

SimplyMap 2.0 Canada Tutorial

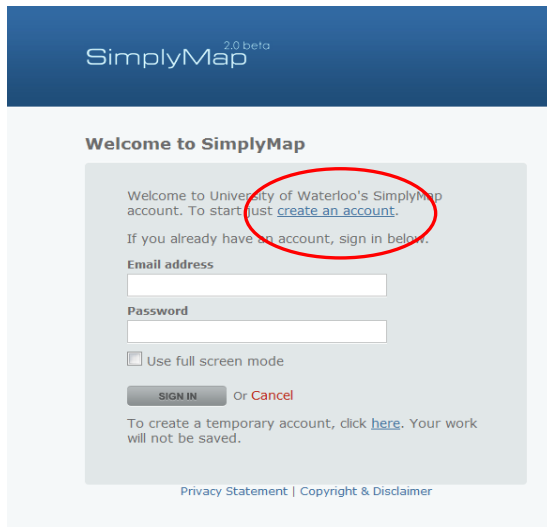
SimplyMap Canada is a web mapping application developed by Geographic Research Inc. The application enables users to create thematic maps and reports using demographic, business, and marketing data on-line. In this tutorial, you are going to create a few thematic maps and a ranking report for the area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

- Get started with SimplyMap Canada 2.0
- Create and customize a thematic map
- Create a data filter
- Add points to the map
- Create a ranking report
- Rename and share a map tab
- Export map, table and shapefile
- Cite data or map from SimplyMap

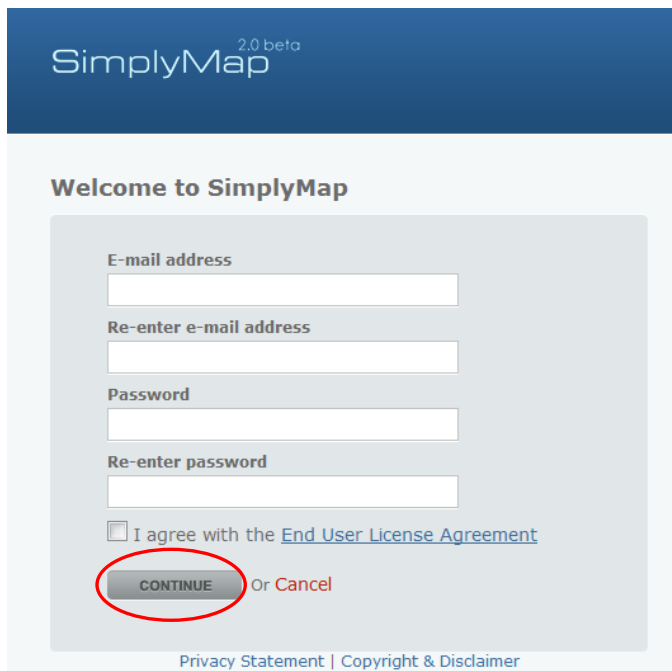
Get Started with SimplyMap 2.0

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.

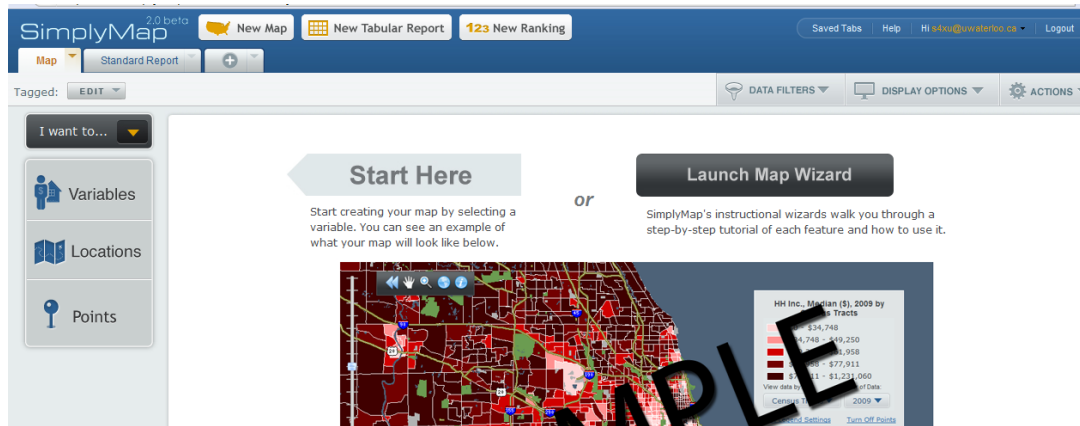
1. Go to University of Waterloo Library Homepage, on the top left side, click Resources for Research, select Research Database, go to Browse Research Databases by Title and select S, Scroll down to find SimplyMap Canada. Double click the item. This will bring you to the website.
2. The welcome page should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



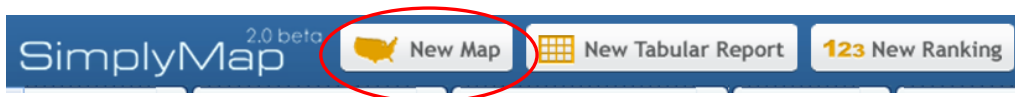
4. When you log in with your new account, you will see a starting page as below.



Create a thematic map

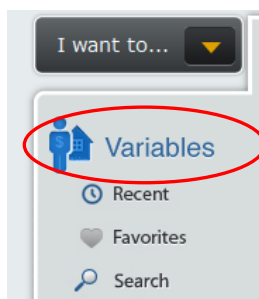
You are going to create an interactive map showing the average household expenditure on dental services in the City of London, Ontario in 2010. To do that, you need to find this variable: **average household expenditure on dental services** and define a location as **City of London**.

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



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

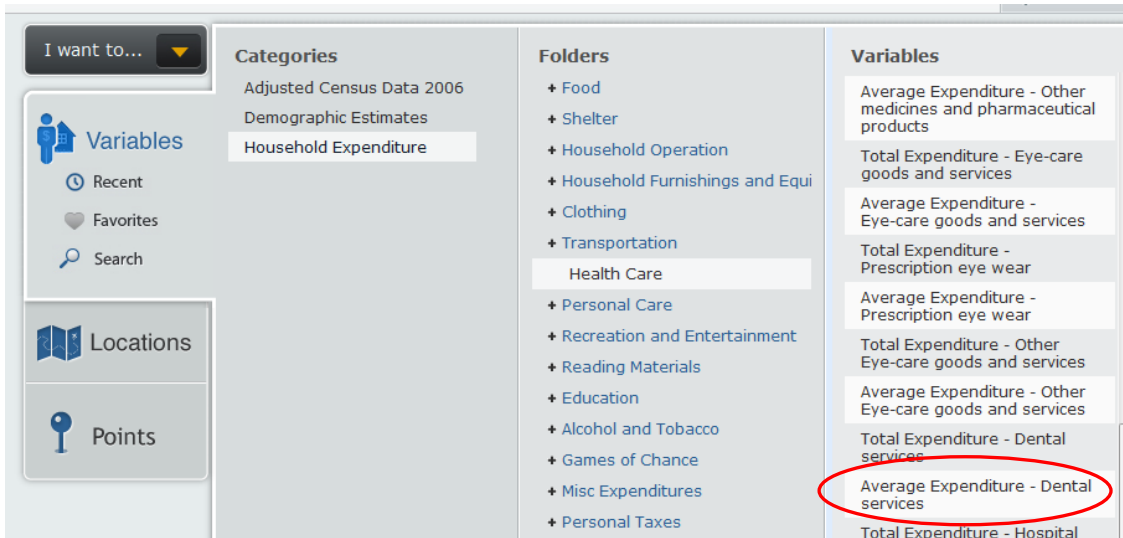
Step a: Click Variables label on the top left to open up the Variables panel.



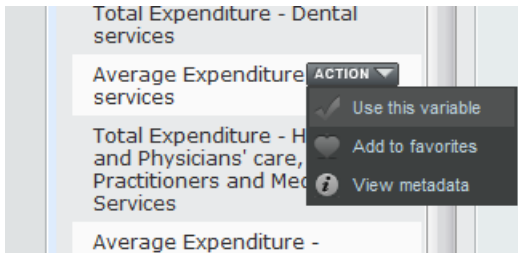
Step b: In the panel, click **Household Expenditure** under **Categories**.

Step c: Find and click the **Health Care** folder

Step d: Browse all the healthcare variables and find the variable Average Expenditure – Dental services (at the bottom).

