

BUYING & SELLING FOR A GOOD CAUSE

- properties for a socially responsible investor
- a proposal by real estate data analysts MJR & TD
- september 2025



OUR CLIENT ERIN ROBINSON

- investing in poor neighborhoods
- buying & selling
- covering costs
- small profit
- socially responsible

QUESTIONS

what are good types of properties for erin to invest in? to what extent do prices, property's condition and season for buying/selling matter for erin's socially responsible purposes?

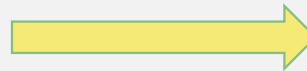
AI-created photo



DATA

DATA SET

- king county house details & king county house sales datasets merged
- 21.420 properties listed
- covering 05/2014-05/2015
- property prices range \$78K-7.7M
- 20 original parameters



PARAMETERS used

date sold, date built, price, coordinates, condition

- H1: properties sold below median price are located further away from the city center
- H2: properties built before 1990 and in poor condition have a 10% lower median price compared to other properties

HYPOTHESIS

- H3: properties sold during the winter season have a median price at least 10% lower compared to other properties

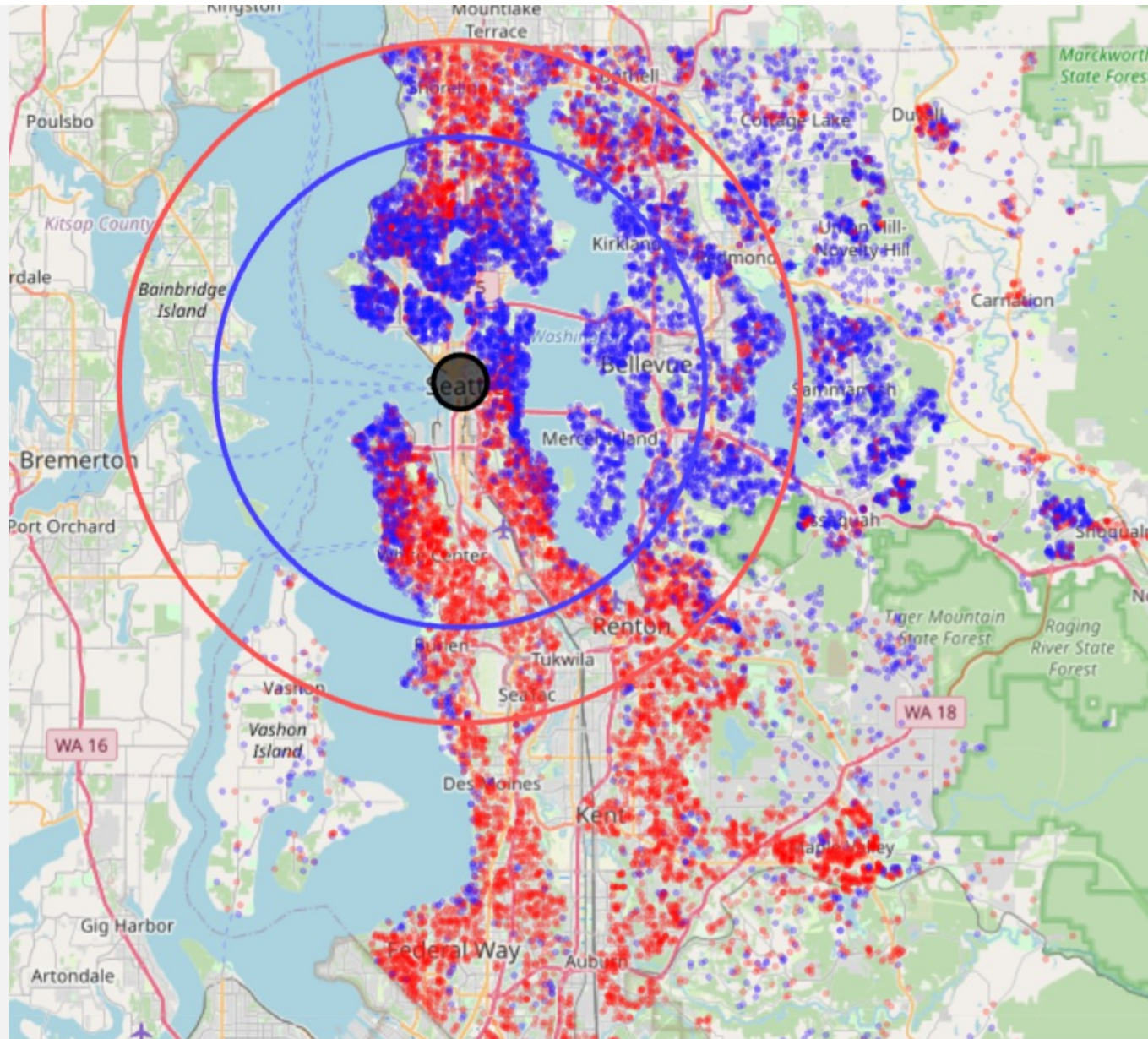
DISTANCE TO CITY CENTER

FINDING

- properties sold **below median price** (red dots) are typically **19.5 km** away from city center (red circle)
- properties sold **above median price** (blue dots) are typically **14 km** away from city center (blue circle)
- property price decreases as we move away from city center ($r = -0.28$, indicating weak correlation)

RECOMMENDATION

- inconclusive - further analysis needed to investigate whether distance makes a significant difference at all



