

I. Data description

In this analysis, the data used is open source on the city of Paris <https://opendata.paris.fr/pages/home/>. We will go through the data set used in details.

a. Data Set 1 : Borough and neighborhoods

The first data set that we need in this analysis is the borough split and the neighborhood segmentation. This first data set groups the 20 arrondissements (borough) and the neighborhoods associated (80), we added afterward the coordinates which will be used to plot the map.

Source :

- <https://www.data.gouv.fr/fr/datasets/r/e88c6fda-1d09-42a0-a069-606d3259114e>
- <https://opendata.paris.fr/explore/dataset/marches-decouverts/download/?format=json&timezone=Europe/Berlin>

b. Data Set 2 : Population

We will include the population for every Borough. As stated in the description , this attribute will give us a better understanding of the population distribution in the city

borough	City	Region	population	postal_code	geo_point_2d
0	1 PARIS	ILE-DE-FRANCE	17.6	75001	[48.8626304851685, 2.336293446550539]
1	2 PARIS	ILE-DE-FRANCE	22.4	75002	[48.86790337886785, 2.344107166658533]
2	3 PARIS	ILE-DE-FRANCE	35.7	75003	[48.86305413181178, 2.359361058970589]
3	4 PARIS	ILE-DE-FRANCE	28.2	75004	[48.854228281954754, 2.357361938142205]
4	5 PARIS	ILE-DE-FRANCE	61.5	75005	[48.844508659617546, 2.349859385560182]
5	6 PARIS	ILE-DE-FRANCE	43.1	75006	[48.84896809191946, 2.332670898588416]
6	7 PARIS	ILE-DE-FRANCE	57.4	75007	[48.85608259819694, 2.312438687733857]
7	8 PARIS	ILE-DE-FRANCE	40.3	75008	[48.87252726662346, 2.312582560420059]
8	9 PARIS	ILE-DE-FRANCE	60.3	75009	[48.87689616237872, 2.337460241388529]
9	10 PARIS	ILE-DE-FRANCE	95.9	75010	[48.87602855694339, 2.361112904561707]
10	11 PARIS	ILE-DE-FRANCE	152.7	75011	[48.85941549762748, 2.378741060237548]
11	12 PARIS	ILE-DE-FRANCE	142.9	75012	[48.83515623066034, 2.419807034965275]
12	13 PARIS	ILE-DE-FRANCE	182.0	75013	[48.82871768452136, 2.362468228516128]
13	14 PARIS	ILE-DE-FRANCE	137.2	75014	[48.82899321160942, 2.327100883257538]
14	15 PARIS	ILE-DE-FRANCE	236.5	75015	[48.84015541860987, 2.293559372435076]
15	16 PARIS	ILE-DE-FRANCE	169.4	75016	[48.86039876035177, 2.262099559395783]
16	17 PARIS	ILE-DE-FRANCE	168.5	75017	[48.88733716648682, 2.307485559493426]
17	18 PARIS	ILE-DE-FRANCE	200.6	75018	[48.892735074561706, 2.348711933867703]
18	19 PARIS	ILE-DE-FRANCE	184.8	75019	[48.88686862295828, 2.384694327870042]
19	20 PARIS	ILE-DE-FRANCE	197.1	75020	[48.86318677744551, 2.400819826729021]

The table presented show the population of the 20 boroughs (it is presented in 1000 unit)

Source:

- <https://www.data.gouv.fr/fr/datasets/r/e88c6fda-1d09-42a0-a069-606d3259114e>

c. Data Set 3 :Events

We will include also the number of events/activity. The data set again is an open source and can be found in the “opendata.paris” websites. This set gives us the number of events held through the year on every borough. We have even the address of the event. This is presented as such :

	access_link	access_type	address_city	address_name	address_street	address_zipcode	blind	category
0	https://exploreparis.com/fr/138-la-gare-du-nor...	reservation	Paris	Gare du Nord	112 rue de Maubeuge	75010	0.0	Animations -> Visite guidée
1	http://resas.scribeparis.org	conseillee	Paris	Espace Protestant Marc Boegner	27, rue de l'Annonciation	75016	0.0	Spectacles -> Théâtre
2	https://www.lebaisersale.com/agenda?event=2020...	conseillee	Paris	Le Baiser Salé	58 rue des Lombards	75001	0.0	Concerts - > Jazz
3	http://www.promotheatre.com/marais_(theatre_du...	conseillee	Paris	Théâtre du Marais	37 rue volta	75003	0.0	Spectacles -> Humour
4	https://theatredebelleville.mapado.com	conseillee	Paris	Théâtre de Belleville	16 Passage Piver	75011	0.0	Spectacles -> Théâtre

The data has to be cleaned and restructured to something consumable. I have did a count of number per borough.

Source :

- https://opendata.paris.fr/explore/dataset/que-faire-a-paris-/export/?disjunctive.category&disjunctive.tags&disjunctive.address_zipcode&disjunctive.address_city&disjunctive.access_type&disjunctive.price_type&basemap=jawg.transports&location=7,47.73195,2.41324

d. Data Set 4 : Farmer markets

This data set gives the list of the farmer markets in Paris. Again we will use just a counting variable linked to that data set.

Borough	dimanche	geo_point_2d	geo_shape	gestionnaire	h_deb_sem_1	h_fin_sem_1	id_marche	jeudi	jours_tenue	lineaire	localisation	
0	9	0.0	[48.88198463, 2.34471710004]	{'type': 'Polygon', 'coordinates': [[[[2.344507...	Dadoun	15:00	20:30	12.0	0.0	vendredi apm	176.0	place d'Anvers le long du square d'Anvers en v...
1	12	1.0	[48.8358272969, 2.3870680979]	{'type': 'Polygon', 'coordinates': [[[[2.387303...	Bensidoun	10:00	20:30	20.0	0.0	mercredi , dimanche	142.0	entre le n° 14 place Lachambeaudie et le n°11 ...
2	16	0.0	[48.8519641378, 2.27489208238]	{'type': 'Polygon', 'coordinates': [[[[2.275891...	Dadoun	07:00	14:30	48.0	0.0	mardi, vendredi	352.0	du n° 31 rue Gros au n° 1 rue la Fontaine
3	12	0.0	[48.8392712255, 2.39241681845]	{'type': 'MultiPolygon', 'coordinates': [[[[[2....	Bensidoun	07:00	14:30	71.0	0.0	mardi, vendredi	1182.0	sur les trottoirs pair et impair du boulevard ...
4	18	0.0	[48.884006836, 2.3533114763]	{'type': 'Polygon', 'coordinates': [[[[2.355248...	Dadoun	07:00	14:30	54.0	0.0	mercredi, samedi	637.0	terre-plein du boulevard de la Chapelle entre ...