

How the Visualizations Were Created

The visualizations in this project were built using **Looker Studio**. Data from two sources—Zillow (via API) and Reddit (via web scraping)—was extracted using Python, loaded into an AWS RDS PostgreSQL database, and queried using SQL. The resulting datasets were exported as CSV files and uploaded to Looker Studio, where I created a series of bar charts, bubble charts, and word frequency graphs. These visuals highlight key trends in housing market affordability and public sentiment, offering clear, actionable insights for real estate stakeholders and content strategists. **Zillow data helps reveal where housing prices and inventory levels are shifting, while Reddit data surfaces the emotions, priorities, and language patterns of active homebuyers and sellers.**

Looker Dashboard –

Zillow –

<https://lookerstudio.google.com/reporting/53e0a459-3943-47b2-bc68-06c3dfb22ec1>

Reddit –

<https://lookerstudio.google.com/reporting/c5de6ce2-c681-42a4-9ee1-ab20dea55352>

Zillow Dashboard Visuals

1. Median Price by City

This bar chart shows the median home prices across five U.S. cities. Los Angeles has the highest median price at \$880,000, while Denver remains the most affordable at \$510,000. This highlights clear regional disparities in housing affordability.

2. City Inventory vs Median Price

This bubble chart compares housing inventory to median price. Despite Los Angeles having the highest inventory, it also has the highest median price, suggesting that demand strongly outweighs supply in this market.

3. Price per Home by City

This chart presents the average price per home across cities. Miami and Los Angeles top the list, showing high competitive demand, while Denver has the lowest price per home, confirming its affordability advantage.

4. Housing Cost Per Unit by City

This visual breaks down housing cost per unit geographically. Coastal cities like Miami and

Los Angeles show much higher unit costs, reinforcing the premium pricing trend in coastal urban markets.

Reddit Dashboard Visuals

5. Distribution of Words by Length Category

This chart analyzes the word lengths used in real estate post titles on Reddit. The majority of titles use short (1–4 letter) words, which reflects a casual, accessible tone. This insight is useful for content strategists or listing platforms aiming to engage users in similar forums — keeping language simple may improve readability and interaction.

6. Most Common Words in Reddit Post Titles

This chart shows the most frequently used words in r/RealEstate post titles. While functional words like “to” and “is” are common, “selling” is the most dominant real estate-related keyword. This suggests that a significant portion of online discussion revolves around the selling process, providing useful context for realtors or platforms targeting seller pain points and motivations.

7. Words Most Associated with ‘Buy’ or ‘Sell’

This chart explores which words frequently appear alongside “buy” or “sell” in post titles. The word “selling” appears far more than “buying” or “sold,” highlighting a seller-dominant conversation. This insight helps businesses tailor their messaging — prioritizing seller-focused education, tools, and emotional support in online marketing or content planning.