Analysis of the Spatial Relationship Between Crime and Non-Owner-Occupied Housing in Denver, Colorado

Tina Padavano (Criminal Justice: Crime Analysis), Dr. Jonathan Allen Kringen

Crime is influenced by a variety of factors; Shaw and McKay (1942) posit that residential instability is one among others in their social disorganization theory. Non-owner-occupied (NOO) housing is an indicator of residential instability. This exploratory research sought to analyze this idea by looking at the geospatial relationship between crime and non-owner-occupied (NOO) housing in Denver using the program ArcGIS. This analysis was conducted using ArcGIS, a geographic information system from Esri, and all data was retrieved from the Denver Open Data Catalog. Crimes were divided and analyzed by type; all crimes, public order offenses, residential property crime and drug and alcohol offenses. Two approaches for measuring owner-occupancy were implemented and compared in this study; zoning codes and census data. In the first approach, the Denver zoning code was reviewed, and zones likely to have NOO residences were selected out. The second approach calculated the percentage of rented homes from all residences in the city. Using the Census method, the stronger measure, a slight visual correlation can be seen between crime and a high concentration of NOO housing. However, due to the limitations of the census data, further research will be needed to analysis the possible relationship statistically.

References

Shaw, C. R., McKay, H. D., & Hayner, N. S. (1942). *Juvenile delinquency and urban areas: A study of rates of delinquents in relation to differential characteristics of local communities in American= cities*. Chicago, IL: University of Chicago Press.

Acknowledgements

Bio

Tina Padavano is a senior at the University of New Haven, majoring in criminal justice with a concentration in crime analysis and minoring in English, sociology, and professional and technical writing. She is the Co-VP of the Honors Society for Experiential Education and a member of both the International English Honors Society and the National Criminal Justice Honors Society. She is a QA at the University's Center for Analytics and an Intel Analyst intern in the New Haven Police Department's Elm City Intel Center. She hopes to continue her studies in the University's National Security Graduate Program.