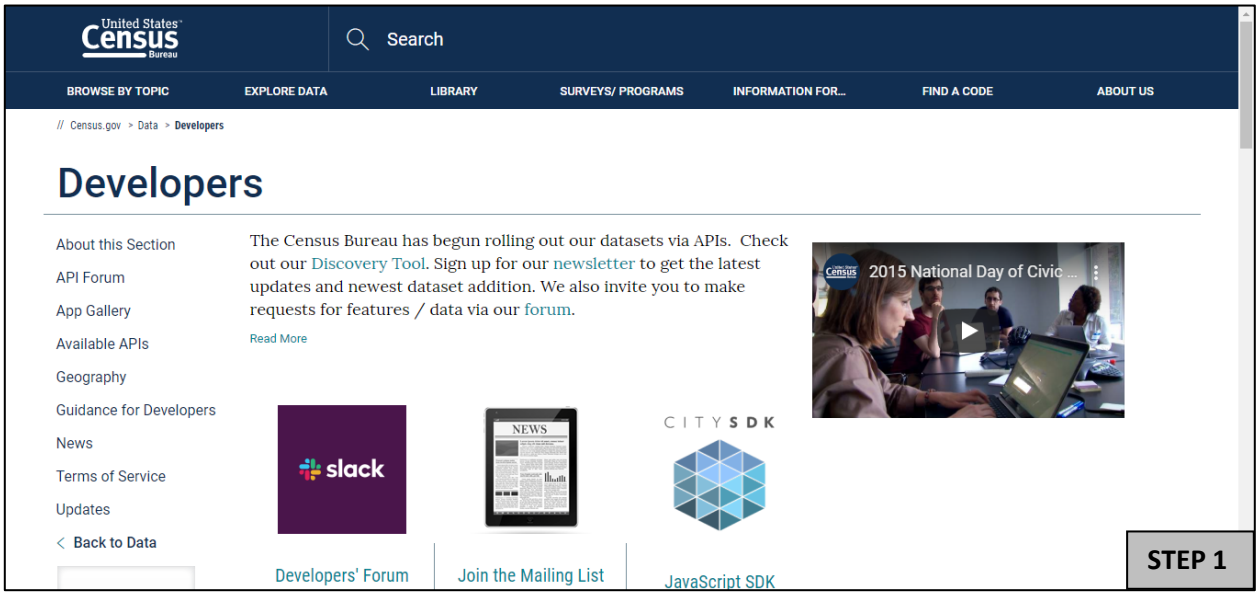
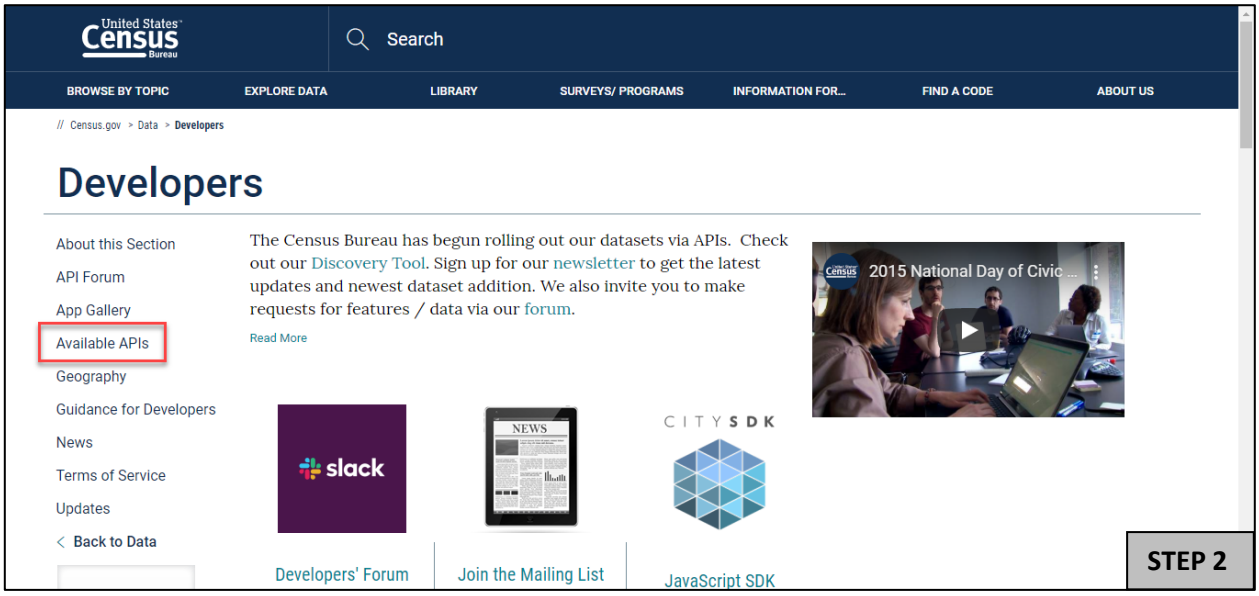
Instructions for Downloading Data from the Census Data API:
2017 American Community Survey 5-Year Detailed Table for All Zip Code Tabulation Areas (ZCTAs) in the U.S.

Follow these steps for building an API call (or a URL) for pulling data from the 2017 American Community Survey 5-Year Detailed Table for All Zip Code Tabulation Areas in the U.S.