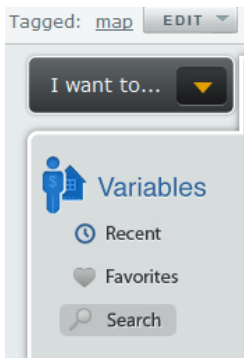


Step e: Move your mouse over the variable, the Action Menu will appear. Use this menu to view metadata and then click **use this variable**. This will be added to the active map.



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**.

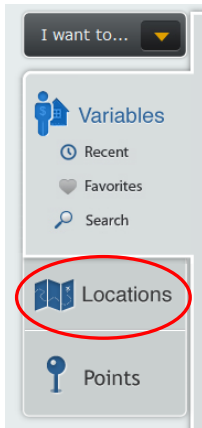
Step c: The search results came back with a number of variables, including **average household expenditure on dental services**

Variable Name	Folder	Source	Popularity
Dental services (\$000)	Consumer Expenditure » Health Care » Medical Services »	U.S. Department of Labor, Bureau of Labor Statistics	★★★★★
Average Expenditure - Dental services	Household Expenditure » Health Care »		★★★★★
Total Expenditure - Dental services	Household Expenditure » Health Care »		★★★★★
Dental services (HH Avg \$)	Consumer Expenditure » Health Care » Medical Services »	U.S. Department of Labor, Bureau of Labor Statistics	★★★
Medical services (HH Avg \$)	Consumer Expenditure » Health Care » Medical Services »	U.S. Department of Labor, Bureau of Labor Statistics	★★★★★
# Employment, Not in the Labor Force Male	Census Data » People and Households » Employment » General »	U.S. Census Bureau	★★★★★
% Employment, Not in the Labor Force Female	Census Data » People and Households » Employment » General »	U.S. Census Bureau	★★★★★
Offices of dentists (#		U.S. Census Bureau	★★★★

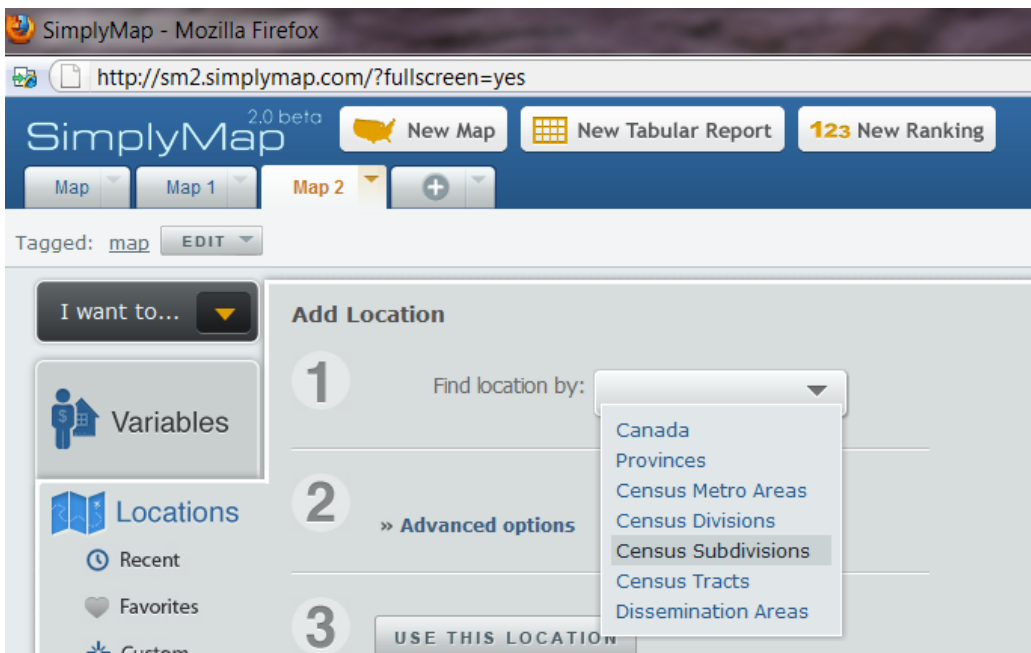
Step d: Move your mouse over the variable, the Action Menu will appear. Use this menu to view metadata and then click **use this variable**. This will add it to the active map.

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

Step a: Click **Locations** button on the top left to open up the Locations panel.



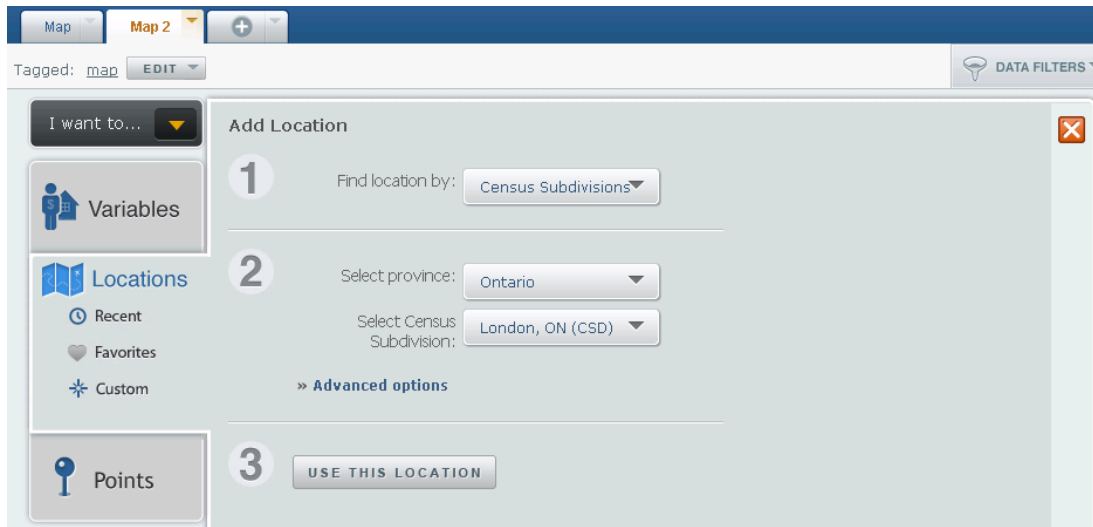
Step b: Set **Find location by** to census subdivisions



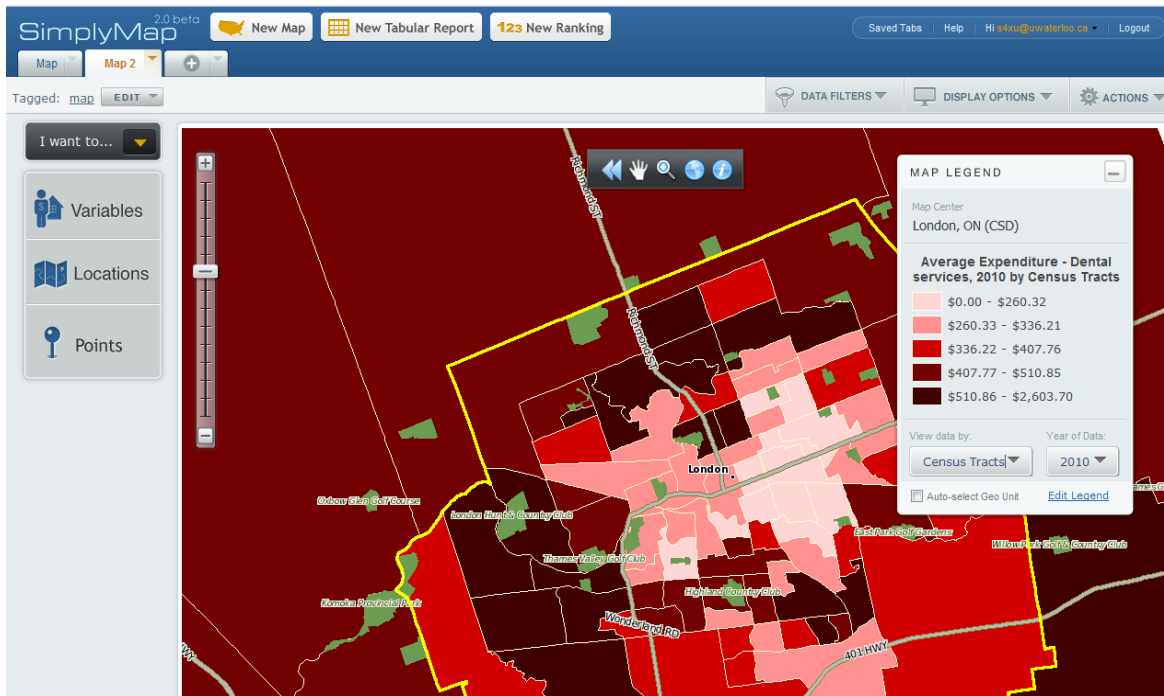
Step c: Select province as Ontario

Step d: Next you are going to select a census subdivision 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.



