

# Housing Development and Local Opposition: Evidence from Dublin County

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# Literature Review: Real Estate and Local Opposition

- **Collective Action (Olsen, 1971; Philippon, 2019)**

- concentrated special interests are likely to organize and fight to protect rents, while diffuse majorities interests are trumped
- Another way to say it is that *“free-riding grows with size*

- **NIMBY Effects (Been, 2018)**

- Property values as primary motivation for opposition
- Local residents more likely to oppose when personal stakes are high
- Pogodzinski and Sass (1994) find that communities with higher median incomes are more likely to have minimum lot size requirements for residential development.

- **Planning Permission Studies**

- Correlation between socioeconomic status and successful oppositions
- Analyzing minutes from planning and zoning board meetings, Glick et. al. (2020) find that community participants overwhelmingly opposed new housing. Objectors were more likely older male, longtime residents, voters, homeowners

# Data Source (1/2)

- **Dataset Characteristics**

- Comprehensive real estate transactions (2023-2024): possibility of extension to 2018
- Approximately 32,700 transactions
- Coverage: Dublin County electoral constituencies

- **Data Processing**

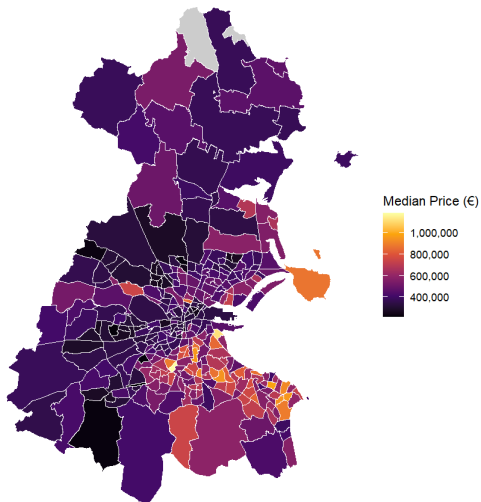
- Python script for merging multiple data sources and geocoding of addresses for spatial analysis
- Matching with electoral boundaries using GIS techniques in an R script

- **Key Variables**

- Transaction prices
- Property locations
- Electoral district mappings

# Median house prices by constituency

Dublin Property Prices by Constituency



Number of constituencies: 320

# Data Source (2/2): An Bord Pleanála

- **Planning Application Outcomes**

- Approved
- Rejected
- Withdrawn
- Under Appeal
- Invalid Applications

- **Dataset Features**

- 2,000 planning applications
- Focus on building construction (Type 1b)
- Binary classification system for analysis

- **Processing Methods**

- Web scraping using BeautifulSoup
- Batch processing (500 applications per page)
- Standardization of outcome categories

# Example of Webscrapping



An  
Bord  
Pleanála

Gaeilge

A

A

A

BrowseAloud

Search...

Q

ABOUT US

PLANNING APPEALS

INFRASTRUCTURE

OBSERVATIONS

OTHER CASES

WEEKLY LISTS

NEWS

YEAR

2024

ABP CASE NUMBER

ABP Case Number

PLANNING AUTHORITY  
CASE NUMBER

Planning authority case number

PLANNING AUTHORITY

Planning authority

SITE ADDRESS

Site address

Displaying: 500 Most recent cases

## Dublin

### PLANNING APPEAL

**Cratloe, 72 Albert Road Upper,  
Glenageary, Co. Dublin, A96 K4C6**

Case reference: 319715

Status: Case is due to be decided by  
16/09/2024

Description: Construction of 4 no. detached  
dwelling houses and all ancillary works  
necessary to facilitate the development.

Date lodged: 12/05/2024

### PLANNING APPEAL

**CitiGroup Building, 1 North Wall  
Quay, Dublin 1, D01 T8Y1**

Case reference: 319719

Status: Case is due to be decided by  
16/09/2024

Description: Demolition of 6 storey office  
building and basement. Construction of mixed  
use development ranging from 9 to 17 sto...

Date lodged: 12/05/2024

# Technical Challenges and Solutions

- **Geocoding Challenges**

- Nominatim vs. Google API tradeoffs
- Cost considerations led to Nominatim choice
- 30% data loss due to address format issues

- **Address Processing Issues**

- Non-standardized formats ("APT" vs. "Apartment")
- Rate limiting and IP flagging concerns
- Implementation of request delays

- **Data Quality Impact**

- 23,370 successfully processed addresses
- 25% loss rate in planning applications
- Potential sampling bias considerations

# Theoretical Framework

- **Key Assumptions**

- Two distinct wealth groups: high-income ( $\bar{n}$ ) and low-income ( $\underline{n}$ )
- High-income groups smaller but wealthier:  $Card(\bar{n}) < Card(\underline{n})$
- $W_{\bar{n}} > W_{\underline{n}}$

- **Coordination Costs**

- $c_i(n) = \alpha \cdot n^2$
- Increases with group size
- Proportional to individual wealth

- **Key Result**

$$\frac{R(\bar{n})}{R(\underline{n})} = \frac{\beta W_{\bar{n}}}{\alpha \bar{n}^2} \cdot \frac{\alpha \underline{n}^2}{\beta W_{\underline{n}}} = \frac{W_{\bar{n}}}{W_{\underline{n}}} \cdot \frac{\underline{n}^2}{\bar{n}^2} > 1$$

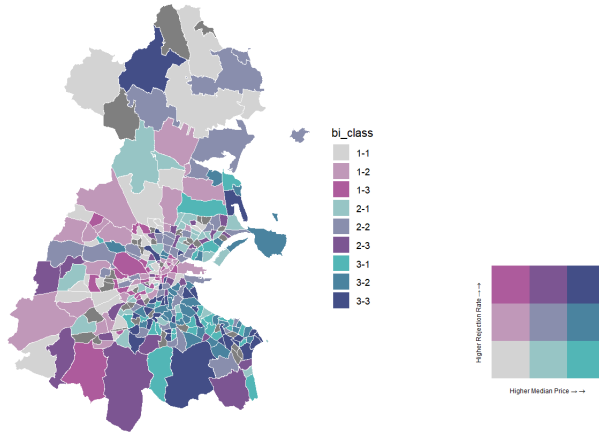


# Map result - 3x3 bivariate

House Prices and Planning Permission Rejection Rates

By Dublin Constituency

Rejections include refused, withdrawn, and invalid applications



# Map result - 2x2 bivariate

House Prices and Planning Permission Rejection Rates  
By Dublin Constituency  
Rejections include refused, withdrawn, and invalid applications