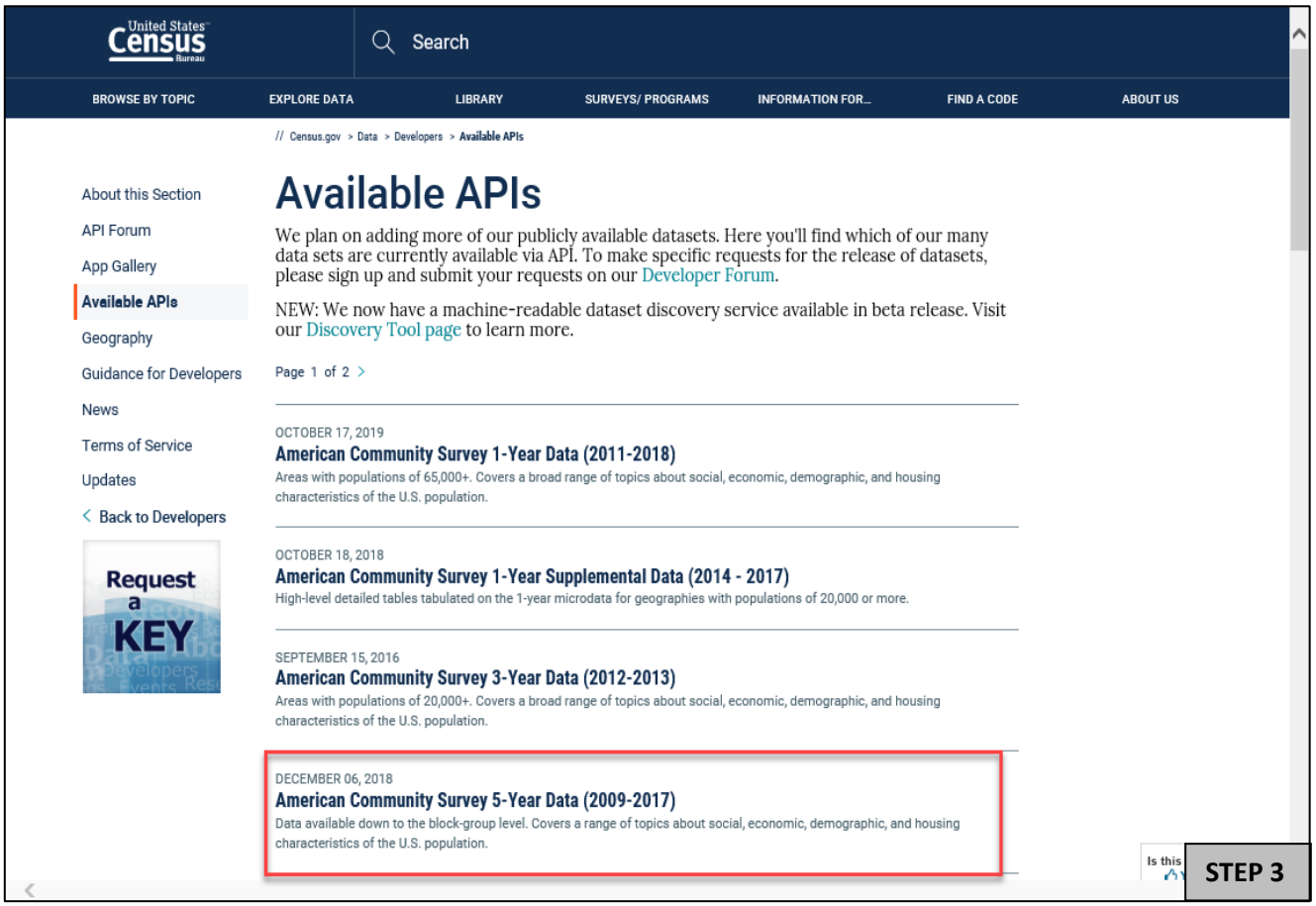
Step 1: Using Firefox or Chrome web browser, go to the census.gov Developers Page at: https://www.census.gov/developers/.



Step 2. On the left side of the screen, click on "Available APIs".



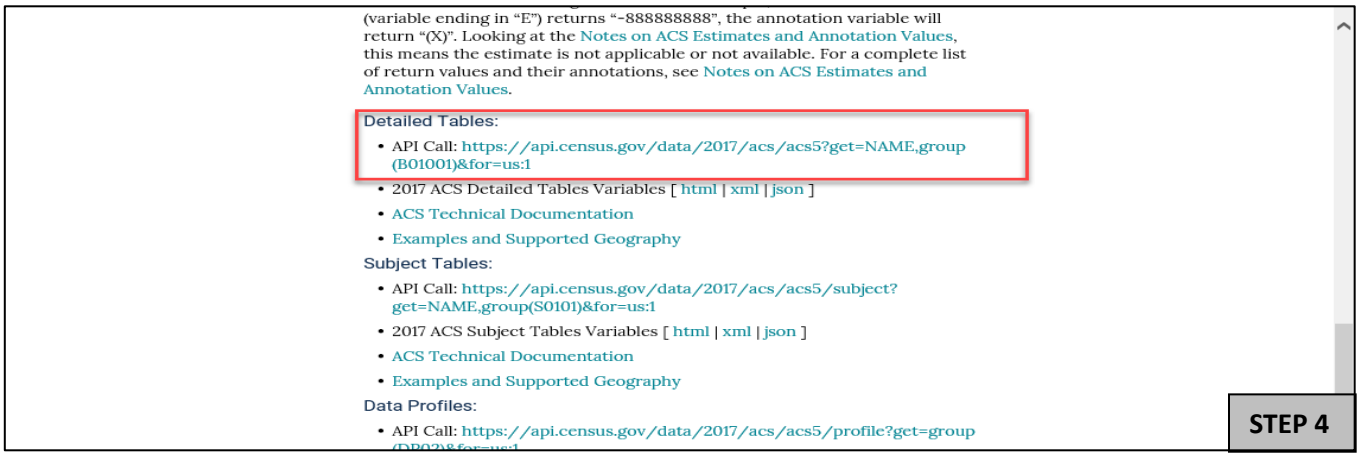
Step 3: Click on American Community Survey 5-Year Data (2009-2017).