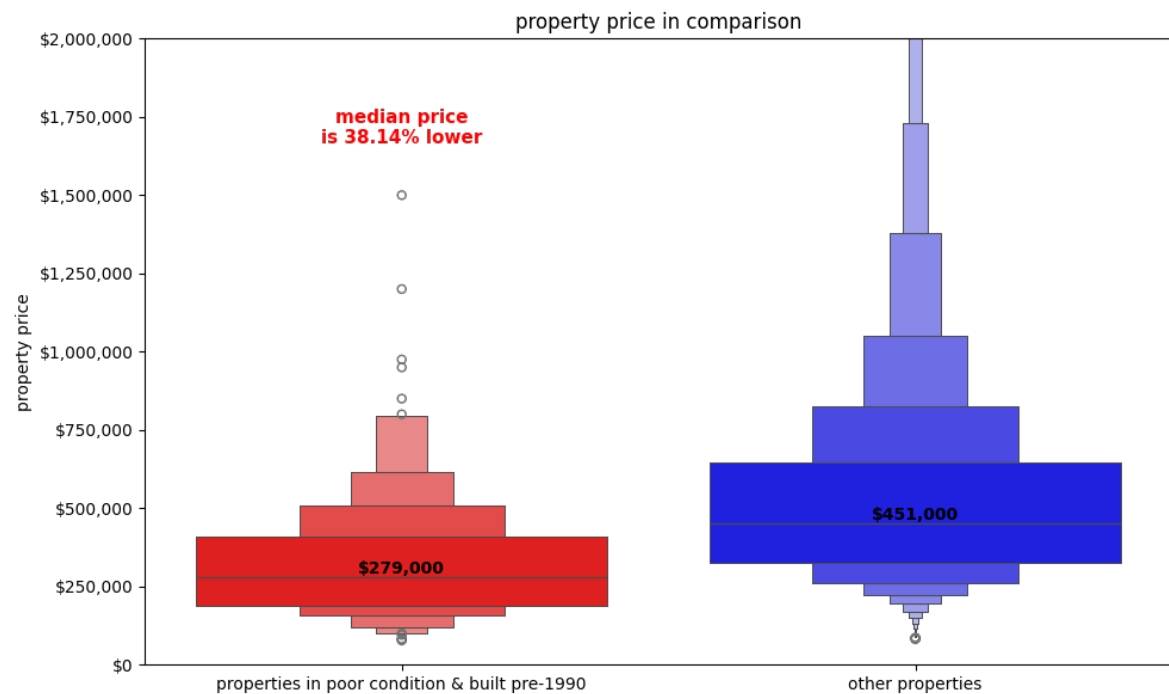
PROPERTIES IN POOR CONDITION

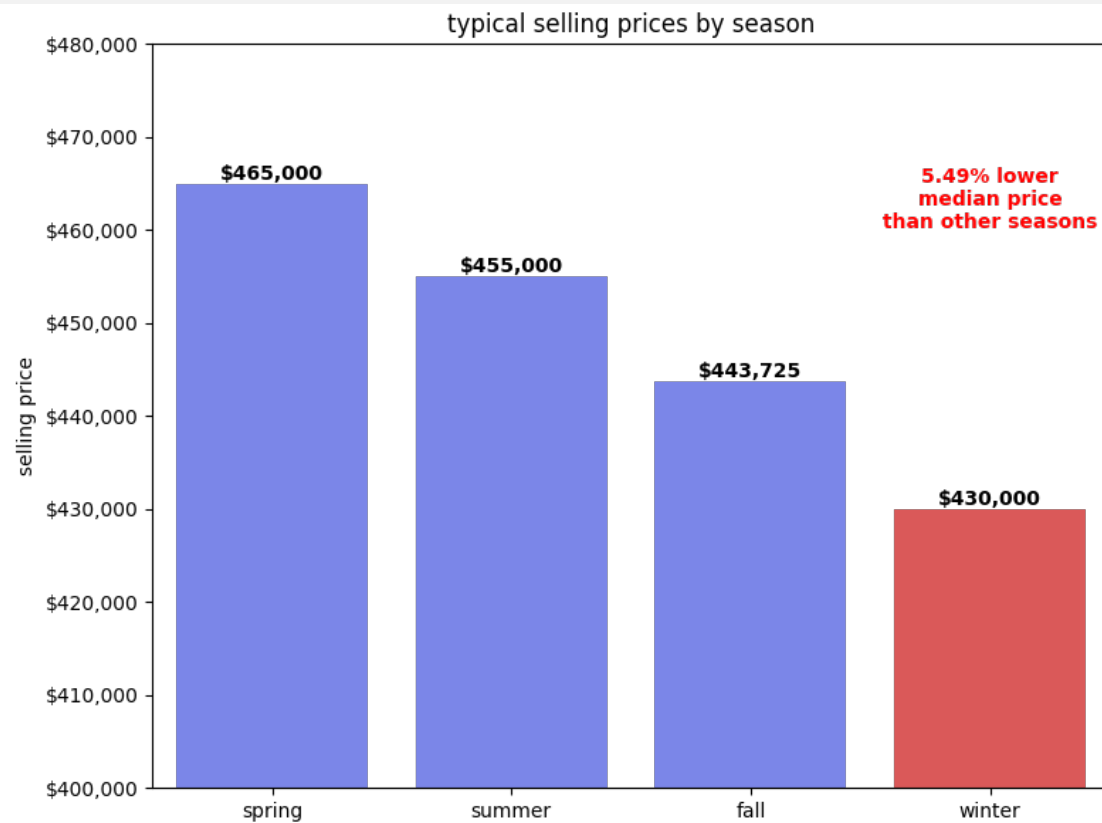
FINDING

- typical price for properties in poor condition and built pre-1990 cost below 300K
- properties built pre-1990 and **in poor condition** are **38% lower in price** than other properties
- construction year not significant in this context (same results for properties in poor condition only)

RECOMMENDATION

- properties in poor condition regardless of construction year are suitable for socially responsible investment





WINTER SEASON

FINDING

- typical selling price for properties lowest in winter, highest in spring
- selling price for properties is **5.5% lower in winter** than in other seasons

RECOMMENDATION

- buying properties in winter recommended
- selling properties in winter gives lower-income buyers an opportunity to buy
- for small profit, consider selling in fall

roadmap

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graph LR; A[roadmap] --- B[buy properties in poor condition]; A --- C[buy properties in winter]; A --- D[sell properties in winter / fall]; A --- E[distance to city center secondary]; F[RECOMMENDATIONS FOR A SOCIALLY RESPONSIBLE INVESTMENT]
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buy properties in
poor condition

buy properties
in winter

sell properties in
winter / fall

distance to city
center secondary

RECOMMENDATIONS
FOR A SOCIALLY
RESPONSIBLE
INVESTMENT