

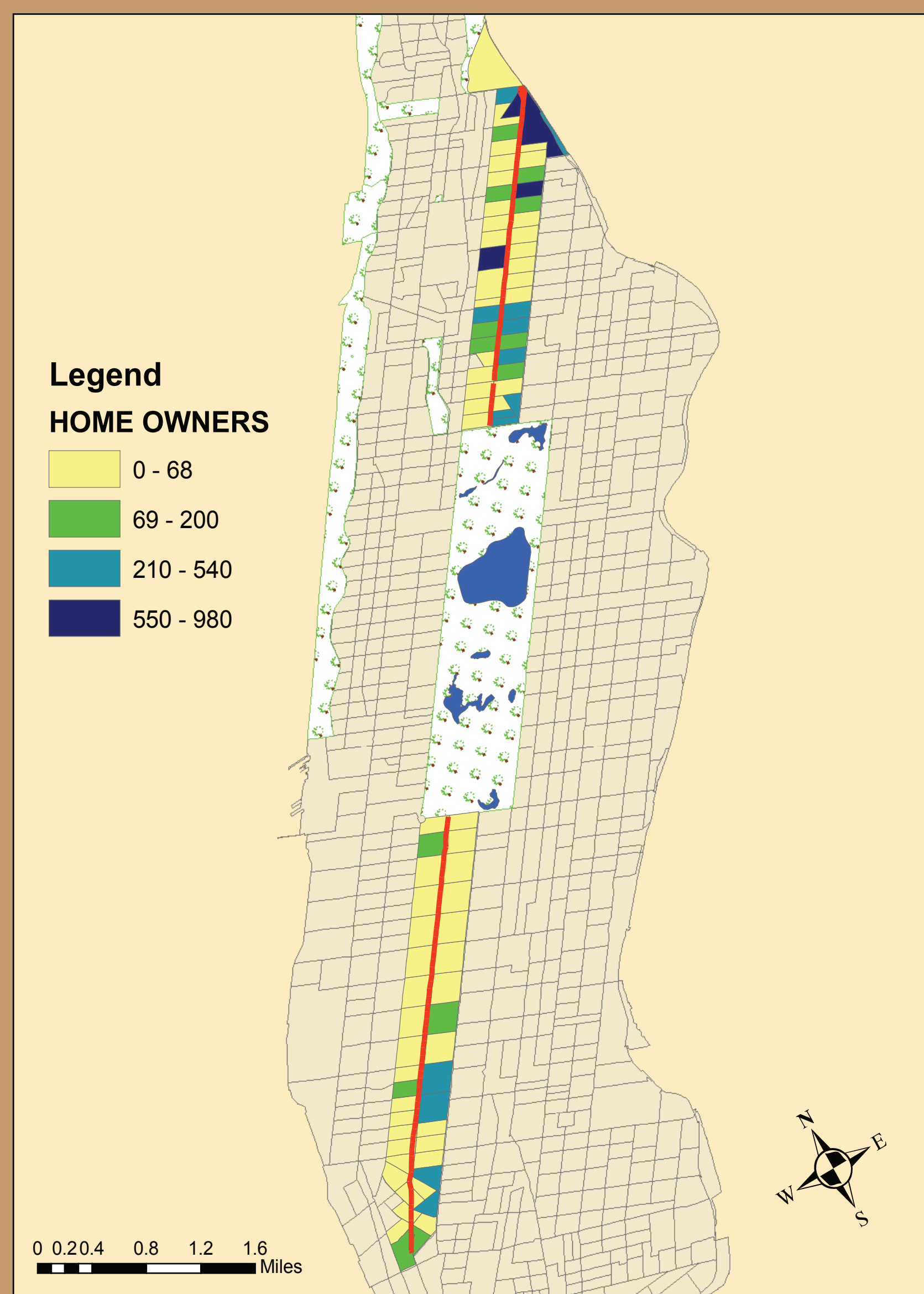


Relationships of Socioeconomic Variables on 7th Avenue



