

DSO 510: Business Analytics Elmer, Issac, Wayne





Topic: Project 2 Analysis

- Executive Summary (WIP)
- Goal & Variable Definition
- Data Organization & Visualization
- Analysis of Dependent Variable (WIP)
- Interpretation, Action, Adoption, Automation (WIP)

Data Organization and Metadata

- Downloaded data to a github repo <u>here</u>
- Data came in tabular format (no additional preprocessing required)
- Loaded data into a windows sql server and sqlite file
 - Parcel Data Table (N = 7,247,834)
 - Census Data Table Zip Code Level (N = 311)
 - LA County Zip Code GeoJSON (N = 311)

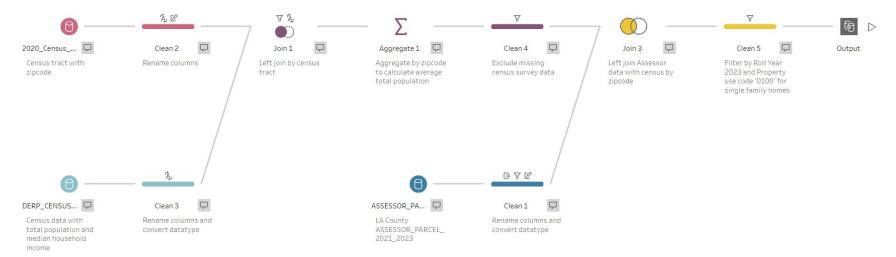


Analysis Variables at a Glance

- Independent Variable
 - Total Value of Single Value Homes in 2023 (Filtered to 1.13M)
- Dependent Variables
 - Population Density (Calculated by Pop / Sq Mile of Zip Code)
 - Year Built
 - Number of Bedrooms
 - Number of Bathrooms
 - Property SqFt
 - Zip Code

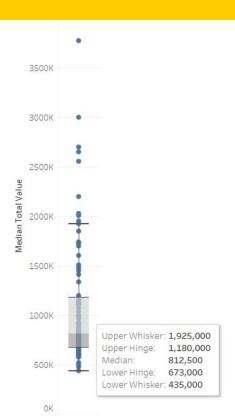


Transformations and Joins





Total Value



House sold in 2023

Median: \$812,500

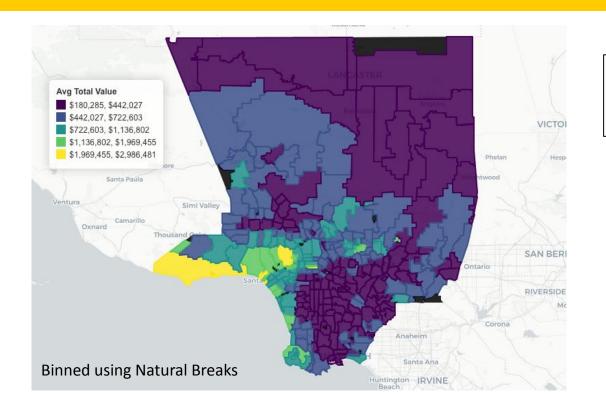
First quartile: \$673,000

Third quartile: \$1,180,000

In LA county majority single family house sold in 2023 are range from \$673,000 to \$1,180,000



