

i-Tree Academy Spring 2023

Session 4: i-Tree Landscape: Your data, maps, and equity portal

Extended Learning Activity



In session 4 we navigated the many layers of data – including land use and canopy cover data – available through i-Tree Landscape. Each of these layers can be used to visualize and analyze information about the people, resources, and climate impacts across the environment. Take a tour of the data and ways to see it on the map with the following scenarios.

1. **Explore Your Space.** Select and Process 10-30 Census Block groups or Counties in the region where you live or work. Scroll below to the tabs of information for your processed geographies. Do any of them have high resolution landcover available?
 - a. Check out the Area tab; which geography has the highest percentage of canopy cover? Is it the same geography that has the highest amount of canopy acreage?
 - b. Now look at the Census Data tab; which of your geographies has the highest concentration of kids under the age of 18? Which has the highest minority population density?
 - c. Under the Health Risk tab, see if you can find the geography with the highest average ozone (O₃) concentrations.

2. **Explore Your Benefits.** Take a look at the carbon sequestration and hydrological benefits – these frequently correspond to the geographies where more canopy is present.
 - a. Under the Air Pollution Removal tab, see if this is also true where you can see the highest rate of avoided incidents involving Asthma Exacerbation, due to the calculated canopy benefits.

3. **Explore Your Opportunities.** The Prioritize Tree Planting section allows you to look for more than just the best spot to put new trees. Start by examining one of the Custom Scenarios and see whether priority areas change when you remove the criteria for Tree Stocking Level.
 - a. Add another criteria, such as high Land Surface Temperature Difference, or low amounts of PM_{2.5} particulate matter removal. What else does this information tell you about the environment in this part of the landscape?