Community Data Training Manual

Manitoba Collaborative Data Portal

(Social Planning Council of Winnipeg)

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Training Approach

Purpose: This manual provides a hands-on training curriculum for staff from community based organizations on how to access a wide range of community data, with a specific focus on the data and tools that can be accessed through the PEG and the Manitoba Collaborative Data Portal (MBCDP) web-sites.

PEG, a project of the United Way Winnipeg uses a wide range of summary indicators to track the Big Picture progress of Winnipeggers over time using the United Nations Sustainable Development Goals. The Manitoba Collaborative Data Portal, coordinated by the Social Planning Council of Winnipeg allows a deeper dive by providing data and tools to describe the local conditions of Manitobans.

Organization: The curriculum is design to be delivered in 3 hours as per the workshop outline on the following page. It can be delivered in a variety of settings (computer lab, small group training session in a boardroom, one-on-one mentoring, or self-learning) as long as all participants have access to a computer connected to the internet so that they can access the PEG and MBCDP web-sites and tools in order to complete the training exercises.

A set of Powerpoint slides and embedded talking points accompany this curriculum to facilitate it being delivered flexibly in a "train-the-trainer" context by individuals who have become familiar with the material and toolsets.

Learning Approach: The curriculum is organized around 6 discrete exercises based on specific learning objectives. These are designed to provide trainees with an orientation to the data and tools available and an opportunity to develop basic skills through hands-on practice.

In the workshop setting, the analytical tools and requisite skills are briefly demonstrated by the instructor at the beginning of each exercise, and then trainees are given the opportunity to practice these on their own by following the step by step instructions provided (with assistance provided as needed by the instructor). In each exercise, trainees are directed to explore the relevant on-line help resources (instructional videos and manuals) so that they can access these outside of the training session.

It is not an expectation that trainees will be fully proficient in the use of the data tools by the end of the training session. Rather it is expected that they will have a basic understanding of how to use the tools and a clear understanding of how to access and use the on-line help resources to become proficient on their own.

Training Workshop Outline

a. **Introduction: (15 minutes)**
   - Review of Training Session Agenda
   - Manitoba Collaborative Data Portal
     i. Background
     ii. Purpose
   - MBCDP vs. PEG

b. **Computer Set up (linking to Wifi): (15 minutes) Only in non-computer lab teaching situations**

c. **Exercise Session 1: (55 minutes)**
   - Exercise 1: Exploring the MBCDP and PEG Interfaces (15 minutes)
   - Exercise 2: Learning to Navigate the Mango Maps Interface (20 minutes)
   - Exercise 3: Printing and Exporting from Mango Maps (20 minutes)

d. **Break: (20 minutes)**

e. **Exercise Session 2: (55 Minutes)**
   - Exercise 4: Search a Map and Ground-Truth using Streetview (20 minutes)
   - Exercise 5: Extract Data for a Custom Area (20 minutes)
   - Exercise 6: Use Dashboards to Extract Demographic Data (15 minutes)

f. **Wind-up and Evaluation (15 minutes)**

Exercise 1

Explore the MBCDP and the PEG Interfaces

(15 minutes)

Learning Objectives:

- *To become familiar with the range of data resources available through PEG and the MBCDP, and how the two platforms complement each other*
- *To become familiar with the resources available on the MBCDP including:*
    - *Knowledge Portals*
    - *Local and National Data Portals*
    - *Data Resources (Interactive Maps, Dashboards, Map Gallery)*
    - *Help Resources*

How PEG and the MBCDP complement each other

Peg
Tracking Progress, Inspiring Action

Big Picture

Uses indicators to track the progress of Winnipeggers over time

- A Project of the United Way Winnipeg and the International Institute for Sustainable Development
- Provides community-wide data over time for Winnipeg on 60+ indicators of wellbeing
- The system also ties local indicators to the United Nations Sustainable Development Goals (SDGs)

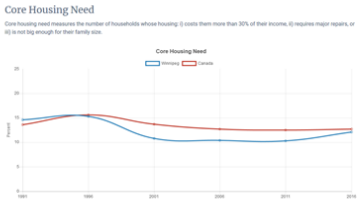
Manitoba Collaborative Data Portal
MBCDP
Community Data Matters

Deep Dive

Data and Tools to describe local conditions of Manitobans

- A collective impact project lead by the Social Planning Council of W
- Provides data for Winnipeg and Manitoba
- Data repository and set of exploratory tools (maps and dashboards to describe detailed social and health conditions at the local level
- Provides links to a wide range of relevant local data sources

Big Picture over time

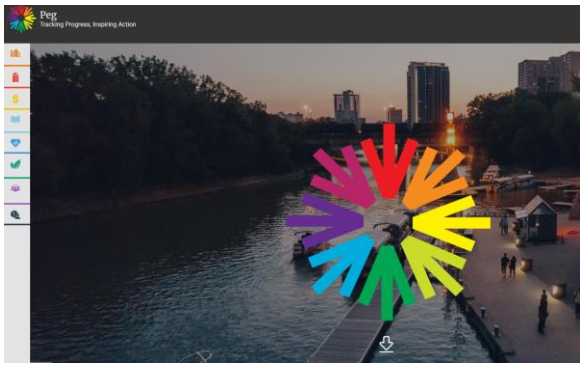


Detailed Local level data

Step 1: Explore PEG Website (5 minutes)

a. Log onto the MBCDP web-site (www.mbcdp.ca)

b. Navigate to the PEG Web-site:
   - Click on ***Resource***s (Main Menu drop down) …. ***Local Data Portals*** …. Click on ***PEG Winnipeg*** (first item in the list)



c. Click on the ***Basic Needs Tab*** on left hand-side of the screen
   - Click on the ***Core Housing Need tab*** to view time trend chart
     - Click Description to view detailed description

d. Click on the ***Health Tab*** on left hand side of the screen
   - Click on ***Life Expectancy (Female) tab*** to view rates by Community Area
     - Click on Maps tab to view map by Community Area

e. Explore other topic areas of interest by clicking on the left hand tabs.

Step 2: Explore the MBCDP Website (10 minutes)

a. Return to the MBCDP website (www.mbcdp.ca)

b. Check on a Knowledge Portal:
   - Click on ***Knowledge Portals*** (Main Menu drop down)
     - Spend some time exploring the ***Housing and Homelessness*** portal
     - Explore another data portal that piques your interest

c. Check out the content of the Local and National Data Portals
   - Click on ***Resources*** (Main Menu drop down)
     - Click on ***Local Data Portals***
     - Click on ***National Data Portals***

d. Check out other resources:
   - Map Gallery
   - Blog
   - Video Tutorials
   - Anything else that catches your attention

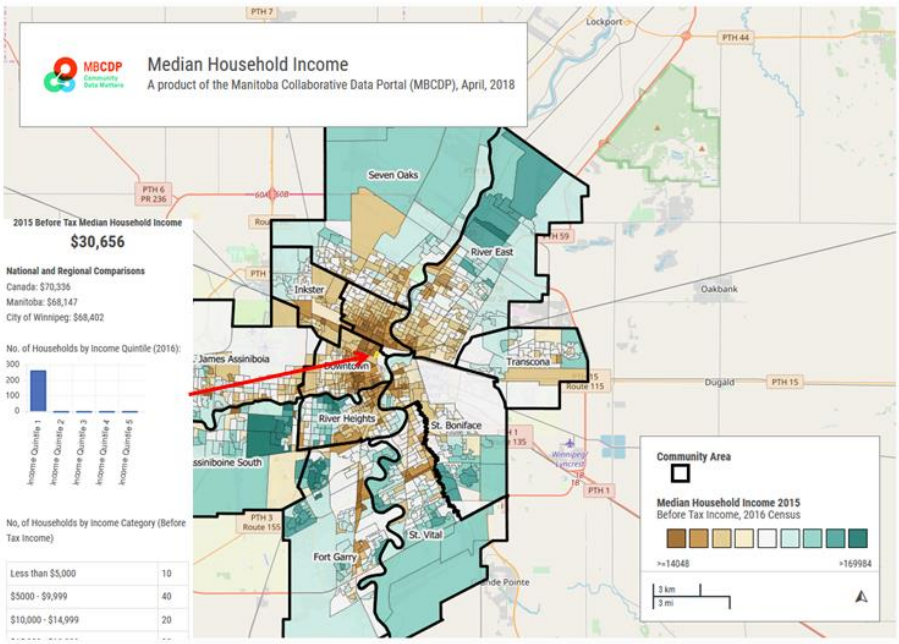
Exercise 2

Learning to Navigate the Mango Maps Interface

(20 minutes)

