

COMPLICATING GENTRIFICATION

WHAT IS GENTRIFICATION?

While there are many competing definitions for gentrification, the phenomenon has been defined as “the process of neighborhood change that results in the displacement of lower income residents with higher income ones” as well as “the upgrading of devalued urban property.”

While definitions vary, some common trends of gentrification include an increase in educational attainment (frequently quantified as the percentage of residents with Bachelor’s degrees), an increase in median household income and increasing rent. Indicators of gentrification can be separated into both spatial variables, such as access to amenities in a city, and demographic variables, such as increasing levels of white residents in previously minority dominated areas.

WHAT IS GENTRIFICATION VULNERABILITY?

Spatially, areas that are vulnerable to gentrification will have high access to amenities, such as universities and colleges, a central business district, and cultural hub spots. Additionally, the closer to public housing, the higher potential for gentrification. Low income areas that are adjacent, or in close proximity to high income areas are generally more vulnerable to be gentrified. Access to green space is also an indicator of gentrification, with the closest blocks to parks having the highest likelihood of gentrification.

Demographically, areas with higher percentages of educational attainment will be more vulnerable, as well as areas that have the largest percentage change of white residents over time. Senior citizens often serve as a deterrent to gentrification, therefore, the areas with the highest percentage of senior citizens will be less vulnerable. Areas in which there is a high concentration of renters paying more than 30% of their household income can be vulnerable, as this variable may indicate overburdened renters. Population density is often strongly correlated with neighborhoods in need of renovation. In addition, a high concentration of rental units, multi-unit housing, and housing built before 1939 can indicate gentrification, while a high concentration of vacancies can decrease the potential for gentrification.

METHODOLOGY

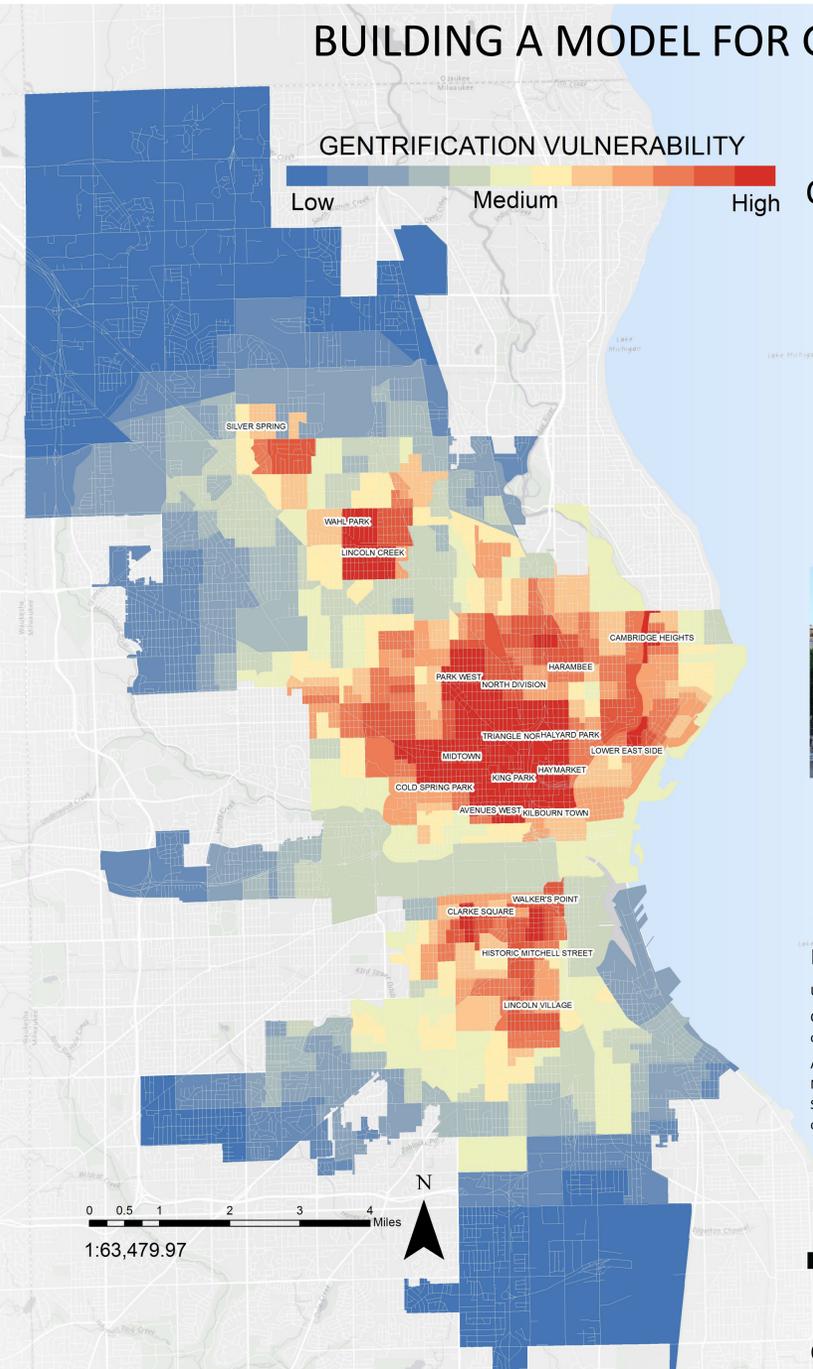
Both spatial and demographic variables were identified, grouped, and then weighted in a final raster calculator analysis.

