

Simply Analytics



Last Modified: September 2018

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SimplyAnalytics Hands-On Exercises

Getting Started

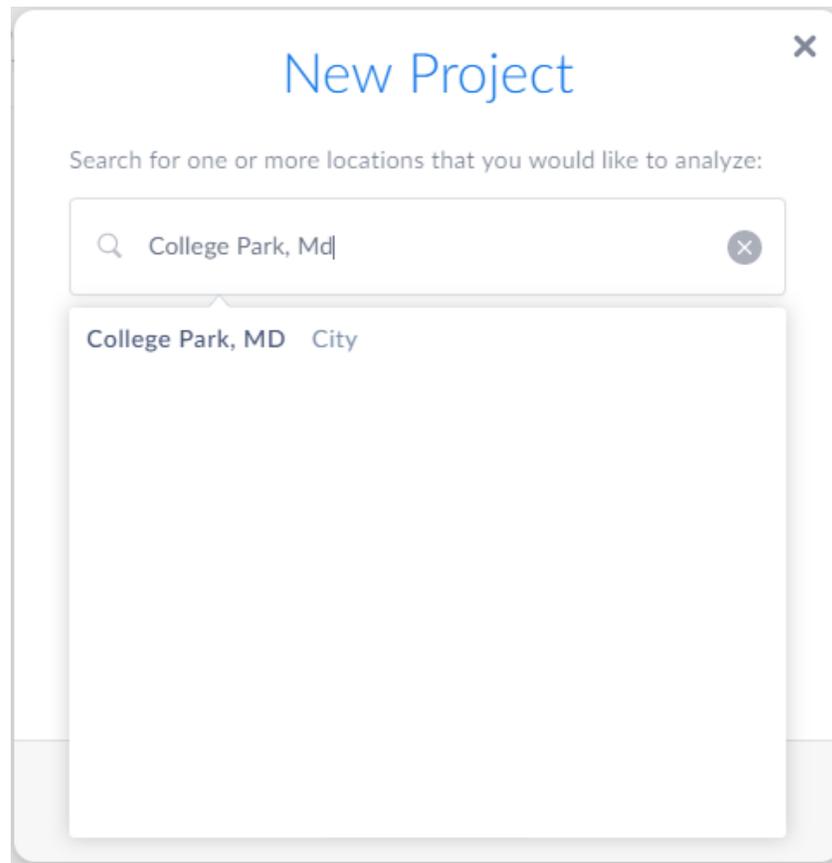
Go to <https://www.lib.umd.edu/dbfinder> and search for SimplyAnalytics and you should be able to see it as the first option. Create an account to proceed.

Practice Exercise 1

(1) How do I create a map showing demographic or marketing data for a specific location?

Which ZIP Code(s) include the highest income households in **College Park, MD**?

