Building Well-Being
Health and the Built Environment

Sara Jensen Carr
Assistant Professor of Environmental Design and Public Health
School of Architecture
University of Hawai‘i Manoa
HPHA Annual Meeting 2015
1870's | Industrial Revolution

2015 | Present Day
Sanitary infrastructure in Kearney, NE, 1889. (Solomon Butcher, Nebraska Historical Society)

From cover of *Scientific American*, 1885. (Collection of Jon C. Schladweiler, Pima County Wastewater Management Department)
Where people walk (left) and where people drive (right) in Los Angeles, CA (Cities.human.co)
Race and ethnicity in San Jose, Houston, and Los Angeles (Eric Fischer, 2010 Census)

See also:
Frameworks of Health and the Built Environment: DIRECT EFFECTS

Energy Use

Destruction of undeveloped land
Deforestation
Emissions and effects of industry and agriculture

Use of toxic materials
Lighting: stress and fatigue
Overall design: stress and fatigue

Pollutant Uptake

Pollutants
Frameworks of Health and the Built Environment: INDIRECT EFFECTS

Supportive Infrastructure

Destinations in walking/biking proximity

- Reliance on energy-heavy features (elevators, lights, heating/cooling)

Personal auto use

- Daily physical activity and stress levels
- Social Capital

Psychological Motivations

Behavioral influence
Built environment and health studies

39 between 1993 and 2002

675 September 2003 through May 2013

Jackson, Dannenberg, and Frumkin (2013)
Contemporary topics:
WALKABLE COMMUNITIES

Paul Lukez, Suburban Transformations (2009)
Galina Tahchieva, Urban Sprawl Repair Kit, Reburbia Competition (2009)
Contemporary topics: WALKABLE COMMUNITIES

Courtesy Walk with a Doc Big Island
Contemporary topics:
ACTIVE DESIGN
Contemporary topics:
NATURE AND MENTAL HEALTH
Contemporary topics: CLIMATE CHANGE
Contemporary topics: HEALTHY FOOD ACCESS
Health at all scales

Environmental Design

Healthcare
- Healing Environments
- Controlled Observation/Intervention
- Specialized populations

Buildings
- Indoor environmental quality
- Energy and sustainability
- Internal circulation

Landscapes
- Ecological health
- Social space
- Active networks
Enhancing the cycle of design + health research

- Government + Community Outreach
- Policy + Design Toolkits
- Practitioner Training
- Ongoing Research
- Built Projects