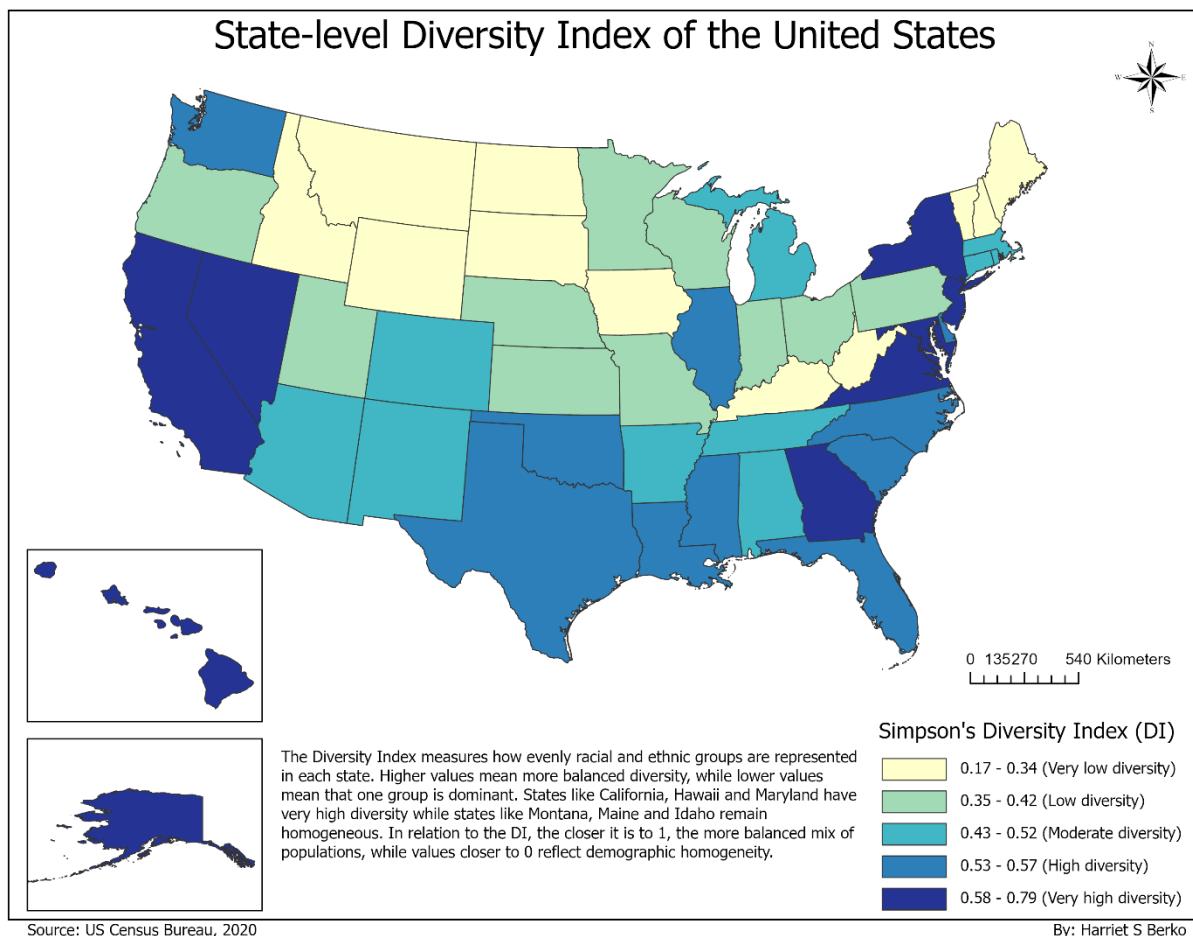


Project Report: State-Level Diversity Index Map

Harriet S Berko



For our group poster on demographic diversity in the United States, I created the *State-Level Diversity Index of the United States* using Simpson's Diversity Index (DI). This map visualizes how evenly racial groups are represented across all 50 states, based on 2020 U.S. Census data. The DI values range from 0.17 to 0.79, with higher scores indicating more balanced diversity. I used a five-class choropleth color scheme to distinguish between very low, low, moderate, high, and very high diversity levels.

I was responsible for designing the map and its layout. I cleaned and organized the census data, applied Simpson's DI to each state, and classified the results into five categories for visual clarity using the Quartile classification scheme to ensure I have roughly the same number of states in each class. I used the Equidistant Conic projection to preserve relative distances across the United States, which is a standard choice for national thematic maps. I also added insets maps for Alaska and Hawaii Islands to maintain completeness of my map.

I also used a gradient from light yellow (very low diversity) to dark blue (very high diversity). States like California, Hawaii, and Maryland show the highest diversity, while states such as Montana, Maine, and Idaho remain more homogeneous. I included a

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clear legend, scale bar, and source attribution. The ancillary text explains how migration, geography, and policy have shaped diversity patterns over time.