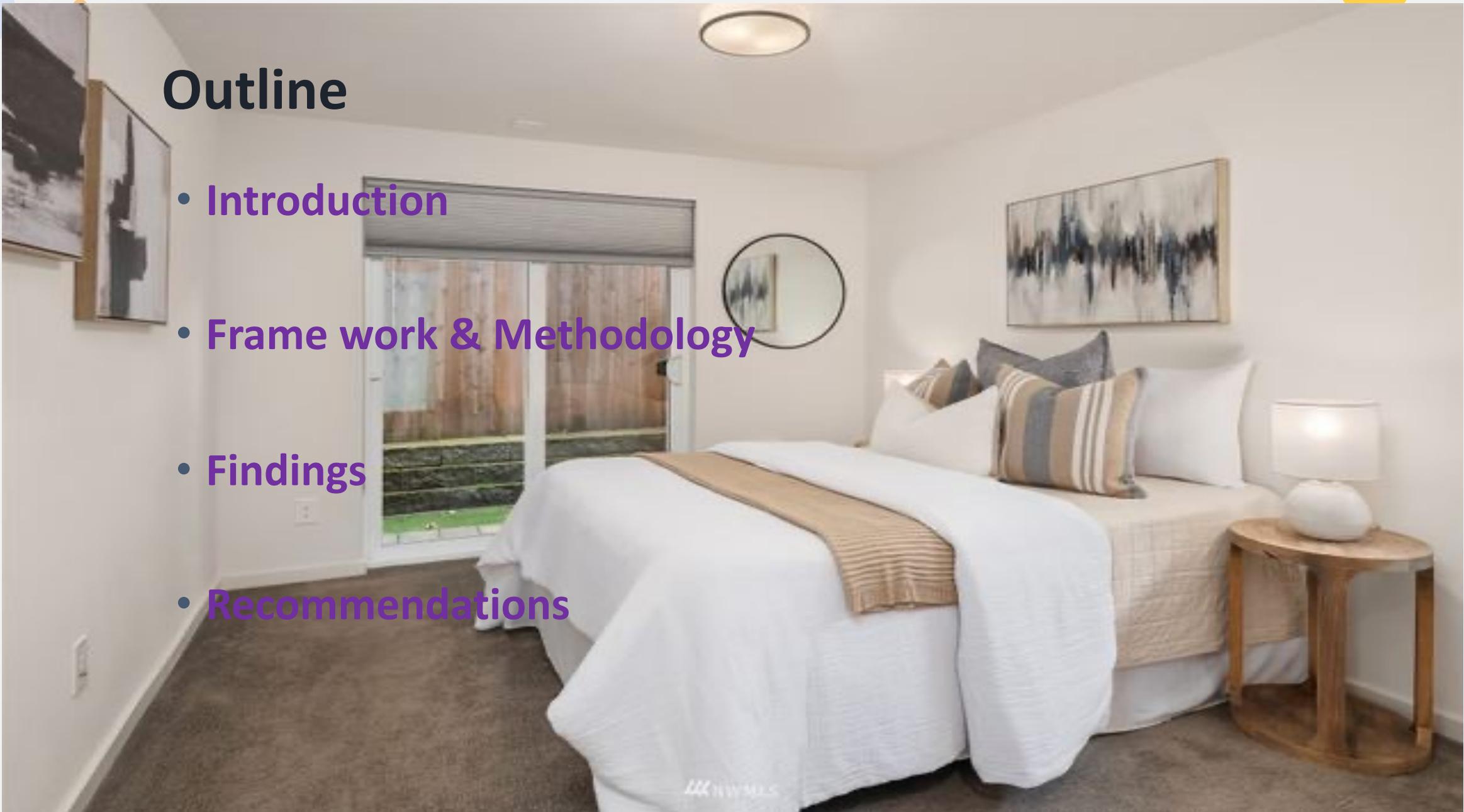


# Proposed Homes for Mr Thomas Hansen

Location: Seattle County, Washington, USA

# Outline

- Introduction
- Frame work & Methodology
- Findings
- Recommendations



# Introduction

Mr.Thomas Hasen recently got a new job in Seattle city, he wants to buy a house but has a very limited budget.

## Objectives:

To look for a home for Thomas Hansen

## Problem Statement.

- Our client Thomas Hansen has 5 kids and wants a nice(social)neighbourhood, Timing and location but has little money.

