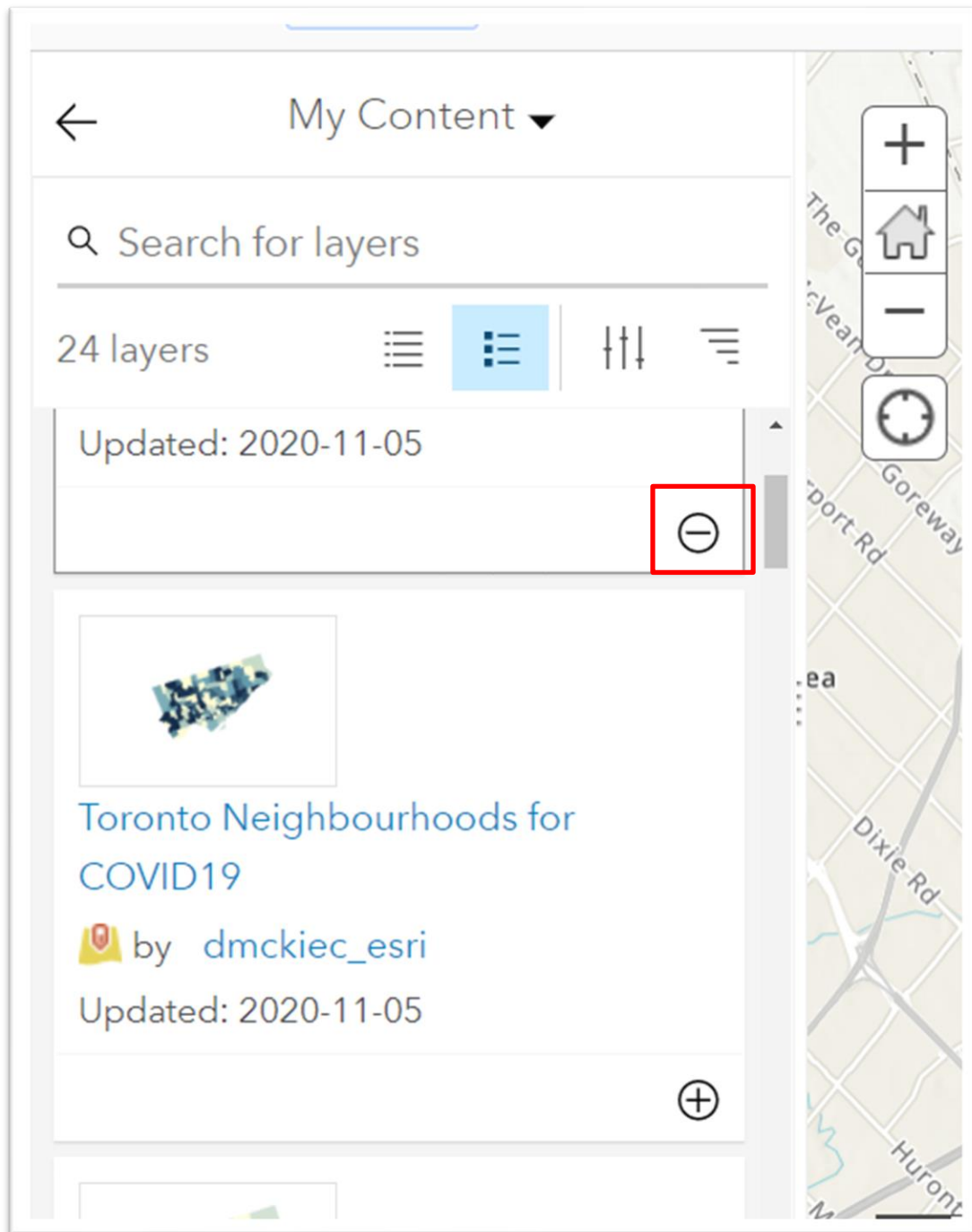


Select the first option, “Search for Layers”.



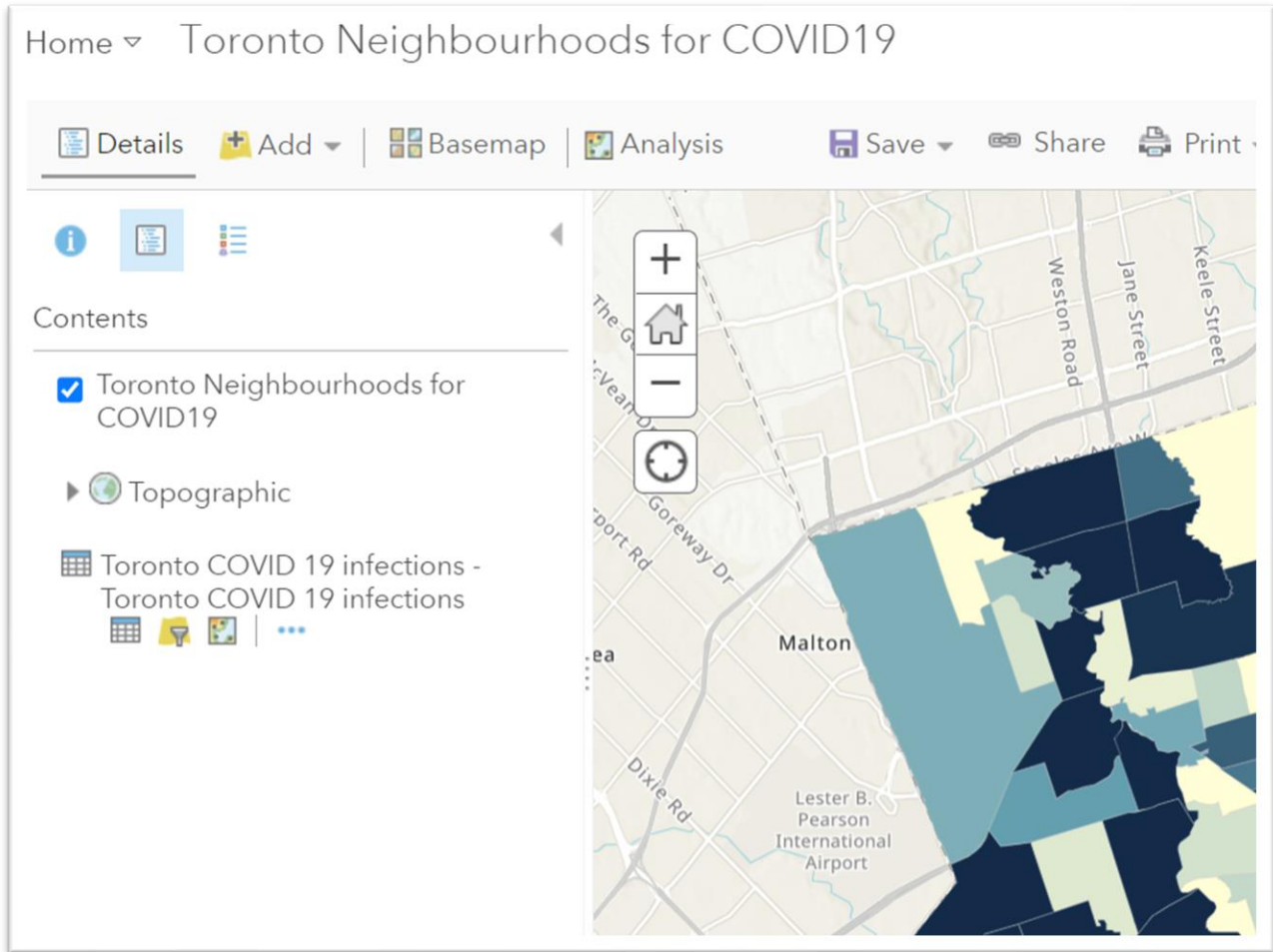
As was the case in the Contents section, the most recent COVID-19 infection layer we created should be at the top.

To add it to the neighbourhood shape file layer, select the “+” sign.



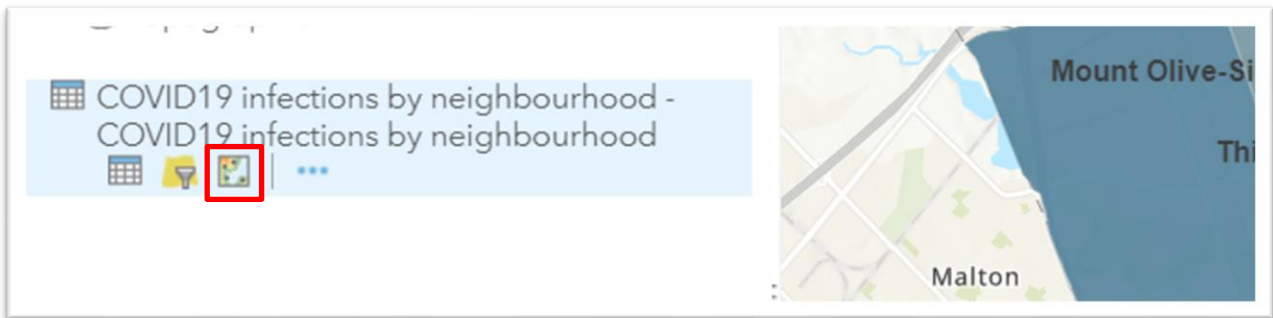
The minus sign means it has been added.

Click the arrow on to the left of “My Content”.

