

# No Place Like Home

An Analysis of King County, WA Real Estate

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# Business Introduction

- The magazine “**Home Owners Yearly**”
- **Renovations** that increase the estimated value of their readers homes.
- Subscriber base: **middle to upper middle class** homeowners



### 3 Main Questions

- Will increasing the **living area size** lead to an associated increase in the **value of the home**?
- Will adding **bedrooms or bathrooms** lead to an associated increase in the **value of the home**?
- Is the **grade or condition** rating of the house associated with the **value of the home**?

# Data: Pros and Cons

## Pros:

- Represents a **middle to upper class neighborhood**
- **Includes information** the magazine asked for

## Cons:

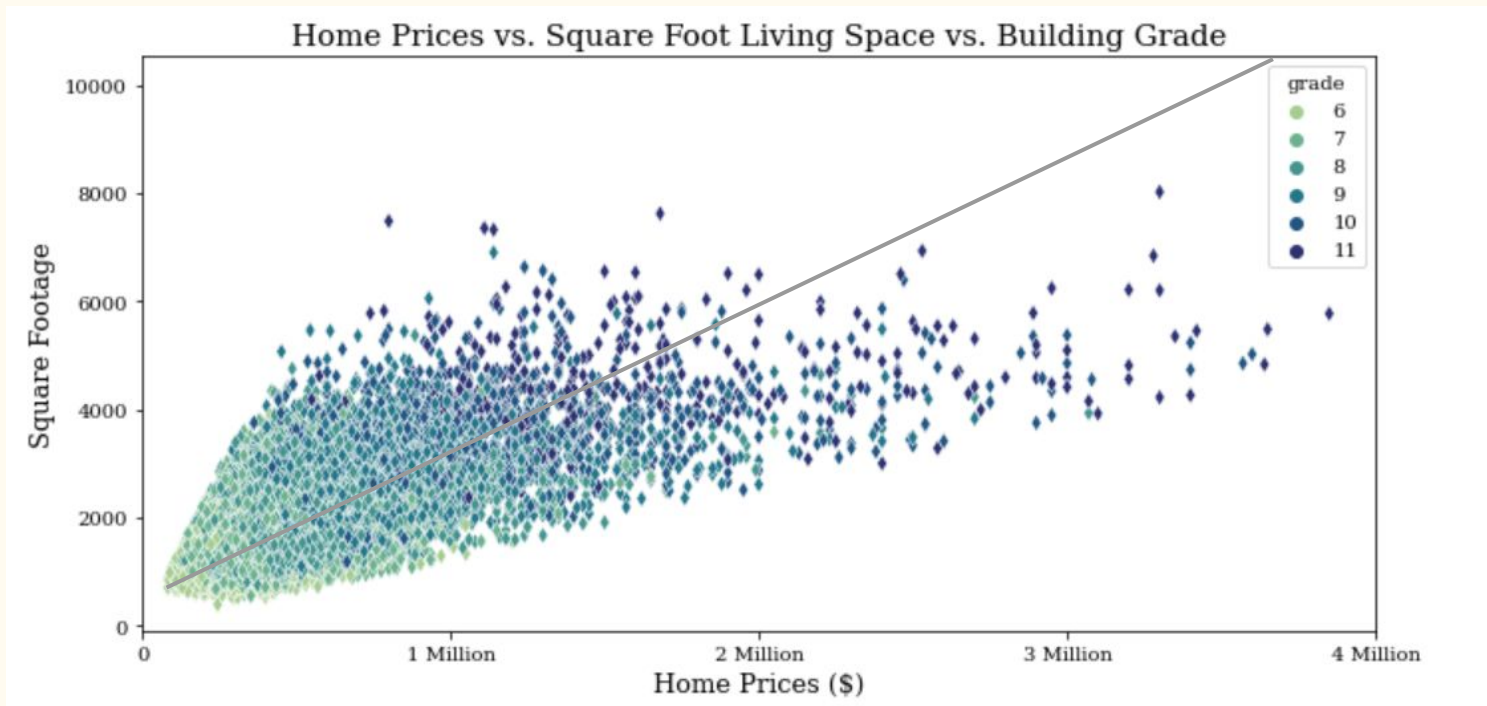
- **Not representative** of the whole USA
- Doesn't include **all possible renovations**

# Data: Intro

After data cleaning:

- **21,225** houses
- Mean sale price **\$535,000**





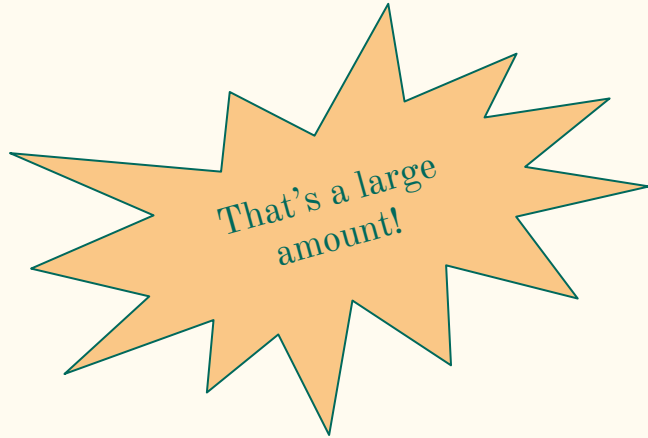
Increased **living space** is associated with increased **prices** and **building grades**.

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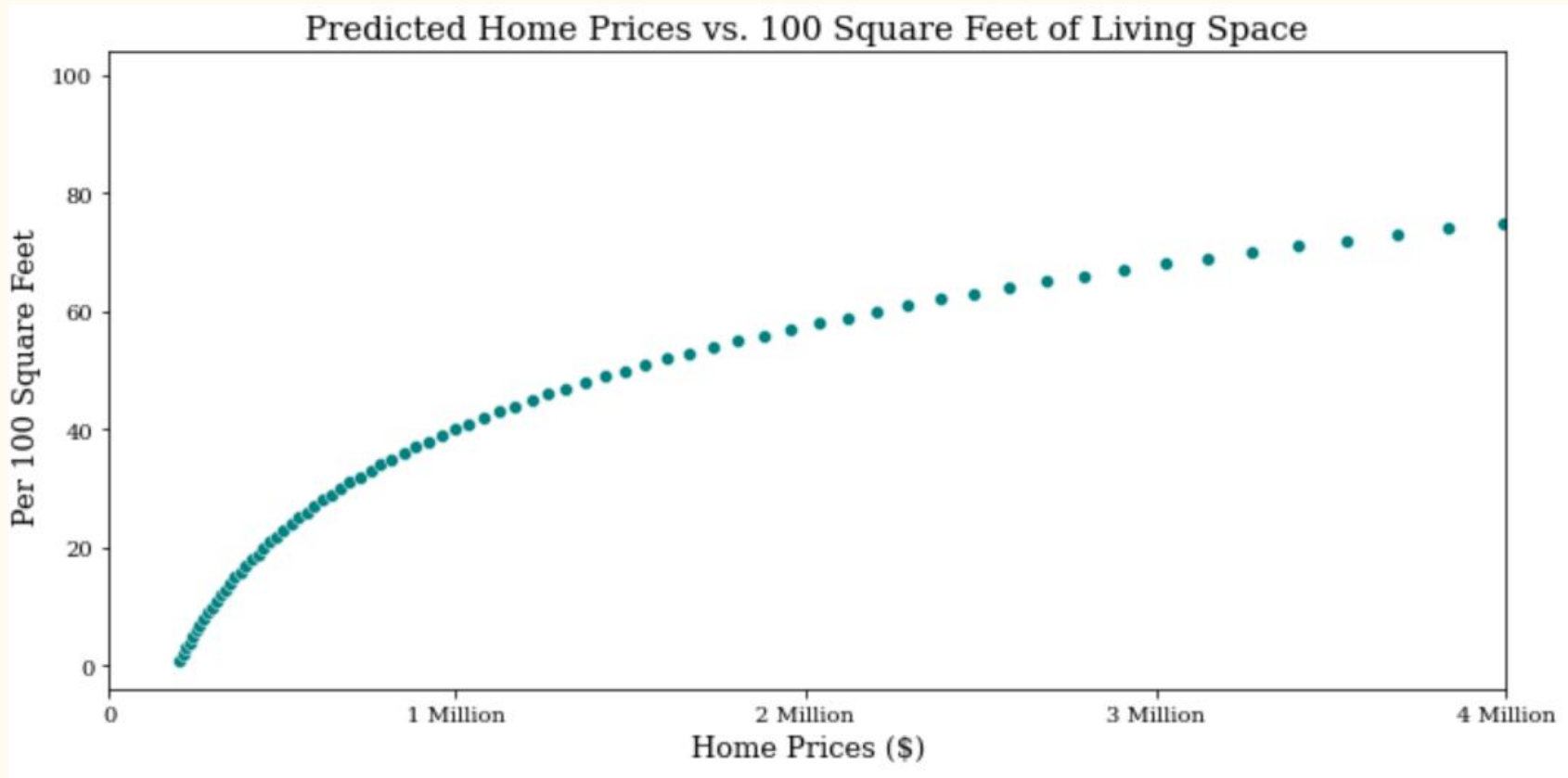
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# Living Area Size: Model

