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

Understanding House Prices and Sales: A Data Story

This project helps **ABC Company** understand what makes house prices go up or down and why some houses sell more than others. We're looking at lots of information about houses, like when they were last fixed up, how old they are, and how many bathrooms or bedrooms they have.

We're using a tool called **Tableau** to create easy-to-understand pictures (like charts and graphs) from this data. The goal is to help our **real estate experts, marketing teams, and company leaders** make smarter decisions about pricing houses and staying competitive in the market.

What We're Looking At:

Scenario 1: Quick Look at All the Data

This is like a **dashboard overview** for our project. It shows us:

- **How many house records** we're looking at.
- The **average price houses are selling for**.
- The **total size of house basements** in square feet.

This gives everyone a quick idea of how much information we have and some basic numbers about the houses.

Scenario 2: How Renovations Affect Sales

This part uses a **bar chart** to show how many years it's been since a house was renovated and what its sales price was.

- We'll see if **recently renovated houses** sell for higher or lower prices.

- This helps us understand if buyers prefer homes that have been recently updated and how much they're willing to pay for them.

Scenario 3: How Old Are the Houses, and Are They Renovated?

This uses a **pie chart** to show the age of the houses in our data and if they've been renovated or not.

- We'll see **what age groups most of our houses fall into**.

- We'll also see **how many houses have been renovated** compared to those that haven't.

This helps us understand the typical age of houses in the market and how common renovations are.

## Scenario 4: House Age by Bathrooms, Bedrooms, and Floors

This part uses a **grouped bar chart** to show how the age of houses relates to their features.

- It breaks down **house ages by the number of bathrooms, bedrooms, and floors** they have.

- This helps us see if older houses tend to have fewer bathrooms, for example, or if newer houses are built with more floors.

This helps us spot trends in house design and features as houses get older.

process

Story 1
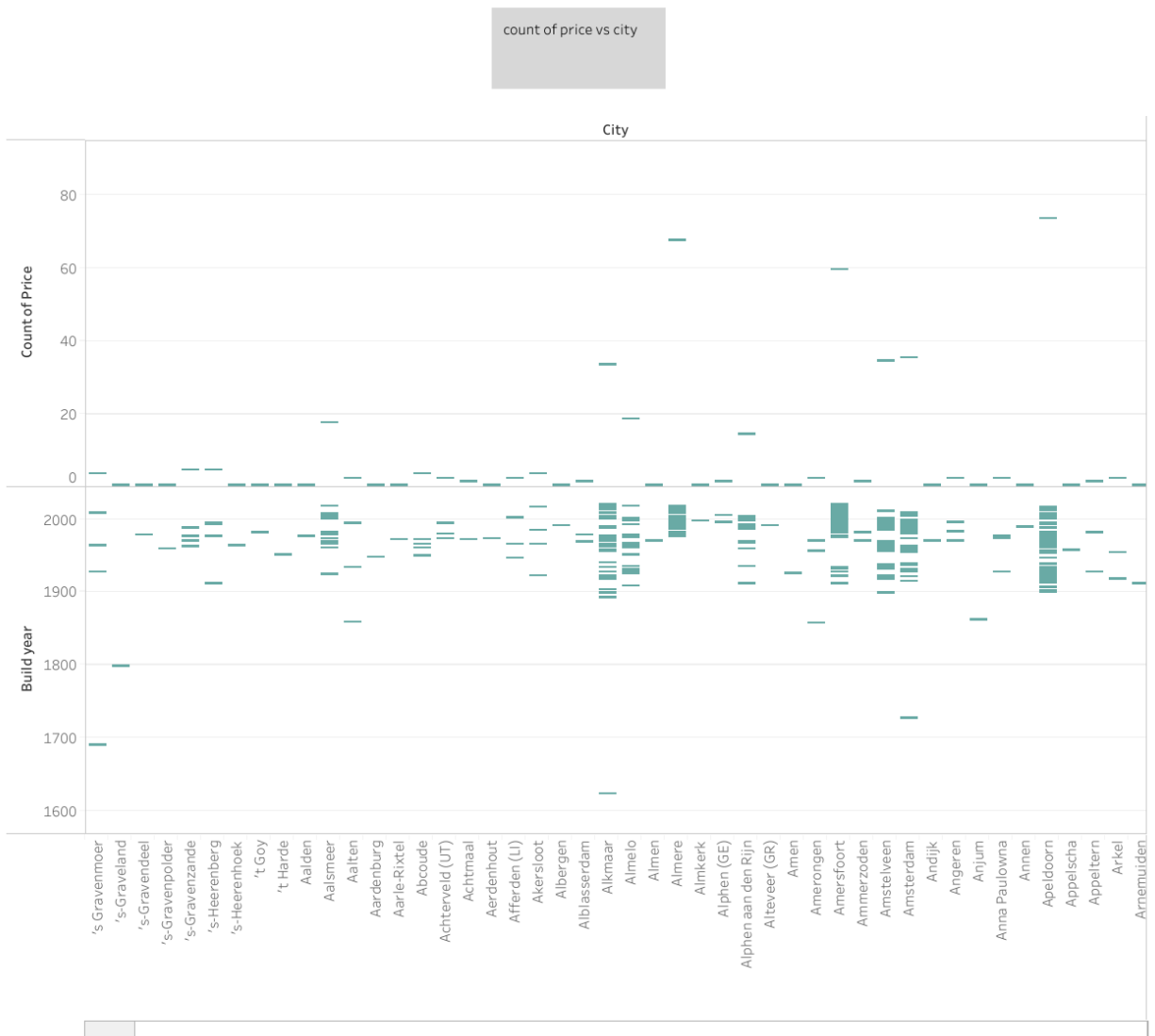
This image displays a scatter plot, "count of price vs city," showing the distribution of property prices against their build year, categorized by various cities. The x-axis represents different cities, while the y-axis shows both the "Count of Price" (presumably the number of sales or properties within a certain price range) and "Build year." Each small horizontal line or cluster of lines represents a data point, indicating properties within a particular city, their build year, and the corresponding price count.

