UNIVERSITY OF WATERLOO

SimplyMap 3.0 Canada Tutorial

SimplyMap Canada is a web mapping application developed by Geographic Research Inc. The application enables users to create thematic maps and reports using demographic, business, and marketing data on-line. In this tutorial, you are going to create a few thematic maps and a ranking report for the area of the City of London, Ontario.

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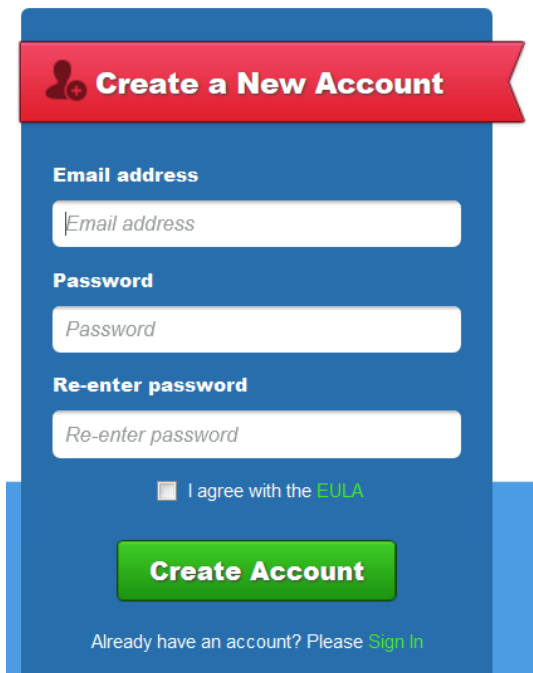
o   Cite data or map from SimplyMap

Get Started with SimplyMap 3.0

If you are off campus, first go to Waterloo Library Homepage (http://www.lib.uwaterloo.ca/) and click Connect from Home on the left side.

1. Go to University of Waterloo Library Homepage, on the top left side, click Resources for Research, select Research Database, go to Browse Research Databases by Title and select S, Scroll down to find SimplyMap Canada. Double click the item. This will bring you to the website.

2. The welcome page should look like image below. If you are a returning user, you can go ahead and login with your e-mail address and password.
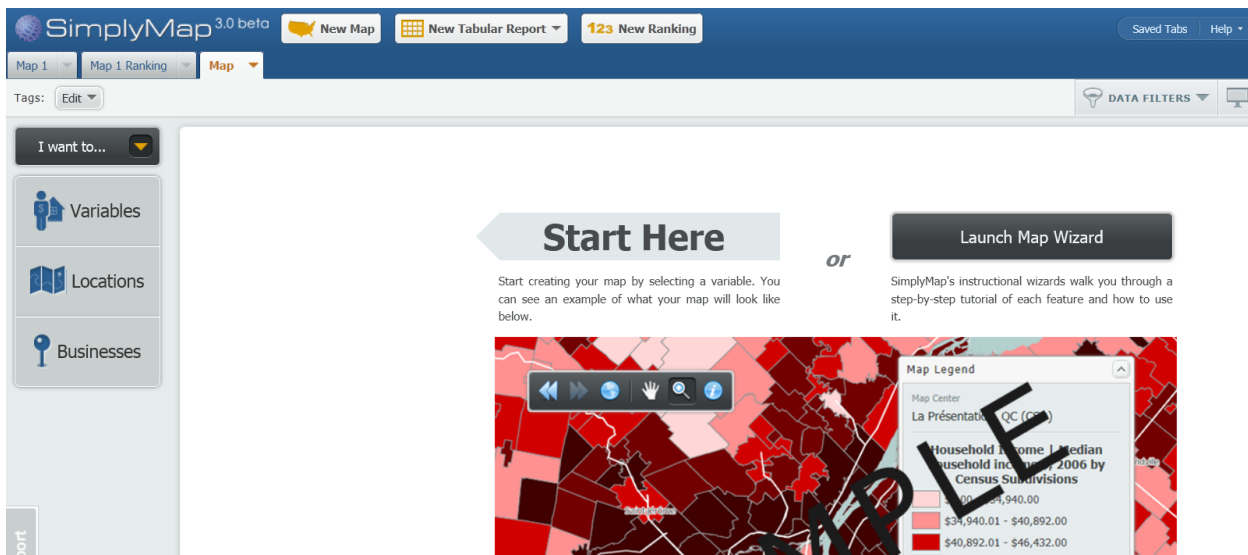
3. If you are a first time user, you will need to create a new account. Click **create an account**, this will bring out a new window. Fill in all the required information and click **Continue** to finish the registration process. (Note: a personal e-mail is fine). Make sure you agree to the EULA. Remember that whether you read it or not you are bound to it! But, it should not really affect you.

4. When you log in with your new account, you will see a starting page as below (formatting might have issues when not using Internet Explorer, but it should still be usable for the most part.)

Create a thematic map

You are going to create an interactive map showing the average household expenditure on dental services in the City of London, Ontario in 2010. To do that, you need to find this variable: **average household expenditure on dental services** and define a location as **City of London**.

5.   You   are   going   to   create   a   new   map.   Click   the   New   Map   Tab.



6. Browse and select the data variable in several steps.

Step a: Click Variables label on the top left to open up the Variables panel.
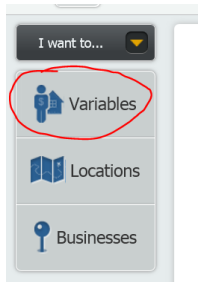
Step b: In the panel, click **Household Spending** under **Categories.**

Step c: Choose a date, we will click the + to the left of "**In 2006 Geographies**". Then click the + beside Health Care, then click **Direct Costs**.

Step d: Browse all the direct costs variables and find the variable *Average Spending –Dental services* (near the bottom).
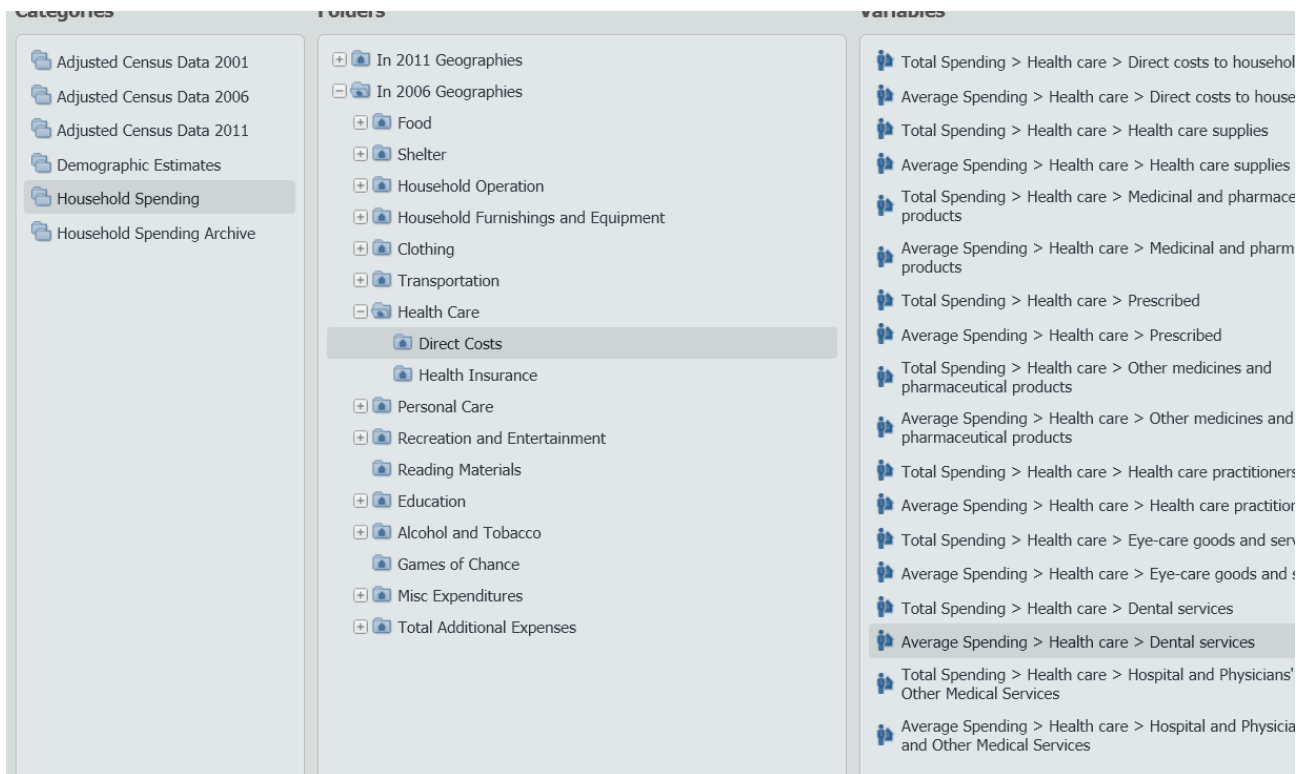
Step e: Move your mouse over the variable, the Action Menu will appear. **Select variable year** as "2011" which will automatically use this variable for that specific date (a popup will immediately appear on the bottom left, telling you the data was added). The selected variable is added to the active map. If you do not select a variable year, clicking **Use This Variable** assumes you want the most recent available data.
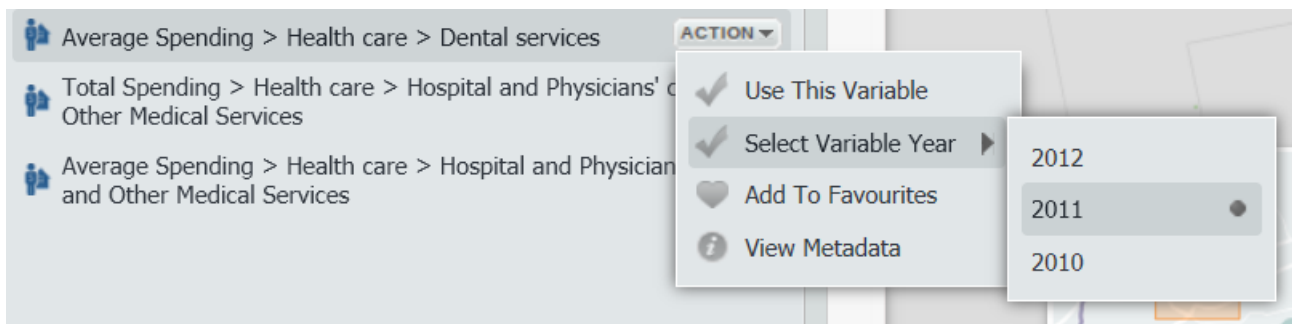
7.   Alternatively, you can search and add the same variable by following a few steps.

