

Buyer's Report

1

Price analysis

For this question we have categorised property into three ranges based on quantiles on price column as low medium high .

- **Low:** Prices up to the 33rd percentile. With price ≤ 87 lakh
- **Medium:** Prices between the 33rd and 67th percentiles. Price ≤ 2 cr
- **High:** Prices above the 67th percentile. Price > 2 cr

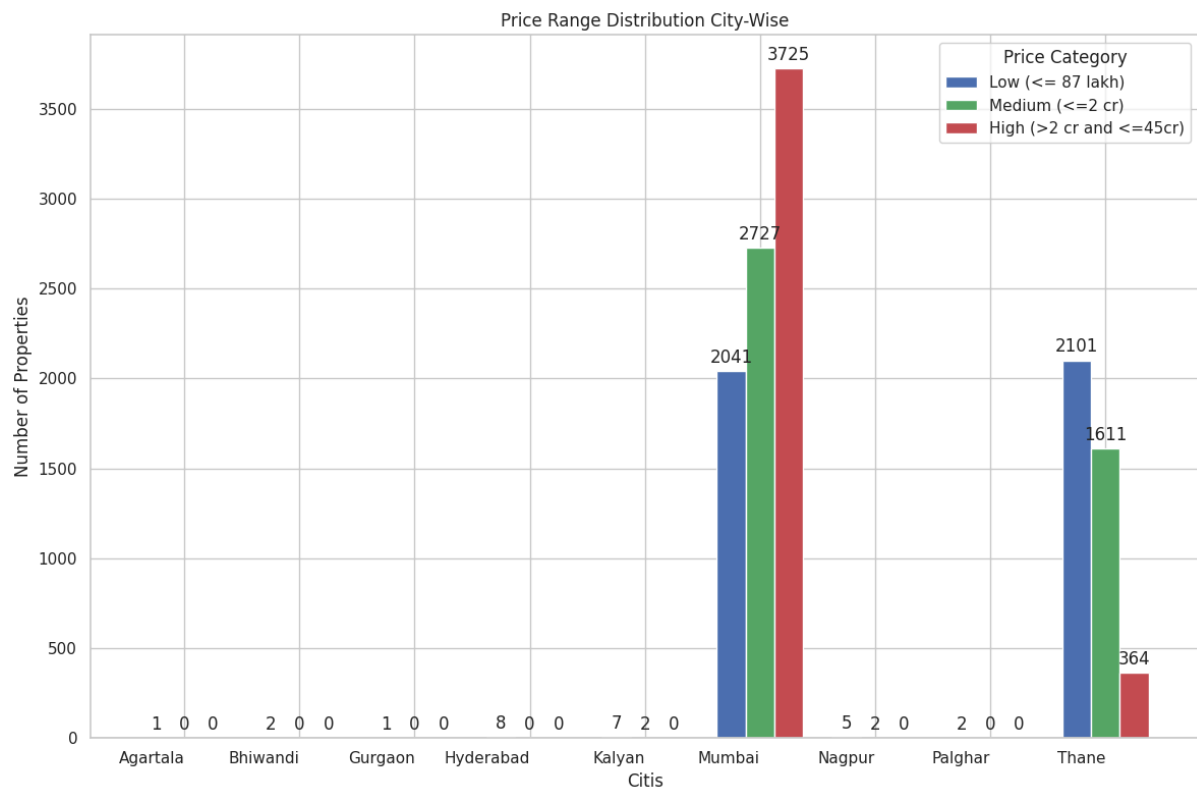


Fig. low medium and high price property per city

As per the graphical representation we conclude

- **Agartala** has only one listed property and that too in low budget range i.e 87 lakh.
- **Bhiwandi** has 2 listed Properties both are in low price range
- **Hyderabad** has 8 listed property and all are in low price range
- **Kalyan** has 9 listed properties out of that 7 are in low price range and 2 are in medium price range which is more than 87 lakhs and less than 2cr .

- **Mumbai** has most number of 8493 listed properties out of which 2041 is in low price range , 2727 are in medium price range and 3725 has high price range . Clearly Mumbai has expensive properties for buyers.
- **Nagpur** has 7 listed properties out of wich 5 has low budget and 2 has medium budget.
- **Palghar** has only 2 listed properties out of which both are low budget.
- **Thane** after Mumbai Thane has most number of listed properties i.e 4076 out of which 2101 has low price , 1611 has medium price and 364 has high price . Thane is desirable to the buyers who want to live near Mumbai at budget price.

The graph below is similar to above , but i have taken price in logged form to get visualisation of small bars.

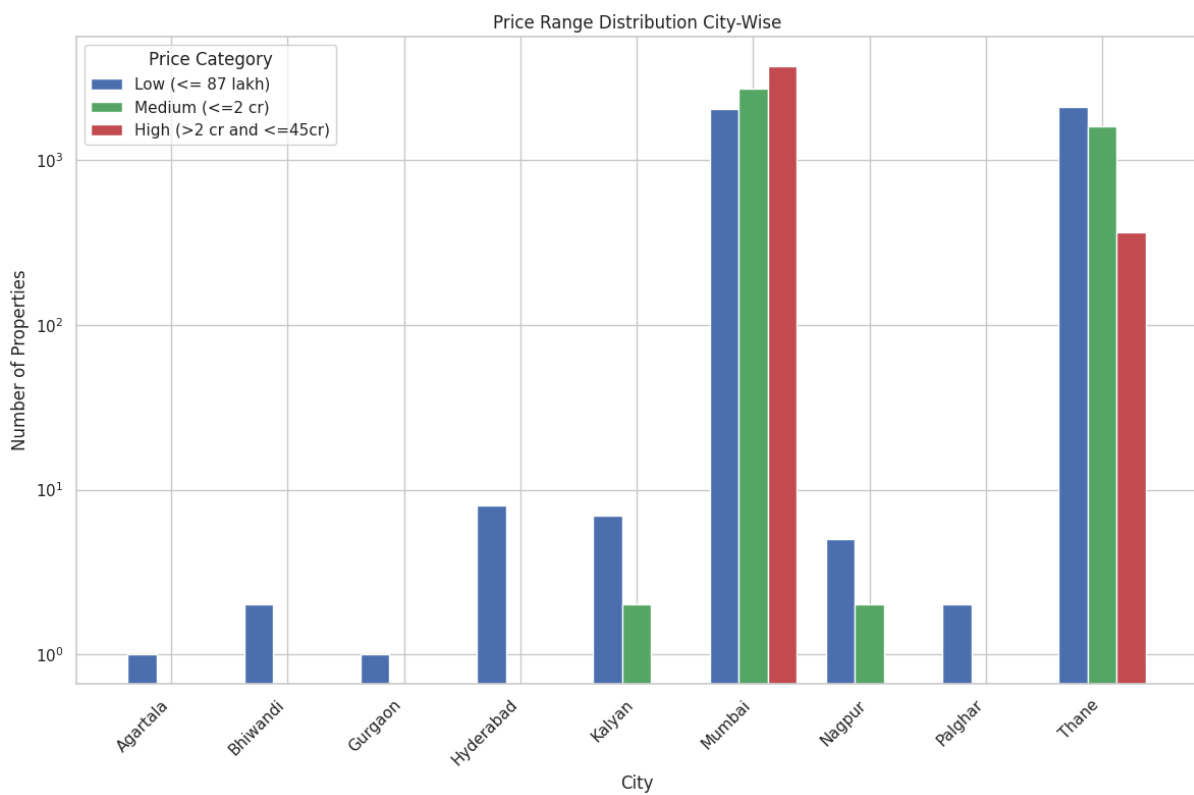


Fig. Logged bar chart

2

Data Summery with respect to price considering property type ,City and Key Amenities

