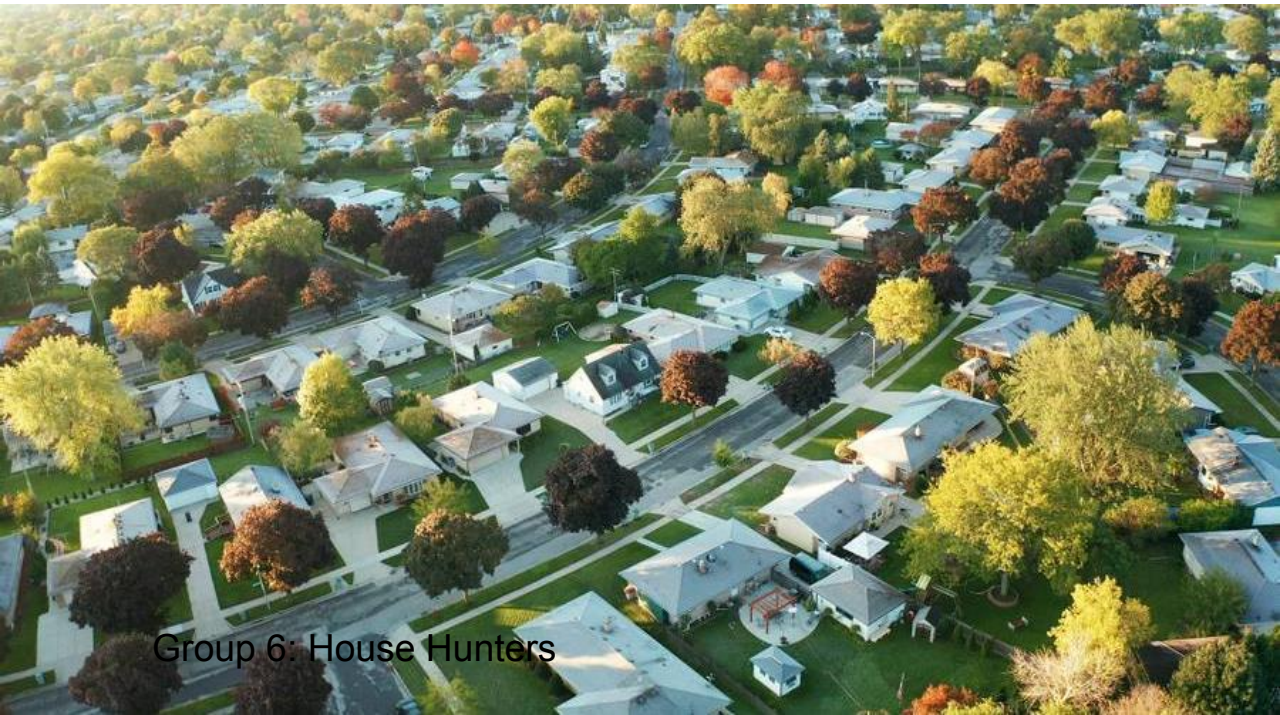


# Affordable Home Analysis

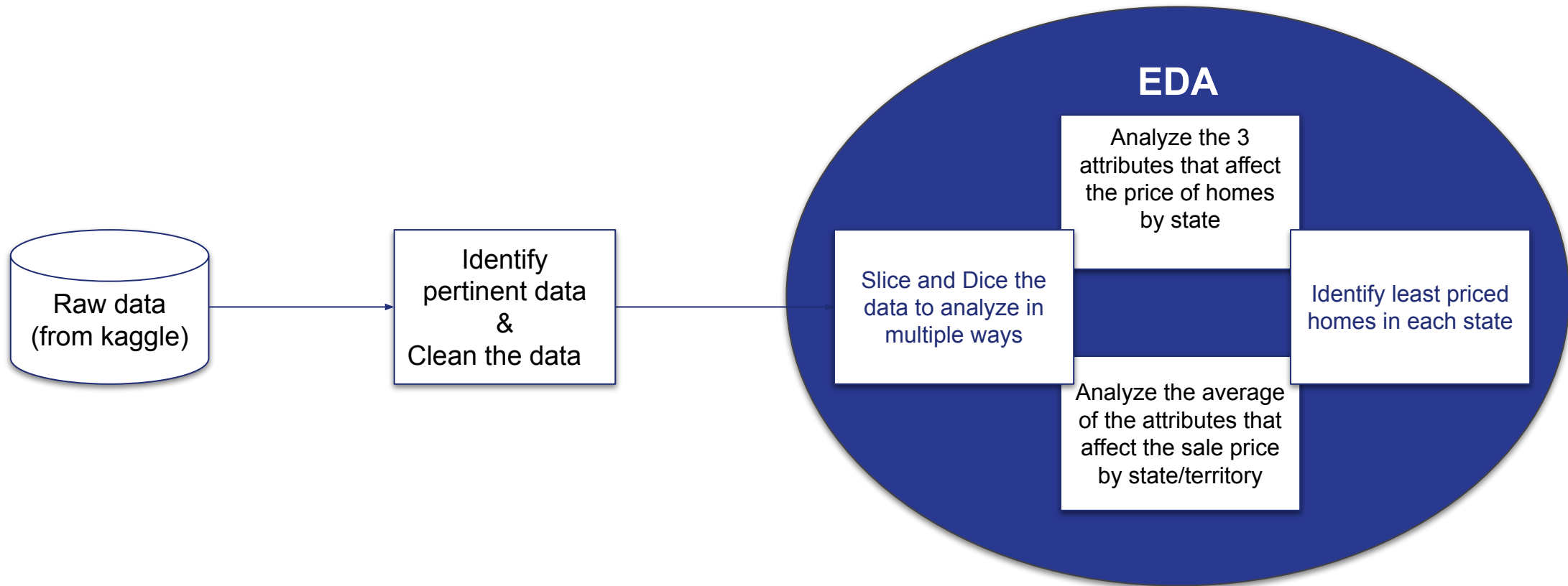
Ben Bowling



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

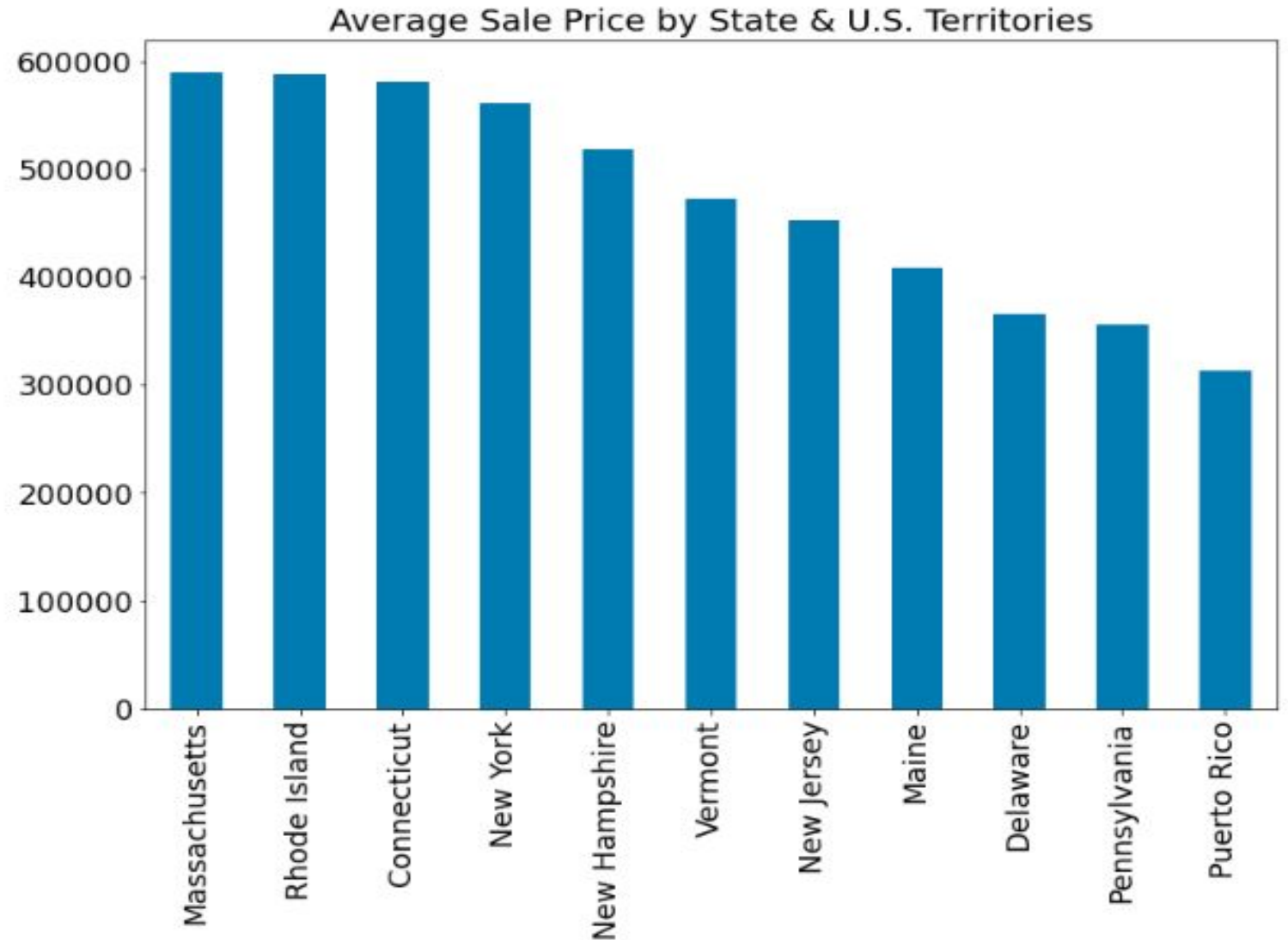


# Flowchart

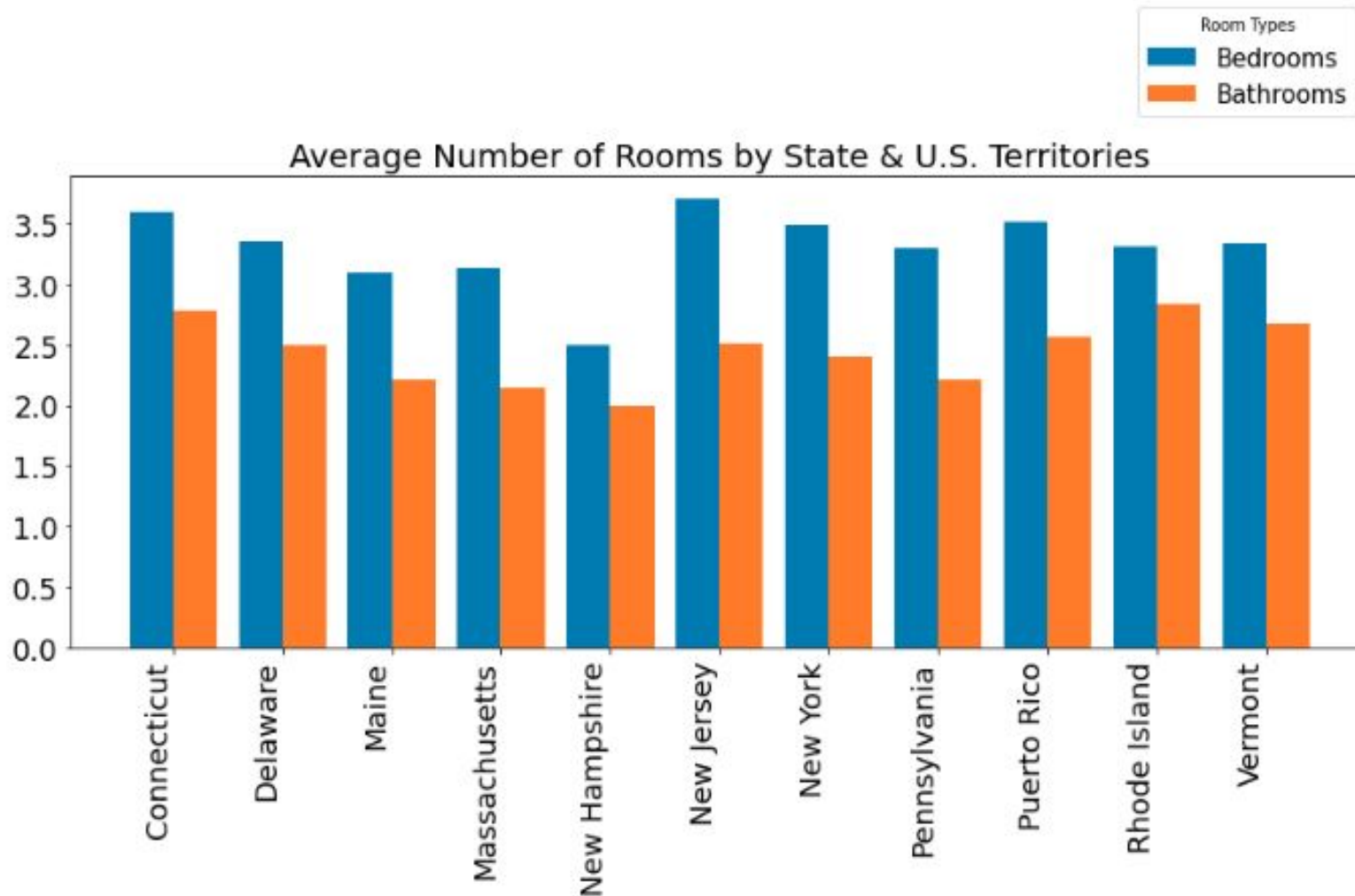


What is the average sales price for each state and how does the number of rooms compare to the sales price for that state?

- Average sale prices
  - Massachusetts (\$589,880)
  - Rhode Island (\$587,449)
  - Pennsylvania (\$356,104)
  - Puerto Rico (\$313,148)



## What is the average sales price for each state and how does the number of rooms compare to the sales price for that state? (cont.)



- Highest Average for Bedrooms
  - New Jersey (3.7)
  - Connecticut (3.6)
- Highest Average for Bathrooms
  - Rhode Island (2.8)
  - Connecticut (2.7)



## What is the average sales price for each state and how does the number of rooms compare to the sales price for that state? (cont.)

- Averages remained consistent
- Average number of bedrooms
  - 3.4
- Average number of bathrooms
  - 2.4



