

Progress Presentation

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Background



CONTINUE HOUSING RESEARCH
FROM MINI-PROJECTS



DIVE DEEPER INTO IMPACT OF
ENVIRONMENTAL AND
NEIGHBORHOOD FACTORS



RESEARCH PLACES WE WANT TO
LIVE AFTER GRADUATION

Research Question(s)

To what extent do the environmental factors of a neighborhood affect housing prices?

Does the characteristics of a house or environmental factors have more influence on housing prices?

Which environmental factors are most predictive of home prices?

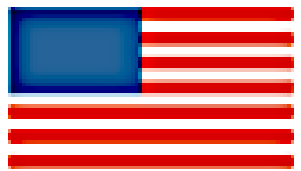
Which environmental factors under/over value home prices?



United States®
Census
Bureau

BJS Bureau of
Justice Statistics

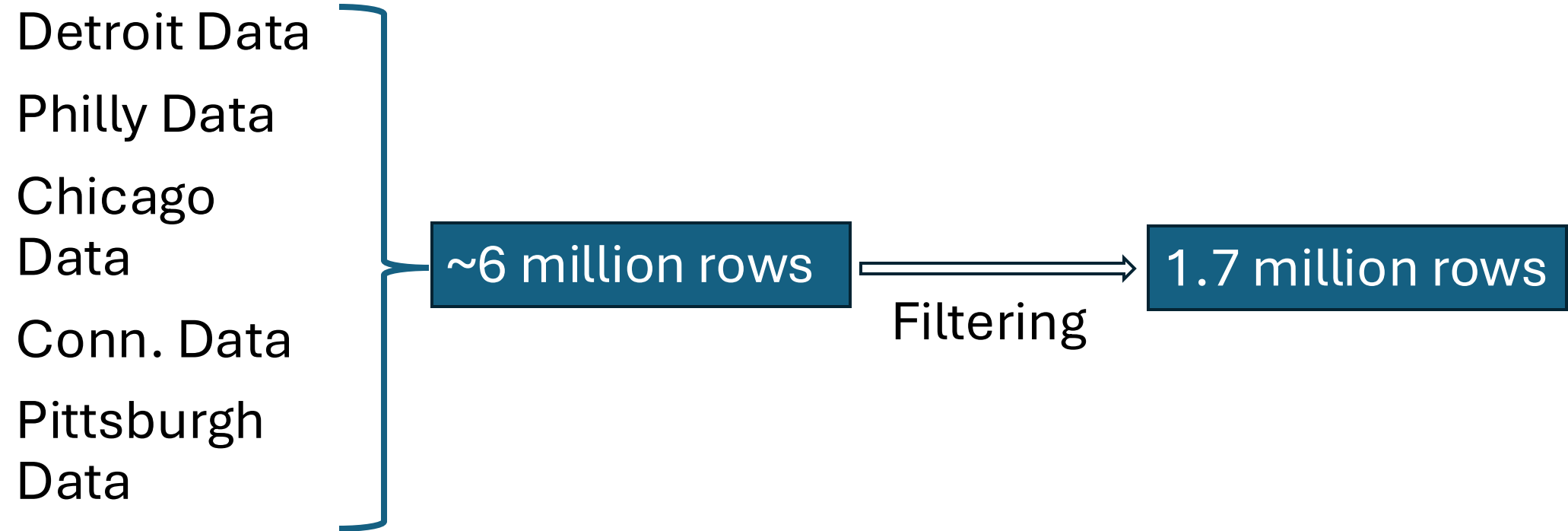
