

Question: What is SimplyAnalytics?

SimplyAnalytics is a web-based mapping, analytics and data visualization program providing demographic information including census data from year 2006-2016 (population, age, language, income, housing, education, race & ethnicity and more), current estimates and 5 year projections, household spending data on hundreds of goods and services, and over 1.3 million Canadian business profiles from Dun & Bradstreet (D&B). Additionally, users have access to a premium marketing segmentation system called PRIZM5 that enables researchers to gain insight into communities and identify locations based on lifestyle traits.

Question: How do I get started?

SimplyAnalytics is **available online** for all current SFU students, staff, and faculty. There is a 5-user limit, so be sure to log out when you are done!

Answer: Getting started is easy! It only requires two steps:

- 1. Enter in at least one location into the first prompt
- 2. Click "Create Project" on the second prompt to quickly create the project

	Please select one or more "seed" variables so we can auto-generate maps and reports for you
×	(Thousands of other data variables are available. Use the 'Data' tab to search and add them to your project.)
	✓ # Basics Total Population (Current Year)
lyze:	# Basics Total Households (Current Year)
	% Occupied Private Dwellings by Period of Construction Total Households For Period Of Construction Built Before 1961
Ð	Households by Income (Current Year) Median Household Income (Current Year \$)
×	% Households by Income (Current Year) Total Households Household Income \$100,000 Or Over (Current Year \$)
×	% Household Population 25 to 64 Years by Educational Attainment Household Population 25 To 64 Years No Certificate, Diploma Or Degree
×	% Household Population 25 to 64 Years by Educational Attainment Household Population 25 To 64 Years University Certificate, Diploma Or Degree At Bachelor Level Or Above
	% Household Population by Mother Tongue Household Population For Mother Tongue Total Single Response English
_	% Household Population by Mother Tongue Household Population For Mother Tongue Total Single Response French
	# Basics Population, 2016 Click on Create Project to get started immediately
	Create project Create project without seed variables
	x yze: 3 x x

That's all there is to it! When you click "Create Project", SimplyAnalytics will automatically generate some reports for you to browse through, including a map.

Quick Reference Page 1 of 2

What are the different Geographic Units that contain data?

Province - Portion of Canada's land area governed by a political authority. Canada is divided into 10 provinces and 3 territories.

Census Metro Area - Area consisting of one or more neighbouring municipalities situated around a core. A census metropolitan area must have a total population of at least 100,000 of which 50,000 or more live in the core.

Census Division - Group of neighbouring municipalities joined together for the purposes of regional planning and managing common services (such as police or ambulance services). These groupings are established under laws in effect in certain provinces of Canada.

Forward Sortation Area - a geographical region in which all postal codes start with the same three characters.

Census Tract - small relatively stable geographic areas that usually have a population of less than 10,000 persons, based on data from the previous Census of Population Program. They are located in census metropolitan areas and in census agglomerations that had a core population of 50,000 or more in the previous census

Dissemination Area - Small area composed of one or more neighbouring dissemination blocks, with a population of 400 to 700 persons. All of Canada is divided into dissemination areas

Choosing the Right Report for your Research

Note: These can all be exported in various formats.

Map – Great visual reference depicting a mapped data variable. You can also overlay business points on top. Maps can be exported as high-resolution images. For example, visualizing household income across the city.

Comparison Table – Think of this as building a table from scratch. You can add any types of locations (provinces, census metro areas, census tracts, etc.) and any variables to compare the data across each. For example, comparing some spending data for your home census tract versus the metro area or province.

Ranking – Allows you to instantly analyze data for all the smaller geographic units within one larger geography. For example, analyzing all of the census divisions in Canada or analyzing all of the census tracts within a metro area.

Quick Report – A nicely formatted, easy-to-read prebuilt report that compiles a comprehensive list of key data variables for any location. Use this when you want to get a quick snapshot of the demographic makeup of some locations.

Ring Study - Select a central location and SimplyAnalytics will automatically calculate your chosen variable for a 1km, 3km and 5km rings around it. Use this when you need to understand the characteristics surrounding a specific location.

Business Table – Provides a data table with detailed information about your business query. For example, pulling a list of all Mexican restaurants in the city.

Related Data Table - Add one data variable to this report and we will automatically add all of the related data for you. For example, if you add "% Households w/ Income \$50,000 to \$74,999" the report will also show all of the other income ranges as well. This works great with the PRIZM data.

