

Preparatory steps for PPGIS data

Urban Experience course 2021



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02.02.2021

Where and how to start?

- Where do people go?
- What are the most popular places in Espoo?
- What do people do there?
- What mode of transport people use to get to everyday places in Espoo?
- Who are these people?

respondent	createtime	id	buttonname	visibleLayers	zoomLevel	wkt	What makes the place nice?
18	2016-10-17T05:27:17.0	1	My school	MapBox	17	POINT (24.630575 60.153104)	
21	2016-10-17T05:27:58.0	2	My school	MapBox	17	POINT (24.630575 60.153104)	
17	2016-10-17T05:28:05.4	3	My home	MapBox	17	POINT (24.655970 60.197308)	
20	2016-10-17T05:28:2.4	4	My school	MapBox	17	POINT (24.630575 60.153104)	
20	2016-10-17T05:28:3.2	5	My home	MapBox	17	POINT (24.630758 60.151999)	
17	2016-10-17T05:28:55.4	6	My school	Google Hybrid	16	POINT (24.630833 60.152976)	

respondent	lang_code	scr_width	Your grade_5th gra	Your grade_9th gra	Your grade	Gender_girl	Gender_boy	Gender	How to you most often travel your school journeys?	Other transport mode, what?
17	fi	1280	1	1	0	0	1	boy	16153 60.1 koska se on kotti	
18	fi	1920	1	1	0	0	1	boy	19760 60.151983	
19	fi	1920	1	1	0	0	1	boy	0543 60.152933	
20	fi	1920	1	1	0	0	1	boy	15382 60.154194	
21	fi	1280	1	1	0	0	1	boy	14352 60.154143	
22	fi	1280	1	1	0	0	1	girl	12581 60.1 siet voi kalastaa	
23	fi	1920	1	1	0	0	1	boy	15065 60.153988	
24	fi	1920	1	1	0	0	1	boy	10763 60.153146	
25	fi	1034	1	1	0	0	1	girl	10492 60.153092	
26	fi	1920	1	1	0	0	1	boy	10618 60.153030	
27	fi	1173	1	1	0	0	1	girl	10661 60.153040	
29	fi	1920	1	1	0	0	1	girl	14102 60.154562	
30	fi	1280	1	1	0	0	1	girl	15582 60.154204	
31	fi	1280	1	1	0	0	1	girl	15269 60.154144	
33	fi	1280	1	1	0	0	1	boy	10640 60.152935	
34	fi	1034	1	1	0	0	1	boy		
36	fi									
37	fi									
38	fi									
39	fi									
40	fi									
42	fi									
45	fi									

