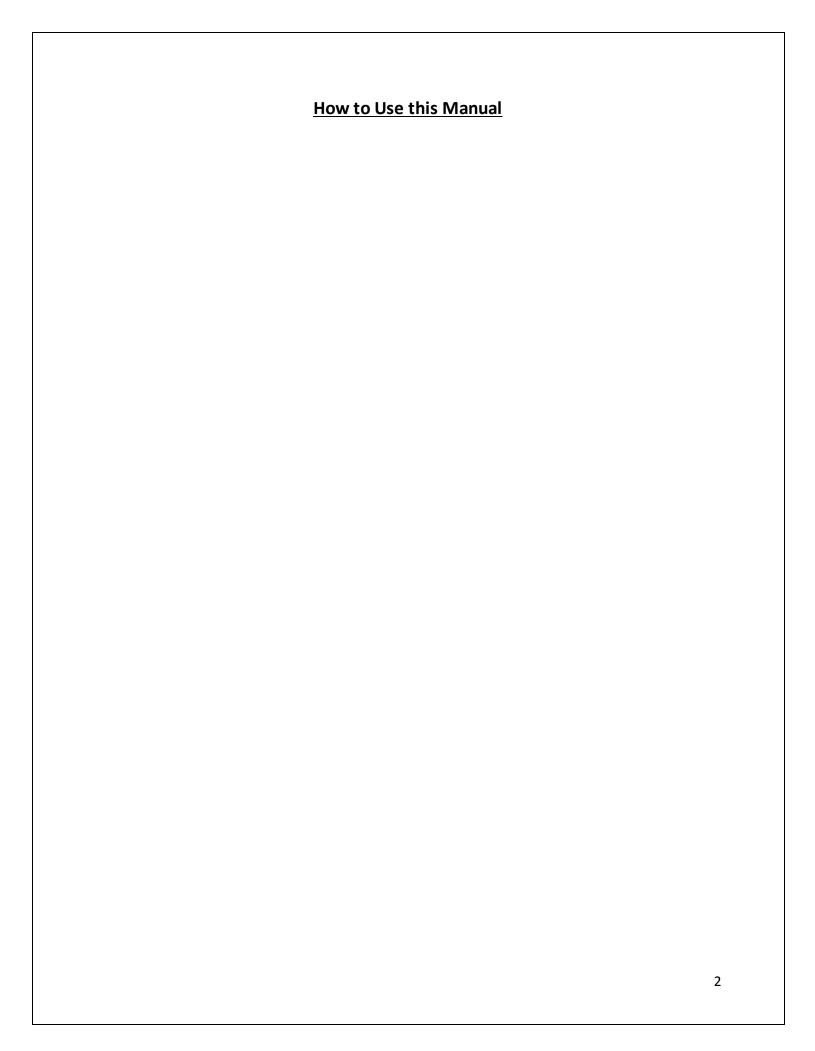
# Case Based Manual Jan 20, 2018



#### **Case Based Mapping Manual Topics**

- 1. How do I navigate around the map (pan, zoom in and out)?
- 2. How can I find a location of interest (client address, facility location)) using postal code, street address, or facility name?
- 3. How can I turn the map layers on and off?
- 4. How can I identify the detailed characteristics of a feature such as a school or a neighborhood.
- 5. How can I measure the distance between features on the map?
- 6. How can I explore and visualize in detail what's on the ground using base maps and Google Streetview
- 7. How can I link to detailed Census, Youth Health Survey, and Community Health Assessment reports using the Smart Layers
- 8. How can I print my maps, or export them to use for reports I am developing in Powerpoint or Word
- 9. How can I visualize more than one map layer at a time in order to compare trends.
- 10. How can I identify the characteristics of people (such as age, gender, income etc.) living within a custom area such as within 1 km of a school, community center, or a specific address?
- 11. How can I identify the characteristics of people living within pre-defined geographic areas such as a City Ward, a neighborhood, or an RHA?
- 12. How can I extract an Excellist and a summary student enrollment report for schools in a geographic area such as a Community Area or City Ward.

# Topic # 1 How do I Navigate around the Map?



Scenario: Once I have opened a map, how do I pan and zoom in and out to further

investigate features?

