

BUS3010

# Insights in Housing Data

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# Hypotheses

## Null Hypothesis

There is no direct correlation between a house's number of bedrooms, lot and living square footage size, to its price.

## Alternative Hypothesis

There is a direct correlation between a house's number of bedrooms, lot and living square footage size, to its price.



# Research Process

01

Determine variables

02

Cleaned and analyzed data

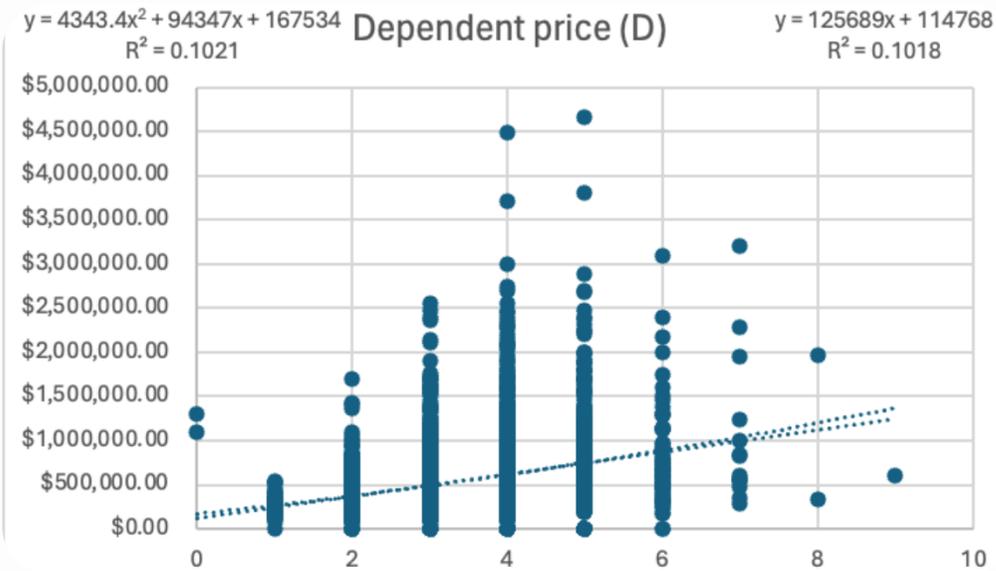
