Answering Research Questions Using SimplyAnalytics

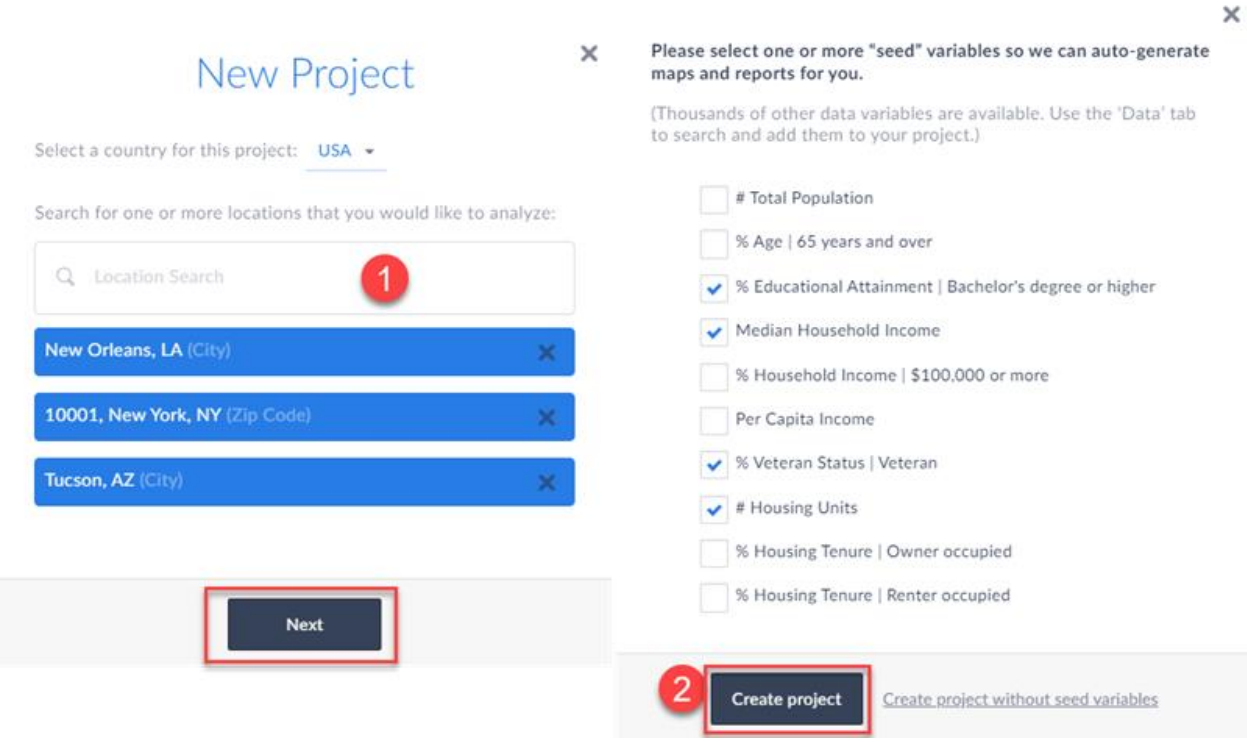
About this document: This guide will demonstrate how to answer research questions using SimplyAnalytics in a step-by-step format.

IMPORTANT – To answer these questions, you will first need to create a project. If you already have a project created, you can skip this section.

Table of Contents

Creating your project

There are two steps to creating your project: ① enter in at least one location, and ② select one or more seed variables. By default, SimplyAnalytics recommends some "seed" variables for you. If you want to get started quickly, feel free to choose from that list. You can always add more variables later.



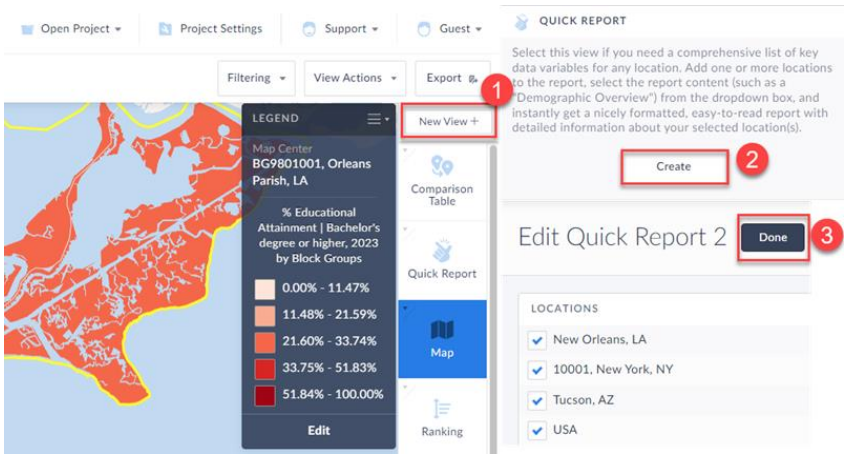
SimplyAnalytics will automatically create a new project providing you with four views: A Map, Comparison Table, Quick Report and Ranking Table.

With the project created, you can proceed to answering the questions below.

How can I get a community snapshot of my target location?

The Quick Report allows you to instantly access many of the most popular demographic & housing variables compiled in a pre-built report. **Because the Quick Report is automatically generated for you when you create your project, you can easily access it by clicking on it towards the far-right of the interface.** *Alternatively*, you can create a new quick report using the directions below.

1. Click on ① *New View* located towards the top-right of the screen and click ② *Create* under the *Quick Report* heading.



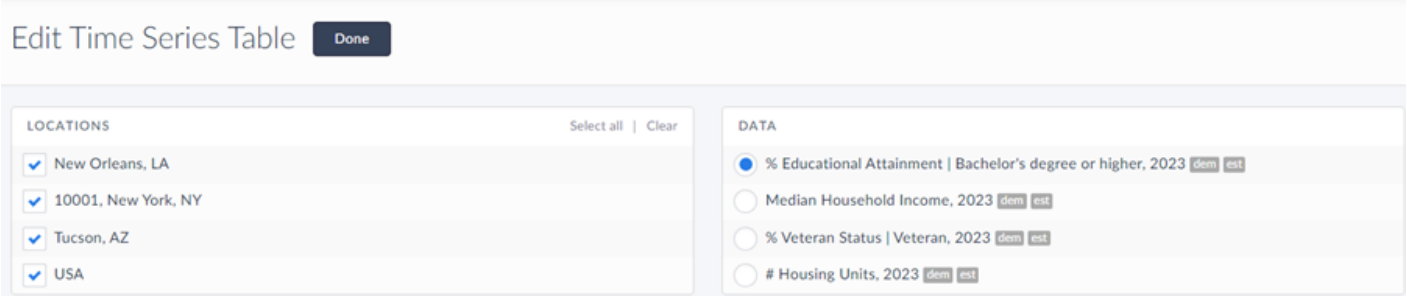
The *Edit View* screen appears showing the locations in your project. You can check or uncheck locations here.

If you want to use or add a new location, click on the Locations button on the top-left side of the interface and type in the location you want to use. Click ③ **Done** and your report will generate.

How do I identify trends over time for a data variable?

