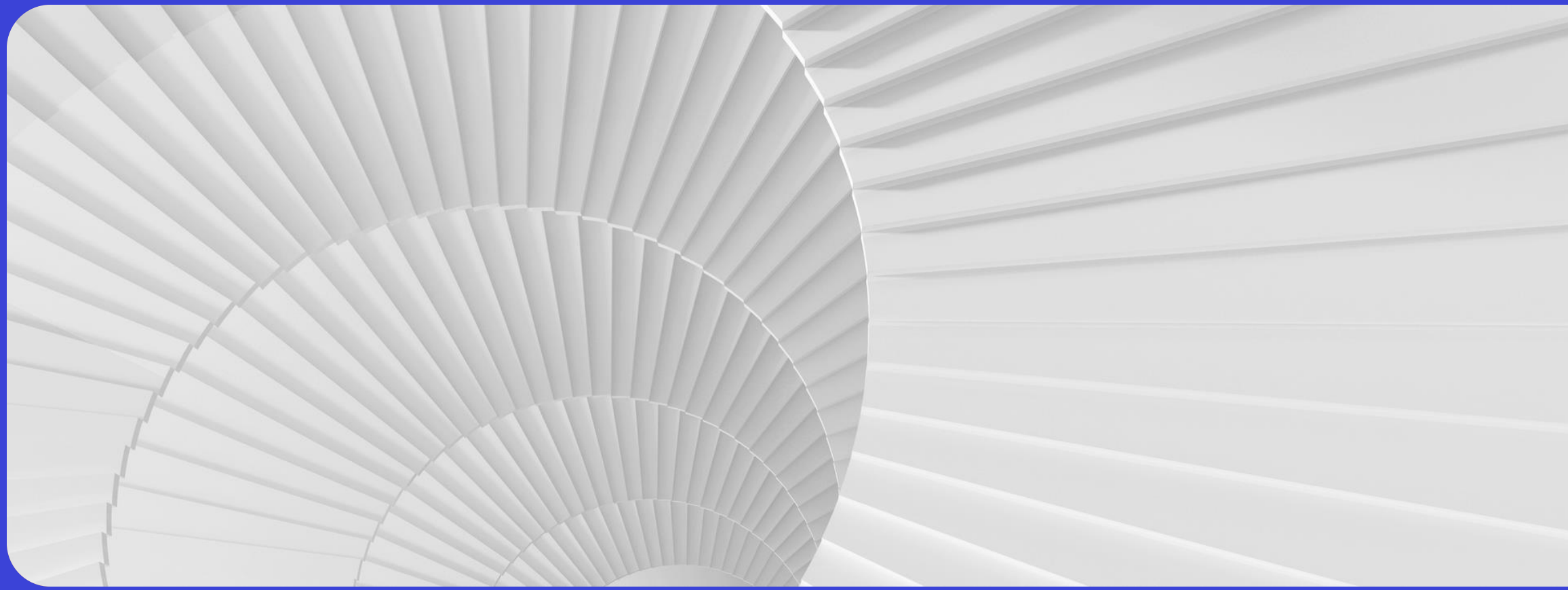


Property Sales Analytics

Presented by Nate

Agenda

Client Overview → Requirements→ Op. Specs→ EDA→ Analysis → 3 Concluding insights

Client →

Picture generated from GAN
thispersondoesnotexist.com

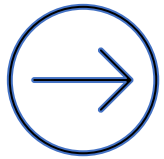
Meet Larry

Hi I'm Larry Sanders. I want to buy a house! But not just any house . . I want it to be in a nice neighborhood. It should be central. Oh and also isolated. I have a limited budget . .

Operationalizing the Client specs

Reqs need to be clarified

- I needed to give my client Larry a call to establish what exactly his "limited" budget is . .
- Larry's contradictory requirement: "Nice & isolated but central"
- […] "doesn't want his kids to play with other kids"



Operationalized requirements:

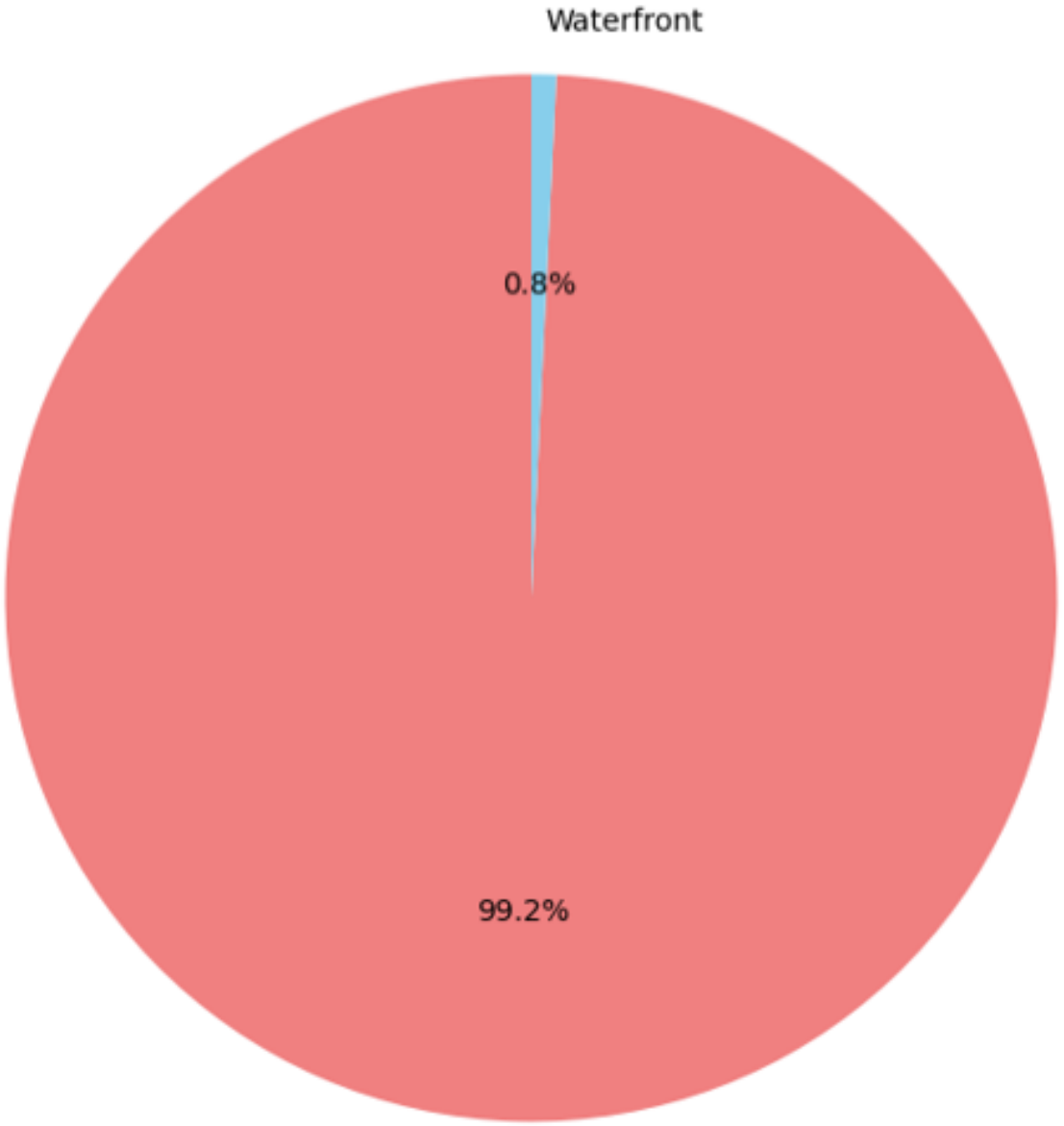
- **Budget:** "Limited" Clarified to be $1,300,000
- **Location Preference:** Close to downtown Seattle (central)
- **Neighborhood:** Low population density (isolated)
- **Family Considerations:** Prefers neighborhoods with fewer children

