

Open House Activity: Create an online Saskatoon Pharmacy Location Map

<http://spatial.usask.ca/WebGIS/>

Background

It is important that the public know where pharmacies are located in their neighborhood. In this case, you will make an online map to show the locations of pharmacies based on the neighborhood boundary in Saskatoon.

Part 1: Create a Saskatoon Pharmacy Map

Note: Please use **Firefox** instead of **Internet Explorer** to avoid bugs when mapping the data online.

• Data Preparation

1. Download and unzip the data, [Pharmacy.zip](#). The spreadsheet (**Pharmacy.csv**) contains all pharmacy locations in Saskatoon. However, the latitude and longitude information for the **first three records** are missing. Before loading the data to the online map, you need to find the latitude and longitude information for those incomplete records.
2. Go to <http://itouchmap.com/latlong.html>, then copy the address in the **Location** column to the address box on top of the webpage, and then click **Go**, the latitude and longitude information will show up in a box below. Make sure that you copy the right value of latitude and longitude back to the spreadsheet. Repeat this step for all three records.

To find the latitude and longitude of a point **Click** on the map, **Drag** the marker, or enter the ...

Address:

Map Center: [Get Address](#) - [Land Plat Size](#) - [Street View](#) - [Google Earth 3D](#) - [Area Photographs](#)

Try out the [Google Earth Plug-in](#). Google Earth gives you a 3D look of the area around the center of the map, which is usually your last click point, and includes latitude, longitude and elevation information.

Latitude and Longitude of a Point



Note: Right click on a **blue marker** to remove it.

Get the Latitude and Longitude of a Point

When you click on the map, move the marker or enter an address the latitude and longitude coordinates of the point are inserted in the boxes below.

Latitude:

Longitude:

Show Point from Latitude and Longitude

Use this if you know the latitude and longitude coordinates of a point and want to see where on the map the point is.

Use: **+** for N Lat or E Long **-** for S Lat or W Long.

Example: +40 689060 -74 044636

Note: Your entry should not have any embedded spaces.

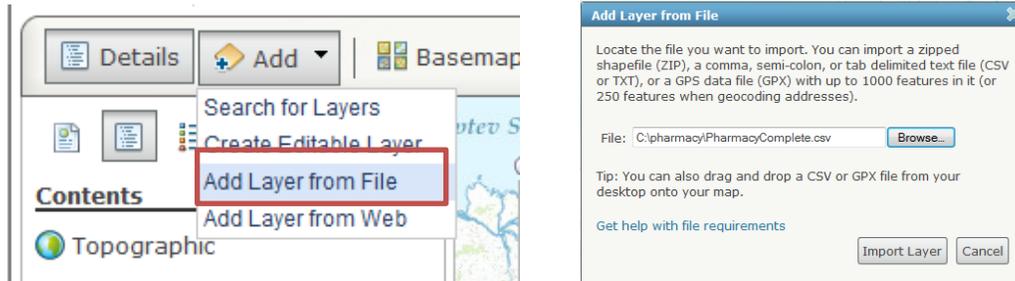
Decimal Deg. Latitude:

Decimal Deg. Longitude:

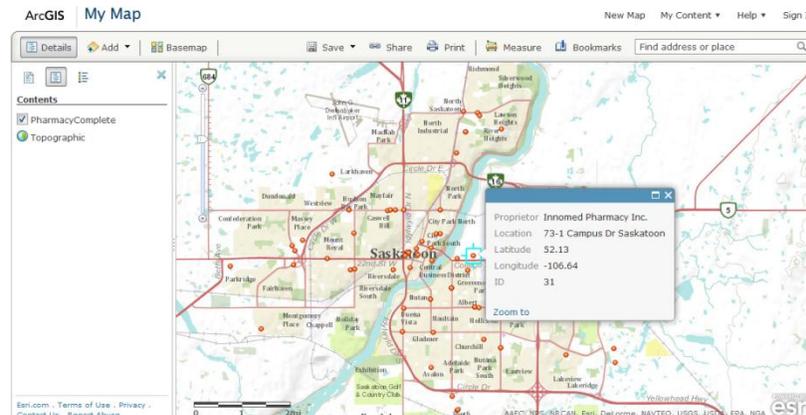
Example: **+34 40 50.12** for **34N 40' 50.12"**

