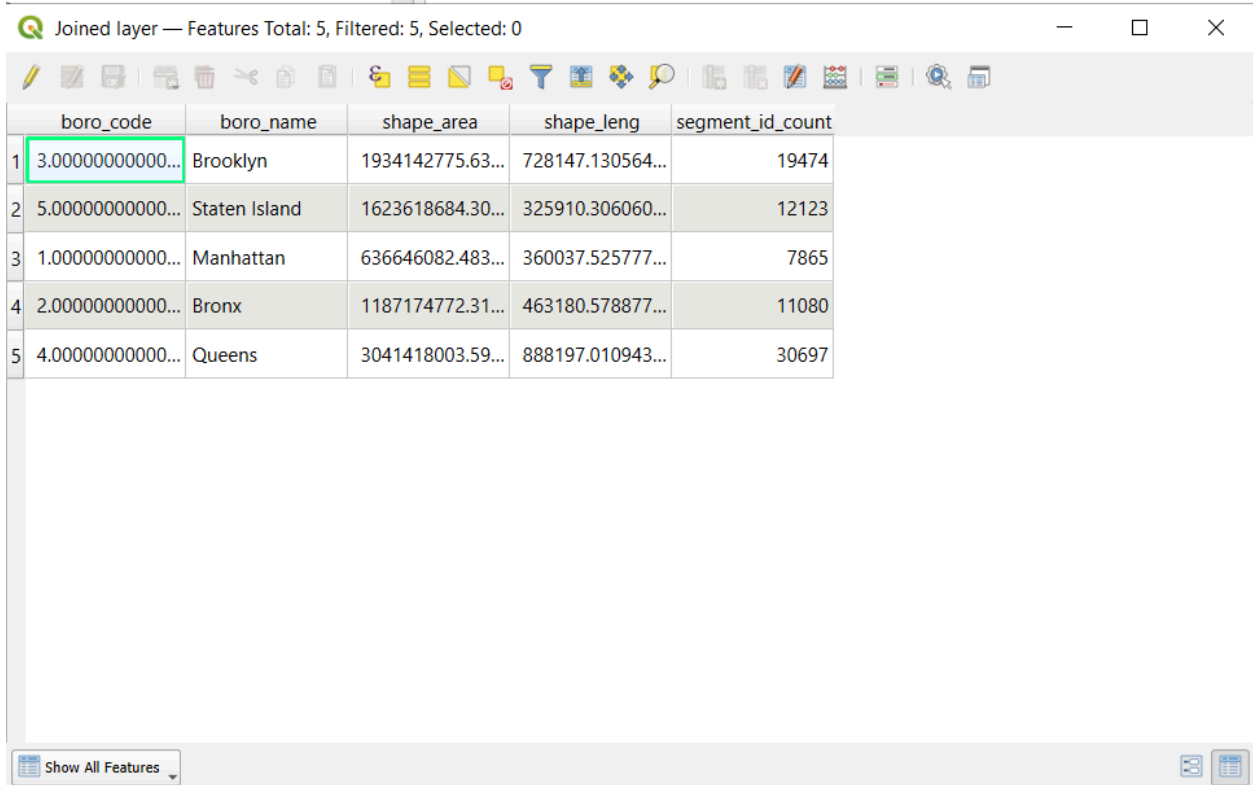


S E 414 Project 4 – GIS

Andrew McMahon

Q1: What is the total number of streets (of any rating) in each of the NYC Boroughs?:



Joined layer — Features Total: 5, Filtered: 5, Selected: 0

	boro_code	boro_name	shape_area	shape_leng	segment_id_count
1	3.000000000000...	Brooklyn	1934142775.63...	728147.130564...	19474
2	5.000000000000...	Staten Island	1623618684.30...	325910.306060...	12123
3	1.000000000000...	Manhattan	636646082.483...	360037.525777...	7865
4	2.000000000000...	Bronx	1187174772.31...	463180.578877...	11080
5	4.000000000000...	Queens	3041418003.59...	888197.010943...	30697

Show All Features

Here, we can see that:

Brooklyn has 19,474 streets

Staten Island has 12,123 streets

Manhattan has 7,865 streets

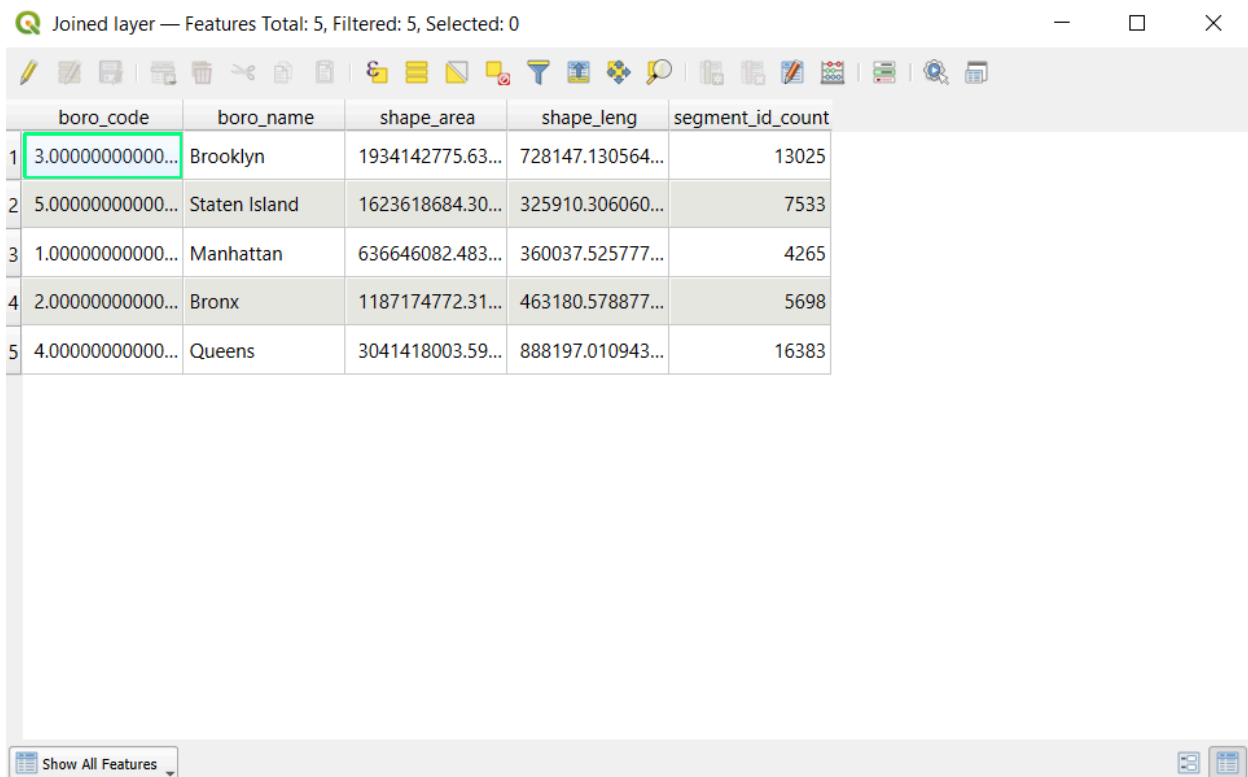
Bronx has 11,080 streets

Queens has 30,697 streets

This was done by joining the street and borough boundary datasets and taking the count of each street segment in each borough (segment_id_count, in this instance).

Q2: What is the total number of streets with GOOD rating in each of the NYC Boroughs?:

Joined layer — Features Total: 5, Filtered: 5, Selected: 0



	boro_code	boro_name	shape_area	shape_leng	segment_id_count
1	3.000000000000...	Brooklyn	1934142775.63...	728147.130564...	13025
2	5.000000000000...	Staten Island	1623618684.30...	325910.306060...	7533
3	1.000000000000...	Manhattan	636646082.483...	360037.525777...	4265
4	2.000000000000...	Bronx	1187174772.31...	463180.578877...	5698
5	4.000000000000...	Queens	3041418003.59...	888197.010943...	16383

Show All Features

Here, we can see that:

Brooklyn has 13,025 streets with GOOD rating

Staten Island has 7,533 streets with GOOD rating

Manhattan has 4,265 streets with GOOD rating

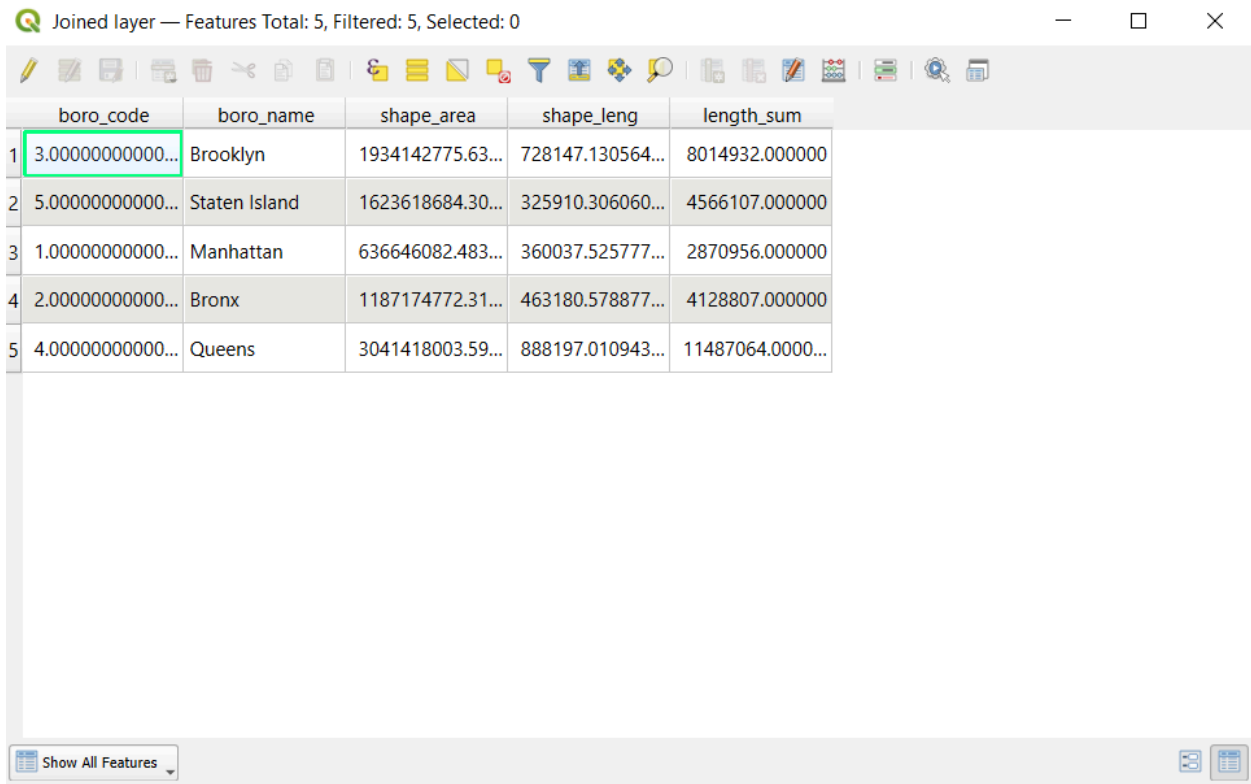
Bronx has 5,698 streets with GOOD rating

Queens has 16,383 streets with GOOD rating

This was done by joining the borough boundary dataset with a filtered street dataset (where rating_wor = 'GOOD'), and then, post-join, taking a count of each street segment in each borough (segment_id_count, in this instance).

Q3(Extra Credit):What is the total length of the streets' segments in each of the NYC Boroughs?:

Joined layer — Features Total: 5, Filtered: 5, Selected: 0



	boro_code	boro_name	shape_area	shape_leng	length_sum
1	3.000000000000...	Brooklyn	1934142775.63...	728147.130564...	8014932.000000
2	5.000000000000...	Staten Island	1623618684.30...	325910.306060...	4566107.000000
3	1.000000000000...	Manhattan	636646082.483...	360037.525777...	2870956.000000
4	2.000000000000...	Bronx	1187174772.31...	463180.578877...	4128807.000000
5	4.000000000000...	Queens	3041418003.59...	888197.010943...	11487064.0000...

Show All Features

Here, we can see that:

Brooklyn has 8,014,932.00 length of all streets combined

Staten Island has 4,566,107.00 length of all streets combined

Manhattan has 2,870,956.00 length of all streets combined

Bronx has 4,128,807.00 length of all streets combined

Queens has 11,487,064.00 length of all streets combined

This was done by joining the street and borough boundary datasets and summing the lengths of all street segments per each borough. Then, the length of all streets in each borough can be seen in the length_sum variable.