

TARNISHING TINSELTOWN: A Gentrification Risk Analysis of the City of Los Angeles



INTRODUCTION

The state of California is facing a housing crisis. It has been estimated that 3.5 million units of housing need to be built by 2025 in order to alleviate the crisis. California's largest city, Los Angeles, is one of the epicenters of this crisis. From 2010 to 2015, the city's population grew 4.7%, or about 258,639 people, and is now at about the 4 million mark. With a current housing stock of only around 87,000 units in the downtown area alone, it's clear that the demand for housing is much larger than the supply. This gap will continue to grow unless more housing units are built. However, increasing the market rate housing supply is a double-edged sword. Development, investment, and much needed renovations may revitalize certain areas of Los Angeles, but these same improvements may also displace current tenants. It is important for legislators to understand which populations will be negatively affected by development and which areas will be vulnerable to it. Through this understanding, a more educated approach can be taken in addressing the housing crisis so that the city of Los Angeles is improved without harming the well-being of certain populations.

This research project attempted to answer the question: Which neighborhoods in Los Angeles are the most vulnerable of undergoing gentrification?

METHODOLOGY

Three weighted indexes were created by spatially joining vectors together. Each index analyzed census tracts. Scoring criteria was based off of variables commonly believed by scholars to be important in estimating which neighborhoods will experience gentrification. It is important to note that because gentrification is a very complex issue, these analyses may have faults when it comes to predicting which neighborhoods are the most endangered of being gentrified. 983 census tracts were analyzed in this project. Some census tracts were not included due to a lack of data provided by the United States Census Bureau.

1. Demographics Analysis

Census tracts were scored based on: the number of non-white individuals, the average median household income, the number of individuals who have attained a Bachelor's degree or above, and the number of individuals renting housing units in each tract. Each census tract received a separate score of 1-5 for each category listed above. The index was then calculated by multiplying each census tract's four categorical scores by 0.25 and then adding these resulting scores together. Census tracts were scored on a 1-5 scale. Tracts with lower scores have more disadvantaged populations while those with higher scores have more privileged populations.

$$([RACESCORE] * 0.25) + ([MHHISCORE] * 0.25) + ([EDUSCORE] * 0.25) + ([RENTERSCORE] * 0.25) = DEM_SCORE$$

2. "Hot Markets" Analysis

"Hot markets" are defined as areas seen most attractive by developers of market rate housing. Census tracts were scored based on: whether or not they had a train station, the percentage of housing units built before 1950, and the amount average rent has changed from 2012 to 2016. Each census tract was given a transportation score of 0 or 1, a housing age score of 1-5, and a rent change score of 1-5. The index was then calculated by multiplying each census tract's three categorical scores by their assigned weights and then adding these resulting scores together. Tracts with lower scores were deemed less attractive to developers while those with higher scores were deemed more attractive.

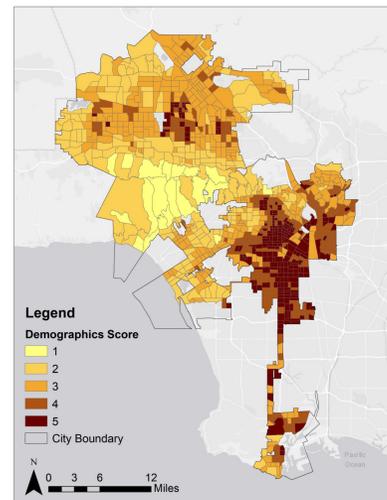
$$([TRANSITSORE] * 0.35) + ([YRBUILTSCORE] * 0.2) + ([RCHNGESCORE] * 0.45) = HM_SCORE$$