- **Map pharmacies through ArcGIS Online**

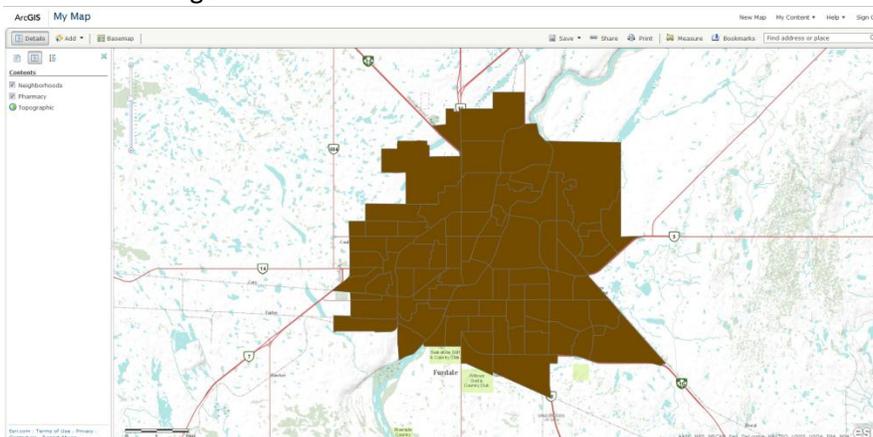
3. Once all the information is complete, you are ready to create the online map. Here we will take advantage of ArcGIS Online, go to <http://www.arcgis.com/home/webmap/viewer.html?useExisting=1>
4. Click on **Add** and select the **Add Layer from File** tool on top of the webpage. Click on Choose File and **browse** to your completed pharmacy.csv file or our prepared PharmacyComplete.csv. Once selected press **Import Layer**.



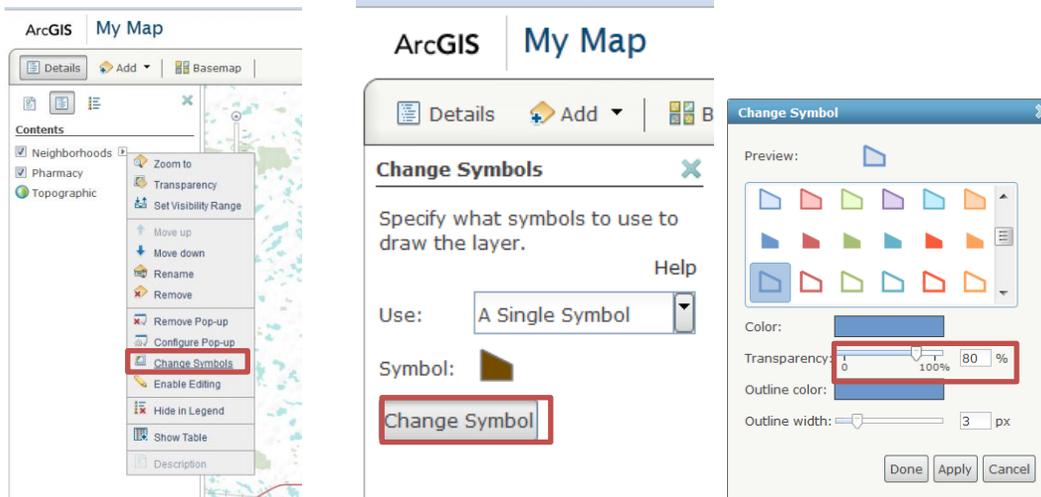
5. Now your map should look like the screenshot below. You can click on any point on the map to pop-up an information window. The information is exactly the same as that stored in the excel spreadsheet .



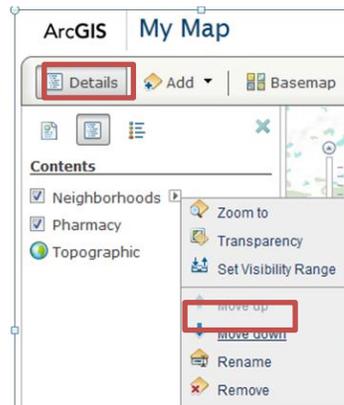
6. To give the public a better sense of the distribution of pharmacies in each neighborhood, you can load the neighborhood boundary file (**Neighborhoods.zip**) for reference. Similarly, use the **Add Layer from File** tool. Now your map should look like this, visually it is not readable at this point, but we will change that next.