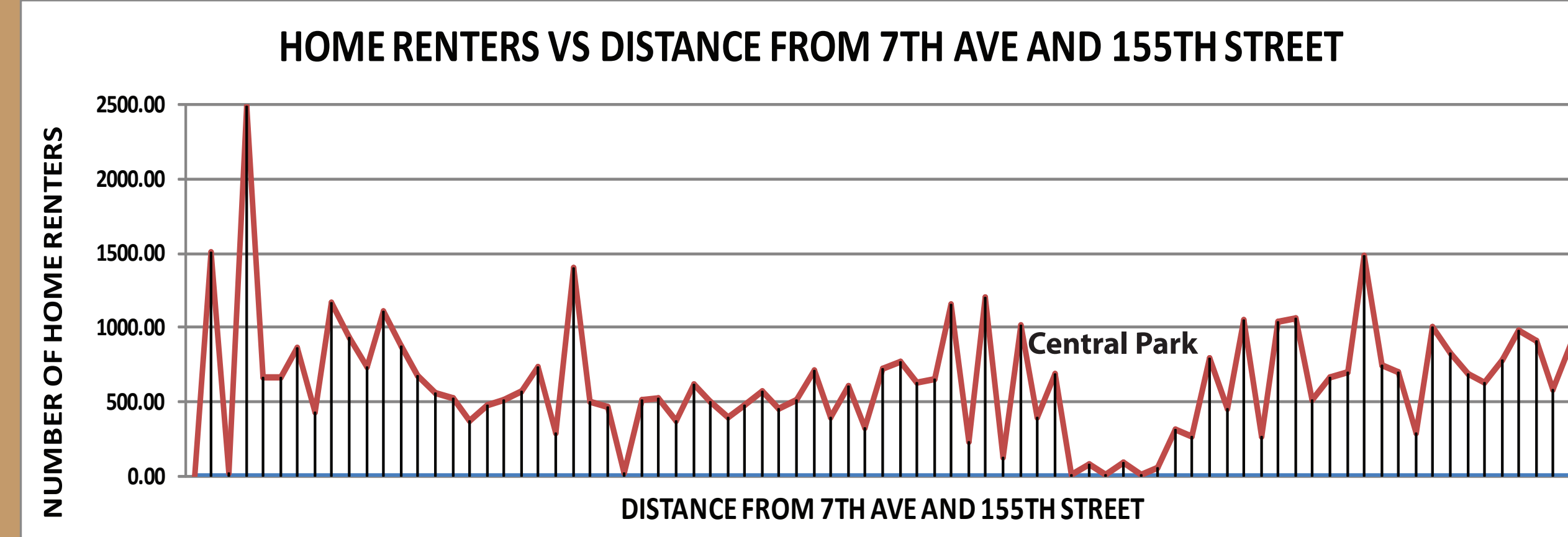
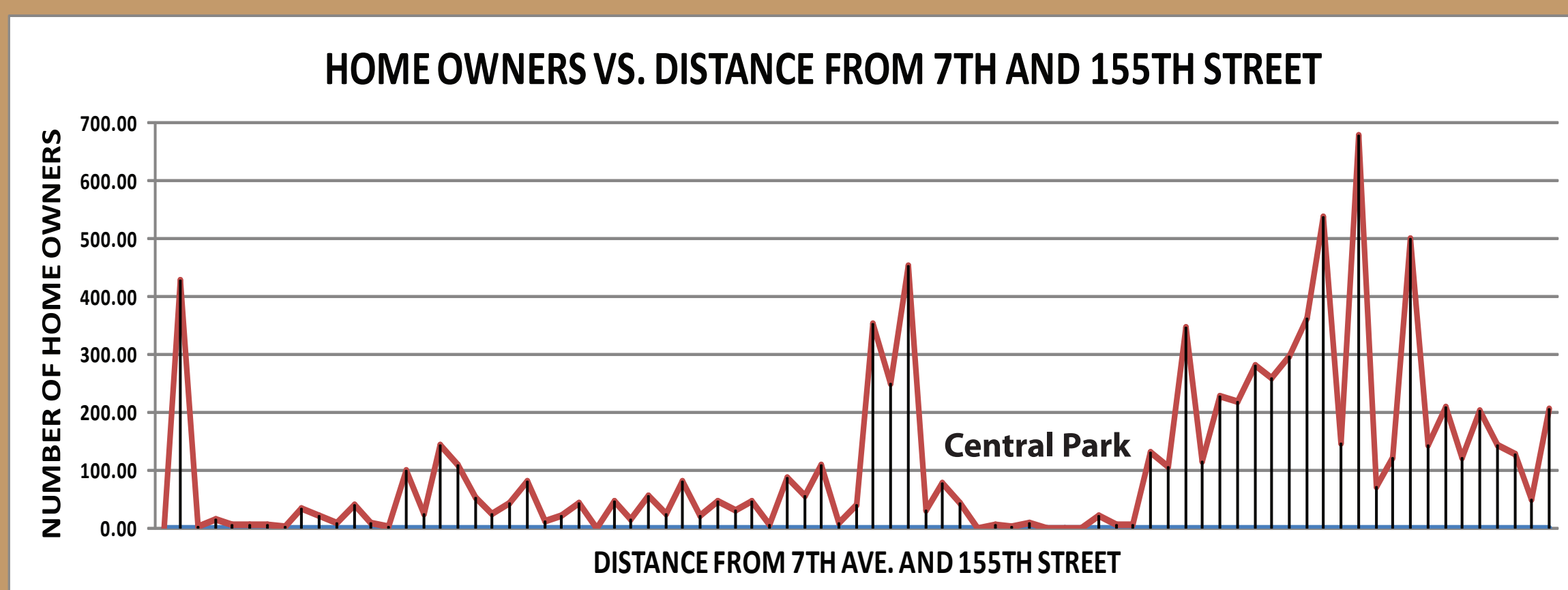
