

# Property Growth Prediction

## Sydney Metropolitan Area



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Property has been known as a great secured investment vehicle which gives a consistent capital growth over the year. It is relatively easy to get bank finance for property purchase and because of this high leverage, property gives a high return on investment.



Figure: Growth of Australian house price 1926-2016 (source: <https://www.livewiremarkets.com>)

The question is: How to get property with high growth potential?

We have answered this in this presentation

# **Property Growth Prediction**

## **Sydney Metropolitan Area**

**Every where property growth equates to**

**Location**

**Location  
&  
location**

But how to find that location??

**We will find the answer soon!!**

# Property Growth Prediction

## Sydney Metropolitan Area

**Main Vehicle of property growth = Population (X10)**

**Other factors:** Multiply that with a multiple

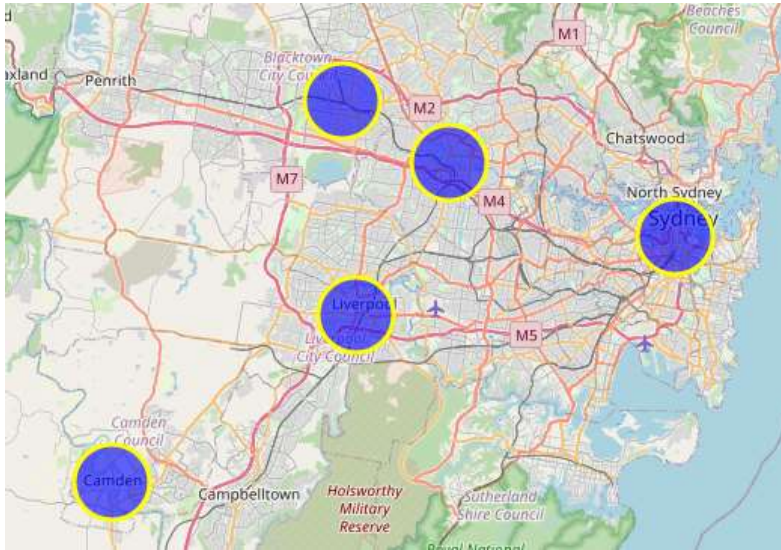
- Travel & Transport X 5
- College & University X 4
- Shop & Service X 3
- Professional & Other Places X 2
- Outdoors & Recreation X2
- All other X 1

Multiple (weight factor): Higher the importance greater the multiple

# Property Growth Prediction

## Sydney Metropolitan Area

We have 5 cities of Sydney Metropolitan to choose from:  
Sydney, Paramatta, Blacktown, Liverpool and Camden



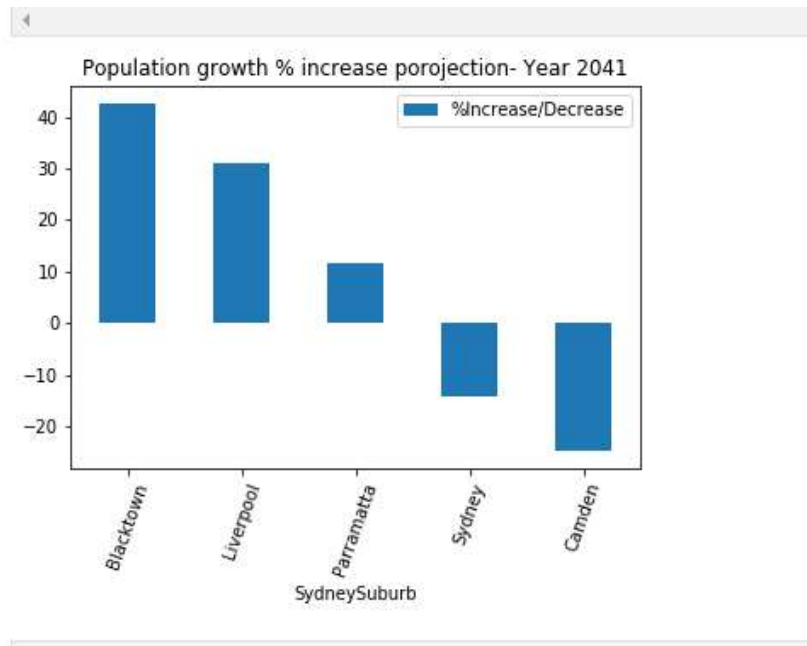
# Property Growth Prediction

## Sydney Metropolitan Area

First we get the population long term growth prediction:

(Source: <https://www.planning.nsw.gov.au/>)

	SydneySuburb	2016	2021	2026	2031	2036	2041	%Increase/Decrease
0	Blacktown	164534.0	198945.0	220879.0	229397.0	228720.0	234613.0	42.59
2	Liverpool	37694.0	43768.0	48429.0	48497.0	48218.0	49362.0	30.95
3	Parramatta	265468.0	269596.0	275246.0	281802.0	288431.0	296625.0	11.74
4	Sydney	20558.0	20188.0	19746.0	19169.0	18453.0	17619.0	-14.30
1	Camden	18114.0	17272.0	16459.0	15580.0	14635.0	13641.0	-24.69



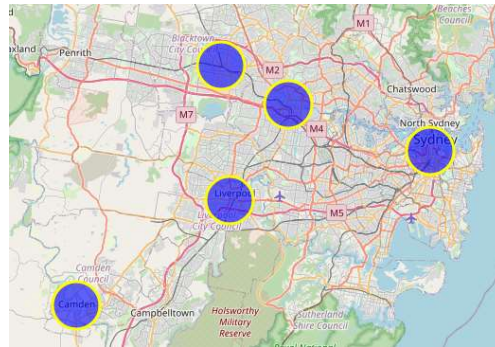
# Property Growth Prediction

## Sydney Metropolitan Area

Then we get the location of these places:

	SydneySuburb	Latitude	Longitude
0	Parramatta	-33.8136	151.0034
1	Blacktown	-33.7668	150.9053
2	Liverpool	-33.9286	150.9180
3	Camden	-34.0544	150.6958
4	Sydney	-33.8688	151.2093

(Source: <https://www.latlong.net/category/towns-14-55.html>)



# Property Growth Prediction

## Sydney Metropolitan Area

Use foresquare api to get venue information

SydneySuburb	%Increase/Decrease	Latitude	Longitude	Arts & Entertainment	College & University	Event	Food	Nightlife Spot	Outdoors & Recreation	Professional & Other Places	Residence	Shop & Service
Blacktown	42.59	-33.7668	150.9053	5	4	0	39	4	8	43	4	51
Liverpool	30.95	-33.9286	150.9180	5	2	0	13	6	6	9	3	16
Parramatta	11.74	-33.8136	151.0034	5	7	2	86	13	20	50	5	67
Sydney	-14.30	-33.8688	151.2093	42	62	7	146	120	99	136	24	137
Camden	-24.69	-34.0544	150.6958	5	2	0	11	5	5	7	1	7



## Property Growth Prediction

### Sydney Metropolitan Area

Multiply factors with weight factors

- Population growth X 10
- Travel & Transport X 5
- College & University X 4
- Shop & Service X 3
- Professional & Other Places X 2
- Outdoors & Recreation X 2
- All other X 1

Once different factors are identified they are multiplied by respective weight factors for instance population growth is multiplied by 10, shop and services by 3 etc.

# Property Growth Prediction

## Sydney Metropolitan Area

Multiply factor with the multiple and add them to get the Total points.

```
df_analyticalData[['SydneySuburb','Total Points']]
```

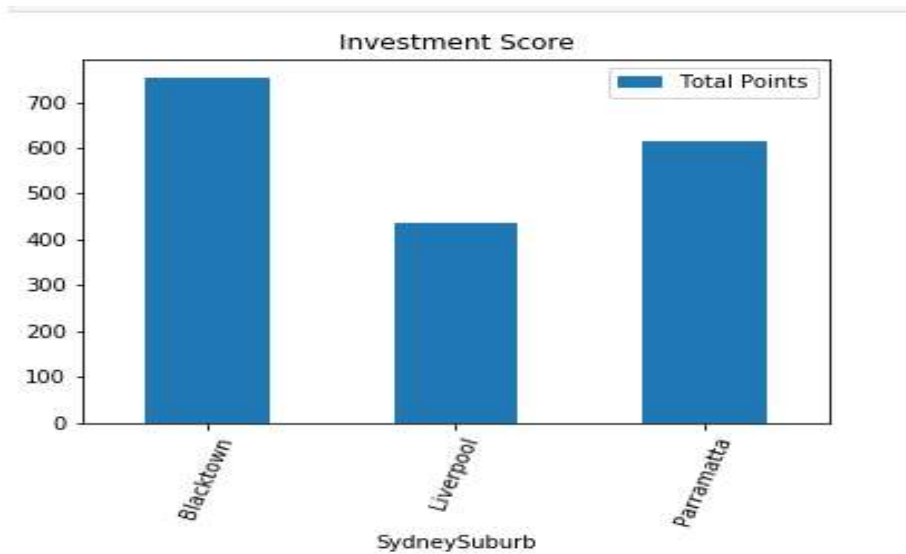
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]:
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	SydneySuburb	Total Points
0	Blacktown	754.9
1	Liverpool	434.5
2	Parramatta	616.4

# Property Growth Prediction

## Sydney Metropolitan Area

Total points of each in absolute term

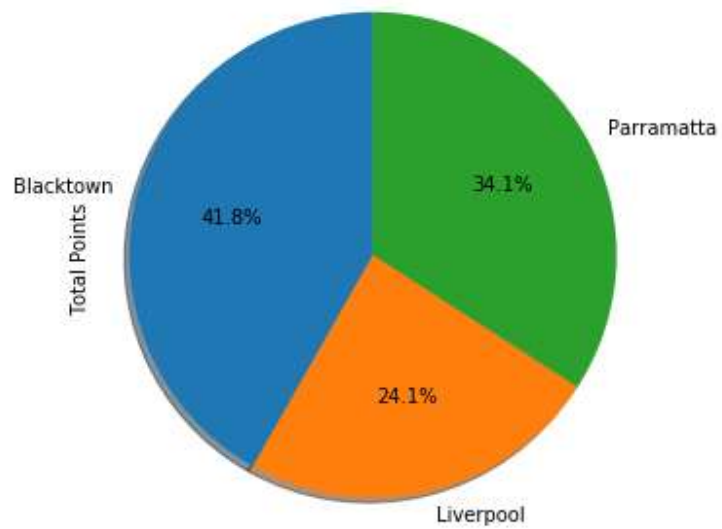


# Property Growth Prediction

## Sydney Metropolitan Area

Total points of each area in percentage ( % )

Property Investment Score: Top LGAs



## Property Growth Prediction

Sydney Metropolitan Area

# Conclusion

Amongst the 5 selected areas of Sydney MPA

The best is

**Blacktown**

2<sup>nd</sup> best

**Paramatta**

3<sup>rd</sup> best

**Liverpool**