

GIS & SPATIAL ANALYSIS - SOC SCI, 2023

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Homework 1: Intro to QGIS

Black and White Population in Maryland and Pennsylvania (Quantile Classification)

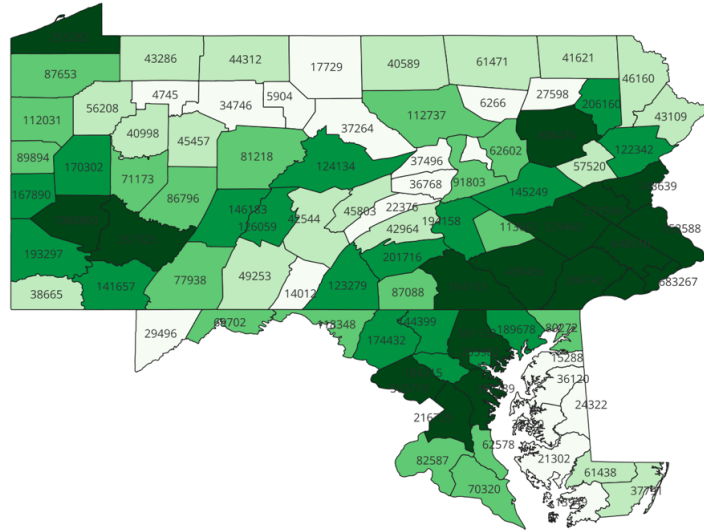


Figure 1 Maryland and Pennsylvania - Population of White Americans

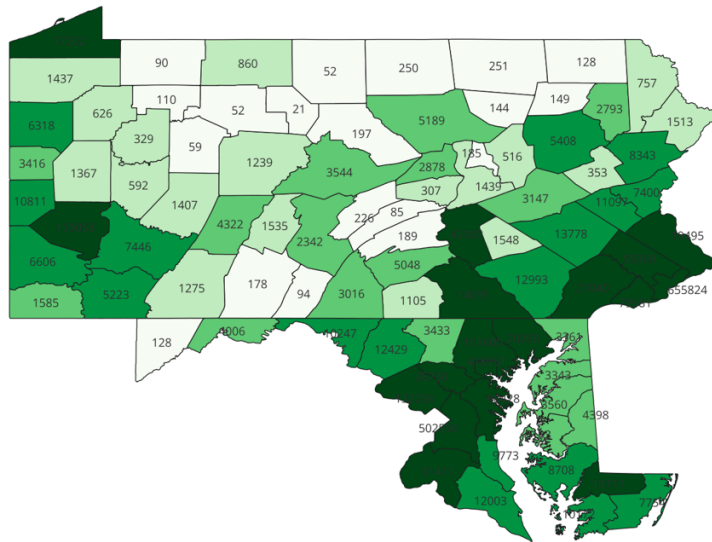


Figure 2 Maryland and Pennsylvania - Population of African Americans

The cartographic visualizations of Maryland and Pennsylvania reveals distinct spatial patterns related to the distributions of White Americans and African Americans. Both maps use Equal Count (Quantile) classification for the Choropleth display, which is a better option for social science research over the Natural Breaks (Jenks) classification because it is easier to explain to a wider audience. The first map, focused on White Americans, demonstrates a widespread distribution of both the quantity and the percentage of the population across both states. In contrast, the map representing the African American population showcases more concentration, especially notable in Pennsylvania, and with a smaller number of African Americans in both states. These patterns underscore the intricate racial demographics of the two states.

Further examining the quantity and the percentage representations for the two states reveals distinct differences in the demographic distributions of Maryland and Pennsylvania. Maryland displays a notable concentration of both its black and white populations towards the state's center. This central convergence suggests a racial mix in Maryland, despite the fact that the black population is in the minority. In contrast to Maryland, Pennsylvania has a more varied distribution, with population clusters in the west and east of the state. While White Americans are dispersed throughout the state with pockets of high concentration, the African American community is relatively more concentrated in specific regions of Pennsylvania.

There is a noticeable merging of both the African American and white populations in densely populated areas of Pennsylvania, indicating several integrated communities. However, there are also regions with a high density of white residents and a sparse black population, hinting at areas of racial distinction. This distribution highlights Pennsylvania's diverse demographic landscape, with a more varied distribution compared to Maryland, featuring integrated communities in densely populated areas and regions of racial distinction between the two communities.