

Environmental Strategies for Improving Urban Health and Safety

Michelle C. Kondo, Ph.D.

Research Social Scientist

USDA Forest Service

Northern Research Station @usfs_nrs

Philadelphia Field Station #phillyfieldstation

michelleckondo@fs.fed.us

@MichelleCKondo

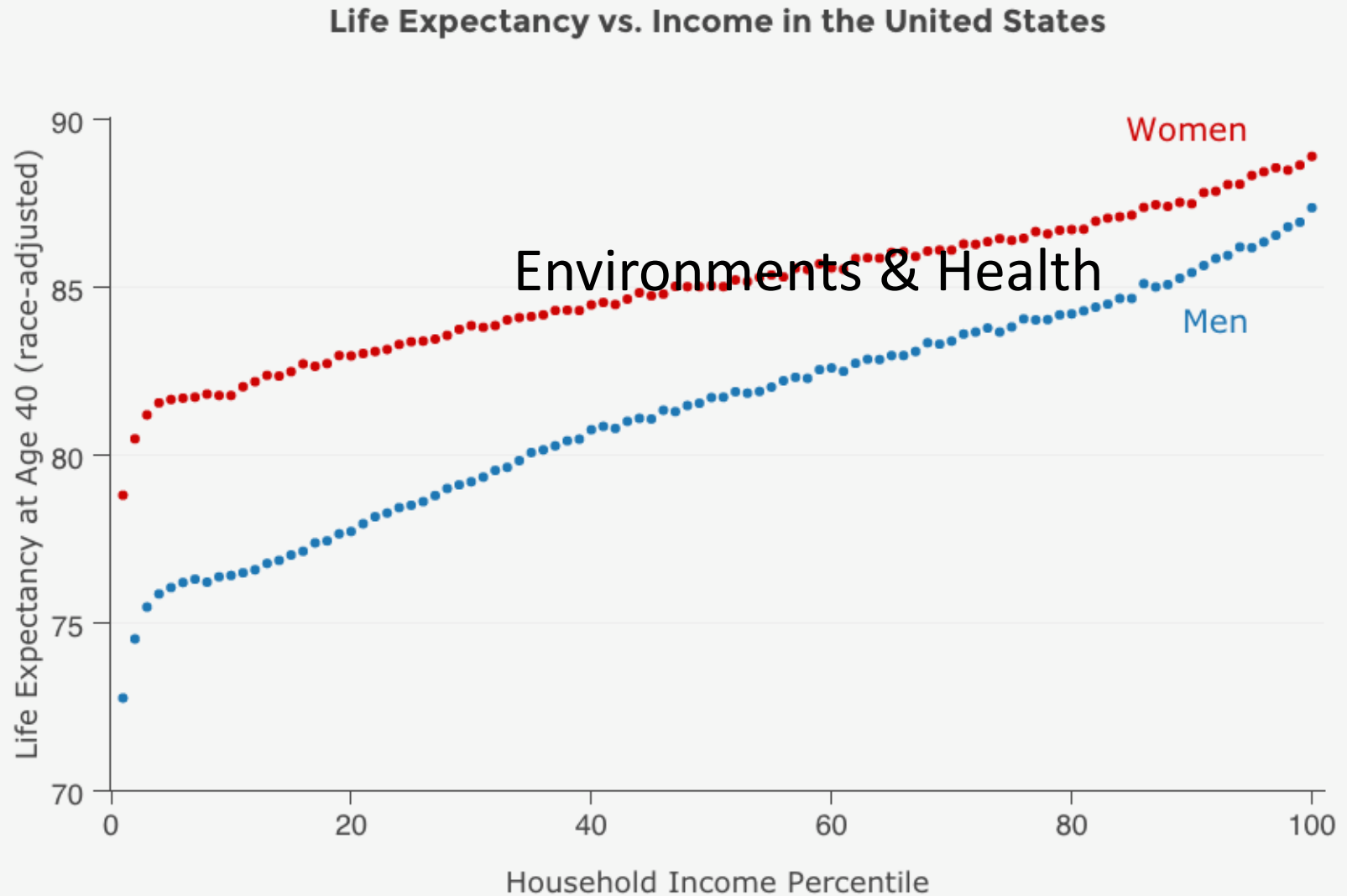