Step 4. Scroll down until you see "Detailed Tables." Under detailed tables, you should see "API Call." Copy/paste the URL into Firefox or Chrome if you are not already using these web browsers.

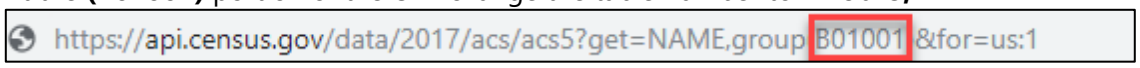
https://api.census.gov/data/2017/acs/acs5?get=NAME,group(B01001)&for=us:1

We are going to use this URL to build an API call for table B19013 for *all Zip Code Tabulation Areas (ZCTAs)*.



Step 5. There are two parts of the URL that you will need to change:

a) First, we want to change our table number to "B19013".
At the **(B01001)** portion of the URL change the table number to "B19013**,**"



b) Second, since we want to build a URL for "all zip code tabulation areas," change the section of the URL from the U.S. to all zip code tabulation areas. Change the "**&for=us:1**" to "**&for=zip%20code%20tabulation%20area:***"

There are more geographies available, and you can find the complete list here: https://api.census.gov/data/2017/acs/acs5.html. Clicking the geographies link will show you the list of geographies available, but the examples will show you how to build URLs (or API calls) for all the geographies.

Census API: Datasets in /data/2017/acs/acs5 and its descendants

Title	Description	Vintage	Dataset Name	Geography List	Variable List	Group List	Tag List	Examples	Developer Documentation	API Base URL
ACS 5-Year Detailed Tables	The American Community Survey (ACS) is an ongoing survey that provides data every year -- giving communities the current information they need to plan investments and services. The ACS covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population. Summary files include the following geographies: nation, all states (including DC and Puerto Rico), all metropolitan areas, all congressional districts (114th congress), all counties, all places, and all tracts and block groups. Summary files contain the most detailed cross-tabulations, many of which are published down to block groups. The data are population and housing counts. There are over 64,000 variables in this dataset.	2017	acs› acs5	geographies	variables	groups	tags	examples	documentation	https://api.census.gov/data/2017/acs/acs5
ACS 5-Year Comparison Profiles	The American Community Survey (ACS) is an ongoing survey that provides data every year -- giving communities the current information they need to plan investments and services. The ACS covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population. The comparison profiles include the following geographies: nation, all states (including DC and Puerto Rico), all metropolitan areas, all congressional districts, all counties and all places with a population of 5,000 or more. Comparison profiles are similar to data profiles but also include comparisons with past-year data. The current year data are compared with prior 5-Year data and include statistical significance testing. There are over 3,000 variables in this dataset.	2017	acs› acs5› cprofile	geographies	variables	groups	*N/A*	examples	documentation	https://api.census.gov/data/2017/acs/acs5/cprofile
ACS 5-Year Data Profiles	The American Community Survey (ACS) is an ongoing survey that provides data every year -- giving communities the current information they need to plan investments and services. The ACS covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population. The data profiles include the following geographies: nation, all states (including DC and Puerto Rico), all metropolitan areas, all congressional districts, all counties, all places and all tracts. Data profiles contain broad social, economic, housing, and demographic information. The data are presented as both counts and percentages. There are over 2,400 variables in this dataset.	2017	acs› acs5› profile	geographies	variables	groups	*N/A*	examples	documentation	https://api.census.gov/data/2017/acs/acs5/profile
ACS 5-Year Subject Tables	The American Community Survey (ACS) is an ongoing survey that provides data every year -- giving communities the current information they need to plan investments and services. The ACS covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population. The subject tables include the following geographies: nation, all states (including DC and Puerto Rico), all metropolitan areas, all congressional districts, all counties, all places and all tracts. Subject tables provide an overview of the estimates available in a particular topic. The data are presented as both counts and percentages. There are over 66,000 variables in this dataset.	2017	acs› acs5› subject	geographies	variables	groups	tags	examples	documentation	https://api.census.gov/data/2017/acs/acs5/subject

4 datasets

Step 6: After making these adjustments to the URL, the final query is:
https://api.census.gov/data/2017/acs/acs5?get=NAME,group(B19013)&for=zip%20code%20tabulation%20area:*

Hit the Enter key to pull the results. The results are in json format. Below are the first few lines.