respondent	createtime	id	buttonname	visibleLayers	zoomLevel	wkt	How to you most often travel your school journeys?	Other transport mode, what?
47	2016-10-17T05:29:41.3	10	My school journey	Google Hybrid	16	LINestring (24.631004 60.153136, 24.6 By bus		
51	2016-10-17T05:30:10.2	13	My school journey	MapBox	18	LINestring (24.634366 60.153991, 24.6 By scooter		
52	2016-10-17T05:31:43.8	28	My school journey	MapBox	17	LINestring (24.629674 60.153189, 24.6 By foot		
24	2016-10-17T05:31:52.0	30	My school journey	MapBox	17	LINestring (24.634309 60.154364, 24.6 By foot		
25	2016-10-17T05:32:51.6	42	My school journey	MapBox	17	LINestring (24.633004 60.152223, 24.632131 60.152346)		
18	2016-10-17T05:34:01.6	52	My school journey	MapBox	18	LINestring (24.637181 60.148725, 24.6 By scooter		
25	2016-10-17T05:34:47.8	128	My school journey	MapBox	17	LINestring (24.633538 60.152426, 24.6 By foot		
27	2016-10-17T05:34:58.0	59	My school journey	MapBox	17	LINestring (24.633290 60.152026, 24.6 By foot		
25	2016-10-17T05:35:38.0	62	My school journey	MapBox	17	LINestring (24.634577 60.151871, 24.6 By foot		
34	2016-10-17T05:37:19.4	81	My school journey	MapBox	17	LINestring (24.632024 60.154994, 24.6 By foot		
38	2016-10-17T05:38:38.8	96	My school journey	MapBox	18	LINestring (24.628467 60.153032, 24.628254 60.152047, 24.628682 60.152031, 24.6		
29	2016-10-17T05:38:52.2	98	My school journey	Google Hybrid	19	LINestring (24.635757 60.151285, 24.6 By foot		
21	2016-10-17T05:39:12.3	101	My school journey	MapBox	17	LINestring (24.704885 60.226719, 24.7 By bus		
33	2016-10-17T05:40:03.5	111	My school journey	Google Hybrid	15	LINestring (24.640794 60.154625, 24.6 By foot		
40	2016-10-17T05:41:18.2	127	My school journey	Google Hybrid	18	LINestring (24.638468 60.150926, 24.6 By foot		
31	2016-10-17T05:44:02.2	160	My school journey	Google Hybrid	17	LINestring (24.649018 60.149422, 24.6 By bus		
47	2016-10-17T05:49:05.7	202	My school journey	MapBox	17	LINestring (24.628258 60.152133, 24.6 By foot		
30	2016-10-17T05:49:10.7	203	My school journey	Google Hybrid	19	LINestring (24.651502 60.146394, 24.6 By bicycle		
51	2016-10-17T05:51:23.5	223	My school journey	MapBox	17	LINestring (24.633236 60.151887, 24.6 By foot		
54	2016-10-17T05:54:07.1	253	My school journey	MapBox	17	LINestring (24.632357 60.151058, 24.6 By foot		
63	2016-10-17T07:48:13.3	301	My school journey	MapBox	14	LINestring (384-803181 60.287323, 38 By car	By taxi	
64	2016-10-17T07:48:43.9	303	My school journey	MapBox	15	LINestring (24.743915 60.157696, 24.743238 60.157888, 24.743056 60.158315, 24.7		
64	2016-10-17T07:49:44.9	305	My school journey	MapBox	15	LINestring (24.735503 60.159020, 24.734387 60.158764, 24.731255 60.158038, 24.7		
64	2016-10-17T07:50:03.0	306	My school journey	MapBox	15	LINestring (24.711514 60.147743, 24.7 Other mode	By taxi	
67	2016-10-17T07:50:09.8	307	My school journey	MapBox	17	LINestring (24.649179 60.149131, 24.648886 60.149436, 24.648814 60.149628, 24.6		
68	2016-10-17T07:51:09.9	309	My school journey	MapBox	11	LINestring (24.719238 60.212531, 24.6 By car	By taxi	

Don't worry – there's always an answer behind the corner

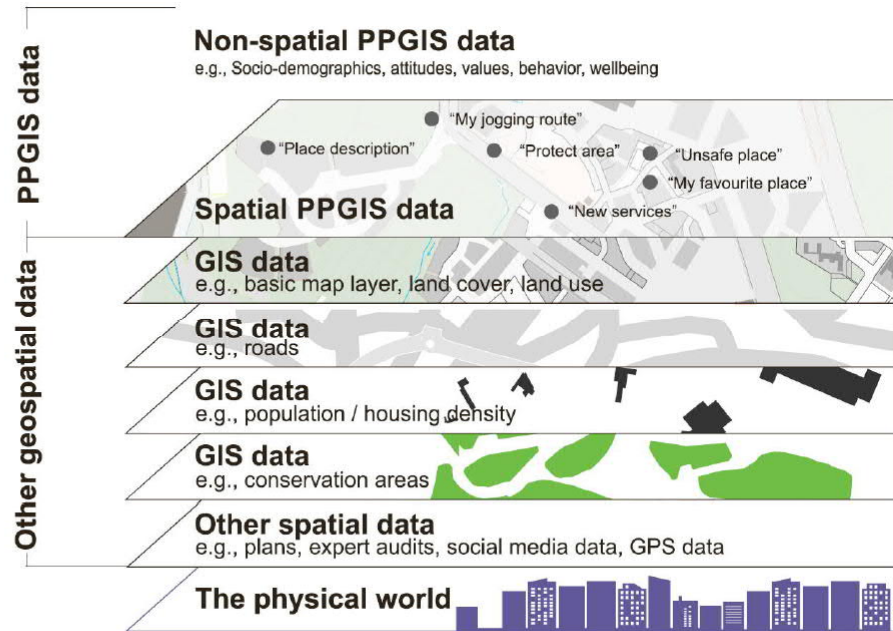
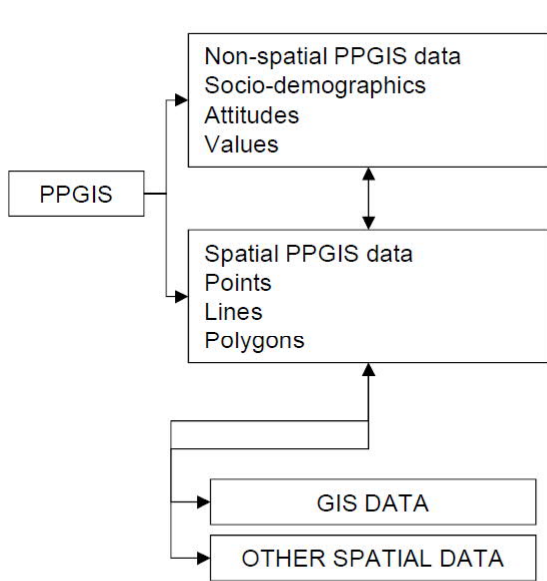
- Learn how your data is structured
- Learn how your survey is structured
- Compare these two – You'll quickly start understanding what is what