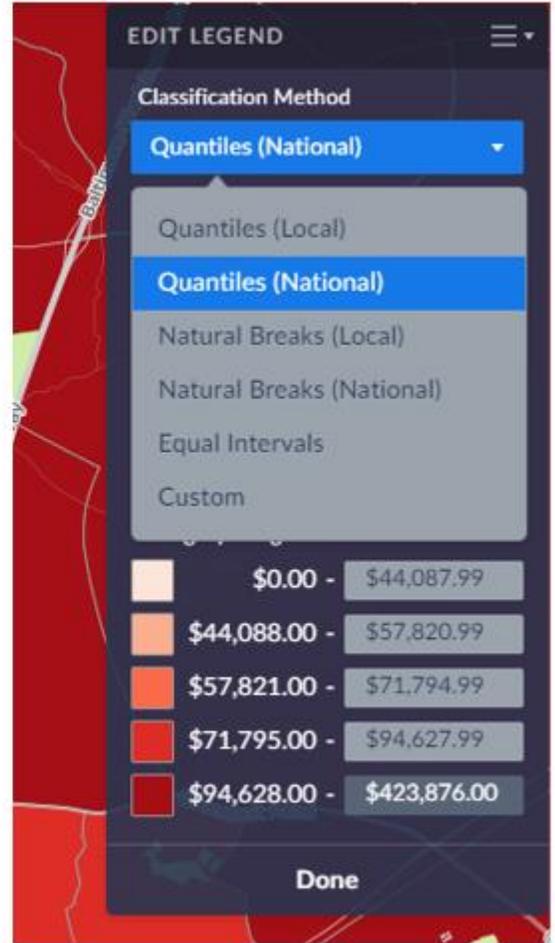
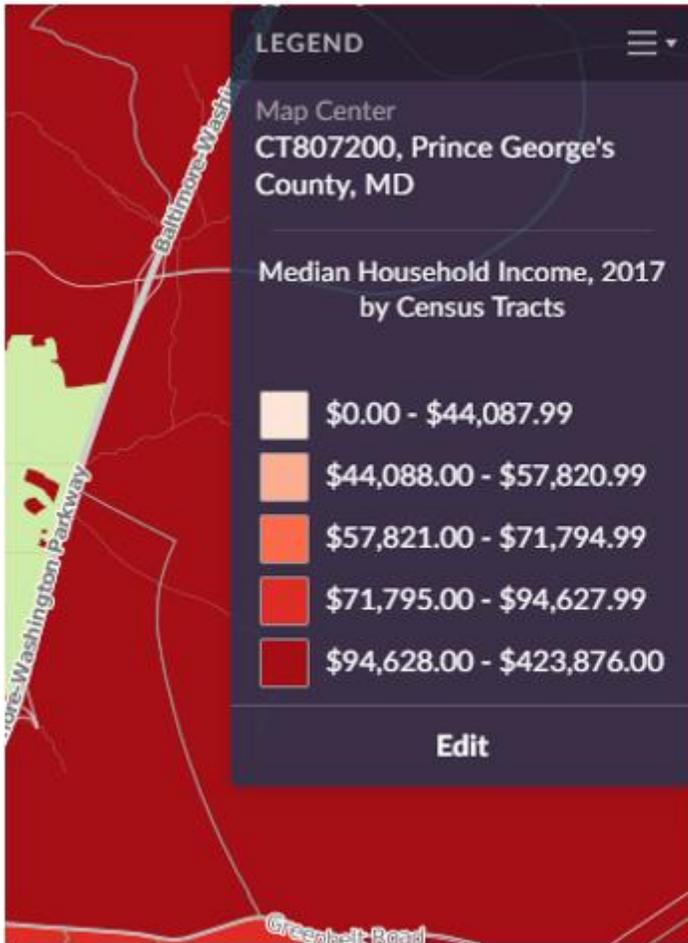
Step 1: Click on New Project in the top bar and you should see a pop-up prompting you to input location details. Key in College Park, MD. Click Next.



Step 2: Select your Variable: A pop-up for selecting one or more “seed” variables will appear. The variable you want is *Median Household Income*. . Click on create project.

Tips:

- Click on edit and try changing the classification method to recalculate the break points for the Variable Median Household Income. For example, switching to *Quantiles Local* will only use data from your local map (in this case College Park and surrounding area) to calculate the break points.



- Label your ZIP Codes by clicking “Show Map Labels,” by clicking on view actions on the upper right corner.

Which area has the most high income households? *Using Quantiles Local shows that the highest incomes are concentrated in several ZIP Codes in north and east of College Park.*

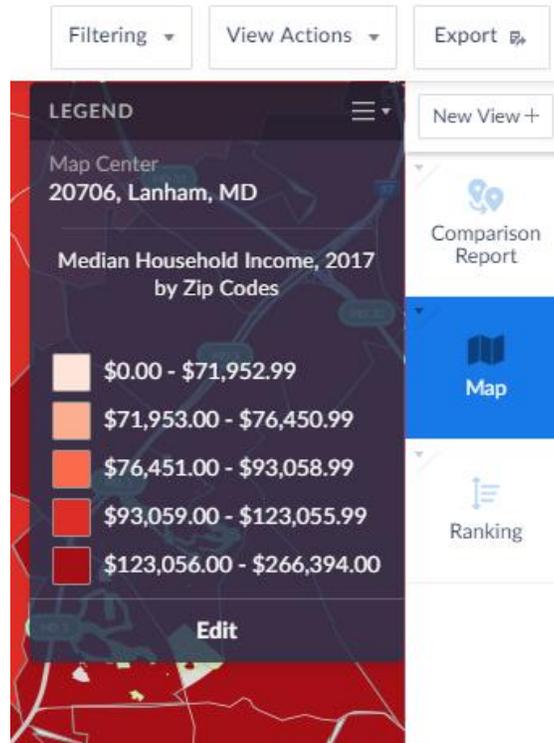
Step 3: Click on Export button at the top right of the screen to export the finished map.

(2) How do I create a custom report comparing data across multiple locations?