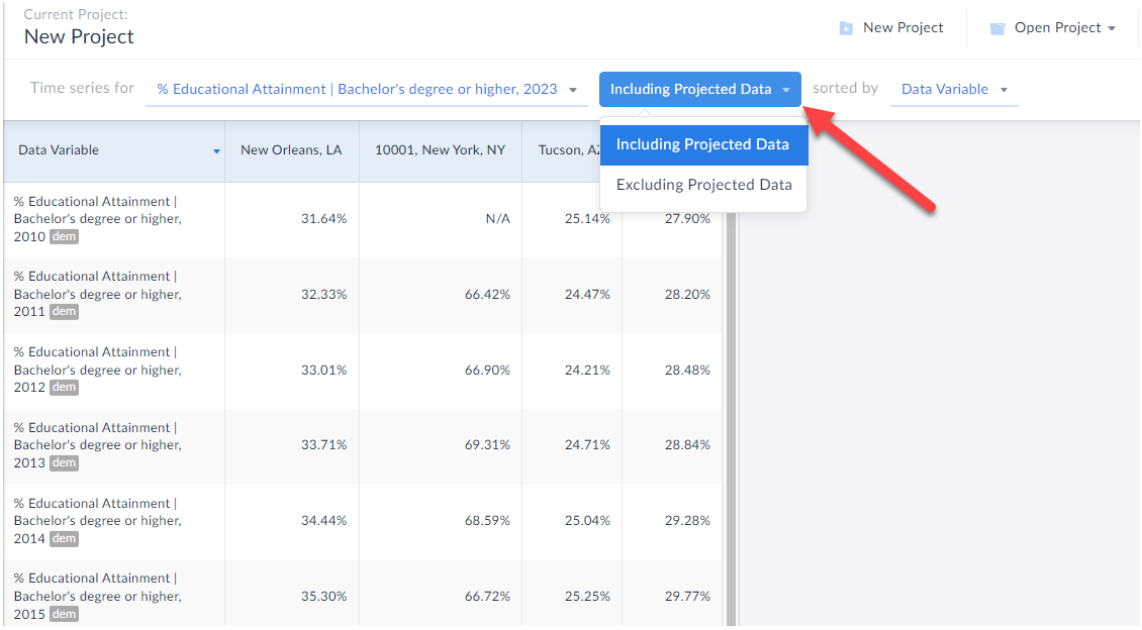
The **Time Series Table** provides users with all years of data available for a given variable in each of your target locations.

1. Click on New View located towards the top-right of the screen and click *Create* under *Time Series Table.*
2. Specify a variable, your locations, and click on **Done**



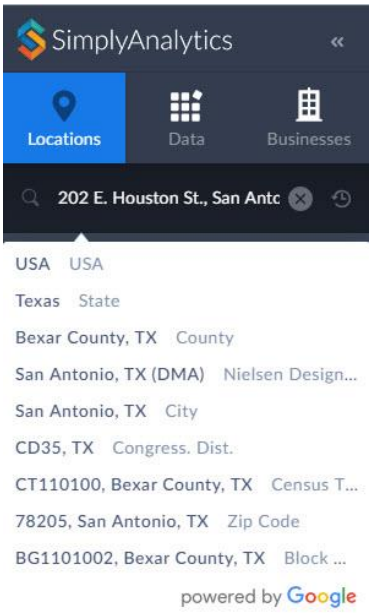
The report will provide you with multiple years of data for the chosen data variable.

Select the dropdown towards the top of the view to include projections of the data.



How do I compare my home Census Block Group (my address) with the Census Tract, ZIP Code, County and State it resides in?

The **Comparison Table** allows you to create a table using different location types and multiple data variables. Think of this as building a spreadsheet from scratch, where you specify the exact locations and variables you want. A Comparison Table is automatically generated when a project is created.



1. Click on the **Comparison Table** option on the far right of the screen to access the report. To add in your home Census Block Group and Census Tract from an address, select the Locations button on the left and type in your address.

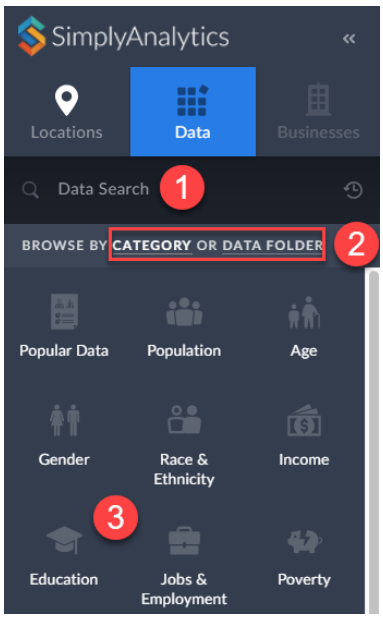
Click *Address Search* and the location hierarchy for the location is shown. Add in the Block Group and repeat to add in the Census Tract.

If you know the ZIP Code and County – enter them in the **Locations** search bar where you entered in the address and they will be added in to the report.

	BG1101002, Bexar County, TX	CT110100, Bexar County, TX	78205, San Antonio, TX	Bexar County, TX	Texas
# Housing Units, 2023 dem est	1,242	3,156	1,974	788,626	11,773,680
% Veteran Status | Veteran, 2023 dem est	17.02%	9.99%	15.70%	9.16%	6.59%
Median Household Income, 2023 dem est	$60,911.44	$53,230.82	$41,858.00	$61,935.48	$67,721.04
% Age | 65 years and over, 2023 dem est	35.96%	24.68%	29.33%	12.32%	12.83%

Adding in other data variables:

The data button located towards the left-hand side of the interface allows users to browse and add additional data variables to your report.



There are **three different ways** to browse for and search for data:

① Enter a keyword into the data search bar, such as: "poverty" or "pet food" and press Enter

② Click on one of the major categories you see present, such as *Population* – the variables panel will open and users can look into the subcategories or make a variable selection.

③ If you prefer browsing by folder, click on the *'Data Folder'* option located next to the default Category option.

Clicking on a category or browsing via dataset opens the Variables panel. To add in a data variable, simply click on the variable title itself and close out the panel. The variable will automatically be added.

Note that browsing by category or data folder is just a preference; it has all the same data.

How do I rank the top 100 ZIP Codes in a state for a variable?

The Ranking Table is a great way to quickly analyze many locations within one larger geography. For example, rank all counties in the US or all the Census Tracts in a county. A Ranking Table is also automatically generated for each project. You can simply toggle to the Ranking Table at the far right of the interface.

1. Select the locations button on the left and enter the state you want to analyze into the search field. You can then use the dropdown box at the top of the report to specify which geographies display and which data variable to rank.

You can rank any data variable in your report by clicking on the "sorted by" dropdown.

	Location	% Educational Attainment | Bac... ...egree or higher, 2023 dem est	Median Household Income, 2023 dem est	% Veteran Status | Veteran, 2023 dem est	# Housing Units, 2023 dem est
1	85718, Tucson, AZ	72.35%	$99,520.35	9.18%	14,972
2	85255, Scottsdale, AZ	69.73%	$137,123.36	6.05%	22,630
3	86017, Munds Park, AZ	69.23%	$94,276.62	4.70%	3,019
4	85750, Tucson, AZ	68.74%	$91,611.36	12.47%	13,417
5	86343, Crown King, AZ	68.29%	$104,922.03	10.16%	240
6	85253, Paradise Valley, AZ	67.06%	$173,148.53	4.95%	9,202
7	85258, Scottsdale, AZ	66.61%	$96,841.42	6.55%	15,369
8	85266, Scottsdale, AZ	65.38%	$148,376.46	5.03%	6,722
9	85259, Scottsdale, AZ	65.25%	$121,345.43	5.68%	10,868
10	85004, Phoenix, AZ	65.22%	$60,720.41	1.59%	6,230

