

# Appraising Homes in King County, Washington

A project for The Hazel Paisley Appraisal Corporation

## Project Goal:

a fast and reliable formula for  
home appraisal in King County

## **The Data:**

- roughly 30,000 home sales
- June 10, 2021 — June 10, 2022
- King County, Washington, (the Seattle metro area)

Which features contribute most to a fair market value appraisal of a home in the Seattle area?

- **median neighborhood price**
- **living area (in square feet)**
- **zip code**
- **waterfront**
- **view**
- **sewer system**

Baseline home price for our model:  
\$806,800

This baseline assumes ...

- median neighborhood price: \$1,000,000
- living area: 2,000 ft<sup>2</sup>
- zip code: lowest level (more details soon)
- waterfront: no
- view: none
- sewer system: public

# Private Sewer Systems

Baseline: \$806,800

Price estimate decreases by \$68,500 for properties that use private sewer systems.



# View

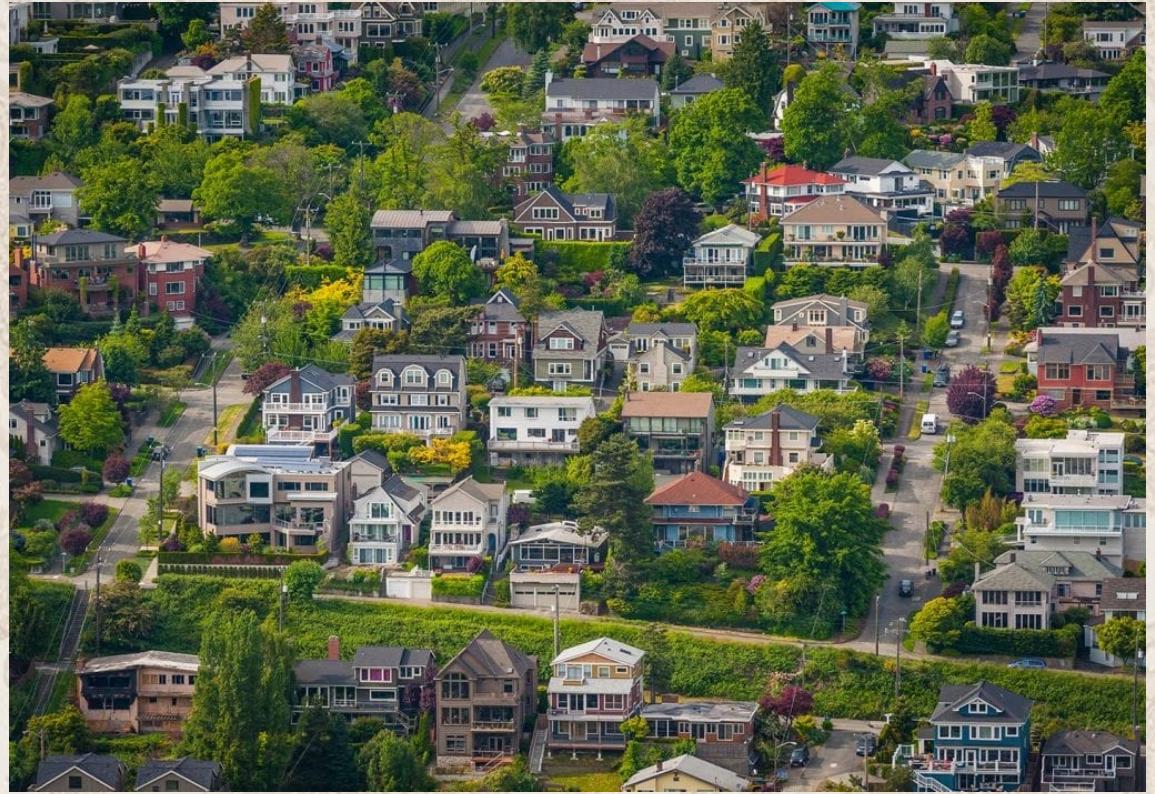
Baseline: \$806,800

“None”	+ \$0
“Fair”	+ \$115,000
“Good”	+ \$230,000
“Excellent”	+ \$345,000



# Neighborhood Median Price

Baseline: \$806,800



Price estimate increases (decreases) 63 cents for every dollar above (below) a neighborhood median price of \$1,000,000