Type of Property	City	Average_Price_in_lakh	Property_Count
Apartment	Agartala	5.12	1
Apartment	Bhiwandi	2.20	2
Apartment	Gurgaon	3.50	1
Apartment	Hyderabad	7.65	1
Apartment	Kalyan	5.53	9
Apartment	Mumbai	34.09	8138
Apartment	Nagpur	6.39	7
Apartment	Palghar	4.15	2
Apartment	Thane	10.70	3876
Builder Floor Apartment	Mumbai	12.50	111
Builder Floor Apartment	Thane	6.49	94
Penthouse	Mumbai	104.02	26
Penthouse	Thane	23.65	12
Residential House	Hyderabad	2.68	6
Residential House	Mumbai	20.83	169
Residential House	Thane	10.58	67
Villa	Hyderabad	8.00	1
Villa	Mumbai	66.49	51
Villa	Thane	39.55	27

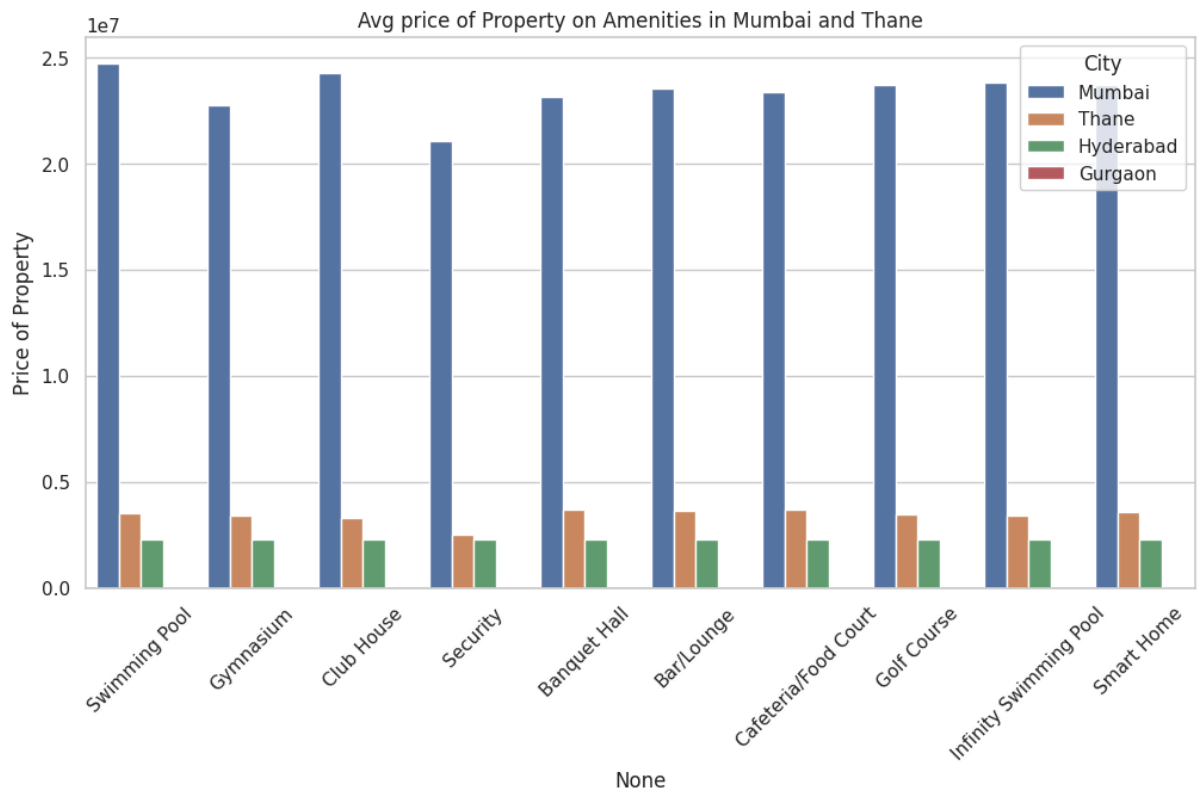
- So here average price of apartment in Bhiwandi is lowest 2.20 lakh with only 2 property and hightest in mumbai with avg price of 34.09lakh and 8138 properties.
- Coming to pent house only mumbai and Thane has pent house with price of 1.04 cr in mumbai ad 23.65 lakh in Thane.
- Coming to Villa gain only Mumbai , Hyderabad and Thane has pent house with price of 66.5 lakh , 8 lakh and 39.5 lakh respectively. Where mumbai has most number of villas.



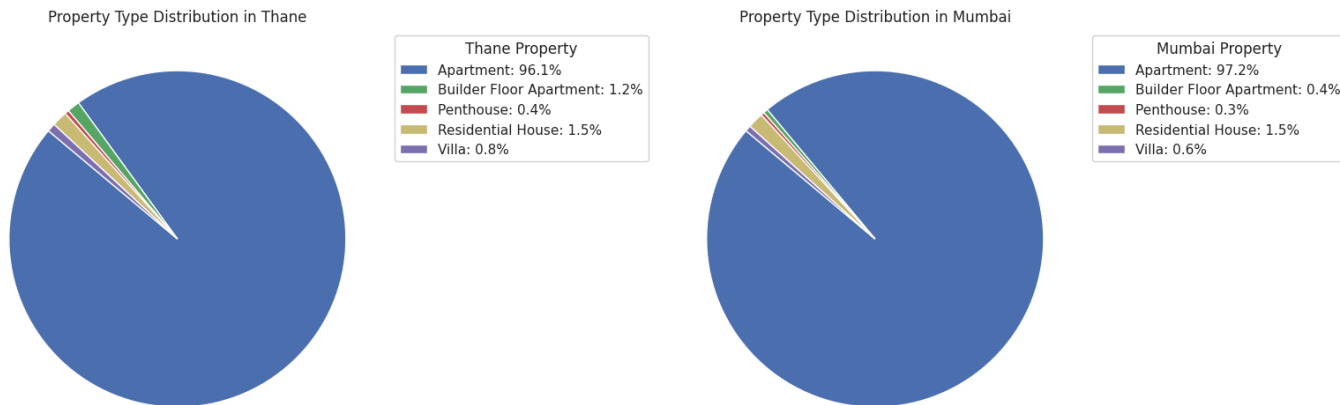
Affect of amenities on price in various cities like mumbai thane hyderabad

- We have taken essential amenities into account like 'Swimming Pool', 'Gymnasium', 'Club House', 'Security', 'Banquet Hall', 'Bar/Lounge', 'Cafeteria/Food Court', 'Golf Course', 'Infinity Swimming Pool', 'Smart Home'.
- As per the graph above we conclude that few amenities has more impact on the prices of the property and that affect is different in different cities. i.e Thane and hyderabad is more cheeper for these kind of amenities than Mumbai.