- Amenities (7.5%)*
 - +Universities and Colleges
 - +Hospitals
 - +Museums
 - +Movie Theaters and Theaters
 - +Libraries and Archives
- Demographics (20%)*
 - +Population with Bachelors Degree
 - +Increase in White Residents Between 2009 – 2015
 - Concentration of Citizens 65+
- Population (20%)*
 - +Percentage of renters paying 30% of household income
 - +Population density
- Property (20%)*
 - +Rental Units
 - Vacancies
 - + Multi-Unit Housing Units
 - +Housing Units built 1939 or Prior
- Income (15%)*
 - Low Income Areas within ½ Mile of High Income Areas
- Public Housing (15%)*
 - +Proximity to Public Housing
- Public Parks (7.5%)*
 - +Proximity to Public Parks

VULNERABILITY RATING

In total, my analysis assessed 18 variables to assess gentrification in Milwaukee. The raster calculation was reclassified into twelve distinct categories by census block in the final map, symbolizing low to high gentrification vulnerability.

BUILDING A MODEL FOR GENTRIFICATION VULNERABILITY IN MILWAUKEE, WISCONSIN



CONCLUSION

The raster analysis yielded 25 census tracts most at risk for gentrification, displayed in the two highest categories of gentrification vulnerability. In the most vulnerable census tracts, there are 54,008 people, and 31,381 (58.1%) are black. The median income of the most vulnerable census tracts is 25,578 USD annually.

If gentrification continues in Milwaukee, these low-income, predominately black areas will likely be the ones most affected.



A photo of Haymarket, Milwaukee, one of the most vulnerable areas for gentrification.



A photo of a bike path in Midtown, Milwaukee, one of the areas most vulnerable for gentrification.

SOURCES

Data:
 US Census Bureau <http://www.census.gov/>
 City of Milwaukee Data Portal <http://city.milwaukee.gov/mapmilwaukee>
 All maps have been projected into NAD_1983_NRS2007_StatePlane_Wisconsin_South_FIPS_4803_Ft_US and the geographic coordinates are GCS_1984.

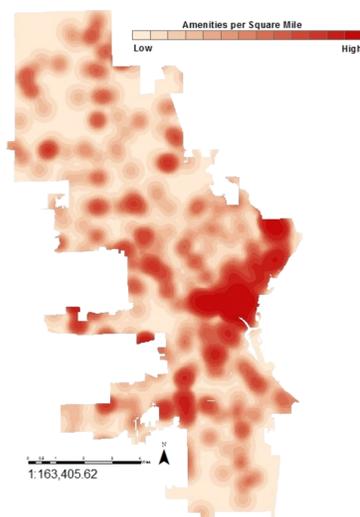
References:

Welch, Nicolas. (2013). City for all? A Geospatial approach to equity, sustainability, and gentrification in Seattle. Order No. 1547263 Tufts University, 2013.
 Martinez, Maria. (2014). Mapping Gentrification Poster. Tufts GIS Poster Expo.
 Fouch, Nakisha Tena. (2012). Planning for Gentrification: A Geographic Analysis of Gentrification Susceptibility in the City of Asheville, N.C. Order No. 1518284 Clemson University, 2012.
 Chang, Chung. (2013). The Advantage of Mapping Gentrification with Geographic Information Systems. Order No. 3601916 City University of New York, 2013.