EDA→

0.8%

Waterfront properties

Let's see if we can find Larry a home →



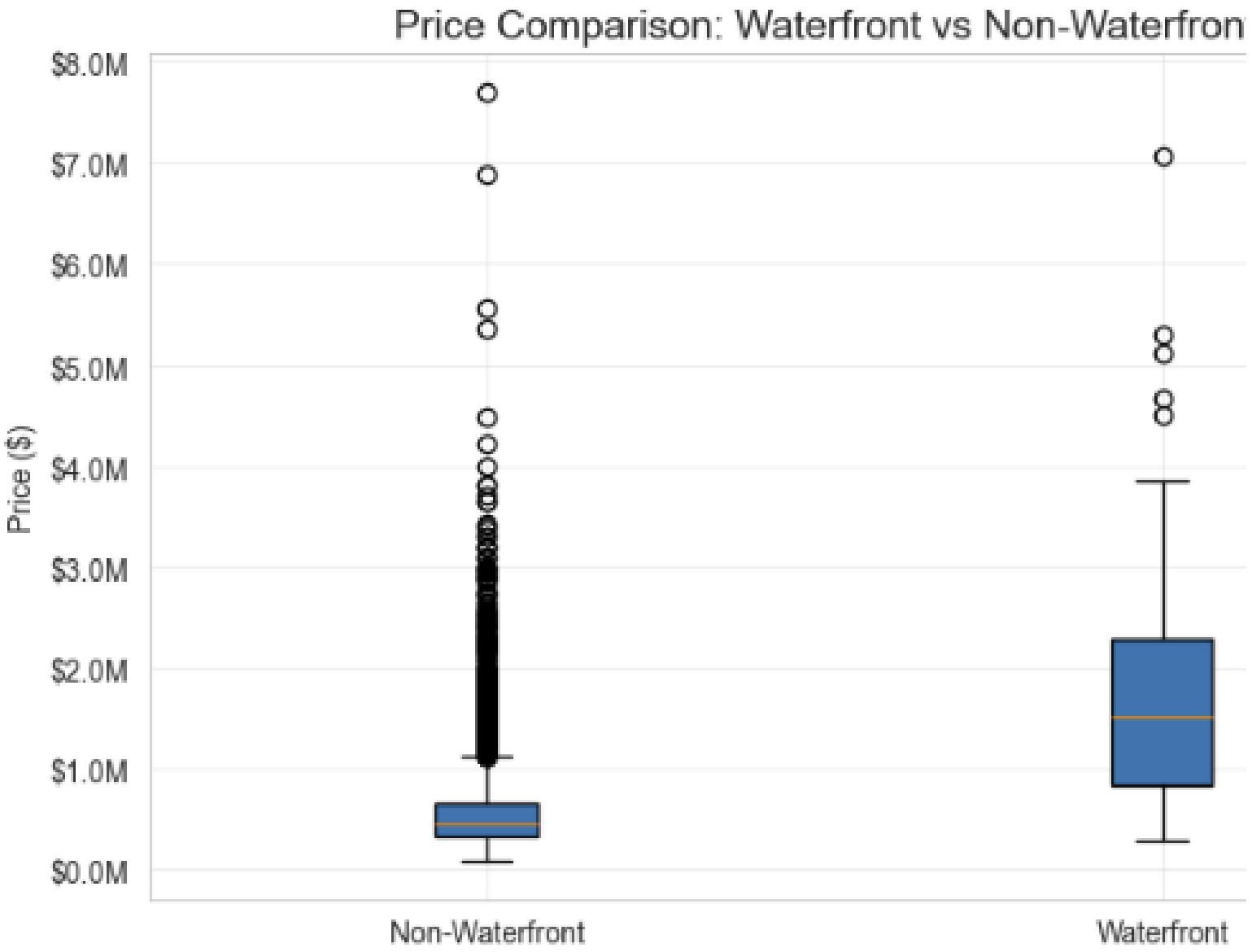
Remember Larry's budget: **1.3 mil.**

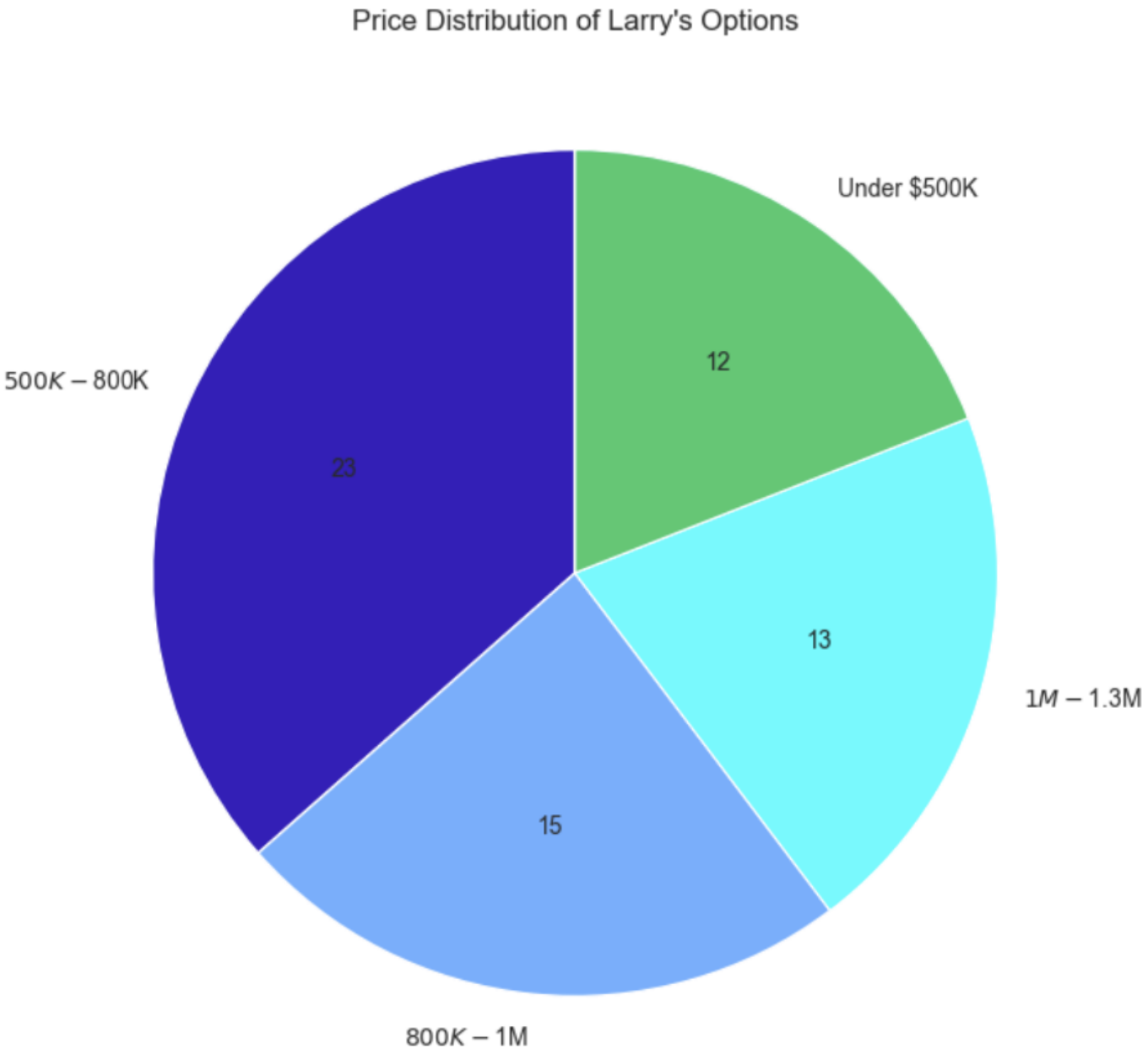
WATERFRONT ANALYSIS

Non-Waterfront Median Price: $450,000

Waterfront Median Price: $1,510,000

Premium: 235.6% (3.4x)





