



# House Recommendations for Mr. Jacob Phillips

# Requirements

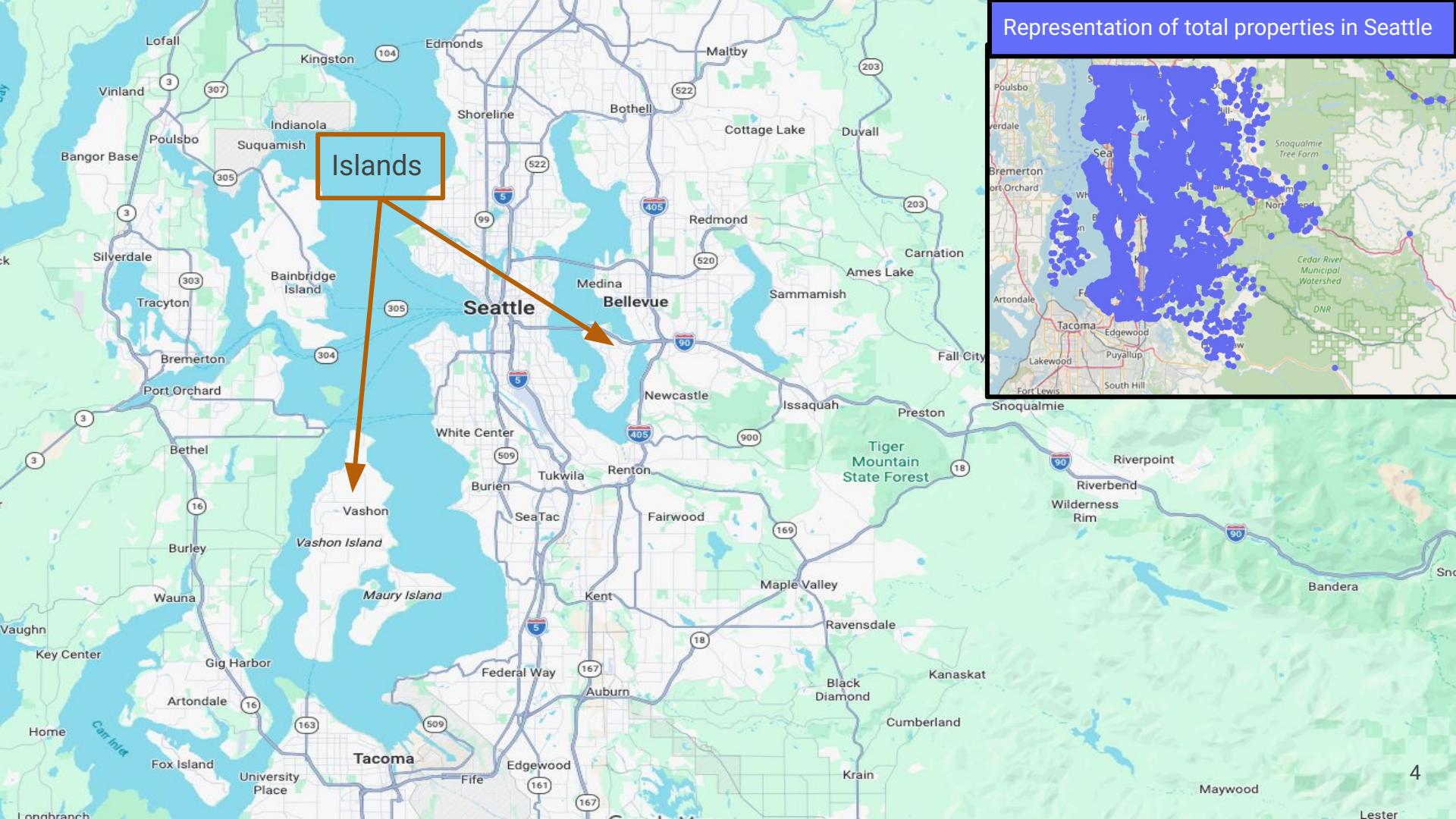
Buy a property with:

- 4+ Bathrooms
  - Big lot area
    - ◆ Tennis court
    - ◆ Pool
    - ◆ Golf
  - Historic house
  - No water front
  - No Budget Restrictions
-

