

Explore Your World With a Geographic Information System

Every day, you explore the world. You journey to and fro, witnessing changes in weather and the nature of the neighborhood. You watch and read about distant events and situations involving society, environment, economics, and politics. You decide your route, choose services, and share comments based on geographic observations. You are engaging in geographic inquiry—asking geographic questions, acquiring resources, exploring and analyzing them, and acting upon the findings.

Asking the questions is easy. Research and analysis are more challenging. The amount and types of geographic information available are growing rapidly, coming from books, news, the Internet, national and local databases, and your own data collection efforts. Managing this data calls for a geographic information system (GIS). With it, you can create a map to solve a puzzle—"Display patterns of population distribution." You can then ask a question of the map—"Among counties with large populations, which have high population densities?"

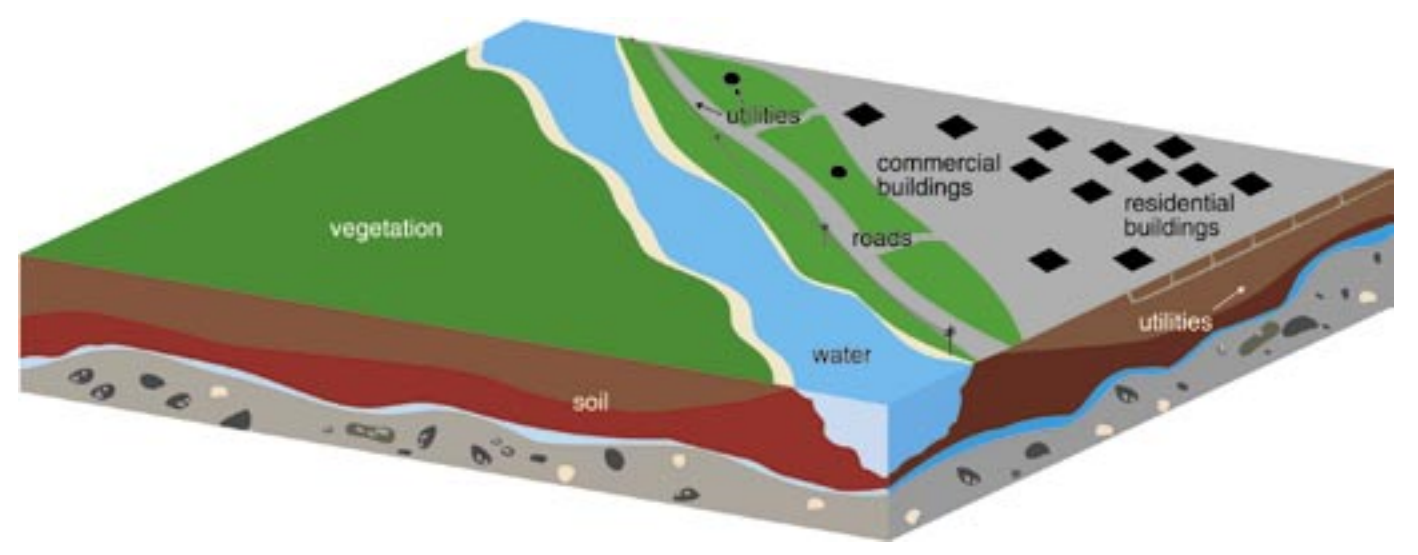
This poster provides a snapshot of what a GIS is and, through a series of maps, presents its key functions of display and analysis—effective ways to explore your world.

What Is GIS?

Information About Your World...