Larry's waterfront options

63 properties in total

Insight #1

Price Premium

Waterfront properties command a significant premium over non-waterfront properties:

Impact on Larry:

With a $1,300,000 budget, Larry can access approximately **43% of the waterfront market** (63 out of 146 properties).

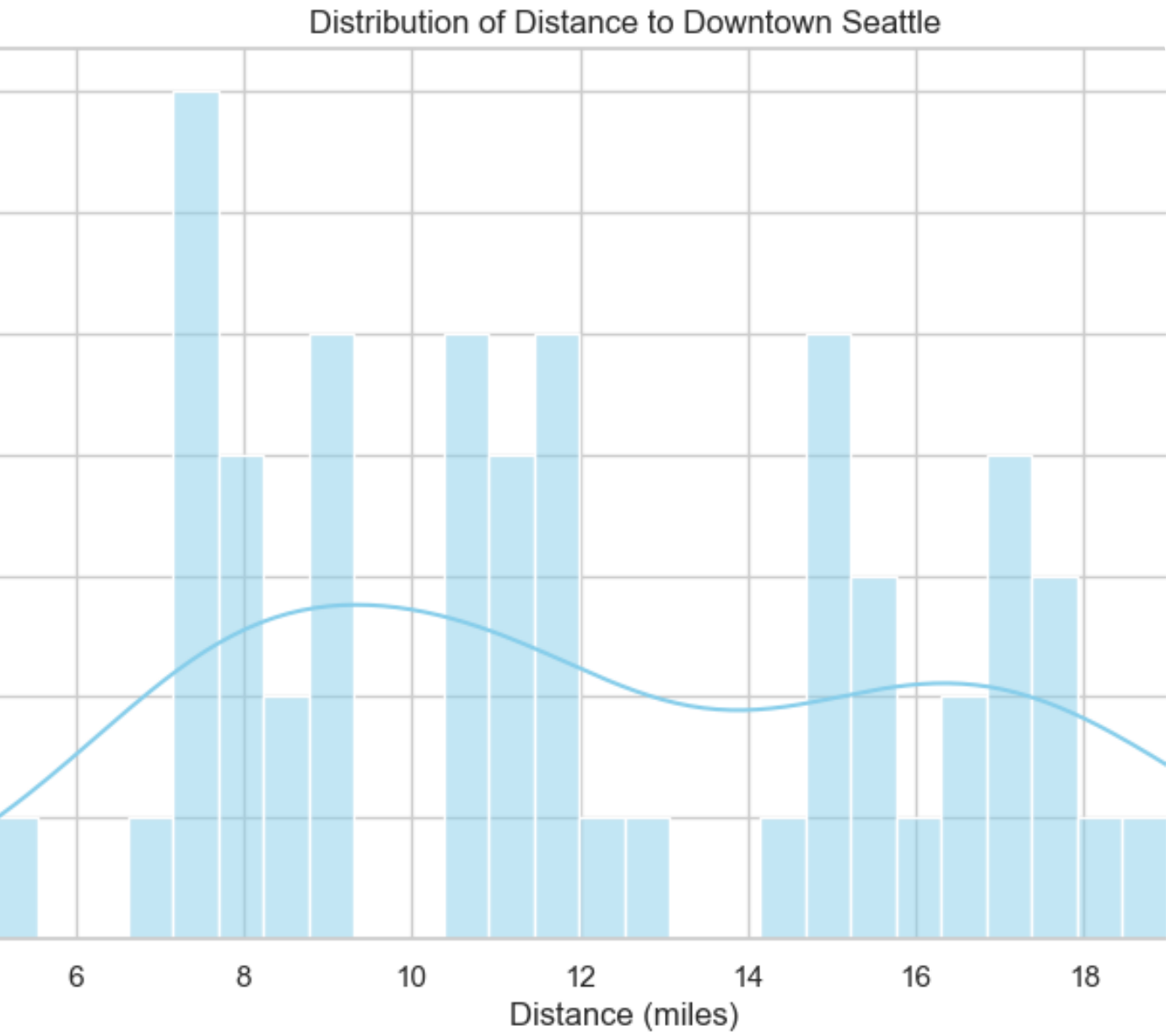
Larry's Position in Market:

He is shopping in the lower-middle tier of waterfront properties, which limits but does not eliminate his options.