**Tools to Use:** To Zoom:

• Magnifying Glasses (+ or -)

• Roller Ball on your Mouse

To Pan:

• Left Mouse Click

**Instructions:** To zoom in and out, you can use the zoom buttons located to the left of the

search bar. The magnifying glass with the positive button is to zoom in, and the magnifying glass with the negative sign is to zoom out. In addition to these buttons, you can use the roller ball on your mouse to zoom in and out. To pan around the map, simply left click and drag the map until you

see the feature you are interested in.

Interpreting N/A the Results:

Additional Comments:

If you zoom too far in or out of the map, you can use the refresh button (Circular arrows to the immediate left of the Search Bar) to bring your back

to the original extent of the map.

Variations of N/A this Exercise:

# Topic # 2 How do I Find a Location of Interest?



Scenario: How to use one of the MbCDP maps to search for a street address, postal code, or

commonplace names.

**Tools to Use:** The **search bar** located on the top right corner of the map frame.

**Instructions:** Type the address, postal code or common name into the search bar, and click on

the correct suggestion that appears below the search box. If you are searching for a

postal code, be sure to maintain a space between the first and last three

characters.

Interpreting the Results:

Once you select (click on) the correct address, postal code or commonplace suggestion that appears below the search bar, the map will place a pin marker and zoom to the location of the address you are searching for.

Suggestive Search:



**Note**: You can zoom in and out of the map and the pin marker will stay on the map, but if you use your mouse to pan the pin marker will be removed.

Additional Comments:

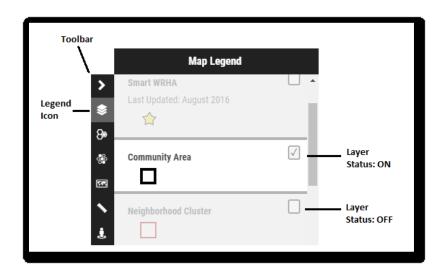
The geocoding of addresses and postal codes in rural areas of Manitoba may not be as precise as addresses and postal codes within urban areas, such as Winnipeg.

You can follow this method to search for:

Variations of this Exercise:

- Common Place Name
- WRHA or Health Facility
- A Postal Code
- Street Address

## Topic #3 How can I Turn Map Layers On and Off?



**Scenario:** How to turn layers on and off when using a MbCDP map.

**Tools to Use:** The **Legend** is located on the window on the right side of the map frame.

Beside the window, there is a tool bar, and within this menu is an icon for the legend. This icon must be selected in order to view the legend (this is the

default).

**Instructions:** Ensure the legend icon is selected in the tool bar.

In the legend each layer will have a small check box to the right of it. If a layer is turned on, this box with have a check

ck mark egend item will be

in it. If the layer is turned off, the box will be empty and legend item will be shaded out. In order to change the status of a layer, click in the check box or

anywhere in the legend.

Interpreting the Results:

N/A

Additional Comments:

It is important to remember that polygon layers (full coverages) are stacked on top of each other in the order they are represented in the legend. If you are trying to turn on a polygon layer and another polygon layer above it in the legend is already turned on, the top layer will cover the layer below. You must turn off the top layer before the bottom layer can be viewed.

Variations of this Exercise:

N/A

# Topic #4 How can I Identify the Detailed Characteristics of Features such as a School or a Neighborhood?



**Scenario:** How to identify features on a Mango Map and obtain additional information

about that feature.

**Tools to Use:** Once a layer is turned on in the map, your cursor will act as the identifying tool.

**Instruction:** Use your mouse to click on the feature that requires identification, or if you are

looking for additional information about that feature.

Interpreting the Results:

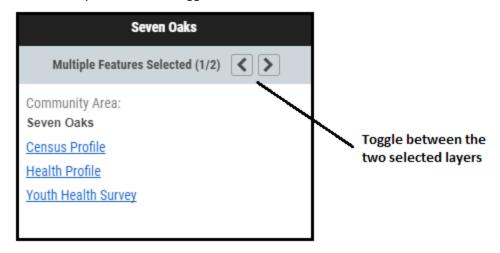
Once you have selected a feature on the map, a small pop-up will appear in the lower left corner of the map. The header of this pop-up will tell you the name of the feature that you have identified, and the pop-up window will provide you

with all of the additional information about this feature (if available).