Learning Objectives:

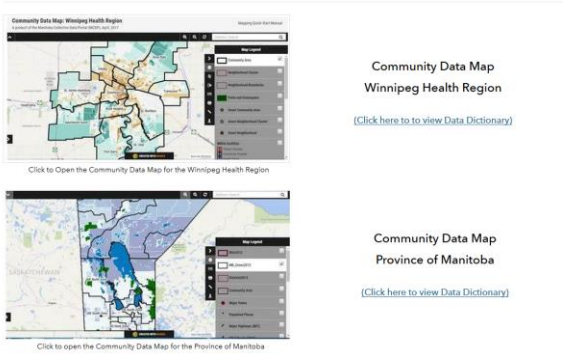
- *To learn the basic functionality of the Mango Maps interface*
- *To be aware of the hyperlinks to source information and definitions on mapping pop-ups and reports*
- *To know where to find relevant on-line help resources*



Step 1: Overview of Mango Map Interface

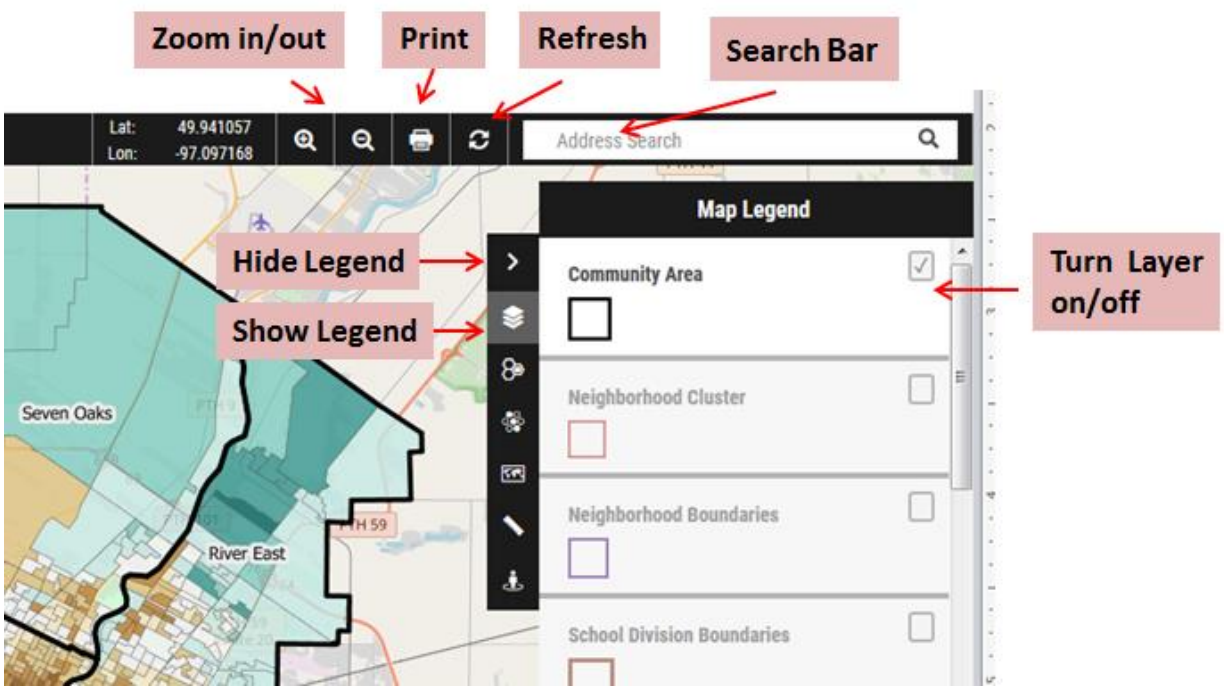
a. If you are not logged into the MBCDP, do so now (www.mbcdp.ca)

b. Navigate to ***Interactive Web Maps*** (click on ***Mapping and Dashboards*** on main menu, then ***Web Mapping***, then ***Interactive Web Maps***). This will bring up two community data maps as follows:



c. Click on the Community Data Map for the Winnipeg Health Region (top map).

d. The Mango Maps interface will appear as illustrated below, with Median Household Income overlaid with Community Area boundaries as a default.

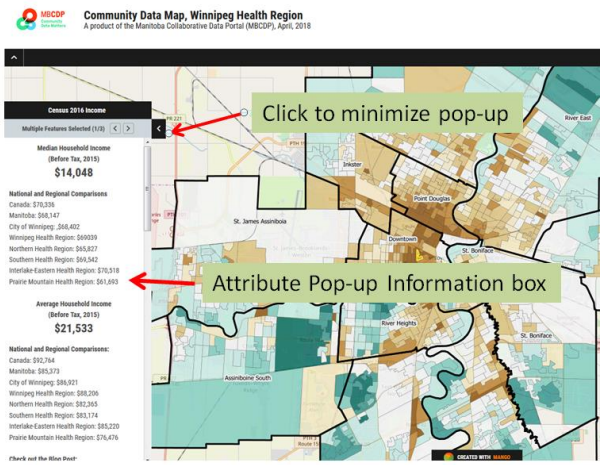


e. Zoom in and out, 2 methods:
    - Mouse Roll Button method: Using the roll button on your mouse zoom in and out
    - Zoom Tool Method: Click on the zoom out and zoom in buttons at the top right of the screen to zoom to the desired extent

f. Pan across the map:
    - Click and hold down the mouse and drag it across the screen to navigate to a new map view
    - Pan the map so that you no longer see the Winnipeg Health Region (i.e. drag into northern Ontario).

g. Refresh the map to Previous Extent:
    - Click the Refresh tool (top right of map) to return to the default extent (Winnipeg Health Region).

h. Identify Layer Attributes:
    - Zoom into downtown Winnipeg
    - Click on one of the small geographic areas (dissemination area). When selected, the geographic area will turn yellow and the income attributes of that area will be displayed in a pop-up information box at the bottom left of the screen.
    - Scroll to the bottom of the pop-up information box and click on ***the 2016 Census: Income Topic hyperlink*** in order to obtain information on the income data source from Statistics Canada
    - To cancel the pop-up information box, click on the left facing arrow on the top right of the box



i. Change the Display Layer:
   - In the Map Legend box (far right of screen), drag the slider bar down until the Median Household Income, 2015 layer appears.
   - Uncheck the Median Household Income layer
   - Drag the slider bar down further until the ***% Households in Unsuitable Housing*** is visible. Click this layer
   - Click anywhere on the map to bring the attribute information for this layer.

j. Add a point layer such as a school
   - In the map legend, scroll up and add schools as an overlay
   - Click on any school to obtain its attribute information

Note - Putting layers on top of each other: Please note that in Mango Maps you can stack multiple layers on top of each other. Pay attention to the following:
   - Polygon data layers (i.e. Median Household Income, Visible Minorities etc.) will cover each other up .. only the top layer will be visible if multiple layers are checked
   - Point layers render nicely on top of polygon data layers. For example, the location of WRHA facilities or school will render nicely on top of the Median Household Income layer)

Step 2: Explore On-line Help Resources for Mango Maps Interface

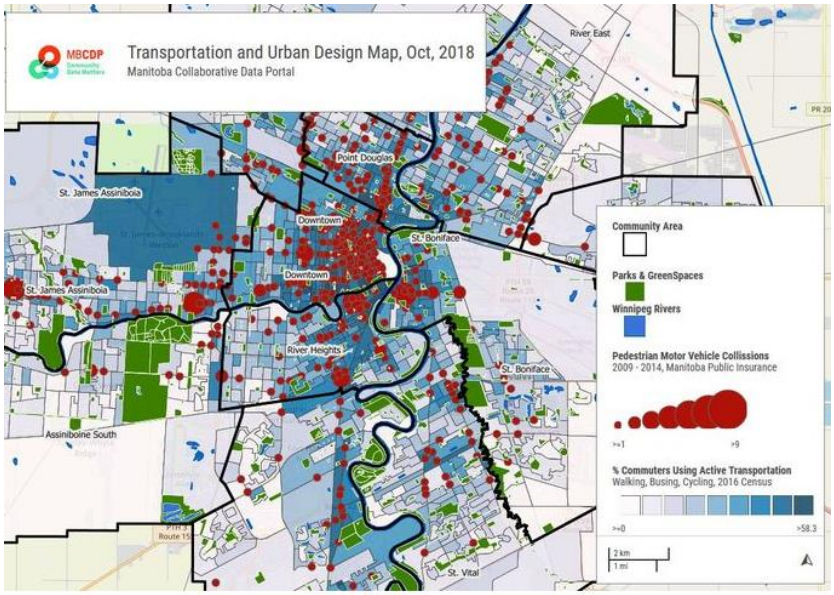
a. Explore on-line Help options for Mango Maps Interface:
   - Navigate to the ***Video Tutorials Page*** (click on Mapping and Dashboards on main menu, then Web Mapping, then Video Tutorials). Take a quick look at:
     i. ***Video #2: Mango Maps Interface Overview***
     ii. ***Video #3: Using the Legends to Turn Layers On and Off***
     iii. ***Video # 5: Identifying Features***
   - Navigate to the ***User Manuals Page*** (click on Mapping and Dashboards on main menu, then Web Mapping, then User Manuals). Click on:
     i. ***Topic #1: How do navigate around the Map (Pan, Zoom in and out)?***
        1. Click on the hyperlink Topic#1: How do I Navigate around the Map? In order to view a document that you can view or print-out on this topic
     ii. ***Topic #4: How can I identify the detailed characteristics of a feature*** ….