Philadelphia

Sparkling and Blighted, Convention Cities Spotlight Ignored Urban Issues

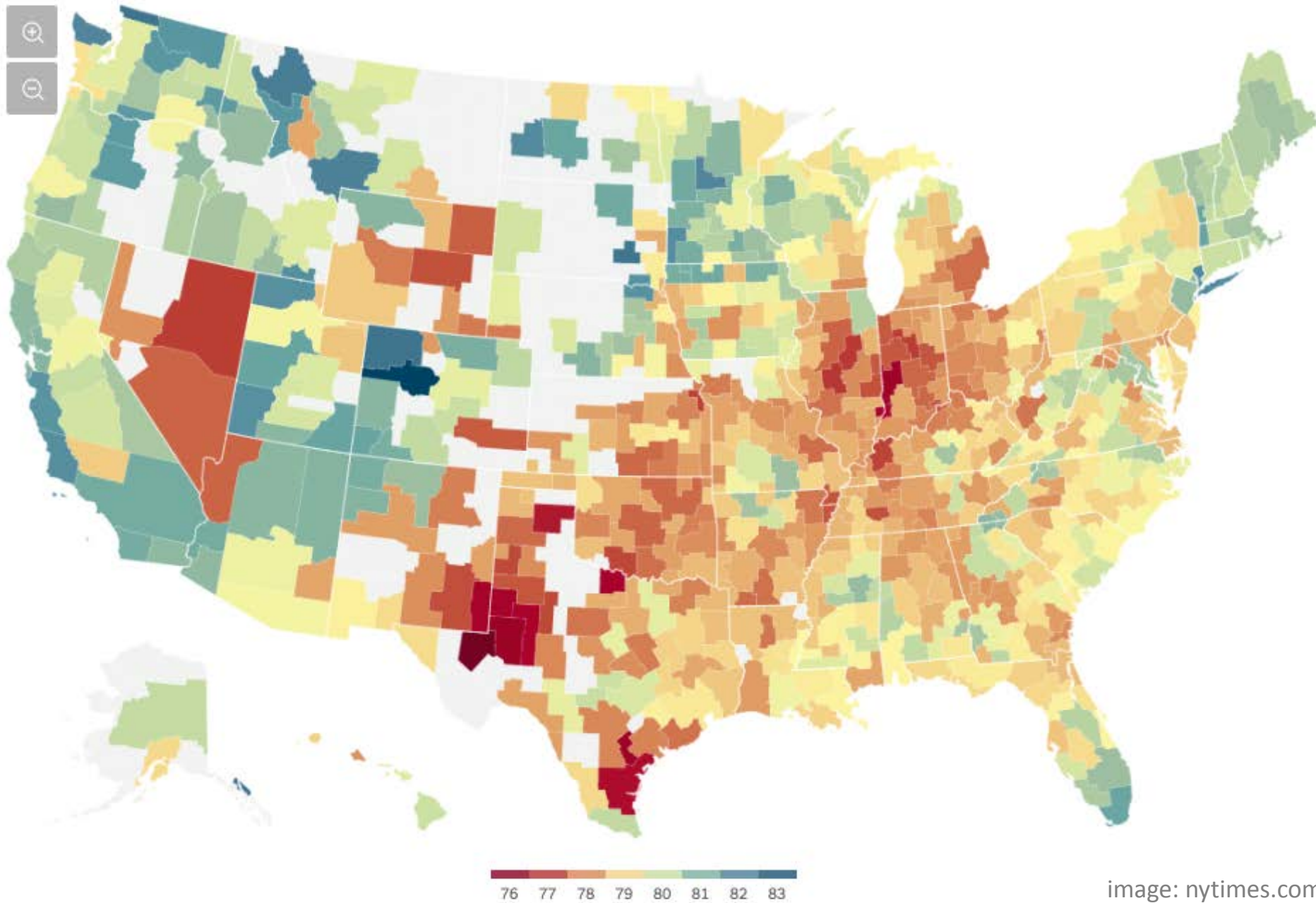
Cleveland and Philadelphia, with areas of gleaming renewal and others of crushing poverty, illustrate the plight of America's cities, little discussed in the campaign.

