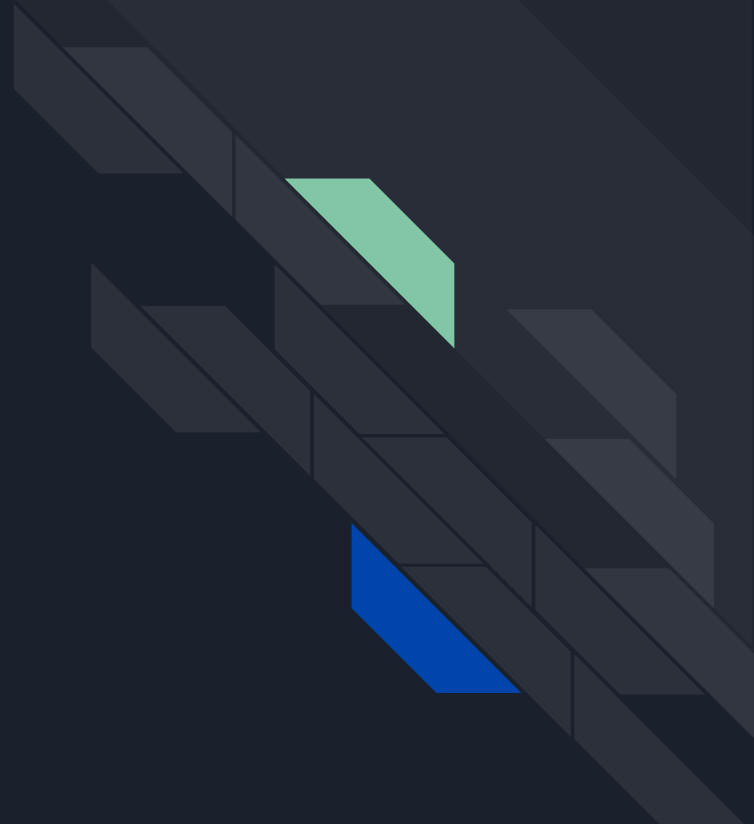# Home Pricing Project

Home pricing models for the city of Seattle
By Zander Bailey and Anna Zubova

Team Z

Zander

Anna

Sales Data for Seattle Homes

- Based on sales during 2014-2015

- Includes many features

- Basis for prediction model

  - Average buyer

date	price	bedrooms	bathrooms	sqft_living
10/13/2014	221900.0	3	1.00	1180
12/9/2014	538000.0	3	2.25	2570
2/25/2015	180000.0	2	1.00	770
12/9/2014	604000.0	4	3.00	1960
2/18/2015	510000.0	3	2.00	1680

Sales Data Features

❖ Price

❖ Things that may affect price:

➢ Total Living Space

➢ Waterfront

➢ Number of floors

➢ Size of neighboring houses

Process

- Baseline Error - Average price
- Initial predictor
  - Square footage
- Additional factors
  - Waterfront
  - Size of neighboring houses
- Budget - 1.2 million
  - Remove outliers

Model

- Included distance from commercial centers
  - Bellevue
  - Downtown
  - South Lake Union

OLS Regression Results			
Dep. Variable:	price	R-squared:	0.727
Model:	OLS	Adj. R-squared:	0.727
Method:	Least Squares	F-statistic:	3890.
Date:	Wed, 17 Apr 2019	Prob (F-statistic):	0.00
Time:	17:25:29	Log-Likelihood:	-2.6599e+05
No. Observations:	20439	AIC:	5.320e+05
Df Residuals:	20424	BIC:	5.321e+05
Df Model:	14		
Covariance Type:	nonrobust		

Prices in Proximity to Areas
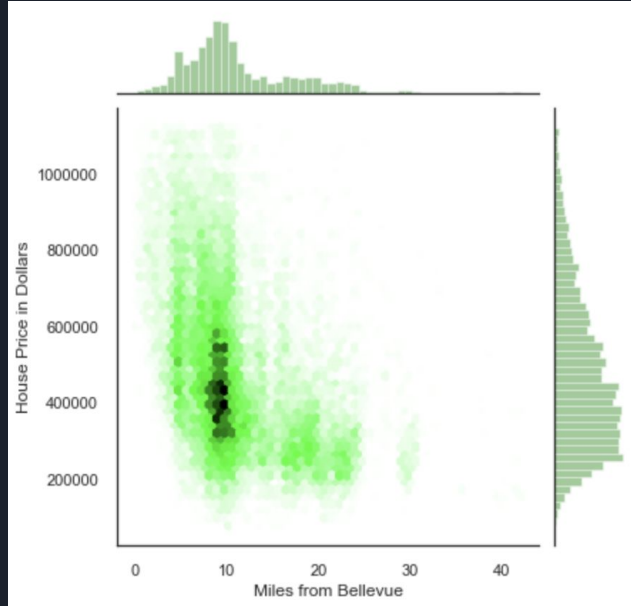
Bellevue
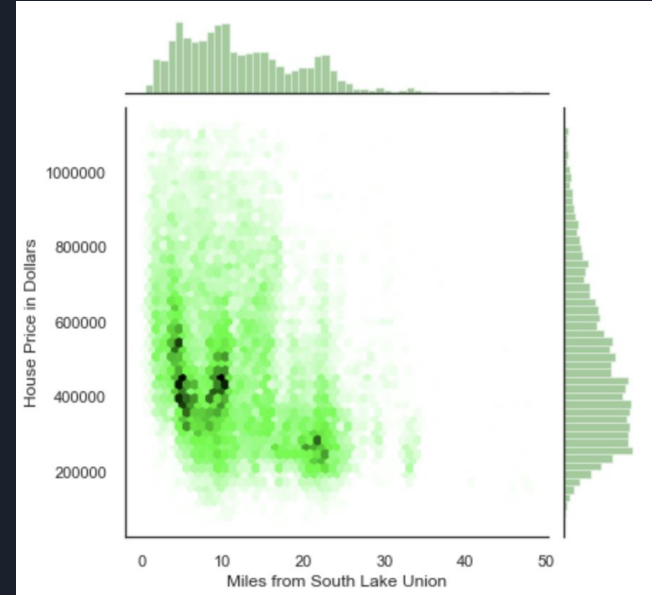
South Lake Union

Other Factors

- ❏ Waterfront
- ❏ Bathrooms

Evaluation

- Model reduced errors by 70% from baseline metric
- Location, Location, Location

Questions