



# Sustainable Healthy Cities Network

*A National Science Foundation-supported Sustainability Research Network (SRN)*

A new movement is gaining momentum in cities around the world toward more distributed, or more localized, infrastructure services. What if we reimagined our cities with more green spaces, with streets that promote walking and bicycling blended with transit, and with vibrant opportunities for more locally produced energy, food, and clean water? How would all these infrastructure sectors interact with each other, and with people and the environment? Could these cities be highly functional, healthy, livable, and protective of the environment?

**Sustainable Healthy Cities** is a unique research network of universities, cities, governments, NGOs, and industry partners who are co-developing the science and practical knowledge that enables urban infrastructure transformation toward environmentally sustainable, healthy, and livable cities. We focus on infrastructure design as well as behavioral and policy levers to advance distributed infrastructure solutions to benefit people, cities, and the environment. Our work is organized in three themes:

## **1. Defining and Measuring Environmental Sustainability, Health, Well-being, and Livability (EHWL)**

We are developing the science and state-of-the-art analytic tools to measure EHWL outcomes in cities of today by understanding interactions of infrastructure sectors with people, equity, environment, health, well-being, and livability.

## **2. Designing Coupled Social and Infrastructural Solutions**

We are identifying the innovations needed in infrastructure design and in our social institutions to enhance EHWL outcomes in cities. Our Network is drawing upon emerging technologies, such as driverless vehicles and smart meters, along with social and policy experiments underway in cities, to identify the best social-infrastructural pathways to a better urban future.

## **3. City Futures Modeling**

We will operationalize the new knowledge created in our Network to model city futures under different infrastructure and policy scenarios in diverse world cities – ranging from small, fast-growing cities like Fort Collins to shrinking cities like Detroit, from stable cities with aging infrastructure like New York City and Minneapolis/St. Paul to young cities emerging in India that are trying to leap-frog into next-generation infrastructure systems.

Our work connects multiple infrastructures and policy solutions in real-world testbeds in cities.



Energy

Water/Wastewater

Green Infrastructure

Food

Transportation

**Learn more at [SustainableHealthyCities.org](https://SustainableHealthyCities.org)**

# Broader Impacts

## Industry, Policy, and Community Partnerships

Collaboration among university, industry, and policy partners is central to this Network's efforts to bring science to action in communities. Our policy partners represent individual cities, metropolitan and regional planning organizations, and state and federal agencies, as well as non-profits. Our industry partners include leaders in the different infrastructure sectors we are engaging with.



## Student, Teacher, and Professional Education

A novel interdisciplinary graduate certificate program on Sustainable Healthy Cities is being offered to students, teachers, and working professionals in the Network. Courses are taught in a hybrid online form by leading experts and practitioners from different disciplines, providing access to key innovators in the field. A high school teacher training program will take these innovations to students in public schools across the country.



## Diversity and Inclusion

The Network engages under-represented groups through student recruitment, partnerships with tribal colleges, student-professional mentor programs, and our work within local communities.

### Network Universities



UNIVERSITY OF MINNESOTA

 COLUMBIA UNIVERSITY  
IN THE CITY OF NEW YORK



THE OHIO STATE  
UNIVERSITY



TEXAS  
The University of Texas at Austin

### Director and Lead PI

Anu Ramaswami,  
University of Minnesota

### Co-Directors

Patricia Culligan, Columbia University  
Ted Russell, Georgia Tech

### Connect with us!

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