Project 2: Base Map Design/Terrain Map

Points: 50 Points

Task 1: Create a base map for West Virginia using available public layers. The base map should make use of public layers and change with scale. Data layers can be obtained from the West Virginia GIS Tech Center (https://wvgis.wvu.edu/) or streamed in using The WV GIS Tech Center Data Services (https://mapwv.gov/gis_services.html). The base map should be delivered as a Project Package.

Rubric:

- ❖ Make sure to include a variety of base map layers. Features you may want to consider including are: imagery, topography, political boundaries, geographic names, roads, railroads, and/or water bodies. Use the WV GIS Tech Center (https://wvgis.wvu.edu/) to find the necessary data. You can also use web services from the WV GIS Tech Center (https://mapwv.gov/gis_services.html) (10 Points)
- ❖ Change the visibility scales of the layers so that different layers and/or symbology are used at different scales. What is drawn at each scale should make sense for that scale. The maps should be more generalized at smaller scales and more detailed at larger scales. (10 Points)
- ❖ Make sure to appropriately symbolize each layer. (5 Points)

Task 2: Create a terrain map by combining contour lines, a hillshade image, and a DEM. You can obtain elevation data from a variety of sources. For West Virginia, you can obtain data from the WV Elevation and LiDAR Download Tool (http://data.wvgis.wvu.edu/elevation/). Data for other areas in the country can be obtained from the National Map (https://viewer.nationalmap.gov/basic/#/). Deliver the map in PDF format.

Rubric:

- ❖ Combine the hillshade and DEM using transparency. Make sure your color ramp is effective for the DEM. The color breaks should line up with the principle contours. (10 Points)
- ❖ Create contour lines with an interval that seems appropriate for the map extent. Symbolize contours and principle contours differently. (5 Points)
- ❖ Include a legend that explains the colorization of the DEM. Also include a title, your name, a scale bar, a north arrow, and a citation for the data used. (5 Points)
- ❖ The map is overall very neat and well organized. Space is used well, and the data are well presented. (5 Points)