9. The map you just created will look like below.

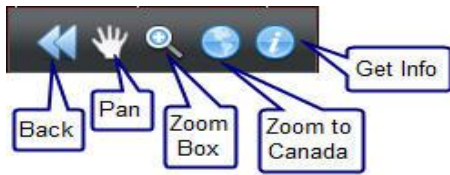


Customizing the map

You can adjust map view zoom level, change map display 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 5 controls:



Back - Click to display the previously viewed location.

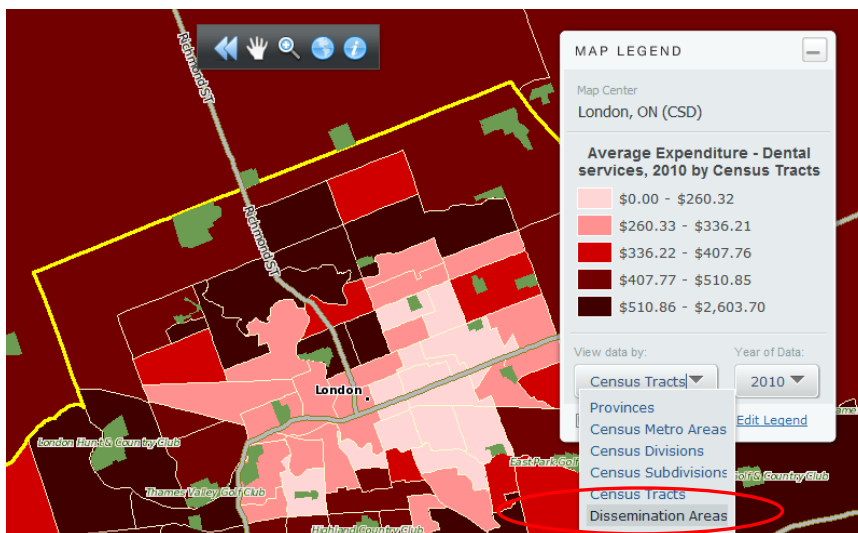
Pan - Click this icon and then click and drag the map to a new location.

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

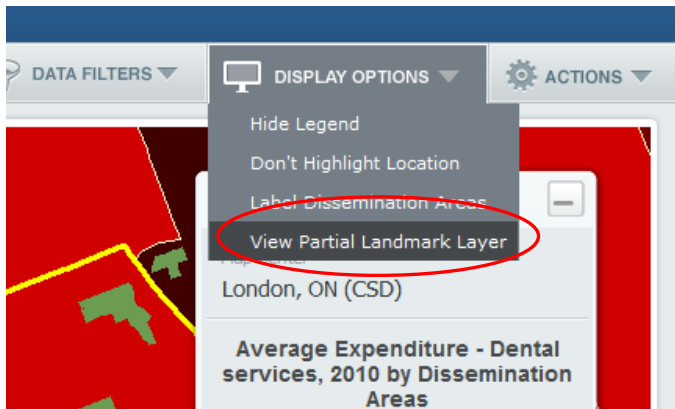
Zoom to Canada - Click to zoom out to view the entire country.

Get Info / Add to Favorites - 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.

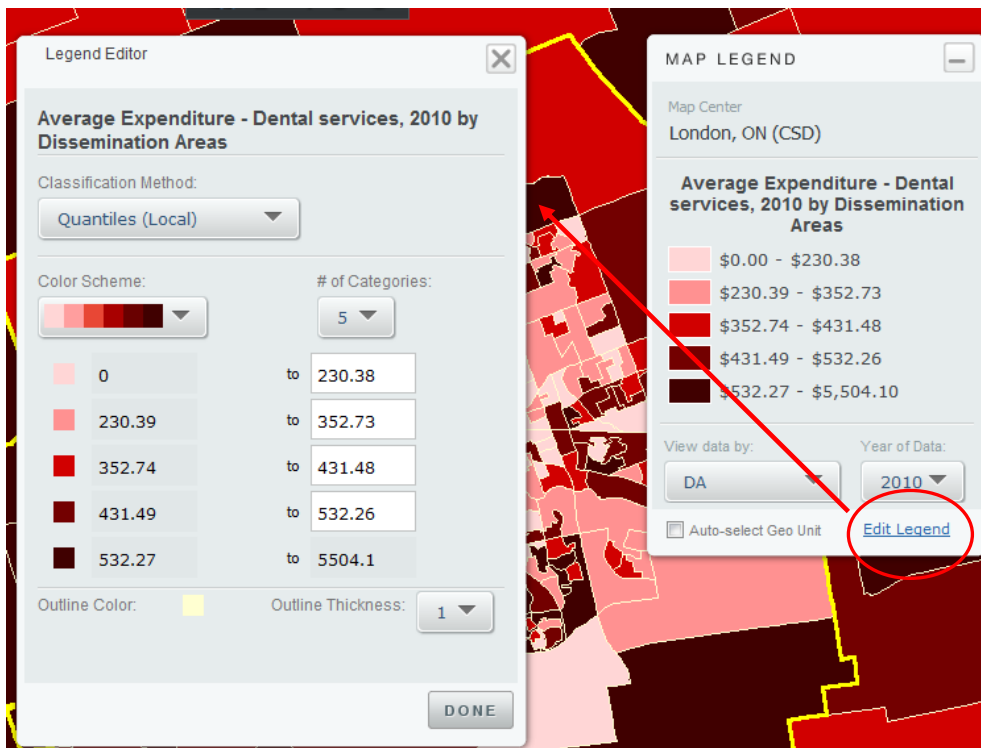
11. Change the display geographic unit. You will change the unit from Census Tracts (CT) to Dissemination Areas (DA). To do that, click **View Data by** in Map LEGEND to show a menu then select Dissemination Areas.



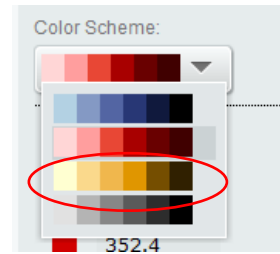
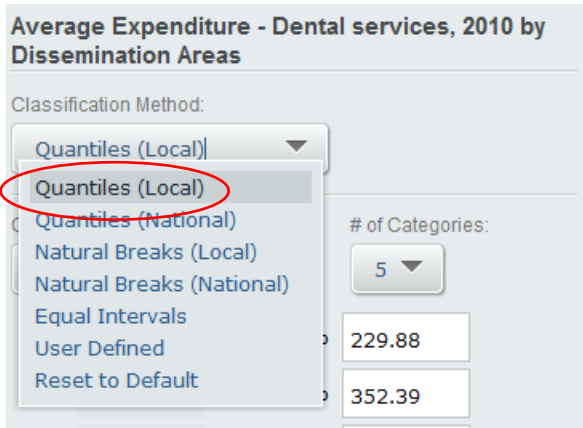
12. Remove some landmark layers. The map you created by default came with some landmark layers, like parks, highways and local roads. You can partially turn them off. To do that, go to DISPLAY OPTIONS menu and select **View Partial Landmark Layer**.