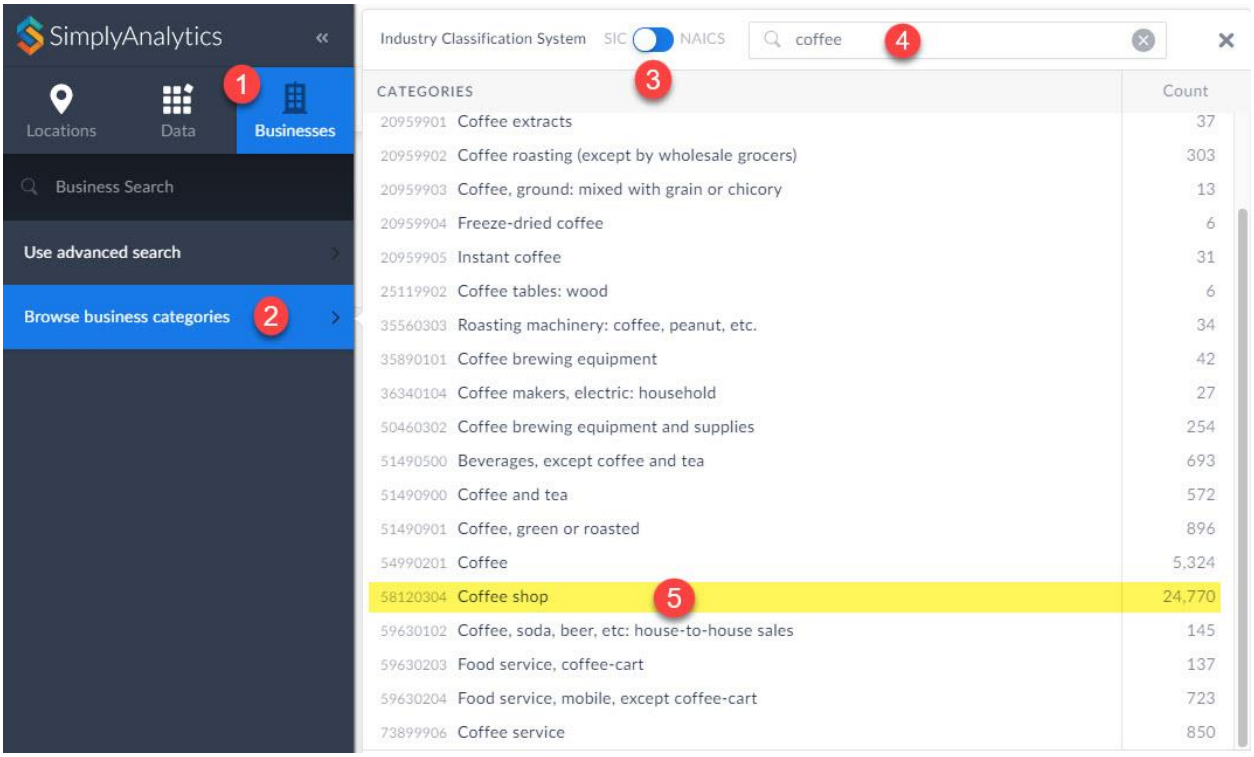
How do I generate a list of coffee shops in my city?

You can use a Business Table to generate a list of businesses in any location. The business information comes from Dun & Bradstreet and is updated once a month.

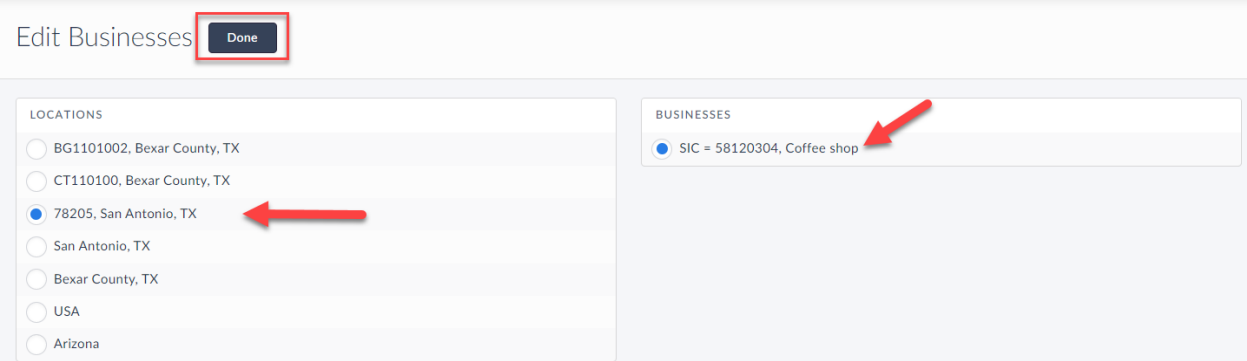
Select *New View* at the top-right and Create under the *Business Table* option.

① Select the Businesses button on the left. ***NOTE***: There is a keyword search functionality within the business block (black bar right under it), try it out by searching for a business name or industry – i.e. type in "Starbucks" or "food" – keep in mind, it is general search so it will find any business related to your keyword.

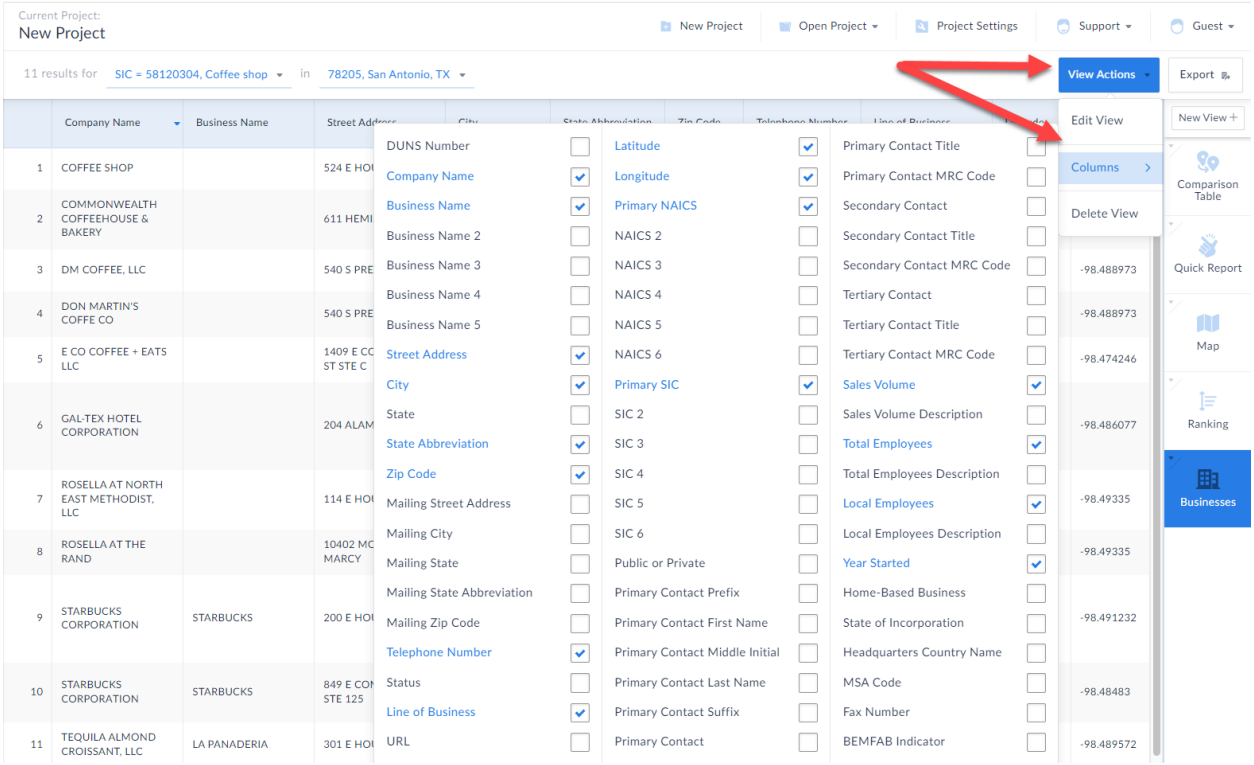
You may also browse businesses by SIC or NAICS code. Select ② Browse Business Categories and toggle to ③ SIC. From there, ④ type the word coffee in the search panel and select the code ⑤ for Coffee Shop.



