

i-Tree Open Academy

Session 4

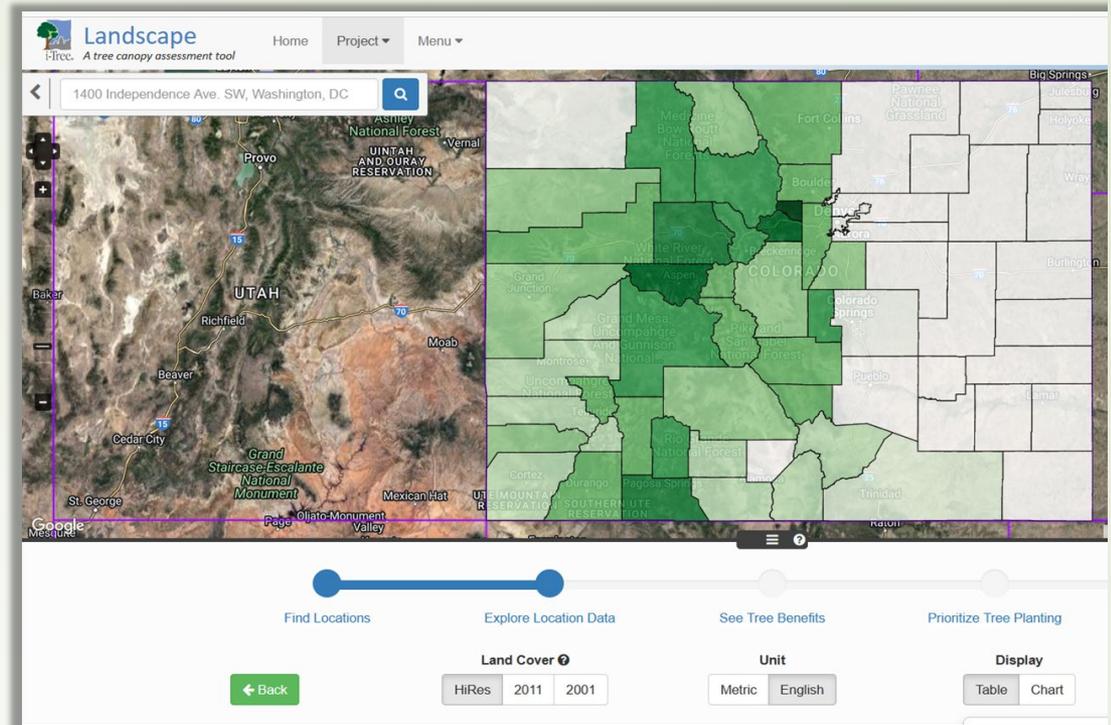
Seeing The Forest For The Trees

The Landscape of Canopy:
Map-based Tools For Benefits Assessments



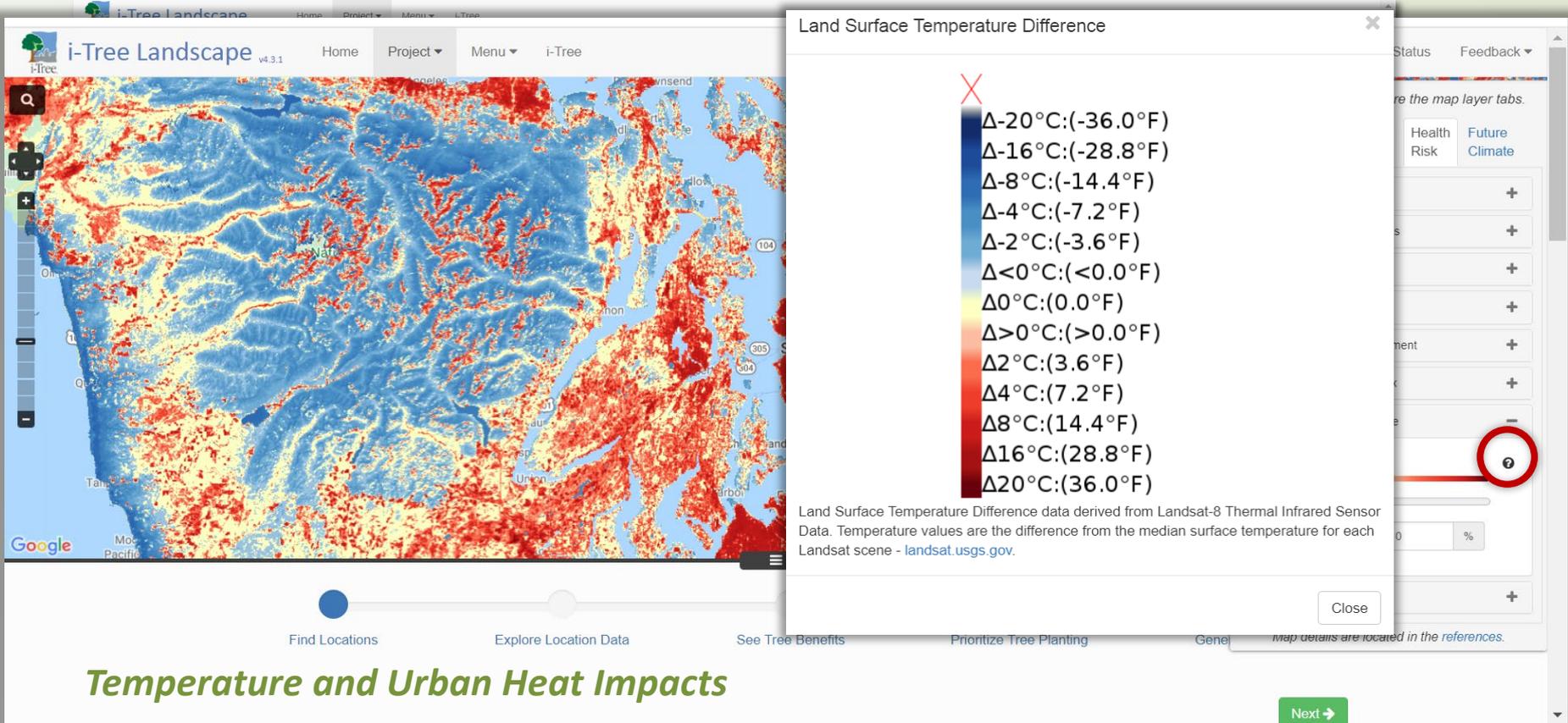
Looking Through Landscape to See Canopy in Action

- **Visualizing the environment** helps us see it in context
 - Trees + people + habitats + infrastructure: *connections*
- Landscape brings **USFS tree benefits science** to a nationwide map tool and offers a rich set of complimentary data
- Spatial distribution of resources and risks: visualizing **canopy impacts at neighborhood scale**
- Includes census demographic data and levels of environmental risk that can be used to **prioritize equity** across project locations



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Canopy, Climate, and Census Data on a National Scale



