Capstone 2 | Outline

Hypothesis Formation

Whether adding multifamily housing and additional apartment buildings to cities in Massachusetts adequately addresses housing affordability, where affordability is the percentage of one's income relative to their housing expenses and their ability to purchase a home—not rent—by measuring the impact of new developments on housing prices and rental rates, demographic data, and government policies in 2021?

Context

A real estate development company, a city government, or a policymaker will likely care about this problem because they are interested in developing and implementing policies that effectively address the issue of housing affordability.

Criteria for Success

- Accurately measuring the impact of adding multifamily housing and apartment buildings on housing affordability using appropriate statistical methods and data sources.
- Actionable insights that inform decision-making by real estate developers, city planners, and policymakers in addressing the issue of housing affordability.

Scope of Solution Space

- Housing prices and rental rates in areas where new developments have been built and in similar areas without new developments.
- Demographic data to evaluate the impact on different income groups.

Constraints

- Data availability: The availability and quality of relevant data sources may be limited, limiting the scope and accuracy of the analysis.
- Stakeholder resistance: The analysis may challenge stakeholders' existing beliefs or interests, such as real estate developers or policymakers, which may result in opposition to the analysis or its findings.

- Legal and regulatory constraints: Legal and regulatory constraints, such as zoning laws, building codes, or rent control regulations, may limit the potential impact of adding new housing developments on housing affordability.
- Economic factors: External economic factors, such as changes in interest rates or economic downturns, may impact the housing market and the potential success of the business initiative.
- Political factors: Political factors, such as changes in government policies or political instability, may impact the potential success of the business initiative.

Stakeholders

- Real estate development companies and investors want to build multifamily housing and apartment buildings.
- City governments and policymakers are responsible for creating and implementing housing affordability policies.
- Non-profit organizations and community groups advocate for affordable housing and the needs of low-income residents.
- Residents and community members whom the addition of new housing developments and changes in housing affordability may impact.

Data sources

Available on the American Housing Survey (AHS)

- Housing prices and rental rates: Data on the cost of housing and rental rates in areas where new developments have been built, as well as in similar areas without new developments, to evaluate the impact of new developments on affordability.
- Economic data: Economic data, such as employment rates and wage levels, may impact housing demand and affordability.
- Data on existing housing stock: Data on the quality and availability of existing housing stock in the same areas can help evaluate the relative impact of new developments on affordability.