**Note**: Many boundary layers will not have additional information available as they are used for visualization purposes.

## Additional Comments:

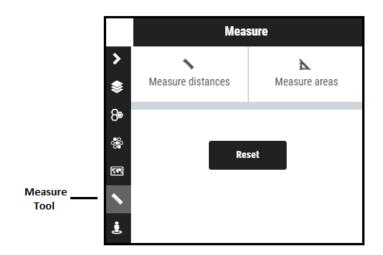
If you are attempting to identify a feature that is in the same place, or very close to another feature, both features might get selected when clicking on the feature. If this happens, there will be two arrows on the top of the pop-up window that you can use to toggle between the features.



Variations of this Exercise:

Use the identify features tool to identify any polygon or point layer. Often boundary layers do not have additional information associated with them.

# **Topic #5 How can I Measure the Distance Between Features on the Map?**



Scenario: How to measure between two points on the map, or the area of a custom polygon

**Tools to Use:** The **Measure** tool located on the tool bar on the right of the map frame.

Instructions: Click on the Measure Tool icon in the toolbar on the right of the map frame to launch the tool. Once the tool is launce, click on "Measure Distances" or "Measure Area"

depending on what you are measuring.



After you have selected your measurement type, use your cursor to click and trace the path of the distance you want to measure, or the perimeter of the area you want to measure. If you are measuring a distance, double click to stop measuring. If you are measuring an area, you must click on the first point to complete the polygon.

Interpreting the Results:

Once you complete tracing the path you wish to measure, or the perimeter of the area you are measuring, the Measure Tool will display the distance (in Kilometers), or the area (in Hectares). Click Reset to start again.

Additional If you measure more than one distance or area without clicking on the "Reset" **Comments:** 

button, the paths and areas will remain on the map but the distance displayed will

only be for the most recent measurement.

Variations of this

You can measure many things in any MbCDP Map:

Exercise:

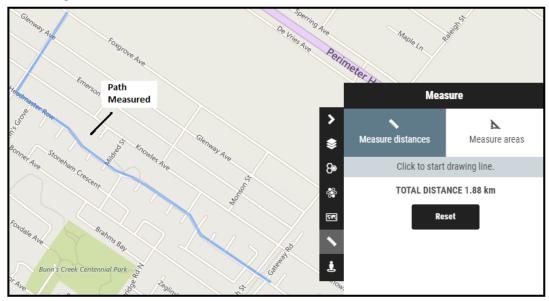
Feature to Feature

A Client Address to a WRHA Facility Your Address to a Clients Address

Area of a Neighborhood

Examples:

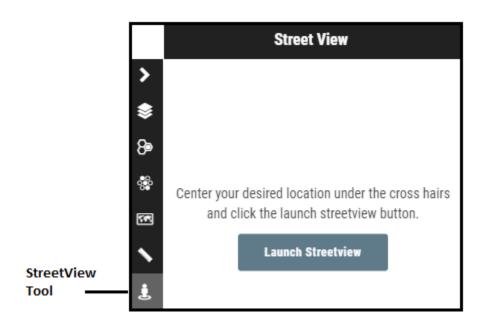
#### Measuring a Distance:



#### Measuring an Area:



# Topic #6 How can I Explore and Visualize in Detail What is on the Ground using Base Maps and Google Streetview?



**Scenario:** These maps are useful to display spatial patterns, and see from a bird's eye

view, but can I explore and visualize what is on the ground?

**Tools to Use:** Google Street View [Built in to MangoMaps]

Instructions: Google Streetview

When looking at a particular area of interest, you can launch Google Street View from the MangoMaps tool bar to investigate closely what is happening on the ground. To do this, select the StreetView button from the toolbar on the right side of the map frame.

Once the tool is open, a yellow bullseye will appear on your screen:



Position the area you would like to investigate on the ground, in the middle of the yellow bullseye. Once you have centered it, click the "Launch StreetView" button. Google StreetView will open in a new window. Use your mouse and keyboard to investigate the area.

