

GIS-based Comparison of Redlining Impacts on Urban Forest Composition in Syracuse and New York City

Thursday, October 26, 2023 11:00 AM (20 minutes)

What impact does the history of redlining have on forest composition in neighborhoods of cities in upstate New York State? The practice of redlining, or discriminatory lending practices, as evidenced by the 1930's era Homeowners Owners Loan Corporation (HOLC) maps is well known to have affected neighborhood property values. The web GIS tools from the Mapping Inequality: Redlining in New Deal America project are integrated with urban forestry data sources here to examine potential linkages between the legacy of 'redlined' properties and their forest composition. These data are scanned images of the HOLC maps in web GIS data format (e.g., GeoJSON) for direct placement into web GIS applications. Spatial analysis of current property values and percent tree canopy cover for nine neighborhoods in Syracuse, NY was conducted with results indicating a substantial difference in tree canopy cover and property value. Spatial analysis of percent tree canopy cover was also conducted for the Boroughs of Manhattan, Brooklyn, and Queens in New York City. Results indicate limited differences were found in median tree canopy cover among neighborhoods in Manhattan but significant differences among neighborhoods in Brooklyn and Queens. This project adds additional insight into the value of urban tree canopy cover as an indicator of inequalities in property values, home ownership rates, and in resilience to climate change.

Primary author: BADUREK, Christopher (SUNY Cortland)

Co-author: HODGES, Madison (SUNY Cortland)

Presenter: BADUREK, Christopher (SUNY Cortland)

Session Classification: Poster Session

Track Classification: GIS