

### **Group 6: House Hunters**

**Ben Bowling** 

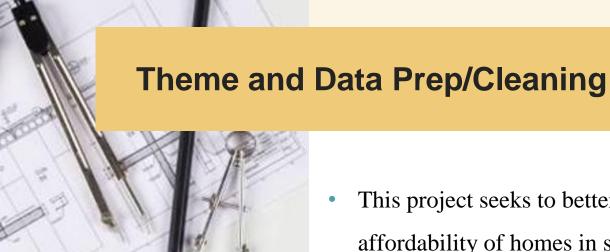
**Corine Daboiko** 

Lakshmi Bhimavarapu

Sarah Beck

**Zemi Moore** 

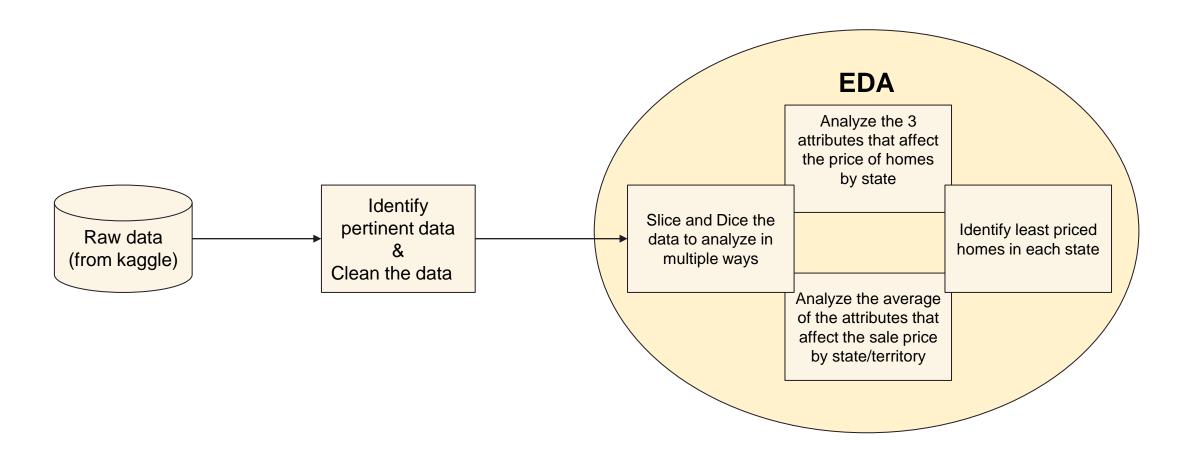






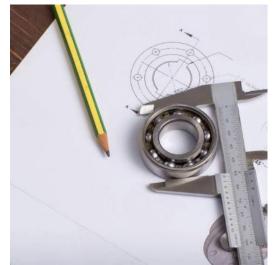
• This project seeks to better understand what affects the affordability of homes in states of the US that interest us as a group.

#### **Flowchart**



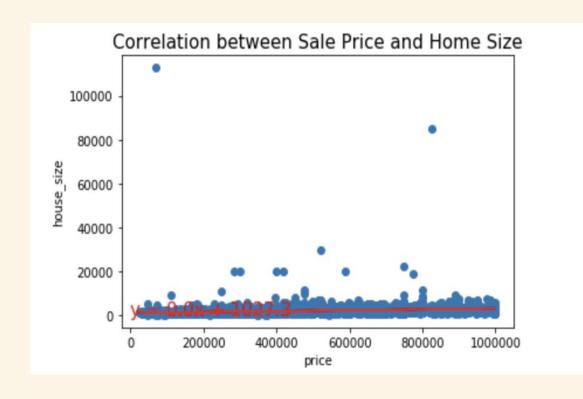






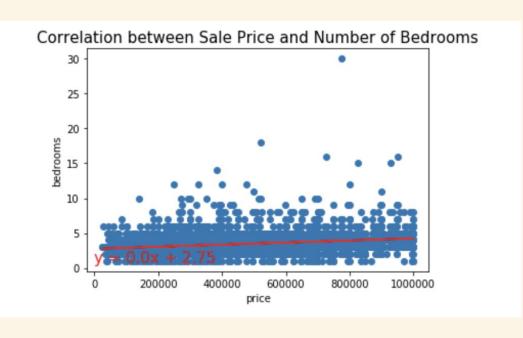


BASED ON THIS DATA, WHICH ATTRIBUTE (NUMBER OF BEDROOMS/BATHS, SQUARE FOOTAGE) MOST AFFECTS THE SELLING PRICE OF A HOME?