b. Explore the Data Dictionary for more information on data layers:
   - Navigate to the ***Data Dictionary for Core Maps Page*** (click on Mapping and Dashboards on main menu, then Web Mapping, then Data Dictionary).
   - Click on the **Population Characteristics Tab**, and then on ***Median Household Income***, in order to view detailed information on this layer including a download link for this data in shape file format

     Note: The Data Dictionary is still under development is not yet complete for all layers

Step 3: Additional Exercises (if there is time):

a. Explore the Active Transportation map that can be found under the Interactive Data Tools tab in the Transportation and Urban Design knowledge portal
    - Identify areas of Winnipeg with high and low walkability
    - Identify the most dangerous intersections for cyclists and pedestrians
    - Identify where there are the highest concentration of commuters



Exercise 3:

Printing and Exporting from Mango Maps

(20 minutes)

Learning Objectives:

- *To learn how to create and configure map outputs and exports these into PowerPoint and Word for reports and presentations using the Snipping tool*
- *To know where to find relevant on-line help resources*

Step 1: Printing and Exporting:

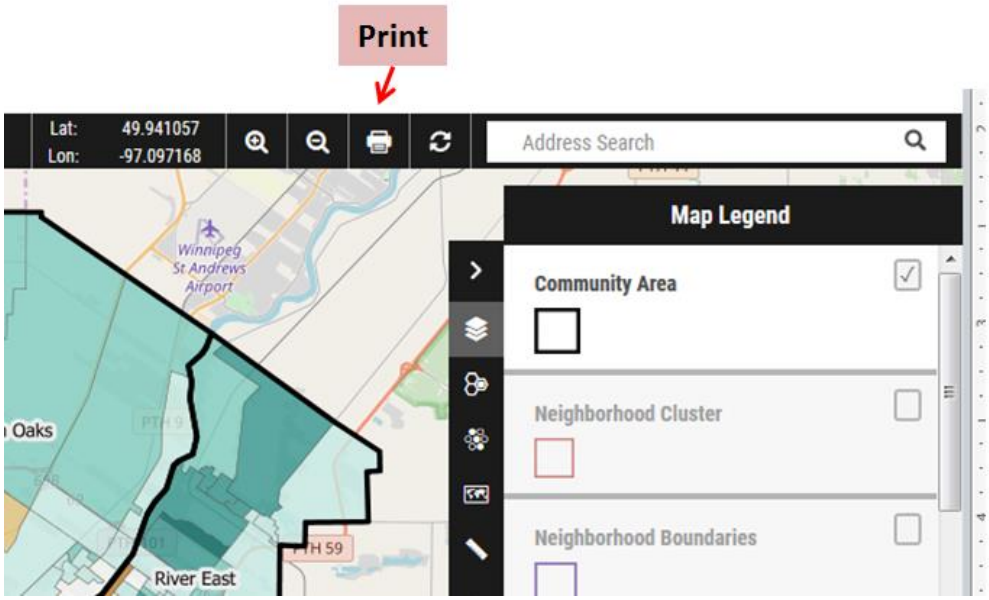
a. Open up a document in either Word or Powerpoint

b. If not already open, launch the Winnipeg Community map.

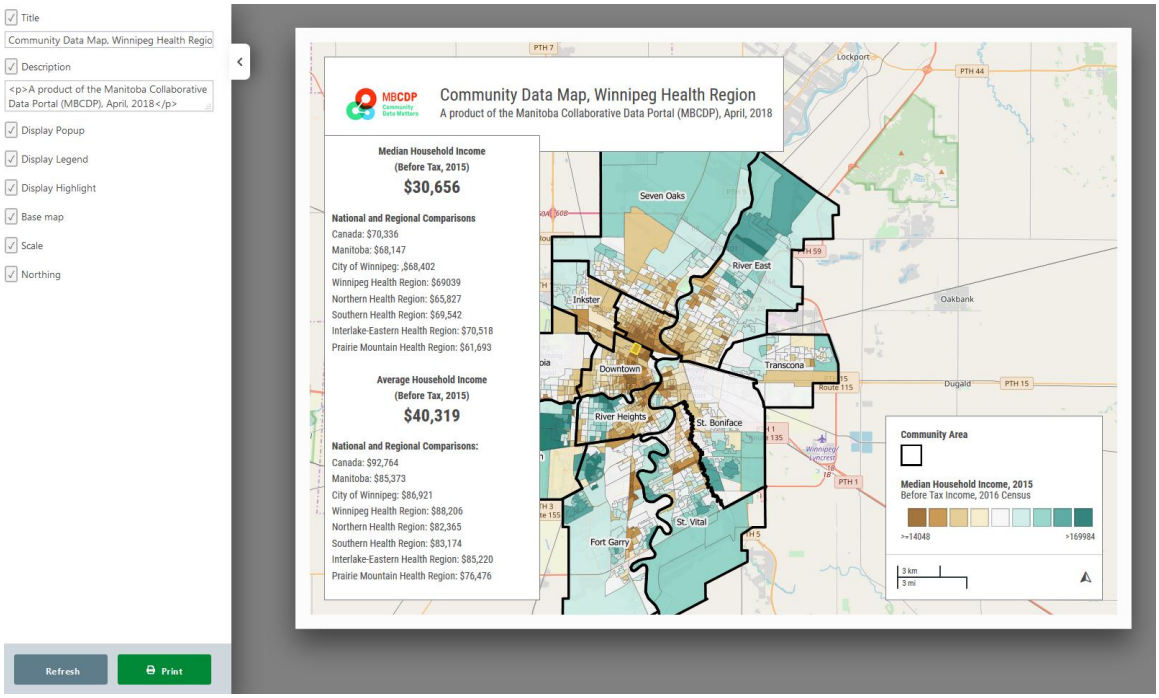
c. Ensure that the Median Household Income and Community Area layers are checked and that the map is refreshed to the default extent.

d. Zoom into Downtown, and click on any geographic area on the map so that the information/attribute pop-up window appears at the bottom left of the map

e. Click on the Print icon at the top right of the map screen.



f. The following mapping output lay-out will appear

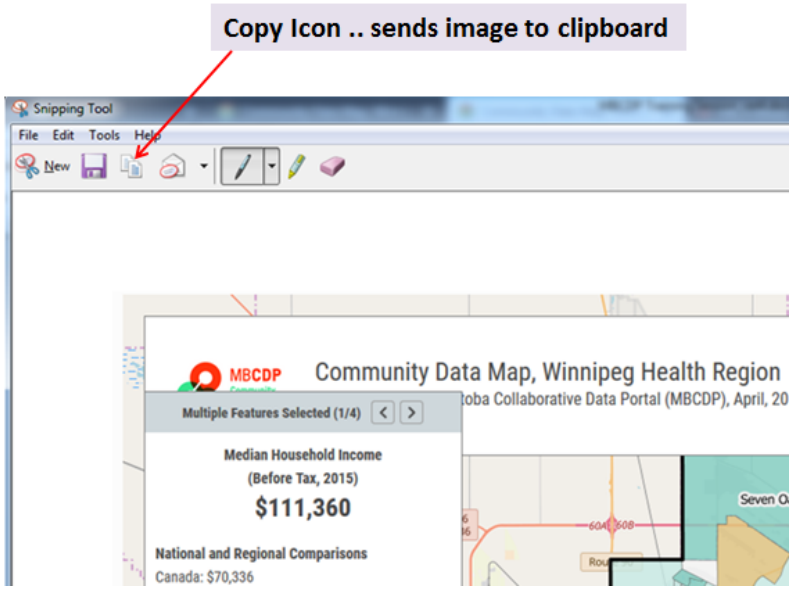


g. Experiment configuring the map output as follows:

- Click the check-boxes (on the left hand side of the screen) to turn on/off any of the la-out elements such as the Title, the map Description, the Display Pop-up, the map Legend etc.
- Change the title of the map by replacing the text in the title information box with the following: "Median Household Income, 2016"
- Change the zoom level (using the scroll buttons your mouse) and pan the map position (click,hold and drag).
-

h. Export the map for insertion into a Powerpoint or Word document using the Windows Snipping Tool

- Launch the ***Snipping Tool i***n either Windows 7 or 10 (type in "Snip" into the Search programs and files box in Windows 7 or 10).
- Once the snipping tool is launched, Click on the New Button, and a cross-hair will appear
- Using the cross-hair, click and drag (starting at the top left hand corner of the map) to capture the map image for export. A red box will show the area of the screen that will be captured. When you un-click the mouse, the image to be captured will appear in a new screen
- As shown below, click on the export/copy icon to send the map image to clipboard



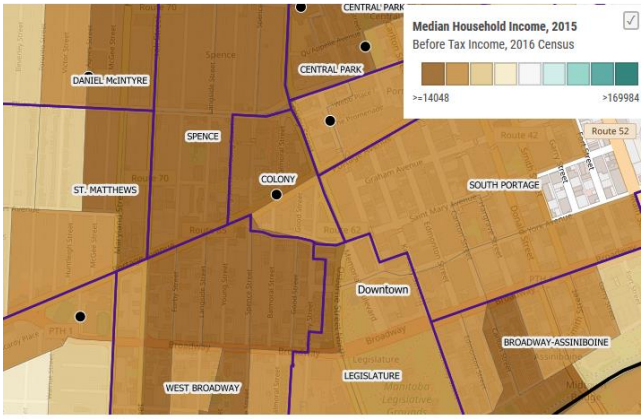
- Navigate to Powerpoint or Word
- Right Click the mouse, and then choose Paste to bring the map image into the document.

Step 2: Explore On-line Help Options for Printing and Exporting

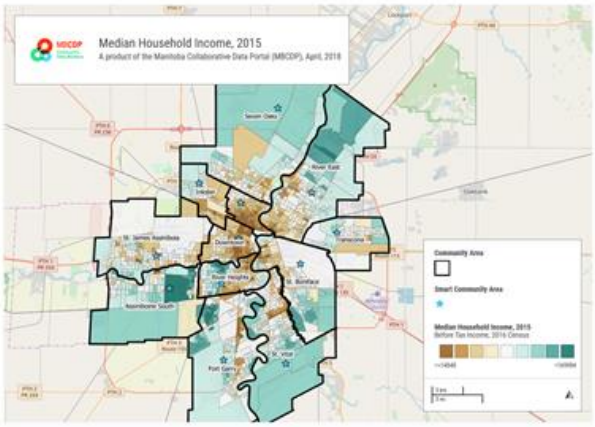
i. Check out the Help options for Printing and Exporting:
   - Navigate to the ***Video Tutorials Page*** (click on Mapping and Dashboards on main menu, then Web Mapping, then Video Tutorials). Take a quick look at:
     i. ***Video #8: Printing a map***
   - Navigate to the ***User Manuals Page*** (click on Mapping and Dashboards on main menu, then Web Mapping, then User Manuals). Click on:
     i. ***Topic #8: How can I print my maps, or Export them to use in reports***
     ii. ***Topic #9: How can I visualize more than one map at a time in order to compare trends?***

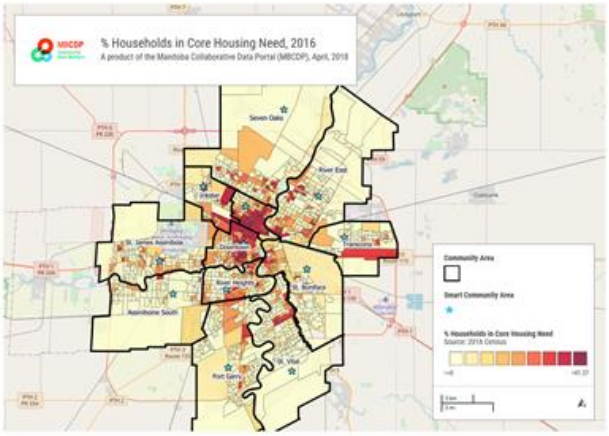
Step 3: Advanced / Additional Exercises (if you have time)

a. Use the Snipping tool to extract images directly out of the main Mango Maps screen
   - Snip a local area of interest
   - Snip a copy of the relevant legend area
   - Assemble these into a Word or Powerpoint document



b. Assemble a comparison document in Word or Powerpoint, showing two maps at the same time:
   - Median Income on one map,
   - Households in Core Housing Need on the other map





Exercise 4:

Search a Map and Ground-Truth using Google Maps

(20 minutes)

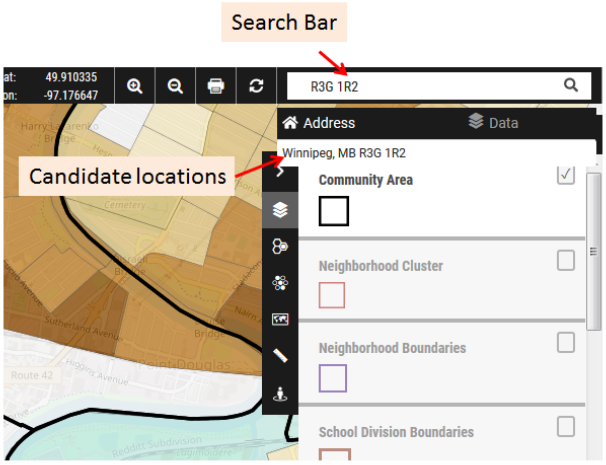
Learning Objectives:

- To learn how to search for and zoom to desired map locations (facility or client location) using postal code, street address or feature name
- To learn how to determine small area neighborhood characteristics of clients or features
- To learn how to use Google Streetview functionality within Mango Maps
- To learn how to use Smart layers at the 3 levels (neighborhood, neighborhood cluster, and community area)

Step 1: Search by 6 Digit Postal Code and Explore Local Neighborhood Characteristics:

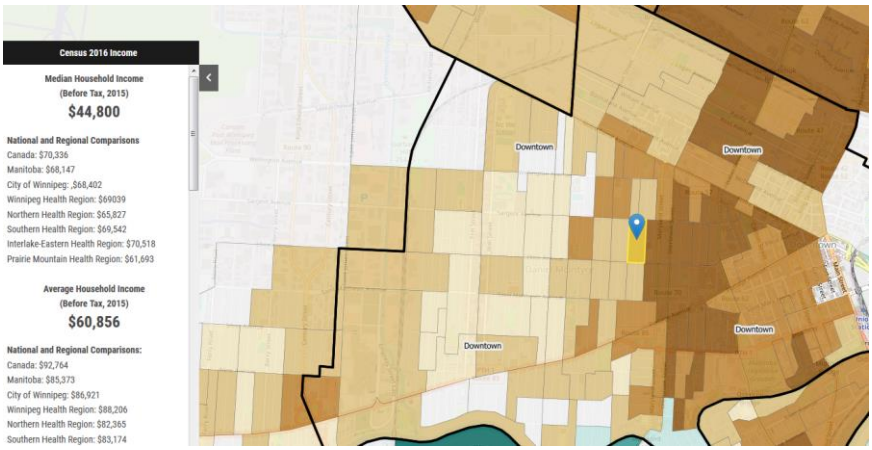
a. Reset the Winnipeg Community map as follows:
   - Click the Refresh button to return to default extent
   - Ensure that only the Median Household Income and Community Area boundary layers are turned on

b. Search for a Client's Location:
   - Click your mouse in the Address Search bar (see below),



   - Type in the following postal code: R3G 1R2, **ensuring that you leave a space between the 1st 3 and last 3 characters (if you don't leave this space, the search won't work properly)**
   - Candidate locations will appear below the address icon.