# Neighborhood EXAMPLE

Baseline: \$806,800

Neighborhood benchmark:  
\$1,000,000

Multiplier: 0.63

## Example

neighborhood mean: \$1,050,000  
benchmark: -\$1,000,000  
difference: \$50,000

...  
multiplier: x 0.63  
neighborhood premium: \$31,500

baseline: \$806,800  
neighborhood premium: +\$31,500  
**appraised value:** \$838,300

# Waterfront Area Premium

Baseline: \$806,800

Price estimate increases (decreases) \$529 *per square foot*  
above (below) 2,000 ft<sup>2</sup>



# Waterfront EXAMPLE

Baseline: \$806,800

Area benchmark: 2,000 ft<sup>2</sup>

Multiplier: \$529

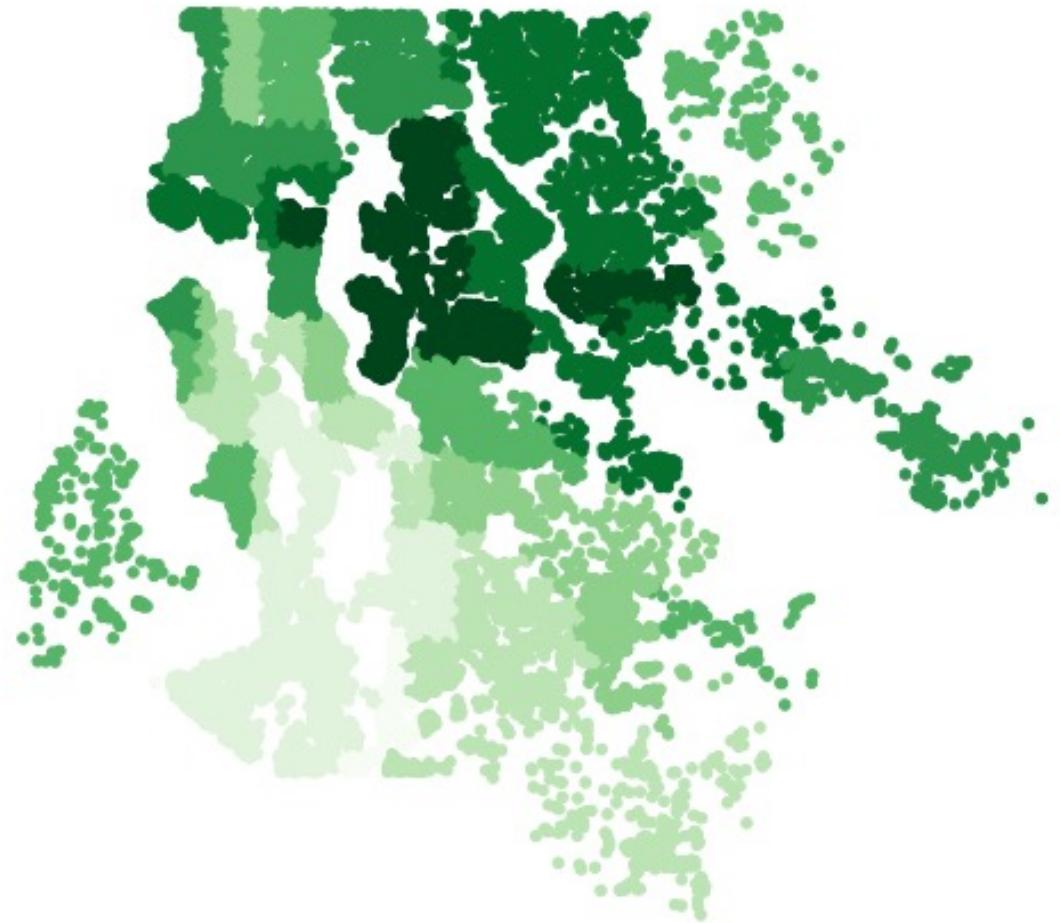
living area:	2,300
benchmark:	<u>- 2,000</u>
difference:	300
	...
multiplier:	x \$529
waterfront premium:	\$158,700

baseline:	\$806,800
waterfront premium:	+ <u>\$158,700</u>
<b>appraised value:</b>	<b>\$965,500</b>