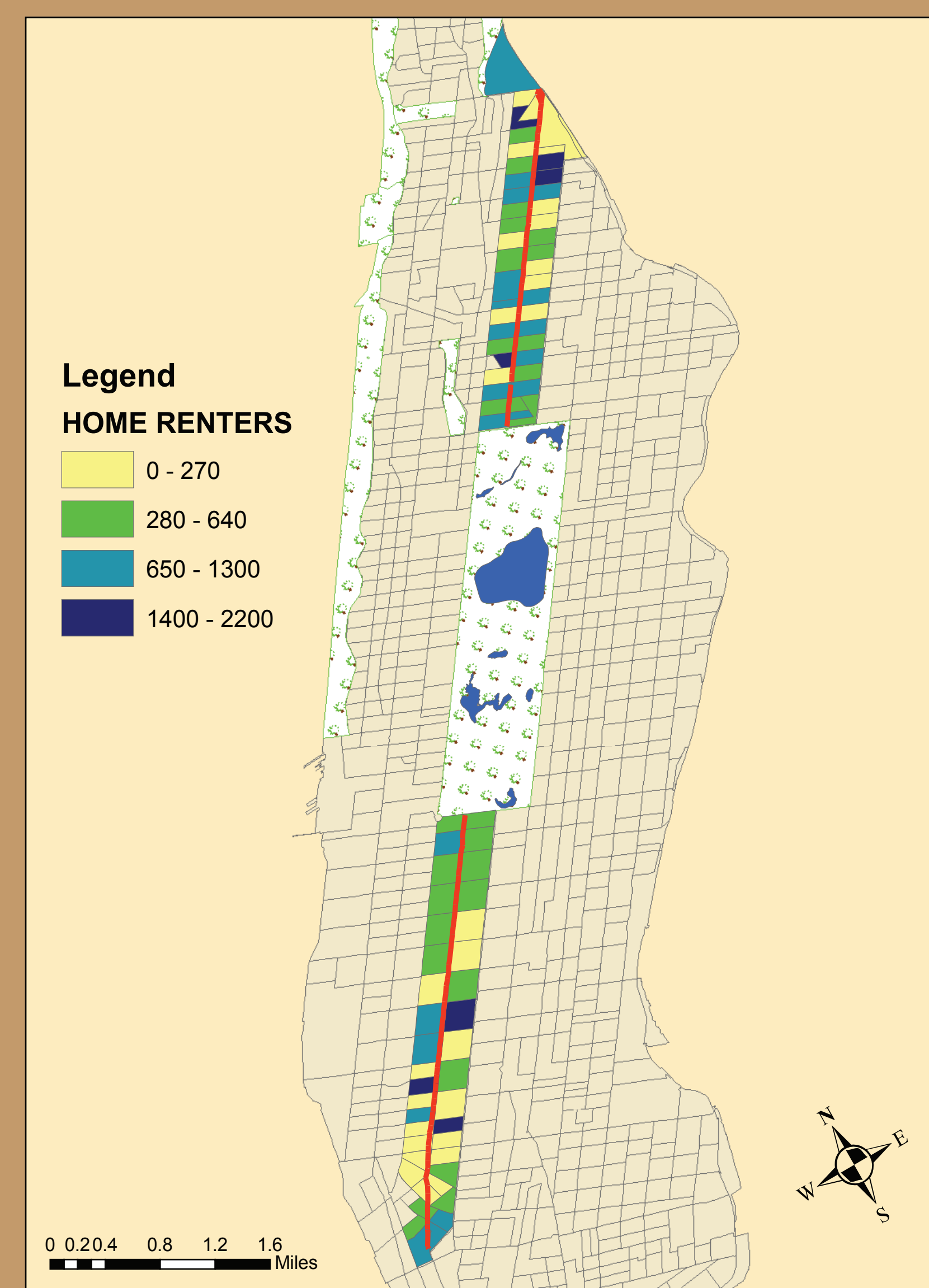
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OWNER OCCUPIED HOMES



