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

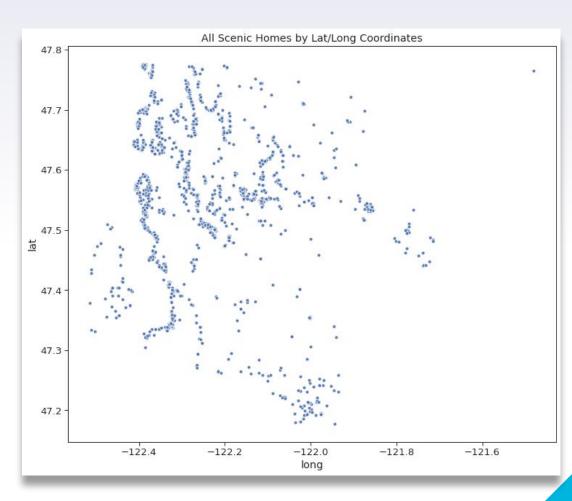




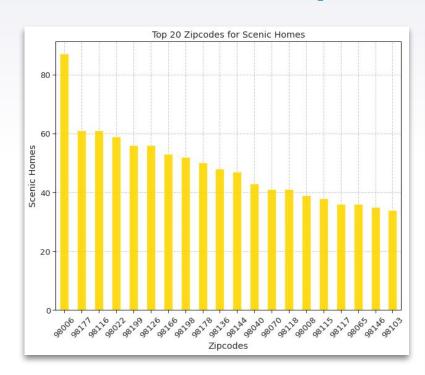
Where are scenic homes located?

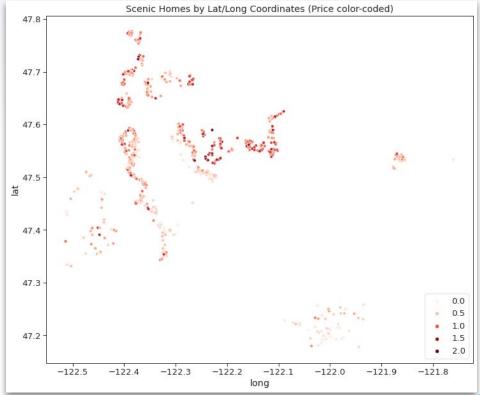
"Scenic" means waterfront and/or a higher than average view score.

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

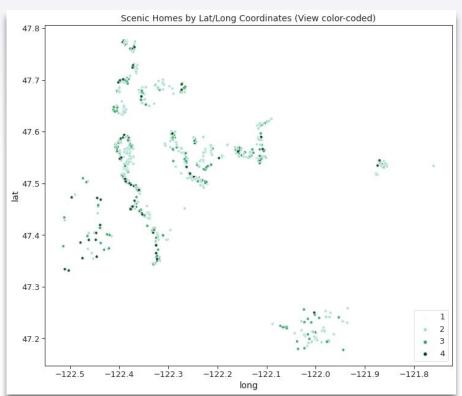


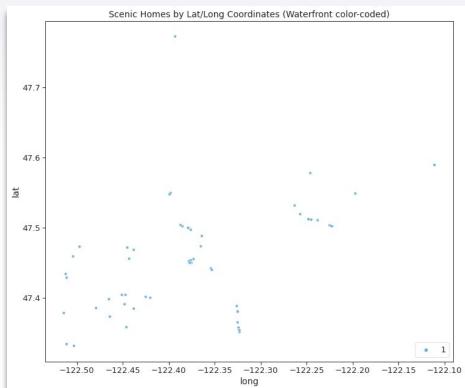
Narrow to Top 20 Zipcodes





View vs Waterfront

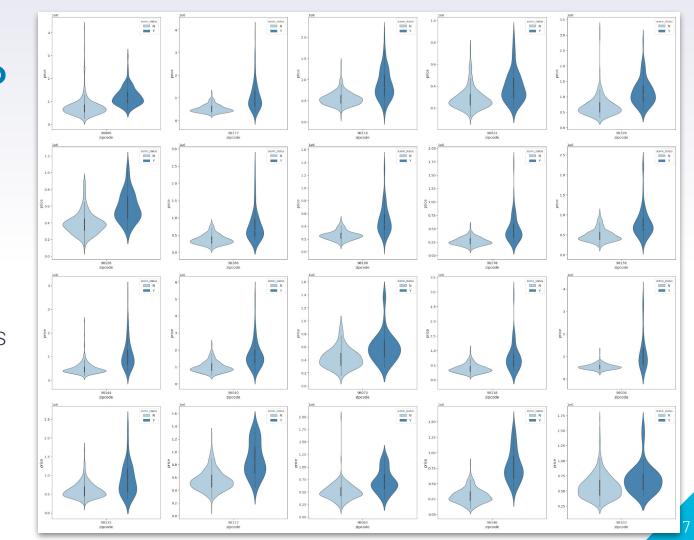




Price Diff?

YES

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



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</p>
- View features were also influential
 - All 4 View Rankings had positive correlation to Price
 - Order of influence: 4, 1, 3, then 2

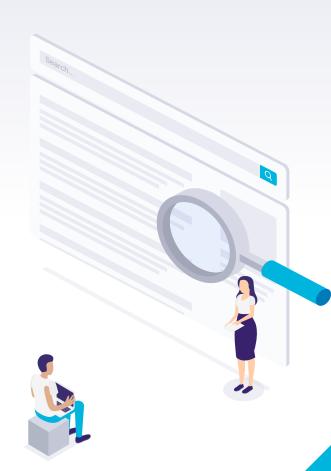


THANKS!

Any questions?

You can find me at:

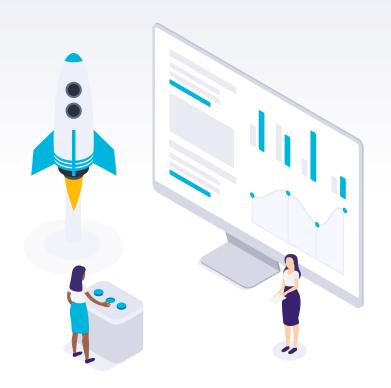
- <u>leah@metisconsultingllc.com</u>
- https://www.linkedin.com/in/leahspope/
- https://github.com/lspope/dsc-phase-2project-online



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 <u>SlidesCarnival</u>
- Illustrations by <u>Sergei Tikhonov</u>
- Photographs by <u>Unsplash</u>

THANK YOU!

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