# Hypothesis:

1. Houses on the Islands have larger lot spaces than houses on the Mainland
  2. Renovated historic houses are more expensive than non-renovated historic houses
  3. Houses with larger lot area have smaller basement area
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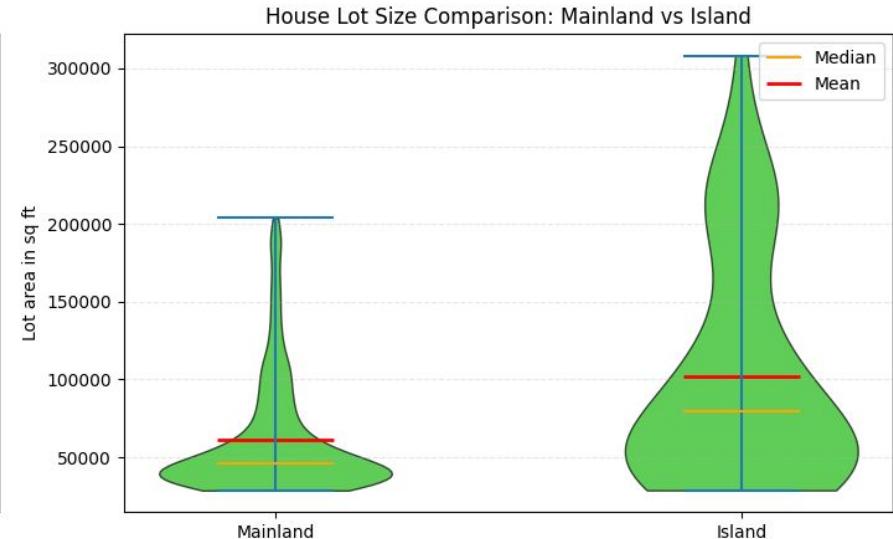
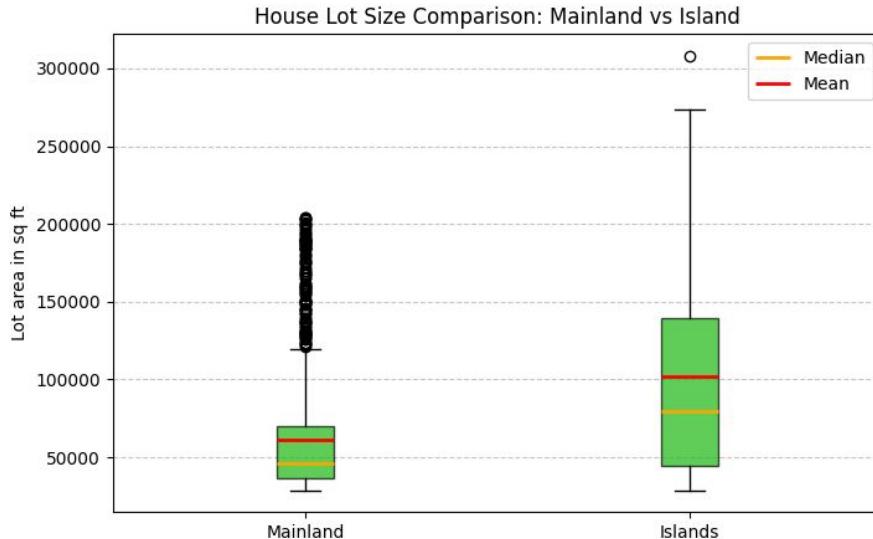
## Representation of total properties in Seattle



# Assumptions and Calculations

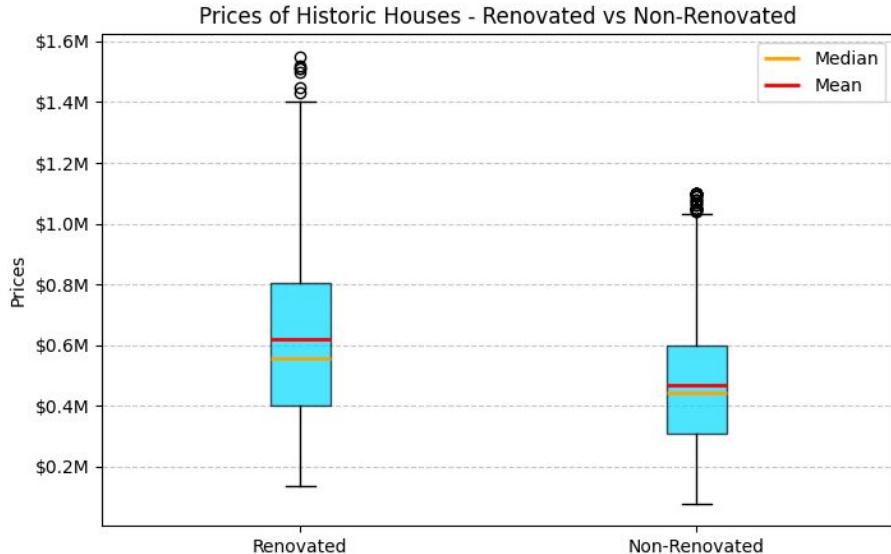
- Any house older than 1950 is considered as Historic house.
  - Usually there is a 50yr rule.
  - The data is till 2018 so theoretically <1968
  - To account for errors 1950 is considered
- He wants a Tennis court, Pool and Golf area
  - Tennis Court (Doubles Court): 7200 ft<sup>2</sup>
  - Pool (Sunbeds + Deck + Spa): 4800 ft<sup>2</sup>
  - Golf (green + chipping + bunker + hitting): 10000 ft<sup>2</sup>
  - Total (+30% Margin to avoid cramped feeling): **28600 ft<sup>2</sup>**

Hypothesis 1: Houses on the Islands have larger lot spaces than houses on the Mainland (Lot sizes more than 28600 ft<sup>2</sup>)