respondent	createatime	id	buttonname	visibleLayers	zoomLevel	wkt	What makes the place nice?
18	2016-10-17T05:27:17.0	1	My school	MapBox		17 POINT (24.630575 60.153104)	
21	2016-10-17T05:27:58.0	2	My school	MapBox		17 POINT (24.630575 60.153104)	
17	2016-10-17T05:28:05.4	3	My home	MapBox		17 POINT (24.635970 60.159208)	
30	2016-10-17T05:28:33.2	4	My school	MapBox		17 POINT (24.630575 60.153104)	
						6.830758 60.151999	
						6.830833 60.152976	
						6.830877 60.153049	
						6.830845 60.152010	
						6.834872 60.154089	
						6.830575 60.153104	
						6.856155 60.140034 see on kort	
						6.829760 60.151983	
						6.830543 60.152933	
						6.833382 60.154194	
						6.834352 60.154143	
						6.830661 60.153040	
						6.830665 60.153868	
						6.830763 60.153146	
						6.830492 60.153092	
						6.830618 60.153030	
						6.830661 60.153040	
						6.834102 60.154562	
						6.833382 60.154204	
						6.835269 60.153244	
						6.830640 60.152933	

respondent	lang_code	scr_width	Your grade_5th_grad	Your grade_9th_grad	Your grade	Gender_girl	Gender_boy	Gender
17	fi	1280	1	1	0	0	1	boy
18	fi	1920	1	1	0	0	1	boy
19	fi	1920	1	1	0	0	1	boy
20	fi	1920	1	1	0	0	1	boy
21	fi	1280	1	1	0	0	1	boy
22	fi	1280	1	1	0	0	1	boy
23	fi	1920	1	1	0	0	1	boy
24	fi	1920	1	1	0	0	1	boy
25	fi	1034	1	1	0	0	1	boy
26	fi	1920	1	1	0	0	1	boy
27	fi	1173	1	1	0	0	1	girl
29	fi	1920	1	1	0	0	1	girl
30	fi	1280	1	1	0	0	1	girl
31	fi	1280	1	1	0	0	1	girl
33	fi	1280	1	1	0	0	1	boy
34	fi	1034	1	1	0	0	1	boy
36	fi	1280	1	1	0	0	1	girl
37	fi	1280	1	1	0	0	1	girl
38	fi							
39	fi							
40	fi							
42	fi							
45	fi							
47	fi							
51	fi							
52	fi							

