

Healthy Urban Redevelopment, The Atlanta Beltline Project, and Health Impact Assessment

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The Public's Health and the Law: Fifth Annual
Partnership Conference
Atlanta, June 14, 2006

Community Design and Health

Related to land use

- Obesity, physical activity, and cardiovascular disease
- Water quantity and quality

Related to automobile dependency

- Air pollution and asthma
- Climate change contribution
- ↑ Car crashes
- ↑ Pedestrian injuries

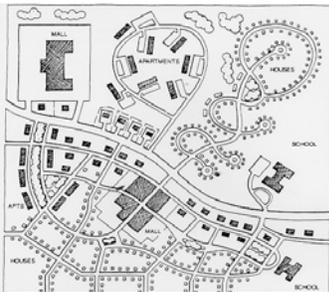
Related to social processes

- Mental health impact
- ↓ Social capital

Walkable Community Designs: Connectivity and Physical Activity

Suburban Development →

Traditional Neighborhood →



Drawing by Duany Plater Zyberk, in ITE Journal 1989,59:17-18



**A Vision of
Health Impact Assessment**

- Community planners and zoning boards will request information on potential health consequences of projects and policies as part of their decision-making process
- Local health officers will have a tool to facilitate their involvement in community planning and land use decisions that impact health

**Definition of
Health Impact Assessment**

- Collection of procedures and tools by which projects, policies, and programs can be evaluated based on their potential effects on the health of a population and the distribution of those effects within the population

Value of Health Impact Assessment

- Focuses attention of decision-makers, who typically do not have a health background, on the health consequences of projects and policies that they are considering
- Ideally an HIA will lead to a better informed decision

Steps in Conducting an HIA

- **Screening**
 - Identify projects or policies for which HIA would be useful
- **Scoping**
 - Identify which health impacts should be included
- **Risk assessment**
 - Identify how many and which people may be affected
 - Assess how they may be affected
- **Reporting** of results to decision-makers
 - Create report suitable in length and depth for audience
- **Evaluation** of impact of HIA on decision process

Scoping: Health Impacts to Consider in an HIA

- Physical activity, obesity, cardiovascular disease
- Air quality, asthma, other respiratory diseases
- Water quality, waterborne diseases
- Food quality, foodborne diseases, nutrition
- Motor vehicle, pedestrian and other injuries
- Accessibility for persons with disabilities
- Noise
- Mental health
- Social capital, community severance
- Access to jobs, stores, schools, recreation
- Social equity, environmental justice

Voluntary vs. Regulatory Approach to Using an HIA

- Voluntary (a tool used by a health officer to inform a planning commission)
 - Simpler, less expensive, less litigious
 - Less likely to be used if not required
 - More politically acceptable
- Regulatory (modeled on a required environmental impact statement)
 - More complex, more expensive, more litigious
 - More likely to be used if required
 - Less politically acceptable

Relationship of HIA to Environmental Impact Assessment

- HIA components could logically fit within an EIA process
- HIA incorporated into EIA is necessarily regulatory and insures it is conducted
- Extending an EIA to include an HIA likely to encounter resistance from developers who see it as an additional barrier

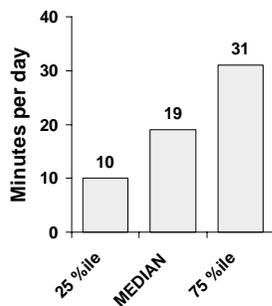
HIA Level of Complexity

- Qualitative – describe direction but not magnitude of predicted results
 - Easy to predict; hard to use in cost/benefit models
 - Example: Build a sidewalk and people will walk more
- Quantitative – describe direction and magnitude of predicted results
 - Difficult to obtain data; useful for cost/benefit models
 - Hypothetical example: Build a sidewalk and 300 people who live within 200 yards of location will walk an average of 15 extra minutes per day

HIA of Atlanta Beltline

- Examining health impacts of transit component and of trails and parks component
- Conducted during ongoing project planning
- Quantitative and qualitative estimates of physical activity, respiratory disease, injury, mental health, social capital, social equity, and other health outcomes
- Conducted by Georgia Tech with technical assistance from CDC
- Funded by Robert Wood Johnson Foundation

Minutes of Walking To and From Public Transit Per Day



Data from National Household Travel Survey, 2001, USDOT
N= 3312 transit users
Besser LM, Dannenberg AL
Amer J Prev Med 29:273, 2005



Public Health Benefits of BeltLine

Opportunity for Recreational Physical Activity

- BeltLine trails and parks offer an attractive setting for walking, bicycling, and other recreational physical activity
- Increased availability of trails is recommended by CDC to promote health
- Existing Silver Comet, Stone Mountain, Chastain Park trails are very popular

Exercise Easily Incorporated into Daily Commute

- Walking to and from BeltLine stations could readily fulfill the U.S. Surgeon General's recommendation of 30 minutes of physical activity each day

Obesity Reduction

- Physical activity helps prevent obesity
- Obesity and physical inactivity are associated with increased risk of overall mortality, heart disease, diabetes, hypertension, and some cancers



Public Health Benefits (continued)

Cleaner Air

- BeltLine could reduce use of automobiles whose emissions are major contributors to ground level ozone in Atlanta
- Ozone is linked with increased asthma attacks and heart disease mortality
- Atlanta exceeded EPA's air quality standard for ozone 51 times in 2002-2003

Fewer Traffic Injuries

- Driving less reduces each individual's risk of injury on the highways
- Nationally, motor vehicle crashes are the leading cause of death among persons 1 - 34 years old

Brownfield Redevelopment

- Urban redevelopment of underutilized land can reduce sprawl and preserve greenspace
- Redevelopment promotes health by offering economically and socially thriving communities that are walkable

HIA in the United States: Next Steps

- Conduct **pilot tests** of existing tools for HIA of projects and policies
- Develop **staff capacity** to conduct HIAs including training materials and train-the-trainer workshops
- Develop **incentives** and political support for use of HIAs
- Develop a **database** for measuring health impacts of common projects and policies
- Conduct process, impact and outcome **evaluations** of HIAs

HIA and Public Health Law

- Key challenge relates to voluntary vs. regulatory HIAs
 - Can voluntary HIAs make an impact on decision-making processes?
 - Can required HIAs be done without creating unacceptable time and resource burdens?



Health Impact Assessments
can help guide community
design and land use choices
to promote human health



www.hiagateway.org.uk
www.cdc.gov/healthyplaces