Larry is value-shopping in a premium segment

“I want something central .. but isolated”

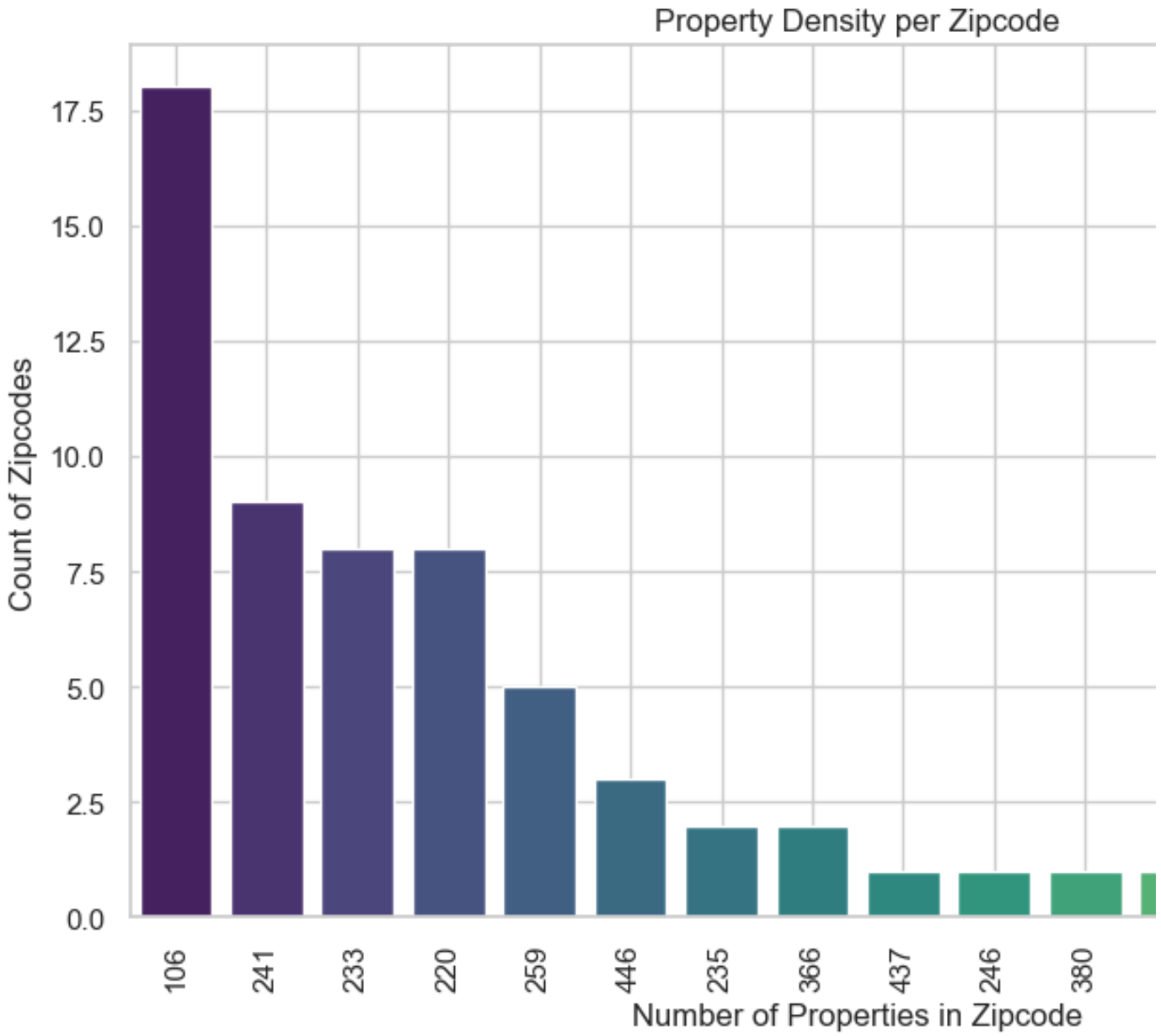
Larry Sanders



"Central"