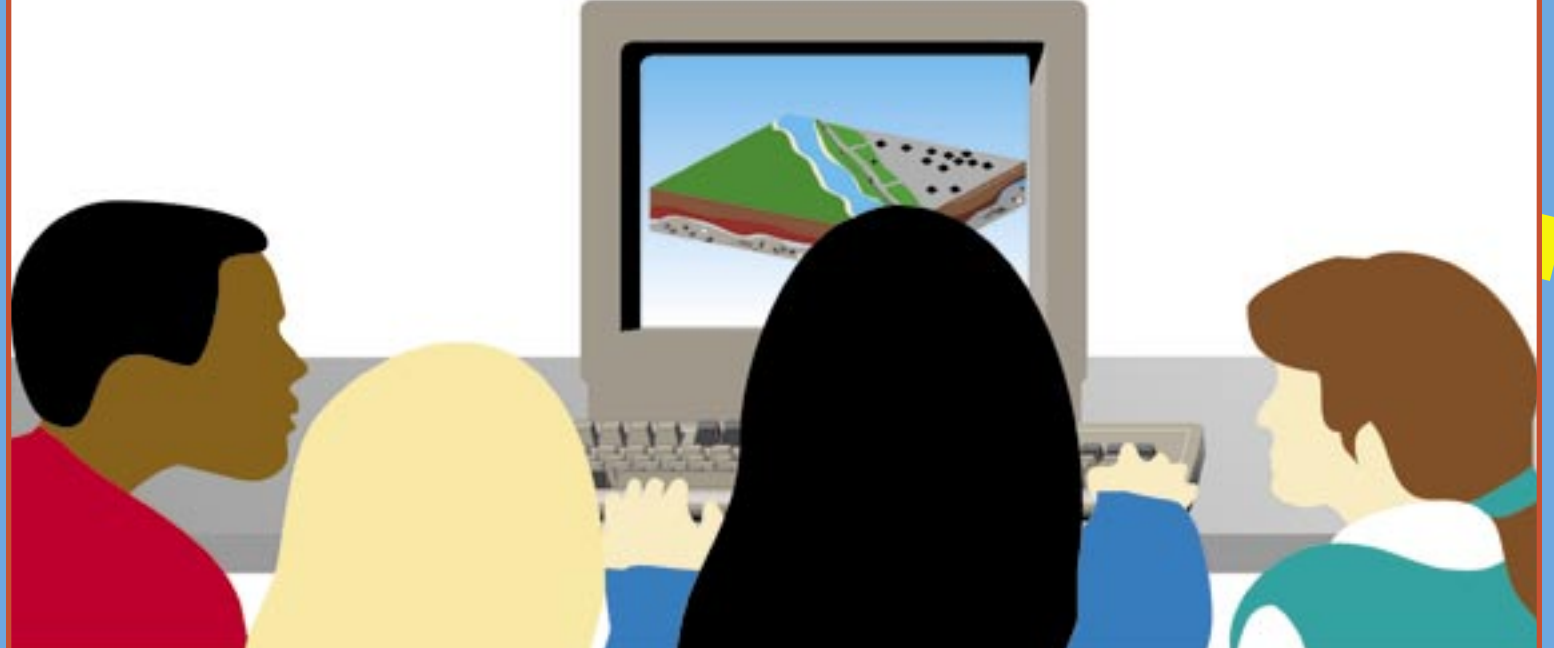
Represented by Points, Lines, Areas, and Images...



For a Range of Geography...

