

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

DATE	28-02-2026
TEAM ID	LTVIP2026TMIDS90693
PROJECT NAME	Visualizing Housing market Trends: An Analysis of Sale Prices and Features using Tableau
MAXIMUM MARKS	4 MARKS

6.3 Data Preparation

Visualizing housing market trends in Tableau involves transforming raw real estate data into actionable insights by cleaning data (handling missing values, formatting dates, removing irrelevant columns), then mapping, filtering by property features (location, size, rooms), and analysing trends over time. Common visualizations include maps for location trends, scatter plots for price-feature correlations, and line graphs for price changes.

Data Preparation Steps for Tableau Housing Analysis

- **Data Collection:** Gather data from sources like MLS, CSVs, or databases, focusing on key fields: Sale Price, Date, Location (Zip Code/City), Property Type, Square Footage, and number of Bedrooms/Bathrooms.
- **Cleaning & Formatting:**
- **Handle Missing Values:** Remove or impute missing data in critical fields like sale price or square footage.
- **Date Conversion:** Ensure date fields are in a date format recognized by Tableau to enable time-series analysis.
- **Data Type Assignment:** Ensure numerical fields (price, area) are measures and categorical fields (zip code, property type) are dimensions.
- **Data Transformation:**
- **Calculate Metrics:** Create calculated fields for, for example, "Price per Square Foot".

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

- **Filtering:** Filter out irrelevant data points, such as outliers or non-residential properties.
- **Geocoding:** Ensure location data (zip codes, city) is correctly recognized for mapping.

Data Preparation is one of the most critical stages of the project. Before building dashboards in **Tableau Desktop**, the housing dataset must be cleaned, transformed, and structured properly to ensure accurate analysis.

Prepare the Data for Visualization

This process helps to make the data easily understandable and ready for creating visualizations to gain insights into the performance and efficiency. Since the data is already cleaned, we can move to visualization.

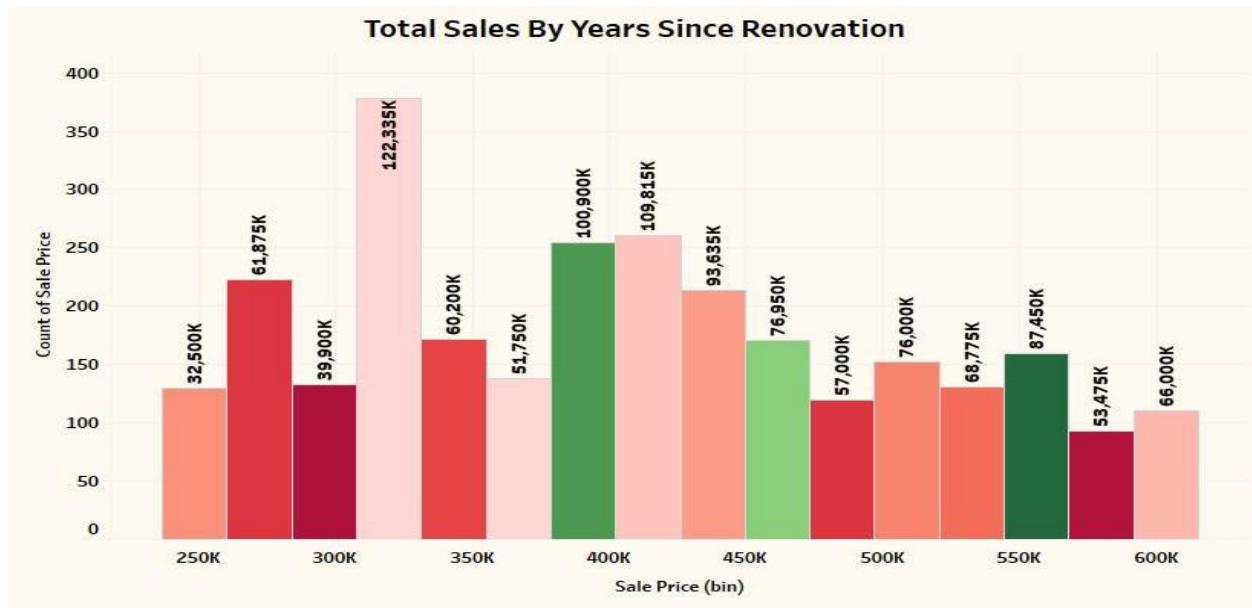
No. of Unique Visualizations

Activity 1



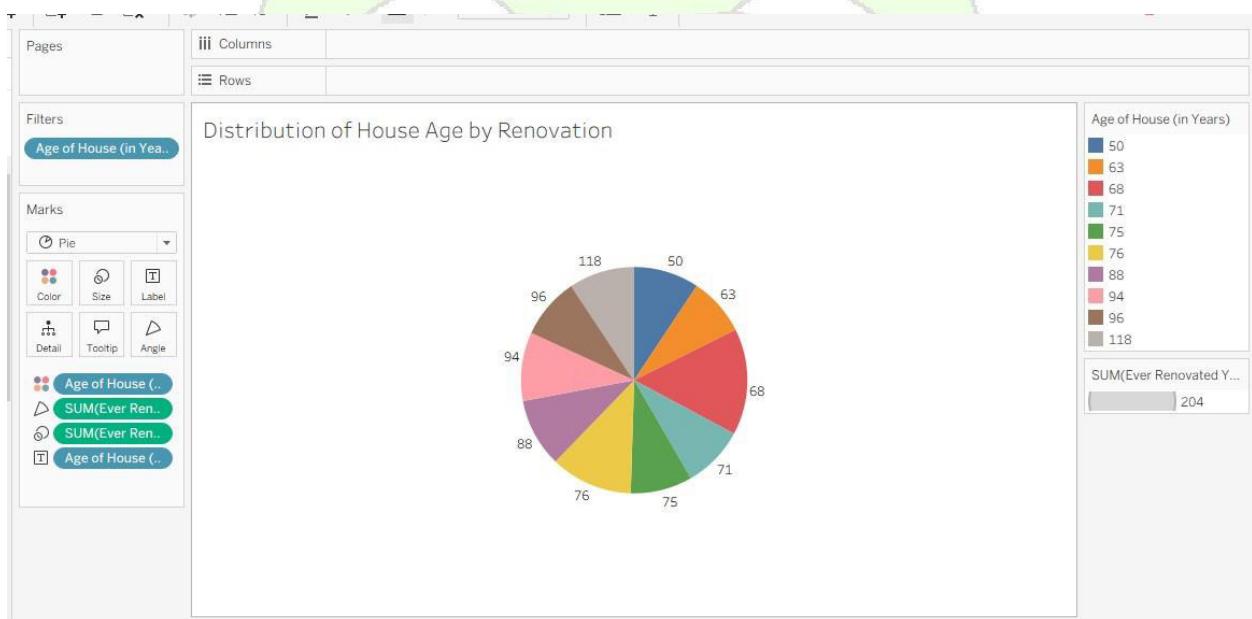
Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau

Total Sales by Years Since Renovation Activity 2



Distribution of House Age by Renovation Status

Activity 3



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

House Age Distribution by Number of Bathrooms, Bedrooms, and Floors

Activity 4



Example

Data preparation involved cleaning and transforming the housing dataset to ensure accuracy and consistency. Duplicate records were removed, missing values were handled appropriately, and data types were standardized. Calculated fields such as price per square foot and yearly growth rate were created within Tableau to support advanced analysis. This pre-processing stage ensured reliable visualization and meaningful analytical insights.