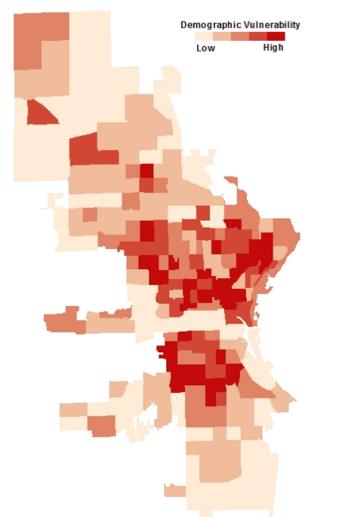
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Created by **Katie Saviano**, May 2017

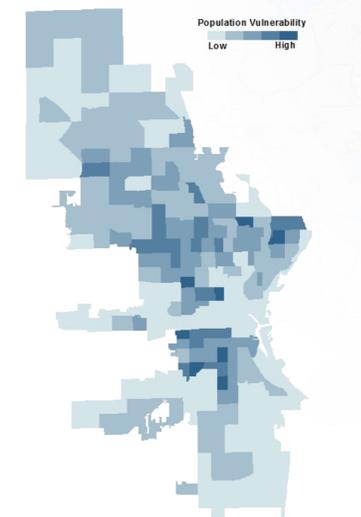
UEP 232 Introduction to Geographic Information Systems
 Instructed by Barbara Parmenter



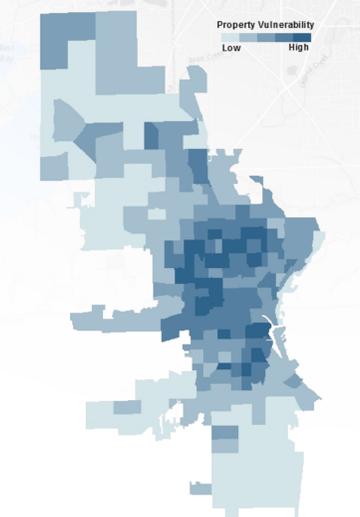
AMENITIES
 Amenities analyzed include universities and colleges, hospitals, museums, movie theaters, theaters, and libraries and archives.



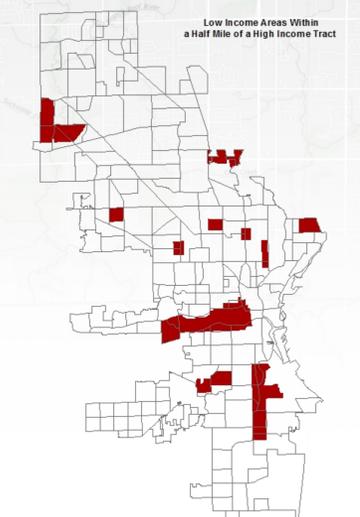
DEMOGRAPHICS
 The most vulnerable census tracts have the lowest educational attainment of bachelors degrees, the largest increase of white residents between 2009-2015 and the lowest concentration of citizens ages 65+.



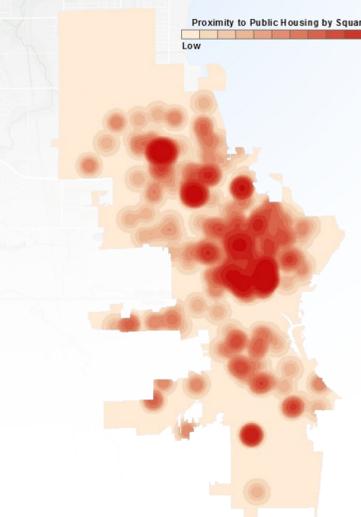
POPULATION
 The most vulnerable census tracts have the largest concentration of renters paying more than 30% of their household income in addition to the highest population density.



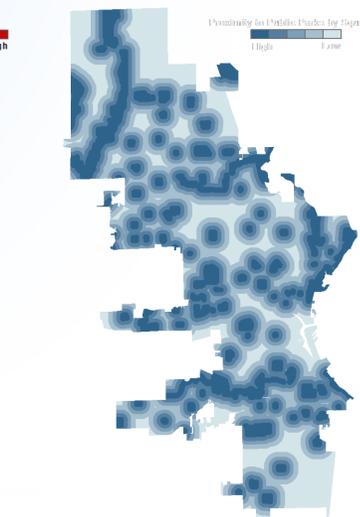
PROPERTY
 The most vulnerable tracts have the highest concentration of rental units, vacancies, and multi-unit housing units, in addition to the highest concentration of housing units built 1939 or prior.



INCOME
 The census tracts highlighted are low income areas with a mean income lower than \$26,176 annually that are within a half mile of a high income area with a mean income above \$59,495.



PUBLIC HOUSING
 This kernel density calculation shows proximity to public housing buildings.



PUBLIC PARKS
 This distance calculation shows proximity to public parks and green spaces.