With the code selected, specify the target location and click **Done**.



The report will generate. Click on **View Actions > Columns** at the top-right of the report to remove or add in additional fields of data. If your institution subscribes to the Premium D&B data you will see exclusive fields such as: sales volume, employee count, primary contact, and more. The Standard D&B (Points-of-Interest) file also includes a limited number of additional fields of data.



How do I analyze data for downtown, or target neighborhood?

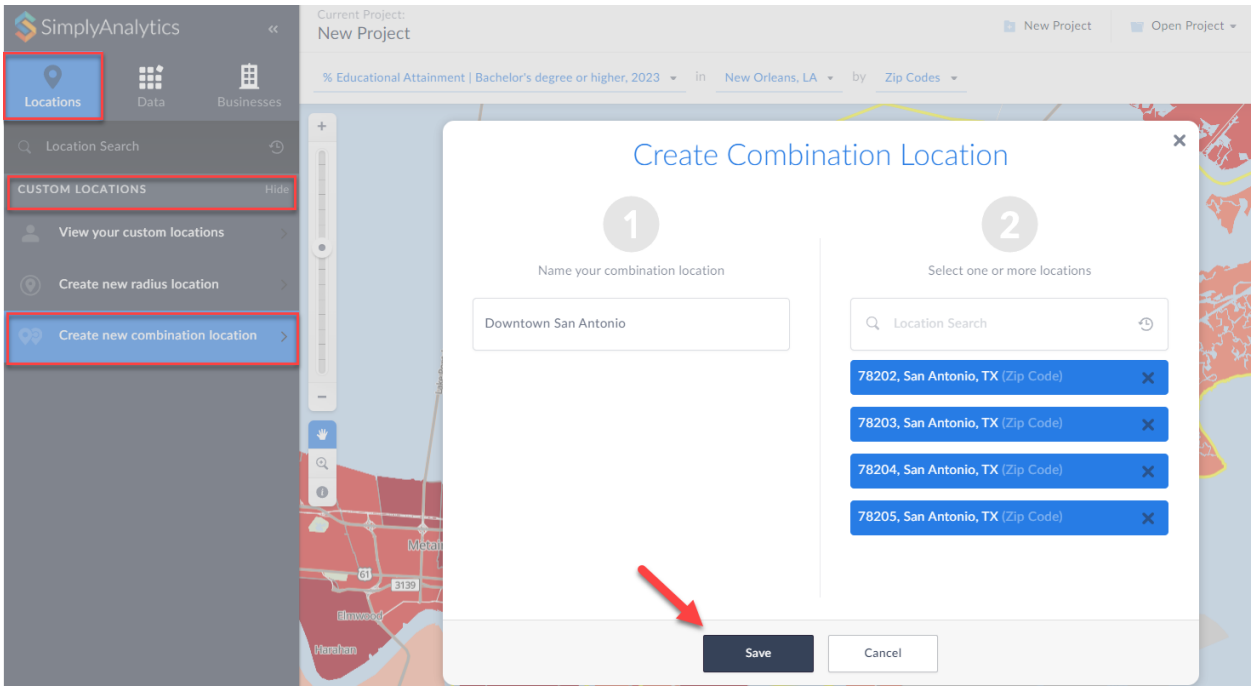
SimplyAnalytics uses Census boundaries, so you are welcome to choose from ZIP Codes, States, Counties, Census Tracts, etc. However, with questions such as this, "Downtown" is not an actual Census boundary, but it is likely a few ZIP Codes combined, or a few Census Tracts, etc. this can be created in SimplyAnalytics.

The **Custom Combination Location** feature enables users to combine locations of similar geographies to form one larger area. This example will combine 4 ZIP Codes to create "Downtown San Antonio". SimplyAnalytics will calculate all number, percent, and average data variables for the custom location.

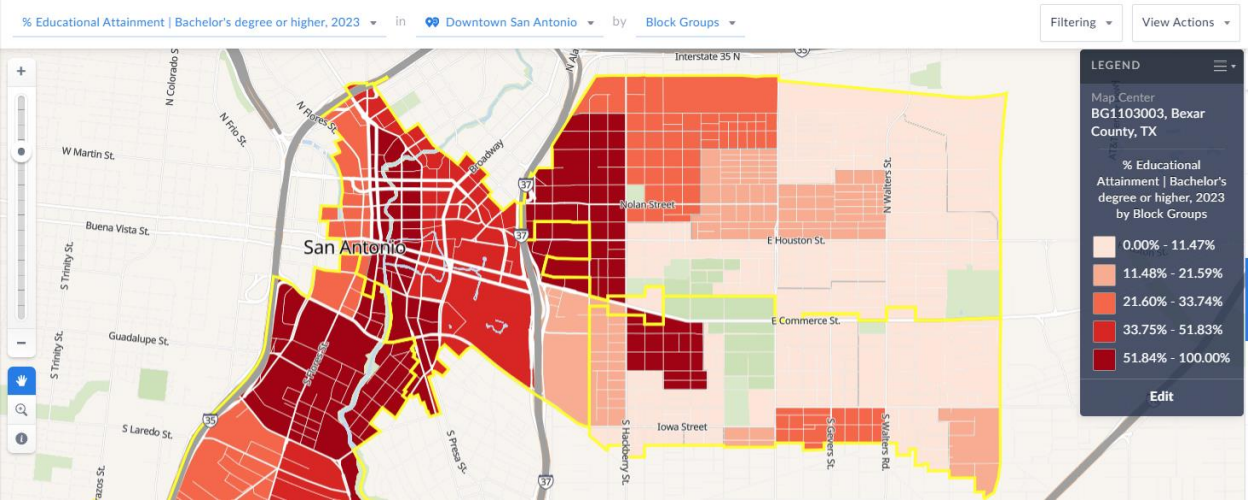
NOTE: You don't have to be in a map to create this custom location, but it is shown in a map here for reference.

Click on the Locations box at the top left and select the **Custom Locations heading**. From there, select *Create New Combination Location*. Enter the name for your location in box number 1.

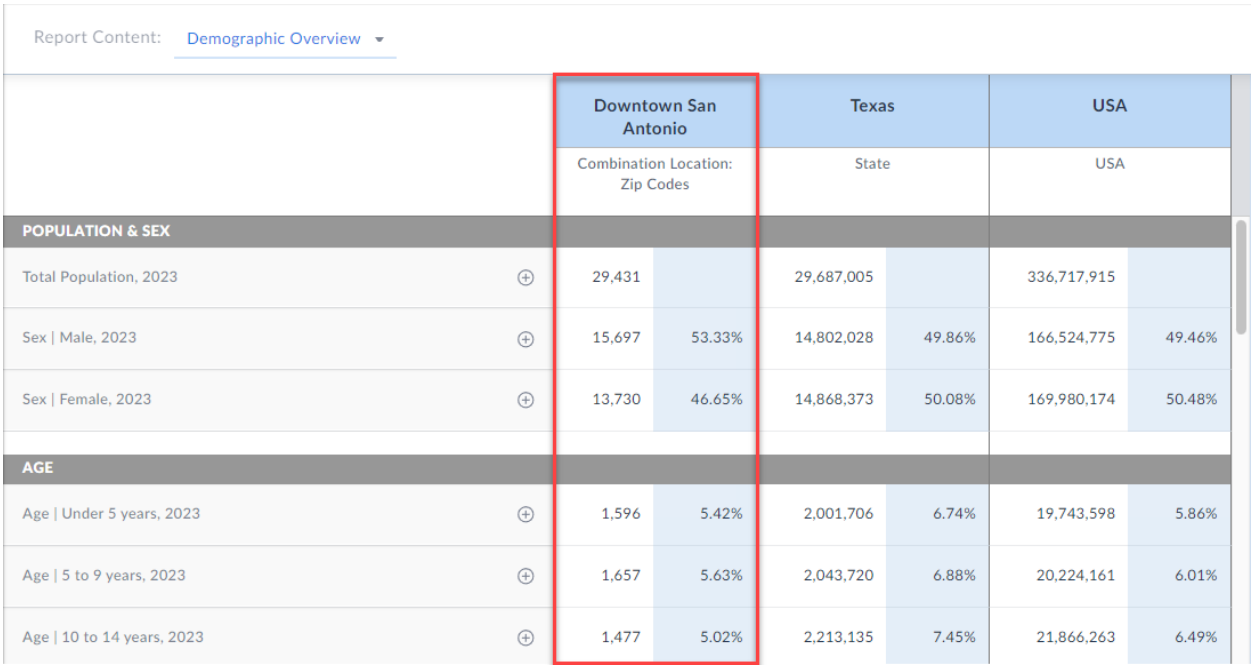
If you have a list of locations that make up your custom location, you can type them into step number 2 shown below.



