

DRAFT Ecosystems Metrics Position Paper

5-9-12 Version 2

1. Canopy Cover (aerial, satellite)

This is a basic measurement useful to establish trends and provide a big-picture view of size of the urban forest

2. Urban Forest Assessment (from the ground, i-Tree)

This is a more in depth view of the many benefits the urban forest provides. It has metrics that better represent current condition and help us track change over time.

a) Urban forest structure:

- Condition of the Urban Forest (ensuring diversity)
 - o Species
 - o Size (age)
 - o Health
- Habitat
 - o Connectivity (Stands/corridors/large trees)
 - o Woody debris
- Understory
- Evergreen/deciduous
- Forest succession

b) Urban forest function (benefits of the Urban Forest)

- Environmental:
 - o Carbon sequestration
 - o Energy avoidance
 - o Micro-climate (urban heat island, temperature attenuation)
 - o Stormwater management
 - o Air/water pollution removal
- Social:
 - o Public health
 - o Food (fruit/nut trees, berries, roots)
 - o Crime prevention
 - o Traffic calming
 - o Community building/livability/access
- Economic:
 - o Property values
 - o Economic vitality
 - Views
 - Public
 - Private
 - o Risk:
 - Invasive species
 - Pest susceptibility
 - Maintenance
 - Land use