Living in Seattle

Housing price predictors using 2014 Kings County Data

Eric Ma - Data Analyst

Seattle Housing Crisis

Seattle is one of the US's most expensive markets.

Mean prices in 2014 were $540K with some homes over $7M

Thats compared to an average US home price of $180K to $225K

1. Our Model

We took a dataset of housing prices correlated with multiple features to rank which predictors work best

➔ **Prices are HIGH**
   but they are highest in where the views are the best and the condition is not that bad
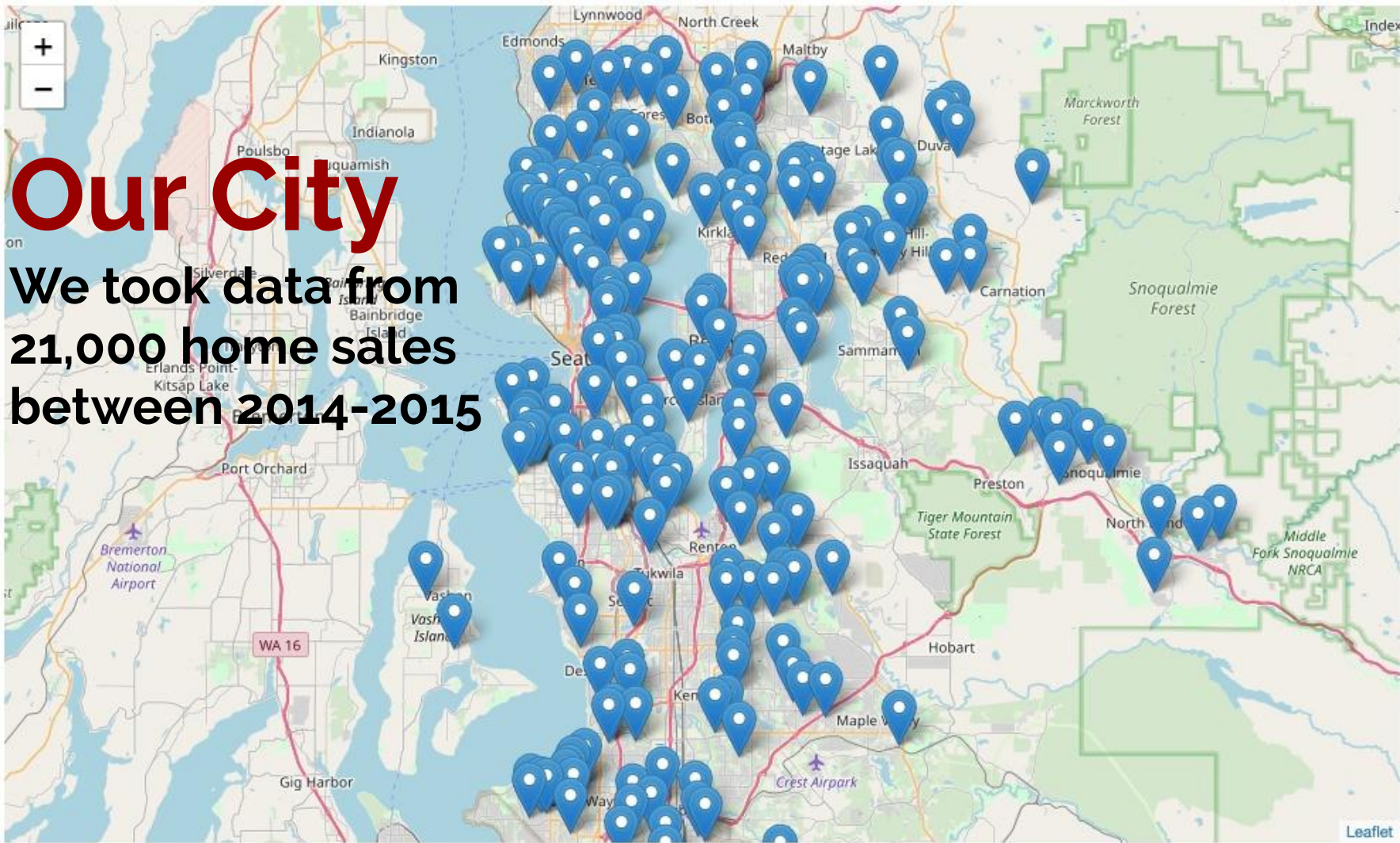
➔ **Best Predictor**
   Living Space. Its hard to get.

