

# Phase 2 Project

## Leah Pope

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# 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

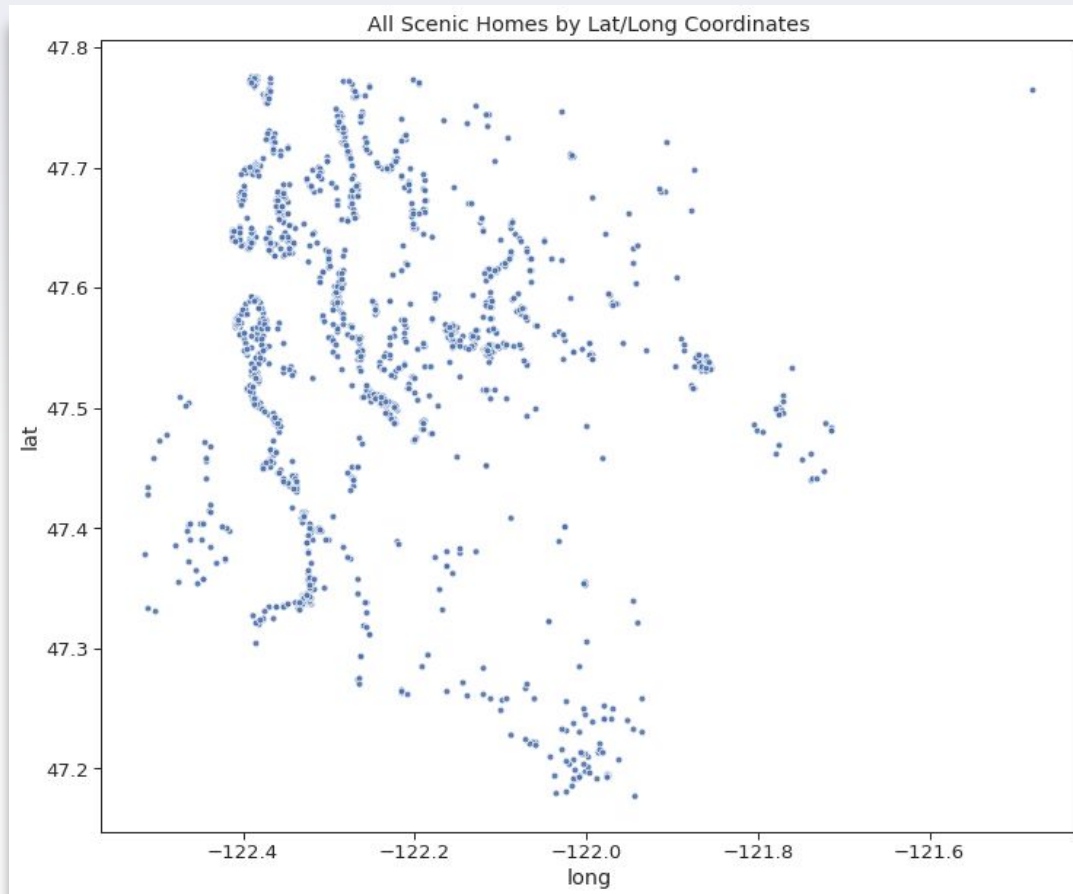
# Locating Scenic Homes



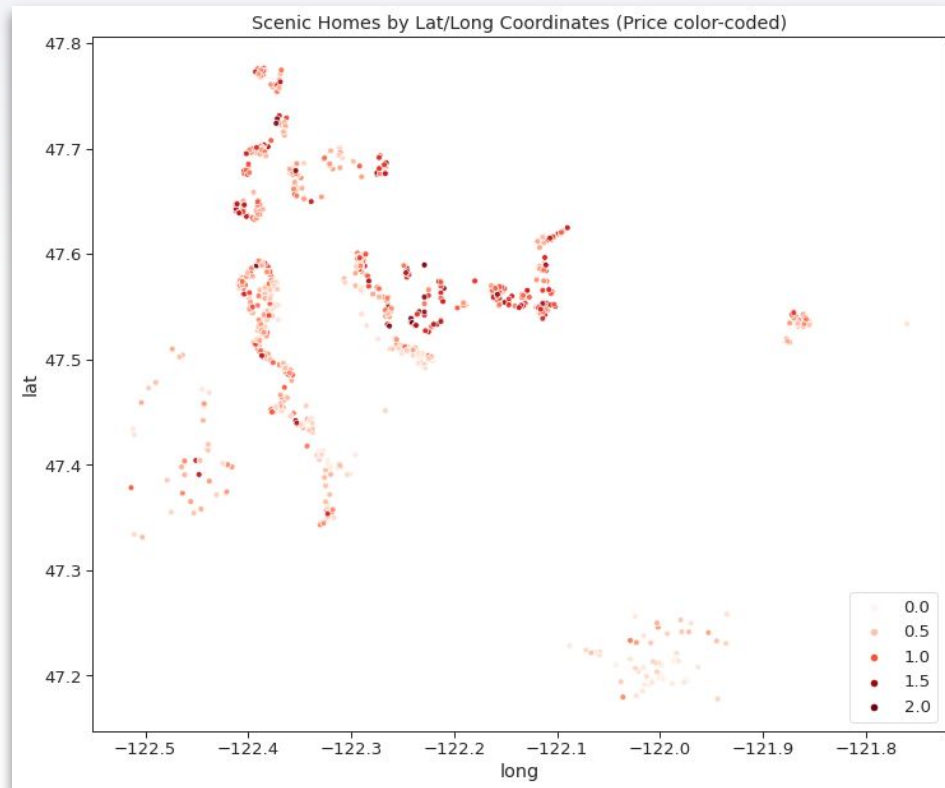
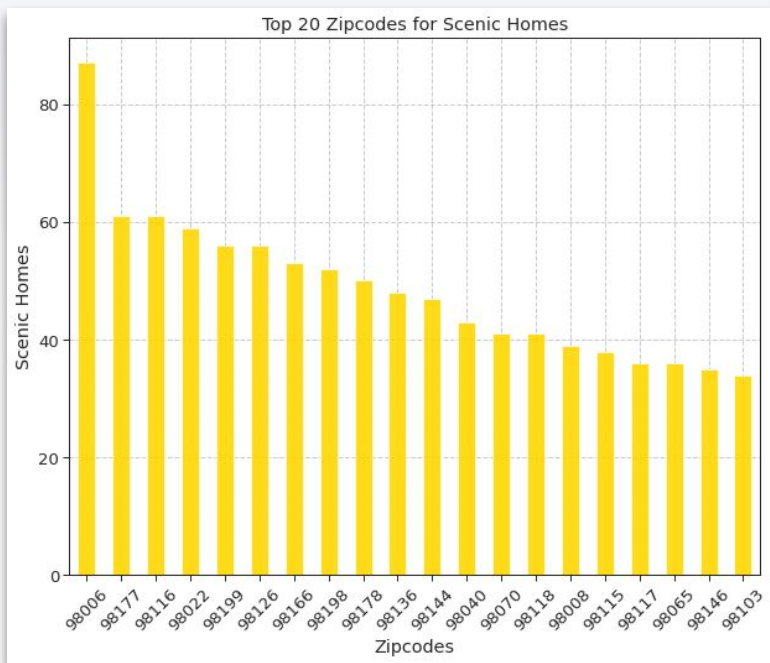
# Where are scenic homes located?

