EnviroAtlas
people health nature economy
Lesson Plan
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Building a Greenway Worksheet: Understanding Maps

Student Name(s): _____

Key Words/Vocabulary

active transportation	alternative transportation	biodiversity	buffering
case study	community cohesion	conservation	connectivity
ecosystem services	greenspaces	greenway	habitat
health outcomes	inbreeding	mitigation	
neighborhood connectivity		patch (habitat)	preservation
public hearing	restoration	siting	social capital
sustainability plan	urbanization	vector borne diseases	

1. Figure 2 shows the percent of the Canton population that is over 70 years old, on top of a map showing percent green space in Canton. The demographic data, in this case the elderly population, are represented by orange circles. The size of the circle indicates the relative number of elderly individuals in a given census block group. Block groups that have the most green space are dark blue, while those with the least are yellow.
   - **Do you see any trends related to the elderly population and green space? Explain.**

2. 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 and those that are underserved and may benefit from additional parks or new park entrances to increase access. The blue lines seen 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 benefit the Parks and Recreation Department?**
   - **Besides the Parks and Recreation Department, which other advocacy groups or community members would be interested in better access to parks?**

3. Figure 4 shows the connectivity of the natural land cover, with water included as background. Connectivity describes the ways in which a landscape promotes or impedes movement among core areas of potential habitat or cover. Connectivity is important to the concept of green infrastructure, which is used in land and water quality management.
   - **How might connectivity be important in the selection of the pilot section of the greenway?**
   - **Is the proposed pilot section the best choice for increasing connectivity? Explain.**

4. Figure 5 shows the land cover classification for the area of interest in Canton. Land cover data are necessary for sound urban planning and sustainable development. There are 8 land cover classes: Water, Impervious Surface, Soil and Barren, Trees and Forest, Grass and Herbaceous, Agriculture, Woody Wetlands, and Emergent Wetlands.
   - **Looking at Figure 5, what is the most common land cover type in Canton?**
   - **How might the land cover affect where a trail would be placed? Think about current developed land and the presence of local businesses.**

5. Figure 6 shows the residential population not within 500m of a park entrance, summarized by census block group. This map uses some of the same information as Figure 3, but takes the presence of people into account and is summarized by block group. The summaries by census block group can be used to evaluate park access per capita. When overlaid with socio-economic layers within EnviroAtlas, these maps can highlight park proximity for specific age groups or other demographic groups for whom access could be especially beneficial.
   - **Would the proposed pilot route increase park access to those who have little access comparatively? How?**

6. Figure 7 shows the street intersection density in the area of interest in Canton. Intersection density is the number of intersections per sq. mile. Higher intersection density is typically associated with smaller blocks, which are more walkable.
   - **When considering where to construct the pilot and subsequent trails, how might intersection density and walkability affect placement?**