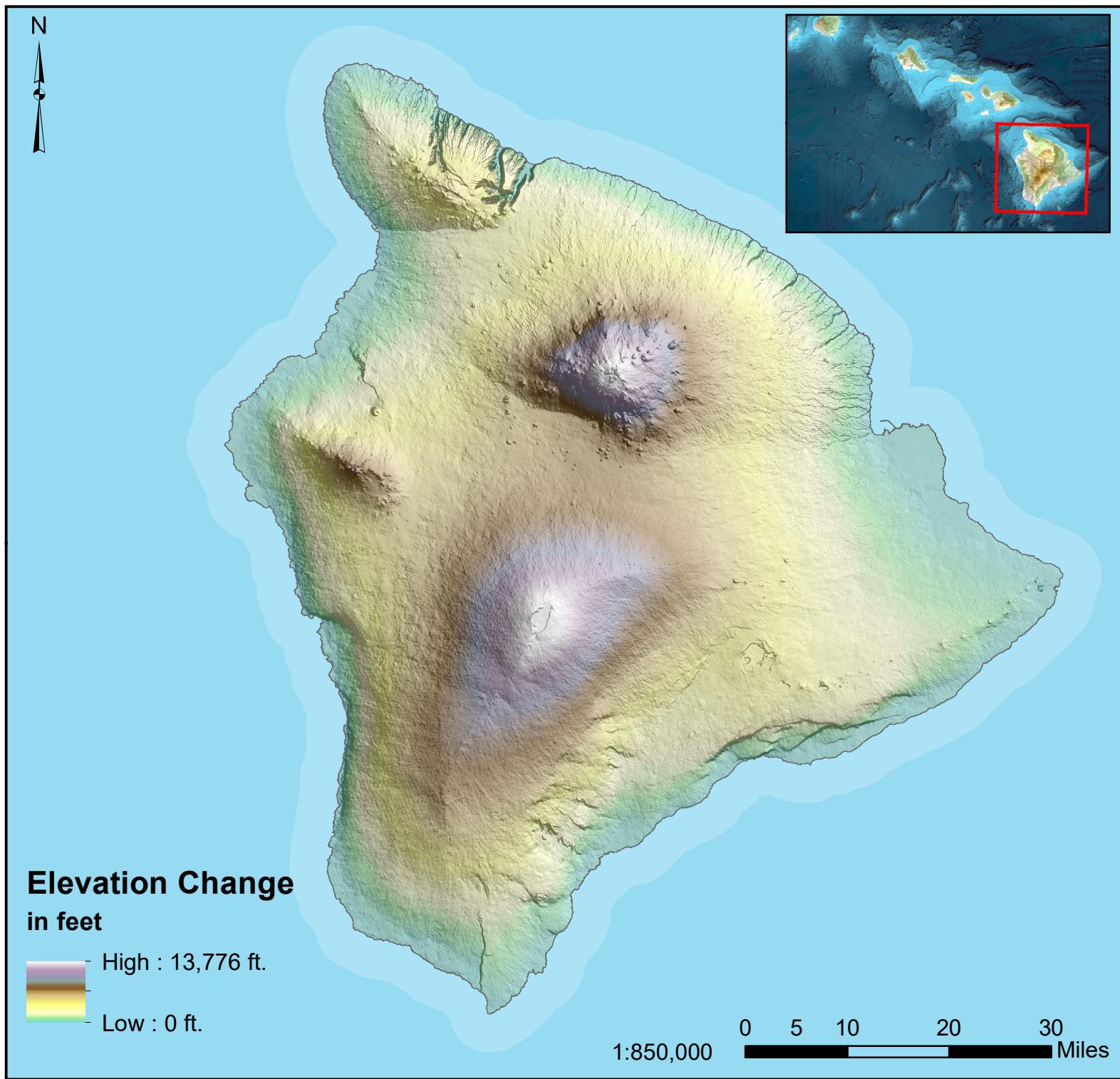


Hawaii

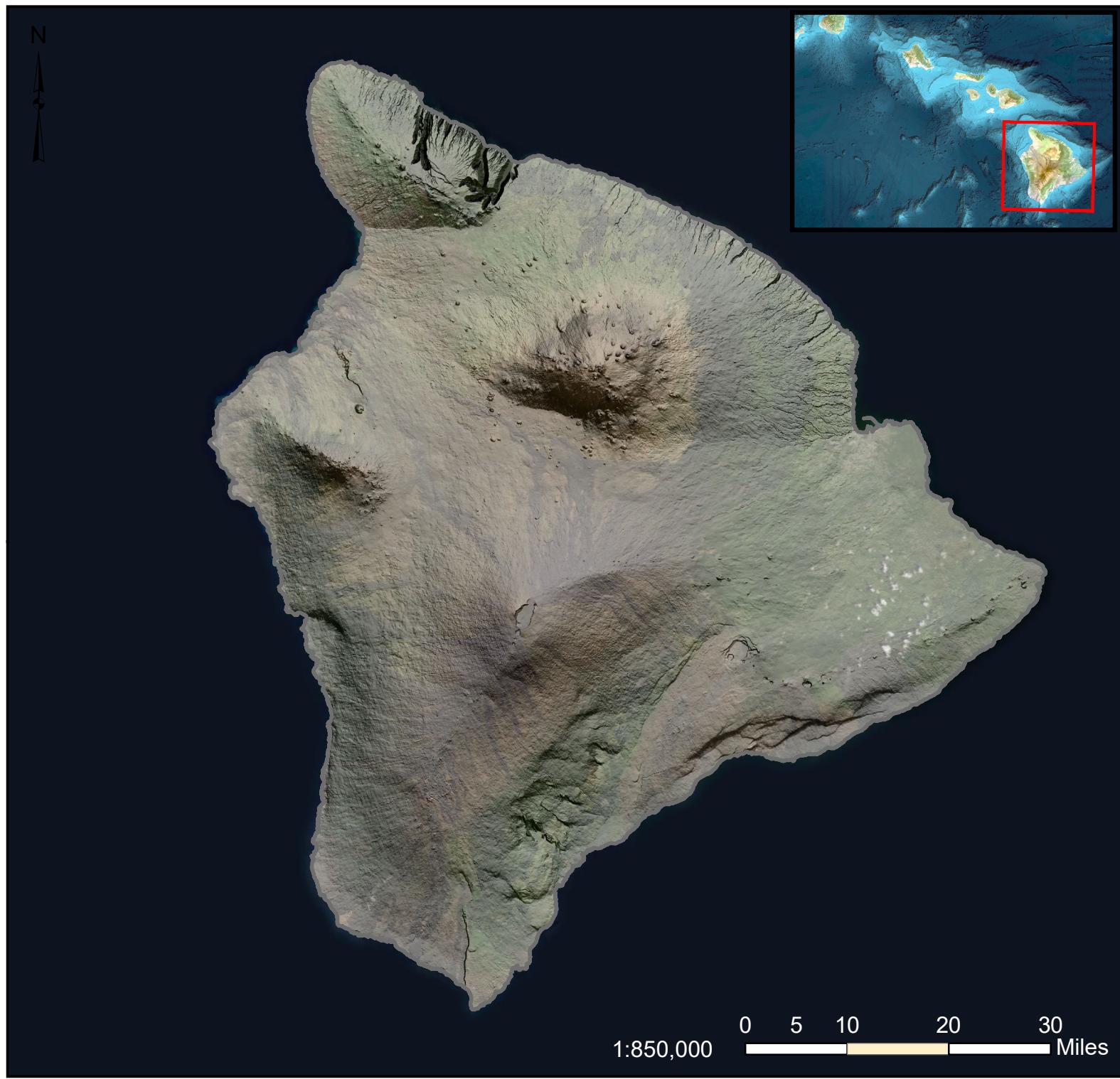
Shaded Relief with Hypsometric Tint



Inset Data Source: LANDSAT Mosaic, State of Hawaii, Office of Planning, <http://planning.hawaii.gov/gis/download-gis-data/>
Map Data Source: Hawaii DEM, UCLA GEOG XL 167, course portal

