THE BATTLE OF NEIGHBORHOODS

Analyzing Suburbs to construct Parks in Canberra, Australia

Report

23 July 2020 Sahar Tosif Jamal

INTRODUCTION

- Canberra, federal capital of the Commonwealth of Australia. Canberra lies on a plain at the foot of 6,200-foot (1,900-metre) spurs of the Australian Alps, enjoying warm summers and cool winters and receiving considerably less rainfall than the surrounding highlands. The city has been expanding, and its population has grown steadily. According to the Australian Bureau of Statistics (ABS), in June 2016 there were an estimated 403,468 people living in the ACT of which 134,492 (33.3%) were children and young people aged 0-24 years. Of these 49.2% were male and 50.8% were female.
- Parks and playgrounds are a Canberra mother's best friend. It turns out parks are a
 crucial part of any community. They have a significant impact on the development of
 children and the happiness of everyone in the neighborhood. Public parks are very
 necessary in cities. They serve as the lungs of the city body. People refresh
 themselves there in the morning, at noon and in the evening.

PROJECT IDEA

- This project will help in analyzing all the list of playgrounds present in the city of Canberra, Australia.
- We will also look into the data of the population of all the Neighborhoods/Suburbs in Canberra.
- The main objective of the project is to be able to construct a playground in the best suitable Suburb.

METHODOLOGY DATA COLLECTION

- Canberra Playground Data https://www.data.act.gov.au/Sport-and-Recreation/Town-And-District-Playgrounds/fwth-mr9q
- Canberra Suburb Datahttps://www.data.act.gov.au/People-and-Society/ACT-Population-Projections-by-Suburb-2015-2020-/kci6-ugxa
- We will also use Foursquare's API for the location
 https://foursquare.com/explore?mode=url&near=Canberra%2C%20ACT%2C%20Australia&nearGeoId=72057594040100453&q=Playground
- About Canberra https://en.wikipedia.org/wiki/Canberra
- Division Boundaries https://actmapi-actgov.opendata.arcgis.com/datasets/act-division-boundaries/data
- For GPS Co-ordinates https://www.gps-coordinates.net

DATA WRANGLING & CLEANING

Data file of Parks in Canberra

LOCATION	DIVISION_NAME	LATITUDE	LONGITUDE	Location_1
Garryowen Drive District Park	Acton	-	149.101138	(-35.292273,
		35.292273		149.101138)
Paterson Street Neighbourhood Park	Ainslie	-	149.141571	(-35.268805,
		35.268805		149.141571)
Bizant Street Neighbourhood Park	Amaroo	-35.17373	149.135224	(-35.17373,
				149.135224)
Telopea Park	Barton	-	149.137312	(-35.315086,
		35.315086		149.137312)
Townsend Place District Park	Belconnen	-	149.074995	(-35.236067,
		35.236067		149.074995)
Diddams Close (West)	Belconnen	-	149.071722	(-35.227204,
]	35.227204		149.071722)
Macdermott Place District Park	Belconnen	-	149.062799	(-35.226759,
		35.226759		149.062799)
Burgoyne Street Neighbourhood Park	Bonython	-	149.071602	(-35.426476,
	<u> </u>	35.426476		149.071602)
Tauchert Street Neighbourhood Park	Chapman	-	149.045935	(-35.357472,
		35.357472		149.045935)
Chifley Place Neighbourhood Park	Chifley	-	149.07665	(-35.352569,
		35.352569		149.07665)
	Paterson Street Neighbourhood Park Bizant Street Neighbourhood Park Telopea Park Townsend Place District Park Diddams Close (West) Macdermott Place District Park Burgoyne Street Neighbourhood Park Tauchert Street Neighbourhood Park	Garryowen Drive District Park Acton Paterson Street Neighbourhood Park Ainslie Bizant Street Neighbourhood Park Amaroo Telopea Park Barton Townsend Place District Park Belconnen Diddams Close (West) Belconnen Macdermott Place District Park Belconnen Burgoyne Street Neighbourhood Park Bonython Tauchert Street Neighbourhood Park Chapman	Garryowen Drive District Park Paterson Street Neighbourhood Park Ainslie 35.268805 Bizant Street Neighbourhood Park Amaroo -35.17373 Telopea Park Barton -35.315086 Townsend Place District Park Belconnen -35.236067 Diddams Close (West) Belconnen -35.227204 Macdermott Place District Park Belconnen -35.227204 Macdermott Place District Park Belconnen -35.226759 Burgoyne Street Neighbourhood Park Tauchert Street Neighbourhood Park Chifley Place Neighbourhood Park	Garryowen Drive District Park Acton - 149.101138 Paterson Street Neighbourhood Park Ainslie - 149.141571 Bizant Street Neighbourhood Park Amaroo -35.17373 149.135224 Telopea Park Barton - 149.137312 Townsend Place District Park Belconnen - 149.074995 Diddams Close (West) Belconnen - 149.071722 Macdermott Place District Park Belconnen - 149.062799 Burgoyne Street Neighbourhood Park Bonython - 149.071602 Tauchert Street Neighbourhood Park Chapman - 149.045935 Chifley Place Neighbourhood Park Chifley - 149.07665

