Phase 2 Project

Leah Pope

Flatiron Cohort: 81720-ONL-DS-FT

10/16/2020

The Business Problem

Persona – Buyers looking for scenic homes in King County, WA

Needs – "We want to know where to find scenic homes in King County. We also want to know what home prices could look like in the near future."
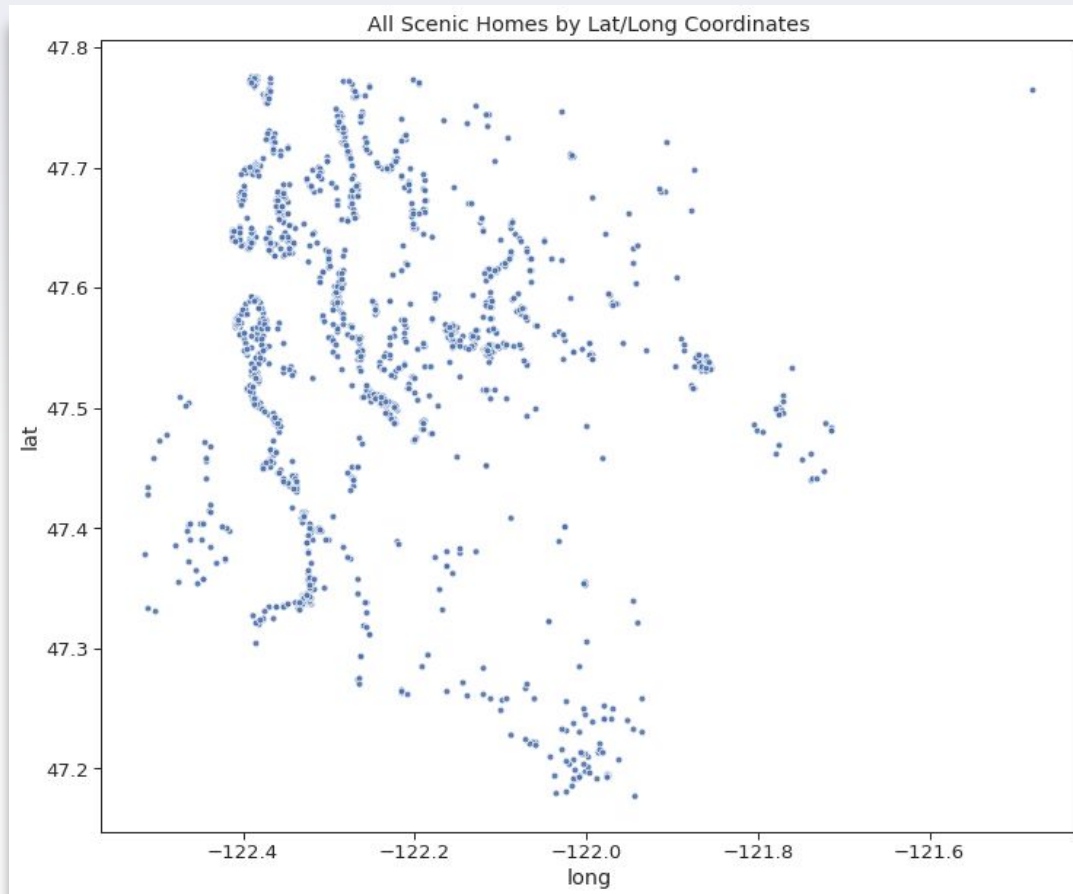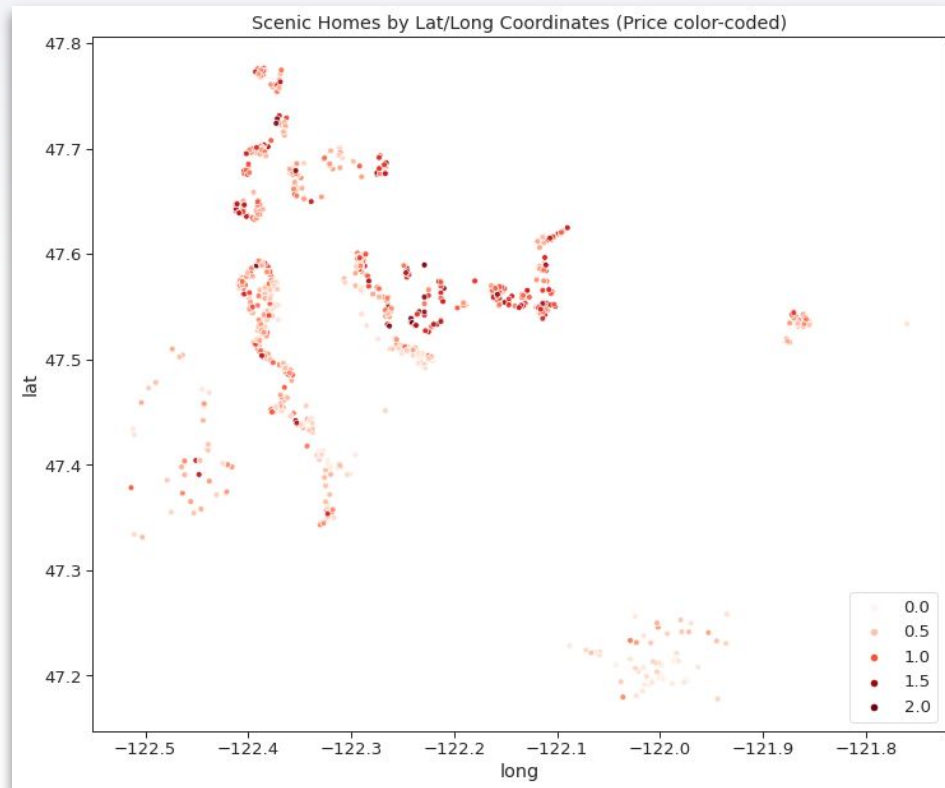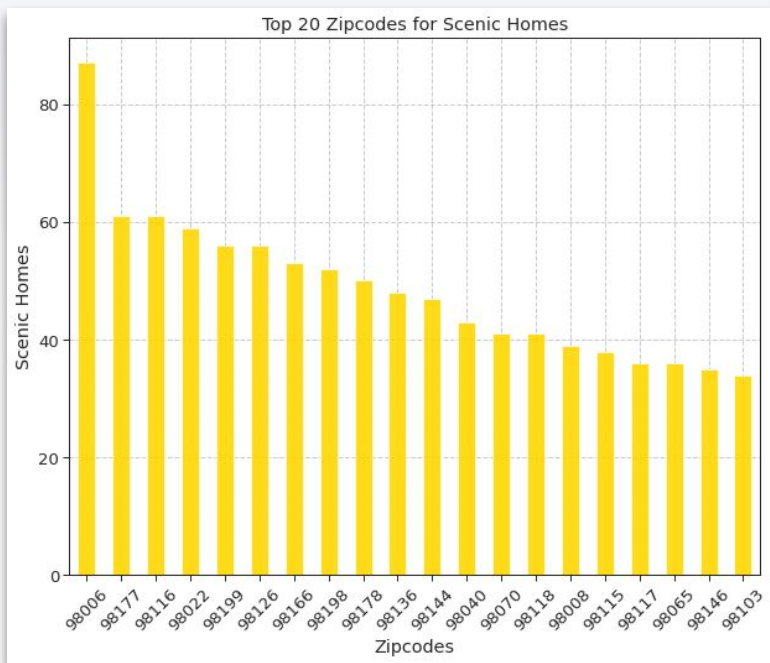
1

