

Mapping Gentrification: Assessing the risk in Somerville, Medford, Malden and Everett

What is Gentrification?

It is often defined as the transformation of neighborhoods from low value to high value, or the restoration and upgrading of deteriorated urban property by middle class or affluent people often resulting in the displacement of low-income people. In the academic realm there are several perspectives about its causes and effects.

Project Overview

This project analyzes six indicators that have been considered as variables that characterize gentrification. The main goal is to predict the Census Tracts across four towns in Massachusetts: Somerville, Medford, Malden and Everett, which are at risk to be gentrified.



The City of Cambridge, which has more affluent population and better access and proximity to transportation facilities, is used only to compare and contrast the characteristics of the focused area of

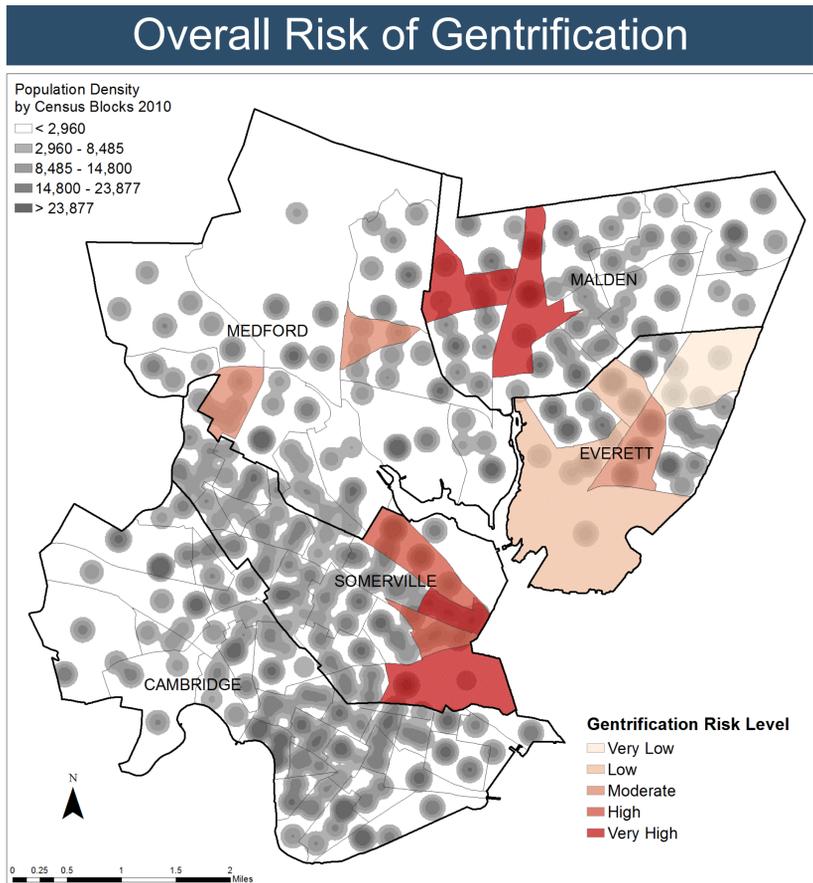
this project.

The six indicators associated with gentrification, shown in the smaller maps of the right, are the following:

- **Income.** Low-income areas adjacent to high-income tracts are more vulnerable to be gentrified. Indicator used instead of land values and change in percent of homebuyers with high income, which are variables used to assess the gentrification risk too.
- **Proximity to Transportation Facilities.** Easy access to job centers is a characteristic of gentrified neighborhoods.
- **Age of housing stock.** This variable identifies housing units that are in greater need of physical upgrading and thus, more likely to be gentrified.
- **Tenure.** Renters are more vulnerable to fluctuations in the market place than are homeowners.
- **Race.** Tracts with large white population are generally less likely to gentrify than those with small white population. In other words it is common that low-income areas at risk of gentrification have a high level of minorities.
- **Population density.** Density is often strongly correlated with neighborhoods that are in need of renovation, thus more vulnerable to be gentrified.

Because the definition used in this project states that gentrification only occurs in low-income neighborhoods, each of the variables are mapped across all Census tracts in the focused area for the year 2010; yet, the final assessment of gentrification risk is limited to the identified low-income Census tracts.

The five first indicators chosen are aggregated by Census Tract and the gentrification risk is calculated by allocating a score to each of the variables, all of them are weighted equally from 1 to 5. The population density is not part of the score and was calculated by using Census Blocks rather than Tracts to improve accuracy.