- Click on the ***"Winnipeg, MB R3G 1R2"*** choice, and the map will zoom to this location (blue icon at location), and the Income attribute pop-up box will appear

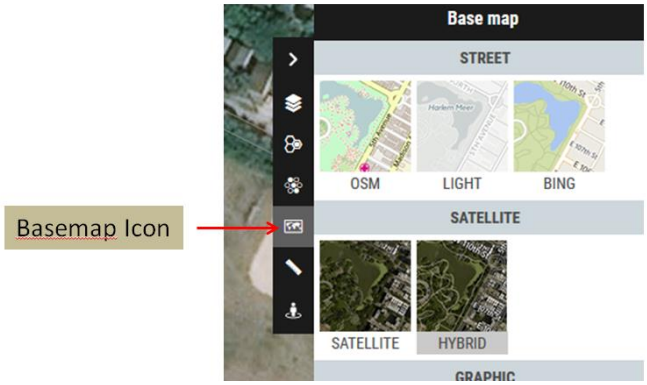


- To view the housing conditions for that same geographic area:
    i. Close the pop-up attribute box by clicking on the arrow (top right of box)
    ii. In the Map Legend, uncheck Median Household income and click the ***"% of Households in Unsuitable Housing"*** layer
    iii. Click on the blue icon and the attribute box for Unsuitable Housing will appear

Step 2: Search by Street Address and Explore using Streetview:

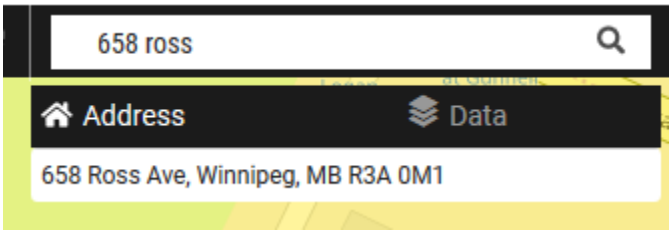
a. Reset the Winnipeg Community map as follows:
   - Click the Refresh button to return to default extent
   - Ensure that only the Median Household Income and Community Area boundary layers are turned on

b. Change the base-map to Hybrid
   - Click on the base-map icon



   - Click on the Hybrid tile and wait a couple of seconds while the map updates. The street base map will replaced with a satellite view overlaid with streetnames

c. Search for Rossbrook House by street address:
   - Click the mouse in the address search bar, and type: ***658 Ross***



   - Click on the candidate location that appears below the Address icon, and the map will place a blue icon at 658 Ross.
   - Turn off the Median Household Income layer to view the underlying satellite imagery

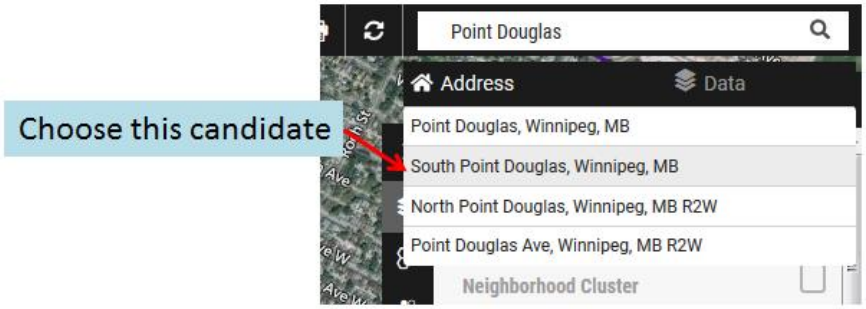
d. Use Google Streetview to view the Roosbrook House from street level as follows:
   - Click on the Streetview Icon, and a little yellow crosshairs will appear.
   - Click, hold and drag to pan the map so that the yellow crosshairs sits on Ross Ave close to the corner of Sherbrook St. (**Note: For Streetview to work properly, the crosshairs must be centered on a street**).

- Click the Launch Streetview button and Streetview will launch in a new window for the Rossbrook House Location

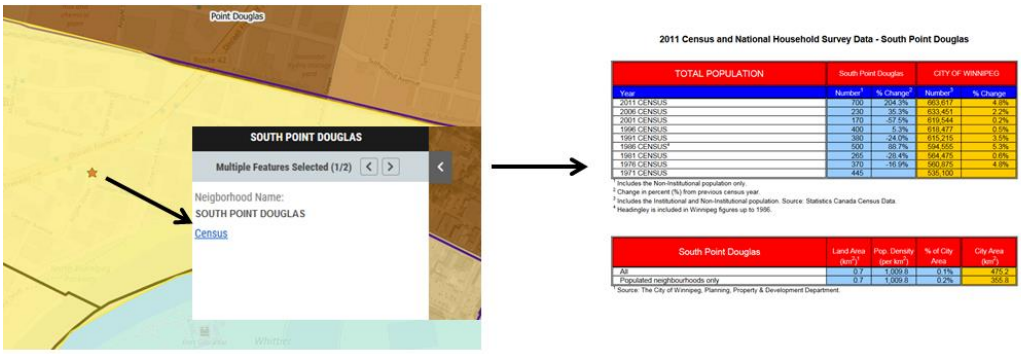
- To navigate in Streetview:
    i. Click hold and drag in order to navigate a 360 circle
    ii. Fine tune the location of your view by clicking on a location in the map located at the bottom left of the Streetview screen (this map can be expanded in size by clicking on the Expand icon at bottom left corner of the map).

Step 3: Search by Feature Name and Obtain Additional Information using Smart Layers

a. Search for South Point Douglas neighborhood:
   - In the Address Box, type Point Douglas, and click on the South Point Douglas location candidate



   - Turn on the Median Household Income Layer
   - Turn on the Neighborhood Boundaries layer
   - Turn on the Smart Neighborhood Layer and Click on the Red Star in the middle of South Point Douglas neighborhood
   - Click on the Census hyperlink to launch the City of Winnipeg 2011 Census report for South Point Douglas neighborhood.



b. Explore Community Area Level Smart Layers
   - Turn off the Neighborhood Boundaries layer
   - Turn off the Smart Neighborhoods layer
   - Turn on the Smart Community Area layer
   - Zoom out and Click on the Smart Community icon (blue star) in the middle of the Downtown Community area to launch the pop-up information box
   - Explore Smart Community Layers by clicking on the hyperlinks in the pop-up info. box:
     i. ***Census Profile:*** City of Winnipeg 2011 Census Reports

ii. ***Health Profile:*** 2015 WRHA Community Area Profile (derived from the 2014 WRHA Community Health Assessment Report)
iii. ***Youth Health Survey:*** 2012 Youth Health Survey Report for students attending schools in the Community Area

Step 4: Explore On-line Help Resources for Searching and Ground-truthing:

a. Video Tutorials:
    - #4: Using the Search Bar to find clients, places of interest by postal code, street address or facility name
    - #5: Identifying features and linking to external documents through Smart Layers
    - #6: Using Base Maps and Google Streetview to Groundtruth
b. User Manuals:
    - Topic #2: How can I find a location of interest?
    - Topic #6: How can I explore and visualize in detail what is on the ground using base maps and Google Streetview
    - Topic #7: How can I Link to detailed Census, youth Health Survey, and Community Health Assessment reports using Smart Layers

Step 5: Advanced / Additional Exercises (if you have time):

a. Learn how to use the Measure Tool
    - Watch the video on this topic (Video #8: Measuring Distance and Area)

b. Export images from Google Street view:
    - Use the Snipping tool to extract images from Streetview and bring these into a Powerpoint or Word document

Exercise 5:

Extract Data for a Custom Area

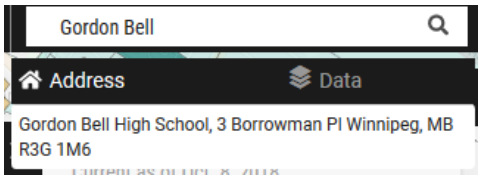
(20 Minutes)

Learning Objectives:

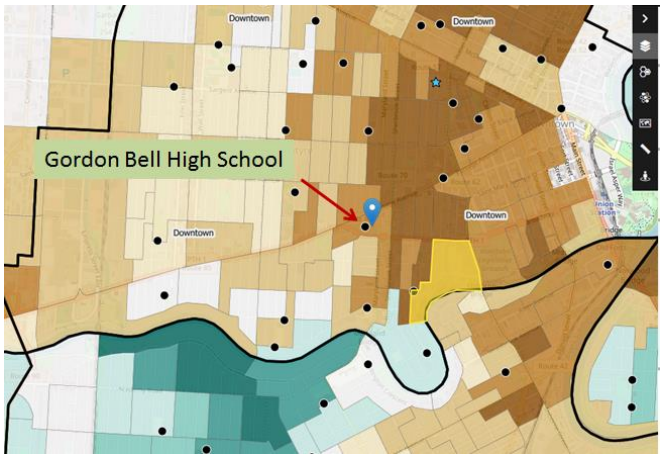
- To learn how to use the query and proximity tools to extract local census data by custom area (buffer or user draw area) or by existing administrative area (neighborhood, Community Area, Electoral District)
- To be aware of the limitations of extracting data using the query and proximity tools:
    - Outputs are good approximations of the actual data in most cases
    - The larger the extraction area, the more accurate the estimates

