## PROPERTY EXPERTS MELBOURNE PROPERTY PRICE ANALYSIS

#### Introduction-

This report is an analysis of property prices across the city of Melbourne. The data contains the Price of the property, date sold, Distance from the CBD and the land size which has been used for the analysis in this report. The report contains the Price distribution and key descriptions about the prices across Melbourne. It also contains an analysis of the property prices with respect to their distance from the CBD.

Property prices in Melbourne depends on various factors like the area, availability of hospitals, schools and parks and their distance from the CBD. People look at the distance and time to commute from the city to the area. The time to commute isn't available for the data considered in this report but includes the distance from the CBD.

# Distribution Analysis of Prices of Property



Figure 1

Price of property in Melbourne varies throughout areas but on analysing the price range we see that most of the houses are sold at a price range of AU\$588,000 to AU\$715,000. As an organization, we must focus on properties being sold at this rate. We can look for properties in the range of AU\$715,000 to AU\$842,000 as well. According to a report by news.com.au (Sharples (2023)), there will be a shortage of homes by 2027, thus we must invest on the properties in this price range to maximise our future profits.

# Key Price Points of the Properties

According to the data, in 2019, the average price of a house in Melbourne was AU\$ 1,172,000 and the median price was AU\$ 977,000. The highest price was AU\$ 6,311,000 and the lowest price of a house was AU\$ 334,000.

# Comparison of Eastern and Western Metropolitan



Figure 2

According to the graph we see that the Eastern Metropolitan has a higher average price than Western Metropolitan. We see a lot of variation in the price of the properties in the Eastern Metropolitan, we have a median price of AU\$1,153,000 and 18 outliers with the max property price to be AU\$4,606,000. In the Western metropolitan, we have a median price of AU\$792,500 and 29 outliers with the max property price at AU\$3,311,000.

#### Highest and Lowest Price Suburbs

The highest priced suburbs in Melbourne is Toorak and the cheapest suburbs is Middlepark

## Linear Regression Model of Distance to Price

To plot the linear regression model, we are using the Distance as the Independent Variable and Price as the Dependent Variable. We have a R Square of 0.185 and Standard Error of 602.31

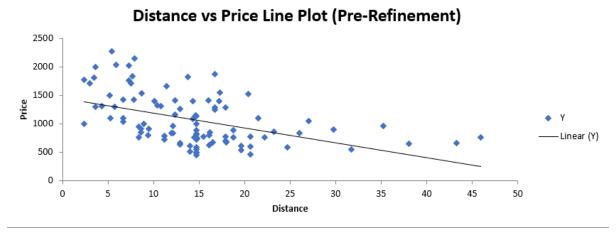
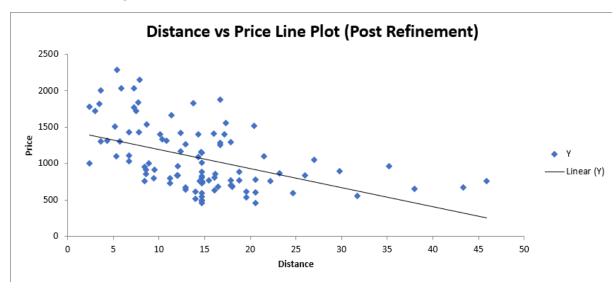


Figure 2.1

As this data contains large number of outliers and has a large standard of error, by removing the outliers and refining the data-



Post refining by removing 2 outliers, we have an improved R-Square score of 0.227 and Standard error of 390.76 thus providing us with a much accurate data. Thus, post refinement we see that most of the properties sold are around 15kms from the city and range from 500,000 to 2,000,000.

# Conclusion-

Thus, we see that PropertyExperts have a wonderful market to invest in now with the prices bound to rise in the future. The best locations to invest are the ones that are around the median prices and the ones 15kms away from the city.

## References-

Sharples, S. (2023, April 3). Housing crisis to be hit by 106k shortage. News. Retrieved from https://www.news.com.au