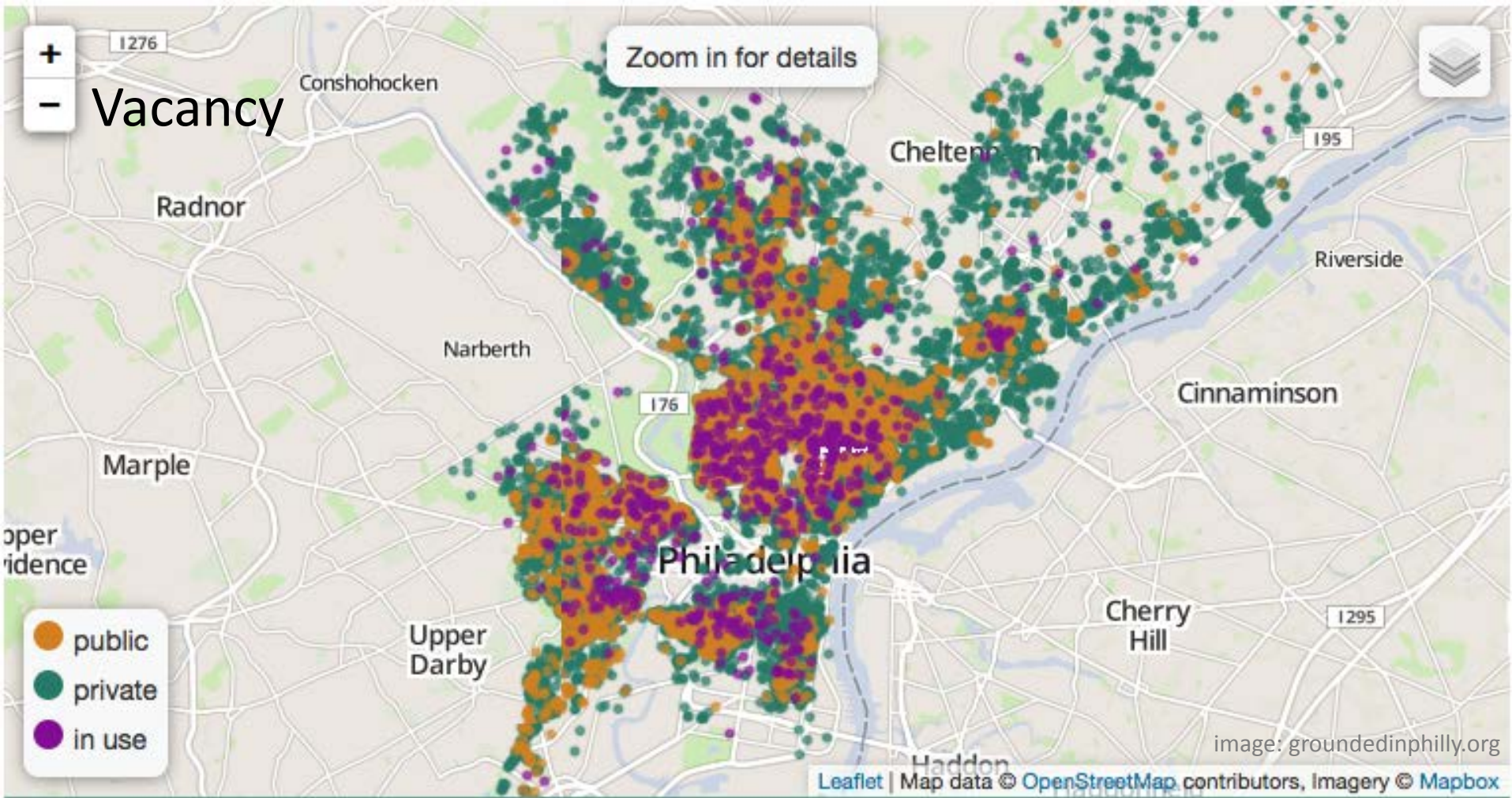
By SHERYL GAY STOLBERG JULY 17, 2016



The richest American men live 15 years longer than the poorest men, while the richest American women live 10 years longer than the poorest women.

Life expectancy of 40-year-olds with household incomes **below \$28,000**,
adjusted for race*





Questions

- How do such environments affect residents' health?
- Which health outcomes are particularly affected by such environments?
- What role do such environments play in violence?

Methods:

- Spatial epidemiology, health geography, econometrics, qualitative methods

Environmental strategies for disease, violence, and injury prevention

- *Everyday environments* can influence health and safety
- Can *place-based* or *nature-based* interventions contribute to a “culture of health” and prevent chronic disease, violence and injury?

“Clean & green” vs. community-initiated reuse in Youngstown, OH



- nearby “clean & green” lots: ~10% reduction in property crimes
- nearby community reuse lots: up to 27% reduction in violent crimes

Kondo, Hohl, Han, Branas (2016) Effects of greening and community reuse of vacant lots on crime. *Urban Studies*.

images: Youngstown Neighborhood Development Corporation

Vacant-lot greening with community engagement trial in Flint, Youngstown & Camden