Time Series Report - Add one data variable to this report and we will automatically add all years of data for that variable. For example, if you add "Median Household Income, 2017" the report will also show data for the years 2010, 2011, 2012 etc.

Bar Chart - Bar charts are a great way to visually compare data values across locations. Add two or more locations to the view and select the desired data variable to create your chart.

Scatter Plot - A scatter plot is a great tool for visualizing the relationship between two data variables. Select a location and a geographic unit (e.g., Census Tracts in Vancouver), then select an x-axis data variable and a y-axis data variable. Each dot represents both the x and y values for a single location. The line of best fit and correlation value indicates the direction and strength of the relationship between the two variables

What is the PRIZM5 Marketing Segmentation Dataset?

The PRIZM5 data is a marketing segmentation system containing 68 unique segments. Each segment has associated with it demographics, lifestyles, consumer behaviour, and settlement patterns in Canada. Marketers use this data to better understand locations, and for target marketing purposes.

Question: I'm looking for a job in the technology sector. How can I find a list of businesses where I might be interested in applying?

Answer: You can browse through a list of businesses that you might be interested in applying to in a business report. The quickest and easiest way to run a business report is to use the general keyword search. Here's how:

1. Click on *New View* (found towards the top right of the screen) > Create <u>Business Table</u> within your project.

2. Specify the location you are interested in, and type in your keyword within the Businesses block on the left.

SimplyAnalytics «	Current Project: New Project 2	🛅 New Project
SHOWING: CURRENT DATA & LOCATION		
♦ III Businesses	Edit Businesses	
C Technology		
Use advanced search	LOCATIONS	BUSINESSES
	Waterloo, ON (CD)	Technology
Browse business categories	Canada	

3. Click "Done" to generate your report

This will generate your business report showing all technology related businesses within the location you specified.

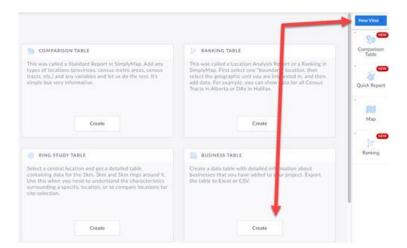
This task can be considered complete at this point, however, please read on if you would like to be more specific with your business query, instead of using the keyword.

SimplyAnalytics also has built in NAICS/SIC codes to help you find the exact industry you are looking for.

NAICS/SIC codes are industry codes utilized in North America to categorize businesses. Every business has both a NAICS/SIC code. So there's codes for Mexican Restaurants, hair salons, and more!

Let's look up an example for NAICS code: 511210. This is the code for Software Publishers. Here's how to find that code.

1. Click on New View > Create <u>Business Table</u> within your project



2. Click on Browse Business Categories within the Businesses block.

You can type in a keyword within the NAICS/SIC panel to instantly view any related codes. Click on one of the codes you see.

SimplyAnalytics	«	Industry Classification System SIC 🔵 NAICS 🔍 software	8 ×
SHOWING: CURRENT DATA & L	OCATIONS +	CATEGORIES	Count
♦ ∰ Locations Data	Businesses	334614 Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing 423430 Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	89 1,220
Q Business Search		511210 Software Publishers	3,237
Use advanced search			
Browse business categories	>		

3. Add in your target Location, then click *done* to generate the table.

This will present you with a myriad of fields available for every business. Feel free to add more columns to your business report such as Primary Contact, URL, etc. under View Actions > Columns.

Question: How can I figure out what area in my city is the best to open a coffee shop?

Answer: There's a number of different approaches to this question. First, you may want to map the coffee shops that already exist within your target market. Add variables to your map such as population or typical spending at restaurants to learn more about the demographic in your target area or target market

In the example below, coffee shop locations and population density have been mapped. All maps can be exported for your reference, or as a visual aid if you are putting together a business feasibility study.



Optional: You can also export the list of coffee shops available within the <u>Business</u> <u>Report</u> tab. A business report is automatically generated when you run a business query on a map.

You can also analyze the raw data within a Ranking Report to see if there are any locations that stand out based on the variables you have searched. As an example, you may easily identify areas that spend a lot on food/drink, or have a high number of users within your preferred age range, which may help you identify a preferred area or community to open your coffee shop.