Locating Scenic Homes

Where are scenic homes located?

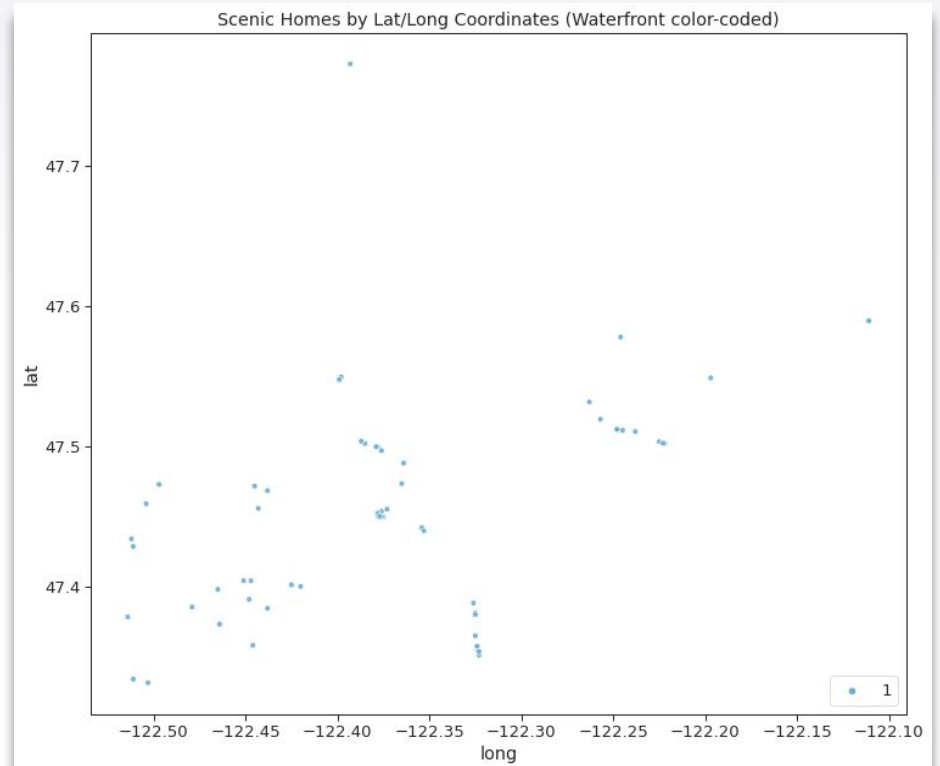"Scenic" means waterfront and/or a higher than average view score.

Scenic homes are spread throughout King County. Narrow the field.