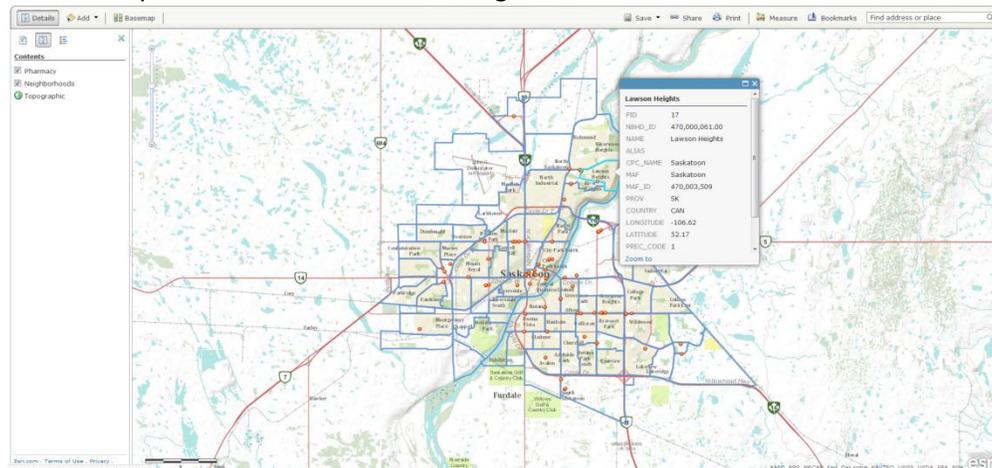
- To make the map more readable, you need to change the symbol for the neighborhood layer to achieve a better visual experience. Click the **Neighborhoods** layer and select the **Change Symbols**. Click on **Change Symbol**. Select a symbol and change the transparency to 80% and then click **Done**.



- Click the **Details** button at the top right of the page and click on the **Neighborhoods** layer. Select **Move down** to move the layer down. Now the pharmacies located on the map are more readable.



- Your final map should look like the following Screenshot.



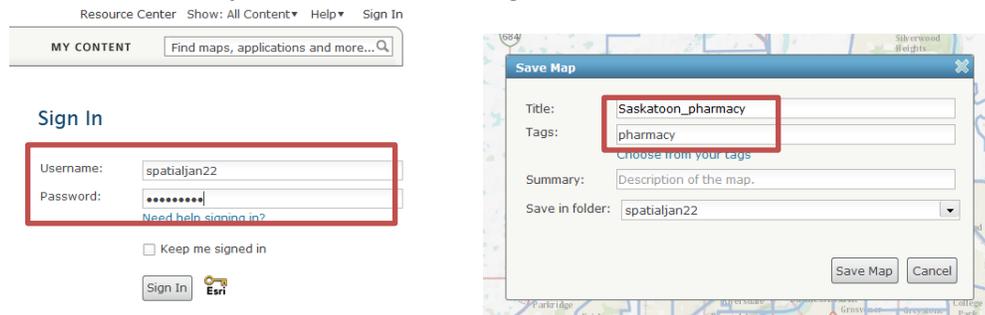
Part 2: Save, share and print the map

You can follow the steps below to print or save the map for future use and share the map with other people.

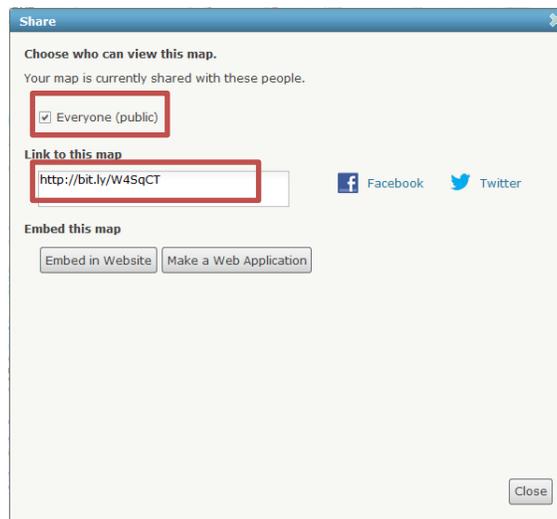
1. You can print the map using the **Print** button on top of the webpage.



2. You can save the map for future use or to share with someone else. Before saving the map, you need an **ArcGIS Online account** to **Sign in** (We have prepared one for you: **Username:** spatialjan22, **Password:** openhouse).
3. To save the map, click the **Save** button at the top of the webpage. Give the map a title and a tag, and then click **Save Map**. It will be saved through ArcGIS Online.



4. After saving the map, now you can share the map with other people. Click **Share** at the top of the webpage and a share dialog box will show the link to this map. You can access your map through the link (e.g, <http://bit.ly/W4SqCT>). Or you can also share this link on Facebook or Twitter.



Acknowledgement

Data used in this activity is provided by [Dr. Jason Perepelkin](#), Assistant Professor with the College of Pharmacy and Nutrition, University of Saskatchewan