

Bad Landlords II

Councilor Breadon

Team 1: Risheet Nair, Chengyu Zhang, Chen Gong, Rohan Sawant

Overview

What we achieved:

- Created visualizations for violation counts by landlord and by neighborhood and most common types of violations
- Analyzed various social features of different neighborhoods for our extension project
- Connected our extension findings back to the base analysis to get a more comprehensive view of the nature of violations
- Did additional analysis on income by neighborhood to study its effects on treatment by landlords

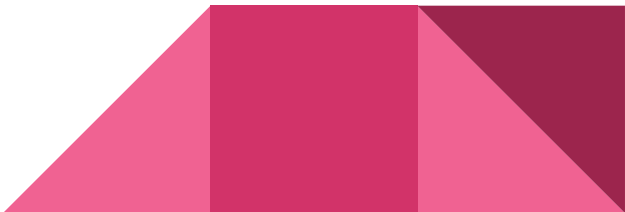
The main datasets we used:

- Buildings and property violations
- Violation codes dictionary
- 311 service requests(2022)
- Income restricted housing inventory(2021)
- Rentsmart dataset
- Climate Ready Boston Social Vulnerability dataset



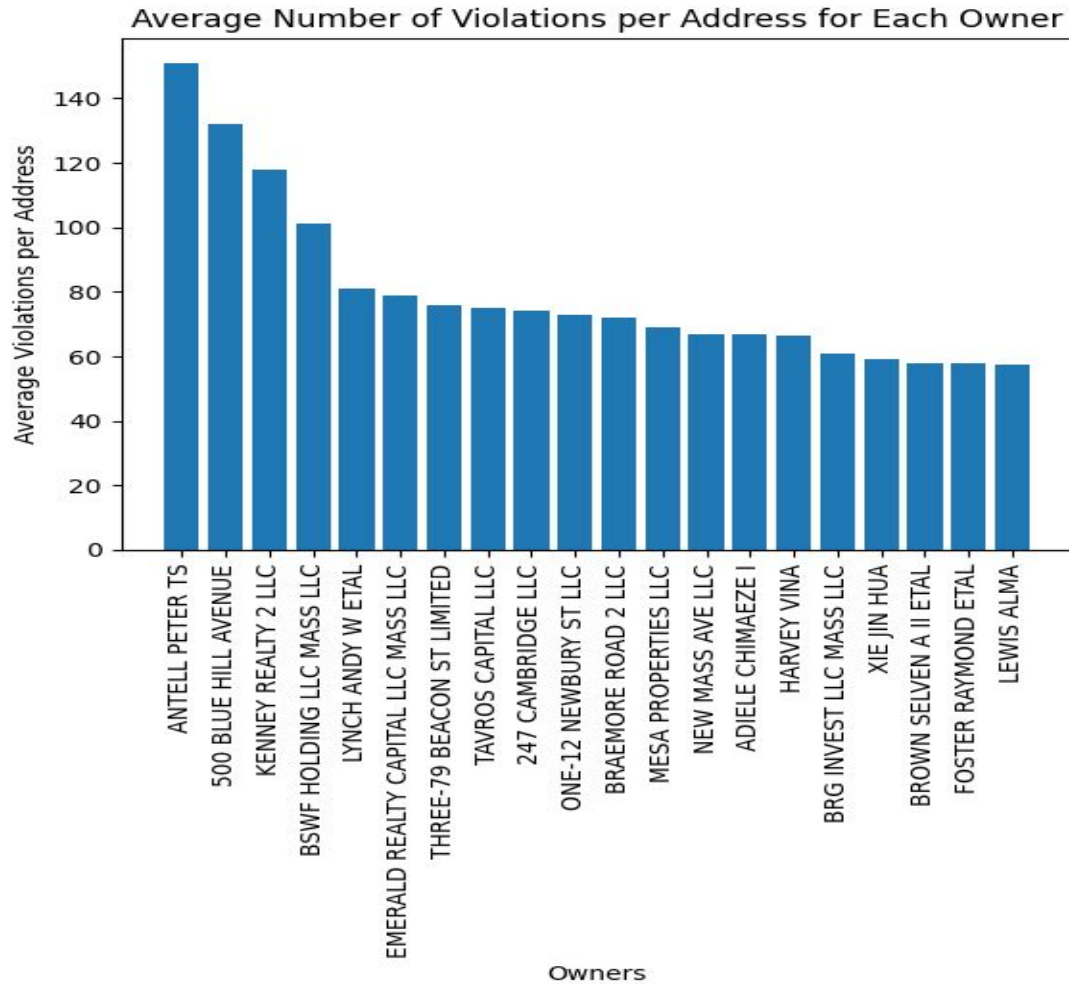
Base Analysis Questions

We try to answer these questions by the visualizations on the following slides:

