SimplyMap 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 reports for the area of the City of London, Ontario.

- Get started with SimplyMap Canada
- Create and export a thematic map
- Create and map a query
- Create and map a point variable
- Produce a regular report
- Export shapefile with variable data

Getting Started

1. Go to the University of Waterloo Library Homepage (http://www.lib.uwaterloo.ca/), on the top left side, click Resources for Research, select Research Database, click Browse Research Databases by Title and select S, Scroll down to find SimplyMap Canada. Double click the link. This will bring you to the website.

2. The welcome page looks like the following. If you are a returning user, you can directly login in with your e-mail address and password.
3. If you are a first time user, you will need to set up an account. Click Create Personal Workspace, this will open a new window. Fill in all the required information and click Register to finish the registration process. (Note: a personal e-mail is all right).

4. A confirmation e-mail will be sent to your address and you will need to check the e-mail and confirm the registration.

5. When you log in, you will automatically navigate to the SimplyMap workspace screen. The workspace screen is displayed below.
Create and export a thematic map

Now we are interested in creating and exporting a thematic map showing the average household expenditure on dental services in the City of London by dissemination area (DA) in 2006. You will need to follow a few steps:

1. Set Province as Ontario

2. Set Census Metro Area (City) as London. Type the name of the desired city in the Census Metro Area (City) text box. As you start to type the letter L, a list of choices will appear in a drop-down box. Then you can select London, ON (CMACA). Click Go.

3. This will add City of London into the active locations list. If you want to remove any locations from the list, click the icon located to the right of the location.
4. Zoom map view to the City of London. You are going to select Zoom by drawing tool to draw a box around city of London.

5. Now you are going to add a variable showing the average household expenditure on dental services. Click on the Variables tab, the Variables Side Tab will appear. Expand the Household Expenditure Potential (HEP) 2009. Scroll down to find Health Care. Expand it to find Average Expenditure - Dental services, 2009.

6. Select Average Expenditure - Dental services, 2009 and click Add Selected Variables found at the top right of the list. This will add it to the Selection List. Close the Variables Side Tab.
7. You are going to set Geographic Unit as Dissemination Areas (DA).

8. Now you are interested in modifying the legend. Under Setting (near the bottom of the page), click **Open legend**. The legend window will appear. Click **Edit**. This will bring out a legend editor window.
9. The default classification breakpoints are calculated using locations across Canada but you are only interested in locations in the City of London. To make the changes, set the Classification Method as Quantiles (Local). Also change # of Categories from 5 to 6. This will change the number of categories. Click Done to finish making the changes.
10. You are going to export the map out as image. The map show average expenditure on dental services in 2009 by dissemination area in the city of London, Ontario. Click Export->Image (at the very bottom right). This will bring out an Export Map window.

11. Now you are going to add a title and subtitle to the map. Type the title “average household expenditure on dental services in 2009”. Set the font color as green and size as 20, and then click Add Title. Set the background as Black and then click Add Background. Move the title to the top the map. Type in City of London as the subtitle. Repeat the same process for font size, color and background.

12. Export the map as GIF format and Save to disk. Click Go and save the file into your E drive.
Create Query

You are going to create a query showing DAs with average household expenditure larger than $500. The resulting query becomes a new variable that can be mapped, used in reports, and can also be used to create new custom variables.

1. Click on the **Query** tab, which is located in the middle of the **Map Tab**. The **Create Query Side Tab** will appear.

2. Use the **Create Query Side Tab** to select and build a query showing DAs average household expenditure on dental services larger than $500 in 2009 by following these steps.

   Step 1: Select the Variable as average household expenditure – dental services in 2009

   Step 2a: Select Criteria: -is greater than

   Step 2b: Enter a value 500

   Step 3: Click the **Add to List** button. The new variable will appear in the list box

   Step 5: Give a Descriptive name to your query: **High Potential Areas**

   Step 6: Click **Done** when you finish.
3. The custom query will be added to the **Active Variables List** in the **Map Tab**. **Select it** and click **Update** to map the custom query. Mapping this custom query will display all DAs that meet the criteria in a dark color, and all others in light color.