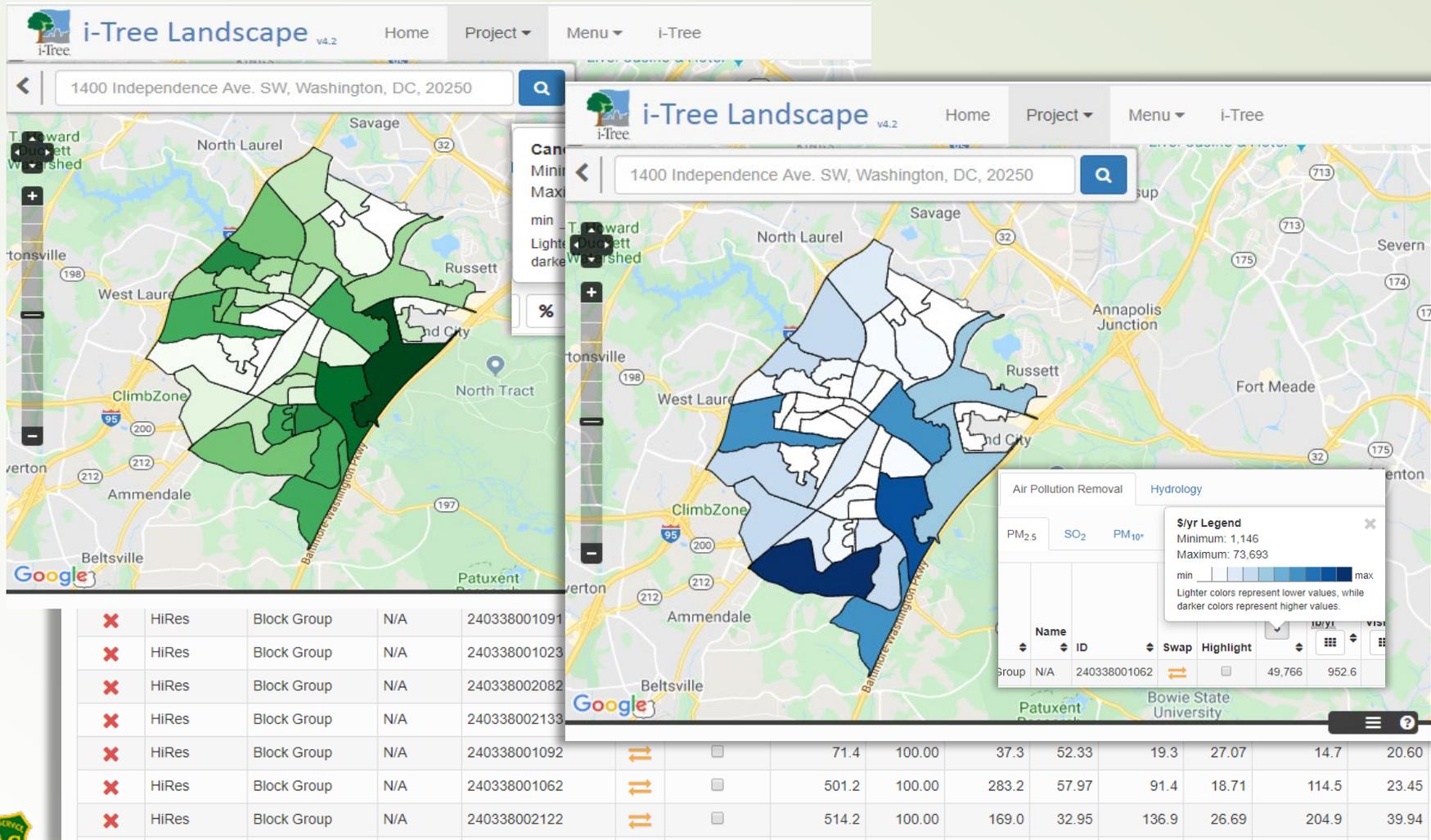
Temperature and Urban Heat Impacts



See canopy benefits in action

Benefits on a Community Scale

- Census, canopy benefits, and land use



View Strengths and Priorities Across Geographies

Priority Index 100

Map details are located in the references.

Choose a boundary area to analyze:
US Census Block Group

Use these tools to work with the map:
+ Navigate Identify
Select Box-Select
Geo-Swap Clear
Process 26 Start Over

Planting Prioritization +

Map details are located in the references.

Find Locations Explore Location Data See Tree Benefits **Prioritize Tree Planting** Generate Results

Land Cover
HiRes 2011 2001

Common Scenarios
Population Minorities Poverty

Custom Scenario
I want to prioritize for areas that have a...
High Low **Avoided Runoff**
Importance (weight) 50 %

How To Prioritize Tree Planting

To map optimal areas to plant trees, create a **"Priority Planting Index"** scenario from user-specified, weighted criteria (under Custom Scenarios) or use one of the Common Scenarios (above). Scenarios are based upon the **Land Cover** dataset selected (above) - HiRes, 2011, 2001.

The three **Common Scenarios** are:

- Population:** (default) an index weighted towards areas of *relatively high population density*, low tree cover per capita, and high available planting space.
- Minorities:** an index weighted towards areas of *relatively high minority population*