1. What is the spectrum of violations and severity in regards to worst landlords classifications?
 2. What landlords are non-compliant in terms of overall volume?
 3. Are landlords unfairly impacting vulnerable communities in certain neighborhoods?
- 

Normalized Violation Counts by Landlord



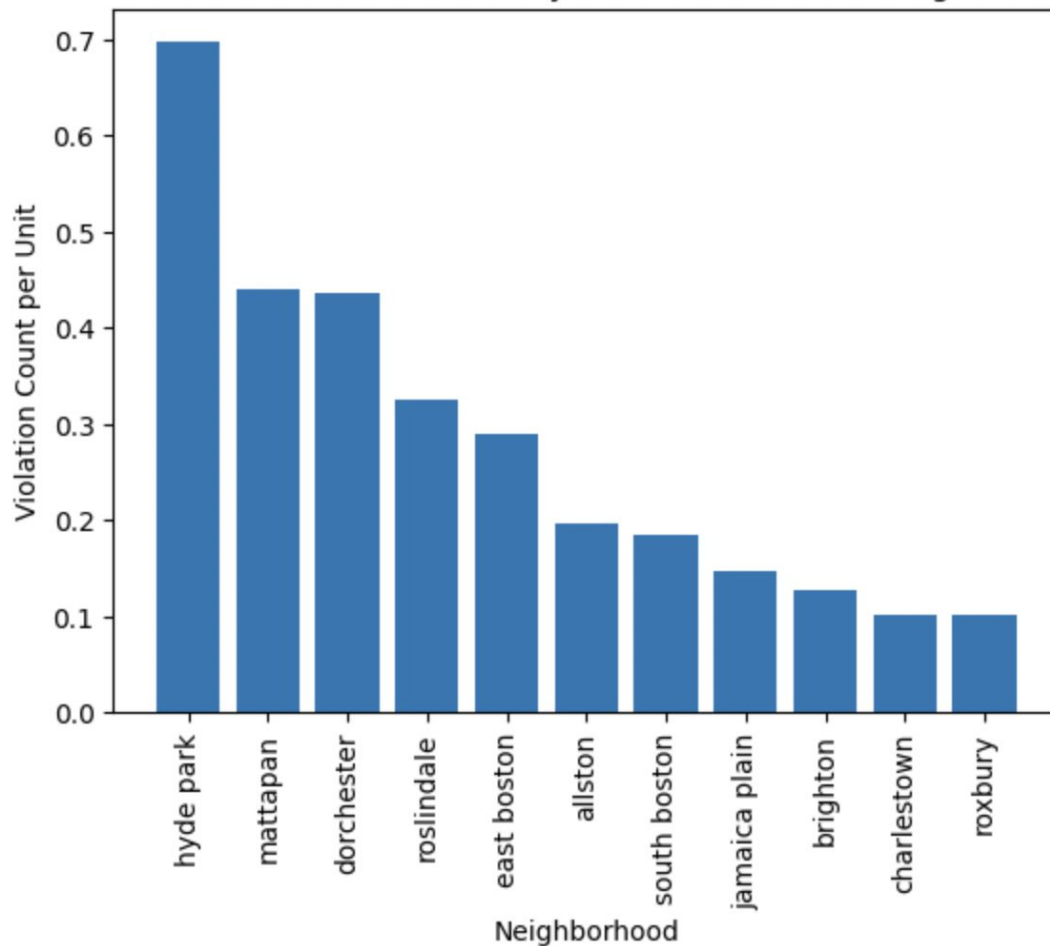


From the graph, we can conclude that Antell Peter TS is the property manager with the greatest number of violations per address in which a unit is owned by them.

