

Racial Segregation in Housing and Median Household Income in Chicago (2010)

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INTRODUCTION

While the urban-rural divide in the US garners significant attention as more and more young people move to urban centers in search of jobs and income, inner-city dynamics of segregation and inequality do not generate just as much press. This project highlights the result of decades of policies that have enabled and supported housing segregation between the African-American (Black) and white population in Chicago and how now, wealth and resources are concentrated in predominantly White and Asian neighborhoods. According to a report from Chicago's Metropolitan Planning Council, "Chicago ranks in the top quarter of all metro areas with regards to economic segregation" (Khare and Novara, 2017). Using various GIS tools like Hotspot Analysis and various joins, I have created 5 maps that show the median household income in 2010 in Chicago and the concentration of 4 racial groups: Asian, Black, White, and "Other."

METHODOLOGY

Given the data from the 2010 Census Tracts of Cook County, the "Other" category here includes the Hispanic population combined with Native American, Pacific Islander as well as Hawaiian and Alaskan populations. All the data used in this project comes from two sources, the City of Chicago GIS portal and the US Census Bureau through the TIGER/Line Shapefiles. Using the Cook County census tracts for data on race, population and household income, I was able to use the selection tool to select and segregate data that was only within the Chicago city limits. The Chicago City boundaries and water bodies were taken off of the city's GIS portal. All data comes from the 2010 US census.

Furthermore, I created a choropleth map with the median household income to better visualize the geographic segregation of income and wealth in the city. According to the 2010 census, the real US median income in 2010 was \$49,445 – the mean income in Map 2 for all census tracts is \$47,723.86. Additionally, poverty for a typical family of four was determined at a household income below \$22,314 in 2010 while the median income for Cook county in 2010 was \$51,457. In combining the hotspot analysis and median household income, I have solely selected households that have an income lower \$30,000 and more than \$80,000 to show the extreme inequalities that coincide within the housing segregation.