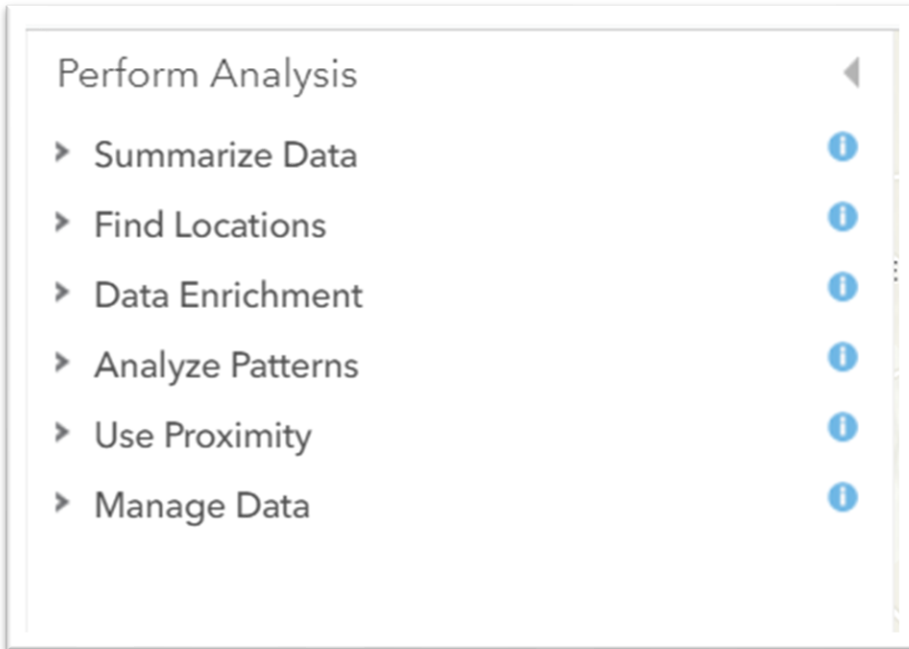


You should have two layers.

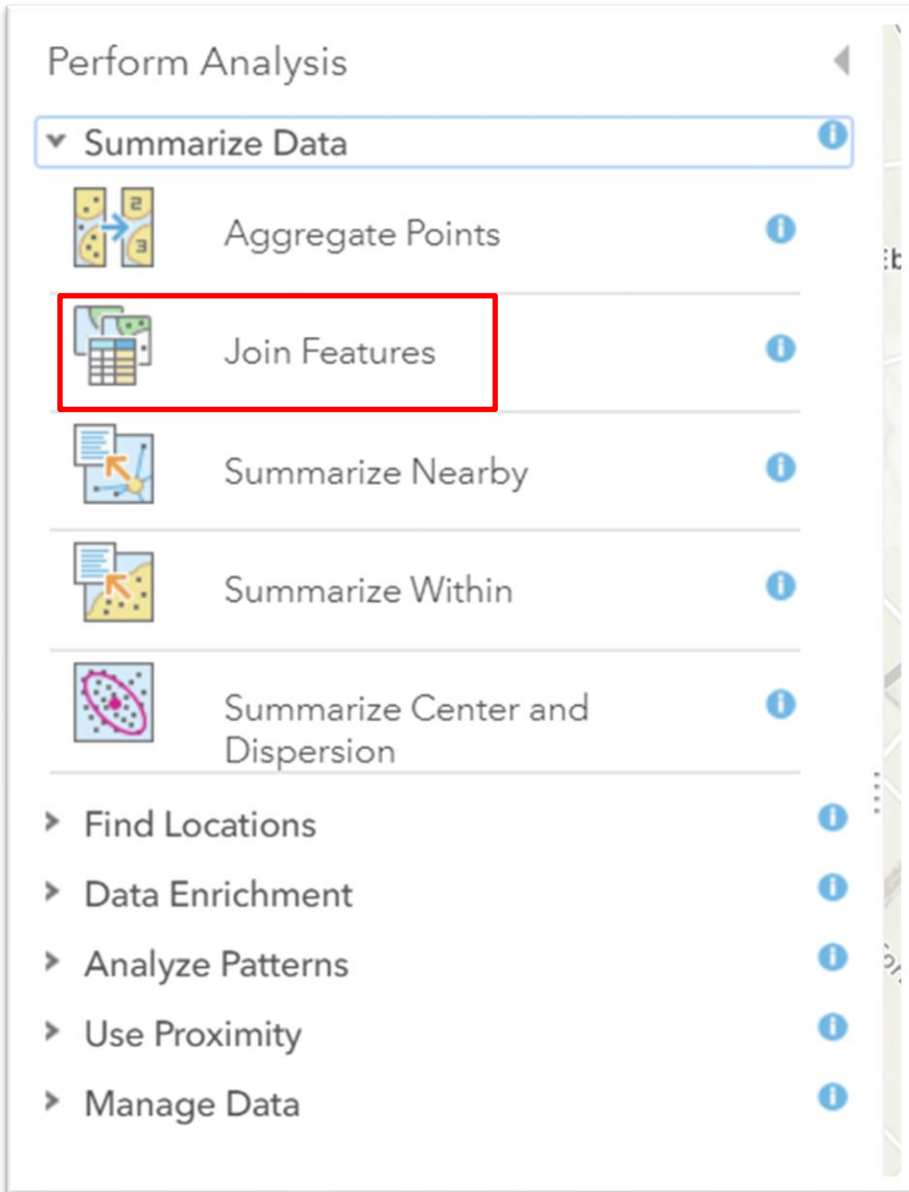
To join this layer to the previous one we created with the demographic information, hover your mouse over the csv layer.



Select the "Perform analysis" icon.





Select "Summarize Data".

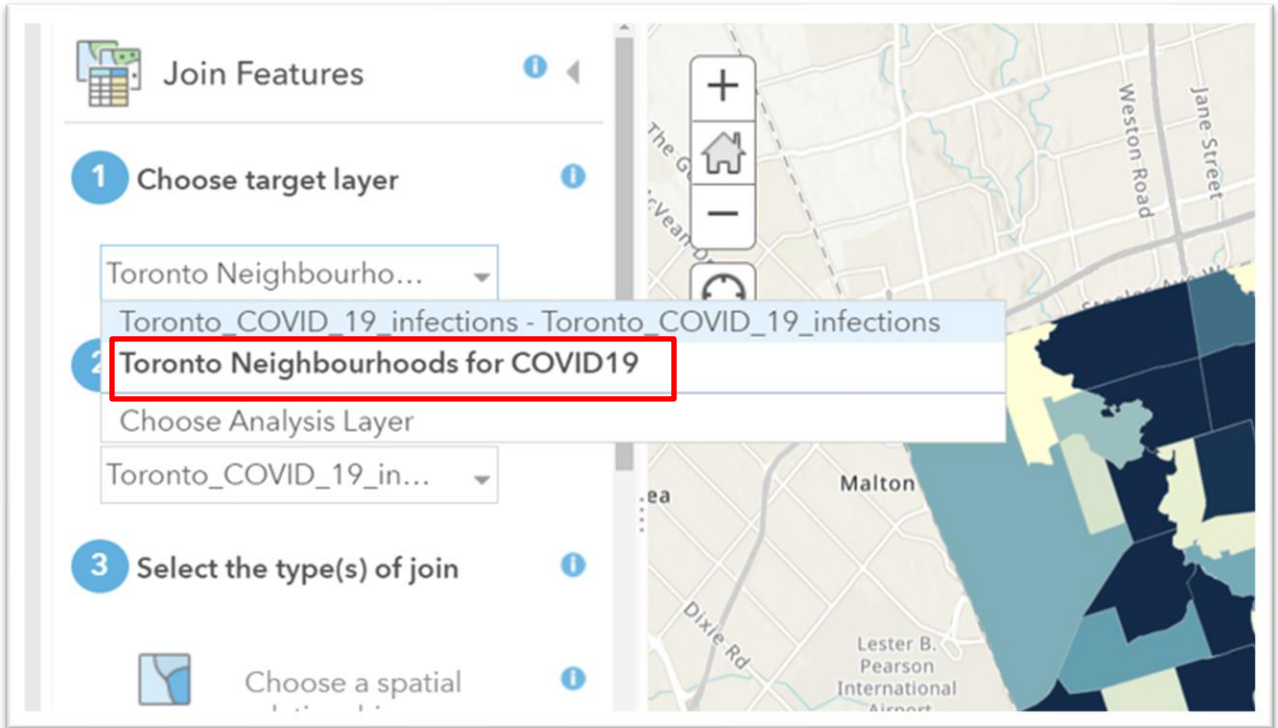


Select "Join Features."

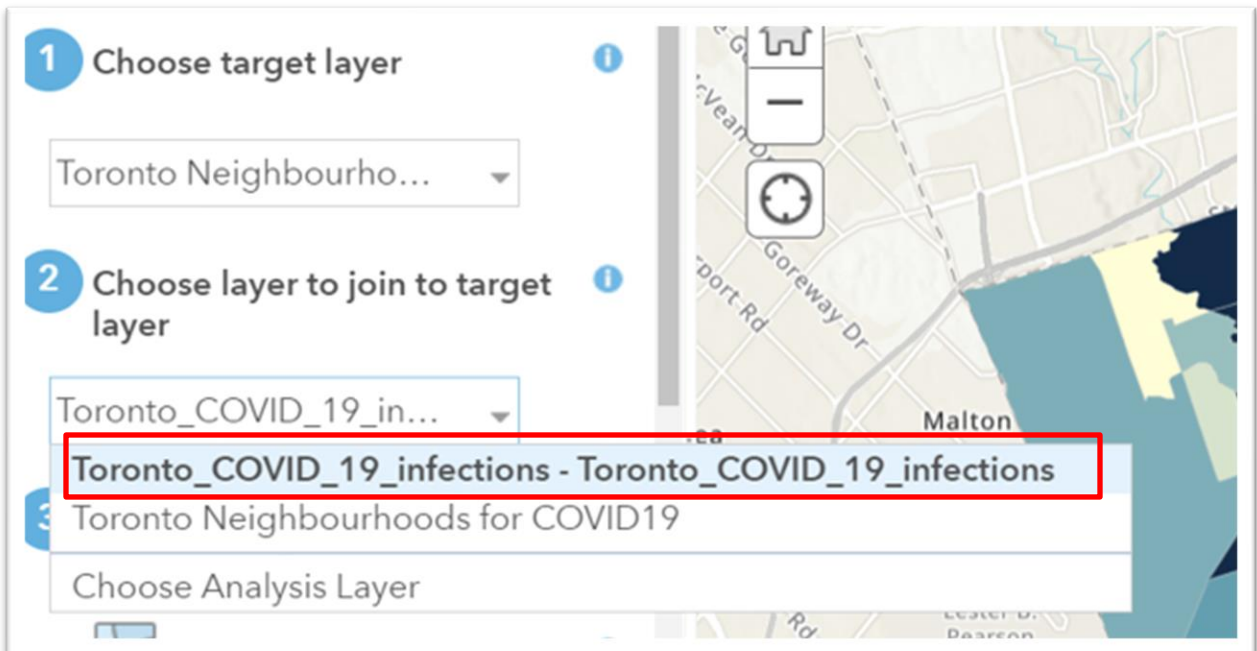
**Join Features**

- 1 Choose target layer**  
COVID19\_infections\_by\_nei...
- 2 Choose layer to join to target layer**  
COVID19\_infections\_by\_nei...
- 3 Select the type(s) of join**
  -  Choose a spatial relationship
  -  Choose the fields to match
- 4 Choose join operation**
  - Join one to one
  - Define which record is kept
    - First record (default)
    - Order by

Your "target layer" is the original shapefile that contains the neighbourhood boundaries from the first [ArcGIS tutorial](#).