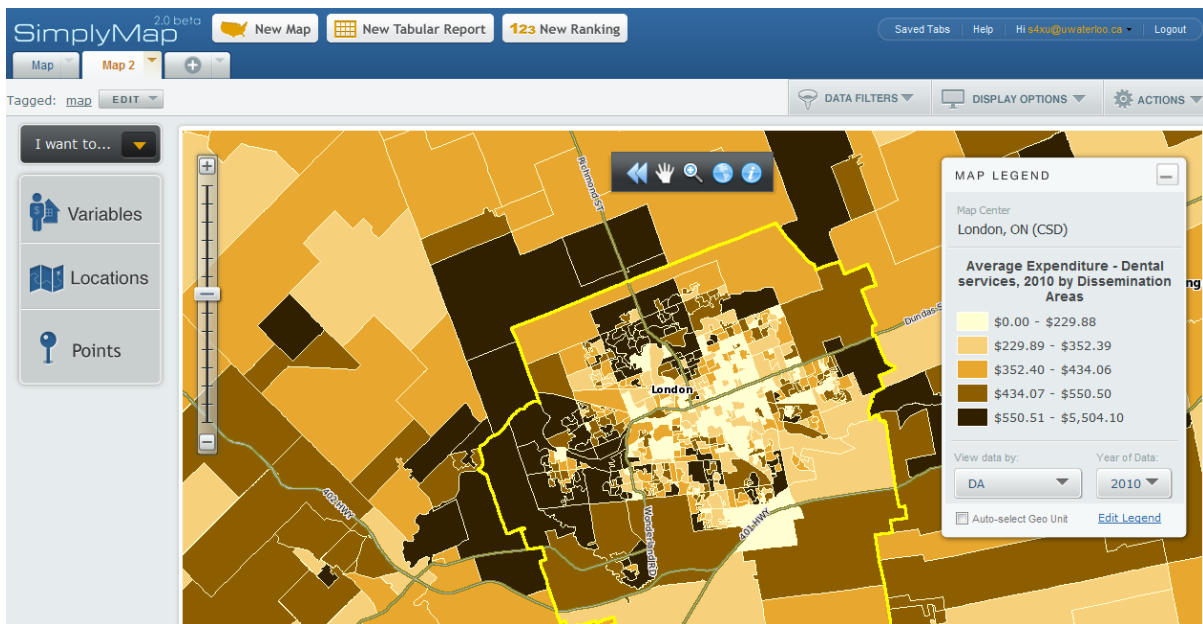
13. Modify the legend. Click 'Edit Legend' in the Map Legend, this will bring out the Legend Editor.



14. 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.

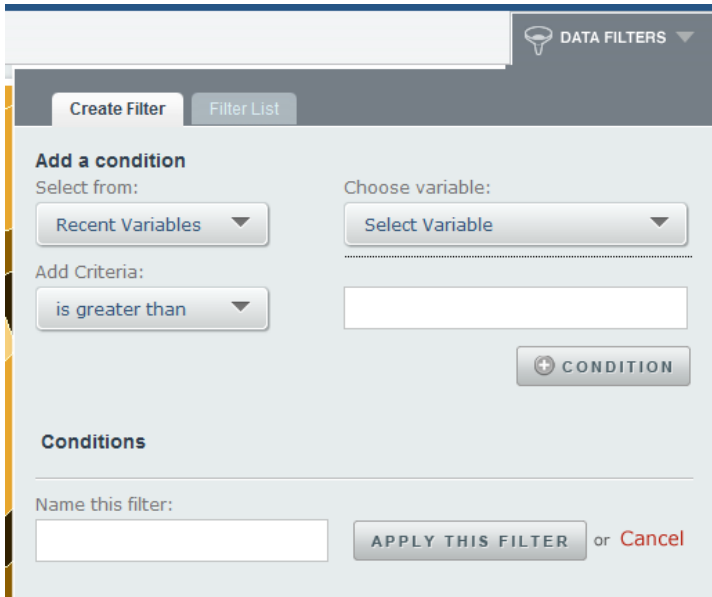


Create a data filter

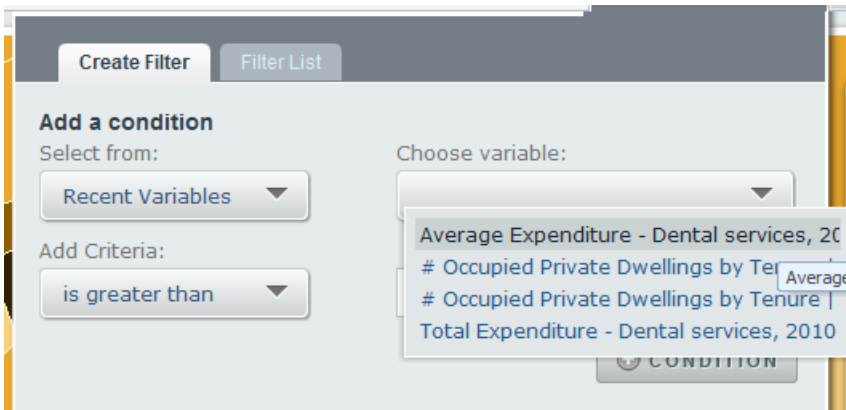
You can create, save and manage filters in SimplyMap. When a filter is applied, the locations that do not meet the filter criteria display in white (cross-hatched).

You are going to create a data filter to show top 20% DAs with average expenditure on dental services over \$550 in 2010 by following a few steps.

Step a: click **Data Filters** to show the pull down menu.



Step b: Select from Recent Variables and choose variable Average Expenditure – Dental services, 2010.



Step c: Set the parameter as 'is greater than' in **Add Criteria** menu and enter a value '550' in the text box.

DATA FILTERS

Create Filter Filter List

Add a condition

Select from: Recent Variables Choose variable: Select Variable

Add Criteria: is greater than

+ CONDITION

Conditions

Step d: Click + CONDITION. This will add a new filter statement under **Conditions**.

Create Filter Filter List

Add a condition

Select from: Recent Variables Choose variable: Select Variable

Add Criteria: is greater than

+ CONDITION

Conditions

Average Expenditure - Dental services, 2010 is greater than 550 EDIT | DELETE

Name this filter: APPLY THIS FILTER or Cancel

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

Step f: Click **Apply This Filter**. This will apply the filter to the map.

15. When the filter is applied, the map will look like below.



There are a few changes on the map view:

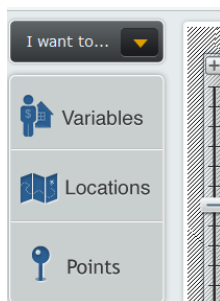
- Data Filters button displays a green "ON" indicator.
- To the left of the Data Filters button, the name of the filter that is being used is displayed, along with links to Edit or Remove the filter.
- Areas on the map that meet the filter criteria are shown in color, while those that do not appear cross-hatched.

Add points to the map

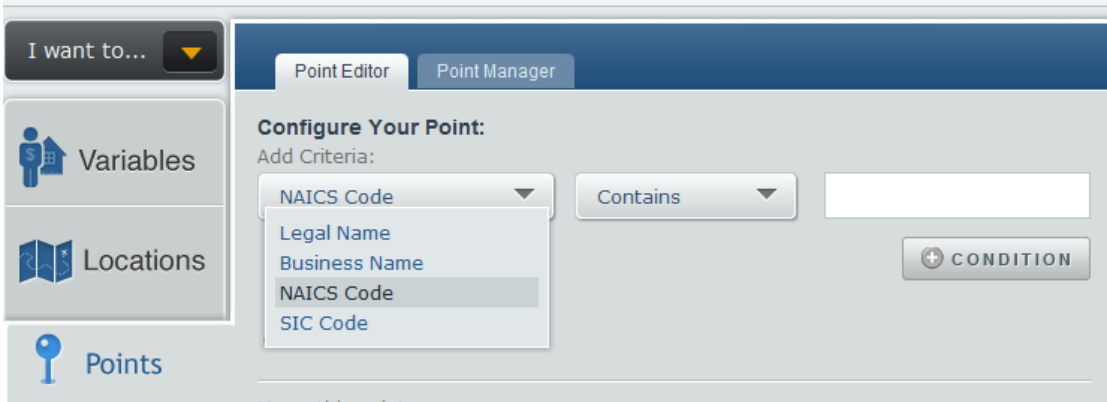
SimplyMap Canada has access to Dun & Bradstreet (D&B) Canada Business Directory of over 1.1 million points-of-interest. These points can be selected and displayed on a map over other variables.