People who choose to rent versus people who are able to own their home is always an important socioeconomic variable. A quick glance at the legends of these two maps makes it clear that many more people on 7th avenue choose to rent their homes as opposed to owning. This can be attributed to very high cost of living, high property taxes and an abundance of rental properties. The graph below (left) displays a strong increase in the number of homeowners at the far south end of 7th Ave. However, there is an unexpected increase of home owners near Central Park in Harlem. This is due to ongoing gentrification of the area and on the side streets of 7th avenue. Many of the high rises are being turned into condos. Very few people own homes south of Central Park until you reach near the end of 7th. It can be seen on the right that there is an inverse relationship between the distance from Central Park and home renters in Harlem, an indication of lower income families.

RENTER OCCUPIED HOMES



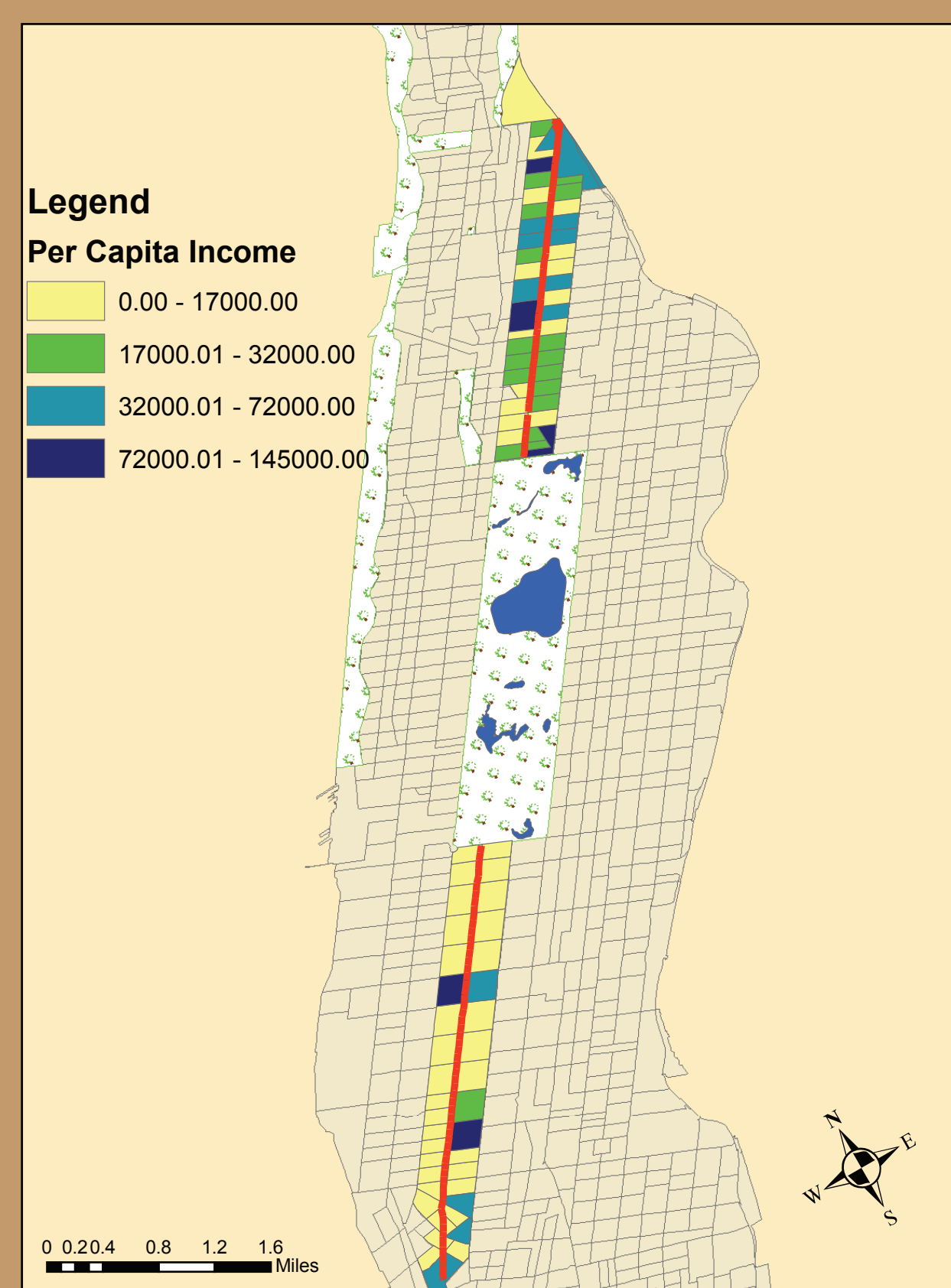
ABSTRACT FORMULA

This study analyzes the relationship between key socioeconomic variables and distance along 7th Avenue in Manhattan. My hypothesis is that there is an inverse relationship between distance from key nodes, such as Central Park and variables such as income. Commercial activities may have a direct impact on socioeconomic conditions. Analysis involved six steps: 1) attribute data development in the form of socioeconomic data for block groups; 2) acquiring shape files for block groups along 