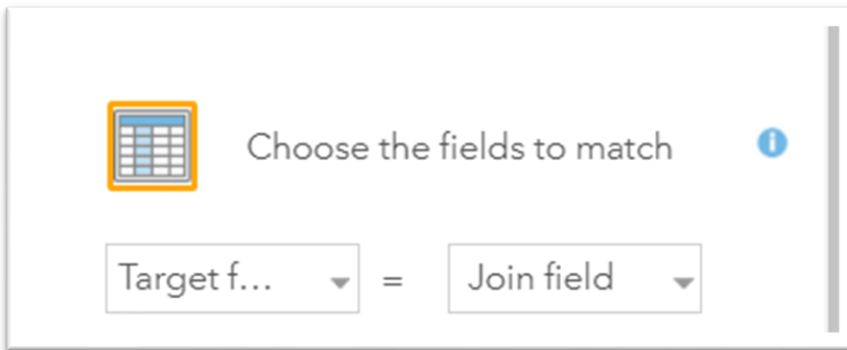
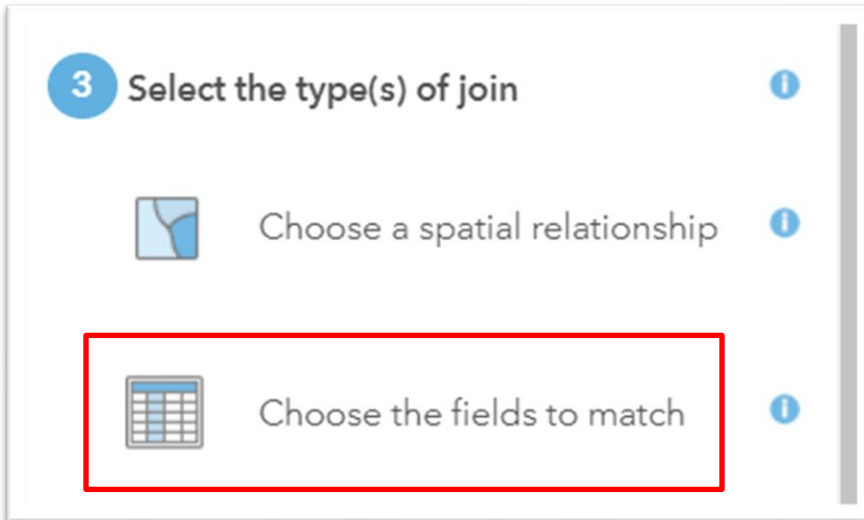


Add the COVID-19 infections layer to the second box.

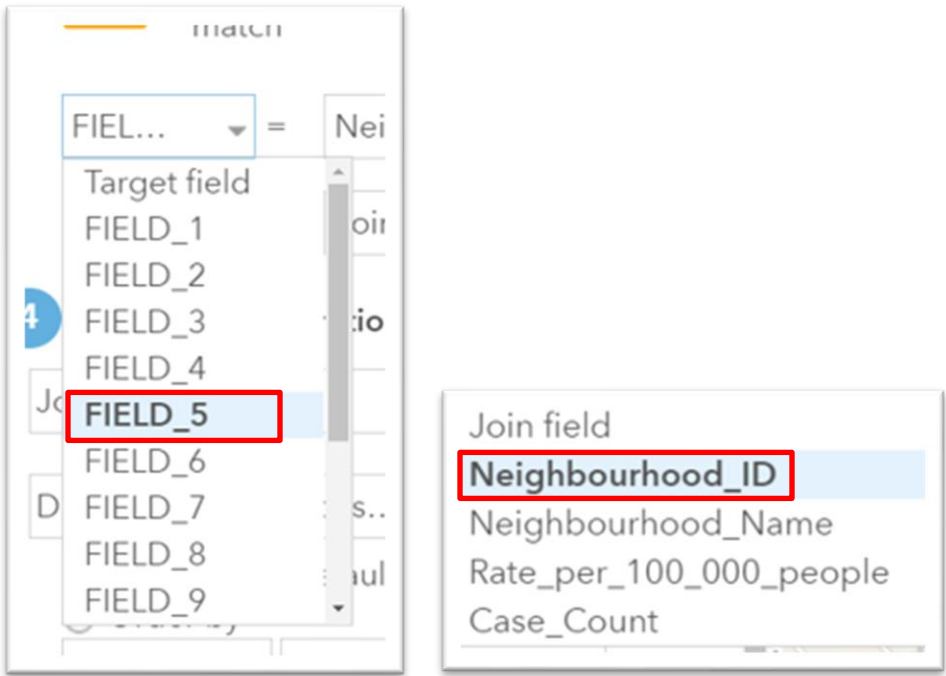




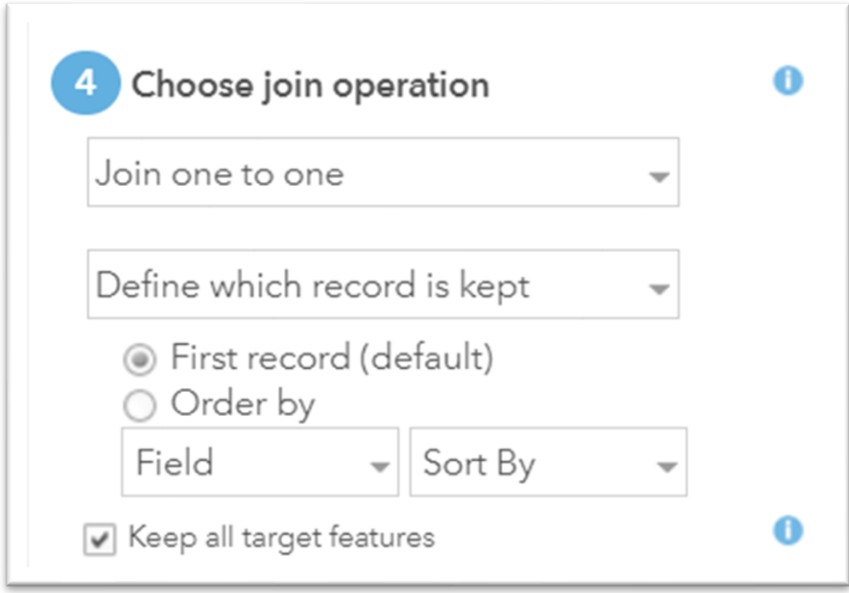
In step three, we want the second choice.



Here, ArcGIS is asking us which columns we want to join, which as we learned earlier in this tutorial are the columns what contain the neighbourhood identifiers, columns “FIELD 5” and “Neighbourhood ID”, respectively.



The type of join in step four is one-to-one, meaning the columns containing the neighbourhood identifiers.



In step five, you will want to rename the layer, check the box to create a new layer and run the analysis.