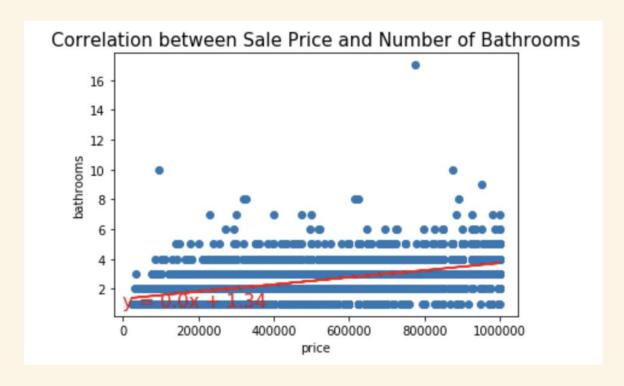
# **Relationship between Price & the Home Size**

- Dropped outliers for sale price above
  \$1,000,000
- 2. Used scatter plot to find out how is the data distributed
- 3. Find correlation : r -value = 0.057



# Relationship between Price & the Number of Bedrooms

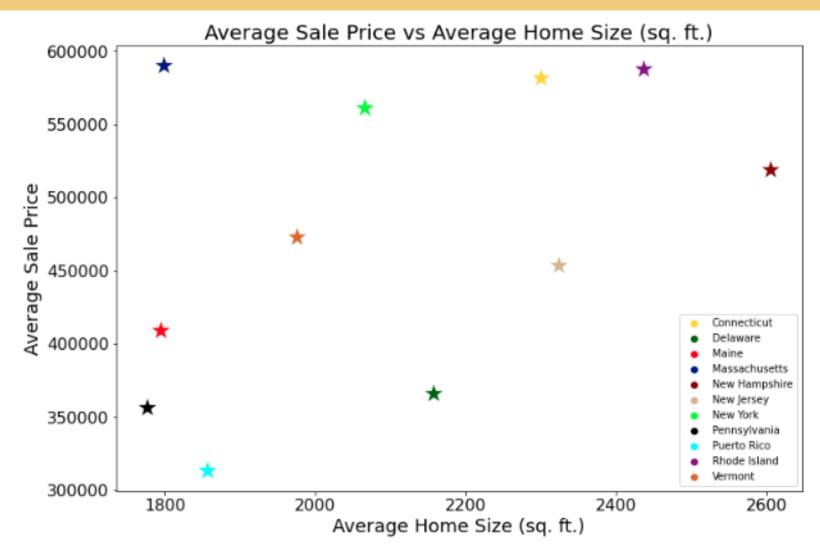
- 1. Dropped outliers for sale price above \$1,000,000
- 2. Used scatter plot to find out how is the data distributed
- 3. Find correlation : r -value = 0.078



# Relationship between Price & the Number of Bathrooms

- 1. Dropped outliers for sale price above \$1,000,000
- 2. Used scatter plot to find out how is the data distributed
- 3. Find correlation : r -value = 0.29

For the all states, how does the average home size impact the average sale price per state?