Step a: Open the Variables Panel and click **Search**. This will open up a search panel.
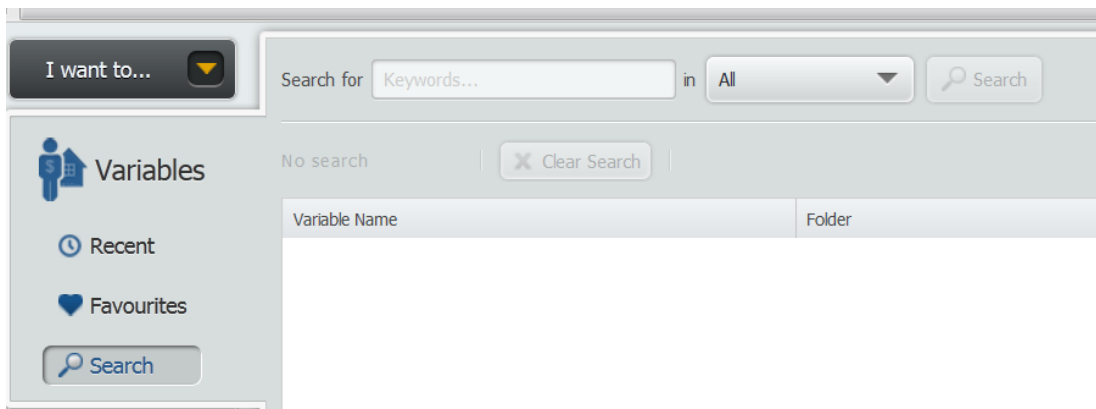
Step b: Enter a keyword 'Dental' in the search panel and click **Search.**

Step c: The search returns a result of 4 variables, including 'average spending household on dental services**'.**

Step d: Move your mouse over the variable under the 2006 category, the 'Action' menu will appear. Use this menu to view metadata and select variable year as 2011. This variable will be added into the active map.
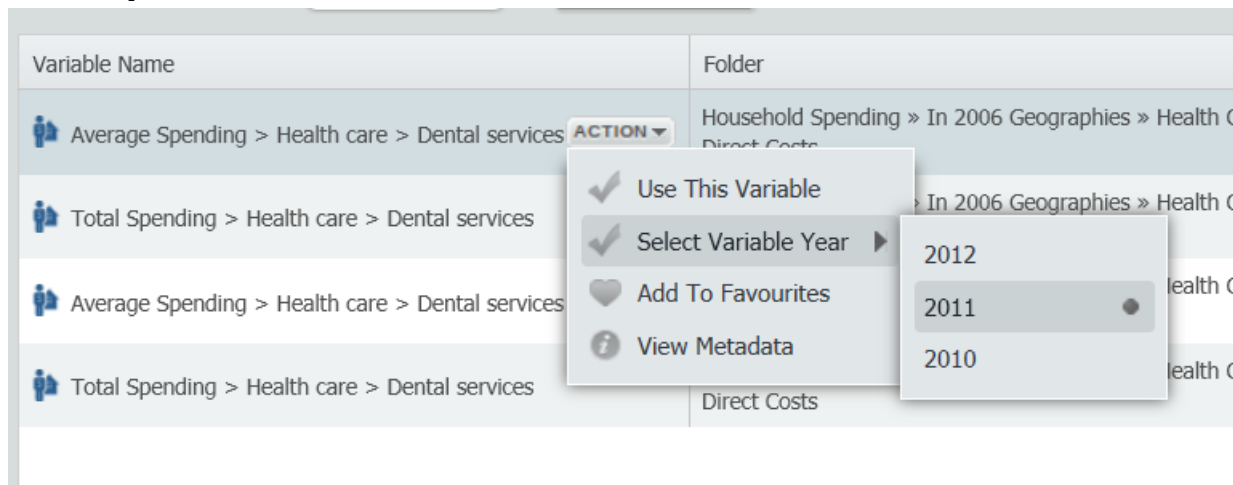

8. Now you are going to add a location, City of London (a census subdivision) by following several steps.

Step a: Click **Locations** button on the top left to open up the Locations panel.
Step b: Set **Find location by** to 'census subdivisions'
Step c: Select province as Ontario
Step d: Next you are going to select a census subdivision (like a city) in Ontario. As you are typing in 'lo', the auto-complete feature will suggest some location names. From the suggestions, select London, ON (CSD).
Step e: Once you have selected the location, click **Use This Location** and then close the location panel using the X on top right of the panel.
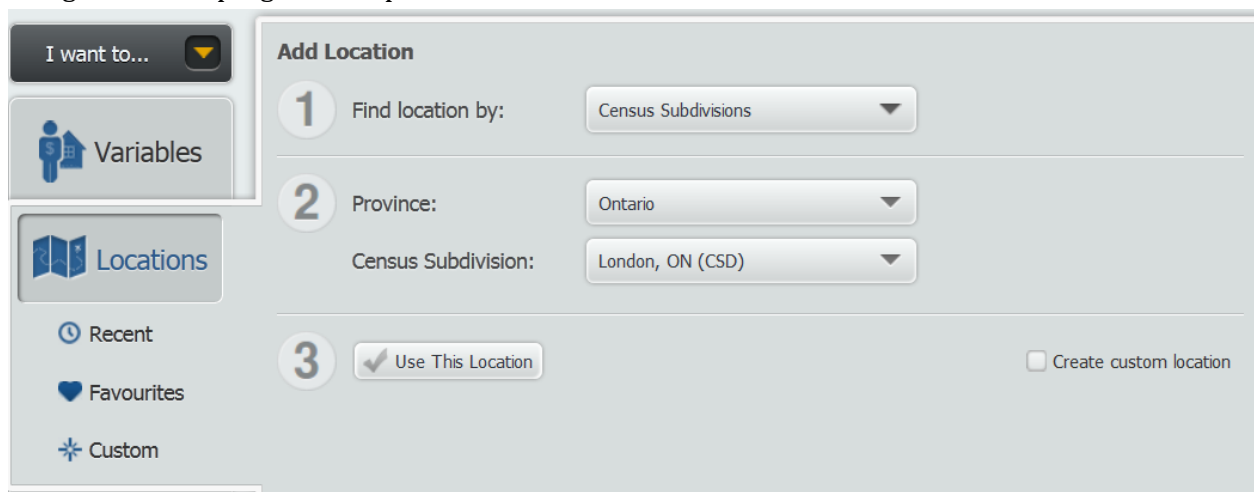
9. The map you just created will look like similar to below (if it looks different, check to see if you are viewing data by Census Tracts, which can be changed below the legend).
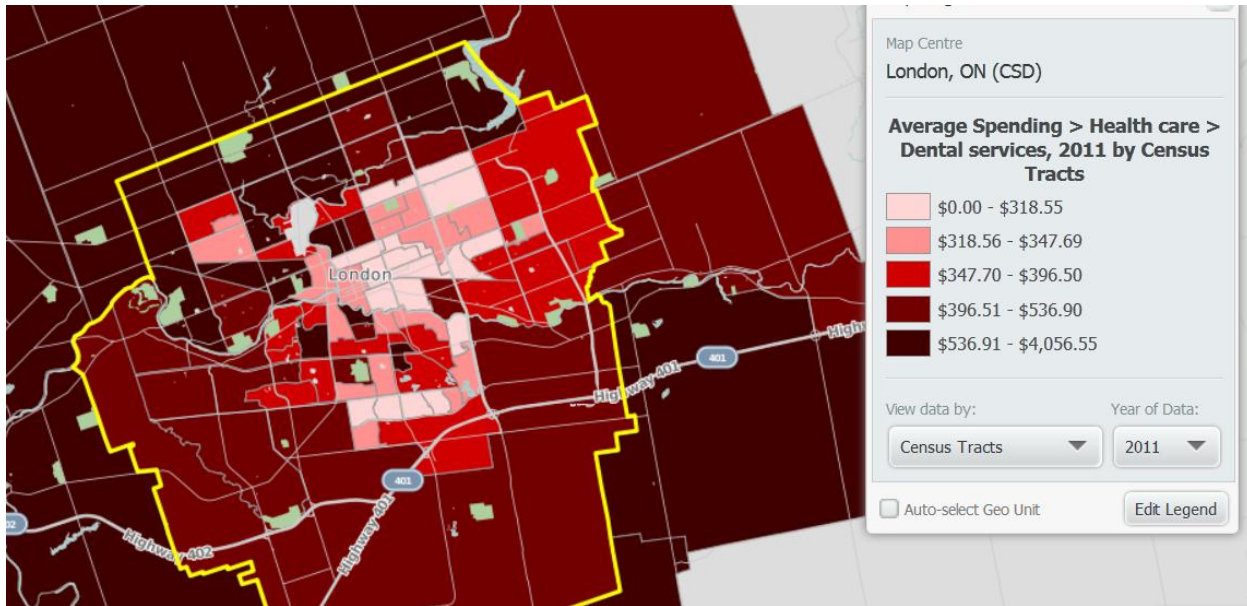
Customizing the map