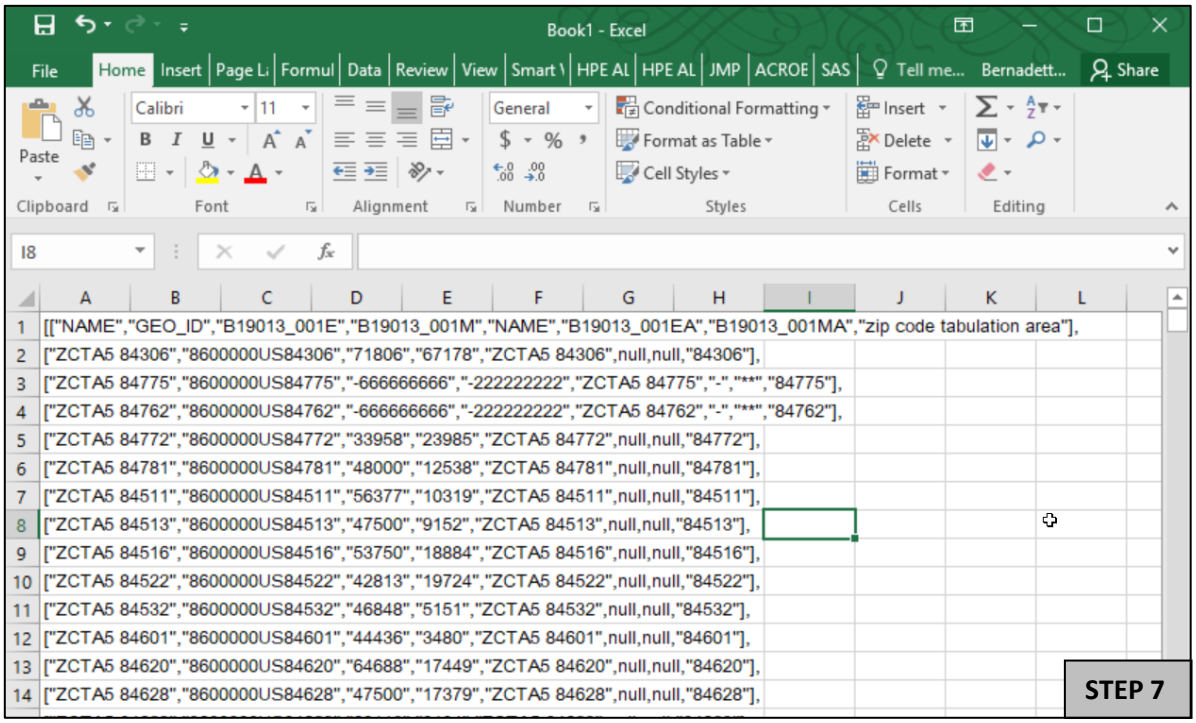

```
[["NAME","GEO_ID","B19013_001E","B19013_001M","NAME","B19013_001EA","B19013_001MA","zip code tabulation area"],
["ZCTA5 84306","8600000US84306","71806","67178","ZCTA5 84306",null,null,"84306"],
["ZCTA5 84775","8600000US84775","-666666666","-222222222","ZCTA5 84775","-","**","84775"],
["ZCTA5 84762","8600000US84762","-666666666","-222222222","ZCTA5 84762","-","**","84762"],
["ZCTA5 84772","8600000US84772","33958","23985","ZCTA5 84772",null,null,"84772"],
["ZCTA5 84781","8600000US84781","48000","12538","ZCTA5 84781",null,null,"84781"],
["ZCTA5 84511","8600000US84511","56377","10319","ZCTA5 84511",null,null,"84511"],
["ZCTA5 84513","8600000US84513","47500","9152","ZCTA5 84513",null,null,"84513"],
["ZCTA5 84516","8600000US84516","53750","18884","ZCTA5 84516",null,null,"84516"],
["ZCTA5 84522","8600000US84522","42813","19724","ZCTA5 84522",null,null,"84522"],
["ZCTA5 84532","8600000US84532","46848","5151","ZCTA5 84532",null,null,"84532"],
["ZCTA5 84601","8600000US84601","44436","3480","ZCTA5 84601",null,null,"84601"],
["ZCTA5 84620","8600000US84620","64688","17449","ZCTA5 84620",null,null,"84620"],
["ZCTA5 84628","8600000US84628","47500","17379","ZCTA5 84628",null,null,"84628"],
["ZCTA5 84629","8600000US84629","68113","8184","ZCTA5 84629",null,null,"84629"],
["ZCTA5 84630","8600000US84630","52113","10600","ZCTA5 84630",null,null,"84630"],
```