**Create point variable**

You are going to create a new layer showing dental office locations in City of London.
1. Click on the **Points** tab, (right below query button). The Points Side Tab will appear.

2. Use the **Points Side Tab** to select and build a query showing **Offices of Dentists** location by following these steps:

   **Step 1:** Select a point dataset as **D&B business Points Canada**.

   **Step 2:** Create a query specifying the business of dental office. To find out the North American Industry Classification System (NAICS) code representing dentist offices. Click the icon. The lookup window opens. Enter **dentist**, then a code will appear. Click the icon to add it to the point variable.

   **Step 3:** Choose a point marker by clicking **Edit Marker**. You can select color as yellow, and shape as star. Click the marker you want to use to close the dialog.
Step 4: Enter a descriptive name **Dental Offices** for the point variable.

Step 5: Click **Done** to create the point variable.

3. Close the points side bar. A new Points menu appears in the Map Tab. Click the check box to turn on points. The legend and the map will update to reflect the points.
Produce regular report

You are going to create a regular report comparing selected variables among difference locations.

1. You are going to add three more locations in the **Map Tab active locations list**. Select Province as **Ontario** and in **Census Metro Area (City)** add these new locations one by one Guelph, Owen Sound and Winsor.

2. Now you are going to add a new variable in the **map tab active variables list**. Click on the **Variables** tab, the **Variables Side Tab** will appear. **Expand Adjusted Census Data 2006.** Scroll down to find **Household Income.** Expand it to find **Household income – average household income $, 2006.** Select this variable and click **Add Selected Variable.**

Now you can continue to create a report comparing the average household income and average household expenditure on dental services among City of London, Winsor, Owen Sound and Guelph.

1. To access the **Report Tab**, click on the **Reports** button located to the right of the **Maps** button.

2. In the **Locations** section of the **Report Tab**, click the check boxes for Winsor, Owen Sound, Windsor and Guelph.
3. In the Variables section of the **Report Tab**, click the check boxes for **Average Expenditure - Dental services, 2009** and **Average Household Income $, 2006**.

4. Click **Update Report** to create the report.

5. You can export the report out as an Excel spreadsheet, CSV or word document. Click **Export**, found at the bottom right of the page, and select **Export - Excel**.

**Shapefile Export**

SimplyMap has the ability to export shapefile data for use in GIS software (such as MapInfo or ArcGIS). You are going to export a shapefile in the geographical unit of DAs showing average household expenditure on dental services in the city of London. Go back to the **Maps Tab**.

1. Before exporting Shapefiles, the **Shapefile export feature** must be enabled. Click the **More Options** menu. This will bring out a new More Options window.
2. In the advanced Options, select **Enable Shapefile Export** as “Yes”. Click Save to save the setting.

3. Now you can export the map as a shapefile, using the same Export tool you used to export the report. Click the **Export** button and select **Shapefiles**. This will bring out a shapefile export window.
4. In the shapefile export windows, you will need to following these steps:

   Step 1a: Select a Geographical Unit as Dissemination Areas

   Step 1b: You will like to export shapefile with data

   Step 2: Select the Census Metro Areas you are interested in exporting as Recent & Flagged Census Metro Areas. A list of Census Metro Areas will appear. Add London, ON to the selected box in the right.

   Step 3: Click the Add to List button. Add Average Expenditure-Dental Services, 2009 and Average Household Income $ 2006 as the selected Variable.
Step 4. Click **Export Shapefile**. This will bring out a new window.

Click **Download Shapefile** to save the file to your computer. To email a link to the Shapefile data, enter any email address and an optional message, and click **Email Download link**.

Congratulations. You now have learned how to use Simply Map Canada web mapping application.