U.S. Housing Market Dashboard – Business Case for True Build LLC

# 📊 Dashboard Overview

Purpose:  
An interactive Tableau dashboard built to help True Build LLC evaluate housing markets across the U.S.  
  
Business Use:  
Identifies regional trends in sale prices, time on market, and price cuts to guide construction and investment decisions.

# 🧮 Data Sources

Provided by: Zillow Research  
Website: https://www.zillow.com/research/data/  
  
Files Used:  
- Metro\_median\_sale\_price\_now\_uc\_sfrcondo\_month.csv  
- Metro\_sales\_count\_now\_uc\_sfrcondo\_month.csv  
- Metro\_mlp\_uc\_sfrcondo\_sm\_month.csv  
- Metro\_mean\_days\_to\_close\_uc\_sfrcondo\_sm\_month.csv  
- Metro\_perc\_listings\_price\_cut\_uc\_sfrcondo\_sm\_month.csv  
  
Time Frame: 2008–2025  
Geography: U.S. metros and national aggregate

# 🧹 Data Cleaning (Google Colab)

- Merged 5 Zillow datasets using shared region and date keys  
- Reshaped columns from wide format (dates as columns) to long format (one row per date)  
- Split combined 'RegionName' into separate 'City' and 'StateAbbrev' fields  
- Removed rows with missing key values (e.g., MedianSalePrice, SalesCount)  
- Renamed fields for clarity (e.g., DaysToClose → Avg Days on Market)  
- Exported final dataset to 'Metro\_Housing\_Trends\_Cleaned.csv' for Tableau use

# 📈 Dashboard Features

- 🗺️ Interactive Map: View median housing prices by state and metro area  
- 📊 Price Trend Chart: Monthly line chart of sale prices with year filter  
- 🧾 State Summary Panel: Key stats like list price, sale price, time on market  
- 📅 Year Filter: Filter all views to focus on a specific year  
- 🎨 Clean dark theme with gold/gray accents  
- 🧭 Map and chart interactivity via click-based filtering

# 💼 Why It Matters for True Build LLC

This dashboard helps True Build LLC:  
  
- Identify high-demand regions and market trends  
- Track price volatility and sales activity over time  
- Evaluate local time on market to gauge buyer/seller leverage  
- Compare pricing patterns between list and sale prices  
- Make data-driven decisions about where and when to build or invest