Zimmerman, Cunningham, Reischl, Branas, Hohl, Kondo, Stoddard, Heinze (Funded September 2015) RFA-CE-15-002 – **The Centers for Disease Control National Centers of Excellence in Youth Violence Prevention: Building the Evidence for Community- and Policy-Level Prevention: Tri-City Vacant Lot Greening Trial**

image: Michigan Yough Violence Prevention Center

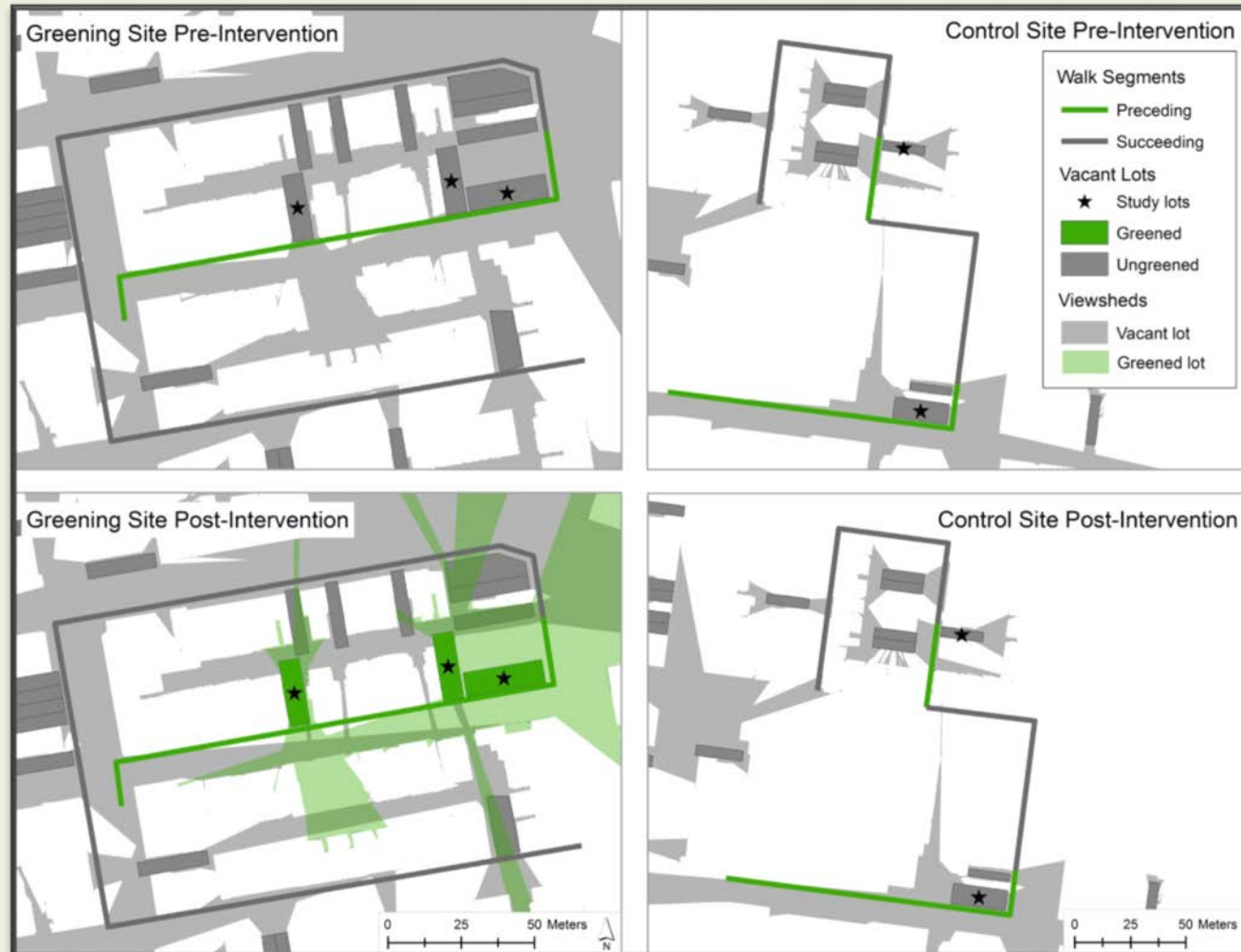


Green storm water infrastructure as public health intervention in Philadelphia

→ up to 27% relative reduction in narcotics possession nearby GSI sites

Kondo, Low, Henning, Branas (2015) Association between green infrastructure installment and surrounding health and safety. *American Journal of Public Health*, 105(3):e114-e121.

Mechanism: Does vacant-lot clean & green impact stress levels (HR) of nearby residents?



South, Kondo, Cheney, Branas (2015) Neighborhood blight, stress, and health: A walking trial of urban greening and ambulatory heart rate. *American Journal of Public Health* 105(4):909-913.



Nature Rx: Go Out and Play

Tools and Translation

- Greening & health toolkits, which include:
 - essential ingredients; where ingredients can be obtained; a step by step implementation strategy; and
 - considerations of local climate, political and regulatory environment

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