

## **Abstract**

According to social disorganization theory, crime is caused by social and economic variables at the neighborhood level. Coined in 1942 by Shaw and McKay, their research utilized the city of Chicago as a natural laboratory to examine how social and economic variables affected crime. It was decided to test this hypothesis using Pueblo, Colorado because of the high crime rate. To test if the theory of social disorganization applies to Pueblo, violent crime and socioeconomic status were analyzed spatially to answer the following questions: 1) have crime rates changed over time? 2) do the changes in crime rates have a spatial pattern? and 3) does the change in crime rates mirror housing values?

Data on violent crimes was determined with the assistance of the Pueblo Police Department, who provided the location of 4,500 individual violent crimes across the city from 2006 to 2016. Statistical analysis showed that many of the counts of individual crime types were too low to be statistically significant, so the five crimes with the highest occurrence were used for further analysis. Socioeconomic status was determined using the housing values within the City of Pueblo.

Hot spot analysis using the GI\* statistic, which uses high and low z-scores to determine clusters of high values (hot spots) and clusters of low values (cold spots), was used to determine statistically significant high crime areas within Pueblo. These hot spots were used to determine where housing values would be analyzed. Statistical analysis showed that 2016 housing values sampled from within a hot spot area were lower than those samples from a non-hot spot area. Additionally, the average housing value in the sampled hot spot areas progressively decreased over the 10-year period, while those sampled in non-hot spots rebounded after the 2008 recession.