

# Investments in Metro Nature Yields Billions of Dollars of Health Care Savings Each Year in the U.S.

*Principal Investigator: Kathleen Wolf, Ph.D., Research Social Scientist, University of Washington*

## Project Title:

This case study highlights a 2011 NUCFAC-recommended USDA Forest Service grant, *Urban Forest Human Health and Well-being Benefits: Translating Evidence to Economic Valuation Models*

## Partners:

University of Washington (Dr. Alicia Robbins); Mississippi State University (Dr. Stephen Grado and Marcus Measells); and USDA Forest Service, Pacific NW Research Station

### PROJECT GOAL

To compile and assess the economic value of human health associated with urban trees and green space.

## PROJECT OVERVIEW:

Anecdotes recount how urban trees and forests contribute to human health and well-being. A broad base of scientific evidence confirms such benefits, yet the studies are distributed across diverse disciplines and publications, making them difficult to access. The purpose of this project was to compile the research, and then assess the economic value of human health associated with city trees and greening (defined as the creation and maintenance of city green space or parks). The project team included social scientists and economists. The team first conducted an extensive review of health benefits studies, then economic valuation models were developed and reviewed. Outreach products and publications were then developed from these analyses. The economic valuation results from this project can be used to integrate public health knowledge into urban forestry policy and programs at all levels, providing justification for urban forest investment in cities and communities. The valuations demonstrate that trees and nearby nature are important for public health promotion and disease prevention. The results of the project have been enthusiastically received, with over 50 conference and meeting presentations highlighting the results.

## REACH:

Promotion of the project's results had the following estimated impact:



5,000

People reached through website<sup>1</sup>



3,200

People reached through presentations



2,260

Youtube Video Views<sup>2</sup>



400

People reached through publications

<sup>1</sup> Website traffic assessment from Google Analytics.

<sup>2</sup> Number of video views- data obtained from YouTube.

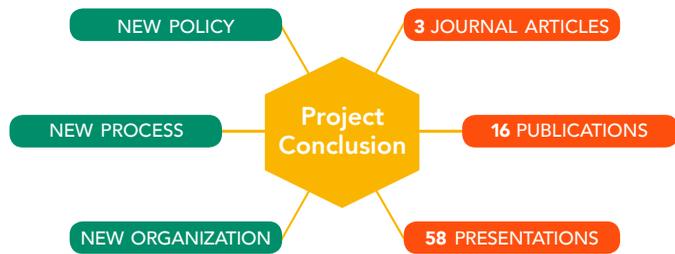


Since 1994, the National Urban and Community Forestry Advisory Council (NUCFAC) has annually recommended urban and community forestry research and technology projects for funding by the US Forest Service. Working with the office of the Southern Regional Extension Forester, NUCFAC is assessing the difference this funding program has made in urban and community forestry.

“When you talk to people about **health**, about going walking and how much better their health is when they have trees around them in the city, people more readily connect to the idea that urban forests have **economic value**.”

– Kathleen Wolf, Ph.D., Research Social Scientist, University of Washington

## PROJECT RESULTS & PRODUCTS:



## STAKEHOLDER UTILIZATION:

Stakeholders have reported that the project results have supported changes in policy and programs in their agency or organization. The guidelines have also been used in the following activities or resources:

- Peer-reviewed journal publications
- Professional and trade publications

## CONTINUED PROJECT WORK:

Following project completion, Dr. Wolf continues to be invited to present on the project’s results. Working with The Nature Conservancy, Dr. Wolf collaborated to produce a science delivery publication that incorporates project results, a brochure called Nature’s Riches (right).

## LESSONS LEARNED:

Work on monetization broadened engaged audiences to include city planners and public health officials.

Great reception of project results from non-traditional audiences. For example, results were disseminated at a forestry economics conference.



Nature’s Riches was co-produced with The Nature Conservancy

## LEARN MORE:

### Publications:

*Economic Values of Metro Nature Health Benefits: A Life Course Approach:* [www.sciencedirect.com](http://www.sciencedirect.com)

*Metro Nature, Environmental Health, and Economic Value:* [www.treesearch.fs.fed.us](http://www.treesearch.fs.fed.us)

*Public Health and the Need for Comprehensive Urban Greening in Cities Metro Nature Services:* [www.semanticscholar.org](http://www.semanticscholar.org)

*Why Do We Need Trees? Let’s Talk About Ecosystem Services:* [www.naturewithin.info](http://www.naturewithin.info)

*Nature’s Riches: The Health and Financial Benefits of Nearby Nature:* [www.nature.org/ourinitiatives/regions/northamerica/unitedstates/washington/natures-riches-washington.pdf](http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/washington/natures-riches-washington.pdf)

Visit [www.greenhealth.washington.edu](http://www.greenhealth.washington.edu) to learn more about this project.