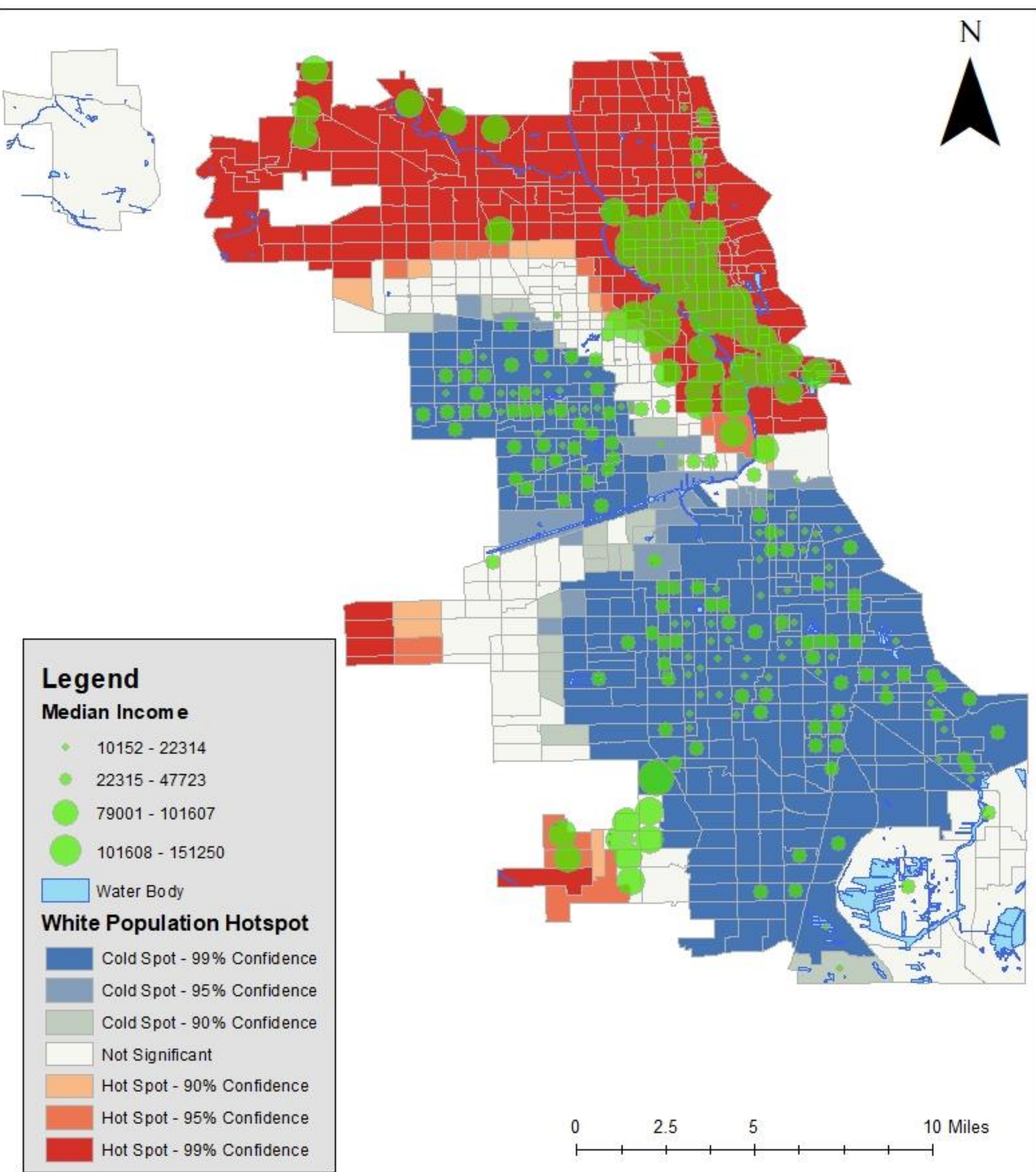
DISCUSSION

Though the number of wealthy census tracts has grown 4 times since 1970 in Chicago, people still struggle with inequality, poverty as well as a lack of upward mobility (Semuels, 2018). The prevailing economic inequality has also led to many middle-class black families to move to better areas, exacerbating an already growing divide – in between 2000 and 2010, Chicago lost 181,000 black residents, most of them families that could afford to move in the first place (Semuels, 2018). Policies like redlining also prevented citizens from getting a federally backed loan for homes in majority-black neighborhoods while the city's decision to build public housing in predominantly black neighborhoods further widens the economic divide.

- **Map 1 and Map 2** show that the median household income is higher in the North and lower in the South.
- **Map 1** and **Map 5** show how high median income is concentrated predominantly in areas that have a high concentration of Asian and Whites.
- **Map 3 and Map 4** are nearly mirror images of **Map 1** and **Map 4**, highlighting how the majority of poor households and neighborhoods are in Black and Brown communities.

