

# AFFORDABLE HOUSING

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## IS IT AFFORDABLE?

Affordable: rent that is equal or less than 30% of income

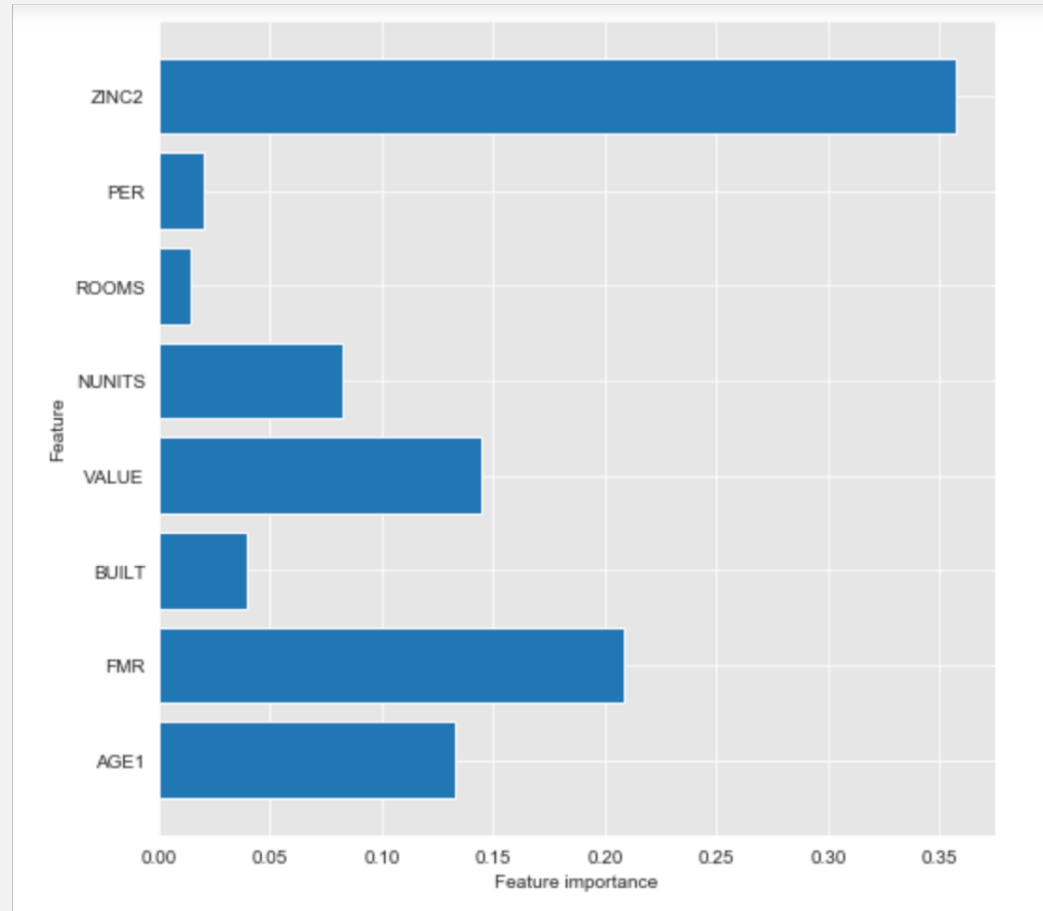
Government housing dataset that tracked over 60,000 housing units in 2013 using a survey – only completed entries were used. Over 20 features in the data set.

# FACTORS

- AGE1: Age of head of household
- ASSISTED: Assisted Housing
- BEDRMS: # of bedrooms in unit
- BUILT: Year unit was built
- BURDEN: Housing cost as a fraction of income
- COSTMED: Housing cost at Median interest
- FMR: Fair Market Rent
- L80: Low income limit (average)
- METRO3: Central city/suburban status
- NUNITS: # of units in building
- OTHERCOST: Insurance, condo, land rent, or other mobile home fees
- OWNRENT: Tenure (adjusted)
- PER: # of persons in household
- REGION: Census Region
- ROOMS: # of room in unit
- STRUCTURETYPE: Recoded structure type
- TOTSAL: Total Wage Income
- TYPE: Structure Type
- UTILITY: Monthly utility cost
- VALUE: Current Market Value of Unit
- ZADEQ: Recoded adequacy of housing
- ZINC2: Household Income
- ZSHMC: Monthly housing costs

## PROCESS

Conducted a series of models to determine which factors determine if a unit is affordable or not.



## **KEY FEATURES: ZINC2**

(Household Income)

This is the feature that played the biggest role in our model. Household income is a big predictor of whether or not a tenant can afford the unit they live in.

Policy Implication:

Raise minimum wage.

## **KEY FEATURES: FMR**

(Free market rent)

How much the unit costs also plays an understandably important role.

Policy Implication:

Cap rent prices.

## **KEY FEATURES: AGE**

(Age of respondent who lived in unit)

The younger a person was, the less affordable the unit was.

Policy Implication:

Provide subsidies or priority housing to first time renters/buyers.



## **KEY FEATURES: VALUE**

(Current market value of the unit)

The value of the unit where the tenant lives is a big predictor of how affordable it is.

Policy Implications:

Complicated –SF as a model

## **KEY FEATURES: NUNITS**

(number of units)

The higher number of units, the more affordable.

Policy Implications:

Emphasis on apartment buildings as opposed to single homes.

## **KEY FEATURES: PER**

(# of people in the household)

The number of people who live in the house effects how affordable it is.

Policy Significance:

Give out higher subsidies based on number of dependents.

## **KEY FEATURES: BUILT**

(age of building)

Policy Significance:

Rent-to-own models should be considered for people living in affordable housing units.

## **KEY FEATURES: ROOMS**

# of rooms

Policy Significance:

Size of unit should be regulated to make it more accessible.