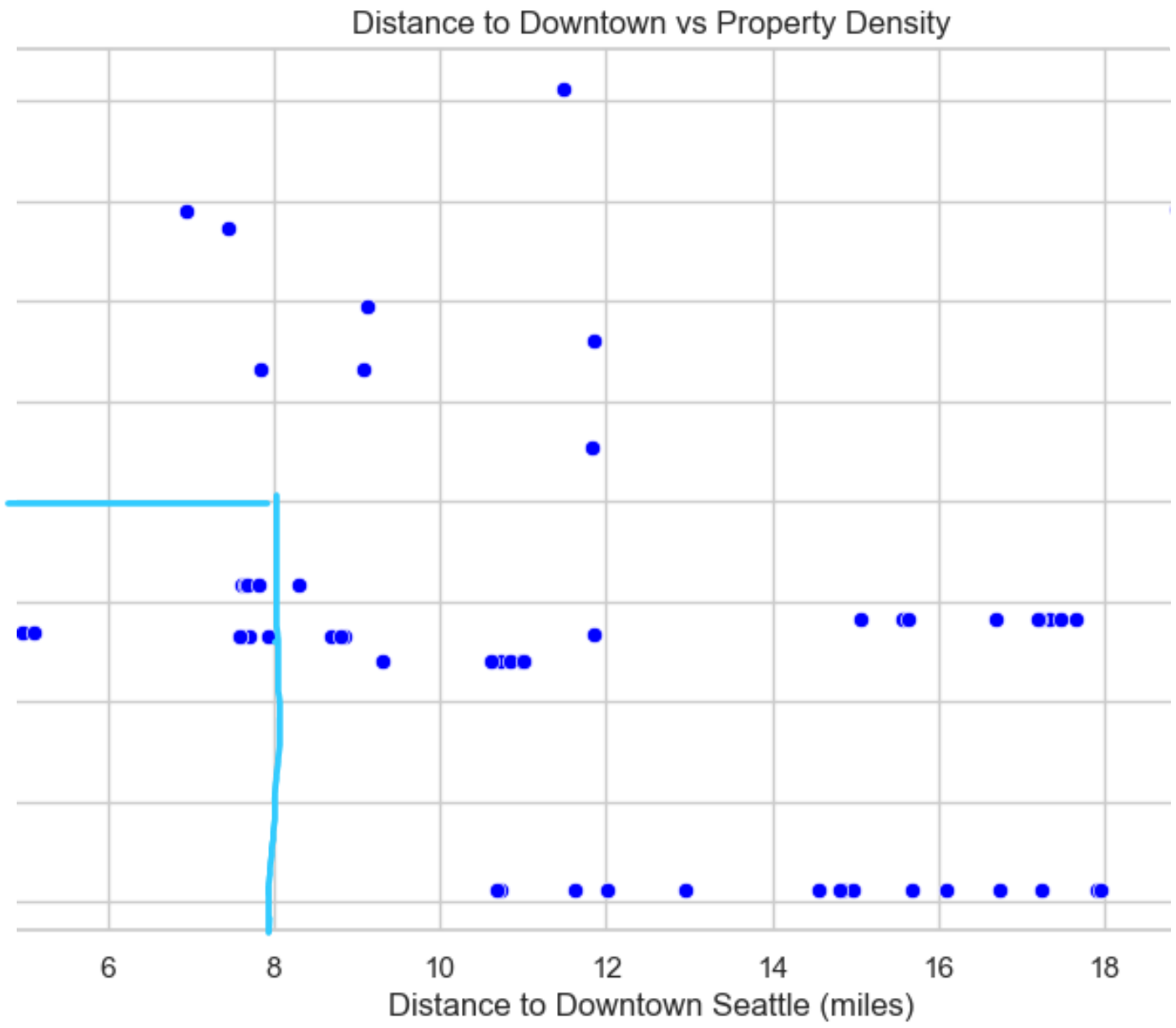
- **Location Preference:** Close to downtown Seattle (central)
- **Neighborhood:** Low population density (isolated

"Isolated"



- **Neighborhood:** Low population density (isolated

1 mile = 1.609 km



Overlay

- **Can we find something that is both close to downtown and has relatively lower property density?**

Insight #2

Isolated / Central Paradox

Distance Analysis:

Closest property to downtown: 4.46 miles

Farthest property: 20.61 miles

Average distance: 12.28 miles

Density Analysis (Properties per Zipcode):