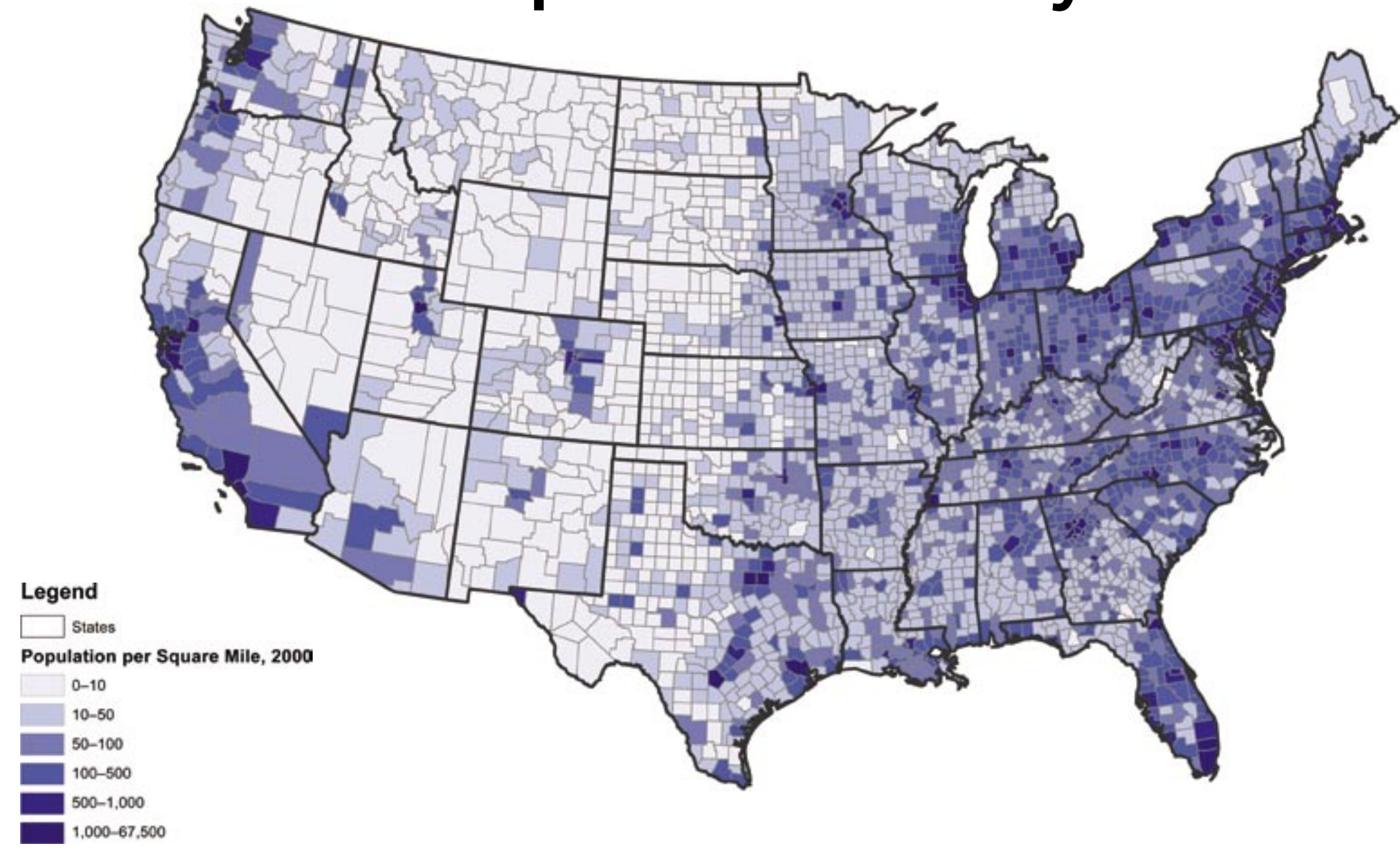


Explored With a Computer.