 Open
Data
Philly



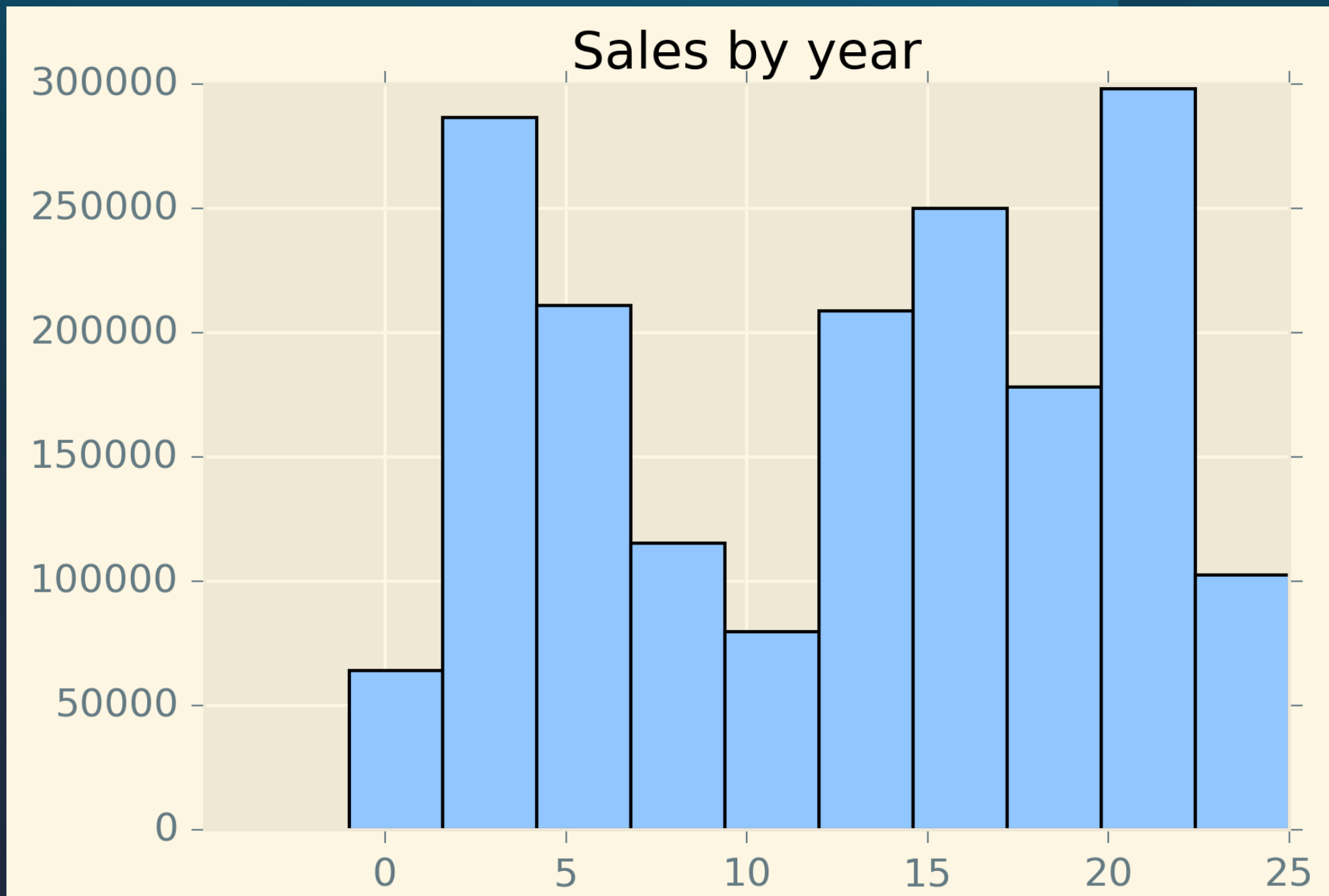
DATA

Data Sources

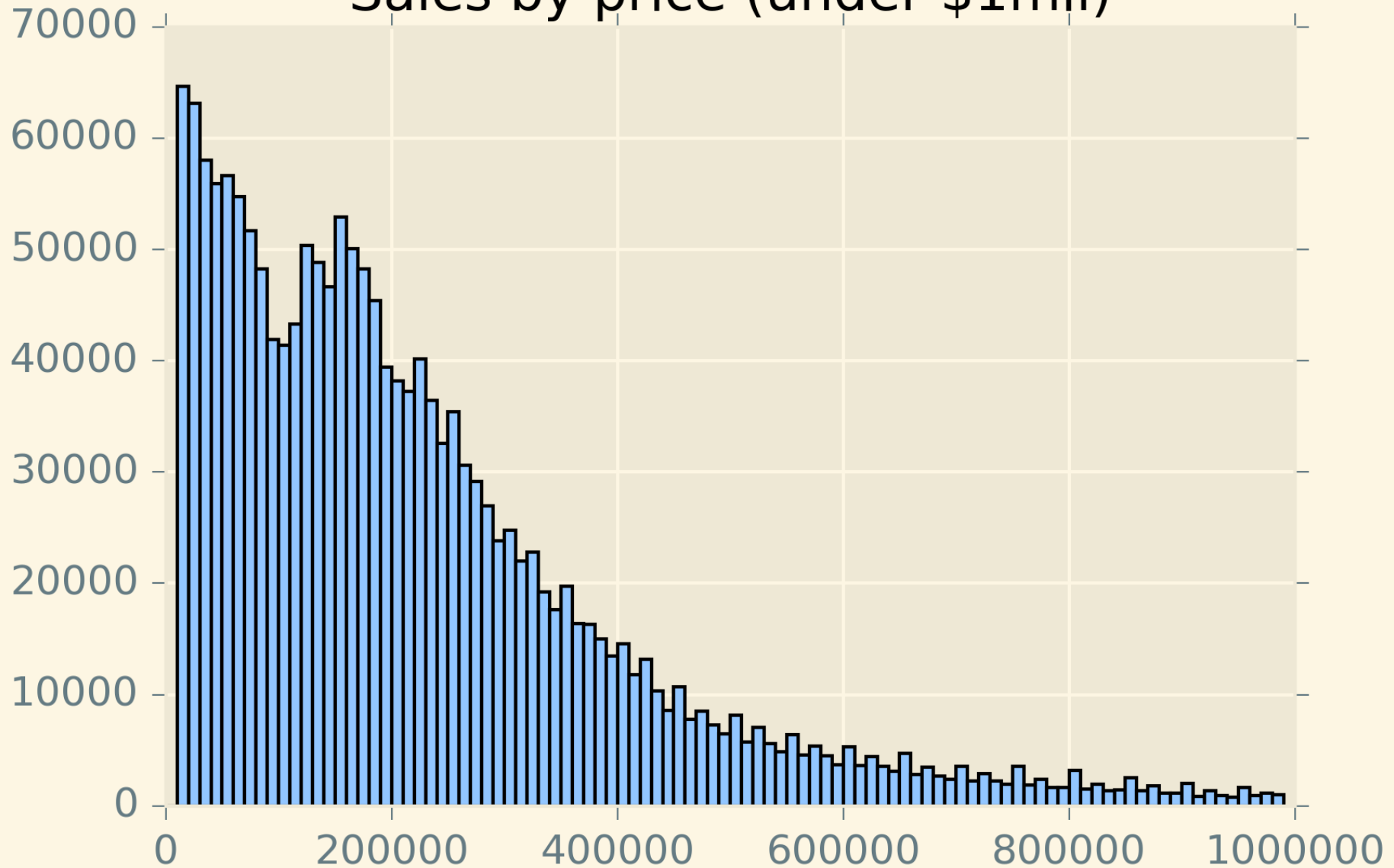
Data Processing



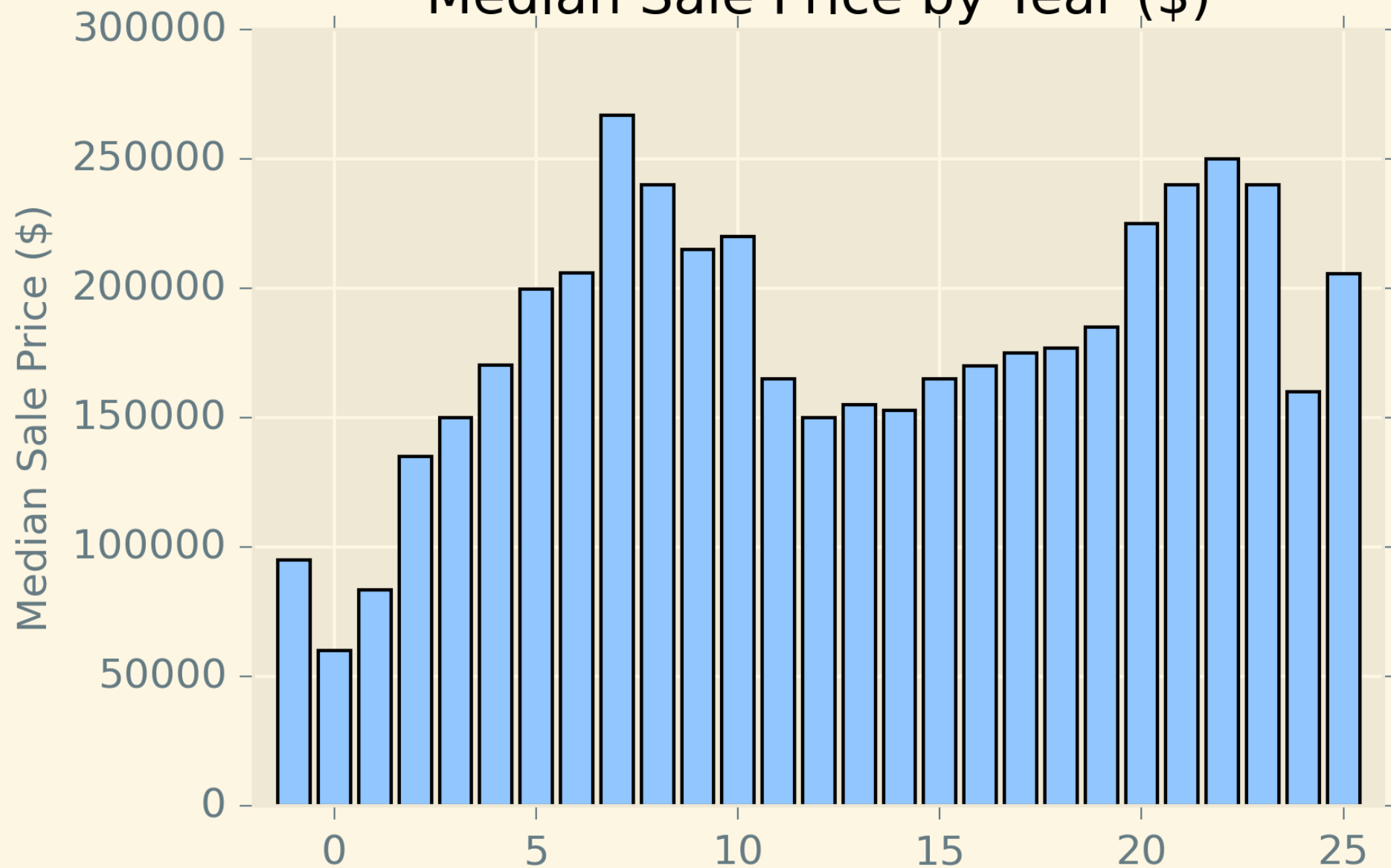
Exploratory Data Analysis

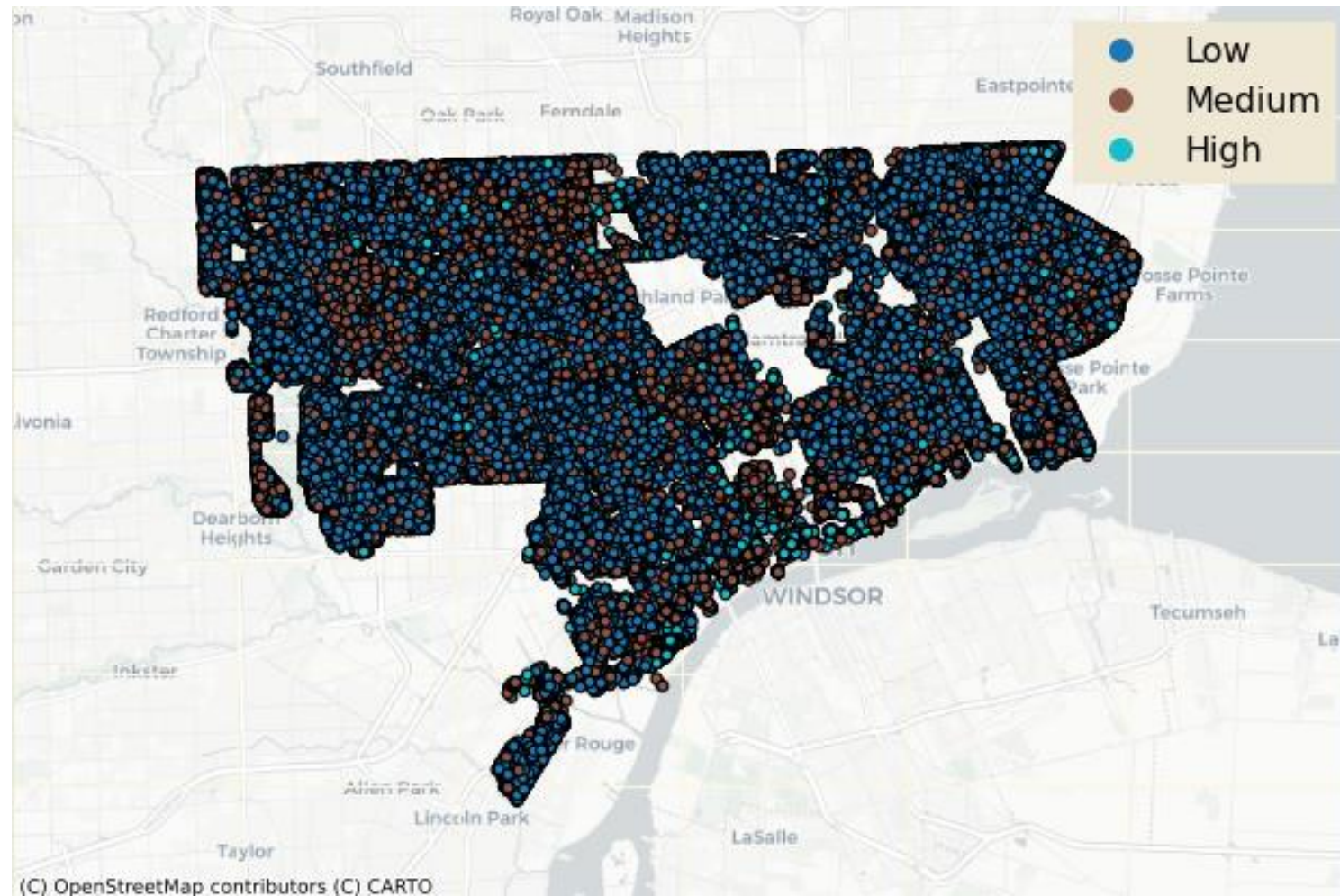


Sales by price (under \$1mil)



Median Sale Price by Year (\$)





- **Detroit home sales by price**

Potential models

Baseline : linear regression model

Random forest model

Convolutional Neural Networks

Geographically Weighted
Regression