

# Characteristics of safe affordable housing

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## Introduction

In the past decade, rent increases have far surpassed income growth in New York City. Data from the American Community Survey shows that, over the last decade median rent has increased by 14.7% whereas median income of renter households has only increased by 2.3% over the same period. This places a substantial burden on low-income households. However, affordable housing projects meant <sup>to</sup> address the need of the most vulnerable population, are often plagued by other problem that arise out of crowding together people with fewer resources and opportunities. <sup>out of -> from</sup>

## Data

The data was obtained from the Subsidized Housing Information Project which is maintained by NYU Furman Center and Moelis Institute for Affordable Housing Policy. The SHIP database contains financial and physical information on nearly 235,000 units of privately-owned subsidized affordable rental properties in New York City developed with financing and insurance from the U.S. Department of Housing and Urban Development (HUD), HUD project-based rental assistance, New York City or State Mitchell-Lama financing, or the Low-Income Housing Tax Credit (LIHTC). This data is made available through the Furman Center's Data Search tool.

The Data Search tool also contains Neighborhood information of New York city, which include key metrics that describe a neighborhood. For the purpose of this project the percentage of population with a bachelor's degree, by community district was used.

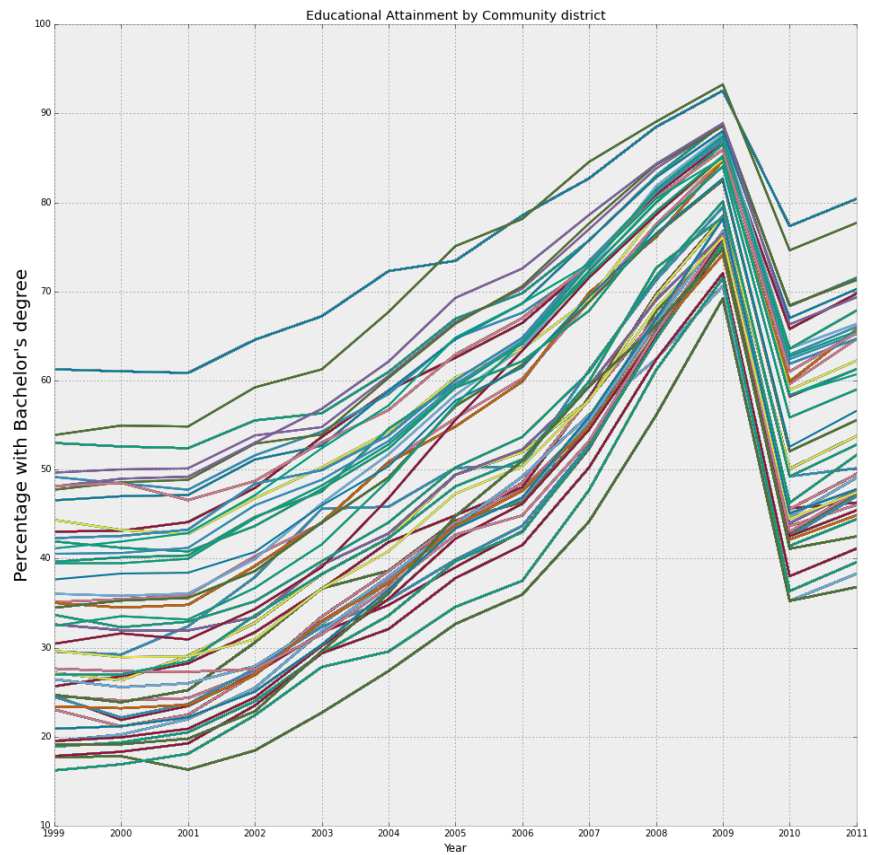
These data sets were merged with the geojson of community districts of New York city obtained from NYC prepared website

## Methodology

A plot of the change in educational attainment over time by community district was plotted. The educational attainment was clustered over community district.

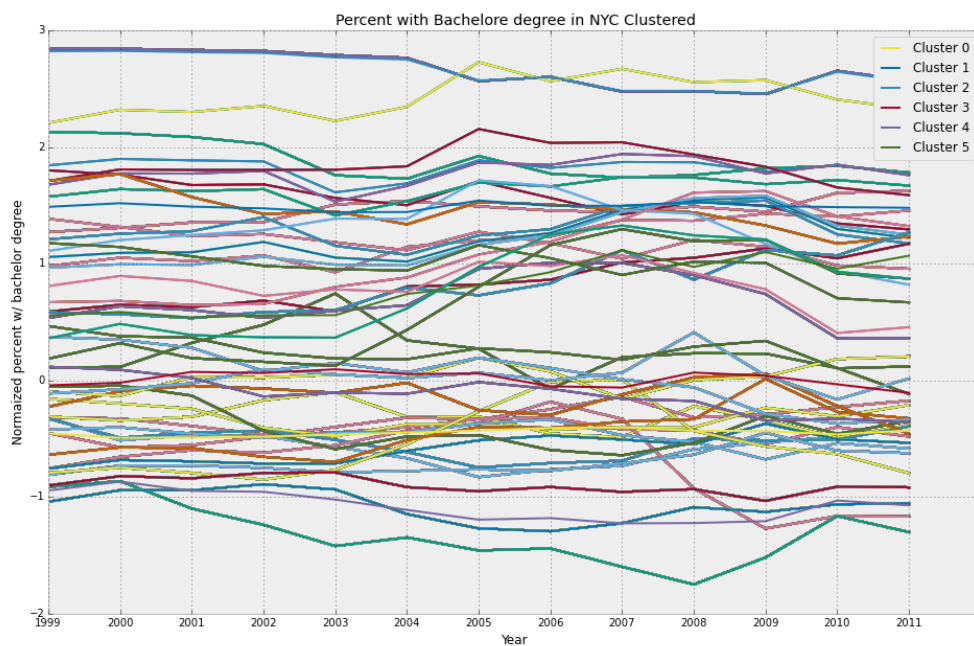
<sup>clustered how? k-means? agglomerative? by eye...?</sup>

this is very odd! the drop between 2009 and 2010 must be artificial. if it is not a clerical error (of yours) i could speculate that it may be due to the redefinition of the community population after the census. either way you must discuss this and see how it would affect your conclusions.



you have a very large number of clusters, and not that many time series.  
have you tested cluster stability? how did you choose the number?

normalized by what?



without a caption or an explanation in the report i am not sure what i should notice in these plots: why are you shouwing me this? how is it ightful about rental costs?

as i mentioned in an email after your submission: you entirely miss the conclusion session. there is no discussion of the meaning of the clusters, whwther they are located geographically in a way that makes sense (neighbouring hoods?) what do the clusters reveal? who do bachelor rate relates to housing??

## Future Work

A time series analysis and event detection of long standing NYCHA projects that have also seen improvements in neighborhood quality, such as lower crime and higher educational attainment, can be carried out.