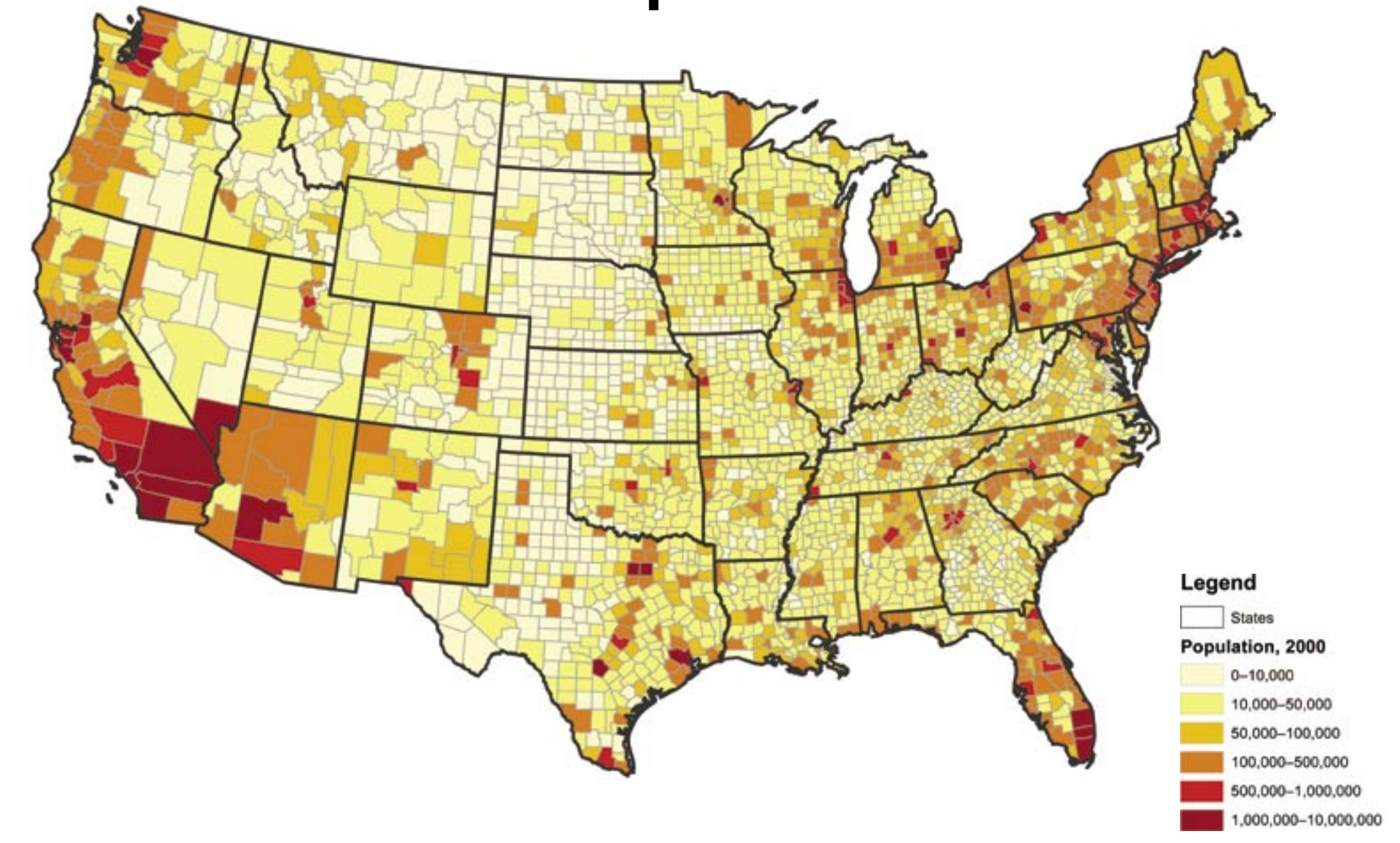


Where We Live, Where We Don't

Population Density



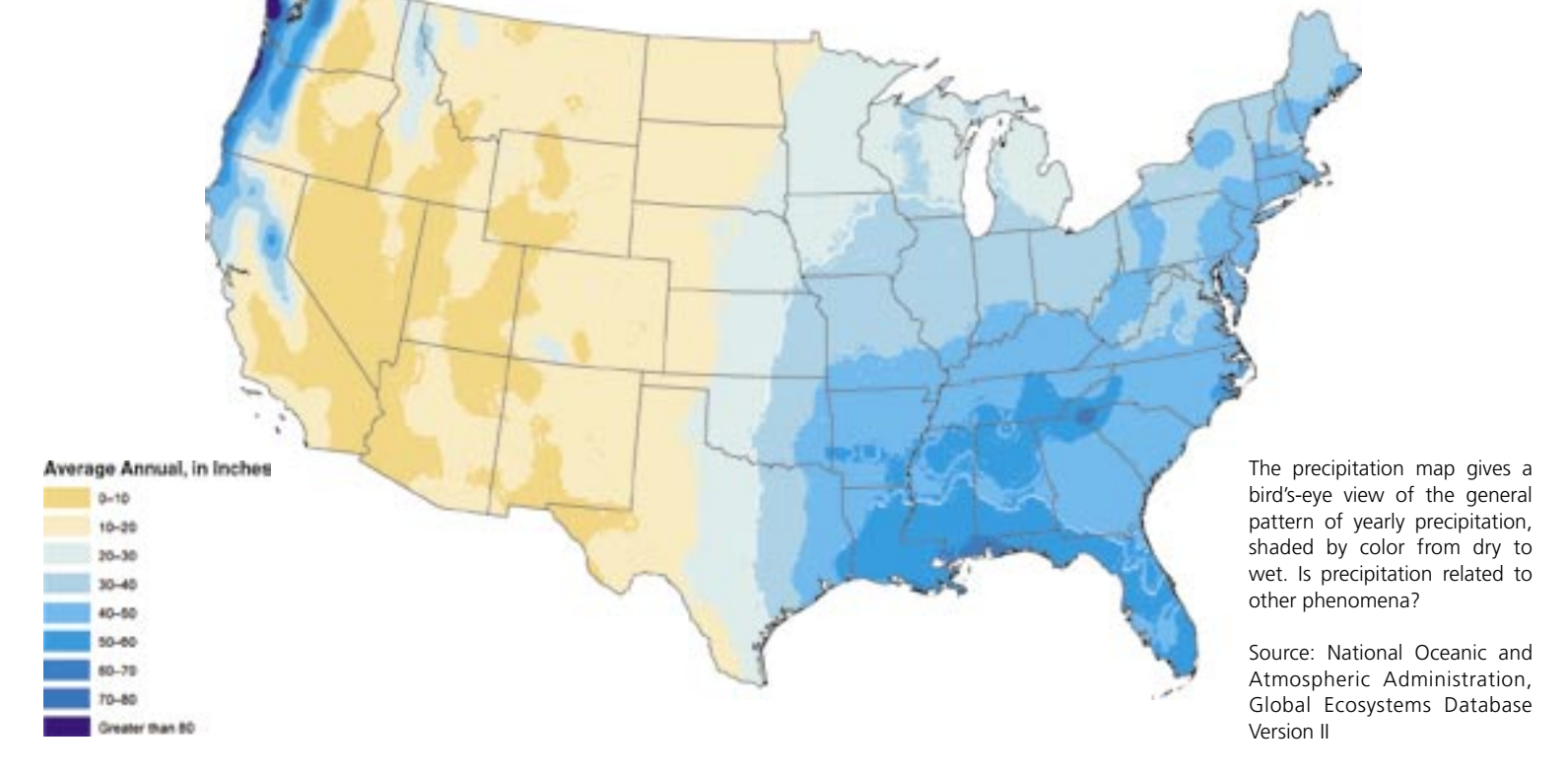
Total Population



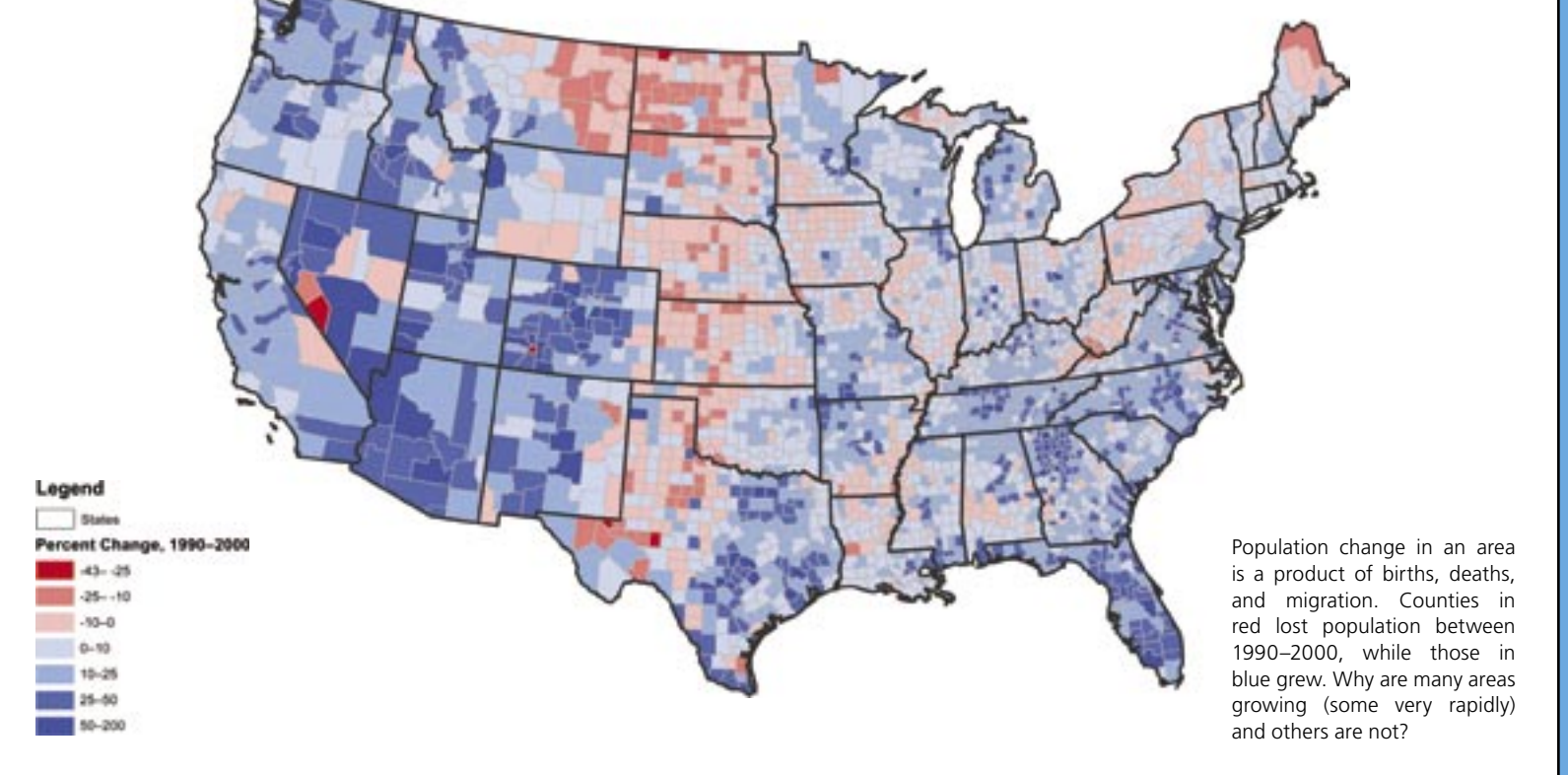
These maps answer questions about population size, distribution, and change in the continental United States. They depict where we live, where we don't, and how our numbers have changed. The map to the left shows population density (people per square mile) at the time of the 2000 census. The map to the right shows total population by county in 2000. The map immediately below is a picture of change from 1990 to 2000: which counties grew, which lost people, and which stayed the same.