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

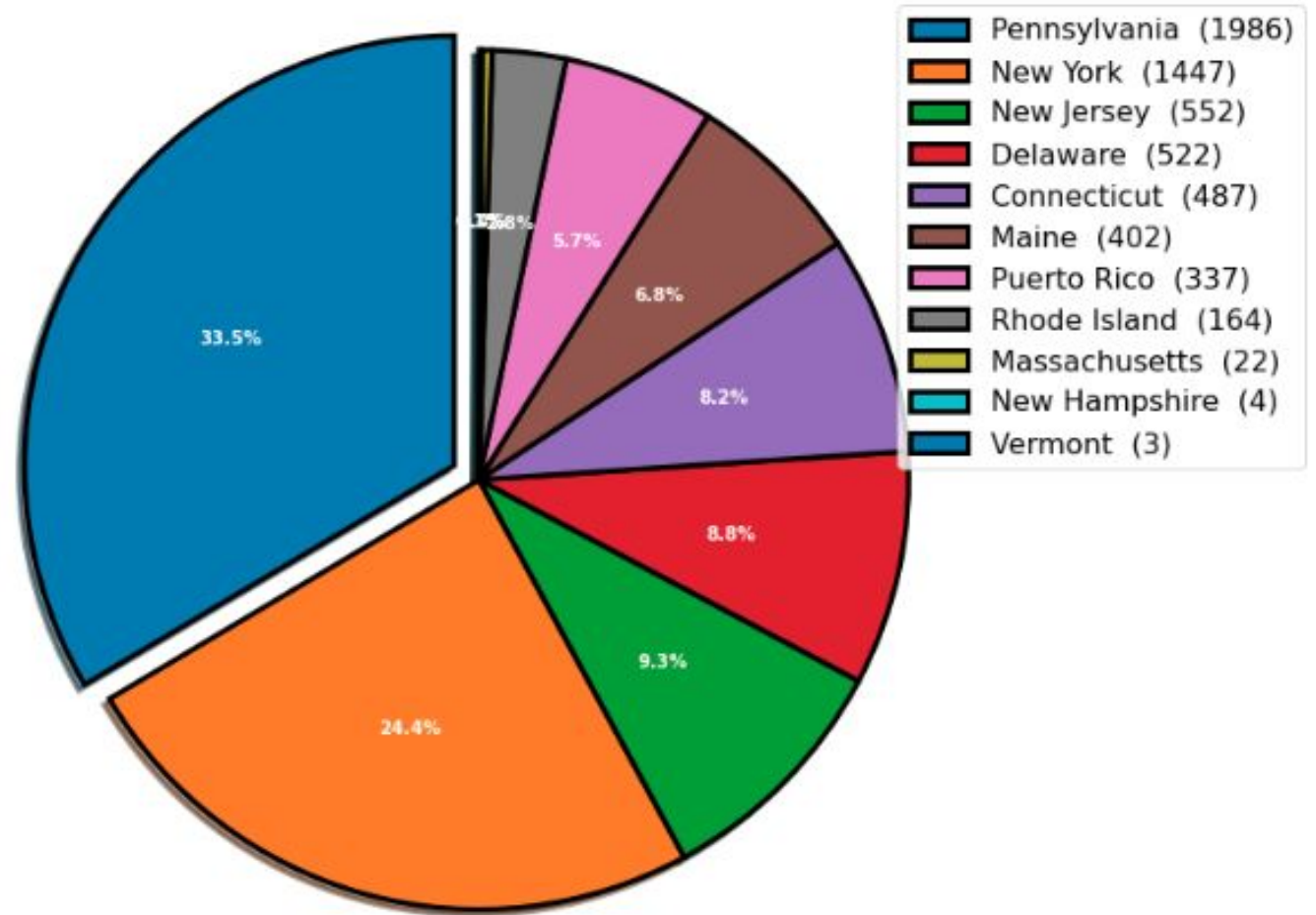
- Best state to live based on the home size is price would be New Jersey (\$453,337 & 2,323 square foot)
- Outlier: Lowest square footage with the highest purchase price - Massachusetts (\$589,880 & 1,799 Square foot)
- The larger the home, the higher the purchase price
- The correlation between the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