Normalized Violation Counts by Neighborhood



Normalized Violation Counts by Total Units in Each Neighborhood

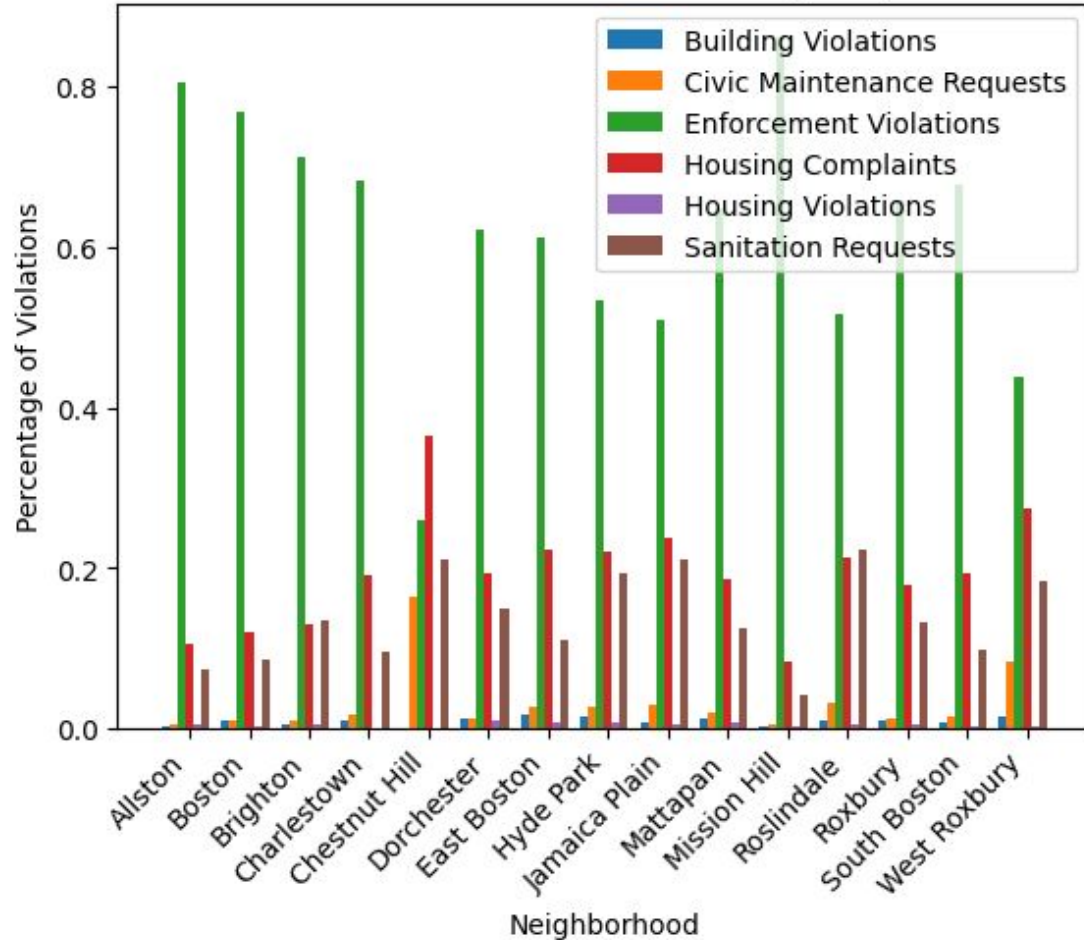


These are the top 11 neighborhoods with the greatest number of violation counts per unit. Hyde Park has the clear highest ratio compared to the other neighborhoods.

Most Common Violations by Neighborhood



Most Common Violations Normalized by Neighborhood



Enforcement violations are by far the most common types of violations followed by housing complaints. However, severity was difficult to determine based on the available data.

Extension Proposal

- Our Extension proposal is determining the influence of various social factors on the number/types of violations that landlords commit.
- Some factors that we might consider are: the number of children/elderly people, the number of individuals who don't speak English as their first language, the number of minorities who live in a particular neighborhood, etc.
- Since housing is a part of society, it is possible that landlords' violations might be influenced by the social environment of the neighborhood.



Extension Proposal

Question for Analysis

What are the social features of different neighborhoods?