Alternatively, if you have previously used ( ) or favorited ( ) locations you can easily access them by clicking on the respective icons within the **Location search** in step 2**.** Click **Save** to see your newly created location.



You can also use this custom location in any report.



	Downtown San Antonio Combination Location: Zip Codes		Texas State		USA USA	
POPULATION & SEX						
Total Population, 2023	29,431		29,687,005		336,717,915	
Sex | Male, 2023	15,697	53.33%	14,802,028	49.86%	166,524,775	49.46%
Sex | Female, 2023	13,730	46.65%	14,868,373	50.08%	169,980,174	50.48%
AGE						
Age | Under 5 years, 2023	1,596	5.42%	2,001,706	6.74%	19,743,598	5.86%
Age | 5 to 9 years, 2023	1,657	5.63%	2,043,720	6.88%	20,224,161	6.01%
Age | 10 to 14 years, 2023	1,477	5.02%	2,213,135	7.45%	21,866,263	6.49%

Tip: if you want to create a custom location from the map, you can use the i-tool on the map toolbar to select locations – they will be instantly added to your recent locations list.

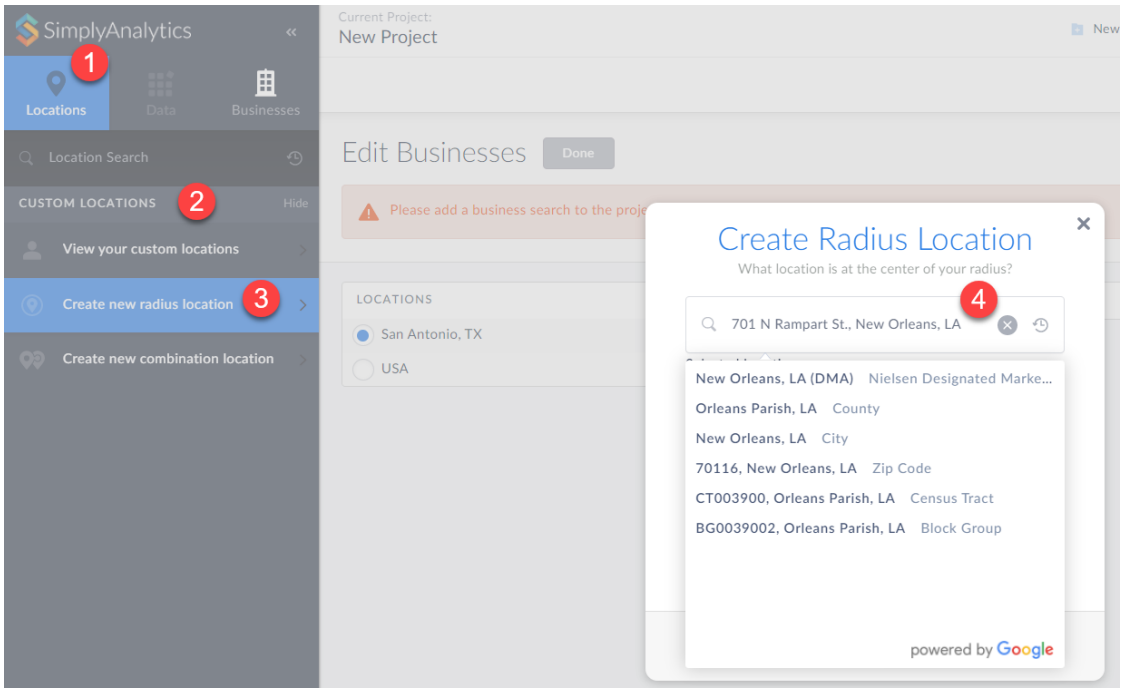
How many restaurants are there within one mile of an address?

The custom radius location feature allows you to create a ring around a specific target area, and SimplyAnalytics will calculate the average, percent and total variables for the radius. You can also run business queries for the custom locations you create.

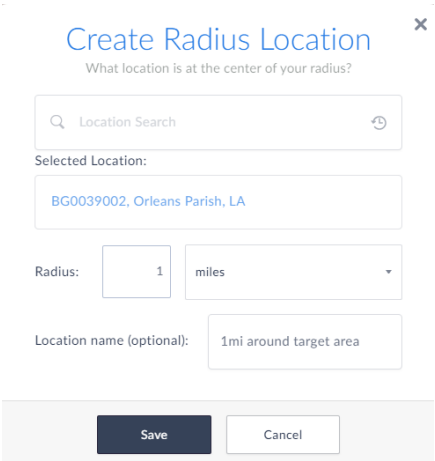
Open a **Business Report** by selecting New View > Business Table

Towards the left, click on ① Location > ② Custom Locations > ③ Create New Radius Location

④ Enter the target address & click on one of the geographic units (such as a block group).



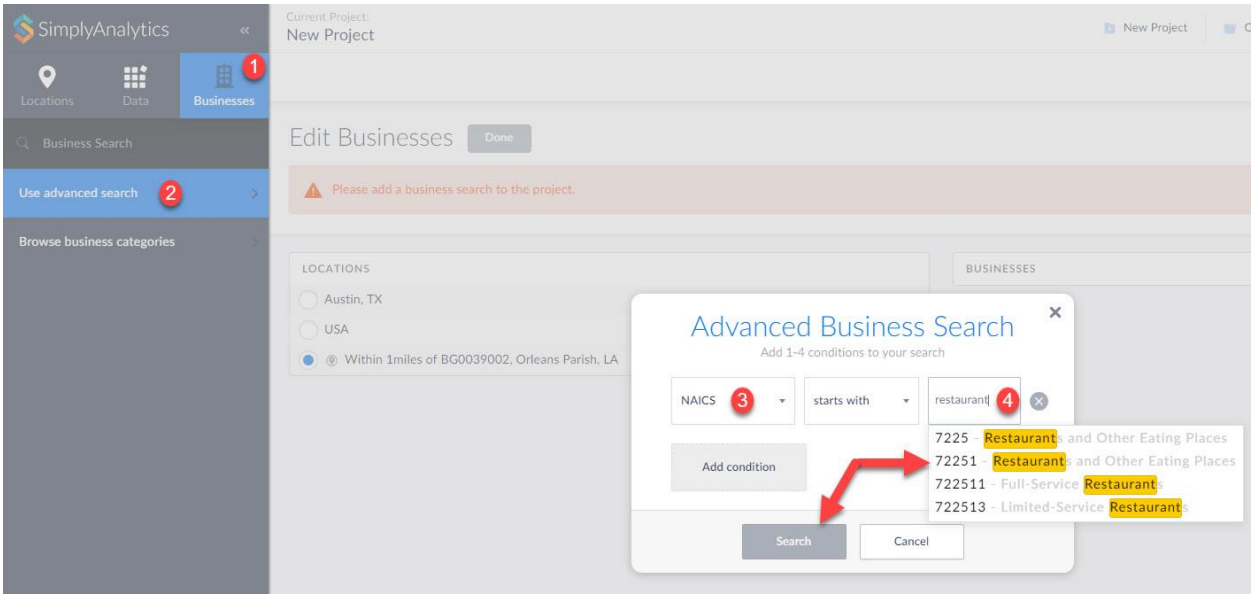
When you select the geographic unit (this example will be the Block Group), click on **Save** to create the custom location (the default radius will be 1 mile).