16. Now you will add the locations of dentist offices into the map by following a few steps.

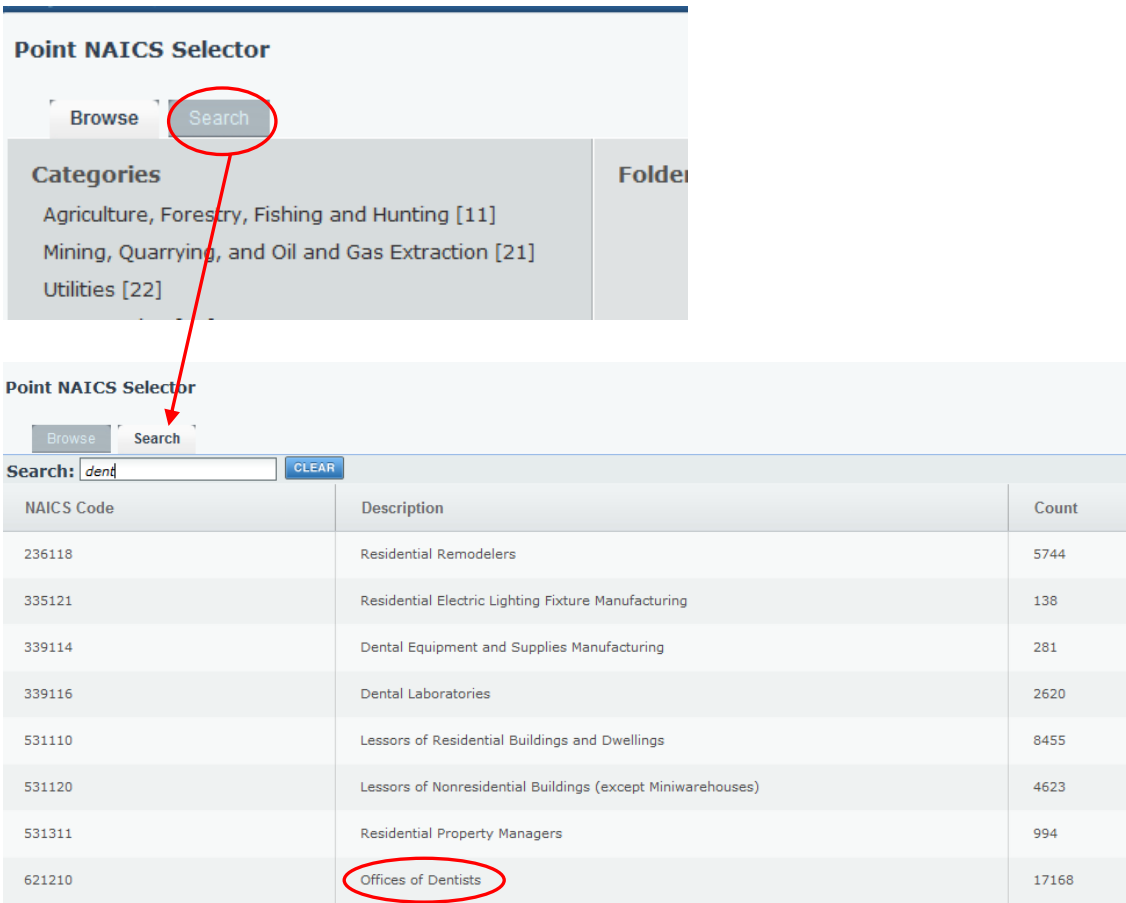
Step a: Click Points label on the top left to open up the Points panel.



Step b: Configure your point. Specify **Add Criteria** as 'NAICS (North American Industry Classification System) code' in the Point editor tab. This will bring out a Point NAICS Selector window.




Step c: Find the code representing Office of Dentists. Click Search tab and in the search box, enter 'dentist'. While entering the text, the list of NAICS code will be smaller and you'll find the code 621210 representing Office of Dentists.



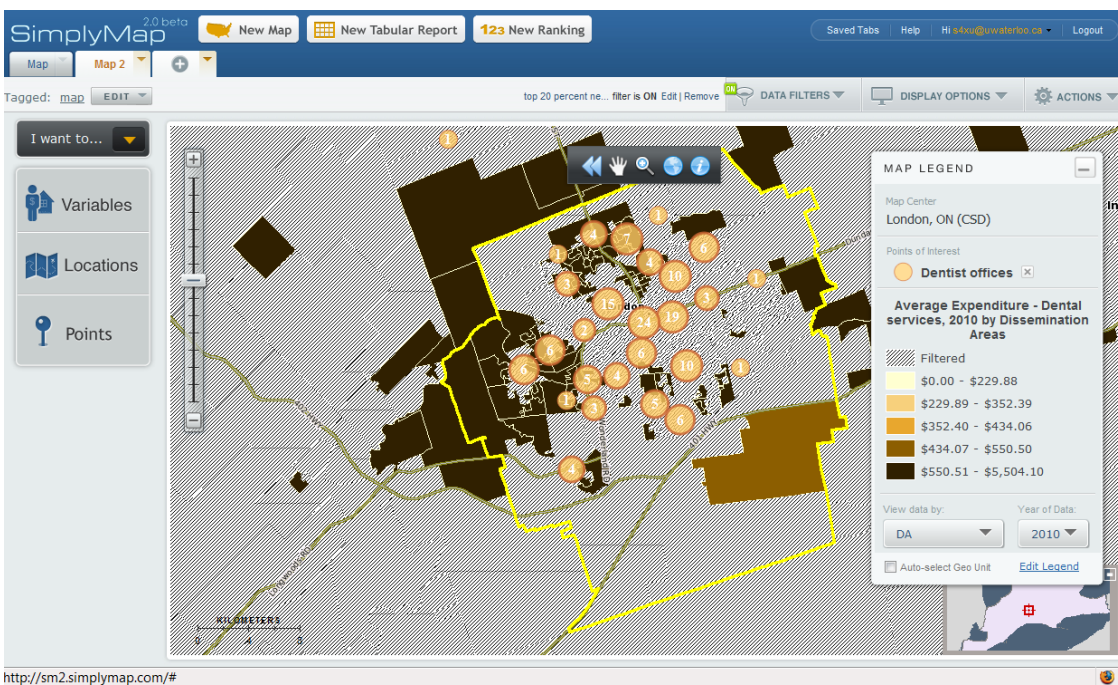
Step d: Now you want to add the code in the text field. Move your mouse over the NAICS code 621210, the Action Menu will appear. Clicking **USE** will add the code.

Step e: Click **+ Condition**. The search condition will be displayed under **Conditions**.

Step f: Assign a name 'Dentist office' to the point and Click **Map These Points**.

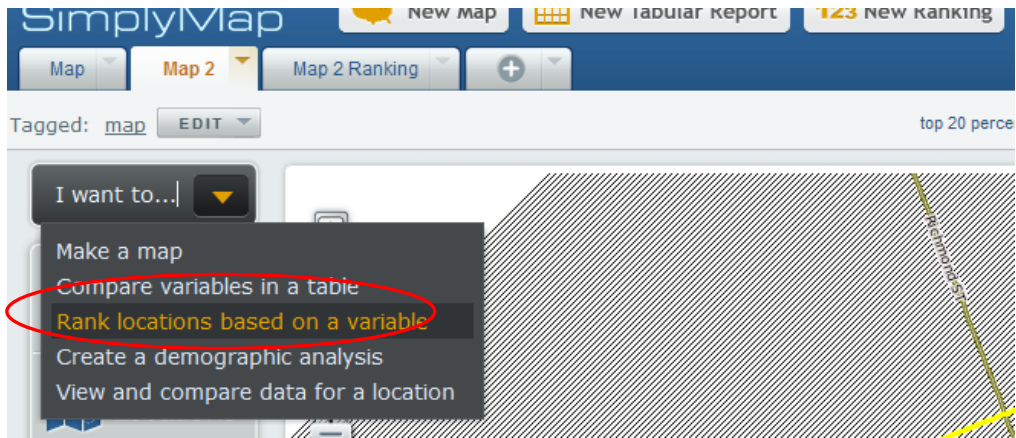
Step g: Close the Points Panel by clicking the  icon to view the updated map.

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.



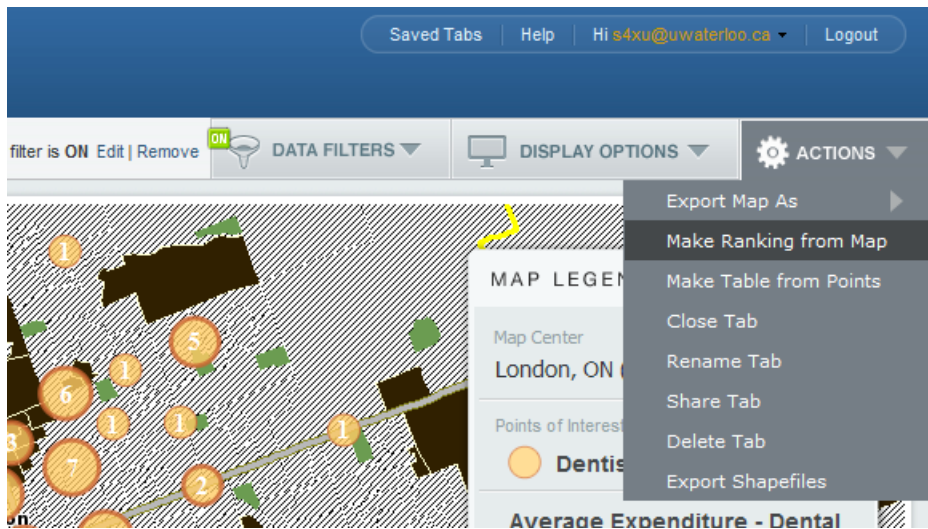
Create a ranking report

You are going to 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 quickest way however is to create a ranking report directly from your map. After that, you can make some changes to 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

The screenshot shows the SimplyMap 2.0 beta interface. At the top, there are navigation buttons for 'New Map', 'New Tabular Report', and '123 New Ranking'. Below this, a dropdown menu is open, showing 'Map 2 Ranking' selected and circled in red. The main content area is titled 'Tagged: ranking' and includes an 'EDIT' button. On the left, there are two panels: 'Variables' and 'Locations'. The main display area shows a table with the following data:

Rank	Dissemination Areas	Average Expenditure - Dental services, 2010
1	DA0042, London, ON	\$3,881.10
2	DA0375, London, ON	\$1,400.01
3	DA0364, London, ON	\$1,317.39

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.