03

Performed linear regression analysis

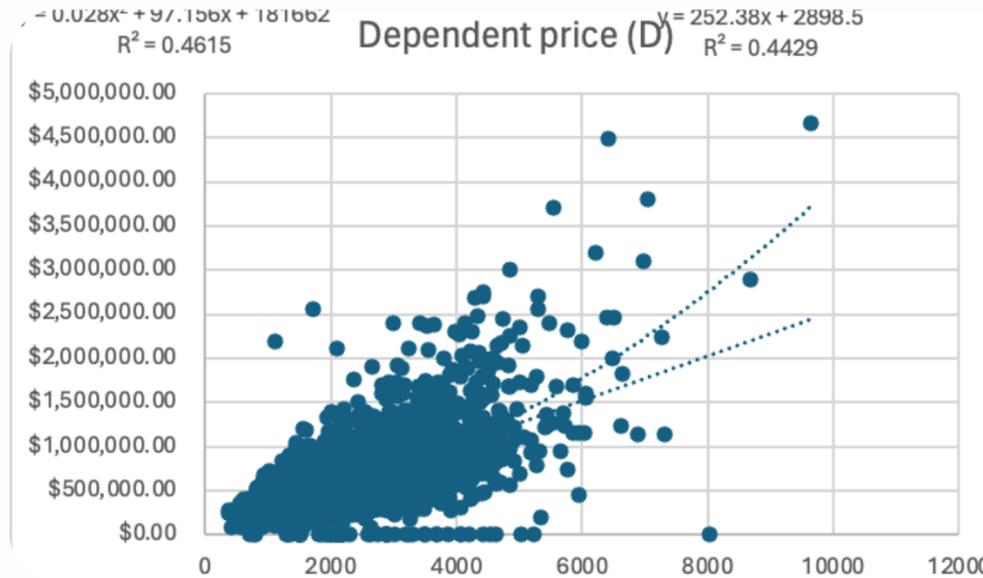
04

Compared findings

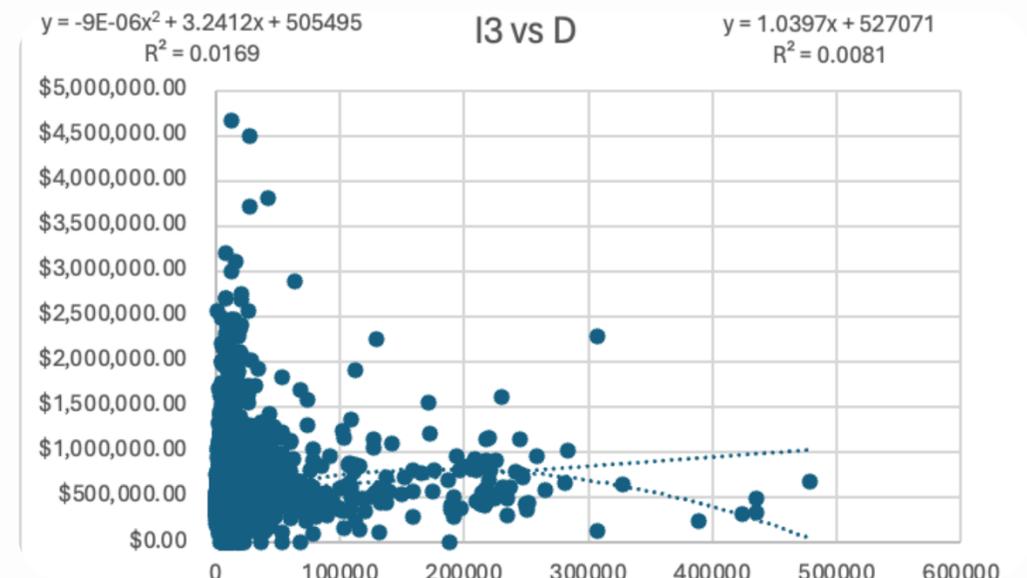
# Variable Correlations



**Bedrooms vs Price**



**Living SQ FT vs Price**



**Lot SQ FT vs Price**

$R^2$  value of 0.19, or 19% variance

$$F = 2.3E-212$$

# FAILURE

Failed to reject the null hypothesis, therefore it is true

# Limitations

01

Missing data variables

02

Market dynamics

03

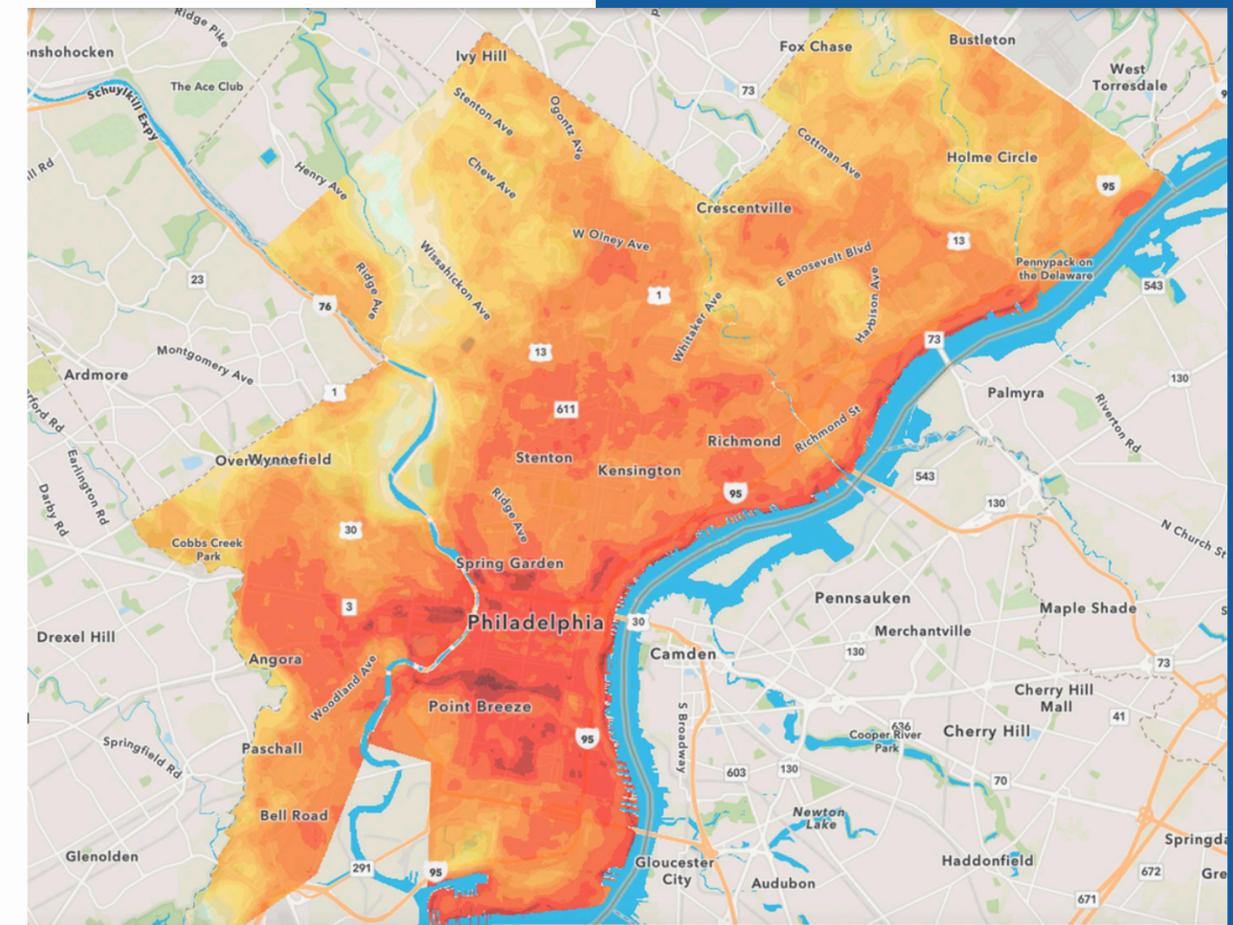