## Hypothesis:

- Ho: There will be a house for Mr Thomas close to Seattle city centre based on his budget.

## Stakeholder Requirements

- Mr. Thomas has 5kids and will require a 6 bedrooms
- Thomas is on little or no money, current net worth  $\leq \$400,000$ .
- Mr Thomas is ok with with a liveable (no major repairs) house based on his budget
- He wants the apartment to be close to Seattle because he works there.

## Definition:

- Building Conditions 3: Average- All major components still functional and contributing toward an extended life expectancy. Minor repairs may be needed
- Building Grades 7: Average grade of construction and design.

## Question:

Can we find a house based on his requirements ?

Are there houses close to or within Seattle based on his requirements?

What are the different houses available based on his requirement?

Which neighbourhood can we recommend to Thomas and his family based on his requirements.?



# Frame Work

## Data processing

### Map Visualization of data

### Drawing conclusions from data

❖ Row: 21597  
❖ Columns: 21  
missing values: 3 columns (view, waterfront, yr\_renovation)

- ❖ Grouping by bedroom
  - ❖ Grouping by grade
  - ❖ Grouping by condition
  - ❖ Grouping by price
- Waterfront = 0
  - Year\_renovation = 0

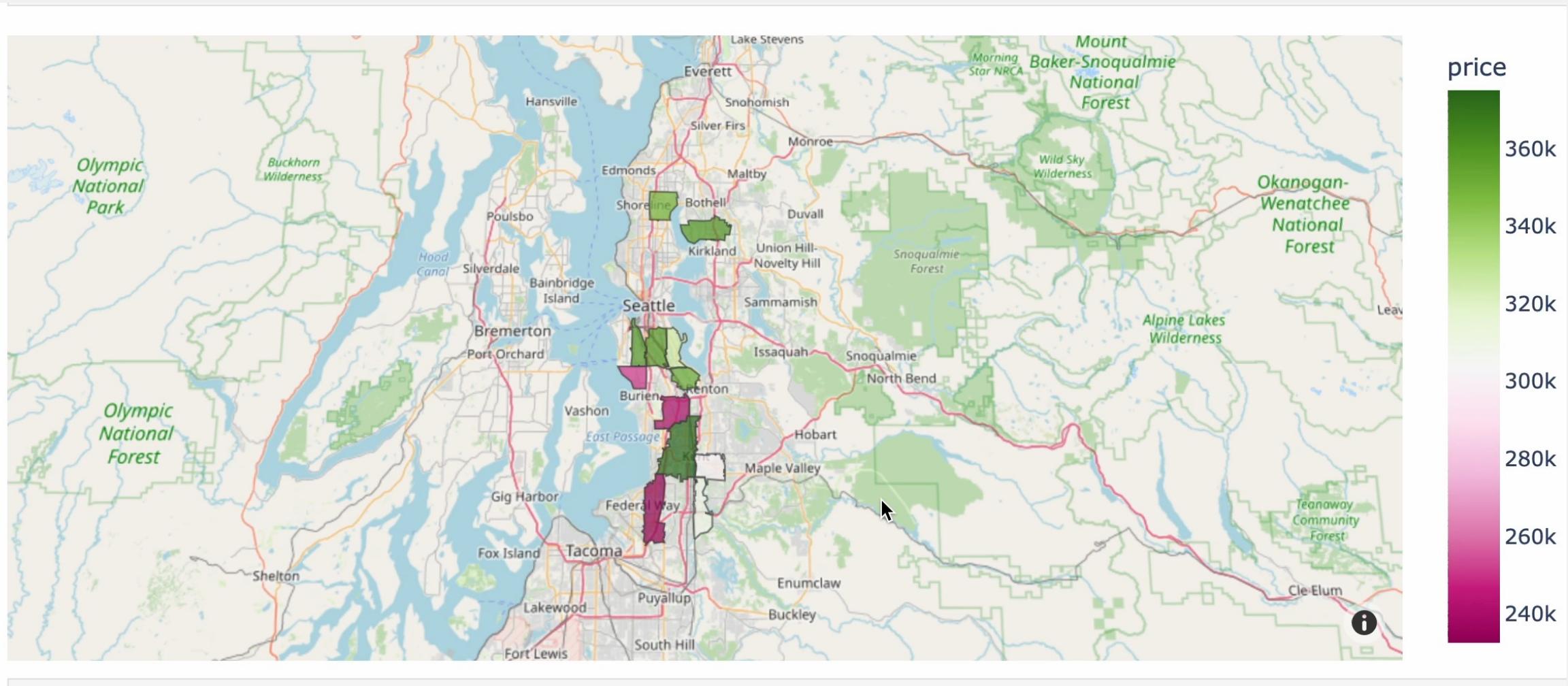
21 rows  
21 columns

Things we excluded

- ✓ Normal distribution
- ✓ Fixing outliers

# Finding:

## Visualization/Location of nice neighborhood close to Seattle

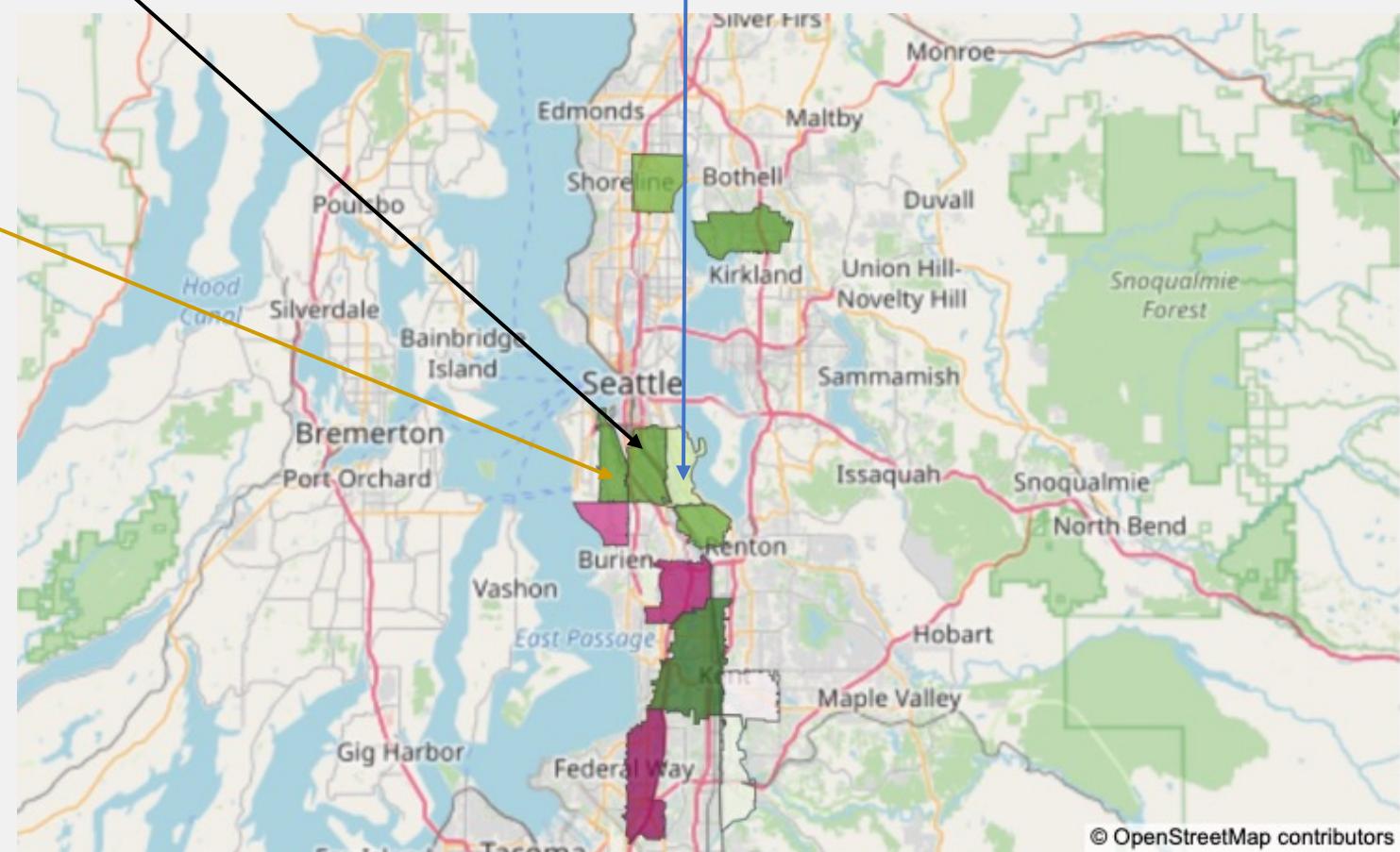
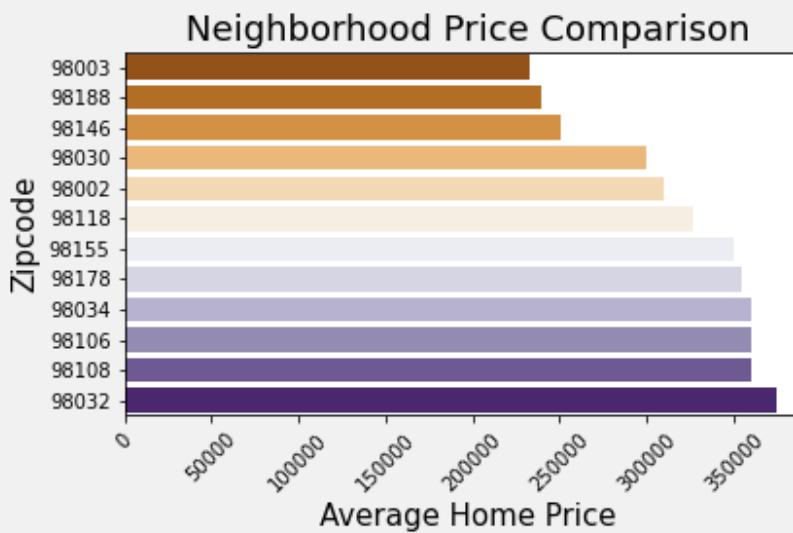