Shown in below table.



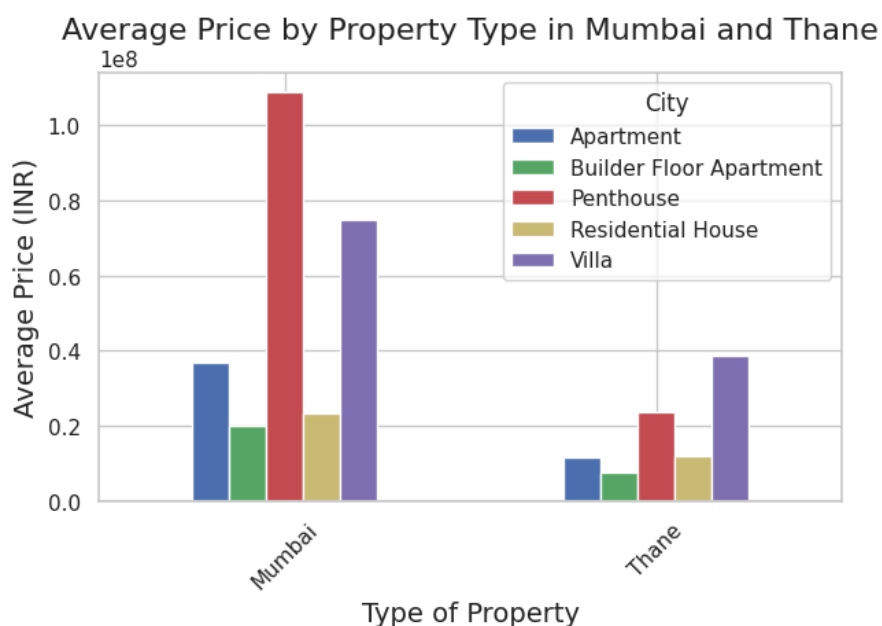
Property type Analysis : In Mumbai and Thane most of the properties are apartments



As shown in the above Pie chart :

- There 2863 apartments listed in thane which is 96.1% of overall listed properties in thane. 36 Builder Floor Apartments , 12 Penthouses , 44 Residential House and 24 Villa.
- And similar to thane Mumbai has 6907 which is almost 97% of all properties listed in mumbai .

Now when it comes to Average price for all property types in mumbai and thane mumbai has higher average price for all property types



Apartment:
Mumbai: 36852436.06
Thane: 11363255.18

Builder Floor Apartment:
Mumbai: 20044806.45
Thane: 7620833.28

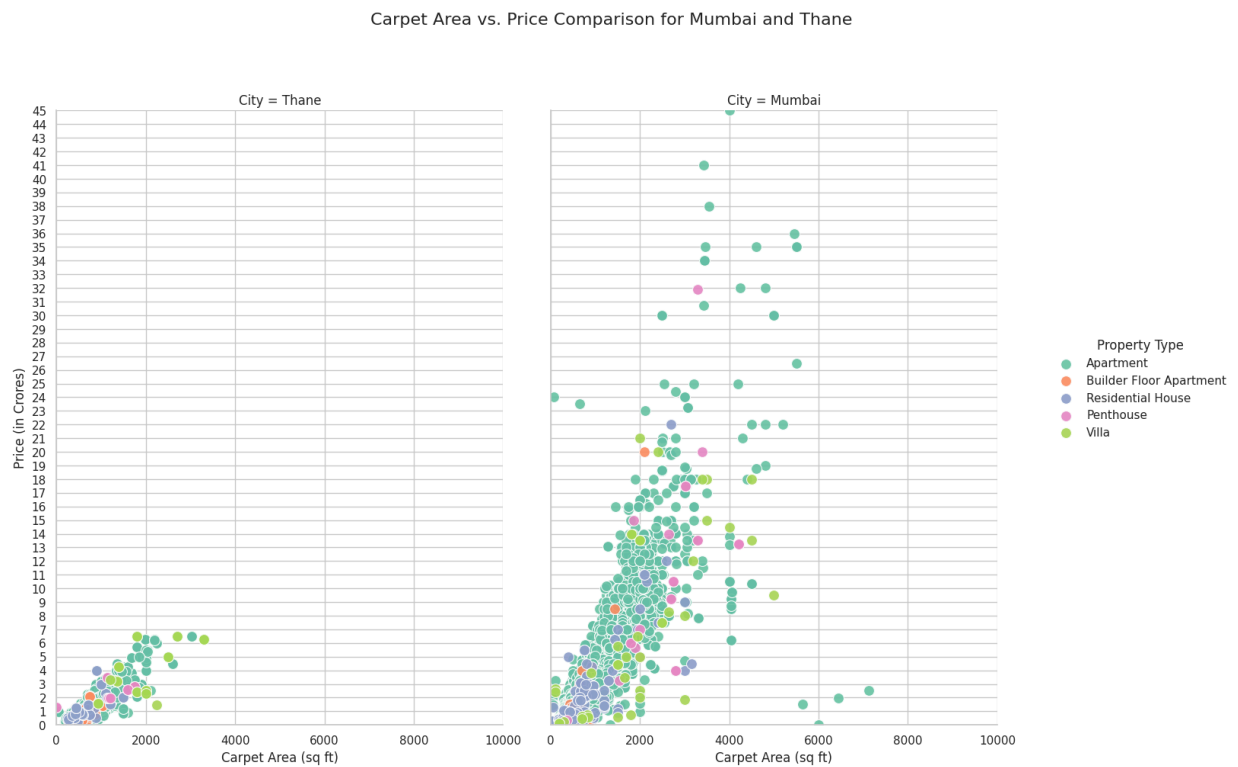
Penthouse:
Mumbai: 108786956.48
Thane: 23650000.0

Residential House:
Mumbai: 23348424.24
Thane: 11900000.0

Villa:
Mumbai: 74957500.0
Thane: 38454166.67

Carpet Area VS Price analysis

Carpet area in mumbai and thane at different price range varies with different property types, In mumbai there are are apartments who has more Carpet area and price then villas , apartments ranging form 20-30 lakhs to 45 crs , where as villas range from few lakhs to 20 crs , where as in thane Villas has more price and carpet areas than apartments , as you can see in the plot below



