

Visualizing Housing Market Trends: Analysis of Sale Prices and Features Using Tableau

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1. Introduction

This project focuses on analyzing housing market trends using Tableau.

The main objective is to understand how different house features such as bedrooms, bathrooms, and house age influence sale prices.

Data visualization helps convert raw data into meaningful insights. By creating charts and dashboards, trends in the housing market can be clearly understood.

2. Objective of the Project

- To analyze housing sale prices
- To study the impact of bedrooms and bathrooms on price
- To examine how house age affects pricing
- To create an interactive dashboard using Tableau

3. Dataset Description

The dataset used in this project contains housing sales information including:

- Price
- Bedrooms
- Bathrooms
- Square feet living area
- Year built
- Other property details

The dataset was provided in Excel format and imported into Tableau for analysis.

4. Tools Used

- Tableau Public (for data visualization and dashboard creation)
- Microsoft Excel (for dataset handling)

5. Data Preparation

The dataset was imported into Tableau from Excel. Necessary adjustments were made such as:

- Converting numerical fields properly
- Creating calculated field for House Age
- Converting fields to Dimensions where required

This ensured accurate visualization and analysis.

6. Visualizations Created

The following visualizations were created:

6.1 Average House Price

A KPI visualization showing the overall average house price in the dataset.

6.2 Price by Bedrooms

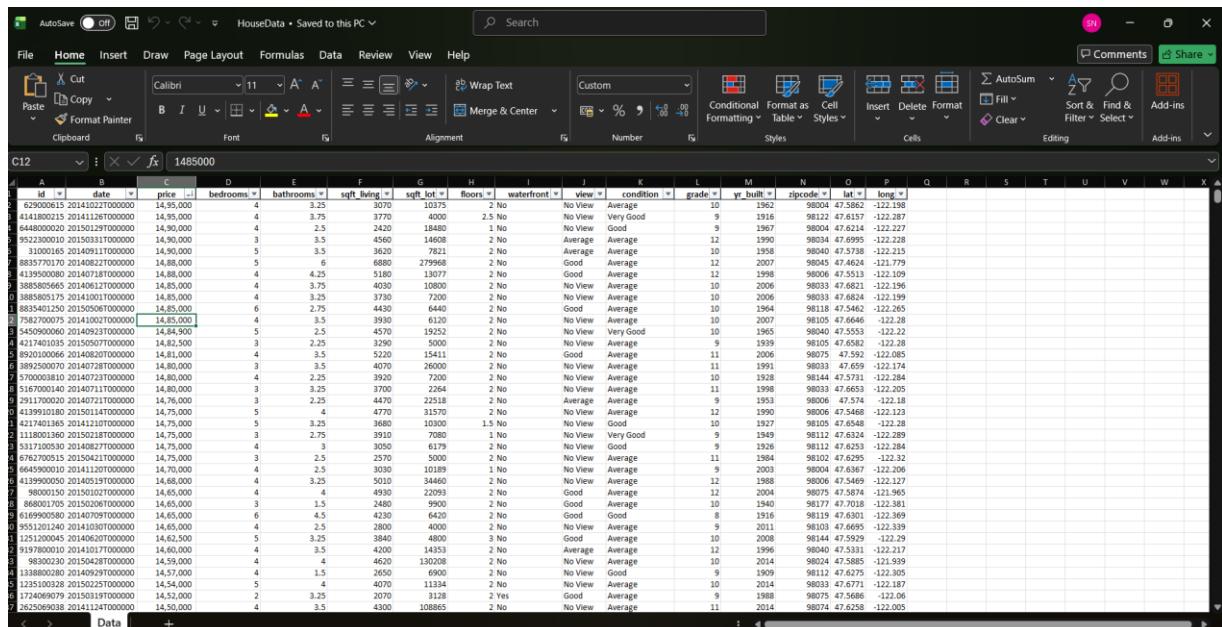
A bar chart showing how house prices increase as the number of bedrooms increases.