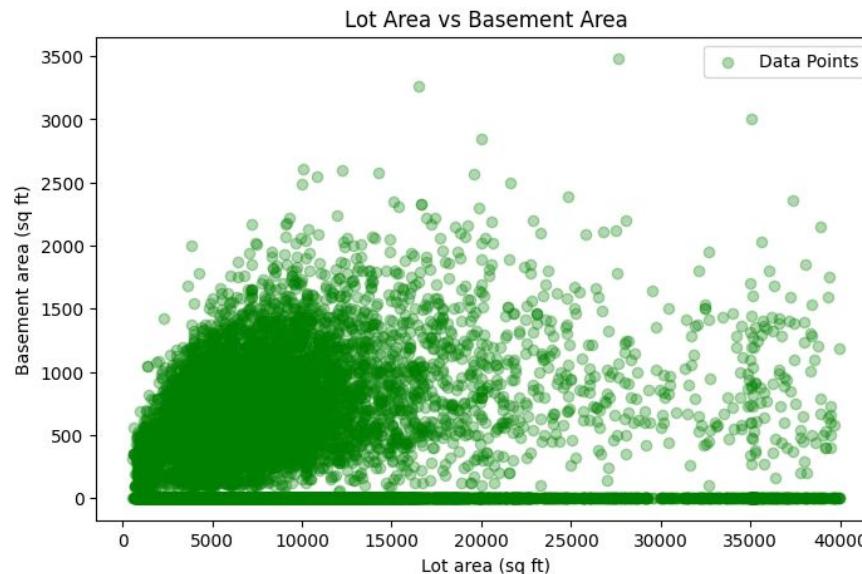
**Conclusion:** The initial hypothesis is valid.

## Hypothesis 2: Renovated historic houses are more expensive than non-renovated historic houses



**Conclusion:** The initial hypothesis is valid.

## Hypothesis 3: Houses with larger lot area have smaller basement area



**Conclusion:** The initial hypothesis is not valid.

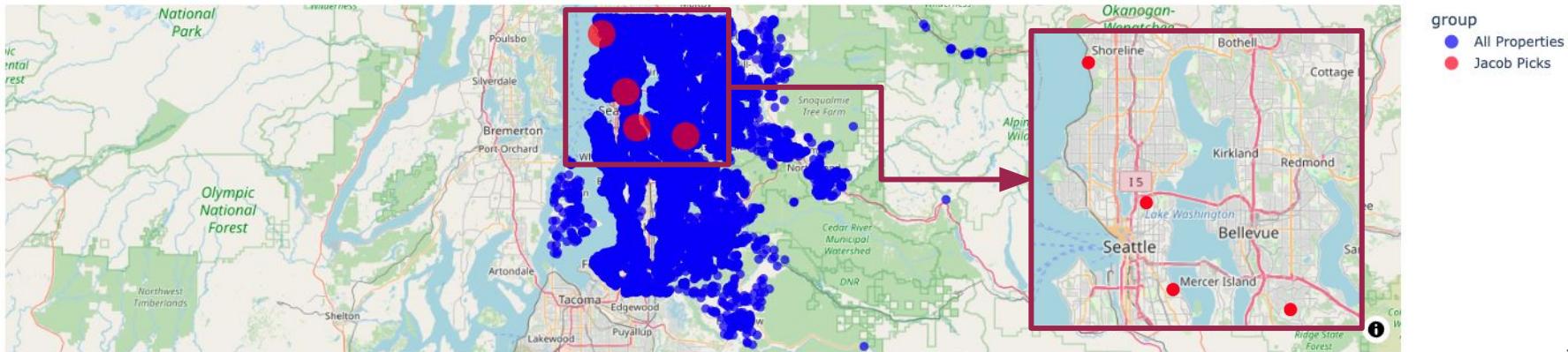
# Decision Criteria:

- Lot  $\geq$  28,600 ft<sup>2</sup>
  - Historic ( $\leq$  1950)
  - $\geq$  4 bathrooms
  - Grade  $\geq$  11
  - Non-waterfront
-

# Recommendation for Jacob

House ID	Bedrooms	Bathrooms	Living Area (ft <sup>2</sup> )	Lot Area (ft <sup>2</sup> )	Floors	Waterfront	Grade	Year Built	Year Renovated	Price
3377900195	4	5.5	6930	45100	1	0	11	1950	1991	\$2,530,000.00
5249800010	4	4.25	6410	43838	2.5	0	12	1906	0	\$2,730,000.00
1333300145	3	4	4200	30120	2	0	11	1933	0	\$2,230,000.00
3304700130	4	4	3860	67953	2	0	12	1927	0	\$1,760,000.00

All properties vs shortlisted recommendations



# Top 4 Property Recommendations for Jacob



**\$2,530,000** • Lot: 45,100 sq ft  
• 6,930 sq ft, Built 1950 • Renovated 1991



**\$2,730,000** • Lot: 43,838 sq ft  
• 6,410 sq ft, Built 1906



**\$2,230,000** • Lot: 30,120 sq ft  
• 4,200 sq ft, Built 1933



**\$1,760,000** • Lot: 67,953 sq ft  
• 3,860 sq ft, Built 1927