A prominent pattern observed is the significant concentration of properties built in the late 1900s to early 2000s across many cities, as evidenced by the dense clusters of data points in that build year range. Some cities like 's-Gravenzande, Aalburg, Alblasserdam, and Amersfoort appear to have a higher density of reported prices or sales data points compared to others, suggesting a potentially larger dataset or more active market in these areas. While most price counts seem to hover at lower values, there are occasional spikes, particularly noticeable in cities like Alblasserdam and Amersfoort, where some properties show higher "Count of Price" values, indicating a greater number of sales or properties within those specific price brackets for those cities.

The visualization also reveals historical data, with properties dating back as far as the 1600s in some cities like 's-Gravenmoer and Aalburg, although these older properties appear less frequently represented in terms of price counts compared to more recent builds. This diverse range of build years across various cities provides a broad overview of the housing stock and market activity, allowing for a preliminary assessment of where transactions are more frequent and what age of properties is most commonly reported in the dataset for each location.

Story 1

count of price vs city
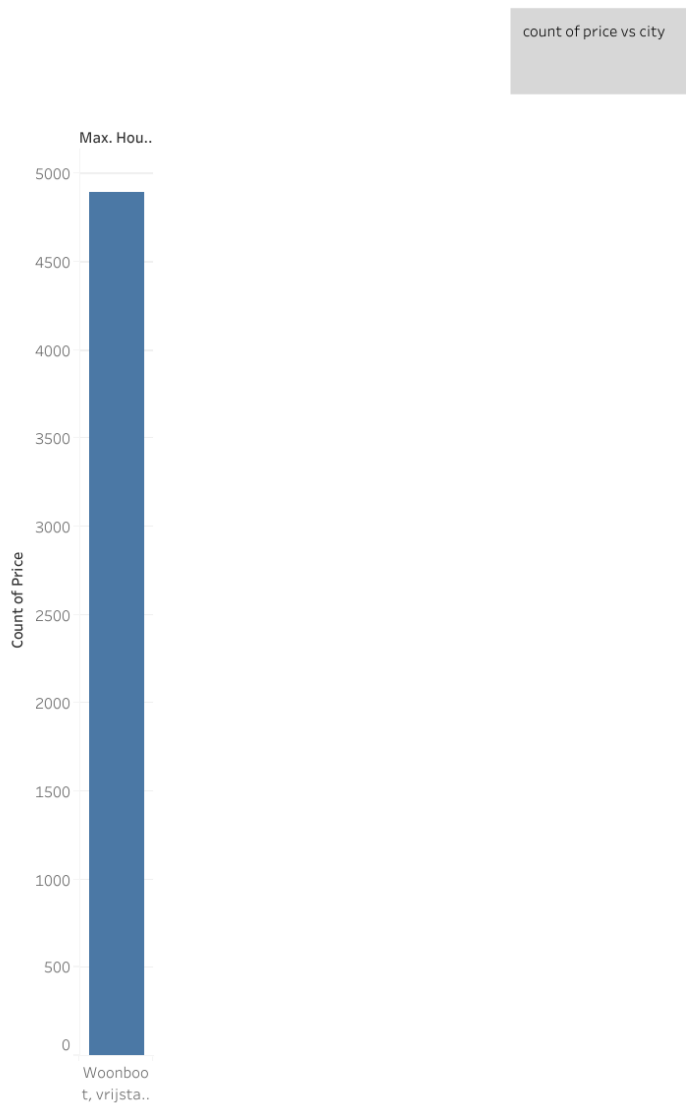
This bar chart, titled "count of price vs city," presents a very focused view, seemingly highlighting a single category with an overwhelmingly large "Count of Price." The x-axis is labeled "Woonboo t, vrijsta..." which likely refers to a specific type of house or property, possibly "Woonboot, vrijstaande" meaning "Houseboat, detached." The y-axis represents the "Count of Price," which can be interpreted as the number of sales records or properties associated with this category.

The most striking feature of this visualization is the singular, tall blue bar that dominates the chart. This bar reaches a "Count of Price" just under 5000,

indicating that this particular property type ("Woonboo t, vrijsta...") accounts for a very significant portion, if not the entirety, of the data being represented in this specific view. The extreme height of this bar, while lacking comparison to other categories, suggests that this type of property is either the most prevalent in the dataset for this analysis or that the filter applied to this visualization has isolated it as the sole focus.

Given the context of the previous image which showed many cities and build years, this chart appears to be a highly filtered or aggregated view. It effectively communicates that for whatever slice of data is being shown here, the "Woonboo t, vrijsta..." category has an exceptionally high volume of associated price data points. Without other bars for comparison, it's impossible to determine its relative dominance against other property types, but its sheer magnitude implies a strong presence in the dataset.