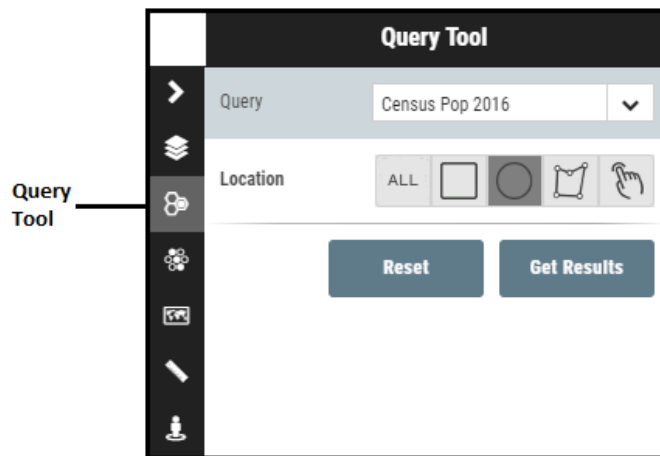# Topic #10

How can I identify the characteristics of people (age, gender, income etc.) living within a custom area such as within 1 km of a school, community center or specific address?

Scenario: How to extract population characteristics of people living within a custom area. Example: Find the population living within 1 km of Immanuel Christian School.

Tools to Use: Query Tool

Instructions: Turn on the school layer and and zoom into a school you want to buffer around in order to identify nearby population characteristics.

Launch the Query tool from the Toolbar on the right-hand side of the map frame.
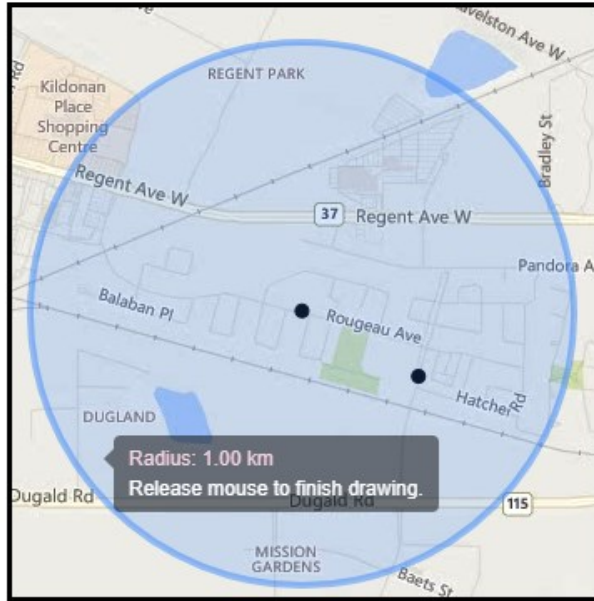
The first step in setting it up, is to select the layer that you are interested in from the drop-down list. In this example we are selecting the population layer from the 2016 Census (Census Pop 2016).

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. Left click your cursor at the center of your

point of interest (the school 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.

When the circle is the correct size/distance, click on GET RESULTS to select the data points that will be used in the population calculation. This may take a couple of seconds, and the selected points will appear highlighted (in yellow). Click on Generate Report to launch the population report .. this may take up to 30 seconds.

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. After running an analysis, click on RESET to before undertaking another analysis.
Variations of this Exercise:	• You can generate reports based on other demographic layers include 2016 Census Income, 2016 Census Housing, etc. • Data for custom geographies can be extracted by using the draw tool to trace the outlines of the area of interest. The draw tool is the tool to the right of the circle tool used in the exercise above.

Video Tutorial: #9 Using the Query Tool to Generate Population and Income reports