

A series of thin, black, overlapping geometric lines and polygons that create a complex, abstract pattern in the upper left and center of the slide. The lines vary in orientation, creating a sense of movement and depth.

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# MELBOURNE PROPERTY ANALYSIS



# AGENDA

INTRODUCTION

Ali

CLEANING DATA

Asal

VISUALISATIONS

Ray and Kylie

FINDINGS,  
CONCLUSIONS

Ali



# INTRODUCTION

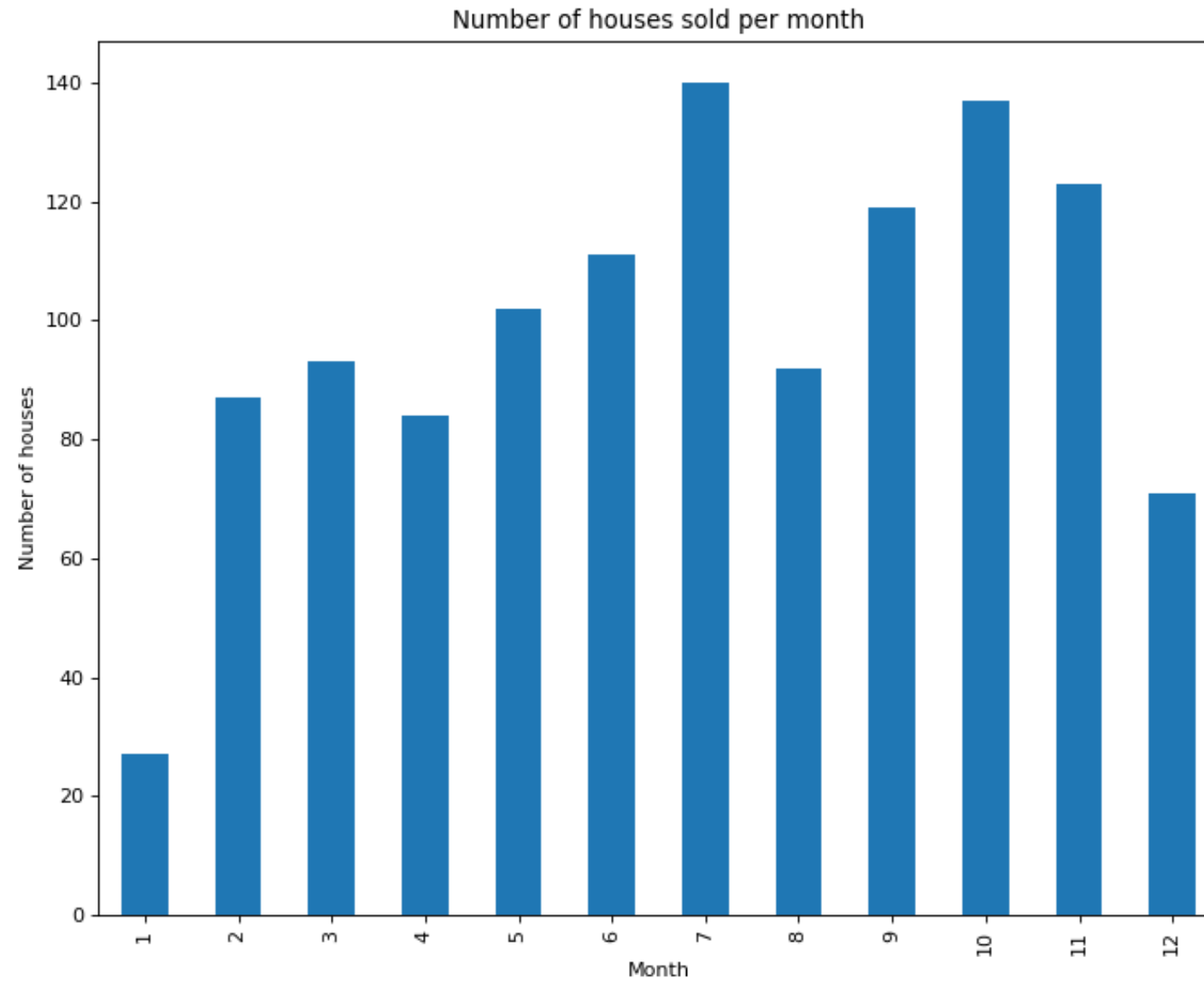
- Lottery winner won \$1 million to buy large family home
- Budget \$800k - \$1m
- Family of 4: husband and 2 children
- Works in CBD
- Free standing home, 4 BR, 2 garage, large.
- Compare different Victorian regions re price, distance to CBD, schools, shopping, transport
- Purpose: to use data to inform her investment decision