Investment Opportunities in less expensive and more expensive areas of a city

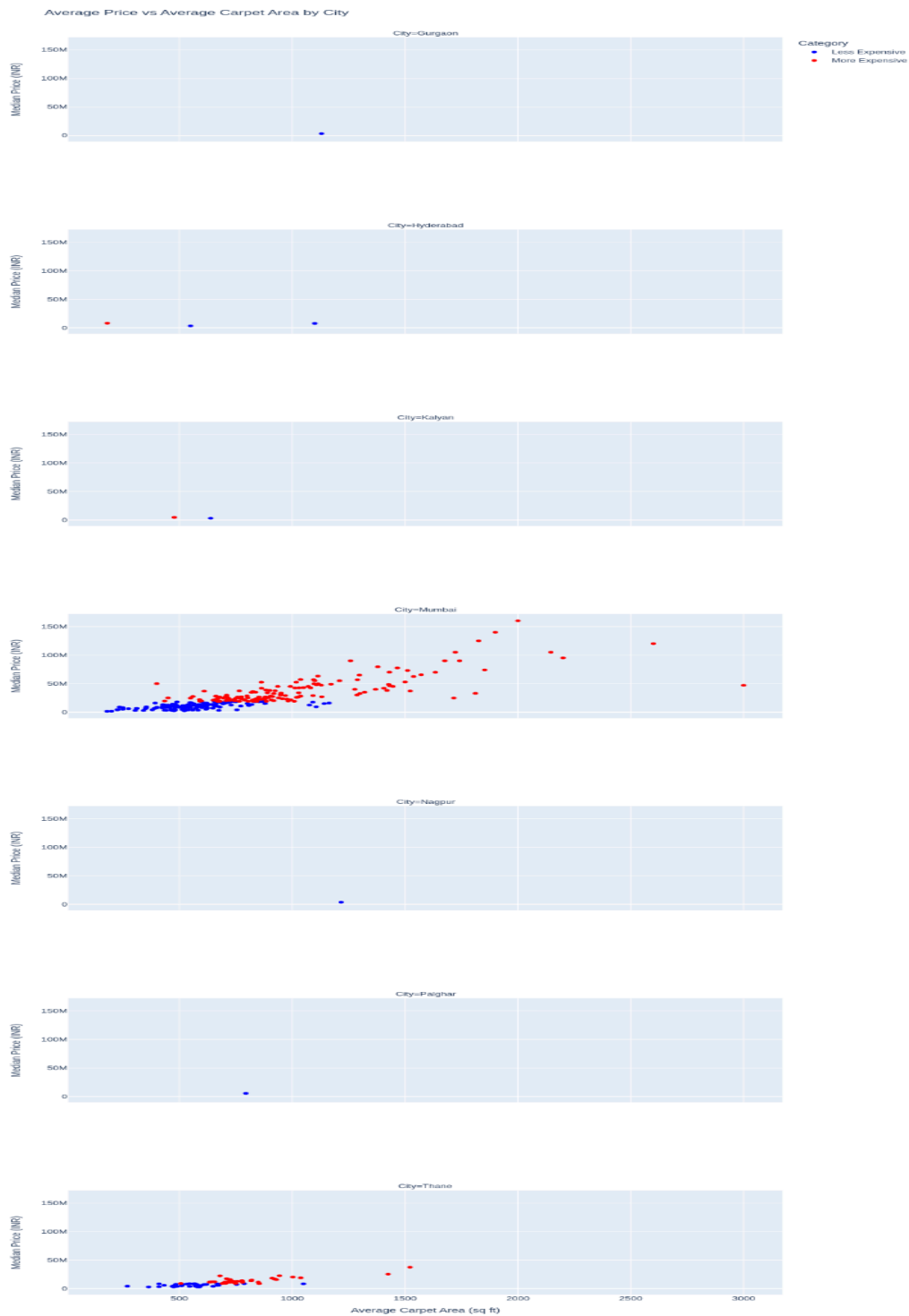


Fig . Avg price vs Avg carpet area in the city localities
(better visibility in .ipnyb file)

Here we have analysed expensiveness per city by taking median price of the properties per city and their localities , so that the high price in thane could come under low price in mumbai.

As per our analysis the the areas with less expensive more expensive are as follows :

- **In Mumbai**

- Janta Nagar is least expensive with avg. price of 16 lakh and avg carpet area of 180 sq feet
- Aarey Milk Colony is best budget area with avg price of 95 lakh and carpet area of almost 1150 sqft
- RTO colony is most expensive with avg price of 16cr and avg car0pet area of 2000 sqft

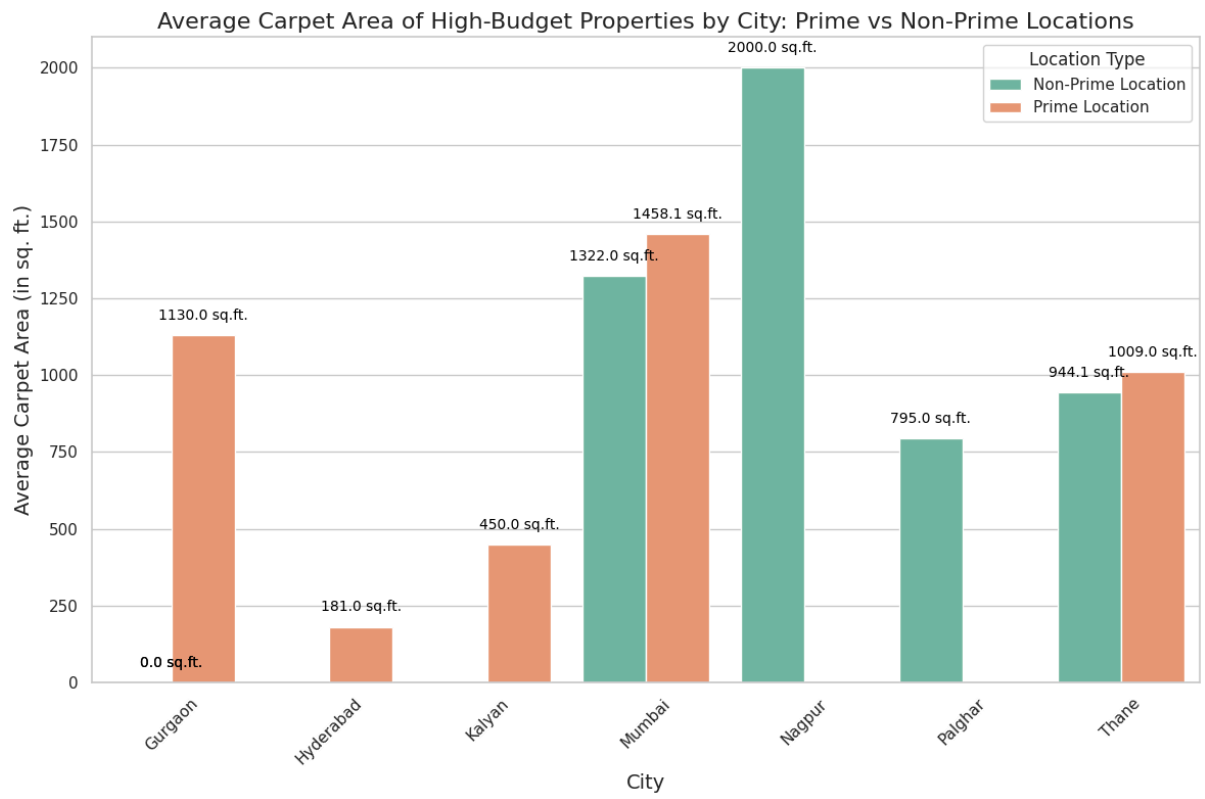
- **In Thane**

- **Lokmanya Nagar** is least expensive with avg price of 30 lakh and avg carpet area is 364 sqft
- **Tilak Nagar** being most budget friendly with 73 lakh avg price and 1100 sqft carpet area
- **Ghantali** being most expensive with 3.7 cr avg property price and 1522 sqft avg carpet area

These two were most imp cities in the dataset rest of them has very less number of properties in the localities.