*Most isolated zipcode: 106 properties

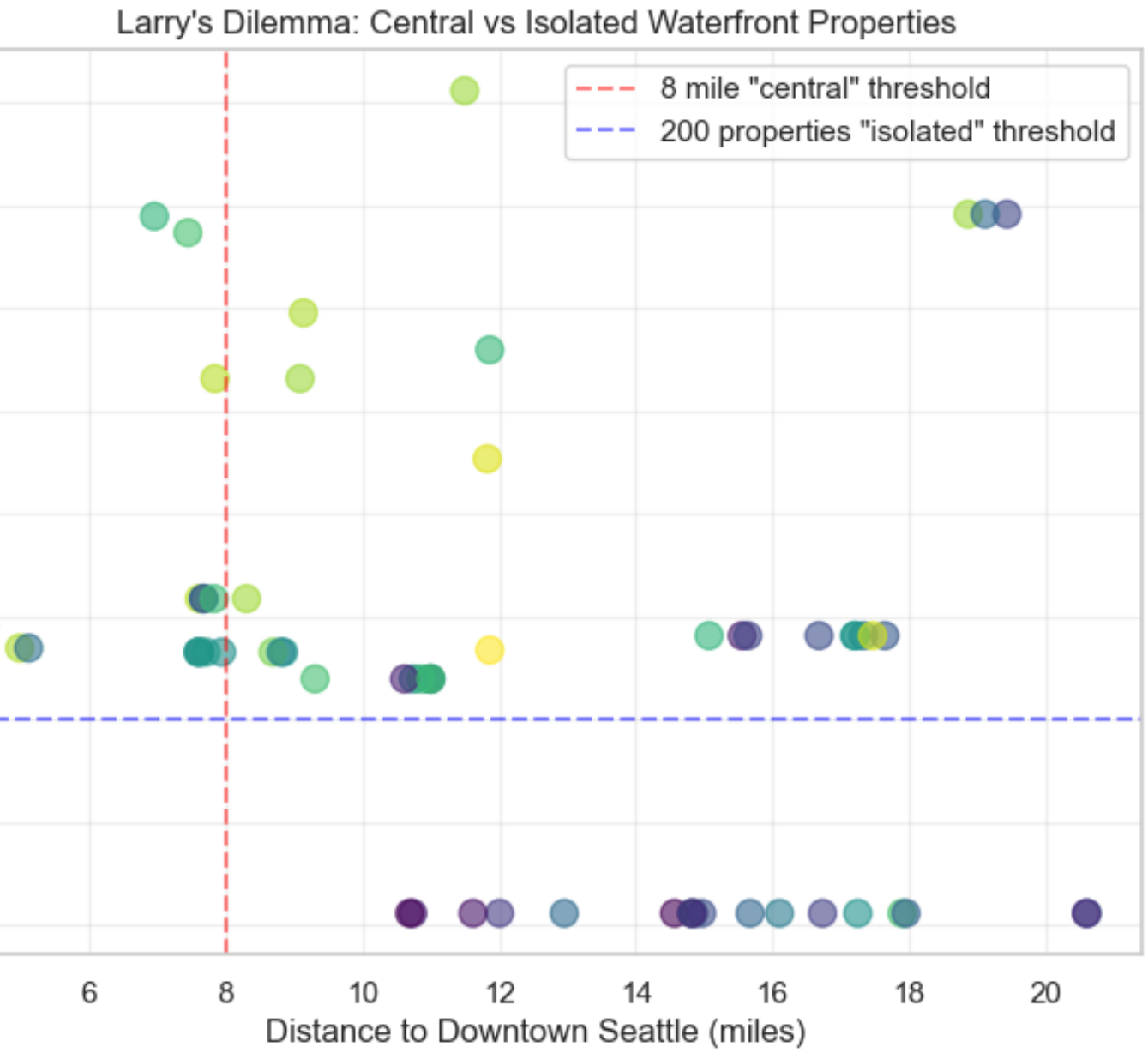
*Least isolated zipcode: 506 properties

*Average: 230 properties

Larry's Position in Market:

Properties within 8 miles of downtown Seattle are located in denser neighborhoods (235-445 properties per zipcode). True isolation (100-150 properties per zipcode) only exists 15-20 miles from downtown.

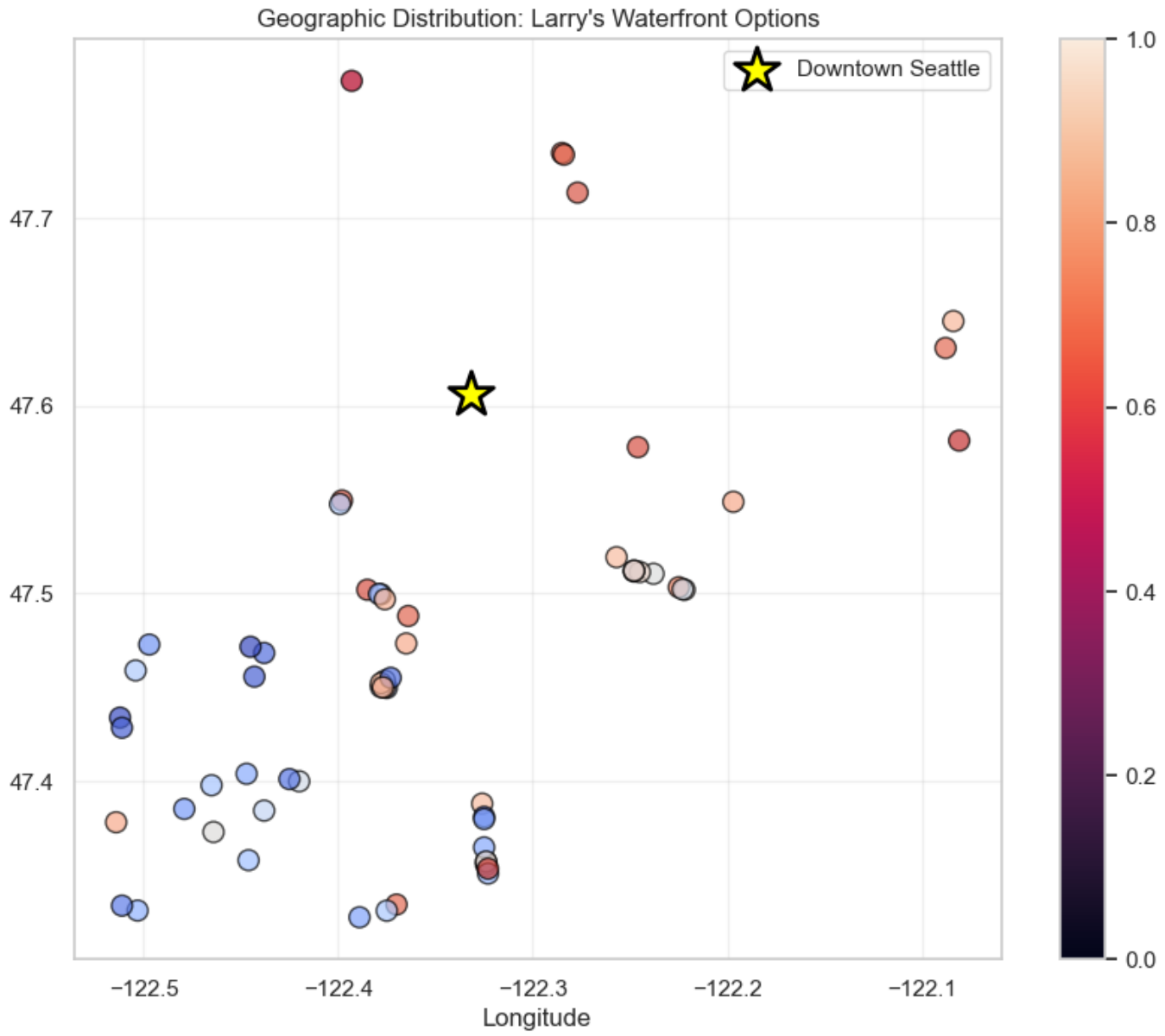
- **Implication: Larry must compromise on either centrality or isolation—the market does not offer both simultaneously at his price point.**



