

## **ABSTRACT**

Student out-of-school suspensions have been an ongoing problem in US schools for many years. Current methods of analysis have not yielded new insights into this problem. The purpose of this thesis is to consider student suspension incidents from a spatial perspective. Using student level data provided by SBCUSD, a large urban school district in southern California, suspension incidents were geocoded and mapped to student home neighborhoods within the district for the purpose of identifying whether or not suspensions incidents are clustered and, if so, to determine by neighborhood where the clusters are located. Spatial analysis indicated that suspension incident clustering does exist. Hotspot analysis showed variations in the suspension incident clustering pattern when disaggregating results by significant student subgroups and incident types. Neighborhoods were classified by these patterns and the results visualized in a choropleth map. As a final step in the analysis, a geographically weighted regression model predicting district wide suspension incidents by census block group was developed. The model, based on the total number of days previously suspended and the number of students identified as having a low socioeconomic status, had an adjusted R-squared greater than 0.90. Additional research needs to be conducted to verify that the patterns noted within this thesis hold steady. If so, discipline issues within SBCUSD may in part be influenced by local neighborhood factors. This becomes an opportunity for the school district to act at a local level and identify strategies to reduce suspensions and improve student outcomes.