Neighborhood Walkability and Physical Activity and Obesity in NYC: Translating Research to Action.

Andrew Rundle, DrPH

Department of Epidemiology
Mailman School of Public Health

Co-Director
Built Environment and Health Research Group
Columbia University
Urban Design: Walkability

• A set of urban design characteristics that promote pedestrian activity and private automobile independence.

• Low walk-ability neighborhoods are often discussed in reference to urban sprawl.

• Low walkability is typified by:
  • Low population density
  • Poor access to public transit
  • Little pedestrian activity
  • Car dependence
  • Little mixing of residential and retail/commercial land uses
Walkability in NYC
Neighborhood Walkability in NYC

NYC is seeking to increase physical activity by promoting walkable urban design.


Neighborhood walkability index based on urban design theory, incorporates measures of:

- Residential density
- Intersection density
- Land Use Mix
- Subway stop density
- Retail space
Neighborhood Walkability and Physical Activity in NYC

NYC Community Health Survey data from 2002-2005 linked to Zip code level data on neighborhood characteristics.

1. adjusted for gender, age, race, education, income, nativity, self-rated health, employment status, martial status, and Zip code % poverty, % Black

Odds ratio for engaging in physical activity or exercise across interquartile range of Zip code walkability

Any Physical Activity (2002-05)

Any Exercise (2003)

Any Mod or Vig Activity (2005)
Neighborhood Walkability and Active Transport (walking or cycling) in NYC

NYC Community Health Survey data from 2003 linked to Zip code level data on neighborhood characteristics.

1. adjusted for gender, age, race, education, income, nativity, self-rated health, employment status, martial status, and Zip code % poverty, % Black
Neighborhood Walkability and BMI in NYC

Pooled NYC Community Health Survey data from 2002 to 2006 linked to Zip code level data on neighborhood characteristics.

1. adjusting for gender, age, race, education, income, nativity, self-rated health, employment status, martial status, and Zip code % poverty, % Black
Neighborhood Walkability and BMI for NYC Residents

1. Adjusted for individual age, race, gender and education, and neighborhood poverty, % Black, and % Hispanic.
Translating Research to Policy

• Direct collaboration and involvement of Dept. of Health and Mental Hygiene (DoHMH) in our research grant applications and on the research team.

• Development of white papers and research briefs in collaboration with DOHMH and Depart. of Parks & Recreation.

• Testimony at City Council meetings and Zoning commission meetings.

• Development of online updates and supplements to existing Governmental reports.
NYC Active Design Guidelines

• Provides architects and urban designers with strategies for creating healthier buildings, streets, and urban spaces.

• Urban design strategies for creating neighborhoods, streets, and outdoor spaces that encourage walking, bicycling, and active transportation and recreation.

• At the time the Guidelines were published (2009) there was little data from NYC to support the concepts. Most of the cited evidence came from other locations.
Collaborators

Department of Health
- Tiffany Harris
- Bonnie Kerker
- Kevin Konty
- Karen Lee
- Thomas Matte
- James Stark

Epidemiology
- Gina Lovasi
- Catherine Richards

Geography & Urban Planning
- Lance Freeman
- Marnie Purciel
- Daniel Sheehan
- James Quinn

Social Work
- Ofira Schwartz-Soicher

Environment Health Sciences
- Darby Jack

Sociology
- Michael Bader
- Kathryn Neckerman
- Christopher Weiss

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