DATA-DRIVEN INSIGHTS INTO HOUSING TRENDS: FORECASTING AFFORDABILITY RISKS

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"OUR HOMES ARE MORE JUST THAN YOUR INVESTMENT"

- The Broadway Plan is a 30-year redevelopment strategy for Vancouver's Broadway Corridor, focused on building high-rise housing nearby new SkyTrain stations.
- Critics fear it will lead to the displacement of renters and worsening affordability.
- This project uses machine learning to model how new developments may impact local housing affordability.

PREDICTIVE MODELING WITH MACHINE LEARNING
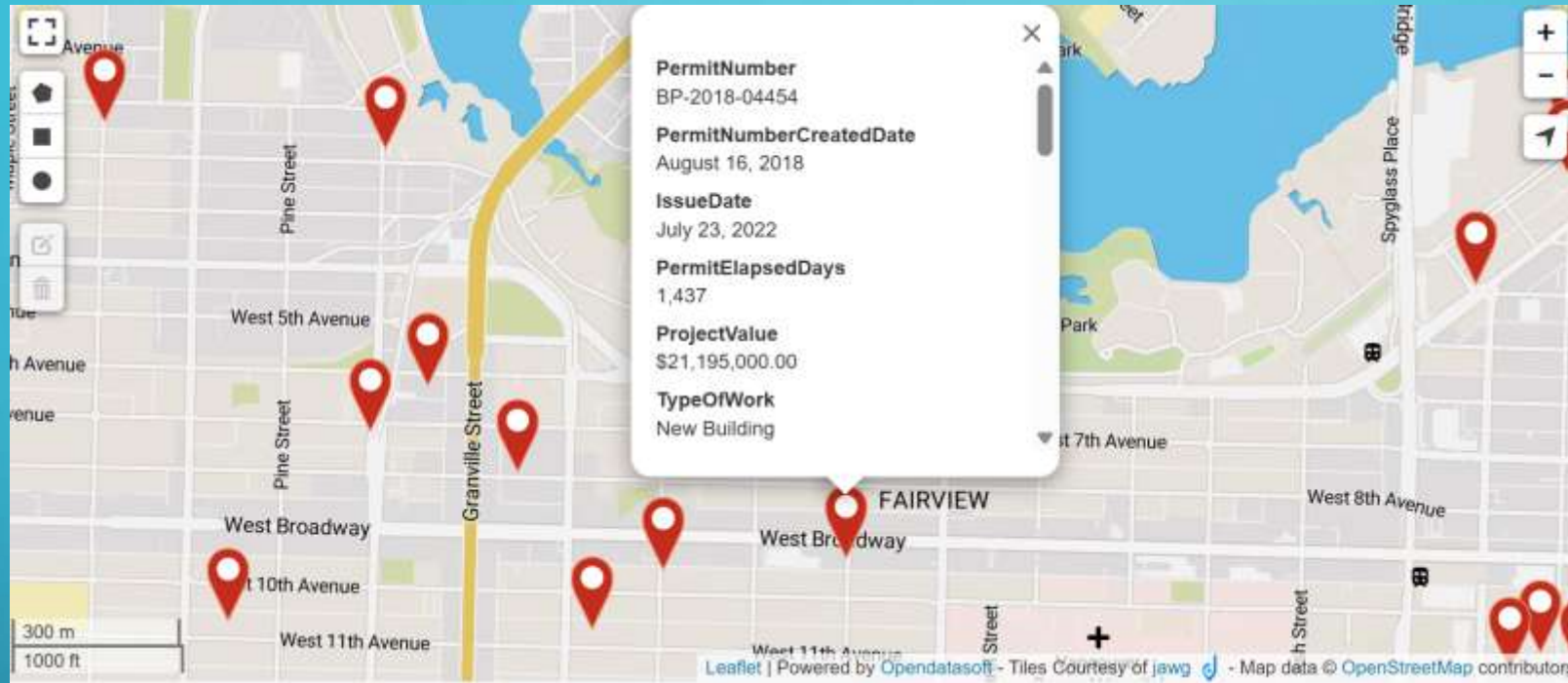
Goal: Build a predictive tool to estimate the effects of developments like those in the Broadway Plan.

- Define affordability metrics at the neighborhood level.
- Use supervised machine learning regression models (such as **Linear Regression, Random Forest, and K-nearest neighbors**) to uncover correlations between development types and shifts in affordability.

PURSUING HOUSING EQUITY WITH DATA SCIENCE

- Activists have organized protests to challenge displacement linked to large-scale redevelopment plans.

- My goal is to provide a data-driven tool to help assess how specific developments may impact neighborhood affordability.

INTRODUCING THE DATA

- The project combines **housing construction data** with **neighborhood-level economic indicators.**
- Preliminary EDA shows the datasets are rich and detailed.
- I anticipate challenges in merging datasets and handling inconsistent values.
- Careful adjustments will also be needed to account for macroeconomic factors.

NEXT STEPS

- Clean and organize datasets, building a cohesive database using SQL and Python.

- Conduct feature engineering to align construction data with neighborhood-level economic indicators.

- Research machine learning models used in housing analysis to identify suitable algorithms.

- Begin baseline modeling!

QUESTIONS?