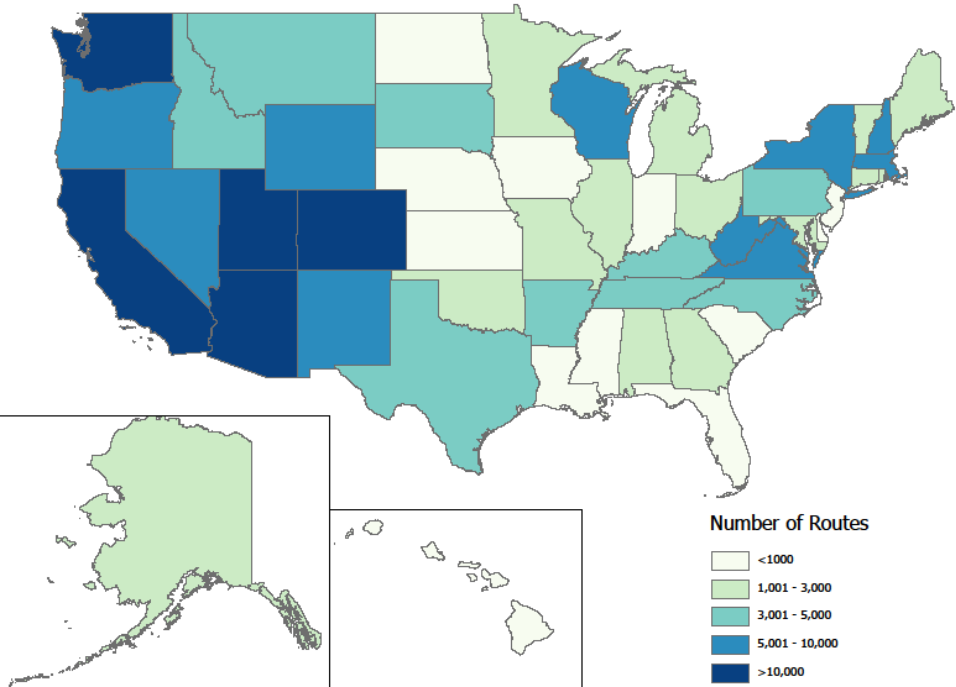


America's Rock Climbing

A spatial comparison of the quantity, type, and quality of the rock climbing in each of the United States.

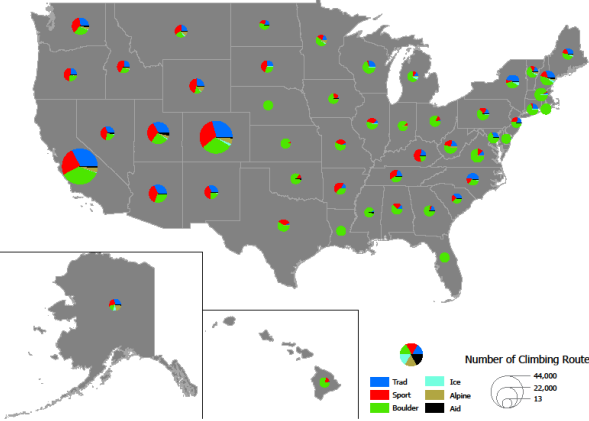
By: Cade Smith

Number of Climbing Routes Per State



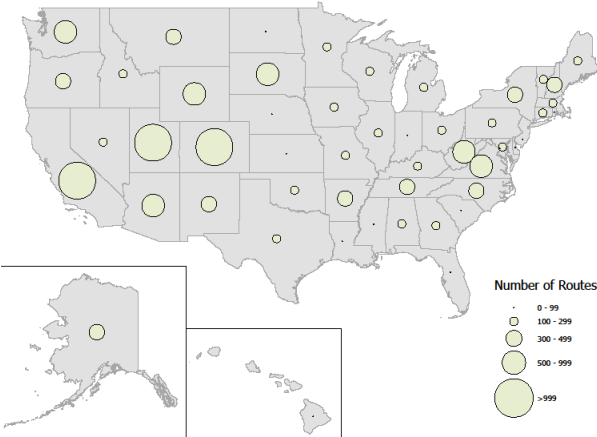
The climbing in the United States, while abundant, is not evenly distributed across its area. This map shows the number of climbing routes listed on popular climbing website MountainProject. While not completely comprehensive, this open-source data allows us to visualize the amount of documented climbing in each state. The western United States dominates in terms of quantity of rock climbs, especially states like California, Utah, and Colorado, which are known as world-class destinations for all types of climbing. These states benefit from a combination of vast public lands, varied geology, and iconic climbing areas that attract climbers from around the world. In contrast, states in the eastern U.S., while offering climbing opportunities, often feature fewer routes due to smaller mountainous areas and less exposed rock. This disparity highlights the influence of natural geography on the distribution and popularity of climbing locations.

Types of Climbing in Each State



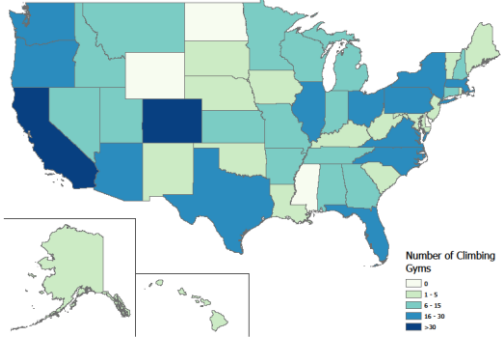
In states with a large amount of total climbing, these are distributed nearly evenly. States like Oregon and Kentucky, while having a fair amount of climbing, are mainly populated with sport climbs, due to extremely popular destinations like Smith Rock and Red River Gorge. States with little to no outdoor climbing, bouldering dominates, because it is the most available with limited rock.

Number of “Four Star” Routes



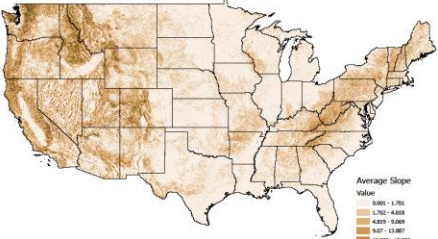
Any route given a consensus of 3.6 stars or higher on MountainProject is given four stars. States with more total climbs clearly have more high quality routes, but the number of four star routes does not drop off as expected. Many states like Arkansas Tennessee, West Virginia, and South Dakota show a higher proportion of rock climbs than expected

Number of Climbing Gyms Per State



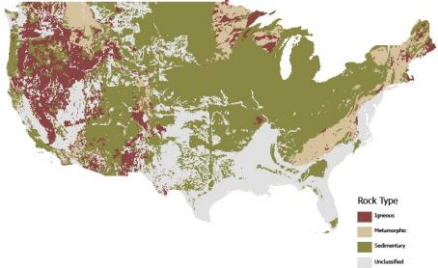
We see that states with more outdoor rock climbing naturally have the most indoor climbing facilities. After states with the most rock climbing, the trend roughly follows states with the most or largest population centers.

Average Slope Across the United States



Areas with steeper slope correlate with high density of climbing. The Rockies, Appalachians, and Sierras hold the highest concentration of climbing, and the greatest variation in slope.

Rock Type Across the United States



The variation in rock types significantly influences climbing opportunities. Diverse rock types, often indicative of tectonic activity, result in steep slopes and exposed rock, creating ideal climbing conditions.