7th Avenue; 3) attribute and spatial data joins for geospatial analysis; 4) mapping for visualizing spatial patterns; 5) graphical and statistical analysis; and 6) the evaluation of results. Attribute data used were obtained in electronic form from ESRI Business Analyst. I did some preliminary analysis before going into the field. Field work in New York (March 13-20, 2008) allowed me to: 1) acquire additional "on-the-ground" data and understanding of the problem; 2) personally observe the dynamics of the process under consideration; 3) take photographs to add an additional visual element to my analysis; and 4) interview and thank data sources in the city. Final results will be presented as cartographic, graphical, and statistical outcomes providing a basis for accepting (or rejecting) my hypothesis.

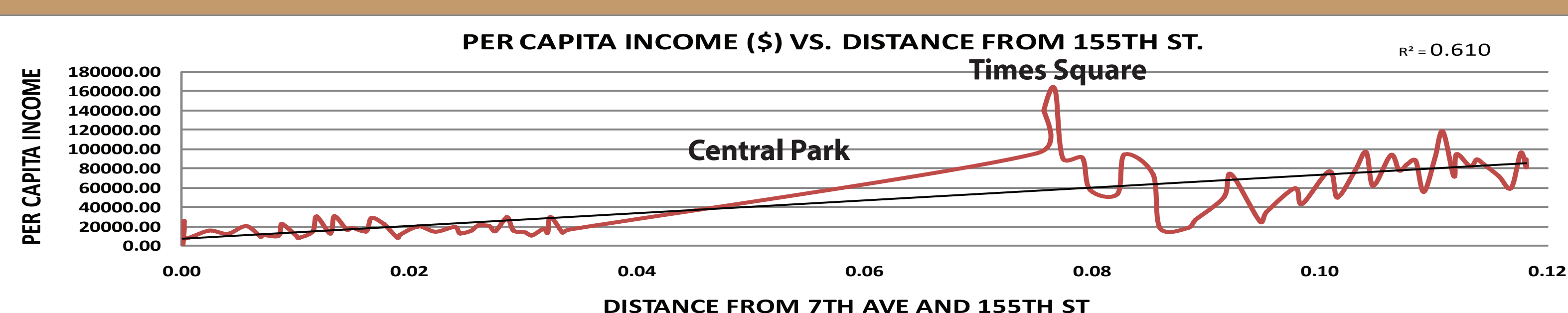
CONCLUSION

Through extensive research I have found that although some socioeconomic variables are inversely related to distance from key nodes of the city such as Central Park just as many of them don't display an inverse relationship. Per Capita income varies inversely with distance from Central Park while moving south through the Business District but shows almost no relationship when looking at distance from Central Park moving north through Harlem. Due to these findings I must disregard my original hypothesis. Although there is definitely a relationship between key nodes on 7th Avenue and socioeconomic variables each should be looked at individually before being compared to others.