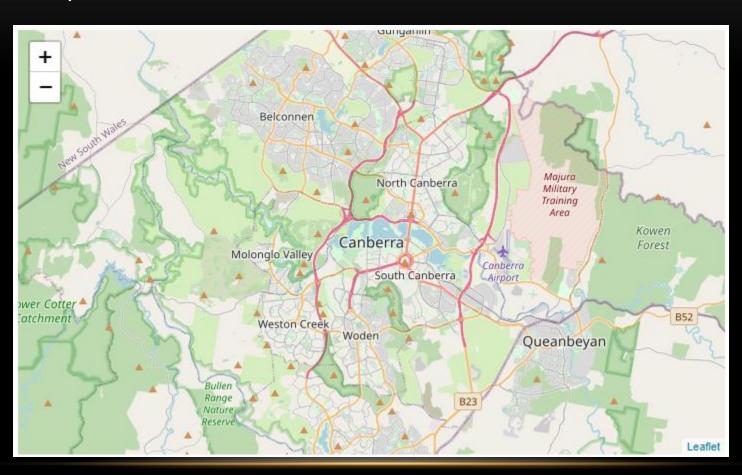
DATA WRANGLING & CLEANING

• Data file of Population in each Suburb of Canberra

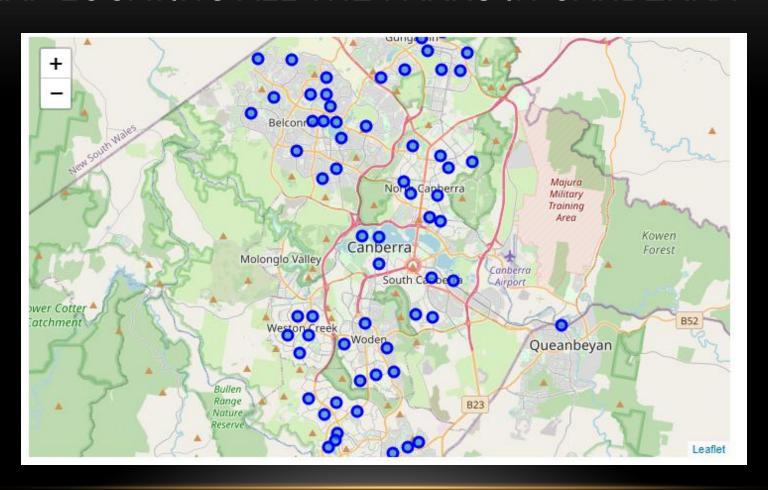
SUBURB	FEMALES (KIDS)	FEMALES (TEENS)	FEMALES (ADULTS)	TOTAL FEMALES	MALES (KIDS)	MALES (TEENS)	MALE (ADULTS)	TOTAL MALES	TOTAL
ACT East	33	32	283	348	47	42	426	515	863
ACT South West	1033	223	4259	5515	1028	220	4337	5585	11100
Acton	47	228	902	1177	69	222	1020	1311	2488
Ainslie	418	190	2206	2814	380	187	1982	2549	5363
Amaroo	694	312	2207	3213	568	314	2010	2892	6105
Aranda	242	114	949	1305	268	93	836	1197	2502
Banks	498	210	1694	2402	535	217	1625	2377	4779
Belconnen	291	145	2892	3328	382	160	3105	3647	6975
Bonner	940	246	1857	3043	1125	234	1689	3048	6091
Bonython	295	158	1356	1809	275	159	1304	1738	3547
Braddon	166	131	2730	3027	206	152	3167	3525	6552
Bruce	434	320	3489	4243	444	341	3308	4093	8336
Calwell	474	247	2093	2814	481	260	1934	2675	5489
Campbell	328	345	1874	2547	413	509	2825	3747	6294
Casey	896	178	1929	3003	929	248	1917	3094	6097
Chapman	175	107	940	1222	222	121	892	1235	2457
Charnwood	316	119	1123	1558	318	105	1031	1454	3012
Chifley	253	131	1003	1387	280	128	967	1375	2762
Chisholm	505	267	1844	2616	516	245	1692	2453	5069
Civic	56	226	1868	2150	63	222	1996	2281	4431

