States are a crucial way that the United States divides land into meaningful units. Americans deal with different public institutions and are subject to varying laws within each state. However, state boundaries are counterintuitive, given their importance. In Kansas City, the Missouri-Kansas boundary cuts the metropolitan area in half. Some Kansas Citians routinely cross state borders to fulfill simple errands. In Texas, El Paso is 285 miles from the nearest metropolitan area in Texas (Odessa) but only 45 miles from the closest metro area in New Mexico (Las Cruces).

What if the state borders of the United States matched where Americans live? This project applies machine learning to reimagine the United States’ state borders. The algorithm groups people who live near each other and place the new state boundaries in the large, unpopulated stretches of land between those groups. The algorithm suggests grouping the contiguous US population into {0} states. The top map draws boundaries (blue lines) around population centers (brown dots) to illustrate how the new boundaries correspond to where people live.

How would the new states differ in typical quality of life and politics? The bottom map labels each of the new states and scores each according to the United Nation’s Human Development Index (HDI). HDI scores locations according to the average lifespan, average income, and average years of education. The maximum score is 1,000, and the minimum score is 0.

The side panels provide additional perspectives on the differences between the new states.

Top Left – The new states containing Seattle WA, San Francisco CA, Denver CO, Boston MA, New York NY, and Washington DC have exceptionally high HDI scores.

Top Right – The typical new state would have a population of {1} to {2} million voters. States with a high proportion of Republican voters, tend to have low total population sizes. The {3} new states with at least 65 percent Republican voters have an average population of {4}. The {5} new states with at least 65 percent non-Republican voters have an average population of {6}. For this purpose, people who voted for the Republican presidential candidate in 2020 count as Republican voters.

Middle Left – New states where people have high average years of education tend to also have high income per capita. The correlation between education and income at the new state-level is {7}. A correlation of 1.0 would indicate that high income and education always go together. A correlation of -1.0 would indicate that they never go together.

[ADDITIONAL CONTENT WILL GO HERE]

Bottom Right – New states with high HDI scores tend to have lower percentages of Republican voters. The correlation between HDI and Republican voters is {8}.