Larry's Dillema

- **Larry Needs to compromise**

Geographical analysis



Insights #3

Zipcode 98136 Represents the Best Compromise

Among Larry's viable options, zipcode 98136 offers the optimal balance between his competing requirements.

98136 Characteristics:

* Distance to downtown: 5-5.1 miles (highly central)
* **Density**: 235 properties per zipcode (lower third of density range) -

Available properties in budget:

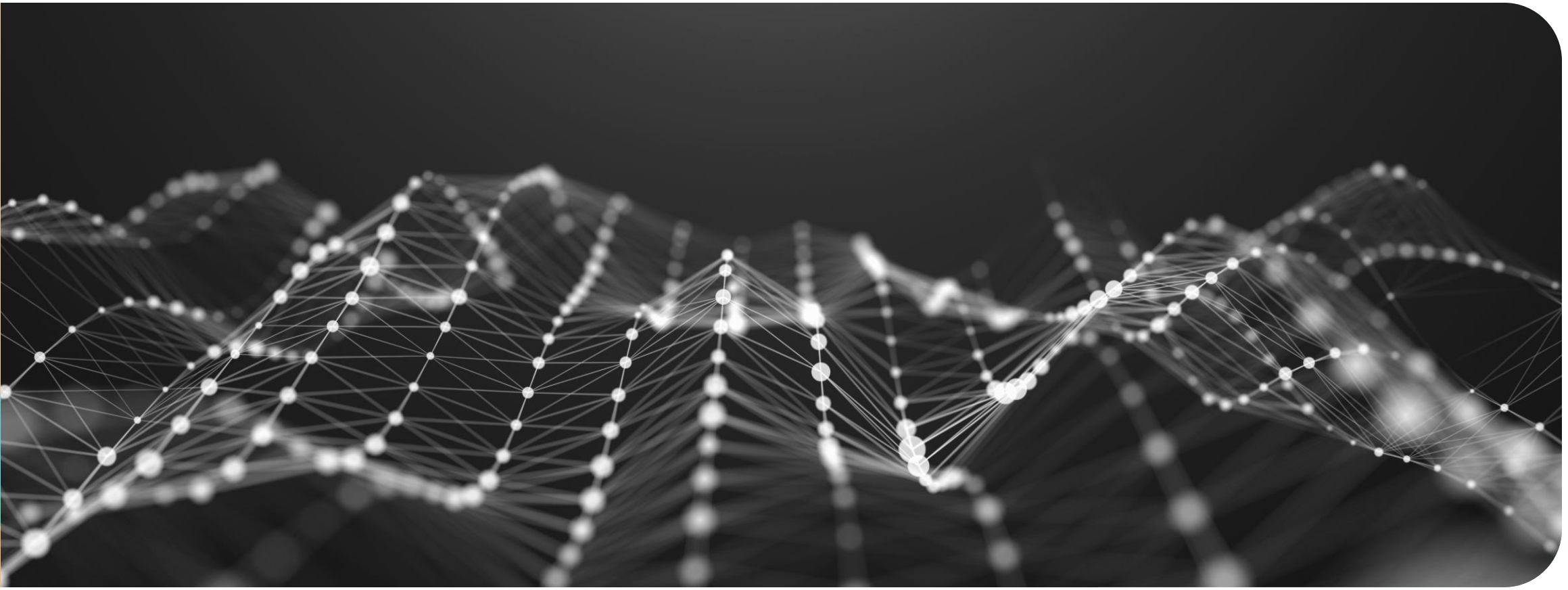
* 2 properties - $658,000 (most affordable in this zipcode) - $1,180,000 (higher-end option)

*Average: 230 properties

Larry's Position in Market:

While not truly "isolated" by suburban standards, 98136 is significantly less dense than downtown-adjacent neighborhoods (which average 400+ properties per zipcode) while maintaining excellent proximity to Seattle's urban core.

- **Implication: Larry should target his house search for Zipcode 98136**



Thank you