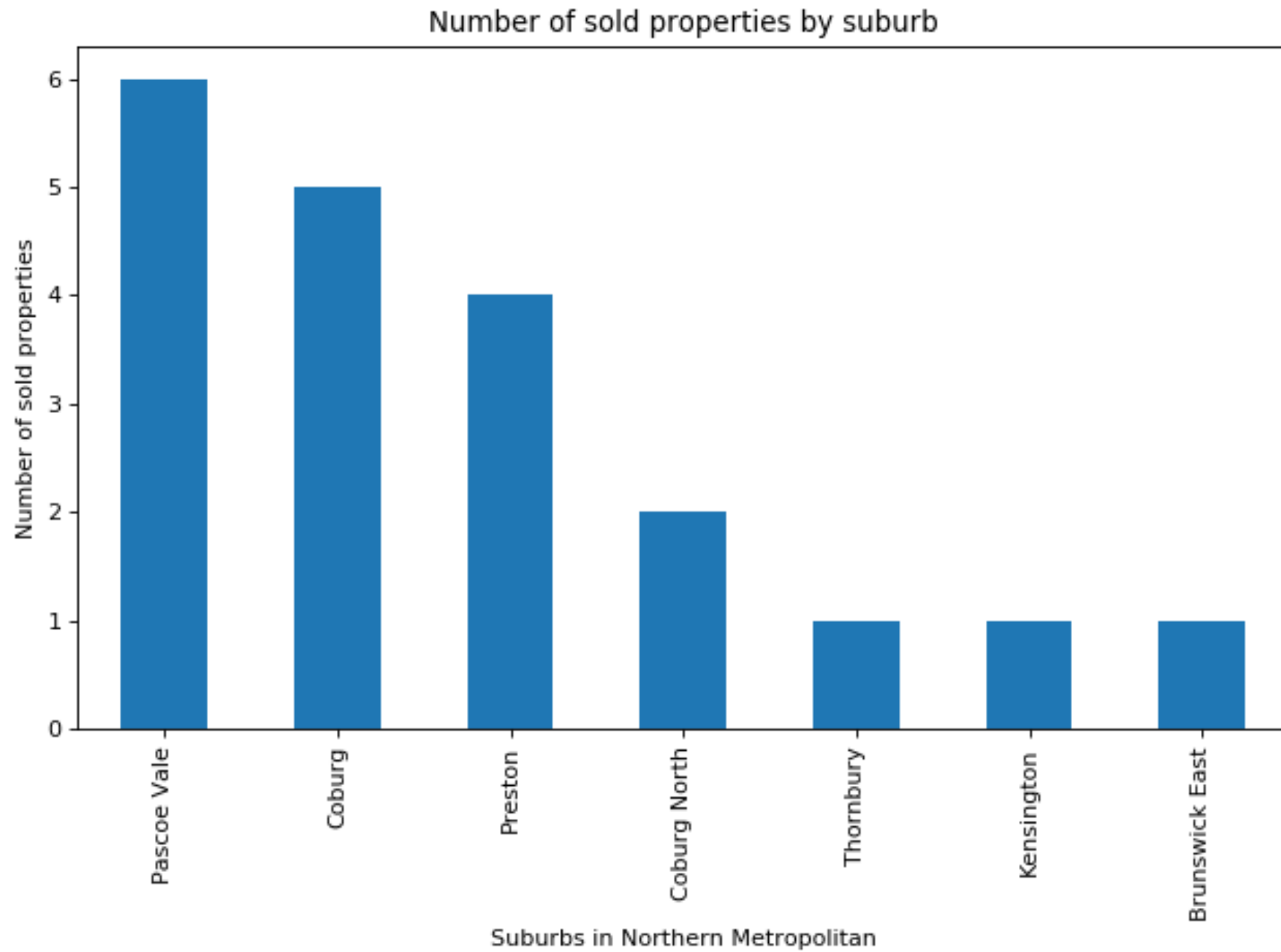


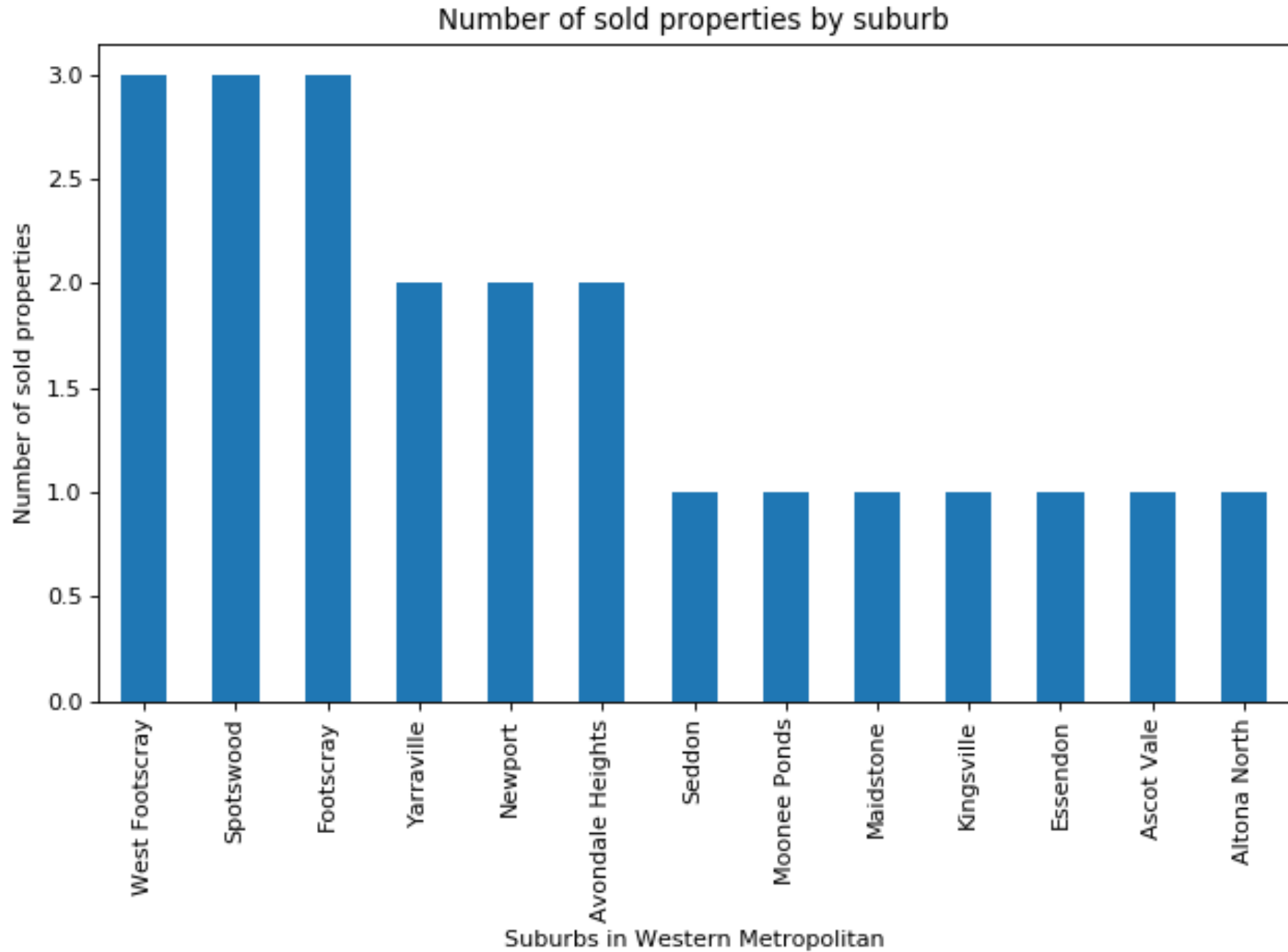
# CLEANING DATA



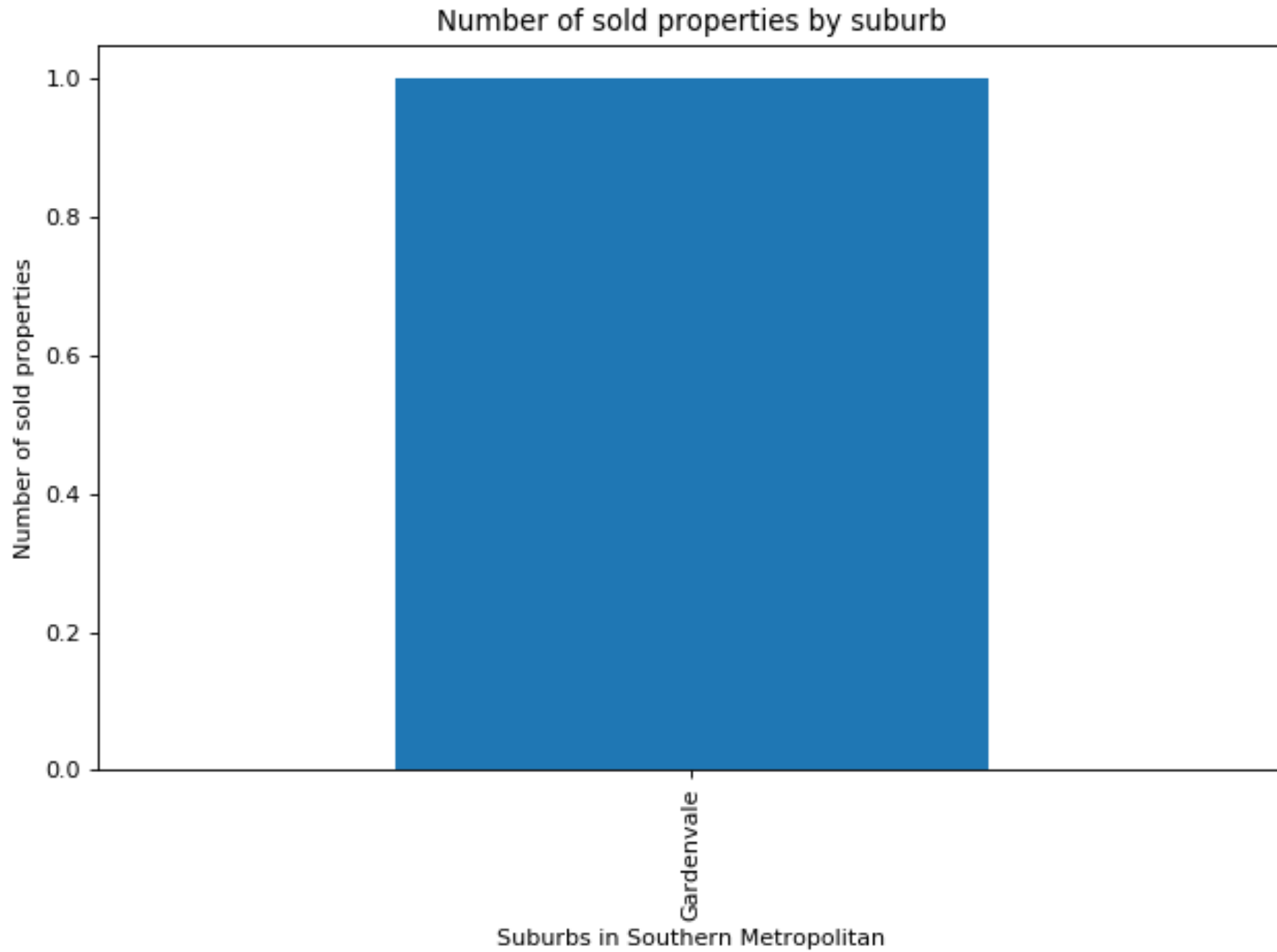