All Scenic Homes by Lat/Long Coordinates
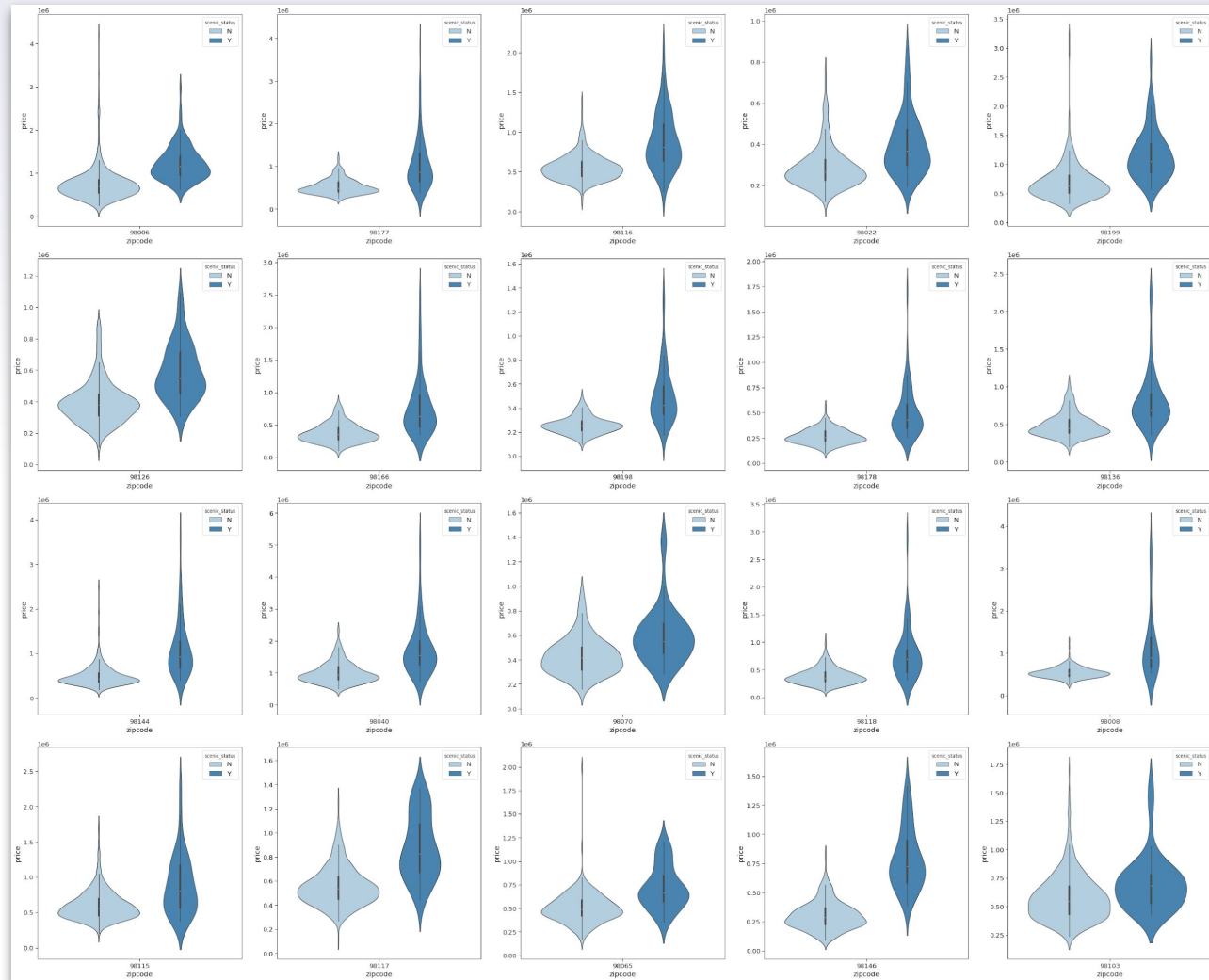
Narrow to Top 20 Zipcodes

View vs Waterfront
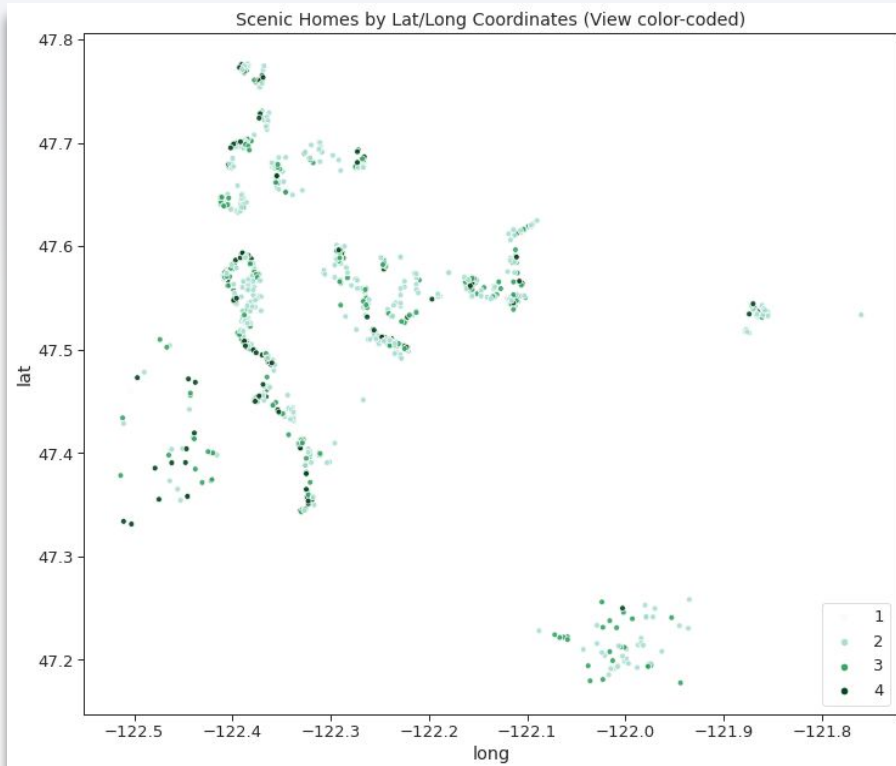
Price Diff?