DATA VISUALIZATION

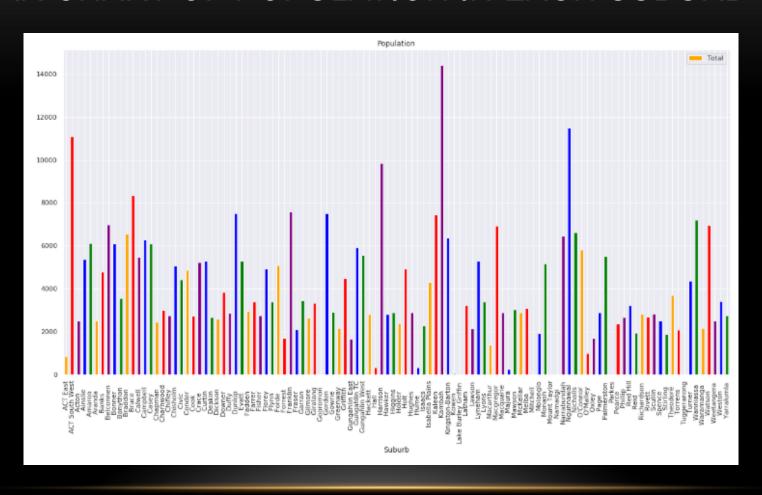
Map of Canberra



MAP LOCATING ALL THE PARKS IN CANBERRA



BAR CHART OF POPULATION IN EACH SUBURB

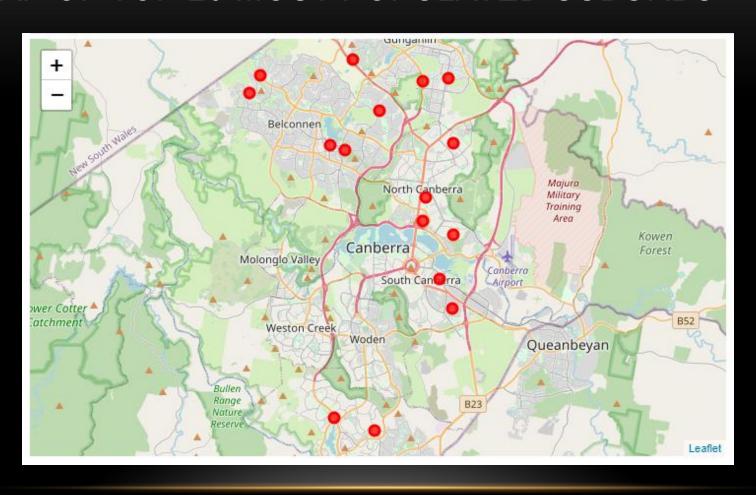


RESULTS

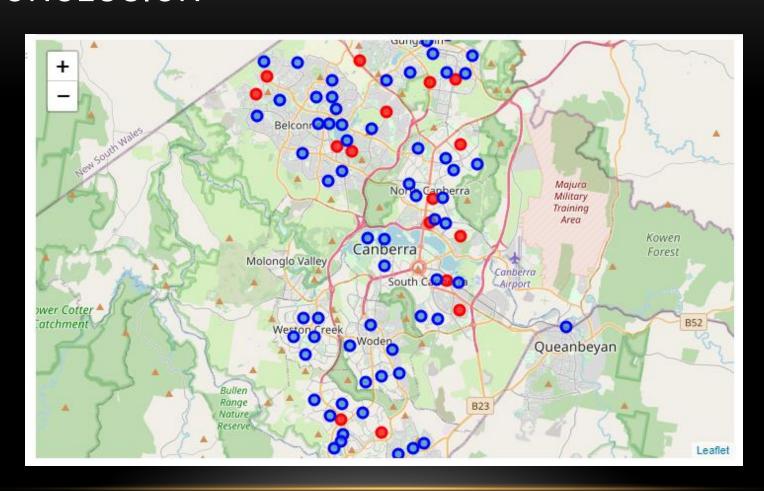
• Data file of Most Populated Suburb of Canberra

Suburb	Latitude	Longitude
Kambah	-35.3948	149.0709
Ngunnawal	-35.1701	149.1102
ACT South West	-35.2826	149.1323
Harrison	-35.2013	149.1504
Bruce	-35.2425	149.0783
Franklin	-35.2027	149.1329
Dunlop	-35.1996	149.0194
Gordon	-35.4504	149.0839
Kaleen	-35.2197	149.1025
Wanniassa	-35.4017	149.0988
Belconnen	-35.2393	149.0682
Watson	-35.2384	149.1538
Macgregor	-35.21	149.0118
Nicholls	-35.1908	149.0838
Braddon	-35.2694	149.1347
Narrabundah	-35.3325	149.1531
Kingston-Barton	-35.3154	149.1442
Campbell	-35.2902	149.1538
Amaroo	-35.173	149.1228
Casey	-35.1713	149.0979

MAP OF TOP 20 MOST POPULATED SUBURBS



CONCLUSION



BEST PLACE TO CONSTRUCT PARKS

By looking closely in the map we can see 10 out of 20 most populated Suburbs don't have parks.

- Wanniassa
- Narrabundah
- Nicholls
- Macgregor
- Kaleen
- Casey
- Campbell
- Braddon
- Watson
- Ngunnawal

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The End!