Limitations

Because these maps represent a simple snapshot of Census 2010 data, the information could be not accurate to current demographic characteristics of the Cities. In addition, risk of gentrification is assessed with several methodologies and different indicators than those which were used in this project.

Results

The analysis finds that the risk of gentrification is not located in any particular region of the focused area. The Census Tracts with more risk of gentrification are located in two cities: Somerville and Malden. The tracts most likely to gentrify are relatively near to subway stations and have a smaller white population than Census Tracts located in Everett and Medford. In addition, the Census Tracts with low risk have less population density than the others.

Census tracts more at risk

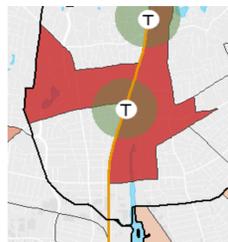
Somerville



Number of Tracts: 4
Key Factors:

One low income tract adjacent to high income tract. Two tracts somewhat accessible by sub way. Three tracts with less than 59% of white people. High number of rental residential units in all the area.

Malden

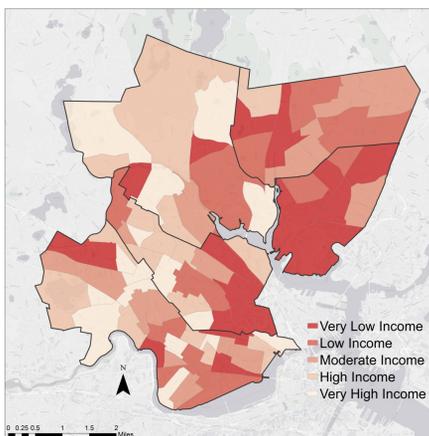


Number of Tracts: 2
Key Factors:

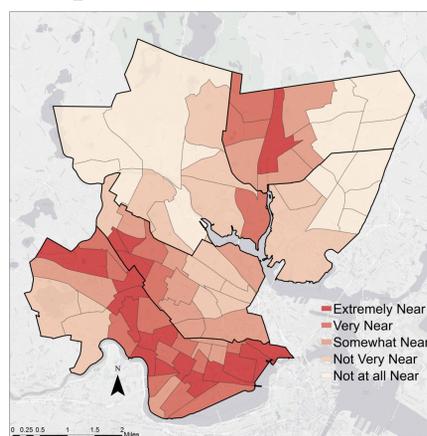
One low income tract adjacent to high income tract. Both tracts accessible by orange subway line. Less than 65% of white people and more than 65% of rental residential units.

Gentrification Factors

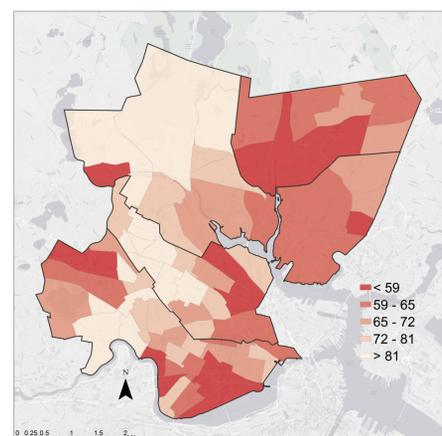
Median Income by Census Tract



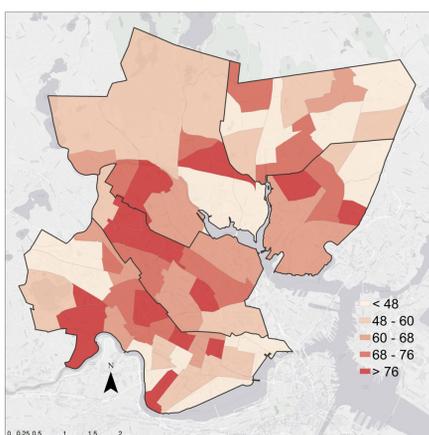
Mean distance to subway stops



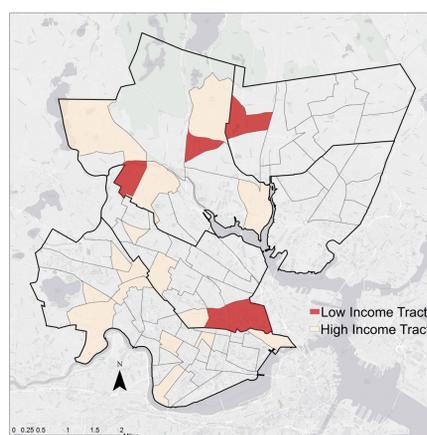
Percentage of white population



Percentage of residential buildings built before 1939



Low income tract adjacent to high income tracts



Percentage of rental residential units