YES

Scenic home prices tend to be higher than regular home prices.

2

Predicting Home Prices

Price Prediction

- Multivariate Linear Regression model with *20* features
- *Grade* features were very influential
  - 12, 11 & 10 (Above Average Grade) had the most *positive* correlation to Price
  - 4 ,5, 6 & 7 had the most *negative* correlation to Price
    - Grades <6 aren't up to Building Code
- *View* features were also influential
  - All 4 View Rankings had *positive* correlation to Price
  - Order of influence: 4, 1, 3, then 2

THANKS!

Any questions?

You can find me at:

▸ leah@metisconsultingllc.com

▸ https://www.linkedin.com/in/leahspope/
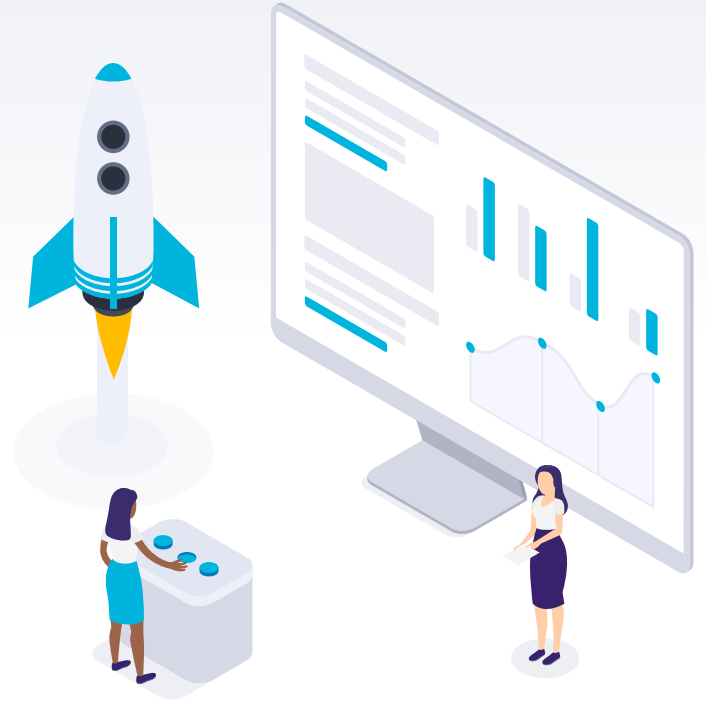
▸ https://github.com/lspope/dsc-phase-2-project-online

Appendix

Future Work

New Persona: King County government officials

Improvement Trends

What percentage of homes are being renovated?

What types of homes (large/small/historic/older) are being renovated?

Tax Assessment Insights

Are homes that are larger than neighboring homes getting a 'tax break' in being compared to smaller properties?

Home Quality Insights

Are there differences home quality between zip codes/county subregions?

Price Prediction: Subregions

22 Subregions

Region titles indicate King County has a mix of Urban and Rural areas.

Model per Subregion

Create models for each Subregion instead of a single model trying to predict across a wide range of residential areas.

Credits

Special thanks to all the people who helped me during this project!

- Cohort Members, Instructor: Rafael Carrasco, Ed Coach: Talia Salzberg Horowitz
- Colleagues, Friends, and Family for moral support and encouragement!

Presentation Credits

Special thanks to all the people who made and released these awesome resources for free:

▶ Presentation template by SlidesCarnival

▶ Illustrations by Sergei Tikhonov

▶ Photographs by Unsplash

THANK YOU!

Leah Pope

Full Time Flatiron Data Science Student

leah@metisconsultingllc.com

https://www.linkedin.com/in/leahspope/

https://github.com/lspope/