**5** Result layer name i

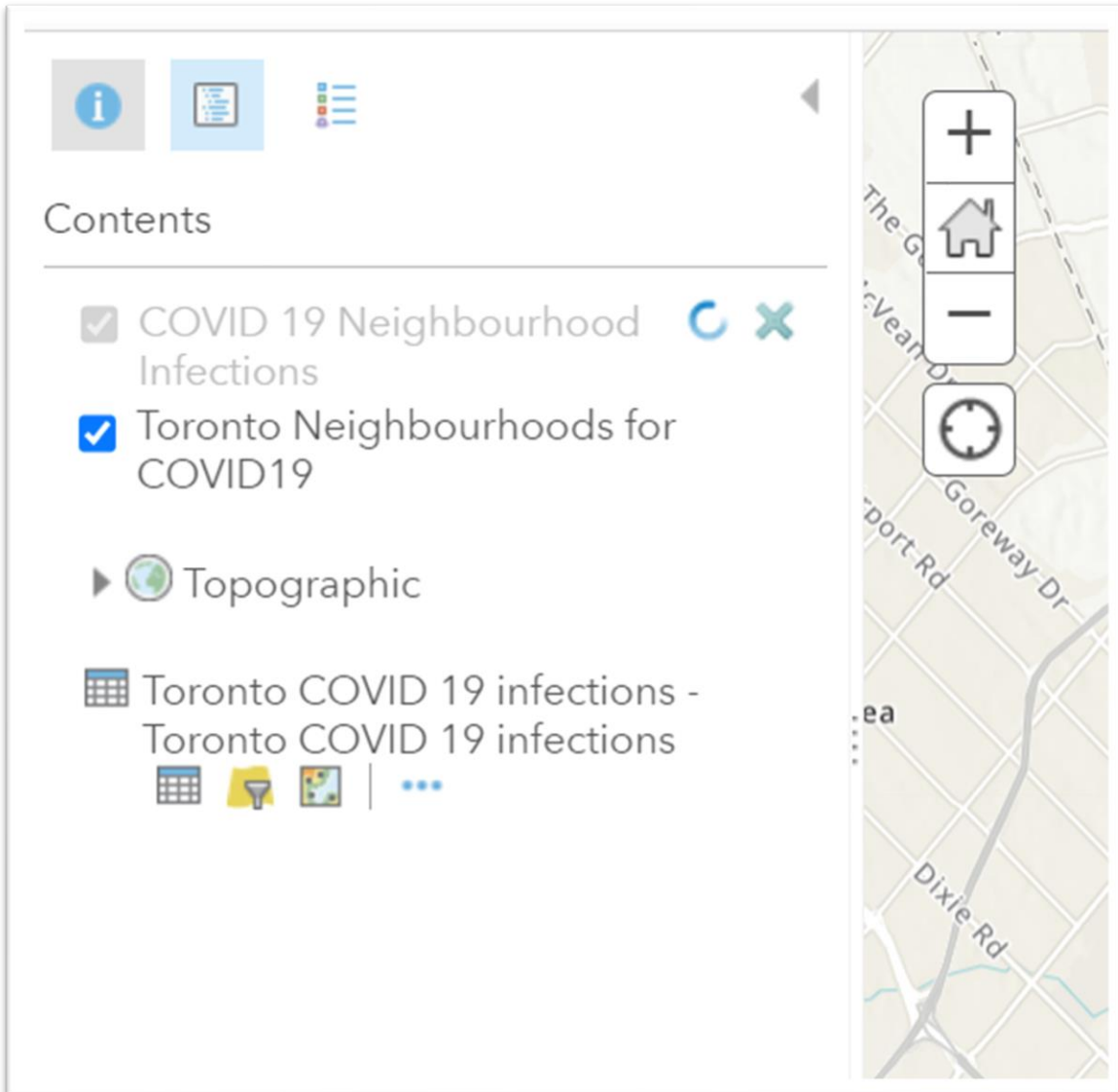
COVID 19 Neighbourhood Inf

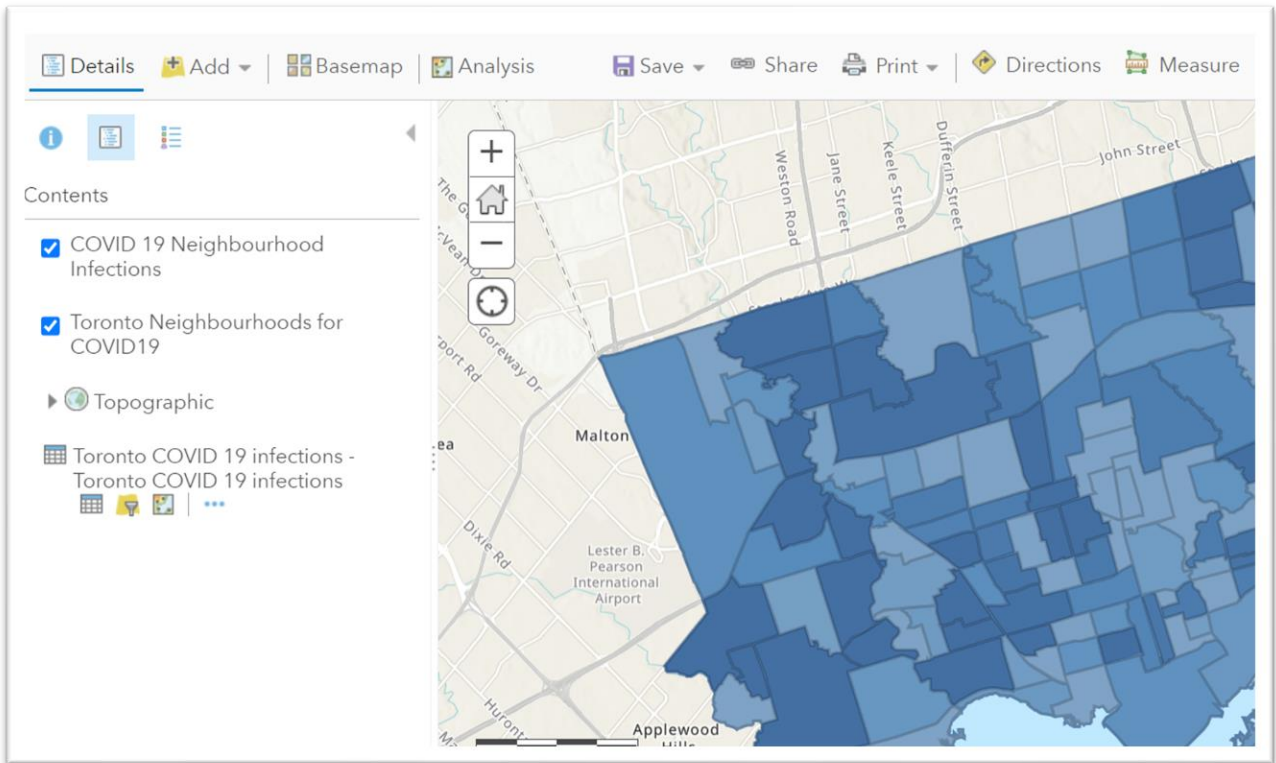
Save result in COVID-19 ▼

Use current map extent

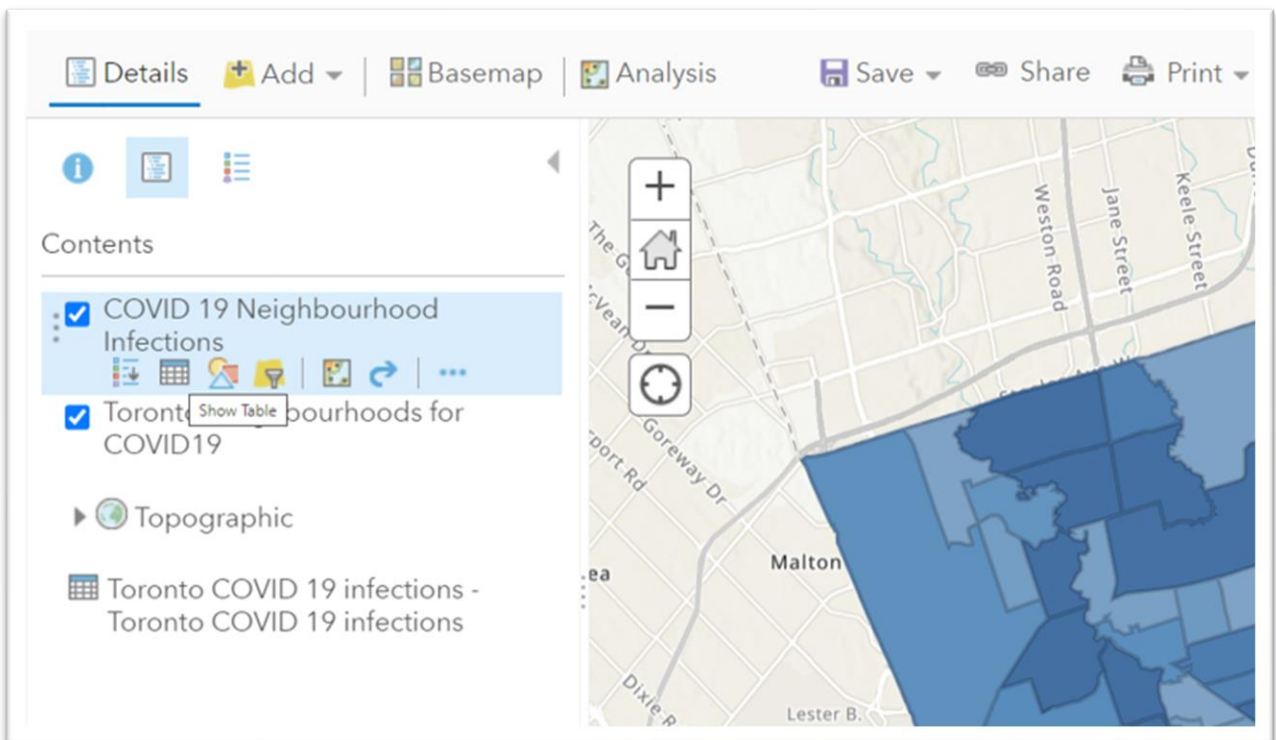
[Show Credits](#)

Run the analysis.

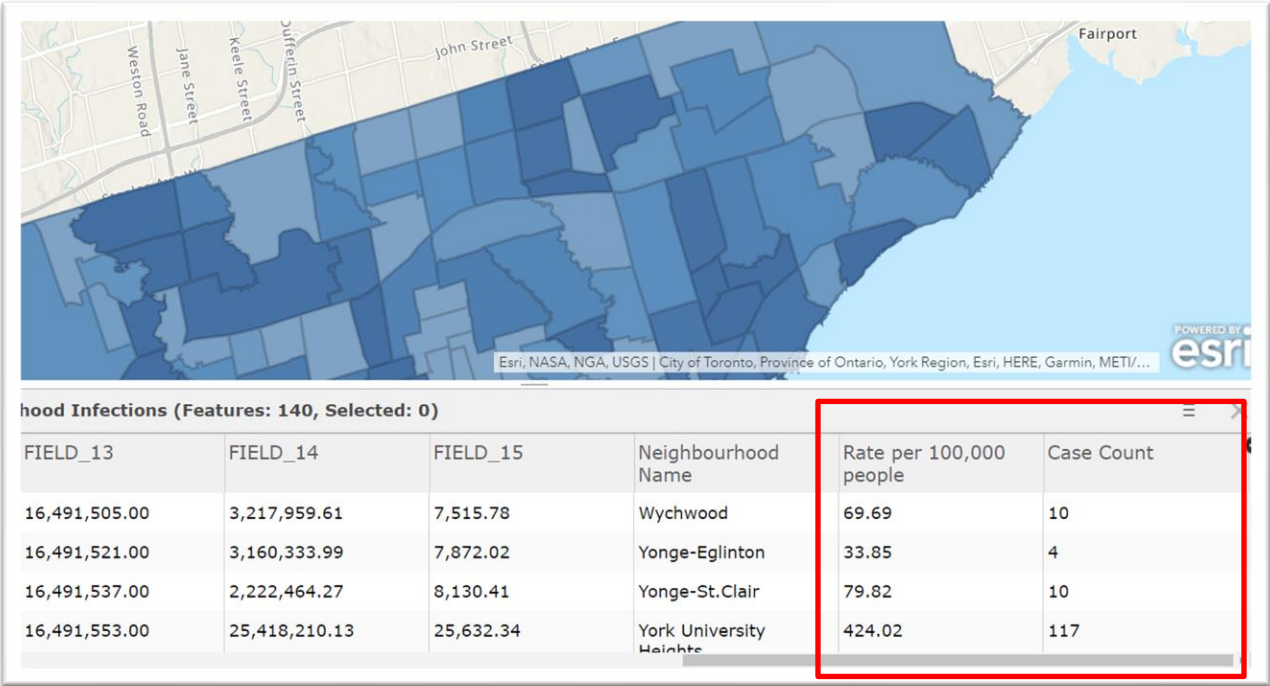




To see the underlying data, hover your cursor over the new layer to obtain the “Show Table” icon.