# VISUALISATIONS

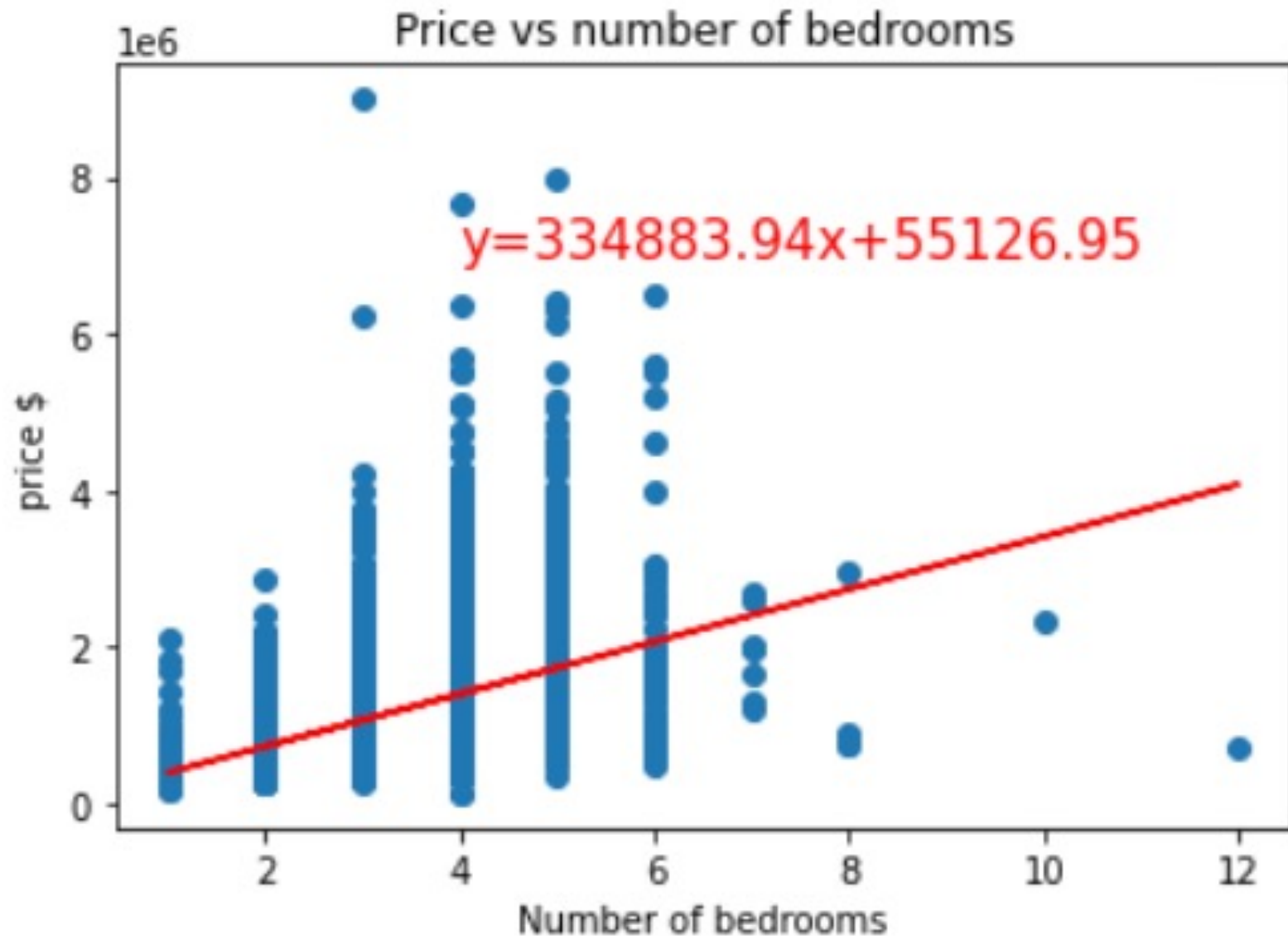




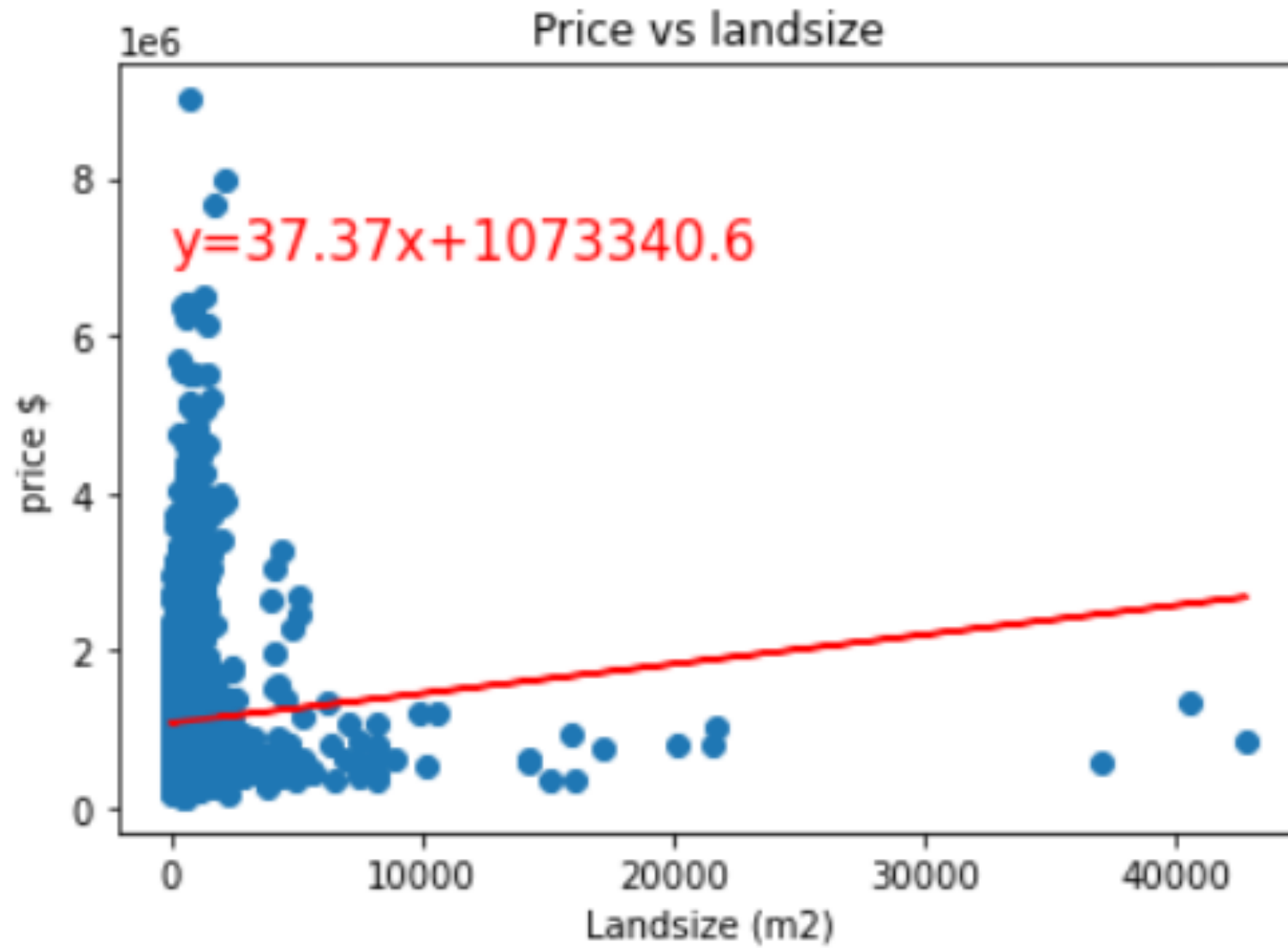




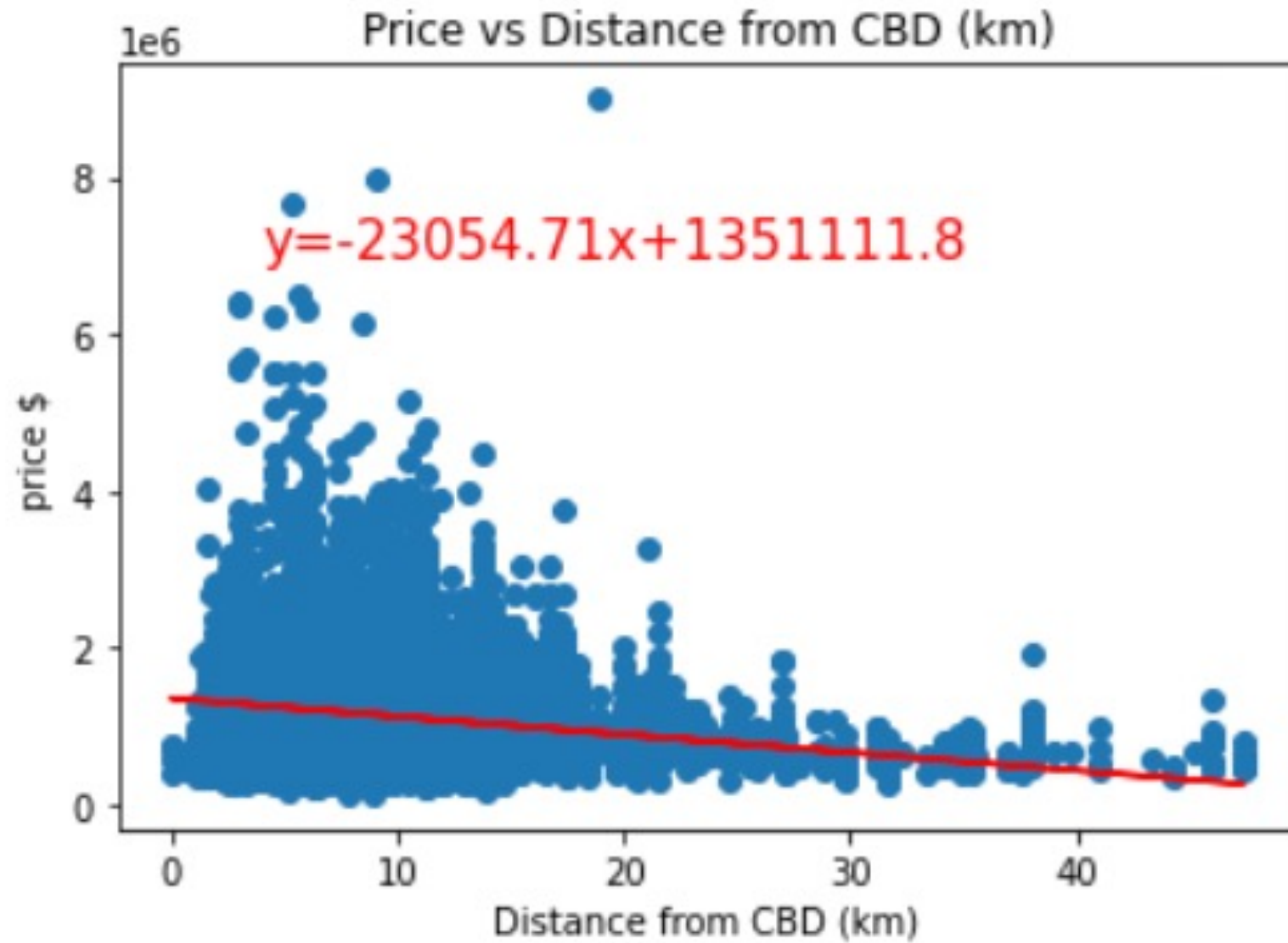




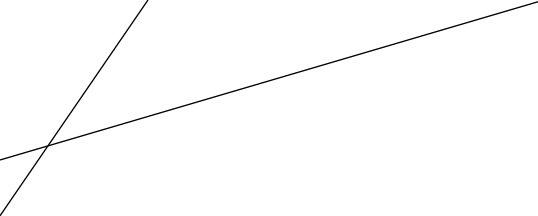