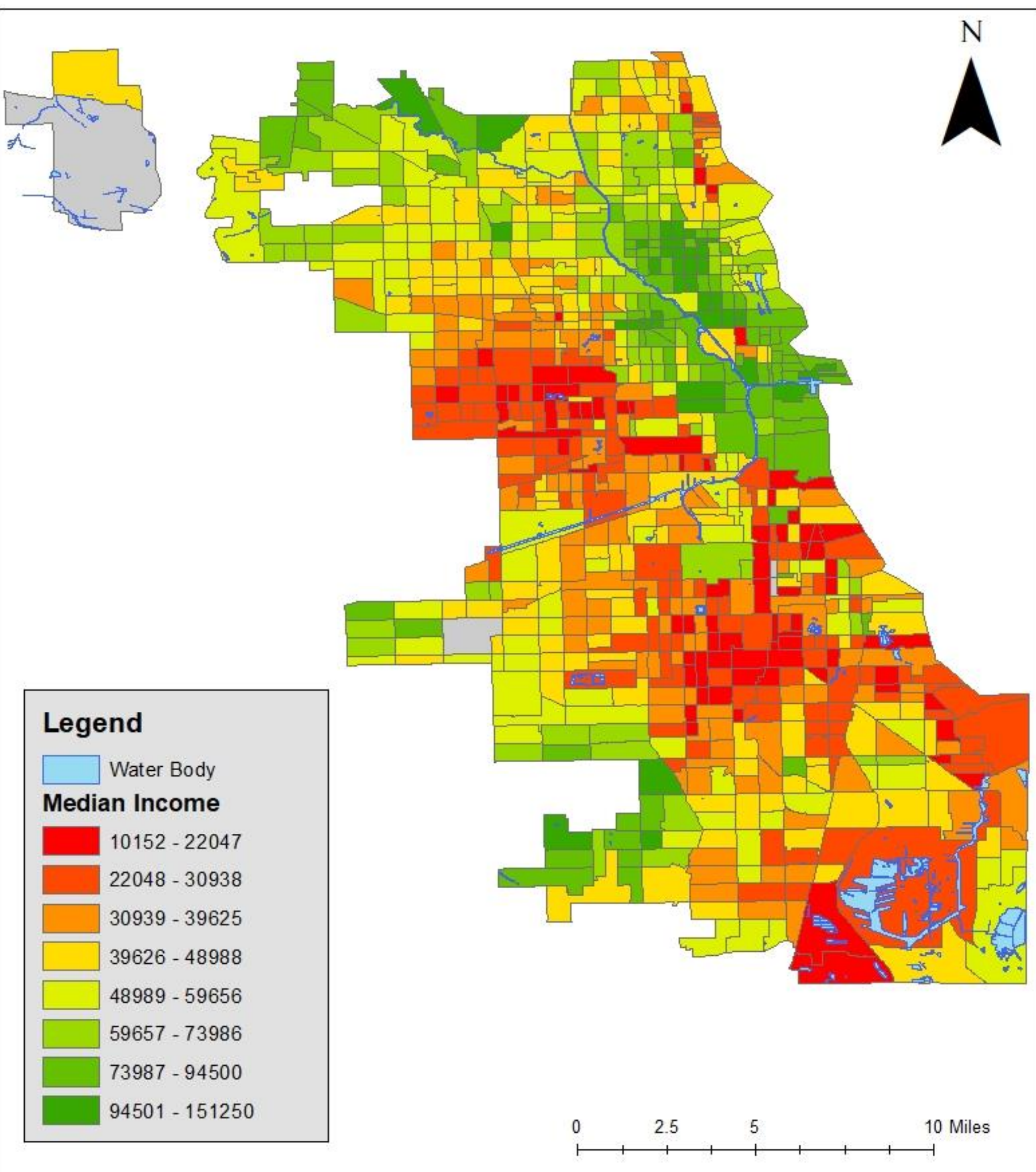
RESULTS

White Household Hotspot Analysis with Median Household Income in Chicago (2010)



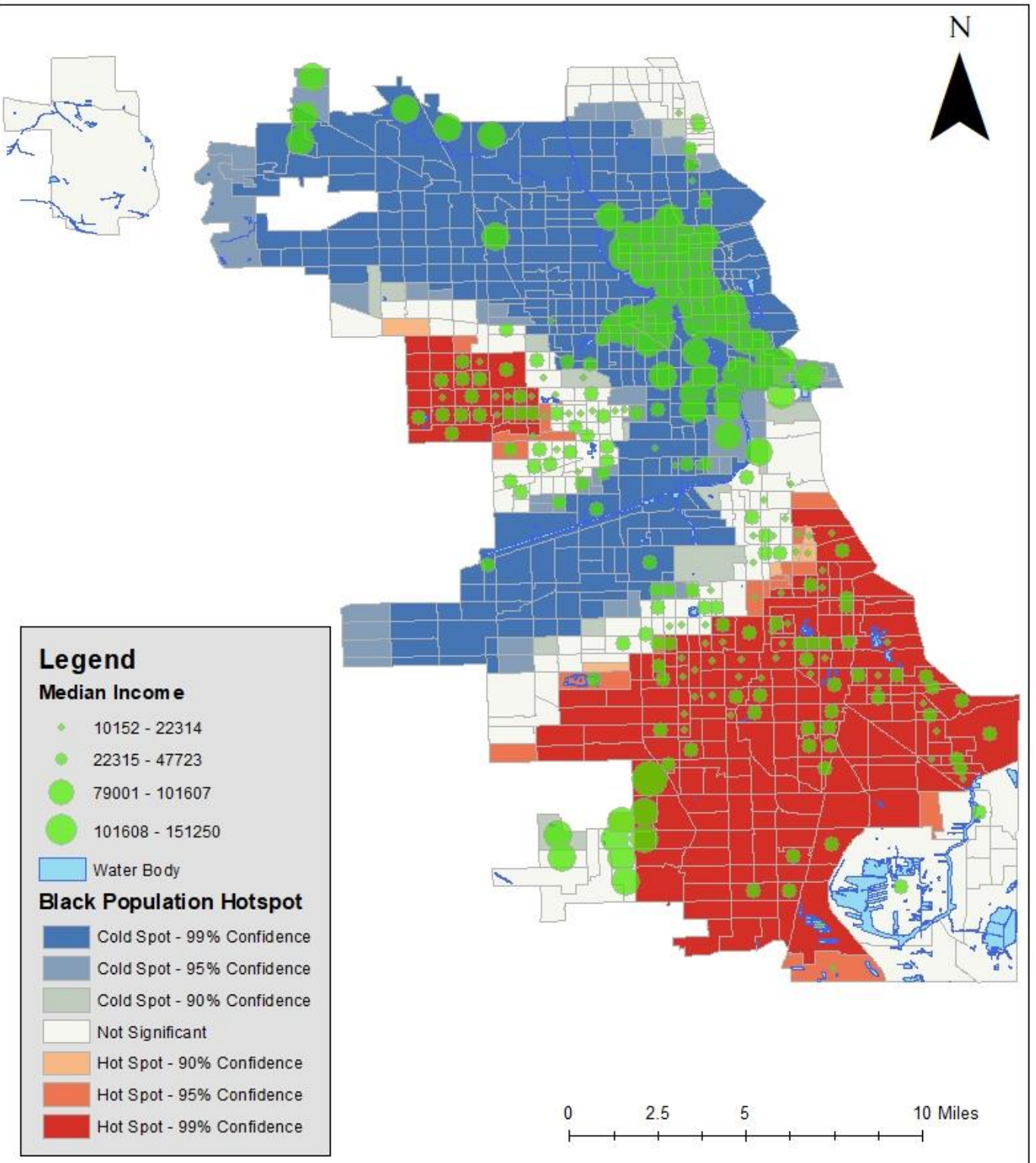
MAP 1 Source: US Census Bureau (2010) TIGER/Line, City of Chicago <https://data.cityofchicago.org/browse?tags=gis>