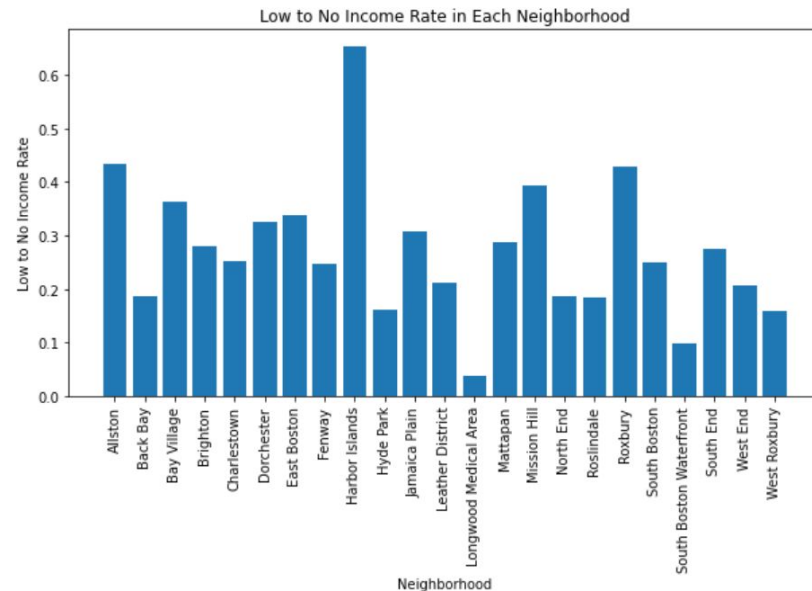
What is the connection between social factors and violations made by landlords?

What social factors influence the number and type of violations most?



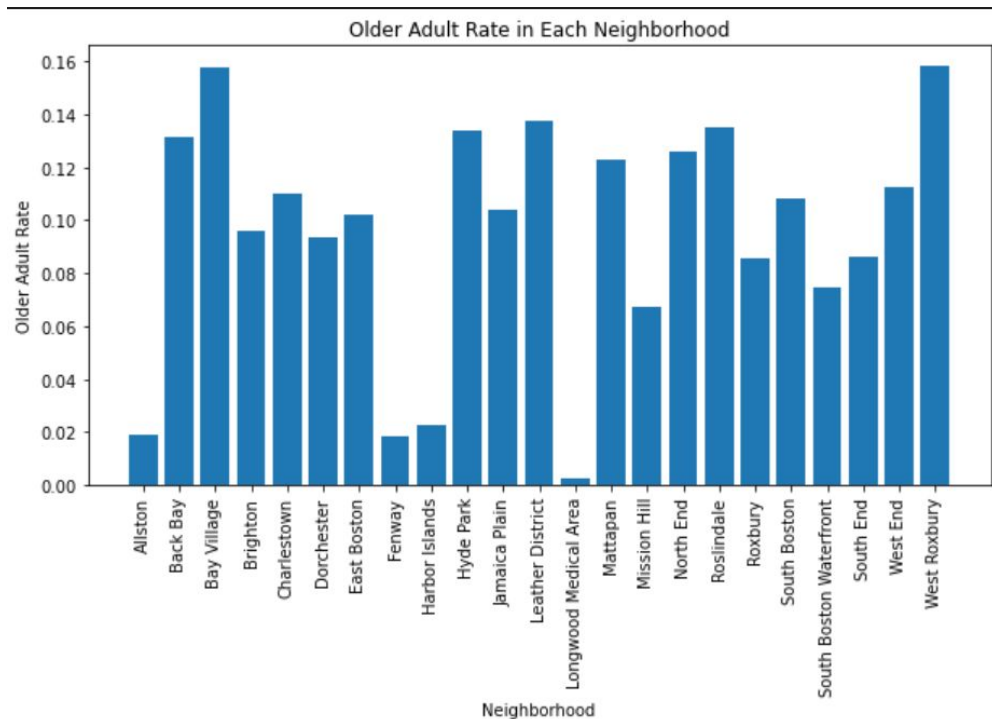
Extension Proposal Analysis

- By analyzing the Climate_Ready_Boston_Social_Vulnerability dataset, we find the social environment of different neighborhoods.
- We began by analyzing how many low to no income people reside in each neighborhood.
- A lack of financial resources impacts a household's ability to prepare for a disaster event and to support friends and neighborhoods.
- Based on the graph here, we can see that Harbor Islands, Allston, and Roxbury have the highest density of low to no income people.