Using the horizontal scroll bar to navigate to the right, we can see that the infection rates and case counts have been added.

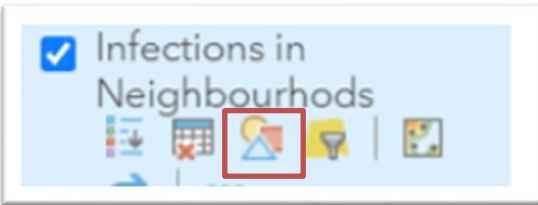


### Colour coding our new layer

Now we can use a colour ramp to show neighbourhoods with the highest number of COVID-19 cases. We can also duplicate the layers, which can use different numbers. For instance, one layer might use colours to show the neighbourhoods with the highest number of deaths. A second layer might show neighbourhoods with the highest rates. And a third might show the ratios of COVID-19 infections. It is the ability to create multiple layers that gives maps their power and advantage over data visualization programs.

So, let's colour code our layer according to ratio.

Hover your cursor over the layer and choose the “change style” icon.



Change Style

Infections in Neighbourhods

**1**

Choose an attribute to show

Rate p... ▼

Add attribute

**2**

Select a drawing style

Set default style

Counts and Amounts (Color) ✓

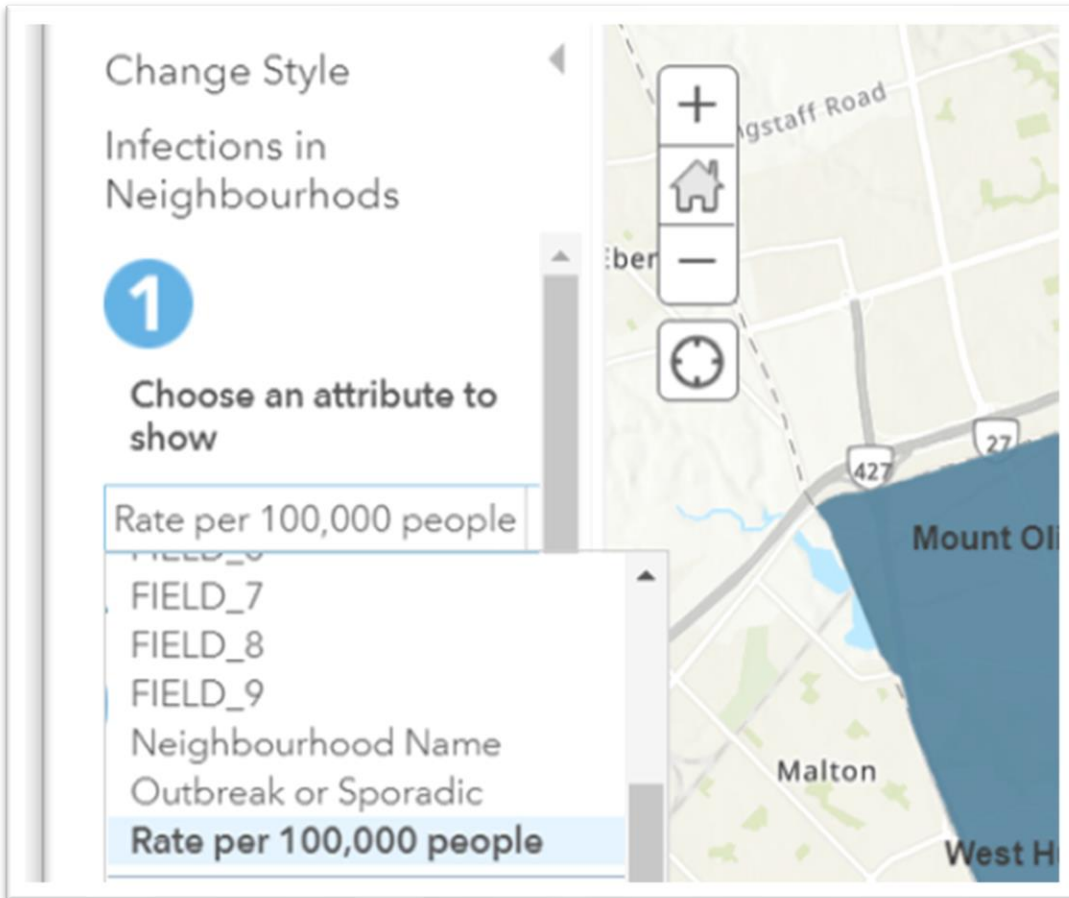
OPTIONS

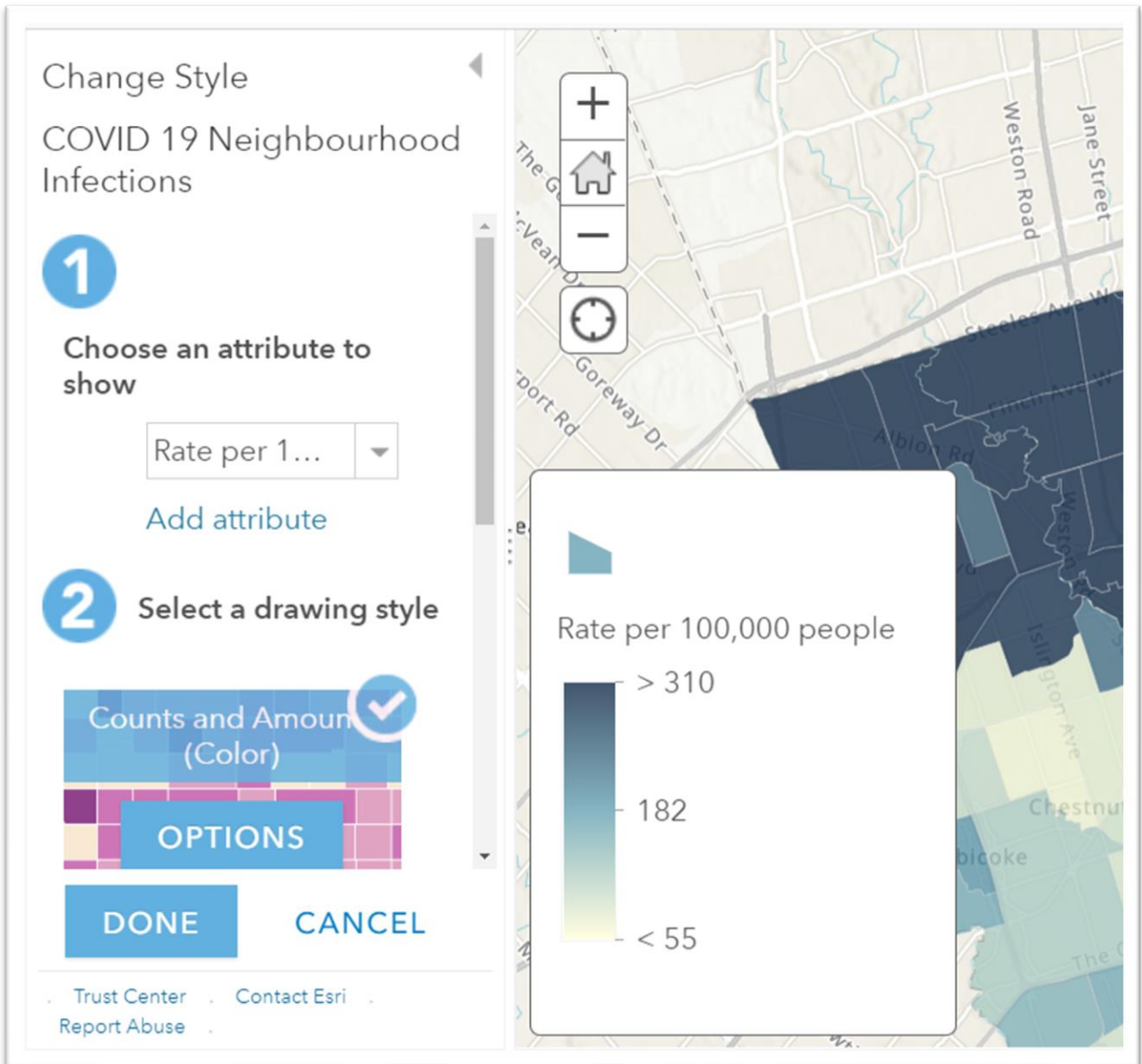
Counts and Amounts (Size)

A vertical panel for changing the style of a layer. It has a title "Change Style" and the layer name "Infections in Neighbourhods". Step 1 is "Choose an attribute to show", with a dropdown menu showing "Rate p..." and a "Add attribute" link below it. Step 2 is "Select a drawing style", with a "Set default style" link below it. There are two style options: "Counts and Amounts (Color)" which is selected (indicated by a blue checkmark icon) and "Counts and Amounts (Size)". The "Color" option shows a blue bar with the word "OPTIONS" in white. The "Size" option shows a grey bar with a blue bar at the bottom.



In step one, the attribute you want to show is the “Rate per 100,000 people.”