You can adjust map view zoom level, change the geographic unit, add or remove roads and other features and modify the legend color by using the map toolbar.

10. Browse the map with map toolbar. The map toolbar includes 6 controls:

Back (Left Arrows) - Click to display the previously viewed location.

**Forward (Right Arrows)** - Click to display the next viewed location. (Only usable after going back)

Zoom to Canada (Globe) - Click to zoom out to view the entire country.

Pan (Hand) - Click this icon and then click and drag the map to a new location.

Zoom Box (Magnifying Glass) - Click this icon and draw a box around the area you wish to zoom

Get Info / Add to Favorites (i) - Click this icon and then click a specific location on the screen. The name of the selected geographic unit will appear briefly on the screen and will be added to your Favorite Locations list.

11. Change the display geographic unit. You will change the unit from Census Tracts (CT) to Dissemination Areas (DA). To do that, click **View Data by** in Map LEGEND to show a dropdown list and then select Dissemination Areas.
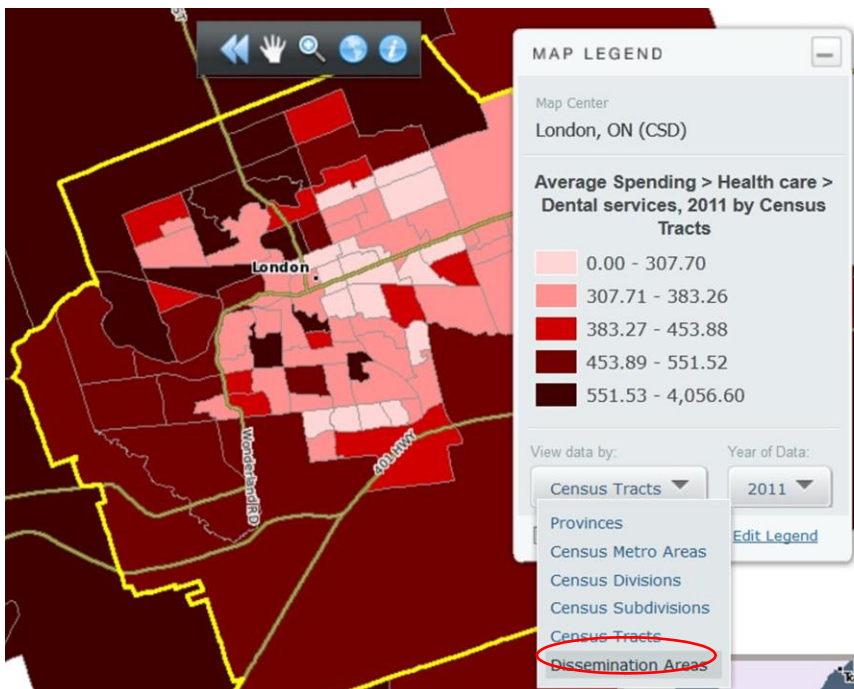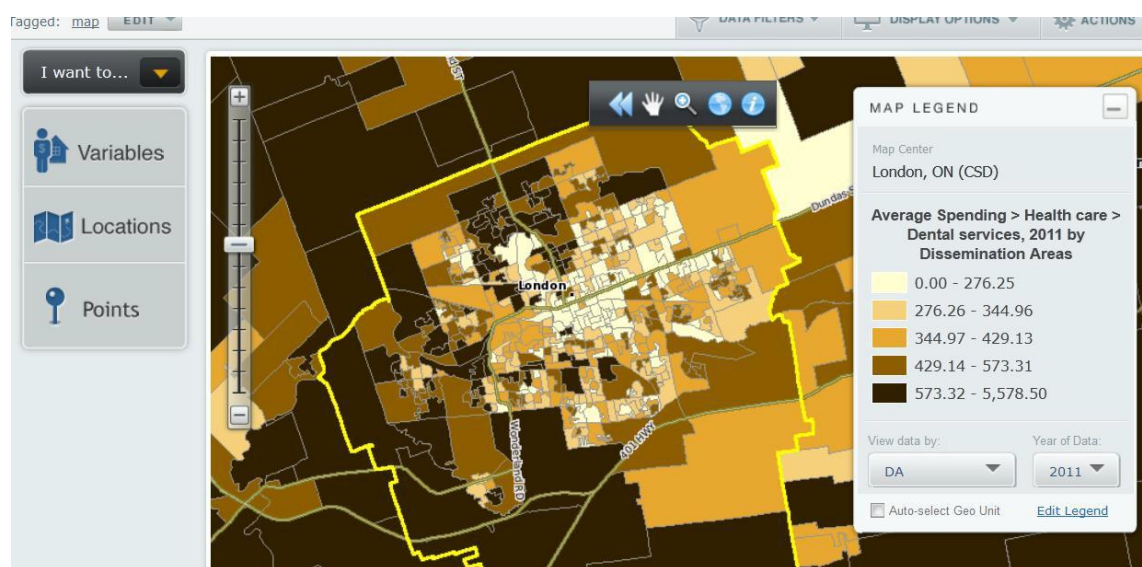
12. Modify the legend. Click 'Edit Legend' in the Map Legend, this will bring out the Legend Editor.
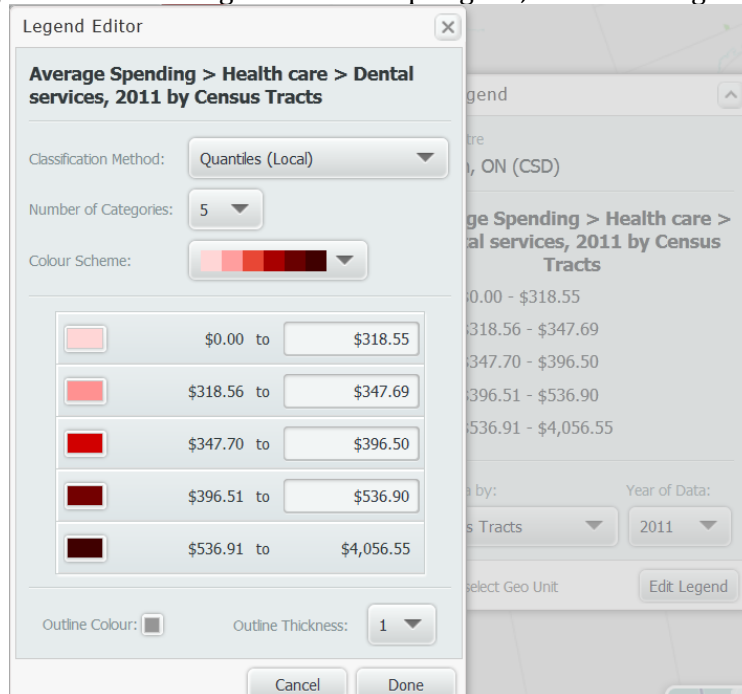
13. Change classification method and color scheme. You can change the classification method to Quantiles (local) and Color Scheme to 'light yellow to dark brown'. Click 'Done' to confirm the changes.
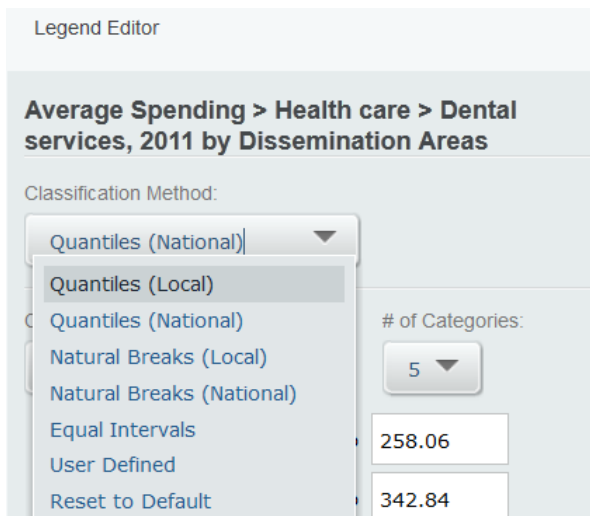
The modified map will look like one below.

