Understanding Maps Worksheet

This worksheet walks through some of maps in the Student Map Set. Familiarize yourself with all of the maps in the map set, and answer the questions for the maps specified here.

Student Name(s):

Figure 1 shows a proposed greenway trail connecting two parks in the greater Tampa area. The map also contains key elements common to all of the maps in this exercise: to the right of the map, note the layer legend, which describes points, shapes, and colors in the map. On the bottom right of the map, note the compass – this shows us which direction is North, and helps orient the map. In the bottom left is a scale, which illustrates the distance between features in the map. Take a moment to familiarize yourself with these elements. Using the scale, approximately how long is the proposed trail? Which direction does it run?

Figure 2 shows the percent of the Tampa population that is under 18 years old, on top of a map showing percent green space. The demographic data, in this case the youth population, are represented by orange circles. The size of the circle indicates the relative number of young people in a given census block group. The amount of green space in a block group is indicated by the color, from yellow to dark blue. Do people living in green block groups have more or less green space compared to people living in blue block groups? Do you see any trends related to the youth population and green space? Explain.

Figure 3 shows the estimated walking distance (in meters) via roads to a park entrance in the proposed trail network area. Dark green areas indicate a short distance to a park entrance. This map can be used to identify neighborhoods that have ready access to parks versus those that have less and therefore may benefit from additional parks or new park entrances to increase access. The blue lines shown on this map are an overlay of water flowlines - i.e., the presence of flowing waters such as streams. How does Figure 3 help illustrate why the chosen route would improve equitable access to parks?
Figure 5 shows the land cover classification for the case study area in Tampa. Land cover data are necessary for sound urban planning and sustainable development. There are 8 land cover classes identified in the legend. Looking at Figure 5, what is the most common land cover type in Tampa? How might the land cover affect where a trail would be placed? Think about current developed land and the presence of local businesses.

Figure 6 shows street intersection density summarized by census block group. This map visualizes the walkability of a neighborhood via the number of street intersections per square mile within a given census block group. When overlaid with socioeconomic layers within EnviroAtlas, these maps can highlight walkability for specific age groups or other demographic groups. Would the proposed pilot route add a walkable path for those who have low intersection density/walkability otherwise? Explain.

Figure 7 shows the Dasymetric allocation of population in the case study area in Tampa. Dasymetric allocation means that population density is adjusted to visually reflect where people might actually live, showing higher densities as darker purple. What would the benefit be of placing the trail near a higher density of people?

Figure 9 shows the Percent low-income households (EJSCREEN) for census block groups in the case study area in Tampa. The information on this map is displayed as a percentile when compared to the rest of the country. For example, a block group at the 95th percentile means that only 5% of the block groups in the country have a higher percentage of low-income households than that selected block group. Would the proposed pilot route increase access for low-income communities? Why or why not?