Step 7: Copy all of these results into MS Excel:

a) Press Ctrl-A to select all contents on the page

b) Press Ctrl-C to copy

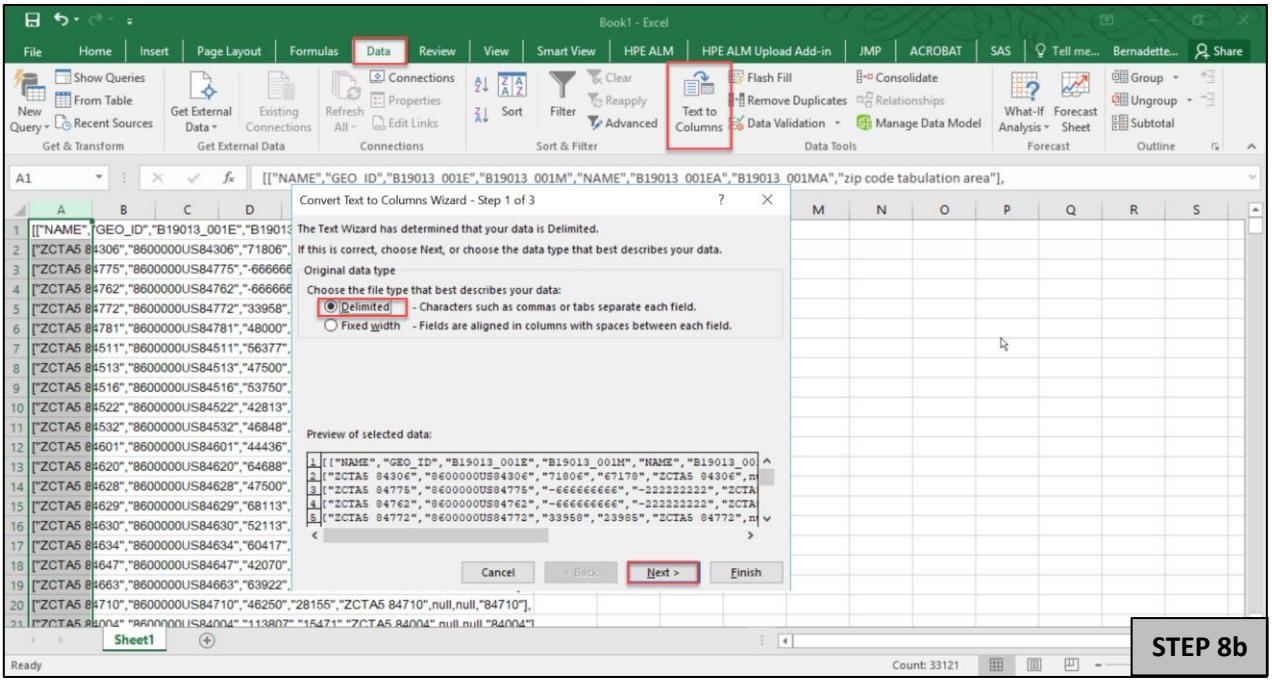
c) Paste into the first cell of MS Excel (Ctrl-V)



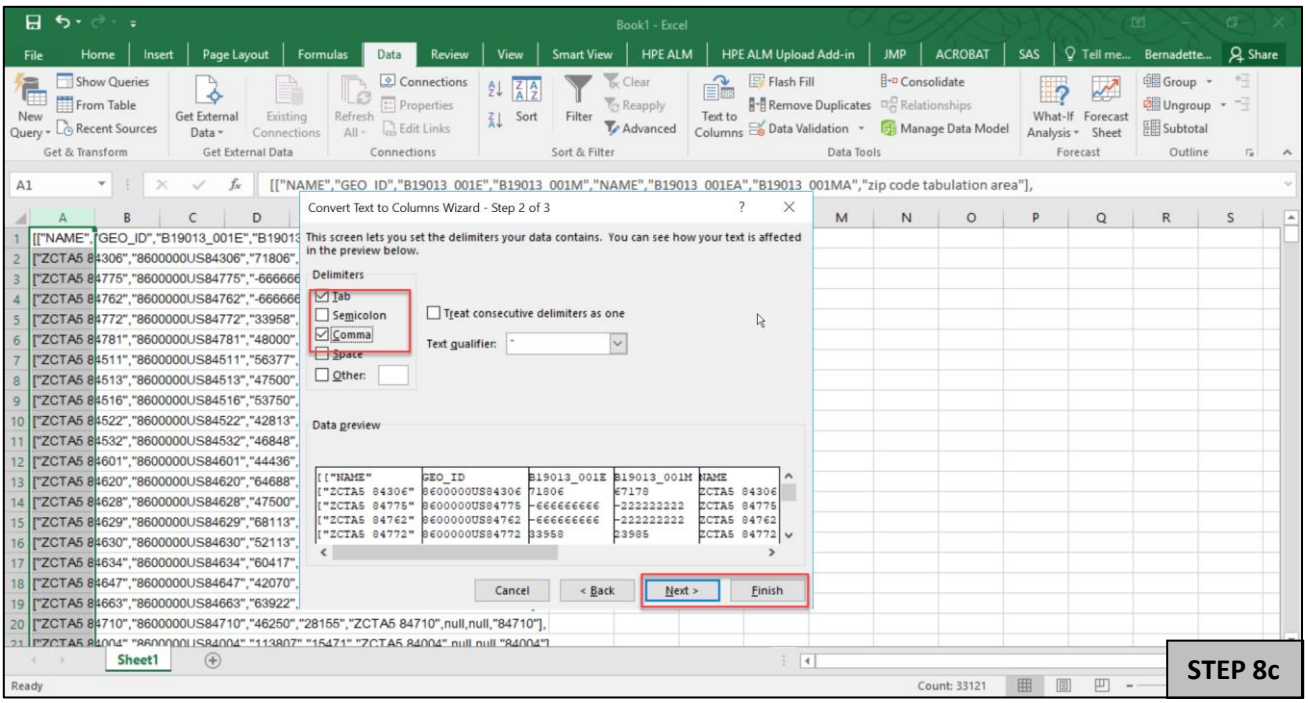
Step 8: Now convert the text to columns.

a) Highlight column A.

b) Click Data -> Click Text to Columns -> Select Delimited -> Click Next.



c) Uncheck Tab and Check Comma -> Click Next -> Click Finish.