the correlation between both factor is : 0.48



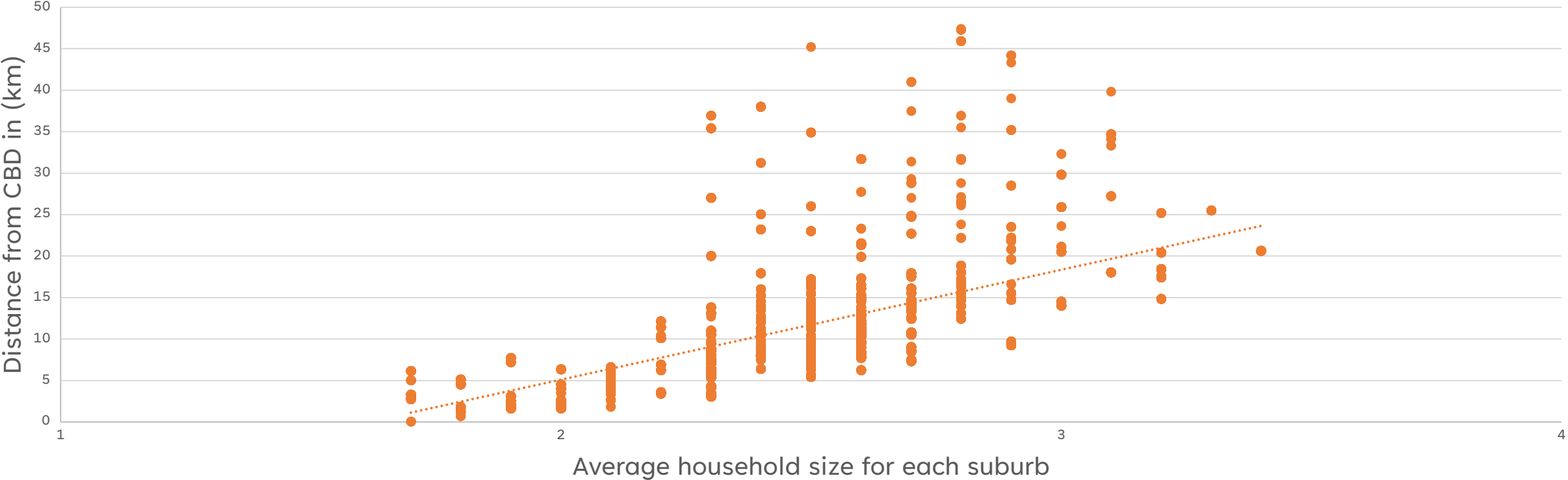
the correlation between both factor is : 0.06