Coming to Prime and Non-Prime locations with their average carpet areas

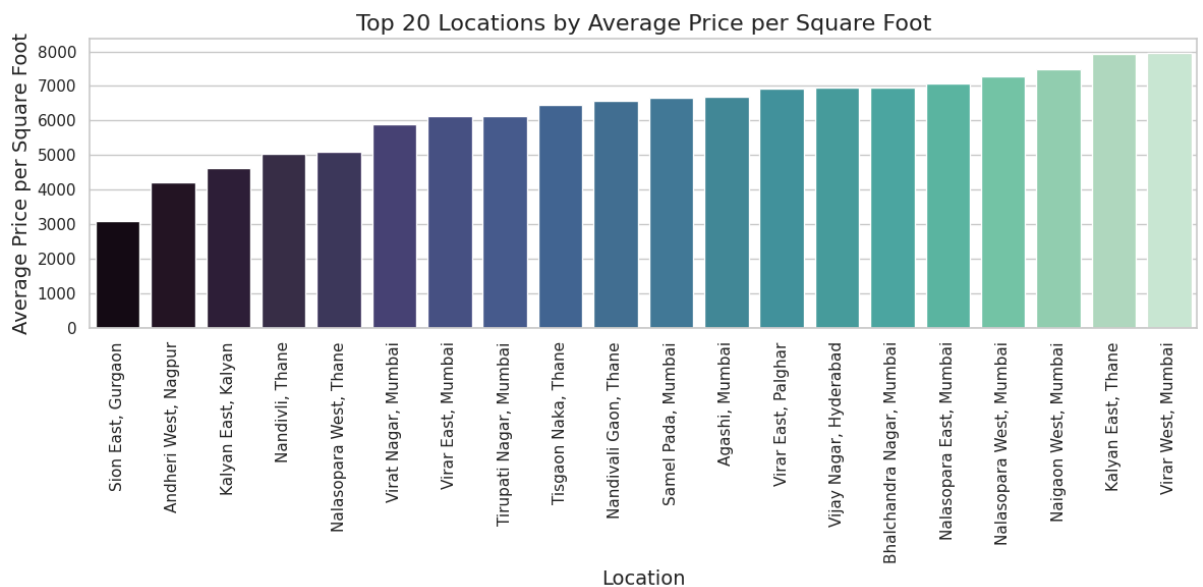
Area	Avg carpet Area		Avg Price	
	Prime	Non Prime	Prime	Non Prime
Thane	1009	944.1	2.14cr	187cr
Mumbai	1458	1322	8.65cr	5.31cr
Gurgaon	1130	NA	35lakh	NA
Hyderabad	181	Na	80lakh	NA
Kalyan	450		45lakh	NA
Nagpur	NA	2000	.	90lakh
Palghar	NA	795		55lakh



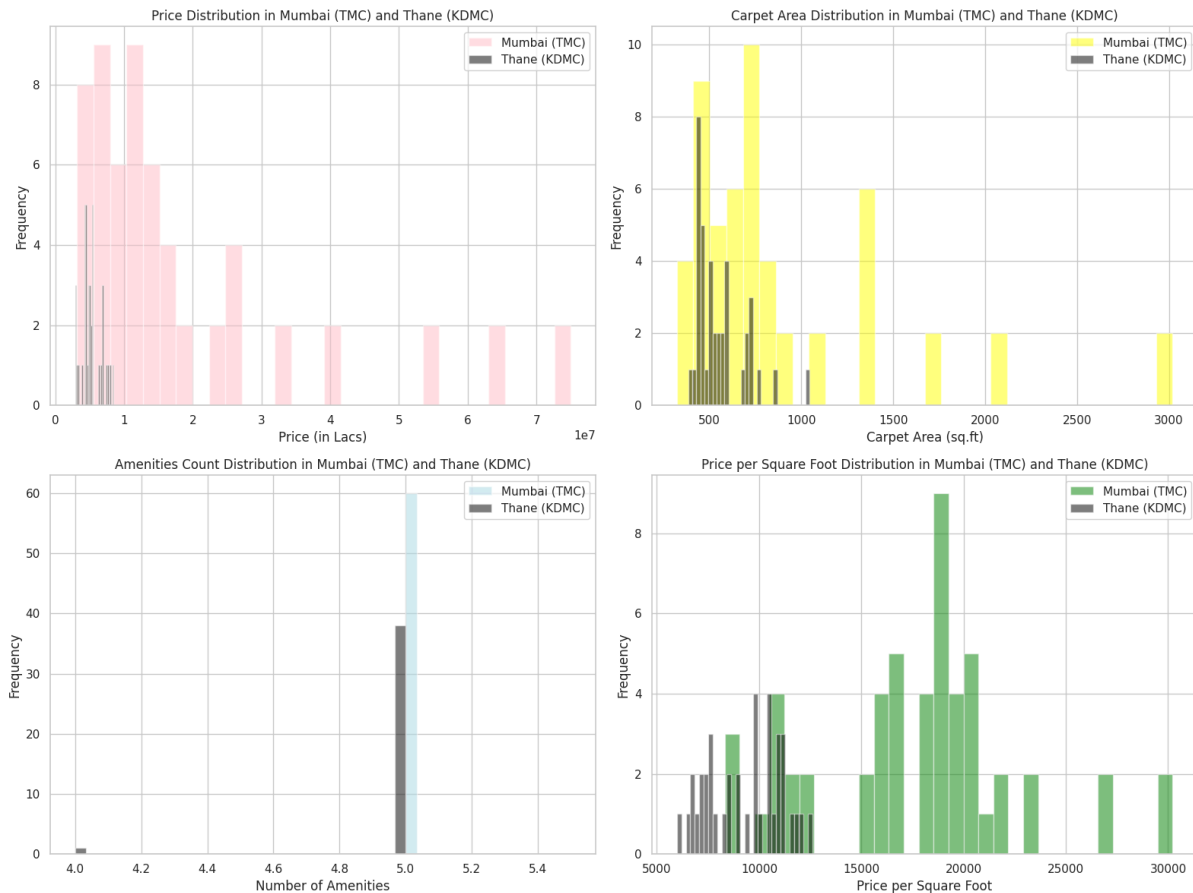
Analysis carpet area per unit price

Assuming it as per square feet price

- We have listed down most budget friendly properties across all cities in terms of per square feet price i.e you can buy larger property in least price , in that first one is Sion east of Gurgaon with least avg price of 3097 rupee sq ft and Most expensive is Virar West, Mumbai with 7961 rupee per sqft , rest . So in Gurgaon you can bigger property in lesser rate.