This image shows a close-up of the 'I want to...' dropdown menu. The 'Variables' option is selected and circled in red, while the 'Locations' option is visible below it.

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.

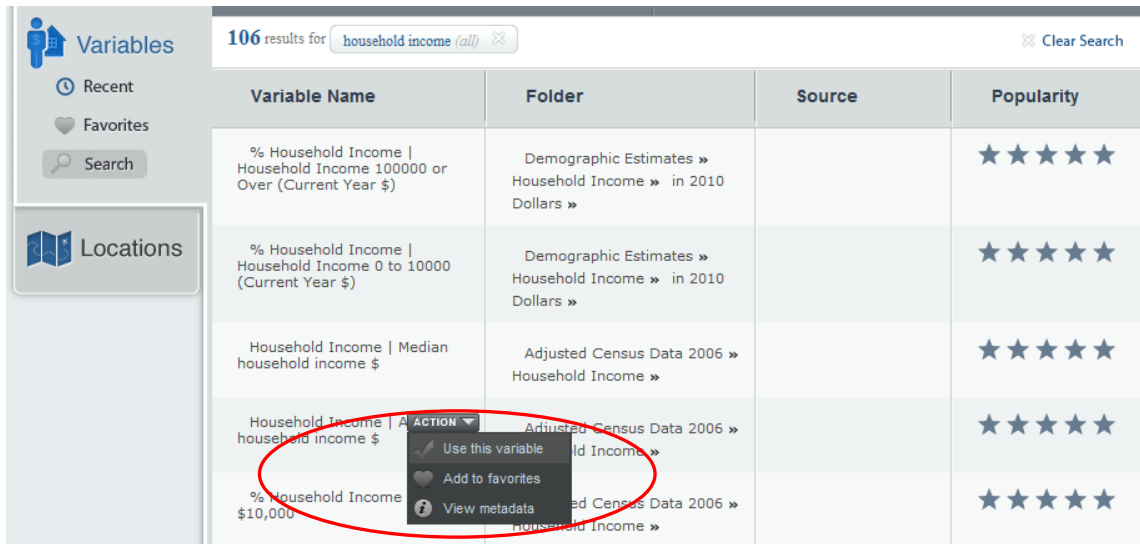
The screenshot shows the search panel with the following fields and buttons:

- Keyword: household income
- Search In: All
- SEARCH button (circled in red)

Below the search fields, there is a table with the following columns:

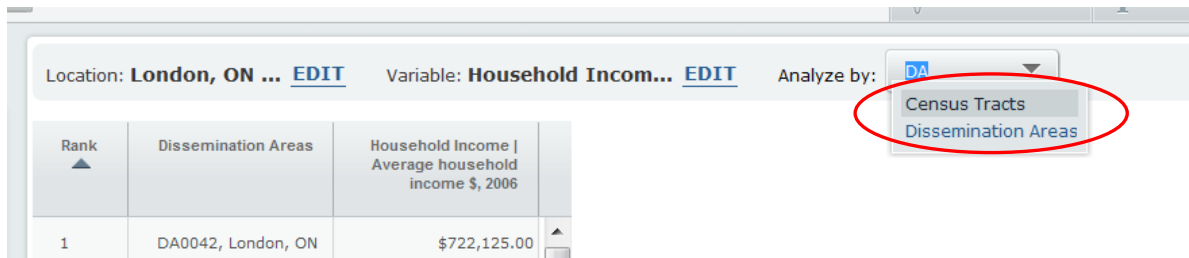
Variable Name	Folder	Source	Popularity
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Step d: Find the variable 'Average Household Income'. Move your mouse over it, the Action Menu will appear. Click **Use this variable**, this will replace the variable in the ranking report.

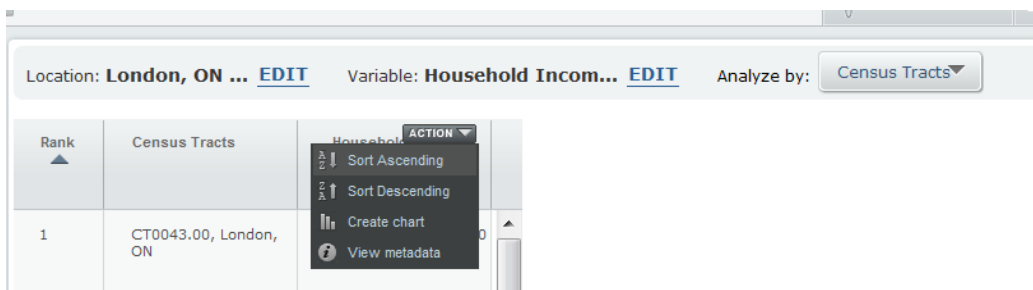


Step e: Close the search Panel by clicking the icon to view the updated report.

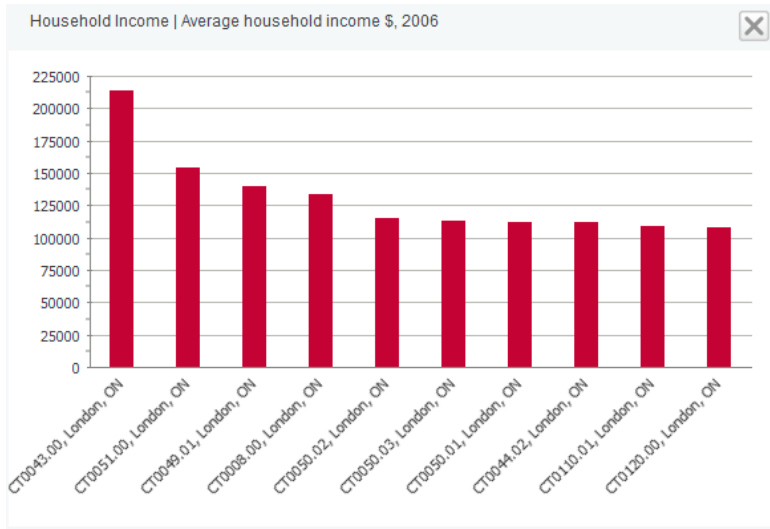
21. Census Tract (CT) is commonly used to represent a community. Now you want to change the geographic unit from DA to CT. Click **Analyze by** and select 'Census Tracts'.



22. Sort the average 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. Following the same procedure above, this time click 'Create chart', you can create a chart showing the top 10 CTs with highest household income.



24. If you want to see one of top 10 high household income CTs in a map, move your mouse over the CT. The Action Menu will appear. Click 'Create Map'.