➔ **Surprises**
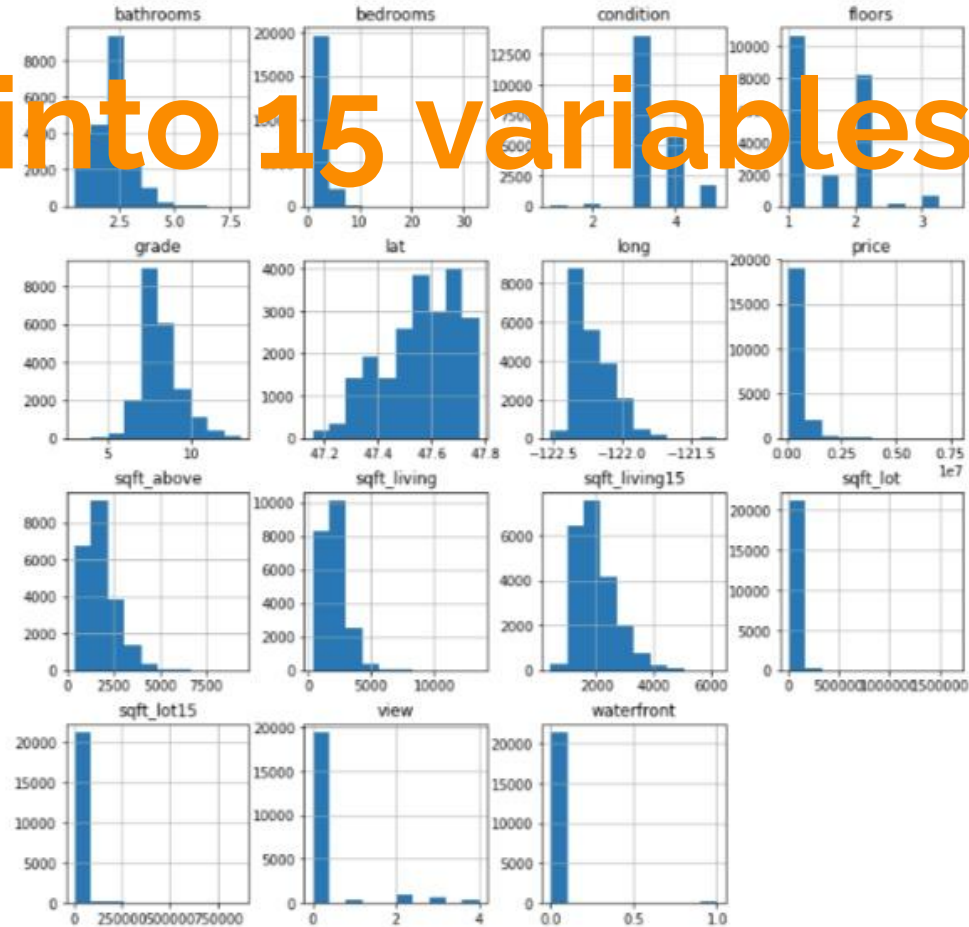   Waterside houses made homeprices pop.

Our City

We took data from 21,000 home sales between 2014-2015
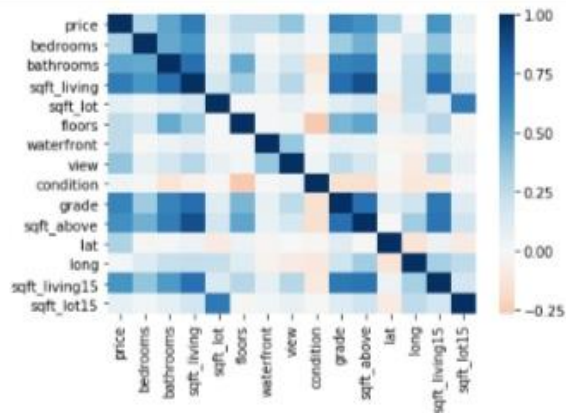
Split it into 15 variables

```
In [16]: abs(kc_df.corr()) > 0.70
```