respondent	createatime	id	buttonname	visibleLayers	zoomLevel	wkt	How to you most often travel your commuterm?	Other transport mode, what?
17	2016-10-17T05:29:41.3	10	My school journey	Google hybrid		18 LINESTRING (24.631004 60.153136, 24.64 By bus		
19	2016-10-17T05:30:10.2	13	My school journey	MapBox		18 LINESTRING (24.634266 60.153991, 24.64 By scooter		
23	2016-10-17T05:31:48.9	28	My school journey	MapBox		17 LINESTRING (24.628744 60.153181, 24.64 By foot		
24	2016-10-17T05:31:52.0	30	My school journey	MapBox		17 LINESTRING (24.634309 60.154564, 24.64 By foot		
25	2016-10-17T05:32:51.6	42	My school journey	MapBox		17 LINESTRING (24.633904 60.152223, 24.632131 60.152346)		
18	2016-10-17T05:34:01.4	52	My school journey	MapBox		18 LINESTRING (24.637181 60.148752, 24.64 By scooter		
25	2016-10-17T05:34:47.9	38	My school journey	MapBox		17 LINESTRING (24.633568 60.152245, 24.64 By foot		
17	2016-10-17T05:34:58.0	39	My school journey	MapBox		17 LINESTRING (24.633290 60.152026, 24.64 By foot		
25	2016-10-17T05:35:38.3	62	My school journey	MapBox		17 LINESTRING (24.634577 60.153871, 24.64 By foot		
34	2016-10-17T05:37:19.4	83	My school journey	MapBox		17 LINESTRING (24.632044 60.154094, 24.64 By foot		
38	2016-10-17T05:38:33.8	95	My school journey	MapBox		18 LINESTRING (24.628467 60.152028, 24.628564 60.152047, 24.628662 60.152031, 24.62		
29	2016-10-17T05:38:52.2	98	My school journey	Google Hybrid		19 LINESTRING (24.635757 60.151185, 24.64 By foot		
21	2016-10-17T05:39:11.3	105	My school journey	MapBox		17 LINESTRING (24.704985 60.202719, 24.64 By bus		
33	2016-10-17T05:40:03.5	112	My school journey	Google Hybrid		35 LINESTRING (24.640794 60.154625, 24.64 By foot		
40	2016-10-17T05:41:18.2	127	My school journey	Google Hybrid		18 LINESTRING (24.638498 60.150995, 24.64 By foot		
11	2016-10-17T05:44:03.2	160	My school journey	Google Hybrid		17 LINESTRING (24.649018 60.144422, 24.64 By bus		
47	2016-10-17T05:49:05.7	202	My school journey	MapBox		17 LINESTRING (24.628258 60.151313, 24.64 By foot		
30	2016-10-17T05:49:10.7	203	My school journey	Google Hybrid		19 LINESTRING (24.651502 60.148364, 24.64 By bicycle		
31	2016-10-17T05:52:23.6	223	My school journey	MapBox		17 LINESTRING (24.633257 60.152058, 24.64 By foot		
34	2016-10-17T05:54:07.1	255	My school journey	MapBox		17 LINESTRING (24.633257 60.152058, 24.64 By foot		
63	2016-10-17T07:48:13.3	301	My school journey	MapBox		14 LINESTRING (184.801381 60.287323, 38 By car	By taxi	
64	2016-10-17T07:48:41.9	302	My school journey	MapBox		35 LINESTRING (24.743915 60.151996, 24.43333 60.171888, 24.743056 60.158115, 24.74	By taxi	
64	2016-10-17T07:49:44.9	305	My school journey	MapBox		15 LINESTRING (24.735503 60.159002, 24.734387 60.158764, 24.731255 60.158038, 24.73	By taxi	
64	2016-10-17T07:50:03.0	306	My school journey	MapBox		35 LINESTRING (24.711514 60.147343, 24.4 Other mode	By taxi	
67	2016-10-17T07:50:06.8	307	My school journey	MapBox		17 LINESTRING (24.649179 60.149133, 24.64888 60.149436, 24.648814 60.149628, 24.64	By taxi	
67	2016-10-17T07:51:09.9	309	My school journey	MapBox		17 LINESTRING (24.719238 60.211533, 17 By taxi	By taxi	

About the nature of PPGIS data



Non-spatial PPGIS data

PPGIS

Non-spatial PPGIS data
 Socio-demographics
 Attitudes
 Values

respondent	lang_code	scr_width	Your grade_5th gra	Your grade_9th gra	Your grade	Gender_girl	Gender_boy	Gender
17	fi	1280	1	0	S. grade	0	1	boy
18	fi	1920	1	0	S. grade	0	1	boy
19	fi	1920	1	0	S. grade	0	1	boy
20	fi	1920	1	0	S. grade	0	1	boy
21	fi	1280	1	0	S. grade	0	1	boy
22	fi	1280	1	0	S. grade	1	0	girl
23	fi	1920	1	0	S. grade	0	1	boy
24	fi	1920	1	0	S. grade	0	1	boy
25	fi	1034	1	0	S. grade	1	0	girl
26	fi	1920	1	0	S. grade	1	0	girl
27	fi	1173	1	0	S. grade	1	0	girl
29	fi	1920	1	0	S. grade	1	0	girl
30	fi	1280	1	0	S. grade	1	0	girl
31	fi	1280	1	0	S. grade	1	0	girl
33	fi	1280	1	0	S. grade	0	1	boy
34	fi	1034	1	0	S. grade	0	1	boy
36	fi	1280	1	0	S. grade	1	0	girl
37	fi	1280	1	0	S. grade	1	0	girl
38	fi	768	1	0	S. grade	0	1	boy
39	fi	1920	1	0	S. grade	0	1	boy
40	fi	1920	1	0	S. grade	1	0	girl
42	fi	1280	1	0	S. grade	1	0	girl
45	fi	1280	1	0	S. grade	1	0	girl
47	fi	1920	1	0	S. grade	0	1	boy
51	fi	1173	1	0	S. grade	1	0	girl
52	fi	1280	1	0	S. grade	1	0	girl