I want to... ▼

Location: **London, ON ...** [EDIT](#) Variable: **Household**

Variables

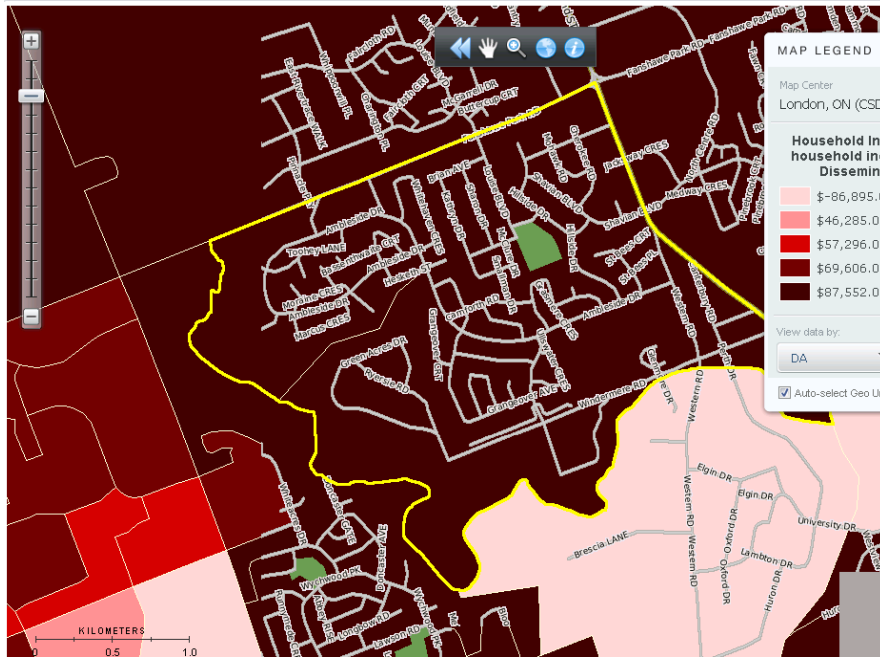
Locations

Rank	Census Tracts	Household Income Average household income \$, 2006
1	CT0043.00, London, ON	\$213,856.00
2	CT0051.00, ON	\$154,207.00
3	CT0049.01, London, ON	\$139,665.00

ACTION ▼

Add to favorites

Create Map

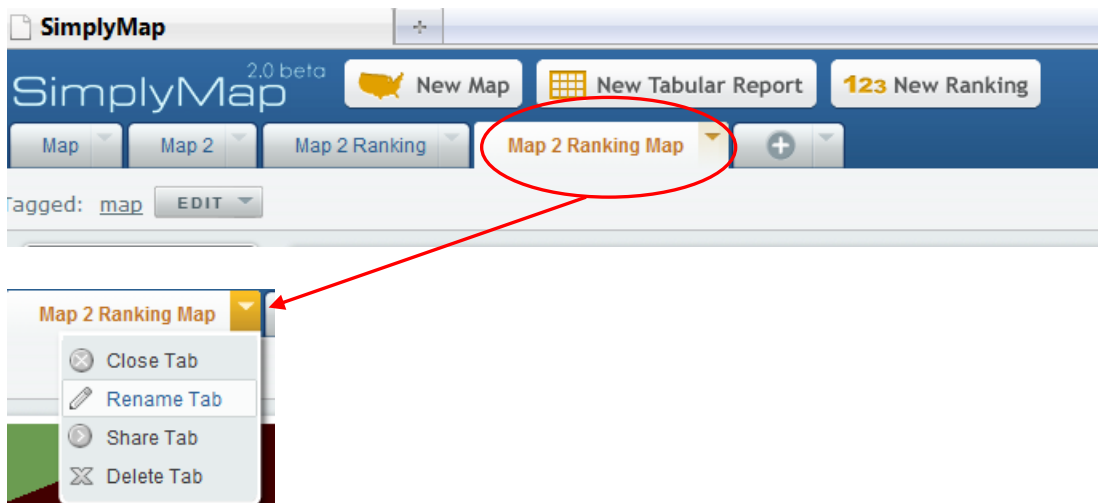


Rename and share the map tab

You can rename your map tab to a meaningful name then share it with other SimplyMap Canada 2.0 users.

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

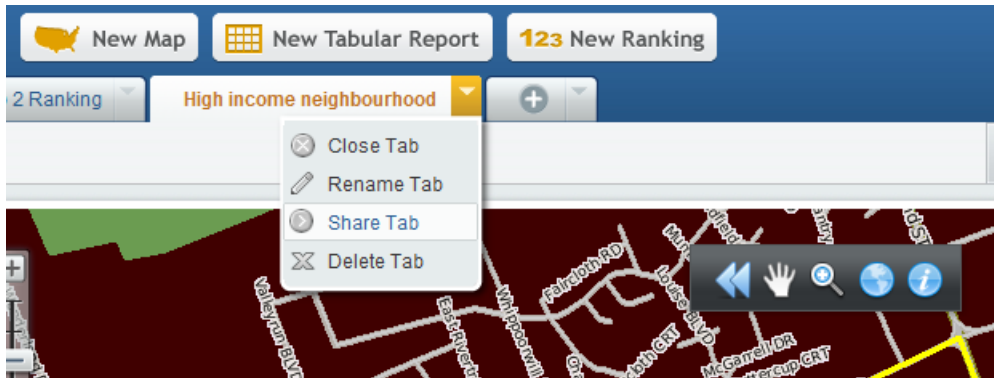
Step a: Click the dropdown menu and select 'Rename Tab'.



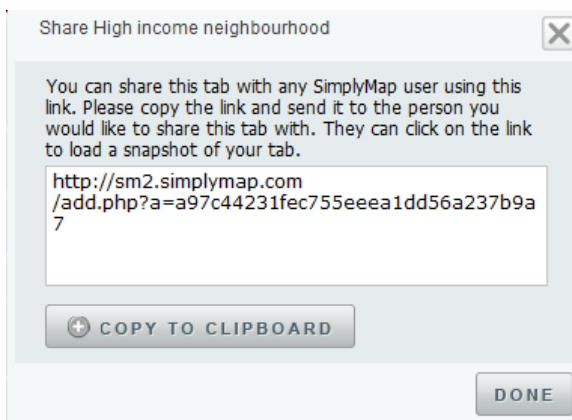
Step b. Enter a name 'High income neighbourhood' in the text box and click 'Save'.

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

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



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



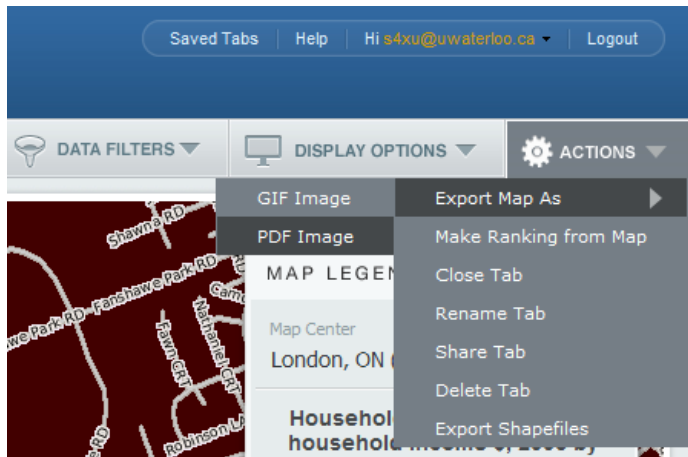
Step c (for the recipient) : Click on the link and log in with your SimplyMap Canada account.

Export the map

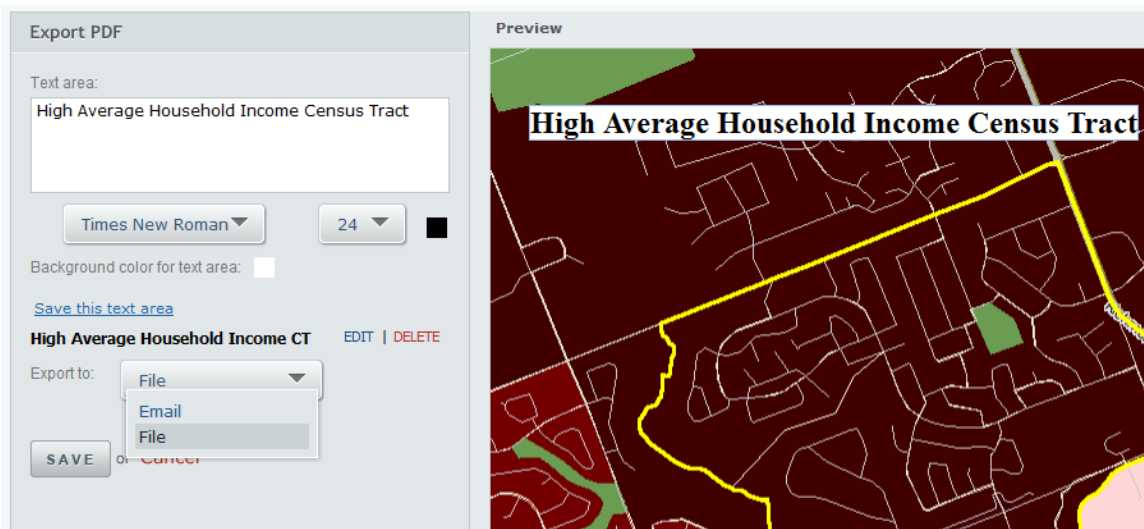
You can export your map as a high-resolution GIF or PDF graphic file. The image can be attached to an email, inserted it into a report, or posted on a blog.