Step 1: Extract Data for a Custom Area using the Query Tool

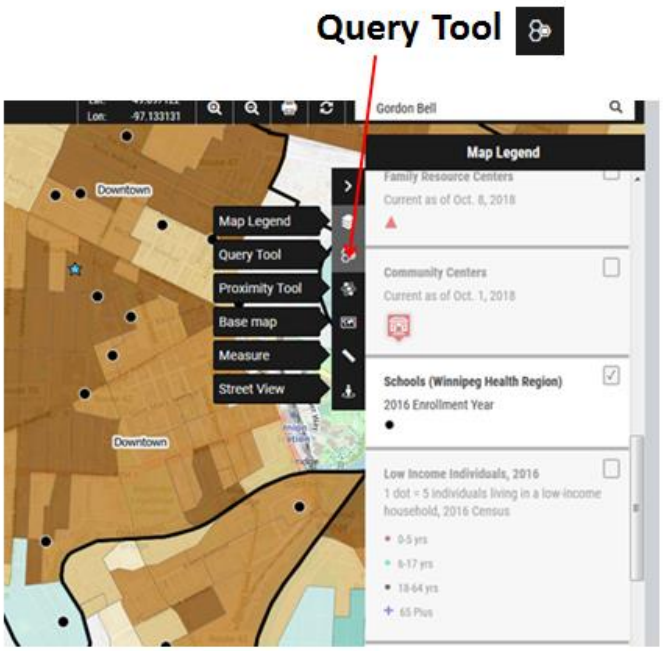
a. Set up the map for analysis:
    - If it not already loaded, launch the ***Winnipeg Community Map***
    - Load the School Layer
    - Ensure the Median Household Income and Community Area layers are loaded
    - In the Search Bar, search for and zoom to Gordon Bell High School



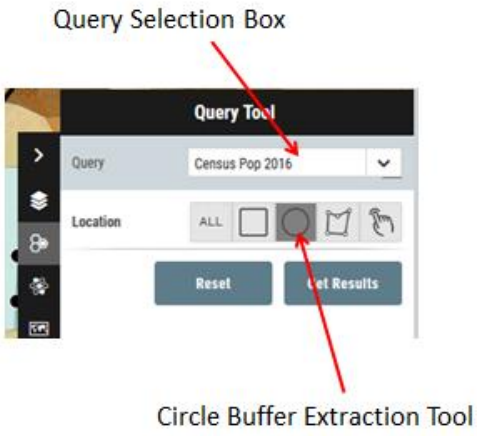
    - Zoom the map out so you can see the larger downtown area as shown



b. Use the Query Tool in order to identify the size of the population living within 1 km of Gordon Bell High School.
    - Launch the Query Tool by clicking on the Query Tool icon as shown:

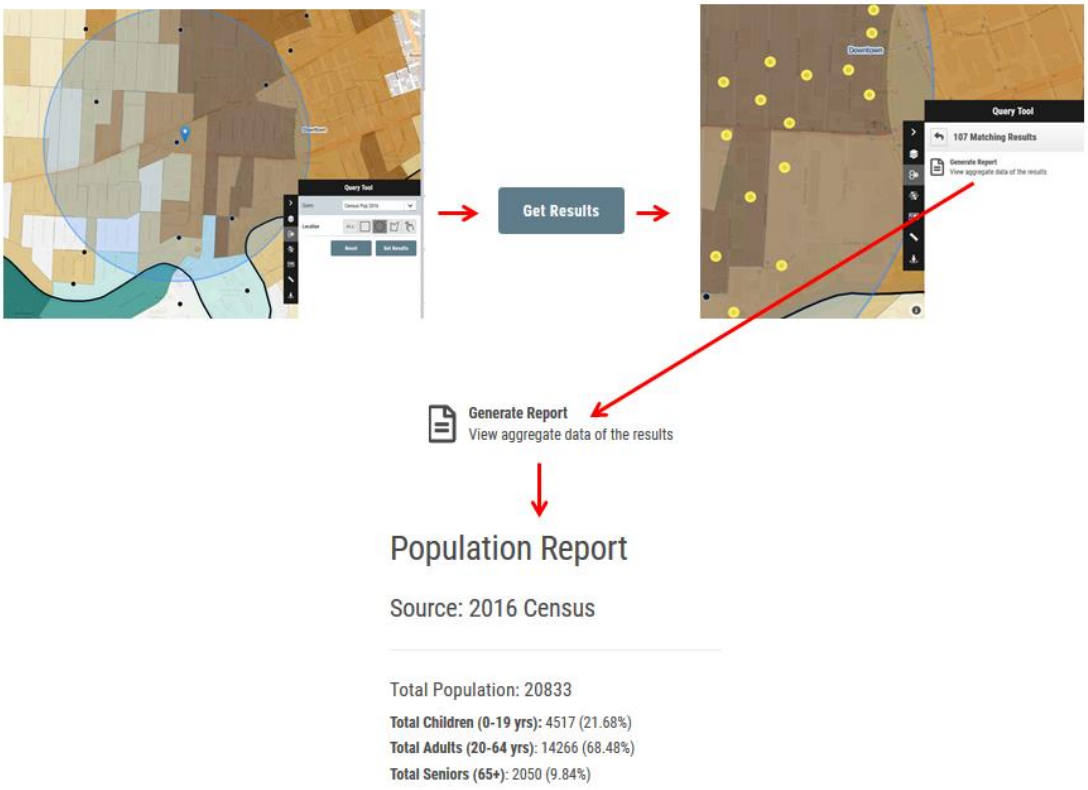


    - Set-up the Query Tool to extract Population data by a circular buffer distance:
        i. In the Query selection box, choose ***Census Pop 2016***



        ii. Click on the ***Circle Extraction tool***, then click and drag out from Gordon Bell High School to draw out a 1 km buffer around the school as shown below. The buffer distance is shown on the edge of the circle.

- Run the Query Tool:
    i. Click on the ***Get Results*** button to activate the query, and then on ***Generate Report*** when the yellow data points have been selected and appear on the screen
    ii. Wait 15 – 45 seconds, and the population report will appear.

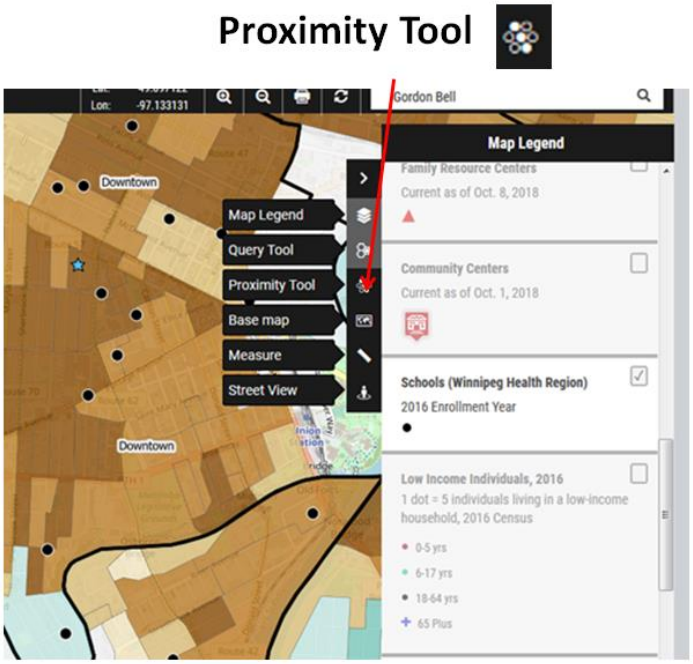


- To cancel and re-set the query, click on the back-arrow keys in the Query Tool box and then click on the ***Reset Button.***

Step 2: Extract Data for existing Geographic Areas (admininistrative boundaries) using the Proximity Tool:

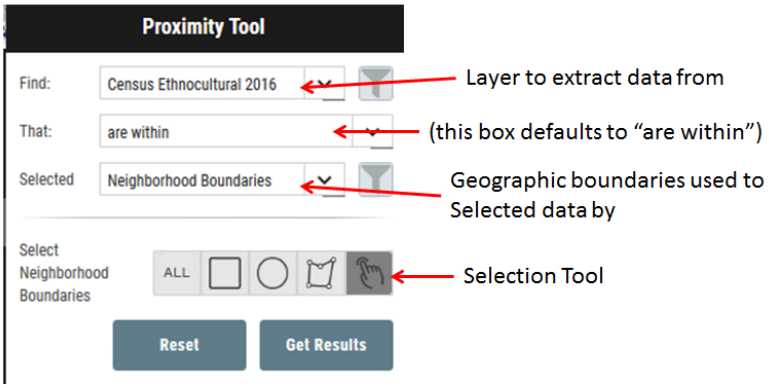
a. Set up the map for analysis:
   - If it not already loaded, launch the ***Winnipeg Community Map***
   - Turn on the Neighborhood Boundary layer, ensuring also that the Median Household Income layer is still loaded
   - Zoom to the downtown area so the neighborhoods of West Broadway, Spence and Danielle McIntyre are visible

b. Use the Proximity Tool to investigate the population characteristics of West Broadway, Spence and St. Matthew neighborhoods combined.
   - Launch the Proximity Tool by clicking on the Proximity Tool icon as shown



   - Set up the Proximity Tool as shown below:
     i. In the ***Find*** drop-down, choose the layer you want to extract data from. In this case, choose ***Census Ethnocultural 2016***
     ii. In the ***Selected*** drop-down, choose the geographic area you want to select data by. In this case, choose ***Neighborhood Boundaries***. When you do this, the ***THAT*** drop down automatically defaults to "***are within***".

This set-up tells the proximity tool to extract those 2016 Census Ethnocultural data points that fall within any Neighborhoods selected in the next step below.



iii. Click on the Selection Tool (pointed finger shape) and then click on neighborhoods on the map to select them. In this example, click on West Broadway, Spence and Daniel McIntyre neighborhoods to select them. Selected neighborhoods will become shaded (red)

- If you want to de-select a selected neighborhood, click on it to de-select.

iv. Once the neighborhoods have been selected, click on Get Results, and then on Generate Report once the data points (highlighted in yellow) have appeared to produce the report for all 3 neighborhoods combined.

Step 3: Know the Limitations of Extracting data using the Query and Proximity Tools:

Demographic estimates generated using the Query and Proximity tools are derived by aggregating data at the Dissemination Area (DA) level to higher level geographies (Community Areas, Electoral Districts, Neighborhoods, user defined areas). DAs are the smallest geographic level for which Statistics Canada provides detailed data (in Winnipeg for example, there are around 1150 DAs). Since the boundaries of DAs do not always perfectly line up with our administrative boundaries or geographic areas of interest that we have created, this can result in some inaccuracies in demographic estimates.

For large geographic areas (Community Areas, Electoral Districts, larger neighborhoods, or large areas we custom draw on the map) these errors will be relatively small; however, in smaller geographies errors in the derived population counts and demographic estimates may result. Although these errors will usually be relatively small in magnitude, the demographic outputs from the query and proximity tools should still be interpreted as rough estimates.

Note also that the 2016 Census under-counts the overall population in Winnipeg by approximately 3-5%, with the under-count in some low-income neighborhoods likely much greater. So this highlights how 2016 census data generally needs to be understood as a rough estimate of reality. See this article for a more precise explanation of why census under-counts occur.

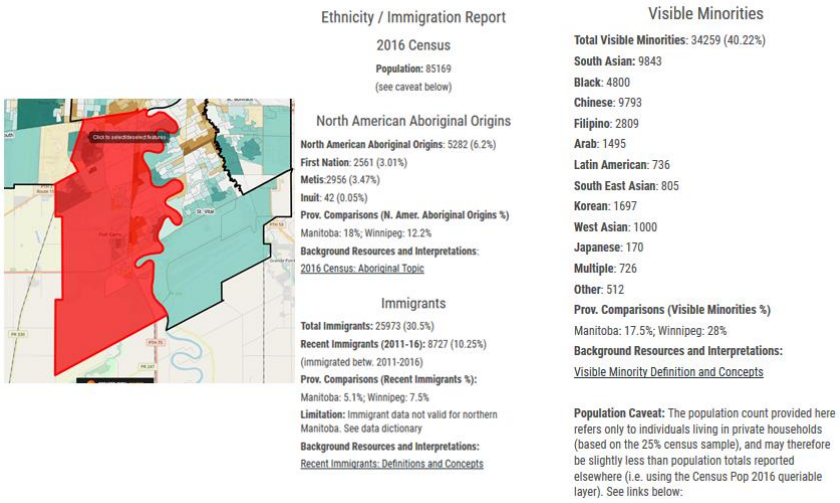
Step 4: Explore On-line Help Resources for the Query and Proximity Tools:

a. Explore the on-line help options for the Query and Proximity Tools:
   - Video Tutorials (navigate to the Video Tutorials Page under Mapping + Dashboards .. Web-Mapping)
     i. #9: Using the Query Tool to Generate Population and Income Reports
     ii. #10 Using the Query Tool to Produce a Custom School Report
     iii. #11 Using the more advanced Proximity Tool to more flexibly Generate Custom Analyses and Reports
   - User Manuals (navigate to the User Manuals page under Mapping + Dashboards .. Web-Mapping)
     i. Topic #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?
     ii. Topic # 11: How can I extract a list of schools and generate a summary report of student counts by grade in a custom defined area within 1 km of a specific address or location?
     iii. Topic # 12: How can I extract a list of schools, and a summary report of student counts by grade with a predefined geographic area such as school division, electoral ward, or neighborhood
     iv. Topic #13: Topic #13: How can I extract features within a custom area defined using the draw/trace tool?
     v. Topic #14: Topic #14: How can I identify the characteristics of people living with a pre-defined geographic area such as electoral ward or neighborhood?

b. Get background information on Queriable Layers:
   - The proximity and query tools extract data for custom areas using Queriable Layers. A detailed description of how these layers are created, and their limitations can be found by navigating to the Queriable Layers page (click on Mapping and Dashboards on main menu, then Web Mapping, then Queriable Layers).

Step 5: Optional/Advanced Exercises (if you have time):

a. Export the results to a Report:
   - Use the Snipping Tool to copy the report results from a Query or Proximity report to a Powerpoint or Word document



Ethnicity / Immigration Report

2016 Census

Population: 85169
(see caveat below)

North American Aboriginal Origins

North American Aboriginal Origins: 5282 (6.2%)
First Nation: 2561 (3.01%)
Metis:2956 (3.47%)
Inuit: 42 (0.05%)
Prov. Comparisons (N. Amer. Aboriginal Origins %)
Manitoba: 18%; Winnipeg: 12.2%
Background Resources and Interpretations:
2016 Census: Aboriginal Topic

Immigrants

Total Immigrants: 25973 (30.5%)
Recent Immigrants (2011-16): 8727 (10.25%)
(immigrated betw. 2011-2016)
Prov. Comparisons (Recent Immigrants %):
Manitoba: 5.1%; Winnipeg: 7.5%
Limitation: Immigrant data not valid for northern Manitoba. See data dictionary
Background Resources and Interpretations:
Recent Immigrants: Definitions and Concepts

Visible Minorities

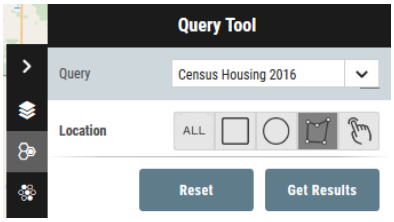
Total Visible Minorities: 34259 (40.22%)
South Asian: 9843
Black: 4800
Chinese: 9793
Filipino: 2809
Arab: 1495
Latin American: 736
South East Asian: 805
Korean: 1697
West Asian: 1000
Japanese: 170
Multiple: 726
Other: 512
Prov. Comparisons (Visible Minorities %)
Manitoba: 17.5%; Winnipeg: 28%
Background Resources and Interpretations:
Visible Minority Definition and Concepts

Population Caveat: The population count provided here refers only to individuals living in private households (based on the 25% census sample), and may therefore be slightly less than population totals reported elsewhere (i.e. using the Census Pop 2016 queriable layer). See links below:

b. Try extracting other population characteristics using the Query and Proximity Tools. Other queriable layers available to produce custom census reports are:
   - Census Housing 2016
   - MB Census Income 2016
   - Census Ethnocultural 2016
   - Schools 2016

c. Instead of extracting data by neighborhood, extract data for other geographic levels such as Winnipeg Electoral District or Community Area

d. In the Query Tool, instead of using the Circular Buffer tool to extract data, try drawing a custom area on the map using the Draw Tool (highlighted below). Specific instructions on how to use this tool can be found in **Topic #13: How can I extract features within a custom area defined using the draw/trace tool?** in the user manuls