Comparison Reports are a great way to compare multiple data variables across all types of geographies. You can compare ZIP Codes with Cities, with Counties, etc.

Compare the ZIP Codes in College Park with the highest median incomes to **your own neighborhood**, ZIP Code, City of **College Park**, and the state of **Maryland**.

Step 1: Click on the comparison report button you see on the right. The Edit View menu appears with the locations and variables you have already used. Here you can remove any variables or locations you don't want, and utilize the Data & Locations tab towards the left to add in any new variables/locations.



Step 2: Click on the location tab you see on the left and input desired ZIP Code, such as 20769. You can add as many zip code as you want to compare.

	College Park, MD	USA	20769, Glenn Dale, MD
Median Household Income, 2017	\$70,615.00	\$68,272.00	\$129,704.00

Step 3: We can also add other variables to compare. Click on Data, Households and Household Income, Per Capita (\$).

	College Park, MD	USA	20769, Glenn Dale, MD
Median Household Income, 2017	\$70,615.00	\$68,272.00	\$129,704.00
Household Income, Per Capita (\$), 2017	\$23,591.00	\$35,542.00	\$51,400.00

Tips:

- Transpose the columns and rows by clicking *Transpose Report* from the View Actions button seen on the top right.
- Sort report data by selecting the sort options that appear when you click on column headings.

(3) How do I create a data filter?

Data filters allow you to select locations on a table or a map based on specific criteria such as population size, average income, or total spending.

Step 1: Click on the Filtering button you see on the top right corner.

Step 2: Select the variable you would like to filter. Choose “Median Household Income”, “is greater than”, “70,000”

The screenshot shows a 'Filtering' dialog box with two main sections:

- Section 1: Select a data variable** (indicated by a '1' in a circle): Contains a search bar labeled 'Filter' and a list of variables:
 - Median Household Income, 2017
 - # Male Population, 2017
 - % Speaks English, 2017
 - Household Income, Per Capita (\$), 2017
- Section 2: Build your filter using one to four conditions** (indicated by a '2' in a circle):
 - Filter: On | Hide | Strikeout
 - Condition 1: Median Household Income, 2017 is greater than \$70,000.00
 - Operator: and
 - Condition 2: Add a variable on the left (Optional)

At the bottom of the dialog are 'Apply' and 'Cancel' buttons.

Step 3: Give your filter a meaningful name. Here will use “Maryland Income” and Save.

- Now your chart should not have any attributes that do not match your criteria removed.

	College Park, MD	USA	20769, Glenn Dale, MD
Median Household Income, 2017	\$70,615.00	\$68,272.00	\$129,704.00
Household Income, Per Capita (\$), 2017	\$23,591.00	\$35,542.00	\$51,400.00

Step 4: You apply filters similarly to maps

- Display your map by selecting the map tab.
- Click on the Filtering button you see on the top right corner.
- Step 2: Select the variable you would like to filter. Choose “Median Household Income, 2017 “is greater than”, “70,000”
- Any areas that do not match your filter criteria will appear in grey.

The screenshot shows a data visualization interface for College Park, MD, filtered by Zip Codes. The map displays various colored regions, with some areas highlighted in grey. The filtering overlay is titled "Filtering ON" and includes a search bar, a list of variables, and a filter configuration panel. The filter is set to "Median Household Income, 2017 is greater than \$70,000.00". The "Apply" button is visible at the bottom of the filter panel.

(4) How can I analyze data 1, 3, and 5 miles from a specific location?

Step 1: Create a Ring Study Report:

- Click the *New View* button on the right and click *Create for Ring Study Table*
- You will be prompted to select one location from the Recent Locations list (such as your Zip Code or City)
- Select the desired Variables for the report from the Variables list.

- Click Done

College Park, MD ▾

	1 mile radius	3 mile radius	5 mile radius	All of USA
Median Household Income, 2017	N/A	N/A	N/A	\$68,272.00
Household Income, Per Capita (\$), 2017	N/A	N/A	N/A	\$35,542.00
# Population Poverty Universe, 2017	75,342	274,993	497,274	324,209,135

(5) How do I rank the top Zip Codes in Maryland?

Step 1: Let's go ahead and add Annapolis, MD to our list to compare. Click on comparison report and key in Annapolis, MD in the location tab search bar you see on the left.

Step 2: Click on ranking button you see on the right and you should see the ranking based on Median Household income.

(6) How do I overlay business data with demographic or marketing data?