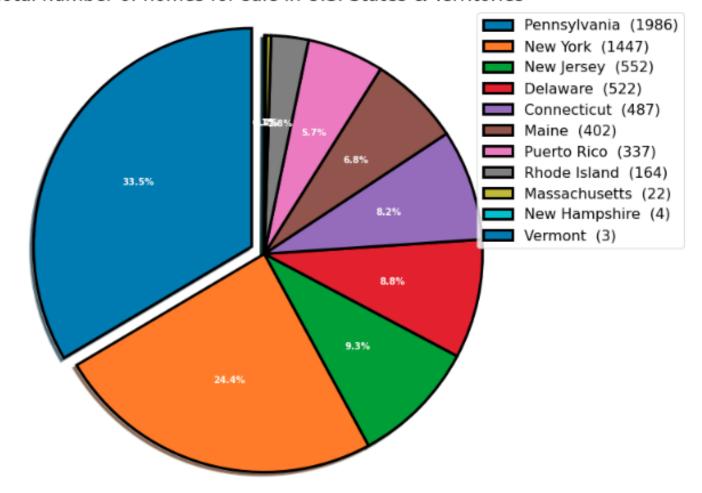
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- Best state to live based on the home size is price would be
  New Jersey (\$453,337 & 2,323 square foot)
- Outlier: Lowest square footage with the highest purchase price -Massachusetts (\$589,880 & 1,799 Square foot)
- The larger the home, the higher the purchase price
- The correlation between the average home size and the average sale price is: 0.45

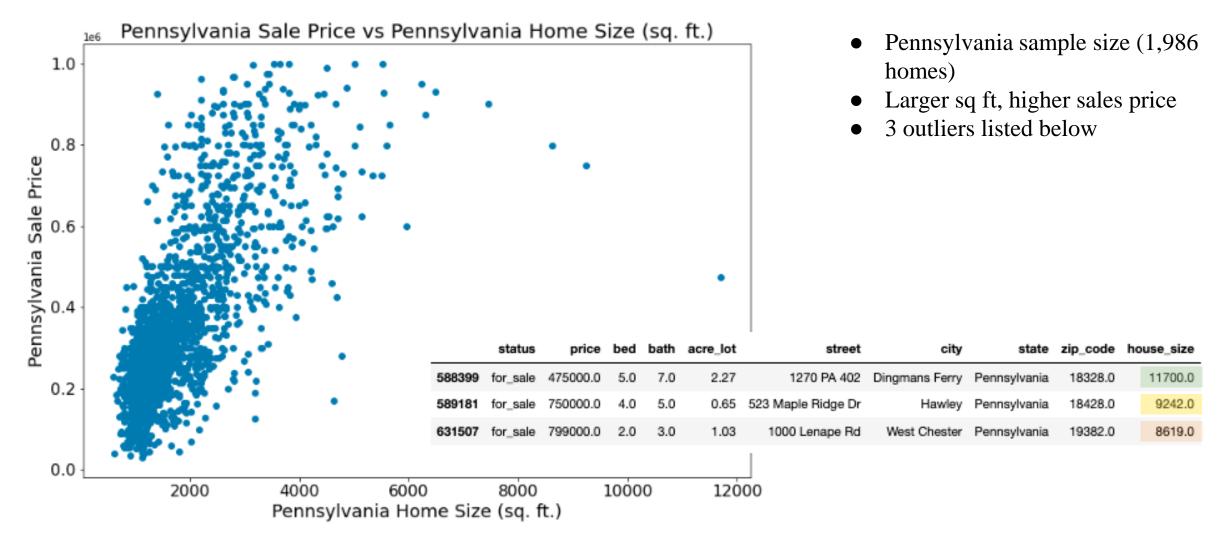
For the state of Pennsylvania, how does the home size impact the selling price for that state and what is the correlation?

- Total number of U.S States & Territories (11)
- Total number of homes (5,926)
- Pennsylvania (1,986) 33.5%