Create a data filter

You can create, save and manage filters in SimplyMap. When a filter is applied, the locations that do not meet the filter criteria display in white (cross-hatched).

14. You are going to create a data filter to show top 20% DAs with average expenditure on dental services exceeding $550 in 2011 by following a few steps.

Step a: click **Data Filters** (located on top right) to show the menu, then click **Create New filter...**
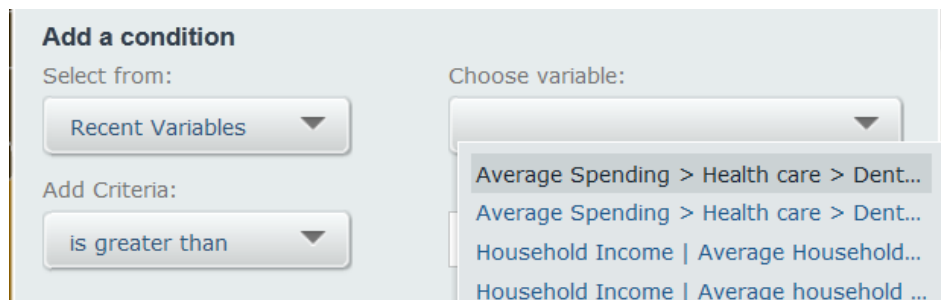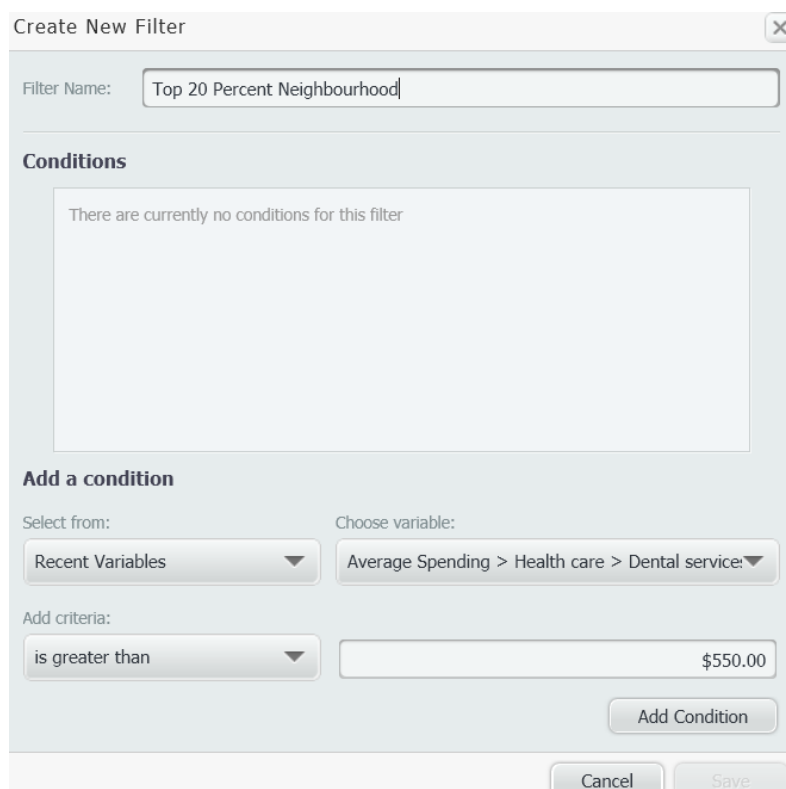
Step b: Select from 'Recent Variables' and choose this variable 'Average Expenditure – Dental services, 2011'.

Step c: Set the parameter as 'is greater than' in **Add Criteria** and enter a value '550' in the text box.
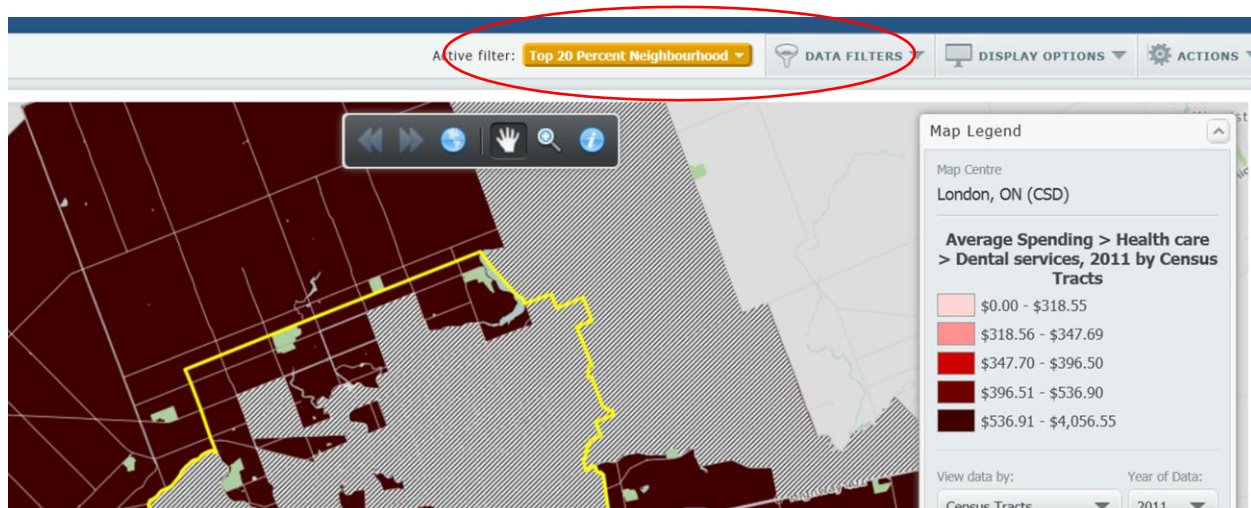
Step d: Click Add Condition (on bottom). This will add a new filter statement under **Conditions**.

Step e: Assign a Name 'top 20 percent neighbourhood' for the filter statement.

Step f: Click **Save.** This applies the filter.

15. When the filter is applied, the map looks like below.

There are a few changes on the map view:

- To the left of the Data Filters button, the name of the filter will display, along with a dropdown list to Edit or Remove the filter.
- Areas on the map that meet the filter criteria are shown in color, while those do not appear cross- hatched.

Add points to the map

SimplyMap Canada has subscribed to Dun & Bradstreet (D&B) Canada Business Directory which has over

1.1 million points-of interest. These points can be queried and displayed on a map.
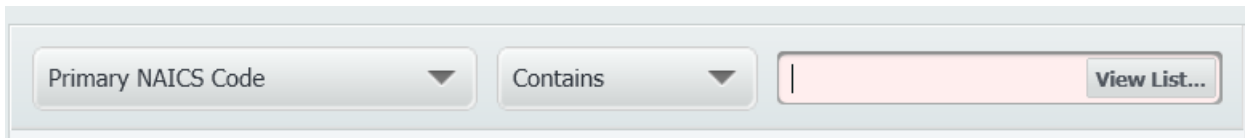
16. Now you will add the locations of dentist offices into the map by following a few steps.