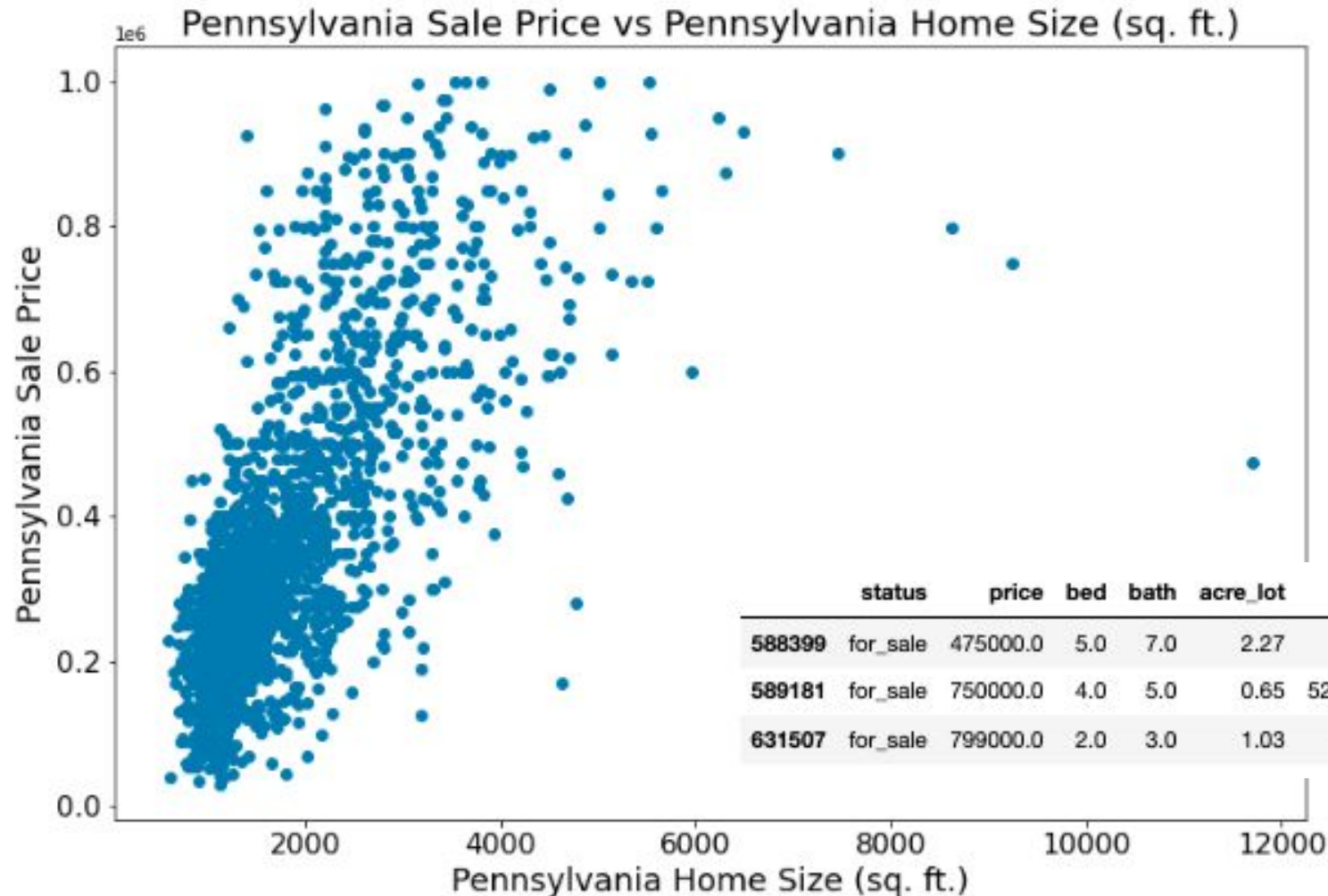
- Total number of U.S States & Territories (11)
- Total number of homes (5,926)
- Pennsylvania (1,986) 33.5%