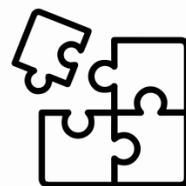
Location data

04

Non-linear relationships

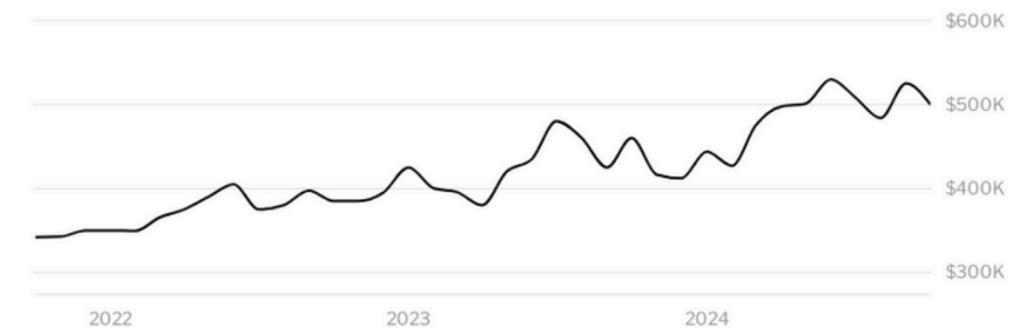
# Recommendations

- ▶ Demographic data 01
- ▶ Current Market Data 02
- ▶ Vicinity data 03
- ▶ Survey buyers 04
- ▶ Data dashboard 05



Heat map

Providence, RI Median Sale Price



Based on Redfin calculations of home data from MLS and/or public records.

● Providence, RI

Line graph

# THANK YOU

## Works Cited

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