Commercial space analysis in terms of Price , carpet area amenities



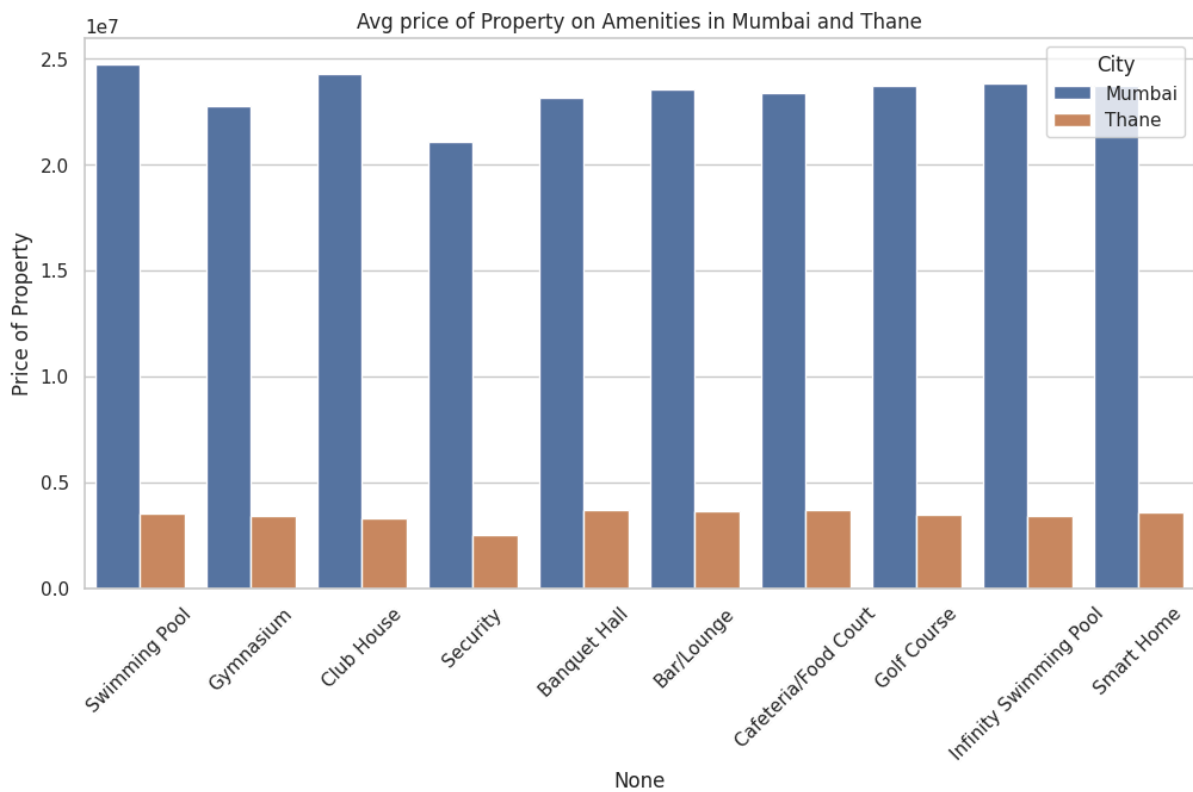
For amenities we have considered only few amenities which are essential for commercial space i.e 'Air Conditioned', 'Gymnasium', 'Swimming Pool', 'Parking', 'Security', 'Club House'

- As per our analysis Mumbai has more number of commercial properties than thane .
- Secondly Mumbai has higher price for commercial properties as well as mumbai has more number of properties with larger carpet area .
- Most of the commercial properties in Mumbai and thane have area between 500-1000 sq feet and price between 1-3 crs.
- Coming to amenities Out of our chooses amenities mumbai has more amenities in more office spaces than thane .
- Moreover in mumbai most of the office spaces are 18000-20000 rupees per soiree foot price where as in thane it is between 10000-12000 rupee per sq feet.

Seeing all above analysis the people who want low budget commercial space with less amenities and less carpet area should buy in Thane.

Amenities analysis

We took only essential amenities for analysis 'Swimming Pool', 'Gymnasium', 'Club House', 'Security', 'Banquet Hall', 'Bar/Lounge', 'Cafeteria/Food Court', 'Golf Course', 'Infinity Swimming Pool', 'Smart Home'



- As per the graph above we conclude that few amenities has more impact on the prices of the property and that affect is different in different cities. i.e Thane is ore cheeper for these kind of amenities than Mumbai. Shown in below table.

	With Amenity Avg Price	Without Amenity Avg Price
Swimming Pool	4.277788e+07	1.804550e+07
Gymnasium	4.149688e+07	1.877213e+07
Club House	4.242446e+07	1.817848e+07
Security	3.880279e+07	1.776132e+07
Banquet Hall	4.265762e+07	1.952848e+07
Bar/Lounge	4.319142e+07	1.968090e+07
Cafeteria/Food Court	4.310318e+07	1.971912e+07
Golf Course	4.346932e+07	1.974906e+07
Infinity Swimming Pool	4.35035e+07	1.972601e+07
Smart Home	4.343495e+07	1.975867e+07
Swimming Pool	1.245424e+07	8.950962e+06
Gymnasium	1.233300e+07	8.929095e+06

Club House	1.228317e+07	8.993925e+06
Security	1.174438e+07	9.211906e+06
Banquet Hall	1.269032e+07	8.985652e+06
Bar/Lounge	1.283475e+07	9.181573e+06
Cafeteria/Food Court	1.278039e+07	9.106367e+06
Golf Course	1.280401e+07	9.366651e+06
Infinity Swimming Pool	1.278491e+07	9.402474e+06
Smart Home	1.287567e+07	9.304381e+06

- As the table above you can see there is huge difference in the price with amenities and without amenities as example , property with swimming pool is worth 4.28cr and the property without swimming pool is worth 1.80cr.