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing

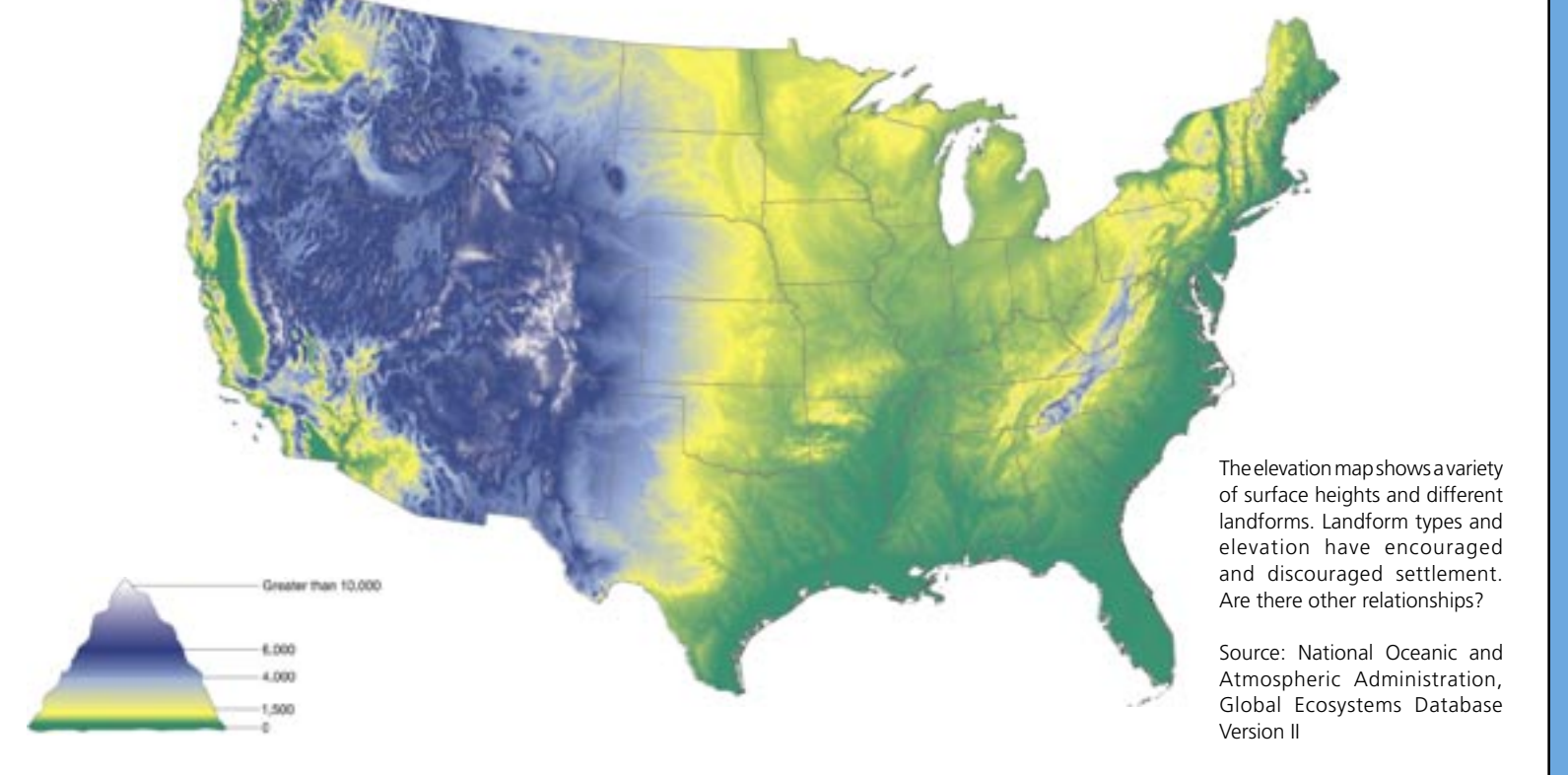
Precipitation



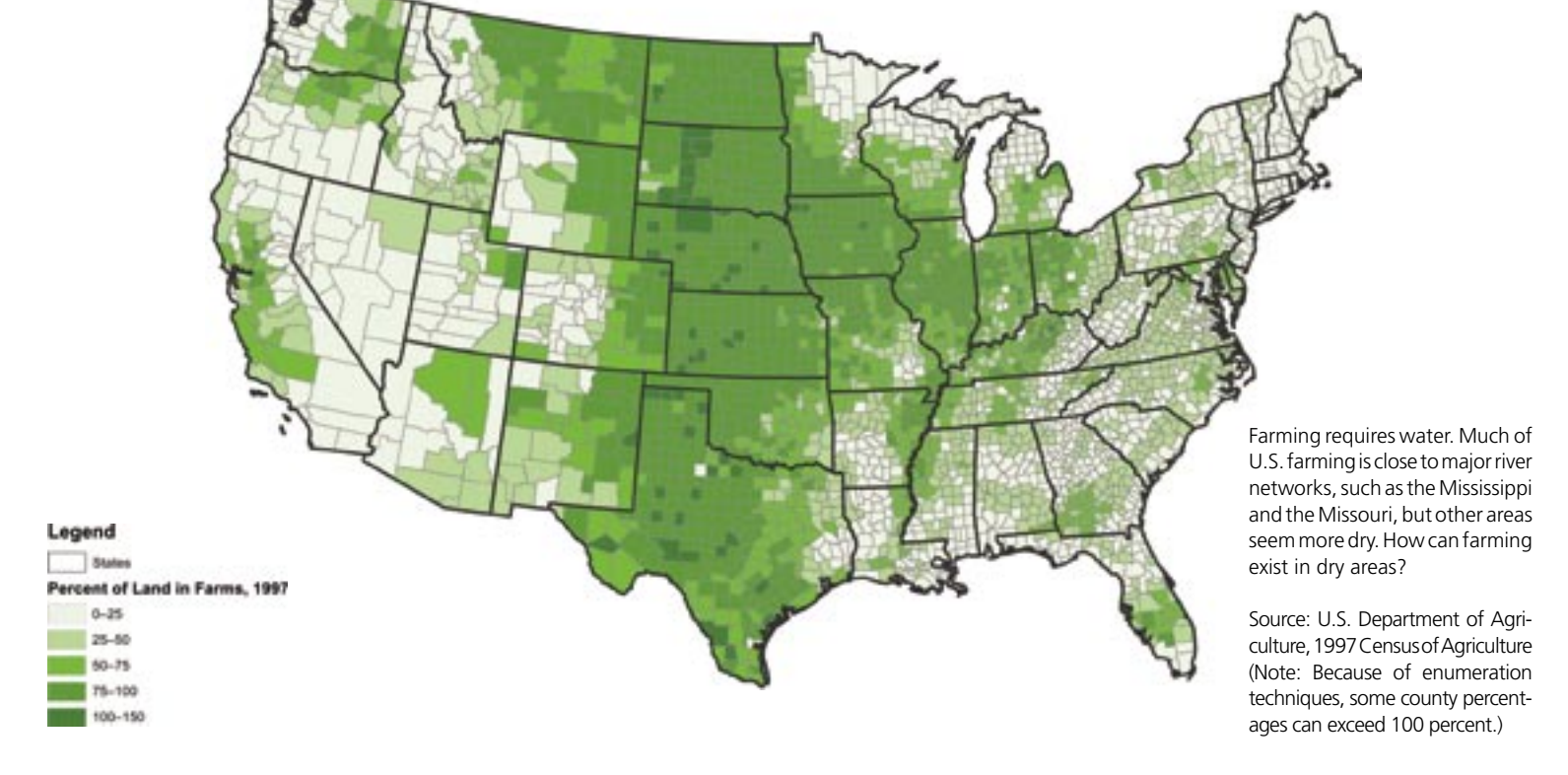
Population Change



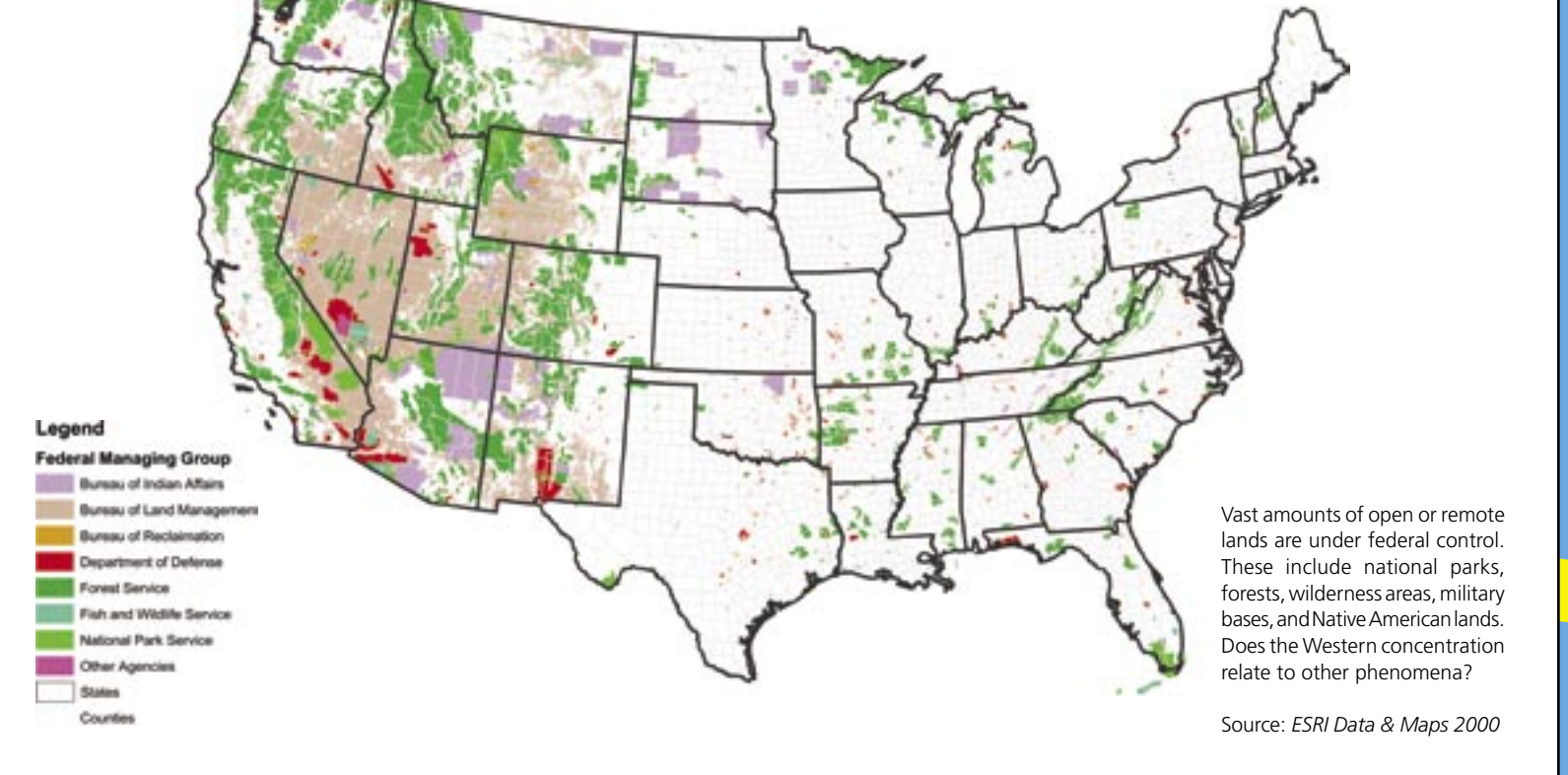
Elevation



Farmlands



Federal Lands



Rivers and Streams



Looking at the precipitation, elevation, rivers, and farmland maps, search for patterns that help explain the distribution of population. Where are the maps alike, and where are they different? What themes are affected by others? Which elements influence others? GIS tools from ESRI can help you explore these and other questions.



Geography Matters! Explore Your World With GIS!

For price and ordering information on ArcView® for schools in the United States, call 800-447-9778 (800-GIS-XPRT). For information about GIS in schools, including software, data, and support, go to www.esri.com/k-12.