#### **Basemap Options**

You can also turn different base-maps on and off using the base-maps tool in

the toolbar. If want to see, for example, an aerial view of an area of interest, turn on Bings Hybrid which will show both aerial photography overlaid by major streets. Similarly, if you want to see detailed streets and local features, turn on the Open Street Maps (OSM) base map. To clearly see the underlying base-map, you may have to turn off some of the map layers that may be covering the base-layer.

## Interpreting the Results:

Once you are in Google StreetView, you can move around using the arrow keys on your keyboard, but you can also re-position yourself using the small map in the lower left-hand corner of the browser. Click on the map to reposition the "Peg Man" which represents where you are on the map.



Use this map to re-position once in StreetView

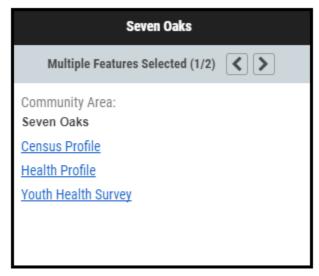
## Additional Comments:

It is important to be as zoomed in as possible when launching the StreetView tool. This will increase the accuracy of where the 'Peg Man' is positioned once StreetView is launched.

## Variations of this Exercise:

 Search an address you are familiar with and launch Google StreetView to test your accuracy

# Manitoba Collaborative Data Portal Case Based Training Exercise # 7: Smart Layers



Scenario: How to identify Census, Youth Health Survey, and Community Health Assessment Reports

using Smart Layers.

Best Map to Use: Community Data Map: Winnipeg Health Region

Smart Layers are located in the legend and are available at the Community Area,

**Tools to Use:** Neighborhood Cluster and Neighborhood geographies.

Instructions: Navigate to the legend and turn on the Smart Layer Geography (Community Area,

Neighborhood Cluster, or Neighborhood) that you are interested in. Once you turn the layer on, a star will appear in the middle of each geography. Click on this star to access the links to the documents corresponding specifically to that geography. Click on each of the links in the pop-up window to access the Census, Youth Health Survey, or Community

Heath Assessment Documents.

Interpreting the Results:

When you select the links from the pop-up window, the selected document will open in a new web-browser and your map will remain open.

Additional Comments:

Not all of these documents are available at each geography. The following outlines what documents are available at which geography.

#### Community Area:

- Census Profile
- Health Profile
- Youth Health Survey

#### **Neighborhood Cluster:**

• Census Profile

#### Neighborhood:

Census Profile

Variations of this Exercise:

N/A

## Manitoba Collaborative Data Portal Case Based Training Exercise # 8: Printing a Map

#### **Method 1: MangoMaps Print Tool**



Scenario: How can I print a copy of the map that I have developed on one of the MbCDP

Maps?

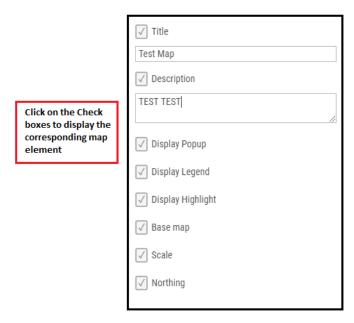
Tools to Use: There are two methods to print a map from a MbCDP map:

**Method 1: Using the Print Tool** 

Method 2: The Snipping Tool (see Next CBT)

Instructions:

Once you have created a custom map using the layers in a MbCDP map, click on the Print button on the top ribbon (left of search bar). This will open a new page that will allow you to customize the Map you are printing. You have the option to add a title, map description, legend, pop-up, map scale, and a north arrow. Click on the check box beside these options if you would like them to be included on your map.



Once your map is created how you like, click on the "Print" button, and you can

send the map directly to a printer, or print to PDF which can then be saved to the location of your choosing on your computer.

#### Interpreting the Results:

N/A

#### Additional Comments:

You have the option to zoom in and out of the map, as well as pan within the Print environment.

All maps should include: A title, a scale, a north arrow, and a legend. These map components are required to ensure that the map can be interpreted accurately when shared.

## Variations of this Exercise:

- Print a map of the entire Winnipeg Health Region
- Print a map of a specific Community Area
- Zoom into a Winnipeg Neighborhood and view detailed Dissemination Area information

# Manitoba Collaborative Data Portal Case Based Training Exercise # 8: Printing a Map

**Method 2: Snipping Tool** 



Scenario: How can I print a copy of the map that I have developed on one of the

MbCDP Maps?