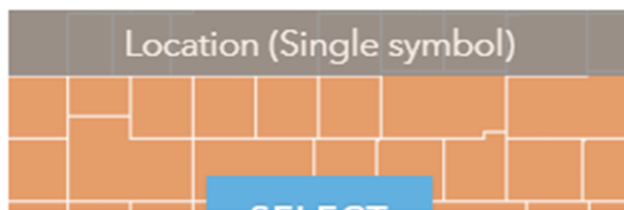
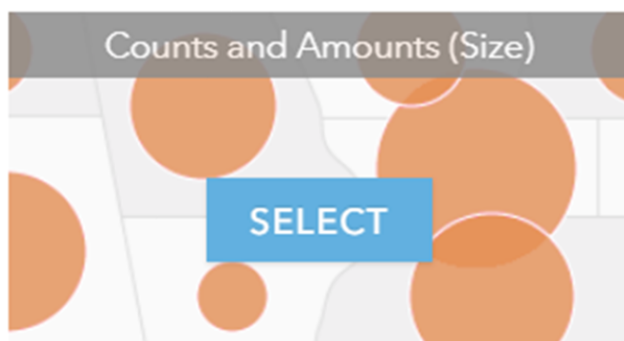
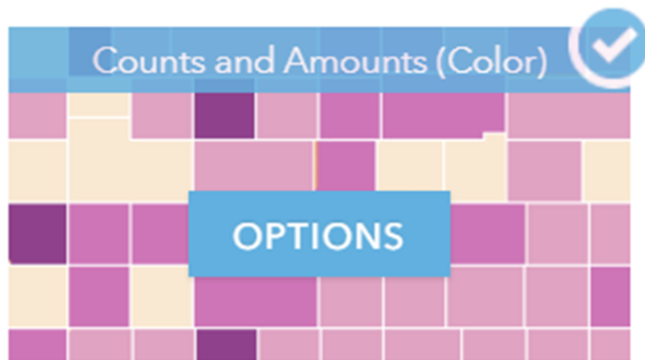
The “drawing style” in step two is the one that is already selected. ArcGIS guessed correctly that we want to build a colour ramp.

## Change Style

### Infections in Neighbourhoods

#### 2 Select a drawing style

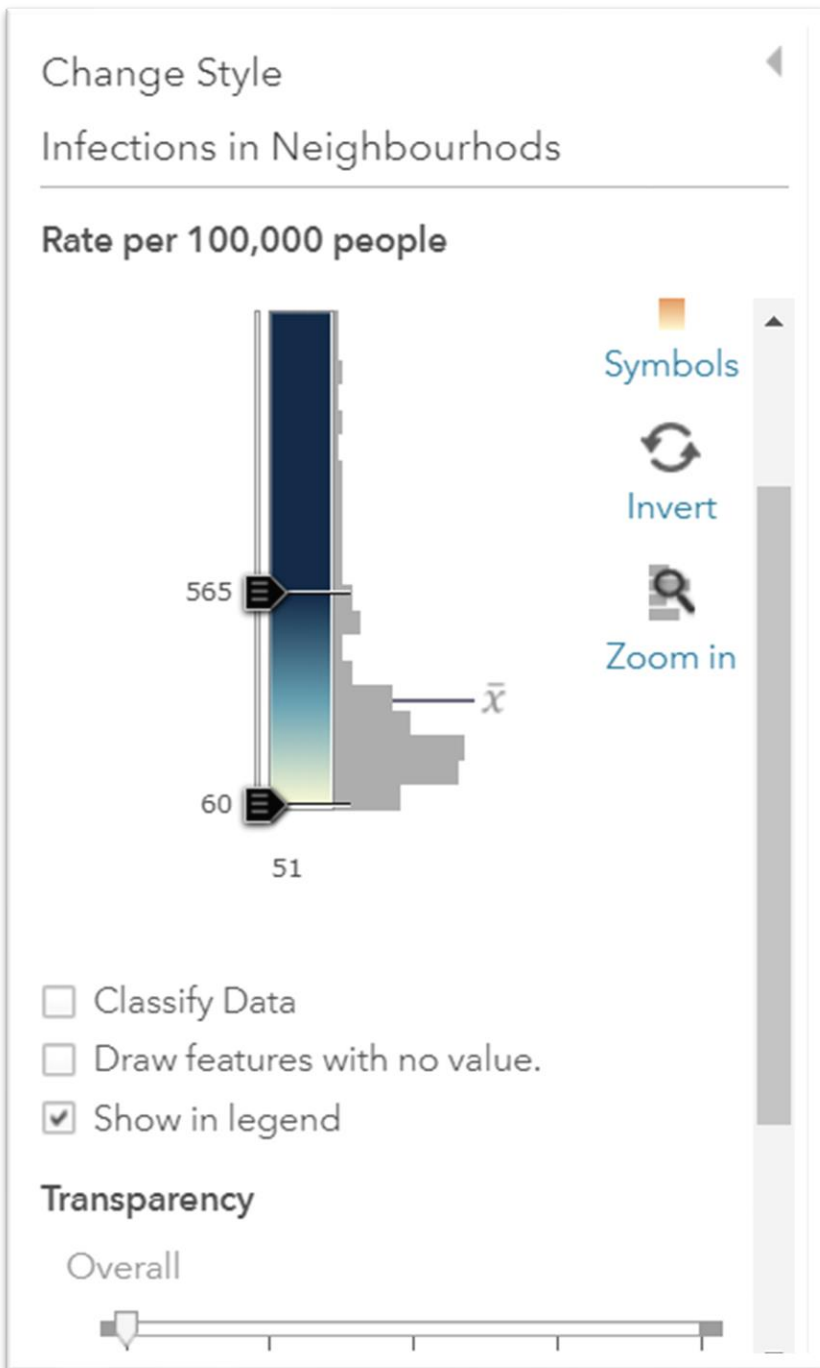
Set default style



DONE

CANCEL

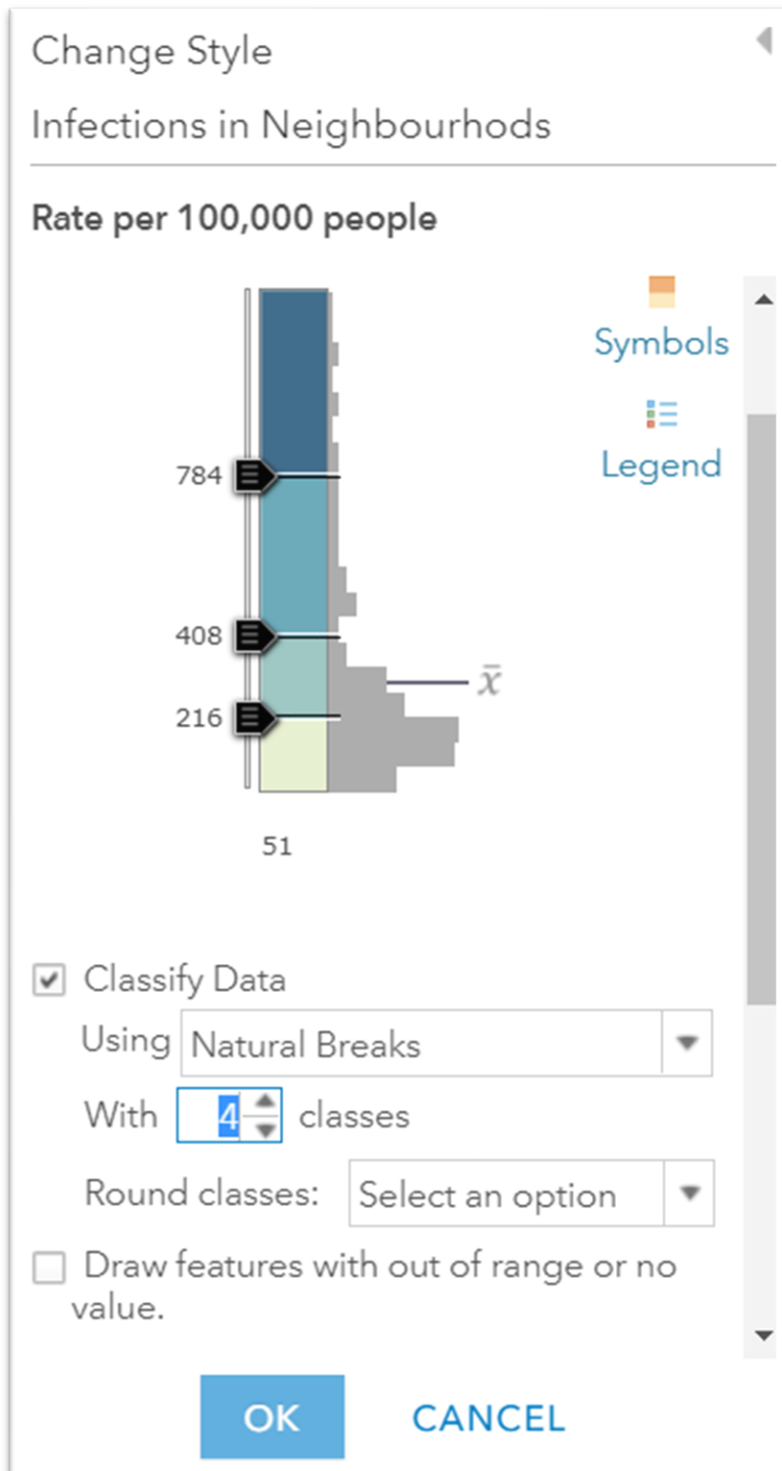
Click that option.



The attribute we want to show is labeled across the top.