Median Household Income in Chicago (2010)



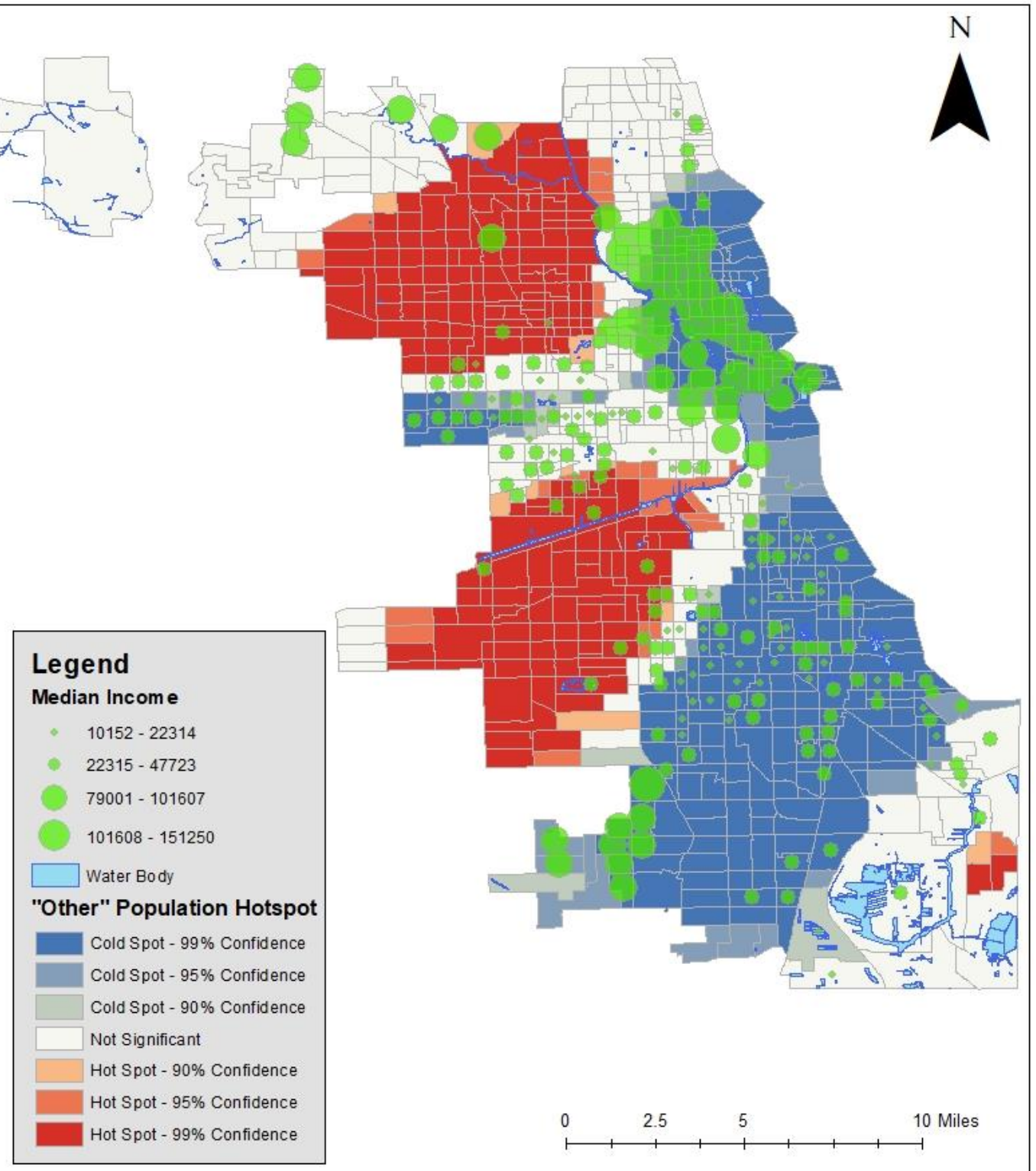
MAP 2 Source: US Census Bureau (2010) TIGER/Line, City of Chicago <https://data.cityofchicago.org/browse?tags=gis>