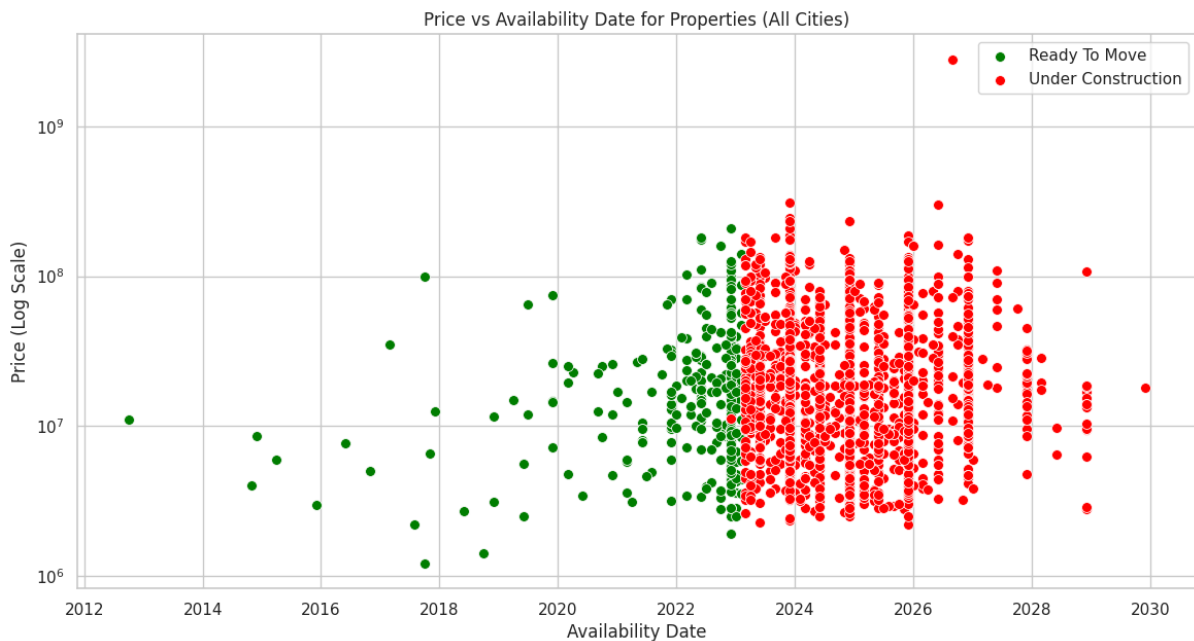
	Price Difference	City
Swimming Pool	2.473238e+07	Mumbai
Gymnasium	2.272475e+07	Mumbai
Club House	2.424598e+07	Mumbai
Security	2.104147e+07	Mumbai
Banquet Hall	2.312914e+07	Mumbai
Bar/Lounge	2.351053e+07	Mumbai
Cafeteria/Food Court	2.338405e+07	Mumbai
Golf Course	2.372026e+07	Mumbai
Infinity Swimming Pool	2.382433e+07	Mumbai
Smart Home	2.367628e+07	Mumbai
Swimming Pool	3.503274e+06	Thane
Gymnasium	3.403904e+06	Thane
Club House	3.289249e+06	Thane
Security	2.532469e+06	Thane
Banquet Hall	3.704664e+06	Thane
Bar/Lounge	3.653174e+06	Thane
Cafeteria/Food Court	3.674020e+06	Thane
Golf Course	3.437355e+06	Thane
Infinity Swimming Pool	3.382439e+06	Thane
Smart Home	3.571294e+06	Thane

- The above table indicating price difference of Mumbai and thane properties with different amenities. I.e in the lesser price we are getting better amenities in thane than mumbai.

Analysis of how price of the property affected by the possession status

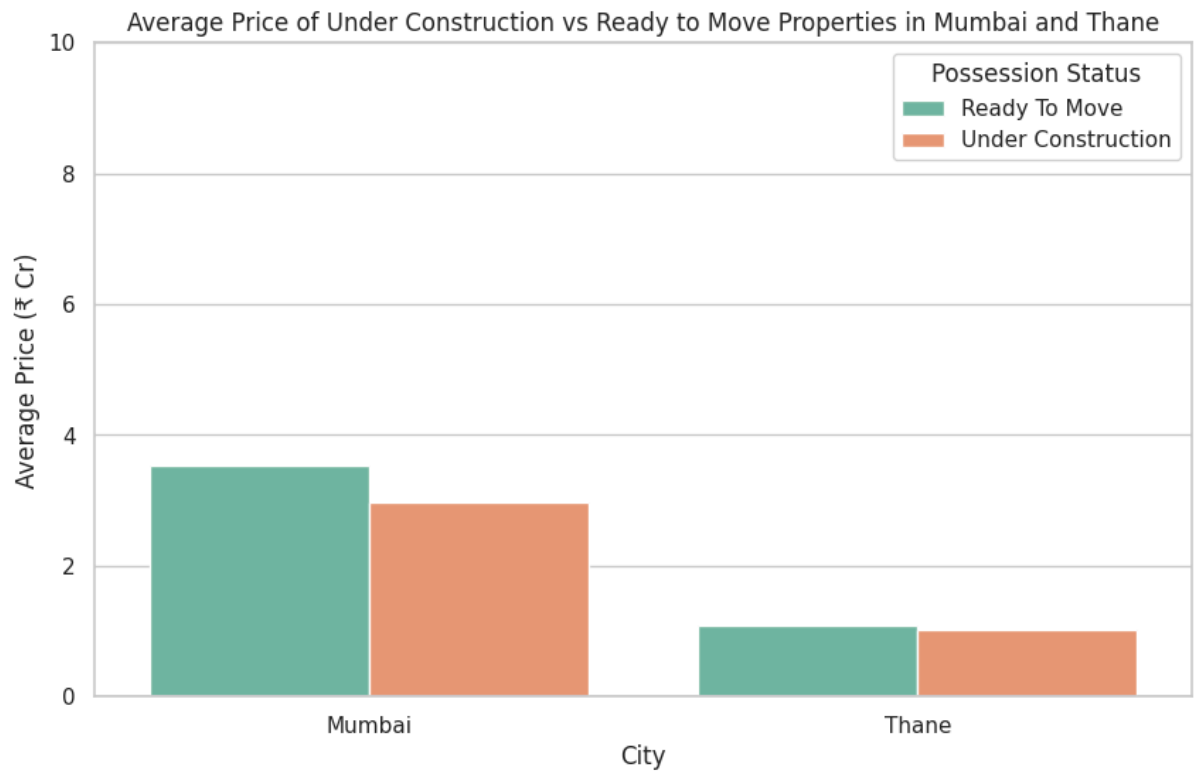
Best time to buy property i.e under construction or ready to move

- In the dataset , 9076 properties are Ready to move and 2866 are under construction
- As per our analysis Average Price of Ready To Move Properties: ₹2.70 Cr
- Average Price of Under Construction Properties: ₹2.46 Cr
Price Difference: ₹0.24 Cr
- Ready-to-move properties are on average ₹0.24 Cr more expensive than under-construction ones.