Hawaii

Shaded Relief with Satellite Imagery Basemap

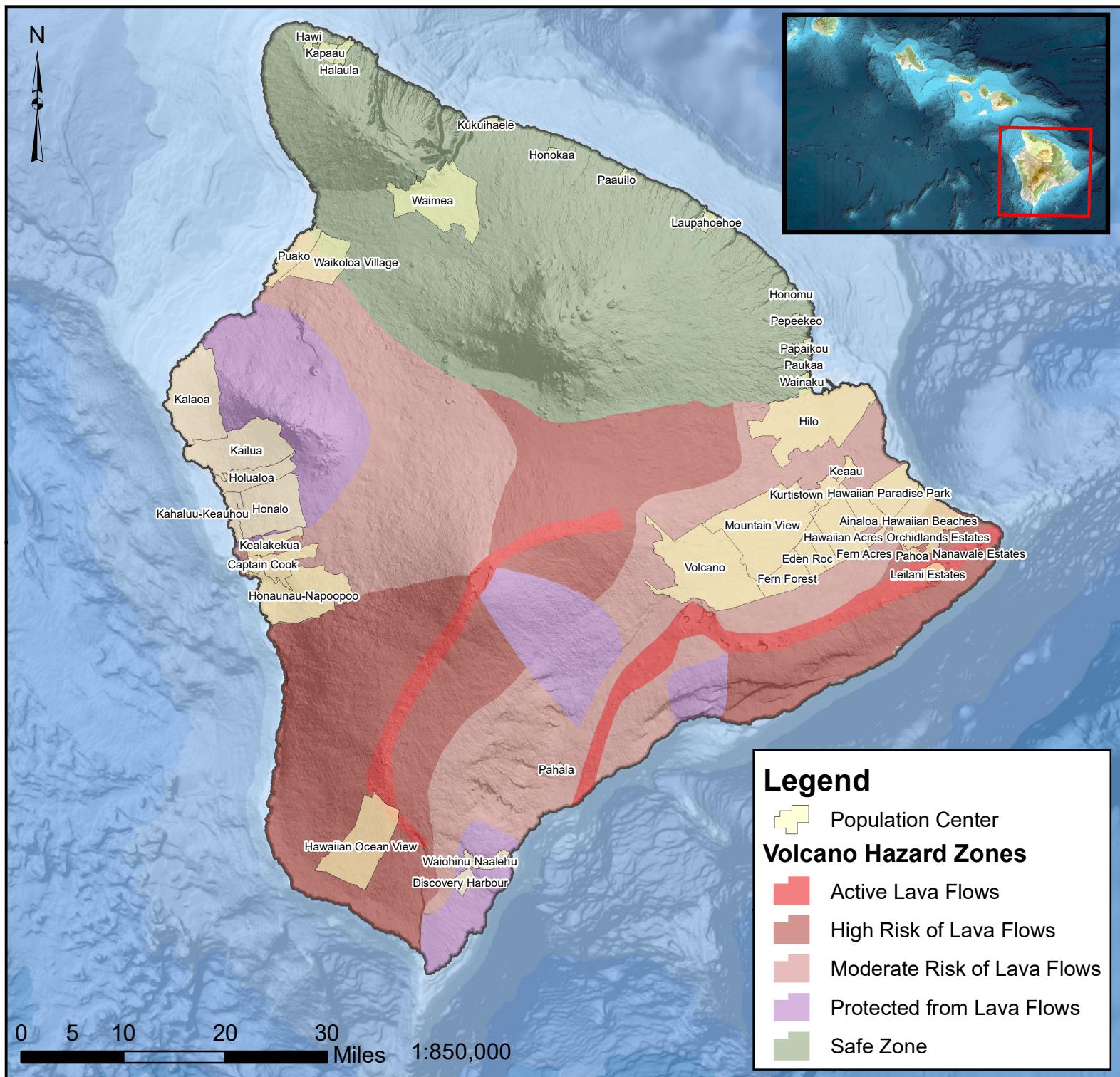


Inset Data Source: LANDSAT Mosaic, State of Hawaii, Office of Planning, <http://planning.hawaii.gov/gis/download-gis-data/>
Map Data Source: Hawaii DEM, UCLA GEOG XL 167, course portal

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Hawaii

Thematic Map with Qualitative Color Scheme Population Centers and Volcano Hazard Zones