Step a: Click '**Businesses**' on the top left to open up the '**Businesses**' panel.
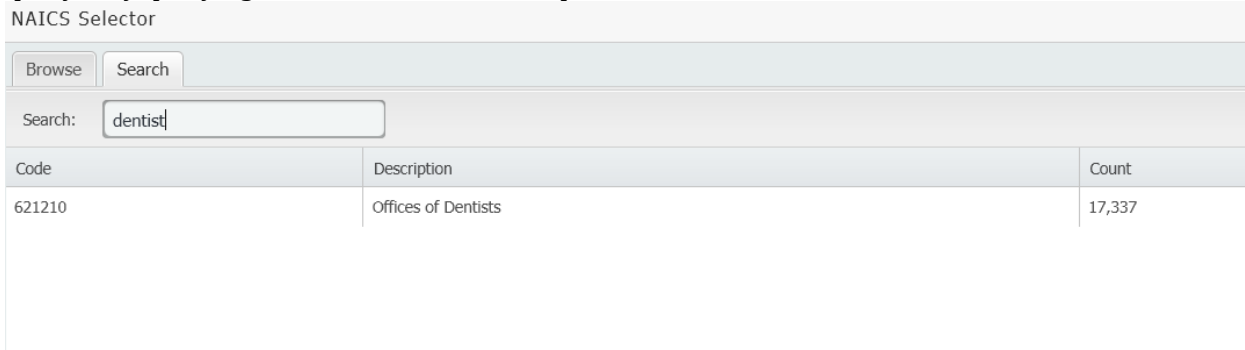
Step b: Click *Find Businesses...*

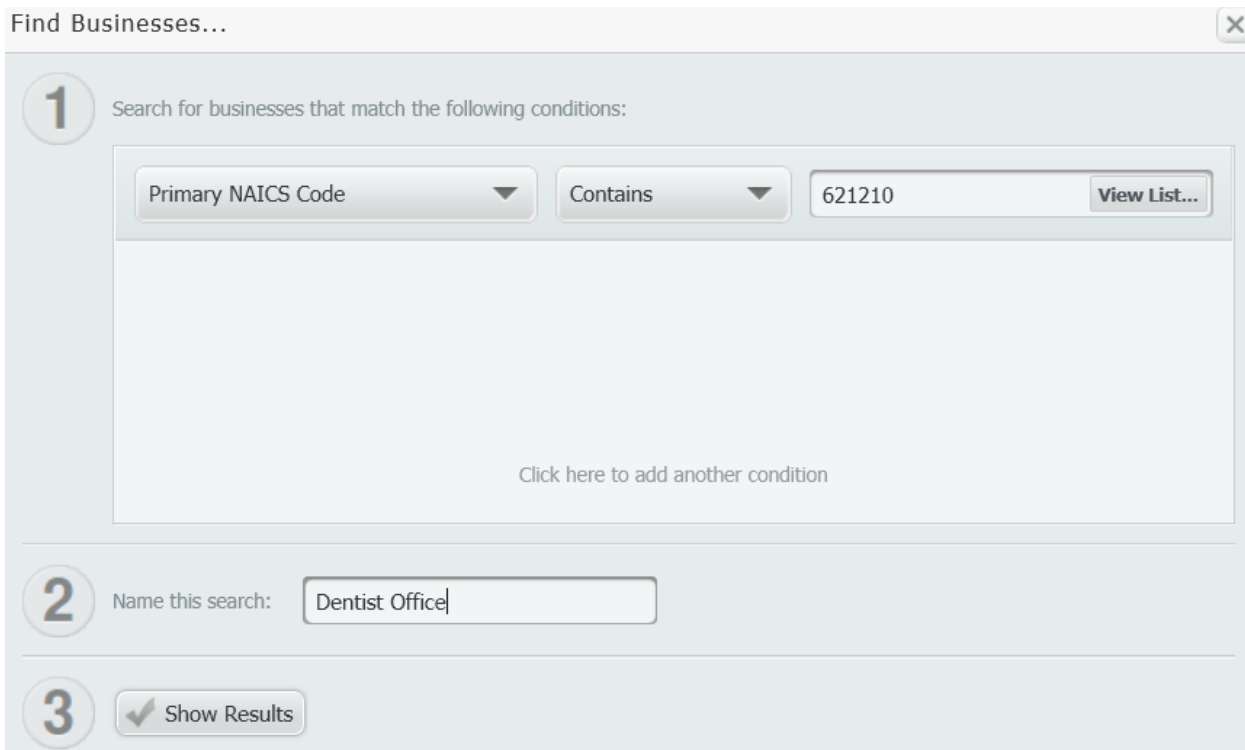Step c: Click the first drop down list saying "Legal Name" and change it to Primary NAICS Code.

Step d: Click "View List…" and this should open a new window. Click the search tab on top and make a query. Try querying for "dentist" in this example.

Step e: You should see the Offices of Dentists show up with the code 621210. Hover over the code, click Action… then Use this Code.

Step f: Assign a name 'Dentist office' to the point and Click **Show Results**.   You should now see the

Dentist Offices marked on your map.

17. The updated map is shown below. The size of each circle represents a cluster of dental offices

around a location. The actual number is given inside each circle which is proportional to its size.
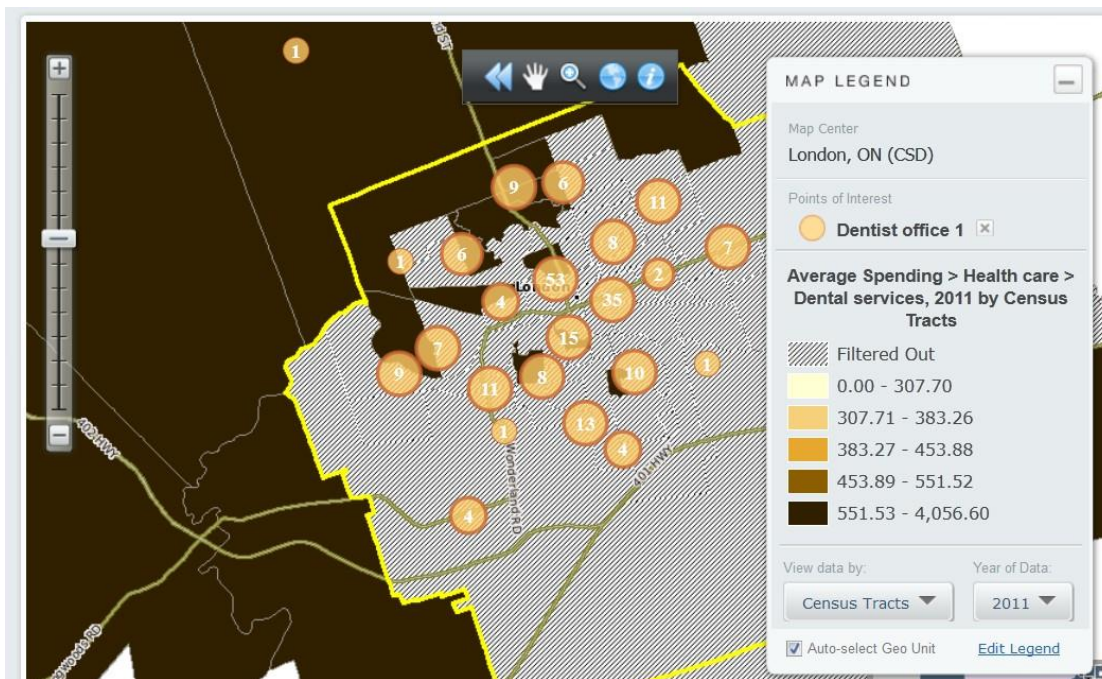
Create a ranking report

You can create a ranking report identifying the wealthiest neighborhood in the City of London. You can use the Ranking Report Wizard. Click 'I want to' menu to select 'Rank locations based on a variable'. This will activate a step-by-step wizard to create a report.
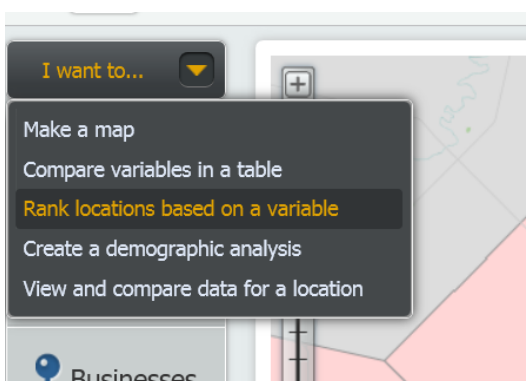
The easiest way however to create a ranking report first is from your map and then make some changes later (e.g. the location, variable or geographical unit).