Total number of homes for sale in U.S. States & Territories



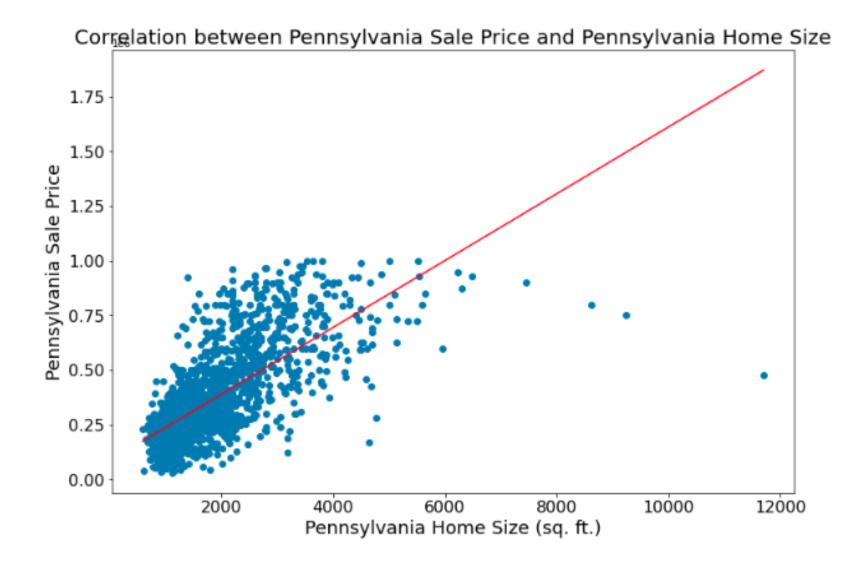
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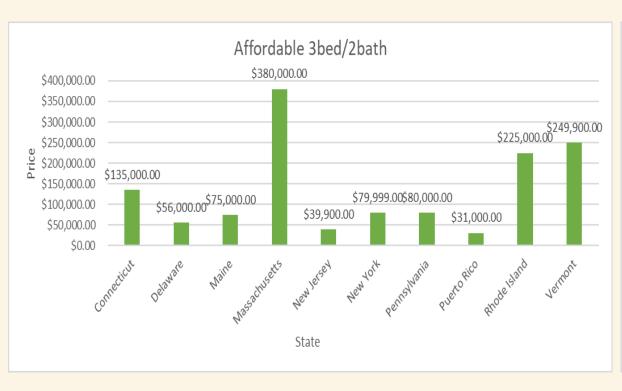
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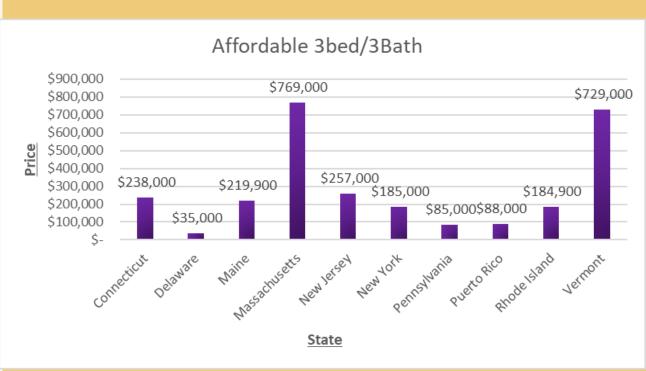
For the state of Pennsylvania, how does the home size impact the selling price for that state and what is the correlation?

- Positive correlation (0.70)
- Larger sq ft, higher sales price



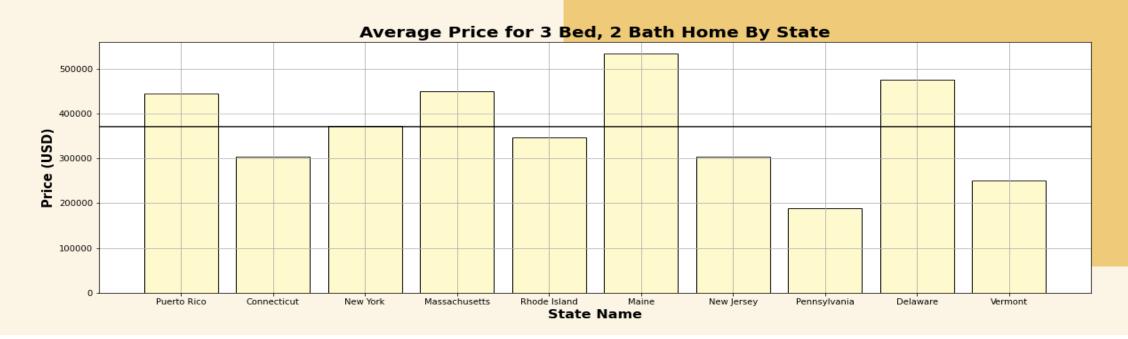
#### Which state has the most affordable 3 bedroom 2 bath home?





## **Average Cost of Home By State**

- According to US Census data, the average home has 3 bedrooms and 2 bathrooms
- Outliers: Vermont & Massachusetts
- H-Line at \$370,397





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