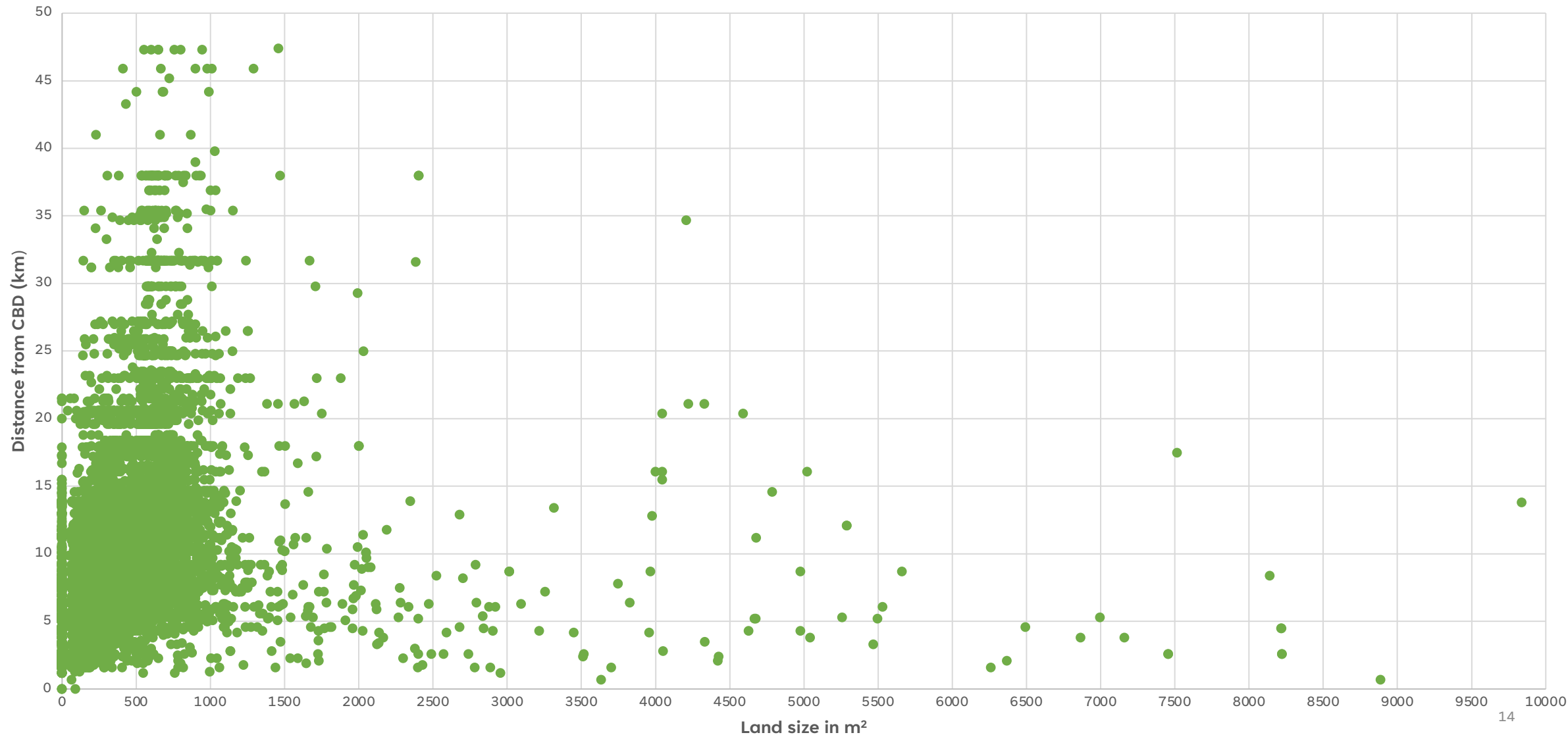
the correlation between both factor is : -0.23



