



# USC URBAN TREES INITIATIVE

## A Scientific Plan for a Healthier, More Resilient Eastside L.A.

- The USC Urban Trees initiative partners USC experts and students with the City of Los Angeles to guide the growth of an urban forest of shade trees that benefit the health and quality of life for local communities.
- Using advanced mapping technology, air quality measurements and landscape architecture expertise, the project explores **where, how many, and what type** of new trees could be added to this area to optimize the benefits of urban forests.
- More trees, and the shade they offer, can improve people's health and well-being. Trees help reduce risks such as heat stroke, heart attacks and breathing problems caused by air pollution and excessive heat. They can also increase opportunities for everyday exercise by making walking and biking more comfortable. Trees can help build communities, but it's important to plant the right trees in the right places.
- Working with local community organizations and leaders, the USC Urban Trees initiative combines scientific analysis with social priorities defined by the needs and preferences of Eastside residents.



USC's Urban Trees initiative is a collaborative effort between the USC Dornsife Public Exchange, the USC Dornsife Spatial Sciences Institute, the USC Dornsife Carbon Census Network, USC's Landscape Architecture Program at the School of Architecture, USC's Office of Community and Local Government Partnerships, and the City of Los Angeles.

# How Can We Beat the Heat?



Los Angeles is hotter and hotter for more days than in previous years. During a heat wave, temperatures can reach 140 degrees F on asphalt streets and 120 degrees on typical sidewalks. These hot temperatures last into the evening with the result being shorter cycles of evening cooling. With climate change, this effect will only grow.

Communities with more diversity and fewer resources, such as those on our Eastside, are impacted by the problems that come with this heat more than others. Part of the reason is that they have fewer trees to cool their streets and homes. On very hot days it can be up to 50 percent cooler under a shade tree. To address some of these environmental inequalities, L.A.'s ambitious Green New Deal includes planting 90,000 new trees citywide. This growing urban tree canopy will make L.A. a more livable place, with healthier residents.

The USC Urban Trees initiative presents a vision for climate justice, deep engagement with the people who live in the area, innovative studies of air quality and soil health, and advanced GIS analysis and mapping to identify how the Eastside can get the most out of L.A.'s tree-planting efforts.



USC's Urban Trees initiative connects scientific research with social impact.



Public Health



Sustainability



Social Equity

To engage with the project team, please contact Marianna Babboni at [babboni@usc.edu](mailto:babboni@usc.edu)