**Tools to Use:** There are two methods to print a map from a MbCDP map:

- Method 1: Using the Print Tool (See Previous CBT)
- Method 2: The Snipping Tool

**Instructions:** If you are on a Microsoft computer, launch the" Snipping Tool" from the

windows menu. Once it is launched, click "New", and use your mouse to capture a screenshot of the map frame that you would like to share. Once you have snipped the image of the map, you can paste it in to any type of document (e-mail, Word document, PowerPoint Presentation etc).

Interpreting the Results:

N/A

Additional Comments:

When using the "Snipping Tool" method of sharing a map, ensure that all important mapping components are included: Legend, Title, Scale, and North Arrow. This may require several 'snips'.

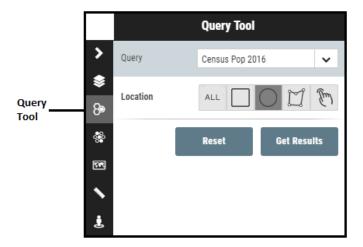
Variations of this Exercise:

Use the snipping tool to capture more than just map images. You can also use the Snip tool to export:

- Tables or reports created using the Query Tool
- Tables or reports created using the Proximity Tool
- Graphs or Charts from the Identify Features pop-up

#### Manitoba Collaborative Data Portal

# Case Based Training Exercise #9: Extracting Populations within X Distance of a Single POI



**Scenario:** How to extract population characteristics of people living within a custom

area of a specific point of interest (School, community Center, or address). Example: Find the population living within 1 km of Immanuel Christian School.

Tools to Use: Query Tool

**Instructions:** Launch the Query tool from the Toolbar on the right-hand side of the map

frame.

The first step in setting it up, is to select the layer that you are interested in from the drop-down list.

Next, select the method in which you would like to define your area of interest. For this example, we want to find the population within a 1 km radius of a specific school. When finding features within a radius, you must select the Circle method to define your Area of Interest.

Once you have selected the circle tool to define your area of interest, use your cursor to define the area. Click your cursor at the center of your point of interest and drag away. As you drag your cursor away from the point of interest, a distance will appear. Use this to define the radius when establishing your area of interest.



## Interpreting the Results:

You can view the results of this query as a report, where you will see a summary of all of the people living within 1 kilometer of Immanuel Christian School. This summary will tell you the total number of people living in the area you defined, as well as the age break down of these individuals.

## Additional Comments:

When drawing the radius, it is easiest to be zoomed in as close as possible.

## Variations of this Exercise:

Find the following populations:

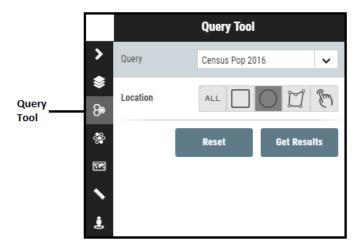
- 2016 Census Population
- North American Aboriginal
- Recent Immigrant
- Low Income Individuals

Within a radius of the following Points of Interest:

- School
- Healthy Baby Site
- Community Centre
- Street Address
- Family Resource Centre

#### Manitoba Collaborative Data Portal

## Case Based Training Exercise # 10: Extracting Features or Facilities within *X* Distance of a Single POI or Address



**Scenario:** How to extract a list of features or facilities within a custom area of a specific

point of interest or address.

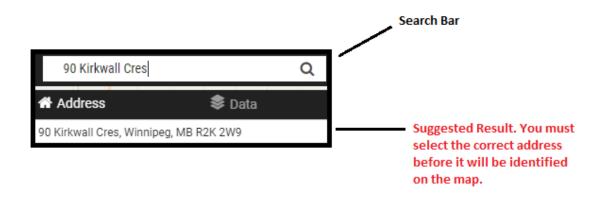
Example: Find all of the schools within a 2-kilometer radius of a client's

address.