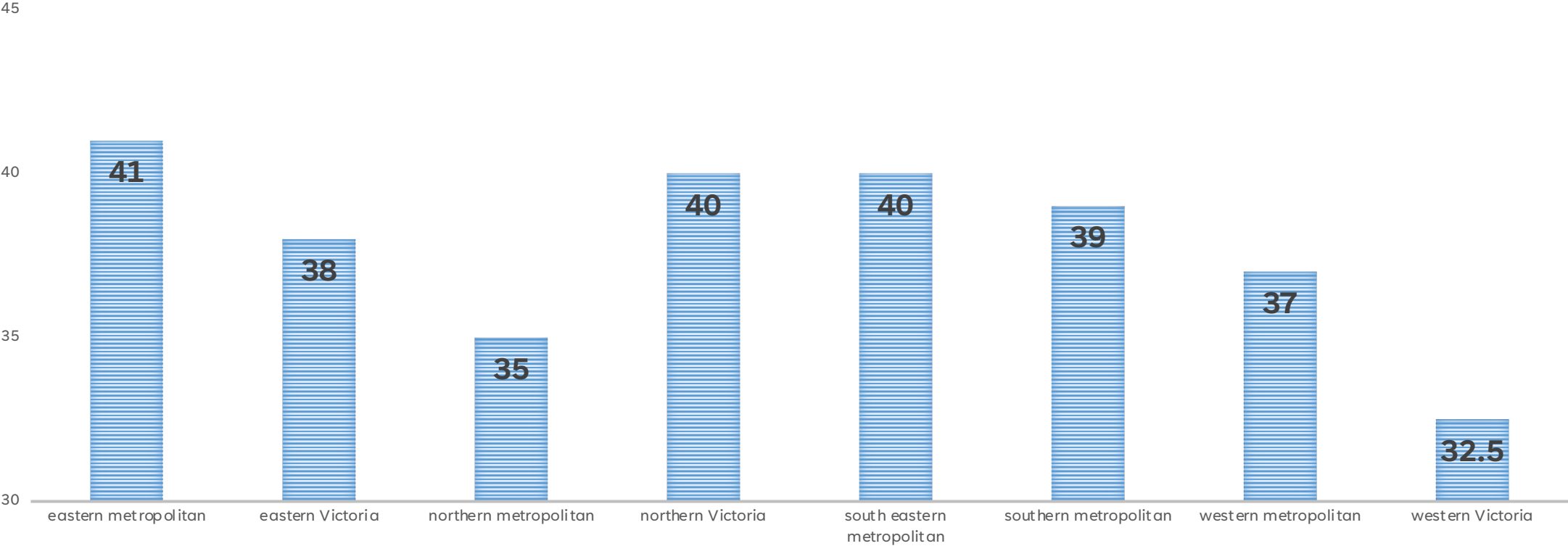
# Household size vs distance from CBD



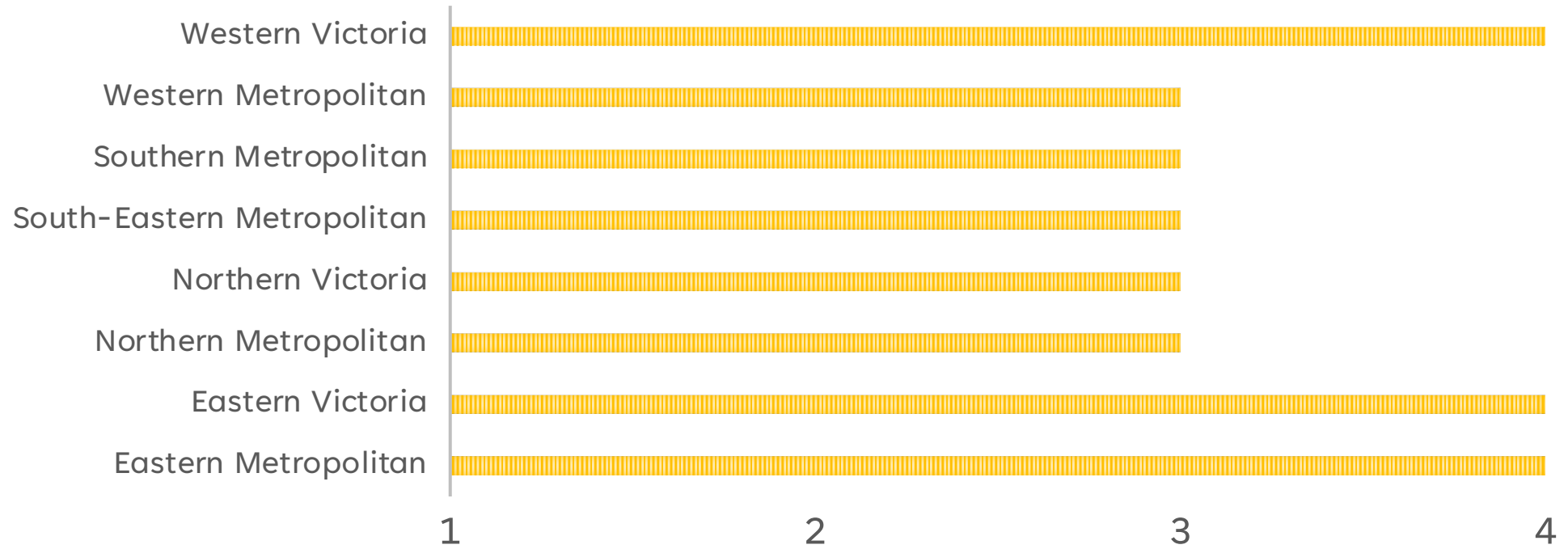
# LAND SIZE VS DISTANCE FROM CBD



# MEDIAN AGE PER REGION

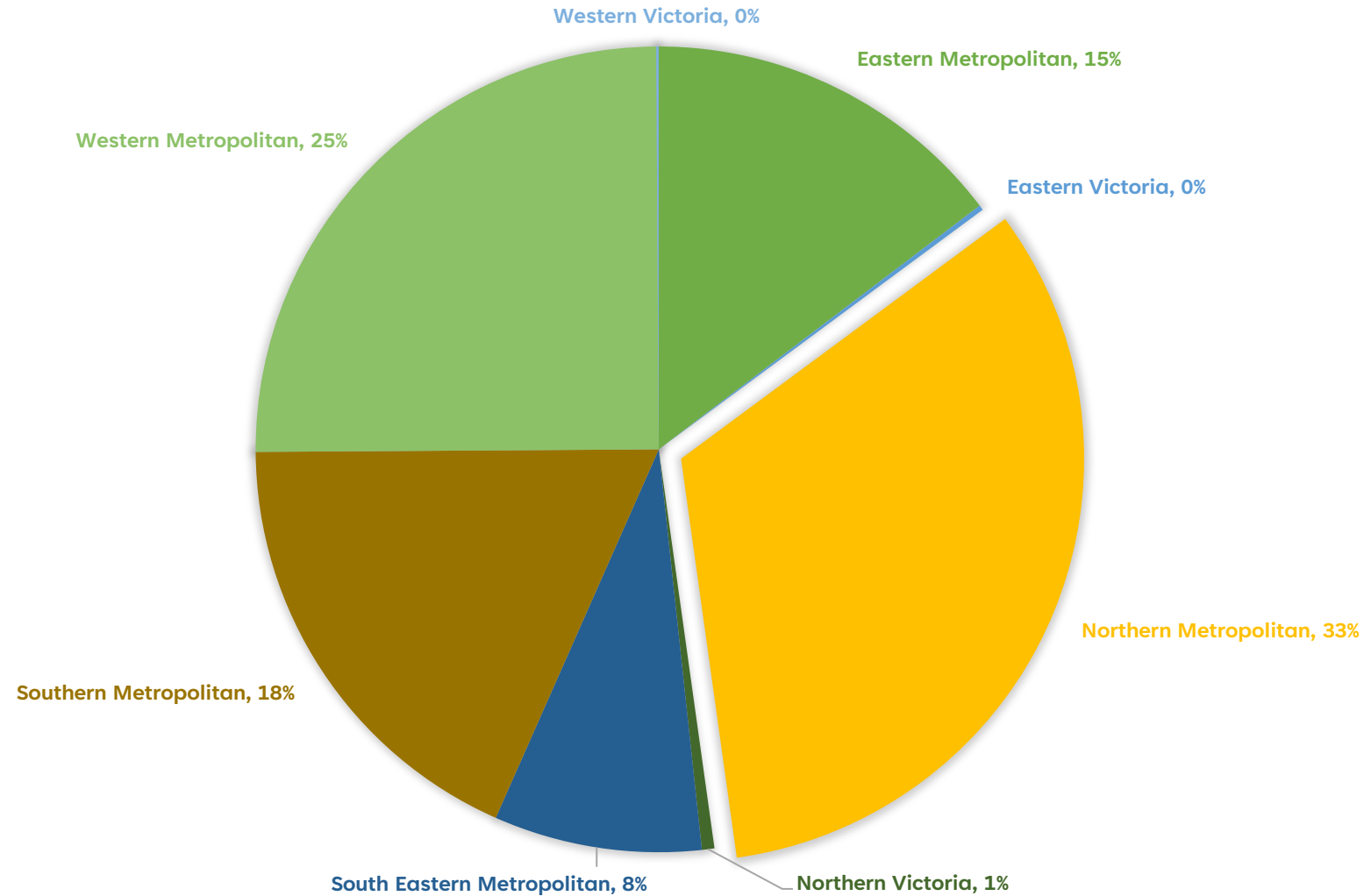


# MEDIAN BEDROOMS PER REGION





# PROPORTION OF REGIONS WITH PROPERTIES SOLD \$800K-\$1M



# PLOTTING THE MAPS

Using Geoapify we wanted to look at 3x of amenities to help determine the best location to purchase a property:

- Schools
- Shopping Centre's
- Transport

The foundation code created was to bring back the below details with a filter of av 15km radius from Melbourne CBD.