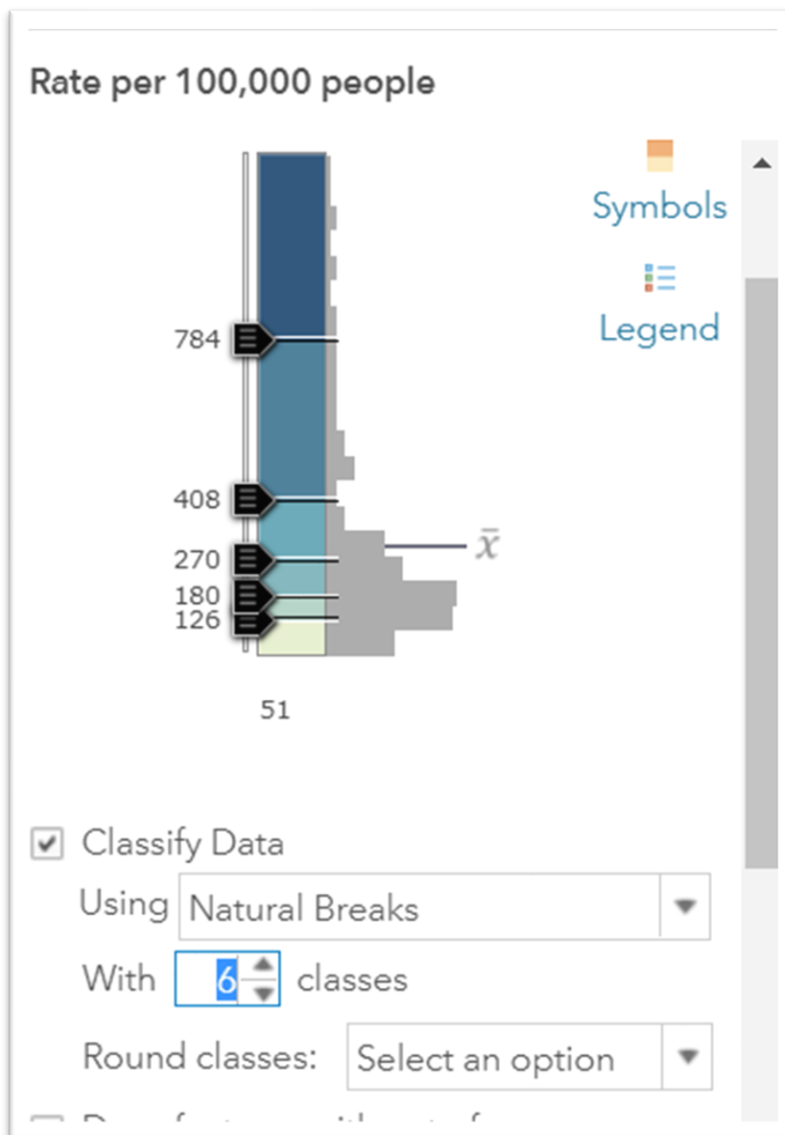
Now, we want to “Classify” our data, meaning divid it into ranges.

Select "Classify Data".



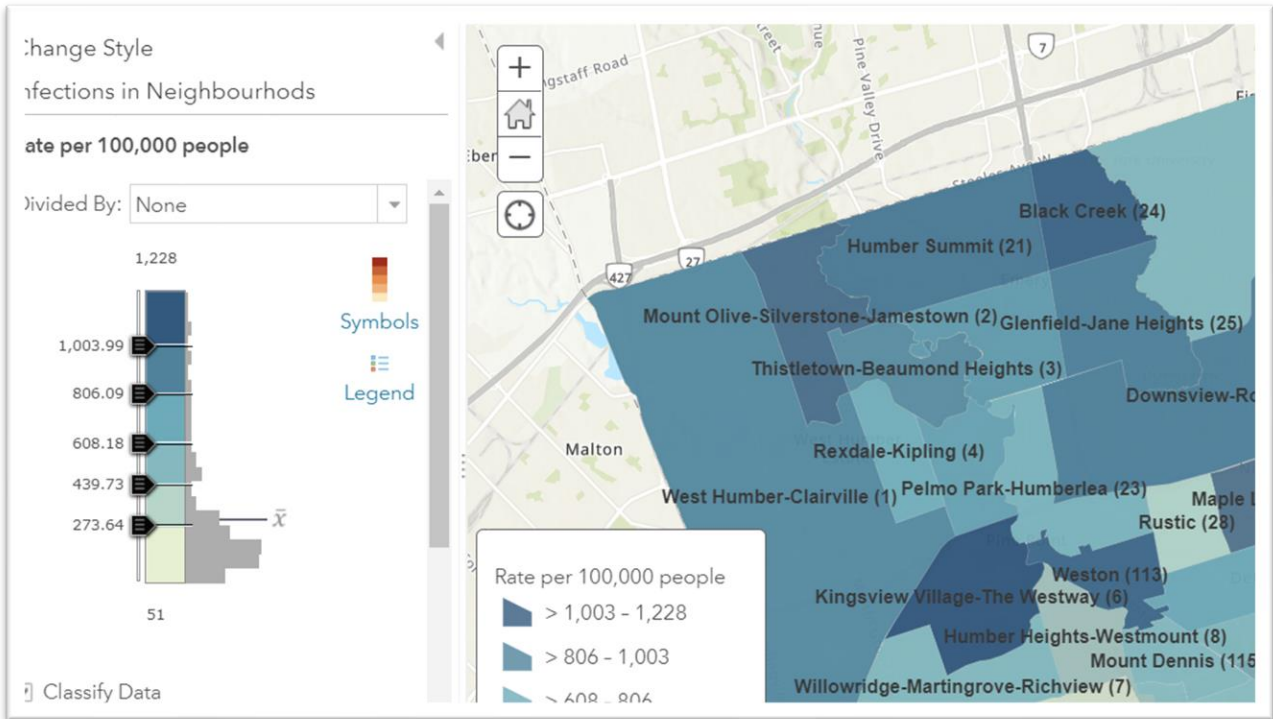
You can change increase the default to as many ranges as you want.

Let's choose six.



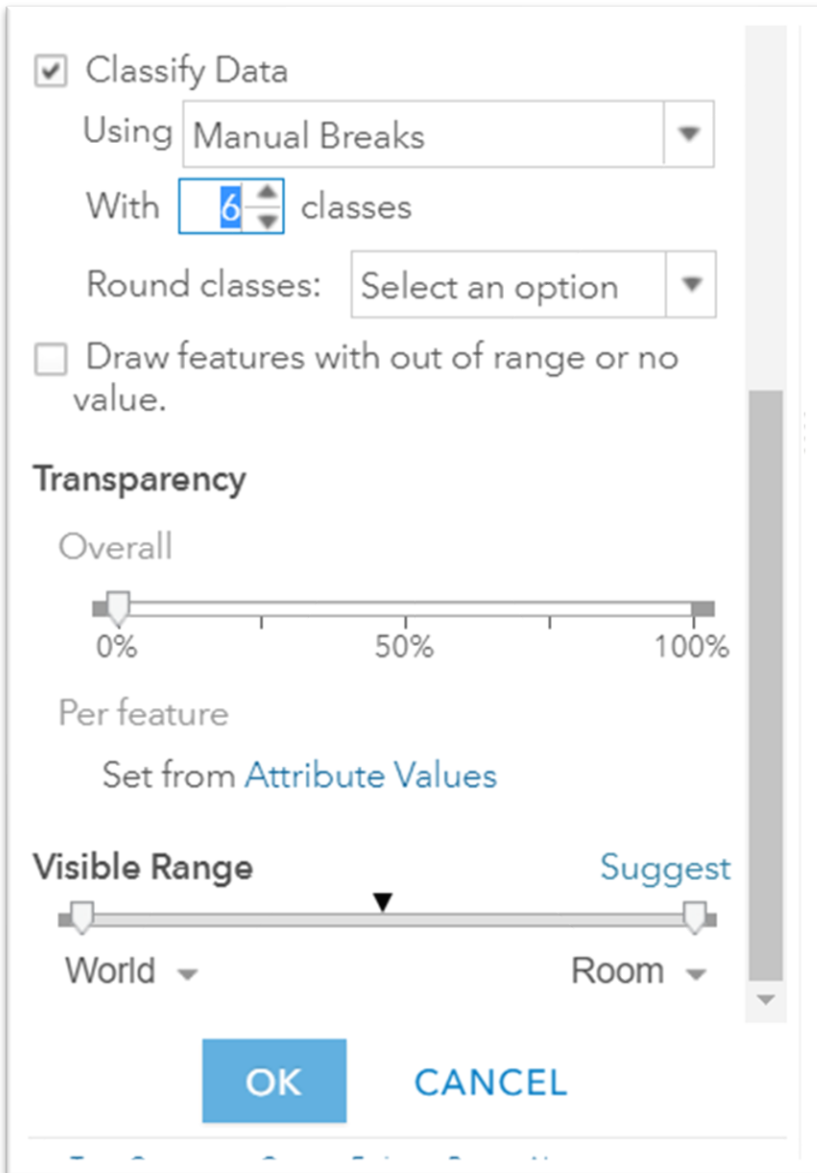
We can use the sliders to adjust the categories to make the intervals more even, or reflective of the data at hand. For instance, it may make more sense have more of the intervals at the higher or lower end, depending on the distribution of your numbers. The choice is yours.

For the purposes of this exercise, let's even out the intervals.