# Data Visualization

Zipcode = 98106  
Price = \$ 360k

Zipcode = 98108  
Price = \$ 389.833k

Zipcode = 98118  
Price = \$394.25K



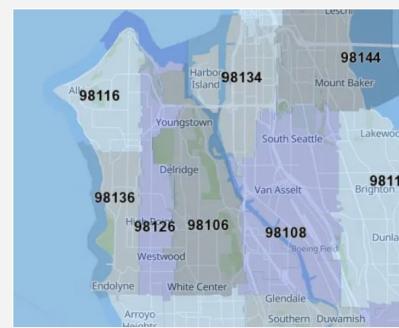
# Recommendation:

## Summary Table of Available homes for Mr. Thomas

| Zipcode | Price(\$) | Bathrooms | Sqft_living | Sqft_lot | Floor | Sqft_above | Yr_built | Yr_renovated | Sqft_living15 | Sqft_lot15 |
|---------|-----------|-----------|-------------|----------|-------|------------|----------|--------------|---------------|------------|
| 98106   | 360000    | 3         | 2850.00     | 15240.00 | 1     | 1850.00    | 1962.00  | 0            | 900.00        | 6000.00    |
| 98108   | 389833    | 3         | 2333.33     | 6587.33  | 1     | 1210.00    | 1982.00  | 0            | 2013.33       | 5655.33    |
| 98118   | 394250    | 3         | 2485.00     | 6032.00  | 2     | 2135.00    | 1963.00  | 0            | 1595.00       | 5542.00    |
| 98146   | 250500    | 2         | 1930.00     | 8400.00  | 1     | 1030.00    | 1971.00  | 0            | 1780.00       | 9520.00    |
| 98188   | 240000    | 2         | 2210.00     | 8594.00  | 1     | 900.00     | 1959.00  | 0            | 1850.00       | 8594.00    |

### Abreviation

|               |   |
|---------------|---|
| Sqft_living   | footage of the home   |
| Sqft_lot      | footage of the lot  |
| Sqft_above    | square footage of house apart from basement                                       |
| Yr_built      | Built Year  |
| Yr_renovaed   | Year when house was renovated   |
| Sqft_living15 | The square footage of interior housing living space for the nearest 15 neighbours |
| Sqft_lot15    | The square footage of the land lots of the nearest 15 neighbours                  |



### Conclusion:

- ❖ Mr. Thomas has a few houses that are within his budgets, with little or no maintenance. It is close to Seattle and his office and it's a great neighborhood.

*Thank you for Listening  
Your Questions and Inputs  
are welcomed.*

