

The Circuit Less Travelled: A Path of Gentrification Through Colorado Neighborhoods

Many factors shape us into the people we are today. Among these factors are the places and people we grew up with or even still live with today. The neighborhood block parties, kids playing together, and even the businesses and schools that were within walking distance played a crucial role in your growth and development. All of these helped create a unique community and culture within your neighborhood that arose naturally as people grew up, moved out, and new families moved in. A common question that arises with this is “What does natural growth and development look like?” A disruption of organic growth is what many refer to as gentrification. By introducing new, market-rate housing and luxurious amenities such as high-end restaurants and new parks, the price of rent can increase and inevitably force local businesses and longtime residents who can no longer afford space in the neighborhood to leave.

We build a model to understand how the neighborhoods of Denver are changing over time. This allows us to predict where gentrification is happening in Denver and where people move when they are displaced. Using data collected in the American Community Surveys over the last 15 years to derive a clustering of neighborhoods based on factors that are associated with gentrification, such as average income, demographic breakdown, and level of education. We construct a so-called circuit walk between these clusters which yields the changes in clusters in smaller time steps than what is possible by looking at just the data sets alone. Using these smaller steps, we can identify when a neighborhood might be susceptible to outside forces making changes to the community. This allows us to make target policy recommendations such as a tax on vacant properties, targeted redistribution of community funds for neighborhood improvements, or even an increase in affordable housing construction, to help preserve the natural growth and development of neighborhoods.