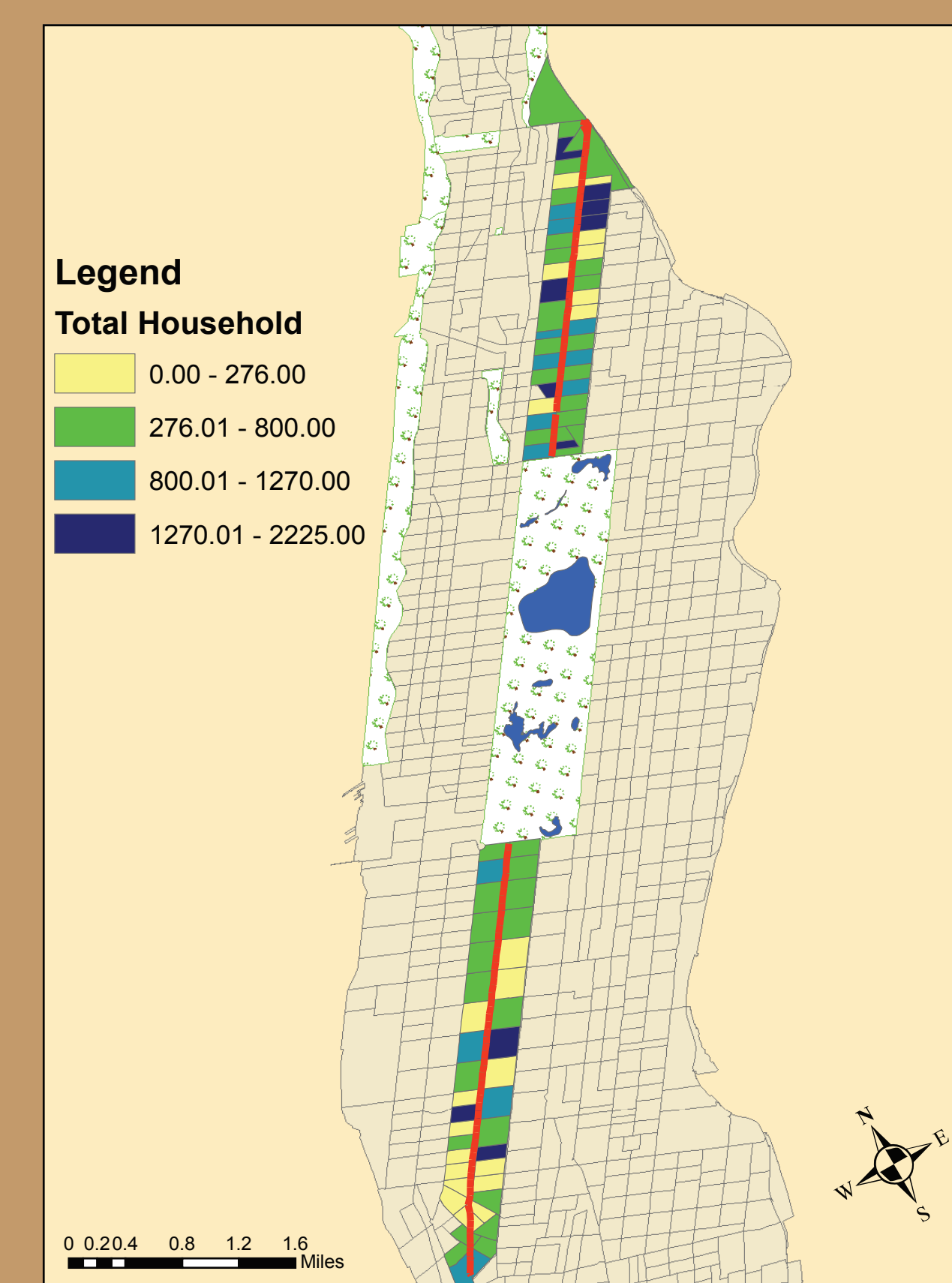
PER CAPITA INCOME



A data analysis of Per Capita Income over the length of 7th Avenue, Manhattan displays an inverse relationship forming from Times Square. The graduated color map to the left shows that for several blocks in each direction from Times Square only one block has a PCI over \$32,000. Contrary to what many people would believe, data shows that the residents of Harlem generally have a higher PCI than residents living just south of Central Park. This is likely because the people of Harlem are working class people and although their PCI is higher than people living South of Central Park their income is still low relative to other parts of Manhattan. The southern portion of 7th avenue generally has a low PCI throughout which can be attributed to less housing, few people living in the area, and a concentration of homeless and poor. Times Square appears to be an anomaly on the graph due to its extremely high PCI.



TOTAL HOUSEHOLDS



The number of households located along 7th Avenue helps make it clear as to why other variables occur in the way that they do. This can help in several ways. One way is that if there are fewer households in a highly populated area such as Manhattan then there is likely to be more single family homes as opposed to apartment buildings. This could in turn explain why there is a higher PCI in the area. This is the case in the very southern end of 7th Avenue. This map and this graph display an inverse relationship from Central Park north towards Harlem, but not to the south.