Black Household Hotspot Analysis with Median Household Income in Chicago (2010)



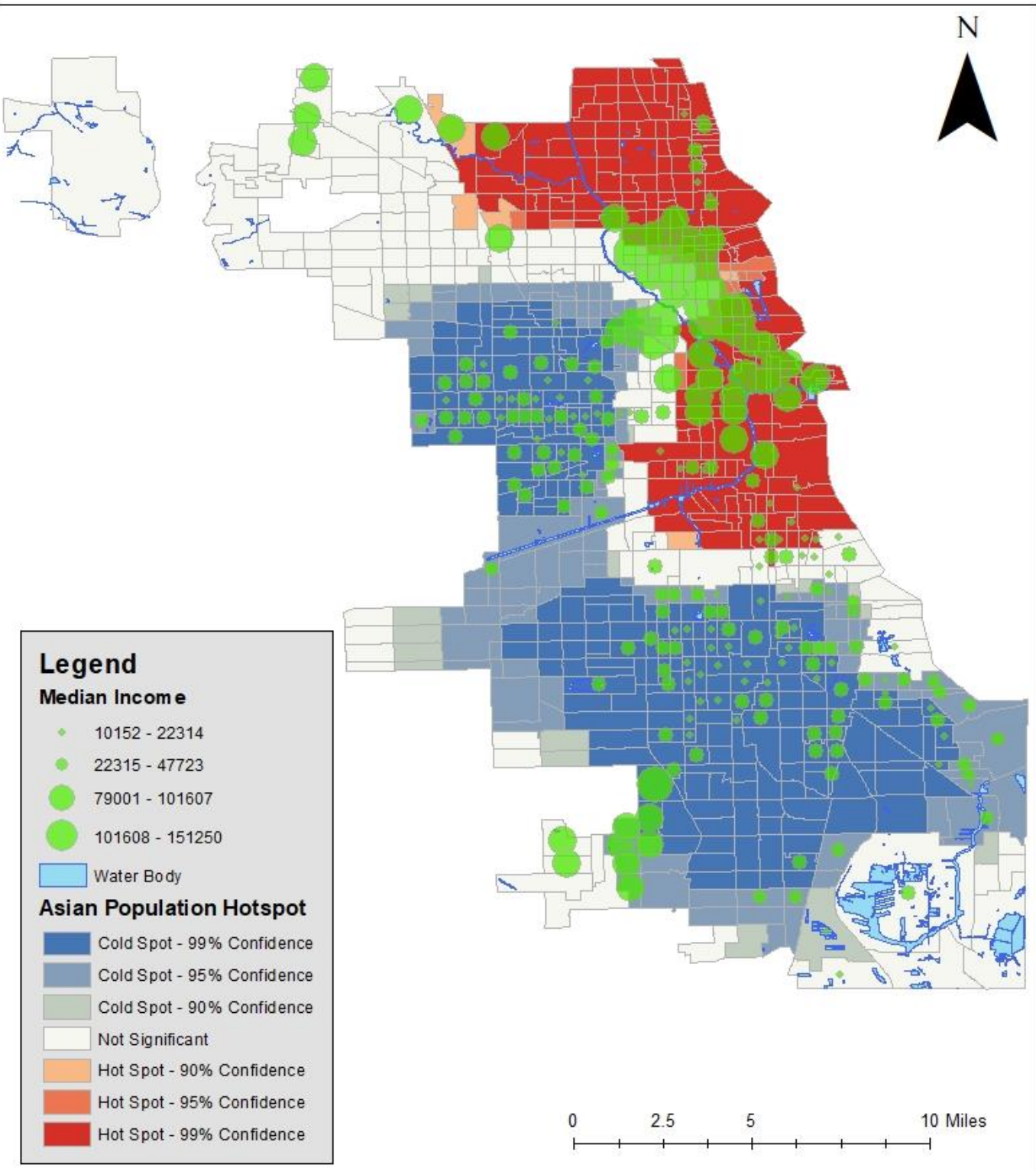
MAP 3 Source: US Census Bureau (2010) TIGER/Line, City of Chicago <https://data.cityofchicago.org/browse?tags=gis>