6.3 Price by Bathrooms

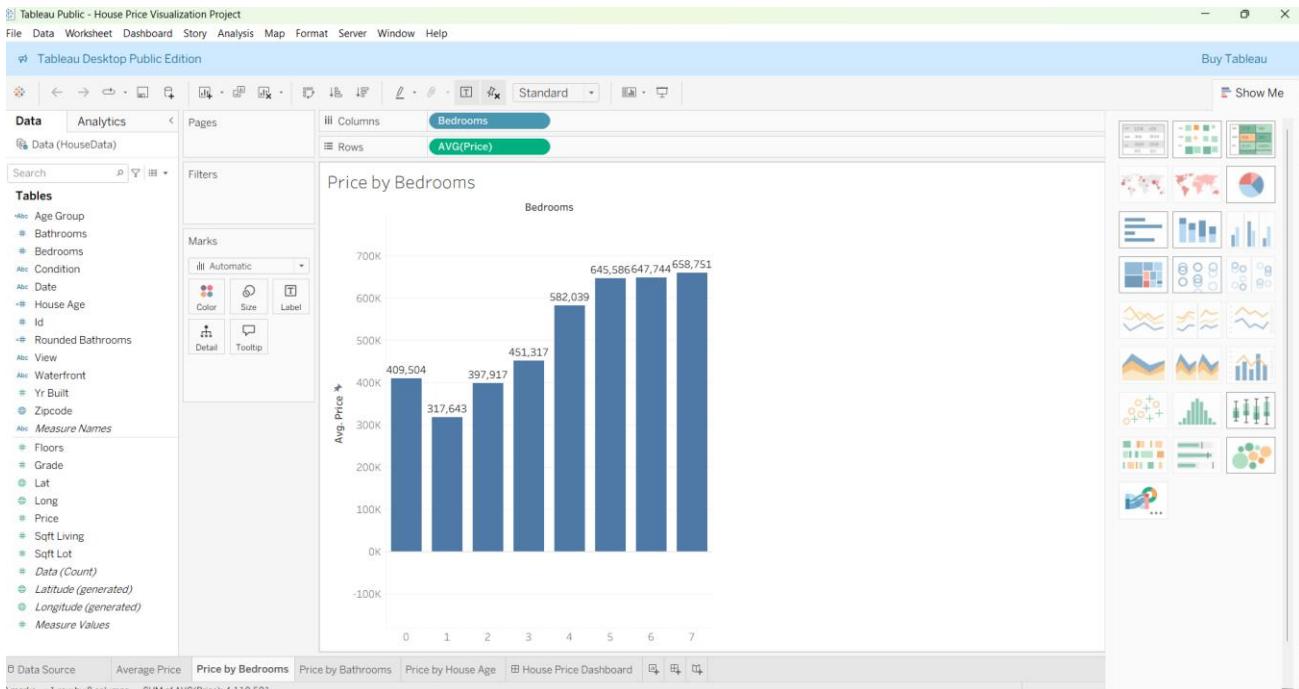
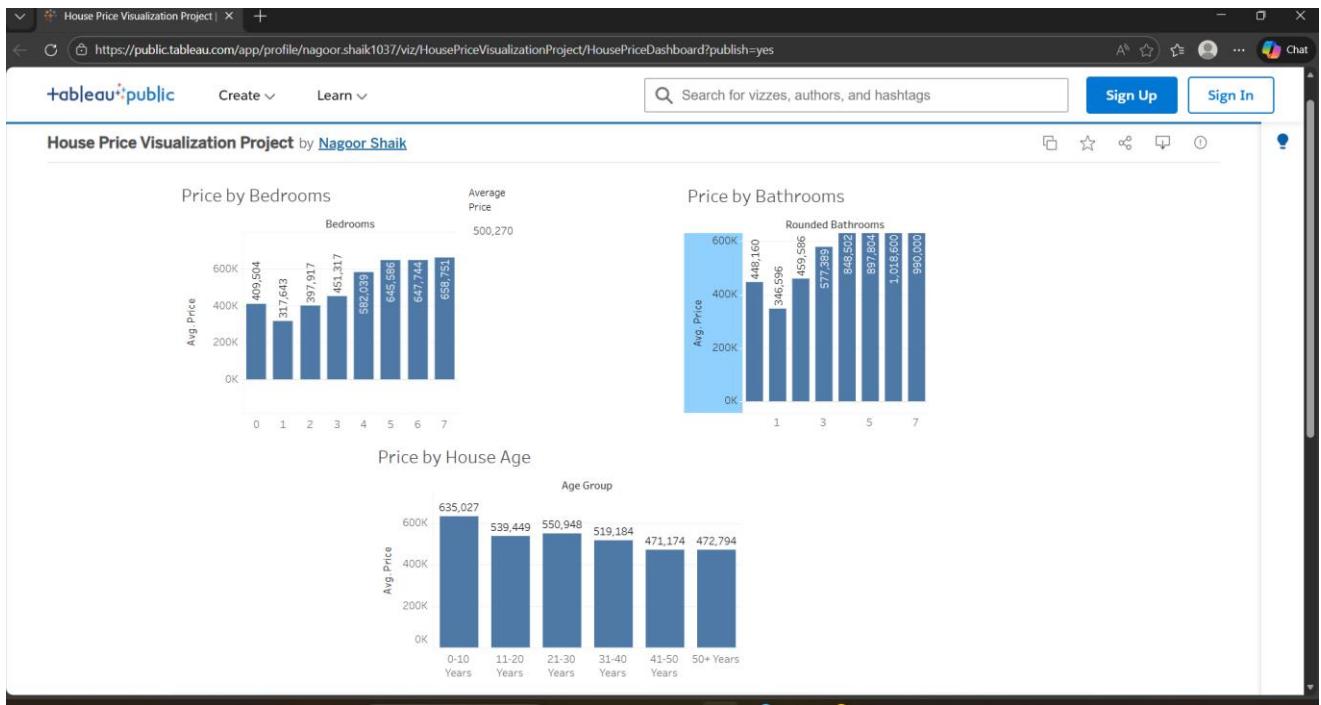
A bar chart illustrating the relationship between number of bathrooms and house price.