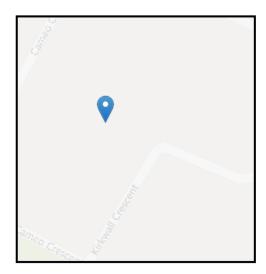
**Tools to Use:** The Search Tool, and the Query Tool

**Instructions:** The first step is to this query is to identify on the map, the clients address

that you are interested in. To do this, use the search bar on the top right corner of the map frame. Remember – this is a suggestive search bar and you must click on the correct address that appears below the search bar.

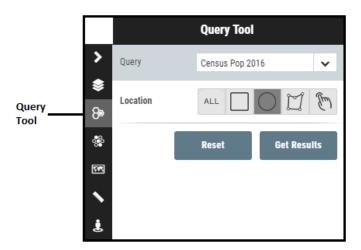


Once you have entered the address into the search bar and click on the suggested search result, the map will locate that address and mark it with a pin point.



This pin point will act as the center of your radius when using the query tool.

The second step in this query is setting up the query tool. The Query tool is located on the toolbar on the right-hand side of the map frame. Click on the tool icon o launch it.



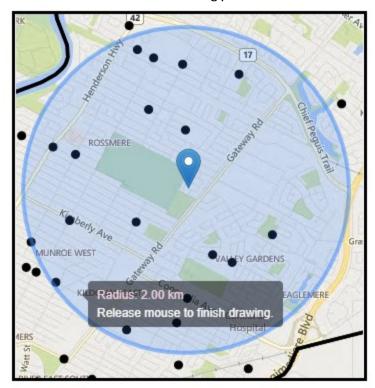
Complete the query tool by selecting the features that you are looking to identify within a radius of the client's address. For this example, select "Schools".

Next, select the method in which you would like to define your area of interest. For this example, we want to find the schools within a 2 km radius of a the clients address defined in the first step of this problem. When

finding features within a radius, you must select the Circle method to define your Area of Interest. For this problem, use the Address Point that was put on the map, as the center of our radius.



Once you have selected the circle tool to define your area of interest, use your cursor to define the area. Click your cursor at the pin point added on the address searched in the first step, and drag it outward. As you drag your cursor away from the point of interest, a distance will appear. Use this to define the radius when establishing your area of interest.



In the query tool, you are given the option to filter the schools within the defined radius by school type [elementary, junior high, or high school], or by the size of the school (#of Students). To filter the results, use the drop downs and select "Yes" if you would like to restrict your search results to a certain type of school.

For this example, we are going to select all schools and will not be filtering the results.

Once the query tool is completely set up, click on the "Get Results" Button in the query tool window.

## Interpreting the Results:

You can view the results of this query in three ways:

- 1. As a report This will tell you the total number of students and teachers in all of the schools selected.
- 2. A Table This will give you a list of each individual school within the defined area. It will provide you the number of students and teachers in the schools, as well as the number of students that are in each grade.
- 3. Download This will download the table previously described as a CSV which can be opened in excel and shared via e-mail, or printed.

## Additional Comments:

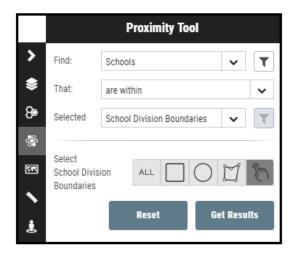
When drawing the radius, it is easiest to be zoomed in as close as possible.

## Variations of this Exercise:

- High schools within 1 km of a client's address
- Community Centers within 1 km of a client's address
- WRHA Facilities within a distance of an address

#### **Topic #11**

How do I Extract Schools within a School Division or City Ward?



Scenario: How can I extract a list of all schools within a specific school division or City

Ward, along with the number of students in each grade?

**Tools to Use:** The Proximity Tool



**Instructions:** Launch the Proximity tool from the toolbar on the right-hand side of the

screen.

Once the proximity tool is launched, set up the tool to by selecting the two layers that have will have a relationship together [Schools, and School Division Boundaries], followed by selection the relationship you want them to have [ie. Schools Within Selected School Division Boundary]. the drop down lists to complete the "Find:" and "Selected:" options. Once you have selected the layers, you must select the relationship that they have with each other. Use the "That:" drop down list to select the relationship between the two layers previously selected.

For this example, select "Are Within".