Step 1: From your map tab showing **College Park**, open the Businesses Side Tab and click *Find Businesses*. You can search for Businesses by keying in the Legal Name or Business Name in the search bar. To search using SIC or NAICS code click on Browse Business Categories. In this example we will map points with the SIC Code for "Eating Places."

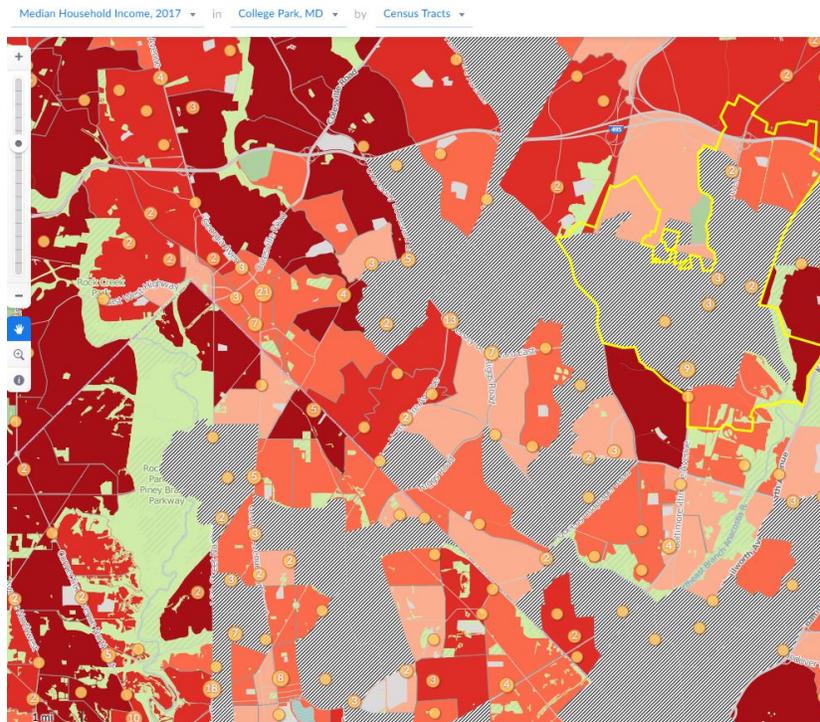
Step 2: Select "Eating Places" (with a count of 164,397) by clicking on it. Action menu that appears:

The screenshot shows the SimplyAnalytics interface. On the left is a dark sidebar with navigation options: 'Locations', 'Data', and 'Businesses' (which is highlighted in blue). Below these are 'Business Search', 'Use advanced search', and 'Browse business categories'. The main content area is light gray and shows a search for 'eating places'. At the top, it says 'Industry Classification System' with a toggle for 'SIC' (selected) and 'NAICS'. Below this is a table of categories:

CATEGORIES	Count
58120000 Eating places	164,397
58120305 Delicatessen (eating places)	15,118
58120310 Grills (eating places)	19,552
58120401 Automat (eating places)	50
58129900 Eating places, nec	0
58129901 Buffet (eating places)	3,602

Tips:

- Points that are clustered close together appear as a single point with a number indicating the number of points in that area. To separate the clusters, zoom in.
- Click a point to view metadata on the point name and location.
- When there are many points, the points may take a moment to load.



Step 3: To make a report click on the Businesses option you see on the right side and click on the Export option where you will have the option to select Excel, CSV or DBF.

Manage Project | Support | reshma.nargund@gmail.com

View Actions | Export

Latitude	Longitude		
38.99589	-76.931784		
38.979826	-76.937789		
38.979826	-76.937789		
38.994766	-76.925876	722511	58120000
38.981754	-76.938578	722511	58120000
38.979826	-76.937789	722511	58120000
38.981752	-76.938617	722511	58120000
38.994209	-76.923473	722511	58120000

File format: Excel CSV DBF

Export to: Email Save to computer

Export Cancel

Ranking

Businesses

Practice Exercise 2: Nielsen PRIZM™ Segments and Consumer Profiles

Use SimplyAnalytics to identify prominent consumer profiles in your neighborhood using the Nielsen PRIZM™ segmentation system, which defines 66 demographic and behavior types to help marketers discern households purchasing preferences.

(1) How do I create a report listing the top PRIZM™ segments for any location?

Step 1: Click on New Project (at the top of the window) and key in College Park, MD in the location search bar and deselect all the variables.