Now, we have our table, but we need to clean up the quotation marks and brackets.

B10 8600000US84522

	A	B	C	D	E	F	G	H
1	[["NAME"	GEO_ID	B19013_001E	B19013_001M	NAME	B19013_00	B19013_00	zip code tabulation area]
2	["ZCTA5 84306"	8600000US84306	71806	67178	ZCTA5 84306	null	null	84306]
3	["ZCTA5 84775"	8600000US84775	-666666666	-222222222	ZCTA5 84775	-	**	84775]
4	["ZCTA5 84762"	8600000US84762	-666666666	-222222222	ZCTA5 84762	-	**	84762]
5	["ZCTA5 84772"	8600000US84772	33958	23985	ZCTA5 84772	null	null	84772]
6	["ZCTA5 84781"	8600000US84781	48000	12538	ZCTA5 84781	null	null	84781]
7	["ZCTA5 84511"	8600000US84511	56377	10319	ZCTA5 84511	null	null	84511]
8	["ZCTA5 84513"	8600000US84513	47500	9152	ZCTA5 84513	null	null	84513]
9	["ZCTA5 84516"	8600000US84516	53750	18884	ZCTA5 84516	null	null	84516]
10	["ZCTA5 84522"	8600000US84522	42813	19724	ZCTA5 84522	null	null	84522]
11	["ZCTA5 84532"	8600000US84532	46848	5151	ZCTA5 84532	null	null	84532]
12	["ZCTA5 84601"	8600000US84601	44436	3480	ZCTA5 84601	null	null	84601]
13	["ZCTA5 84620"	8600000US84620	64688	17449	ZCTA5 84620	null	null	84620]
14	["ZCTA5 84628"	8600000US84628	47500	17379	ZCTA5 84628	null	null	84628]
15	["ZCTA5 84629"	8600000US84629	68113	8184	ZCTA5 84629	null	null	84629]
16	["ZCTA5 84630"	8600000US84630	52113	19690	ZCTA5 84630	null	null	84630]
17	["ZCTA5 84634"	8600000US84634	60417	10066	ZCTA5 84634	null	null	84634]
18	["ZCTA5 84647"	8600000US84647	42070	8094	ZCTA5 84647	null	null	84647]
19	["ZCTA5 84663"	8600000US84663	63922	2817	ZCTA5 84663	null	null	84663]

Step 9: To remove the quotation marks and brackets:

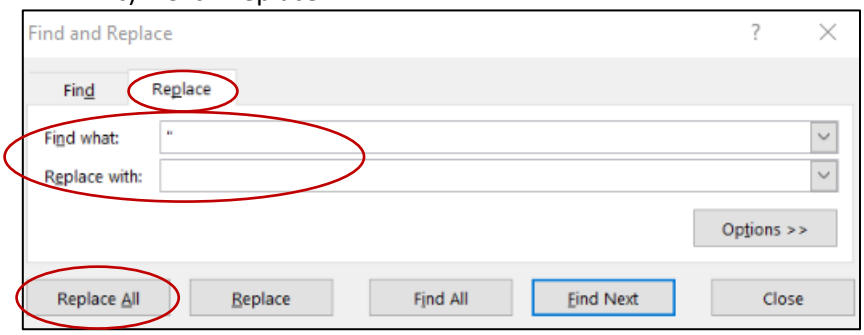
Quotation Marks

a) Press Ctrl- F and click the Replace tab.

b) Enter the following:

- Find what: “
- Replace: *(leave this blank)*

c) Click Replace All



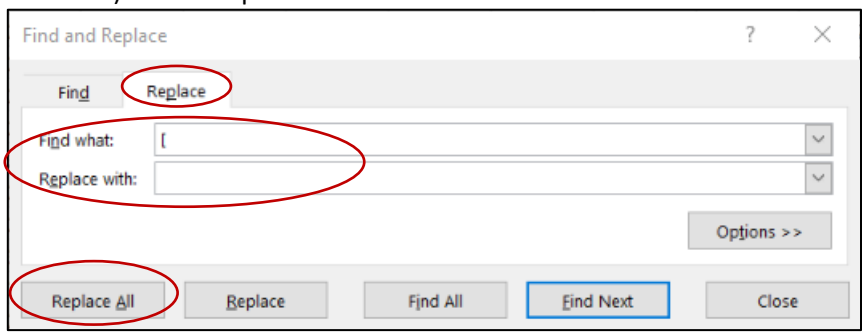
Left Brackets

a) Press Ctrl- F and click the Replace tab.

b) Enter the following:

- Find what: [
- Replace: *(leave this blank)*

c) Click Replace All



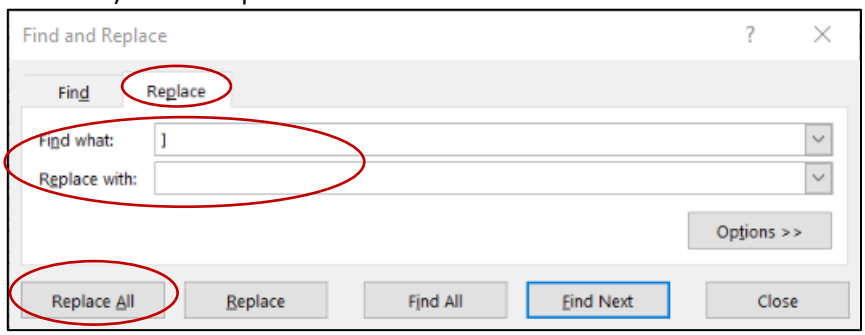
Right Brackets

a) Press Ctrl- F and Click the Replace Tab

b) Enter the following

- Find what:]
- Replace: *(leave this blank)*

c) Click Replace All



Step 10: Change instances of -666666666 and -222222222 to (X).

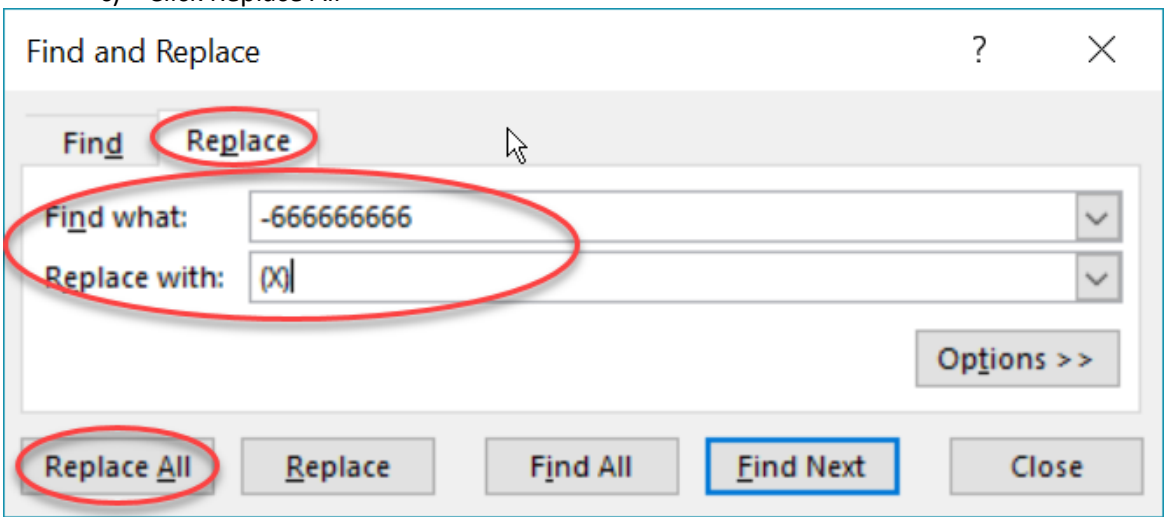
-666666666

a) Press Ctrl- F and click the Replace tab.

b) Enter the following:

- Find what: -666666666
- Replace: *(X)*

c) Click Replace All



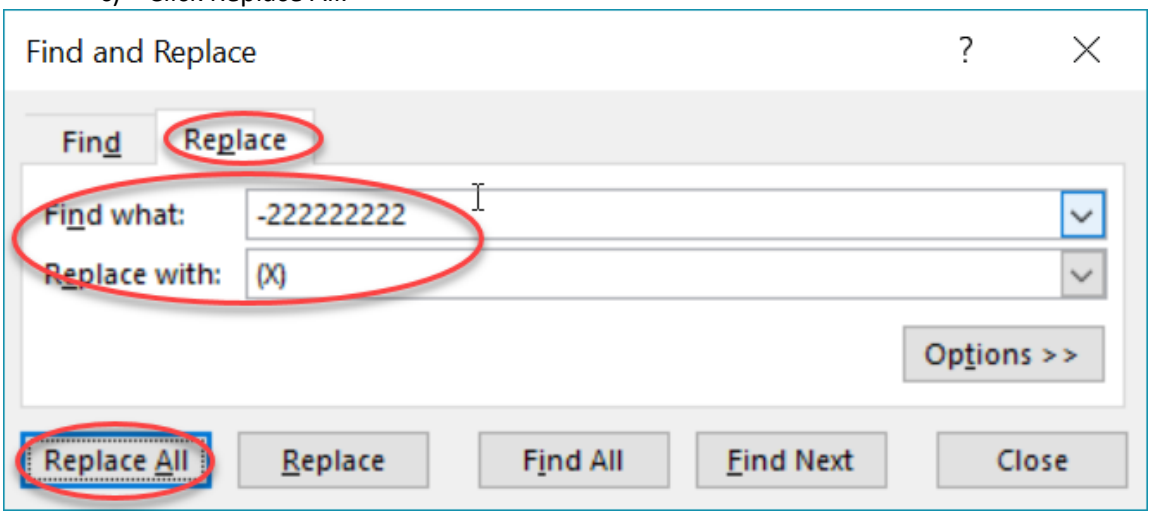
-222222222

a) Press Ctrl- F and click the Replace tab.