6.4 Price by House Age

A visualization showing how house age influences pricing trends.



C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
629000015	20141022700000	14,95,000	4	3.25	3070	10375	2 No	No View	Average	10	1962	98004	47,5862	-122,198							
4141800215	20141126700000	14,95,000	4	3.75	3770	4000	2.5 No	No View	Very Good	9	1916	98112	47,6157	-122,287							
652200010	20141022700000	14,90,000	4	2.5	2420	1840	2 No	No View	Good	9	1957	98005	47,6055	-122,227							
552200010	20150311700000	14,90,000	3	3.5	4540	14608	2 No	Average	Average	12	1990	98034	47,6995	-122,248							
31002165	20149911700000	14,90,000	5	3.5	3620	7821	2 No	Average	Average	10	1958	98040	47,5738	-122,215							
6835730170	20140822700000	14,88,000	5	6	6880	279968	2 No	Good	Average	12	2007	98045	47,4623	-121,779							
4139500080	20140718700000	14,88,000	4	4.25	5180	13077	2 No	Good	Average	12	1998	98006	47,5511	-122,109							
3888800179	20141001700000	14,85,000	4	3.75	4030	10800	2 No	No View	Average	10	2006	98033	47,6821	-122,196							
3888800179	20141001700000	14,85,000	4	3.25	3720	10200	2 No	No View	Average	10	2006	98034	47,6824	-122,196							
582700075	20141002700000	14,85,000	6	2.75	4430	6440	2 No	Good	Average	10	1964	98118	47,5462	-122,265							
582700075	20141002700000	14,85,000	4	3.5	3930	6120	2 No	No View	Average	10	2007	98105	47,6646	-122,28							
345090066	20140923700000	14,84,900	5	2.5	4570	19525	2 No	No View	Very Good	10	1965	98040	47,5553	-122,22							
217401035	20150507700000	14,82,500	3	2.25	3290	5000	2 No	No View	Average	9	1939	98105	47,6582	-122,08							
992010006	20140822700000	14,81,000	4	3.5	5220	15411	2 No	Good	Average	11	2006	98075	47,592	-122,08							
629000015	20140723700000	14,80,000	3	3.5	4070	26000	2 No	No View	Average	11	1991	98075	47,592	-122,08							
700003810	20140723700000	14,80,000	4	2.25	3920	7200	2 No	No View	Average	10	1928	98144	47,5731	-122,284							
5167000140	20140711700000	14,80,000	3	3.25	3700	2264	2 No	No View	Average	11	1998	98033	47,6655	-122,205							
211170020	20140717100000	14,76,000	3	2.25	4470	22518	2 No	Average	Average	9	1953	98006	47,574	-122,18							
4139501180	20141014700000	14,75,000	5	4	4770	31570	2 No	No View	Average	12	1990	98006	47,5468	-122,123							
118001290	20141212700000	14,75,000	5	3.25	3660	150	1.5 No	No View	Good	10	1937	98112	47,5324	-122,389							
118001290	20150218700000	14,75,000	3	2.75	3910	7080	1 No	No View	Very Good	9	1949	98112	47,5324	-122,389							
311700330	20140827700000	14,75,000	4	3	3050	6179	2 No	No View	Good	9	1926	98112	47,6253	-122,284							
762700515	20150421700000	14,75,000	3	2.5	2570	5000	2 No	No View	Average	11	1984	98102	47,6295	-122,32							
664590010	20141120700000	14,70,000	4	2.5	3030	10189	1 No	No View	Average	9	2003	98004	47,6386	-122,206							
4141800215	20141126700000	14,70,000	4	3.25	3610	33000	2 No	No View	Average	12	1939	98080	47,5874	-122,127							
98000150	20150102700000	14,65,000	4	4	4930	2293	2 No	Good	Average	12	2004	98177	47,5874	-122,125							
668001705	20150206700000	14,65,000	3	1.5	2480	9900	2 No	Good	Average	10	1940	98117	47,6302	-122,381							
116900580	20140709700000	14,65,000	6	4.5	4230	6420	2 No	Good	Good	8	1916	98119	47,6302	-122,369							
5551201240	20141030700000	14,65,000	4	2.5	2800	4000	2 No	No View	Average	9	2011	98103	47,6669	-122,339							
125100045	20141017700000	14,62,500	5	3.25	3840	4800	3 No	Good	Average	10	2008	98144	47,5929	-122,29							
118000800	20141017700000	14,62,500	4	3.25	4200	1613	2 No	Average	Average	12	1996	98024	47,5885	-122,326							
98300230	20150428700000	14,59,000	4	4	4620	13028	2 No	No View	Good	9	2014	98024	47,5885	-121,939							
133800280	20140929700000	14,57,000	4	1.5	2650	6900	2 No	No View	Good	9	1909	98112	47,6275	-122,305							
125100328	20150225700000	14,54,000	5	4	4070	11334	2 No	No View	Average	10	2014	98033	47,6771	-122,187							
727406979	20150319700000	14,52,000	2	3.25	2070	3128	2 Yes	Good	Average	9	1988	98075	47,5686	-122,06							
625069038	20141124700000	14,50,000	4	3.5	4300	108865	2 No	No View	Average	11	2014	98074	47,6258	-122,005							



7. Dashboard Overview

A dashboard was created combining all visualizations into a single view.

The dashboard allows users to:

- View average house price

- Compare prices by bedrooms
- Compare prices by bathrooms
- Analyze pricing trends by house age

This provides a complete overview of housing market patterns.

8. Key Insights

- Houses with more bedrooms tend to have higher sale prices.
- Houses with more bathrooms generally show increased property value.
- Newer houses are priced higher compared to older houses.
- The average house price in the dataset is approximately (write your value here, e.g., 500,270).

9. Conclusion

This project demonstrates how Tableau can be used to analyze and visualize housing market trends effectively.

By using interactive dashboards, patterns in sale prices and property features can be easily understood. The analysis helps in understanding how structural features influence housing value.

10. Tableau Dashboard Link

<https://public.tableau.com/app/profile/nagoor.shaik1037/viz/HousePriceVisualizationProject/HousePriceDashboard?publish=yes>