Next, you will need to setup the business query to search for both full service and limited-service restaurants. This is possible by truncating the NAICS code to include both types of restaurants.

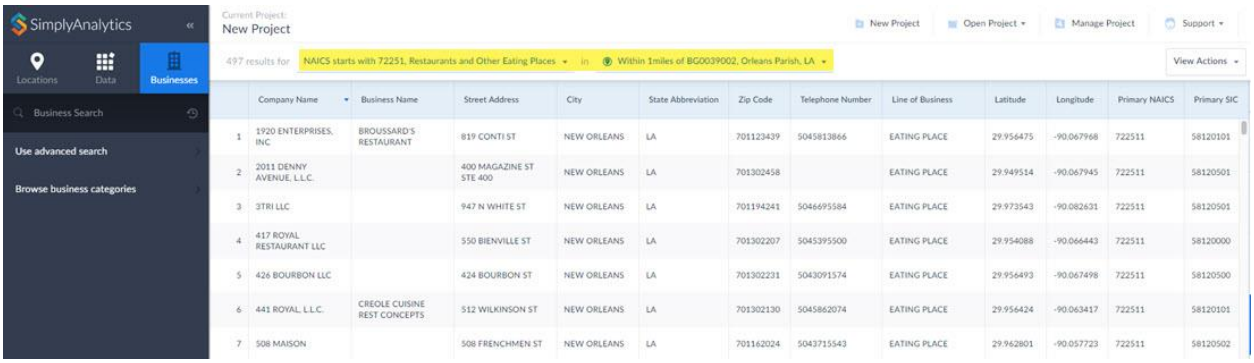
① Click on the Businesses button towards left and select ② *Use Advanced Search*.

③ Set the first dropdown to NAICS, then select "starts with" and lastly ④ type in the word "restaurant". A list of related codes will appear.



Click on **72251** – this query is then setup to include 722511 (full service) and 722513 (limited service).

Click search and the report will generate.



How do I use the data filter?

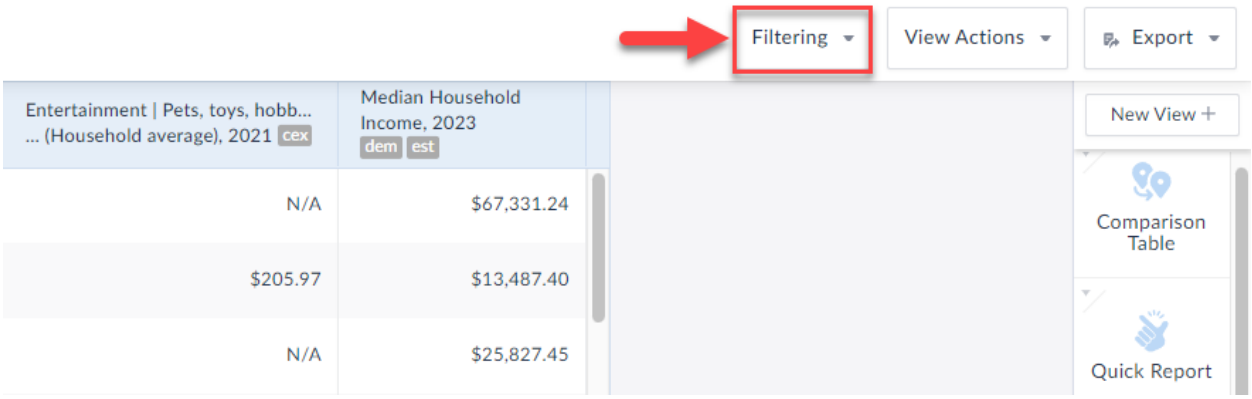
You can use data filters to identify target areas based on criteria. For example, you want to rank the cities in the US that spend the most money on pet food (household average), but you only want to include cities with a population greater than 150,000.

Open a Ranking Table and add some variables, including Pet Food (HH Avg) (found by selecting **Consumer Behavior** > **Pets categories**), and # Population (Found under the **Popular** category).

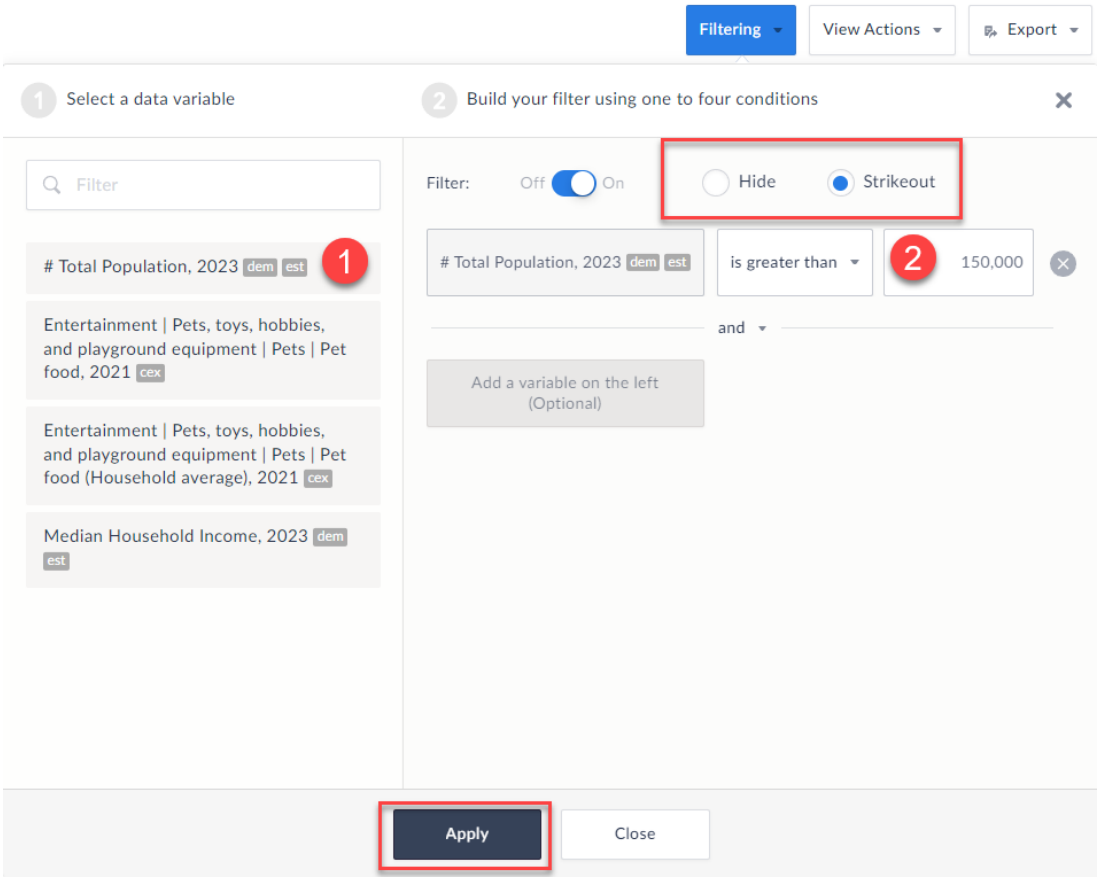
At the top of the Ranking Table, ensure USA is the chosen geography, and that cities is the geographic unit.

