Using Building Permit Data to Track Gentrification in Austin, TX

PROJECT DESCRIPTION
This project uses traditional gentrification indicators to identify areas of Austin, TX that are experiencing gentrification and determines whether or not these areas correlate to areas that have had high rates of residential renovation.

PROJECT GOAL
Determine if the rate of permits granted for residential renovations can be used as a reliable indicator of gentrification.

BACKGROUND
Gentrification is the process of middle and upper-income populations moving into traditionally working class, less wealthy, often minority communities. As wealthier groups move in, the area’s established residents are often displaced, changing the neighborhood’s character. Gentrification occurs at a very local level and can happen rapidly, making it difficult to trace and predict with census data.

The City of Austin has been experiencing rapid growth and demographic shifts. The area’s socioeconomic changes provide an interesting case study for gentrification research.

CONCLUSIONS AND IMPLICATIONS
This project is a first step in showing that a high rate of renovations in urban neighborhoods can be used to identify gentrifying areas. Census data is not available quickly enough for municipalities to respond to gentrification. Building permit data, which is readily available, may be a way for local leaders to track neighborhood change as it is occurring. Making policy makers and planners aware, in real time, of which areas are experiencing gentrification allows them to employ policy and planning tools to manage gentrification and its effects.

METHODOLOGY
First, it was determined which indicators should be used and separate maps of the 1990 and 2000 Census data were created for each indicator. To calculate the percent change for the indicators, the two datasets were combined. A gentrification map was created by combining the rate of change for each indicator.

Using only the building permits for residential renovations, a spatial join was performed. The number of permits per block group was mapped as the rate of permits per 1,000 housing units.

Finally, the gentrification map combining the traditional indicators and building permit data was created by selecting the block groups with both a high level of demographic change and renovation rate.

FURTHER RESEARCH AND LIMITATIONS
The building permit data begins in 1995, so it does not reflect the same period of time as the census data. The way the US Census Bureau asked race and ethnicity questions, which are very important in gentrification research, changed between 1990 and 2000, making it impossible to compare the two datasets. The census data available is very out of date; these trends may not have carried through the 2000s.

Fine tuning the methodology, looking at a longer time horizon and using data from a number of cities to see if these results are representative of other time periods and areas of the country would be important to continue and verify this research.

Cartography: Alison LeFlore
Date: 17 Dec 2010
Projected Coordinate System:
NAD 1983 StatePlane Texas Central FIPS 4203 (Feet)
Sources:
1990 Census, 2000 Census, City of Austin GIS, City of Austin Growth Watch