City of Boston: Remodeling and Unit Loss

**Project Focus/Overall Goal:**

The focus of our project is to analyze how remodeling and unit conversions impact rental units in the City of Boston. The overall goal is to understand the trends and potential consequences of higher-income individuals moving into the city, leading to a reduction in available housing units and their potential impact on local communities.

**Importance of the Project :**

This project is crucial for the City of Boston as it aims to provide insights into the housing market dynamics, particularly regarding the reduction in available housing units due to remodeling and conversions. Understanding these trends is extremely important for guiding policy decisions and implementing interventions aimed at ensuring equitable housing access for all residents. By addressing the central question of the project—identifying the communities impacted by these conversions, whether through displacement, increased housing costs, or insufficient unit availability—we can then proceed to formulate solutions aimed at aiding these communities and ensuring they are afforded equal opportunities for housing.

**Data Collection and Analysis:**

We have been advised to look into two data sets : Property Assessments Data Set and Approved Building Permits Data Set. Both these data sets have been made available online by the boston government. We would be using these data sets and possibly explore other data sets, for example, the community and demographic data of different regions of boston, to be able to answer the first two questions of the problem statement.

Possible analysis on the data sets (subject to change as we progress) :

1. The analysis will involve examining historical trends over time to identify patterns and correlations between remodeling activities, zoning conversions, and changes in housing availability.
2. Conduct spatial analysis to identify geographic patterns and hotspots of remodeling and conversions. This can involve mapping techniques to visualize how these activities are distributed across different neighborhoods and districts within the city.
3. Utilize clustering algorithms to categorize communities based on their susceptibility to housing market changes induced by remodeling and conversions. This can help identify vulnerable communities requiring targeted interventions.
4. Develop predictive models to forecast future trends in remodeling and conversions and their potential impact on housing availability and affordability. This proactive approach can assist policymakers in devising preemptive measures to mitigate adverse effects.

**Potential Limitations :**

1. From some initial screening of the data, we have realized that the data needs significant cleaning. Therefore, the quality of the data could prove to be a hindrance to the project.
2. The first two questions in the project problem statement report are related to the impact of remodeling on communities but it doesn’t explain what it really means by the use of the term ‘communities’. This lack of clarity on this could prove to be a hindrance as well.

**Client Meeting Notes :**