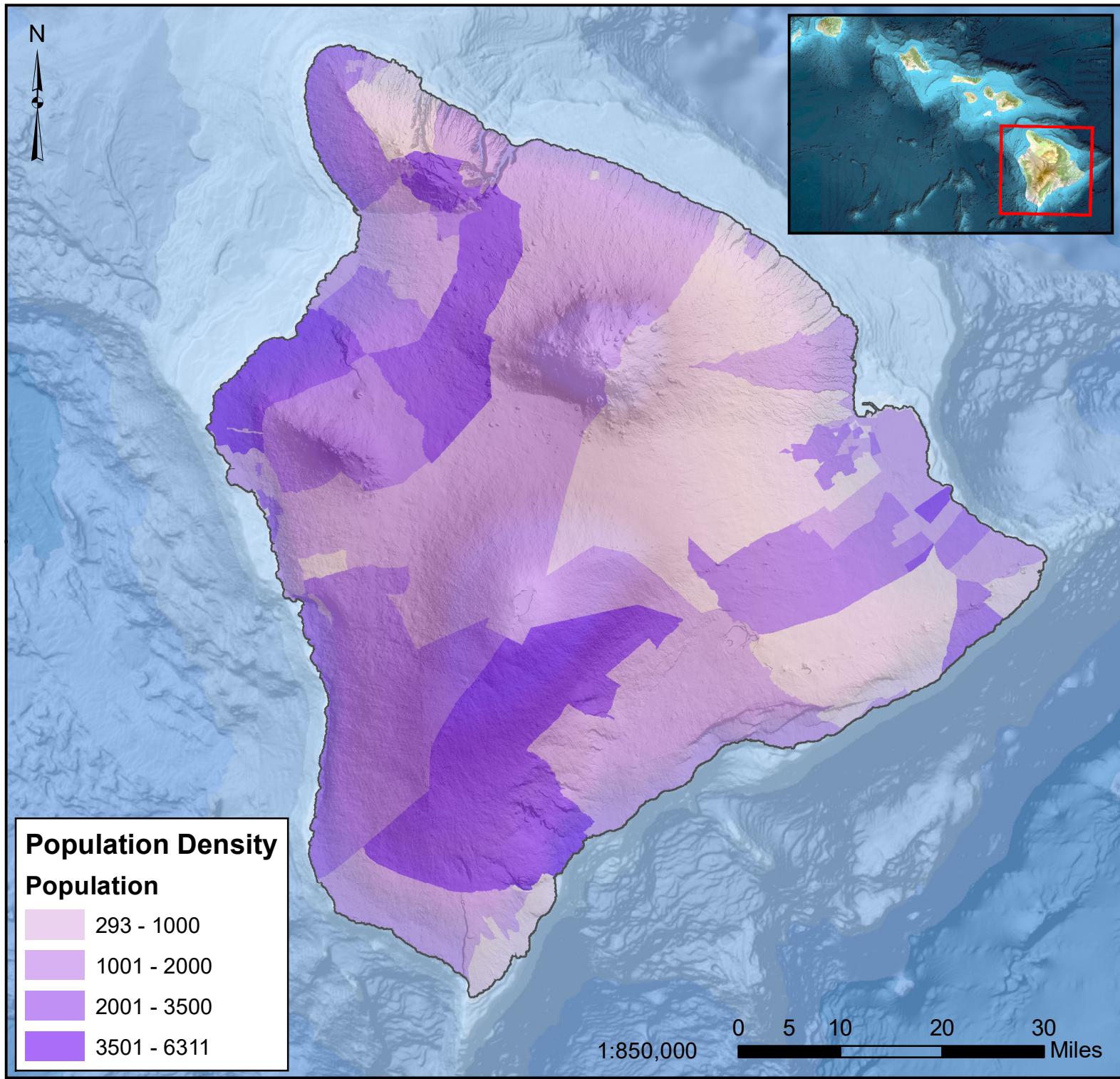


Inset Data Source: LANDSAT Mosaic, State of Hawaii, Office of Planning, <http://planning.hawaii.gov/gis/download-gis-data/>
Map Data Source: Hawaii DEM, UCLA GEOG XL 167, course portal; Volcano Hazard data & Census Designated Places data, State of Hawaii, Office of Planning, <http://planning.hawaii.gov/gis/download-gis-data/>
Service Layer Credits: Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Hawaii

Thematic Map with Sequential Color Scheme

Population Density



UCLA Cartography GEOG XL 167

Unit 4: Shade Relief, Color & Texture

Dan Grady

Methodology

HillShade:

The first task was to create my Hillshade layer from the DEM file. First, I identified a localized feature to focus my attention on. In this case, it was the canyons on the northeast coastline. If I could enhance the geological features of the whole while keeping these canyons relatively clear, then I would have a good result. After creating numerous HS layers with different aspect, altitude and z specifications, I began combining the rasters in various combinations. Ultimately I settled on the following combination:

HS1: Asp315 Al45 Z1

HS2: Asp35 Al70 Z3

HS3: Asp280 Al45 Z1

HS2 altitude was important to minimize the shade effect within the canyon, yet still allow for relief detail. I also felt that high Z-factor in HS1 and HS3 created too much shade within the localized target feature. The created HS relief was utilized in all four maps.

Map1:

Here I chose to keep with the standard 'Elevation2' color scheme. I felt that it is visually agreeable and that the representative colors are readily understood. The shoreline was highlighted with the boundary layer by hollowing it out, emphasizing the border and creating a halo in the water.

I did attempt to utilize the BumpMap tool. However, I kept receiving error messages. I had to move on.

Map2:

This map simply applies the HS layer over the satellite basemap imagery. The biggest consideration was the transparency level. I went with a 75% transparency and a little more exaggerated border due to dark nature of the background provided by the imagery. I did attempt to clip the island from the rest of the imagery and then apply it to a lighter background, but that was not possible.

Map3:

Simple layered map of the Volcano Hazard Zones with a qualitative color scheme. To provide more context and value, I added the location of populated areas.

Map4:

Since I was mapping hazard zone and cities, population seemed to keep with a theme of the mapping and is a good data point for the sequential criteria of the exercise. I thought about overlaying the hazard data, but it became too disruptive.