# Zip Code Level Premium

Baseline: \$806,800

Price estimate increases  
\$50,000 per zip code level

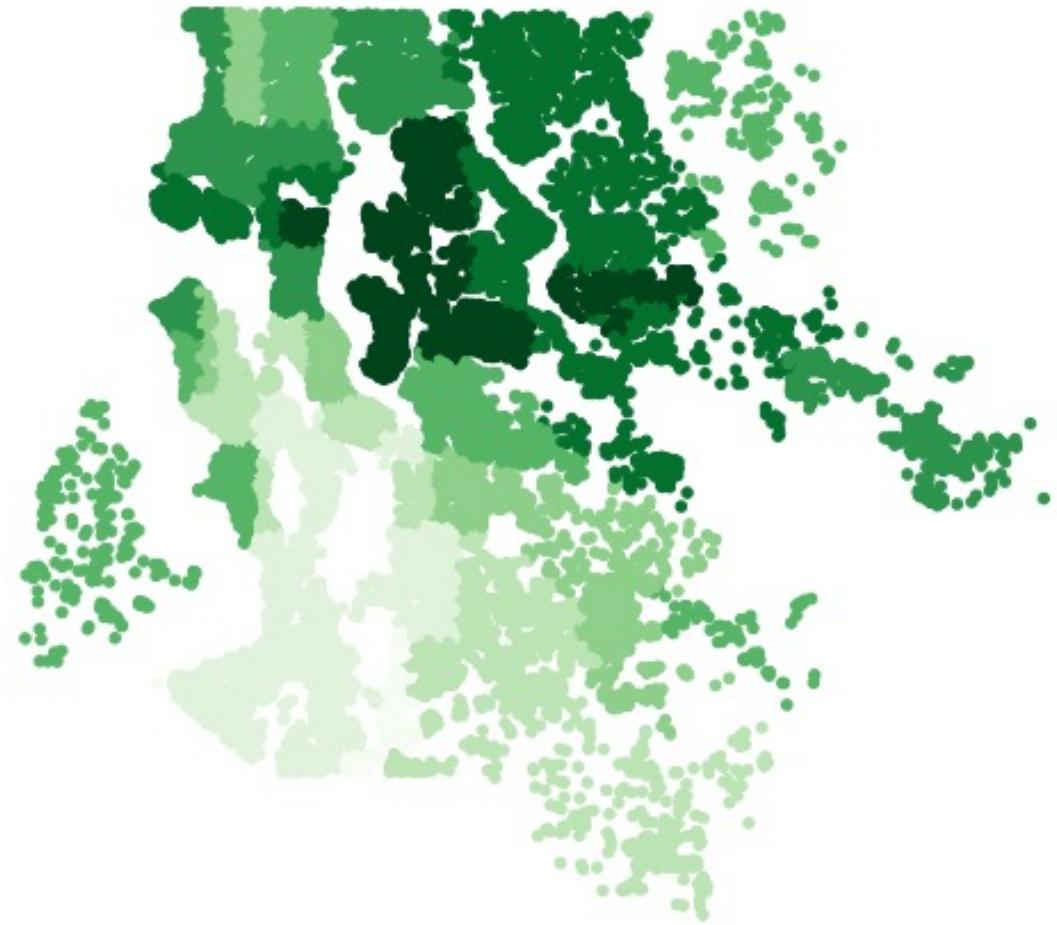


Level 0	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
+\$0	+\$50k	+\$100k	+\$150k	+\$200k	+\$250k	+\$300k	+\$350k

# Zip Code Area Premium

Baseline: \$806,800

Price estimate increases (decreases)  
*\$61 per zip code level, per square foot,*  
above (below) 2,000 ft<sup>2</sup>



Level 0	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
+\$0	+\$61	+\$122	+\$183	+\$244	+\$305	+\$366	+\$427

# Zip Code EXAMPLE

Baseline: \$806,800

Area benchmark: 2,000 ft<sup>2</sup>

Level multiplier: \$50,000

Area multiplier: \$61 (per level)

zip code level: 5  
level multiplier: x \$50,000  
level premium: \$250,000

living area: 2,300  
benchmark: - 2,000  
difference: 300

area multiplier: x 5 x \$61  
area: premium: \$91,500

baseline: \$806,800  
level premium: + \$250,000  
area premium: + \$91,500  
appraised value: \$1,148,300

## Limitations:

- mean absolute error  $\sim \$225,000$
- best performance between  $+/- 2$  standard deviations

# Recommendation #1:

- Starting from a baseline of \$806,800, add (or subtract) 64 cents for every \$1 that the median home value (nearest 20-30 recent listings) exceeds (or falls short of) \$1 million.

## Recommendation #2:

- Starting from a baseline of \$806,800, add (or subtract) \$60 *per zip code level* for every square foot that the home's living area exceeds (or falls short of) 2,000 square feet.

**Thank you**

Aaron Galbraith • 2023

[www.linkedin.com/in/aarongalbraith](https://www.linkedin.com/in/aarongalbraith)