Could you please provide some background information?

The results will be handled confidentially. No single respondent can be identified.

Gender

Female
 Male

Birthyear (19XX)

Monthly available household income (after taxation)

Are you retired?

Yes
 No

Which of the following personal goals are important to you?

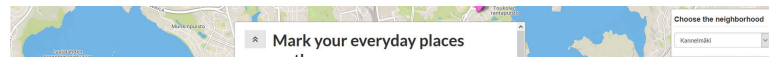
People have, at different stages of their life, a variety of areas of interests, projects and objectives. These interests or objectives might be related to any area of your life, such as to oneself, hobbies, everyday life, health, relationships, children, or friends. We ask you now to think about which of the following objectives, projects and interests describe you at the moment.

Evaluate the importance of the objectives mentioned here below on a scale from zero to six.
 0 = Not important... 6 = very important.

Current interests of targets and goals:	0	1	2	3	4	5	6
Everyday physical activities (e.g. walking, biking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sports or dance hobby	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing with a disease	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintaining health and functional capacity of the body	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diet / weight loss / physical appearance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintaining memory capacities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

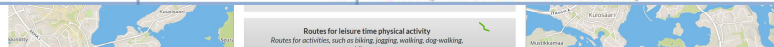
Spatial PPGIS data

DDGIS



respondent	createtime	id	buttonname	visibleLayers	zoomLevel	wkt	What makes the place nice?
	18	2016-10-17T05:27:17.0	1	My school	MapBox	17	POINT (24.630575 60.153104)
	21	2016-10-17T05:27:58.0	2	My school	MapBox	17	POINT (24.630575 60.153104)
	17	2016-10-17T05:28:05.4	3	My home	MapBox	17	POINT (24.655970 60.197308)
	20	2016-10-17T05:28:22.4	4	My school	MapBox	17	POINT (24.630575 60.153104)
	20	2016-10-17T05:28:32.4	5	My home	MapBox	17	POINT (24.630758 60.151999)
	17	2016-10-17T05:28:55.5	6	My school	Google Hybrid	16	POINT (24.630833 60.152976)
	19	2016-10-17T05:29:11.3	7	My school	MapBox	18	POINT (24.630677 60.153048)
	20	2016-10-17T05:29:17.1	8	Safe place	MapBox	17	POINT (24.630843 60.152010)

respondent	createtime	id	buttonname	visibleLayers	zoomLevel	wkt	What makes the place nice?
18	2016-10-17T05:27:17.0	1	My school	MapBox	17	POINT (24.630575 60.153104)	



respondent	createtime	id	buttonname	visibleLayers	zoomLevel	wkt	How do you most often travel your school journeys?	Other transport mode, what?
17	2016-10-17T05:29:41.3	10	My school journey	Google Hybrid	16	LINestring (24.631004 60.153136, 24.631004 60.153136)	By bus	
19	2016-10-17T05:30:10.2	13	My school journey	MapBox	18	LINestring (24.634266 60.153991, 24.634266 60.153991)	By scooter	
23	2016-10-17T05:31:43.9	28	My school journey	MapBox	17	LINestring (24.629674 60.152181, 24.629674 60.152181)	By foot	
24	2016-10-17T05:31:52.0	30	My school journey	MapBox	17	LINestring (24.634309 60.154364, 24.634309 60.154364)	By foot	
25	2016-10-17T05:32:51.6	42	My school journey	MapBox	17	LINestring (24.633504 60.152223, 24.632131 60.152346)	By foot	
18	2016-10-17T05:34:01.6	52	My school journey	MapBox	18	LINestring (24.637181 60.148752, 24.637181 60.148752)	By scooter	
25	2016-10-17T05:34:47.9	58	My school journey	MapBox	17	LINestring (24.633558 60.152245, 24.633558 60.152245)	By foot	
27	2016-10-17T05:34:58.0	59	My school journey	MapBox	17	LINestring (24.633290 60.152026, 24.633290 60.152026)	By foot	
25	2016-10-17T05:35:38.0	62	My school journey	MapBox	17	LINestring (24.634577 60.151871, 24.634577 60.151871)	By foot	
34	2016-10-17T05:37:19.4	83	My school journey	MapBox	17	LINestring (24.632024 60.154994, 24.632024 60.154994)	By foot	