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



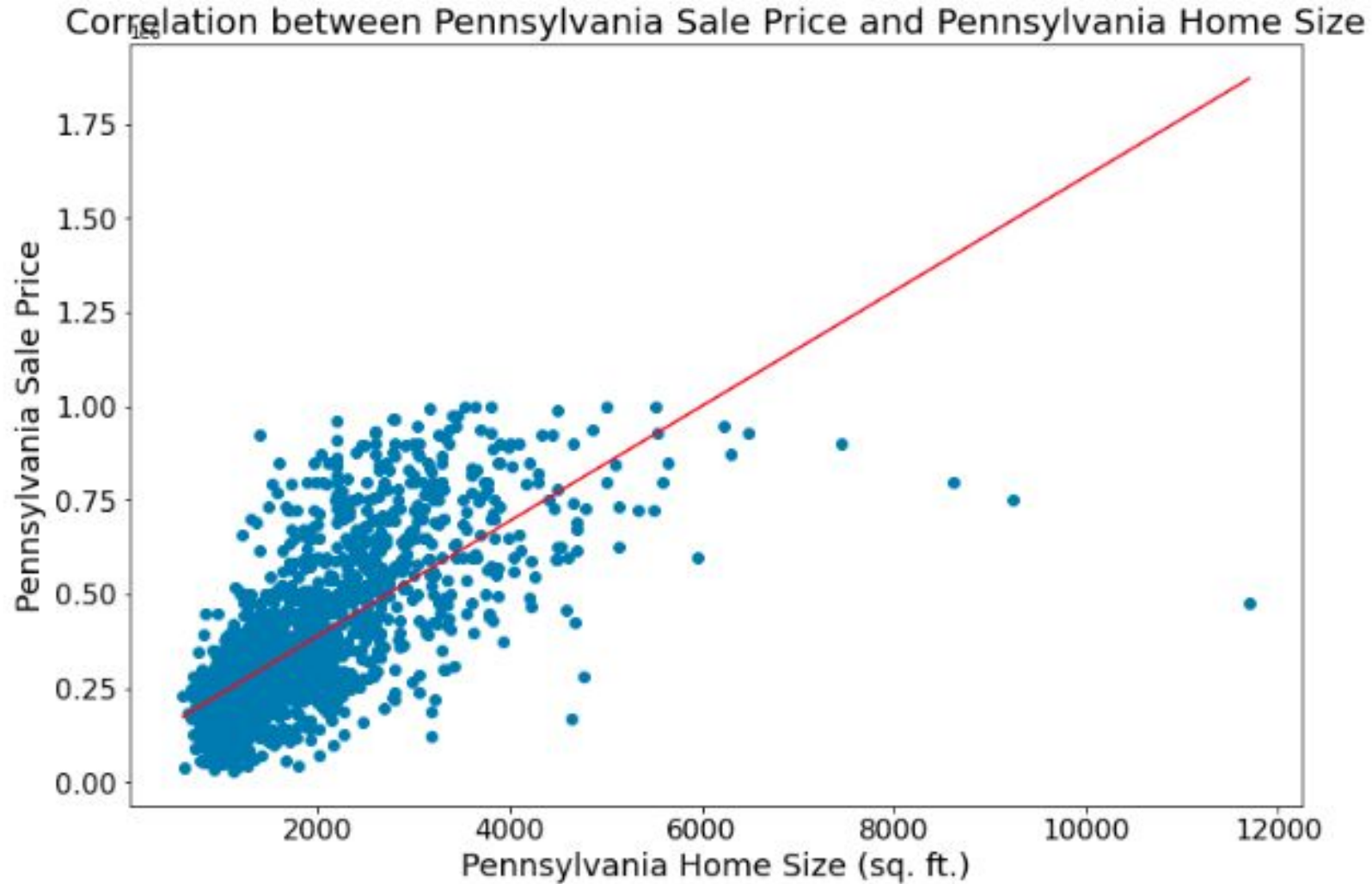


For the state of Pennsylvania, how does the home size impact the selling price for that state and what is the correlation?



- Pennsylvania sample size (1,986 homes)
- Larger sq ft, higher sales price
- 3 outliers listed below

	status	price	bed	bath	acre_lot	street	city	state	zip_code	house_size
588399	for_sale	475000.0	5.0	7.0	2.27	1270 PA 402	Dingmans Ferry	Pennsylvania	18328.0	11700.0
589181	for_sale	750000.0	4.0	5.0	0.65	523 Maple Ridge Dr	Hawley	Pennsylvania	18428.0	9242.0
631507	for_sale	799000.0	2.0	3.0	1.03	1000 Lenape Rd	West Chester	Pennsylvania	19382.0	8619.0



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



# Thank you