	Location	# Total Population, 2023 dem est	Entertainment | Pets, toys, hobb... ...ent | Pets | Pet food, 2021 cex	Entertainment | Pets, toys, hobb... ... (Household average), 2021 cex	Median Household Income, 2023 dem est
1	Aaronsburg, Centre County, PA	607	N/A	N/A	$67,331.24
2	Aaronsburg, Washington County, PA	367	$41,081.77	$205.97	$13,487.40
3	Abanda, AL	233	N/A	N/A	$25,827.45
4	Abbeville, AL	2,216	$118,738.91	$232.95	$36,944.38
5	Abbeville, GA	2,742	$15,891.00	$75.48	$22,128.00
6	Abbeville, LA	11,193	$1,059,845.50	$261.64	$37,603.60
7	Abbeville, MS	402	$16,507.18	$357.84	$53,670.98

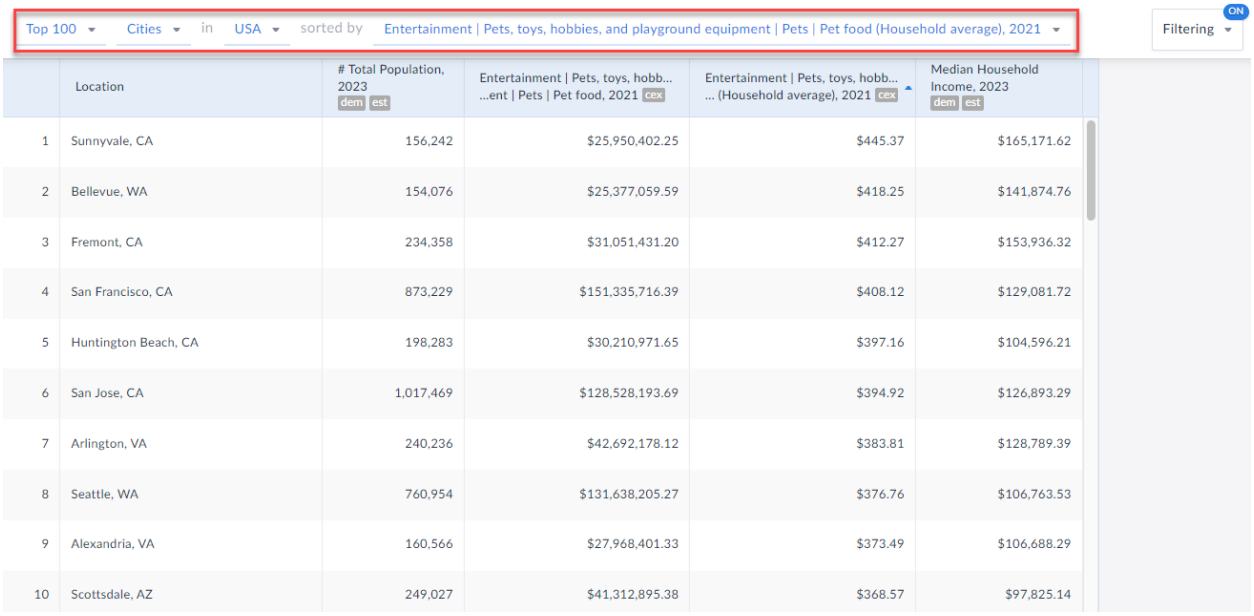
Click on the **Filtering** dropdown at the top-right. The Filters panel will open.



① Click on # Total Population variable, leave the condition dropdown to: "is greater than" and ② enter in 150,000 in the last available box. Click **Apply** & close out the panel.



All locations that don't meet your criteria will be stricken out. You can hide these locations altogether by reopening the Filters panel and clicking on the **Hide** option at the top. Now, you can select the "Sorted By" dropdown to see the final list ranking Pet Food (HH Average) for cities with more than 150,000 people. Final list shown here.



	Location	# Total Population, 2023 dem est	Entertainment | Pets, toys, hobb... ...ent | Pets | Pet food, 2021 cex	Entertainment | Pets, toys, hobb... ... (Household average), 2021 cex	Median Household Income, 2023 dem est
1	Sunnyvale, CA	156,242	$25,950,402.25	$445.37	$165,171.62
2	Bellevue, WA	154,076	$25,377,059.59	$418.25	$141,874.76
3	Fremont, CA	234,358	$31,051,431.20	$412.27	$153,936.32
4	San Francisco, CA	873,229	$151,335,716.39	$408.12	$129,081.72
5	Huntington Beach, CA	198,283	$30,210,971.65	$397.16	$104,596.21
6	San Jose, CA	1,017,469	$128,528,193.69	$394.92	$126,893.29
7	Arlington, VA	240,236	$42,692,178.12	$383.81	$128,789.39
8	Seattle, WA	760,954	$131,638,205.27	$376.76	$106,763.53
9	Alexandria, VA	160,566	$27,968,401.33	$373.49	$106,688.29
10	Scottsdale, AZ	249,027	$41,312,895.38	$368.57	$97,825.14

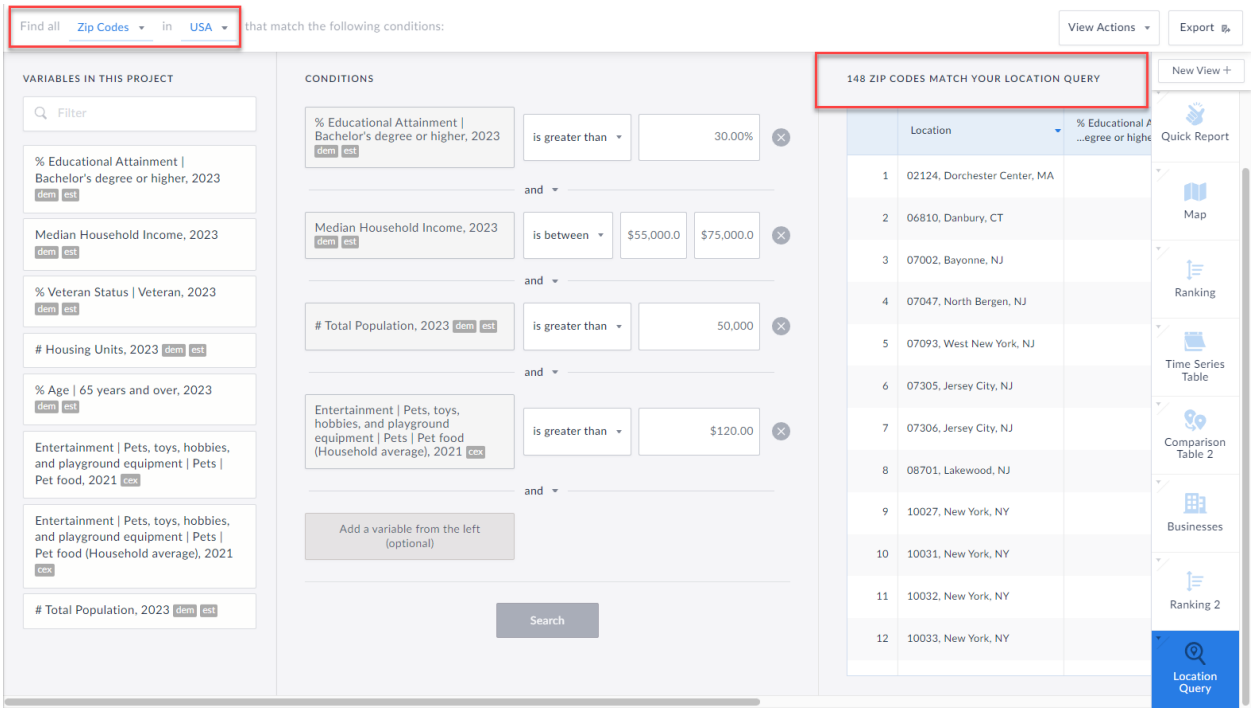
How can I pull a list of target locations based on some criteria without using the data filter?