"Other" Household Hotspot Analysis with Median Household Income in Chicago (2010)



MAP 4 Source: US Census Bureau (2010) TIGER/Line, City of Chicago <https://data.cityofchicago.org/browse?tags=gis>

Asian Household Hotspot Analysis with Median Household Income in Chicago (2010)



MAP 5 Source: US Census Bureau (2010) TIGER/Line, City of Chicago <https://data.cityofchicago.org/browse?tags=gis>

LIMITATIONS

There are several limitations to this project, first, the data is outdated – unfortunately, even though there was some data on recent household income, the census tracts and Chicago boundaries (including race) were from 2010 and joining outdated tracts with updated data from another source did not work. Secondly, the threshold for the median household income mentioned earlier was selected to highlight inequality – the poverty threshold was \$22,314 for a family of four and the maps could have been more informative if the number of members in a household was taken into consideration. Additionally, a comparative study of segregation and inequality with other cities could have also yielded more fruitful results.

RECOMMENDATIONS

The cause of the inequality and segregation is not just a question of local housing policies but also an amalgamation of other socio-economic factors. Efforts to curb inequality and promote social mobility should always be multi-faceted and include numerous factors. I have included three categories that could assist in moving people (both physically and economically) out of poverty:

- **Housing Policies**
The city has initiated several projects that are aimed at assisting housing for poor families ranging from Housing Choice Vouchers to Chicago's Neighborhood Rebuild Pilot Program to rehab vacant homes. (Khare & Novara, 2017)
- **Educational Initiatives**
I also looked at maps that show high school dropout rates – these closely resemble the choropleth and suggest a correlation between educational attainment and income. Investing in educational initiatives that incentivize students to stay in school and support low-income students outside of school should also be pursued.
- **Public Transportation and Resources**
Certain areas are also underfunded when it comes to public goods – lack of transportation and basic resources like high-speed internet are still lacking. This prevents predominantly black and brown families from access jobs in the North, thus, isolating them from any social mobility. Funding more transportation lines or improving/extending the bus and train services would enable more families to gain employment.

CONCLUSION

Undoing decades of policies of segregation will take an immense effort – a "mental map" about deeply held perception of different neighborhoods has been imprinted on the people of Chicago. Reversing this image and perception will take not just public policy efforts like the ones mentioned above but also innovative approaches that can harmonize policy efforts with other strategies (media involvement, cash transfers etc.) to improvement on the inequality as well as perceptions of certain neighborhoods. Alleviating inequality and racial segregation, though extremely difficult here, is not impossible though a concentrated effort that has to come from the local, state and federal government as well as the wealth communities in the city.

SOURCES

- Semuels, Alana. "Chicago's Awful Divide." March 28, 2019. *The Atlantic*.
- Khare, Amy & Marisa Novara. "Two Extremes of Residential Segregation: Chicago's Separate Worlds and Policy Strategies for Integration." April 2017. *President and Fellows of Harvard College*.