18. Create a ranking directly from map. Click the Map tab that you just created and go to ACTIONS menu and select **Make Ranking from Map**.
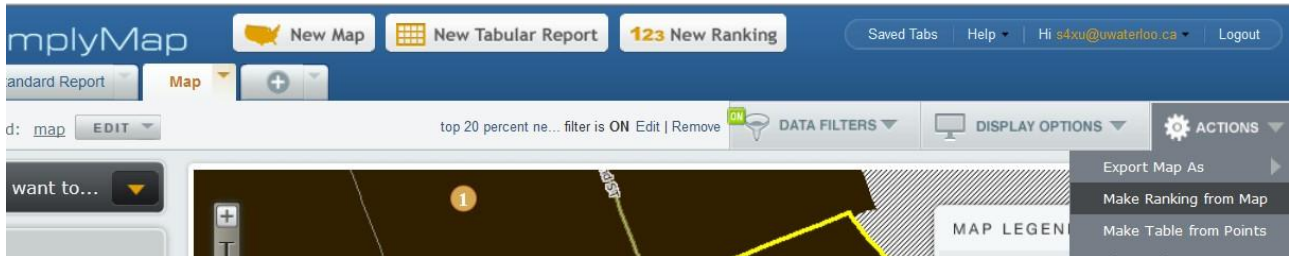
19. After selecting **Make Ranking from Map**, a new Ranking Tab will appear.
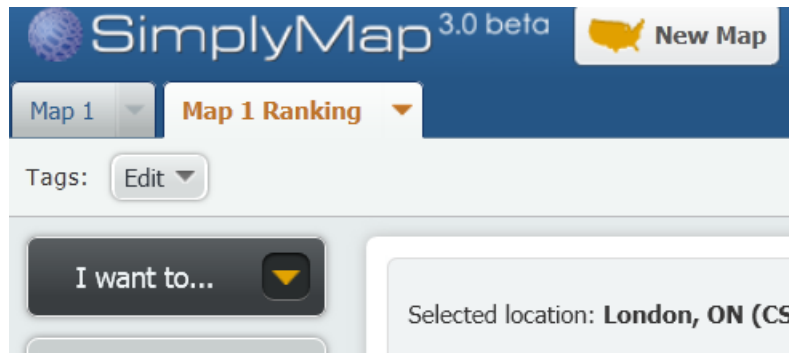
20. You will look for a variable (average household income) which can show the wealthiest neighborhood (CT) by following a few steps.

Step a: Click Variables label on the top left to open up the '**Variables'** panel. Step b: Click **Search.** This will

activate a search panel.

Step c: Enter 'Household income' in the text box and click Search. The search result will bring out a list of variables.

| Variable Name	Folder	Source	Popularity
Household Income | Median Household Income (Current Year $)	Demographic Estimates » In 2006 Geographies » Household Income » in Current Year Dollars		★★★★★
Household Income | Average Household Income (Current Year $)	Demographic Estimates » In 2006 Geographies » Household Income » in Current Year Dollars		★★★★★
# Household Income | Household Income 100000 or Over (Current Year $)	Demographic Estimates » In 2006 Geographies » Household Income » in Current Year Dollars		★★★★★
% Household Income | Household Income 100000 or Over (Current Year $)	Demographic Estimates » In 2006 Geographies » Household Income » in Current Year Dollars		★★★★★
Household Income | Median household income $	Adjusted Census Data 2006 » In 2006 Geographies » Household Income		★★★★★
Household Income | Average household income $	Adjusted Census Data 2006 » In 2006 Geographies » Household Income		★★★★★
# Household Income | Household Income 60000 to 69999 (Current Year $)	Demographic Estimates » In 2006 Geographies » Household Income » in Current Year Dollars		★★★★★
% Household Income | $100,000 and over	Adjusted Census Data 2006 » In 2006 Geographies » Household Income » After Tax Income		★★★★★
% Household Income | $100,000 and over	Adjusted Census Data 2006 » In 2006 Geographies » Household Income		★★★★★

Step d: Find the variable 'Average Household Income' for 2006 geographies. Move your mouse over it, the Action Menu will appear. **Select variable by year 2011**, this will replace the variable in the ranking report.

Step e: Close the search Panel by clicking the ☒ icon to view the updated report.
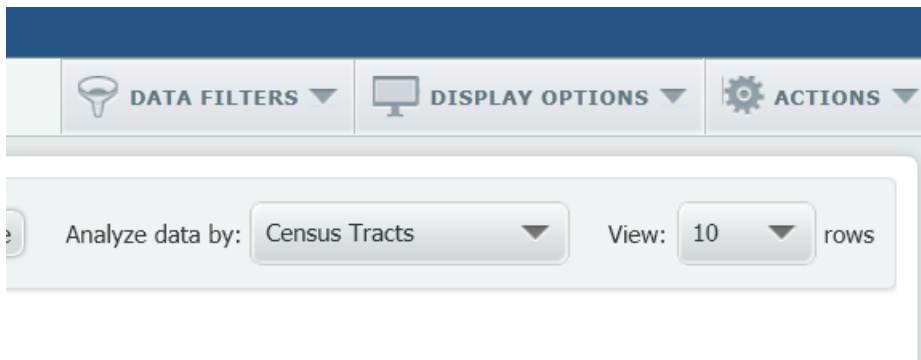
21. Census Tract (CT) is commonly used to represent a community. Now you want to change the geographic unit from DA to CT. Click '**Analyze by'** and select 'Census Tracts'.

22. Sort the household income from high to low. Move your mouse over the variable, the Action Menu will appear. Click 'Sort Descending', this will rearrange household income from high to low.

23. You will also see the option to '**Create chart**', allowing you to create a chart showing the top 10 CTs with highest household income.
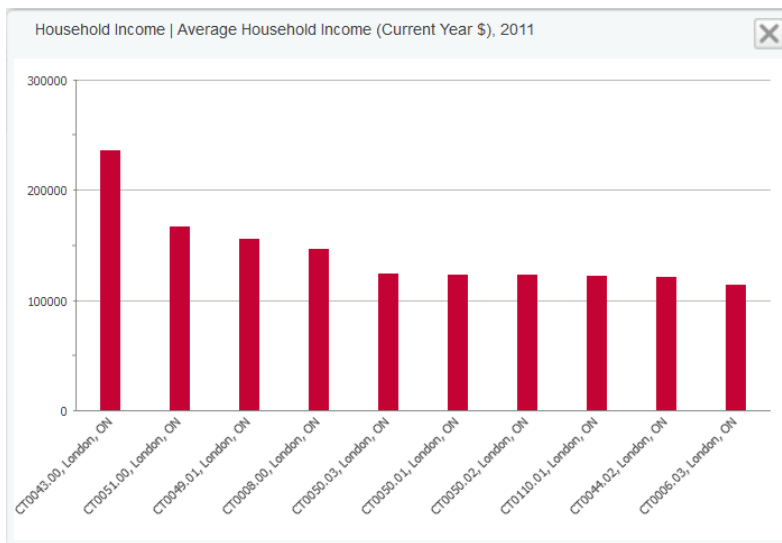
24. If you would like to see one of top 10 high household income neighborhoods in a map, move your mouse over the CT. The Action Menu will appear. Click 'Create Map'.
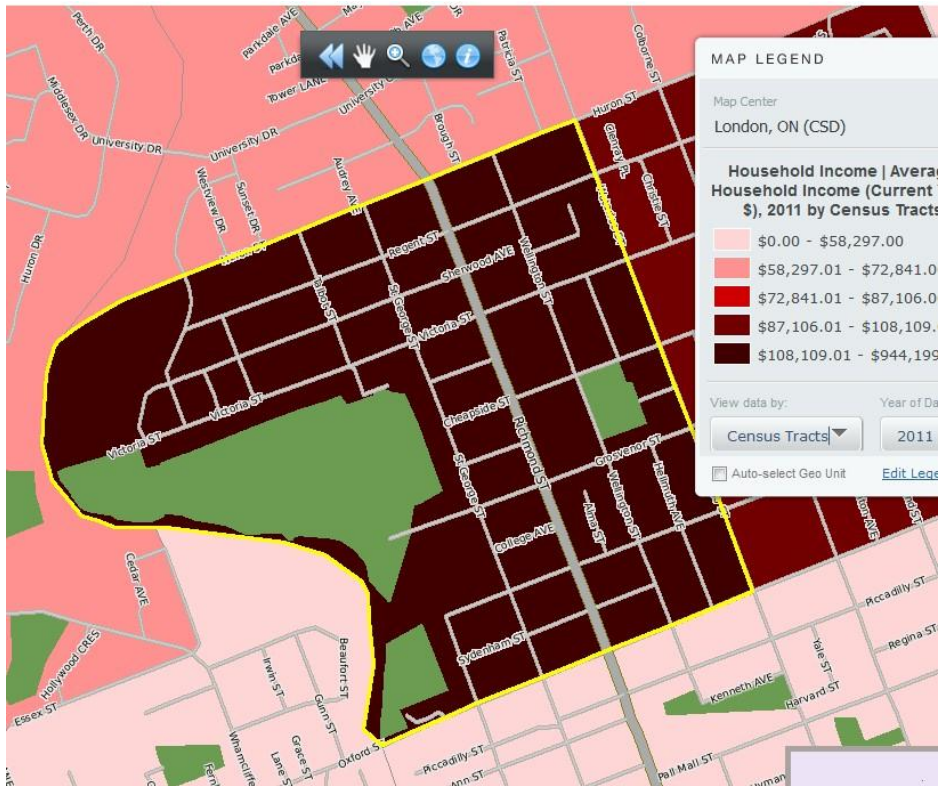
Rename and share the map tab

You can rename your map tab to a meaningful name then share it with other SimplyMap Canada 3.0 users.