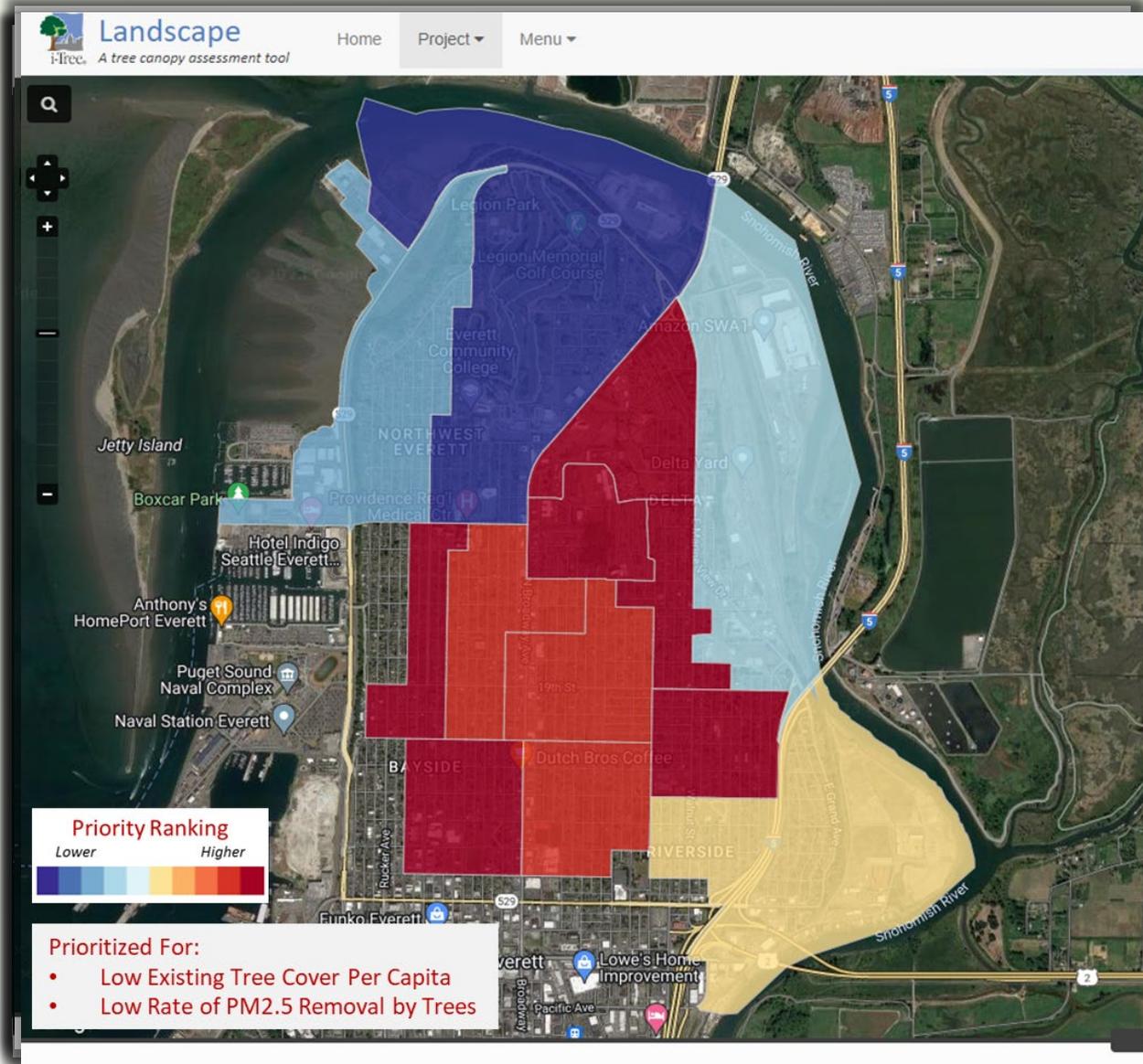


Inform Community Decisions and Prioritize Strategies

Everett, WA

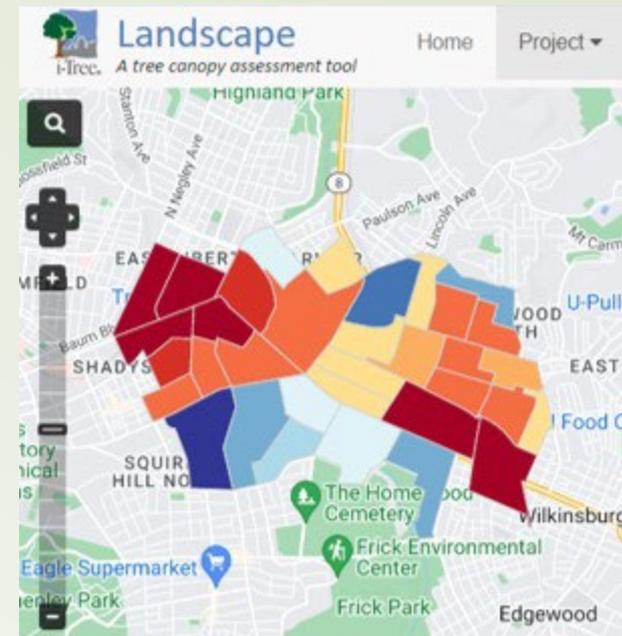
Delta

Neighborhood



The Lens of i-Tree Landscape

- See impacts on geographic scales that can highlight benefits in action
 - Distribution of canopy and other resources: where does your landscape fit?
- Estimate future impacts of climate change
- Spatial breakdown of benefits: visualize data at neighborhood scales
- See impacts alongside demographic info that can inform decisions for social equity and city priorities
- Prioritization and Limitations
 - Focus on neighborhoods where you want to increase canopy benefits
 - Data layers are publicly available, and not directly downloadable from Landscape itself
 - For use in the US, working with layers available on a nationwide level



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Reveal Your Landscape

- Letting It All Sink In
 - *Knowledge is power –*
 - *Use your power for good!*

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