Top 1	00 • Census Tracts • in Water	loo, ON (CD) 👻 sorted by #1	Fotal Population by Age Total Popula	tion Total 20 To 24, 2019 👻	Filterin	view Actions +
	Location	# Basics Total Population, 2019	# Total Population by Age Total Population Total 20 To 24, 2019	# Total Population by Age Total Population Total 25 To 29, 2019	Total expenditure Food Food ant snacks and beverages, 2019	# Total Population by Age Population Total 15 To 19,
1	CT0106.01, Kitchener - Cambridge - Wa	4,440	2,507	768	\$605,388.90	
2	CT0107.02, Kitchener - Cambridge - Wa	6,611	851	615	\$1,469,887.26	
3	CT0002.10, Kitchener - Cambridge - Wa	11,941	767	768	\$2,558,705.03	
4	CT0106.02, Kitchener - Cambridge - Wa	4,040	760	573	\$776,963.53	
5	CT0002.11, Kitchener - Cambridge - Wa	11,857	679	963	\$2,789,575.93	

The Census Tract in the image above has a high total of 20 to 24 year olds, with good spending on snacks and beverages. You can click on the value to view a map of that location. In the map below, you can see that the Census Tract identified already has a number of coffee shops!

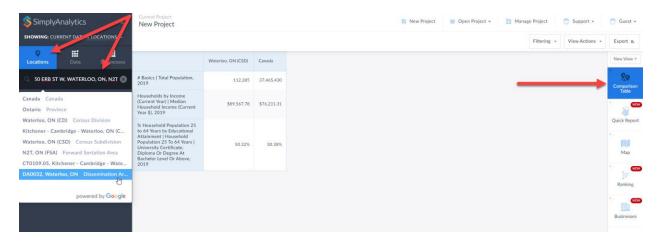


Other steps you can take include, creating a Ring Study Report in case you already have a target location in mind. Ring Study reports are helpful because they will calculate data within a 1, 3 and 5km range.

Question: We're opening a new business and we're interested in learning what kinds of interests and spending patterns exist in the surrounding neighbourhood we've selected. How do the interests and spending patterns compare to the whole city?

Answer: Create a <u>Comparison Table</u> to compare these different geographies across each other. Let's say for example that you want to compare demographics, and spending data in your home address (Dissemination Area), with the Census Tract, City, Forward Sortation Area and Province.

- 1. Toggle to the Comparison Table or create a new one by selecting New View > Comparison Table.
- 2. Add in your locations one by one by selecting the Locations block on the left and entering your locations. To enter a specific address, simply type it in then click on the Address Search button to discover which Dissemination Area or Census Tract the address belongs to.



Once you have added in the target locations, feel free to add in any pertinent data variables found within the Data block.

See the image below comparing a few spending variables across a Dissemination Area, a Census Tract, Census Division, Census Subdivision, Forward Sortation Area, and Canada.

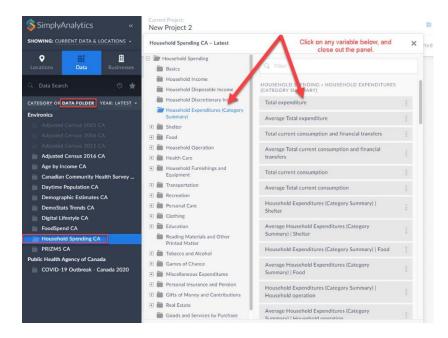
	DA0032, Waterloo, ON	CT0109.05, Kitchener - Cambridge - Waterloo, ON	N2T, ON (FSA)	Waterloo, ON (CSD)	Waterloo, ON (CD)	Canada
# Basics Total Population, 2019	1,548	7,526	20,804	112,385	571,232	37,465,430
Households by Income (Current Year) Median Household Income (Current Year \$), 2019	\$143,925.98	\$113,012.92	<mark>\$119,311.40</mark>	\$89,567.78	\$84,088.16	\$76,211.31
% Household Population 25 to 64 Years by Educational Attainment Household Population 25 To 64 Years University Certificate, Diploma Or Degree At Bachelor Level Or Above, 2019	58,56%	55.06%	54.59%	50,32%	30.10%	30.38%
Average Total expenditure Food, 2019	\$18,898.39	\$16,026.04	\$15,758.73	\$13,072.80	\$12,249.20	\$12,088.38
Average Total expenditure Education Total tuition fees, 2019	\$4,611.24	\$3,999.16	\$3,941.72	\$2,835.90	\$1,957.72	\$1,574.51
Average Total expenditure Education, 2019	\$4,614.27	\$4,009.15	\$3,961.53	\$2,855.88	\$1,975.48	\$1,618.15

Answer 2: If instead of adding in specific spending variables as demonstrated above, you can utilize a <u>Related Data Table</u> to add in all the major spending categories at once. Here's how:

1. Click on New View > Create Related Data Table

2. Navigate to this folder: Household Spending » Household Expenditures (Category Summary) and click on any variable and close out the panel.