25. Rename a map tab by following a few steps.

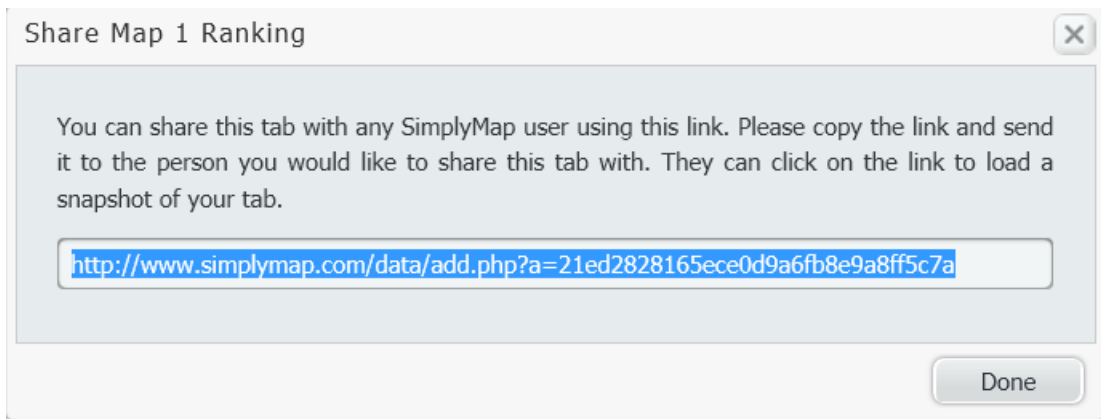Step a: Click the dropdown menu and select 'Rename…'.

Step b. Enter a name 'High income neighbourhood' in the text box and click 'Save'.

26. Share the map tab by following a few steps.

Step a: Click the dropdown menu and select 'Share...'

Step b: Copy the link and send it to another user.

Step c (for the recipient): Click on the link and log in with your SimplyMap Canada account.

Export the map

You can export your map as a high-resolution GIF or PDF graphic file. The image can be attached to an email, inserted it into a report, or posted on a blog.

27. To export the map out by following a few steps:

Step a: Go to **Actions** menu and select Export Map Image... This will bring out an Export window.
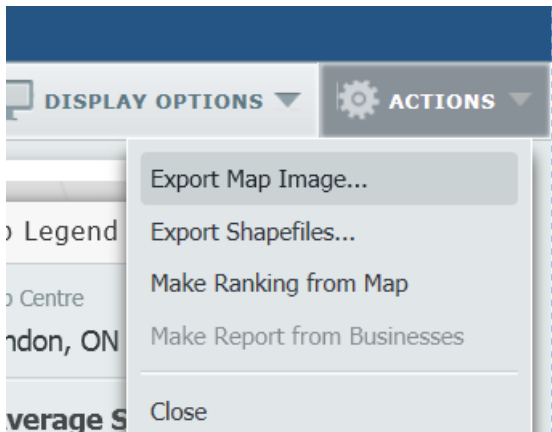
Step b: In the Export Map window, use the crop box to choose what part of the map you want to include in the export. Choose whether or not you want the orientation to be Landscape or Portrait, as well as pic the standard size for the width to height ratio. It's probably best to leave it on Letter if you are unsure. Once you are done, click Continue to Layout.
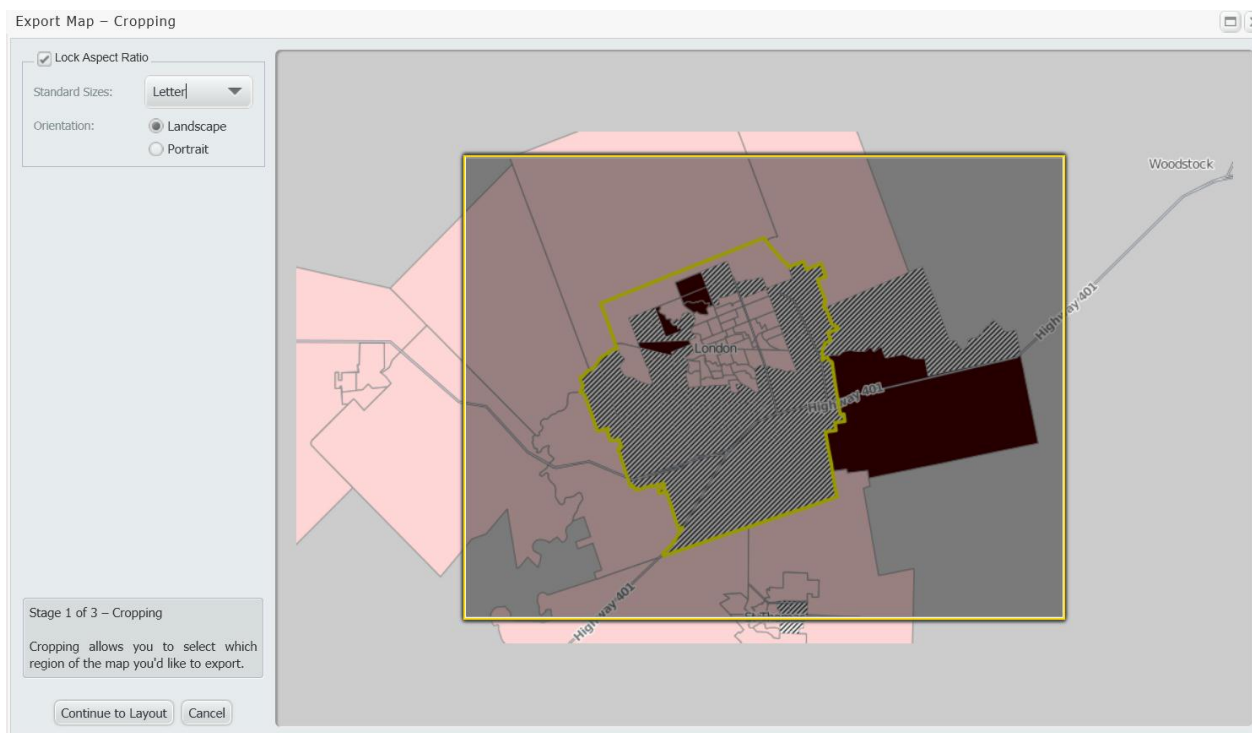
Step c: In the Layout window, you can better format the map as well as change up the design to your preferences. You can change the size of the paper, the orientation, and decide which elements to show, such as the Legend or Scale bar. You may also add text labels of your own using the Add Text Label… button. You may drag and drop, as well as resize, any element on the page by clicking and dragging the edges and corners of elements, or the elements themselves. When you select an element, you may rescale them by specific values instead. When you are done, click Continue to Export.
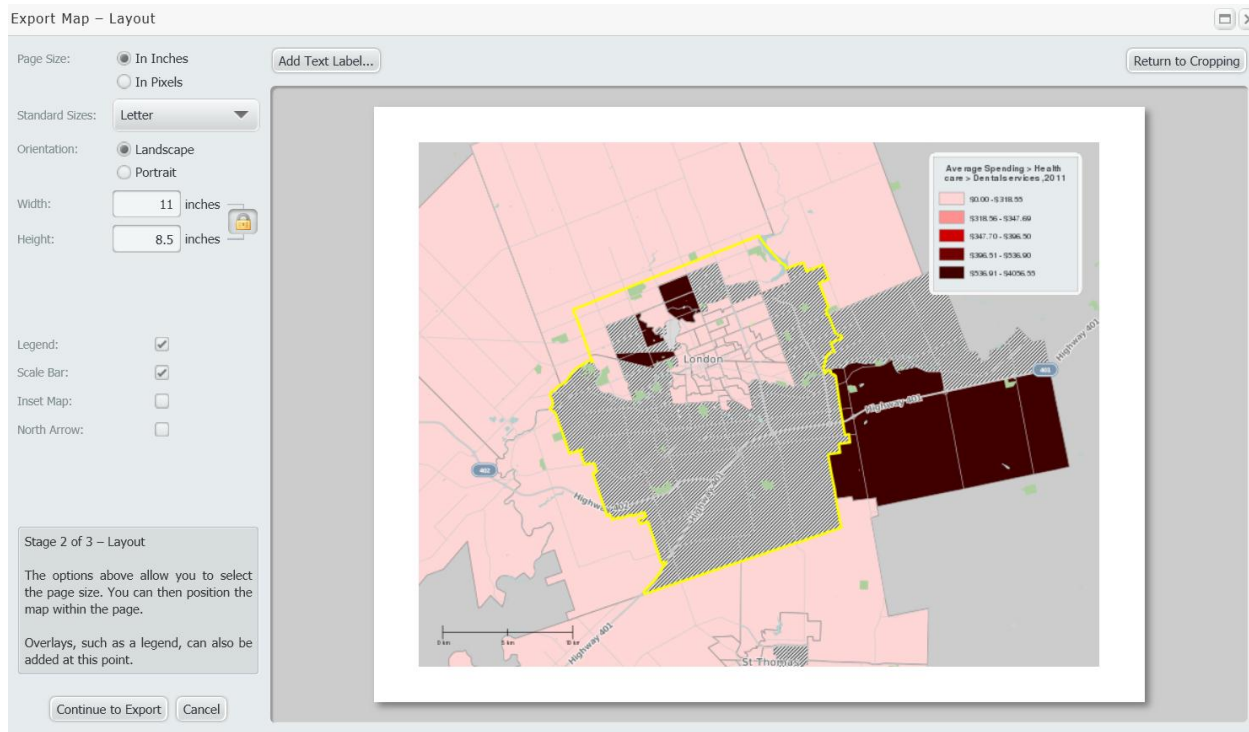
Step d: Here on the export window, you may decide what file type to save your map as, as well as decide on if you are going to email the file or download it directly yourself. If you email it, you can choose which email to send to as well as write a descriptive message that they will receive. Click Finished when you have chosen what you want to do. The map may take a while to process before it can be downloaded or emailed. Be patient.
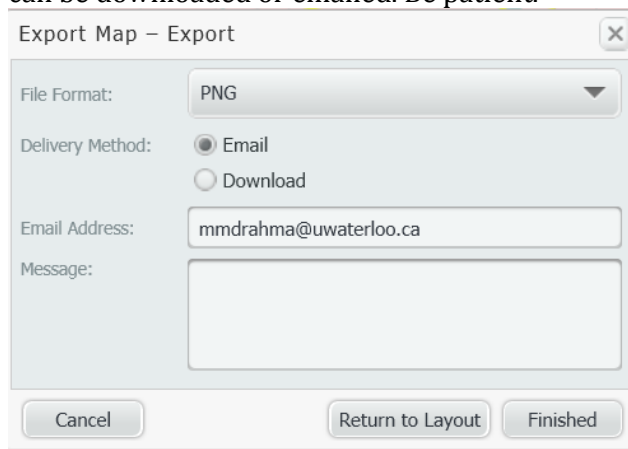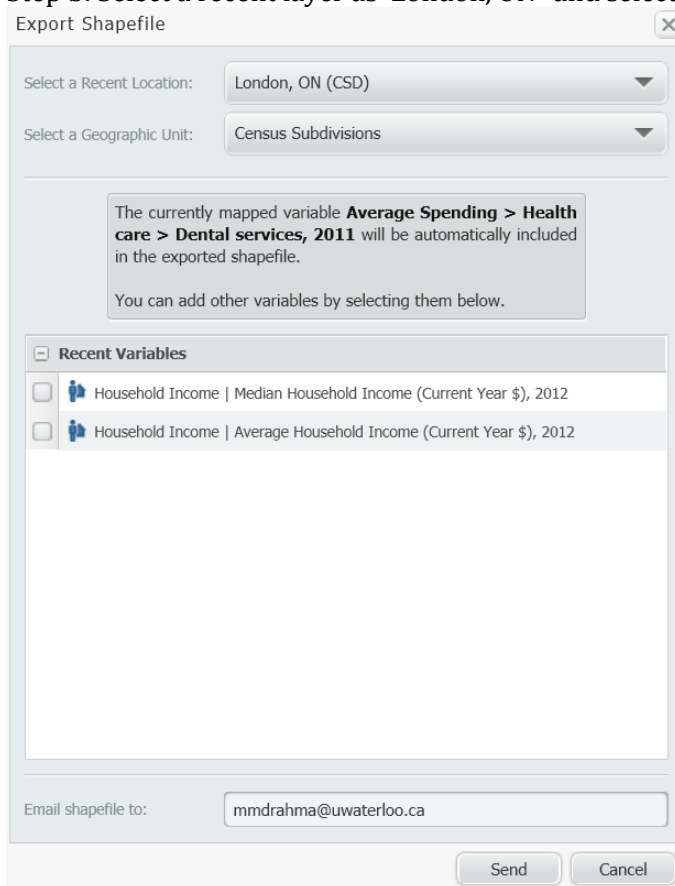
28. To export a shapefile with selected variable. SimplyMap can export a shapefile via e- mail by