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

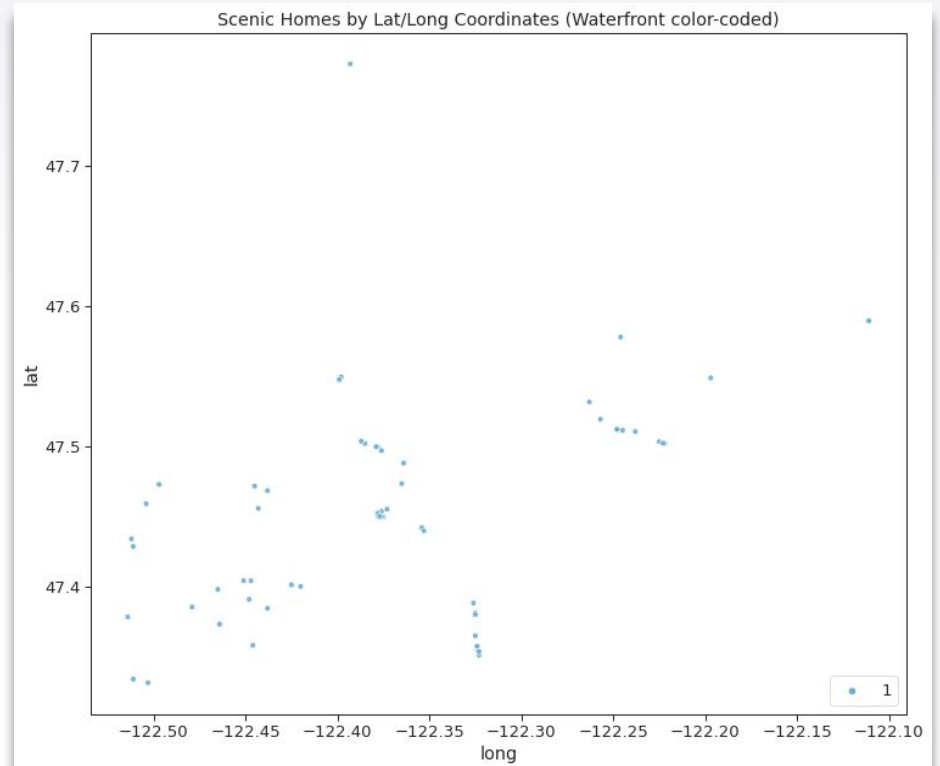
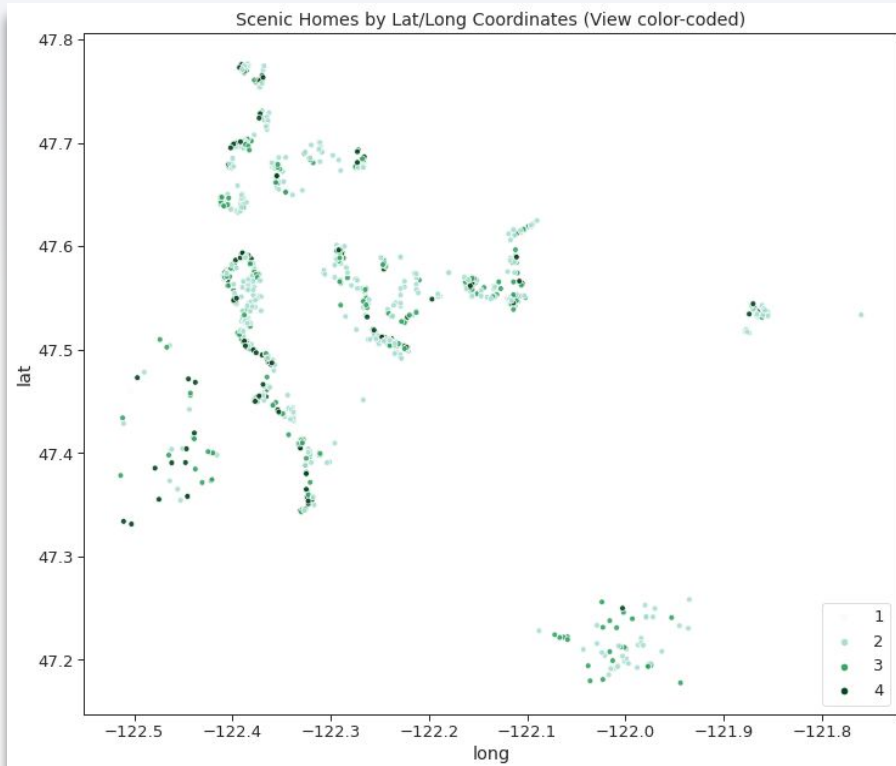
Scenic homes are spread throughout King County.  
Narrow the field.