3. Gentrification Risk Analysis

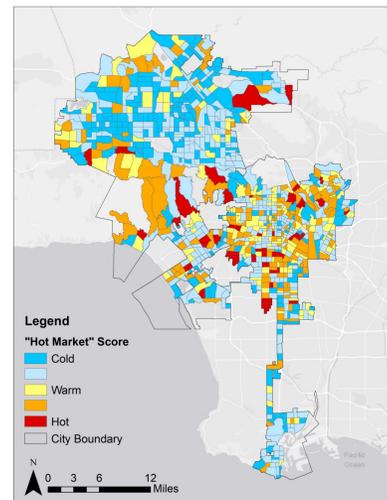
This index was created by spatially joining all vectors from the two previously created indexes. Variables taken from the demographics index were once again weighted equally but their respective weights were reduced to 10%. The weights of the variables from the "hot markets" index were also reduced. Transit score was reduced to 20%, housing age score was reduced to 15%, and rent change score was reduced to 25%. In the resulting index, census tracts that scored lower are less likely to undergo some degree of gentrification while those that scored higher are more likely.

$$([HMIndex.TRANSITSORE] * 0.2) + ([HMIndex.YRBUILTSCORE] * 0.15) + ([HMIndex.RCHNGESCORE] * 0.25) + ([DEM_Index.RENTERSCORE] * 0.1) + ([DEM_Index.EDUSCORE] * 0.1) + ([DEM_Index.MHHISCORE] * 0.1) + ([DEM_Index.RACESCORE] * 0.1) = GR_SCORE$$