The **Location Query** report is similar to using data filters, except it is presented within its own report, and you are not limited to only using 4 conditions.

Click on *New View > Location Query*

The report looks similar to the filter dialog box. Choose variables that represent what you are looking for and click **Search**. The far right of the screen displays the results.

In this example, a researcher is looking for a list of ZIP Codes in the USA that: More than 30% of Adults have a college degree, and those ZIP Codes have a median HH incomes between $55-75k, and a total population of more than 50k, and spend more than $120 per year on pet food.

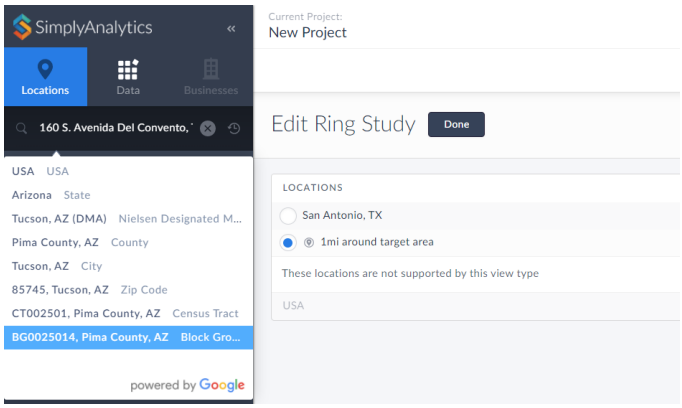


Note: any variable can be a condition. By default you will see a list of variables in your project (shown on the left of the screenshot)– if you don't see the variable you are looking for there already, you will have to add that in by clicking on the Data block and adding it to your report.

How many millennials are there within a 1, 3, 5mi radius around an address?

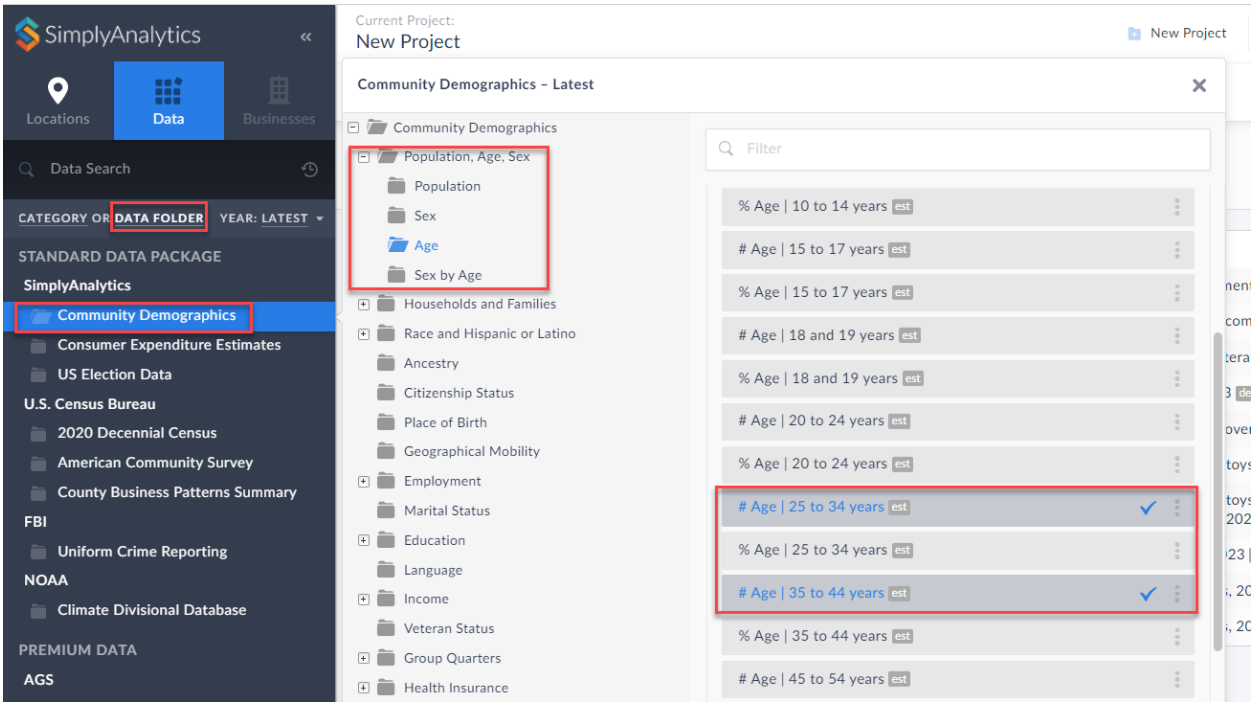
The **Ring Study Table** allows users to select a central location, and get a detailed table containing data (#/% or Total/Avg variables) for the 1mi, 3mi, and 5mi rings around it. It is ideal when you need to understand the characteristics surrounding a specific location, or to compare locations for site selection.

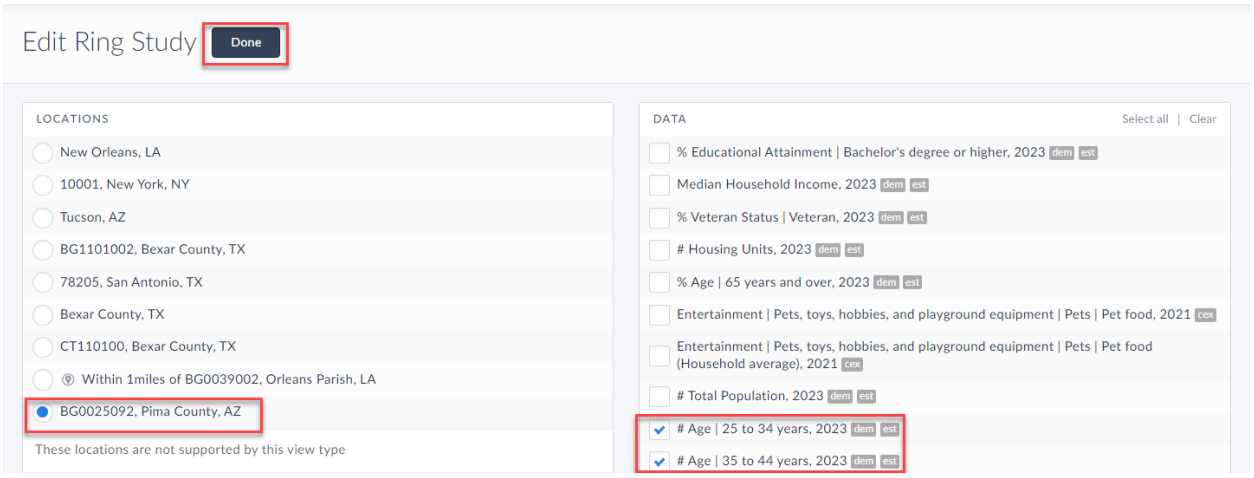
Click on *New View* > *Ring Study Table*



In the **Locations** button at the top-left, type in the chosen address and make your geography selection (block group in this example).

Under the **Data** block, navigate to the Age category *or* **Community Demographics folder** and add in the appropriate age ranges.





Click **Done** to generate the final report. All number, percentage, average or total variables should calculate. You will see N/A for median, and any other variables that are unable to be calculated for a radii.

BG0025092, Pima County, AZ

	1 mile radius	3 mile radius	5 mile radius	All of USA
# Age | 25 to 34 years, 2023 dem est	2,307	15,027	32,080	45,396,842
# Age | 35 to 44 years, 2023 dem est	1,856	10,942	24,735	42,052,653