31	2016-10-17T05:31:59.2	31	My school	MapBox	17	POINT (24.630575 60.153104)	
64	2016-10-17T07:48:43.9	303	My school journey	MapBox	15	LINestring (24.743915 60.157696, 24.743928 60.157888, 24.743956 60.158315, 24.743956 60.158315, 24.743956 60.158315, 24.743956 60.158315)	
64	2016-10-17T07:49:44.9	305	My school journey	MapBox	15	LINestring (24.735503 60.159020, 24.734387 60.158764, 24.731255 60.158038, 24.731255 60.158038, 24.731255 60.158038, 24.731255 60.158038)	
64	2016-10-17T07:50:03.0	306	My school journey	MapBox	15	LINestring (24.711514 60.147743, 24.711514 60.147743)	By taxi
67	2016-10-17T07:50:09.8	307	My school journey	MapBox	17	LINestring (24.649179 60.149131, 24.648868 60.149436, 24.648814 60.149628, 24.648814 60.149628, 24.648814 60.149628, 24.648814 60.149628)	By taxi
68	2016-10-17T07:51:09.9	309	My school journey	MapBox	11	LINestring (24.719238 60.212533, 24.719238 60.212533)	By taxi

How should it look on a map?

The screenshot shows the QGIS interface with a map view displaying a dense network of red lines. A table window titled 'DATA_Espoo_Children_lines' is open on the right, showing 21 rows of data. The first row is highlighted with a green border. The table columns are: respondent, createtime, id, buttonname, visibleLayers, zoomLevel, and often.

	respondent	createtime	id	buttonname	visibleLayers	zoomLevel	often
1	1080	2017-05-11T09:...	6862	My school jourm...	MapBox		15
2	1073	2017-05-11T09:...	6860	My school jourm...	MapBox		13 By bic
3	1073	2017-05-11T09:...	6857	My school jourm...	MapBox		13 By bic
4	1082	2017-05-11T09:...	6879	My school jourm...	MapBox		16
5	1082	2017-05-11T09:...	6876	My school jourm...	MapBox		16
6	1081	2017-05-11T09:...	6875	My school jourm...	MapBox		17
7	1082	2017-05-11T09:...	6874	My school jourm...	MapBox		16
8	1086	2017-05-11T13:...	6897	My school jourm...	MapBox		15
9	1084	2017-05-11T10:...	6893	My school jourm...	MapBox		17
10	1083	2017-05-11T09:...	6888	My school jourm...	Google Hybrid		14 Other
11	1082	2017-05-11T09:...	6880	My school jourm...	MapBox		15
12	1086	2017-05-11T13:...	6902	My school jourm...	MapBox		16
13	1086	2017-05-11T13:...	6901	My school jourm...	MapBox		15
14	1086	2017-05-11T13:...	6900	My school jourm...	MapBox		16
15	1086	2017-05-11T13:...	6898	My school jourm...	MapBox		15 By bic
16	886	2016-11-16T09:...	5154	My school jourm...	Google Hybrid		18 By foo
17	882	2016-11-16T09:...	5125	My school jourm...	Google Hybrid		16 By foo
18	884	2016-11-16T09:...	5118	My school jourm...	Google Hybrid		16
19	883	2016-11-16T09:...	5107	My school jourm...	Google Hybrid		16 By bic
20	889	2016-11-16T09:...	5214	My school jourm...	Google Hybrid		19 By foo
21	890	2016-11-16T09:...	5209	My school jourm...	MapBox		16 By car

So the next steps are:

- **Get to know your data**
 - Non-spatial data
 - Spatial data
 - Other data sets – what data sets you might need?
 - Does your data need cleaning?
- **Do you need to transform your raw data files to spatial data?**
 - Each excel sheet to csv. and then csv. to shp.
- **Explore, Explain, Predict. GO!**