following a few steps:

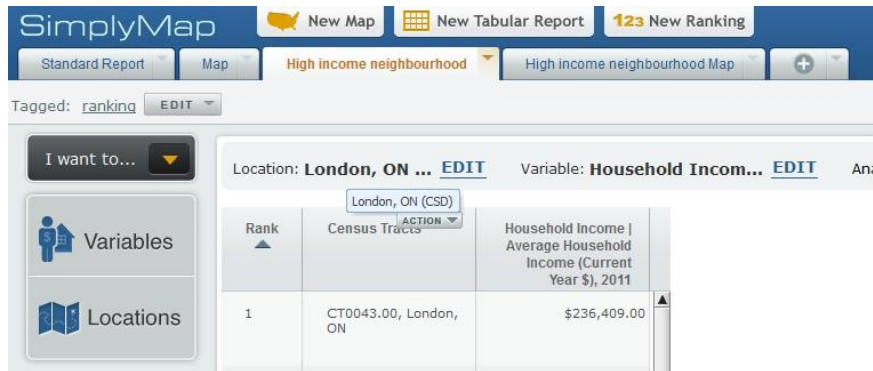Step a: Open the Actions Menu and select Export Shapefiles
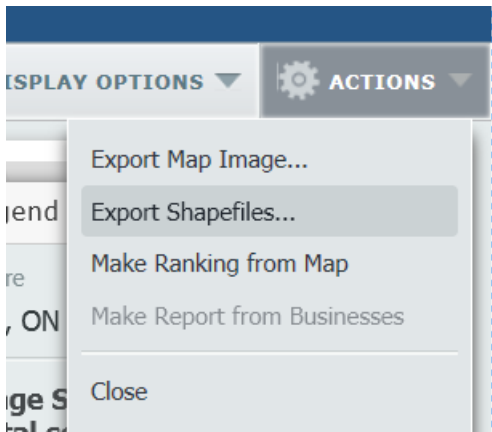
Step b: Select a recent layer as 'London, ON" and select a geographic unit 'Census Tracts'.

Step d: Click 'Send' and check the bottom left side of the screen to see a success message.

29. All reports created in SimplyMap can be downloaded or sent via email in Excel, .dbf, or .csv formats. You can follow a few steps:

Step a: Click the High income neighbourhood and make sure you see the tabular view of the ranking report.

Step b: Go to **Actions** menu and Select **Download Report** as **Excel File**.
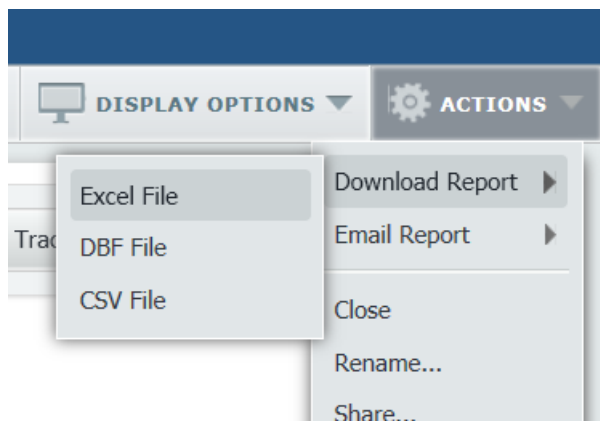
Step c: Open and save the exported Excel file

Cite data and map from SimplyMap

You may create and display maps and reports from SimplyMap and incorporate them in a website, book, or PowerPoint presentation. Here are some examples on how to cite the information you find in SimplyMap in APA style:

Geographic Research, Inc. (2011). 2006 Adjusted Census Data retrieved February 17th, 2011, from SimplyMap database.

Geographic Research, Inc. (2011). Map with 2010 Household Expenditure Potential retrieved February 17th, 2011, from SimplyMap database. Tips

- Try not to be inactive in SimplyMap for more than a few minutes, otherwise you will receive timeout warning message and have to log in again.
- Reuse the recently used variable. Click Variables button and select 'Recent'. Move your move over a recent variable that you want to reuse. The ACTION menu will appear and you can select
'Use this variable'.

Steve Xu

Revised and updated for SimplyMap 3.0 by Mohamed Mursheed Drahman on January 15, 2014.