Exercise 6:

Use Dashboards to Extract Demographic Data

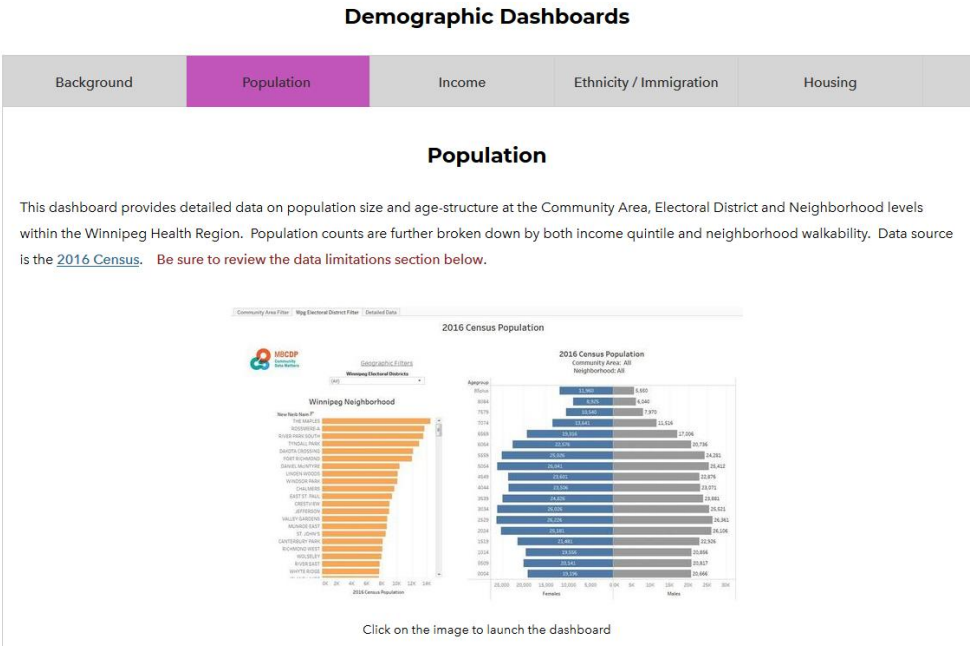
(15 minutes)

Learning Objectives:

- *Learn to how manipulate Tableau Dashboards*
  - *Filtering Data*
  - *Re-Setting a dashboard*
  - *Exporting outputs to Powerpoint or Word for reports or presntations*
  - *Exporting Data in Excel Format*
- *Awareness of current data limitations of census data provided through dashboards*

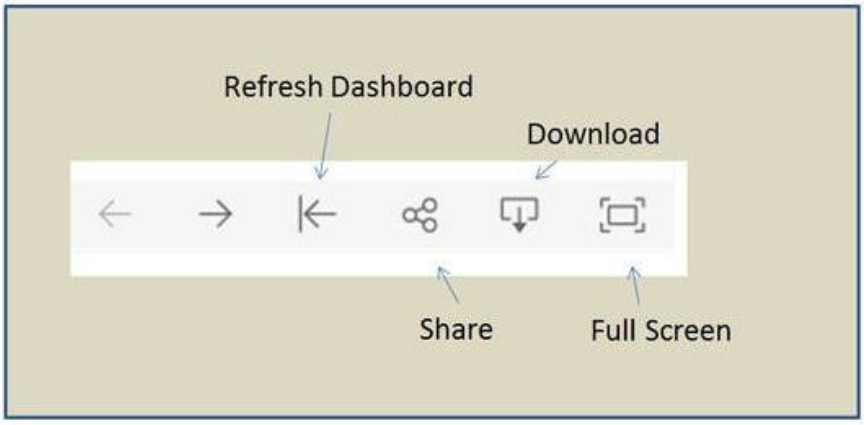
Step 1: Explore 2016 Census Population Profiles for the Winnipeg Community Areas, Neighborhoods and Electoral Districts

a. Launch the Population Dashboard:
   - Navigate to the Demographic Dashboards page (click on Mapping and Dashboards on main menu, then Demographic Dashboards)
   - Click on the Population tab
   - Click on the dashboard image to launch the interactive population dashboard



b. View Population data only for the Downtown Community Area, and the Sargent Park neighborhood:
    - Click on the Community Area filter drop down
    - Unclick the ALL box and now only Neighborhoods in downtown Winnipeg will appear
        i. The population pyramid on the right shows the population for all Downtown Community Area neighborhoods combined
    - Click on the Sargent Park neighborhood in the left hand bar chart
        i. The population pyramid on the right now show the population only for Sargent Park
    - Click on the Detailed Data tab at the top of the dashboard to see more detailed demographic data about the Sargent Park neighborhood
    - **Note that all geographic selections you make are reflected in the chart and table titles.**

c. To clear the Dashboard to its original State:
    - Click on the Refresh Dashboard icon at the bottom of the screen
    - All previous data selections will now be removed and you can start a new analysis

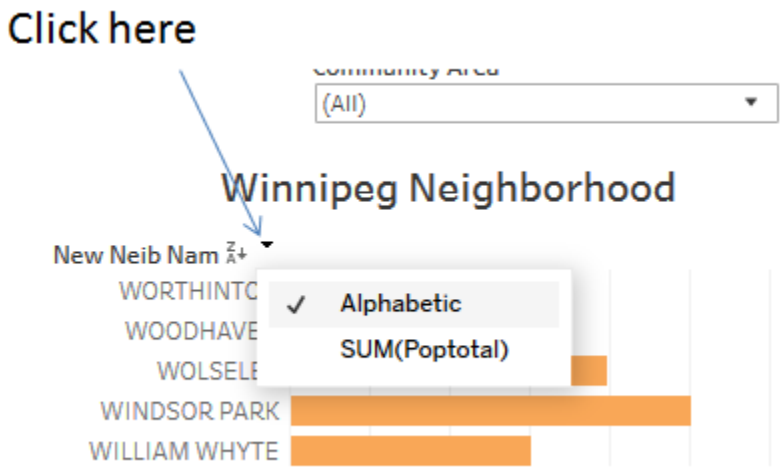


d. To Export an image of the dashboard:
    - Use Snipping Tool, ***or alternatively***
    - Click on the download icon at the bottom of the screen and click either Image (for a .png graphics file) or PDF for an Adobe Acrobat file).

e. To export the underlying data for a dashboard object:
    - Click on the title of the object
    - Click on the Download Icon and choose Crosstab and then Download.
        i. This will result in a .csv file being downloaded to your computer that you can open with Excel

f. To filter data by Electoral District instead of Community Area, click on the Winnipeg Electoral District Filter tab.

g. To sort neighborhoods on the left hand graphic in alphabetical order (to make it easier to find a specific neighborhood):
   - Click on the small AZ icon to the right of New Neib Nam on the chart
   - Choose Alphabetic for sorting



Step 2: Be Aware of the Current Data Limitations of these Population Data

- Population Undercount: The 2016 Census under-counts the overall population in Winnipeg by approximately 3-5%. In some low-income neighborhoods the population under-count may be as great as 10%. See this article for a more precise explanation of why census under-counts occur.
- Population Counts are Estimates derived at the Dissemination Area Level: Population counts provided here are estimates derived by aggregating data at the Dissemination Area (DA) level to higher level geographies (Community Areas, Electoral Districts, Neighborhoods). DAs are the smallest geographic level for which Statistics Canada provides detailed data. The boundaries of DAs do not always perfectly line up with our administrative boundaries and this can result in some inaccuracies in population counts. **For large geographic areas (Community Areas, Electoral Districts, larger neighborhoods) these errors will be relatively small; however, in smaller neighborhoods there may be larger errors in the population counts and these must therefore be interpreted as rough estimates.** For the most part population counts at the neighborhood level align closely to preliminary population estimates provided by Statistics Canada (median total population difference at the neighborhood level of 35, or 1.4% difference on average).
- ***Once we receive our custom census data for neighborhoods, electoral wards, and community areas, this dashboard will be updated with more exact information (hopefully in the summer of 2019).***

Step 3: Additional/Advanced Exercises (If you have time):

a. Explore the Housing Dashboard located in the Housing and Homelessness Portal