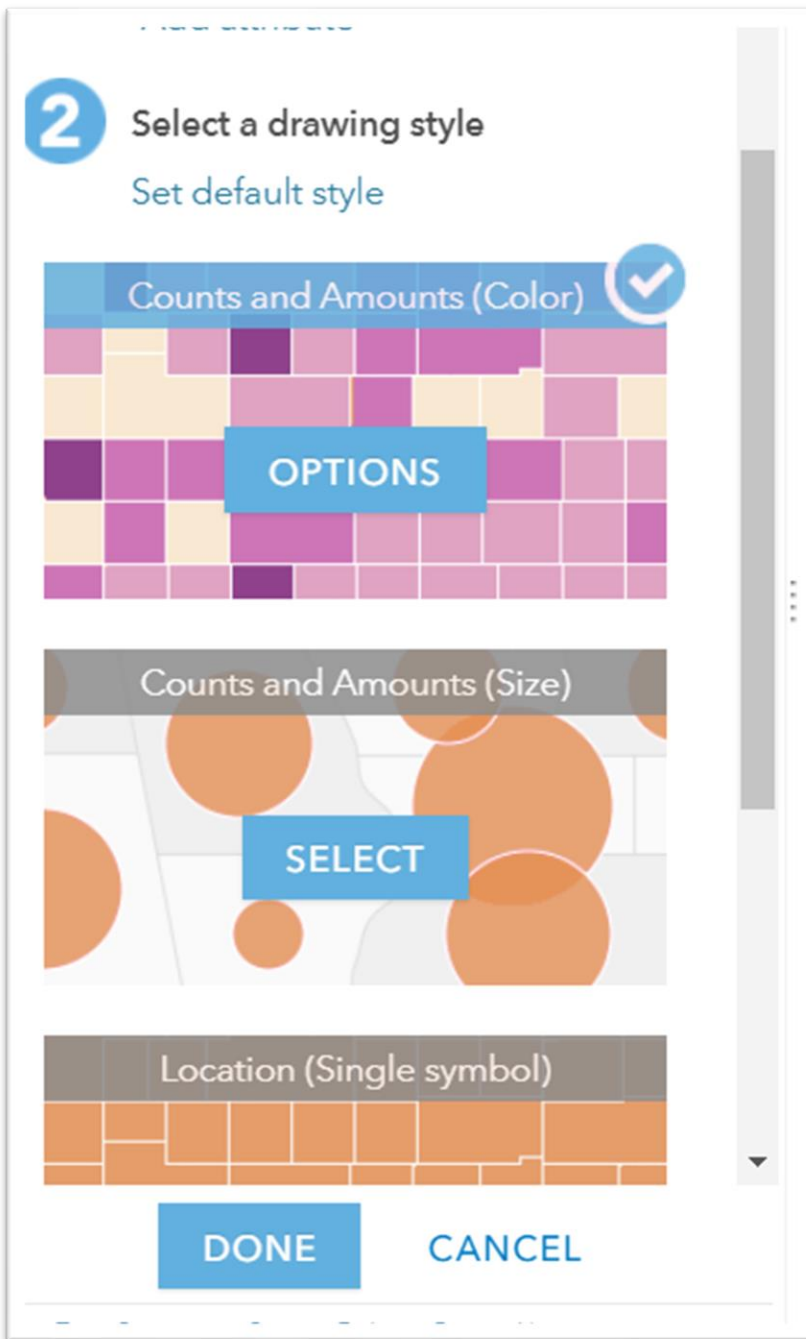
Adjusting the categories produces a result in your map as well as the legend.





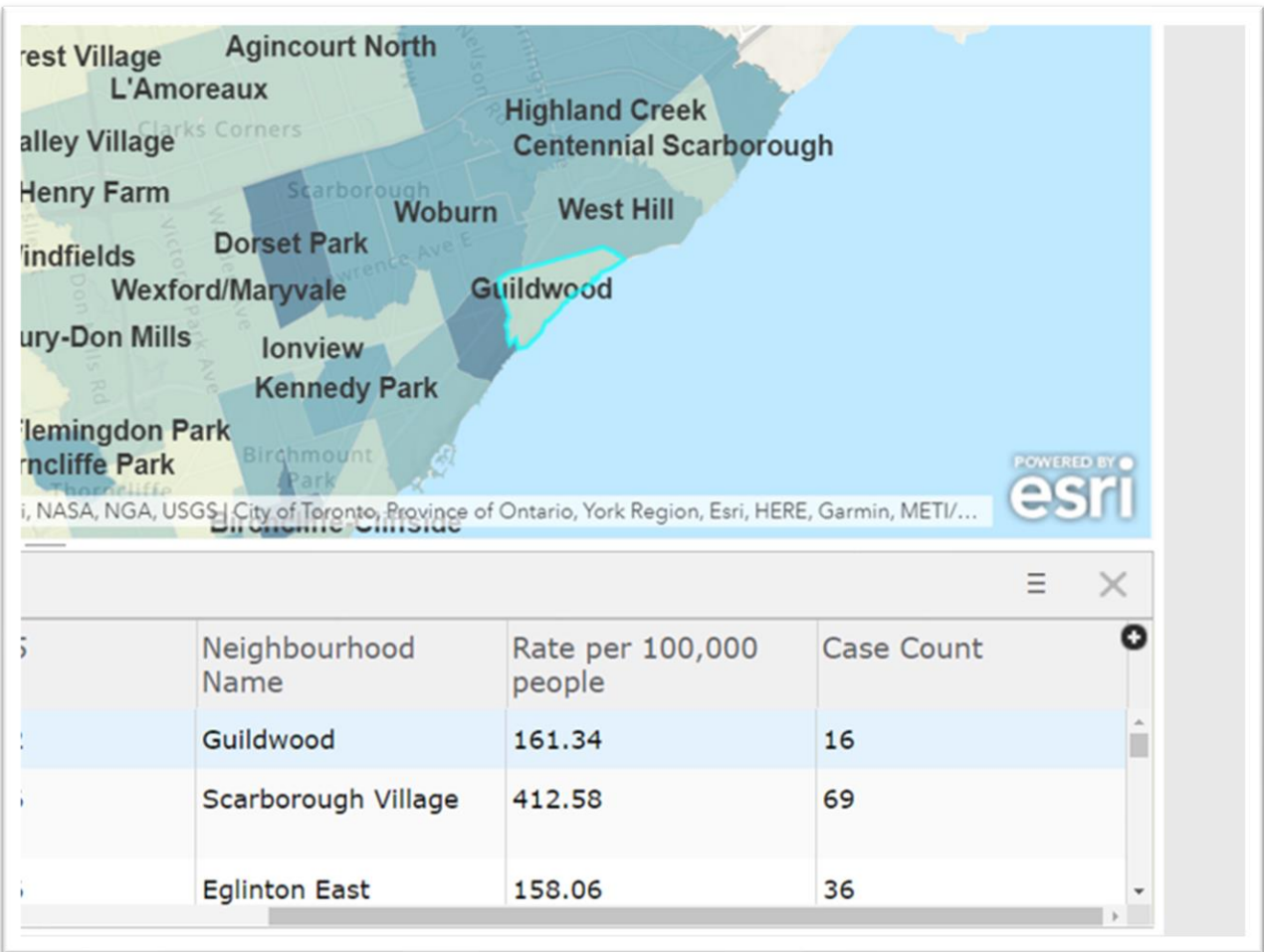
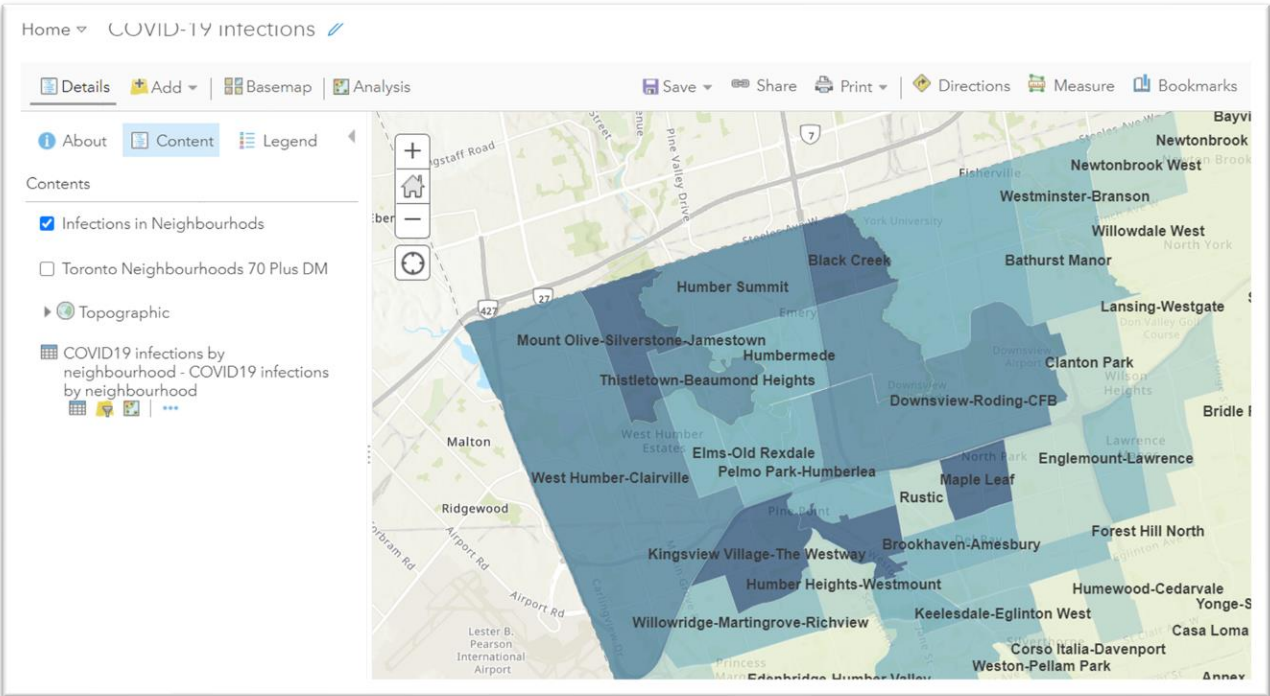
You can also adjust the transparency which allows viewers to see more of the basemap, which comes in handy if you want a better idea of the part of town where the higher rates are located.

If you're happy with the result, press okay.



And "Done."

Add neighbourhood labels to your layer and make sure that it is the only one selected.



At 161.34 cases for every 100,000 people, the Guildwood neighbourhood has one of the highest rates.

You can also copy this layer, and change the coordinates to colour code the neighbourhoods by case counts.

While it may take time to master some of basic functionalities of ArcGIS, it is worth the effort, especially if you are serious about mapping.

From here, you can also create dashboards and story maps.

We have not covered sharing your map by obtaining the embed code.

You'll find embedding information [on page 11 of this tutorial](#), which will also be posted on our syllabus.

Esri Canada's [website](#) is full of [examples](#).

And there are many social media discussion groups where people swap ideas and help trouble shoot.