# Narrow to Top 20 Zipcodes



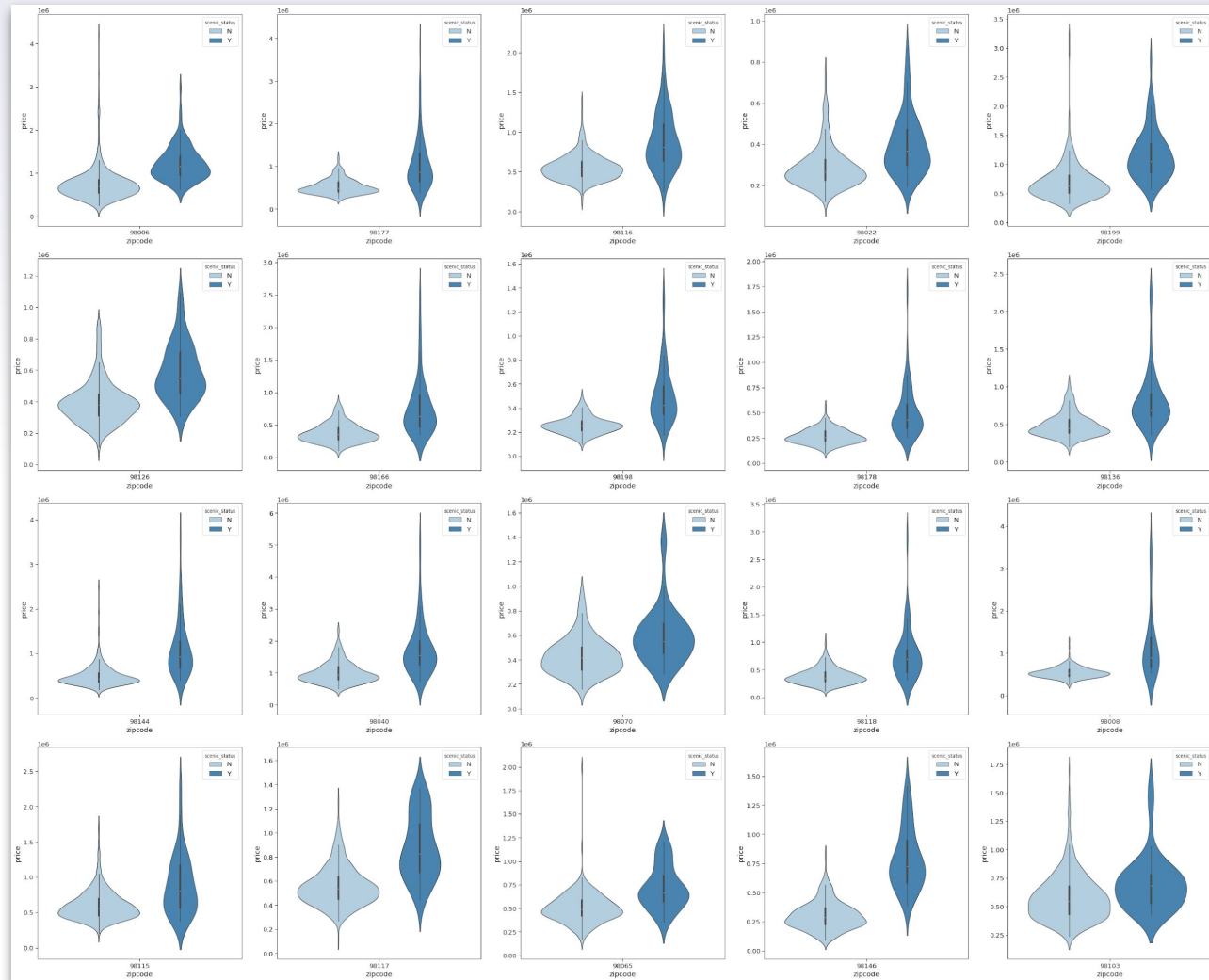
# View vs Waterfront



# Price Diff?

YES

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



2

# Predicting Home Prices





# Price Prediction

- ▶ Multiple 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](mailto:leah@metisconsultingllc.com)
- ▶ <https://www.linkedin.com/in/leahspope/>
- ▶ <https://github.com/lspope/dsc-phase-2-project-online>

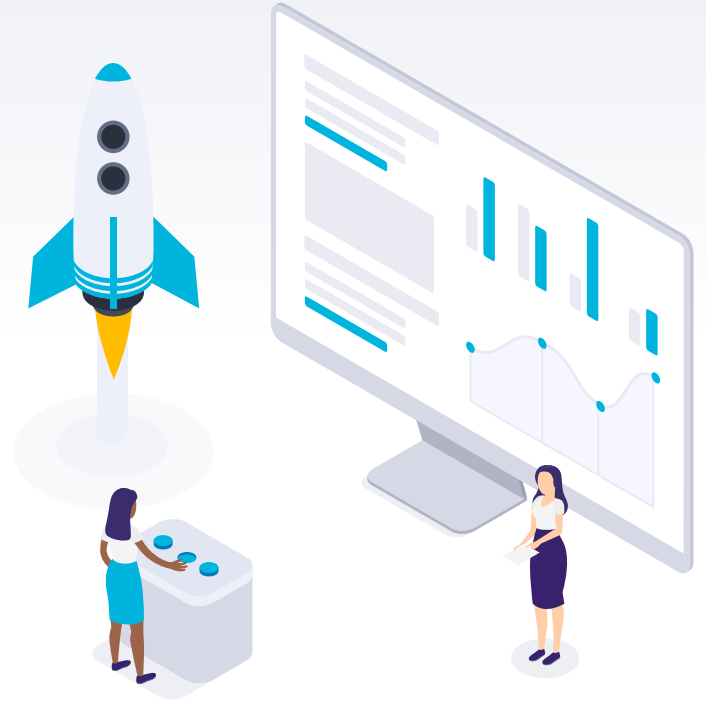


# Appendix





# 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!

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