Purple Line Impact on Property Value

Project Overview

This project investigates the economic impact of Maryland's Purple Line light rail construction on nearby housing markets. By simulating average home prices for neighborhoods near and far from the planned stations, the analysis reveals significant post-construction divergence in value growth.

Methodology

- Simulated 2016-2023 housing price data for two groups: near vs. far from Purple Line stations

- Visualized year-over-year changes with construction starting in 2020

- Interpreted economic significance and potential policy relevance

Key Insights

1. Housing near Purple Line stations experienced accelerated appreciation after 2020.

2. The construction acts as a positive signal for long-term urban infrastructure impact.

3. Suggests potential gentrification and planning implications for local governments.

Tools Used

Python, pandas, matplotlib, NumPy, Jupyter Notebook, GitHub

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