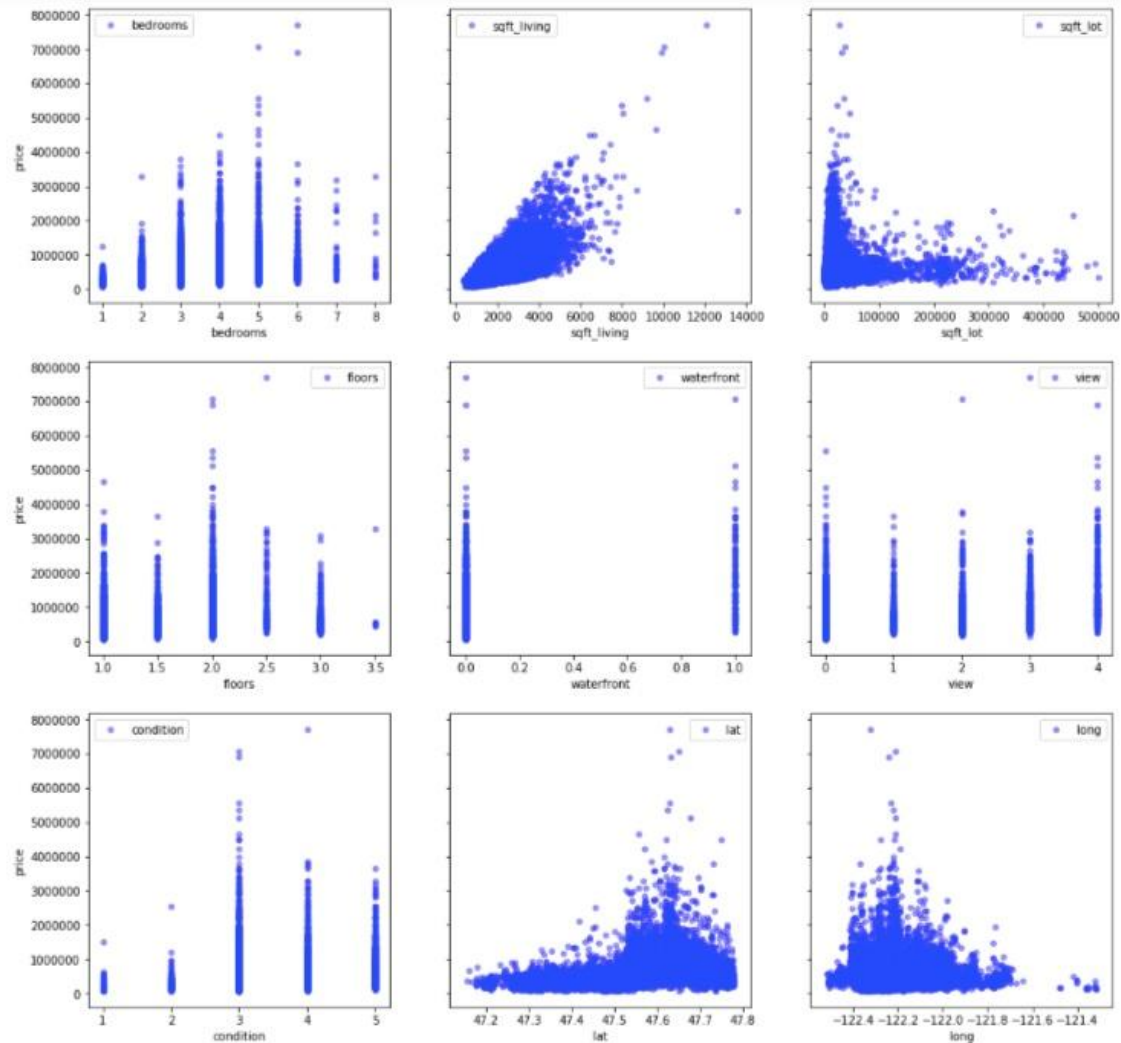|	price	bedrooms	bathrooms	sqft_living	sqft_lot	floors	waterfront	view	condition	grade	sqft_above	lat	long	sqft_living15	sqft_lot15
price	True	False	False	True	False	False	False	False	False	False	False	False	False	False	False
bedrooms	False	True	False	False	False	False	False	False	False	False	False	False	False	False	False
bathrooms	False	False	True	True	False	False	False	False	False	False	False	False	False	False	False
sqft_living	True	False	True	True	False	False	False	False	False	True	True	False	False	True	False
sqft_lot	False	False	False	False	True	False	False	False	False	False	False	False	False	False	True
floors	False	False	False	False	False	True	False	False	False	False	False	False	False	False	False
waterfront	False	False	False	False	False	False	True	False	False	False	False	False	False	False	False
view	False	False	False	False	False	False	False	True	False	False	False	False	False	False	False
condition	False	False	False	False	False	False	False	False	True	False	False	False	False	False	False
grade	False	False	False	True	False	False	False	False	False	False	True	False	False	True	False
sqft_above	False	False	False	True	False	False	False	False	False	True	True	False	False	True	False
lat	False	False	False	False	False	False	False	False	False	False	False	True	False	False	False
long	False	False	False	False	False	False	False	False	False	False	False	False	True	False	False
sqft_living15	False	False	False	True	False	False	False	False	False	True	True	False	False	True	False
sqft_lot15	False	False	False	False	True	False	False	False	False	False	False	False	False	False	True

```
In [17]: sns.heatmap(kc_df.corr(), center=0, cmap='RdBu');
```


Ran correlation between all 15 variables

Where the data leads

Some values were highly correlated. Some were extraneous.

Top Correlators

1. Living space
2. North Side of Seattle
3. The View

Extraneous

Number of Bathrooms

Grade

How big your neighbors house is

Good night Seattle