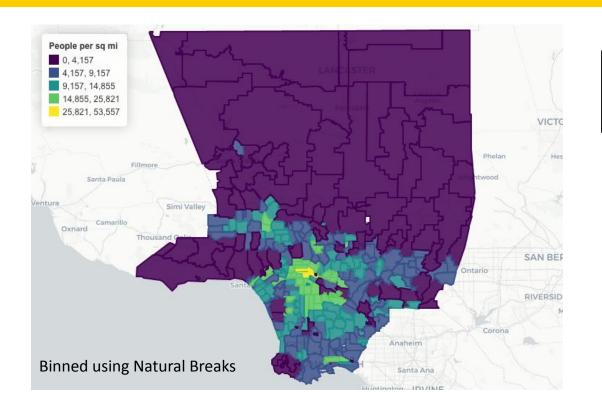
Average Home Value by Zip Code



Average home value is largest to the west



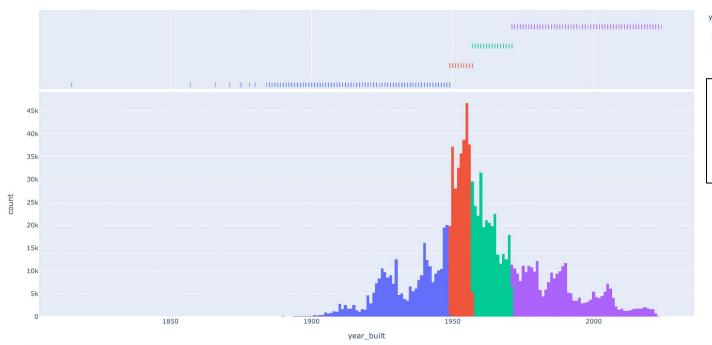
Population Density by Zip Code



Population is densest around the city of LA



Histogram of Effective Year Built

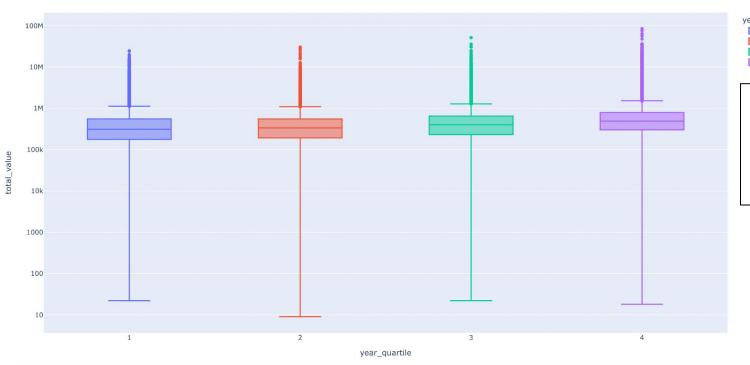




Fifty percent of housing was built between the 50s and 70s



Box Plot of Total Value by Year Quartile

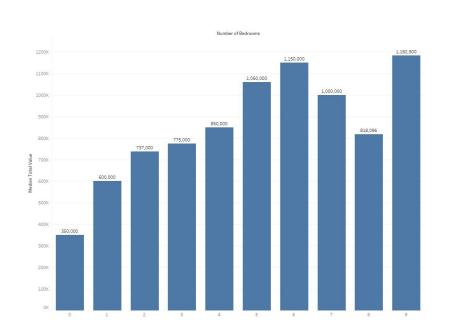


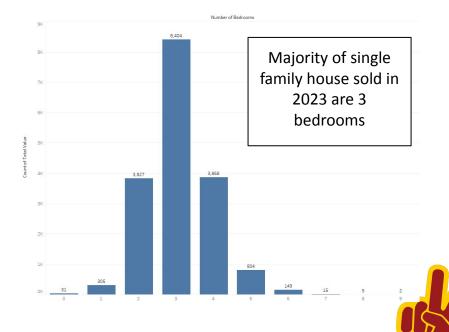


Homes have similar median values regardless of what quartile they fell into

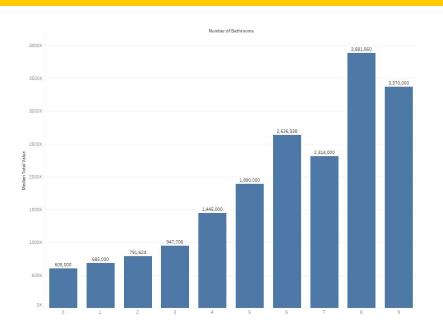


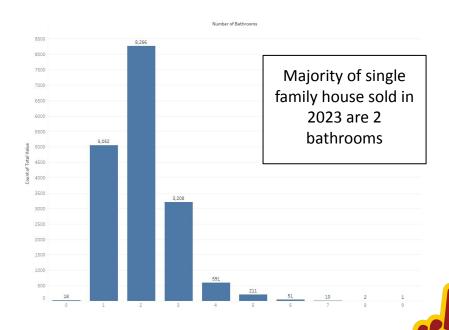
Number of Bedrooms vs. Total Value



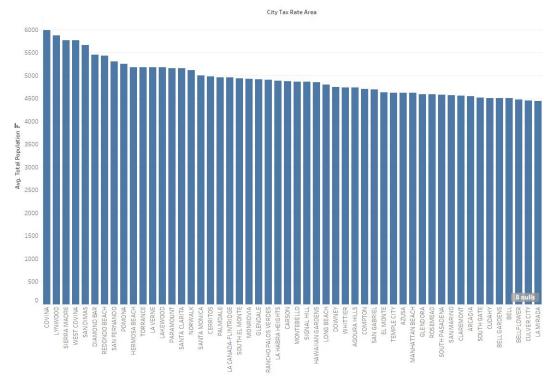


Number of Bathrooms vs. Total Value





Population by Cities

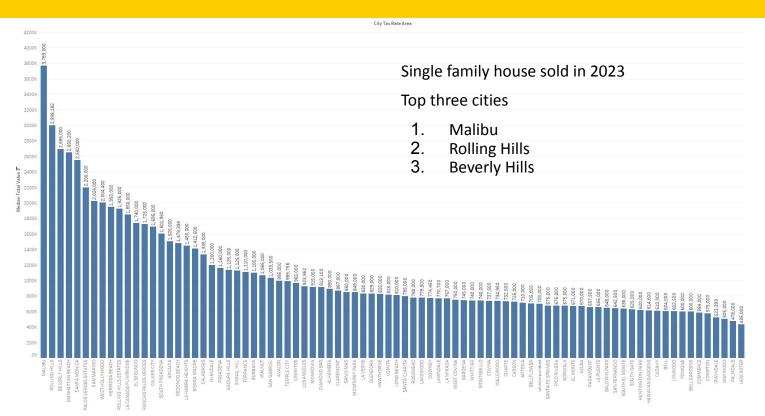


Top five cities with the highest population

- 1. Covina
- 2. Lynwood
- 3. Sierra Madre
- 4. West Covina
- 5. San Dimas

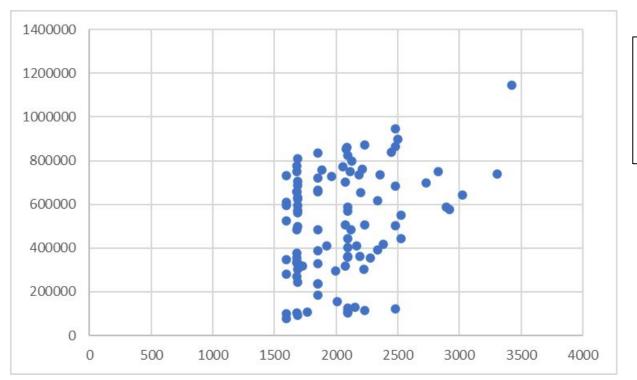


Median Total Value by Cities





Square Footage vs Total Value



An Increase in Square Footage is correlated with an increase in Total Home Value



Q&A (QUESTIONS & ANSWERS)

Questions?





Thank you!