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

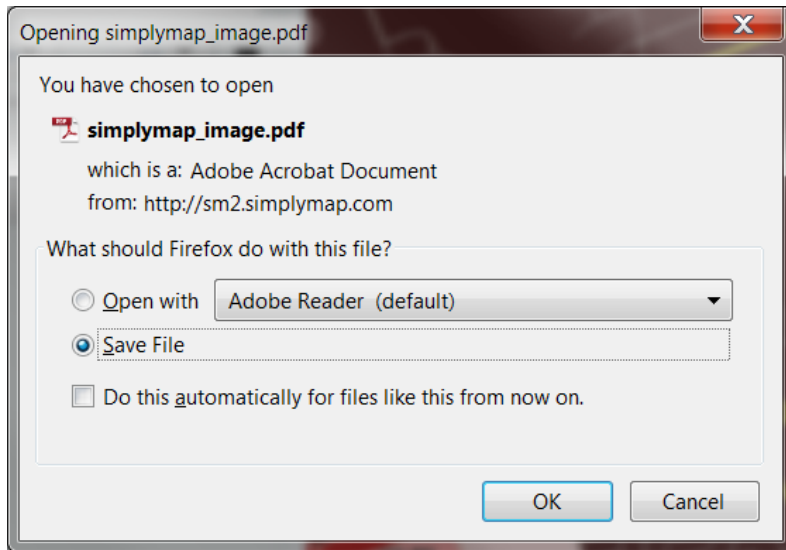
Step a: Go to **Actions** menu and select Export Map as PDF Image. This will bring out an Export PDF window.



Step b: In the Export PDF window, enter “High Average Household Income Census Tract’ in the text area. Set the font size to 24 or larger. Adjust the position of text box in the preview window if necessary.

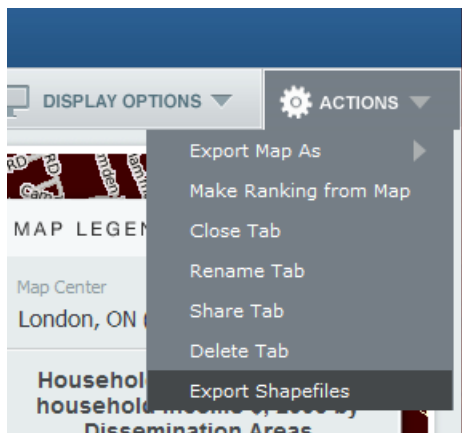


Step c: In the Export to section, select File. Click ‘Save’ when finished.

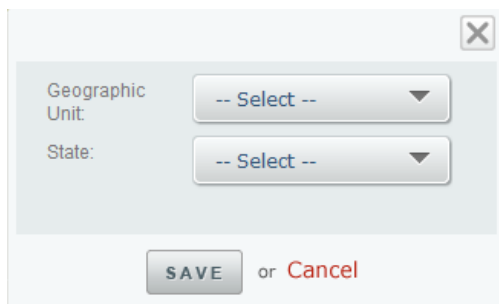


28. To export the shapefiles. SimplyMap can export a shapefile by following a few steps:

Step a: Open the Actions Menu and select Export Shapefiles

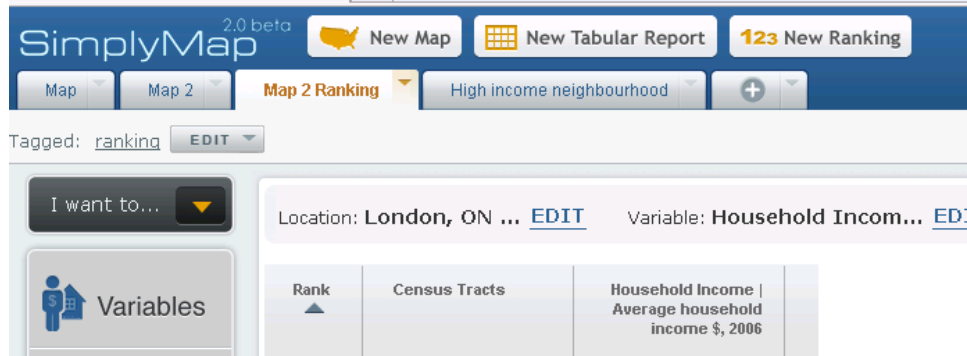


Step b: Currently this is a bug which shows geographical units of US Census. (Reported to Geographical Research, promised to fix it in priority).

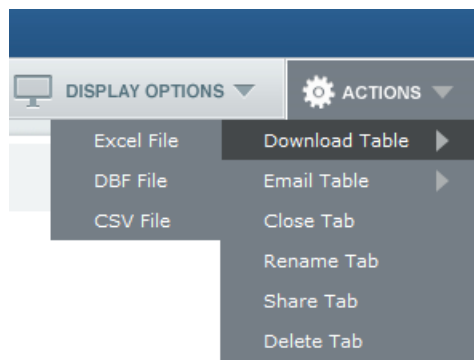


29. All reports created in SimplyMap can be downloaded or sent via email in Excel, .dbf, or .csv formats. You can follow a few steps:

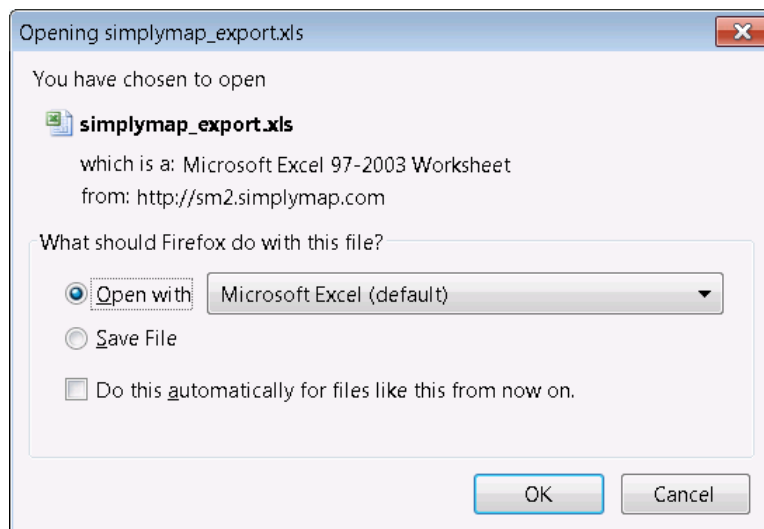
Step a: Click the Map 2 Ranking Tab and make sure you see the tabular view of the ranking report.



Step b: Go to **Actions** menu and Select **Download Table** as **Excel File**.



Step c: Open and save the exported Excel file.



Cite data and map from SimplyMap

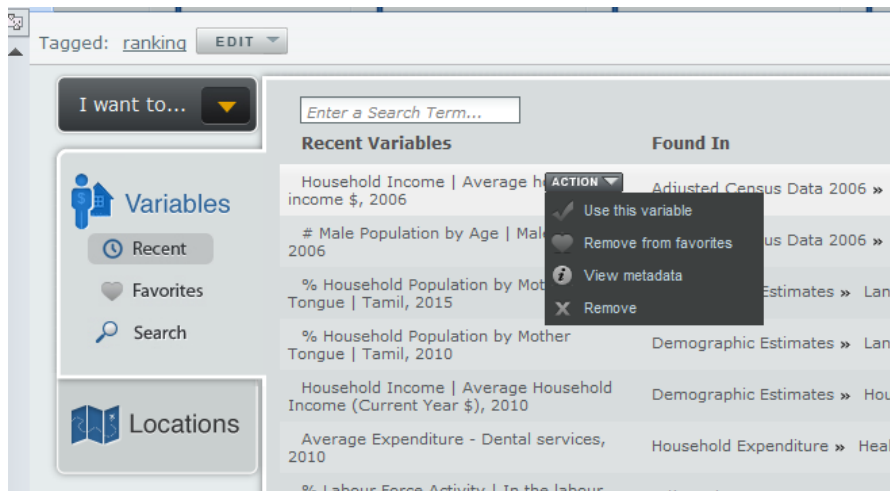
You may create and display maps and reports from SimplyMap and incorporate them in a website, book, or PowerPoint presentation. Here are some examples on how to cite the information you find in SimplyMap in APA style:

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 and have to log in again.
- Reuse the recently used variable. Click Variables button and select 'Recent'. Move your mouse over a recent variable that you want to reuse. The ACTION menu will appear and you can select 'Use this variable'.



Steve Xu

September, 2011