3. The report will generate highlighting all the major spending category areas such as transportation, food, health care, etc.



Question: I'd like to better understand the demographic and spending behaviours of people who live within 2km around my ice cream shop. I want to use the PRIZM marketing segmentation system for this.

Answer: This is a 2-step process. First, you need to create a custom *radius location* for 2km around the address. Secondly, you need to use a <u>Related Data Table</u> to add in one household PRIZM segment (you can click on any segment, this report will add them all), and you can rank your location to see what is the most represented household segment. Each segment's metadata has a myriad of demographic & lifestyle information. Here's how:

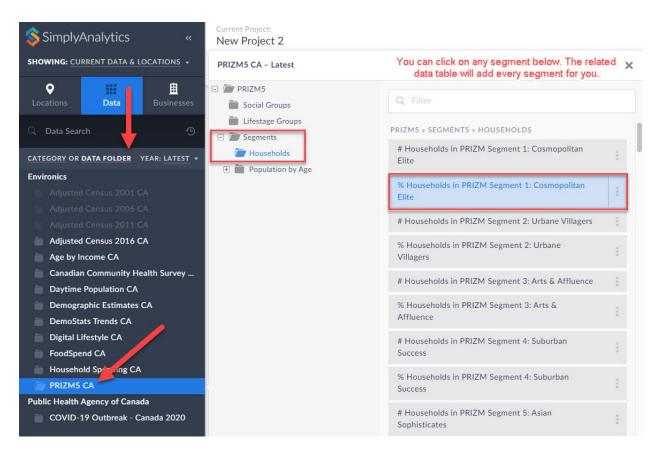
- 1. Click on New View > <u>Related Data Table</u>
- 2. Click on Locations > Custom Locations > Create New Radius Location

SimplyAnalytics «	Create Radius Location What location is at the center of your radius?	Create Radius Location What location is at the center of your radius?
SHOWING: CURRENT ON & LOCATIONS -	🔍 151 Charles St W, Kitchener, ON N2G 1ł 🛞 🕚	Q Type the address in here. 19
Locations Dr a Businesses	Waterloo, ON (CD) Census Division	Selected Location:
Q Location Search	Kitchener - Cambridge - Waterloo, ON (CMACA) C Kitchener, ON (CSD) Census Subdivision	DA0381, Kitchener, ON
CUSTOM LOCATIONS Hide	N2G, ON (FSA) Forward Sortation Area	Radius: 2 kilometers •
View your custom locations	CT0017.00, Kitchener - Cambridge - Waterloo, ON	Radius: 2 kilometers •
Create new radius location >	DA0381, Kitchener, ON Dissemination Area	
Create new combination location	1	Location name (optional):
3. Enter an	powered by Google	Save

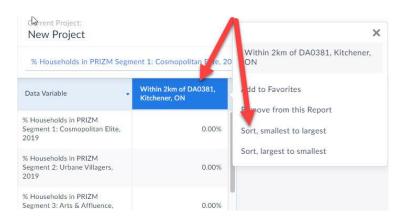
address at the

center of your radius to geocode the location to the dissemination area or census tract. Click on the location, and specify 2km within the radius box and click Save

4. With the Custom Radius Location created, you can now add a PRIZM5 segment into the Related Data Table. See the image below showing where to find the PRIZM5 folder.



5. When you click on **Done**, the report will automatically add all PRIZM segments to the report. Click on the location and Sort Largest to Smallest to see which segments are the highest represented within the area.



Õ

Click on the variable itself and select, *View Metadata* to read more about that segment.

Question: What are the top 5 languages in my neighbourhood? How do they compare to other neighbourhoods?

Answer: Create a <u>Related Data Table</u> to add in your target locations, and then add in one Mother Tongue nonofficial language so the report adds them all in.