- Facility Name
- Facility Address
- Facility Postcode
- Distance to the CBD
- Latitude and Longitude

# SCHOOL MAP

Additional filters in place for schools:

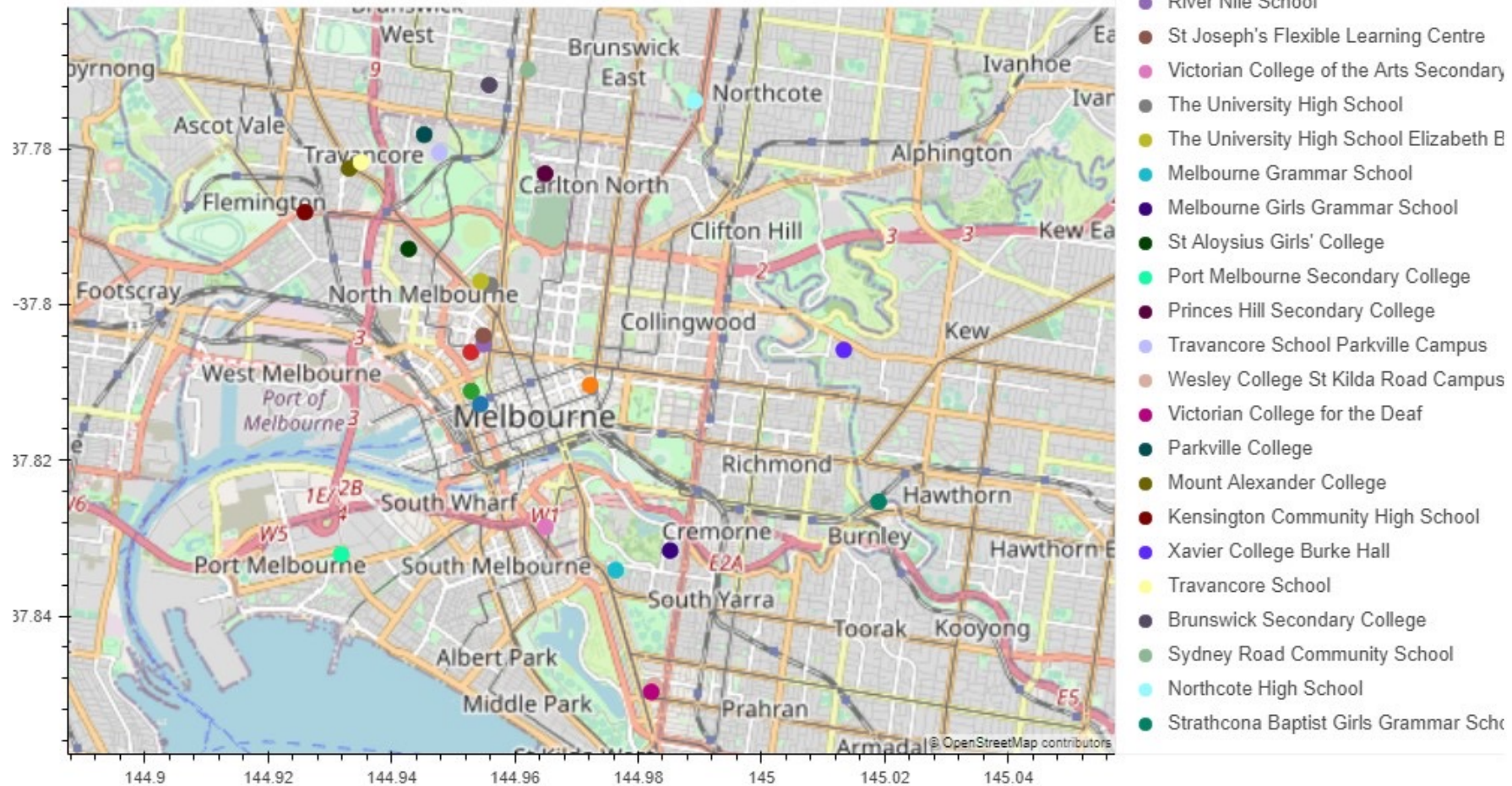
School Type – I wanted to show all options, e.g. public, private, as this may also be taken into consideration for the buyer.

School Grades - with a further filter to remove schools that only cater up to year 6.

Once the school grades filter was performed, we had a smaller, more precise list of options

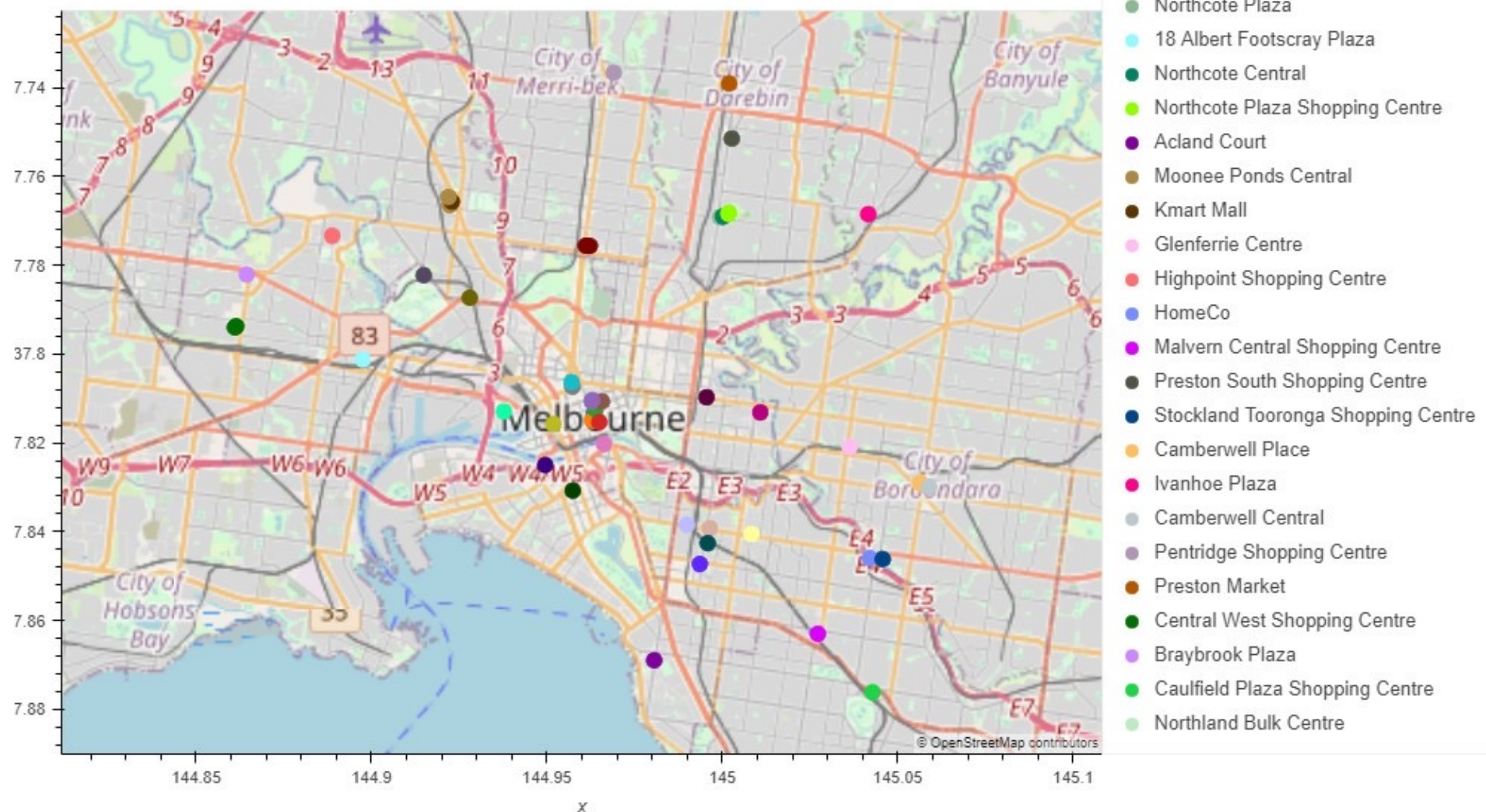
	school name	address	postcode	latitude	longitude	distance from CBD	school type	school grades
0	Ozford College	310 King Street, Melbourne VIC 3000, Australia	3000	-37.812797	144.954404	787	private	10-12
1	Holmes Grammar School	185 Spring Street, Melbourne VIC 3000, Australia	3000	-37.810321	144.972187	905	private	11-12
2	Haileybury College City Campus	383 King Street, West Melbourne VIC 3003, Aust...	3003	-37.811119	144.952924	931	private	0-12
3	Simonds Catholic College (St Mary's 7–10 Campus)	273 Victoria Street, West Melbourne VIC 3051, ...	3051	-37.806108	144.952881	1201	religious	7-12
4	River Nile School	117 Capel Street, North Melbourne VIC 3050, Au...	3050	-37.805078	144.954952	1246	private	11-12
5	St Joseph's Flexible Learning Centre	385 Queensberry Street, North Melbourne VIC 30...	3050	-37.803974	144.954902	1306	private	7-12
6	Victorian College of the Arts Secondary School	55-65 Miles Street, Southbank VIC 3006, Australia	3006	-37.828521	144.964938	1558	public	7-12
7	The University High School	77 Story Street, Parkville VIC 3050, Australia	3050	-37.797459	144.956064	1868	public	7-12
8	The University High School Elizabeth Blackburn...	77 Story Street, Parkville VIC 3050, Australia	3050	-37.796998	144.954471	2035	public	7-12
9	Melbourne Grammar School	1-47 Domain Road, Melbourne VIC 3004, Australia	3004	-37.834087	144.976354	2254	private	7-12
10	Melbourne Girls Grammar School	62-90 Anderson Street, South Yarra VIC 3141, A...	3141	-37.831581	144.985192	2618	private	5-12
11	St Aloysius Girls' College	31-55 Curran Street, North Melbourne VIC 3051,...	3051	-37.792855	144.942778	2909	religious	7-12
12	Port Melbourne Secondary College	477 Graham Street, Port Melbourne VIC 3207, Au...	3207	-37.832084	144.931833	3351	public	7-12
13	Princes Hill Secondary College	47 Arnold Street, Princes Hill VIC 3054, Austr...	3054	-37.783189	144.964915	3382	N/A	7-12
14	Travancore School Parkville Campus	35 Poplar Road, Parkville VIC 3052, Australia	3052	-37.780461	144.947790	3984	public	6-12
15	Wesley College St Kilda Road Campus	577 St Kilda Road, Melbourne VIC 3004, Australia	3004	-37.848863	144.982586	4027	private	0-12
16	Victorian College for the Deaf	597 St Kilda Road, Melbourne VIC 3004, Australia	3004	-37.849725	144.982118	4154	public	0-12