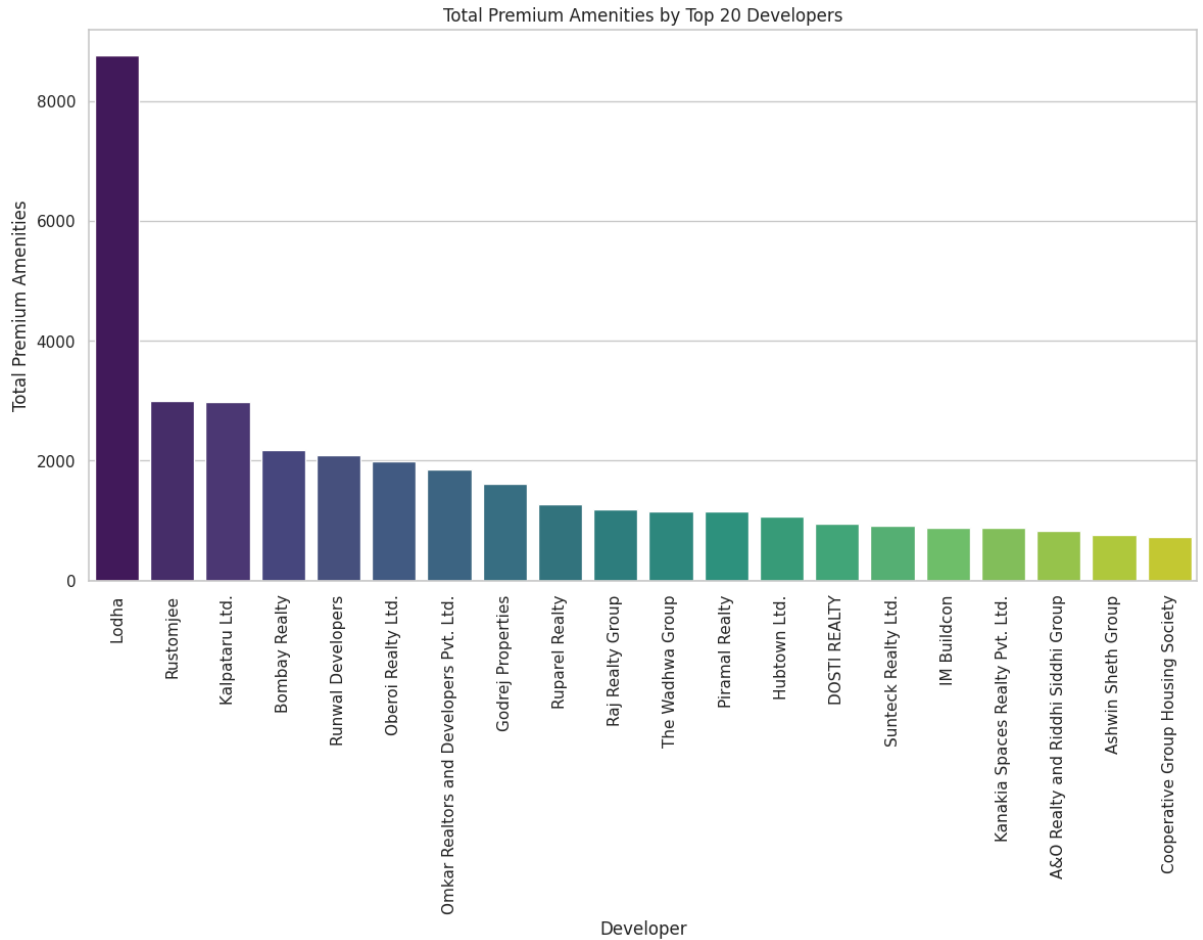
- So it is better to buy property under construction if you don't have immediate need.
- Also coming to mumbai and thane , Mumbai and thane both more number of ready to move properties .
- Variation of avg property price in mumbai and thane
Average Prices in Mumbai:
Ready To Move: ₹3.54 Cr
Under Construction: ₹2.96 Cr

Average Prices in Thane:
Ready To Move: ₹1.10 Cr
Under Construction: ₹1.02 Cr

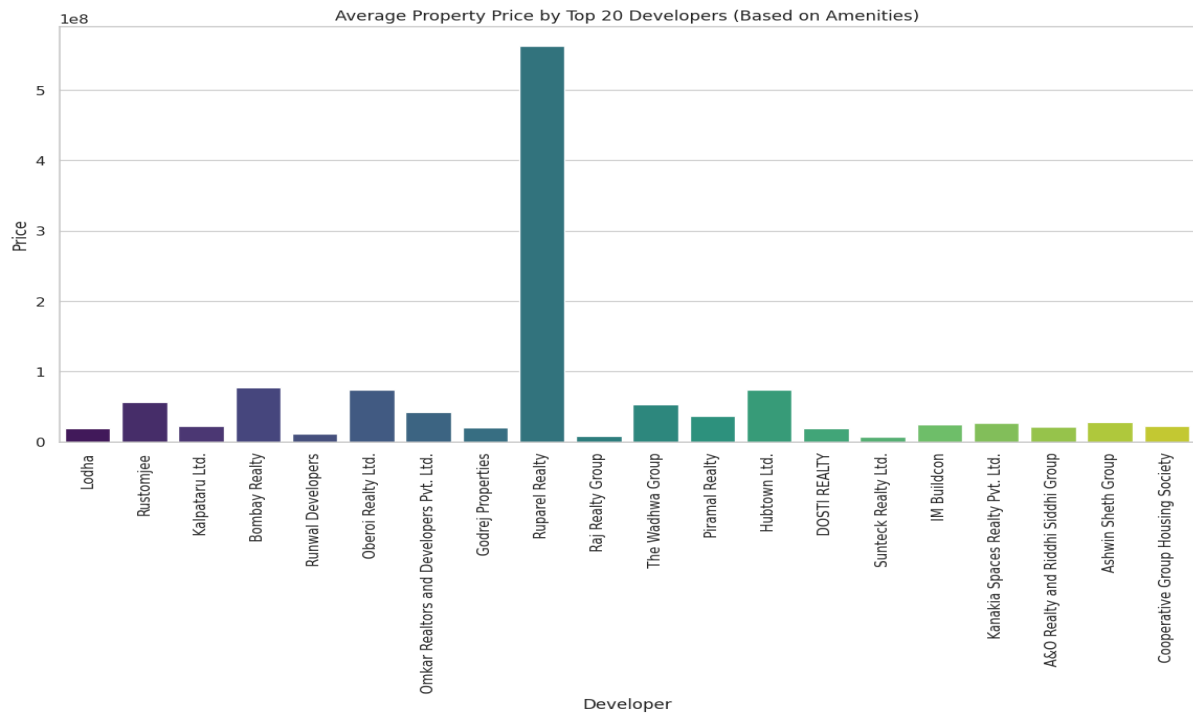


Developer vs Property analysis with respect to price and amenities

- There are many developers almost 983 , but we tool top 20 developers in terms of their property prices and amenities provided by them
- And we took amenity score per developer ie all the amenities provided by the developer in each of his properties .



- By looking at the graph we see Lodha provides best amenities out of all builders in the least of the possible price.



- By looking at the price chart the Lodha has the lowest possible price and best amenities and Rupearl Realty has highest property price but low amenities score.