Step 2: Add the PRIZM™ segments to the report:

- Click on the Data option you see at the top left side of the screen and scroll down to market segments and click on it.
- Scroll down and check the box next to PRIZM US (193)
- Look for various segments as you scroll down and select the segment you want for your map.

The screenshot shows the SimplyAnalytics interface. On the left, a navigation menu is open to the 'Data' section, with 'Market Segments' highlighted. The main content area shows a search for 'College Park, MD' with 193 results for 'Market Segments'. The filters are set to 'Year = Latest' and 'Data Set = PRIZM US'. The results are displayed in a list format, showing various PRIZM segments. The segment '% Households Segment 4: Young Digerati' is selected, indicated by a blue checkmark. The interface also shows a 'Filter' search bar and a 'Group Related Data' checkbox.

- You can click on the three dots next to each segment and click on view metadata to see information about the segment.

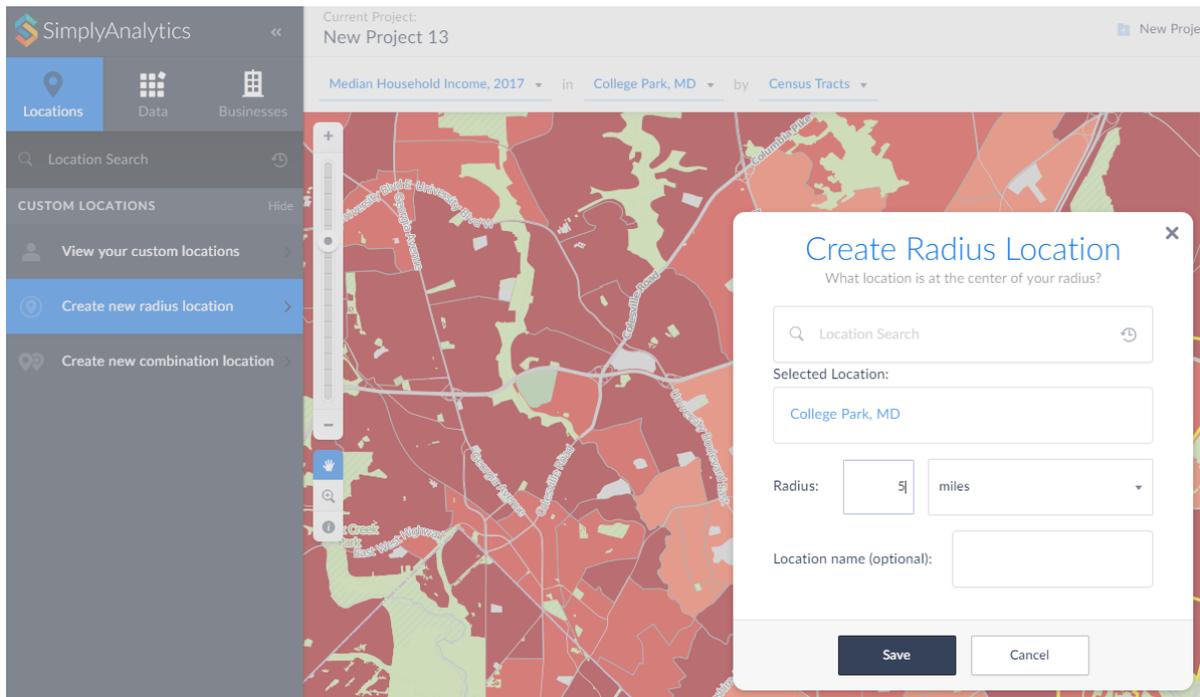
Due to the large number of variables, the report will take a few moments to update.

(2) How do I create a map showing all of the supermarkets in a 5 mile radius of College Park?

For this example we are using College Park but feel free to use your own address.