# SCHOOL MAP





# SHOPPING MAP



# TRANSPORT MAP





# HOUSING SALE MAP

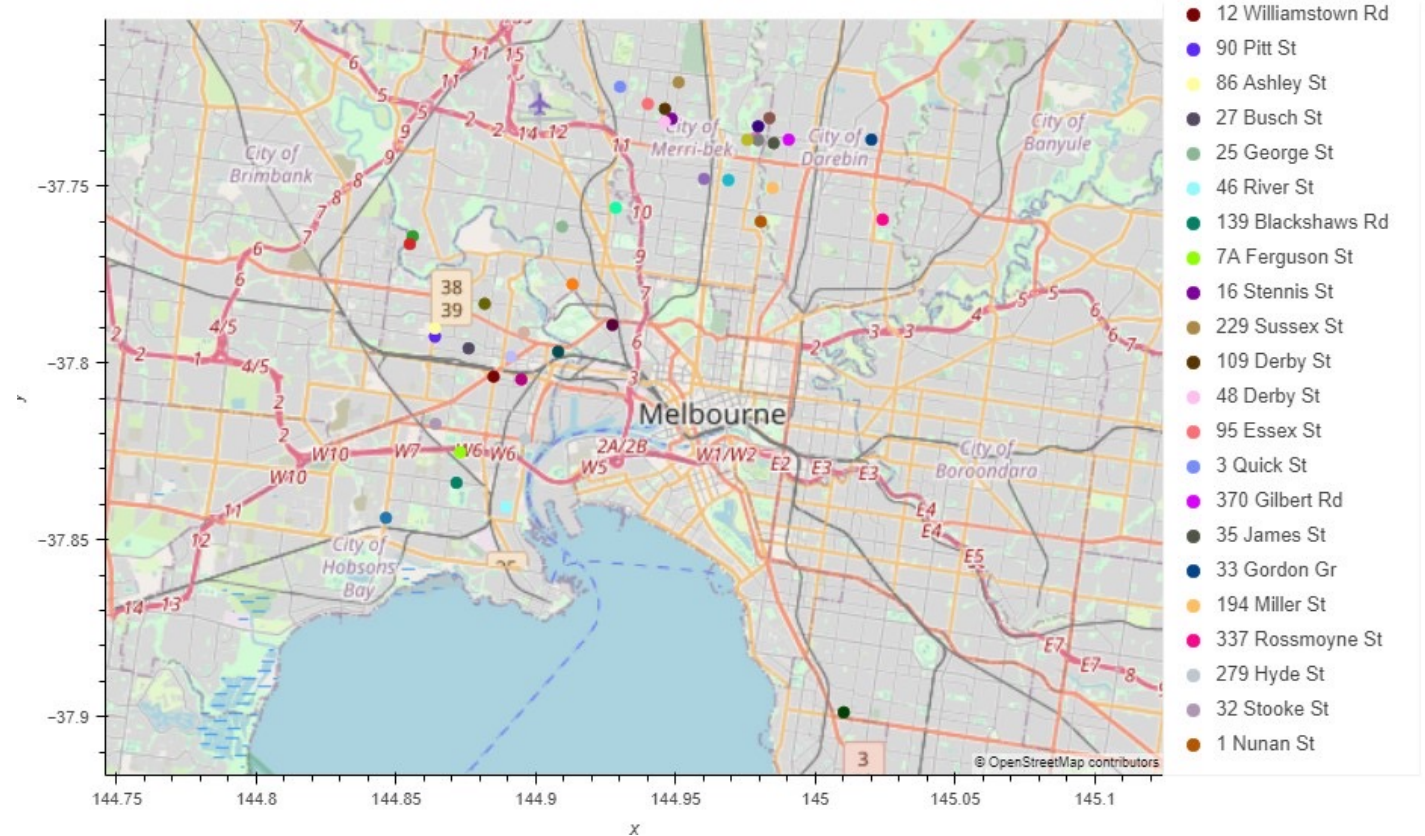
Using the sales data csv file, I generated a map plotting the location of where these sales happened.

From this new DataFrame, I copied only the columns that might be useful for the plotting:

- Address
- Suburb
- Postcode
- Rooms
- Bathrooms
- Carparks
- Latitude
- Longitude
- Price
- Type
- Distance

I then filtered the data so that only those sales that met below criteria set by the lottery winner:

- Distance from CBD 10km
- Number of Bedrooms 4
- Number of Bathrooms 2
- Number of carparks – more than 1





## FINDINGS, CONCLUSIONS

- Ali can you fill this in?