Once the relationship is set up, you must select the specific school division that you are interested in. For this example, we are wanting to find schools that are within the River East Transcona School division.

Use the finger pointer to select the River East Transcona School division. Once you click on the school division it will be highlighted in red on the map. You can click on more than one polygon at a time.

Interpreting the Results:

You can view the results of this query in two different ways: as a report, or as a table. The report will give you the total number of schools, students

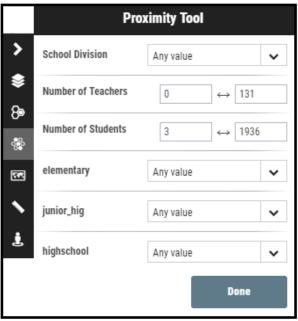
and teachers located in the school division that you have selected. The table will give you a list of each school located in the selected school division as well as the number of students (by grade) and teachers in each school. You will be given the option to download this table in excel format, or view online within the mapping environment.

## Additional Comments:

When setting up the proximity tool, you can select the filter button to the right of the 'Find' drop down to filter the type of school that will be returned as a result of the query.



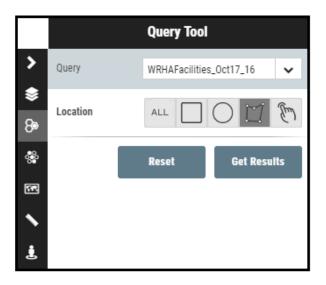
When you click on the filter button, you will be brought to a new screen which will give you an option to select schools based on the grade ranges (Elementary, Junior High, High School), or by the number of teachers or students that belong to the school. Use the drop downs, or the text boxes to apply these filters.



Once you have applied the filters (not mandatory) click the "Done" button to on the bottom of the window and continue to set up the proximity tool as normal.

#### **Manitoba Collaborative Data Portal**

# Case Based Training Exercise #12: Extracting features within a Custom Boundary



Scenario: How to extract a list of features within a custom boundary. For example, all of the

WRHA facilities within a 2-neighborhood area.

Example: WRHA Facilities within West Alexander and Centennial Neighborhoods

Tools to Use:

**Query Tool** 

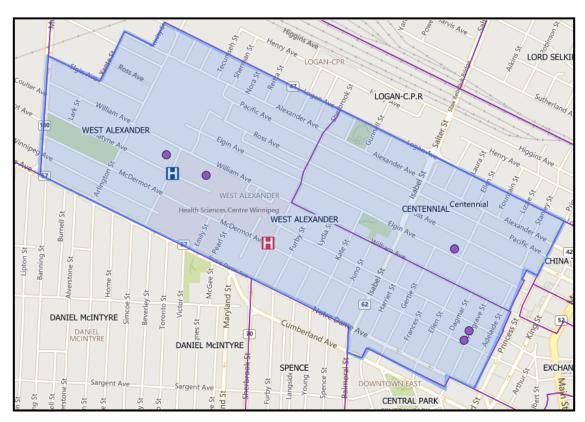


**Instructions:** Launch the Query tool from the toolbar on the right-hand side of the map frame.

The first step is to select the layer you are interested in extracting. For this example, we are looking to find WRHA facilities. Select the layer from the dropdown



The second step is to define the area where we want to find these WRHA facilities. To define our area of interest, we are going to use the query tool to trace the perimeter of the two neighborhoods we are interested in (West Alexander and Centennial Neighborhoods). To do this, select the draw tool and use your cursor to trace the area you are interested in. Click once to start, and move your mouse to the next point you would like to make – click to establish a point and change the direction of the line. Once you are complete, click on the first point to complete the drawing.



Now that you have defined your area of interest, click on the "Get Results" button.

Interpreting the Results:

When you click on the "Get Results" button you will be re-directed to a page that gives you options in how to view your results.

You can view this query as a table that will provide a list of all of the WRHA facilities that were located in the area that you defined. You will also be given the option to download this table as a CSV file which can be saved to your computer and opened in excel.

Additional Comments:

When drawing the custom geography, it is easiest to be zoomed in as close as possible.

Variations of this Exercise:

Features to extract within a custom geography:

- Schools
- Low income Individuals
- Obesity Points
- WRHA Facilities