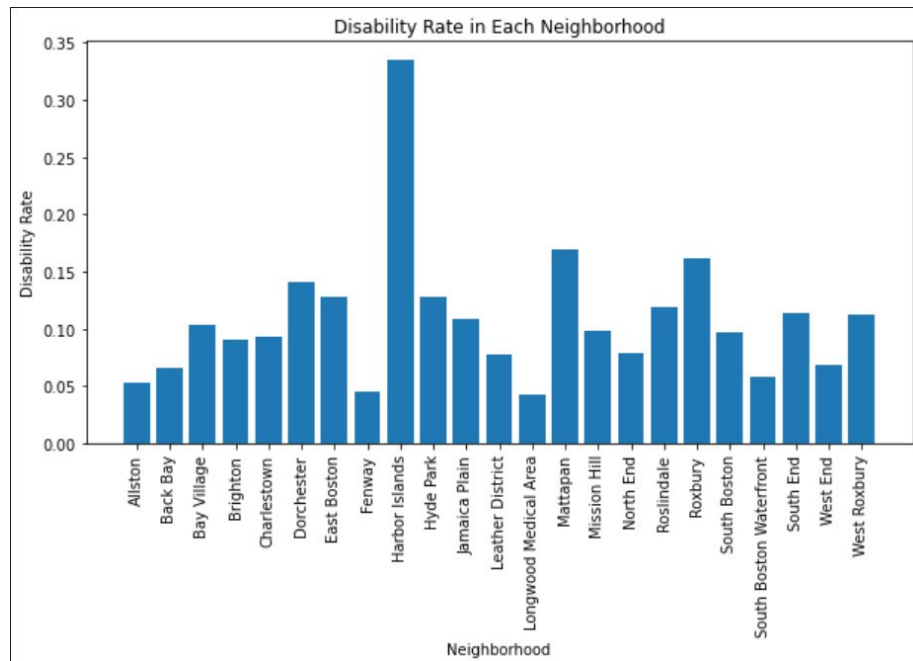
Extension Proposal Analysis

- We then investigated the distribution of older adult rates across various neighborhoods in Boston using the Climate Ready Boston dataset.
- The older adult rate plot highlights the disparities in the proportion of senior residents among different neighborhoods
- From the graph, we conclude that West Roxbury, Bay Village, and Leather District have the highest proportions of older residents



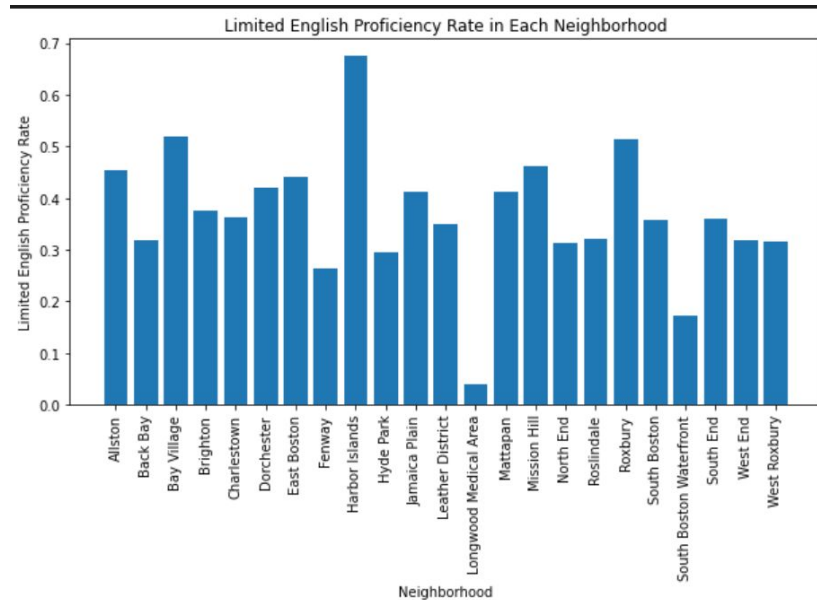
Extension Proposal Analysis

- Additionally, we have examined the distribution of disability rates across Boston neighborhoods using the Climate Ready Boston dataset
- This crucial insight helps policymakers, local organizations, and support services identify areas that may require more focused efforts and resources to address the unique challenges faced by disabled residents.
- The top 3 neighborhoods that have a high disability rate are Harbor Islands, Mattapan, and Roxbury based on the visualization above.