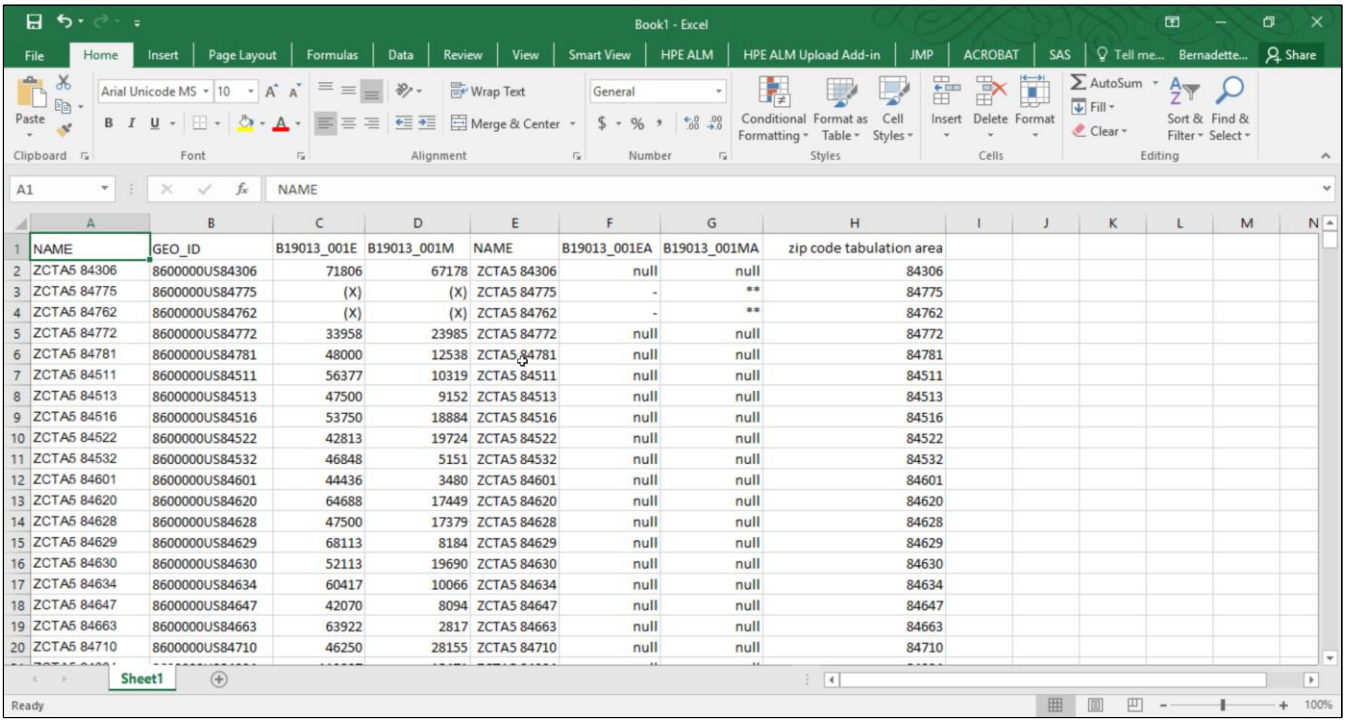
b) Enter the following:

- Find what: -222222222
- Replace: *(X)*

c) Click Replace All.



Here’s the finished table:



Book1 - Excel

NAME	GEO_ID	B19013_001E	B19013_001M	NAME	B19013_001EA	B19013_001MA	zip code tabulation area
ZCTA5 84306	8600000US84306	71806	67178	ZCTA5 84306	null	null	84306
ZCTA5 84775	8600000US84775	(X)	(X)	ZCTA5 84775	-	**	84775
ZCTA5 84762	8600000US84762	(X)	(X)	ZCTA5 84762	-	**	84762
ZCTA5 84772	8600000US84772	33958	23985	ZCTA5 84772	null	null	84772
ZCTA5 84781	8600000US84781	48000	12538	ZCTA5 84781	null	null	84781
ZCTA5 84511	8600000US84511	56377	10319	ZCTA5 84511	null	null	84511
ZCTA5 84513	8600000US84513	47500	9152	ZCTA5 84513	null	null	84513
ZCTA5 84516	8600000US84516	53750	18884	ZCTA5 84516	null	null	84516
ZCTA5 84522	8600000US84522	42813	19724	ZCTA5 84522	null	null	84522
ZCTA5 84532	8600000US84532	46848	5151	ZCTA5 84532	null	null	84532
ZCTA5 84601	8600000US84601	44436	3480	ZCTA5 84601	null	null	84601
ZCTA5 84620	8600000US84620	64688	17449	ZCTA5 84620	null	null	84620
ZCTA5 84628	8600000US84628	47500	17379	ZCTA5 84628	null	null	84628
ZCTA5 84629	8600000US84629	68113	8184	ZCTA5 84629	null	null	84629
ZCTA5 84630	8600000US84630	52113	19690	ZCTA5 84630	null	null	84630
ZCTA5 84634	8600000US84634	60417	10066	ZCTA5 84634	null	null	84634
ZCTA5 84647	8600000US84647	42070	8094	ZCTA5 84647	null	null	84647
ZCTA5 84663	8600000US84663	63922	2817	ZCTA5 84663	null	null	84663
ZCTA5 84710	8600000US84710	46250	28155	ZCTA5 84710	null	null	84710