- Living area explains **46%** of the **total home price**



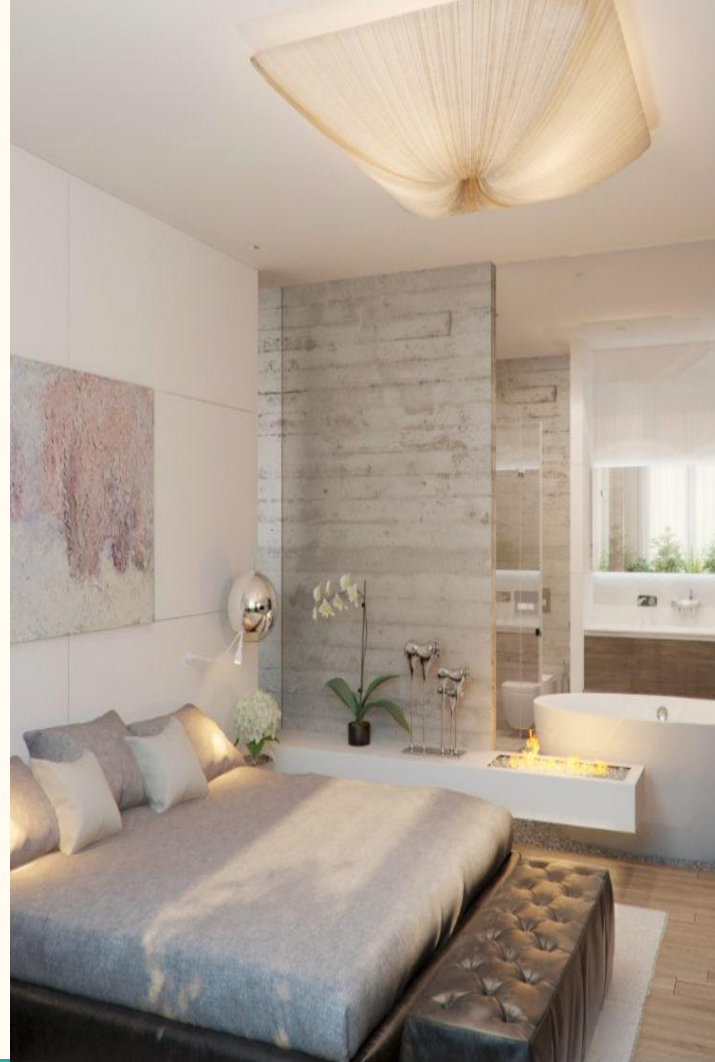




Prediction of **home prices** when looking at the square footage of the **living area**.

# Bedrooms and Bathrooms: Model

- **22.9%** of home sales prices explained by **number of bedrooms and bathrooms**
- Adding **bathrooms** increases the price **more** than adding **bedrooms**.



# Building Grade and Maintenance Conditions: Model

- **Living area, grade, and condition** together explain **54.8%** of the home price.
- **Maintenance conditions** increase price only at the highest level
- Higher building grades ➡ higher prices



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# Summary

Does increasing \_\_\_\_\_ *increase the sales price?*

<b>Living area</b>	<b>Yes!</b>
<b>Bedrooms and Bathrooms</b>	<b>Yes!</b> But <b>bathrooms</b> lead to a <b>larger increase</b> .
<b>Building Grade</b>	<b>Yes!</b>
<b>Maintenance Condition</b>	Only at the <b>highest level</b> .

# Possible Next Steps

- Look at data from **other counties**
- **Disentangle the overlap** between living space and bedrooms/bathrooms
- Investigate **other renovations** (plumbing, electric, ect.)



# Thank you!

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