- 1. Select New View > Related Data Table. Add in any locations of your choosing.
- 2. Click on the Languages category > Mother Tongue subcategory, and then scroll down to the nonofficial languages and select any language there.
- 3. Click Done

Current Project: New Project		Λ	×	🛅 Nev	w Pro
% Household Population by N	Mother Tongue Household Poul	CT0126.07, Kitcl Waterloo, ON	hener - Cambridge	fficial Italian, 2019 🔹	S
Data Variable	CT0126.07, Kitchener - Cambridge - Waterloo, ON	dd to Favorites	n Name	aterloo, ON (CD)	
% Household Population by Mother Tongue Household Population For Mother Tongue Total Single Response Total Non-Official Other Languages, 2019	3.21%	emove from this rt, smallest to la Sort, largest to sm	argest	3.06%	
% Household Population by Mother Tongue Household Population For Mother Tongue Total Single Response Total Non-Official Mandarin, 2019	1.10%	1.79%	2.30%	1.98%	
% Household Population by Mother Tongue Household Population For Mother Tongue Total Single Response Total Non-Official Cantonese, 2019	0.50%	1.63%	1.50%	0.41%	
% Household Population by Mother Tongue Household	7 400/	1 570/	0.40%	0.04%	

The report will generate for you. To see which unofficial languages are most representative in the locations, click on the location and *Sort*, *Largest to Smallest*.

How can I see how my neighbourhood has changed over the past few years? How much will it keep changing in the next few years?

Answer: You can use a <u>Time-Series Table</u> to track a data variable across multiple years. To do this:

1. Click on New View > Time Series Table

Create	Create	Create	New View
UUICK REPORT	RING STUDY TABLE	BUSINESS TABLE	Comparise Table
elect this view if you need a comprehensive fill of lary this variable for any location. Add one or more locations of the report, select the report content (such as a Demographic (Develow) from the dropdown box, and nstantly get a nicely formatted, easy-to-read report with letailed information about your selected location(s). Create	Select a central location and get a detailed tuble containing data for the 31x, 34m and 35m rings arough 1 it. Use this when you need to understand the character itics surrounding a specific location, or to compare locations for site selection.	Create a data table with detailed information about businesses that you have added to your project. Export the table to Excel or CSV.	Quick Rep Map
RELATED DATA TABLE	TIME SERIES TABLE	BAR CHART	Ranking
kid one etab variable to this report and new WI unmittabilit and it in the related data for you. For xample, I you and "% Households wi income \$50,000 to 74,999" the report will also show all of the other income anges as well.	Add one-data variable to this report and provide automatical and any ease of data for only variable. For example, if you add "Median Househourncome, 2017" the report will also show data for the year 2000, 2010, 2011, etc.	Bar charts are a great way to violally compare data values across locations. Add two or more locations to the view and select the desired data variable to create your chart.	Time Serie Table
Create	Create	Create	

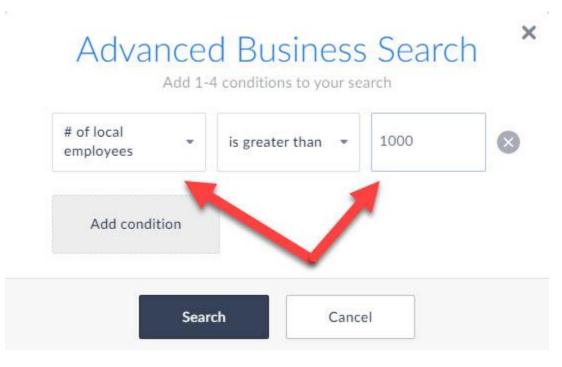
- 2. Specify your location and choose a single variable.
- 3. Click done to generate the report.

Surrent Project: New Project		🗈 New Project 🖉 Open Project 👻 Manage Project 💍 Support 👻	🔵 Guest 👻
Edit Time Series Table Done	1		New View -
LOCATIONS	Select all Clear	DATA	Compariso Table
Vaterloo, ON (CD)		# Basics Total Population, 2019	1 × 1
✓ Canada		Households by Income (Current Year) Median Household Income (Current Year \$). 2019	Quick Repo
Toronto, ON (CMACA)		% Household Population 25 to 64 Years by Educational Attainment Household Population 25 To 64 Years University Certificate, Diploma Or Degree At Bachelor Level Or Above 2019 Average Total expenditure Household Operation Pet expenses Pet food, 2019	Map
			Ì≡ Ranking
			Time Serie Table

Question: How can I get a list of businesses in the city that have more than 1,000 employees?

Answer: Use the Advanced Business Search to run an advanced business query.

- 1. Click on New View > Business Table, add in your target location
- 2. In the Businesses block, click on Use Advanced Search. The panel will open up
- 3. Click on the name dropdown and set that to *# of local employees* the second dropdown will display "is greater than" and then lastly, type in 1000.



4. Click Search, and then *Done* on the report to generate it.