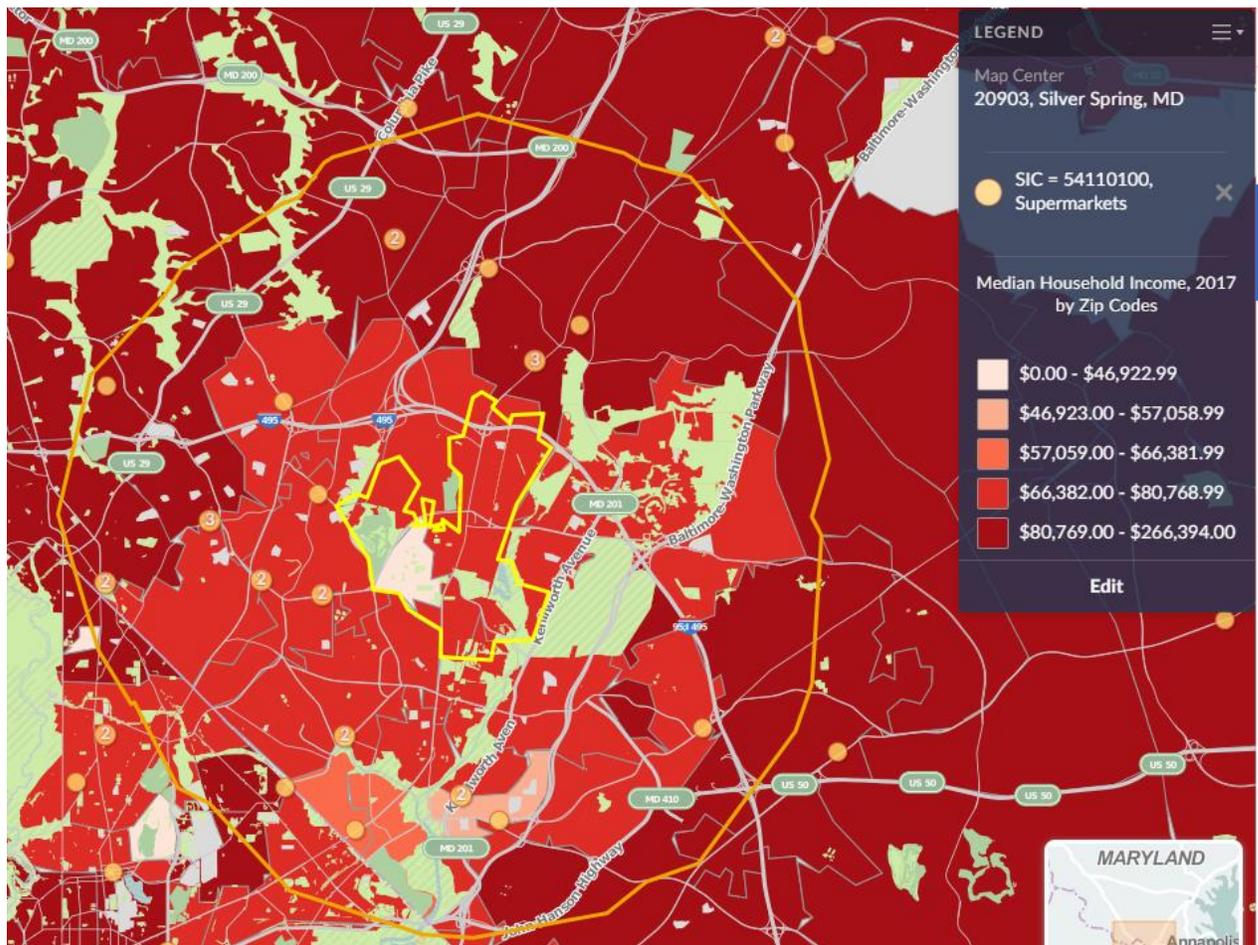
Step 1: Select New Project at the top of the Simply Analytics window and key in College Park, MD in the location search bar and check the box next to Median Household income and click create project.

- Click on Location on the left side of the screen and click on custom locations
- Click "Create New Radius Location" and enter College Park, MD in Location Search and enter 5 miles into the radius field.
- Click Save. The map will update to the selected location and highlight all of the areas which fall within the 5 mile radius.'



Step 4: Create a point variable for Supermarkets:

- Click on Businesses on the left side of the screen and click on browse business categories
- Select SIC Code
- Type Supermarket into the search field and you should see the option of Supermarket. Click on it.



More Training and Information

University of Maryland at College Park students, faculty, and staff have access to free online courses provided by ESRI. These cover a wide range of GIS topics and skills. To gain access to online classes, please contact *kelleyo@umd.edu* with the name of the course you are interested in and your UMD e-mail address to obtain a registration code.

Course list: <https://www.esri.com/training/unlimited-esri-training/>

University of Maryland Libraries' GIS and Spatial Data Services Center website: <http://lib.umd.edu/gis/>

University of Maryland Libraries' GIS and Spatial Data Services Center workshop series:
<https://www.lib.umd.edu/gis/workshops>