

The inspiration for this report came from a similar report commissioned by the city of Portland, OR and authored by Lisa K. Bates titled “Gentrification and Displacement Study: Implementing an equitable inclusive development strategy in the context of gentrification.” The idea of this report is to use the methods developed by Bates and adapt them in order to look critically at the Twin Cities of Minneapolis and St. Paul, MN to understand where gentrification has happened, where it is happening, and where it is likely to happen.

The data in this report came primarily from the U.S. Census Bureau. Data from 2000 were obtained using the 2000 US Census and data from 2010 were obtained from the American Community Survey’s 5 year estimates. In addition, county shapefile data were obtained from the Twin Cities’ Met Council and housing value data from 1990, 2000, and 2010 were obtained from Brown University’s US2010 Project’s Longitudinal Tract Database which provides old census data within updated census geographies.

The basis for this project was to classify the stages of gentrification of the Twin Cities’ neighborhoods using the same definition as the city of Portland, OR. The classification used depended on three factors which will shortly be discussed further – a neighborhood’s vulnerability score, its demographic change, and its housing market. Based off of the confluence of these factors, neighborhoods were classified as being in one of six stages of gentrification or left unclassified as either long term poor or long term wealthy neighborhoods.

To account for neighborhoods, census tract level data were used. Although not a perfect representation of Twin Cities’ neighborhoods, it enables us to look at the Twin Cities relatively precisely.

In order to determine a neighborhood’s susceptibility to or level of gentrification, census data was collected on the percentage of communities of color, the percentage of persons who rent their homes, the population above 25 without a bachelor’s degree, and the median household income for each census tract. These numbers were then compared to the average value of these categories for the Twin Cities seven county metro area composed of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties. If a census tract had a higher minority population than the Twin Cities’ average (19.4%), it was given one point. Additionally, if it had more renters (28.3%), more people above 25 without a bachelor’s degree (60.6%), or a lower median household income (\$52,156.78), it was also given a point. These points were then summed for a total from 0 – 4 where zero meant the population was not vulnerable at all and a 4 meant quite vulnerable. A census tract with a vulnerability score of three or four was classified as having a vulnerable population and a score of zero, one, or two meant that the population was not vulnerable.

A very similar process was done to obtain each census tract’s demographic change score. The same data were obtained for census tracts in 2000 and the amount that each tract’s racial breakdown (26.6% increase), owner vs renter proportion (.5% increase), percentage uneducated

(7.2% decrease), and median household income (19.6% increase) changed over the previous decade was analyzed and compared once again to the Twin Cities' average. Here, if a census tract had a larger increase in white people, the percentage of homeowners, the population with a bachelor's degree, or the median household income than the Twin Cities' average, it was assigned one point. These points were again summed to obtain a demographic change score from 0 – 4 where once again, a four represented a tract that had undergone a significant demographic change in the past decade and a zero represented one that had not. Here, a census tract with a demographic change score of three or four was classified as having undergone demographic change and a score of zero to two was considered to be unchanged.

The last factor that was looked at to determine a neighborhood's gentrification status was the housing market. Using Census Data obtained from Brown University, the median home value was obtained for each census tract in 1990, 2000, and 2010. This value was then compared to the metro area's median value. Additionally, the homes' appreciation rates were looked at to see how much the housing market had grown in the previous two decades. Two decades worth of data were used for the housing market because it generally tends to change more slowly than the other factors.

The values and the appreciation rates were then both joined to a shapefile of the census tracts in ArcMap and divided into even groups of five, where the first three fifths were considered to have low and moderate values and appreciation rates while the upper two fifths were considered to have high values and appreciation rates. For 1990, the dividing value was \$92,900; in 2000, the dividing value was \$145,659; and for 2010, the dividing value was \$244,500 where tracts with lower values than these were considered to have low/moderate values and those with higher values were considered to have high housing values. In terms of the rate of appreciation, the dividing values were .552 from 1990 to 2000, .797 from 2000 to 2010, and 1.804 from 1990 to 2010 where once again, tracts that appreciated at a lower rate than this were considered to have low/moderate rates of appreciations and those that had higher rates were considered to have high rates of appreciation.

Using this housing market data, the census tracts were classified as being in one of three groups, adjacent, accelerating, or appreciated:¹

An adjacent tract was defined as having a low or moderate 2010 value, having experienced low or moderate 2000-2010 appreciation, and as touching the boundary of at least one tract with a high 2010 value and/or high 2000-2010 appreciation.

An accelerating tract was defined as having a low or moderate 2010 value but having experienced a high 2000 – 2010 appreciation.

¹ All of the following classifications come from Bates' (2013) study of Portland

Lastly, an appreciated tract was defined as having a low or moderate 1990 value, a high 2010 value, and as having experienced high 1990 – 2010 appreciation.

It should be noted that in dealing with obtaining a demographic change score and classifying the housing markets, the US census changed a fair amount of the census tract boundaries between 1990, 2000, and 2010. Certain tracts were split into two or more and two tracts were at times merged into one. When one tract was split, the average value of the two tracts was used to obtain change based statistics and when two tracts were merged, the average of the two original tracts was used. The Brown University data for the housing market had already done this work and that is why its data was used for that segment as opposed to getting the data directly from the US Census Bureau.

Once all of the data were obtained and joined into ArcMap with each census tract classified with its vulnerability score, demographic transition score, and housing market condition, each neighborhood was classified into one of the following six categories.²

Susceptible neighborhoods are adjacent to high-value and/or appreciation tracts yet have maintained a low value/appreciation rate. Their population is vulnerable but has not undergone demographic change indicative of gentrification

Early, Type 1 neighborhoods are those that have experienced high appreciation rates but still maintain low to moderate home values. Their population is vulnerable but has not undergone demographic change indicative of gentrification

Early, Type 2 neighborhoods are near high-value and/or appreciation tracts that have maintained a low value/appreciation rate. Their population is vulnerable and has experienced demographic change indicative of gentrification.

Dynamic neighborhoods are undergoing more significant gentrification processes. They have experienced high appreciation rates but still have low to moderate home values. Their population is vulnerable and has experienced demographic change indicative of gentrification.

Late neighborhoods have changed from having low or moderate home values in 1990 to currently having high value homes after experiencing high appreciation. They still have vulnerable populations despite having undergone demographic changes as a result of gentrification.

Continued loss neighborhoods have changed from having low or moderate home values in 1990 to currently having high value homes after experiencing high appreciation. They no longer have considerable vulnerable populations, and are undergoing additional demographic change.

² Again, these neighborhood classification descriptions and table come from Bates' (2013) study

The following table summarizes the different classifications of each variable used to classify neighborhoods into one of the six categories.

Neighborhood Type	Vulnerable Population?	Demographic Change?	Housing Market Condition
Susceptible	Yes	No	Adjacent
Early: Type 1	Yes	No	Accelerating
Early: Type 2	Yes	Yes	Adjacent
Dynamic	Yes	Yes	Accelerating
Late	Yes	Yes	Appreciated
Continued Loss	No	Has % white and % with BA increasing	Appreciated