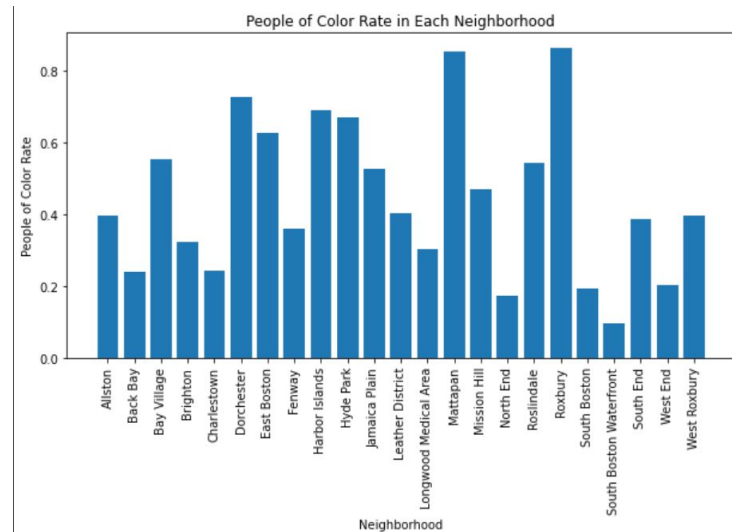
Extension Proposal Analysis

- By normalizing the Limited English Proficiency values based on the population of each neighborhood, we created a bar plot that displays the LEP rate in each area.
- Based on the visualization here, Harbor Islands, Bay Village, and Roxbury have the highest rate of residents with limited English proficiency.



Extension Proposal Analysis

- We have also analyzed the dataset to study the distribution of people of color rates across various neighborhoods in the city. by normalizing the number of people of color based on the population of each neighborhood
- Based on the visualization, Roxbury, Mattapan, and Dorchester have the highest population of POC.



Extension Proposal Conclusion

- Initial focus on analyzing evictions and housing court cases in Boston was hindered due to insufficient and non-representative data, as it mainly covered pre-Covid and during Covid periods, lacking information about changing demographics and times.
- Shifted focus to alternative questions to gain insights into housing issues:
 - Correlation between violation counts and income-restricted housing in certain neighborhoods.
 - Identification of neighborhoods with the highest number of violations based on the number of units.
 - Examination of potential unfair targeting of marginalized communities by landlords in terms of violation rates.



Extension Proposal Conclusion

- we can see from the above visualizations, the social features that impacted discrimination the most were:
The number of low-to-no income people, the number of older adults and disabilities, Limited English Proficiency by Neighborhood and The POC population by neighborhood.
- Roxbury is a neighborhood with an extremely large rate of low to no income residents, residents with disabilities, residents with limited English proficiency, and POC population. This is a significant observation to make because as we saw from the base analysis, Roxbury is one of the top neighborhoods with a large rate of violations per unit. We guess it's because people with less income are less likely to pay for their rent and are more likely to live in housing that is poorly maintained, overcrowded, so are the POC population which we can also see in the example of Mattapan. Mattapan has a large population of disabled residents and a large POC population. As before, we see that Mattapan has a large rate of violations per unit. And the example of Bay Village and Roxbury, where the violation of housing complaints are the most common compared with other regions, tells us that the number of older adults and disabilities are also important factors to consider. Those people may be more strict about the environment and conditions which will cause violations like housing complaints and sanitation requests.



Final Conclusions

- Findings suggest a concerning trend in Roxbury and Mattapan:
 - These neighborhoods exhibit a high concentration of income-restricted units.
 - Residents in these neighborhoods have significantly low per capita income.
- Possible indication of landlords attempting to push out residents with lower income levels, potentially driven by rising rent prices.
- Extension analysis supports the notion of landlords taking advantage of marginalized communities, specifically observed in Mattapan and Roxbury.
- These findings emphasize the need for further examination and potential interventions to ensure equitable housing practices and protect vulnerable communities.