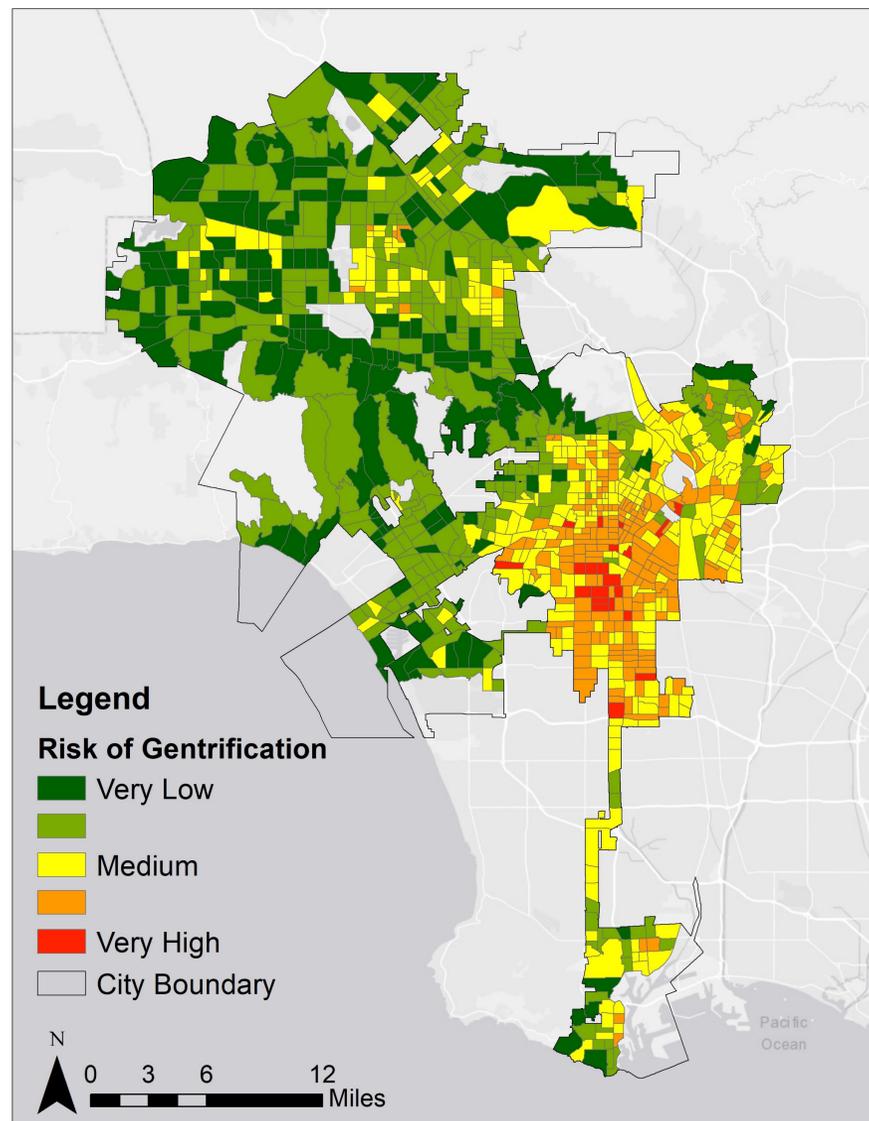
DEMOGRAPHICS ANALYSIS



"HOT MARKETS" ANALYSIS



GENTRIFICATION RISK ANALYSIS

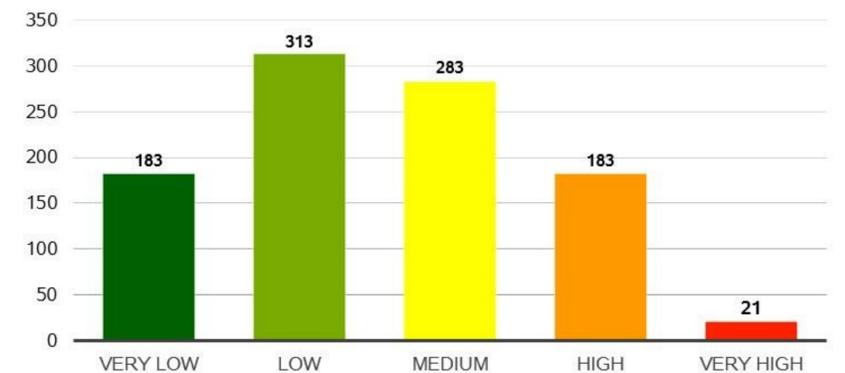


RESULTS AND DISCUSSION

Out of those analyzed, 496 census tracts were identified as having a very low or low risk of undergoing some degree of gentrification. These neighborhoods were mostly seen in areas like Beverly Hills, the Hollywood Hills, and Venice. These areas are known for being inhabited by wealthier and more privileged individuals. 204 census tracts were identified as having a high or very high risk of going under some degree of gentrification in the future. These high and very high risk neighborhoods are located mostly within Downtown Los Angeles and South Central Los Angeles, which are inhabited by more disadvantaged individuals. There is a lesser number of high risk neighborhoods in the San Fernando Valley, Northeast Los Angeles, and South Bay areas. These results support the theory that neighborhoods most at risk of undergoing gentrification are those with the most disadvantaged populations. Of the 21 census tracts that were deemed to have a very high risk of undergoing gentrification, all scored high either a 4 or 5 on the demographics index. This means all have very disadvantaged populations. Out of the very high risk census tracts, 10 of them were identified as being "hot markets". There is a positive correlation between "hot markets" and gentrification risk, but the correlation between more disadvantaged areas and the occurrence of gentrification is stronger.

As the population of Los Angeles continues to grow, so will the demand for housing. If the construction of market rate housing is not regulated intelligently by lawmakers, disadvantaged populations will be forced out of their neighborhoods due to rising rents. Lawmakers must find a way to encourage development while minimizing displacement.

CENSUS TRACTS BY RISK LEVEL



SOURCES

Written Sources:

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- Gentrification and Displacement Census Tract Typologies. (n.d.). Berkeley, California: Urban Displacement Project.
- Woetzel, J. et al. (2016). *A Tool Kit to Close California's Housing Gap: 3.5 Million Homes by 2025*. Retrieved from McKinsey Global Institute Database.
- Zuk, M. (2015). *Regional Early Warning System for Displacement (Rep.)*. Berkeley, California: Center for Community Innovation.

Data Sources:

ESRI, Los Angeles County Metropolitan Transportation Authority, United States Census Bureau

Projection:

NAD_1983_2011_StatePlane_California_V_FIPS_0405_Ft_US

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